A319/A320/A321

FLIGHT CREW OPERATING MANUAL

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REFERENCE: LTM A319/A320/A321 FLEET FCOM ISSUE DATE: 02 MAY 23

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TRANSMITTAL LETTER

Issue date: 02 MAY 23

This is the FLIGHT CREW OPERATING MANUAL at issue date 02 MAY 23 for the A319/A320/A321 and replacing last issue dated 26 OCT 22

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FILING INSTRUCTIONS

Please incorporate this revision as follow:

Localization Subsection Title	Remove	Insert Rev. Date
PLP-LESS **LIST OF EFFECTIVE SECTIONS/SUBSECTIONS**	ALL	02 MAY 23
PLP-AAT **AIRCRAFT ALLOCATION TABLE**	ALL	02 MAY 23
PLP-LOM **LIST OF MODIFICATIONS**	ALL	02 MAY 23
GEN-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
GEN-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
GEN **General Information**	ALL	02 MAY 23
DSC-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-PLP-LEDU **LIST OF EFFECTIVE DOCUMENTARY UNITS**	ALL	02 MAY 23
DSC-20-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-20-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-20-10 **Overview**	ALL	02 MAY 23
DSC-20-20 **Description**	ALL	02 MAY 23
DSC-20-30 **Ground Handling**	ALL	02 MAY 23
DSC-20-40 **Ground Clearance Diagram**	ALL	02 MAY 23
DSC-20-50 **Landing Geometry**	ALL	02 MAY 23
DSC-21-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-21-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-21-10-10 **General**	ALL	02 MAY 23
DSC-21-10-20 **Main Components**	ALL	02 MAY 23

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DSC-21-10-30 **Temperature and Flow Regulation**	ALL	02 MAY 23
DSC-21-10-40 **System Operation under Failure Condition**	ALL	02 MAY 23
DSC-21-10-50 **Controls and Indicators**	ALL	02 MAY 23
DSC-21-20-40 **Controls and Indicators**	ALL	02 MAY 23
DSC-21-30-20 **Avionics Ventilation**	ALL	02 MAY 23
DSC-21-30-60 **Controls and Indicators**	ALL	02 MAY 23
DSC-21-40-10 **General**	ALL	02 MAY 23
DSC-21-40-30 **Controls and Indicators**	ALL	02 MAY 23
DSC-21-40-35 **ECAM Cond Page**	ALL	02 MAY 23
DSC-22_10-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-22_10-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-22_10-10 **Description**	ALL	02 MAY 23
DSC-22_10-20 **System Interface Diagram**	ALL	02 MAY 23
DSC-22_10-30 **FMGS Modes of Operation**	ALL	02 MAY 23
DSC-22_10-40-10 **MCDU**	ALL	02 MAY 23
DSC-22_10-40-20 **FCU**	ALL	02 MAY 23
DSC-22_10-40-50 **Navigation Display**	ALL	02 MAY 23
DSC-22_10-50-20 **Characteristic Speeds**	ALL	02 MAY 23
DSC-22_10-50-50 **Other Speeds**	ALL	02 MAY 23
DSC-22_20-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23

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DSC-22_20-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-22_20-20-10 **Position Computation**	ALL	02 MAY 23
DSC-22_20-20-20 **Evaluation of Position Accuracy**	ALL	02 MAY 23
DSC-22_20-20-30 **Radio Navigation Tuning**	ALL	02 MAY 23
DSC-22_20-20-40 **Alignment of Inertial Reference System**	ALL	02 MAY 23
DSC-22_20-20-60 **FLS Function in the FMS**		02 MAY 23
DSC-22_20-30-10-05 **General**	ALL	02 MAY 23
DSC-22_20-30-10-15 **FMS2 HONEYWELL**	ALL	02 MAY 23
DSC-22_20-30-20-05 **General**	ALL	02 MAY 23
DSC-22_20-30-20-25 **FMS2 Honeywell**	ALL	02 MAY 23
DSC-22_20-40-10 **Optimization**	ALL	02 MAY 23
DSC-22_20-40-30 **Predictions**	ALL	02 MAY 23
DSC-22_20-45-10 **Takeoff Surveillance Function**	ALL	02 MAY 23
DSC-22_20-50-10-25 **FMS2 Honeywell**	ALL	02 MAY 23
DSC-22_20-50-20-35 **FMS2 Honeywell**	ALL	02 MAY 23
DSC-22_20-50-30 **MCDU - Data Format List**	ALL	02 MAY 23
DSC-22_20-60-10 **Effect of Baro Reference Setting**	ALL	02 MAY 23
DSC-22_20-60-20 **Clear Key (Clearing Function)**	ALL	02 MAY 23
DSC-22_20-60-30 **How to Execute a Diversion**	ALL	02 MAY 23
DSC-22_20-60-40 **Engine Out**	ALL	02 MAY 23

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DSC-22_20-60-50 **Secondary Flight Plan**	ALL	02 MAY 23
DSC-22_20-60-60 **Pilots/Stored Route Function**	ALL	02 MAY 23
DSC-22_20-60-70 **Report Page**	ALL	02 MAY 23
DSC-22_20-60-80 **Closest Airports**	ALL	02 MAY 23
DSC-22_20-60-90 **Time Marker**	ALL	02 MAY 23
DSC-22_20-60-100 **Step ALTS**	ALL	02 MAY 23
DSC-22_20-60-120 **Equitime Point**	ALL	02 MAY 23
DSC-22_20-60-130 **MCDU Back Up Navigation**	ALL	02 MAY 23
DSC-22_20-65 **Polar Navigation**	ALL	02 MAY 23
DSC-22_20-70 **AOC Functions**	ALL	02 MAY 23
DSC-22_20-80 **Print Functions**	ALL	02 MAY 23
DSC-22_20-85 **How to**	ALL	02 MAY 23
DSC-22_20-90-10 **FMGC Reset**	ALL	02 MAY 23
DSC-22_20-100-20 **FMS2 HONEYWELL Temporary Abnormal Behaviors**	ALL	02 MAY 23
DSC-22_30-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-22_30-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-22_30-40-20-20 **SRS TO Mode**	ALL	02 MAY 23
DSC-22_30-40-30-10 **HDG/TRK Mode**	ALL	02 MAY 23
DSC-22_30-40-30-20 **NAV Mode**	ALL	02 MAY 23
DSC-22_30-40-40-30 **EXP CLB Mode**	ALL	02 MAY 23

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DSC-22_30-40-50-20 **ALT CST**	ALL	02 MAY 23
DSC-22_30-40-50-30 **ALT CRZ**	ALL	02 MAY 23
DSC-22_30-40-60-40 **EXP DES Mode**	ALL	02 MAY 23
DSC-22_30-40-80-00 **General**	ALL	02 MAY 23
DSC-22_30-40-80-10 **LOC Mode**	ALL	02 MAY 23
DSC-22_30-40-80-20 **G/S Mode**	ALL	02 MAY 23
DSC-22_30-40-80-60 **F-LOC Mode**		02 MAY 23
DSC-22_30-40-80-70 **F-G/S Mode**		02 MAY 23
DSC-22_30-40-80-90 **FINAL APP Mode**	ALL	02 MAY 23
DSC-22_30-40-90-10 **General**	ALL	02 MAY 23
DSC-22_30-40-90-20 **SRS GA Mode**	ALL	02 MAY 23
DSC-22_30-40-90-30 **GA TRK Mode**	ALL	02 MAY 23
DSC-22_30-40-100 **AP/FD TCAS Mode**	ALL	02 MAY 23
DSC-22_30-40-110 **AP/FD Mode Reversions**	ALL	02 MAY 23
DSC-22_30-40-120-50 **Altitude with ALT**	ALL	02 MAY 23
DSC-22_30-40-120-70 **Altitude with ALT CRZ**	ALL	02 MAY 23
DSC-22_30-40-120-80 **Approach and Landing**	ALL	02 MAY 23
DSC-22_30-50-30 **A/THR Arming and Activation**	ALL	02 MAY 23
DSC-22_30-50-40 **A/THR Disconnection**	ALL	02 MAY 23

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DSC-22_30-50-60 **Scenario Examples**	ALL	02 MAY 23
DSC-22_30-60-20 **Managed Speed/Mach**	ALL	02 MAY 23
DSC-22_30-70 **Approach and Landing Capability**	ALL	02 MAY 23
DSC-22_30-80-10 **Autoland Light**	ALL	02 MAY 23
DSC-22_30-80-20 **FMA**	ALL	02 MAY 23
DSC-22_30-110 **Temporary Abnormal Behaviors**	ALL	02 MAY 23
DSC-22_40-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-22_40-20 **Yaw Functions**	ALL	02 MAY 23
DSC-22_40-30 **Flight Envelope Function**	ALL	02 MAY 23
DSC-22_45-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-22_45 **Auto Flight - AOC Functions**	ALL	02 MAY 23
DSC-22_46-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-22_46 **Auto Flight - Print Interface**	ALL	02 MAY 23
DSC-23-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-23-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-23-10-10 **Introduction**	ALL	02 MAY 23
DSC-23-10-20 **Radio Tuning**	ALL	02 MAY 23
DSC-23-10-30 **Intercommunication Systems**	ALL	02 MAY 23
DSC-23-10-40 **Cockpit Voice Recorder**	ALL	02 MAY 23

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DSC-23-10-50 **Controls**	ALL	02 MAY 23
DSC-23-20-20 **Cabin Interphone System**	ALL	02 MAY 23
DSC-23-20-40 **Passenger Address**	ALL	02 MAY 23
DSC-23-30-10 **Radio Communication**	ALL	02 MAY 23
DSC-23-40-30 **Emergency Locator Transmitter**	ALL	02 MAY 23
DSC-23-45-10 **RMP - Page Description**		02 MAY 23
DSC-23-45-20 **RMP - Messages**		02 MAY 23
DSC-23-50 **Memo Display**	ALL	02 MAY 23
DSC-23-60 **How to**	ALL	02 MAY 23
DSC-24-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-24-10-30-20 **Normal Configuration**	ALL	02 MAY 23
DSC-24-10-30-30 **Abnormal Configurations**	ALL	02 MAY 23
DSC-24-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-25-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-25-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-25-10-40 **Main Instrument Panels**	ALL	02 MAY 23
DSC-25-10-50 **Pedestal**	ALL	02 MAY 23
DSC-25-10-60 **Overhead Panel**	ALL	02 MAY 23
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DSC-26-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23

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DSC-26-50-10 **System Description**	ALL	02 MAY 23
DSC-26-50-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-27-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-27-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-27-10-20 **Architecture**	ALL	02 MAY 23
DSC-27-20-10-10 **General**	ALL	02 MAY 23
DSC-27-20-10-20 **Pitch Control**	ALL	02 MAY 23
DSC-27-20-10-30 **Lateral Control**	ALL	02 MAY 23
DSC-27-20-10-40 **Load Alleviation Function**	ALL	02 MAY 23
DSC-27-20-20 **Reconfiguration Control Laws**	ALL	02 MAY 23
DSC-27-20-30 **Controls and Indicators**	ALL	02 MAY 23
DSC-27-30-10 **Description**	ALL	02 MAY 23
DSC-27-30-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-28-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
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DSC-28-10-10 **General**	ALL	02 MAY 23
DSC-28-10-20 **Tanks**	ALL	02 MAY 23
DSC-28-10-30 **Engine Feed**	ALL	02 MAY 23
DSC-28-10-40 **ACT System**		02 MAY 23
DSC-28-10-60 **Fuel Recirculation System**	ALL	02 MAY 23

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DSC-28-10-70 **Refueling and Defueling**	ALL	02 MAY 23
DSC-28-10-80 **Fuel Quantity Indication and Level Sensing**	ALL	02 MAY 23
DSC-28-10-90 **Fuel Tank Inerting System**	ALL	02 MAY 23
DSC-28-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-29-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-29-10-30 **Distribution**	ALL	02 MAY 23
DSC-29-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-30-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-30-20-20 **Controls And Indicators**	ALL	02 MAY 23
DSC-30-30-10 **Description**	ALL	02 MAY 23
DSC-30-30-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-30-70-10 **Description**	ALL	02 MAY 23
DSC-31-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-31-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-31-05-10 **Introduction**	ALL	02 MAY 23
DSC-31-05-30 **Architecture**	ALL	02 MAY 23
DSC-31-05-50 **Reconfiguring the DMC**	ALL	02 MAY 23
DSC-31-05-60 **Reconfiguring DUs**	ALL	02 MAY 23
DSC-31-10 **ECAM Description**	ALL	02 MAY 23
DSC-31-15 **Indications on E/WD**	ALL	02 MAY 23

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DSC-31-20 **Indications on SD**	ALL	02 MAY 23
DSC-31-25-20 **Example**	ALL	02 MAY 23
DSC-31-27 **OEB Reminder**	ALL	02 MAY 23
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DSC-31-40 **Indications on PFD**	ALL	02 MAY 23
DSC-31-45 **Indications on ND**	ALL	02 MAY 23
DSC-31-50 **EFIS Controls**	ALL	02 MAY 23
DSC-31-55-10 **General**	ALL	02 MAY 23
DSC-31-55-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-31-60-10 **Flight Data Recording System**	ALL	02 MAY 23
DSC-31-60-30 **Aircraft Integrated Data System**	ALL	02 MAY 23
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DSC-32-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-32-10-30 **Interactions between Landing Gear and Aircraft Systems**	ALL	02 MAY 23
DSC-32-10-40 **Controls and Indicators**	ALL	02 MAY 23
DSC-32-20-10 **Description**	ALL	02 MAY 23
DSC-32-20-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-32-30-10 **Description**	ALL	02 MAY 23
DSC-32-30-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-33-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23

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DSC-33-20-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-33-30-10 **Description**	ALL	02 MAY 23
DSC-33-30-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-34-NAV-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-34-NAV-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-34-NAV-10-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-34-NAV-10-30-20 **Digital Backup Speed/Altitude**	ALL	02 MAY 23
DSC-34-NAV-20 **Standby Instruments**	ALL	02 MAY 23
DSC-34-NAV-30-10 **Tuning**	ALL	02 MAY 23
DSC-34-NAV-30-20 **Navaids**	ALL	02 MAY 23
DSC-34-NAV-30-30 **Controls and Indicators**	ALL	02 MAY 23
DSC-34-SURV-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-34-SURV-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-34-SURV-10-10 **Description**	ALL	02 MAY 23
DSC-34-SURV-10-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-34-SURV-30-10 **Description**	ALL	02 MAY 23
DSC-34-SURV-30-20 **Predictive Windshear System**	ALL	02 MAY 23
DSC-34-SURV-30-30 **Controls and Indicators**	ALL	02 MAY 23
DSC-34-SURV-40-20 **GPWS Basics Modes**	ALL	02 MAY 23

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DSC-34-SURV-40-40 **Controls and Indicators**	ALL	02 MAY 23
DSC-34-SURV-50-10 **General**	ALL	02 MAY 23
DSC-34-SURV-50-20 **Description**	ALL	02 MAY 23
DSC-34-SURV-50-30 **Controls and Indicators**	ALL	02 MAY 23
DSC-34-SURV-60-10 **Description**	ALL	02 MAY 23
DSC-34-SURV-60-20 **Controls and Indicators**	ALL	02 MAY 23
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DSC-35-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-35-20-10 **Description**	ALL	02 MAY 23
DSC-35-20-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-35-20-30 **How to**	ALL	02 MAY 23
DSC-35-30-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-35-40-10 **Description**	ALL	02 MAY 23
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DSC-36-10-20 **Engine Bleed System**	ALL	02 MAY 23
DSC-36-10-40 **Crossbleed**	ALL	02 MAY 23
DSC-36-10-50 **Leak Detection**	ALL	02 MAY 23
DSC-36-10-60 **Operation Following Failures**	ALL	02 MAY 23
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DSC-38-10 **Description**	ALL	02 MAY 23
DSC-45-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-45-10 **Description**	ALL	02 MAY 23
DSC-45-20 **System Operation**	ALL	02 MAY 23
DSC-45-25 **Data Loading**	ALL	02 MAY 23
DSC-46-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-46-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-46-10-10 **General System Description**	ALL	02 MAY 23
DSC-46-10-30-10 **Notifications**	ALL	02 MAY 23
DSC-46-10-40-30 **MCDU Datalink Pages**	ALL	02 MAY 23
DSC-46-10-40-40 **MCDU Scratchpad Messages**	ALL	02 MAY 23
DSC-46-10-40-60 **ECAM**	ALL	02 MAY 23
DSC-46-10-50 **How To**	ALL	02 MAY 23
DSC-46-10-60 **Temporary Abnormal Behaviors**	ALL	02 MAY 23
DSC-49-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-49-10-10 **General**	ALL	02 MAY 23
DSC-49-10-20 **Main Components**	ALL	02 MAY 23
DSC-49-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-52-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23

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DSC-52-10-10 **General**	ALL	02 MAY 23
DSC-52-10-30 **Emergency Exits**	ALL	02 MAY 23
DSC-52-10-60 **Cockpit Door**	ALL	02 MAY 23
DSC-52-10-80 **Escape Slides/Rafts**	ALL	02 MAY 23
DSC-52-20 **Controls and Indicators**	ALL	02 MAY 23
DSC-52-40-10 **Description**	ALL	02 MAY 23
DSC-52-40-20 **Cockpit Door Locking System (CDLS)**	ALL	02 MAY 23
DSC-52-40-30 **Cockpit Door Surveillance System (CDSS)**	ALL	02 MAY 23
DSC-70-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
DSC-70-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
DSC-70-05 **Overview**	ALL	02 MAY 23
DSC-70-10 **System Description**	ALL	02 MAY 23
DSC-70-20 **FADEC**	ALL	02 MAY 23
DSC-70-30-10 **General**	ALL	02 MAY 23
DSC-70-30-20 **Thrust Levers**	ALL	02 MAY 23
DSC-70-30-30 **Thrust Rating Limit**	ALL	02 MAY 23
DSC-70-30-40 **Thrust Control**	ALL	02 MAY 23
DSC-70-48 **Fuel System (PW1100G)**	ALL	02 MAY 23
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DSC-70-70 **Thrust Reverser System**	ALL	02 MAY 23
DSC-70-80-20 **Architecture**	ALL	02 MAY 23
DSC-70-80-30 **Ignition System**	ALL	02 MAY 23
DSC-70-80-40 **Engine Starting System**	ALL	02 MAY 23
DSC-70-90-10 **Overhead Panel**	ALL	02 MAY 23
DSC-70-90-40 **Engine Display**	ALL	02 MAY 23
DSC-70-90-50 **Memo Display**	ALL	02 MAY 23
DSC-70-95 **Temporary Abnormal Behaviours**	ALL	02 MAY 23
PRO-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
PRO-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
PRO-PLP-LEDU **LIST OF EFFECTIVE DOCUMENTARY UNITS**	ALL	02 MAY 23
PRO-PLP-LETDU **LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS**	ALL	02 MAY 23
PRO-ABN-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
PRO-ABN-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
PRO-ABN-ABN-ADV **[ADV] ECAM ADVISORY**	ALL	02 MAY 23
PRO-ABN-ABN-QRH **[QRH] PROCEDURES**	ALL	02 MAY 23
PRO-ABN-ABN-RESET **[RESET] SYSTEM RESET**	ALL	02 MAY 23
PRO-ABN-A-ICE **A-ICE**	ALL	02 MAY 23
PRO-ABN-AIR **AIR**	ALL	02 MAY 23

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PRO-ABN-APU **APU**	ALL	02 MAY 23
PRO-ABN-AUTO_FLT **AUTO FLT**	ALL	02 MAY 23
PRO-ABN-BLEED **BLEED**	ALL	02 MAY 23
PRO-ABN-BRAKES **BRAKES**	ALL	02 MAY 23
PRO-ABN-NWS **BRAKES-N/WS**	ALL	02 MAY 23
PRO-ABN-CAB_PR **CAB PR**	ALL	02 MAY 23
PRO-ABN-COM **COM**	ALL	02 MAY 23
PRO-ABN-COND **COND**	ALL	02 MAY 23
PRO-ABN-CONFIG **CONFIG**	ALL	02 MAY 23
PRO-ABN-DATALINK **DATALINK**	ALL	02 MAY 23
PRO-ABN-DOOR **DOOR**	ALL	02 MAY 23
PRO-ABN-EIS **EIS**	ALL	02 MAY 23
PRO-ABN-ELEC **ELEC**	ALL	02 MAY 23
PRO-ABN-ENG **ENG**	ALL	02 MAY 23
PRO-ABN-F_CTL **F/CTL**	ALL	02 MAY 23
PRO-ABN-FUEL **FUEL**	ALL	02 MAY 23
PRO-ABN-FWS **FWS**	ALL	02 MAY 23
PRO-ABN-HYD **HYD**	ALL	02 MAY 23
PRO-ABN-LG **L/G**	ALL	02 MAY 23
PRO-ABN-MISC **MISC**	ALL	02 MAY 23

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Localization Subsection Title	Remove	Insert Rev. Date
PRO-ABN-NAV **NAV**	ALL	02 MAY 23
PRO-ABN-OVERSPEED **OVERSPEED**	ALL	02 MAY 23
PRO-ABN-RECORDER **RECORDER**	ALL	02 MAY 23
PRO-ABN-SEVERE_ICE **SEVERE ICE**	ALL	02 MAY 23
PRO-ABN-SMOKE **SMOKE**	ALL	02 MAY 23
PRO-ABN-SURV **SURV**	ALL	02 MAY 23
PRO-ABN-T-O **T.O**	ALL	02 MAY 23
PRO-ABN-VENT **VENT**	ALL	02 MAY 23
PRO-ABN-WHEEL **WHEEL**	ALL	02 MAY 23
PRO-ABN-W_A_ICE **WING A.ICE**	ALL	02 MAY 23
PRO-ABN-90 **Detailed Cabin / Cockpit Evacuation Procedure**	ALL	02 MAY 23
PRO-NOR-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
PRO-NOR-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
PRO-NOR-SOP **Standard Operating Procedures**	ALL	
PRO-NOR-SCO **Standard Callouts**	ALL	
PRO-NOR-TSK **Tasksharing**	ALL	
PRO-NOR-SOP-01 **General Information**		02 MAY 23
PRO-NOR-SOP-02 **Flight Preparation**		02 MAY 23
PRO-NOR-SOP-03 **Safety Exterior Inspection**		02 MAY 23
PRO-NOR-SOP-04 **Preliminary Cockpit Preparation**		02 MAY 23

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FILING INSTRUCTIONS

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Localization Subsection Title	Remove	Insert
		Rev. Date
PRO-NOR-SOP-05 **Exterior Walkaround**		02 MAY 23
PRO-NOR-SOP-06 **Cockpit Preparation**		02 MAY 23
PRO-NOR-SOP-07 **Before Pushback or Start**		02 MAY 23
PRO-NOR-SOP-08 **Engine Start**		02 MAY 23
PRO-NOR-SOP-09 **After Start**		02 MAY 23
PRO-NOR-SOP-10 **Taxi**		02 MAY 23
PRO-NOR-SOP-10B **Departure Change**		02 MAY 23
PRO-NOR-SOP-11 **Before Takeoff**		02 MAY 23
PRO-NOR-SOP-12 **Takeoff**		02 MAY 23
PRO-NOR-SOP-13 **After Takeoff**		02 MAY 23
PRO-NOR-SOP-14 **Climb**		02 MAY 23
PRO-NOR-SOP-15 **Cruise**		02 MAY 23
PRO-NOR-SOP-16 **Descent Preparation**		02 MAY 23
PRO-NOR-SOP-17 **Descent**		02 MAY 23
PRO-NOR-SOP-18-A **Approach General**		02 MAY 23
PRO-NOR-SOP-18-B **Aircraft Configuration Management**		02 MAY 23
PRO-NOR-SOP-18-C **Aircraft Guidance Management**		02 MAY 23
PRO-NOR-SOP-19 **Landing**		02 MAY 23
PRO-NOR-SOP-20 **Go-Around**		02 MAY 23
PRO-NOR-SOP-21 **After Landing**		02 MAY 23

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Localization Subsection Title	Remove	Insert
		Rev. Date
PRO-NOR-SOP-22 **Parking**		02 MAY 23
PRO-NOR-SOP-23 **Securing the Aircraft**		02 MAY 23
PRO-NOR-SCO **Standard Callouts**		02 MAY 23
PRO-NOR-TSK **Tasksharing**		02 MAY 23
PRO-NOR-SUP-ADVWXR **Adverse Weather**	ALL	02 MAY 23
PRO-NOR-SRP-01-10 **Cockpit Preparation**	ALL	02 MAY 23
PRO-NOR-SRP-01-15 **Before Pushback or Start**	ALL	02 MAY 23
PRO-NOR-SRP-01-20 **Taxi**	ALL	02 MAY 23
PRO-NOR-SRP-01-30 **Takeoff**	ALL	02 MAY 23
PRO-NOR-SRP-01-40 **Climb**	ALL	02 MAY 23
PRO-NOR-SRP-01-50 **Cruise**	ALL	02 MAY 23
PRO-NOR-SRP-01-60 **Descent**	ALL	02 MAY 23
PRO-NOR-SRP-01-70 **Approach**	ALL	02 MAY 23
PRO-NOR-SRP-01-80 **Go-Around**	ALL	02 MAY 23
PRO-SPO-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
PRO-SPO-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
PRO-SPO-40-50 **Procedures**	ALL	02 MAY 23
PRO-SPO-40-60 **Performance**	ALL	02 MAY 23
PRO-SPO-50 **Reduced Vertical Separation Minimum - RVSM**	ALL	02 MAY 23
PRO-SPO-51 **Performance-Based Navigation (PBN)**	ALL	02 MAY 23

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Localization Subsection Title	Remove	Insert
		Rev. Date
PRO-SPO-60 **Operations on Narrow Runways**	ALL	02 MAY 23
PRO-SPO-62 **Operations at EL SALVADOR**	ALL	02 MAY 23
LIM-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
LIM-PLP-LEDU **LIST OF EFFECTIVE DOCUMENTARY UNITS**	ALL	02 MAY 23
LIM-AG-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
LIM-AG-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-AG-OPS **Operational Parameters**	ALL	02 MAY 23
LIM-AG-SPD **Speeds**	ALL	02 MAY 23
LIM-AG-WGHT **Weights**	ALL	02 MAY 23
LIM-AIR-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-AIR **Air Bleed/Cond/Press/Vent**	ALL	02 MAY 23
LIM-AFS-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
LIM-AFS-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-AFS-10 **General**	ALL	02 MAY 23
LIM-AFS-20 **Automatic Approach, Landing and Rollout**	ALL	02 MAY 23
LIM-APU-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-APU **Auxiliary Power Unit**	ALL	02 MAY 23
LIM-CAB-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-CAB **Cabin Systems**	ALL	02 MAY 23
LIM-EFB-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23

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Localization Subsection Title	Remove	Insert Rev. Date
LIM-EFB-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-EFB-24 **Cockpit Portable Electronic Device Outlet**		02 MAY 23
LIM-EFB-46 **Electronic Flight Bag Class 1 (EFB Class 1)**		02 MAY 23
LIM-ENG-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
LIM-ENG-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-ENG **Engines**	ALL	02 MAY 23
LIM-FUEL-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-FUEL **Fuel**	ALL	02 MAY 23
LIM-NAV-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-NAV **Navigation**	ALL	02 MAY 23
LIM-OXY-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-OXY **Oxygen**	ALL	02 MAY 23
LIM-ROW_ROP-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
LIM-ROW_ROP **ROW/ROP**	ALL	02 MAY 23
TAB-PLP-TOC **TABLE OF CONTENTS**	ALL	02 MAY 23
TAB-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
TAB **Temporary Abnormal Behaviors**	ALL	02 MAY 23
EFB-PLP-LEDU **LIST OF EFFECTIVE DOCUMENTARY UNITS**	ALL	02 MAY 23
EFB-LOD-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
EFB-LOD-FUL **FUEL**	ALL	02 MAY 23

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Localization Subsection Title	Remove	Insert
		Rev. Date
EFB-TOF-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
EFB-TOF-20-20-20 **Flexible Takeoff**	ALL	02 MAY 23
EFB-IFT-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
EFB-IFT-20-40 **Holding**	ALL	02 MAY 23
EFB-IFT-30 **One Engine Inoperative Operations**	ALL	02 MAY 23
EFB-LDG-PLP-SOH **SUMMARY OF HIGHLIGHTS**	ALL	02 MAY 23
EFB-LDG-40 **Dispatch Requirements**	ALL	02 MAY 23

AIRCRAFT SYSTEMS - AUTO FLIGHT - FLIGHT MANAGEMENT

Localization Title	Toc Index	ID	Reason
DSC-22_20-30-10-15 Inserting an Airway with "Via" - Successive Airway Segments from a Waypoint	C	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-22_20-50-10-25 Alternate Page	S	19	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-22_20-60-40 Engine-Out Conditions	E	3	**Wording enhancement. No technical change.**
			Update of the content in order to take into account the engine-out conditions for A318 and A320neo Family with PW engines.
DSC-22_20-65 Description - FMGS	B	1	**Layout improvement. No technical change.**
			Addition of a note to describe the behavior of the system in the case the approach is defined in magnetic references in the FMS navigation data base whereas the chart of the airport is defined in true references.
DSC-22_20-70 Wind Data - Procedure to Insert Wind Data	D	6	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

AIRCRAFT SYSTEMS - FLIGHT CONTROLS

Localization Title	Toc Index	ID	Reason
DSC-27-20-10-20 Flight Mode	C	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-20-30 Glareshield	C	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	3	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	5	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	6	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	7	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	8	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

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Localization Title	Toc Index	ID	Reason
DSC-27-30-20 Pedestal	A	9	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	10	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

AIRCRAFT SYSTEMS - INDICATING/RECORDING SYSTEMS

Localization Title	Toc Index	ID	Reason
DSC-31-10 Audio Indicators - RETARD RETARD	F	5	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.** **Layout modification, no technical change.** **Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-31-10 Audio Indicators - RETARD RETARD	F	10	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.** **Layout modification, no technical change.** **Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-31-10 Audio Indicators - RETARD RETARD	F	15	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.** **Layout modification, no technical change.** **Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-31-10 Audio Indicators - RETARD RETARD	F	21	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.** **Layout modification, no technical change.** **Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-31-25-20 3 - The Flight Crew Follows the Instruction Displayed on the E/WD	D	4	**Layout modification, no technical change.**
DSC-31-25-20 3 - The Flight Crew Follows the Instruction Displayed on the E/WD	D	5	**Update of the illustration in order to replace "3000 PSI" by "0 PSI" for the Blue hydraulic system pressure in accordance with the SD page.**
DSC-31-30 Switching Panel	B	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

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Localization Title	Toc Index	ID	Reason
DSC-31-30 Switching Panel	B	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-31-30 Memo Display	D	6	**Correction of the ECAM memo from "SWITCHING PNL" to "SWITCHG PNL" in order to reflect the actual indication on ECAM.**
DSC-31-40 General	A	1	**Update of DUref link. No technical change.**
DSC-31-40 General	A	3	**Update of DUref link. No technical change.**

AIRCRAFT SYSTEMS - LANDING GEAR

Localization Title	Toc Index	ID	Reason
DSC-32-10-30 Proximity Detectors on Shock Absorbers	B	2	**Enhancement of the wording. No technical change.**
			Adding of the abbreviation tag.
			Layout modification. No technical change.
			Update of the skin temperature in order to be in line with the system logic.
DSC-32-10-30 Proximity Detectors on Shock Absorbers	B	3	**Adding of the abbreviation tag.**
			Enhancement of the wording. No technical change.
			Layout modification. No technical change.
			Update of the skin temperature in order to be in line with the system logic.

AIRCRAFT SYSTEMS - ENGINES

Localization Title	Toc Index	ID	Reason
DSC-70-30-40 Manual Mode	A	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-70-30-40 Manual Mode	A	3	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

PROCEDURES - ABNORMAL AND EMERGENCY PROCEDURES

Localization Title	Toc Index	ID	Reason
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	2	**Update of on ground procedure in order to indicate that C/B N11has to be pushed back.**

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	3	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	6	**Update of on ground procedure in order to indicate that C/B N11has to be pushed back.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	7	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	9	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	11	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	14	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	17	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	21	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	28	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	36	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	44	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	52	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	61	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET	B	70	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**

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Localization Title	Toc Index	ID	Reason
System Reset Table - COM - Frozen RMP			
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	80	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	87	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	95	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	104	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	113	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	123	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	136	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	148	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	162	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	176	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	191	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	207	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-APU APU FIRE DET FAULT	B	1	**Update of triggering conditions in order to clarify the fact that if both loops fail with more than 5 s between the failures, the fire detection function is considered inoperative.**

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Localization Title	Toc Index	ID	Reason
PRO-ABN-APU APU FIRE LOOP A(B) FAULT	C	2	**Addition of triggering condition.**
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	22	**Minor revision of the documentation structure. No technical change.** **A note is added to indicate where additional information about the alternate law can be found.** **Minor revision of the documentation structure. No technical**
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	23	**Minor revision of the documentation structure. No technical change.** **Minor revision of the documentation structure. No technical** **A note is added to indicate where additional information about the alternate law can be found.**
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	24	**A note is added to indicate where additional information about the alternate law can be found.** **Minor revision of the documentation structure. No technical change.**
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	25	**Minor revision of the documentation structure. No technical change.** **A note is added to indicate where additional information about the alternate law can be found.**
PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT - FWSPAGE	J	20	**Addition of the condition to display the INOP SYS "N/W STRG" in order to be in accordance with the ECAM.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	62	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	63	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	65	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	67	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	70	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC	F	79	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.**

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Localization Title	Toc Index	ID	Reason
ELEC AC ESS BUS FAULT - FWSPAGE			**Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC ESS BUS FAULT - FWSPAGE	F	80	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC ESS BUS FAULT - FWSPAGE	F	81	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	93	**Addition of "CAB TEMP CKPT CTL ONLY" in the status information, for aircraft equipped with ACSC.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	94	**Addition of "CAB TEMP CKPT CTL ONLY" in the status information, for aircraft equipped with ACSC.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	97	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	98	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	100	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	103	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	109	**Addition of NORM BRK, move of AUTO BRK (from OTHER INOP SYS to INOP SYS), and removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	110	**Layout modification, no technical change.** **Removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.**
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	112	**Addition of NORM BRK, move of AUTO BRK (from OTHER INOP SYS to INOP SYS), and removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	114	**Addition of NORM BRK, move of AUTO BRK (from OTHER INOP SYS to INOP SYS), and removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.**

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Localization Title	Toc Index	ID	Reason
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	123	Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	124	Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	125	Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	126	Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	127	Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Addition of an explanatory note to clarify the real landing capability of the aircraft.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	128	Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Addition of an explanatory note to clarify the real landing capability of the aircraft.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	129	Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	130	Removal of A/THR, ENG 2 START and REV 2 from the INOP SYS to be consistent with the ECAM display.
			Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	131	Removal of A/THR, ENG 2 START and REV 2 from the INOP SYS to be consistent with the ECAM display.
			Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	133	Removal of A/THR, ENG 2 START and REV 2 from the INOP SYS to be consistent with the ECAM display.
			Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.

PROCEDURES - NORMAL PROCEDURES

Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)	A	1	**Addition of RNP2 and RNP4 in order to be consistent with all RNP operations.** **Addition of abbreviation tags in order to comply with Airbus**
PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)	A	3	**Addition of abbreviation tags in order to comply with Airbus** **Addition of RNP2 and RNP4 in order to be consistent with all RNP operations.**
PRO-NOR-SOP-04 ADIRS	E	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-04 ADIRS	E	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-04 ADIRS	F	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-04 Before Walk-Around - Alternate Braking System	K	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **Removal of the condition "before the first flight of the day" when checking the alternate braking system because the check must be done after each flight crew change.**
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Air Cond	C	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Air Cond	C	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-06 Overhead Panel - Air COND	C	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Fuel	C	18	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Fuel	C	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrument Panel - STBY Instrument	D	25	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrumental Panel - ISIS	D	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrument Panel - Clock	D	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrument Panel - Clock	D	28	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Pedestal - Cockpit Door	E	32	**Addition of CKPT DOOR sw in order to harmonize with tasksharing.**
			Wording enhancement. No technical change.
			Removal of abbreviation tag in order to comply with the Airbus authoring policy.
			Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.
PRO-NOR-SOP-06 FMGS Initialization - FM Database Validity	H	40	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - FM Database Validity	H	41	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - NAVAID Deselection	H	42	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - NAVAID Deselection	H	43	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-06 FMGS Initialization - NAVAID Deselection	H	44	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - ADIRS Position Initialization	H	46	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - ADIRS Position Initialization	H	47	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Data Insertion - RNP Insertion (PROG PAGE)	H	53	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Instrument Panels	K	59	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Instrument Panels	K	60	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-07 At Pushback/Start Clearance - Windows and Doors	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-07 At Pushback/Start Clearance - Windows and Doors	B	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-07 At Pushback/Start Clearance - NW STRG DISC	B	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
			Change of the wording from "N WHEEL STEERG DISC" to “NW STRG DISC”, to be in accordance with the actual memo display of the aircraft.
			SOP LATAM Standarization
PRO-NOR-SOP-07 At Pushback/Start Clearance - NW STRG DISC	B	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
			Change of the wording from "N WHEEL STEERG DISC" to “NW STRG DISC”, to be in accordance with the actual memo display of the aircraft.
			SOP LATAM Standarization
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	1	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	B	6	**Introduction of a note to highlight a normal engine start sequence behavior where the EGT may slightly drop during the early phase of the start sequence.**
PRO-NOR-SOP-08 Automatic Engine Start	B	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	C	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	C	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	C	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	C	11	**Introduction of a note to highlight a normal engine start sequence behavior where the EGT may slightly drop during the early phase of the start sequence.**
PRO-NOR-SOP-08 Automatic Engine Start	C	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - Flow Pattern	A	1	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-SOP-09 After Start - Flow Pattern	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - Dual Cooling	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - APU Bleed	A	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Anti Ice	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Anti Ice	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Anti Ice	A	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Brakes	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Brakes	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Engine 2 Start	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Engine 2 Start	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Engine 2 Start	A	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-10 Taxi - ENG Mode Selector	A	17	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - ENG Mode Selector	A	18	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	21	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10B Departure Change	A	1	**Modification of content according to SOP.**
PRO-NOR-SOP-11 Before Takeoff - Exterior Lights	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-11 Before Takeoff - RNP AR Departure Check	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-12 Takeoff - Thrust Setting	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-12 Takeoff - Thrust Setting	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-12 Takeoff - Above Acceleration Altitude (or Once in Climb Phase)	A	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-12 Takeoff - Above Acceleration Altitude (or Once in Climb Phase)	A	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-13 After Takeoff - ENG MODE Selector	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-13 After Takeoff - Anti-Ice Protection	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-13 After Takeoff - Anti-Ice Protection	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - At the Transition Altitude	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Radar	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Radar	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Radar	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Radar	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-15 Cruise - Radar Tilt	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-15 Cruise - Radar Tilt	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - FMGS - PERF APPR - PERF GO AROUND	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-16 Descent Preparation - FMGS - PERF APPR - PERF GO AROUND	A	8	**13 December 2022 : Modification of content of the element 00020102.0001001**
PRO-NOR-SOP-16 Descent Preparation - FMGS - PERF APPR - PERF GO AROUND	A	9	**SOP LATAM Standarization**
PRO-NOR-SOP-16	A	10	**Update of the content in order to introduce the SLS function.**

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Localization Title	Toc Index	ID	Reason
Descent Preparation - FMGS - RADIO NAV			
PRO-NOR-SOP-16 Descent Preparation - FMGS - RADIO NAV	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - FMGS - RADIO NAV	A	12	**Update of the content in order to introduce the SLS function.**
PRO-NOR-SOP-16 Descent Preparation - FMGS - RADIO NAV	A	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Runway Condition	A	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Radar	A	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Radar	A	24	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Anti-Ice Protection	A	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Anti-Ice Protection	A	28	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-A Cross-Reference Table	B	2	**Addition of RNP before RNAV(GNSS) to comply with the evolution of the name of the charts.**
PRO-NOR-SOP-18-A Cross-Reference Table	B	3	**Added Note.**
PRO-NOR-SOP-18-A Cross-Reference Table	B	4	**Addition of RNP before RNAV(GNSS) to comply with the evolution of the name of the charts.**
PRO-NOR-SOP-18-A Cross-Reference Table	B	5	**Added Note.**
PRO-NOR-SOP-18-B Initial Approach - Radar	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Initial Approach - Radar	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At green dot speed	B	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches- At green dot speed	B	9	**SOP LATAM Standarization**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2	B	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2	B	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE	B	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE	B	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Final Approach	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Final APPROACH	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	17	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	18	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation	C	21	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - Descent	C	22	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach	C	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft	C	24	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum	C	25	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum	C	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum	C	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum	D	35	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum	D	36	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum	D	37	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Landing - At Touchdown	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Landing - At Touchdown	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Landing - At Touch Down	B	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Landing - At Touchdown	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	1	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Predictive Windshear	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Flaps	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-21 After Landing - Flaps	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - TCAS	A	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
			Deleted "2000". SOP LATAM standardization.
PRO-NOR-SOP-21 After Landing - TCAS	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
			Deleted "2000". SOP LATAM standardization.
PRO-NOR-SOP-21 After Landing - ATC	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Anti-Ice Protection	A	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Anti-Ice Protection	A	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Anti-Ice Protection	A	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Brake Temperature	A	17	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Brake Temperature	A	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Brake Temperature	A	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Single Engine Taxi	A	22	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Single Engine Taxi	A	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	9	**21 October 2022 : Modification of content of the element 00011856.0004001**
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Fuel Pumps	A	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Fuel Pumps	A	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Severe Icing Conditions	A	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - ADIRS	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - ADIRS	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - EMER Lights and Signs	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - EMER Lights and Signs	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SCO Summary for Each Phase - Taxi	J	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-SCO Summary for Each Phase - Taxi	J	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-TSK Preliminary Cockpit Preparation - EFB/ACARS ◁ INITIALIZATION	B	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Preliminary Cockpit Preparation - EFB Initialization	B	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK	B	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**

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Localization Title	Toc Index	ID	Reason
Preliminary CocKpit Preparation - Before Walkaround			
PRO-NOR-TSK Preliminary Cockpit Preparation - BEFORE WALKAROUND	B	12	**11 October 2022 : Modification of content of the element 00024979.0001001**
PRO-NOR-TSK Cockpit Preparation - PEDESTAL	C	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Cockpit Preparation - PEDESTAL	C	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Engine Start	E	22	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Engine Start	E	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Engine Start for One Engine Taxi	F	24	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Engine Start For One Engine Taxi	G	25	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start	H	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start	H	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi	I	28	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi	I	29	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi SETWA	J	30	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi SETWA	J	31	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK One Engine Taxi	K	33	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
			SOP LATAM Standarization
PRO-NOR-TSK One Engine Taxi	K	34	**SOP LATAM Standarization**
PRO-NOR-TSK One Engine Taxi SETWA	L	35	**27 January 2023 : Modification of content of the element 20800716.9001003**
PRO-NOR-TSK One Engine Taxi SETWA	L	36	**27 January 2023 : Modification of content of the element 20800716.9001002**
PRO-NOR-TSK	L	37	**SOP LATAM Standarization**

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Localization Title	Toc Index	ID	Reason
One Engine Taxi SETWA			
PRO-NOR-TSK Taxi	M	39	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Before Takeoff	O	41	**SOP Requirement**
PRO-NOR-TSK Descent Preparation	T	42	**09 May 2023 : Modification of content of the element 00024910.0003001**
PRO-NOR-TSK Descent Preparation	T	43	**09 May 2023 : Modification of content of the element 00024910.0002001**
PRO-NOR-TSK APPROACH - Aircraft Configuration for Approach	V	45	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.** **SOP LATAM Standarization**
PRO-NOR-TSK APPROACH - Aircraft Configuration for Approach	V	46	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.** **SOP LATAM Standarization**
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance for RNAV(RNP)	V	48	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance for RNAV(RNP)	V	49	**SOP LATAM Standarization**
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance	V	51	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance	V	52	**SOP LATAM Standarization**
PRO-NOR-TSK Manual Landing	W	54	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Manual Landing	W	55	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Automatic Landing	X	56	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Automatic landing	Y	57	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Go Around (With FD On)	Z	58	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK GO AROUND (With FD On)	AA	59	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Parking	AC	61	**Modification of content**

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AIRCRAFT SYSTEMS - AUTO FLIGHT - FLIGHT MANAGEMENT

Localization Title	Toc Index	ID	Reason
DSC-22_20-50-10-25 GPS Monitor Page ◁	AK	38	Correction of a typo error.
			Wording enhancement. No technical change.
			Addition of information about SBAS (if installed) mode in the GPS MONITOR page.

PROCEDURES - SPECIAL OPERATIONS

Localization Title	Toc Index	ID	Reason
PRO-SPO-51 RNP AR Operations - Procedures	J	6	Layout modification. No technical change.
			Removal of abbreviation tag in order to comply with the Airbus authoring policy.
			Addition of SBAS (if installed) to indicate that the RNAV(RNP) procedure can also be performed when SBAS (if installed) is displayed on the GPS MONITOR page.
			Correction of a typo error.

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GENERAL INFORMATION

Localization Title	Toc Index	ID	Reason
GEN ADS-B OUT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AP/FD TCAS	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Backup Navigation Function of the MCDU	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN DIGITAL BACKUP SPEED	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN CPDLC	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Descent Profile Optimization	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FANS	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FLS Function in the FMS	A	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN FMS2 Release 2	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN GLS	A	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Metric Altitude Indications on the PFD	A	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN NAV Mode Automatically Engaged (Armed) at Go-Around	A	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN PED compatible Operation Manual and Checklist Stowage Aluminium Box	A	15	Effectivity update: The information now also applies to MSN 04563, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN PED compatible Operation Manual and Checklist Stowage Aluminium Box	A	16	Effectivity update: The information no longer applies to MSN 04563, 07098.
GEN PWS	A	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RAAS	A	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RNP AR	A	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ROW/ROPS	A	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Soft Go-Around	A	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN 4th Occupant Folding Seat	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN 4th Oxygen Mask	B	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AC ESS FEED Auto Switching	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ACT	B	25	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670,

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Localization Title	Toc Index	ID	Reason
			06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN 1 ADF	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN 2 ADF	B	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ADS-B OUT	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AFT Cargo Heating	B	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AFT Cargo Smoke Detector	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AFT Cargo Ventilation	B	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Aileron Anti Droop	B	34	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN Air Conditioning System Controller (ACSC)	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AP/FD TCAS	B	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN Avail Indication During Engine Start	B	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Backup Navigation Function of the MCDU	B	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Brake Fans	B	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Bulk Cargo Door	B	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN BUSS	B	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cargo Ventilation System	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Center Tank Transfer Valves	B	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Center Fuel Tank Pumps	B	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Chemical Oxygen System 22 min	B	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN CIDS SDF	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Door Deadbolt	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Door Escape Panel	B	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Fixed Second Oxygen Bottle	B	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Power Outlet	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN COMMERCIAL pb	B	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN CVR Datalink Function	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Data Loading Selector Unit	B	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN DDRMI	B	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN DECEL Message on the PFD	B	56	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN DECEL Message on the PFD	B	57	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
GEN Descent Profile Optimization	B	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Display of Delta ISA	B	59	Effectivity update: The information now also applies to MSN 11531.
GEN Display of Delta ISA	B	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN Dual Ice Detection System	B	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN EGPWS	B	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Electrical Alternate Braking	B	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Expedite Function	B	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FANS A+	B	66	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
GEN FANS B+	B	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Fire Extinguishing in the AFT Cargo	B	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Fire Extinguishing in the FWD Cargo	B	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN FLS	B	70	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN FLS/FINAL APP - Coexistence	B	73	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN FMS Crossload	B	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FTIS	B	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN Fuel Leak Detection	B	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Fuel Tank Overflow Alert	B	77	Effectivity update: The information now also applies to MSN 11531.
GEN Fuel Tank Overflow Alert	B	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN FWD Cargo Smoke Detector	B	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FWD Cargo Ventilation	B	80	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Galley Bus Automatic Shedding	B	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN Galley Bus Automatic Shedding	B	82	Effectivity update: The information now also applies to MSN 11531.
GEN GAPCU	B	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Gaseous Oxygen generators in lavatories	B	84	Effectivity update: The information no longer applies to MSN 04860, 05097.
GEN Gaseous Oxygen generators in lavatories	B	85	Effectivity update: The information now also applies to MSN 04860, 05097, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN GLS	B	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN GSM Onboard	B	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN HF DATALINK	B	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN HI ALT pb	B	89	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN IRS Alignment Based on GPS Position	B	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ISIS	B	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN LAF	B	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN LAT DEV SCALE pb	B	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Man-Made Obstacle Function	B	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN Metric Altitude Indications on the PFD	B	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN MORA	B	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN NAV Mode Automatically Engaged (Armed) in Go-Around	B	97	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Optional Applications	B	98	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
GEN 1 Pair of Overwing Emergency Exit	B	99	Effectivity update: The information now also applies to MSN 11531.
GEN 2 Pairs of Overwing Emergency Exit	B	100	Effectivity update: The information now also applies to MSN 11572, 11597.
GEN Parking Brake Monitoring	B	101	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Printer Function in FMS	B	102	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN PWS	B	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN QAR	B	104	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RAAS	B	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN ROW/ROPS	B	106	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RPCU	B	107	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN SATCOM	B	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN SDCU	B	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Second Fire Extinguishing Bottle	B	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN Second Fire Extinguishing Bottle	B	112	Effectivity update: The information now also applies to MSN 11531.
GEN Soft Go-Around	B	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN T3CAS	B	114	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Tail Strike Pitch Limit Indicator	B	115	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Temperature Control Panel	B	116	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Weather Hazard Prediction Function	B	117	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

AIRCRAFT SYSTEMS - AIRCRAFT GENERAL

Localization Title	Toc Index	ID	Reason
DSC-20-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-10 General	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-20-10 Cockpit	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-20-20 Principal Dimensions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-20 Ground Service Connections and Panels	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-20 Ground Service Connections and Panels	E	4	Effectivity update: The information now also applies to MSN 11531.
DSC-20-30 Taxiing	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-20-30 Taxiing	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-30 180 degrees Turn on Runway	B	3	Effectivity update: The information now also applies to MSN 11531.
DSC-20-30 180 degrees Turn on Runway	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-40 Ground Clearance Diagram	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-50 ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-50 ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-20-50 Minimum Visual Ground Segments (Flare Phase)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-50 Minimum Visual Ground Segments (Flare Phase)	B	4	Effectivity update: The information now also applies to MSN 11531.

AIRCRAFT SYSTEMS - AIR CONDITIONING / PRESSURIZATION / VENTILATION

Localization Title	Toc Index	ID	Reason
DSC-21-10-10 Architecture	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-10-20 Pack Schematic (Simplified)	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-10-20 Hot-Air Pressure-Regulating Valve	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-30 Air Conditioning System Controllers	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-40 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-40 Air Cycle Machine Failure	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-50 Controls on Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-50 ECAM COND Page	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-50 ECAM Cruise Page	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-50 Engine Warning Display	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-20-40 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-20-40 ECAM CAB PRESS Page	B	2	Effectivity update: The information now also applies to MSN 05947, 05987, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-20-40 ECAM CAB PRESS Page	B	3	Effectivity update: The information no longer applies to MSN 02321.
DSC-21-20-40 ECAM CAB PRESS Page	B	5	Effectivity update: The information no longer applies to MSN 05947, 05987.
DSC-21-20-40 ECAM Cruise Page	C	6	Effectivity update: The information now also applies to MSN 11531, 11572, 11597.
DSC-21-20-40 ECAM DOOR/OXY Page	D	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-30-20 Normal Operation, Open-Circuit Configuration	C	2	Effectivity update: The information now also applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-30-20 Normal Operation, Open-Circuit Configuration	C	3	Effectivity update: The information no longer applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883.

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Localization Title	Toc Index	ID	Reason
DSC-21-30-20 Normal Operation, Close-Circuit Configuration	D	4	Effectivity update: The information now also applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-30-20 Normal Operation, Close-Circuit Configuration	D	6	Effectivity update: The information no longer applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883.
DSC-21-30-20 Normal Operation, Intermediate Configuration	E	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-21-30-60 ECAM CAB PRESS Page	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-40-10 Schematic	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-40-30 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-40-35 ECAM COND Page	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

AIRCRAFT SYSTEMS - AUTO FLIGHT - GENERAL

Localization Title	Toc Index	ID	Reason
DSC-22_10-10 FMGC Standard	A	1	Effectivity update: The information no longer applies to MSN 02014.

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Localization Title	Toc Index	ID	Reason
DSC-22_10-10 FMGC Standard	A	2	Effectivity update: The information now also applies to MSN 03002, 03284, 03313, 03565, 03630, 03662, 04544, 04734.
DSC-22_10-10 FMGC Standard	A	3	Effectivity update: The information now also applies to MSN 02014.
DSC-22_10-10 FMGC Standard	A	4	Effectivity update: The information no longer applies to MSN 06798, 06949, 07005, 07081, 07098.
DSC-22_10-10 FMGC Standard	A	5	Effectivity update: The information now also applies to MSN 06798, 06949, 07005, 07081, 07098.
DSC-22_10-10 FMGC Standard	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-10 Flight Management Guidance Computer (FMGC)	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-10 Multipurpose Control and Display Unit (MCDU)	G	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-20 System Interface Diagram	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 Independent Mode	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 Single Mode	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 Back Up Navigation Mode	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - MCDU Interface	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - General	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Keyboard	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Annunciators (On the Side of the Keyboard)	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Annunciators (On the Top of the Keyboard)	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - BRT and DIM Keys	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_10-40-10 MCDU - Colors	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Screen Prompts	A	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - MCDU Function Keys	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-20 Lateral Control Area	D	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_10-40-20 Vertical Control Area	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_10-40-50 Flight Plan Display Colors	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_10-50-20 Characteristic Speeds	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_10-50-50 Other Speeds	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_10-50-50 Other Speeds	A	2	Effectivity update: The information now also applies to MSN 11531.

AIRCRAFT SYSTEMS - AUTO FLIGHT - FLIGHT MANAGEMENT

Localization Title	Toc Index	ID	Reason
DSC-22_20-20-10 GPS Position	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-20-10 Position Monitor	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-10 Navigation Modes	H	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-20 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-20 Estimated Position Uncertainty	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-30 DME	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-30 Manual Tuning	I	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-40 Alignment of Inertial Reference System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 Flight Plan Construction	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 Flight Plan Capacity	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 Lateral Revisions	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Temporary F-PLN (TMPY)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting an Airway with "Via" - General	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting an Airway with "Via" - The Pilot Wishes to Insert One Airway Segment to an Ending Waypoint	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting an Airway with "Via" - Flight Plan Insertion	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - General	D	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15	D	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
Inserting a Waypoint - Waypoint Identification			
DSC-22_20-30-10-15 Inserting a Waypoint - Waypoint Inserted Directly in the Flight Plan	D	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Along Track Waypoint Insertion	D	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Waypoint Inserted Through the Use of "Next Waypoint"	D	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Latitude/Longitude Crossing Waypoint Insertion	D	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - General	E	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - Inserting a Radial Intercept Waypoint	E	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - Inserting a Circle Intercept Waypoint	E	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - Inserting an Abeam Intercept Waypoint	E	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a New Destination	F	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - General	G	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - Hold to Fix (HF)	G	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - Hold to Altitude (HA)	G	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - Procedure to Insert a Hold (Hold with Manual Termination)	G	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-30-10-15 Holding Pattern - Procedure to Delete a Hold (Hold with Manual Termination)	G	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Offset - General	H	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Offset - Inserting an Offset	H	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Offset - Manual Cancellation of an Offset	H	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Alternate Function - General	I	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Alternate Function - Review and Selection of Alternate Airport	I	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Enable ALTN	J	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - General	K	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Procedure for DIR TO Waypoint	K	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Particular Cases for Use of DIR TO	K	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Procedure for DIR TO/ABEAM	K	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Procedure for DIR TO/Intercept	K	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 OVFY (Overfly) Key	L	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 POSITION update at	M	35	Effectivity update: The information now also applies to MSN 02014, 03002, 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Update at	N	36	Effectivity update: The information no longer applies to MSN 02014, 03002, 03284, 03313, 03565, 03662, 04544, 04734.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-30-20-05 Flight Phases	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-05 Vertical Revision	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-05 Vertical Constraints (Speed, Altitude, Time)	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Required Time of Arrival (RTA) - General	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Required Time of Arrival (RTA) - Entering a Required Time of Arrival	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - General	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Trip Wind and Temperature During F-PLN Initialization	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Wind and Temperature During F-PLN Initialization	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Cruise Winds and Temperatures	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Effect of Wind Entries On Optimum Flight Level	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Descent Winds	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Alternate Wind	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
Wind - Temperature - QNH - Entering the Approach Wind Temperature and QNH			
DSC-22_20-30-20-25 Constant Mach Segment - General	D	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Constant Mach Segment - Entering a Constant Mach Segment	D	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-10 Optimization	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Computation of Predictions	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Predictions Displayed on the Navigation Display	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Examples of MCDU Predictions	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Other Computations - Engine-out Case	K	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Other Computations - Recommended Maximum Altitude (REC MAX)	K	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-45-10	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-45-10 Associated Alerts	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 MCDU MENU Page	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 INIT A Page	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Route Selection Page	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 IRS INIT Page	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 WIND Pages	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 INIT FUEL PRED Page	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-50-10-25 Fuel Prediction Page	I	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Flight Plan Pages	J	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Fix Info Page	L	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Offset Page	M	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Airways Page	N	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Departure Pages	O	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Hold Pages	P	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Direct TO Page	Q	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Alternate Page	S	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Route Selection Page for Alternate	T	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 VERTICAL REVISION Pages	U	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Step ALTS Page	V	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 RTA Page	W	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Data Index Pages	X	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Waypoint/Stored Waypoint/New Waypoint Pages	Y	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 NAVAID/Stored NAVAID/New NAVAID Pages	Z	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Runways/Stored Runways/New Runway Pages	AA	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Route/Stored Route/New Route Pages	AB	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-50-10-25 Aircraft Status Page	AC	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 P/N XLOAD Page	AD	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 P/N Status Pages	AE	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Duplicate Names Page	AF	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Position Monitor Page	AG	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Position Monitor and Position Frozen Page	AH	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Selected NAVAIDS Page	AI	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 IRS Monitor Page	AJ	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 GPS Monitor Page ◁*	AK	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Closest Airports Pages	AL	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Equi-Time Point Page	AM	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Print Function Pages	AN	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 ACARS Function Page	AO	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 ACARS Function Page 1	AP	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Uplink TO Data REQ Pages	AQ	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Uplink MAX TO Data Pages	AR	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Uplink FLX TO Data Pages	AS	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 ACARS Function Page 2	AT	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Page	AU	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Takeoff Page	AV	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-50-10-25 PERF Climb Page	AW	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Cruise Page	AX	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Descent Page	AY	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF APPR Page	AZ	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Go Around Page	BA	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PROG Pages	BB	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Predictive GPS Pages	BC	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Report Page	BD	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Radio NAV Page	BE	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Secondary Pages	BF	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Back Up NAV Pages	BG	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 General	BH	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 CRZ TEMP Page	BH	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-20-35 MCDU Message List	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_20-50-30 MCDU Data Format List	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-10 MCDU Altitude Predictions - In Flight	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-10 Target Altitude on PFD	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-20 Clearing Data Fields	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 En Route Diversion with Several Airports Available	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
Diversion Preparation on the Secondary Flight Plan			
DSC-22_20-60-30 Miscellaneous	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 Execution of the Diversion	G	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 Diversion to the Alternate Airport	H	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Flight Management Part	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out Conditions	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out SID - General	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out SID - Before the Diversion Point	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out in CLB Phase (above acceleration altitude) - Aircraft is Flying	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out in Cruise Phase	H	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out in Descent Phase	I	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-50 Secondary Flight Plan	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-60 Stored Route Function	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-70 Report Page Access	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-80 Closest Airports	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-90 How to Insert a Time Marker	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-100 Step Climb/Step Descent	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-120 Equitime Point	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-120 Equitime Point Entry	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-60-130 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Selection - FM F-PLN Download in MCDU	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Selection - Example of Downloaded F-PLN	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - AP and A/THR	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Navigation Monitoring	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Flight Planning	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Waypoint Insertion	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Waypoint Deletion	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Overfly Insertion/Deletion	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Direct to a Waypoint	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - CLR Waypoint/Discontinuity	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Approaches	C	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - End of Descent	C	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Non ILS Approaches	C	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-60-130 Back Up NAV Operation - ILS Approaches	C	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Flight Plan Initialization Through ACARS	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Takeoff Data - General	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Takeoff Data - Procedure to Insert Uplink Takeoff Data	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Wind Data - Request for Wind Data	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Wind Data - Procedure to Insert Wind Data	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Print Function	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Print Function Access	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 On Ground Before Engine Start	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Example (FM Preflight Report)	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 In Flight	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Example (FM Inflight Report)	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Reaching the Gate After Landing	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Example (FM Postflight Report)	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-85 QNH Use for Aircraft NOT Equipped with QFE Option	B	2	Effectivity update: The information no longer applies to MSN 02321.
DSC-22_20-85 QNH Use for Aircraft NOT Equipped with QFE Option	B	3	Effectivity update: The information now also applies to MSN 02321, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - FM Reset	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - FM Resynchronization	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - FMGC Status During a Reset/Resynchronization	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - Single Reset or Dual Reset with Autorecovery	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - Single Latch	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - Dual Reset with Loss of Data and Autorecovery	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGC Reset and Resynchronization - Dual Latch	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Manual FMGS Reset - General	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-100-20 Loss Of FMS Position Further To IRS Loss	E	1	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_20-100-20 Erroneous Fuel Prediction In The Case Of Descent With Two Altitude Constraints	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-100-20 Undue AP Disconnection or Reversion to V/S during Climb and Descent	H	3	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_20-100-20 Erroneous Trajectory while in HDG (TRK) Mode during Procedures with a Turn Direction on a Leg with an Altitude Termination	O	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-100-20 No Engagement of the PRESEL SPD TARGET in Climb	R	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-100-20 Erroneous CF Leg Computation following FMS NEW RUNWAY with LS IDENT creation	S	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - AUTO FLIGHT - FLIGHT GUIDANCE

Localization Title	Toc Index	ID	Reason
DSC-22_30-40-20-20 General - Pitch	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-40-30-10 Engagement Conditions 7	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591,

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			05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-40-30-10 HDG/TRK Preset (at Go Around) NAV mode in GA	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-30-20 Arming Conditions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-30-20 Disarming Conditions	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-30-20 Engagement Conditions	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Engagement Conditions	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Disengagement Conditions	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Reversions	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Reversions - Triple Click	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-50-10 General - TCAP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-50-20 General - TCAP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-50-30 General - TCAP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 Engagement Conditions	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 Disengagement Conditions	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 Reversions	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_30-40-80-00 Approach Selection - Manual Tuning on FMS	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-10 LOC Disarming Conditions	C	1	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-10 LOC Disarming Conditions	C	2	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-20 G/S Disarming Conditions	C	1	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-20 G/S Disarming Conditions	C	2	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-90 APP NAV and FINAL Disarming Conditions	C	1	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-90 APP NAV and FINAL Disarming Conditions	C	2	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032,

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			03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-40-80-90 Reversions	G	7	Effectivity update: The information now also applies to MSN 11531. The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-90 Reversions	G	8	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_30-40-90-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-90-20 General	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

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DSC-22_30-40-90-30 Engagement Conditions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 AP/FD TCAS Mode Availability	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Arming Conditions	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Disarming Conditions	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Engagement Conditions	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Disengagement Conditions	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a TA is triggered	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on AP and FD	H	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on AP/FD Lateral Mode	H	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on AP/FD Vertical Mode	H	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - AP/FD Vertical Mode Engaged At Occurence of the RA	H	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - AP/FD Vertical Mode Armed at Occurrence of the RA	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on A/THR and Speed/Mach Control	H	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on ALPHA FLOOR	H	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When Clear of Conflict	I	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-110 Speed Protection due to Excessive V/S Target (AP/FD TCAS mode engaged)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-120-50 ALT in Descent with TCAS TA	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-120-70 ALT CRZ with TCAS TA	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-30 Arming Conditions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-30 A/THR Engagement In Overspeed	C	2	Effectivity update: The information now also applies to MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-50-40 A/THR Disconnection	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-40 A/THR Disconnection	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-50 A/THR Soft Mode	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-50 ALPHA FLOOR	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-60 From Soft Go-around to Thrust Reduction Altitude	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-60-20 Managed Speed Target Computation	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-60-20 Managed Speed Target Computation	D	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032,

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DSC-22_30-70 List of Approach and Landing Capabilities - FLS - Disconnect AP for Landing	A	2	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 08495, 08596, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-10 Autoland Warning Light	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-10 Autoland Warning Light	A	2	Effectivity update: The information now also applies to MSN 03002, 03284, 03313, 03565, 03630, 03662, 04544, 04734.
DSC-22_30-80-10 Autoland Warning Light	A	3	Effectivity update: The information now also applies to MSN 02014.
DSC-22_30-80-10 Autoland Warning Light	A	4	Effectivity update: The information no longer applies to MSN 02014, 03002, 03284, 03313, 03565, 03630, 03662, 04544, 04734.
DSC-22_30-80-20 FMA Display	A	1	Effectivity update: The information no longer applies to MSN 07081, 07098.
DSC-22_30-80-20 FMA Display	A	2	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK LO (armed)	Y	3	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK LO (activated)	Z	4	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK MAX (activated)	AA	5	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_30-80-20 BRK MAX (armed) on Line 2	AB	6	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK MAX (armed) on Line 3	AC	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 04827, 04860, 06634, 06871.
DSC-22_30-80-20 BRK MED (armed)	AD	8	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK MED (activated)	AE	9	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 CHECK APP SEL	AJ	10	Effectivity update: The information no longer applies to MSN 02321.
DSC-22_30-80-20 CHECK APPR SELECTION	AK	11	Effectivity update: The information now also applies to MSN 02321, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 CHECK SPEED MODE	AL	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 DISCONNECT AP FOR LDG	AR	13	Effectivity update: The information now also applies to MSN 02321. The information no longer applies to MSN 05947, 05987, 07081, 07098, 08495, 08596.
DSC-22_30-80-20 DISCONNECT AP FOR LDG	AR	14	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 08495, 08596, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 EXP CLB	AS	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 EXP DES	AT	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 FINAL APP SELECTED	BB	22	Effectivity update: The information now also applies to MSN 11531. The information no longer applies to all MSN.
DSC-22_30-80-20 FOR GA: SET TOGA	BG	26	Effectivity update: The information now also applies to MSN 03002, 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 LVR CLB	BS	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 LVR MCT	BT	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 LVR TOGA	BU	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_30-80-20 LVR TOGA	BU	30	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098.
DSC-22_30-80-20 LVR TOGA	BU	31	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-22_30-80-20 MACH (with a flashing amber box)	BW	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 MAN GA SOFT	BZ	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 SPEED with a flashing amber box	CU	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TCAS (armed)	CX	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TCAS (engaged)	CY	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TCAS RA INHIBITED	CZ	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 T/D REACHED	DA	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TRK FPA DESELECTED	DI	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-110 Left Turn Not Expected while in HDG or TRK Mode	C	1	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-110 Spurious CAT 2 INOP	D	2	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734. The information no longer applies to MSN 06798, 06949, 07005, 07081, 07098.

AIRCRAFT SYSTEMS - AUTO FLIGHT - FLIGHT AUGMENTATION

Localization Title	Toc Index	ID	Reason
DSC-22_40-20 RUDDER TRAVEL LIMITATION	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_40-30 PFD Speed Scale Management	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_40-30 Alpha-Floor Protection - Inhibition Conditions - FAC	C	2	Effectivity update: The information now also applies to MSN 01459, 01593, 01825, 02014, 03032, 03111, 03222, 03284, 03313, 03565, 03662, 03733, 03816, 04171, 04441, 04446, 04544, 04953, 05749, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - AUTO FLIGHT - AOC FUNCTIONS

Localization Title	Toc Index	ID	Reason
DSC-22_45 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Flight Plan Initialization Function	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Takeoff Data Function	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Wind Data Function	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Flight Reports	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - AUTO FLIGHT - PRINT INTERFACE

Localization Title	Toc Index	ID	Reason
DSC-22_46 Print Function	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_46 AOC/Printer Programming Options ◁	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - COMMUNICATIONS

Localization Title	Toc Index	ID	Reason
DSC-23-10-10 Communication System Architecture	B	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098,

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			08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-10-20 Description	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-10-20 Radio Management Panel	B	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-30 Audio Management System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-30 Cabin Intercommunication Data System	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-10-40 Description	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-50 Audio Control Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-50 Audio Switching	D	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591,

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			05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-20-20 Introduction	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-20-20 Calls from the Cabin	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-20-40 Description	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806,

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DSC-23-20-40 Controls and Indicators	B	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-30-10 Description	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-30-10 VHF	B	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014,

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DSC-23-30-10 HF	C	5	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-30-10 HF	C	6	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
DSC-23-30-10 SELCAL (Selective calling)	D	7	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-40-30 Controls and Indicators	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-50 AUDIO 3 XFRD	C	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014,

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DSC-23-50 SATCOM ◁	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-60 VHF, HF Utilization - Tuning	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-60 VHF, HF Utilization - Transmission and Reception	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.

AIRCRAFT SYSTEMS - ELECTRICAL

Localization Title	Toc Index	ID	Reason
DSC-24-10-30-20 In Flight	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-20 On Ground	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of One Engine Generator	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of AC BUS 1	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of One TR	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of TR 1 and TR 2	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 EMER GEN Running	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Smoke Configuration	J	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-20 ECAM ELEC Page	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - EQUIPMENT

Localization Title	Toc Index	ID	Reason
DSC-25-10-40 Main Instrument Panel - First Officer Side	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-25-10-50 Pedestal	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-25-10-60 Overhead Panel	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.

AIRCRAFT SYSTEMS - FIRE PROTECTION

Localization Title	Toc Index	ID	Reason
DSC-26-50-10 Smoke Detection	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-26-50-10 Smoke Detection	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-26-50-10 Fire Extinguishing	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-26-50-20 CARGO SMOKE Panel	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-26-50-20 SMOKE Light	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-26-50-20 TEST pb	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-26-50-20 DISCH Light	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-26-50-20 DISCH pb	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - FLIGHT CONTROLS

Localization Title	Toc Index	ID	Reason
DSC-27-10-20 Roll Control - General	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-10-20 Speed Brakes and Ground Spoilers - Speed Brake Control	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-10-20 Speed Brakes and Ground Spoilers - Speed Brake Control	D	4	Effectivity update: The information now also applies to MSN 11531.
DSC-27-10-20 Short Airfield Package (SHARP)	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-10 General	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-20 Ground Mode	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-20-10-20 Flight Mode	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to MSN 02904.
DSC-27-20-10-20 Flare Mode	D	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773,

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DSC-27-20-10-20 Protections - High Speed Protection - Pitch Trim Setting	E	7	Effectivity update: The information now also applies to MSN 11531.
DSC-27-20-10-20 Protections - High Speed Protection - Pitch Trim Setting	E	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-20 Protections - High Speed Protection - Overspeed	E	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-20-10-30 Normal Law	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-30 Bank Angle Protection	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-30 Bank Angle Protection	B	4	Effectivity update: The information now also applies to MSN 11531.
DSC-27-20-10-40 Load Alleviation Function (LAF)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-20-20 Flight Controls Law Reconfiguration	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-20 Flight Controls Law Reconfiguration	B	2	Effectivity update: The information now also applies to MSN 11531.
DSC-27-20-20 Alternate Law	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-20-20 Alternate Law	C	4	Effectivity update: The information no longer applies to MSN 05947, 05987, 06634, 06871, 07081, 07098, 08495, 08596.
DSC-27-20-30 Glareshield	C	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229,

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DSC-27-20-30 ECAM F/CTL Page	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-30 ECAM Wheel Page	G	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-30-10 General - Slat Flap surface	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-27-30-10 General - Slat Flap surface	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-30-10 Architecture	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-30-10 Architecture	B	4	Effectivity update: The information now also applies to MSN 11531.
DSC-27-30-10 Alpha/Speed Lock Function (Slats)	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-30-10 Alpha/Speed Lock Function (Slats)	D	6	Effectivity update: The information now also applies to MSN 11531.
DSC-27-30-20 ECAM Upper Display	B	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - FUEL

Localization Title	Toc Index	ID	Reason
DSC-28-10-10 GENERAL	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-10 General	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-28-10-20 Tanks	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-20 Usable Fuel	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 GENERAL	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 GENERAL	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-30 MAIN COMPONENTS - TANK PUMPS	B	3	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-30 Main Components - Tank Pumps	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 MAIN COMPONENTS - INTERTANK TRANSFER VALVES	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 MAIN COMPONENTS - SUCTION VALVES	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 MAIN COMPONENTS - SUCTION VALVES	B	7	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-30 Engine Feed	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 Fuel Feed Sequence	D	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-60 Fuel Recirculation System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-60 Fuel Recirculation System	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-60 Fuel Recirculation System - Description	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-60 Fuel Recirculation System - Description	A	4	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-70 Refueling - Defueling	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-80 FUEL QUANTITY INDICATION (FQI) SYSTEM	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-28-10-80 FUEL LEVEL SENSING CONTROL UNIT (FLSCU)	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-80 Fuel Level Sensing Control Unit (FLSCU)	D	4	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-80 Fuel System Architecture	G	7	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-28-10-90 Fuel Tank Inerting System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 L(R) TK PUMPS 1(2) pb-sw	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 MODE SEL pb-sw	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 MODE SEL pb-sw	A	4	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 CTR TK PUMP 1(2) pb-sw	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 ACT pb-sw	A	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229,

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Localization Title	Toc Index	ID	Reason
			03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-28-20 Refueling Control Panel	C	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-28-20 CKPT Light	C	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 ECAM Fuel Page	E	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 CTR Tanks Valves Indications	E	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 LP Valve (ENG) Indications	E	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-28-20 Transfer Valve Indications	E	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Transfer Valve Indications	E	22	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 APU Indications	E	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 Fuel Temperature Indication	E	24	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Fuel Temperature Indication	E	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Fuel Quantity Indication	E	26	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Fuel Quantity Indication	E	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Boxed Indications	E	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Boxed Indications	E	29	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Overflow Indication	E	30	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Overflow Indication	E	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Advisory	E	32	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Advisory	E	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Fuel On Board (FOB) Indication	E	34	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Fuel On Board (FOB) Indication	E	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 ACT ◁ to Center Tank Fuel Transfer Indication	E	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Fuel Flow Indication	E	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 ECAM Upper Display	F	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 Total Fuel Indication	F	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Total Fuel Indication	F	41	Effectivity update: The information now also applies to MSN 11531.

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Localization Title	Toc Index	ID	Reason
DSC-28-20 OUTR TK FUEL XFRD	G	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

AIRCRAFT SYSTEMS - HYDRAULIC

Localization Title	Toc Index	ID	Reason
DSC-29-10-30 Distribution	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-29-20 ECAM HYD Page	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - ICE AND RAIN PROTECTION

Localization Title	Toc Index	ID	Reason
DSC-30-20-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-20-20 Engine Warning Display	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-20-20 ICE NOT DET	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-20 Engine Warning Display	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-20 ICE NOT DET	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-70-10 Ice Detection System	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - INDICATING/RECORDING SYSTEMS

Localization Title	Toc Index	ID	Reason
DSC-31-05-10 Introduction	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-30 Display Unit (DU)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-31-05-30 Display Management Computer (DMC)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-30 EIS Block Diagram	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-50 Reconfiguring the Display Management Computer (DMC)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 General	F	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 Failure of a DU	G	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 Feedback Messages	H	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 DU Reset	J	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 ECAM DU Arrangement	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - WINDSHEAR	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - RETARD RETARD	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - WINDSHEAR	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - RETARD RETARD	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - WINDSHEAR	F	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-31-10 Audio Indicators - RETARD RETARD	F	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - PITCH, PITCH	F	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - WINDSHEAR	F	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - RETARD RETARD	F	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - PITCH, PITCH	F	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - BANK BANK	F	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-15 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-15 Memos - TO and LDG Memos	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-15 Configuration Warnings	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-20 System Pages	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-20 Permanent Data	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 1 - The Ecam Detects No Failure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 2 - The ECAM Detects a Failure	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 3 - The Flight Crew Follows the Instruction Displayed on the E/WD	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 4 - One of the Pilots Pushes the CLR Pushbutton on the ECP	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-31-25-20 5 - One of the Pilots Pushes the CLR Pushbutton a Second Time	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 6 - One of the Pilots Pushes the CLR Pushbutton a Third Time	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-27 Description	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-30 ECAM Control Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-30 Switching Panel	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-30 Memo Display	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 General	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Attitude Data	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Airspeed	D	5	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-31-40 Airspeed	D	6	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Altitude	E	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Altitude	E	8	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098.
DSC-31-40 Altitude	E	9	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-31-40 Altitude (CONT'D)	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Vertical Speed	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Heading	H	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Trajectory Deviation - ILS Approach (CONT'D)	K	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Trajectory Deviation - RNP-RNAV Non Precision Approach	K	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-31-40 Altitude Alert	N	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40	O	17	Effectivity update: The information now also applies to MSN 05947, 05987, 06634, 06871, 07081, 07098, 08495, 08596, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40	O	18	Effectivity update: The information now also applies to MSN 02321, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40	O	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 ROSE Modes	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 ROSE LS Mode	C	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-31-45 Cross Track Error	E	5	Effectivity update: The information now also applies to MSN 11531.
DSC-31-45 Cross Track Error	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-31-45 Plan Mode	F	9	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595,

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Localization Title	Toc Index	ID	Reason
			03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-31-45 EGPWS	I	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 Flags and Messages Displayed on ND	K	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-31-45 Flags and Messages Displayed on ND	K	12	Effectivity update: The information now also applies to MSN 11531.
DSC-31-45	K	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45	K	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45	K	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-50	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-55-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-55-20 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-55-20 Operation in Internal Mode	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-60-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-60-30 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - LANDING GEAR

Localization Title	Toc Index	ID	Reason
DSC-32-10-30 Proximity Detectors on Shock Absorbers	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-10-40 WHEEL SD Page	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-10-40 Memo Display	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-20-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-20-10 Architecture	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-20-20 WHEEL SD Page	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Auto Brake - System Arming	C	2	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Auto Brake - System Arming	C	3	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-32-30-10 Auto Brake - System Activation	C	4	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Auto Brake - System Activation	C	5	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-32-30-10 Braking Modes - Alternate Braking with Anti-Skid	D	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Braking Modes - Alternate Braking without Anti-Skid	D	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Braking Modes - Parking Brake	D	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Braking Schematic	E	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 Center Instrument Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 Auto BRK Panel	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-32-30-20 WHEEL SD Page	E	3	Effectivity update: The information now also applies to MSN 02321.
DSC-32-30-20 WHEEL SD Page	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 WHEEL SD Page	E	5	Effectivity update: The information no longer applies to MSN 02321.
DSC-32-30-20 Audio Indicators	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 AUTO BRK OFF	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - LIGHTS

Localization Title	Toc Index	ID	Reason
DSC-33-20-20 Overhead Panel	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-33-30-10 Proximity Emergency Escape Path Marking System/Exit Signs	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-33-30-20 Controls and Indicators	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - NAVIGATION

Localization Title	Toc Index	ID	Reason
DSC-34-NAV-10-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 ADIRS SWTG	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 IR IN ATT ALIGN	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 IRS IN ALIGN X MN	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 Maximum Differences Between Speed/Mach Indications	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Speed Monitoring Function	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-34-NAV-10-30-20 Asscociated Alerts and Messages	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Speed Monitoring Status	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Digital Backup Speed/Altitude - General	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Digital Backup Speed/Altitude - Digital Backup Speed	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Description of the ISIS	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Attitude	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Airspeed	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Altimeter	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Landing System Function	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Bugs Function	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Flags	H	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-30-10 Architecture	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098,

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Localization Title	Toc Index	ID	Reason
			08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-34-NAV-30-20 VOR	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482. The information no longer applies to all MSN.
DSC-34-NAV-30-20 Marker Beacon	E	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482. The information no longer applies to all MSN.
DSC-34-NAV-30-30 Radio Management Panel (RMP)	F	5	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593,

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Localization Title	Toc Index	ID	Reason
			01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.

AIRCRAFT SYSTEMS - SURVEILLANCE

Localization Title	Toc Index	ID	Reason
DSC-34-SURV-10-10 Principle	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-34-SURV-10-10 ADS-B OUT	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-10-20 Control Panels	B	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-34-SURV-30-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 Windshear Alerts During Takeoff Roll, Up to 100 knots	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 Windshear Alerts Above 50 feet	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 Windshear Alerts Inhibition	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-30 Control Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-30 Weather Radar indication on ND	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-34-SURV-30-30 PWS ◁ indication on PFD and ND	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-30 Memo Display	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 1 : Excessive Rate of Descent	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 2 : Excessive Terrain Closure Rate	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 3 : Altitude Loss After Takeoff	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 4 : Unsafe Terrain Clearance when Not in Landing Configuration	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 5 : Descent Below Glideslope	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Terrain Awareness and Display	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Terrain Caution and Warning Envelope	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Terrain Clearance Floor	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Runway Field Clearance Floor	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Runway Awareness and Advisory System	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-40 Overhead Panel	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658,

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Localization Title	Toc Index	ID	Reason
			06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098.
DSC-34-SURV-40-40 Instrument Panels	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-40 TERR STBY	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-50-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-50-20 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-50-30 Controls and Indicators	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-10 Main Components	C	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-34-SURV-60-10 TCAS Modes	E	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097,

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Localization Title	Toc Index	ID	Reason
			06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-34-SURV-60-10 AP/FD TCAS	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-20 ATC/TCAS Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-34-SURV-60-20 PFD Indications	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-20 Aural Messages	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-20 Memo Display	G	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - OXYGEN

Localization Title	Toc Index	ID	Reason
DSC-35-20-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-20-10 Schematic	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-20-20 ECAM DOOR/OXY Page	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-20-30 How to Test the Mask	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806,

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Localization Title	Toc Index	ID	Reason
			06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-35-30-20 HI ALT SET	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-30-20 OXY PAX ON	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-40-10 Flight Crews Portable Oxygen System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-40-10 Using the Hood	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - PNEUMATIC

Localization Title	Toc Index	ID	Reason
DSC-36-10-20 Architecture	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-20 Air Bleed Selection	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-20 Pressure Regulation and Limitation	D	3	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
DSC-36-10-20 Pressure Regulation and Limitation	D	4	Effectivity update: The information now also applies to MSN 03229, 03565, 07081.
DSC-36-10-20 Pressure Regulation and Limitation	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-20 Temperature Regulation and Limitation	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-40 ECAM Indication	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-50 Leak Detection	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-60 BMC Failure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-20 Overhead Panel	A	1	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
DSC-36-20 Overhead Panel	A	2	Effectivity update: The information now also applies to MSN 03229, 03565, 07081.

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Localization Title	Toc Index	ID	Reason
DSC-36-20 Overhead Panel	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-20 ECAM Bleed Page	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - WATER / WASTE

Localization Title	Toc Index	ID	Reason
DSC-38-10 Potable Water	B	1	Effectivity update: The information now also applies to MSN 11531.
DSC-38-10 Potable Water	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

AIRCRAFT SYSTEMS - MAINTENANCE SYSTEM

Localization Title	Toc Index	ID	Reason
DSC-45-10 Architecture	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-10 Functions of the Centralized Fault Display System (CFDS)	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-20 Maintenance Menu	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-20 Last (or Current) Leg ECAM Report - Post Flight Report Print	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-25 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - INFORMATION SYSTEMS

Localization Title	Toc Index	ID	Reason
DSC-46-10-10 Overview	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-10 HF	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-10 VHF	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-46-10-40-30 ATSU DATALINK	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-30 COMM MENU	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-40 Scratchpad Messages	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY ALERT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY CALL	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY DATALINK STBY	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY MSG	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-50 Introduction	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-50 How to Initialize	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-60 ATC MSG RECORD NOT RELIABLE - Displayed at ATSU Power-up	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - APU

Localization Title	Toc Index	ID	Reason
DSC-49-10-10 Architecture	A	1	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-10-10 Architecture	A	2	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-10-20 Air Bleed System	H	1	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-10-20 Air Bleed System	H	2	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 O.verhead Panel - Master SW pb-sw	A	1	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-49-20 Overhead Panel - Master SW pb-sw	A	2	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 Overhead Panel - Start pb-sw	A	3	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 Overhead Panel - Start pb-sw	A	4	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 ECAM - AVAIL	C	5	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 ECAM - AVAIL	C	6	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 ECAM - FLAP OPEN	C	7	Effectivity update: The information no longer applies to MSN 06689.
DSC-49-20 ECAM - FLAP OPEN	C	8	Effectivity update: The information now also applies to MSN 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 ECAM - APU EGT	C	9	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 ECAM - APU EGT	C	10	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - DOORS

Localization Title	Toc Index	ID	Reason
DSC-52-10-10 Description	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-10-30 Cabin	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-10-60 Cockpit Door	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-10-80 Wing Slides	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-10-80 Escape Slide Arrangement	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-20 DOOR/OXY SD Page	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-40-10 Cockpit Door Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-52-40-20 COCKPIT DOOR LOCKING SYSTEM (CDLS)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-20 Controls - Keypad	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-20 Central Pedestal Cockpit Door Panel	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-20 Controls - Overhead Control Panel	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-30 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-40-30 General	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-52-40-30 Central Pedestal	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-40-30 Central Pedestal	B	4	Effectivity update: The information now also applies to MSN 11531.
DSC-52-40-30 Overhead Panel	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

AIRCRAFT SYSTEMS - ENGINES

Localization Title	Toc Index	ID	Reason
DSC-70-05 Overview	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-10 Engine	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-10 LP Compressor Turbine Assembly	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-10 HP Compressor Turbine Assembly	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-20 Architecture	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-20 Functions	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-20 Idle Control	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-70-30-20 Thrust Levers	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-30 Thrust Rating Limit	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-40 Manual Mode	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-40 Automatic Mode	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-40 Thrust Control Malfunction Logic	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 Integrated Fuel Pump and Control (IFPC)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 Fuel Oil Heat Exchanger	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 Fuel Filter	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 IDG Cooling Recirculation System	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-50 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-68 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-68 Cooling	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-68 Engine Stability	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-70 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-70 Protection	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-70 Schematic	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-20 Architecture	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-30 Ignition for Starting	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-30 Continuous Ignition	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-70-80-40 Protection	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Dry Cranking	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Second Step	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Manual Starting	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Engine Cooling	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Automatic Engine Start with Dual Cooling - Envelope	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-10 ENG MAN START Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-10 ENG DUAL COOLING Panel	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-10 ENG DUAL COOLING pb-sw	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Engine Warning Display	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Thrust Rating Mode and Thrust Limit Value	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Thrust Limit Value	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Flex Temperature	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Bleed Air Configuration	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Current EGT	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 EGT Limit	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 EGT Red Line	A	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Indicator	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Current N1	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-70-90-40 N1 Trend	A	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Command	A	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Transient N1	A	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Thrust Lever Position	A	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Limit	A	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Red Line	A	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N2	A	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Cooling Indication	A	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 ENG SD Page	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Oil Quantity	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Oil Pressure	B	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Oil Temperature	B	22	Effectivity update: The information now also applies to MSN 07081, 07098.
DSC-70-90-40 Oil Temperature	B	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Oil Temperature	B	24	Effectivity update: The information no longer applies to MSN 07081, 07098.
DSC-70-90-40 Oil Filter CLOG Indication	B	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1, N2 Vibrations	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Starting Sequence Indication	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Nacelle Temperature Indication	B	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-50 ENG 1(2) COWL	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-50 DUAL COOLING	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-70-95 Erroneous Detection of Engine Fuel Leak	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

PROCEDURES - ABNORMAL AND EMERGENCY PROCEDURES

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PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - ENG	A	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - OXY	A	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - ENG	A	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - OXY	A	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] AIR	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] BRAKES	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] DOOR	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] ENG	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] FUEL	A	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139,

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PRO-ABN-ABN-QRH [QRH] NAV	A	8	Effectivity update: The information no longer applies to MSN 08635, 10949, 11139.
PRO-ABN-ABN-QRH [QRH] SMOKE	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	15	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	18	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	23	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000,

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			04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	30	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139,

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			11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	38	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	46	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	54	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032,

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			03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	63	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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			06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	72	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

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PRO-ABN-ABN-RESET System Reset Table - ELEC	B	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	82	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	89	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	97	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	98	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	100	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	101	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	102	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	106	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446,

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PRO-ABN-ABN-RESET System Reset Table - DOOR	B	107	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	112	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	114	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	115	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139,

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			11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	116	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	118	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	119	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	120	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	121	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	122	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	124	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	125	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - DOOR	B	126	Effectivity update: The information now also applies to MSN 11531.

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PRO-ABN-ABN-RESET System Reset Table - ELEC	B	127	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	129	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	130	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	131	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	132	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	133	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	134	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	135	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	137	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	138	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

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PRO-ABN-ABN-RESET System Reset Table - ELEC	B	139	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	140	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	141	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	142	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	143	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	144	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	145	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	146	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	147	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	149	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	150	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139,

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			11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	151	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	152	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	153	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	154	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	155	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	156	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	157	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	158	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	159	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	160	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	161	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	163	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	164	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591,

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PRO-ABN-ABN-RESET System Reset Table - ELEC	B	165	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	166	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	167	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	168	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	169	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	170	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	171	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - BRAKES	B	172	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	173	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	174	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	175	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	177	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	178	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229,

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PRO-ABN-ABN-RESET System Reset Table - ELEC	B	179	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	180	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	181	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	182	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	183	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	184	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	185	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	186	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - BRAKES	B	187	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	188	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	189	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	190	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	193	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	194	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	195	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	196	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	197	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	198	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	199	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	200	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	201	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - BRAKES	B	203	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	204	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	205	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	206	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DOOR	B	211	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	212	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	213	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	215	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ALL PITOT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ALL PITOT - FWSPAGE	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O AOA	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O AOA	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O AOA - FWSPAGE	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O PITOT	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O PITOT - FWSPAGE	E	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY AOA	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY AOA	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY AOA - FWSPAGE	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY PITOT	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE	G	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
ANTI ICE CAPT + STBY PITOT - FWSPAGE			
PRO-ABN-A-ICE ANTI ICE CAPT PITOT	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT L(R) STAT	I	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT AOA - FWSPAGE	J	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT AOA	J	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT AOA - FWSPAGE	J	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT PROBES	K	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE DETECT FAULT	L	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE DETECT FAULT	L	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE DETECT FAULT - FWSPAGE	L	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)	M	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)	M	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)	N	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)	N	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT - FWSPAGE (ENG 1(2) A.ICE MON FAULT)	N	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) OVER PRESS	O	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) OVER PRESS	O	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-A-ICE ANTI ICE ENG 1(2) VALVE CLSD	P	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) VALVE OPEN	Q	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY AOA	R	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY AOA	R	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY AOA - FWSPAGE	R	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY PITOT	S	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY PITOT - FWSPAGE	S	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O PITOT or L(R) STAT or AOA	T	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O PROBES	U	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ICE DETECTED	V	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ICE DETECTED	V	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE STBY PITOT or L(R) STAT or AOA	Z	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE STBY PROBES	AA	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR [QRH] BLEED 1+2 FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU BLEED LEAK APU LEAK FED BY ENG	E	2	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU BLEED LEAK APU LEAK FED BY ENG	E	3	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU BLEED LEAK - FWSPAGE APU LEAK FED BY ENG	E	4	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-AIR AIR APU LEAK DET FAULT	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU LEAK DET FAULT	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU LEAK DET FAULT - FWSPAGE	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR BLEED LEAK	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR BLEED LEAK	H	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR BLEED LEAK	H	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR COND CTL 1(2) - A(B) FAULT	I	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR COND CTL 1(2) - A(B) FAULT	I	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR COND CTL 1(2) - A(B) FAULT - FWSPAGE	I	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED ABNORM PR	J	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED ABNORM PR - FWSPAGE	J	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	16	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	17	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	18	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	19	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	20	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	21	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE	K	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	23	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE	K	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED	L	27	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED	L	29	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED	L	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED	L	37	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE	M	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK	N	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK	N	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE LEFT LEAK	N	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT RIGHT LEAK	O	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT RIGHT LEAK	O	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE RIGHT LEAK	O	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK AND RIGHT LEAK	P	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK RIGHT LEAK	P	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE LEFT LEAK RIGHT LEAK	P	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LO TEMP (OPPOSITE BLEED NOT AVAILABLE)	R	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (OPPOSITE BLEED NOT AVAILABLE)	R	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (OPPOSITE BLEED NOT AVAILABLE)	R	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED LO TEMP	S	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1 + 2 BLEED LO TEMP - FWSPAGE	S	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1 + 2 BLEED LO TEMP - FWSPAGE	S	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP - FWSPAGE	T	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP	T	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP - FWSPAGE	T	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP	T	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP	T	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP - FWSPAGE	T	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR	U	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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AIR ENG 1(2) BLEED LEAK - FWSPAGE			
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK - FWSPAGE	U	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK - FWSPAGE	U	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK - FWSPAGE	U	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED NOT CLSD - FWSPAGE	V	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT	X	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT - FWSPAGE	X	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT	X	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT	X	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT - FWSPAGE	X	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	78	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000,

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			04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK - FWSPAGE	Z	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	80	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	81	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773,

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			04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK - FWSPAGE	Z	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	83	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR L(R) WING LEAK - FWSPAGE	Z	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) FAULT	AB	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) FAULT - FWSPAGE	AB	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1+2 FAULT	AC	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-AIR AIR PACK 1 + 2 FAULT - FWSPAGE	AC	89	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1+2 FAULT	AC	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1+2 FAULT	AC	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1 + 2 FAULT	AC	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1 + 2 FAULT - FWSPAGE	AC	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) OVHT	AE	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) REGUL FAULT	AF	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) REGUL FAULT	AF	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) REGUL FAULT-FWSPAGE	AF	97	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR X BLEED FAULT - FWSPAGE	AG	98	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT	E	1	Effectivity update: The information no longer applies to MSN 10949, 11139.
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT	E	2	Effectivity update: The information no longer applies to MSN 10949, 11139.
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT - FWSPAGE	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FAC VERSIONS DISAGREE	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FAC VERSIONS DISAGREE	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FCU 1 + 2 FAULT	H	7	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
PRO-ABN-AUTO_FLT AUTO FLT FCU 1 + 2 FAULT	H	8	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT	I	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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AUTO FLT FMGC VERSIONS DISAGREE			
PRO-ABN-AUTO_FLT AUTO FLT FMGC VERSIONS DISAGREE	I	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT REAC W/S DET FAULT	J	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT REAC W/S DET FAULT	J	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT REAC W/S DET FAULT - FWSPAGE	J	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRIM SYS	L	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM 1(2)	M	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM SYS - FWSPAGE	N	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM SYS	N	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM SYS - FWSPAGE	N	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT TCAS MODE FAULT	O	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT TCAS MODE FAULT	O	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT TCAS MODE FAULT - FWSPAGE	O	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS	Q	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BLEED BLEED MONIT SYS 1(2) FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BLEED BLEED MONIT SYS 1(2) FAULT	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-BLEED BLEED MONIT SYS 1(2) FAULT - FWSPAGE	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES [MEM] LOSS OF BRAKING	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES [QRH] ASYMMETRIC BRAKING	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN BRK FAULT	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN BRK FAULT	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN BRK FAULT - FWSPAGE	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN L(R) RELEASED	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN L(R) RELEASED	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN L(R) RELEASED - FWSPAGE	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT	G	9	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT - FWSPAGE	G	10	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT - FWSPAGE	G	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-BRAKES BRAKES BRK Y ACCU LO PR	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES BRK Y ACCU LO PR	H	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES BRK Y ACCU LO PR - FWSPAGE	H	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES HOT	I	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT	J	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT	J	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT - FWSPAGE	J	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT	K	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT - FWSPAGE	K	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT	K	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT	K	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT - FWSPAGE	K	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK FAULT ◁	L	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK FAULT ◁	L	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK LO PR	M	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK LO PR	M	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK LO PR - FWSPAGE	M	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES RELEASED	O	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES RELEASED	O	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES RELEASED - FWSPAGE	O	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NWS BRAKES-N/WS MINOR FAULT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NWS BRAKES - N/WS MINOR FAULT	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-CAB_PR CAB PR EXCESS CAB ALT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR EXCESS CAB ALT - FWSPAGE	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR EXCES RESIDUAL PR	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR EXCES RESIDUAL PR	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR LDG ELEV FAULT	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR SAFETY VALVE OPEN - FWSPAGE	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR SYS 1+2 FAULT - FWSPAGE	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COM COM SINGLE PTT STUCK ◁	L	18	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK - FWSPAGE	L	19	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK ◁	L	20	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK	L	21	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK - FWSPAGE	L	22	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-COND COND FWD(AFT) CARGO DUCT OVHT ◁	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND HOT AIR FAULT	H	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND L+R CAB FAN FAULT	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND LAV + GALLEY FAN FAULT - FWSPAGE	J	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CONFIG CONFIG PARK BRK ON	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT - FWSPAGE	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK COMPANY FAULT	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK COMPANY FAULT	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK COMPANY FAULT - FWSPAGE	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR [QRH] COCKPIT DOOR FAULT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R)(FWD)(AFT) AVIONICS (IN FLIGHT)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R)(FWD)(AFT) AVIONICS or STAIRS - FWSPAGE (IN FLIGHT)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) CABIN (IN FLIGHT)	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-DOOR DOOR L(R) FWD(AFT) CABIN - FWSPAGE (IN FLIGHT)	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT - FWSPAGE (IN FLIGHT)	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)	H	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (ON GROUND)	J	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (ON GROUND)	J	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR FWD(AFT)(BULK) CARGO (IN FLIGHT)	P	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR FWD(AFT)(BULK) - FWSPAGE (IN FLIGHT)	P	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS [QRH] Display Unit Failure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS EIS DMC 1(2)(3) FAULT	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS EIS DMC/FWC COM FAULT	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS EIS DMC/FWC COM FAULT	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014,

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[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS			02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	9	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION	B	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	18	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	23	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097,

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	28	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	32	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	34	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	37	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773,

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	41	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	45	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	46	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION	B	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION	B	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	58	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	61	Effectivity update: The information now also applies to MSN 02321. The information no longer applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	64	Effectivity update: The information now also applies to MSN 02321. The information no longer applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	66	Effectivity update: The information now also applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 02321.

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PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	68	Effectivity update: The information now also applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 02321.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT	D	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT	D	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT - FWSPAGE	D	73	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT	D	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT - FWSPAGE	D	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS ALTN	E	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS ALTN	E	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS FAULT	F	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS SHED	G	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC APU GEN FAULT - FWSPAGE	H	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC APU GEN FAULT - FWSPAGE	H	84	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	85	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000,

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PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	86	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	87	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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			06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT - FWSPAGE	L	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	89	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT - FWSPAGE	L	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	92	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	99	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 2 FAULT	N	101	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	102	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	115	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	116	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	117	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	119	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC EMER CONFIG	P	121	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC EMER CONFIG - FWSPAGE	P	122	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT	Q	132	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT	Q	134	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC ESS BUS SHED - FWSPAGE	R	137	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	138	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	139	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	140	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	141	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	142	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	143	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG - FWSPAGE	S	144	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) FAULT - FWSPAGE	W	145	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ELEC ELEC GEN 1(2) FAULT - FWSPAGE	W	146	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC GEN 1(2) OFF	X	147	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) OFF - FWSPAGE	X	148	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) OFF - FWSPAGE	X	149	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) OFF	X	150	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) OFF - FWSPAGE	X	151	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	152	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	153	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	154	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	155	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	156	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	157	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	158	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	159	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	160	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	161	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC IDG 1(2) FILTER CLOG	Z	162	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) FILTER CLOG	Z	163	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ELEC ELEC IDG 1(2) OIL LO LVL	AA	164	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) OIL LO LVL	AA	165	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) OIL LO PR/OVHT - FWSPAGE	AB	166	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) OIL LO PR/OVHT - FWSPAGE	AB	167	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG [QRH] ENG RELIGHT IN FLIGHT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	21	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	25	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	36	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	39	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ECAM - Pitch Table	B	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Gliding Distance & FAC	B	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted	B	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	49	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Gliding Distance & FAC	B	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted	B	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	55	Effectivity update: The information now also applies to MSN 11531.

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PRO-ABN-ENG [QRH] ENG 1(2) STALL	E	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ENGINE TAILPIPE FIRE	F	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION	G	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] One Engine Inoperative - Circling Approach	I	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG FAC 1	K	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG FAC 1	K	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE - FWS PAGE	K	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED	L	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED - FWSPAGE	L	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED	L	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG FUEL CONTAMINATED	L	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED - FWSPAGE	L	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY	M	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY	M	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY	M	80	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY - FWSPAGE	M	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR MINOR FAULT	O	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR MINOR FAULT	O	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR SYS FAULT	P	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR SYS FAULT	P	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR SYS FAULT	P	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR VALVE	Q	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR VALVE	Q	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) BOWED ROTOR PROTECTION FAULT	U	89	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) BOWED ROTOR PROTECTION FAULT	U	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) BOWED ROTOR PROTECTION FAULT	U	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COLD FUEL	V	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COLD FUEL	V	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1+2 COMPRESSOR VANE	W	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1+2 COMPRESSOR VANE	W	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COMPRESSOR VANE	Y	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COMPRESSOR VANE	Y	97	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COMPRESSOR VANE - FWSPAGE	Y	98	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) CTL SYS FAULT	Z	99	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) CTL SYS FAULT	Z	100	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) CTL SYS FAULT - FWSPAGE	Z	101	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG DUAL COOLING NOT AVAIL	AB	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG DUAL COOLING NOT AVAIL	AB	104	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EGT EXCEEDED DURING AIR START	AD	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EGT EXCEEDED DURING AIR START	AD	106	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT	AE	107	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT - FWSPAGE	AE	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT	AE	109	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT	AE	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT - FWSPAGE	AE	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC FAULT	AI	112	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) FADEC IDENT FAULT	AK	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC IDENT FAULT	AK	114	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	115	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	116	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	117	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	118	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC SYS FAULT	AN	119	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC SYS FAULT	AN	120	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC SYS FAULT	AN	121	Effectivity update: The information now also applies to MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FAN COWL NOT CLSD	AO	122	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FAN COWL NOT CLSD	AO	123	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FAIL	AP	124	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FIRE (ON GROUND)	AR	125	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL CTL FAULT	AU	126	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL CTL FAULT - FWSPAGE	AU	127	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL FILTER - PARTLY CLOGGED	AW	128	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL FILTER - PARTLY CLOGGED	AW	129	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL HEAT SYS	AZ	130	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) FUEL HEAT SYS	AZ	131	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL LEAK	BA	132	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL LEAK	BA	133	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL SENSOR FAULT	BC	134	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL SENSOR FAULT	BC	135	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	136	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	137	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	138	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	139	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG GA SOFT FAULT	BE	140	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG GA SOFT FAULT	BE	141	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG GA SOFT FAULT - FWSPAGE	BE	142	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT EXCHGR CLOG	BF	143	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT EXCHGR CLOG	BF	144	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT EXCHGR CLOG	BF	145	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS DEGRADED	BH	146	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS DEGRADED	BH	147	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS FAULT	BI	148	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS FAULT	BI	149	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS FAULT	BI	150	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) HIGH VIBRATION	BJ	151	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HIGH VIBRATION	BJ	152	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR DET FAULT	BK	153	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR DET FAULT	BK	154	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR DET FAULT	BK	155	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK	BL	156	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK	BL	157	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK	BL	158	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK - FWSPAGE	BL	159	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT FUEL	BM	160	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT FUEL	BM	161	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT FUEL - FWSPAGE	BM	162	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) IGN FAULT (IGN A or B Fault)	BO	163	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) IGN FAULT (IGN A+B Fault) - FWSPAGE	BP	164	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	165	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	166	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	167	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	168	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) MINOR FAULT	BS	169	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) MINOR FAULT	BS	170	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY	BU	171	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) N1/N2/EGT OVER LIMIT	BV	172	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) N1/N2/EGT OVER LIMIT	BV	173	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL CHIP DETECTED	BW	174	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL CHIP DETECTED	BW	175	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL FILTER CLOG	BX	176	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL FILTER - PARTLY CLOGGED	BY	177	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL FILTER - PARTLY CLOGGED	BY	178	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL HI TEMP	CA	179	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL HI TEMP	CA	180	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CB	181	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CB	182	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CC	183	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CC	184	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CC	185	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	186	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	187	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	188	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	189	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SENSOR FAULT	CE	190	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SENSOR FAULT	CE	191	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SYS FAULT	CF	192	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SYS FAULT	CF	193	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SYS FAULT	CF	194	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OVTHR PROT FAULT	CI	195	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OVTHR PROT FAULT	CI	196	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OVTHR PROT FAULT - FWSPAGE	CI	197	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV INHIBITED	CK	198	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV INHIBITED	CK	199	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV INHIBITED - FWSPAGE	CK	200	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV LOCKED (on Ground)	CM	201	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV LOCKED (On Ground)	CM	202	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV LOCKED - FWSPAGE (ON GROUND)	CM	203	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV MINOR FAULT	CN	204	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV MINOR FAULT	CN	205	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV PRESSURIZED	CO	206	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) REV PRESSURIZED	CO	207	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV PRESSURIZED	CO	208	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSE UNLOCKED	CR	209	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER CTL FAULT	CS	210	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER CTL FAULT	CS	211	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER CTL FAULT - FWSPAGE	CS	212	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER FAULT - FWSPAGE	CT	213	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG SAT ABOVE FLEX TEMP	CU	214	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG SAT ABOVE FLEX TEMP	CU	215	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SENSOR FAULT	CX	216	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SENSOR FAULT	CX	217	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SHUT DOWN - FWSPAGE	CY	218	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SHUT DOWN	CY	219	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SHUT DOWN - FWSPAGE	CY	220	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENGINE STALL	CZ	221	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) STALL - FWSPAGE	CZ	222	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) STALL - FWSPAGE	CZ	223	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT	DA	224	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT - FWSPAGE	DA	225	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) START FAULT	DA	226	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT	DA	227	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT - FWSPAGE	DA	228	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT - FWSPAGE	DB	229	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT - FWSPAGE	DB	230	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT	DB	231	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT - FWSPAGE	DB	232	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	233	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT - FWSPAGE	DC	234	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	235	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	236	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT - FWSPAGE	DC	237	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	239	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT - FWSPAGE	DC	240	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER ABV IDLE	DD	241	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER ABV IDLE	DD	242	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER DISAGREE	DE	243	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) THR LEVER DISAGREE	DE	244	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER DISAGREE - FWSPAGE	DE	245	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER FAULT	DF	246	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER FAULT	DF	247	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER FAULT - FWSPAGE	DF	248	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG T.O. THRUST DISAGREE	DG	249	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG T.O. THRUST DISAGREE	DG	250	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) TURB COOL FAULT	DH	251	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) TURB COOL FAULT	DH	252	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (ON GROUND)	DJ	253	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (ON GROUND)	DJ	254	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (AT GO-AROUND)	DK	255	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (AT GO-AROUND)	DK	256	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ALTN LAW - FWSPAGE	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-F_CTL F/CTL DIRECT LAW	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW - FWSPAGE	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (One Computer Failed) - FWSPAGE	G	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (ONE COMPUTER FAILED)	G	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (One Computer Failed) - FWSPAGE	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	14	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (Both Computers Failed) - FWSPAGE	H	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	18	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (Both Computers Failed) - FWSPAGE	H	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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F/CTL ELAC 1(2) PITCH FAULT - FWSPAGE (ONE COMPUTER FAILED)			
PRO-ABN-F_CTL F/CTL ELAC PITCH FAULT	K	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC PITCH FAULT	K	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC PITCH FAULT	K	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELEV REDUND DEGRDD	L	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELEV REDUND DEGRDD	L	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS FAULT/LOCKED	Q	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS FAULT/LOCKED	Q	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS FAULT/LOCKED - FWSPAGE	Q	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP SYS 1(2) FAULT	S	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP SYS 1(2) FAULT - FWSPAGE	S	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP/MCDU DISAGREE	T	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP/MCDU DISAGREE	T	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED	U	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR 5 FAULT	V	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR 5 FAULT	V	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR 5 FAULT - FWSPAGE	V	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL	W	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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F/CTL GND SPLR / 1+2 / 3+4 / FAULT - FWSPAGE			
PRO-ABN-F_CTL F/CTL GND SPLR NOT ARMED	X	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR NOT ARMED	X	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) AIL FAULT	Y	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L (R) AIL FAULT - FWSPAGE	Y	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) ELEV FAULT	Z	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) ELEV FAULT - FWSPAGE	Z	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L+R ELEV FAULT - FWSPAGE	AA	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) SIDESTICK FAULT - FWSPAGE	AB	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	47	Effectivity update: The information no longer applies to MSN 02321.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	49	Effectivity update: The information now also applies to MSN 01459, 02321. The information no longer applies to MSN 03111.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	51	Effectivity update: The information now also applies to MSN 03111, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 01459.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	56	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT - FWSPAGE	AD	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	60	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT - FWSPAGE	AD	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE	AG	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	64	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED - FWSPAGE	AH	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	68	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED - FWSPAGE	AH	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPD BRK FAULT - FWSPAGE	AM	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPLR FAULT	AO	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-F_CTL F/CTL SPLR FAULT	AO	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPLR FAULT	AO	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPLR FAULT - FWSPAGE	AO	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL STABILIZER JAM	AP	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL STABILIZER JAM - FWSPAGE	AP	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL [QRH] FUEL IMBALANCE	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL [QRH] FUEL LEAK	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL [QRH] FUEL LEAK	D	5	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL ACT XFR FAULT ◁	J	13	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL ACT ◁ XFR FAULT - FWSPAGE	J	14	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032,

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Localization Title	Toc Index	ID	Reason
			03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL ACT PUMP LO PR ◁	K	16	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL ACT PUMP LO PR ◁	K	17	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446,

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Localization Title	Toc Index	ID	Reason
			04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL AUTO TRANSFER FAULT	N	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL AUTO TRANSFER FAULT	N	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL AUTO TRANSFER FAULT - FWSPAGE	N	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L(R) XFR FAULT	O	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L(R) XFR FAULT	O	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L(R) XFR FAULT - FWSPAGE	O	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY CLOSED)	P	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY CLOSED)	P	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT - FWSPAGE (VALVES NOT FULLY CLOSED)	P	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY OPEN)	Q	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY OPEN)	Q	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT - FWSPAGE (VALVES NOT FULLY OPEN)	Q	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR TK XFR OFF	U	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR TK XFR OFF	U	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL ENG 1(2) LP VALVE FAULT	V	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL ENG 1(2) LP VALVE FAULT	V	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL F. USED/FOB DISAGREE	X	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL F. USED/FOB DISAGREE	X	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL F.USED/FOB DISAGREE	X	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL FQI CH 1+2 FAULT	Z	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL FQI CH 1+2 FAULT	Z	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL IDG 1(2) COOL FAULT	AC	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL IDG 1(2) COOL FAULT	AC	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL FUEL INERTING SYS FAULT	AD	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL INERTING SYS FAULT	AD	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL INERTING SYS FAULT - FWSPAGE	AD	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK HI TEMP	AE	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK HI TEMP	AE	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL	AE	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
FUEL L (R) OUTER (INNER) TK HI TEMP			
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK LO TEMP	AF	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK LO TEMP	AF	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR CLOSED	AG	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR CLOSED	AG	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR CLOSED - FWSPAGE	AG	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR OPEN	AH	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR OPEN	AH	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR OPEN - FWSPAGE	AH	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) TK PUMP 1(2) LO PR	AI	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) TK PUMP 1 + 2 LO PR	AJ	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) TK PUMP 1 + 2 LO PR	AJ	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L(R) TK PUMP 1 + 2 LO PR	AJ	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L(R) TK PUMP 1 + 2 LO PR - FWSPAGE	AJ	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	64	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	65	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	66	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	67	Effectivity update: The information now also applies to MSN 11531.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-FUEL FUEL L(R) WING TK LO LVL	AN	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	71	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK LO TEMP	AP	75	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK LO TEMP	AP	76	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW	AQ	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L(R) WING TK OVERFLOW	AQ	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW - FWSPAGE	AQ	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW	AQ	80	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW	AQ	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW - FWSPAGE	AQ	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL LO LVL DET FAULT	AT	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL LO LVL DET FAULT	AT	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS AUDIO DEGRADED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS AUDIO DEGRADED	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL SUMMARY OF HIGHLIGHTS

EFFECTIVITY HIGHLIGHTS

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Localization Title	Toc Index	ID	Reason
PRO-ABN-FWS FWS AUDIO REDUND LOST ON FWC 1(2)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS AUDIO REDUND LOST ON FWC 1(2)	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS SDAC 1 + 2 FAULT - FWSPAGE	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS SLAT (FLAP) SYNCHRO FAULT	H	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS SLAT (FLAP) SYNCHRO FAULT	H	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B ELEC PUMP LO PR or OVHT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B ELEC PUMP LO PR or OVHT - FWSPAGE	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR - FWSPAGE	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	7	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR - FWSPAGE	B	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO LVL	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO LVL - FWSPAGE	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-HYD HYD B RSVR OVHT	D	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR OVHT - FWSPAGE	D	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G ENG 1 PUMP LO PR (PTU Operative) - FWSPAGE	E	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G ENG 1 PUMP LO PR - FWSPAGE (PTU INOPERATIVE)	F	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR - FWSPAGE	G	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL - FWSPAGE	H	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-HYD HYD G RSVR OVHT	I	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT - FWSPAGE	I	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ELEC PUMP LO PR or OVHT	J	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ELEC PUMP LO PR or OVHT	J	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ELEC PUMP LO PR or OVHT - FWSPAGE	J	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ENG 2 PUMP LO PR - FWSPAGE (PTU INOPERATIVE)	L	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR	M	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR	M	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR	M	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR - FWSPAGE	M	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-HYD HYD Y RSVR LO LVL	N	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL - FWSPAGE	N	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT - FWSPAGE	O	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR	P	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR	P	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR - FWSPAGE	P	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR	P	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+B SYS LO PR	Q	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+B SYS LO PR	Q	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+B SYS LO PR - FWSPAGE	Q	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+Y SYS LO PR	R	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+Y SYS LO PR	R	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+Y SYS LO PR - FWSPAGE	R	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG [QRH] Landing with Abnormal L/G	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G DOORS NOT CLOSED - FWSPAGE	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G DOORS NOT CLOSED	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G DOORS NOT CLOSED - FWSPAGE	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWN	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED - FWSPAGE	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED - FWSPAGE	F	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT UPLOCKED - FWSPAGE	G	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT UPLOCKED	G	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT UPLOCKED - FWSPAGE	G	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR UPLOCK FAULT	H	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR UPLOCK FAULT - FWSPAGE	H	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT - FWSPAGE	I	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	J	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT - FWSPAGE	L	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G SHOCK ABSORBER FAULT (SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)	N	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G SHOCK ABSORBER FAULT - FWSPAGE (SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)	N	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G SYS DISAGREE	O	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [MEM] Stall Recovery	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] BOMB ON BOARD	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] DITCHING	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] EMER EVAC	H	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] FORCED LANDING	J	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-MISC Thrust and Airspeed	L	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-MISC Thrust Setting (N1) for Recommended Speed	L	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-MISC [QRH] VOLCANIC ASH ENCOUNTER	N	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV UNRELIABLE SPEED INDICATION	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV [QRH] ALL ADR OFF	D	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV [QRH] IR Alignment in ATT Mode	E	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AIR SPD STS CHANGED	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AIR SPD STS CHANGED	F	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AIR SPD STS CHANGED	F	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1(2)(3) FAULT - Second Threshold	G	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1(2)(3) FAULT - FWSPAGE	G	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2(1+3)(2+3) FAULT	H	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE	H	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT - FWSPAGE	I	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR ALT DISAGREE	J	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR ALT DISAGREE	J	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE - FWSPAGE	K	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE	K	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE	K	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE - FWSPAGE	K	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADS-B RPTG 1(2) FAULT	L	30	Effectivity update: The information now also applies to MSN 03180, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADS-B RPTG 1(2) FAULT	L	31	Effectivity update: The information now also applies to MSN 03180, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADS-B RPTG 1 (2) FAULT - FWSPAGE	L	32	Effectivity update: The information now also applies to MSN 03180, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALL SPD UNCERTAIN	M	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALL SPD UNCERTAIN	M	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALL SPD UNCERTAIN - FWSPAGE	M	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALT DISCREPANCY	N	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-NAV NAV ALT DISCREPANCY	N	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV CAPT(F/O)(STBY) AOA FAULT	Q	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV CAPT (F/O) (STBY) AOA FAULT	Q	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV CAPT (F/O) (STBY) AOA FAULT - FWSPAGE	Q	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT - FWSPAGE	R	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	51	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT - FWSPAGE	S	53	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	54	Effectivity update: The information now also applies to MSN 11228, 11293.

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PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR STBY	U	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR STBY	U	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO REF DISCREPANCY	W	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO REF DISCREPANCY	W	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO VALUE DISAGREE	X	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO VALUE DISAGREE	X	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT(F/O) PFD	Y	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT(F/O) PFD	Y	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD	Z	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD	Z	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD	Z	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD FAULT	AA	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD FAULT	AA	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD FAULT	AA	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD UNCERTAIN	AB	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD UNCERTAIN	AB	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-NAV NAV BKUP SPD UNCERTAIN - FWSPAGE	AB	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV GPWS TERR DET FAULT	AH	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV HDG DISCREPANCY	AI	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT	AL	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT - FMGS Specificity	AL	89	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT - FMGS Specificity	AL	90	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT	AL	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR 1+2(1+3)(2+3) FAULT - FWSPAGE	AM	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR DISAGREE- FWSPAGE	AN	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR NOT ALIGNED	AO	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR NOT ALIGNED	AO	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV LS 1(2)(1+2) FAULT	AP	96	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-NAV NAV LS 1(2)(1+2) FAULT	AP	97	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-NAV NAV LS 1(2)(1+2) FAULT - FWSPAGE	AP	98	Effectivity update: The information now also applies to MSN 11531.

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PRO-ABN-NAV NAV LS TUNING DISAGREE	AQ	99	Effectivity update: The information now also applies to MSN 02014, 03002, 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV LS TUNING DISAGREE	AQ	100	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV LS TUNING DISAGREE - FWSPAGE	AQ	101	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV PRED W/S DET FAULT ◁	AR	102	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA 1 AND 2 FAULT - FWSPAGE (DUAL RA FAILURE)	AS	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA 1(2) FAULT - FWSPAGE	AT	104	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA DEGRADED	AU	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA DEGRADED	AU	106	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV TCAS FAULT ◁	AV	107	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV TCAS STBY	AX	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV TCAS STBY	AX	109	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV L(R) CAPT(F/O) STATIC FAULT	AY	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV L(R) CAPT(F/O) STATIC FAULT	AY	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV L(R) CAPT(F/O) STATIC FAULT - FWSPAGE	AY	112	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV STALL WARNING	BA	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-OVERSPEED OVERSPEED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-RECORDER	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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RECORDER CVR FAULT-ANNUNCIATION			
PRO-ABN-RECORDER RECORDER CVR FAULT	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER CVR FAULT - FWSPAGE	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDR FAULT	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDR FAULT	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDR FAULT - FWSPAGE	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDIU FAULT	E	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDIU FAULT	E	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDIU FAULT - FWSPAGE	E	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SEVERE_ICE SEVERE ICE DETECTED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SEVERE_ICE SEVERE ICE DETECTED	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SEVERE_ICE SEVERE ICE DETECTED	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE			
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE	C	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
[QRH] SMOKE / FUMES / AVNCS SMOKE			
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE	C	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES	D	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE AFT CARGO SMOKE ◁	F	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE AFT CARGO SMOKE ◁	F	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE AFT CARGO SMOKE ◁ - FWSPAGE	F	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD(AFT) CRG BTL 1(2) FAULT ◁	J	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD(AFT) CRG BTL (1)(2) FAULT ◁	J	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE DET FAULT	L	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE DET FAULT	L	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE DET FAULT - FWSPAGE	L	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE LAVATORY DET FAULT	P	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] EGPWS Cautions	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] EGPWS Warnings	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] TCAS CAUTION - TRAFFIC ADVISORY	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] TCAS WARNING - RESOLUTION ADVISORY	G	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV SURV ROW/ROP LOST	I	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV SURV ROW/ROP LOST	I	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV SURV ROW/ROP LOST - FWSPAGE	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O SPEEDS NOT INSERTED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-T-O T.O SPEEDS NOT INSERTED	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O SPEEDS TOO LOW	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O SPEEDS TOO LOW	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O V1/VR/V2 DISAGREE	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O V1/VR/V2 DISAGREE	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT BLOWER FAULT	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT BLOWER FAULT	B	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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			06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT EXTRACT FAULT - FWSPAGE	C	7	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	9	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT - FWSPAGE	D	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	11	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101,

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			05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	13	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670,

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			06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT - FWSPAGE	D	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT - FWSPAGE	D	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-WHEEL WHEEL HYD SEL FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-WHEEL WHEEL TYRE LO PR ◁	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE L(R) WING LO PR	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE L(R) WING LO PR	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE L(R) WING LO PR - FWSPAGE	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE SYS FAULT	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE SYS FAULT - FWSPAGE	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-90 Cabin Crew-Assigned Areas for Evacuation	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-90 Evacuation on Water - Cabin Crew Responsible for Type "I" Doors	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

PROCEDURES - NORMAL PROCEDURES

Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SOP-09 After Start - APU Bleed	A	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-TSK One Engine Taxi	K	32	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596,

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			08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-TSK Taxi	M	38	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance	V	50	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.

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PRO-NOR-SUP-ADVWXR Deicing/Anti-Icing Procedure on Ground - Upon Completion of the Spraying Operation	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-SRP-01-10 FMGS Initialization	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - General	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - Aligning IRS	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - Lateral Flight Plan	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - Vertical Flight Plan	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 FLIGHT PLAN INITIALIZATION - RADIO NAV	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 FMGS Data Insertion - Climb Speed Preselection	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 FMGS Data Insertion - Cruise Mach (Speed) Preselection	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-NOR-SRP-01-15 Change of Runway	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-20 FMA Mode Check	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-30 Takeoff Using the Localizer of the Opposite Runway	F	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-40 Monitoring the Climb Phase	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-40 Expedite Climb	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-40 Immediate Return to Origin Airport	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Monitoring the Navigation Accuracy - Position Discrepancy	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Entering a Step Climb or a Step Descent	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Immediate Change of Level in Cruise	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Revision of Lateral F-PLN	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Revision of Vertical Flight Plan	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Entering the Winds for Descent	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Preselecting a Managed Speed/Mach	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Modification of the Cabin Rate	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Entering the Approach Data	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Selecting the Radio NAVAIDs	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-60 Descent Monitoring - DES Mode Engaged	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-60 Descent Monitoring - OP DES, V/S or FPA Mode Engaged	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-60 Too Steep Path	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 Initial Approach	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-NOR-SRP-01-70 ILS Approach - Intermediate/Final Approach (ILS Approach Entered in the F-PLN)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
ILS / GLS ◁ / LPV(with SLS ◁) Approach - Approach Mode Activation (LOC - G/S)			
PRO-NOR-SRP-01-70 ILS/MLS Approach - Autoland	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-70 ILS/MLS Approach - Autoland	B	6	Effectivity update: The information now also applies to MSN 11531.
PRO-NOR-SRP-01-70 ILS Approach - Standard ILS Automatic Approach	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS Approach - Data Lock	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS Approach - Use of RMPs for ILS/DME	B	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS Approach - Localizer (LOC) Beam Capture	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-70 Switching from Non ILS to ILS Approach	C	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 Landing Categories	F	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-70 Warnings for ILS Approach	J	15	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 Warnings for ILS Approach	J	16	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-NOR-SRP-01-80 MONITORING THE GO-AROUND	B	2	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-80 MONITORING THE GO-AROUND	B	3	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-NOR-SRP-01-80 Go-Around Profile	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-80 Missed Approach: Try Again	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-80 Missed Approach: Divert	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

PROCEDURES - SPECIAL OPERATIONS

Localization Title	Toc Index	ID	Reason
PRO-SPO-40-50 Abnormal and Emergency Procedures	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-40-60 Maximum Diversion Distance	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-50 Required Equipments/Functions for RVSM	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-50 RVSM Normal Procedure	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-50 RVSM Abnormal and Emergency Procedure	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-51 RNP APCH / RNAV(GNSS) - Procedure	I	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-SPO-51 RNP AR Operations - General	J	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-51 RNP AR Operations - Required RNP AR Equipment	J	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-51 RNP AR Operations - Procedures	J	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-60 Procedures	C	1	Effectivity update: The information now also applies to MSN 11531.

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Localization Title	Toc Index	ID	Reason
PRO-SPO-60 Procedures	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 Limitations	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 Procedures	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 Performance	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

LIMITATIONS - AIRCRAFT GENERAL

Localization Title	Toc Index	ID	Reason
LIM-AG-OPS Environmental Envelope	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-OPS Runway Slope	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-OPS Runway Slope	F	4	Effectivity update: The information now also applies to MSN 11531.
LIM-AG-OPS Runway Altitude	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-OPS Tailwind Landing	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-OPS Flaps Full Note	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-SPD Maximum Flaps/Slats Speeds	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-SPD Maximum Operating Speed VMO/MMO	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-SPD Minimum Control Speeds	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-WGHT Weight Limitations	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-WGHT Weight Limitations	A	3	Effectivity update: The information now also applies to MSN 03588, 03595.

LIMITATIONS - AIR BLEED/COND/PRESS/VENT

Localization Title	Toc Index	ID	Reason
LIM-AIR Cabin Pressure	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

LIMITATIONS - AUTO FLIGHT SYSTEM

Localization Title	Toc Index	ID	Reason
LIM-AFS-10 Autopilot Function - Other Phases	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - PAR Approach	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - Other Phases	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - PAR Approach	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - Other Phases	A	5	Effectivity update: The information now also applies to MSN 11531.
LIM-AFS-10 Autopilot Function - Other Phases	A	6	Effectivity update: The information now also applies to MSN 11531.
LIM-AFS-10 RNP AR	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-10 Navigation Database Validation	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 ILS Category III Fail Operational (Dual)	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Engine-Out	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I	H	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Glide Slope	I	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
LIM-AFS-20 Automatic Landing - Airport Elevation	I	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Runway	I	16	Effectivity update: The information now also applies to MSN 11531.
LIM-AFS-20 Automatic Landing - Glide Slope	I	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Pressure Altitude Limit	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Rollout	I	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Glide Slope	I	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Pressure Altitude Limit	I	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Rollout	I	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
LIM-AFS-20 Automatic Landing - Glide Slope	I	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Pressure Altitude Limit	I	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Runway	I	33	Effectivity update: The information now also applies to MSN 11531.

LIMITATIONS - AUXILIARY POWER UNIT

Localization Title	Toc Index	ID	Reason
LIM-APU EGT	A	1	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-APU EGT	A	2	Effectivity update: The information no longer applies to MSN 02321, 06689.
LIM-APU Operational Envelope	C	3	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-APU Operational Envelope	C	4	Effectivity update: The information no longer applies to MSN 02321, 06689.
LIM-APU APU Bleed	C	5	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-APU APU Bleed	C	6	Effectivity update: The information no longer applies to MSN 02321, 06689.

LIMITATIONS - CABIN SYSTEMS

Localization Title	Toc Index	ID	Reason
LIM-CAB Power Supply for Portable Electronic Device (PED)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

LIMITATIONS - ENGINES

Localization Title	Toc Index	ID	Reason
LIM-ENG Thrust Setting/EGT Limits	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Shaft Speeds	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Oil	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Starter	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Flex Takeoff	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-ENG Crosswind Operation on Ground	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Soft Go-Around	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

LIMITATIONS - FUEL

Localization Title	Toc Index	ID	Reason
LIM-FUEL Certified Fuel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-FUEL Fuel Temperature	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-FUEL Maximum Allowed Fuel Imbalance	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-FUEL Maximum Allowed Fuel Imbalance	D	4	Effectivity update: The information now also applies to MSN 11531.

LIMITATIONS - NAVIGATION

Localization Title	Toc Index	ID	Reason
LIM-NAV Inertial Reference System (IRS)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

LIMITATIONS - OXYGEN

Localization Title	Toc Index	ID	Reason
LIM-OXY Minimum Flight Crew Oxygen Pressure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

LIMITATIONS - ROW/ROP

Localization Title	Toc Index	ID	Reason
LIM-ROW_ROP ROW/ROP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

TEMPORARY ABNORMAL BEHAVIORS

Localization Title	Toc Index	ID	Reason
TAB Erroneous Fuel Predictions in the case of Descent with two Altitude Constraints	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB AUTO FLT - Undue Reversion to V/S during Climb and Descent	A	2	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
TAB AUTO FLT - No Engagement of the PRESEL SPD TARGET in Climb	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Loss Of FMS Position Further To IRS Loss	A	4	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
TAB Erroneous Trajectory while in HDG (TRK) Mode during Procedures with a Turn Direction on a Leg with an Altitude Termination	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Erroneous CF Leg Computation following FMS NEW RUNWAY with LS IDENT creation	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Left Turn Not Expected while in HDG or TRK Mode	A	8	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
TAB Spurious CAT 2 INOP	A	9	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734. The information no longer applies to MSN 06798, 06949, 07005, 07081, 07098.
TAB ATC MSG RECORD NOT RELIABLE - Displayed at ATSU Power-up	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Erroneous Detection of Engine Fuel Leak	A	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

PERFORMANCE (EFB) - LOADING

Localization Title	Toc Index	ID	Reason
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL	A	2	Effectivity update: The information now also applies to MSN 11531.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE OUTER TANK	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE WING TANK	A	4	Effectivity update: The information now also applies to MSN 11531.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE INNER TANK	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)	A	7	Effectivity update: The information now also applies to MSN 11531.

PERFORMANCE (EFB) - TAKEOFF

Localization Title	Toc Index	ID	Reason
EFB-TOF-20-20-20 Flexible Takeoff Limitations	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

PERFORMANCE (EFB) - IN-FLIGHT

Localization Title	Toc Index	ID	Reason
EFB-IFT-20-40 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
EFB-IFT-30 Holding	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

PERFORMANCE (EFB) - LANDING

Localization Title	Toc Index	ID	Reason
EFB-LDG-40 REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)	H	1	Effectivity update: The information now also applies to MSN 05005, 05097.
EFB-LDG-40 REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)	H	2	Effectivity update: The information now also applies to MSN 02321.
EFB-LDG-40 REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)	I	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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GENERAL INFORMATION

Localization Title	Toc Index	ID	Reason
GEN-PLP-TOC General Information		1	Documentation update: Deletion of the "20800846 App Sheet" table of content entry. Documentation update: Deletion of the "20800846.9001001 App Sheet" documentary unit.
GEN FLS Function in the FMS	A	9	Documentation update: Addition of "FLS Function in the FMS" documentary unit
GEN G/S Mode Engagement before LOC Mode Engagement	A	11	Documentation update: Addition of "G/S Mode Engagement before LOC Mode Engagement" documentary unit
GEN 3 ACTs	B	26	Documentation update: Addition of "3 ACTs" documentary unit
GEN Aileron Anti Droop	B	33	Documentation update: Addition of "Aileron Anti Droop" documentary unit
GEN Cabin Door 3	B	42	Documentation update: Addition of "Cabin Door 3" documentary unit
GEN Single Navigation Lights	B	62	Documentation update: Addition of "Single Navigation Lights" documentary unit
GEN FLS	B	71	Documentation update: Addition of "FLS" documentary unit
GEN FLS/FINAL APP - Coexistence	B	72	Documentation update: Addition of "FLS/FINAL APP - Coexistence" documentary unit
GEN SBAS	B	109	Documentation update: Addition of "SBAS" documentary unit
GEN Weather Hazard Prediction Function	B	118	Documentation update: Addition of "Weather Hazard Prediction Function" documentary unit

AIRCRAFT SYSTEMS - AIRCRAFT GENERAL

Localization Title	Toc Index	ID	Reason
DSC-20-20 Principal Dimensions	B	2	Documentation update: Addition of "Principal Dimensions" documentary unit
DSC-20-40 Ground Clearance Diagram	A	1	Documentation update: Addition of "Ground Clearance Diagram" documentary unit

AIRCRAFT SYSTEMS - AIR CONDITIONING / PRESSURIZATION / VENTILATION

Localization Title	Toc Index	ID	Reason
DSC-21-PLP-TOC Controls and Indicators		1	Documentation update: Deletion of the "00000316.0001001 ECAM BLEED Page" documentary unit.

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Localization Title	Toc Index	ID	Reason
			Documentation update: Deletion of the "00000316.0003001 ECAM BLEED Page" documentary unit.
DSC-21-10-10 Architecture	B	2	Documentation update: Addition of "Architecture" documentary unit
DSC-21-10-20 Pack Schematic (Simplified)	B	2	Documentation update: Addition of "Pack Schematic (Simplified)" documentary unit
DSC-21-10-50 ECAM BLEED Page	B	2	Documentation update: Addition of "ECAM BLEED Page" documentary unit
DSC-21-10-50 ECAM BLEED Page	B	3	Documentation update: Addition of "ECAM BLEED Page" documentary unit
DSC-21-20-40 ECAM CAB PRESS Page	B	4	Documentation update: Addition of "ECAM CAB PRESS Page" documentary unit
DSC-21-30-20 Normal Operation, Open-Circuit Configuration	C	1	Documentation update: Addition of "Normal Operation, Open-Circuit Configuration" documentary unit
DSC-21-30-20 Normal Operation, Close-Circuit Configuration	D	5	Documentation update: Addition of "Normal Operation, Close-Circuit Configuration" documentary unit
DSC-21-30-20 Normal Operation, Intermediate Configuration	E	7	Documentation update: Addition of "Normal Operation, Intermediate Configuration" documentary unit

AIRCRAFT SYSTEMS - AUTO FLIGHT - GENERAL

Localization Title	Toc Index	ID	Reason
DSC-22_10-PLP-TOC Description		1	Documentation update: Deletion of the "00022442.0002001 FMGC Standard" documentary unit.
DSC-22_10-40-20 Lateral Control Area	D	2	Documentation update: Addition of "Lateral Control Area" documentary unit
DSC-22_10-40-20 Vertical Control Area	F	3	Documentation update: Addition of "Vertical Control Area" documentary unit
DSC-22_10-40-50 Flight Plan Display Colors	E	1	Documentation update: Addition of "Flight Plan Display Colors" documentary unit
DSC-22_10-50-20 Characteristic Speeds	A	1	Documentation update: Addition of "Characteristic Speeds" documentary unit

AIRCRAFT SYSTEMS - AUTO FLIGHT - FLIGHT MANAGEMENT

Localization Title	Toc Index	ID	Reason
DSC-22_20-PLP-TOC FMS2 Honeywell		1	Documentation update: Deletion of the "00000570.0015001 ARRIVAL Pages" documentary unit.
			Documentation update: Deletion of the "00000570.0009001 ARRIVAL Pages" documentary unit.
DSC-22_20-20-60 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-22_20-20-60 FLS Beam Computation - General	B	2	Documentation update: Addition of "FLS Beam Computation - General" documentary unit
DSC-22_20-20-60 FLS Beam Computation - Baro Correction of the FLS Vertical Deviation	B	3	Documentation update: Addition of "FLS Beam Computation - Baro Correction of the FLS Vertical Deviation" documentary unit
DSC-22_20-20-60 Temperature Correction of the FLS Vertical Deviation	B	4	Documentation update: Addition of "Temperature Correction of the FLS Vertical Deviation" documentary unit
DSC-22_20-50-10-25 ARRIVAL Pages	R	16	Documentation update: Addition of "ARRIVAL Pages" documentary unit
DSC-22_20-50-10-25 ARRIVAL Pages	R	17	Documentation update: Addition of "ARRIVAL Pages" documentary unit
DSC-22_20-50-20-35 MCDU Message List	A	1	Documentation update: Addition of "MCDU Message List" documentary unit
DSC-22_20-85 QNH Use for Aircraft NOT Equipped with QFE Option	B	1	Documentation update: Addition of "QNH Use for Aircraft NOT Equipped with QFE Option" documentary unit
DSC-22_20-85 QNH Use for Aircraft Equipped with QFE Option	B	4	Documentation update: Addition of "QNH Use for Aircraft Equipped with QFE Option" documentary unit
DSC-22_20-100-20 Loss of FMS Predictions in Low Density of Airports	V	7	Documentation update: Addition of "Loss of FMS Predictions in Low Density of Airports" documentary unit

AIRCRAFT SYSTEMS - AUTO FLIGHT - FLIGHT GUIDANCE

Localization Title	Toc Index	ID	Reason
DSC-22_30-PLP-TOC Altitude		1	Documentation update: The "ALT" table of content entry renamed in "Altitude"
DSC-22_30-PLP-TOC Ground Speed Mini Function		2	Documentation update: Deletion of the "00025750.0001001 Managed Speed Target Computation" documentary unit.
DSC-22_30-40-20-20 General - Pitch	A	1	Documentation update: Addition of "General - Pitch" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-22_30-40-80-00 Guidance Selection	C	2	Documentation update: Addition of "Guidance Selection" documentary unit
DSC-22_30-40-80-00 FLS Function Availability	C	3	Documentation update: Addition of "FLS Function Availability" documentary unit
DSC-22_30-40-80-00 Approaches flown with Lateral and Vertical FLS Guidance	C	4	Documentation update: Addition of "Approaches flown with Lateral and Vertical FLS Guidance" documentary unit
DSC-22_30-40-80-00 Approaches flown with Vertical FLS Guidance	C	5	Documentation update: Addition of "Approaches flown with Vertical FLS Guidance" documentary unit
DSC-22_30-40-80-60 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-22_30-40-80-60 F-LOC Arming Conditions	B	2	Documentation update: Addition of "F-LOC Arming Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC Disarming Conditions	C	3	Documentation update: Addition of "F-LOC Disarming Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC* Engagement Conditions	D	4	Documentation update: Addition of "F-LOC* Engagement Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC* Disengagement Conditions	E	5	Documentation update: Addition of "F-LOC* Disengagement Conditions" documentary unit
DSC-22_30-40-80-60 Reversions	E	6	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-60 Reversions - Triple Click	E	7	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-60 F-LOC Engagement Conditions	F	8	Documentation update: Addition of "F-LOC Engagement Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC Disengagement Conditions	G	9	Documentation update: Addition of "F-LOC Disengagement Conditions" documentary unit
DSC-22_30-40-80-60 Reversions	G	10	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-60 Reversions - Triple Click	G	11	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-70 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-22_30-40-80-70 F-G/S Arming Conditions	B	2	Documentation update: Addition of "F-G/S Arming Conditions" documentary unit
DSC-22_30-40-80-70 F-G/S Disarming Conditions	C	3	Documentation update: Addition of "F-G/S Disarming Conditions" documentary unit
DSC-22_30-40-80-70 F-G/S* Engagement Conditions	D	4	Documentation update: Addition of "F-G/S* Engagement Conditions" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-22_30-40-80-70 F-G/S* Disengagement Conditions	E	5	Documentation update: Addition of "F-G/S* Disengagement Conditions" documentary unit
DSC-22_30-40-80-70 Reversions	E	6	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-70 Reversions - Triple Click	E	7	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-70 F-G/S Engagement Conditions	F	8	Documentation update: Addition of "F-G/S Engagement Conditions" documentary unit
DSC-22_30-40-80-70 F-G/S Disengagement Conditions	G	9	Documentation update: Addition of "F-G/S Disengagement Conditions" documentary unit
DSC-22_30-40-80-70 Reversions	G	10	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-70 Reversions - Triple Click	G	11	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	3	Documentation update: Addition of "FINAL APP Engagement Conditions" documentary unit
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	5	Documentation update: Addition of "FINAL APP Engagement Conditions" documentary unit
DSC-22_30-40-90-20 General	A	2	Documentation update: Addition of "General" documentary unit
DSC-22_30-40-120-80 VOR Approach Flown with FLS Function	B	1	Documentation update: Addition of "VOR Approach Flown with FLS Function" documentary unit
DSC-22_30-40-120-80 LOC only Approach Flown with FLS Function	C	2	Documentation update: Addition of "LOC only Approach Flown with FLS Function" documentary unit
DSC-22_30-70 List of Approach and Landing Capabilities - FLS	A	1	Documentation update: Addition of "List of Approach and Landing Capabilities - FLS" documentary unit
DSC-22_30-80-20 F-APP	AU	17	Documentation update: Addition of "F-APP" documentary unit
DSC-22_30-80-20 F-APP + RAW	AV	18	Documentation update: Addition of "F-APP + RAW" documentary unit
DSC-22_30-80-20 F-G/S (armed)	AW	19	Documentation update: Addition of "F-G/S (armed)" documentary unit
DSC-22_30-80-20 F-G/S (engaged)	AX	20	Documentation update: Addition of "F-G/S (engaged)" documentary unit
DSC-22_30-80-20 F-G/S*	AY	21	Documentation update: Addition of "F-G/S*" documentary unit
DSC-22_30-80-20 F-LOC (armed)	BD	23	Documentation update: Addition of "F-LOC (armed)" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-22_30-80-20 F-LOC (engaged)	BE	24	Documentation update: Addition of "F-LOC (engaged)" documentary unit
DSC-22_30-80-20 F-LOC*	BF	25	Documentation update: Addition of "F-LOC*" documentary unit
DSC-22_30-80-20 RAW ONLY	CM	34	Documentation update: Addition of "RAW ONLY" documentary unit

AIRCRAFT SYSTEMS - COMMUNICATIONS

Localization Title	Toc Index	ID	Reason
DSC-23-10-10 Communication System Architecture	B	1	Documentation update: Addition of "Communication System Architecture" documentary unit
DSC-23-10-20 Description	C	3	Documentation update: Addition of "Description" documentary unit
DSC-23-10-20 RMP	C	4	Documentation update: Addition of "RMP" documentary unit
DSC-23-10-20 RMP synchronization	C	5	Documentation update: Addition of "RMP synchronization" documentary unit
DSC-23-10-20 Active communication	C	6	Documentation update: Addition of "Active communication" documentary unit
DSC-23-10-20 Standby Control	C	7	Documentation update: Addition of "Standby Control" documentary unit
DSC-23-10-30 Audio Management System	A	2	Documentation update: Addition of "Audio Management System" documentary unit
DSC-23-10-40 Description	A	1	Documentation update: Addition of "Description" documentary unit
DSC-23-20-20 Cabin Interphone	B	2	Documentation update: Addition of "Cabin Interphone" documentary unit
DSC-23-20-40 Description	A	1	Documentation update: Addition of "Description" documentary unit
DSC-23-20-40 Controls and Indicators	B	4	Documentation update: Addition of "Controls and Indicators" documentary unit
DSC-23-30-10 Description	A	2	Documentation update: Addition of "Description" documentary unit
DSC-23-30-10 VHF	B	4	Documentation update: Addition of "VHF" documentary unit
DSC-23-30-10 SELCAL	E	8	Documentation update: Addition of "SELCAL" documentary unit
DSC-23-45-10 HF ◁ Page	A	1	Documentation update: Addition of "HF (If Installed) Page" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-23-45-10 MENU Page	B	2	Documentation update: Addition of "MENU Page" documentary unit
DSC-23-45-10 RMP External Communication	C	3	Documentation update: Addition of "RMP External Communication" documentary unit
DSC-23-45-10 RMP Overview	D	4	Documentation update: Addition of "RMP Overview" documentary unit
DSC-23-45-10 VHF Page	E	5	Documentation update: Addition of "VHF Page" documentary unit
DSC-23-45-20 RMP Messages on the RMP Page Area	A	1	Documentation update: Addition of "RMP Messages on the RMP Page Area" documentary unit
DSC-23-45-20 RMP Messages on the RMP Message Area	B	2	Documentation update: Addition of "RMP Messages on the RMP Message Area" documentary unit
DSC-23-50 Loudspeakers	E	3	Documentation update: Addition of "Loudspeakers" documentary unit

AIRCRAFT SYSTEMS - EQUIPMENT

Localization Title	Toc Index	ID	Reason
DSC-25-10-50 Pedestal	A	1	Documentation update: Addition of "Pedestal" documentary unit
DSC-25-10-60 Overhead Panel	A	1	Documentation update: Addition of "Overhead Panel" documentary unit

AIRCRAFT SYSTEMS - FIRE PROTECTION

Localization Title	Toc Index	ID	Reason
DSC-26-50-10 Fire Extinguishing	B	3	Documentation update: Addition of "Fire Extinguishing" documentary unit
DSC-26-50-20 CARGO SMOKE Panel	A	1	Documentation update: Addition of "CARGO SMOKE Panel" documentary unit
DSC-26-50-20 BTL Light	A	7	Documentation update: Addition of "BTL Light" documentary unit

AIRCRAFT SYSTEMS - FLIGHT CONTROLS

Localization Title	Toc Index	ID	Reason
DSC-27-10-20 Roll Control - General	C	1	Documentation update: Addition of "Roll Control - General" documentary unit
DSC-27-20-10-10 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-27-20-10-20 Flight Mode	C	2	Documentation update: Addition of "Flight Mode" documentary unit
DSC-27-20-10-20 Flare Mode	D	5	Documentation update: Addition of "Flare Mode" documentary unit
DSC-27-20-10-30 Normal Law	A	2	Documentation update: Addition of "Normal Law" documentary unit
DSC-27-20-20 Alternate Law	C	5	Documentation update: Addition of "Alternate Law" documentary unit
DSC-27-20-30 ECAM F/CTL Page	F	3	Documentation update: Addition of "ECAM F/CTL Page" documentary unit
DSC-27-30-20 Pedestal	A	1	Documentation update: Addition of "Pedestal" documentary unit

AIRCRAFT SYSTEMS - FUEL

Localization Title	Toc Index	ID	Reason
DSC-28-10-20 Tanks	A	1	Documentation update: Addition of "Tanks" documentary unit
DSC-28-10-20 Usable Fuel	A	3	Documentation update: Addition of "Usable Fuel" documentary unit
DSC-28-10-30 Engine Feed	C	8	Documentation update: Addition of "Engine Feed" documentary unit
DSC-28-10-30 Fuel Feed Sequence	D	10	Documentation update: Addition of "Fuel Feed Sequence" documentary unit
DSC-28-10-40 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-28-10-40 Automatic Transfer	B	2	Documentation update: Addition of "Automatic Transfer" documentary unit
DSC-28-10-40 Manual Transfer - General	C	3	Documentation update: Addition of "Manual Transfer - General" documentary unit
DSC-28-10-40 Manual Transfer - Ecam Indication	C	4	Documentation update: Addition of "Manual Transfer - Ecam Indication" documentary unit
DSC-28-10-40 Manual Transfer - ACT System Architecture	C	5	Documentation update: Addition of "Manual Transfer - ACT System Architecture" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-28-10-70 Refueling - Defueling	A	1	Documentation update: Addition of "Refueling - Defueling" documentary unit
DSC-28-10-80 FUEL QUANTITY INDICATION (FQI) SYSTEM	B	2	Documentation update: Addition of "FUEL QUANTITY INDICATION (FQI) SYSTEM" documentary unit
DSC-28-10-80 AUXILIARY FUEL MANAGEMENT SYSTEM (AFMS)	E	5	Documentation update: Addition of "AUXILIARY FUEL MANAGEMENT SYSTEM (AFMS)" documentary unit
DSC-28-10-80 AUXILIARY LEVEL SENSE CONTROL UNIT (ALSCU)	F	6	Documentation update: Addition of "AUXILIARY LEVEL SENSE CONTROL UNIT (ALSCU)" documentary unit
DSC-28-10-80 Fuel System Architecture	G	8	Documentation update: Addition of "Fuel System Architecture" documentary unit
DSC-28-20 ACT Control Panel	B	7	Documentation update: Addition of "ACT Control Panel" documentary unit
DSC-28-20 ACT XFR MODE SEL pb-sw	B	8	Documentation update: Addition of "ACT XFR MODE SEL pb-sw" documentary unit
DSC-28-20 ACT XFR rotary Selector	B	9	Documentation update: Addition of "ACT XFR rotary Selector" documentary unit
DSC-28-20 ALL ACT pb-sw	B	10	Documentation update: Addition of "ALL ACT pb-sw" documentary unit
DSC-28-20 Refueling Control Panel	C	11	Documentation update: Addition of "Refueling Control Panel" documentary unit
DSC-28-20 ACT QUANTITY Indicator	C	13	Documentation update: Addition of "ACT QUANTITY Indicator" documentary unit
DSC-28-20 TOTAL ACT Indicator	C	14	Documentation update: Addition of "TOTAL ACT Indicator" documentary unit
DSC-28-20 ACT Selector	C	16	Documentation update: Addition of "ACT Selector" documentary unit
DSC-28-20 ECAM Fuel Page	E	17	Documentation update: Addition of "ECAM Fuel Page" documentary unit
DSC-28-20 ACT ◁ to Center Tank Fuel Transfer Indication	E	36	Documentation update: Addition of "ACT (If Installed) to Center Tank Fuel Transfer Indication" documentary unit
DSC-28-20 FOB BELOW 3T (6600 LBS)	G	42	Documentation update: Addition of "FOB BELOW 3T (6600 LBS)" documentary unit

AIRCRAFT SYSTEMS - INDICATING/RECORDING SYSTEMS

Localization Title	Toc Index	ID	Reason
DSC-31-40 Trajectory Deviation - Non Precision Approach using FLS	K	15	Documentation update: Addition of "Trajectory Deviation - Non Precision Approach using FLS" documentary unit
DSC-31-45 ROSE LS Mode	C	4	Documentation update: Addition of "ROSE LS Mode" documentary unit
DSC-31-45 FLS Beam	E	7	Documentation update: Addition of "FLS Beam" documentary unit
DSC-31-45 Plan Mode	F	8	Documentation update: Addition of "Plan Mode" documentary unit

AIRCRAFT SYSTEMS - LIGHTS

Localization Title	Toc Index	ID	Reason
DSC-33-30-10 Proximity Emergency Escape Path Marking System/Exit Signs	B	1	Documentation update: Addition of "Proximity Emergency Escape Path Marking System/Exit Signs" documentary unit

AIRCRAFT SYSTEMS - NAVIGATION

Localization Title	Toc Index	ID	Reason
DSC-34-NAV-30-20 VOR	A	1	Documentation update: Addition of "VOR" documentary unit
DSC-34-NAV-30-20 Marker Beacon	E	3	Documentation update: Addition of "Marker Beacon" documentary unit
DSC-34-NAV-30-30 ADF ◁ Page	A	1	Documentation update: Addition of "ADF (If Installed) Page" documentary unit
DSC-34-NAV-30-30 LS Page	B	2	Documentation update: Addition of "LS Page" documentary unit
DSC-34-NAV-30-30 NAV Page	C	3	Documentation update: Addition of "NAV Page" documentary unit
DSC-34-NAV-30-30 VOR Page	D	4	Documentation update: Addition of "VOR Page" documentary unit

AIRCRAFT SYSTEMS - SURVEILLANCE

Localization Title	Toc Index	ID	Reason
DSC-34-SURV-PLP-TOC Controls and Indicators		1	Documentation update: Deletion of the "00001418.0008001 Overhead Panel" documentary unit.

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Localization Title	Toc Index	ID	Reason
			Documentation update: Deletion of the "00001418.0002001 Overhead Panel" documentary unit.
DSC-34-SURV-10-10 Principle	A	2	Documentation update: Addition of "Principle" documentary unit
DSC-34-SURV-10-10 Principle	A	3	Documentation update: Addition of "Principle" documentary unit
DSC-34-SURV-10-20 ATC Page	A	1	Documentation update: Addition of "ATC Page" documentary unit
DSC-34-SURV-30-30 Weather Hazard Prediction Function Indication on ND	E	4	Documentation update: Addition of "Weather Hazard Prediction Function Indication on ND" documentary unit
DSC-34-SURV-40-40 Overhead Panel	A	1	Documentation update: Addition of "Overhead Panel" documentary unit
DSC-34-SURV-60-10 Main Components	C	2	Documentation update: Addition of "Main Components" documentary unit
DSC-34-SURV-60-10 TCAS Modes	E	4	Documentation update: Addition of "TCAS Modes" documentary unit
DSC-34-SURV-60-20 ATC Page	B	2	Documentation update: Addition of "ATC Page" documentary unit

AIRCRAFT SYSTEMS - OXYGEN

Localization Title	Toc Index	ID	Reason
DSC-35-20-30 How to Test the Mask	A	1	Documentation update: Addition of "How to Test the Mask" documentary unit

AIRCRAFT SYSTEMS - DOORS

Localization Title	Toc Index	ID	Reason
DSC-52-PLP-TOC Escape Slides/Rafts		1	Documentation update: Deletion of the "00005952 Cabin Emergency Exit Lights" table of content entry.
			Documentation update: Deletion of the "00005952.0001001 Cabin Emergency Exit Slides" documentary unit.
DSC-52-10-10 Description	A	1	Documentation update: Addition of "Description" documentary unit
DSC-52-10-30 Cabin	B	1	Documentation update: Addition of "Cabin" documentary unit
DSC-52-10-80 Wing Slides	B	1	Documentation update: Addition of "Wing Slides" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-52-10-80 Escape Slide Arrangement	C	4	Documentation update: Addition of "Escape Slide Arrangement" documentary unit
DSC-52-20 DOOR/OXY SD Page	A	1	Documentation update: Addition of "DOOR/OXY SD Page" documentary unit

PROCEDURES - PRELIMINARY PAGES

Localization Title	Toc Index	ID	Reason
PRO-PLP-TOC Normal Procedures		1	Documentation update: The "GPS PRIMARY Availability (If Installed)" table of content entry moved from "NP02584" to "AIL-00001802"
			Documentation update: The "Exterior Walkaround - ENG 1 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Preliminary Cockpit Preparation - EFB/ACARS Initialization" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Preliminary Cockpit Preparation - Before Walkaround" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Cockpit Preparation - Pedestal" table of content entry moved from "NG01999" to "AIL-00001872"
			Documentation update: The "Aircraft Configuration for Approach" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP)" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Engine Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Engine Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Exterior Walkaround - ENG 1 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "After Start For One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Before Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Climb" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Cruise" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Descent Preparation" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Overhead Panel - RCDR" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "Manual Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Automatic Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Go Around (With FD On)" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Parking" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Overhead Panel - Air Cond" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: Deletion of the "NP02582 Standard Operating Procedures" table of content entry.
			Documentation update: The "Overhead Panel - Fuel" table of content entry moved from "NG00846" to "AIL-00001813"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "CTR Instrument Panel - STBY Instrument " table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - ISIS" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - Clock" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "Pedestal - Cockpit Door " table of content entry moved from "NG00854" to "AIL-00001815"
			Documentation update: The "EFB/ACARS Init - FMGS Pre-Initialization - FM Database Validity" table of content entry moved from "NG01252" to "AIL-00001808"
			Documentation update: The "FMGS Preparation - FM Database Validity" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - NAVAID Deselection" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - ADIRS Position Initialization" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - RNP Insertion (PROG page)" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "ATC Datalink Communication" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "Instrument Panels" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "At Pushback/Start Clearance - Windows and Doors" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "At Pushback/Start Clearance - NW STRG DISC" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "One Engine Taxi Procedure" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Automatic Engine Start" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Before Walkaround - ECAM Pages" table of content entry moved from "NG00709" to "AIL-00001809"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Ground Run Up - Danger Areas" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "After Start - Flow Pattern" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Mode Selector" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - Dual Cooling" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - APU Bleed" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Anti-Ice" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "Taxi - Brakes" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - Engine 2 Start" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - ENG Mode Selector" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Before Walkaround - Alternate Braking System" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Taxi - Radar" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Departure Change" table of content entry moved from "NP05905" to "AIL-00001826"
			Documentation update: The "Before Takeoff - Exterior Lights" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Before Takeoff - RNP AR Departure Check" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Takeoff - Thrust Setting" table of content entry moved from "NG00917" to "AIL-00001830"
			Documentation update: The "Takeoff - Above Acceleration Altitude (or Once in Climb Phase)" table of content entry moved from "NG00917" to "AIL-00001830"
			Documentation update: The "After Takeoff - ENG MODE Selector" table of content entry moved from "NG00706" to "AIL-00001832"
			Documentation update: The "After Takeoff - Anti-Ice Protection" table of content entry moved from "NG00706" to "AIL-00001832"
			Documentation update: Deletion of the "NP02609 Standard Callouts" table of content entry.

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Climb - At the Transition Altitude" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: The "ADIRS" table of content entry moved from "NP02586" to "AIL-00001805"
			Documentation update: The "Climb - Radar" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: Deletion of the "NP05794 Tasksharing" table of content entry.
			Documentation update: The "Cruise - Radar Tilt" table of content entry moved from "NG00734" to "AIL-00001836"
			Documentation update: The "Descent Preparation - FMGS - PERF APPR - PERF GO AROUND" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - FMGS - RADIO NAV" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - RUNWAY CONDITION" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Radar" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Anti-Ice Protection" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Cross-Reference Table" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Stabilization Criteria" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Initial Approach - Radar" table of content entry moved from "NG01260" to "AIL-00001844"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At Green Dot Speed" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear

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Localization Title	Toc Index	ID	Reason
			is down and Not Below 1 500 ft AFE" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Approach using LOC G/S Guidance - Final Approach" table of content entry moved from "NG01262" to "AIL-00001847"
			Documentation update: The "Approach using FINAL APP Guidance - General" table of content entry moved from "NG01263" to "AIL-00001848"
			Documentation update: The "Approach using FINAL APP Guidance - At Entered Minimum" table of content entry moved from "NG01263" to "AIL-00001848"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - General" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Aircraft Equipment" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Exterior Walkaround - Lower Center Fuselage" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Flight Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Engine Failure" table of content entry moved from "NG01273" to "AIL-00001849"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Management of Degraded Navigation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FPA Guidance - At Entered Minimum" table of content entry moved from "NG01265" to "AIL-00001850"
			Documentation update: The "Visual Approach - General" table of content entry moved from "NG01267" to "AIL-00001853"
			Documentation update: The "Exterior Walkaround - ENG 2 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Landing - At Touchdown" table of content entry moved from "NG00743" to "AIL-00001855"
			Documentation update: The "Autoland - At Touch Down" table of content entry moved from "NG01757" to "AIL-00001856"
			Documentation update: The "Go Around with FD - Go Around Initiation" table of content entry moved from "NG00919" to "AIL-00001858"
			Documentation update: The "After Landing - Predictive Windshear" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Flaps" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - TCAS" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - ATC" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Anti-Ice Protection" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Brake Temperature" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Exterior Walkaround - ENG 2 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "After Landing - Single Engine Taxi" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Parking - General" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - ENG MASTER Levers" table of content entry moved from "NG00986" to "AIL-00001862"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Parking - Fuel Pumps" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Severe Icing Conditions" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Securing the Aircraft - ADIRS" table of content entry moved from "NG00742" to "AIL-00001864"
			Documentation update: The "Securing the Aircraft - EMER Lights and Signs" table of content entry moved from "NG00742" to "AIL-00001864"
			Documentation update: The "Approach" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Landing" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Summary for Each Phase - Taxi" table of content entry moved from "NG00990" to "AIL-00001869"

PROCEDURES - ABNORMAL AND EMERGENCY PROCEDURES

Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
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PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC ENG 1(2) FADEC SYS FAULT		2	Documentation update: Deletion of the "00015570.0011001 ENG 1(2) FADEC SYS FAULT" documentary unit.
PRO-ABN-PLP-TOC ENG 1(2) FADEC SYS FAULT		2	Documentation update: Deletion of the "00015570.0011001 ENG 1(2) FADEC SYS FAULT" documentary unit.
PRO-ABN-PLP-TOC ENG 1(2) IGN A(B) FAULT		3	Documentation update: The "ENG 1(2) IGN FAULT (IGN A or B Fault)" table of content entry renamed in "ENG 1(2) IGN A(B) FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A(B) FAULT		3	Documentation update: The "ENG 1(2) IGN FAULT (IGN A or B Fault)" table of content entry renamed in "ENG 1(2) IGN A(B) FAULT"

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Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC ENG 1(2) IGN A(B) FAULT		3	Documentation update: The "ENG 1(2) IGN FAULT (IGN A or B Fault)" table of content entry renamed in "ENG 1(2) IGN A(B) FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A+B FAULT		4	Documentation update: The "ENG 1(2) IGN FAULT (IGN A+B Fault)" table of content entry renamed in "ENG 1(2) IGN A+B FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A+B FAULT		4	Documentation update: The "ENG 1(2) IGN FAULT (IGN A+B Fault)" table of content entry renamed in "ENG 1(2) IGN A+B FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A+B FAULT		4	Documentation update: The "ENG 1(2) IGN FAULT (IGN A+B Fault)" table of content entry renamed in "ENG 1(2) IGN A+B FAULT"
PRO-ABN-PLP-TOC FUEL		5	Documentation update: Deletion of the "NG01286 FUEL CTR L (R) XFR FAULT (Valve not Fully Open)" table of content entry.
			Documentation update: Deletion of the "00018050.0001001 FUEL CTR L(R) XFR FAULT (Valve not Fully OPEN)" documentary unit.
			Documentation update: Deletion of the "00018904.0001001 FUEL CTR L(R) XFR FAULT (Valve not Fully Open)" documentary unit.
			Documentation update: Deletion of the "00014906.0008001 FUEL CTR L (R) XFR FAULT - FWSPAGE (Valve not Fully Open)" documentary unit.
PRO-ABN-PLP-TOC FUEL CTR L(R) XFR FAULT		6	Documentation update: The "FUEL CTR L (R) XFR FAULT (Valve not Fully Closed)" table of content entry renamed in "FUEL CTR L(R) XFR FAULT"
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	24	Documentation update: Addition of "ECAM Advisory Conditions - FUEL" documentary unit
PRO-ABN-ABN-QRH [QRH] FUEL	A	5	Documentation update: Addition of "[QRH] FUEL" documentary unit
PRO-ABN-ABN-QRH [QRH] NAV	A	7	Documentation update: Addition of "[QRH] NAV" documentary unit
PRO-ABN-ABN-RESET System Reset Table - ENG	B	40	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - ENG	B	56	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - ENG	B	74	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - ENG	B	99	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - ENG	B	109	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - ENG	B	117	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - ENG	B	128	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - RMP Malfunction	B	192	Documentation update: Addition of "System Reset Table - COM - RMP Malfunction" documentary unit
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	202	Documentation update: Addition of "System Reset Table - AUTO FLT" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - RMP Malfunction	B	208	Documentation update: Addition of "System Reset Table - COM - RMP Malfunction" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	209	Documentation update: Addition of "System Reset Table - COM - FAP freezing" documentary unit
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	210	Documentation update: Addition of "System Reset Table - DATALINK" documentary unit
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	214	Documentation update: Addition of "System Reset Table - FUEL" documentary unit
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	216	Documentation update: Addition of "System Reset Table - SMOKE" documentary unit
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT	E	3	Documentation update: Addition of "AUTO FLT FAC 1 + 2 FAULT" documentary unit
PRO-ABN-COM COM AMU PART FAULT	B	1	Documentation update: Addition of "COM AMU PART FAULT" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-COM COM AMU PART FAULT	B	2	Documentation update: Addition of "COM AMU PART FAULT" documentary unit
PRO-ABN-COM COM CAPT(F/O)(3RD OCC)(4TH OCC ◁) PTT STUCK	C	3	Documentation update: Addition of "COM CAPT(F/O)(3RD OCC)(4TH OCC (If Installed)) PTT STUCK" documentary unit
PRO-ABN-COM COM CAPT(F/O) (3RD OCC) (4TH OCC ◁) PTT STUCK	C	4	Documentation update: Addition of "COM CAPT(F/O) (3RD OCC)(4TH OCC (If Installed)) PTT STUCK" documentary unit
PRO-ABN-COM COM CAPT(F/O) (3RD OCC) (4TH OCC) PTT STUCK - FWSPAGE	C	5	Documentation update: Addition of "COM CAPT(F/O) (3RD OCC)(4TH OCC) PTT STUCK - FWSPAGE" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) FAULT	F	6	Documentation update: Addition of "COM RMP 1(2)(3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) FAULT	F	7	Documentation update: Addition of "COM RMP 1(2)(3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) FAULT - FWSPAGE	F	8	Documentation update: Addition of "COM RMP 1(2)(3) FAULT - FWSPAGE" documentary unit
PRO-ABN-COM COM RMP 1+2(1+3)(2+3) FAULT	G	9	Documentation update: Addition of "COM RMP 1+2(1+3)(2+3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2(1+3)(2+3) FAULT	G	10	Documentation update: Addition of "COM RMP 1+2(1+3)(2+3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2(1+3)(2+3)	G	11	Documentation update: Addition of "COM RMP 1+2(1+3)(2+3)" documentary unit
PRO-ABN-COM COM RMP 1+2+3 FAULT	H	12	Documentation update: Addition of "COM RMP 1+2+3 FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2+3 FAULT	H	13	Documentation update: Addition of "COM RMP 1+2+3 FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2+3 FAULT - FWSPAGE	H	14	Documentation update: Addition of "COM RMP 1+2+3 FAULT - FWSPAGE" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) OFF	I	15	Documentation update: Addition of "COM RMP 1(2)(3) OFF" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) OFF	I	16	Documentation update: Addition of "COM RMP 1(2)(3) OFF" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) OFF - FWSPAGE	I	17	Documentation update: Addition of "COM RMP 1(2)(3) OFF - FWSPAGE" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (IN FLIGHT)	I	11	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (In flight)" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (IN FLIGHT)	I	12	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT - FWSPage (IN FLIGHT)	I	13	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT - FWSPage (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (ON GROUND)	L	16	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (ON GROUND)	L	17	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (IN FLIGHT)	M	18	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (IN FLIGHT)	M	19	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (IN FLIGHT)	M	20	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (ON GROUND)	N	21	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (ON GROUND)	N	22	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG FAULT	O	23	Documentation update: Addition of "DOOR L(R) OVERWNG FAULT" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG FAULT	O	24	Documentation update: Addition of "DOOR L(R) OVERWNG FAULT" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG FAULT - FWSPAGE	O	25	Documentation update: Addition of "DOOR L(R) OVERWNG FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	50	Documentation update: Addition of "[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS" documentary unit
PRO-ABN-ELEC	B	56	Documentation update: Addition of "[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS" documentary unit

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Localization Title	Toc Index	ID	Reason
[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS			
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	90	Documentation update: Addition of "ELEC DC BAT BUS FAULT" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	95	Documentation update: Addition of "ELEC DC BUS 1 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	96	Documentation update: Addition of "ELEC DC BUS 1 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT	N	104	Documentation update: Addition of "ELEC DC BUS 2 FAULT" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	105	Documentation update: Addition of "ELEC DC BUS 2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT	N	106	Documentation update: Addition of "ELEC DC BUS 2 FAULT" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	107	Documentation update: Addition of "ELEC DC BUS 2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE	O	118	Documentation update: Addition of "ELEC DC BUS 1+2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE	O	120	Documentation update: Addition of "ELEC DC BUS 1+2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC ESS BUS FAULT	Q	135	Documentation update: Addition of "ELEC DC ESS BUS FAULT" documentary unit
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	136	Documentation update: Addition of "ELEC DC ESS BUS FAULT - FWSPAGE" documentary unit
PRO-ABN-ENG [QRH] One Engine Inoperative - Circling Approach	I	59	Documentation update: Addition of "[QRH] One Engine Inoperative - Circling Approach" documentary unit
PRO-ABN-ENG ENG 1(2) CTL VALVE FAULT	AA	102	Documentation update: Addition of "ENG 1(2) CTL VALVE FAULT" documentary unit
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	238	Documentation update: Addition of "ENG 1(2) SYSTEM FAULT" documentary unit
PRO-ABN-F_CTL	A	2	Documentation update: Addition of "[QRH] Landing with Slats or Flaps Jammed" documentary unit

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Localization Title	Toc Index	ID	Reason
[QRH] Landing with Slats or Flaps Jammed			
PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED	U	33	Documentation update: Addition of "F/CTL FLAPS/SLATS FAULT/LOCKED" documentary unit
PRO-ABN-F_CTL F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE	AG	63	Documentation update: Addition of "F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE" documentary unit
PRO-ABN-FUEL [QRH] ACT SYSTEM FAULT	A	1	Documentation update: Addition of "[QRH] ACT SYSTEM FAULT" documentary unit
PRO-ABN-FUEL [QRH] ACT XFR FAULT	B	2	Documentation update: Addition of "[QRH] ACT XFR FAULT" documentary unit
PRO-ABN-FUEL [QRH] FWD ACT ISOLATED	F	6	Documentation update: Addition of "[QRH] FWD ACT ISOLATED" documentary unit
PRO-ABN-FUEL FUEL ACT PUMP LO PR	H	8	Documentation update: Addition of "FUEL ACT PUMP LO PR" documentary unit
PRO-ABN-FUEL FUEL ACT PUMP LO PR	H	9	Documentation update: Addition of "FUEL ACT PUMP LO PR" documentary unit
PRO-ABN-FUEL FUEL ACT PUMP LO PR - FWSPAGE	H	10	Documentation update: Addition of "FUEL ACT PUMP LO PR - FWSPAGE" documentary unit
PRO-ABN-FUEL FUEL ACT SYSTEM FAULT	I	11	Documentation update: Addition of "FUEL ACT SYSTEM FAULT" documentary unit
PRO-ABN-FUEL FUEL ACT SYSTEM FAULT	I	12	Documentation update: Addition of "FUEL ACT SYSTEM FAULT" documentary unit
PRO-ABN-FUEL FUEL ACT XFR FAULT ◁	J	15	Documentation update: Addition of "FUEL ACT XFR FAULT (If Installed)" documentary unit
PRO-ABN-FUEL FUEL FWD ACT ISOLATED	AA	39	Documentation update: Addition of "FUEL FWD ACT ISOLATED" documentary unit
PRO-ABN-FUEL FUEL FWD ACT ISOLATED	AA	40	Documentation update: Addition of "FUEL FWD ACT ISOLATED" documentary unit
PRO-ABN-FUEL FUEL FWD ACT LINE FAULT	AB	41	Documentation update: Addition of "FUEL FWD ACT LINE FAULT" documentary unit
PRO-ABN-FUEL FUEL FWD ACT LINE FAULT	AB	42	Documentation update: Addition of "FUEL FWD ACT LINE FAULT" documentary unit
PRO-ABN-FUEL FUEL L(R) WING TK OVERFLOW	AQ	82	Documentation update: Addition of "FUEL L(R) WING TK OVERFLOW" documentary unit
PRO-ABN-HYD HYD B+Y SYS LO PR - FWSPAGE	P	63	Documentation update: Addition of "HYD B+Y SYS LO PR - FWSPAGE" documentary unit
PRO-ABN-MISC Thrust and Airspeed	L	6	Documentation update: Addition of "Thrust and Airspeed" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-MISC Thrust Setting (N1) for Recommended Speed	L	8	Documentation update: Addition of "Thrust Setting (N1) for Recommended Speed" documentary unit
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	1	Documentation update: Addition of "Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	2	Documentation update: Addition of "Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit
PRO-ABN-NAV UNRELIABLE SPEED INDICATION	A	7	Documentation update: Addition of "UNRELIABLE SPEED INDICATION" documentary unit
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	8	Documentation update: Addition of "Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	56	Documentation update: Addition of "NAV ATC/XPDR 1+2 FAULT" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT - FWSPAGE	S	58	Documentation update: Addition of "NAV ATC/XPDR 1+2 FAULT - FWSPAGE" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 2 CTL FAULT	T	59	Documentation update: Addition of "NAV ATC/XPDR 2 CTL FAULT" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 2 CTL FAULT	T	60	Documentation update: Addition of "NAV ATC/XPDR 2 CTL FAULT" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 2 CTL FAULT - FWSPAGE	T	61	Documentation update: Addition of "NAV ATC/XPDR 2 CTL FAULT - FWSPAGE" documentary unit
PRO-ABN-NAV NAV FLS 1(2)(1+2) FAULT	AC	79	Documentation update: Addition of "NAV FLS 1(2)(1+2) FAULT" documentary unit
PRO-ABN-NAV NAV FLS 1(2)(1+2) FAULT	AC	80	Documentation update: Addition of "NAV FLS 1(2)(1+2) FAULT" documentary unit
PRO-ABN-NAV NAV FLS 1(2)(1+2) FAULT - FWSPAGE	AC	81	Documentation update: Addition of "NAV FLS 1(2)(1+2) FAULT - FWSPAGE" documentary unit
PRO-ABN-OVERSPEED OVERSPEED	A	2	Documentation update: Addition of "OVERSPEED" documentary unit
PRO-ABN-VENT VENT BLOWER FAULT - FWSPAGE	B	2	Documentation update: Addition of "VENT BLOWER FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT BLOWER FAULT - FWSPAGE	B	4	Documentation update: Addition of "VENT BLOWER FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT BLOWER FAULT	B	5	Documentation update: Addition of "VENT BLOWER FAULT" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-VENT VENT BLOWER FAULT - FWSPAGE	B	6	Documentation update: Addition of "VENT BLOWER FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT EXTRACT FAULT - FWSPAGE	C	8	Documentation update: Addition of "VENT EXTRACT FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	16	Documentation update: Addition of "VENT SKIN VALVE FAULT" documentary unit
PRO-ABN-90 Cabin Crew-Assigned Areas for Evacuation	C	1	Documentation update: Addition of "Cabin Crew-Assigned Areas for Evacuation" documentary unit

PROCEDURES - NORMAL PROCEDURES

Localization Title	Toc Index	ID	Reason
PRO-NOR-PLP-TOC Normal Procedures		1	Documentation update: The "GPS PRIMARY Availability (If Installed)" table of content entry moved from "NP02584" to "AIL-00001802"
			Documentation update: The "Exterior Walkaround - ENG 1 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Preliminary Cockpit Preparation - EFB/ACARS Initialization" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Preliminary Cockpit Preparation - Before Walkaround" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Cockpit Preparation - Pedestal" table of content entry moved from "NG01999" to "AIL-00001872"
			Documentation update: The "Aircraft Configuration for Approach" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP)" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Engine Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Engine Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "After Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Exterior Walkaround - ENG 1 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "After Start For One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Before Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Climb" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Cruise" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Descent Preparation" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Overhead Panel - RCDR" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "Manual Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Automatic Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Go Around (With FD On)" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Parking" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Overhead Panel - Air Cond" table of content entry moved from "NG00846" to "AIL-00001813"

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Localization Title	Toc Index	ID	Reason
			Documentation update: Deletion of the "NP02582 Standard Operating Procedures" table of content entry.
			Documentation update: The "Overhead Panel - Fuel" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "CTR Instrument Panel - STBY Instrument " table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - ISIS" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - Clock" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "Pedestal - Cockpit Door " table of content entry moved from "NG00854" to "AIL-00001815"
			Documentation update: The "EFB/ACARS Init - FMGS Pre-Initialization - FM Database Validity" table of content entry moved from "NG01252" to "AIL-00001808"
			Documentation update: The "FMGS Preparation - FM Database Validity" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - NAVAID Deselection" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - ADIRS Position Initialization" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - RNP Insertion (PROG page)" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "ATC Datalink Communication" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "Instrument Panels" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "At Pushback/Start Clearance - Windows and Doors" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "At Pushback/Start Clearance - NW STRG DISC" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "One Engine Taxi Procedure" table of content entry moved from "NP02590" to "AIL-00001821"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Automatic Engine Start" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Before Walkaround - ECAM Pages" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Ground Run Up - Danger Areas" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "After Start - Flow Pattern" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Mode Selector" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - Dual Cooling" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - APU Bleed" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Anti-Ice" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "Taxi - Brakes" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - Engine 2 Start" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - ENG Mode Selector" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Before Walkaround - Alternate Braking System" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Taxi - Radar" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Departure Change" table of content entry moved from "NP05905" to "AIL-00001826"
			Documentation update: The "Before Takeoff - Exterior Lights" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Before Takeoff - RNP AR Departure Check" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Takeoff - Thrust Setting" table of content entry moved from "NG00917" to "AIL-00001830"
			Documentation update: The "Takeoff - Above Acceleration Altitude (or Once in Climb Phase)" table of content entry moved from "NG00917" to "AIL-00001830"
			Documentation update: The "After Takeoff - ENG MODE Selector" table of content entry moved from "NG00706" to "AIL-00001832"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "After Takeoff - Anti-Ice Protection" table of content entry moved from "NG00706" to "AIL-00001832"
			Documentation update: Deletion of the "NP02609 Standard Callouts" table of content entry.
			Documentation update: The "Climb - At the Transition Altitude" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: The "ADIRS" table of content entry moved from "NP02586" to "AIL-00001805"
			Documentation update: The "Climb - Radar" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: Deletion of the "NP05794 Tasksharing" table of content entry.
			Documentation update: The "Cruise - Radar Tilt" table of content entry moved from "NG00734" to "AIL-00001836"
			Documentation update: The "Descent Preparation - FMGS - PERF APPR - PERF GO AROUND" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - FMGS - RADIO NAV" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - RUNWAY CONDITION" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Radar" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Anti-Ice Protection" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Cross-Reference Table" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Stabilization Criteria" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Initial Approach - Radar" table of content entry moved from "NG01260" to "AIL-00001844"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At Green Dot Speed" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS

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Localization Title	Toc Index	ID	Reason
			are at 2" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Approach using LOC G/S Guidance - Final Approach" table of content entry moved from "NG01262" to "AIL-00001847"
			Documentation update: The "Approach using FINAL APP Guidance - General" table of content entry moved from "NG01263" to "AIL-00001848"
			Documentation update: The "Approach using FINAL APP Guidance - At Entered Minimum" table of content entry moved from "NG01263" to "AIL-00001848"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - General" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Aircraft Equipment" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Exterior Walkaround - Lower Center Fuselage" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Flight Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft" table of content entry moved from "NG01273" to "AIL-00001849"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Engine Failure" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Management of Degraded Navigation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FPA Guidance - At Entered Minimum" table of content entry moved from "NG01265" to "AIL-00001850"
			Documentation update: The "Visual Approach - General" table of content entry moved from "NG01267" to "AIL-00001853"
			Documentation update: The "Exterior Walkaround - ENG 2 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Landing - At Touchdown" table of content entry moved from "NG00743" to "AIL-00001855"
			Documentation update: The "Autoland - At Touch Down" table of content entry moved from "NG01757" to "AIL-00001856"
			Documentation update: The "Go Around with FD - Go Around Initiation" table of content entry moved from "NG00919" to "AIL-00001858"
			Documentation update: The "After Landing - Predictive Windshear" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Flaps" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - TCAS" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - ATC" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Anti-Ice Protection" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Brake Temperature" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Exterior Walkaround - ENG 2 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "After Landing - Single Engine Taxi" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Parking - General" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - ENG MASTER Levers" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Fuel Pumps" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Severe Icing Conditions" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Securing the Aircraft - ADIRS" table of content entry moved from "NG00742" to "AIL-00001864"
			Documentation update: The "Securing the Aircraft - EMER Lights and Signs" table of content entry moved from "NG00742" to "AIL-00001864"
			Documentation update: The "Approach" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Landing" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Summary for Each Phase - Taxi" table of content entry moved from "NG00990" to "AIL-00001869"
PRO-NOR-PLP-TOC Flight Preparation		2	Documentation update: The "GPS PRIMARY Availability (If Installed)" table of content entry moved from "NP02584" to "AIL-00001802"
PRO-NOR-PLP-TOC Preliminary Cockpit Preparation		3	Documentation update: The "ADIRS" table of content entry moved from "NP02586" to "AIL-00001805"
PRO-NOR-PLP-TOC EFB/ACARS (If Installed) Initialization		4	Documentation update: The "EFB/ACARS Init - FMGS Pre-Initialization - FM Database Validity" table of content entry moved from "NG01252" to "AIL-00001808"
PRO-NOR-PLP-TOC Before Walkaround		5	Documentation update: The "Before Walkaround - ECAM Pages" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Before Walkaround - Alternate Braking System" table of content entry moved from "NG00709" to "AIL-00001809"
PRO-NOR-PLP-TOC Exterior Walkaround		6	Documentation update: The "Exterior Walkaround - ENG 1 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Exterior Walkaround - ENG 1 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Exterior Walkaround - Lower Center Fuselage" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Exterior Walkaround - ENG 2 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Exterior Walkaround - ENG 2 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
PRO-NOR-PLP-TOC Cockpit Preparation		7	Documentation update: The "ATC Datalink Communication" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "Instrument Panels" table of content entry moved from "NP02588" to "AIL-00001812"
PRO-NOR-PLP-TOC Overhead Panel		8	Documentation update: The "Overhead Panel - RCDR" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "Overhead Panel - Air Cond" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "Overhead Panel - Fuel" table of content entry moved from "NG00846" to "AIL-00001813"
PRO-NOR-PLP-TOC CTR Instrument Panel		9	Documentation update: The "CTR Instrument Panel - STBY Instrument " table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - ISIS" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - Clock" table of content entry moved from "NG00852" to "AIL-00001814"
PRO-NOR-PLP-TOC Pedestal		10	Documentation update: The "Pedestal - Cockpit Door " table of content entry moved from "NG00854" to "AIL-00001815"
PRO-NOR-PLP-TOC FMGS Preparation		11	Documentation update: The "FMGS Preparation - FM Database Validity" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - NAVAID Deselection" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - ADIRS Position Initialization" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - RNP Insertion (PROG page)" table of content entry moved from "NG00864" to "AIL-00001816"

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Localization Title	Toc Index	ID	Reason
PRO-NOR-PLP-TOC At Pushback/Start Clearance		12	Documentation update: The "At Pushback/Start Clearance - Windows and Doors" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "At Pushback/Start Clearance - NW STRG DISC" table of content entry moved from "NG00713" to "AIL-00001820"
PRO-NOR-PLP-TOC Engine Start		13	Documentation update: The "One Engine Taxi Procedure" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Automatic Engine Start" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Ground Run Up - Danger Areas" table of content entry moved from "NP02590" to "AIL-00001821"
PRO-NOR-PLP-TOC After Start		14	Documentation update: The "After Start - Flow Pattern" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Mode Selector" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - Dual Cooling" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - APU Bleed" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Anti-Ice" table of content entry moved from "NG00714" to "AIL-00001823"
PRO-NOR-PLP-TOC Taxi		15	Documentation update: The "Taxi - Brakes" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - Engine 2 Start" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - ENG Mode Selector" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - Radar" table of content entry moved from "NG00715" to "AIL-00001825"
PRO-NOR-PLP-TOC Departure Change		16	Documentation update: The "Departure Change" table of content entry moved from "NP05905" to "AIL-00001826"
PRO-NOR-PLP-TOC Before Takeoff		17	Documentation update: The "Before Takeoff - Exterior Lights" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Before Takeoff - RNP AR Departure Check" table of content entry moved from "NG00745" to "AIL-00001828"
PRO-NOR-PLP-TOC Takeoff		18	Documentation update: The "Takeoff - Thrust Setting" table of content entry moved from "NG00917" to "AIL-00001830"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Takeoff - Above Acceleration Altitude (or Once in Climb Phase)" table of content entry moved from "NG00917" to "AIL-00001830"
PRO-NOR-PLP-TOC After Takeoff		19	Documentation update: The "After Takeoff - ENG MODE Selector" table of content entry moved from "NG00706" to "AIL-00001832"
			Documentation update: The "After Takeoff - Anti-Ice Protection" table of content entry moved from "NG00706" to "AIL-00001832"
PRO-NOR-PLP-TOC Climb		20	Documentation update: The "Climb - At the Transition Altitude" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: The "Climb - Radar" table of content entry moved from "NG00723" to "AIL-00001834"
PRO-NOR-PLP-TOC Cruise		21	Documentation update: The "Cruise - Radar Tilt" table of content entry moved from "NG00734" to "AIL-00001836"
PRO-NOR-PLP-TOC Descent Preparation		22	Documentation update: The "Descent Preparation - FMGS - PERF APPR - PERF GO AROUND" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - FMGS - RADIO NAV" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - RUNWAY CONDITION" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Radar" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Anti-Ice Protection" table of content entry moved from "NG00916" to "AIL-00001838"
PRO-NOR-PLP-TOC Approach General		23	Documentation update: The "Cross-Reference Table" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Stabilization Criteria" table of content entry moved from "NP03173" to "AIL-00001842"
PRO-NOR-PLP-TOC Initial Approach		24	Documentation update: The "Initial Approach - Radar" table of content entry moved from "NG01260" to "AIL-00001844"
PRO-NOR-PLP-TOC Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches		25	Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At Green Dot Speed" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2" table of content entry moved from "AIL-00000005" to "AIL-00001845"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE" table of content entry moved from "AIL-00000005" to "AIL-00001845"
PRO-NOR-PLP-TOC Approach using LOC G/S Guidance		26	Documentation update: The "Approach using LOC G/S Guidance - Final Approach" table of content entry moved from "NG01262" to "AIL-00001847"
PRO-NOR-PLP-TOC Approach using FINAL APP Guidance		27	Documentation update: The "Approach using FINAL APP Guidance - General" table of content entry moved from "NG01263" to "AIL-00001848"
			Documentation update: The "Approach using FINAL APP Guidance - At Entered Minimum" table of content entry moved from "NG01263" to "AIL-00001848"
PRO-NOR-PLP-TOC Approach using FINAL APP Guidance for RNAV(RNP)		28	Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - General" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Aircraft Equipment" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Flight Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Engine Failure" table of content entry moved from "NG01273" to "AIL-00001849"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Management of Degraded Navigation" table of content entry moved from "NG01273" to "AIL-00001849"
PRO-NOR-PLP-TOC Approach using FPA Guidance		29	Documentation update: The "Approach using FPA Guidance - At Entered Minimum" table of content entry moved from "NG01265" to "AIL-00001850"
PRO-NOR-PLP-TOC Visual Approach		30	Documentation update: The "Visual Approach - General" table of content entry moved from "NG01267" to "AIL-00001853"
PRO-NOR-PLP-TOC Manual Landing		31	Documentation update: The "Landing - At Touchdown" table of content entry moved from "NG00743" to "AIL-00001855"
PRO-NOR-PLP-TOC Autoland		32	Documentation update: The "Autoland - At Touch Down" table of content entry moved from "NG01757" to "AIL-00001856"
PRO-NOR-PLP-TOC Go Around with FD		33	Documentation update: The "Go Around with FD - Go Around Initiation" table of content entry moved from "NG00919" to "AIL-00001858"
PRO-NOR-PLP-TOC After Landing		34	Documentation update: The "After Landing - Predictive Windshear" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Flaps" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - TCAS" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - ATC" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Anti-Ice Protection" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Brake Temperature" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Single Engine Taxi" table of content entry moved from "NG00985" to "AIL-00001860"
PRO-NOR-PLP-TOC Parking		35	Documentation update: The "Parking - General" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - ENG MASTER Levers" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Fuel Pumps" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Severe Icing Conditions" table of content entry moved from "NG00986" to "AIL-00001862"
PRO-NOR-PLP-TOC Securing the Aircraft		36	Documentation update: The "Securing the Aircraft - ADIRS" table of content entry moved from "NG00742" to "AIL-00001864"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Securing the Aircraft - EMER Lights and Signs" table of content entry moved from "NG00742" to "AIL-00001864"
PRO-NOR-PLP-TOC Flight Parameters		37	Documentation update: The "Approach" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Landing" table of content entry moved from "NG01819" to "AIL-00001868"
PRO-NOR-PLP-TOC Summary for Each Phase		38	Documentation update: The "Summary for Each Phase - Taxi" table of content entry moved from "NG00990" to "AIL-00001869"
PRO-NOR-PLP-TOC Tasksharing		39	Documentation update: The "Engine Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Engine Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start For One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Before Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Climb" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Cruise" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Descent Preparation" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Manual Landing" table of content entry moved from "NP05794" to "AIL-00001870"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Automatic Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Go Around (With FD On)" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Parking" table of content entry moved from "NP05794" to "AIL-00001870"
PRO-NOR-PLP-TOC Preliminary Cockpit Preparation		40	Documentation update: The "Preliminary Cockpit Preparation - EFB/ACARS Initialization" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Preliminary Cockpit Preparation - Before Walkaround" table of content entry moved from "NG01998" to "AIL-00001871"
PRO-NOR-PLP-TOC Cockpit Preparation		41	Documentation update: The "Cockpit Preparation - Pedestal" table of content entry moved from "NG01999" to "AIL-00001872"
PRO-NOR-PLP-TOC Approach		42	Documentation update: The "Aircraft Configuration for Approach" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP)" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance" table of content entry moved from "NG02002" to "AIL-00001874"
PRO-NOR-SOP-01 Foreword	A	1	Documentation update: Addition of "Foreword" documentary unit
PRO-NOR-SOP-01 Golden Rules for Pilots	B	2	Documentation update: Addition of "Golden Rules for Pilots" documentary unit
PRO-NOR-SOP-01 Airlines Policy	C	3	Documentation update: Addition of "Airlines Policy" documentary unit
PRO-NOR-SOP-03 Safety Exterior Inspection - General	A	1	Documentation update: Addition of "Safety Exterior Inspection - General" documentary unit
PRO-NOR-SOP-03 Safety Exterior Inspection - Wheel Chocks	A	2	Documentation update: Addition of "Safety Exterior Inspection - Wheel Chocks" documentary unit
PRO-NOR-SOP-03 Safety Exterior Inspection - Landing Gear Doors	A	3	Documentation update: Addition of "Safety Exterior Inspection - Landing Gear Doors" documentary unit
PRO-NOR-SOP-03 Safety Exterior Inspection - APU Area	A	4	Documentation update: Addition of "Safety Exterior Inspection - APU Area" documentary unit
PRO-NOR-SOP-04 General	A	1	Documentation update: Addition of "General" documentary unit
PRO-NOR-SOP-04	B	2	Documentation update: Addition of "General" documentary unit

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Localization Title	Toc Index	ID	Reason
General			
PRO-NOR-SOP-04 Aircraft Power Up - ENG	B	3	Documentation update: Addition of "Aircraft Power Up - ENG" documentary unit
PRO-NOR-SOP-04 Aircraft Power Up - Weather Radar	B	4	Documentation update: Addition of "Aircraft Power Up - Weather Radar" documentary unit
PRO-NOR-SOP-04 Aircraft Power Up - L/G	B	5	Documentation update: Addition of "Aircraft Power Up - L/G" documentary unit
PRO-NOR-SOP-04 Aircraft Power Up - Wipers	B	6	Documentation update: Addition of "Aircraft Power Up - Wipers" documentary unit
PRO-NOR-SOP-04 Batteries Check/External Power	C	7	Documentation update: Addition of "Batteries Check/External Power" documentary unit
PRO-NOR-SOP-04 RMP	D	8	Documentation update: Addition of "RMP" documentary unit
PRO-NOR-SOP-04 APU Fire Test/Start - APU fire	D	9	Documentation update: Addition of "APU Fire Test/Start - APU fire" documentary unit
PRO-NOR-SOP-04 APU Fire Test/Start - APU Start	D	10	Documentation update: Addition of "APU Fire Test/Start - APU Start" documentary unit
PRO-NOR-SOP-04 Cockpit Lights	G	15	Documentation update: Addition of "Cockpit Lights" documentary unit
PRO-NOR-SOP-04 EFB Initialization	H	16	Documentation update: Addition of "EFB Initialization" documentary unit
PRO-NOR-SOP-04 EFB/ACARS Init - ACARS Initialization	H	17	Documentation update: Addition of "EFB/ACARS Init - ACARS Initialization" documentary unit
PRO-NOR-SOP-04 FMGS Pre-Initialization - General	H	18	Documentation update: Addition of "FMGS Pre-Initialization - General" documentary unit
PRO-NOR-SOP-04 FMGS Pre-Initialization - Engine and Aircraft Type	H	19	Documentation update: Addition of "FMGS Pre-Initialization - Engine and Aircraft Type" documentary unit
PRO-NOR-SOP-04 FMGS Pre-Initialization - FLT NBR - FROM/TO	H	20	Documentation update: Addition of "FMGS Pre-Initialization - FLT NBR - FROM/TO" documentary unit
PRO-NOR-SOP-04 EFB STATUS Page	H	21	Documentation update: Addition of "EFB STATUS Page" documentary unit
PRO-NOR-SOP-04 AIRCRAFT ACCEPTANCE	I	22	Documentation update: Addition of "AIRCRAFT ACCEPTANCE" documentary unit
PRO-NOR-SOP-04 Preliminary Performance Determination	J	23	Documentation update: Addition of "Preliminary Performance Determination" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - F/CTL	K	24	Documentation update: Addition of "Before Walk-Around - F/CTL" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-04 Before Walk-Around - Parking Brake	K	25	Documentation update: Addition of "Before Walk-Around - Parking Brake" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - Emergency Equipment	K	27	Documentation update: Addition of "Before Walk-Around - Emergency Equipment" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - Rain Repellent ◁	K	28	Documentation update: Addition of "Before Walk-Around - Rain Repellent" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - Rear and Overhead Circuit Breakers Panels	K	29	Documentation update: Addition of "Before Walk-Around - Rear and Overhead Circuit Breakers Panels" documentary unit
PRO-NOR-SOP-04 Before Walkaround - Landing Gear Pins	K	30	Documentation update: Addition of "Before Walkaround - Landing Gear Pins" documentary unit
PRO-NOR-SOP-05 General	A	1	Documentation update: Addition of "General" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - Schematic	B	2	Documentation update: Addition of "Exterior Walk-Around - Schematic" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH FWD Fuselage	B	3	Documentation update: Addition of "Exterior Walk-Around - LH FWD Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - Nose Section	B	4	Documentation update: Addition of "Exterior Walk-Around - Nose Section" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - Nose L/G	B	5	Documentation update: Addition of "Exterior Walk-Around - Nose L/G" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH FWD Fuselage	B	6	Documentation update: Addition of "Exterior Walk-Around - RH FWD Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH Center Wing	B	7	Documentation update: Addition of "Exterior Walk-Around - RH Center Wing" documentary unit
PRO-NOR-SOP-05 Exterior WalkAround RH Wing Leading Edge	B	8	Documentation update: Addition of "Exterior WalkAround RH Wing Leading Edge" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH Wing Trailing Edge	B	9	Documentation update: Addition of "Exterior Walk-Around - RH Wing Trailing Edge" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH L/G and Fuselage	B	10	Documentation update: Addition of "Exterior Walk-Around - RH L/G and Fuselage" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-05 Exterior Walk-Around - RH AFT Fuselage	B	11	Documentation update: Addition of "Exterior Walk-Around - RH AFT Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - TAIL	B	12	Documentation update: Addition of "Exterior Walk-Around - TAIL" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - APU	B	13	Documentation update: Addition of "Exterior Walk-Around - APU" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH AFT Fuselage	B	14	Documentation update: Addition of "Exterior Walk-Around - LH AFT Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Landing Gear	B	15	Documentation update: Addition of "Exterior Walk-Around - LH Landing Gear" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Wing Trailing Edge	B	16	Documentation update: Addition of "Exterior Walk-Around - LH Wing Trailing Edge" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Wing Leading Edge	B	17	Documentation update: Addition of "Exterior Walk-Around - LH Wing Leading Edge" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Center Wing	B	18	Documentation update: Addition of "Exterior Walk-Around - LH Center Wing" documentary unit
PRO-NOR-SOP-06 General	A	1	Documentation update: Addition of "General" documentary unit
PRO-NOR-SOP-06 Flow Pattern	B	2	Documentation update: Addition of "Flow Pattern" documentary unit
PRO-NOR-SOP-06 Overhead Panel - White Lights On Overhead Panel	C	3	Documentation update: Addition of "Overhead Panel - White Lights On Overhead Panel" documentary unit
PRO-NOR-SOP-06 Overhead Panel - EVAC	C	9	Documentation update: Addition of "Overhead Panel - EVAC" documentary unit
PRO-NOR-SOP-06 Overhead Panel - EXTERIOR LIGHTS	C	10	Documentation update: Addition of "Overhead Panel - EXTERIOR LIGHTS" documentary unit
PRO-NOR-SOP-06 Overhead Panel - SIGNS	C	11	Documentation update: Addition of "Overhead Panel - SIGNS" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Probe/Window Heat	C	12	Documentation update: Addition of "Overhead Panel - Probe/Window Heat" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Cabin Press	C	13	Documentation update: Addition of "Overhead Panel - Cabin Press" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-06 Overhead Panel - Elec	C	17	Documentation update: Addition of "Overhead Panel - Elec" documentary unit
PRO-NOR-SOP-06 Overhead Panel - ENG 1- ENG 2 Fire	C	20	Documentation update: Addition of "Overhead Panel - ENG 1- ENG 2 Fire" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Audio Switching Panel	C	21	Documentation update: Addition of "Overhead Panel - Audio Switching Panel" documentary unit
PRO-NOR-SOP-06 Cargo Heat	C	22	Documentation update: Addition of "Cargo Heat" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Third Occupant Audio Control Panel	C	23	Documentation update: Addition of "Overhead Panel - Third Occupant Audio Control Panel" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Maintenance Panel	C	24	Documentation update: Addition of "Overhead Panel - Maintenance Panel" documentary unit
PRO-NOR-SOP-06 CTR Instrument Panel - Nosewheel Steering	D	29	Documentation update: Addition of "CTR Instrument Panel - Nosewheel Steering" documentary unit
PRO-NOR-SOP-06 Pedestal - ACP	E	30	Documentation update: Addition of "Pedestal - ACP" documentary unit
PRO-NOR-SOP-06 Pedestal - Parking BRK	E	31	Documentation update: Addition of "Pedestal - Parking BRK" documentary unit
PRO-NOR-SOP-06 Pedestal - Switching Panel	E	33	Documentation update: Addition of "Pedestal - Switching Panel" documentary unit
PRO-NOR-SOP-06 Pedestal - Engines	E	34	Documentation update: Addition of "Pedestal - Engines" documentary unit
PRO-NOR-SOP-06 Pedestal - Gravity Gear EXTN	E	35	Documentation update: Addition of "Pedestal - Gravity Gear EXTN" documentary unit
PRO-NOR-SOP-06 Pedestal - ATC	E	36	Documentation update: Addition of "Pedestal - ATC" documentary unit
PRO-NOR-SOP-06 RMP	F	37	Documentation update: Addition of "RMP" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - General	H	38	Documentation update: Addition of "FMGS Initialization - General" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - Engine and Aircraft Type	H	39	Documentation update: Addition of "FMGS Initialization - Engine and Aircraft Type" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - Flight Plan Initialization	H	45	Documentation update: Addition of "FMGS Initialization - Flight Plan Initialization" documentary unit
PRO-NOR-SOP-06	H	48	Documentation update: Addition of "FMGS Initialization - Active F-PLN Check" documentary unit

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Localization Title	Toc Index	ID	Reason
FMGS Initialization - Active F-PLN Check			
PRO-NOR-SOP-06 FMGS Initialization - Secondary F-PLN	H	49	Documentation update: Addition of "FMGS Initialization - Secondary F-PLN" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - Radio NAV	H	50	Documentation update: Addition of "FMGS Initialization - Radio NAV" documentary unit
PRO-NOR-SOP-06 FMGS Data Insertion - Gross Weight Insertion (INIT B PAGE)	H	51	Documentation update: Addition of "FMGS Data Insertion - Gross Weight Insertion (INIT B page)" documentary unit
PRO-NOR-SOP-06 FMGS Data Insertion - Takeoff Data Insertion (PERF TAKEOFF PAGE)	H	52	Documentation update: Addition of "FMGS Data Insertion - Takeoff Data Insertion (PERF Takeoff page)" documentary unit
PRO-NOR-SOP-06 FMGS Data Insertion - Climb, Cruise, Descent, SpeEd Preselection	H	54	Documentation update: Addition of "FMGS Data Insertion - Climb, Cruise, Descent, SpeEd Preselection" documentary unit
PRO-NOR-SOP-06 FMGS Preparation - Check of FMGS Preparation	H	55	Documentation update: Addition of "FMGS Preparation - Check of FMGS Preparation" documentary unit
PRO-NOR-SOP-06 Glareshield - EFIS Control Panel	I	56	Documentation update: Addition of "Glareshield - EFIS Control Panel" documentary unit
PRO-NOR-SOP-06 Glareshield - FCU	I	57	Documentation update: Addition of "Glareshield - FCU" documentary unit
PRO-NOR-SOP-06 Lateral Consoles	J	58	Documentation update: Addition of "Lateral Consoles" documentary unit
PRO-NOR-SOP-06 ECAM Control Panel	L	61	Documentation update: Addition of "ECAM Control Panel" documentary unit
PRO-NOR-SOP-06 ADIRS	M	62	Documentation update: Addition of "ADIRS" documentary unit
PRO-NOR-SOP-06 Fuel on Board	N	63	Documentation update: Addition of "Fuel on Board" documentary unit
PRO-NOR-SOP-06 Departure Briefing	O	64	Documentation update: Addition of "Departure Briefing" documentary unit
PRO-NOR-SOP-06 Cockpit Preparation Checklist	P	65	Documentation update: Addition of "Cockpit Preparation Checklist" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Loadsheet	A	1	Documentation update: Addition of "Before Pushback/Start Clearance - Loadsheet" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Fuel	A	2	Documentation update: Addition of "Before Pushback/Start Clearance - Fuel" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Takeoff Data	A	3	Documentation update: Addition of "Before Pushback/Start Clearance - Takeoff Data" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Seating Position	A	4	Documentation update: Addition of "Before Pushback/Start Clearance - Seating Position" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - MCDU	A	5	Documentation update: Addition of "Before Pushback/Start Clearance - MCDU" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - EXT PWR	A	6	Documentation update: Addition of "Before Pushback/Start Clearance - EXT PWR" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Flow Pattern	B	7	Documentation update: Addition of "At Pushback/Start Clearance - Flow Pattern" documentary unit
PRO-NOR-SOP-07 At Start Clearance	B	8	Documentation update: Addition of "At Start Clearance" documentary unit
PRO-NOR-SOP-07 At Start Clearance - Slides Armed Announce	B	9	Documentation update: Addition of "At Start Clearance - Slides Armed Announce" documentary unit
PRO-NOR-SOP-07 At Start Clearance - Safety Check	B	10	Documentation update: Addition of "At Start Clearance - Safety Check" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Pushback/Start Clearance	B	11	Documentation update: Addition of "At Pushback/Start Clearance - Pushback/Start Clearance" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Beacon Light	B	12	Documentation update: Addition of "At Pushback/Start Clearance - Beacon Light" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - ATC	B	13	Documentation update: Addition of "At Pushback/Start Clearance - ATC" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - THR Levers	B	16	Documentation update: Addition of "At Pushback/Start Clearance - THR Levers" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - ACCU PRESSURE	B	17	Documentation update: Addition of "At Pushback/Start Clearance - ACCU PRESSURE" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Parking Brake	B	18	Documentation update: Addition of "At Pushback/Start Clearance - Parking Brake" documentary unit
PRO-NOR-SOP-09 After Start - Wing Anti Ice	A	13	Documentation update: Addition of "After Start - Wing Anti Ice" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-09 After Start - APU	A	14	Documentation update: Addition of "After Start - APU" documentary unit
PRO-NOR-SOP-09 After Start - Ground Spoilers	A	15	Documentation update: Addition of "After Start - Ground Spoilers" documentary unit
PRO-NOR-SOP-09 After Start - Rudder Trim	A	16	Documentation update: Addition of "After Start - Rudder Trim" documentary unit
PRO-NOR-SOP-09 After Start - Flaps Lever	A	17	Documentation update: Addition of "After Start - Flaps Lever" documentary unit
PRO-NOR-SOP-09 After Start - Pitch Trim	A	18	Documentation update: Addition of "After Start - Pitch Trim" documentary unit
PRO-NOR-SOP-09 After Start - ECAM Status	A	19	Documentation update: Addition of "After Start - ECAM Status" documentary unit
PRO-NOR-SOP-09 After Start - N/W STEER DISC MEMO	A	20	Documentation update: Addition of "After Start - N/W STEER DISC MEMO" documentary unit
PRO-NOR-SOP-09 After Start - Ground Crew	A	21	Documentation update: Addition of "After Start - Ground Crew" documentary unit
PRO-NOR-SOP-09 After Start - Checklist	A	22	Documentation update: Addition of "After Start - Checklist" documentary unit
PRO-NOR-SOP-10 Taxi - Taxi Clearance	A	1	Documentation update: Addition of "Taxi - Taxi Clearance" documentary unit
PRO-NOR-SOP-10 Taxi - Lights	A	2	Documentation update: Addition of "Taxi - Lights" documentary unit
PRO-NOR-SOP-10 Taxi - Y Elec Pump	A	3	Documentation update: Addition of "Taxi - Y Elec Pump" documentary unit
PRO-NOR-SOP-10 Taxi - Parking Brake	A	4	Documentation update: Addition of "Taxi - Parking Brake" documentary unit
PRO-NOR-SOP-10 Taxi - Flight Controls	A	10	Documentation update: Addition of "Taxi - Flight Controls" documentary unit
PRO-NOR-SOP-10 Taxi - ATC Clearance	A	11	Documentation update: Addition of "Taxi - ATC Clearance" documentary unit
PRO-NOR-SOP-10 Taxi - AFS/Flight Instruments	A	12	Documentation update: Addition of "Taxi - AFS/Flight Instruments" documentary unit
PRO-NOR-SOP-10 Taxi - Flow Pattern	A	13	Documentation update: Addition of "Taxi - Flow Pattern" documentary unit
PRO-NOR-SOP-10 Taxi - Auto BRK	A	14	Documentation update: Addition of "Taxi - Auto BRK" documentary unit
PRO-NOR-SOP-10 Taxi - Terr on ND	A	15	Documentation update: Addition of "Taxi - Terr on ND" documentary unit
PRO-NOR-SOP-10 Taxi - ATC	A	16	Documentation update: Addition of "Taxi - ATC" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-10 Taxi - Final Check	A	24	Documentation update: Addition of "Taxi - Final Check" documentary unit
PRO-NOR-SOP-10 Taxi - Checklist	A	25	Documentation update: Addition of "Taxi - Checklist" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Line-Up Flow Pattern	A	1	Documentation update: Addition of "Before Takeoff - Line-Up Flow Pattern" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Brake Temperature	A	2	Documentation update: Addition of "Before Takeoff - Brake Temperature" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Line-Up Clearance	A	3	Documentation update: Addition of "Before Takeoff - Line-Up Clearance" documentary unit
PRO-NOR-SOP-11 Before Takeoff - TCAS	A	4	Documentation update: Addition of "Before Takeoff - TCAS" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Takeoff Runway Check	A	5	Documentation update: Addition of "Before Takeoff - Takeoff Runway Check" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Approach Path Cleared of Traffic	A	6	Documentation update: Addition of "Before Takeoff - Approach Path Cleared of Traffic" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Exterior Lights	A	8	Documentation update: Addition of "Before Takeoff - Exterior Lights" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Packs	A	9	Documentation update: Addition of "Before Takeoff - Packs" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Sliding Table/efb	A	11	Documentation update: Addition of "Before Takeoff - Sliding Table/efb" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Cabin Crew	A	12	Documentation update: Addition of "Before Takeoff - Cabin Crew" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Line-Up Checklist	A	13	Documentation update: Addition of "Before Takeoff - Line-Up Checklist" documentary unit
PRO-NOR-SOP-12 Takeoff - Takeoff Clearance	A	1	Documentation update: Addition of "Takeoff - Takeoff Clearance" documentary unit
PRO-NOR-SOP-12 Takeoff - Exterior Lights	A	2	Documentation update: Addition of "Takeoff - Exterior Lights" documentary unit
PRO-NOR-SOP-12 Takeoff - Below 80 Knots	A	5	Documentation update: Addition of "Takeoff - Below 80 Knots" documentary unit
PRO-NOR-SOP-12 Takeoff - At 80 kt	A	6	Documentation update: Addition of "Takeoff - At 80 kt" documentary unit
PRO-NOR-SOP-12 Takeoff - At 100 Knots	A	7	Documentation update: Addition of "Takeoff - At 100 Knots" documentary unit
PRO-NOR-SOP-12 Takeoff - At V1	A	8	Documentation update: Addition of "Takeoff - At V1" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-12 Takeoff - At VR	A	9	Documentation update: Addition of "Takeoff - At VR" documentary unit
PRO-NOR-SOP-12 Takeoff - When Positive Climb	A	10	Documentation update: Addition of "Takeoff - When Positive Climb" documentary unit
PRO-NOR-SOP-12 Takeoff - At Thrust Reduction Altitude	A	11	Documentation update: Addition of "Takeoff - At Thrust Reduction Altitude" documentary unit
PRO-NOR-SOP-12 Takeoff - Takeoff Pattern	A	14	Documentation update: Addition of "Takeoff - Takeoff Pattern" documentary unit
PRO-NOR-SOP-13 After Takeoff - APU	A	1	Documentation update: Addition of "After Takeoff - APU" documentary unit
PRO-NOR-SOP-13 After Takeoff - TCAS	A	3	Documentation update: Addition of "After Takeoff - TCAS" documentary unit
PRO-NOR-SOP-14 Climb - Initial Climb	A	1	Documentation update: Addition of "Climb - Initial Climb" documentary unit
PRO-NOR-SOP-14 Climb - At the Transition Altitude	A	2	Documentation update: Addition of "Climb - At the Transition Altitude" documentary unit
PRO-NOR-SOP-14 Climb - Climb	A	4	Documentation update: Addition of "Climb - Climb" documentary unit
PRO-NOR-SOP-14 Climb - Anti Ice Protection	A	5	Documentation update: Addition of "Climb - Anti Ice Protection" documentary unit
PRO-NOR-SOP-14	A	11	Documentation update: Addition of "" documentary unit
PRO-NOR-SOP-14 Climb - Climb At 10 000 ft	A	12	Documentation update: Addition of "Climb - Climb At 10 000 ft" documentary unit
PRO-NOR-SOP-15 Cruise - ECAM	A	1	Documentation update: Addition of "Cruise - ECAM" documentary unit
PRO-NOR-SOP-15 Cruise - Flight Progress	A	2	Documentation update: Addition of "Cruise - Flight Progress" documentary unit
PRO-NOR-SOP-15 Cruise - Step Flight Level	A	3	Documentation update: Addition of "Cruise - Step Flight Level" documentary unit
PRO-NOR-SOP-15 Cruise - Navigation Accuracy	A	4	Documentation update: Addition of "Cruise - Navigation Accuracy" documentary unit
PRO-NOR-SOP-15 Cruise - Oxygen Masks	A	8	Documentation update: Addition of "Cruise - Oxygen Masks" documentary unit
PRO-NOR-SOP-15 Cruise - Cruise Briefing	A	9	Documentation update: Addition of "Cruise - Cruise Briefing" documentary unit
PRO-NOR-SOP-16 Descent Preparation - General	A	1	Documentation update: Addition of "Descent Preparation - General" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Landing Information	A	2	Documentation update: Addition of "Descent Preparation - Landing Information" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-16 Descent Preparation - ECAM Status	A	3	Documentation update: Addition of "Descent Preparation - ECAM Status" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Landing Performance	A	4	Documentation update: Addition of "Descent Preparation - Landing Performance" documentary unit
PRO-NOR-SOP-16 Descent Preparation - FMGS - ARRIVAL - F-PLN	A	5	Documentation update: Addition of "Descent Preparation - FMGS - ARRIVAL - F-PLN" documentary unit
PRO-NOR-SOP-16 Descent Preparation - FMGS - DES WIND - PERF CRUISE - PERF DES	A	6	Documentation update: Addition of "Descent Preparation - FMGS - DES WIND - PERF CRUISE - PERF DES" documentary unit
PRO-NOR-SOP-16 Descent Preparation - FMGS - SEC F-PLN	A	14	Documentation update: Addition of "Descent Preparation - FMGS - SEC F-PLN" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Check of FMGS Preparation	A	15	Documentation update: Addition of "Descent Preparation - Check of FMGS Preparation" documentary unit
PRO-NOR-SOP-16 Preferential Setting for Landing	A	16	Documentation update: Addition of "Preferential Setting for Landing" documentary unit
PRO-NOR-SOP-16 Descent Preparation - VIP	A	17	Documentation update: Addition of "Descent Preparation - VIP" documentary unit
PRO-NOR-SOP-16 Descent Preparation - GPWS LDG Flaps 3	A	18	Documentation update: Addition of "Descent Preparation - GPWS LDG Flaps 3" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Landing Elevation	A	19	Documentation update: Addition of "Descent Preparation - Landing Elevation" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Autobrake	A	21	Documentation update: Addition of "Descent Preparation - Autobrake" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Arrival Briefing	A	22	Documentation update: Addition of "Descent Preparation - Arrival Briefing" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Radar	A	25	Documentation update: Addition of "Descent Preparation - Radar" documentary unit
PRO-NOR-SOP-16 Descent PREPARATION - TCAS	A	26	Documentation update: Addition of "Descent PREPARATION - TCAS" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Descent Clearance	A	29	Documentation update: Addition of "Descent Preparation - Descent Clearance" documentary unit
PRO-NOR-SOP-17 Descent Initiation	A	1	Documentation update: Addition of "Descent Initiation" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-17 Descent Monitoring	B	2	Documentation update: Addition of "Descent Monitoring" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - General	C	3	Documentation update: Addition of "Descent Adjustment - General" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - Terr on ND	C	4	Documentation update: Addition of "Descent Adjustment - Terr on ND" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - BARO Ref	C	5	Documentation update: Addition of "Descent Adjustment - BARO Ref" documentary unit
PRO-NOR-SOP-17	C	6	Documentation update: Addition of "" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - At 10000 FT	C	7	Documentation update: Addition of "Descent Adjustment - At 10000 FT" documentary unit
PRO-NOR-SOP-17 descent Adjustment - ENG MODE	C	8	Documentation update: Addition of "descent Adjustment - ENG MODE" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - Navigation Accuracy	C	9	Documentation update: Addition of "Descent Adjustment - Navigation Accuracy" documentary unit
PRO-NOR-SOP-17 Approach Checklist	D	10	Documentation update: Addition of "Approach Checklist" documentary unit
PRO-NOR-SOP-18-A Introduction	A	1	Documentation update: Addition of "Introduction" documentary unit
PRO-NOR-SOP-18-A Flying Reference	C	6	Documentation update: Addition of "Flying Reference" documentary unit
PRO-NOR-SOP-18-A Approach Speed Technique	E	7	Documentation update: Addition of "Approach Speed Technique" documentary unit
PRO-NOR-SOP-18-A Discontinued Approach	F	8	Documentation update: Addition of "Discontinued Approach" documentary unit
PRO-NOR-SOP-18-B Initial Approach - General	A	1	Documentation update: Addition of "Initial Approach - General" documentary unit
PRO-NOR-SOP-18-B Initial Approach - Initial Approach	A	2	Documentation update: Addition of "Initial Approach - Initial Approach" documentary unit
PRO-NOR-SOP-18-B Initial Approach - Radar	A	5	Documentation update: Addition of "Initial Approach - Radar" documentary unit
PRO-NOR-SOP-18-B Initial Approach - Navigation Accuracy	A	6	Documentation update: Addition of "Initial Approach - Navigation Accuracy" documentary unit
PRO-NOR-SOP-18-B Intermediate/Final Approach	B	7	Documentation update: Addition of "Intermediate/Final Approach" documentary unit
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - One Dot Below Flight	B	10	Documentation update: Addition of "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - One Dot Below Flight Path, Prior To VIP OR 2 000 ft AFE, Whichever Occurs First" documentary unit

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Localization Title	Toc Index	ID	Reason
Path, Prior To VIP OR 2 000 ft AFE, Whichever Occurs First			
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At 2 500 ft AFE	B	11	Documentation update: Addition of "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At 2 500 ft AFE" documentary unit
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - Pattern (decelerated)	B	17	Documentation update: Addition of "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - Pattern (decelerated)" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - General	A	1	Documentation update: Addition of "Approach using LOC G/S Guidance - General" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Descent Preparation	A	2	Documentation update: Addition of "Approach using LOC G/S Guidance - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Initial/Intermediate Approach	A	3	Documentation update: Addition of "Approach using LOC G/S Guidance - Initial/Intermediate Approach" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Glide Interception from Above	A	4	Documentation update: Addition of "Approach using LOC G/S Guidance - Glide Interception from Above" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Management of Degraded Guidance	A	7	Documentation update: Addition of "Approach using LOC G/S Guidance - Management of Degraded Guidance" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Aircraft Equipment	B	8	Documentation update: Addition of "Approach using FINAL APP Guidance - Aircraft Equipment" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Flight Preparation	B	9	Documentation update: Addition of "Approach using FINAL APP Guidance - Flight Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Descent Preparation	B	10	Documentation update: Addition of "Approach using FINAL APP Guidance - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Descent	B	11	Documentation update: Addition of "Approach using FINAL APP Guidance - Descent" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Initial/Intermediate/Final Approach	B	12	Documentation update: Addition of "Approach using FINAL APP Guidance - Initial/Intermediate/Final Approach" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum +100 ft	B	13	Documentation update: Addition of "Approach using FINAL APP Guidance - At Entered Minimum +100 ft" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Management of Degraded Navigation	B	19	Documentation update: Addition of "Approach using FINAL APP Guidance - Management of Degraded Navigation" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Selected Vertical (NAV/FPA - TRACK/FPA) FDP (BIRD ON)	B	20	Documentation update: Addition of "Approach using FINAL APP Guidance - Selected Vertical (NAV/FPA - TRACK/FPA) FDP (BIRD ON)" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - General	D	28	Documentation update: Addition of "Approach using FPA Guidance - General" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Aircraft Equipment	D	29	Documentation update: Addition of "Approach using FPA Guidance - Aircraft Equipment" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Flight Preparation	D	30	Documentation update: Addition of "Approach using FPA Guidance - Flight Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Descent Preparation	D	31	Documentation update: Addition of "Approach using FPA Guidance - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Descent	D	32	Documentation update: Addition of "Approach using FPA Guidance - Descent" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Initial/Intermediate/Final Approach	D	33	Documentation update: Addition of "Approach using FPA Guidance - Initial/Intermediate/Final Approach" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum +100 ft	D	34	Documentation update: Addition of "Approach using FPA Guidance - At Entered Minimum +100 ft" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Management of Degraded Navigation	D	38	Documentation update: Addition of "Approach using FPA Guidance - Management of Degraded Navigation" documentary unit
PRO-NOR-SOP-18-C Circling Approach - General	E	39	Documentation update: Addition of "Circling Approach - General" documentary unit
PRO-NOR-SOP-18-C	E	40	Documentation update: Addition of "Circling Approach - Approach Preparation" documentary unit

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Localization Title	Toc Index	ID	Reason
Circling Approach - Approach Preparation			
PRO-NOR-SOP-18-C Circling Approach - Instrument Approach	E	41	Documentation update: Addition of "Circling Approach - Instrument Approach" documentary unit
PRO-NOR-SOP-18-C Circling Approach - Circling Approach	E	42	Documentation update: Addition of "Circling Approach - Circling Approach" documentary unit
PRO-NOR-SOP-18-C Circling Approach - Circling Approach Pattern	E	43	Documentation update: Addition of "Circling Approach - Circling Approach Pattern" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - General	F	44	Documentation update: Addition of "RNAV Visual Approach - General" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Equipment Required	F	45	Documentation update: Addition of "RNAV Visual Approach - Equipment Required" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - FMGC guidance mode	F	46	Documentation update: Addition of "RNAV Visual Approach - FMGC guidance mode" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Descent Preparation	F	47	Documentation update: Addition of "RNAV Visual Approach - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Descent	F	48	Documentation update: Addition of "RNAV Visual Approach - Descent" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Final Approach	F	49	Documentation update: Addition of "RNAV Visual Approach - Final Approach" documentary unit
PRO-NOR-SOP-18-C Visual Approach - Initial/Intermediate Approach	G	50	Documentation update: Addition of "Visual Approach - Initial/Intermediate Approach" documentary unit
PRO-NOR-SOP-18-C Visual Approach - Final Approach	G	51	Documentation update: Addition of "Visual Approach - Final Approach" documentary unit
PRO-NOR-SOP-18-C Visual Approach - Visual Approach (1 or 2 engines) Pattern	G	52	Documentation update: Addition of "Visual Approach - Visual Approach (1 or 2 engines) Pattern" documentary unit
PRO-NOR-SOP-18-C Selected Vertical (NAV/FPA - TRACK/FPA) FPD (Bird On)	H	53	Documentation update: Addition of "Selected Vertical (NAV/FPA - TRACK/FPA) FPD (Bird On)" documentary unit
PRO-NOR-SOP-19 Landing	A	1	Documentation update: Addition of "Landing" documentary unit
PRO-NOR-SOP-19 Landing - Flare	A	2	Documentation update: Addition of "Landing - Flare" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-19 Landing - At 70 Knots	A	5	Documentation update: Addition of "Landing - At 70 Knots" documentary unit
PRO-NOR-SOP-19 Landing - At Taxi Speed	A	6	Documentation update: Addition of "Landing - At Taxi Speed" documentary unit
PRO-NOR-SOP-19 Landing - Before 20 Knots	A	7	Documentation update: Addition of "Landing - Before 20 Knots" documentary unit
PRO-NOR-SOP-19 Autoland	B	8	Documentation update: Addition of "Autoland" documentary unit
PRO-NOR-SOP-19 Autoland - At 350 ft RA	B	9	Documentation update: Addition of "Autoland - At 350 ft RA" documentary unit
PRO-NOR-SOP-19 Autoland - At 40 ft RA	B	10	Documentation update: Addition of "Autoland - At 40 ft RA" documentary unit
PRO-NOR-SOP-19 Autoland - At 30 ft RA	B	11	Documentation update: Addition of "Autoland - At 30 ft RA" documentary unit
PRO-NOR-SOP-19 Autoland - At 10 ft RA	B	12	Documentation update: Addition of "Autoland - At 10 ft RA" documentary unit
PRO-NOR-SOP-19 Autoland - At 70 Knots	B	15	Documentation update: Addition of "Autoland - At 70 Knots" documentary unit
PRO-NOR-SOP-19 Autoland - Before 20 Knots	B	16	Documentation update: Addition of "Autoland - Before 20 Knots" documentary unit
PRO-NOR-SOP-19 Autoland - End of Roll Out	B	17	Documentation update: Addition of "Autoland - End of Roll Out" documentary unit
PRO-NOR-SOP-20 Go Around with FD - At Go-Around Thrust Reduction Altitude	A	5	Documentation update: Addition of "Go Around with FD - At Go-Around Thrust Reduction Altitude" documentary unit
PRO-NOR-SOP-20 Go Around with FD - At Go-Around Acceleration Altitude	A	6	Documentation update: Addition of "Go Around with FD - At Go-Around Acceleration Altitude" documentary unit
PRO-NOR-SOP-21 After Landing - Flow Pattern	A	1	Documentation update: Addition of "After Landing - Flow Pattern" documentary unit
PRO-NOR-SOP-21 After Landing - Ground Spoilers	A	2	Documentation update: Addition of "After Landing - Ground Spoilers" documentary unit
PRO-NOR-SOP-21 After Landing - Lights	A	3	Documentation update: Addition of "After Landing - Lights" documentary unit
PRO-NOR-SOP-21 After Landing - Radar	A	4	Documentation update: Addition of "After Landing - Radar" documentary unit
PRO-NOR-SOP-21 After Landing - ENG Mode Selector	A	6	Documentation update: Addition of "After Landing - ENG Mode Selector" documentary unit
PRO-NOR-SOP-21 TERR ON ND	A	12	Documentation update: Addition of "TERR ON ND" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-21 After Landing - APU	A	13	Documentation update: Addition of "After Landing - APU" documentary unit
PRO-NOR-SOP-21 After Landing - After Landing Checklist	A	21	Documentation update: Addition of "After Landing - After Landing Checklist" documentary unit
PRO-NOR-SOP-22 Parking - Flow Pattern	A	1	Documentation update: Addition of "Parking - Flow Pattern" documentary unit
PRO-NOR-SOP-22 Parking - Parking Brake	A	2	Documentation update: Addition of "Parking - Parking Brake" documentary unit
PRO-NOR-SOP-22 Parking - Anti-Ice Protection	A	3	Documentation update: Addition of "Parking - Anti-Ice Protection" documentary unit
PRO-NOR-SOP-22 Parking - APU	A	4	Documentation update: Addition of "Parking - APU" documentary unit
PRO-NOR-SOP-22 Parking - APU Bleed	A	5	Documentation update: Addition of "Parking - APU Bleed" documentary unit
PRO-NOR-SOP-22 Parking - Y ELEC PUMP	A	6	Documentation update: Addition of "Parking - Y ELEC PUMP" documentary unit
PRO-NOR-SOP-22 Parking - Slide Disarmed Announce	A	11	Documentation update: Addition of "Parking - Slide Disarmed Announce" documentary unit
PRO-NOR-SOP-22 Parking - Exterior Lights	A	12	Documentation update: Addition of "Parking - Exterior Lights" documentary unit
PRO-NOR-SOP-22 Parking - Slide Disarmed Check	A	15	Documentation update: Addition of "Parking - Slide Disarmed Check" documentary unit
PRO-NOR-SOP-22 Parking - Seat Belts	A	16	Documentation update: Addition of "Parking - Seat Belts" documentary unit
PRO-NOR-SOP-22 Parking - Ground Contact	A	17	Documentation update: Addition of "Parking - Ground Contact" documentary unit
PRO-NOR-SOP-22 Parking - Brake Fan	A	18	Documentation update: Addition of "Parking - Brake Fan" documentary unit
PRO-NOR-SOP-22 Parking - Parking Brake	A	19	Documentation update: Addition of "Parking - Parking Brake" documentary unit
PRO-NOR-SOP-22 Parking - Parking Checklist	A	20	Documentation update: Addition of "Parking - Parking Checklist" documentary unit
PRO-NOR-SOP-22 Parking - ATC	A	21	Documentation update: Addition of "Parking - ATC" documentary unit
PRO-NOR-SOP-22 Parking - IRS Performance	A	22	Documentation update: Addition of "Parking - IRS Performance" documentary unit
PRO-NOR-SOP-22 Parking - Fuel Quantity	A	23	Documentation update: Addition of "Parking - Fuel Quantity" documentary unit
PRO-NOR-SOP-22 Parking - Icing Conditions	A	24	Documentation update: Addition of "Parking - Icing Conditions" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-22 Parking - Electronic Flight Bag (EFB)	A	25	Documentation update: Addition of "Parking - Electronic Flight Bag (EFB)" documentary unit
PRO-NOR-SOP-22 Parking - Display Unit	A	27	Documentation update: Addition of "Parking - Display Unit" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - General	A	1	Documentation update: Addition of "Securing the Aircraft - General" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Parking Brake	A	2	Documentation update: Addition of "Securing the Aircraft - Parking Brake" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Oxygen Crew Supply	A	3	Documentation update: Addition of "Securing the Aircraft - Oxygen Crew Supply" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Exterior Lights	A	6	Documentation update: Addition of "Securing the Aircraft - Exterior Lights" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - APU BLEED	A	7	Documentation update: Addition of "Securing the Aircraft - APU BLEED" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - External Power	A	8	Documentation update: Addition of "Securing the Aircraft - External Power" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - APU	A	9	Documentation update: Addition of "Securing the Aircraft - APU" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - BAT	A	12	Documentation update: Addition of "Securing the Aircraft - BAT" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Securing the Aircraft Checklist	A	13	Documentation update: Addition of "Securing the Aircraft - Securing the Aircraft Checklist" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Electronic Flight Bag (EFB)	A	14	Documentation update: Addition of "Securing the Aircraft - Electronic Flight Bag (EFB)" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Maintenance Bus	A	15	Documentation update: Addition of "Securing the Aircraft - Maintenance Bus" documentary unit
PRO-NOR-SCO Communications and Standard Terms	A	1	Documentation update: Addition of "Communications and Standard Terms" documentary unit
PRO-NOR-SCO Checklist Callouts	B	2	Documentation update: Addition of "Checklist Callouts" documentary unit
PRO-NOR-SCO Actions Commanded by PF - General	C	3	Documentation update: Addition of "Actions Commanded by PF - General" documentary unit
PRO-NOR-SCO Actions Commanded by PF - Set	C	4	Documentation update: Addition of "Actions Commanded by PF - Set" documentary unit
PRO-NOR-SCO	C	5	Documentation update: Addition of "Actions Commanded by PF - Manage/Pull" documentary unit

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Localization Title	Toc Index	ID	Reason
Actions Commanded by PF - Manage/Pull			
PRO-NOR-SCO Actions Commanded by PF - Arm	C	6	Documentation update: Addition of "Actions Commanded by PF - Arm" documentary unit
PRO-NOR-SCO Actions Commanded by PF - On/Off	C	7	Documentation update: Addition of "Actions Commanded by PF - On/Off" documentary unit
PRO-NOR-SCO FMA	D	8	Documentation update: Addition of "FMA" documentary unit
PRO-NOR-SCO Altitude	E	9	Documentation update: Addition of "Altitude" documentary unit
PRO-NOR-SCO Flaps or Gear Callouts - Flaps' Callouts	F	10	Documentation update: Addition of "Flaps or Gear Callouts - Flaps' Callouts" documentary unit
PRO-NOR-SCO Flaps or Gear Callouts - Gear Callouts	F	11	Documentation update: Addition of "Flaps or Gear Callouts - Gear Callouts" documentary unit
PRO-NOR-SCO Go-Around	G	12	Documentation update: Addition of "Go-Around" documentary unit
PRO-NOR-SCO PF/PM Duties Transfer	H	13	Documentation update: Addition of "PF/PM Duties Transfer" documentary unit
PRO-NOR-SCO Pilot/Cabin Crew Announcements	I	14	Documentation update: Addition of "Pilot/Cabin Crew Announcements" documentary unit
PRO-NOR-SCO Summary for Each Phase	J	15	Documentation update: Addition of "Summary for Each Phase" documentary unit
PRO-NOR-SCO Summary for Each Phase - To Remove Ground Supply	J	16	Documentation update: Addition of "Summary for Each Phase - To Remove Ground Supply" documentary unit
PRO-NOR-SCO Before Engine Start / Push Back	J	17	Documentation update: Addition of "Before Engine Start / Push Back" documentary unit
PRO-NOR-SCO Summary for Each Phase - Pushback/Engine Start	J	18	Documentation update: Addition of "Summary for Each Phase - Pushback/Engine Start" documentary unit
PRO-NOR-SCO Summary for Each Phase - Take Off	J	21	Documentation update: Addition of "Summary for Each Phase - Take Off" documentary unit
PRO-NOR-SCO Summary for Each Phase - Altimeter Setting Changes To/From QNH/QFE-STD	J	22	Documentation update: Addition of "Summary for Each Phase - Altimeter Setting Changes To/From QNH/QFE-STD" documentary unit
PRO-NOR-SCO Summary for Each Phase - Approach and Landing	J	23	Documentation update: Addition of "Summary for Each Phase - Approach and Landing" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SCO Summary for Each Phase - Discontinued Approach	J	24	Documentation update: Addition of "Summary for Each Phase - Discontinued Approach" documentary unit
PRO-NOR-SCO Summary for Each Phase - Go Around	J	25	Documentation update: Addition of "Summary for Each Phase - Go Around" documentary unit
PRO-NOR-TSK Safety Exterior Inspection	A	1	Documentation update: Addition of "Safety Exterior Inspection" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - AIRCRAFT SETUP	B	2	Documentation update: Addition of "Preliminary Cockpit Preparation - AIRCRAFT SETUP" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - BATTERIES/EXTERNAL POWER	B	3	Documentation update: Addition of "Preliminary Cockpit Preparation - BATTERIES/EXTERNAL POWER" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - APU FIRE TEST/APU START	B	4	Documentation update: Addition of "Preliminary Cockpit Preparation - APU FIRE TEST/APU START" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - ADIRS	B	5	Documentation update: Addition of "Preliminary Cockpit Preparation - ADIRS" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - COCKPIT LIGHTS	B	6	Documentation update: Addition of "Preliminary Cockpit Preparation - COCKPIT LIGHTS" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - AIRCRAFT ACCEPTANCE	B	9	Documentation update: Addition of "Preliminary Cockpit Preparation - AIRCRAFT ACCEPTANCE" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - PRELIMINARY PERFORMANCE DETERMINATION	B	10	Documentation update: Addition of "Preliminary Cockpit Preparation - PRELIMINARY PERFORMANCE DETERMINATION" documentary unit
PRO-NOR-TSK Cockpit Preparation - OVERHEAD PANEL	C	13	Documentation update: Addition of "Cockpit Preparation - OVERHEAD PANEL" documentary unit
PRO-NOR-TSK Cockpit Preparation - CTR Instrument Panel	C	14	Documentation update: Addition of "Cockpit Preparation - CTR Instrument Panel" documentary unit
PRO-NOR-TSK Cockpit Preparation - RMP	C	17	Documentation update: Addition of "Cockpit Preparation - RMP" documentary unit
PRO-NOR-TSK Cockpit Preparation - GLARESHIELD	C	18	Documentation update: Addition of "Cockpit Preparation - GLARESHIELD" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-TSK Cockpit Preparation - LATERAL CONSOLE AND PF/PM INSTRUMENT PANELS	C	19	Documentation update: Addition of "Cockpit Preparation - LATERAL CONSOLE AND PF/PM INSTRUMENT PANELS" documentary unit
PRO-NOR-TSK Before Pushback or Start - BEFORE PUSHBACK/START CLEARANCE	D	20	Documentation update: Addition of "Before Pushback or Start - BEFORE PUSHBACK/START CLEARANCE" documentary unit
PRO-NOR-TSK BEFORE PUSHBACK OR START - At Pushback/Start Clearance	D	21	Documentation update: Addition of "BEFORE PUSHBACK OR START - At Pushback/Start Clearance" documentary unit
PRO-NOR-TSK DEPARTURE CHANGE	N	40	Documentation update: Addition of "DEPARTURE CHANGE" documentary unit
PRO-NOR-TSK Descent	U	44	Documentation update: Addition of "Descent" documentary unit
PRO-NOR-TSK APPROACH - Approach using LOC G/S Guidance	V	47	Documentation update: Addition of "APPROACH - Approach using LOC G/S Guidance" documentary unit
PRO-NOR-TSK Approach - Approach using FPA Guidance	V	53	Documentation update: Addition of "Approach - Approach using FPA Guidance" documentary unit
PRO-NOR-TSK After Landing	AB	60	Documentation update: Addition of "After Landing" documentary unit
PRO-NOR-TSK Securing the Aircraft	AD	62	Documentation update: Addition of "Securing the Aircraft" documentary unit
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Entering the Approach Data	F	9	Documentation update: Addition of "Preparation for Descent and Approach - Entering the Approach Data" documentary unit
PRO-NOR-SRP-01-60 Descent Monitoring - OP DES, V/S or FPA Mode Engaged	B	3	Documentation update: Addition of "Descent Monitoring - OP DES, V/S or FPA Mode Engaged" documentary unit
PRO-NOR-SRP-01-70 Initial Approach	A	2	Documentation update: Addition of "Initial Approach" documentary unit
PRO-NOR-SRP-01-70 ILS/FLS Approach - Localizer (LOC) or F-LOC Beam Capture	B	11	Documentation update: Addition of "ILS/FLS Approach - Localizer (LOC) or F-LOC Beam Capture" documentary unit
PRO-NOR-SRP-01-70 Landing Capabilities	G	14	Documentation update: Addition of "Landing Capabilities" documentary unit
PRO-NOR-SRP-01-80 Monitoring the Go-Around	A	1	Documentation update: Addition of "Monitoring the Go-Around" documentary unit

PROCEDURES - SPECIAL OPERATIONS

Localization Title	Toc Index	ID	Reason
PRO-SPO-40-60 Maximum Diversion Distance	A	1	Documentation update: Addition of "Maximum Diversion Distance" documentary unit
PRO-SPO-51 RNP APCH / RNAV(GNSS) - Procedure	I	1	Documentation update: Addition of "RNP APCH / RNAV(GNSS) - Procedure" documentary unit

LIMITATIONS - AIRCRAFT GENERAL

Localization Title	Toc Index	ID	Reason
LIM-AG-PLP-TOC Weights		1	Documentation update: Deletion of the "00001893.0112001 Weight Limitations" documentary unit.
LIM-AG-OPS Environmental Envelope	B	2	Documentation update: Addition of "Environmental Envelope" documentary unit
LIM-AG-SPD Maximum Flaps/Slats Speeds	B	1	Documentation update: Addition of "Maximum Flaps/Slats Speeds" documentary unit
LIM-AG-SPD Minimum Control Speeds	F	5	Documentation update: Addition of "Minimum Control Speeds" documentary unit
LIM-AG-WGHT Weight Limitations	A	2	Documentation update: Addition of "Weight Limitations" documentary unit
LIM-AG-WGHT Center of Gravity Limits with up to 3 ACTs installation	B	4	Documentation update: Addition of "Center of Gravity Limits with up to 3 ACTs installation" documentary unit

LIMITATIONS - AUTO FLIGHT SYSTEM

Localization Title	Toc Index	ID	Reason
LIM-AFS-20 Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I	H	3	Documentation update: Addition of "Maximum Wind Conditions for ILS/MLS (If Installed) CAT II or CAT III and for GLS (If Installed) CAT I" documentary unit
LIM-AFS-20 Automatic Landing - Airport Elevation	I	29	Documentation update: Addition of "Automatic Landing - Airport Elevation" documentary unit
LIM-AFS-20 Automatic Landing - Weight	I	30	Documentation update: Addition of "Automatic Landing - Weight" documentary unit

LIMITATIONS - EFB

Localization Title	Toc Index	ID	Reason
LIM-EFB-24 Cockpit Portable Electronic Device Outlets	A	1	Documentation update: Addition of "Cockpit Portable Electronic Device Outlets" documentary unit
LIM-EFB-24 Cockpit Portable Electronic Device Outlet	B	2	Documentation update: Addition of "Cockpit Portable Electronic Device Outlet" documentary unit
LIM-EFB-46 EFB Class 1 (iPad)	A	1	Documentation update: Addition of "EFB Class 1 (iPad)" documentary unit
LIM-EFB-46 Jeppesen Function (JeppFD-PRO App)	B	2	Documentation update: Addition of "Jeppesen Function (JeppFD-PRO App)" documentary unit
LIM-EFB-46 Documents Function (Contents App)	C	3	Documentation update: Addition of "Documents Function (Contents App)" documentary unit
LIM-EFB-46 FlySmart Function (OLB/Landing/Loadsheet/Takeoff)	D	4	Documentation update: Addition of "FlySmart Function (OLB/Landing/Loadsheet/Takeoff)" documentary unit
LIM-EFB-46 Power charger with cable	E	5	Documentation update: Addition of "Power charger with cable" documentary unit
LIM-EFB-46 Mount	F	6	Documentation update: Addition of "Mount" documentary unit
LIM-EFB-46 Kneeboard	G	7	Documentation update: Addition of "Kneeboard" documentary unit

LIMITATIONS - ENGINES

Localization Title	Toc Index	ID	Reason
LIM-ENG Flex Takeoff	F	6	Documentation update: Addition of "Flex Takeoff" documentary unit

TEMPORARY ABNORMAL BEHAVIORS

Localization Title	Toc Index	ID	Reason
TAB Loss of FMS Predictions in Low Density of Airports	A	7	Documentation update: Addition of "Loss of FMS Predictions in Low Density of Airports" documentary unit

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AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL
Rua Renascença, nº 112 - Ed. Office Congonhas - Vila Congonhas, São Paulo/SP, CEP 04612-010
https://www.anac.gov.br

Ofício nº 1720/2023/GCTA/SPO-ANAC

Ao Senhor
GERALDO COSTA DE MENESES
Diretor de Operações da empresa TAM Linhas Aéreas S/A
Rua General Pantaleão Teles, 210 - Parque Jabaquara
CEP 04355-901 - São Paulo - SP

Assunto: **Recebimento de manual**
Referência**: Processo 00066.016369/2022-93**

Prezado Senhor,

1. Este ofício atesta o recebimento do seguinte manual:

Nome da empresa	Nome do manual	Revisão	Data
TAM Linhas Aéreas S/A	AOM - Aircraft Operating Manual - A32F, SEI 8727190; Documentos associados: FCOM A319/A320/A321 02/05/2023, SEI 8727187; QRH A319/A320/A321 02/05/2023, SEI 8727184; FCTM A318/A319/A320/A321 16/11/2022, SEI 8727181. AFM A320FAM 03/05/2023 SEI 8727189	02.05	02/05/2023

2. De acordo com a Instrução Suplementar nº 121-010, operadores certificados podem revisar, distribuir e usar material aceito mesmo que a ANAC ainda não tenha realizado uma avaliação. Entretanto, se depois de uma avaliação a ANAC determinar que partes do material são inaceitáveis, o operador deve revisar tais partes inaceitáveis nos prazos e condições estabelecidas.

3. O presente documento não concede isenção a nenhum item de regulamento ou norma vigente. Adicionalmente, destaca-se que é responsabilidade do operador assegurar que o conteúdo do manual contemple todos os requisitos aplicáveis e, concomitantemente, não esteja em conflito com nenhuma norma vigente.

4. Ainda, é responsabilidade do operador garantir o cumprimento dos procedimentos e políticas definidas no manual. O não cumprimento do conteúdo do manual poderá representar deficiências na certificação do operador, bem como motivar a adoção das providências administrativas cabíveis.

5. Esta gerência permanece à disposição para os esclarecimentos necessários.

Atenciosamente,

Leonardo Gonçalves Coutinho

Gerente Técnico de Certificação

Documento assinado eletronicamente por **Leonardo Gonçalves Coutinho**, **Gerente Técnico**, em 12/07/2023, às 17:59, conforme horário oficial de Brasília, com fundamento no art. 4º, do Decreto nº 10.543, de 13 de novembro de 2020.

A autenticidade deste documento pode ser conferida no site https://sei.anac.gov.br/sei/autenticidade, informando o código verificador **8841473** e o código CRC **02C615D2**.

PRELIMINARY PAGES

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M(1)	Localization	Subsection Title	Rev. Date
	PLP-LEOEB	**LIST OF EFFECTIVE OPERATIONS ENGINEERING BULLETIN**	02 MAY 23
R	PLP-LESS	**LIST OF EFFECTIVE SECTIONS/SUBSECTIONS**	02 MAY 23
	GEN-PLP-LETDU	**LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS**	02 MAY 23
R	GEN	**General Information**	02 MAY 23
	DSC-PLP-LETDU	**LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS**	02 MAY 23
E	DSC-20-10	**Overview**	02 MAY 23
R	DSC-20-20	**Description**	02 MAY 23
E	DSC-20-30	**Ground Handling**	02 MAY 23
R	DSC-20-40	**Ground Clearance Diagram**	02 MAY 23
E	DSC-20-50	**Landing Geometry**	02 MAY 23
	DSC-20-60	**Visual Ground Geometry**	26 OCT 22
R	DSC-21-10-10	**General**	02 MAY 23
R	DSC-21-10-20	**Main Components**	02 MAY 23
E	DSC-21-10-30	**Temperature and Flow Regulation**	02 MAY 23
E	DSC-21-10-40	**System Operation under Failure Condition**	02 MAY 23
R	DSC-21-10-50	**Controls and Indicators**	02 MAY 23
	DSC-21-20-10	**General**	26 OCT 22
	DSC-21-20-20	**Main Components**	26 OCT 22
	DSC-21-20-30	**System Operation**	26 OCT 22
R	DSC-21-20-40	**Controls and Indicators**	02 MAY 23
	DSC-21-30-10	**General**	26 OCT 22
R	DSC-21-30-20	**Avionics Ventilation**	02 MAY 23
	DSC-21-30-40	**Battery Ventilation**	26 OCT 22
	DSC-21-30-50	**Lavatory and Galley Ventilation**	26 OCT 22
E	DSC-21-30-60	**Controls and Indicators**	02 MAY 23
E	DSC-21-40-10	**General**	02 MAY 23
	DSC-21-40-20	**System Operation**	26 OCT 22
E	DSC-21-40-30	**Controls and Indicators**	02 MAY 23
E	DSC-21-40-35	**ECAM Cond Page**	02 MAY 23
E	DSC-22_10-10	**Description**	02 MAY 23
E	DSC-22_10-20	**System Interface Diagram**	02 MAY 23
E	DSC-22_10-30	**FMGS Modes of Operation**	02 MAY 23
	DSC-22_10-40-05	**Management of the Displays**	26 OCT 22
E	DSC-22_10-40-10	**MCDU**	02 MAY 23
R	DSC-22_10-40-20	**FCU**	02 MAY 23
	DSC-22_10-40-30	**Thrust Levers**	26 OCT 22
	DSC-22_10-40-40	**Primary Flight Display**	26 OCT 22
R	DSC-22_10-40-50	**Navigation Display**	02 MAY 23
	DSC-22_10-50-10	**General**	26 OCT 22
R	DSC-22_10-50-20	**Characteristic Speeds**	02 MAY 23

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M[(1)]	Localization	Subsection Title	Rev. Date
	DSC-22_10-50-30	**Limit Speeds**	26 OCT 22
	DSC-22_10-50-40	**Protection Speeds**	26 OCT 22
E	DSC-22_10-50-50	**Other Speeds**	02 MAY 23
	DSC-22_20-10	**General**	26 OCT 22
	DSC-22_20-20-05	**General**	26 OCT 22
R	DSC-22_20-20-10	**Position Computation**	02 MAY 23
E	DSC-22_20-20-20	**Evaluation of Position Accuracy**	02 MAY 23
E	DSC-22_20-20-30	**Radio Navigation Tuning**	02 MAY 23
E	DSC-22_20-20-40	**Alignment of Inertial Reference System**	02 MAY 23
	DSC-22_20-20-50	**Navigation Database**	26 OCT 22
N	DSC-22_20-20-60	**FLS Function in the FMS**	02 MAY 23
	DSC-22_20-30-05	**General**	26 OCT 22
E	DSC-22_20-30-10-05	**General**	02 MAY 23
R	DSC-22_20-30-10-15	**FMS2 HONEYWELL**	02 MAY 23
	DSC-22_20-30-10-18	**FMS2 Thales**	26 OCT 22
R	DSC-22_20-30-20-05	**General**	02 MAY 23
E	DSC-22_20-30-20-25	**FMS2 Honeywell**	02 MAY 23
	DSC-22_20-30-20-28	**FMS2 Thales**	26 OCT 22
E	DSC-22_20-40-10	**Optimization**	02 MAY 23
	DSC-22_20-40-20	**Cost Index**	26 OCT 22
E	DSC-22_20-40-30	**Predictions**	02 MAY 23
R	DSC-22_20-45-10	**Takeoff Surveillance Function**	02 MAY 23
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E	DSC-70-20	**FADEC**	02 MAY 23
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	PRO-ABN-ABN-MEM	**[MEM] MEMORY ITEMS**	26 OCT 22
R	PRO-ABN-ABN-QRH	**[QRH] PROCEDURES**	02 MAY 23
R	PRO-ABN-ABN-RESET	**[RESET] SYSTEM RESET**	02 MAY 23
E	PRO-ABN-A-ICE	**A-ICE**	02 MAY 23
E	PRO-ABN-AIR	**AIR**	02 MAY 23
R	PRO-ABN-APU	**APU**	02 MAY 23
	PRO-ABN-APUF	**APU FIRE**	26 OCT 22
R	PRO-ABN-AUTO_FLT	**AUTO FLT**	02 MAY 23
	PRO-ABN-AVNCS	**AVIONICS SMOKE**	26 OCT 22
E	PRO-ABN-BLEED	**BLEED**	02 MAY 23
R	PRO-ABN-BRAKES	**BRAKES**	02 MAY 23
E	PRO-ABN-NWS	**BRAKES-N/WS**	02 MAY 23
E	PRO-ABN-CAB_PR	**CAB PR**	02 MAY 23
	PRO-ABN-CRG_SMOKE	**CARGO SMOKE**	26 OCT 22
	PRO-ABN-C_B	**C/B**	26 OCT 22
R	PRO-ABN-COM	**COM**	02 MAY 23
R	PRO-ABN-COND	**COND**	02 MAY 23
E	PRO-ABN-CONFIG	**CONFIG**	02 MAY 23
E	PRO-ABN-DATALINK	**DATALINK**	02 MAY 23
R	PRO-ABN-DOOR	**DOOR**	02 MAY 23
E	PRO-ABN-EIS	**EIS**	02 MAY 23
R	PRO-ABN-ELEC	**ELEC**	02 MAY 23
R	PRO-ABN-ENG	**ENG**	02 MAY 23
R	PRO-ABN-F_CTL	**F/CTL**	02 MAY 23
R	PRO-ABN-FUEL	**FUEL**	02 MAY 23
E	PRO-ABN-FWS	**FWS**	02 MAY 23
R	PRO-ABN-HYD	**HYD**	02 MAY 23
R	PRO-ABN-LG	**L/G**	02 MAY 23
R	PRO-ABN-MISC	**MISC**	02 MAY 23
R	PRO-ABN-NAV	**NAV**	02 MAY 23
R	PRO-ABN-OVERSPEED	**OVERSPEED**	02 MAY 23
E	PRO-ABN-RECORDER	**RECORDER**	02 MAY 23
E	PRO-ABN-SEVERE_ICE	**SEVERE ICE**	02 MAY 23
R	PRO-ABN-SMOKE	**SMOKE**	02 MAY 23
E	PRO-ABN-SURV	**SURV**	02 MAY 23
E	PRO-ABN-T-O	**T.O**	02 MAY 23
R	PRO-ABN-VENT	**VENT**	02 MAY 23

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M[(1)]	Localization	Subsection Title	Rev. Date
E	PRO-ABN-WHEEL	**WHEEL**	02 MAY 23
E	PRO-ABN-W_A_ICE	**WING A.ICE**	02 MAY 23
	PRO-ABN-W_S	**WINDSHEAR**	26 OCT 22
R	PRO-ABN-90	**Detailed Cabin / Cockpit Evacuation Procedure**	02 MAY 23
N	PRO-NOR-SOP-01	**General Information**	02 MAY 23
N	PRO-NOR-SOP-02	**Flight Preparation**	02 MAY 23
N	PRO-NOR-SOP-03	**Safety Exterior Inspection**	02 MAY 23
N	PRO-NOR-SOP-04	**Preliminary Cockpit Preparation**	02 MAY 23
N	PRO-NOR-SOP-05	**Exterior Walkaround**	02 MAY 23
N	PRO-NOR-SOP-06	**Cockpit Preparation**	02 MAY 23
N	PRO-NOR-SOP-07	**Before Pushback or Start**	02 MAY 23
N	PRO-NOR-SOP-08	**Engine Start**	02 MAY 23
N	PRO-NOR-SOP-09	**After Start**	02 MAY 23
N	PRO-NOR-SOP-10	**Taxi**	02 MAY 23
N	PRO-NOR-SOP-10B	**Departure Change**	02 MAY 23
N	PRO-NOR-SOP-11	**Before Takeoff**	02 MAY 23
N	PRO-NOR-SOP-12	**Takeoff**	02 MAY 23
N	PRO-NOR-SOP-13	**After Takeoff**	02 MAY 23
N	PRO-NOR-SOP-14	**Climb**	02 MAY 23
N	PRO-NOR-SOP-15	**Cruise**	02 MAY 23
N	PRO-NOR-SOP-16	**Descent Preparation**	02 MAY 23
N	PRO-NOR-SOP-17	**Descent**	02 MAY 23
N	PRO-NOR-SOP-18-A	**Approach General**	02 MAY 23
N	PRO-NOR-SOP-18-B	**Aircraft Configuration Management**	02 MAY 23
N	PRO-NOR-SOP-18-C	**Aircraft Guidance Management**	02 MAY 23
N	PRO-NOR-SOP-19	**Landing**	02 MAY 23
N	PRO-NOR-SOP-20	**Go-Around**	02 MAY 23
N	PRO-NOR-SOP-21	**After Landing**	02 MAY 23
N	PRO-NOR-SOP-22	**Parking**	02 MAY 23
N	PRO-NOR-SOP-23	**Securing the Aircraft**	02 MAY 23
N	PRO-NOR-SCO	**Standard Callouts**	02 MAY 23
N	PRO-NOR-TSK	**Tasksharing**	02 MAY 23
	PRO-NOR-SUP-SUP	**Supplementary Procedures Menu**	26 OCT 22
E	PRO-NOR-SUP-ADVWXR	**Adverse Weather**	02 MAY 23
	PRO-NOR-SUP-ENG	**Engines**	26 OCT 22
	PRO-NOR-SUP-FUEL	**Fuel**	26 OCT 22
	PRO-NOR-SUP-GPSINT	**GPS Interferences**	26 OCT 22
	PRO-NOR-SUP-LG-LG_DN	**Flight With Landing Gear Down**	26 OCT 22
	PRO-NOR-SUP-LG-LG	**Operation with Nosewheel Steering Offset**	26 OCT 22

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M(1)	Localization	Subsection Title	Rev. Date
	PRO-NOR-SUP-MISC-E	**Flight Without Cabin Pressurization**	26 OCT 22
	PRO-NOR-SUP-MISC-A	**High Altitude Airport Operations**	26 OCT 22
	PRO-NOR-SUP-MISC-C	**Operations at QNH above 1050 hPa (31.00 inHg)**	26 OCT 22
	PRO-NOR-SUP-MISC-D	**Pushback with Power Push Unit**	26 OCT 22
	PRO-NOR-SUP-SURV	**Surveillance**	26 OCT 22
	PRO-NOR-SRP-01-05	**Introduction**	26 OCT 22
E	PRO-NOR-SRP-01-10	**Cockpit Preparation**	02 MAY 23
R	PRO-NOR-SRP-01-15	**Before Pushback or Start**	02 MAY 23
E	PRO-NOR-SRP-01-20	**Taxi**	02 MAY 23
E	PRO-NOR-SRP-01-30	**Takeoff**	02 MAY 23
E	PRO-NOR-SRP-01-40	**Climb**	02 MAY 23
R	PRO-NOR-SRP-01-50	**Cruise**	02 MAY 23
R	PRO-NOR-SRP-01-60	**Descent**	02 MAY 23
R	PRO-NOR-SRP-01-70	**Approach**	02 MAY 23
R	PRO-NOR-SRP-01-80	**Go-Around**	02 MAY 23
	PRO-SPO-40-30	**Dispatch Consideration**	26 OCT 22
	PRO-SPO-40-40	**Diversion During Extended Range Operations**	26 OCT 22
E	PRO-SPO-40-50	**Procedures**	02 MAY 23
R	PRO-SPO-40-60	**Performance**	02 MAY 23
	PRO-SPO-45	**Engine Intermix Operations**	26 OCT 22
E	PRO-SPO-50	**Reduced Vertical Separation Minimum - RVSM**	02 MAY 23
R	PRO-SPO-51	**Performance-Based Navigation (PBN)**	02 MAY 23
R	PRO-SPO-60	**Operations on Narrow Runways**	02 MAY 23
E	PRO-SPO-62	**Operations at EL SALVADOR**	02 MAY 23
	PRO-SPO-85	**Simultaneous Parallel Approach Operations**	26 OCT 22
	LIM-PLP-LETDU	**LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS**	26 OCT 22
	LIM-INT	**Introduction**	26 OCT 22
	LIM-AG-F_CTL	**Flight Maneuvering Load Acceleration Limits**	26 OCT 22
R	LIM-AG-OPS	**Operational Parameters**	02 MAY 23
R	LIM-AG-SPD	**Speeds**	02 MAY 23
R	LIM-AG-WGHT	**Weights**	02 MAY 23
E	LIM-AIR	**Air Bleed/Cond/Press/Vent**	02 MAY 23
E	LIM-AFS-10	**General**	02 MAY 23
R	LIM-AFS-20	**Automatic Approach, Landing and Rollout**	02 MAY 23
E	LIM-APU	**Auxiliary Power Unit**	02 MAY 23
E	LIM-CAB	**Cabin Systems**	02 MAY 23
	LIM-COM	**Communication**	26 OCT 22
N	LIM-EFB-24	**Cockpit Portable Electronic Device Outlet**	02 MAY 23
N	LIM-EFB-46	**Electronic Flight Bag Class 1 (EFB Class 1)**	02 MAY 23

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M[(1)]	Localization	Subsection Title	Rev. Date
R	LIM-ENG	**Engines**	02 MAY 23
	LIM-F_CTL	**Flight Controls**	26 OCT 22
E	LIM-FUEL	**Fuel**	02 MAY 23
	LIM-ICE_RAIN	**Ice and Rain Protection**	26 OCT 22
	LIM-LG	**Landing Gear**	26 OCT 22
E	LIM-NAV	**Navigation**	02 MAY 23
E	LIM-OXY	**Oxygen**	02 MAY 23
E	LIM-ROW_ROP	**ROW/ROP**	02 MAY 23
	LIM-SURV	**Surveillance**	26 OCT 22
	TAB-PLP-LETDU	**LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS**	02 MAY 23
R	TAB	**Temporary Abnormal Behaviors**	02 MAY 23
	EFB-PLP-LETDU	**LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS**	02 MAY 23
E	EFB-LOD-FUL	**FUEL**	02 MAY 23
	EFB-THR-N1	**N1 MODE THRUST CONTROL**	26 OCT 22
	EFB-TOF-10	**Takeoff Performance Optimization**	26 OCT 22
	EFB-TOF-20-10	**Takeoff at Maximum Thrust**	26 OCT 22
	EFB-TOF-20-20-10	**General**	26 OCT 22
E	EFB-TOF-20-20-20	**Flexible Takeoff**	02 MAY 23
	EFB-TOF-20-20-30	**Derated Takeoff (If Installed)**	26 OCT 22
	EFB-TOF-20-20-40	**Flexible Takeoff vs Derated Takeoff**	26 OCT 22
	EFB-TOF-30-10	**Takeoff on Dry Runway**	26 OCT 22
	EFB-TOF-30-20	**Takeoff on Wet Runways**	26 OCT 22
	EFB-TOF-30-30	**Takeoff on Contaminated Runway**	26 OCT 22
	EFB-TOF-40	**Takeoff with MEL or CDL Item**	26 OCT 22
	EFB-TOF-50	**Takeoff Recommendations**	26 OCT 22
	EFB-IFT-10	**In-Flight Performance Calculation**	26 OCT 22
	EFB-IFT-20-10-10	**General**	26 OCT 22
	EFB-IFT-20-10-20	**Climb Thrusts**	26 OCT 22
	EFB-IFT-20-20-10	**Speeds**	26 OCT 22
	EFB-IFT-20-20-20	**Altitude/Ceilings**	26 OCT 22
	EFB-IFT-20-30	**Descent**	26 OCT 22
E	EFB-IFT-20-40	**Holding**	02 MAY 23
E	EFB-IFT-30	**One Engine Inoperative Operations**	02 MAY 23
	EFB-LDG-10	**Landing Performance Calculation**	26 OCT 22
	EFB-LDG-20	**Landing Speeds and Distances Definitions**	26 OCT 22
	EFB-LDG-30	**Runway Conditions**	26 OCT 22
E	EFB-LDG-40	**Dispatch Requirements**	02 MAY 23
	EFB-LDG-50	**In-Flight Performance Assessment**	26 OCT 22

(1) Evolution code : N=New, R=Revised, E=Effectivity, M=Moved

PRELIMINARY PAGES

AIRCRAFT ALLOCATION TABLE

This table gives, for each delivered aircraft, the cross reference between:

- The Manufacturing Serial Number (MSN).
- The Fleet Serial Number (FSN) of the aircraft as known by AIRBUS S.A.S.
- The registration number of the aircraft as known by AIRBUS S.A.S.
- The aircraft model.

M[(1)]	MSN	FSN	Registration Number	Model
	01143		PT-MZG	320-232
	01158		PT-MZH	320-232
	01246		PT-MZI	320-232
	01251		PT-MZJ	320-232
	01376		PT-MZL	320-232
	01459		PR-MBG	320-232
	01518		PT-MZU	320-232
	01591	LTM 0734	PR-MBX	320-232
	01593		PT-MZZ	320-232
	01628		PT-MZY	320-232
	01652	LTM 0735	PR-MBQ	320-232
	01801		PR-MAL	319-132
	01802	LTM 0736	PR-MBR	320-232
	01825		PR-MAK	320-232
	01826		PR-MAM	319-132
	01827	LTM 0738	PR-MBZ	320-232
	01832		PR-MAG	320-232
	01835	LTM 0737	PR-MBS	320-232
	01837		PR-MAO	319-132
	01855		PR-MAQ	319-132
	01857	LTM 0722	PR-MAP	320-232
	01891	LTM 0739	PR-MBY	320-232
	02014		PR-MBT	320-233
	02321		PT-TMT	319-132

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M[1]	MSN	FSN	Registration Number	Model
	02513	LTM 0721	PR-MAZ	320-232
	02734		PR-MBA	320-232
	02887		PT-TML	319-132
	02896		PR-MBF	320-232
	02904		PR-MBH	320-232
	02924		PR-MHA	320-214
	03002		PR-MHG	320-214
	03032		PR-MBN	319-132
	03035		PR-MHI	320-214
	03047		PR-MHJ	320-214
	03058		PR-MHK	320-214
	03111		PR-MHE	320-214
	03180		PR-MHF	320-214
	03211		PR-MHM	320-214
	03222		PT-MXA	321-231
	03229		PT-MXB	321-231
	03266		PR-MHP	320-214
	03284		PR-MHQ	320-214
	03294		PT-MXC	321-231
	03313		PR-MHR	320-214
	03391		PR-MHU	320-214
	03565		PR-MHX	320-214
	03588		PR-MBU	319-132
	03595		PR-MBV	319-132
	03630		PR-MHW	320-214
	03658		PR-MHZ	320-214
	03662		PR-MYA	320-214
	03710		PR-MBW	319-132

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M(1)	MSN	FSN	Registration Number	Model
	03727	LTM 0581	PR-MYB	319-112
	03733		PR-MYC	319-112
	03761		PT-MXD	321-231
	03816		PT-MXE	321-231
	04000		PT-TMA	319-132
	04163		PT-TMB	319-132
	04171		PT-TMC	319-132
	04192		PT-TMD	319-132
	04352		PT-MXF	321-231
	04358		PT-MXG	321-231
	04389		PT-TME	319-132
	04441		PR-MYH	320-214
	04446		PR-MYI	320-214
	04465		PR-MYJ	320-214
	04544		PR-MYK	320-214
	04563		PT-TMO	319-132
	04570		PT-MXH	321-231
	04662		PT-MXI	321-231
	04734		PR-MYL	319-112
	04756		PR-MYM	319-112
	04773		PT-TMG	319-132
	04827		PR-TQB	320-214
	04860		PR-TQC	320-214
	04953		PR-MYN	320-214
	04974		PR-MYO	320-214
	05005		PT-TPA	319-112
	05066		PR-MYP	320-214
	05097		PT-TPB	319-112

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M[1]	MSN	FSN	Registration Number	Model
	05101		PR-MYQ	320-214
	05107		PR-MYR	320-214
	05184		PR-MYT	320-214
	05222		PR-MYV	320-214
	05240		PR-MYW	320-214
	05342		PR-MYX	320-214
	05345		PT-TMI	319-132
	05528		PT-MXJ	321-231
	05591		PR-MYY	320-214
	05621		PR-MYZ	320-214
	05643		PR-TYA	320-214
	05749		PR-TYD	320-214
	05752		PR-TYF	320-214
	05883		PR-TYH	320-214
	05947		PT-MXL	321-231
	05987		PT-MXM	321-231
	06057	LTM 0374	PR-TYX	320-214
	06097		PT-MXN	321-231
	06103	LTM 0376	PR-TYY	320-214
	06110	LTM 0373	PR-TYZ	320-214
	06121		PT-MXO	321-231
	06125	LTM 0375	PR-TQA	320-214
	06139		PR-TYI	320-214
	06163		PT-MXP	321-231
	06165		PT-MXQ	321-231
	06173		PR-TYJ	320-214
	06409		PT-XPA	321-211
	06414		PT-XPB	321-211

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M[(1)]	MSN	FSN	Registration Number	Model
	06528		PR-TYK	320-214
	06536		PR-TYL	320-214
	06561		PR-TYM	320-214
	06592		PT-XPC	321-211
	06598		PR-TYN	320-214
	06632		PT-XPD	321-211
	06634		PR-TYO	320-214
	06658		PT-XPE	321-211
	06670		PT-XPF	321-211
	06685		PT-XPG	321-211
	06689		PR-TYS	320-214
	06712		PR-TYT	320-214
	06718		PT-XPH	321-211
	06729		PT-XPI	321-211
	06798		PT-XPJ	321-211
	06800		PR-TYP	320-214
	06806		PR-TYQ	320-214
	06813		PR-TYR	320-214
	06871		PR-TYU	320-214
	06876		PR-TYV	320-214
	06895		PT-XPL	321-211
	06949		PT-XPM	321-211
	07005		PT-XPN	321-211
	07081		PT-XPQ	321-211
	07098		PT-XPO	321-211
	08495		PR-XBB	320-273N
	08529		PR-XBA	320-273N
	08596		PR-XBC	320-273N

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M(1)	MSN	FSN	Registration Number	Model
	08635		PR-XBD	320-273N
	09190		PR-XBE	320-273N
	09324		PR-XBF	320-273N
	09558	LTM 0909	PR-XBH	320-273N
	09563	LTM 0910	PR-XBG	320-273N
R	10949		PR-XBI	320-271N
R	11139		PR-XBJ	320-271N
R	11228		PR-XBK	320-271N
R	11293		PR-XBL	320-271N
N	11482		PR-XBM	320-271N
N	11522		PR-XBN	320-271N
N	11531		PS-LBB	321-271NX
N	11572		PR-XBO	320-271N
N	11597		PR-XBH	320-271N

(1) Evolution code : N=New, R=Revised

M(1)	CRITERION	Linked SB	Incorp. Date	Title
	G0553	49-1082 45	16 FEB 22	AIRBORNE AUXILIARY POWER - POWER PLANT - REPLACE APU APIC APS 3200 BY HONEYWELL 131-9(A)(BY SB)
	Applicable to: MSN 01459, 02321-02513, 02887, 04563, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06813			
	G1056	36-1075 01	03 APR 23	PNEUMATIC - ENGINE BLEED AIR SUPPLY SYSTEM - Define and install BMC STD 12 SW
	Applicable to: MSN 02734, 02904-03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081			
	G1142		16 FEB 22	PNEUMATIC - Bleed Monitoring Computer - Introduce NEO BMC SW 4.1
	Applicable to: MSN 08495-11597			
	G1174		02 AUG 22	PNEUMATIC - LEAK DETECTION - CHANGE THE OHDS MATING CABLES ON PYLON LOOP(FORWARD FIT FOR NEO PW)
	Applicable to: MSN 08495-11597			
	G1213		16 FEB 22	AIRBORNE AUXILIARY POWER - GENERAL - UPDATE THE STANDARD AND OPTION DEFINITION FOR APU
	Applicable to: MSN 08495-11597			
	G1220	36-1078 01	16 FEB 22	PNEUMATIC - ENGINE BLEED AIR SUPPLY SYSTEM - Introduce NEO BMC SW 4.3
	Applicable to: MSN 08495-11597			
	J0006		16 FEB 22	FUEL SYSTEM - ADDITIONAL TREATMENT OF CENTRE TANK STRUCTURE AND INSTALLATION OF CENTRE TANK SYSTEM
	Applicable to: ALL			
	J0012		16 FEB 22	NAVIGATION LIGHTS SYSTEM - INSTALLATION OF A SECOND NAVIGATION LIGHT SYSTEM
	Applicable to: ALL			
	J0022		16 FEB 22	INSTALLATION OF A FUEL QUANTITY SELECTOR IN THE FLIGHT COMPARTMENT
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	J0071		16 FEB 22	WING STRUCTURE-INTRODUCTION OF A WING TIP INCORPORATING A TIP FENCE FOR 72T MTOW A/C
	Applicable to: ALL			
	J0664		16 FEB 22	FUEL SYSTEM-TO IMPROVE LOW LEVEL WARNING
	Applicable to: ALL			
	J0689		16 FEB 22	WING-TO DELETE L/E VENTILATION SYSTEM (PICCOLO TUBE)
	Applicable to: ALL			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	J1255		16 FEB 22	FUEL - TANK LEVEL SENSING - CHANGE TO LOW PRESSURE WARNING
	Applicable to: MSN 01143-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J1334		16 FEB 22	LANDING GEAR-MLG-LGCIU-INTRODUCTION OF A NEW STANDARD FOR IMPROVED PROXIMITY SENSOR FAULT MONITORING FUNCTION
	Applicable to: ALL			
	J1617		16 FEB 22	FLIGHT CONTROLS - GENERAL - DELETE LAF FEATURE FROM A320 DEFINITION (PRODUCTION SOLUTION)
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J2190		16 FEB 22	FUEL - MAIN FUEL PUMPS SYSTEMS - CENTRE TANK PUMPS AUTO FEED FAULT.ADAPT PUMP CONTROL LATCH FOR FLIGHT DECK REFUEL CABABILITY
	Applicable to: MSN 01518-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J2257	28-1106 03	16 FEB 22	FUEL - MANUAL MAGNETIC INDICATORS - ATTITUDE MONITOR DELETION
	Applicable to: ALL			
	J2360		16 FEB 22	FUEL - QUANTITY INDICATION - INTRODUCE FUEL LEAK DETECTION ASSOCIATED WITH FQIC - 13 - 9
	Applicable to: MSN 02734-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J2361	28-1150 01	16 FEB 22	FUEL - QUANTITY INDICATION - REMOVAL OF FUEL LEAK DETECTION FUNCTION ASSOCIATED WITH THE FQIC 13 - 9
	Applicable to: MSN 02734-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J2527		16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE NEW STANDARD OF FUEL QTY INDICATING COMPUTER 13-10
	Applicable to: MSN 02321-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J2567		16 FEB 22	FUEL QUANTITY INDICATING - INTRODUCTION OF STAGE 8.0 FQIC
	Applicable to: MSN 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	J2662		16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE NEW STANDARD OF FQIC (P/N SIC5059 14-20)
	Applicable to: MSN 03391-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J2816		16 FEB 22	WING - FIXED PARTITION - INTRODUCED A STANDARD OF BOX WITHOUT DRY BAY
	Applicable to: MSN 03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J2817		16 FEB 22	WING - FIXED PARTITION - INTRODUCE A VERSION OF WING BOX WITH A DRY BAY
	Applicable to: MSN 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345			
	J2818	32-1346 10	16 FEB 22	LANDING GEAR - EXTENSION & RETRACTION - INTRODUCE POWER INTERRUPT PROTECTION CIRCUIT FOR LGCIUS
	Applicable to: ALL			
	J2879	47-1026 22 47-1035 17 47-1041 06	16 FEB 22	INERT GAS SYSTEM - CERTIFICATION OF FUEL TANK INERTING SYSTEM
	Applicable to: MSN 01628-01855, 02014, 02734-03032, 03058, 03180-03710, 03761-11597			
	J2887		16 FEB 22	WING - FIXED PARTITION - INTRODUCE A STANDARD OF WING BOX WITHOUT DRY BAY ON A321 AIRCRAFT
	Applicable to: MSN 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	J2888		16 FEB 22	WING - FIXED PARTITION - INTRODUCE A VERSION OF WING BOX WITH A DRY BAY ON A321 AIRCRAFT
	Applicable to: MSN 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165			
	J2937		16 FEB 22	FUEL - QUANTITY INDICATION - INTRODUCE FUEL LEAK DETECTION FUNCTION ON A321 A/C
	Applicable to: MSN 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	J2938		16 FEB 22	FUEL - QUANTITY INDICATION - DISABLING OF THE FUEL LEAK DETECTION FUNCTION ON A321 A/C
	Applicable to: MSN 04570-04662			
	J2963		16 FEB 22	REDUCTION IN QUANTITY OF MAGNETIC LEVEL INDICATORS
	Applicable to: MSN 04000-11597			
	J3238		16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE NEW STANDARD OF FQIC (P/N SIC5059-14-30).
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	J3240	28-1214 02	16 FEB 22	FUEL - QUANTITY INDICATING - ACTIVATE FUEL LEAK DETECTION WARNING SYSTEM
	Applicable to: MSN 04827-04860, 05342-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J3241		16 FEB 22	FUEL - QUANTITY INDICATING - DE-ACTIVATE FUEL LEAK DETECTION WARNING SYSTEM
	Applicable to: MSN 05342-05345, 05591-05883			
	J3282		16 FEB 22	WINGS - General - Define and Certify Structural Provisions for Sharklet for A320 family
	Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J3283	57-1173 04	16 FEB 22	WINGS - GENERAL - Certify Sharklet Installation for A320/A319/A318
	Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J3448	57-1187 13	16 FEB 22	WINGS - GENERAL - Certify Sharklet Installation for A321
	Applicable to: MSN 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	J3527		16 FEB 22	FUEL - MAIN TRANSFER SYSTEM - Introduce the A321 Centre Tank Fuel Transfer System onto A319 and A320 Single Aisle Variants
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J3559		16 FEB 22	FUEL - TANK LEVEL SENSING - ACTIVATE FUEL OVERFLOW CAUTION ON A318/A319/A320
	Applicable to: MSN 05621-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	J3702		16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE FQIC, MTI AND PRESELECTOR UPGRADE.
	Applicable to: MSN 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	J3703		16 FEB 22	FUEL - QUANTITY INDICATING - INSTALL FQIS ONTO A319 and A320 A/C.
	Applicable to: MSN 06689-06712, 06800-06876			
	J3739		16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE NEW FQIC SIC5059-14-31.
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	J3896		16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE NEW FUEL QUANTITY INDICATING SYSTEM UPGRADE FOR NEO A/C
	Applicable to: MSN 08495-11522, 11572-11597			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	J4030	32-1432 01	16 FEB 22	LANDING GEAR - NORMAL BRAKING - INTRODUCE NEW BSCU SOFTWARE STANDARD (L4.10).
	Applicable to: MSN 01143-06871, 06895-11597			
	J4209	28-1233 00	16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE FQIC SOFTWARE DEVELOPMENT
	Applicable to: MSN 06632, 06658-07098, 11531			
	J4231	32-1476 00	15 FEB 23	LANDING GEAR - NORMAL BRAKING - MODIFY AUTOBRAKE LOW MODE SETTINGS
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098, 11531			
	J4302		16 FEB 22	FUEL - FUEL RECIRCULATION - COOLING - ESTABLISH MISSING GRND CONNECTION TO INHIBIT RECIRCULATION DURING GRAVITY FEED
	Applicable to: MSN 08495-11522, 11572-11597			
	J4337		15 FEB 23	FUEL - TANKS - INTRO FULL ELEC SYS PROVSN FOR ACT1, 2 & 4.1 & FLUID MECH SYS PROVSN for ACT1 ON A321 ACF
	Applicable to: MSN 11531			
	J4376	28-1245 00	16 FEB 22	FUEL - QUANTITY INDICATING - Update Software FQIC (-0203)
	Applicable to: MSN 08495-11597			
	J4386		16 FEB 22	LANDING GEAR - WHEELS AND BRAKES - Install SepCarb IV carbon with OPS Anoxy 360 (Long Life)
	Applicable to: MSN 08495, 08596-11522, 11572-11597			
	J4530		15 FEB 23	CERTIFICATION DOCUMENTS - GENERAL - CERTIFY UP TO 3 ACTS ON A321NX
	Applicable to: MSN 11531			
	J4604		22 FEB 22	LANDING GEAR - NORMAL BRAKING - Introduce new standard of BSCU due to obsolescence of components
	Applicable to: MSN 10949-11597			
	K0024		16 FEB 22	INSTALLATION OF ADDITIONAL CARGO DOOR (BULK DOOR)
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-11597			
	K0026		16 FEB 22	LIGHTS - LOGOLIGHTS - INSTALLATION OF LOGOLIGHTS SYSTEM
	Applicable to: ALL			
	K0035		16 FEB 22	FIRE PROTECTION - FWD LOWER HOLD - INSTALLATION OF SMOKE DETECTION SYSTEM
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K0036		16 FEB 22	FIRE PROTECTION - AFT LOWER HOLD - INSTALLATION OF SMOKE DETECTION SYSTEM
	Applicable to: ALL			
	K0037		16 FEB 22	FIRE PROTECTION - FWD AND AFT LOWER HOLD INSTALLATION OF A SINGLE SHOT FIRE EXTINGUISHING SYSTEM
	Applicable to: ALL			
	K0052		16 FEB 22	INSTALLATION OF AN AIDS
	Applicable to: ALL			
	K0064		16 FEB 22	LIGHTS - INSTALLATION OF STROBE LIGHTS SYNCHRONISED MODE
	Applicable to: ALL			
	K0066		16 FEB 22	AIR CONDITIONING - VENTILATION SYSTEM FOR FWD CARGO COMPARTMENT
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	K0070	21-1047 05 21-1175 08	16 FEB 22	AIR CONDITIONING - VENTILATION SYSTEM FOR AFT CARGO COMPARTMENT
	Applicable to: MSN 01891-02887, 03032, 04563, 04827-04860, 05005, 05097, 08495-11597			
	K0071		16 FEB 22	AIR CONDITIONING - HEATING SYSTEM FOR AFT CARGO COMPARTMENT -
	Applicable to: MSN 02014, 02734, 03032, 04827-04860			
	K0082		16 FEB 22	WATER WASTE-INSTALL VACUUM TOILET SYSTEM
	Applicable to: ALL			
	K0151		16 FEB 22	EQUIPMENT FURNISHINGS ESCAPE FACILITIES INSTALL SLIDE RAFTS (AIRCRUISERS)
	Applicable to: MSN 01246-01376, 01518-01628, 01825, 01832, 02014, 03002, 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	K0344		16 FEB 22	LIGHTS-INSTALLATION OF A LSI-EEPMS FOR 164
	Applicable to: MSN 01143-01628, 01825, 01832, 02014, 02896-03002			
	K10003	49-1070 00	16 FEB 22	AIRBORNE AUXILIARY POWER - CONTROL AND MONITORING INTRODUCE SOFTWARE VERSION 06.00.000
	Applicable to: MSN 01891, 02321-02513, 02887-07098, 09190-11597			
	K10009		16 FEB 22	EQUIPMENT/FURNISHINGS - CURTAINS AND PARTITIONS INTRODUCE IMPROVED STRIKES FOR COCKPIT DOOR
	Applicable to: MSN 02734-11597			
	K1014		16 FEB 22	WATER/WASTE-RELOCATION OF POT.WATER TANK FROM SECTION 18 TO SECTION 15 AND REDESIGN OF POT.WATERSYSTEM
	Applicable to: MSN 01143-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K10143		16 FEB 22	EQUIPMENT/FURNISHING - MISC.EMERGENCY EQUIPMENT - INSTALL ELT (406AF) WITH PROG. DONGLE AND RCP IN COCKPIT - THALES
	Applicable to: MSN 04827-04860			
	K10359		16 FEB 22	LIGHTS - EMERGENCY LIGHTING - DEFINE FLOOR MOUNTED LUFTHANSA TECHNIK 900 SERIES EEPMS
	Applicable to: MSN 02887, 03032-11597			
	K10405		16 FEB 22	AIR CONDITIONING - AIR COOLING SYSTEM INTRODUCE MODIFIED AIR CONDITIONING PACK P/N 1802A0000-03(AIV DELETION) FOR A318/A319
	Applicable to: MSN 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345			
	K10463	21-1160 00	16 FEB 22	AIR CONDITIONING PACK TEMPERATURE CONTROL INTRODUCE IMPROVED AIR CONDITIONING CONTROLLER P/N 1803B0000-02
	Applicable to: MSN 02887-11597			
	K10494		16 FEB 22	AIRBORNE AUXILIARY POWER - CHANGE STANDARD APU HONEYWELL GTCP36-300 TO APIC APS3200
	Applicable to: MSN 02734-07098, 09190-11597			
	K10516	49-1067 01 49-1075 01	16 FEB 22	AIRBORNE AUXILIARY POWER - CONTROL AND MONITORING INTRODUCE HONEYWELL VECB WITH SOFTWARE -04
	Applicable to: MSN 01143-01855, 02014, 02734, 02896-04544, 04570-04974, 05066, 05101-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	K10561	44-1037 02 44-1038 01 44-1041 01	16 FEB 22	CABIN SYSTEM - ON-BOARD MOBILE TELEPHONY SYSTEM INSTALL GSM ON BOARD
	Applicable to: MSN 03035-03111, 03222-03229, 03294, 03588, 03630-04358, 04734-04773, 04953-04974, 05066, 05101			
	K10575		16 FEB 22	FIRE PROTECTION - CARGO COMPARTMENT FIRE EXTINGUISHING - INSTALL 2ND FIRE EX BOTTLE FOR ETOPS 120/180 ON A320
	Applicable to: MSN 04827-04860			
	K10889		16 FEB 22	CABIN SYSTEM - ON-BOARD MOBILE TELEPHONY SYSTEM - DEFINE AND CERTIFY GSM ON BOARD
	Applicable to: MSN 04352, 04734-04773, 04953-04974, 05066, 05101			
	K11047		16 FEB 22	COMMUNICATION - ANTI HIJACK CAMERA MONITORING - INSTALL COCKPIT DOOR SURVEILLANCE SYSTEM DISPLAYEDON SD
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11531			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K11694		16 FEB 22	EQUIPMENT/FURNISHINGS-MISCELLANEOUS EMERGENCY EQUIPMENT-INSTALLATION OF ELT(406AFN) WITH RCP IN COCKPIT AND NAV PROVISIONS-HONEYWELL
	Applicable to: MSN 03391-03733, 04000-04544, 04570-04773, 04953-04974, 05066, 05101-09324			
	K11855		16 FEB 22	COMMUNICATION - INTEGRATED IFE SYSTEM - INSTALL PANASONIC EFX FOR TAM04 VERSION
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	K12405	23-1397 06	16 FEB 22	COMMUNICATIONS-CIDS-INTRODUCE HANDSET SERIES N40A FROM VENDOR HOLMBERG
	Applicable to: MSN 03035-03111, 03222-03229, 03294, 03588, 03630-03816, 04163-11597			
	K12824		16 FEB 22	COMMUNICATIONS - CIDS - INSTALL CIDS AND SDF OBRM SOFTWARE P/N -33A AND CAM UPDATE
	Applicable to: MSN 04465-11597			
	K12825		16 FEB 22	COMMUNICATIONS - CIDS - INSTALL CIDS DIRECTOR P/N -333B
	Applicable to: MSN 04465-11597			
	K12999		16 FEB 22	CERTIFICATION-ADD. CERTIF. ITEMS A320 INCREASED CABIN OPERATIONAL FLEXIBILITY: OPERATION WITH 150 PAX AND 3 CABIN ATTENDANTS ACC. JAR25.803(D)
	Applicable to: MSN 04827-04860			
	K13015		16 FEB 22	EQUIPMENT/FURNISHING-MISC. EMERGENCY EQUIPMENT-REPLACE REMOTE CONTROL PANEL RC500 BY RC800 - THALES
	Applicable to: MSN 04827-04860			
	K13046		16 FEB 22	OXYGEN - CONTROL AND INDICATING - ADAPT PASS INFO RELAY, RELAY SOCKET AND WIRINGS FOR CHEMICAL OXYGEN SYSTEM
	Applicable to: MSN 05987-11597			
	K13050		16 FEB 22	GENERAL DESIGN WEIGHT INTRODUCE A320 WV017 (MTOW 78T, MLW 66T AND MZFW 62,5 T)
	Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	K13078		16 FEB 22	OXYGEN - PASSENGER OXYGEN - INTRODUCE OPTIONAL CHEMICAL OXYGEN HYBRID CONTAINER 22 MIN (DAE SYSTEMS)
	Applicable to: MSN 04563, 04827-04860, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	K1420		16 FEB 22	DOORS-FWD/AFT CARGO DOOR-INTRODUCTION OF LOCKING INDICATION
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K16128	21-1216 03	16 FEB 22	AIR CONDITIONING - AVIONICS EQUIPMENT VENTILATION - Introduce Avionics Comfort Duct Temperature Sensor (FIN 34HQ)
	Applicable to: MSN 01459, 01832, 02321, 03035-03047, 03266-03284, 03313, 03662, 03761, 04000, 04171, 04563, 04734, 05591, 05752-05883, 05987-11597			
	K16173		16 FEB 22	OXYGEN - PASSENGER OXYGEN - DEFINE 22 MIN CHEMICAL OXYGEN CONTAINER WITH ALUMINIUM HOUSING (B/E AEROSPACE SYST.)
	Applicable to: MSN 05883, 05987-09324			
	K16376	25-1B78 00 25-1BCD 00 25-1BCP 00 25-1BGE 00 25-1BZT 00 25-1CBJ 00	16 FEB 22	Oxygen - Passenger Oxygen - Define unregulated decentralized gaseous Type II container (22min) in lavatories
	Applicable to: MSN 01143-01376, 01518-01855, 02887, 03032, 04563, 04860, 05097, 05883, 05987-06121, 06139-11597			
	K1688		27 JUL 22	ETOPS-FIRE PROTECTION-INSTALL A FLOW METERING SYSTEM FOR FIRE EXTINGUISHING IN CARGO COMP.
	Applicable to: MSN 02014, 11531			
	K17059		16 FEB 22	OXYGEN - CREW OXYGEN - INTRODUCE COCKPIT OXYGEN SEGREGATION FOR NEO A/C
	Applicable to: MSN 08495-11597			
	K17120		16 FEB 22	Lights - Cabin Emergency Lighting Define Floor Mounted EEPMS Lufthansa Technik 1000 Series
	Applicable to: MSN 08495-11597			
	K17133		16 FEB 22	GENERAL - DESIGN WEIGHT - INTRODUCE WV050 (MTOW 73,5T, MLW 66,3T AND MZFW 62,8T) FOR A320 NEO
	Applicable to: MSN 08495-11522, 11572-11597			
	K17137		16 FEB 22	GENERAL - DESIGN WEIGHT - INTRODUCE WV055 (MTOW 79T, MLW 67,4T AND MZFW 64,3T) FOR A320 NEO
	Applicable to: MSN 08495-11522, 11572-11597			
	K17996		15 FEB 23	AIR CONDITIONING - FLOW CONTROL AND INDICATING - Install A320 pack flow selector with three positions on A321
	Applicable to: MSN 11531			
	K1806		16 FEB 22	AIR CONDITIONING SYSTEM POWER SUPPLY - MODIFY POWER TO FLOW CONTROL VALVE
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K18070		15 FEB 23	GENERAL - DESIGN WEIGHT - INTRODUCE WV050 (MTOW 89T, MLW 77,3T AND MZFW 73,3T) FOR A321 NEO
	Applicable to: MSN 11531			
	K18071		15 FEB 23	GENERAL - DESIGN WEIGHT - INTRODUCE WV051 (MTOW 89T, MLW 79,2T AND MZFW 75,6T) FOR A321 NEO
	Applicable to: MSN 11531			
	K18102	21-1226 01	16 FEB 22	AIR CONDITIONING - PACK TEMPERATURE CONTROL - Introduce improved Air Conditioning System Controller
	Applicable to: MSN 02924, 03229, 04662, 05005, 05097, 05240-05342, 05528, 05947, 08495-11597			
	K18256		16 FEB 22	OXYGEN - FLIGHT CREW PORTABLE DEVICES - INSTALL PBE P/N 15-40F-80 (AIR LIQUIDE) IN THE COCKPIT (702VU)
	Applicable to: MSN 08495-11597			
	K19351		16 FEB 22	HYDRAULIC POWER - GENERAL - EXTEND ENVIRONMENTAL OPERATION ENVELOPE TO ISA +40DEG C
	Applicable to: MSN 08495-11597			
	K2106		16 FEB 22	FIRE PROTECTION - INSTALL A FIRE DETECTION AND EXTINGUISHING SYSTEM
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	K2113		16 FEB 22	FUSELAGE - AFT SECTION - DEFINE A321 BASIC STRUCTURE OF SECTION 16
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	K2319		16 FEB 22	GENERAL-INCREASED MAXIMUM TAKE-OFF WEIGHT (MTOW) TO 75.5T
	Applicable to: MSN 01459			
	K2335		16 FEB 22	LAVATORY SMOKE DETECTION - IMPROVEMENT OF SMOKE DETECTION
	Applicable to: ALL			
	K2393		16 FEB 22	AIR COND.-CABIN PRESSURE CONTROL-IMPROVE CONTROLLER TO ENABLE USE OF EXTERNAL MODE
	Applicable to: ALL			
	K2450	49-1029 27	16 FEB 22	AUXILIARY POWER UNIT - INTRODUCTION OF APIC APS-3000
	Applicable to: MSN 01459, 01891, 02321-07098, 09190-11597			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	K2762		16 FEB 22	HYDRAULIC POWER - AUXILIARY HYDRAULIC POWER - INTRODUCE A321 RAM AIR TURBINE
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02321-02513, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	K2938		16 FEB 22	DOORS - C.C.DOOR HYDRAULIC SYSTEM - INTRODUCE MODIFIED ELECTRICAL (MANUAL) SELECTOR VALVE -
	Applicable to: ALL			
	K2962		16 FEB 22	HYDRAULIC POWER - MAIN BLUE HYDRAULIC POWER - IMPROVE MAINTENACE STATUS OF BLUE HYDRAULIC RESERVOIR -
	Applicable to: MSN 01143-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K30154		15 FEB 23	Doors - Emergency Exit - Introduce FWD automatic OWD mech. deactivation kit for NEO ACF
	Applicable to: MSN 11531			
	K30489		16 FEB 22	GENERAL - DESIGN WEIGHTS - OPERATE A320 NEO WITH DUAL OPERATIONAL WEIGHT - MTOW 73.5/79T MLW67.4T MZFW64.3T - WV051/055
	Applicable to: MSN 08495-11522, 11572-11597			
	K3065		16 FEB 22	INCREASED MAXIMUM TAKE OFF WEIGHT(MTOW) TO 77T
	Applicable to: MSN 01143-01376, 01518-01628, 01825, 01832, 01891, 02734, 02896-02924, 03035-03111, 03211, 03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883			
	K30673		15 FEB 23	FIRE PROTECTION-CARGO COMPT FIRE EXTING - IMPROVE FIRE SUPPRESSION TIME FOR HIGHLY FILLED CARGO COMPT FOR NEO ACF
	Applicable to: MSN 11531			
	K30725		16 FEB 22	AIR CONDITIONING - PACK TEMPERATURE CONTROL - Introduce improved Air Conditioning System Controller P/N 1803B0000-05
	Applicable to: MSN 08495-11597			
	K30988		16 FEB 22	INDICATING/RECORDING SYSTEMS-COMBINED VOICE AND DATA RECORDING/AC LOCATING SYSTEM - INSTALL CVDR1 and CVDR2
	Applicable to: MSN 10949-11597			
	K31012		18 MAY 22	OXYGEN - PAX OXYGEN - DEFINE 22 MIN CHEMICAL OXYGEN CONTAINER WITH ADAPTED MASK DROP POINT (B/E AEROSPACE SYST.)
	Applicable to: MSN 10949-11597			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	K3118		16 FEB 22	AUXILIARY POWER UNIT - CONTROL AND MONITORING - INTRODUCTION OF NEW ECB P/N 304817-1
	Applicable to: ALL			
	K3154		16 FEB 22	FUSELAGE - REAR FUSELAGE - ADAPT STRUCTURE OF SECTION 17 TO 19 TO A319 DEFINITION
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02321-02513, 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345			
	K32081		16 FEB 22	COMMUNICATIONS - CIDS - INTRODUCE CIDS OBRM SOFTWARE P/N Z064H010035B
	Applicable to: MSN 09324-11597			
	K32247		16 FEB 22	E/F - MISC EMERGENCY EQUIPMENT - Install ELT (406AFN2) with RCP in Cockpit - Honeywell
	Applicable to: MSN 10949-11597			
	K3279		16 FEB 22	AUXILIARY POWER UNIT - CONTROL AND MONITORING - MODIFIED WIRE HARNESSES TO NEW ECB
	Applicable to: ALL			
	K33563		15 FEB 23	AIR CONDITIONING-AVIONICS EQUIPMENT VENT- Adapt AEVS control logic for improvement of SAOV re-configuration
	Applicable to: MSN 11531			
	K3471		16 FEB 22	GENERAL - INCREASE DESIGN WEIGHT TO 61T MZFW
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	K3566		16 FEB 22	WATER/WASTE - ADAPT WATER/WASTE SYSTEM TO A319 DEFINITION
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02321-02513, 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345			
	K3599		16 FEB 22	AIR CONDITIONING - COCKPIT AND CABIN TEMPERATURE CONTROL - INTRODUCE IMPROVED ZONE TEMPERATURE CONTROLLER -03
	Applicable to: ALL			
	K3712		16 FEB 22	EQUIPMENT/FURNISHINGS - PAX COMPARTMENT - DELETION OF LIFELINES
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987			
	K3838		16 FEB 22	EQUIPMENT/FURNISHINGS - PAX COMPARTMENT - INSTALL SLIDE RAFTS ON A321 AIRCRAFT
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K3867		16 FEB 22	HYDRAULIC POWER-AUXILLIARY HYDRAULIC POWER- INTRODUCE R.A.T. WITH IMPROVED MAIN BEARING
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K3901		16 FEB 22	COMMUNICATIONS - CIDS - MODIFICATION OF DIRECTOR POWER SUPPLY PRINCIPLE
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02014-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K3984		16 FEB 22	AIR CONDITIONIN -COCKPIT AND CABIN TEMPERATURE CONTROL-INTRODUCE MODIFIED TEMPERATURE SENSOR -02 ON MIXER UNIT
	Applicable to: ALL			
	K4277		15 FEB 23	FIRE PROTECTION-ETOPS-CARGO COMPARTMENTS INSTALL A FLOW METERING SYSTEM
	Applicable to: MSN 11531			
	K4402		16 FEB 22	LIGHTS - EMERGENCY LIGHTING - INSTALL EMERGENCY ESCAPE PATH MARKING SYSTEM , FLOOR MOUNTED -LSI-
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 03032			
	K4457	49-1067 01	16 FEB 22	INTRODUCTION OF NEW ALLIED SIGNAL APU GTCP 131-9 (A)
	Applicable to: MSN 01143-01855, 02014, 02734, 02896-04544, 04570-04974, 05066, 05101-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	K4509		16 FEB 22	LIGHTS - EMERGENCY LIGHTING- INSTALL FLOOR PROXIMITY EMERGENCY ESCAPTE PATH MARKING SYSTEM - P.E.R. -
	Applicable to: MSN 02321-02513			
	K4574		16 FEB 22	AIR CONDITIONING-FLOW CONTROL AND INDICATING- INTRODUCE IMPROVED AIR CONDITIONING PACKAGE FOR FLOW CONTROL
	Applicable to: ALL			
	K4670		16 FEB 22	EQUIPMENT/FURNISHINGS - PAX COMPARTMENT - INSTALL SLIDE RAFTS ON A319 A/C
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 04563			
	K4705	00-1106 16	16 FEB 22	GENERAL-INCREASE DESIGN WEIGHTS TO- 75.5T MTOW, 62,5 T MLW 58,5 MZFW
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K4724		16 FEB 22	OXYGEN-PASSENGER OXYGEN-INTRODUCE IMPROVED CHEMICAL OXYGEN CONTAINER SERIES 15 MIN (DRAEGER)
	Applicable to: MSN 01459, 02014			
	K4725		16 FEB 22	DOORS - CARGO COMPARTMENT DOOR FWD AND AFT - MODIFY CARGO DOORS
	Applicable to: ALL			
	K4726		16 FEB 22	WATER/WASTE-TOILET SYSTEM-INTRODUCE IMPROVED TOILET ASSY
	Applicable to: ALL			
	K4787		16 FEB 22	LIGHTS - INTRODUCTION OF A COMMON EPSU
	Applicable to: MSN 01143-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K4788		16 FEB 22	LIGHTS - INTRODUCTION OF A COMMON EPSU FOR A321
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	K4793		16 FEB 22	AIR CONDITIONING-AIR COOLING SYSTEM-INTRODUCE AN IMPROVED RAM OUTLET (RAO)
	Applicable to: ALL			
	K4913		16 FEB 22	HYDRAULIC POWER - AUXILIARY HYDRAULIC POWER - INSTALL A319 RAM AIR TURBINE ON A320
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K5070		16 FEB 22	COMMUNICATIONS - CIDS - DUAL DIAL CODE ON HANDSET KEYBOARD (A319/A321)
	Applicable to: MSN 01143-01376, 01518-01628, 01825, 01832, 01891-02014, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05752			
	K5104		16 FEB 22	LIGHTS - EMERGENCY LIGHTING - INSTALL A FLOOR PROXIMITY EMERGENCY ESCAPE PATH MARKING - PHOTOLUMINISCENT SYSTEM LTAG
	Applicable to: MSN 01891, 02734			
	K5157		16 FEB 22	OXYGEN-PASSENGER OXYGEN-INTRODUCE IMPROVED OPTIONAL CHEMICAL OXYGEN CONTAINER (22 MIN) TO REPLACE "HIGH FLOW" CONTAINER
	Applicable to: MSN 01143-01376, 01518-01855, 04827-04860			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	K5213		16 FEB 22	AIR CONDITIONING - PACK TEMPERATURE CONTROL - INTRODUCE IMPROVED PACK TEMPERATURE CONTROLLER
	Applicable to: ALL			
	K5355		16 FEB 22	LIGHTS - EMERGENCY LIGHTING - INSTALL FLOOR PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM - PHOTOLUMINESCENT SYSTEM VENDOR LTAG
	Applicable to: MSN 01891, 02321-02734			
	K5382		16 FEB 22	OXYGEN - PASSENGER OXYGEN SYSTEM - INTRODUCE O2-CONTAINER WITH IMPROVED FUNCTION (DRAEGER, 15 MIN.)
	Applicable to: MSN 01459, 02014			
	K5446		16 FEB 22	INDICATING/RECORDING SYSTEMS - INSTALLATION OF A COMBINED FDIU/DMU
	Applicable to: MSN 01801-11597			
	K5451		16 FEB 22	EQUIPMENT/FRUNISHINGS - PASSENGER COMPARTMENT SEATS - INSTALL A PC POWER SYSTEM IN ENTIRE CABIN FOR USA01 VERSION
	Applicable to: MSN 01891			
	K5549		16 FEB 22	OXYGEN - PASSENGER OXYGEN - INTRODUCE CHEMICAL OXYGEN CONTAINER (15MIN) WITH IMPROVED ACTUATOR (VENDOR PURITAN)
	Applicable to: ALL			
	K5638	23-1157 20	16 FEB 22	EQUIPMENT/FURNISHINGS - MISCELLANEOUS EMERGENCY EQUIPMENT - INSTALL ELT CEIS A06V2 WITH CONTROL PANEL IN COCKPIT
	Applicable to: MSN 01143-02321			
	K5769		16 FEB 22	OXYGEN - PASSENGER OXYGEN - INTRODUCE OXYGEN CONTAINER PURITAN 22MIN (LONG RANGE EQUIPMENT) FOR TAM01/KK01 VERSION ONLY
	Applicable to: MSN 01801, 01826-01827, 01837-01855			
	K5779	00-1070 01	16 FEB 22	GENERAL -DESIGN WEIGHT- INCREASE DESIGN WEIGHT TO DUAL MTOW OPERATION WITH 64,0T OR 75,5T
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04734-04773, 05345			
	K5801		16 FEB 22	AIR CONDITIONING-PRESSURE CONTROL AND MONITORING- INTRODUCE MODIFIED PRESSURE CONTROLLER P/N 9022-15702-10
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K5939		16 FEB 22	GENERAL - INCREASE DESIGN WEIGHTS TO: 70,0T MTOW, 62,5T MLW, 58,5T MZFW
	Applicable to: MSN 02321-02513, 02887			
	K6109		16 FEB 22	FIRE PROTECTION-CC SMOOKE DETECTION- REVERT TO PREVIOUS A/S SPECIFICATION FOR ST1/ST3 IN FWD AND AFT CARGO COMPARTMENTS
	Applicable to: MSN 01459			
	K6156		16 FEB 22	AIR CONDITIONING-PACK TEMPERATURE CONTROL- INTRODUCE MODIFIED PACK TEMPERATURE CONTROLLER
	Applicable to: ALL			
	K6163		16 FEB 22	FIRE PROTECTION -CC FIRE EXTINGUISHING REVERT TO PREVIOUS A/S SPEC. IN CARGO HOLDS
	Applicable to: MSN 01459			
	K6164	00-1069 54 00-1227 07 03-1165 05	16 FEB 22	GENERAL-INCREASE A320 DESIGN WEIGHTS TO 77,0T MTOW; 66,0T MLW AND 62.5T MZFW (WV012)
	Applicable to: MSN 02014, 02734, 02896, 02924-03002, 03058, 03180-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 05066, 05101-05342, 05591-05621			
	K6208		16 FEB 22	GENERAL - DESIGN WEIGHT - OPERATE A320 WITH DUAL WEIGHT VARIANTS CERTIFICATION (002 OR 010)
	Applicable to: MSN 01143-01376, 01518-01628, 01825, 01832, 01891, 02896-02904, 03035-03047, 03111, 04953-04974, 05240			
	K6318	49-1029 27 49-1061 03	16 FEB 22	APU-CONTROL AND MONITORING-INTRODUCE APIC ECB SOFTWARE VERSION 5
	Applicable to: MSN 01459, 01891, 02321-07098, 09190-11597			
	K6345	03-1131 06	16 FEB 22	GENERAL - DESIGN WEIGHTS - INCREASE A321-200 DESIGN WEIGHTS TO 77,8T MLW AND 73,8T MZFW
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	K6443		16 FEB 22	AIR CONDITIONING_AIR COOLING INSTALL A NEW ECS
	Applicable to: MSN 02734-11597			
	K6472	35-1063 02	16 FEB 22	CERTIF.-MOD TO BE OPENED FOR O-2 BOXES DRAEGER 22-MIN CONTAINER RFC LAN35D2011302E
	Applicable to: MSN 01891, 02321-02513, 02887, 04563			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	K6936		16 FEB 22	AUXILIARY POWER UNIT (APU)-GENERAL- INCREASE OPERATION ENVELOPE TO 39800 FT. FOR GTCP36-300
	Applicable to: MSN 01628-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K7072		16 FEB 22	LIGHTS-EMERGENCY LIGHTING- EPSU LOAD DISTRIBUTION IMPROVEMENT
	Applicable to: MSN 01801-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K7253		16 FEB 22	LIGHTS-EMERGENCY LIGHTING- EPSU LOAD DISTRIBUTION IMPROVEMENT
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	K7735		16 FEB 22	EQUIPMENT/FURNISHINGS LININGS AND FURNISHINGS CHANGE OF MANUFACTURING PROCESS FOR DADO PANEL SPACER
	Applicable to: MSN 01801-01855			
	K7755	25-1305 06	16 FEB 22	EQUIPMENT/FURNISHINGS PAX COMPARTMENT INTRODUCE A MODIFIED INTRUSION AND PENETRATION RESISTANCE COCKPIT DOOR
	Applicable to: MSN 01376-01459, 01801-11597			
	K7778	23-1208 14 23-1695 01 23-1738 08	16 FEB 22	COMMUNICATIONSAUDIO AND VIDEO MONITORING INSTALL A COCKPIT DOOR SURVEILLANCE SYSTEM
	Applicable to: MSN 01459, 01891, 02321-02734, 04827-04860, 05005, 05097, 08635-11522, 11572-11597			
	K7790	25-1305 06	16 FEB 22	DOORS PASSENGER COMPARTMENT FIXED PARTITIONS INTERIOR DOOR-ELECTRICAL COCKPIT DOOR RELEASE SYSTEM
	Applicable to: MSN 01376-01459, 01801-11597			
	K7847	25-1BCV 01	16 FEB 22	EQUIPMENT/FURNISHINGS PASSENGER COMPARTMENT DEFINITION OF A PED POWER SUPPLY SYSTEM PROVIDING 110/60 HZ FROM VENDOR THALES
	Applicable to: MSN 01825, 01832, 02887, 02904, 03222-11522, 11572-11597			
	K8400		16 FEB 22	COMMUNICATIONS CABIN INTERCOMMUNICATION MODIFY CABIN INTERCOMMUNICATION DATA SYSTEM ON A319
	Applicable to: MSN 02734-11597			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	K8734		16 FEB 22	AIR CONDITIONING - AIR COOLING ADAPT A318 ECS TO A320
	Applicable to: MSN 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	K8905	25-1789 05	16 FEB 22	EQUIPMENT/FURNISHINGS -CURTAINS AND PAR INSTALL A DEADBOLT FOR THE REINFORCED COCKPIT DOOR
	Applicable to: MSN 02734, 02896-02904, 03047, 03180-11597			
	K9009		16 FEB 22	COMMUNICATIONS-PASSENGER ADDRESS EMERGENCY POWER SIMPLIFICATION
	Applicable to: MSN 04827-04860			
	K9230		16 FEB 22	EQUIPMENT/FURNISHINGS -MISCELLANEOUS EMER EQMT INSTAL AN ELT WITH RCP IN COCKPIT BASED ON ENHANCED PROVISIONS-ELTA
	Applicable to: MSN 02887-02904, 03002-03032			
	K9231		16 FEB 22	EQUIPMENT/FURNISHINGS - MISCELLANEOUS EMER EQPT INSTALL AN ELT WITH RCP IN COCKPIT BASED ON ENHANCED PROVISIONS - HONEYWELL
	Applicable to: MSN 02924, 03035-03313, 03761-03816			
	K9234		16 FEB 22	EQUIPMENT/FURNISHINGS - MISCELLANEOUS EMER EQPT INSTALL AN ELT (406AF) WITH RCP IN COCKPIT BASED ON ENHANCED PROVISIONS - ELTA
	Applicable to: MSN 02734, 04563, 05005, 05097			
	K9235		16 FEB 22	COMMUNICATIONS - ANTI HIJACK CAMERA MONITORING REPLACE HINGE ASSEMBLY FOR CDSS LCD/SYSTEM CONTROLLER
	Applicable to: MSN 02734, 04827-04860, 08635-11522, 11572-11597			
	K9458		16 FEB 22	AIR CONDITIONING - PACK TEMPERATURE CONTROL IMPROVED AIR CONDITIONING SYSTEM CONTROLLER P/N 1803B0000-01
	Applicable to: MSN 02734-11597			
	K9473		16 FEB 22	AIR CONDITIONING-PRESSURE CONTROL AND MONITORING-INTRODUCE RESIDUAL PRESSURE CONTROL UNIT (RPCU)
	Applicable to: MSN 02734-11597			
	K9877	25-1789 05	16 FEB 22	EQUIPMENT / FURNISHINGS - CURTAINS AND PARTITIONS - MODIFY DEADBOLT FOR REFORCED COCKPIT DOOR
	Applicable to: MSN 02734, 02896-02904, 03047, 03180-11597			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	K9920	23-1695 01 23-1738 08	16 FEB 22	COMMUNICATIONS - ANTI HIJACK CAMERA MONITORING REPLACE CDSS LCD /SYSTEM CONTROLLER
	Applicable to: MSN 01891, 02321-02734, 04827-04860, 05005, 05097, 08635-11522, 11572-11597			
	K9995		16 FEB 22	AIR CONDITIONING - PRESSURE CONTROL AND MONITORING REMOVAL OF RESIDUAL PRESSURE CONTROL UNIT DUE TO MSCN REJECTANCE(ANTI MOD)
	Applicable to: MSN 02887, 04563			
	P0033		16 FEB 22	COMMUNICATIONS - HF1 SYSTEM PROVISION FOR HF1 SYSTEM
	Applicable to: ALL			
	P0034		16 FEB 22	SINGLE HF SYSTEM
	Applicable to: ALL			
	P0040		16 FEB 22	4TH OCCUPANT SEAT
	Applicable to: ALL			
	P0091		16 FEB 22	ALTERNATIVE FLIGHT CREW OXYGEN BOTTLE (77.1CU/FT) IN COMPOSITE MATERIAL FOR FIXED SYSTEM
	Applicable to: ALL			
	P0143		16 FEB 22	COMMUNICATIONS - INSTALLATION OF A 3RD RMP
	Applicable to: MSN 01143-01376, 01518-11293			
	P0147		16 FEB 22	DESIGN WEIGHT-MTOW 72T-STRUCTURAL REINFORCEMENT
	Applicable to: ALL			
	P0160		16 FEB 22	OXYGEN-FLIGHT CREW OXYGEN STORAGE-INSTALLATION OF A 115 CU/FT (STEEL) OXYGEN CYLINDER
	Applicable to: MSN 01143-01376, 01518-04773, 04953-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P0197		16 FEB 22	COMMUNICATIONS-SINGLE HF SYSTEM INSTALLATION
	Applicable to: MSN 01143-01891, 02321-11597			
	P0283		16 FEB 22	COMMUNICATIONS-INSTALLATION OF DATA LINK USING EXISTING SYSTEM PROVISION
	Applicable to: MSN 01459			
	P0287		16 FEB 22	NAVIGATION-REPLACE EXISTING VOR DDRMI WITH A COMBINED VOR ADF DDRMI COLLINS
	Applicable to: MSN 01143-01376, 01518-01891, 02321-04773, 04953-04974, 05066, 05101-05345, 05591-05643, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P0357		16 FEB 22	ELECTRICAL GENERATION-PUBLIC ADDRESS SWITCHING BY P/B ON HOT BUS BUSBAR
	Applicable to: MSN 04827-04860			
	P0415		16 FEB 22	COMMUNICATIONS-HOT MIKE RECORDING
	Applicable to: ALL			
	P0824		16 FEB 22	NAVIGATION-INSTALL AN ADF BENDIX TYPE DFA-75A
	Applicable to: MSN 01459			
	P10054	34-1384 02	16 FEB 22	NAVIGATION - MMR - INSTALL COLLINS MMR STANDARD P/N 822-1152-122
	Applicable to: MSN 01143-01376, 01518-01891, 02321-11597			
	P10098	24-1120 04	16 FEB 22	ELECTRICAL POWER AC ESSENTIAL GENERATION SWITCHING INSTALL AUTO SWITCHING SYSTEM FOR AC&DC ESS BUS.
	Applicable to: MSN 01143-03002, 03035-11597			
	P10178		16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC)- RE-INSTALL HONEYWELL FMS PERFORMANCE DATA BASE (PDB) -901
	Applicable to: MSN 04827-04860			
	P10257	32-1242 07	16 FEB 22	LANDING GEAR - WHEELS AND BRAKES - INTRODUCE REDESIGNED MESSIER-BUGATTI SEPCARB BRAKES ON MLG
	Applicable to: MSN 01459, 03180-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 08495-11522, 11572-11597			
	P10267		16 FEB 22	NAVIGATION - RADIO MAGNETIC INFORMATION SWITCHING AND INDICATING : RE-INSTALL THALES DDRMI VOR/DME INDICATORS (ANTI-MOD 33503)
	Applicable to: MSN 03211, 03266-04773, 04953-04974, 05066, 05101-05345, 05591-05643, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P10321	22-1289 01	16 FEB 22	AUTO-FLIGHT - GENERAL - REMOVE AFM LIMITATION ON NON PRECISION APPROACHES WITH ONE ENGINE OUT
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P10383	31-1334 04 31-1414 03	16 FEB 22	INDICATING/RECORDING SYSTEMS FLIGHT WARNING COMPUTER (FWC) INSTALL FWC STANDARD H2-F5
	Applicable to: MSN 01143-01246, 01376-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P10402		16 FEB 22	COMMUNICATIONS - AUDIO MANAGEMENT- MODIFY AMU POWER SUPPLY TO COPE WITH DC ESSENTIAL BUS LOSS
	Applicable to: MSN 03180-11597			
	P10439	22-1248 01	16 FEB 22	AUTO-FLIGHT FMGC INSTALL FMGC HNWL STD P1C12 ON CFM A/C
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P10440		16 FEB 22	AUTO-FLIGHT FMGC INSTALL FMGC THALES S4C12 ON CFM A/C
	Applicable to: MSN 04827-04860			
	P10443	27-1182 04	16 FEB 22	FLIGHT CONTROL - ELAC SYSTEM - INTRODUCE ELAC "L93" SOFTWARE STANDARD
	Applicable to: MSN 01376-11597			
	P10447		16 FEB 22	POWERPLANT - GENERAL - INTRODUCE SELECT ONE PRODUCTION PACKAGE ON IAE V2500-A5 ENGINES
	Applicable to: MSN 03816-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P10493		16 FEB 22	FLIGHT CONTROL - ELAC - ACTIVATE HIGH ALTITUDE UPSETS VMO/MMO OVERSHOOT PROTECTION FUNCTION ON ELAC
	Applicable to: MSN 04163-11597			
	P10527	31-1335 01 31-1372 10 31-1433 01	16 FEB 22	INDICATING/RECORDING SYSTEM - ELECTRONIC INSTRUMENT SYSTEM (EIS)- INSTALL DISPLAY MANAGEMENT COMP. SOFTW. EIS2 S8-1
	Applicable to: MSN 02734-11597			
	P10530	34-1403 08 34-1480 24 34-1662 13	16 FEB 22	NAVIGATION - GENERAL - MODIFY FLIGHT MANUAL TO EXTEND RNP SAAAR RNAV CAPABILITY (STEP 2+)
	Applicable to: MSN 01891, 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-07098			
	P10686	22-1266 03 22-1676 03	16 FEB 22	AUTO-FLIGHT - FMGC INSTALL HONEYWELL PERFORMANCE DATABASE RELEASE 1A (PS4087592-901)
	Applicable to: ALL			
	P10694	22-1296 06 22-1614 10 34-1403 08	16 FEB 22	AUTO-FLIGHT - FMGC ACTIVATE "MOD NAV IN GO AROUND" ON FMGC
	Applicable to: MSN 01143-01251, 01459-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P10721	73-1090 00	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM INTRODUCE "5BQ" FADEC SOFTWARE STANDARD ON CFM56-5B ENGINES - CNF CFM 111B -
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P10762	22-1269 05	16 FEB 22	AUTO FLIGHT - FMGC INSTALL FMGC HWL H2C12 (RELEASE 1A) ON CFM A/C
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P10763	22-1270 04 22-1676 03	16 FEB 22	AUTO FLIGHT - ON IAE & PW A/C INSTALL FMGC HWL H2I11 (RELEASE 1A) ON IAE & PW A/C
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			
	P10785		16 FEB 22	AUTO-FLIGHT - FMGC INSTALL FMGC THALES S5C12 (RELEASE 1A) ON CFM A/C
	Applicable to: MSN 04827-04860			
	P10801	22-1359 05	16 FEB 22	AUTO-FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) INSTALL FMGC HONEYWELL H2C13 ON CFM A/C
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05752			
	P10804		16 FEB 22	AUTOFLIGHT - AUTOLAND LIMIT - EXTEND AUTOLAND TO GLIDE SLOPE AT -3.25 DEGREES
	Applicable to: MSN 04000-04192, 04389, 04563, 04773, 05345			
	P10870	34-1480 24 34-1662 13	16 FEB 22	NAVIGATION GENERAL INSTALL PUSH-BUTTON IN THE COCKPIT FOR LAT DEV SCALE DISPLAY ACTIVATION
	Applicable to: MSN 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-07098			
	P10960		16 FEB 22	NAVIGATION - T3CAS - INSTALL T3CAS COMPUTER WITH TRANSPONDER FUNCTION INACTIVE
	Applicable to: MSN 04827-04860, 06409-11597			
	P11140		16 FEB 22	FLIGHT CONTROLS - ELAC SYSTEM - ACTIVATE ENHANCED LAF FUNCTIONS ON ELAC FOR A320 78T FWD CG OR A319CJ WV10
	Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P11146		16 FEB 22	LANDING GEAR - PARKING/ULTIMATE EMERGENCY BRAKING ACTIVATE PARKING BRAKE MONITORING FUNCTION ON SA A/C
	Applicable to: MSN 04544-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P11247	46-1062 16	16 FEB 22	INFORMATION SYSTEMS - GENERAL - CERTIFY FANS B+ CONFIGURATION (OVERALL MODIFICATION)
	Applicable to: MSN 04827-04974			
	P11256	34-1480 24 34-1662 13	16 FEB 22	NAVIGATION - GENERAL - CERTIFY RNP AR CAPABILITY (STEP 3)ON A320 AND A318 A/C
	Applicable to: MSN 01891, 05240-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P11325	73-1095 02	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM INTRODUCE ECU SOFTWARE STANDARD "5BR" ON CFM56-5B ENGINES
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P11355		16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER - INTRODUCE FMGC H2PC12 (HONEYWELL/CFM)
	Applicable to: MSN 05883, 06139, 06173-07098			
	P11356	22-1676 03	16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER - INTRODUCE FMGC H2PI11 (HONEYWELL/IAE-PW)
	Applicable to: MSN 01459, 05947-06121, 06163-06165, 08495-11597			
	P11363	22-1472 18	16 FEB 22	AUTO FLIGHT - AUTOPILOT/FLIGHT DIRECTOR (AP/FD)- ACTIVATE AP/FD TCAS FUNCTION
	Applicable to: MSN 01459, 08495-11597			
	P11473	22-1315 05 22-1614 10	16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT SYSTEM (FMS) ACTIVE BARO RADIO SETTING FUNCTION
	Applicable to: ALL			
	P11490		16 FEB 22	NAVIGATION - TRAFFIC AND TERRAIN INTEGRATED SURVEILLANCE (T/TISS) ACTIVATE XPDR FUNCTION ON T3CAS
	Applicable to: MSN 04827-04860, 06409-11597			
	P11510	34-1506 34 34-1667 17	16 FEB 22	NAVIGATION - TCAS - INSTALL TCAS HONEYWELL TPA-100B CHANGE 7.1 CAPABLE OF ATSAW
	Applicable to: MSN 03035-03047, 03111, 03391, 04441, 05184-11597			
	P11567	22-1484 01	16 FEB 22	AUTO-FLIGHT - GENERAL - REMOVE AFM LIMITATION ON NON PRECISION APPROACHES WITH ONE ENGINE OUT ON A321 A/C
	Applicable to: MSN 03222-03229, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P11569	34-1480 24 34-1662 13	16 FEB 22	NAVIGATION - GENERAL - CERTIFY RNP AR CAPABALITY (STEP 3) ON A319 AIRCRAFT.
	Applicable to: MSN 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345			
	P11570	34-1480 24 34-1662 13	16 FEB 22	NAVIGATION - GENERAL - CERTIFY RNP AR CAPABILITY (STEP 3) ON A321 AIRCRAFT
	Applicable to: MSN 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P11588	34-1711 12	16 FEB 22	NAVIGATION - ATC - INSTALL "ACSS" ATC XS 950 P/N 7517800-10100 COMPLIANT WITH DO-260A
	Applicable to: MSN 04827-04860, 06409-11597			
	P11592		16 FEB 22	COMMUNICATION - COCKPIT VOICE RECORDER SUPPLY THE CVR 28VDC TO COMPLY WITH FAA REGULATION (FAR 25.14.57 (D) (5))
	Applicable to: MSN 04352-04773, 04953-11597			
	P11614		16 FEB 22	INDICATING/RECORDING SYSTEMS - EIS - INSTALL ENHANCED DU INSTEAD OF EIS2 LCDU
	Applicable to: MSN 05528-11597			
	P11620		16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - ACQUISITION/INTERFACE - ACTIVATE MONITORING OF ATC / XPDR
	Applicable to: MSN 04544-11597			
	P11652		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL SINGLE WEATHER RADAR RDR 4000 HONEYWELL
	Applicable to: MSN 08495-11597			
	P11677	73-1097 00	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM INTRODUCE EEC SOFTWARE STANDARD SCN21/AA FOR IAE V2500-A5
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P11744	27-1219 03	16 FEB 22	FLIGHT CONTROLS - SEC SYSTEM - INTRODUCE NEW SPOILER ELEVATOR COMPUTER (SEC) SOFTWARE STD 120 WITH HARD B'
	Applicable to: MSN 04352-11597			
	P11807	31-1359 00 31-1372 10 31-1433 01	16 FEB 22	INDICATING/RECORDING SYSTEM ELECTRONIC INSTRUMENT SYSTEM (EIS) INSTALL NEW EIS2 SOFTWARE S9
	Applicable to: MSN 02734-11597			
	P11819	31-1373 00 31-1414 03	16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) INSTALL FWC STANDARD H2-F6
	Applicable to: MSN 01143-01246, 01376-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P11844	46-1121 14	16 FEB 22	RFC FIN091010D4610 - SA - INFORMATION SYSTEM - UPGRADE ATSU WITH FANS B+ APPLICATION
	Applicable to: MSN 04827-04974			
	P11856	22-1315 05 22-1614 10	16 FEB 22	AUTO - FLIGHT FMGC: ACTIVATE NO AP DISCONNECTION BELOW MDA/MDH UNTIL MISSED APPROACH POINT
	Applicable to: ALL			
	P11955	31-1374 01	16 FEB 22	INDICATING/RECORDING SYSTEMS -GENERAL - SYSTEM DATA ACQUISITION CONCENTRATOR (SDAC) - INSTALL SDAC STANDARD H2-E3
	Applicable to: MSN 01891, 02321-02513, 03180-03211, 03313, 04827-11597			
	P12034	22-1472 18	18 MAY 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) - ACTIVATE AP/FD TCAS FUNCTION ON FMGC BY PIN PROGRAMMING
	Applicable to: MSN 01459			
	P12060		16 FEB 22	AUTO FLIGHT - FMGC HONEYWELL REINSTALL FMGC CFM MOD 31896 (ANTI-MOD 38778)
	Applicable to: MSN 04827-04860			
	P12083		16 FEB 22	COMMUNICATIONS - COCKPIT VOICE RECORDER(CVR) - IMPROVE CVR/FDR RECORDING LOGIC INDEPENDENCE
	Applicable to: MSN 04352-04773, 04953-11597			
	P12092		16 FEB 22	AUTOFLIGHT - FMGC INSTALL FMS THALES RELEASE 1A S6 (WITH FG C12) ON CFM A/C
	Applicable to: MSN 04827-04860			
	P12094		16 FEB 22	NAVIGATION - TRAFFIC AND TERRAIN - INTEGRATED SURVEILLANCE SYSTEM (T/TISS)ACTIVATE OBSTACLE FUNCTION
	Applicable to: MSN 04827-04860, 06409-11597			
	P12095		16 FEB 22	NAVIGATION -TRAFFIC AND TERRAIN - INTEGRATED SURVEILLANCE SYTEM (T/TISS) ACTIVATE ELEVIEW FUNCTION
	Applicable to: MSN 04827-04860, 06409-11597			
	P12125	27-1219 03	16 FEB 22	FLIGHT CONTROLS - SPOILER & ELEVATOR COMPUTER (SEC) - INSTALL SEC B' 121 (SHARKLET PROJECT)
	Applicable to: MSN 04352-05222, 05342-05643, 05947-06097			
	P12126	22-1427 05 22-1461 12	16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER - INSTALL FAC B0622 (SHARKLET PROJECT)
	Applicable to: MSN 05342, 05528-05752			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P12127	27-1225 06 27-1238 00	16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM - INSTALL ELAC B L96 (SHARKLET PROJECT)
	Applicable to: MSN 01143-01837, 01891-04192, 05342, 05528-11597			
	P12171		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS SINGLE WEATHER RADAR CAPABLE OF PWS FUNCTION IN SINGLE CONFIG (WITH TRANSCEIVER -624)
	Applicable to: MSN 05066-11597			
	P12173		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS MULTISCAN WXR IN FULL SINGLE CONFIG (WITH P/N -213) AND MULTISCAN FUNCTION ACTIVATED
	Applicable to: MSN 05066, 05101-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P12301	23-1707 13	16 FEB 22	COMMUNICATIONS - COCKPIT VOICE RECORDER - INSTALL CVR STANDARD L3-C P/N 2100-1025-02 (ANTI-MOD 150806 and 157368 and 159888)
	Applicable to: MSN 04570-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324			
	P12310		16 FEB 22	NAVIGATION - AIR DATA/INERTIAL REFERENCE SYSTEM - INSTALL ADIRS SYSTEM HONEYWELL AS STANDARD SUPPLIER ON ST2 and ST3 A/C.
	Applicable to: MSN 04662-04773, 05005, 05097, 05345-05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P12330		16 FEB 22	NAVIGATION - TRAFFIC COLLISION AVOIDANCE SYSTEM (TCAS) -Install TCAS Collins TTR-921 change 7.1
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P12367	73-1100 02	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INSTALL ECU SOFTWARE STANDARD 5BS ON CFM56-5B ENGINES
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P1237		16 FEB 22	INDICATING RECORDING SYSTEM-TOGGLE SWITCHES RELOCATED IN 25VU ON OVERHEAD PANEL
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P12484		16 FEB 22	INDICATING/RECORDING SYSTEMS - SDAC - ACQUISITION/INTERFACE - REMOVE USELESS PIN PROGRAMMING ON SDAC (FWC H2-F5 INSTALLED)
	Applicable to: MSN 05342-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P12637		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS MANUAL EQUIPMENTS FOR CONFIGURATIONS WITH DUAL PROVISIONS
	Applicable to: MSN 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P12697	31-1433 01	16 FEB 22	INDICATING/RECORDING SYSTEMS - Electronic Instrument System (EIS) - Introduce EIS2 Standard S10
	Applicable to: MSN 02734-11597			
	P12746	34-1517 01	16 FEB 22	NAVIGATION - Traffic and Terrain Integrated Surveillance (T/TISS) - Install T3CAS corrective standard STD1-1
	Applicable to: MSN 04827-04860, 06409-11597			
	P12753		16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL STANDARD FAC CAA02 (SHARKLETS CAPABILITY AND ROPS FUNCTION)
	Applicable to: MSN 05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	P12909		16 FEB 22	NAVIGATION - AIR DATA/INERTIAL REFERENCE SYSTEM - Install ADIRU Honeywell OPS Software STD L4.2 (Vzbi evolution and hybrid FPA within Block III ADIRU)
	Applicable to: MSN 05528-11597			
	P12911	22-1359 05 22-1360 02 22-1379 01 22-1547 01 22-1614 10	16 FEB 22	AUTO FLIGHT SYSTEM ? FMGC ? ACTIVATE "NO AP DISCONNECTION UPON PROFILE OR F-PLAN INVALIDATION IN FINAL DES MODE" FUNCTION BY PIN-PROGRAMMING
	Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832-01837, 01891-11522, 11572-11597			
	P12946		16 FEB 22	NAVIGATION - SENSORS, POWER SUPPLY AND SWITCHING - Define static probe monitoring on ground function on FWC/SDAC
	Applicable to: MSN 05621-11597			
	P12994	34-1571 03	16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS WXR CAPABLE MULTISCAN WITH TRANSCEIVER WRT-2100 (P/N 822-1710-214)
	Applicable to: MSN 04827-04860, 08495-11597			
	P1302		16 FEB 22	LANDING GEAR-POST EIS STANDARD 4 OF BSCU EQUIPMENT
	Applicable to: ALL			
	P13023	31-1414 03	16 FEB 22	INDICATING RECORDING SYSTEMS - FWC - Introduce FWC Standard H2-F7
	Applicable to: MSN 01143-01246, 01376-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P13061		16 FEB 22	NAVIGATION - GROUND PROXIMITY WARNING SYSTEM (GPWS) - INSTALL NEW EGPWS STANDARD PNR 965-1676-006
	Applicable to: MSN 06528-11597			
	P1312		16 FEB 22	LIGHTS-COCKPIT-INTEGRALLY LIGHTED PLACARD 25VU,ANTI ICE PART MODIFIED
	Applicable to: ALL			
	P13210	34-1549 00	16 FEB 22	NAVIGATION - TRAFFIC AND TERRAIN INTEGRATED SURVEILLANCE SYSTEM(T/TISS) - INSTALL ACSS T3CAS STD 1.2
	Applicable to: MSN 04827-04860, 06409-11597			
	P13321		16 FEB 22	AUTO FLIGHT - FMGC - INTRODUCE FMS HONEYWELL PEGASUS II ASSOCIATED WITH FG 3G PC13
	Applicable to: MSN 05883, 06139, 06173-07098			
	P13322	22-1676 03	16 FEB 22	AUTO FLIGHT - FMGC - INTRODUCE FMS HONEYWELL PEGASUS II ASSOCIATED WITH FG 3G PI12
	Applicable to: MSN 01459, 05947-06121, 06163-06165, 08495-11597			
	P13357	22-1480 03	16 FEB 22	AUTO FLIGHT ? FLIGHT AUGMENTATION COMPUTER (FAC) - DEFINE STOP RUDDER INPUT WARNING FUNCTION ON AIRCRAFT
	Applicable to: MSN 01143-01246, 01376-11597			
	P13389		16 FEB 22	COMMUNICATIONS - SATELLITE COMMUNICATION - INSTALL IRIDIUM SATCOM SYSTEM
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P13390		16 FEB 22	COMMUNICATION - SATELLITE COMMUNICATION - DEFINE IRIDIUM SATCOM COCKPIT VOICE INTERFACE
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P13476	22-1554 01	16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC CAA03 STANDARD
	Applicable to: MSN 05883-06871, 06895-11597			
	P13482	27-1251 01	16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - Install ELAC L98 STANDARD WITH DATA LOADING CAPABILITY
	Applicable to: MSN 01855, 04352-11597			
	P13487	31-1492 00	16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - Install FWC H2-F8 for NEO EIS
	Applicable to: MSN 01143-01246, 01376-01891, 02321-06536, 06592-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P13489		16 FEB 22	ELECTRICAL POWER-AC MAIN GENERATION - DEFINE AND INSTALL IDG ON NEO PW ENGINE
	Applicable to: MSN 08495-11597			
	P13491		16 FEB 22	ICE AND RAIN PROTECTION - AIR INTAKES - CONNECT NACELLE ANTI ICING PUSH BUTTON TO ENGINE INTERFACE UNIT for PW engines (NEO CONFIGURATION)
	Applicable to: MSN 08495-11597			
	P13619	27-1234 01 27-1243 01	16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL L97 STANDARD ON ELAC B WITH DATALOADING CAPABILITY
	Applicable to: MSN 01855, 04352-11597			
	P13630	31-1450 01	16 FEB 22	INDICATING/RECORDING SYSTEMS - SDAC ACQUISITION/INTERFACE - Install SDAC standard H2-E4
	Applicable to: MSN 01891, 02321-02513, 03180-03211, 03313, 04827-05005, 05097, 05749, 06528-11597			
	P1371		16 FEB 22	LANDING GEAR-INSTALLATION OF GOODRICH BRAKES COOLING FANS
	Applicable to: MSN 01143-01376			
	P13808	46-1095 03 46-1121 14	16 FEB 22	INFORMATION SYSTEMS - ATIMS ? COMPONENTS AND INTERFACES - INSTALL ATSU CSB8 FANS B+
	Applicable to: MSN 04827-04974			
	P13834		16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL STANDARD FAC CAA02 (SHARKLETS AND ROPS PROJECT) on A321 AIRCRAFT
	Applicable to: MSN 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	P13843	34-1711 12	16 FEB 22	NAVIGATION - ATC - INSTALL ACSS ATC XS-950 P/N 7517800-12401 COMPLIANT WITH DO-260B MANDATE
	Applicable to: MSN 04827-04860, 06871-11597			
	P13844	34-1663 14 34-1692 09	16 FEB 22	NAVIGATION - ATC - INSTALL AND CONFIGURE ROCKWELL COLLINS ATC TPR-901 P/N 822-1338-225 COMPLIANT WITH DO-260B MANDATE
	Applicable to: MSN 01891, 02321-02734, 02924-03002, 03058, 03180-03211, 03266-03284, 08495-11597			
	P1390		16 FEB 22	ELECTRICAL GENERATION-BCL'S CHANGE
	Applicable to: ALL			
	P13901		16 FEB 22	NAVIGATION ? GROUND PROXIMITY WARNING SYSTEM (GPWS) ? ACTIVATE RUNWAY

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
				AWARENESS AND ADVISORY SYSTEM (RAAS) FUNCTION ON MKV-A EGPWS HONEYWELL
	Applicable to: MSN 08495-11597			
	P13922	22-1618 01	16 FEB 22	CERTIFICATION DOCUMENTS - GENERAL - DEFINE SOFT GO AROUND FUNCTION FOR NEO
	Applicable to: MSN 08495-11597			
	P13937	31-1433 01	16 FEB 22	INDICATING/RECORDING SYSTEMS - ELECTRONIC INSTRUMENT SYSTEM (EIS) - INTRODUCE EIS2 STANDARD S11
	Applicable to: MSN 02734-11597			
	P14095	22-1606 00 22-1676 03	16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) - INSTALL FMGC 3G H2BPI14 FMS KIT PEGASUS II HONEYWELL ON IAE/PW AIRCRAFT
	Applicable to: MSN 01459, 05947-06121, 06163-06165, 08495-11597			
	P14155	34-1595 18 34-1630 17	16 FEB 22	NAVIGATION - ATC/MODE S (SELECT) - ACTIVATE ADS-B OUT DO-260B CAPABILITY FOR ATC TRANSPONDEUR
	Applicable to: MSN 01891, 02321-02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-11597			
	P14160	34-1711 12	16 FEB 22	NAVIGATION - TRAFFIC AND TERRAIN INTEGRATED SURVEILLANCE SYSTEM (T/TISS) - Install ACSS T3CAS std 2 P/N 9005000-11203 capable DO-260B and ROPS
	Applicable to: MSN 04827-04860, 06871-11597			
	P14161		15 FEB 23	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS WXR SYSTEM WITH HAZARD FUNCTION (P/N 822-1710-411) IN FULL SINGLE CONFIGURATION
	Applicable to: MSN 11531			
	P14306		16 FEB 22	NAVIGATION - TRAFFIC COLLISION AVOIDANCE SYSTEM (TCAS) - REINSTALL TCAS PROVISIONS CONFIGURATION
	Applicable to: MSN 06409-11597			
	P14307		16 FEB 22	NAVIGATION - TRAFFIC COLLISION AVOIDANCE SYSTEM (TCAS) - REINSTALL TCAS HONEYWELL TPA-100B P/N 940-0351-001
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P14310		16 FEB 22	NAVIGATION - ATC/MODE S (SELECT) - REINSTALL XPDR1 AND XPDR2 TRA-67A P/N 066-01127-1101
	Applicable to: MSN 06409-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P14311		16 FEB 22	NAVIGATION - ATC/MODE S (SELECT) - REINSTALL ATC XPDR HONEYWELL (TYPE TRA67A P/N 066-01127-1402)
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P14313		16 FEB 22	NAVIGATION - GROUND PROXIMITY WARNING SYSTEM (GPWS) - REINSTALL EGPWS P/N 965-1676-002
	Applicable to: MSN 06409-11597			
	P14314		16 FEB 22	NAVIGATION - GROUND PROXIMITY WARNING SYSTEM (GPWS) - REACTIVATE GEO ALTI/PEAKS/OBSTACLE/LATERAL GPS POSITION
	Applicable to: MSN 06409-11597			
	P14457		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - Install new RDR-4000 step 2 Radar Processor and activate WX ahead function (for FULL SINGLE CONFIGURATION)
	Applicable to: MSN 08495-11597			
	P1450		16 FEB 22	NAVIGATION - ATC MODE "S" - ACTIVATION OF SELECTIVE INTERROGATION FUNCTION
	Applicable to: ALL			
	P14510	27-1243 01	16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL ELAC B L97+ WITH DATA LOADING CAPABILITY
	Applicable to: MSN 01855, 04352-11597			
	P14582	34-1663 14 34-1692 09 34-1711 12	16 FEB 22	NAVIGATION - ATC/MODE S (SELECT) - Configure DO-260B TRANSPONDER ATC 1
	Applicable to: MSN 01891, 02321-02734, 02924-03002, 03058, 03180-03211, 03266-03284, 04827-04860, 06871-11597			
	P14628	31-1482 03	16 FEB 22	INDICATING/RECORDING SYSTEMS - ELECTRONIC INSTRUMENT SYSTEM (EIS) - INTRODUCE EIS2 S12 STANDARD
	Applicable to: MSN 02734-03032, 03058, 03180-04860, 05005-11597			
	P14629	31-1492 00	16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F8P FOR A320NEO PW TC
	Applicable to: MSN 01143-01246, 01376-01891, 02321-06536, 06592-11597			
	P14708	73-1103 00	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE ECU SOFTWARE "5BTF3" ON CFM56-5B ENGINES
	Applicable to: MSN 03035, 03058, 03180-03211, 04974, 05101, 05222, 05342, 05749, 05883, 06409, 06528-07098			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P14762	71-1068 01	16 FEB 22	POWER PLANT - FAN COWL DOORS - INTRODUCE IMPROVED FAN COWL DOOR LATCH WITH KEY & FLAG ON CFM56-5A/5B ENGINE
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P14825	31-1482 03	16 FEB 22	INDICATING/RECORDING SYSTEM - EIS - INTRODUCE EIS2 S13 STANDARD
	Applicable to: MSN 02734-03032, 03058, 03180-04860, 05005-11597			
	P14826	31-1490 00 31-1492 00	16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F9 STANDARD
	Applicable to: MSN 01143-01246, 01376-01891, 02321-06536, 06592-11597			
	P14828		16 FEB 22	NAVIGATION - TRAFFIC AND TERRAIN INTEGRATED SURVEILLANCE SYSTEM (T/TISS) - REINSTALL T3CAS STD 1.2 AND ACSS ATC XS-950 (ANTI-MOD 156002 155999 167961)
	Applicable to: MSN 06871-11597			
	P1485		16 FEB 22	ELECTRICAL POWER-"BAT OFF"INDICATOR LIGHT POWER SOURCE MODIFIED
	Applicable to: ALL			
	P14946		16 FEB 22	AUTO FLIGHT - FMGC - INTRODUCE FMS HONEYWELL H2C AND FG PC14 IN FMGC 3G WITH KIT PEG II ON CFM AIRCRAFT
	Applicable to: MSN 06798, 06895-07098			
	P14947	22-1610 02	03 APR 23	AUTO FLIGHT - FMGC - INSTALL FMGC HONEYWELL STANDARD H2BPC15 FOR NEO CONFIGURATION - A320 CFM
	Applicable to: MSN 05883, 06139, 06173-06876, 06949-07098			
	P14948	22-1610 02	03 APR 23	AUTO FLIGHT - FMGC - Introduce FG PC16 associated to Honeywell FMS H2C for A320NEO CFM POST TC
	Applicable to: MSN 05883, 06139, 06173-06876, 06949-07098			
	P14949	22-1610 02	03 APR 23	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER - Introduce FG PC17 associated to FM H2C for NEO configuration
	Applicable to: MSN 05883, 06139, 06173-06876, 06949-07098			
	P14950	22-1610 02	03 APR 23	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER - Install FG PC18 associated to Honeywell FM H2C
	Applicable to: MSN 05883, 06139, 06173-06876, 06949-07098			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	P15084	26-1103 09	03 APR 23	FIRE PROTECTION - ENGINE FIRE EXTINGUISHING - CERTIFY SINGLE ENGINE TAXI WITHOUT APU RUNNING
	Applicable to: MSN 01143, 01246, 01376-01891, 02321-03032, 03058, 03180-04773, 05005-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098			
	P15275		16 FEB 22	NAVIGATION - ATC/MODE S (SELECT) - RE-CONFIGURE ATC1 WIRING IN DO260A CONF (ANTI-MOD 156506/P14582 & MOD 157970/P15322)
	Applicable to: MSN 06871-07098			
	P15322	34-1663 14 34-1692 09 34-1711 12	16 FEB 22	NAVIGATION - ATC/MODE S (SELECT) - RE-ACTIVATE THE TRANSPONDER MONITORING ON SDAC / FWC
	Applicable to: MSN 01891, 02321-02734, 02924-03002, 03058, 03180-03211, 03266-03284, 04827-04860, 06871-11597			
	P15323		16 FEB 22	AUTO FLIGHT - GENERAL - Activate ROPS function on SA-NEO
	Applicable to: MSN 08495-11597			
	P15347		16 FEB 22	FIRE PROTECTION - ENGINE FIRE EXTINGUISHING - CERTIFY SINGLE ENGINE TAXI WITHOUT APU RUNNING (NEO PW & CFM)
	Applicable to: MSN 08495-11597			
	P15372	22-1575 00 22-1606 00 22-1676 03	16 FEB 22	AUTO FLIGHT - FMGC - INTRODUCE FG PI15 ASSOCIATED WITH HONEYWELL FMS H2C
	Applicable to: MSN 01459, 05947-06121, 06163-06165, 08495-11597			
	P15572		16 FEB 22	NAVIGATION - GENERAL - CERTIFY RNP AR CAPABILITY (STEP 3) ON SINGLE AISLE NEO
	Applicable to: MSN 08495-11597			
	P15599		16 FEB 22	CERTIFICATION DOCUMENTS - GENERAL - Certify and activate SHARP (SHort AiRfield Package) on NEO A/C
	Applicable to: MSN 08495-11522, 11572-11597			
	P15674		16 NOV 22	NAVIGATION - ILS - Install MMR Rockwell Collins GLU-2100
	Applicable to: MSN 11522-11597			
	P15675		16 NOV 22	NAVIGATION - ILS - Install Honeywell IMMR L1A
	Applicable to: MSN 11522-11597			
	P15701		16 FEB 22	ENGINE FUEL AND CONTROL - FULL AUTHORITY DIGITAL ENGINE CONTROL (FADEC) SYSTEM - INTRODUCE NEW FADEC SOFTWARE ON SA NEO PW
	Applicable to: MSN 08495-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P15763		16 FEB 22	GENERAL-FLIGHT ENVELOPE EXTENSION - NEO PW - GRD OPERATION TO 9200FT
	Applicable to: MSN 08495-11522, 11572-11597			
	P15797		16 FEB 22	ENGINE - GENERAL - REDUCE #3/#4 DAMPER GAP ON NEO PW
	Applicable to: MSN 08495-11597			
	P15809		16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT GUIDANCE AND ENVELOPE COMPUTER (FMGC) - INSTALL HONEYWELL PDB FOR A320NEOPW POST-EIS
	Applicable to: MSN 08495-11597			
	P15825		16 FEB 22	NAVIGATION - AIR DATA - Install and define reversible Back-Up Speed Scale function
	Applicable to: MSN 08495-11597			
	P15847		16 NOV 22	NAVIGATION - ILS - ACTIVATE VOR MARKER FUNCTION ON HONEYWELL IMMR
	Applicable to: MSN 11522-11597			
	P15872	22-1593 01 22-1594 00	16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC CAA06
	Applicable to: MSN 05883-06871, 06895-11597			
	P15874		16 FEB 22	AUTO FLIGHT - GENERAL - Introduce CAT2/CAT3 Autoland on SA NEO Family
	Applicable to: MSN 08495-11597			
	P15897		16 FEB 22	ENGINE - HIGH PRESSURE COMPRESSOR (HPC) ASSEMBLY - NEO PW - ADD CBN COATING ON HPC
	Applicable to: MSN 08495-11597			
	P15967		16 FEB 22	ENGINE - GENERAL - DEFINE, INSTALL AND ACTIVATE DUAL COOLING ON NEO PW ENGINES
	Applicable to: MSN 08495-11597			
	P15983	73-1111 00	16 FEB 22	ENGINE FUEL AND CONTROL - FUNCTIONAL INTERFACES - Install EIU software S3.1 on NEO A/C
	Applicable to: MSN 08495-11597			
	P15991	31-1490 00 31-1492 00	16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F9C STANDARD
	Applicable to: MSN 01143-01246, 01376-01891, 02321-06536, 06592-11597			
	P15992	31-1490 00 31-1492 00	16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F9D
	Applicable to: MSN 01143-01246, 01376-01891, 02321-06536, 06592-11597			
	P15993	31-1499 00	16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F9E
	Applicable to: MSN 08495-11597			

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M$^{(1)}$	CRITERION	Linked SB	Incorp. Date	Title
	P15994	73-1108 00	16 FEB 22	ENGINE FUEL AND CONTROL - FULL AUTHORITY DIGITAL ENGINE CONTROL (FADEC) SYSTEM - INTRODUCE FCS3.1 FADEC ON NEO PW
	Applicable to: MSN 08495-11597			
	P15997	73-1109 01	16 FEB 22	ENGINE FUEL AND CONTROL-FUNCTIONAL INTERFACES-Install A429 links between MMR/clock and EIU to acquire time for cooling computed by FADEC on NEO A/C
	Applicable to: MSN 08495-11597			
	P16015	34-1677 02	16 FEB 22	NAVIGATION - GENERAL - EXTEND MAGVAR OPERATION DOMAIN
	Applicable to: MSN 10949-11597			
	P1631	34-1278 04	16 FEB 22	NAVIGATION - MODIFY GPWC WARNINGS
	Applicable to: MSN 01891-11597			
	P1752		16 FEB 22	HYDRAULICS-MODIFICATION OF ELECTRICAL ROUTING OF GREEN LEAKAGE MEASUREMENT ELECTROVALVE CONTROL
	Applicable to: ALL			
	P1850		16 FEB 22	FLIGHT CONTROLS-ELAC SYSTEM-EFCS ELAC -SOFTWARE L62
	Applicable to: ALL			
	P1872	21-1047 05 21-1175 08	16 FEB 22	AIR CONDITIONING-INSTALLATION OF CIRCUIT BREAKER FOR REAR CARGO COMPARTMENT VALVE SUPPLY
	Applicable to: MSN 01891-02887, 03032, 04563, 04827-04860, 05005, 05097, 08495-11597			
	P1873		16 FEB 22	AIR CONDITIONING-ESSENTIAL DC SUPPLY FOR FORWARD CARGO COMPARTMENT SHUT-OFF VALVES
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P1875		16 FEB 22	AIR CONDITIONING-ESSENTIAL DC SUPPLY FOR REAR CARGO COMPARTMENT HEATING CONTROLER
	Applicable to: MSN 02014, 02734, 03032, 04827-04860			
	P1883		16 FEB 22	FLIGHT CONTROLS-FCDC L 40
	Applicable to: ALL			
	P1906		16 FEB 22	ENGINES FUEL AND CONTROL-EIU FOR CFMI POWERPLANT (SOFTWARE VERSION 11)
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P1970		16 FEB 22	COMMUNICATIONS-INSTALL HF1 IN EMERGENCY CONFIG. (ETOPS)
	Applicable to: ALL			

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M⁽¹⁾	CRITERION	Linked SB	Incorp. Date	Title
	P20095		16 FEB 22	COMMUNICATIONS - COCKPIT VOICE RECORDER - Install new L3COM CVR to remove Larsen Noise during CVR test
	Applicable to: MSN 08495-11597			
	P20189	73-1113 00	16 FEB 22	ENGINE FUEL AND CONTROL - FUNCTIONAL INTERFACES - Install EIU S3.2
	Applicable to: MSN 08495-11597			
	P20240		16 NOV 22	COMMUNICATIONS - AUDIO MANAGEMENT SYSTEM (AMS) - INSTALL DIGITAL AUDIO SYSTEMS (creation and removal)
	Applicable to: MSN 11482-11597			
	P20300	73-1120 00	16 FEB 22	ENGINE FUEL AND CONTROL - FUNCTIONAL INTERFACES - Install EIU S3.3
	Applicable to: MSN 08495-11597			
	P20305	73-1122 00	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE FCS4.2 FADEC SOFTWARE ON NEO PW
	Applicable to: MSN 08495-11597			
	P20323		16 NOV 22	COMMUNICATIONS - AUDIO MANAGEMENT - INCLUDE 3rd RMP INTO DIGITAL AUDIO SYSTEMS (with ACP3 removal)
	Applicable to: MSN 11482-11597			
	P20327		16 FEB 22	COMMUNICATIONS - COCKPIT VOICE RECORDER - CVR TEST PANEL - ADD PLUG XLR5
	Applicable to: MSN 08495-11597			
	P20347	27-1268 01 27-1269 01	16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL ELAC L101 STANDARD WITH DATA LOADING CAPABILITY
	Applicable to: MSN 01855, 04352-11597			
	P20351	73-1121 00	16 FEB 22	ENGINE FUEL AND CONTROL - FULL AUTHORITY DIGITAL ENGINE CONTROL (FADEC) SYSTEM - INTRODUCE FCS4.0b FADEC SOFTWARE ON NEO PW
	Applicable to: MSN 08495-11597			
	P20374		15 FEB 23	EQUIPMENT/FURNISHINGS - COCKPIT - New C/B arrangement for ST8 for 120VU and 49VU
	Applicable to: MSN 11531			
	P20375	31-1576 01 31-1577 01	16 FEB 22	INDICATING/RECORDING SYSTEMS - ELECTRONIC INSTRUMENT SYSTEM (EIS) - install EIS2 STANDARD S14
	Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597			
	P20385	22-1605 00 22-1606 00	16 FEB 22	AUTO FLIGHT - FMGC - INSTALL FG PI16 ASSOCIATED WITH HONEYWELL FM H2C

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
		22-1676 03		
	Applicable to: MSN 01459, 05947-06121, 06163-06165, 08495-11597			
	P2040		16 FEB 22	OXYGENE-COCKPIT-MODIFY LP VALVE
	Applicable to: ALL			
	P20427	27-1284 02	16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL ELAC L102 STANDARD WITH DATA LOADING CAPABILITY
	Applicable to: MSN 08495-11597			
	P20429	22-1629 00 22-1630 00	16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC CAA09
	Applicable to: MSN 05947-06871, 07005-11597			
	P20440		16 FEB 22	INDICATING/RECORDING SYSTEMS - UP AND DOWN DATA LOADING SYSTEM ACQUISITION/INTERFACE AND EQUIPMENT - INSTALL E-DATALOADING FUNCTIONNALITY
	Applicable to: MSN 10949-11597			
	P20441		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - RE-INSTALL SINGLE MANUAL HONEYWELL WEATHER RADAR WITH DUAL PROVISION (ANTI-MOD)
	Applicable to: MSN 08495-11597			
	P20442		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM RE-INSTALL SINGLE MANUAL ROCKWELL COLLINS WEATHER RADAR WITH DUAL PROVISION (ANTI-MOD)
	Applicable to: MSN 08495-11597			
	P20444		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - RE-INSTALL SINGLE MANUAL COLLINS WXR CONFIGURATION WITH SINGLE PROVISIONS
	Applicable to: MSN 08495-11597			
	P20466	31-1558 01 31-1575 02	16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F10
	Applicable to: MSN 08635, 10949-11597			
	P20467	22-1819 00	16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) - Introduce HONEYWELL FMS release 2 standard H3 associated to FG PI16
	Applicable to: MSN 10949-11597			
	P20473		16 FEB 22	AUTO FLIGHT - GENERAL - INSTALL AND ACTIVATE ROPS STEP 2+ CAPABILITY INCLUDING RUNWAY CONDITION SELECTION (FOR NEO AIRCRAFT ONLY)
	Applicable to: MSN 10949-11597			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P20496	75-1005 00	16 FEB 22	AIR - GENERAL - REDESIGN BUFFER AIR SOLENOID TO INCREASE MARGIN TO SPEC REQUIREMENTS ON NEO PW
	Applicable to: MSN 08495-11597			
	P20596		15 FEB 23	AUTO FLIGHT - Flight Management System Introduce FLS function and FLS/Final APP coexistence certification & activation with HONEYWELL FMS
	Applicable to: MSN 11531			
	P20599	22-1736 00 22-1737 00	16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER FAC - INSTALL FAC CAA12 SUPPORTING SAFETY BEYOND STANDARD STEP 1 FUNCTIONS
	Applicable to: MSN 05947-06871, 07005-11597			
	P20604	22-1819 00	16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER - Install FG PI17 associated to Honeywell FM H3
	Applicable to: MSN 10949-11597			
	P20608	27-1284 02	16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM - INSTALL ELAC B L103 - DATA LOADABLE
	Applicable to: MSN 08495-11597			
	P20610	31-1575 02	16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - ACQUISITION/INTFC - INSTALLATION FWC standard H2-F12
	Applicable to: MSN 08635, 10949-11597			
	P20611	31-1576 01 31-1577 01	16 FEB 22	INDICATING/RECORDING SYSTEMS -ELECTRONIC INSTRUMENT SYSTEM (EIS) - INTRODUCE EIS2 STANDARD S16 (SAFETY BEYOND STANDARD)
	Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-08495, 08596, 10949-11597			
	P20614		16 FEB 22	AUTO FLIGHT - GENERAL - CERTIFY AND DEFINE UAMM (Unreliable Airspeed Mitigation Means) STEP 2 FUNCTION
	Applicable to: MSN 10949-11597			
	P20664	31-1576 01 31-1577 01	16 FEB 22	INDICATING/RECORDING SYSTEMS -ELECTRONIC INSTRUMENT SYSTEM (EIS) - INTRODUCE EIS2 STANDARD S15
	Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597			
	P20717	73-1123 00	16 FEB 22	ENGINE FUEL AND CONTROL - FUNCTIONAL INTERFACES - Install EIU S4.0
	Applicable to: MSN 08495-11597			
	P20738	22-1736 00 22-1737 00	16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC CAA11
	Applicable to: MSN 05947-06871, 07005-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P20758		16 NOV 22	NAVIGATION - ILS - install Honeywell IMMR L2
	Applicable to: MSN 11522-11597			
	P20827	22-1723 02	16 FEB 22	AUTO FLIGHT - FMGC Install PDB Honeywell (SA11) on NEO A/C and associated to FMS Release 2 standard H3
	Applicable to: MSN 08495-11597			
	P20903	73-1128 01	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE FCS4.4 FADEC SOFTWARE WITH ASSOCIATED HARDWARE ON NEO PW
	Applicable to: MSN 08495-11597			
	P21030	49-1082 45	16 FEB 22	ENGINE FUEL AND CONTROL - FUNCTIONAL INTERFACES - Introduce preboost capability for APU Honeywell 131-9A with PW1100G engines
	Applicable to: MSN 08495, 08596-11522, 11572-11597			
	P21125		16 FEB 22	ENGINE FUEL AND CONTROL - FUNCTIONAL INTERFACES - Adapt wiring from EIU S4.1
	Applicable to: MSN 09190-11597			
	P21213	25-1BPJ 01 25-1BPK 01	16 FEB 22	EQUIPMENT/FURNISHINGS - COCKPIT - Reinforce Cockpit Documents Stowage (SB & Serial Solution)
	Applicable to: MSN 01891, 02321-02513, 04563, 04953-05005, 05097, 06632, 06800, 06949, 07098, 08596, 09324-11597			
	P21265		16 FEB 22	INDICATING RECORDING - FLIGHT WARNING COMPUTER (FWC) - INTRODUCE FWS S/W STANDARD F13
	Applicable to: MSN 10949-11597			
	P21270		16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE FCS 6.0 FADEC SOFTWARE ON NEO PW
	Applicable to: MSN 10949-11597			
	P21423	31-1575 02	16 FEB 22	INDICATING/RECORDING SYSTEMS -FWC - ACQUISITION/INTERFACE - Install FWC F12E
	Applicable to: MSN 08635, 10949-11597			
	P21469	73-1136 00	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE EEC and PHMU FCS 5.0 ON NEO PW
	Applicable to: MSN 08495-11597			
	P21486		16 FEB 22	AUTO FLIGHT - GENERAL - Install P/B OFF and activate ROPS inhibition capability (NEO only)
	Applicable to: MSN 10949-11597			
	P21529	22-1734 03	27 JUL 22	AUTO FLIGHT - FMGC Install NEO PDB Honeywell (SA17) capable of DTO 27k
	Applicable to: MSN 10949-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P21566	22-1819 00	16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER - Install FM Honeywell H4 associated to FG PI18
	Applicable to: MSN 10949-11597			
	P21650		15 FEB 23	ENG FUEL AND CTRL- MERGE MOD EIU PIN PROG AND MOD PREBOOST CAPABILITY FOR APU HONEYWELL
	Applicable to: MSN 11531			
	P21705		15 FEB 23	NAVIGATION - ILS - INSTALL COLLINS MMR GLU-925
	Applicable to: MSN 11522-11597			
	P21765		03 APR 23	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM - INSTALL ELAC B L104 SUPPORTING SAFETY BEYOND STANDARD STEP 1 FUNCTIONS (DATA LOADABLE)
	Applicable to: MSN 11531, 11597			
	P21844	22-1797 01 22-1798 01	16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC CAA13 SUPPORTING ROPS EVOLUTION FUNCTIONS AND ADDITIONAL SAFETY ENHANCEMENTS
	Applicable to: MSN 05947-06871, 07005-08596, 09190, 10949-11597			
	P21875		16 NOV 22	COMMUNICATIONS - AUDIO INTEGRATING AND VOICE COMMAND SYSTEM - INSTALL S4.2 STD FOR DIGITAL AUDIO
	Applicable to: MSN 11482-11597			
	P21888		16 NOV 22	NAVIGATION - ILS - INSTALL NEW HONEYWELL OPERATIONAL SOFTWARE IN THE 2 IMMR STANDARD L2.2
	Applicable to: MSN 11522-11597			
	P2196		16 FEB 22	BATCH OF MINOR IMPROVEMENTS OF SERIES A/C DESIGN (AS ZONE) FROM A/C N 268
	Applicable to: ALL			
	P21977		16 NOV 22	COMMUNICATIONS - AUDIO MANAGEMENT SYSTEM (AMS) - MODIFY INSTALLATION FOR GROUND CREW BOOMSET ON BATTERIES
	Applicable to: MSN 11482-11597			
	P21984		16 FEB 22	ENGINE FUEL AND CONTROL - FULL AUTHORITY DIGITAL ENGINE CONTROL SYSTEM - INTRODUCE FCS 6.01 FADEC S/W ON NEO PW
	Applicable to: MSN 10949-11597			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	P22033		16 NOV 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE FCS 6.2 FADEC SOFTWARE ON NEO PW
	Applicable to: MSN 11482-11597			
	P2205		16 FEB 22	FIRE PROTECTION - REPLACE ENGINE/APU FIRE PANEL
	Applicable to: ALL			
	P22108		16 NOV 22	ILS - INSTALL HONEYWELL IMMR STANDARD L2.3
	Applicable to: MSN 11522-11597			
	P2218		16 FEB 22	NAVIGATION - TCAS II COMPLETE PROVISIONS
	Applicable to: ALL			
	P2223		16 FEB 22	NAVIGATION - INSTALLATION OF GPWC MARK V WITH INTERFACE WITH CFDS
	Applicable to: ALL			
	P22284		16 NOV 22	COMMUNICATIONS - AUDIO MANAGEMENT SYSTEM (AMS) - ADAPT WIRING FOR GROUND CREW BOOMSET ON BATTERIES FOR RMP3
	Applicable to: MSN 11482-11597			
	P22484		03 APR 23	ELECTRIC AND ELECTRONIC COMMON INSTALLATION - EQUIPMENT FOR BOXES AND PANELS - REINTRODUCE SUPPRESSED RELAYS ON 24GG & 25GG
	Applicable to: MSN 10949-11597			
	P22550		15 FEB 23	ENGINE FUEL AND CONTROL - FULL AUTHORITY DIGITAL ENGINE CONTROL (FADEC) SYSTEM - INTRODUCE FCS 6.3 FADEC SOFTWARE ON NEO PW
	Applicable to: MSN 11482-11597			
	P2294		16 FEB 22	ENGINE FUEL AND CONTROL - CFM 56 POWERPLANT EIU VERSION 12
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P2316		16 FEB 22	AUTOFLIGHT - ACTIVATE WINDSHEAR FUNCTION
	Applicable to: ALL			
	P2493		16 FEB 22	COCKPIT - INSTALL A340 TYPE PILOT SEATS
	Applicable to: ALL			
	P2546		16 FEB 22	INDICATING/RECORDING SYSTEMS - INSTRUMENTS - DEFINE SDAC STANDARD FOR A321 COF A
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P2547		16 FEB 22	INDICATING/RECORDING SYSTEMS - INSTRUMENTS - DEFINE DMC STANDARD FOR A321 COF A
	Applicable to: ALL			
	P2588		16 FEB 22	OXYGEN - COCKPIT - REPLACE BASIC AIR LIQUIDE PBE BY DRAEGER
	Applicable to: ALL			
	P2590		16 FEB 22	NAVIGATION - INSTALL A TCAS II COLLISION AVOIDANCE SYSTEM
	Applicable to: MSN 01459, 02014, 02924, 03035-11597			
	P2650	30-1048 32	16 FEB 22	ICE AND RAIN DETECTION - DUAL ADVISORY - ICE DETECTION SYSTEM INSTALLATION
	Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P2693		16 FEB 22	LANDING GEAR - MLG - INSTALL ABS BRAKE COOLING FANS ON A321
	Applicable to: MSN 01459			
	P2842		16 FEB 22	GENERAL - EXTEND FLIGHT ENVELOPE FOR IAE V2500
	Applicable to: MSN 01143-01376, 01518-01628, 01825, 01832, 01891-02014, 02896-02904			
	P2859		16 FEB 22	NAVIGATION - INSTALL A TCAS II COLLISION AVOIDANCE SYSTEM (HONEYWELL)
	Applicable to: MSN 01143-01376, 01518-01891, 02321-02734, 02896-02904, 03002-03032, 04827-04860, 06409-11597			
	P2875		16 FEB 22	COMMUNICATION - INSTALL SUNDSTRAND ACARS MANAGEMENT UNIT (BFE) FOR LH1
	Applicable to: MSN 01459			
	P2878		16 FEB 22	INDICATING RECORDING SYSTEM - SDAC - DEFINE A PIN PROGRAM FOR REAR C.C. VENTILATION
	Applicable to: MSN 01891-02887, 03032, 04563, 04827-04860, 05005, 05097, 08495-11522, 11572-11597			
	P2879		16 FEB 22	INDICATING RECORDING SYSTEM - SDAC - DEFINE A PIN PROGRAM FOR FWD C.C VENTILATION
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P2960	00-1016 88	16 FEB 22	CERTIFICATION DOCUMENTS - GENERAL - CERTIFICATION FOR TAKING OFF WITH 15 KNOT TAILWING
	Applicable to: MSN 01143-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	P2963		16 FEB 22	AIR CONDITIONING - IMPROVE CABIN PRESSURIZATION CONTROL ON 25VU -
	Applicable to: ALL			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	P3004		16 FEB 22	LIGHTS-COCKPIT LIGHTING-IMPROVE COCKPIT LIGHTING
	Applicable to: ALL			
	P3011		16 FEB 22	FMS - FMS CROSS LOAD
	Applicable to: ALL			
	P3040		16 FEB 22	NAVIGATION - INSTALL 4MCU ADIRS CAPABLE OF A321 A/C FITTED WITH IAE ENGINES
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02321-02513, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P3042		16 FEB 22	NAVIGATION-INSTALL A HONEYWELL 4 MCU ADIRS CAPABLEOF OPERATING ON A321 WITH IAE OR CFM ENGINES -
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570			
	P3044		16 FEB 22	NAVIGATION -ADAPT SHELVES FOR INSTALLATION OF 4MCUADIRS -
	Applicable to: ALL			
	P3102		16 FEB 22	AUTO FLIGHT - FCU-CPIP1 STANDARD
	Applicable to: ALL			
	P3105		16 FEB 22	ENGINE FUEL AND CONTROL - CFM 56 - EIU VERSION 13
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P3106		16 FEB 22	ENGINE FUEL AND CONTROL - IAE V2500 - EIU VERSION 4
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P3112		16 FEB 22	NAVIGATION - INSTALLATION OF TCAS II COLLINS SYSTEM
	Applicable to: MSN 02887, 04563, 05005, 05097, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P3197	00-1020 15 22-1491 21	16 FEB 22	GENERAL - OPERATION FROM HIGH ALTITUDE AIRPORTS (CFM ENGINES) (PRESSURE ALTITUDE LIMIT 9200 FT)
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P3202		16 FEB 22	AUTOFLIGHT - FCU - CPIP 2 STANDARD M10
	Applicable to: ALL			
	P3204		16 FEB 22	AUTO FLIGHT - FMGC - A320/A321 STANDARD WITH SOFTWARE OPTIONS + 400 KILOWORDS DATA

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
				BASE OPTION + ACARS HARDWARE PROVISION (B1 CFM VERSION)
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P3208		16 FEB 22	AUTO FLIGHT - FMGC - A320/A321 - STANDARD WITH SOFTWARE OPTIONS + 400 KWORDS DATA BASE OPTION + ACARS HARDWARE (B1 IAE VERSION)
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			
	P3336		16 FEB 22	GENERAL - A321 - CFM ENGINES CAT IIIB AUTOLAND VALIDATION UP TO 9.200 FT WITHIN EXTENDED TEMPERATURE LIMITS
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P3337		16 FEB 22	GENERAL - A321 - IAE ENGINES CAT IIIB AUTOLAND VALIDATION UP TO 9.200 FT WITHIN EXTENDED TEMPERATURE LIMITS
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165			
	P3341		16 FEB 22	LANDING GEAR - MLG - INSTALL MESSIER BUGATTI/BF GOODRICH WHEELS AND CARBON BRAKES
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	P3348	00-1032 02	16 FEB 22	LAND CAT III CAPABILITY TEST - CAT III CAPABILITY EXTENSION FOR IAE ENGINES
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-02904			
	P3365		16 FEB 22	ICE PROTECTION - ICING INDICATOR ILLUMINATION
	Applicable to: ALL			
	P3379		16 FEB 22	INDICATING/RECORDING SYSTEMS - GENERAL - DEFINE PIN PROGRAMMING FOR STD VERSIONS
	Applicable to: ALL			
	P3401		16 FEB 22	AUTOFLIGHT - FCU - DELETE "EXPEDITE" FUNCTION FROM FCU
	Applicable to: MSN 02014, 04827-04860			
	P3420		16 FEB 22	A320/321 ENERGY MANAGEMENT FUNCTIONS - ACTIVATION BY PIN PROGRAMMING FOR IAE AND CFM ENGINES
	Applicable to: ALL			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P3451	32-1476 00	16 FEB 22	LANDING GEAR - WHEELS AND BRAKES - EXTEND PIN PROGRAMMING FOR STD6 BSCU
	Applicable to: MSN 01459, 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098			
	P3452	32-1476 00	16 FEB 22	LANDING GEAR - WHEELS AND BRAKES - EXTEND PIN PROGRAMMING FOR STD6 BSCU
	Applicable to: MSN 01459, 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098			
	P3510		16 FEB 22	NAVIGATION - ADIRS - IMPROVED STANDARD OF A320 ADIRU
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11597			
	P3511		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION - AFS COMPUTER A320/A321 FAC CFM/IAE
	Applicable to: ALL			
	P3524		16 FEB 22	ELECTRICAL GENERATION - APU GENERATOR NEW STANDARD
	Applicable to: ALL			
	P3560		16 FEB 22	AUTO FLIGHT - FMGC - PROVIDE TIME CONSTRAINT AND TEN CHARACTERS RTE IDENT FUNCTIONS
	Applicable to: ALL			
	P3565		16 FEB 22	NAVIGATION - INSTALLATION OF COLLINS TCAS II (-320) UPGRADED WITH CHANGE 6.04A
	Applicable to: MSN 02887, 04563, 05005, 05097, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P3588		16 FEB 22	LANDING GEAR - A320/A321 TWIN WHEELS BSCU STANDARD 7 (70B VERSION)
	Applicable to: ALL			
	P3594		16 FEB 22	INDICATING/RECORDING SYSTEMS - ELECTRICAL CLOCK - INSTALLATION OF A CLOCK SMITHS TYPE 2610
	Applicable to: ALL			
	P3660		16 FEB 22	FLIGHT CONTROLS - EFCS EQUIPMENT - MODIFY SEC STANDARD FOR A320 AND A321
	Applicable to: ALL			
	P3686		16 FEB 22	AUTO FLIGHT: FLIGHT AUGMENTATION COMPUTER INTRODUCE FAC POST CDN ON A320/321.
	Applicable to: ALL			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P3693		16 FEB 22	AUTOFLIGHT -FMGC-A320/321-STANDARD FOR A321 IAE CAT III
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			
	P3694		16 FEB 22	AUTO FLIGHT-FMGC-A320/321-FG STANDARD FOR A321 CFM CAT III
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P3704		16 FEB 22	ENGINE FUEL AND CONTROL -FUNCTIONAL INTERFACES- INTRODUCE A NEW EIU VERSION 5 ON IAE V2500 ENGINES
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P3737		16 FEB 22	ENGINE FUEL AND CONTROL-FUNCTIONAL INTERFACES- INTRODUCE A NEW EIU VERSION 14 ON CFM56 ENGINES
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P3752		16 FEB 22	NAVIGATION- SWITCHING AND INDICATING-INSTALL RMI/VOR/DME SEXTANT WITH SOFTWARE MODIFICATION.
	Applicable to: ALL			
	P3756	00-1024 07 22-1491 21	16 FEB 22	AUTO FLIGHT - GENERAL - EXTEND CAT III B AUTOMATICLANDING CAPABILITY (FOR CFM ENGINES)
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P3790		16 FEB 22	NAVIGATIOIN-AIRS-IMPROVED STANDARD OF HONEYWELL 4 MCU ADIRU
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11597			
	P3800		16 FEB 22	NAVIGATION - ADIRU - INTRODUCE A NEW STANDARD OF ADIRU LITTON COMMON WITH A330/A340
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02321-02513, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P3830		16 FEB 22	FLIGHT CONTROLS-PARTIAL LIFT DUMPING FUNCTION ACTIVATION
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P3878		16 FEB 22	FLIGHT CONTROL-ELAC SYSTEM-INSTALL ELAC 69J
	Applicable to: ALL			
	P3956		16 FEB 22	ATA 2900 HYDRAULIC POWER-GENERAL INSTALL AN HYDRAULIC SHUT-OFF VALVE ON THE IAE THRUST REVERSER SYSTEM
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P3957		16 FEB 22	ATA 2900 HYDRAULIC POWER-GENERAL INSTALL AN HYDRAULIC SHUT-OFF VALVE ON THE CFM THRUST REVERSER SYSTEM
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P3964		16 FEB 22	NAVIGATION-WEATHER RADAR SYSTEM-NEW SEXTANT ATC/TCAS CONTROL PANEL -SFE WITH FULL TIME AND ABOVE BELOW FUNCTIONS
	Applicable to: ALL			
	P3996		16 FEB 22	NAVIGATION - ADIRS - INSTALLATION OF HONEYWELL ADIRS CAPABLE OF A319 A/C FITTED WITH CFM ENGINES
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02321-02513, 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563			
	P4017		16 FEB 22	NAVIGATION - ADIRS - INSTALLATION OF ADIRS LITTON 4MCU ON A320
	Applicable to: MSN 01459			
	P4023	35-1041 18	16 FEB 22	GENERAL - HIGH ALTITUDE CERTIFICATION UP TO 14.500 FT
	Applicable to: MSN 01143-01376, 01518-02513, 02887-02924, 03035-04773, 04953-11597			
	P4054		16 FEB 22	AUTOFLIGHT-FCU-INSTALL M11 STANDARD
	Applicable to: ALL			
	P4055		16 FEB 22	AUTOFLIGHT-FCU-INSTALL M11 STANDARD WITH EXPEDITE FUNCTION DELETED
	Applicable to: MSN 02014, 04827-04860			
	P4087		16 FEB 22	NAVIGATION-ADIRS-INSTALL HONEYWELL ADIRS PROVIDING THE GPS PRIMARY NAVIGATION CAPABILITY
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11597			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	P4089		16 FEB 22	AUTO-FLIGHT - FMGC - REDUCE VAPP FOR A320 CFM/IAE
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	P4121		16 FEB 22	EXHAUST - THRUST REVERSER CONTROL AND INDICATING -ACTIVATE ADDITIONAL THRUST REVERSER LOCK CONTROL
	Applicable to: ALL			
	P4149		16 FEB 22	ENGINE FUEL AND CONTROL - CONTROLLING -INSTALL A NEW E.E.C. SOFTWARE SCN 10A ON IAE V2500-A5 P/N 2A3210
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P4151		16 FEB 22	INDICATING/RECORDING SYSTEMS - UP AND DOWN DATA LOADING SYSTEM - INSTALL A "PORTABLE DATA LOADER" CONNECTOR AND DISK STOWAGE.
	Applicable to: ALL			
	P4155		16 FEB 22	AUTOFLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER - ACTIVATION OF ACARS AND PRINTER INTERFACES IN F.M.S (CFM ENGINES)
	Applicable to: ALL			
	P4170	27-1113 12	16 FEB 22	FLIGHT CONTROLS - FCDC - PROVIDE A VISUAL INDICATION FOR SIMULTANEOUS SIDE STICK ACTION
	Applicable to: ALL			
	P4191		16 FEB 22	NAVIGATION AND COMMUNICATIONS REPLACE BFE EQUIPMENT BY SFE EQUIPMENT
	Applicable to: ALL			
	P4205		16 FEB 22	AUTOFLIGHT - FMGC - ACTIVATE PRINTER INTERFACE IN FMS (CFM AND IAE ENGINES)
	Applicable to: ALL			
	P4230		16 FEB 22	POWER PLANT-GENERAL INTRODUCTION OF CFM56-5B/P
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P4234		16 FEB 22	ICE AND RAIN PROTECTION-WINDSHIELD RAIN PROTECTION DESACTIVATION OF RAIN REPELLENT SYSTEM.
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P4281		16 FEB 22	ENGINE FUEL AND CONTROL-CONTROLLING INTRODUCE OF A NEW ECU SOFTWARE STANDARD 5BE-1 FOR CFM56-5B SAC ENGINES
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P4287	31-1113 31 31-1264 04	16 FEB 22	INDICATING-RECORDING SYSTEM FWC DEFINE OEB REMINDER NEW FUNCTION IN FWC
	Applicable to: ALL			
	P4308		27 JUL 22	NAVIGATION - BENDIX WEATHER RADAR SYSTEM - ACTIVATION OF PREDICTIVE WINDSHEAR FUNCTION
	Applicable to: MSN 02014			
	P4319		16 FEB 22	AUTO FLIGHT/FCU DEFINE FD ENGAGEMENT IN CROSSED BARS AT GO AROUND
	Applicable to: ALL			
	P4320		16 FEB 22	AUTO FLIGHT - ACTIVATE GLOBAL SPEED PROTECTION AND FD DISENGAGEMENT UPON SPEED CONDITIONS
	Applicable to: ALL			
	P4354		16 FEB 22	ENGINE FUEL AND CONTROL-CONTROLLING INSTALL A NEW EEC SOFTWARE SCN 10B ON V2500-A5
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P4378	00-1054 28	16 FEB 22	CERTIFICATION - GENERAL - CERTIFICATION FOR HIGH ALTITUDE AIRPORT OPERATION
	Applicable to: MSN 01143-01376, 01518-02513, 02887-02924, 03035-04773, 04953-11597			
	P4417		16 FEB 22	ELECTRICAL POWER - IMPROVE DESIGN OF TRU INSTALLATION ON A/C TO AVOID TRANSFORMER RECTIFIER MISBEHAVIOUR
	Applicable to: ALL			
	P4456		16 FEB 22	ENGINE FUEL AND CONTROL-FADEC SYSTEM INSTALL EEC SOFTWARE SCN 11 P/N 2A3250 ON V2500-A5
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P4495		16 FEB 22	INDICATING/RECORDING SYSTEMS- DISPLAY MANAGEMENT COMPUTER (DMC) DEFINE DMC V32 STANDARD
	Applicable to: ALL			
	P4497		16 FEB 22	DOORS-EMERGENCY ESCAPE SLIDE RELEASE AND OVERPRESSURE WARNING SYSTEMS-MODIFY

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
				CONTROL LOGIC OF THE OVERPRESSURE WARING SYSTEM
	Applicable to: ALL			
	P4502		16 FEB 22	INFORMATION SYSTEMS - ATIMS - INSTALL ATSU COMPUTER FOR PRE-FANS CONFIGURATION
	Applicable to: ALL			
	P4507		16 FEB 22	LANDING GEAR - INSTALL ABS A321 WHEELS AND BRAKES ON A320
	Applicable to: MSN 01459			
	P4528		16 FEB 22	ENGINE FUEL AND CONTROL -CONTROLLING- INTRODUCE AN ECU SOFTWARE STD 5BH FOR CFM56-5B SAC ENGINES.
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P4539		16 FEB 22	AUTO FLIGHT-GENERAL/FLIGHT CONTROL UNIT- DEFINE AND INSTALL SEXTANT MODULAR FCU
	Applicable to: ALL			
	P4576		16 FEB 22	LANDING GEAR-GENERAL WHEELS AND BRAKES EQUIPMENT COST REDUCTION ELECTRICAL ALTERNATE BRAKING
	Applicable to: MSN 02734-11597			
	P4613		27 JUL 22	COMMUNICATIONS - HF SYSTEM - INSTALL ONE ALLIED SIGNAL HF VOICE SYSTEM
	Applicable to: MSN 02014			
	P4642		16 FEB 22	NAVIGATION - WETAHER RADAR SYSTEM - ACTIVATE DUAL PREDICTIVE WINDSHEAR FUNCTION
	Applicable to: MSN 08495-11597			
	P4647		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - COLLINS DUAL PWS ACTIVATOR
	Applicable to: MSN 02734-05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P4654		16 FEB 22	COCKPIT - PROTECTIVE BREATHING EQUIPMENT (PBE) AIR LIQUIDE - SFE
	Applicable to: MSN 05947-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P4663		16 FEB 22	AUTOFLIGHT-FMGC-DEFINE AND INSTALL FMGC B546CCM0102 FOR A319 TC IAE ENGINES (CAPABLE GPS/ACARS FCTS).
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02321-02513, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 11531			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P4682		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - ALLIED SIGNAL CONFIGURATION WITH ALLIED SIGNAL FULL PROVISION FOR THE SECOND TRANSCEIVER
	Applicable to: MSN 02014, 08495-11597			
	P4706		16 FEB 22	NAVIGATION - ADF - INSTALLATION OF 1 ADF QUANTUM LINE P/N 066-50014-0202
	Applicable to: MSN 02014, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P4709	00-1043 81	16 FEB 22	LANDING WITH A 15 KNOT TAILWIND
	Applicable to: MSN 01143-04773, 04953-11597			
	P4710	00-1016 88	16 FEB 22	TAKE OFF WITH A 15 KNOT TAILWIND.
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	P4763		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - COLLINS SINGLE PWS CONFIGURATION
	Applicable to: MSN 01143-01376, 01518-01855			
	P4766		16 FEB 22	NAVIGATION - SINGLE PWS - COLLINS SINGLE PWS ACTIVATION
	Applicable to: MSN 01143-01376, 01518-01891, 02321-02513, 05066-11597			
	P4770		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM. INSTALL FULL PROVISION FOR THE SECOND TRANSCEIVER.
	Applicable to: MSN 01143-05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11597			
	P4773	34-1063 17 34-1363 08	16 FEB 22	NAVIGATION - INSTALL DUAL COLLINS ADF 700 - P/N 622-5222-020
	Applicable to: MSN 01143-01855, 02014, 02734, 02896-04544, 04570-04773, 04953-04974, 05066, 05101-05345, 05591-05643			
	P4786		16 FEB 22	COCKPIT PROTECTIVE BREATHING EQUIPMENT (PBE)-SCOTT AVIATION
	Applicable to: MSN 04570-04974, 05066, 05101-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P4789		16 FEB 22	NAVIGATION-MMR-INSTALLATION OF SEXTANT MULTICI-MODE RECEIVERS PROVIDING ILS (FM IMMUNE) AND GPS PRIMARY FUNCTION
	Applicable to: ALL			
	P4801		16 FEB 22	ELECTRICAL POWER - GENERATION SYSTEM - DEFINE AND INSTALL ON A320 FAMILY NEW ELECTRICAL GENERATION CONCEPT (WIRING/EQUIPMENT)
	Applicable to: MSN 02734-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P4808		16 FEB 22	LANDING GEAR - GENERAL - WHEELS AND BRAKES - EQUIPMENT COST REDUCTION BSCU REDESIGN
	Applicable to: MSN 02321-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	P4859		16 FEB 22	NAVIGATION - ADF - INSTALL AN ADF 900 RECEIVER P/N 822-0299-020
	Applicable to: ALL			
	P4867		16 FEB 22	NAVIGATION - EGPWS - INSTL. NEW SPECIFICATION INSTALLATION OF EGPWC (NEW SPECIFICATION)
	Applicable to: ALL			
	P4880		16 FEB 22	AUTOFLIGHT - FMGC - DEFINE AND INSTALL FMGC B546CCM0103 FOR A319 AUTOLAND IAE ENGINES (CAPABLE OF GPS/ACARS FUNCTION)
	Applicable to: MSN 01143-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345, 08495-11522, 11572-11597			
	P4885		16 FEB 22	NAVIGATION - EGPWS - ACTIVATION OF ENHANCED FUNCTIONS OF THE EGPWS
	Applicable to: ALL			
	P4916		16 FEB 22	FLIGHT CONTROL - GENERAL - ELAC-SYSTEM - INSTALL ELAC COMPATIBLE A320/321/319 (EM2 PROGRAM)
	Applicable to: MSN 01376-11597			
	P4954		16 FEB 22	AUTO FLIGHT - FMGC - DEFINE AND INSTALL FMGC B546CAM0102 FOR A319 AUTOLAND CFM ENGINES (CAPABLE OF GPS/ACARS FUNCTION)
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P4956		16 FEB 22	COCKPIT PROTECTIVE BREATHING EQUIPMENT (PBE) PURITAN BENNETT
	Applicable to: MSN 01143-01376, 01518-01855, 02734, 02896-04544			
	P4977	31-1115 12 31-1264 04	16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - PROVIDE NEW SYNTHETIC VOICE "DUAL INPUT"
	Applicable to: ALL			
	P4983		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION - DEFINE FAC STANDARD B0513
	Applicable to: ALL			
	P4985		16 FEB 22	ENGINE FUEL AND CONTROL - CONTROLLING FADEC SYSTEM -V2500-A5 - INSTALL EEC SOFTWARE SCN 11/P P/N 2A2383
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P5020		16 FEB 22	NAVIGATION - ATC - INSTALL GABLES ATC/TCAS CONTROL PANEL P/N G6990-40
	Applicable to: MSN 01459			
	P5066		16 FEB 22	PNEUMATIC-ENGINE BLEED AIR SYSTEM-INTRODUCE AN IMPROVED DEFINITION OF TLT
	Applicable to: MSN 01143-07098			
	P5071		16 FEB 22	ICE AND RAIN PROTECTION-WINDSHIELD RAIN PROTECTIONREACTIVATE RAIN REPELLENT SYSTEM WITH FLUID COMPATIBLE WITH OZONE PROTECTION RULES
	Applicable to: ALL			
	P5138		16 FEB 22	FLIGHT CONTROLS-GENERAL-ELAC SYSTEM- INSTALL ELAC STANDARD L80
	Applicable to: ALL			
	P5168		16 FEB 22	NAVIGATION-MMR-INSTALLATION OF COLLINS MULTI-MODE RECEIVERS PROVIDING ILS (FM IMMUNE) AND GPS PRIMARY FUNCTION
	Applicable to: ALL			
	P5180		16 FEB 22	AUTOFLIGHT - FMGC-IAE ENGINES - DEFINE AND INSTALLFMGC B54CCM0104 (FA817 STANDARD) CAPABLE OF GPS/ACARS FUNCTION
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			
	P5206		16 FEB 22	ENGINE FUEL AND CONTROL - CONTROLLING - FADEC SYSTEM IAE V2500-A5 - INSTALL EEC SOFTWARE SCN12
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P5224		16 FEB 22	NAVIGATION - EGPWS - INTRODUCE OPTIONAL AURAL WARNINGS FOR EGPWS
	Applicable to: MSN 02014, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P5228	31-1118 29	16 FEB 22	INDICATING/RECORDING SYSTEM-FWC-ACTIVATE THE HI ALT SET" RIGH MEMO FOR HIGH ALTITUDE AIRPORT OPERATION
	Applicable to: MSN 01143-01376, 01518-02513, 02887-02924, 03035-04773, 04953-11597			
	P5239		16 FEB 22	NAVIGATION-ATC MODE "S"-INSTALL ATC/TCAS CONTROL UNIT P/N C12240B02
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P5241		16 FEB 22	NAVIGATION-WEATHER RADAR SYSTEMS-INSTALL COLLINS SINGLE WITH PROVISION FOR THE SECOND SYSTEM
	Applicable to: MSN 01891, 02321-11597			
	P5253		16 FEB 22	NAVIGATION ADIRS REMOVE ADIRS CDU
	Applicable to: MSN 03710-11597			
	P5314		16 FEB 22	AUTO FLIGHT - GENERAL - MULTIPURPOSE CONTROL AND DISPLAY UNIT (MCDU) - INSTALL MCDU HONEYWELL 2ND GENERATION P/N : 4077880-980
	Applicable to: ALL			
	P5429		16 FEB 22	ENGINE FUEL AND CONTROL - GENERAL FADEC SYSTEM A320/CFM56-5B - INTRODUCE ECU SOFTWARE STANDARD 5BI
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P5451		16 FEB 22	ELECTRICAL POWER - GENERAL AC & DC MAIN DISTRIBUTION - INSTALL A/C AND DC SHEDDABLE BUSBARS
	Applicable to: ALL			
	P5459		16 FEB 22	POWER PLANT - GENERAL - ADD RELAY LOGIC FOR CONTROL PACK CLOSURE AT ENGINE START
	Applicable to: ALL			
	P5465		16 FEB 22	INDICATING/RECORDING SYSTEMS - CLOCKS - INSTALL AIR PRECISION CLOCK P/N APE5100 CAPABLE OF GPS TIME
	Applicable to: ALL			
	P5486		16 FEB 22	AUTO FLIGHT - MULTIPURPOSE CONTROL AND DISPLAY UNIT (MCDU) - INSTALL MCDU SEXTANT 2ND GENERATION P/N C19266AA01
	Applicable to: MSN 04827-04860			
	P5567		16 FEB 22	INDICATING/RECORDING SYSTEM - DMC - DEFINE DMC V40 STANDARD
	Applicable to: ALL			
	P5577		16 FEB 22	ENGINE FUEL AND CONTROL - GENERAL - INSTALL A V2500-A5 ENGINE WITH DATA ENTRY PLUG CONFIGURATION FOR 30 SECONDS EXTRA CRANK SELECTION
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P5583		16 FEB 22	NAVIGATION - ADIRS - REDUCED VERTICAL SEPARATION MINIMUM (RVSM) USING ADR 1 AND ADR 2 ONLY (A319/A320/A321 APPLICABLE)
	Applicable to: ALL			
	P5586	32-1235 24	16 FEB 22	LANDING GEAR - BRAKE COOLING - INSTALL UNIVERSAL BRAKE COOLING FAN ON ALL AIRCRAFT FAMILIES
	Applicable to: MSN 01143-01246, 01376, 01518-11597			
	P5613		16 FEB 22	NAVIGATION - TCAS - INSTALL COLLINS TCAS TTR921 WITH COLLINS ATC TPR901
	Applicable to: MSN 02887, 04563, 05005, 05097, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P5622		16 FEB 22	AUTO FLIGHT - MCDU - INSTALL AN MCDU 2ND GENERATION HONEYWELL FMS (MCDU WITH A340 KEYBOARD)
	Applicable to: MSN 01143-01376, 01518-01891, 02321-02904, 03002-03032			
	P5638		16 FEB 22	NAVIGATION - STANDBY DATA : ALTITUDE AND HEADING -INSTALL ISIS (INTEGRATED STANDBY INSTRUMENT SYSTEM) - SERIAL SOLUTION -
	Applicable to: MSN 02014, 02734-11597			
	P5669		16 FEB 22	NAVIGATION - TCAS - INSTALL ALLIED SIGNAL TCAS COMPUTER P/N 066-50000-2220 (WITH CHANGE 7.0) (BFE)
	Applicable to: MSN 01459, 02014, 02924, 03035-11597			
	P5685		16 FEB 22	COMMUNICATIONS - AUDIO MANAGEMENT - INSTALL SATCOM AMU AND ACP
	Applicable to: MSN 01143-01376, 01518-01855, 02734, 02896-03002, 03035-04544, 04570-04974, 05066, 05101-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P5687		16 FEB 22	COM AERO-I COLLINS COCKPIT VOICE FUNCTION
	Applicable to: MSN 01143-01376, 01518-01628, 01825, 01832, 02734, 02896-03002, 03035-04544, 04570-04974, 05066, 05101-05883			
	P5698		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL ALLIED SIGNAL WEATHER RADAR TRANSCEIVER P/N 066-50008-0405
	Applicable to: MSN 02014, 08495-11597			
	P5706	31-1197 00 31-1257 01	16 FEB 22	INDICATING/RECORDING SYSTEMS- FLIGHT WARNING COMPUTER (FWC) INSTALL FWC STD H2/E3
	Applicable to: MSN 01143-01459, 01591-11597			
	P5711		16 FEB 22	PNEUMATIC - ENGINE BLEED AIR SYSTEM - INSTALL TLT P/N 341E030000
	Applicable to: MSN 01143-07098			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P5726		16 FEB 22	NAVIGATION - MMR - INSTALL SEXTANT MMR PROVIDING ILS (FM IMMUNE) P/N TLS755-01-0101B
	Applicable to: MSN 01459, 02014			
	P5768		16 FEB 22	ELECTRICAL POWER - AC EMERGENCY GENERATION - ACTIVATE ON A320 SAME ELECTRICAL EMERG. CONFIGURATION THAN A321
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	P5895		16 FEB 22	NAVIGATION-GPWS-INSTALL EGPWS P/N-206-206 & INHIBIT AUTOMATIC DEACTIVATION OF ENHANCED FUNCTIONS.
	Applicable to: ALL			
	P5905		16 FEB 22	COMMUNICATIONS - SATCOM SYSTEM - INSTALL A COLLINSAERO I SATCOM AVIONIC (6 CHANNELS)
	Applicable to: MSN 01143-01376, 01518-01855, 02734, 02896-03002, 03035-04544, 04570-04974, 05066, 05101-05883			
	P5914	00-1135 00	16 FEB 22	CERTIFICATION - GENERAL - CERTIFICATION OPERATION WITH 3.5% RUNWAY SLOPE
	Applicable to: MSN 01891, 02321-02513, 02887-02904, 04563, 05005, 05097, 08495-11522, 11572-11597			
	P5956		16 FEB 22	INFORMATION SYSTEMS - ATIMS - REMOVE ATSU INSTALLATION TO REVERT TO ACARS PROVISION
	Applicable to: MSN 01459			
	P5981	30-1048 32	16 FEB 22	ICE AND RAIN PROTECTION - GENERAL - ICE DETECTION INSTALL ICE DETECTOR P/N 0871DP4
	Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P6027		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - REINSTALL A SINGLE WEATHER RADAR CONFIGURATION
	Applicable to: MSN 01143-01855, 02014			
	P6030		16 FEB 22	ELECTRICAL POWER - AC GENERATION - INSTALL ELECTRICAL OUTLETS IN COCKPIT
	Applicable to: MSN 02887-11597			
	P6054		16 FEB 22	NAVIGATION - MMR - SEXTANT MMR - ACTIVATE GPS PRIMARY FUNCTION (HYBRID) (WITH HONEYWELL OR LITTON ADIRU)
	Applicable to: MSN 01459, 02014			
	P6071		16 FEB 22	INDICATING/RECORDING SYSTEMS - DMC - DISPLAY THE ALTITUDE IN METRES ON THE PRIMARY FLIGHT DISPLAY (PFD)
	Applicable to: MSN 04827-04860			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P6119		16 FEB 22	INDICATING/RECORDING SYSTEMS-ELECTRICAL CLOCK INSTALL SMITH CLOCK P/N 2610-13-1 (ANTI MOD OF 27330)
	Applicable to: MSN 01459			
	P6142		16 FEB 22	NAVIGATION -STANDBY BY DATA-ATTITUDE AND HEADING-COMPLETE PROVISIONS FOR ISIS ELECTRICAL SUPPLY
	Applicable to: MSN 01143-01376, 01518-01628, 01825, 01832, 02014, 02734-11597			
	P6146		16 FEB 22	INDICATING/RECORDING SYSTEM - FWC - INTRODUCE "F/CTL FLAP LVR NOT ZERO" RED WARNING
	Applicable to: MSN 01143-05240			
	P6167	34-1206 18	16 FEB 22	NAVIGATION - TCAS - INSTALL HONEYWELL 2000 TCAS COMPUTER P/N 751-7900-10003 (WITH CHANGE 7.0)
	Applicable to: MSN 01143-01376, 01518-01891, 02321-02734, 02896-02904, 03002-03032			
	P6183		16 FEB 22	NAVIGATION - MMR - REMOVE COLLINS MMR PROVIDING ILS (FM IMMUNE) AND GPS PRIMARY FUNCTION
	Applicable to: MSN 01459, 02014			
	P6194		16 FEB 22	AUTO FLIGHT - FMS - DEACTIVATE CROSS LOAD FUNCTIONOF FMS
	Applicable to: MSN 01459			
	P6195		16 FEB 22	AUTO FLIGHT - FMS - DEACTIVATE ACARS FUNCTION OF FMS
	Applicable to: MSN 01459			
	P6196		16 FEB 22	AUTO FLIGHT - FMS - DEACTIVATE PRINTER FUNCTION OF FMS
	Applicable to: MSN 01459			
	P6197		16 FEB 22	AUTO FLIGHT - FCU - DEACTIVATE FUNCTION "FD ENGAGEMENT IN CROSSED BARS GOAROUND" FROM THE FCU
	Applicable to: MSN 01459			
	P6198		16 FEB 22	INDICATING/RECORDING SYSTEMS - DATA LOADING SYSTEM - REMOVE MDDU AND DLRB (ANTI-MOD)
	Applicable to: MSN 01459			
	P6201		16 FEB 22	GENERAL-FLIGHT ENVIRONMENTAL ENVELOPE- EXTENSION TO 12100 M
	Applicable to: MSN 01518-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P6267		16 FEB 22	COMMUNICATIONS - CVR - REMOVE HOT MIKE CAPABILITY FOR CVR
	Applicable to: MSN 01459			
	P6283	00-1059 09	16 FEB 22	CERTIFICATION DOCUMENTS - GENERAL - CERTIFY LANDING OPERATIONS AT SANTOS DUMONT AIRPORT
	Applicable to: MSN 01143-01376, 01518-01855, 02321, 02734-02904, 03032, 03180-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-04773, 04953-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	P6314		16 FEB 22	AUTO FLIGHT - DEFINE "GUIDED RADAR APPROACH WITH AUTOPILOT ENGAGED" PROCEDURE (MUH 250 FT)
	Applicable to: MSN 01518-01628, 01825, 01832, 01891-02014, 02734, 02896-02924, 03035-04544, 04570-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11522, 11572-11597			
	P6316	34-1206 18	16 FEB 22	NAVIGATION - TCAS - INSTALL HONEYWELL COMPUTER TCAS 2000 WITH CHANGE 7.0
	Applicable to: MSN 01143-01251, 04827-04860, 06409-11597			
	P6319		16 FEB 22	COMMUNICATIONS - AUDIO MANAGEMENT - INSTALL TEAM DIGITAL AMU P/N 4031-SA-01
	Applicable to: MSN 02321-11597			
	P6375	32-1201 04	16 FEB 22	LANDING GEAR-PARKING/ULTIMATE EMERGENCY BRAKING -INSTALL A PRESSURE SWITCH (PARKING BRAKE SYSTEM IMPROVEMENT
	Applicable to: ALL			
	P6380		16 FEB 22	ELECTRICAL POWER-GALLEY SUPPLY- INSTALL A RELAY FOR GALLEY SHEDDING IN A SINGLE GENERATOR CONFIGURATION
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531			
	P6437	31-1257 01	16 FEB 22	INDICATING/RECORDING SYSTEMS - FWS - INSTALL NEW FWC STANDARD H1PE3P
	Applicable to: MSN 01143-01518, 01801, 01826-01827, 01837-02321			
	P6538		16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - IMPROVE FWC TO COMPLY WITH NEW EMM BSCS WARNINGS AND ECAM INDICATIONS
	Applicable to: MSN 02734-11597			
	P6544	31-1153 00	16 FEB 22	INDICATING RECORDING SYSTEM - FWC ACTIVATE SPECIFIC FWC PROCEDURE
	Applicable to: ALL			
	P6578		16 FEB 22	INDICATING RECORDING SYSTEMS- EIS-INSTALL DMC, DU AND DISKETTES FOR EIS2
	Applicable to: MSN 02734-11597			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P6588	46-1009 06	16 FEB 22	INFORMATION SYSTEM - ATIMS IMPROVE ATSU AIRCRAFT INTERFACE SOFTWARE TO UPDATE SERVICE PROVIDERS LIST AND MANAGEMEN
	Applicable to: ALL			
	P6589	31-1150 37	16 FEB 22	INDICATING/RECORDING SYSTEMS - CFDIU INTRODUCE CFDIU STANDARD 9B
	Applicable to: MSN 01143-01246, 01518-11597			
	P6630	00-1058 97	16 FEB 22	CERTIFICATION DOCUMENTS - GENERAL - CERTIFY AIRCRAFT FOR OPERATION ON RUNWAYS LESS THAN 45 M WIDTH
	Applicable to: ALL			
	P6687	23-1184 02	16 FEB 22	COMMUNICATION - RADIO MANAGAMENT INTRODUCE NEW RMP STANDARD 2 P/N C12848AB02
	Applicable to: MSN 01459, 02321-11597			
	P6688	23-1184 02	16 FEB 22	COMMUNICATIONS - RADIO MANAGEMENT INSTALL A THIRD RADIO MANAGEMENT PANEL
	Applicable to: MSN 01459, 02321-11293			
	P6703	22-1079 08 22-1102 02 22-1226 04 22-1461 12	16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER INSTALL NEW FAC SOFTWARE STANDARD P/N B397BAM0515
	Applicable to: ALL			
	P6758		16 FEB 22	PNEUMATIC - ENGINE BLEED AIR SUPPLY SYSTEM INSTALL NEW TEMPERATURE CONTROL THERMOSTAT (TCT)
	Applicable to: MSN 01855, 02014-07098			
	P6766		16 NOV 22	NAVIGATION - ILS (MMR) - INSTALL HONEYWELL MMR PROVIDING ILS (FM IMMUNE) AND GPS PRIMARY FUNCTIONS (HYBRID ARCHITECTURE)
	Applicable to: MSN 11522-11597			
	P6777	46-1121 14	16 FEB 22	INFORMATION SYSTEM - ATIMS UPGRADE ATSU HARDWARE FOR NEW ARINC 429 I/O BOARD
	Applicable to: MSN 01376-11597			
	P6801	31-1197 00 31-1218 01 31-1231 01 31-1257 01	16 FEB 22	INDICATING RECORDING SYSTEM - FWC INSTALL FWC STANDARD H2E4
	Applicable to: ALL			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P6832	46-1013 04	16 FEB 22	INFORMATION SYSTEMS - ATIMS - DEFINE AND INSTALL NEW SOFTWARE ATSU A/C INTERFACE UPGRADED
	Applicable to: MSN 01143-01376, 01518-11597			
	P6901	27-1160 01	16 FEB 22	FLIGHT CONTROLS - ELAC SYSTEM - INTRODUCE ELAC SOFTWARE "L90" CAPABLE OF A318
	Applicable to: MSN 01376-11597			
	P6911		16 FEB 22	INDICATING/RECORDING SYSTEM : FROM FWC-F1 PIN-PROGRAMMING FOR IMPROVING THE MONITORING ABOUT THE NORMAL BRAKING SYSTEM
	Applicable to: MSN 02734-11522, 11572-11597			
	P6954	22-1102 02 22-1226 04 22-1461 12	16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC SYSTEM) - INTRODUCE FAC SOFTWARE "BAM0516" CAPABLE OF A318
	Applicable to: ALL			
	P6985	34-1332 02	16 FEB 22	NAVIGATION - ADIRS - INSTALL HONEYWELL ADIRU 4MCU CAPABLE OF A318 A/C
	Applicable to: MSN 02887-04570, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11597			
	P6986	22-1083 03 22-1676 03	16 FEB 22	AUTO FLIGHT - FMGC INSTALL FMGC P/N B546CCM0105 (IAE GPS/ACARS)
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			
	P6987		16 FEB 22	AUTO FLIGHT - FMGC INSTALL FMGC P/N B546CAM0103 (CFM GPS/ACARS)
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P7004	31-1214 08 31-1286 01	16 FEB 22	INDICATING/RECORDING SYSTEM - DMC - INSTALL DMC V50 STANDARD
	Applicable to: MSN 01143-02321			
	P7009		16 FEB 22	COMMUNICATION - AUDIO MANAGEMENT INSTALL A DIGITAL SATCOM AMU P/N AMU4031L*01
	Applicable to: MSN 02734, 02896-03002, 03035-04544, 04570-04974, 05066, 05101-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P7062		16 FEB 22	OXYGEN - CREW OXYGEN - INSTALL ALTERNATIVE 115CU FT FLIGHT CREW OXYGEN CYLINDER COMPOSITE - SCOTT P/N 897940-15
	Applicable to: MSN 04827-04860			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	P7092		16 FEB 22	INDICATING/RECORDING SYSTEM - EIS - ACTIVATE FUEL FLOW/DELTA ISA FUNCTION BY PIN PROGRAMMING ON DMC
	Applicable to: MSN 02734-11522, 11572-11597			
	P7125	31-1197 00 31-1218 01 31-1257 01	16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - INSTALL FWC STANDARD H2 F1 ON A318 PW
	Applicable to: ALL			
	P7148		16 FEB 22	COMMUNICATIONS - HF SYSTEM - ACTIVATE DATA LINK FUNCTION FOR HFDR 1
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P7175		16 FEB 22	ELECTRICAL POWER - GENERAL - INSTALL A COMMERCIAL SHEDDING PUSH-BUTTON SWITCH IN COCKPIT
	Applicable to: MSN 01801-11597			
	P7185	34-1278 04	16 FEB 22	NAVIGATION - EGPWS INSTALL ENHANCED GPWS P/N 965-1676-001
	Applicable to: MSN 01891, 02321-11597			
	P7186	34-1345 02	16 FEB 22	NAVIGATION - EGPWS ACTIVATE PEAKS MODE OF EGPWS IN CONJUNCTION WITH THE TERRAIN DISPLAY
	Applicable to: MSN 01891, 02321-11597			
	P7187	34-1351 03	16 FEB 22	NAVIGATION - EGPWS ACTIVATE GEOMETRIC ALTITUDE FUNCTION IN THE EGPWS
	Applicable to: MSN 01891, 02321-11597			
	P7188	34-1345 02	16 FEB 22	NAVIGATION - EGPWS ACTIVATE OBSTACLE OPTION ON THE EGPWS
	Applicable to: MSN 01891, 02321-02513, 02887-11597			
	P7218	22-1090 11 22-1676 03	16 FEB 22	AUTOFLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) DEVELOP FMS 2ND GENERATION HONEYWELL STEP1
	Applicable to: ALL			
	P7268	34-1252 00	16 FEB 22	NAVIGATION - ADIRU RESTORE RVSM 3 CIRCUITS CAPABILITIES - SERIAL SOLUTION
	Applicable to: MSN 01376, 01518-11597			
	P7278		16 FEB 22	INDICATING RECORDING SYSTEM - EIS2 INSTALL EIS2 SOFTWARE CAPABLE OF A318 A/C
	Applicable to: MSN 02734-11597			
	P7300		16 FEB 22	ELECTRICAL POWER - AC GENERATION - INSTALL ELECTRICAL OUTLETS IN COCKPIT 4MM AND 4.8MM DIA. PLUGS
	Applicable to: MSN 02887-11597			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	P7373		16 FEB 22	AUTOFLIGHT - FMGC DEFINE AND INSTALL FMGC CFM C13043AA01 THALES (EQUIPPED WITH "FMS2" THALES/SMITH)
	Applicable to: MSN 04827-04860			
	P7397	34-1332 02	16 FEB 22	NAVIGATION - ADIRS INSTALL HONEYWELL ADIRU 4MCU CAPABLE OF A318
	Applicable to: MSN 02887-04570, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11597			
	P7407		16 FEB 22	COMMUNICATION - RADIO MANAGEMENT INSTALL RMP STANDARD 3 WITH MLS AND GLS FUNCTION CAPABILITY
	Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05528, 05883-11293			
	P7424		16 FEB 22	NAVIGATION - ATC - INSTALL L3-COM ATC XS950 INCORPORATING EUROPEAN MODE S REGULATIONS
	Applicable to: MSN 04827-04860, 06409-11597			
	P7425	34-1259 64	16 FEB 22	NAVIGATION - ATC - INSTALL HONEYWELL ATC TRA67A INCORPORATING EUROPEAN MODE S REGULATIONS
	Applicable to: MSN 01459, 02734-11597			
	P7455		16 FEB 22	ELECTRICAL POWER - GENERAL IN FLIGHT ENTERTAINMENT (IFE) POWER SUPPLY ON SHEDDABLE BUSBARS CONTROLED BY "GALY & CAB" SW
	Applicable to: MSN 01801-11597			
	P7519		16 FEB 22	AUTOFLIGHT - FMGC - INSTALL FMGC CFM C13042AA01 (EQUIPPED WITH FMS2 HONEYWELL)
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P7520	22-1090 11 22-1676 03	16 FEB 22	AUTOFLIGHT - FMGC - INSTALL FMGC IAE C13042BA01 (EQUIPPED WITH FMS2 HONEYWELL)
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			
	P7585	34-1663 14 34-1692 09	16 FEB 22	NAVIGATION - ATC - INSTALL COLLINS ATC MODE S TPR901 INCORPORATING ELEMENTARY AND ENHANCED SURVEILLANCE
	Applicable to: MSN 01891, 02321-04773, 04953-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P7605	31-1357 01	16 FEB 22	INDICATING RECORDING SYSTEM - SDAC INSTALL WIRING PROVISIONS FOR SDAC H2E1A PIN PROGRAMMING.
	Applicable to: MSN 01801, 01826-01827, 01837-11597			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P7613		16 FEB 22	AUTO-FLIGHT - FMGC - ACTIVATE MORA DISPLAY ON ND
	Applicable to: MSN 04827-04860			
	P7635	27-1154 00 27-1160 01	16 FEB 22	FLIGHT CONTROLS - ELAC SYSTEM INTRODUCE ELAC SOTWARE L82
	Applicable to: ALL			
	P7666		16 FEB 22	AUTO FLIGHT - FMGC DEVELOP FMS 2ND GENERATION THALES/SMITH REV 1 STANDARD
	Applicable to: MSN 04827-04860			
	P7790	22-1123 08	16 FEB 22	AUTO FLIGHT FLIGHT MANAGEMENT AND GUIDANCE SYSTEM ACTIVATE FMA ENHANCEMENT FUNCTION
	Applicable to: ALL			
	P7876	73-1075 01	16 FEB 22	ENGINE FUEL AND CONTROL - CONTROLLING INTRODUCE EEC SOFTWARE STANDARD "SCN17" ON V2500-A5 ENGINES
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P7919		16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE NEW FADEC SOFTWARE "5BK" ON SAC CFM56-5B ENGINES
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P7929		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM INSTALL COLLINS DUAL CONTROL PANEL TO ACTIVATE MULTISCAN FUNCTION
	Applicable to: MSN 02734, 02896-04544, 04570-05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P7976		16 FEB 22	COMMUNICATION - AUDIO MANAGEMENT REMOVE "LS" FUNCTIONS ACP (ANTI MOD 32526)
	Applicable to: MSN 02321-02734, 02896-03002, 03035-04544, 04570-04974, 05066, 05101-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P7977		16 FEB 22	AUTO FLIGHT - FMGC INSTALL FMGC CFM C13043AA02 THALES (EQUIPPED WITH FMS2 THALES/SMITH)
	Applicable to: MSN 04827-04860			
	P8014		16 FEB 22	AUTO FLIGHT - FMGC RE-INSTALL FMGC2 CFM P/N C13042AA01 (ANTI MOD 32222)
	Applicable to: MSN 04827-04860			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P8025		16 FEB 22	NAVIGATION - TCAS INSTALL ROCKWELL/COLLINS TCAS TTR921 (P/N 822-1293-322)
	Applicable to: MSN 02887, 04563, 05005, 05097, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-11597			
	P8069		16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM INTRODUCE NEW ECU SOFTWARE STANDARD "5BL" FOR CFM56-5B ENGINES CAPABLE OF A318 CFM A/C
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P8076	32-1335 00	16 FEB 22	LANDING GEAR NORMAL BRAKING INSTALL BSCU STD L4.5
	Applicable to: MSN 02321-11597			
	P8148	32-1464 01 32-1465 00	16 FEB 22	LANDING GEAR - NORMAL BRAKING - AUTOBRAKE DECELERATION LEVELS MODIFICATION
	Applicable to: MSN 01246, 01376-01826, 01832-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-04773, 05005-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11522, 11572-11597			
	P8162		16 FEB 22	NAVIGATION - GENERAL INTRODUCE POLAR NAVIGATION FUNCTION ON SA FAMILY
	Applicable to: MSN 02887			
	P8175		16 FEB 22	INDICATING/RECORDING SYSTEMS - SDAC - ACTIVATE IAS DISCREPANCY MONITORING BY PIN PROGRAMMING
	Applicable to: MSN 02734-05240			
	P8176		16 FEB 22	INDICATING/RECORDING SYSTEMS - SDAC - ACTIVATE DUAL PITOT MONITORING BY PIN PROGRAMMING
	Applicable to: MSN 02734-05240			
	P8194		16 FEB 22	NAVIGATION - ADIRS ACTIVATE ALIGNMENT IMPROVEMENT FUNCTION ON ADIRU
	Applicable to: MSN 02887, 02924-11597			
	P8211	22-1159 00	16 FEB 22	AUTOFLIGHT - GENERAL INSTALL LIFT IMPROVEMENT PACKAGE ON IAE A5 A320 A/C (LIP)
	Applicable to: MSN 01518-01628, 01825, 01832, 02896-02904			
	P8232	31-1266 02	16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - INTRODUCE IAS DISCREPANCY AND DUAL PITOT MONITORING ON FWC H2F1
	Applicable to: ALL			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P8243		16 FEB 22	CERTIFICATION DOCUMENTS / EXTEND OPERATING FLIGHT ENVELOPE TO MINUS 2000FT PRESSURE ALTITUDE
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P8256	22-1102 02 22-1226 04 22-1461 12	16 FEB 22	AUTO FLIGHT FLIGHT AUGMENTATION COMPUTER INSTALL FAC STANDARD BAM0617 FOR A318 EIS
	Applicable to: ALL			
	P8274	31-1197 00 31-1218 01 31-1257 01	16 FEB 22	INDICATING RECORDING SYSTEM FWC INSTALL FWC STANDARD H2F2
	Applicable to: ALL			
	P8303		16 FEB 22	NAVIGATION DDRMI REMOVE DDRMI VOR/ADF/DME INDICATORS
	Applicable to: MSN 03211, 03266-11597			
	P8310		16 FEB 22	NAVIGATION - GPWS RE-INSTALL EGPWS P/N -206-206 (ANTI-MOD 31374+26935+21391)
	Applicable to: MSN 02321-02513			
	P8315		16 FEB 22	COMMUNICATION - AUDIO MANAGEMENT RE-INSTALL TEAM ANALOGIQUE AMU (ANTI MOD 31296)
	Applicable to: MSN 02734, 02896-03002, 03035-04544, 04570-04974, 05066, 05101-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P8440		16 FEB 22	LANDING GEAR - WHEELS AND BRAKES INTRODUCE GOODRICH DURACARB CARBON BRAKES WITH ANTI - OXYDAN "M1"
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P8483		16 FEB 22	AUTO FLIGHT - FMGC - INSTALL A NEW FMS2 THALES SMITH S3 STANDARD ON CFM A/C
	Applicable to: MSN 04827-04860			
	P8484		16 FEB 22	NAVIGATION - MMR - INSTALL MMR COLLINS GLU 925 PN -430 CAPABLE ILS/GPS/FLS/MIX LOC VNAV/GLS AND ASSOCIATED GPS ANTENNA
	Applicable to: MSN 04544-04563, 04662-11597			
	P8500		16 FEB 22	NAVIGATION - MMR - ACTIVATE GLS FUNCTION ON MMR
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P8521	73-1082 01	16 FEB 22	ENGINE FUEL AND CONTROL - CONTROLLING INTRODUCE NEW EEC SOFTWARE "SCN18" ON V2500-A5 IAE ENGINES
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P8564	31-1331 01	16 FEB 22	INDICATING/RECORDING SYSTEM EIS ACTIVATE ENGINE AVAIL DISPLAY
	Applicable to: MSN 01143-01855, 02014, 02734, 02896-11597			
	P8572	57-1173 04 57-1187 13	16 FEB 22	AUTO-FLIGHT - FAC - DEFINE NEW PIN PROGAMMING FOR WEIGHT AND CG COMPUTATION BASED ON FMS REFERENCES
	Applicable to: MSN 05342, 05528-11522, 11572-11597			
	P8625		16 FEB 22	AUTO-FLIGHT - FMGC - INSTALL NEW FMGC STANDARD S2C11 ON CFM ENGINES
	Applicable to: MSN 04827-04860			
	P8626		16 FEB 22	NAVIGATION - STANDBY DATA (ISIS) - INSTALL ISIS STANDARD VA01 WITH CORRECTION OF "OUT OF ORDER" MESSAGE & "NEW IMU STANDARD"
	Applicable to: MSN 03588-11597			
	P8629		16 FEB 22	INFORMATION SYSTEMS - ATIMS - UPGRADE SOFTWARE - ATSU A/C INTERFACE FOR FAN A+ IMPLEMENTATION CSB4.1
	Applicable to: MSN 02734, 02924, 03032-11597			
	P8671		16 FEB 22	INDICATING RECORDING SYSTEM EIS INSTALL DMC SOFTWARE EIS2 S4-2 TO CORRECT TEMPORARY LOSS OF ALL EIS2 IMAGES
	Applicable to: MSN 02734-11597			
	P8708		16 FEB 22	AUTOFLIGHT - FMGC INSTALL FMS2 HONEYWELL P1C11 ON A/C FITTED WITH CFMI PPS
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P8710		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS TRANSCEIVER FULLY COMPLIANT WITH MULTISCAN FUNCTION
	Applicable to: MSN 02734, 02896-04544, 04570-05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P8751	34-1345 02	16 FEB 22	NAVIGATION - EGPWS - INSTALL AN EGPWC CAPABLE OF PEAKS/OBSTACLE FUNCTIONS WITH EIS1 & OF USING GPS LATERAL POSITION
	Applicable to: MSN 01891, 02321-02513, 02887-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P8757		16 FEB 22	ENGINE FUEL AND CONTROL - GENERAL INTRODUCE HMU P13 ON CFM56-5A/5B ENGINES
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P8799	34-1352 01	16 FEB 22	NAVIGATION - EGPWS - INSTALL AN EGPWC CAPABLE OF PEAKS/OBSTACLE FUNCTIONS WITH EIS1 & OF USING GPS LATERAL POSITION
	Applicable to: MSN 01891, 02321-02513, 02887-11597			
	P8850	36-1057 01	16 FEB 22	PNEUMATIC - ENGINE BLEED AIR SUPPLY - INTRODUCE BMC STD 9 CAPABLE OF A318 PW
	Applicable to: MSN 02734, 02904-03002, 03211-11597			
	P8863		16 FEB 22	INDICATING/RECORDING SYSTEM FWC ACQUISITION INTERFACE CONNECT FWC TO RPWS TO PREVENT DOOR OPENING WITH RESIDUAL CABIN PRESSURE
	Applicable to: MSN 02734-11597			
	P8866		16 FEB 22	LANDING GEAR NORMAL BRAKING INSTALL BSCU STD L4.8 (EM2)
	Applicable to: MSN 02734-11597			
	P9034		16 FEB 22	NAVIGATION - GPWS - GROUND PROXIMITY WARNING SYSTEM (GPWS) DEACTIVATE GEOMETRIC ALTITUDE FUNCTION (ANTI MOD 31426)
	Applicable to: MSN 04827-04860, 06409-11597			
	P9038		16 FEB 22	AUTOFLIGHT-MULTIPURPOSE CONTROL AND DISPLAY UNIT (MCDU) - INSTALL HONEYWELL LCD MCDU
	Applicable to: MSN 02924, 03035-11597			
	P9050		16 FEB 22	NAVIGATION T2CAS ACTIVATE AUTOMATIC DEACTIVATION OF T2CAS-TAWS
	Applicable to: MSN 04827-04860, 06409-11597			
	P9051		16 FEB 22	NAVIGATION T2CAS ACTIVATE ALTERNATE LATERAL POSITION FOR T2CAS-
	Applicable to: MSN 04827-04860, 06409-11597			
	P9057		16 FEB 22	OXYGEN - PORTABLE OXYGEN - INSTALL AN AIR LIQUIDE PROTECTIVE BREASING EQUIPMENT (PBE) P/N 15-40F-11 IN PLACE OF BASIC EQUIPMENT IN THE COCKPIT
	Applicable to: MSN 05947-06125, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	P9107	31-1267 03 31-1300 02	16 FEB 22	INDICATING/RECORDING SYSTEM FLIGHT WARNING COMPUTER - FWC - INSTALL FWC STANDARD H2 F3
	Applicable to: ALL			
	P9126	22-1203 02 22-1676 03	16 FEB 22	AUTOFLIGHT - FMGC INSTALL FMGC IAE / PW STD P1I10 (WITH FMS2 HONEYWELL) ON A/C FITTED WITH IAE AND PW PPS
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			
	P9171	34-1397 05	16 FEB 22	NAVIGATION - ADIRS INTRODUCE AIR DATA MONITORING FUNCTION
	Applicable to: MSN 02887, 04352-11597			
	P9196	34-1335 02	16 FEB 22	NAVIGATION - STANDBY DATA (ISIS) INSTALL ISIS STD WB01 WITH CORRECTION OF "OUT OF ORDER" MESSAGE
	Applicable to: MSN 02014, 02734-11597			
	P9207	34-1369 02	16 FEB 22	NAVIGATION - ATC / MODE S - CERTIFY EHS FUNCTION
	Applicable to: MSN 03032, 03111-04544, 04570-04974, 05066, 05101-06121, 06139-11522, 11572-11597			
	P9225		16 FEB 22	INDICATING / RECORDING SYSTEM : ELECTRONIC INSTRUMENT SYSTEM (EIS) - INSTALL DISPLAY MANAGEMENT COMPUTER SOFTWARE EIS2 S6-1
	Applicable to: MSN 03035-11597			
	P9233		16 FEB 22	NAVIGATION - GROUND PROXIMITY WARNING SYSTEM (GPWS) - ACTIVATE GEOMETRIC ALTITUDE FUNCTION ON EGPWS BY PIN PROGRAMMING
	Applicable to: MSN 08495-11522, 11572-11597			
	P9332	34-1350 02	16 FEB 22	NAVIGATION - ADIRU - INSTALL NORTHROP GRUMAN ADIRU P/N 465020-0303-0316
	Applicable to: MSN 01459, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	P9333	34-1356 03	16 NOV 22	NAVIGATION - AIR DATA/INERTIAL REFERENCE SYSTEM - INSTALL HONEYWELL ADIRU P/N HG2030-AE23
	Applicable to: MSN 03002-04570, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-11597			
	P9351	34-1368 09	16 FEB 22	NAVIGATION - GENERAL ACTIVATE POLAR NAVIGATION FUNCTION ON SA FAMILY
	Applicable to: MSN 02887			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P9464	34-1480 24 34-1662 13	16 FEB 22	INDICATING / RECORDING SYSTEM - EIS - PIN PROG LATERAL DEVIATION SCALE DISPLAY ON EIS2
	Applicable to: MSN 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-11522, 11572-11597			
	P9486	46-1121 14	16 FEB 22	INFORMATION SYSTEM - ATIMS - INSTALL NEW ATSU HARDWARE A10
	Applicable to: MSN 04827-04974, 08495-11597			
	P9496	73-1088 01	16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM INTRODUCE EEC SOFTWARE 'SCN19' STANDARD ON V2500-A5 IAE ENGINES
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	P9508		16 FEB 22	INDICATING/RECORDING SYSTEMS - SDAC - ACQUISITION/INTERFACE CONFIGURATION CABIN FOR NO PED FLIGHTS
	Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P9522		16 FEB 22	AUTO FLIGHT - MCDU ACTIVATE BACK UP NAV FUNCTION
	Applicable to: MSN 03710-11597			
	P9593	34-1374 12 34-1480 24 34-1662 13	16 FEB 22	NAVIGATION - GENERAL - MODIFY FLIGHT MANUAL TO EXTEND RNP < 0.18 RNAV CAPABILITY (STEP 2)
	Applicable to: MSN 01891, 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-07098			
	P9594		16 FEB 22	PNEUMATIC LEAK DETECTION ACTIVATE PYLON LEAK DETECTION MONITORING
	Applicable to: MSN 04163-11597			
	P9652		16 FEB 22	AUTO-FLIGHT FMGC INSTALL FMS2 THALES S4 (REV2+) STD ON CFM A/C
	Applicable to: MSN 04827-04860			
	P9654		16 FEB 22	NAVIGATION EGPWS RE-INSTALL EGPWS P/N 965-1676-001 (ANTI-MOD 34634)
	Applicable to: MSN 04827-04860, 06409-11597			
	P9655	32-1335 00	16 FEB 22	LANDING GEAR NORMAL BRAKING INSTALL BSCU SOFTWARE STD "L4.9" (EM2)
	Applicable to: MSN 02321, 03284-03313, 03630-11597			
	P9823	22-1244 02 22-1676 03	16 FEB 22	AUTO-FLIGHT - FMGC - INSTALL FMGC STANDARD P1I11 ON IAE & PW A/C
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165, 08495-11597			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	P9824	31-1276 02	16 FEB 22	INDICATING/RECORDING SYSTEMS - ELECTRONIC INSTRUMENT SYSTEM(EIS)- INSTALL DISPLAY MANAGEMENT COMPUTER SOFTWARE EIS2 S7
	Applicable to: MSN 02734-11597			
	P9867		16 FEB 22	NAVIGATION - GPWS - DEACTIVATE PEAKS AND OBSTACLE FUNCTIONS ON THE EGPWS (ANTI MODS 31367/P7186 AND 31375/P
	Applicable to: MSN 04827-04860, 06409-11597			
	P9873		16 FEB 22	POWER PLANT - GENERAL - INTRODUCE CFM56-5BX/3 ENGINE (SAC) "TECH INSERTION PROGRAM"
	Applicable to: MSN 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098			
	P9891	31-1281 02	16 FEB 22	INDICATING RECORDING SYSTEM SDAC INSTALL SDAC STANDARD H2-E2
	Applicable to: MSN 01891, 02321-02734, 03035-03211, 03266-03284, 03313-03733, 04000-11597			
	P9894		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER - INTRODUCE TAIL STRIKE INDICATION ON PFD FOR A320 & A321 A/C
	Applicable to: MSN 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-11597			
	P9895	22-1259 19	16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER - INTRODUCE TAIL STRIKE "PITCH-PITCH" CALL-OUT FOR A320 & A321 AIRCRAFT
	Applicable to: MSN 03222-03229, 03294, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-11597			
	P9902		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS WXR MULTISCAN WRT -2100 P/N 822-1710-213
	Applicable to: MSN 04352-04544, 04570-05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	P9964	34-1412 06	16 FEB 22	NAVIGATION - EGPWS INSTALL EGPWS STANDARD -003
	Applicable to: MSN 05184-06121, 06163-06165, 06409-11597			
	00-1016 88		15 FEB 23	CERTIFICATION - CERTIFY TAKE-OFF OPERATIONS WITH 15 KNOTS TAILWIND
	Applicable to: MSN 01459, 02014			
	00-1020 15		16 FEB 22	GENERAL - CFM ENGINES - MANUAL OPERATIONS FOR HIGH ALTITUDE AIRPORTS (PRESSURE ALTITUDE LIMIT 9200 FT).
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	00-1024 07		16 FEB 22	GENERAL - AUTO FLIGHT - INTRODUCE EXTENDED CAT III B AUTOMATIC LANDING CAPABILITY (FOR CFM ENGINES).
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662			
	00-1032 02		16 FEB 22	GENERAL - AUTO FLIGHT - INTRODUCE EXTENDED CAT III B AUTOMATIC LANDING CAPABILITY (FOR IAE ENGINES)
	Applicable to: MSN 01459, 02014			
	00-1043 81		15 FEB 23	CERTIFICATION - CERTIFY LANDING OPERATIONS WITH 15 KNOTS TAILWIND
	Applicable to: MSN 01459, 02014			
	00-1054 28		15 SEP 22	CERTIFICATION - HIGH ALTITUDE OPERATIONS UP TO 14,100 FT.
	Applicable to: MSN 03733			
	00-1058 97		16 FEB 22	GENERAL - CERTIFICATION DOCUMENTS - CERTIFY AIRCRAFT FOR OPERATION ON RUNWAYS LESS THAN 45 METER WIDTH.
	Applicable to: MSN 01143-01518			
	00-1059 09		18 MAY 22	CERTIFICATION - CERTIFY LANDING ON WET PFC RUNWAYS AT SANTOS DUMONT AIRPORT
	Applicable to: MSN 02321, 02887, 04563, 05005, 05097			
	00-1070 01		15 FEB 23	GENERAL - DESIGN WEIGHTS - OPERATE WITH DUAL OPERATIONAL WEIGHTS (MTOW 64T/75.5T - MLW 61T/62.5T - MZFW 57T/58.5T)
	Applicable to: MSN 03588-03595			
	00-1106 16		16 FEB 22	GENERAL - DESIGN WEIGHTS - INCREASE FROM WV000 (MTOW 64T/MLW 61T/MZFW 57T) TO WV002 (MTOW 75.5T/MLW 62.5T/MZFW 58.5T)
	Applicable to: MSN 04563, 05005, 05097			
	00-1124 08		16 FEB 22	DESIGN WEIGHT - DECREASE FROM WV005 (MTOW 70T MLW 62.5T MZFW 58.5T) TO WV000 (MTOW 64T MLW 61T MZFW 57T)
	Applicable to: MSN 04563, 05005, 05097			
	00-1135 00		16 FEB 22	GENERAL - CERTIFICATION - CERTIFY OPERATIONS ON SLOPING RUNWAY AT EL SALVADOR AIRPORT
	Applicable to: MSN 01891			
	00-1227 07		16 NOV 22	DESIGN WEIGHTS - INCREASE FROM WV010 (MTOW 77T MLW 64.5T MZFW 61T) TO WV012 (MTOW 77T MLW 66T MZFW 62.5T)
	Applicable to: MSN 02734, 02896, 02924, 03058, 03211, 03313-03565, 03630-03662, 04441-04544, 05066, 05101-05342, 05591-05621			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	03-1001 04		16 FEB 22	DESIGN WEIGHTS - VALIDATE MULTIPLE OPERATIONAL WEIGHTS WV002/005 (MTOW 75.5T/70T, MLW 62.5T, MZFW 58.5T)
	Applicable to: MSN 04563, 05005, 05097			
	03-1165 05		03 APR 23	DESIGN WEIGHTS - INCREASE FROM WV010 (MTOW 77T MLW 64.5T MZFW 61T) TO WV012 (MTOW 77T MLW 66T MZFW 62.5T)
	Applicable to: MSN 03002, 03180, 03266-03284			
	21-1216 03		16 FEB 22	AVIONICS EQUIPMENT VENTILATION - INTRODUCE AVIONICS COMFORT DUCT TEMPERATURE SENSOR (FIN 34HQ)
	Applicable to: MSN 01459, 01832, 02321, 03035-03047, 03266-03284, 03313, 03662, 03761, 04000, 04171, 04563, 04734, 05591, 05752-05883			
	21-1226 01		16 FEB 22	AIR CONDITIONING - PACK TEMPERATURE CONTROL - INTRODUCE IMPROVED AIR CONDITIONING SYSTEM CONTROLLER
	Applicable to: MSN 02924, 03229, 04662, 05005, 05097, 05240-05342, 05528, 05947			
	22-1079 08		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER - INSTALL NEW FAC SOFTWARE STANDARD PN B397BAM0515.
	Applicable to: MSN 01143, 01376, 01518-01628, 01825, 01832, 01891, 02321			
	22-1083 03		16 FEB 22	AUTO FLIGHT - FMGC-INSTALL FMGC PN B546CCM0105(IAE GPS/ACARS)
	Applicable to: MSN 01143-01518			
	22-1087 03		16 FEB 22	AUTOFLIGHT - FMGC - INSTALL FMGC PN B546CCM0106 (IAE GPS AND ACARS).
	Applicable to: MSN 01459			
	22-1090 11		16 FEB 22	AUTOFLIGHT - FMGC - INSTALL FMGC IAE C13042BA01 (EQUIPPED WITH FMS2 HONEYWELL).
	Applicable to: MSN 01143-01376, 01518-01628			
	22-1102 02		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER - INSTALL FAC STANDARD BAM0617.
	Applicable to: MSN 01143-02321			
	22-1123 08		16 FEB 22	AUTO FLIGHT - FMGC - ACTIVATE FLIGHT MODE ANNUNCIATOR ENHANCEMENT FUNCTION.
	Applicable to: MSN 01143-02014			
	22-1142 04		16 FEB 22	AUTO FLIGHT - FCU - DEFINE FLIGHT DIRECTOR ENGAGEMENT IN CROSSED BARS AT GO AROUND (REACTIVATION)
	Applicable to: MSN 01459			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	22-1159 00		16 FEB 22	AUTO FLIGHT - GENERAL - INSTALL LIFT IMPROVEMENT PACKAGE ON IAE A5 A320 A/C (LIP)
	Applicable to: MSN 01518-01628, 01825, 01832			
	22-1203 02		16 FEB 22	AUTOFLIGHT - FMGC - INSTALL FMGC IAE STD P1I10 (WITH FMS2 HONEYWELL) ON A/C FITTED WITH IAE POWERPLANTS.
	Applicable to: MSN 01143-01376, 01518-02734, 02896-02904			
	22-1226 04		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION (FAC) INTRODUCE FAC SOFTWARE STD "BAM0619".
	Applicable to: MSN 01143-02321			
	22-1230 03		27 JUL 22	FLIGHT CONTROL UNIT (FCU) - INSTALL FCU WITH "EXPEDITE" FUNCTION
	Applicable to: MSN 02014			
	22-1244 02		16 FEB 22	AUTO-FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) - INSTALL FMGC STD P1I11 ON IAE AND PW ENGINED A/C.
	Applicable to: MSN 01143-01376, 01518-02904, 03032, 03222-03229, 03294			
	22-1248 01		16 FEB 22	AUTO-FLIGHT - FMGC - INSTALL FMGC HNWL STD P1C12 ON CFM A/C.
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662			
	22-1259 19		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER - INTRODUCE TAIL STRIKE PITCH-PITCH CALL-OUT
	Applicable to: MSN 03222-03229, 03294			
	22-1266 03		16 FEB 22	AUTO-FLIGHT - FMGC - INSTALL HONEYWELL PERFORMANCE DATABASE RELEASE 1A (PS4087592-901).
	Applicable to: MSN 01143-01376, 01518-03662			
	22-1269 05		16 FEB 22	AUTO FLIGHT - FMGC - INSTALL FMGC HWL H2C12 (RELEASE 1A) ON CFM A/C.
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733			
	22-1270 04		16 FEB 22	AUTO FLIGHT - FMGC - INSTALL FMGC HWL H2I11 (RELEASE 1A) ON IAE AND PW A/C.
	Applicable to: MSN 01143-01376, 01518-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389			
	22-1289 01		16 FEB 22	AUTO FLIGHT - GENERAL - REMOVE AFM LIMITATION ON NON-PRECISION APPROACHES WITH ONE ENGINE OUT ON A320/A318 A/C.
	Applicable to: MSN 01143-01628, 01825, 01832, 01891-02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662			
	22-1296 06		16 FEB 22	AUTO-FLIGHT - FMGC - ACTIVATE MOD NAV GO AROUND ON FMGC
	Applicable to: MSN 01143-01251, 01518-02321, 02734, 02896-04000			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	22-1315 05		16 FEB 22	AUTO FLIGHT- FLIGHT MANAGEMENT SYSTEM - ACTIVATE NO AP DISCONNECTION BELOW MDA/MDH UNTIL MISSED APPROACH POINT AND ACTIVATE BARO RADIO SETTING FUNCTION.
	Applicable to: MSN 01143-01376, 01518-04389			
	22-1359 05		16 FEB 22	AUTO-FLIGHT-FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC)-INSTALL FMGC HONEYWELL H2C13 ON CFM A/C
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05643			
	22-1360 02		16 FEB 22	AUTO-FLIGHT-FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC)-INSTALL FMGC THALES S6C13 ON CFM A/C
	Applicable to: MSN 04827-04860			
	22-1375 00		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INTRODUCE FAC SOFTWARE STANDARD BAM0621 (ROPS FUNCTION).
	Applicable to: MSN 01143-03032, 03058, 03180-05240, 05345			
	22-1379 01		16 FEB 22	AUTO FLIGHT - FMGC - INSTALL FMGC H2I12 HONEYWELL ON IAE/PW AIRCRAFT
	Applicable to: MSN 01518, 01593, 01825, 01837, 01891, 02734-02896, 03595, 04000-04192, 04358-04389, 04563-04662, 04773, 05528			
	22-1427 05		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC 622 (SHARKLET PROJECT)
	Applicable to: MSN 05342			
	22-1461 12		16 FEB 22	AUTO FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC B623 (SHARKLET PROJECT)
	Applicable to: MSN 05528			
	22-1462 02		16 FEB 22	AUTOFLIGHT - FMGC - INSTALL FMS THALES RELEASE 1A S7A (WITH FG C13) ON CFM A/C
	Applicable to: MSN 04827-04860			
	22-1472 18		16 FEB 22	AUTOPILOT/FLIGHT DIRECTOR - ACTIVATE AP/FD TCAS FUNCTION ON SA CEO A/C
	Applicable to: MSN 01459			
	22-1480 03		16 FEB 22	AUTO FLIGHT-FLIGHT AUGMENTATION (FAC) DEFINE STOP RUDDER INPUT WARNING FUNCTION ON AIRCRAFT
	Applicable to: MSN 01143-01246, 01376-06121			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	22-1484 01		16 FEB 22	AUTO FLIGHT - GENERAL - REMOVE AFM LIMITATION ON NON PRECISION APPROACHES WITH ONE ENGINE OUT ON A321
	Applicable to: MSN 03222-03229, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098			
	22-1523 02		16 FEB 22	AUTO FLIGHT - FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) - INSTALL FMGC HONEYWELL H2CC14 ON CFM A/C
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05752			
	22-1545 01		16 FEB 22	FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) - INSTALL FMGC S7AC14 THALES ON CFM A/C
	Applicable to: MSN 04827-04860			
	22-1547 01		16 FEB 22	FLIGHT MANAGEMENT AND GUIDANCE COMPUTER (FMGC) - INSTALL FMGC H2CI15 HONEYWELL ON IAE AND PW ENGINE
	Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832-01837, 01891-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528			
	22-1553 01		17 AUG 22	INTRODUCE FAC B624 (ROPS AND SHARKLET)
	Applicable to: MSN 01376-01459, 01591-01628, 01825, 02014-03111, 03211-03284, 03313-03662, 03733-04563, 04662-04974, 05066, 05101-05752			
	22-1554 01		16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC CAA03 STANDARD
	Applicable to: MSN 05883-06670, 06689-06712, 06800-06871			
	22-1590 02		16 FEB 22	FLIGHT MANAGEMENT - INTRODUCE FM THALES S7B ASSOCIATED TO FG 2G C14 (CFM ENGINES)
	Applicable to: MSN 04827-04860			
	22-1593 01		16 FEB 22	AUTO-FLIGHT - FAC - INSTALL FAC CAA06 FOR CEO AIRCRAFT
	Applicable to: MSN 05883-06871, 06895-07098			
	22-1606 00		16 FEB 22	AUTO FLIGHT - FMGC - INSTALL FG PI16 ASSOCIATED WITH HONEYWELL FM H2C ON CEO AIRCRAFT FITTED WITH IAE/PW ENGINES
	Applicable to: MSN 05947-06121, 06163-06165			
	22-1610 02		16 NOV 22	INSTALL FG PC18 ASSOCIATED TO HONEYWELL FM H2C
	Applicable to: MSN 05883, 06139, 06173-06876, 06949-07098			
	22-1614 10		16 FEB 22	FMGC - ACTIVATE FMS2 R1A FUNCTIONS PACKAGE
	Applicable to: MSN 01459			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	22-1629 00		16 FEB 22	AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INSTALL FAC CAA09 FOR CEO AIRCRAFT
	Applicable to: MSN 05947-06871, 07005-07098			
	22-1676 03		16 FEB 22	FMGC - INSTALL FMGC H2C-PI16 FROM LEGACY (INCLUDING PDB)
	Applicable to: MSN 01459			
	22-1723 02		18 MAY 22	FMGC - INSTALL HONEYWELL PDB SA12 ON NEO A/C
	Applicable to: MSN 08529			
	22-1736 00		16 FEB 22	FAC - INSTALL FAC CAA12
	Applicable to: MSN 05947-06871, 07005-07098			
	22-1737 00		16 FEB 22	FAC - INSTALL FAC CAA12
	Applicable to: MSN 08495-09324			
	22-1797 01		16 FEB 22	INSTALL FAC CAA13 SUPPORTING ROPS EVOLUTION FUNCTIONS ON CEO AIRCRAFT
	Applicable to: MSN 05947-06871, 07005-07098			
	22-1798 01		16 FEB 22	INSTALL FAC CAA13 SUPPORTING ROPS EVOLUTION FUNCTIONS ON NEO AIRCRAFT
	Applicable to: MSN 08495-08596, 09190			
	23-1157 20		16 FEB 22	COMMUNICATIONS - MISCELLANEOUS EMERGENCY EQUIPMENT - INSTALL AN EMERGENCY LOCATOR TRANSMITTER (ELT) PN 956088 WITH PROGRAMMING BOX AND A REMOTE CONTROL PANEL IN THE COCKPIT
	Applicable to: MSN 01459			
	23-1184 02		16 FEB 22	COMMUNICATIONS - RADIO MANAGEMENT - INSTALL NEW RMP STANDARD 2A P/N C12848CA01.
	Applicable to: MSN 01459			
	23-1208 14		16 FEB 22	COMMUNICATIONS - ANTI HIJACK CAMERA MONITORING - CDSS INSTALLATION OF UNITS
	Applicable to: MSN 01459			
	23-1397 06		16 FEB 22	COMMUNICATIONS - CABIN INTERCOMMUNICATION DATA SYSTEM (CIDS) - INSTALL HANDSET HOLMBERG
	Applicable to: MSN 03035-03111, 03222-03229, 03294, 03588, 03630-03816			
	23-1695 01		16 FEB 22	COMMUNICATIONS - ANTI HIJACK CAMERA MONITORING - INSTALL UNITS FOR A COCKPIT DOOR SURVEILLANCE SYSTEM (CDSS)
	Applicable to: MSN 02321-02513, 05005, 05097			
	23-1738 08		18 MAY 22	INSTALL UNITS FOR A COCKPIT DOOR SURVEILLANCE SYSTEM
	Applicable to: MSN 01891			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	24-1120 04		16 FEB 22	ELECTRICAL POWER - AC ESSENTIAL GENERATION SWITCHING - INSTALL AUTO SWITCHING SYSTEM FOR AC AND DC ESS BUS.
	Applicable to: MSN 01143-03002, 03035-03058			
	25-1305 06		16 FEB 22	EQUIPMENT/FURNISHINGS - PASSENGER COMPARTMENT - INTRODUCE A MODIFIED INTRUSION AND PENETRATION RESISTANT COCKPIT DOOR
	Applicable to: MSN 01376-01459, 01891			
	25-1444 02		16 FEB 22	EQUIPMENT/FURNISHINGS - CURTAINS AND PARTITIONS - INTRODUCE PPTC FOR COCKPIT DOOR STRIKE PROTECTION
	Applicable to: MSN 01459, 01801-02321			
	25-1789 05		16 FEB 22	EQUIPMENT / FURNISHINGS - CURTAINS AND PARTITIONS - INSTALL DEADBOLT IN THE REINFORCED COCKPIT DOOR
	Applicable to: MSN 02896-02904, 03047			
	25-1B78 00		16 FEB 22	EQUIPMENT / FURNISHINGS - LAVATORIES - REPLACE CHEMICAL BY GASEOUS OXYGEN CONTAINER IN LAVATORIES
	Applicable to: MSN 01143-01855, 02014, 02734, 02896-03002, 03035-04544, 04570-04773, 04953-04974, 05066, 05101-06121, 06163-06165			
	25-1BCD 00		16 FEB 22	EQUIPMENT / FURNISHINGS - LAVATORIES - REPLACE CHEMICAL BY GASEOUS OXYGEN BOXES IN LAVATORIES
	Applicable to: MSN 02887, 03032			
	25-1BCP 00		16 FEB 22	EQUIPMENT / FURNISHINGS - LAVATORIES - REPLACE CHEMICAL BY GASEOUS OXYGEN BOXES IN THE LAVATORIES
	Applicable to: MSN 06139			
	25-1BCV 01		16 FEB 22	EQUIPMENT / FURNISHINGS - PASSENGER COMPARTMENT SEATS - INSTALL AN IN-SEAT POWER SUPPLY SYSTEM (ISPSS) AND PRERECORDED ANNOUNCEMENT AND MUSIC (PRAM)
	Applicable to: MSN 01825, 01832, 02904			
	25-1BGE 00		16 FEB 22	EQUIPMENT / FURNISHINGS - LAVATORIES - REPLACE CHEMICAL BY GASEOUS OXYGEN CONTAINERS IN LAVATORIES
	Applicable to: MSN 04563			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	25-1BPJ 01		16 FEB 22	COCKPIT - REINFORCE COCKPIT DOCUMENTS STOWAGE BOX
	Applicable to: MSN 01891, 02321-02513, 04563, 04953-05005, 05097, 06632, 06800, 06949, 07098			
	25-1BPK 01		16 FEB 22	COCKPIT - REINFORCE COCKPIT DOCUMENTS STOWAGE BOX
	Applicable to: MSN 08596			
	25-1BZT 00		16 NOV 22	REPLACE CHEMICAL BY GASEOUS OXYGEN CONTAINERS (22 MIN) IN LAVATORIES
	Applicable to: MSN 04860			
	25-1CBJ 00		17 AUG 22	REPLACE CHEMICAL BY GASEOUS OXYGEN CONTAINERS (22 MIN) IN LAVATORIES
	Applicable to: MSN 05097			
	26-1103 09		27 JUL 22	ENGINE FIRE EXTINGUISHING - CERTIFY SINGLE ENGINE TAXI WITHOUT APU RUNNING
	Applicable to: MSN 01143, 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03032, 03058, 03180-03710, 03733-04773, 05005-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098			
	27-1113 12		16 FEB 22	FLIGHT CONTROLS - FCDC SYSTEM - PROVIDE A VISUAL INDICATION FOR SIMULTANEOUS SIDE STICK ACTION.
	Applicable to: MSN 01459			
	27-1154 00		16 FEB 22	FLIGHT CONTROLS - ELAC SYSTEM - INSTALL ELAC L83 SOFTWARE
	Applicable to: MSN 01143-01251			
	27-1160 01		16 FEB 22	FLIGHT CONTROLS - ELAC SYSTEM - INSTALL ELAC L91 SOFTWARE.
	Applicable to: MSN 01376-02321			
	27-1182 04		16 FEB 22	FLIGHT CONTROL - ELAC SYSTEM - INTRODUCE ELAC L93 SOFTWARE STANDARD.
	Applicable to: MSN 01376-04000			
	27-1188 00		16 FEB 22	FLIGHT CONTROL -ELAC SYSTEM- INTRODUCE ELAC A L84 SOFTWARE STANDARD - SB ONLY.
	Applicable to: MSN 01143-01251			
	27-1219 03		16 FEB 22	SPOILER AND ELEVATOR COMPUTER - INSTALL SEC 121 HARDWARE B'
	Applicable to: MSN 04352-05222, 05342-05345			
	27-1225 06		16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM - INSTALL ELAC B L96 (SHARKLET PROJECT)
	Applicable to: MSN 05342, 05528			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	27-1230 02		16 FEB 22	SPOILER AND ELEVATOR COMPUTER (SEC) - INSTALL SEC 123 HARDWARE B
	Applicable to: MSN 01143-04192			
	27-1234 01		16 FEB 22	FLIGHT CONTROL - ELEVATOR AILERON COMPUTER SYSTEM (ELAC)-INSTALL L97 STANDARD ON ELAC B WITH DATA LOADING CAPABILITY
	Applicable to: MSN 04352-04974, 05066, 05101-05591			
	27-1238 00		16 FEB 22	FLIGHT CONTROLS - ELAC - INSTALL L97 STANDARD ON ELAC B WITHOUT DATALOADING CAPABILITY
	Applicable to: MSN 01143-01837, 01891-04192			
	27-1243 01		16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL ELAC B L97+ WITH DATA LOADING CAPABILITY
	Applicable to: MSN 01855, 04352-06414			
	27-1244 00		16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL ELAC B L97+ WITHOUT DATALOADING
	Applicable to: MSN 01143-01837, 01891-04192			
	27-1251 01		16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL SOFTWARE STANDARD L98 ON ELAC B WITH DATA LOADING CAPABILITY
	Applicable to: MSN 01855, 04352-06895			
	27-1255 01		16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL SOFTWARE STANDARD L98 ON ELAC B WITHOUT DATA LOADING CAPABILITY
	Applicable to: MSN 01158-01246, 01376-01837, 01891-04192			
	27-1267 00		16 FEB 22	FLIGHT CONTROLS - ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL SOFTWARE STANDARD L101 ON ELAC B WITHOUT DATA LOADING CAPABILITY
	Applicable to: MSN 01158-01246, 01376-01837, 01891-04192			
	27-1269 01		16 FEB 22	ELEVATOR AILERON COMPUTER SYSTEM (ELAC) - INSTALL SOFTWARE STANDARD L101 ON ELAC B WITH DATA LOADING CAPABILITY
	Applicable to: MSN 01855, 04352-07098			
	27-1284 02		16 FEB 22	ELEVATOR AILERON COMPUTER SYSTEM - INSTALL ELAC B L103 - DATA LOADABLE
	Applicable to: MSN 08495-09324			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	28-1106 03		16 FEB 22	FUEL - MANUAL MAGNETIC INDICATORS - ATTITUDE MONITOR DELETION
	Applicable to: MSN 01143-01891			
	28-1150 01		16 FEB 22	FUEL - QUANTITY INDICATION - REMOVE FUEL LEAK DETECTION FUNCTION ASSOCIATED WITH FQIC 13-10 (ANTI-MOD FOR MOD 32650)
	Applicable to: MSN 02734-03002, 03035			
	28-1214 02		16 FEB 22	FUEL - QUANTITY INDICATING - ACTIVATE FUEL LEAK DETECTION WARNING SYSTEM
	Applicable to: MSN 04827-04860			
	28-1233 00		16 FEB 22	FUEL - QUANTITY INDICATING - INTRODUCE FUEL QUANTITY INDICATING COMPUTER (FQIC) P/N 30320-0202
	Applicable to: MSN 06632, 06658-06689, 06718-06729			
	28-1242 01		16 FEB 22	FUEL - FUEL RECIRCULATION - ESTABLISH MISSING GROUND CONNECTION TO INHIBIT RECIRCULATION
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	31-1113 31		16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - ACTIVATION OF OEB REMINDER FUNCTION.
	Applicable to: MSN 01459			
	31-1115 12		16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - PROVIDE NEW SYNTHETIC VOICE "DUAL INPUTS".
	Applicable to: MSN 01459			
	31-1150 37		16 FEB 22	INDICATING/RECORDING SYSTEMS - CFDIU - INTRODUCE CFDIU STANDARD 9B.
	Applicable to: MSN 01143-01246			
	31-1153 00		16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - ACTIVATE SPECIFIC FWC PROCEDURE
	Applicable to: MSN 01143-01251			
	31-1197 00		16 FEB 22	INDICATING RECORDING SYSTEM - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2F2.
	Applicable to: MSN 01591-01628, 01825, 01832			
	31-1214 08		16 FEB 22	INDICATING/RECORDING SYSTEM -DMC- INTRODUCE DMC V50 STANDARD (BY RETROFIT SOLUTION)
	Applicable to: MSN 01891			
	31-1218 01		16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL STD H2/F2 HARDWARE AND SOFTWARE.
	Applicable to: MSN 01518			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	31-1231 01		16 FEB 22	INDICATING/RECORDING SYSTEMS - FWC - INSTALL FWC STANDARD H2E4
	Applicable to: MSN 01891			
	31-1257 01		16 FEB 22	INDICATING RECORDING SYSTEM - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2-F2.
	Applicable to: MSN 01143-01459, 01801, 01826-01827, 01837-02321			
	31-1264 04		16 FEB 22	INDICATING RECORDING SYSTEM - ACTIVATION OF FWC HARD PIN PROGRAMMED FUNCTIONS.
	Applicable to: MSN 01143-03710			
	31-1266 02		16 FEB 22	INDICATING/RECORDING SYSTEMS - SDAC - ACTIVATION OF HARD PIN PROGRAMMED FONCTIONS.
	Applicable to: MSN 01143-02321			
	31-1267 03		16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2F3.
	Applicable to: MSN 01143-03229			
	31-1276 02		16 FEB 22	INDICATING/RECORDING SYSTEMS - ELECTRONIC INSTRUMENT SYSTEM(EIS) - INSTALL DISPLAY MANAGEMENT COMPUTER SOFTWARE EIS2 S7
	Applicable to: MSN 02734-03032			
	31-1281 02		16 FEB 22	INDICATING RECORDING SYSTEM - SYSTEM DATA ACQUISITION CONCENTRATOR (SDAC) - INSTALL SDAC STANDARD H2-E2.
	Applicable to: MSN 01891, 02321-02734			
	31-1286 01		16 FEB 22	INDICATING/RECORDING SYSTEMS - DMC - INTRODUCE DMC EIS1 V60 STANDARD.
	Applicable to: MSN 01143-02321			
	31-1300 02		16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2-F3P.
	Applicable to: MSN 01143-03229			
	31-1331 01		16 FEB 22	INDICATING/RECORDING SYSTEM - ELECTRONIC INSTRUMENT SYSTEM (EIS)- ACTIVATE ENGINE AVAIL DISPLAY.
	Applicable to: MSN 01143-01855, 02014, 02734, 02896-03595			
	31-1334 04		16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2-F5
	Applicable to: MSN 01143-01246, 01376-04192			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	31-1335 01		16 FEB 22	INDICATING/RECORDING SYSTEM - ELECTRONIC INSTRUMENT SYSTEM (EIS) - INSTALL DISPLAY MANAGEMENT COMP. SOFTW. EIS2 S8-2.
	Applicable to: MSN 02887			
	31-1359 00		16 FEB 22	INDICATING/RECORDING SYSTEM - ELECTRONIC INSTRUMENT SYSTEM (EIS) - INSTALL NEW EIS2 SOFTWARE S9
	Applicable to: MSN 02887			
	31-1372 10		16 FEB 22	INDICATING/RECORDING SYSTEM - EIS - INSTALL EIS2 SOFTWARE S9
	Applicable to: MSN 03032, 03588-03595, 03710-03733, 04000-04192, 04389			
	31-1373 00		16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2-F6
	Applicable to: MSN 01143-01246, 01376-03111, 03211-03294, 03391-05222, 05342-05345			
	31-1374 01		16 FEB 22	INDICATING RECORDING SYSTEMS-SYSTEM DATA ACQUISITION CONCENTRATOR - INSTALL SDAC H2-E3.
	Applicable to: MSN 01891, 02321-02513, 03180-03211, 03313, 04827-05005			
	31-1414 03		16 FEB 22	INDICATING RECORDING SYSTEMS - FWC - INTRODUCE FWC STANDARD H2-F7
	Applicable to: MSN 01143-01246, 01376-05528			
	31-1421 31		16 FEB 22	DMC - INTRODUCE STD V70
	Applicable to: MSN 01459			
	31-1433 01		16 FEB 22	INDICATING/RECORDING SYSTEMS - ELECTRONIC INSTRUMENT SYSTEM (EIS) - INTRODUCE EIS2 STANDARD S11
	Applicable to: MSN 02734-05947			
	31-1450 01		16 FEB 22	INDICATING/RECORDING SYSTEMS - SDAC ACQUISITION/INTERFACE - INSTALL SDAC STANDARD H2-E4
	Applicable to: MSN 01891, 02321-02513, 03180-03211, 03313, 04827-05005, 05097, 05749			
	31-1482 03		15 FEB 23	INDICATING/RECORDING SYSTEM - DMC - INTRODUCE EIS2 S13-2 STANDARD FOR CEO CONFIGURATION
	Applicable to: MSN 02734-03032, 03058, 03180-04860, 05005-07098			
	31-1492 00		16 FEB 22	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F9D FOR CEO AIRCRAFT
	Applicable to: MSN 01143-01246, 01376-01891, 02321-06536, 06592-07098			

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M[1]	CRITERION	Linked SB	Incorp. Date	Title
	31-1558 01		16 FEB 22	FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F10
	Applicable to: MSN 08635			
	31-1575 02		18 MAY 22	FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC H2-F12E (NEO)
	Applicable to: MSN 08635			
	31-1576 01		15 FEB 23	ELECTRONIC INSTRUMENT SYSTEM (EIS) - INTRODUCE EIS2 STANDARD S16 (SAFETY BEYOND STANDARD STEP 1)
	Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098			
	31-1577 01		15 FEB 23	ELECTRONIC INSTRUMENT SYSTEM (EIS) - INTRODUCE EIS2 STANDARD S16 (SAFETY BEYOND STANDARD STEP 1)
	Applicable to: MSN 08495, 08596			
	31-1602 00		15 FEB 23	INTRODUCE DMC-EIS1 STD V80 WITH STALL STALL MESSAGE CAPABILITY
	Applicable to: MSN 02321			
	32-1042 27		16 FEB 22	LANDING GEAR - BRAKE COOLING - INSTALL BRAKE COOLING FANS (MESSIER).
	Applicable to: MSN 01143-01376			
	32-1151 57		16 FEB 22	BRAKE COOLING - REMOVE BRAKE COOLING FANS FROM SAFRAN LS (EX MESSIER-BUGATTI) OR UTAS (EX GOODRICH) WHEELS
	Applicable to: MSN 01143-01376			
	32-1201 04		16 FEB 22	LANDING GEAR - GENERAL - PARK/ULTIMATE EMERGENCY BRAKING - IMPROVE PARKING BRAKE SYSTEM.
	Applicable to: MSN 01143-01251			
	32-1235 24		16 FEB 22	LANDING GEAR - BRAKE COOLING - INTRODUCE UNIVERSAL BRAKE COOLING FAN.
	Applicable to: MSN 01143-01246, 01376			
	32-1242 07		16 FEB 22	LANDING GEAR - WHEELS AND BRAKES - REPLACE A321 TYPE ABS WHEELS AND BRAKES BY MESSIER WHEELS AND "SEPCARB III PLUS" BRAKES OR "SEPCARB III PLUS OR" BRAKES
	Applicable to: MSN 01459			
	32-1264 20		16 FEB 22	BRAKE COOLING - REMOVE BRAKE COOLING FANS FROM MABS WHEELS
	Applicable to: MSN 01459			
	32-1283 36		16 FEB 22	BRAKE COOLING - INSTALL BRAKE COOLING FANS ON SAFRAN LS (EX MESSIER-BUGATTI) WHEELS
	Applicable to: MSN 01459			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	32-1305 00		16 FEB 22	LANDING GEAR - NORMAL BRAKING - INSTALL BSCU STD L4.8 (EM2).
	Applicable to: MSN 02321-02513			
	32-1335 00		16 FEB 22	LANDING GEAR - NORMAL BRAKING - INSTALL BSCU SOFTWARE STD "L4.9".
	Applicable to: MSN 02321			
	32-1336 01		16 FEB 22	LANDING GEAR - NORMAL BRAKING - INSTALL BSCU STD 10 BY SB ONLY.
	Applicable to: MSN 01143-02014			
	32-1346 10		16 FEB 22	LANDING GEAR - EXTENSION AND RETRACTION - INTRODUCE POWER INTERRUPT PROTECTION CIRCUIT FOR LGCIUS
	Applicable to: MSN 01143-03595			
	32-1347 04		16 FEB 22	BRAKE COOLING - REMOVE BRAKE COOLING FANS FROM SAFRAN LS (EX MESSIER-BUGATTI) WHEELS
	Applicable to: MSN 01143-01246, 01376			
	32-1361 00		03 APR 23	LANDING GEAR - NORMAL BRAKING - INSTALL BSCU L4.9B (EM2) FROM STD BSCU STD 10 OR 10.1 (PRE EM2).
	Applicable to: MSN 01143-02014			
	32-1432 01		16 FEB 22	LANDING GEAR - NORMAL BRAKING - INSTALL BSCU SOFTWARE STANDARD L4.10
	Applicable to: MSN 01143-06871, 06895-07005			
	32-1464 01		16 FEB 22	NORMAL BRAKING - MODIFY AUTOBRAKE LOW MODE SETTINGS
	Applicable to: MSN 01246, 01376-01826, 01832-03211, 03266-03284, 03313-03733, 04000-04192, 04389-04563, 04734-04773, 05005-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876			
	32-1476 00		16 FEB 22	LANDING GEAR - NORMAL BRAKING - MODIFY AUTOBRAKE LOW MODE SETTINGS
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098			
	33-1057 03		16 FEB 22	LIGHTS - INSTRUMENT AND PANEL INTEGRAL LIGHTING - ENSURE EMERGENCY LIGHTING FOR STAND-BY INSTRUMENTS.
	Applicable to: MSN 01143-01891, 02321			
	34-1063 17		16 FEB 22	NAVIGATION - AUTOMATIC DIRECTION FINDER - INSTALL SECOND ADF SYSTEM.
	Applicable to: MSN 01459			
	34-1206 18		16 FEB 22	NAVIGATION - TCAS - INSTALL ACSS TCAS 2000 COMPUTER WITH CHANGE 7.0.
	Applicable to: MSN 01143-01251			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	34-1252 00		16 FEB 22	NAVIGATION - ADIRU - RESTORE RVSM 3 CIRCUIT CAPABILITIES
	Applicable to: MSN 01376, 01518			
	34-1259 64		16 FEB 22	NAVIGATION-ATC/MODE S-INSTALL HONEYWELL ATC TRANSPONDERS TRA-67A INCORPORATING EUROPEAN MODE S REGULATIONS.
	Applicable to: MSN 01459			
	34-1278 04		16 FEB 22	NAVIGATION - GPWS - INSTALL ENHANCED GPWS PN 965-1676-001.
	Applicable to: MSN 01891			
	34-1335 02		16 FEB 22	NAVIGATION - STANDBY DATA : INTEGRATED STANDBY INSTRUMENT SYSTEM (ISIS) - INSTALL ISIS STD WB01.
	Applicable to: MSN 02014			
	34-1345 02		16 FEB 22	NAVIGATION - EGPWS - INSTALL EGPWS CAPABLE OF USING THE GPS LATERAL POSITION AND ACTIVATION OF PEAKS AND OBSTACLES FUNCTIONS.
	Applicable to: MSN 01891, 02321-02513			
	34-1350 02		16 FEB 22	NAVIGATION - ADIRU - INSTALL NORTHROP GRUMMAN ADIRU P/N 465020-0303-0316.
	Applicable to: MSN 01459			
	34-1351 03		16 FEB 22	NAVIGATION - EGPWS - ACTIVATE GEOMETRIC ALTITUDE FUNCTION IN THE EGPWS.
	Applicable to: MSN 01891, 02321			
	34-1352 01		16 FEB 22	NAVIGATION - GPWS - USE LATERAL GPS POSITION WITH AUTOMATIC DESELECTION OF TERRAIN MODES.
	Applicable to: MSN 01891, 02321-02513			
	34-1363 08		27 JUL 22	NAVIGATION - AUTOMATIC DIRECTION FINDER - INSTALL SECOND ADF SYSTEM.
	Applicable to: MSN 02014			
	34-1369 02		16 FEB 22	NAVIGATION - ATC/MODE S (SELECT) - CERTIFY EHS FUNCTION.
	Applicable to: MSN 03032			
	34-1374 12		16 FEB 22	NAVIGATION - GENERAL - IMPROVE RNP DOWN TO 0.10 IN APPROACH
	Applicable to: MSN 02887			
	34-1375 08		16 FEB 22	NAVIGATION - GENERAL - INSTALL P/B IN THE COCKPIT ACTIVATING LOGICS OF LAT DEV SCALE DISPLAY
	Applicable to: MSN 02887			

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M[(1)]	CRITERION	Linked SB	Incorp. Date	Title
	34-1384 02		16 FEB 22	NAVIGATION - MMR - INSTALL COLLINS MMR STANDARD P/N 822-1152-122.
	Applicable to: MSN 01143-01376, 01518-01891, 02321-03111			
	34-1397 05		16 FEB 22	NAVIGATION - AIR DATA/INERTIAL REFERENCE SYSTEM (ADIRS) - INTRODUCE BACK-UP SPEED SCALE FUNCTION
	Applicable to: MSN 02887			
	34-1403 08		16 FEB 22	GENERAL - RNP 0.1/0.24/0.24 (RNP STEP 2+)
	Applicable to: MSN 02887			
	34-1429 00		16 FEB 22	NAVIGATION- DDRMI - INSTALL THALES VOR/ADF/DME DDRMI PN 63543-250-4
	Applicable to: MSN 01459, 02014			
	34-1443 03		16 FEB 22	NAVIGATION - WEATHER RADAR SYSTEM - INSTALL COLLINS TRANSCEIVER FULLY COMPLIANT WITH MULTISCAN FUNCTION PN 822-1710-203.
	Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163			
	34-1480 24		16 FEB 22	GENERAL- FLIGHT MANUAL EXTENSION TO RNP STEP 3
	Applicable to: MSN 02887, 03032, 03588-03595, 03710-03733, 04000-04192, 04389, 04563, 04734-04773			
	34-1506 34		16 FEB 22	NAVIGATION - TCAS - INSTALL A NEW HONEYWELL TCAS TPA-100B
	Applicable to: MSN 03035-03047, 03111			
	34-1517 01		16 FEB 22	NAVIGATION - TRAFFIC AND TERRAIN INTEGRATED SURVEILLANCE (T/TISS) - INSTALL T3CAS CORRECTIVE STD 1-1
	Applicable to: MSN 04827			
	34-1532 34		16 FEB 22	TCAS - INSTALL TCAS 7.1 ACSS
	Applicable to: MSN 01158-01246, 01376, 01518-01801, 01826-01827, 01837-01891, 02321-02734, 02896-02904, 03002-03032			
	34-1549 00		16 FEB 22	NAVIGATION - TRAFFIC AND TERRAIN INTEGRATED SURVEILLANCE SYSTEM (T/TISS) - INSTALL ACSS T3CAS STD 1.2
	Applicable to: MSN 04827-04860			
	34-1571 03		16 FEB 22	WEATHER RADAR SYSTEM - INSTALL COLLINS WXR CAPABLE MULTISCAN WITH TRANSCEIVER WRT-2100 (PN 822-1710-214)
	Applicable to: MSN 04827-04860			
	34-1595 18		03 APR 23	ATC/MODE S (SELECT) - ACTIVATE ADS-B OUT DO-260B CAPABILITY FOR ATC TRANSPONDER
	Applicable to: MSN 04827-04860, 08495-08596			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	34-1630 17		16 NOV 22	ATC/MODE S (SELECT) - ACTIVATE ADS-B OUT DO-260B CAPABILITY FOR ATC TRANSPONDER
	Applicable to: MSN 01891, 02321-02734, 02924-03002, 03058, 03180-03211, 03266			
	34-1662 13		03 APR 23	GENERAL - FLIGHT MANUAL EXTENSION TO RNP STEP 3
	Applicable to: MSN 01891			
	34-1663 14		03 APR 23	ATC - INSTALLATION OF ATC TRANSPONDER TPR901 COMPLIANT ADS-B OUT DO-260B
	Applicable to: MSN 01891, 02321-02734, 02924-03002, 03058, 03180-03211, 03266-03284			
	34-1667 17		16 FEB 22	TCAS - INSTALL A NEW HONEYWELL TCAS TPA-100B CAPABLE OF ATSAW, BASED ON TPA-100A
	Applicable to: MSN 03391, 04441			
	34-1711 12		27 JUL 22	T/TISS - INSTALL ACSS T3CAS STD 2 P/N 9005000-11203 CAPABLE DO-260B AND ROPS AND ACSS TRANSPONDER XS950 P/N 7517800-12402 CAPABLE DO-260B
	Applicable to: MSN 04827-04860			
	35-1084 00		16 FEB 22	OXYGEN - PASSENGER OXYGEN - REPLACE OXYGEN CONTAINERS WITH 15 MINUTES DURATION BY CONTAINERS WITH 22 MINUTES DURATION
	Applicable to: MSN 05947			
	36-1057 01		16 FEB 22	PNEUMATIC - ENGINE BLEED AIR SUPPLY SYSTEM - INSTALL BMC STD 9 CAPABLE OF A318 PW.
	Applicable to: MSN 02734, 02904-03002			
	36-1075 01		16 FEB 22	ENGINE BLEED AIR SUPPLY SYSTEM - DEFINE AND INSTALL BMC STD 12 SW
	Applicable to: MSN 02734, 02904-03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081			
	44-1037 02		16 FEB 22	CABIN SYSTEM - ON-BOARD MOBILE TELEPHONY SYSTEM - INSTALL GLOBAL SYSTEM MOBILE PHONE (GSM) ON BOARD
	Applicable to: MSN 03588, 03710-03733, 04000-04192			
	44-1038 01		16 FEB 22	CABIN SYSTEM - ON-BOARD MOBILE TELEPHONY SYSTEM - INSTALL GLOBAL SYSTEM MOBILE PHONE (GSM) ON BOARD
	Applicable to: MSN 03035-03111, 03630-03662			
	44-1041 01		16 FEB 22	CABIN SYSTEM - ON BOARD TELEPHONY SYSTEM - INSTALL GLOBAL SYSTEM MOBILE PHONE (GSM) ON BOARD
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04358			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	46-1009 06		16 FEB 22	INFORMATION SYSTEM - ATIMS - MODIFY ATSU AIRCRAFT INTERFACE SOFTWARE ACCORDING TO SERVICE PROVIDERS LIST.
	Applicable to: MSN 01143-01251			
	46-1013 04		16 FEB 22	INFORMATION SYSTEMS - ATIMS - DEFINE AND INSTALL NEW SOFTWARE ATSU A/C INTERFACE UPGRADED
	Applicable to: MSN 01143-01376, 01518			
	46-1062 16		15 FEB 23	GENERAL - CERTIFY FANS B+ CONFIGURATION (OVERALL MODIFICATION)
	Applicable to: MSN 04953-04974			
	46-1095 03		16 FEB 22	ATIMS - INSTALL ATSU CSB8 CORRECTIVE STANDARD
	Applicable to: MSN 04827-04860			
	46-1121 14		15 FEB 23	ATIMS - INSTALL ATSU CSB8.3/HW-A10 WITH FANS B+ APPLICATIONS AND WITH VDL MODE 2 ACTIVATED
	Applicable to: MSN 04953-04974			
	47-1026 22		27 JUL 22	FUEL TANK INERTING SYSTEM (FTIS) - INSTALLATION OF FUEL TANK INERTING SYSTEM (FTIS)
	Applicable to: MSN 01628, 01825, 01832, 02014, 02734, 02896-03002, 03058, 03180-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544			
	47-1035 17		27 JUL 22	FUEL TANK INERTING SYSTEM (FTIS) - INSTALLATION OF FUEL TANK INERTING SYSTEM (FTIS)
	Applicable to: MSN 01801, 01826-01827, 01837-01855, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563			
	47-1041 06		27 JUL 22	FUEL TANK INERTING SYSTEM (FTIS) - INSTALLATION OF FUEL TANK INERTING SYSTEM (FTIS)
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358			
	49-1061 03		16 FEB 22	AIRBORNE AUXILIARY POWER - CONTROL AND MONITORING - INTRODUCE APIC ECB SOFTWARE VERSION 5
	Applicable to: MSN 01459			
	49-1067 01		16 FEB 22	AIRBORNE AUXILIARY POWER - CONTROL AND MONITORING - PROCEDURE OF RE-INITIALIZATION OF DATA MEMORY MODULE HONEYWELL FOR 131-9 A].
	Applicable to: MSN 01143-01855, 02014, 02734			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	49-1070 00		16 FEB 22	AIRBORNE AUXILIARY POWER-CONTROL AND MONITORING - INTRODUCE ECB SOFTWARE VERSION 06.00.000
	Applicable to: MSN 01891, 02321-02513			
	49-1075 01		16 FEB 22	AIRBORNE AUXILIARY POWER - CONTROL AND MONITORING - INTRODUCE HONEWELL VECB WITH SOFTWARE -04
	Applicable to: MSN 01143-01855, 02014, 02734			
	49-1082 45		16 NOV 22	POWER PLANT - REPLACE APU APIC APS 3200 BY HONEYWELL 131-9(A)
	Applicable to: MSN 01459, 02321-02513, 02887, 04563, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800, 06813			
	52-1157 02		16 FEB 22	DOORS - EMERGENCY EXIT- DE-ACTIVATE FORWARD OVERWING EMERGENCY EXIT
	Applicable to: MSN 04827-04860			
	57-1173 04		16 FEB 22	WINGS - WINGTIP - INTRODUCE SHARKLET DEVICE FOR A319 AND A320 AIRCRAFT
	Applicable to: MSN 05342			
	57-1187 13		18 MAY 22	WINGTIP - INTRODUCE SHARKLET DEVICE FOR A321 AIRCRAFT
	Applicable to: MSN 05528			
	71-1068 01		16 FEB 22	POWER PLANT - FAN COWL DOORS - INTRODUCE NEW FAN COWL DOOR LATCH WITH KEY & FLAG ON CFM56-5A/5B ENGINE.
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07005			
	71-1069 01		16 FEB 22	POWER PLANT - FAN COWL DOORS - INTRODUCE NEW FAN COWL DOOR LATCH WITH KEY & FLAG ON IAE V2500 ENGINE.
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-06121, 06163-06165			
	73-1075 01		16 FEB 22	ENGINE FUEL AND CONTROL - CONTROLLING - INTRODUCE EEC SOFTWARE STANDARD "SCN17" ON V2500-A5 ENGINES.
	Applicable to: MSN 01143-01891			
	73-1082 01		16 FEB 22	ENGINE FUEL AND CONTROL - CONTROLLING - INSTALL EEC SOFTWARE "SCN18" ON IAE V2500-A5 ENGINES.
	Applicable to: MSN 01143-02014			

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M(1)	CRITERION	Linked SB	Incorp. Date	Title
	73-1088 01		16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE EEC SOFTWARE STANDARD "SCN19" ON IAE V2500-A5 ENGINES.
	Applicable to: MSN 01143-02904			
	73-1090 00		16 FEB 22	ENGINE FUEL AND CONTROL- FADEC SYSTEM- INTRODUCE 5BQ FADEC SOFTWARE STANDARD ON CFM56-5B ENGINES - CNF CFM 111B.
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284			
	73-1095 02		16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE ECU SOFTWARE STANDARD "5BR" ON CFM56-5B ENGINES.
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733			
	73-1097 00		16 FEB 22	ENGINE FUEL AND CONTROL- FADEC SYSTEM- INTRODUCE EEC SOFTWARE STANDARD SCN21/AA FOR IAE V2500-A5
	Applicable to: MSN 01143-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773			
	73-1100 02		16 FEB 22	ENGINE FUEL AND CONTROL- FADEC SYSTEM- INSTALL ECU SOFTWARE STANDARD 5BS2 ON CFM56-5B ENGINES.
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05005			
	73-1103 00		16 FEB 22	ENGINE FUEL & CONTROL - FADEC SYSTEM - INTRODUCE ECU SOFTWARE "5BTF3" ON CFM56-5B ENGINES
	Applicable to: MSN 03035, 03058, 03180-03211, 04974, 05101, 05222, 05342, 05749, 05883, 06409			
	73-1112 01		16 FEB 22	ENGINE FUEL AND CONTROL - FADEC SYSTEM - INTRODUCE ECU SOFTWARE STANDARD 5.B.T.F1 ON FADEC1+ HARDWARE ON CFM56-5B ENGINES.
	Applicable to: MSN 02924-03002, 03035-03047, 03111-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04544, 04734-04756, 04953-05107, 05222-05342, 05621-05643			
	73-1136 00		16 FEB 22	FADEC SYSTEM - INTRODUCE FCS5.0 FADEC SOFTWARE ON NEO PW
	Applicable to: MSN 08495-08596			

(1) Evolution code : N=New, R=Revised, E=Effectivity

GENERAL INFORMATION

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SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
GEN-PLP-TOC General Information		1	Documentation update: Deletion of the "20800846 App Sheet" table of content entry.
			Documentation update: Deletion of the "20800846.9001001 App Sheet" documentary unit.
GEN FLS Function in the FMS	A	9	Documentation update: Addition of "FLS Function in the FMS" documentary unit
GEN G/S Mode Engagement before LOC Mode Engagement	A	11	Documentation update: Addition of "G/S Mode Engagement before LOC Mode Engagement" documentary unit
GEN 3 ACTs	B	26	Documentation update: Addition of "3 ACTs" documentary unit
GEN Aileron Anti Droop	B	33	Documentation update: Addition of "Aileron Anti Droop" documentary unit
GEN Cabin Door 3	B	42	Documentation update: Addition of "Cabin Door 3" documentary unit
GEN Single Navigation Lights	B	62	Documentation update: Addition of "Single Navigation Lights" documentary unit
GEN FLS	B	71	Documentation update: Addition of "FLS" documentary unit
GEN FLS/FINAL APP - Coexistence	B	72	Documentation update: Addition of "FLS/FINAL APP - Coexistence" documentary unit
GEN SBAS	B	109	Documentation update: Addition of "SBAS" documentary unit
GEN Weather Hazard Prediction Function	B	118	Documentation update: Addition of "Weather Hazard Prediction Function" documentary unit

GEN ADS-B OUT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AP/FD TCAS	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Backup Navigation Function of the MCDU	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN DIGITAL BACKUP SPEED	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN CPDLC	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Descent Profile Optimization	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FANS	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN FLS Function in the FMS	A	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN FMS2 Release 2	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN GLS	A	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Metric Altitude Indications on the PFD	A	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN NAV Mode Automatically Engaged (Armed) at Go-Around	A	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN PED compatible Operation Manual and Checklist Stowage Aluminium Box	A	15	Effectivity update: The information now also applies to MSN 04563, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN PED compatible Operation Manual and Checklist Stowage Aluminium Box	A	16	Effectivity update: The information no longer applies to MSN 04563, 07098.
GEN PWS	A	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RAAS	A	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RNP AR	A	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN ROW/ROPS	A	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Soft Go-Around	A	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN 4th Occupant Folding Seat	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN 4th Oxygen Mask	B	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AC ESS FEED Auto Switching	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ACT	B	25	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN 1 ADF	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN 2 ADF	B	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ADS-B OUT	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AFT Cargo Heating	B	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AFT Cargo Smoke Detector	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AFT Cargo Ventilation	B	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN Aileron Anti Droop	B	34	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN Air Conditioning System Controller (ACSC)	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN AP/FD TCAS	B	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Avail Indication During Engine Start	B	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Backup Navigation Function of the MCDU	B	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Brake Fans	B	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Bulk Cargo Door	B	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN BUSS	B	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cargo Ventilation System	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Center Tank Transfer Valves	B	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Center Fuel Tank Pumps	B	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN Chemical Oxygen System 22 min	B	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN CIDS SDF	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Door Deadbolt	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Door Escape Panel	B	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Fixed Second Oxygen Bottle	B	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Cockpit Power Outlet	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN COMMERCIAL pb	B	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN CVR Datalink Function	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Data Loading Selector Unit	B	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN DDRMI	B	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN DECEL Message on the PFD	B	56	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN DECEL Message on the PFD	B	57	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
GEN Descent Profile Optimization	B	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Display of Delta ISA	B	59	Effectivity update: The information now also applies to MSN 11531.
GEN Display of Delta ISA	B	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN Dual Ice Detection System	B	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN EGPWS	B	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Electrical Alternate Braking	B	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Expedite Function	B	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FANS A+	B	66	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593,

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Localization Title	Toc Index	ID	Reason
			01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
GEN FANS B+	B	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Fire Extinguishing in the AFT Cargo	B	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Fire Extinguishing in the FWD Cargo	B	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FLS	B	70	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

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Localization Title	Toc Index	ID	Reason
GEN FLS/FINAL APP - Coexistence	B	73	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
GEN FMS Crossload	B	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FTIS	B	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Fuel Leak Detection	B	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Fuel Tank Overflow Alert	B	77	Effectivity update: The information now also applies to MSN 11531.
GEN Fuel Tank Overflow Alert	B	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN FWD Cargo Smoke Detector	B	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN FWD Cargo Ventilation	B	80	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Galley Bus Automatic Shedding	B	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN Galley Bus Automatic Shedding	B	82	Effectivity update: The information now also applies to MSN 11531.
GEN GAPCU	B	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN	B	84	Effectivity update: The information no longer applies to MSN 04860, 05097.

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Localization Title	Toc Index	ID	Reason
Gaseous Oxygen generators in lavatories			
GEN Gaseous Oxygen generators in lavatories	B	85	Effectivity update: The information now also applies to MSN 04860, 05097, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN GLS	B	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN GSM Onboard	B	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN HF DATALINK	B	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN HI ALT pb	B	89	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN IRS Alignment Based on GPS Position	B	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ISIS	B	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN LAF	B	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN LAT DEV SCALE pb	B	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Man-Made Obstacle Function	B	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Metric Altitude Indications on the PFD	B	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN MORA	B	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN NAV Mode Automatically Engaged (Armed) in Go-Around	B	97	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Optional Applications	B	98	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101,

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Localization Title	Toc Index	ID	Reason
			05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
GEN 1 Pair of Overwing Emergency Exit	B	99	Effectivity update: The information now also applies to MSN 11531.
GEN 2 Pairs of Overwing Emergency Exit	B	100	Effectivity update: The information now also applies to MSN 11572, 11597.
GEN Parking Brake Monitoring	B	101	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Printer Function in FMS	B	102	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN PWS	B	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN QAR	B	104	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RAAS	B	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN ROW/ROPS	B	106	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN RPCU	B	107	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN SATCOM	B	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN SDCU	B	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Second Fire Extinguishing Bottle	B	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
GEN Second Fire Extinguishing Bottle	B	112	Effectivity update: The information now also applies to MSN 11531.
GEN Soft Go-Around	B	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN T3CAS	B	114	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Tail Strike Pitch Limit Indicator	B	115	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
GEN Temperature Control Panel	B	116	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
GEN Weather Hazard Prediction Function	B	117	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

AIRCRAFT CONFIGURATION SUMMARY

Ident.: GEN-ACS-00016449.0001001 / 26 JUN 15
Applicable to: ALL

For awareness and for the specified aircraft, the following table provides the flight crew with a list of optional aircraft systems and functions related to flight and aircraft operations.

Ident.: GEN-ACS-00018963.0001001 / 04 MAR 16
Applicable to: ALL

Item	System	Installed

Ident.: GEN-ACS-00015613.0001001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02887-02904, 03032-03047, 03111, 03222-03229, 03284-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-07098

ADS-B OUT	SURV	No

Ident.: GEN-ACS-00015613.0002001 / 23 JUN 15
1 **Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11597**

ADS-B OUT	SURV	Yes

Ident.: GEN-ACS-00016448.0001001 / 23 JUN 15
Applicable to: ALL

AP Automatic Disconnection at Minima	AUTO FLT	No

Ident.: GEN-ACS-00015927.0001001 / 26 JUN 15
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

AP/FD TCAS	AUTO FLT	No

Ident.: GEN-ACS-00015927.0002001 / 26 JUN 15
2 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

AP/FD TCAS	AUTO FLT	Yes

Ident.: GEN-ACS-00015892.0002001 / 19 FEB 16
Applicable to: ALL

Automatic FD Bar Engagement	AUTO FLT	Yes

Ident.: GEN-ACS-00016009.0001001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

Backup Navigation Function of the MCDU	AUTO FLT	No

Ident.: GEN-ACS-00016009.0002001 / 23 JUN 15
3 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Backup Navigation Function of the MCDU	AUTO FLT	Yes

Ident.: GEN-ACS-00025300.0001001 / 05 MAY 22
Applicable to: ALL

BACF	DATALINK	No

Ident.: GEN-ACS-00016014.0004001 / 10 MAY 22

4 **Applicable to: MSN 10949-11597**

DBUS	NAV	Yes

Ident.: GEN-ACS-00016014.0003001 / 04 JUN 19

Applicable to: MSN 08495-09324

BUSS Reversible	NAV	Yes

Ident.: GEN-ACS-00016014.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-04192

BUSS	NAV	No

Ident.: GEN-ACS-00016014.0002001 / 23 JUN 15

Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-07098

BUSS	NAV	Yes

Ident.: GEN-ACS-00016010.0002001 / 23 JUN 15

Applicable to: MSN 04827-04974

CPDLC	DATALINK	Yes

Ident.: GEN-ACS-00016010.0001001 / 23 JUN 15

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

CPDLC	DATALINK	No

Ident.: GEN-ACS-00015917.0001001 / 23 JUN 15

Applicable to: ALL

Derated Takeoff	ENG	No

Ident.: GEN-ACS-00019728.0003001 / 06 JUN 16

6 **Applicable to: MSN 08495-09324, 10949-11597**

Descent Profile Optimization (DPO)	AUTO FLT	Yes

Ident.: GEN-ACS-00019728.0002001 / 06 JUN 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Descent Profile Optimization (DPO)	AUTO FLT	No

Ident.: GEN-ACS-00023360.0001001 / 26 NOV 19

7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

FANS	DATALINK	No

Ident.: GEN-ACS-00023360.0004001 / 26 NOV 19

Applicable to: MSN 04827-04974

FANS B+	DATALINK	Yes

Ident.: GEN-ACS-00015912.0001001 / 23 JUN 15
8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

FLS Function in the FMS	AUTO FLT	No

9 Ident.: GEN-ACS-00015912.0003001 / 04 JUN 19
Applicable to: MSN 11531

FLS/FINAL APP Coexistence	AUTO FLT	Yes

Ident.: GEN-ACS-00015913.0006001 / 16 NOV 18
10 **Applicable to: MSN 10949-11597**

FMS2 Release 2 (including RF leg capability)	AUTO FLT	Yes

Ident.: GEN-ACS-00015913.0005001 / 16 NOV 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

FMS2 Release 1A (including RF leg capability)	AUTO FLT	Yes

11 Ident.: GEN-ACS-00026015.0002001 / 03 NOV 22
Applicable to: ALL

G/S Mode Engagement before LOC Mode Engagement	AUTO FLT	No

Ident.: GEN-ACS-00015899.0001001 / 23 JUN 15
12 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

GLS	AUTO FLT	No

Ident.: GEN-ACS-00015899.0002001 / 23 JUN 15
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

GLS	AUTO FLT	Yes

Ident.: GEN-ACS-00015924.0002001 / 23 JUN 15
Applicable to: ALL

GPS	NAV	Yes

Ident.: GEN-ACS-00016553.0002001 / 23 JUN 15
Applicable to: ALL

GPS PRIMARY Function	NAV	Yes

Ident.: GEN-ACS-00022547.0002001 / 30 OCT 18
Applicable to: ALL

HPFD	EIS	No

Ident.: GEN-ACS-00015926.0001001 / 23 JUN 15

13 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Metric Altitude Indications on the PFD	EIS	No

Ident.: GEN-ACS-00015926.0002001 / 23 JUN 15

Applicable to: MSN 04827-04860

Metric Altitude Indications on the PFD	EIS	Yes

Ident.: GEN-ACS-00015900.0001001 / 23 JUN 15

Applicable to: ALL

MLS	AUTO FLT	No

Ident.: GEN-ACS-00015923.0001001 / 19 FEB 16

Applicable to: MSN 01376

NAV Mode automatically Engaged (Armed) in Go-Around	AUTO FLT	No

Ident.: GEN-ACS-00015923.0002001 / 19 FEB 16

14 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

NAV Mode automatically Engaged (Armed) in Go-Around	AUTO FLT	Yes

Ident.: GEN-ACS-00024439.0002001 / 04 NOV 20

15 **Applicable to: MSN 02321, 04563, 04953-05005, 05097, 06632, 06800, 06949, 07098, 08596, 09324, 10949-11597**

PED compatible Operation Manual and Checklist Stowage Aluminium Box	EQPT	Yes

Ident.: GEN-ACS-00024439.0001001 / 04 NOV 20

16 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03710, 03733-04544, 04570-04860, 05066, 05101-05987, 06097, 06121, 06139-06598, 06634-06798, 06806-06895, 07005-07081, 08495-08529, 08635-09190**

PED compatible Operation Manual and Checklist Stowage Aluminium Box	EQPT	No

Ident.: GEN-ACS-00016013.0001001 / 23 JUN 15

Applicable to: MSN 01459

PWS	SURV	No

Ident.: GEN-ACS-00016013.0002001 / 23 JUN 15

17 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

PWS	SURV	Yes

Ident.: GEN-ACS-00015920.0001001 / 23 JUN 15

Applicable to: ALL

QFE BARO Setting	NAV	No

Ident.: GEN-ACS-00019573.0001001 / 10 MAY 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

RAAS	SURV	No

Ident.: GEN-ACS-00019573.0002001 / 10 MAY 16

18 **Applicable to: MSN 08495-09324, 10949-11597**

RAAS	SURV	Yes

Ident.: GEN-ACS-00015897.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

RNP AR	AUTO FLT	No

Ident.: GEN-ACS-00015897.0002001 / 16 NOV 18

19 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**

RNP AR below 0.3	AUTO FLT	Yes

Ident.: GEN-ACS-00016008.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

ROW/ROPS	SURV	No

Ident.: GEN-ACS-00016008.0002001 / 23 JUN 15

20 **Applicable to: MSN 08495-09324, 10949-11597**

ROW/ROPS	SURV	Yes

Ident.: GEN-ACS-00025170.0001001 / 12 MAY 22

Applicable to: ALL

SLS	NAV	No

Ident.: GEN-ACS-00016015.0001001 / 22 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Soft Go-Around	ENG	No

Ident.: GEN-ACS-00016015.0002001 / 22 MAR 17

21 **Applicable to: MSN 08495-09324, 10949-11597**

Soft Go-Around	ENG	Yes

IF INSTALLED TABLE

Ident.: GEN-IFIT-00016590.0001001 / 23 JUN 15

Applicable to: ALL

The "If Installed Table" provides a list of optional systems and functions of the aircraft. For most of the optional systems or functions associated with the "if installed" ◁ symbol in the FCOM, the table indicates if the optional systems or functions are installed, or not installed.

Note: *Highly customized options such as cabin installations are not covered in the following table.*

Ident.: GEN-IFIT-00018965.0001001 / 22 MAR 16
Applicable to: ALL

Item	System	Installed

Ident.: GEN-IFIT-00015896.0002001 / 17 MAR 17
22 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

4th Occupant Folding Seat 4th Occupant Fourth Occupant	EQUIPMENT	Yes

Ident.: GEN-IFIT-00016012.0002001 / 21 MAR 16
23 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

4th Oxygen Mask Four	OXY	Yes

Ident.: GEN-IFIT-00018779.0001001 / 21 MAR 16
Applicable to: MSN 03032

AC ESS FEED Auto Switching	ELEC	No

Ident.: GEN-IFIT-00018779.0002001 / 21 MAR 16
24 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

AC ESS FEED Auto Switching	ELEC	Yes

Ident.: GEN-IFIT-00016516.0001001 / 04 NOV 20
25 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

L13

ACT 1 ACT 2 ACTs ACT PUMP ACT PUMP LO PR ACT XFR FAULT ACT1 ACT2 ACTs FWD ACT AFT1 ACT AFT2 ACT	FUEL	No

26 Ident.: GEN-IFIT-00016516.0004001 / 04 NOV 20
Applicable to: MSN 11531

L13

3 ACTs Capability ACT PUMP ACT PUMP LO PR ACT XFR FAULT ACT1 ACT2 ACTs FWD ACT AFT1 ACT AFT2 ACT	FUEL	Yes

Ident.: GEN-IFIT-00020299.0001001 / 13 SEP 16

27 **Applicable to: MSN 02321, 02887, 04563, 04827-04860, 05005, 05097, 05528, 05749-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

1 ADF ADF 1 ADF1	NAV	Yes

Ident.: GEN-IFIT-00020299.0002001 / 13 SEP 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05345, 05591-05643

L13

1 ADF ADF 1 ADF1	NAV	No

Ident.: GEN-IFIT-00020300.0001001 / 13 SEP 16

28 **Applicable to: MSN 02321, 02887, 04563, 04827-04860, 05005, 05097, 05528, 05749-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

2 ADFs 2 ADF ADF1 ADF 1 ADF2 ADF 2 ADFs	NAV	No

Ident.: GEN-IFIT-00020300.0002001 / 13 SEP 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05345, 05591-05643

L13

2 ADFs 2 ADF ADF1 ADF 1 ADF 2 ADF2 ADFs	NAV	Yes

Ident.: GEN-IFIT-00016641.0002001 / 23 JUN 15

29 **Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11597**

ADS-B OUT	SURV	Yes

Ident.: GEN-IFIT-00016641.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02887-02904, 03032-03047, 03111, 03222-03229, 03284-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-07098

ADS-B OUT	SURV	No

Ident.: GEN-IFIT-00015891.0001001 / 21 MAR 16

30 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02887-03002, 03035-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

AFT Cargo Heating AFT CRG HOT AIR temperature selector HOT AIR pb AFT CRG HEAT AFT CARGO HEAT AFT CARGO DUCT OVHT AFT Cargo heat controller Cargo Heat Cargo Temperature Regulation CRG HEAT Forward (aft) cargo heat controller HOT AIR	COND	No

Ident.: GEN-IFIT-00015891.0002001 / 21 MAR 16

Applicable to: MSN 02014, 02734, 03032, 04827-04860

L13

AFT Cargo Heating AFT CRG HOT AIR temperature selector HOT AIR pb AFT CRG HEAT AFT CARGO HEAT AFT CARGO DUCT OVHT AFT Cargo heat controller Cargo Heat Cargo Temperature Regulation CRG HEAT Forward (aft) cargo heat controller HOT AIR	COND	Yes

Ident.: GEN-IFIT-00015901.0001001 / 21 MAR 16
Applicable to: MSN 01459

L13

AFT Cargo Smoke Detector SMOKE AFT CARGO SMOKE SMOKE AFT CRG DET FAULT AFT CRG DET AFT CARGO SMOKE AFT CRG DET FAULT	FIRE	No

Ident.: GEN-IFIT-00015901.0002001 / 21 MAR 16
31 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

AFT Cargo Smoke Detector SMOKE AFT CARGO SMOKE SMOKE AFT CRG DET FAULT AFT CRG DET AFT CARGO SMOKE AFT CRG DET FAULT	FIRE	Yes

Ident.: GEN-IFIT-00015931.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02896-03002, 03035-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05987, 06097, 06121, 06139-07098

L13

AFT Cargo Ventilation Cargo Ventilation AFT ISOL VALVE AFT CRG VENT AFT CRG VENT FAULT AFT Cargo isol valves FWD(AFT) CARGO DUCT OVHT FWD(AFT) CRG HEAT FWD(AFT) CRG HEAT FAULT FWD(AFT) CRG ISOL VALVE FWD(AFT) CRG VENT FAULT FWD(AFT) CRG VENT Forward (aft) cargo isolation valves isolation valves	VENT	No

Ident.: GEN-IFIT-00015931.0002001 / 21 MAR 16

32 **Applicable to: MSN 02014-02321, 02734-02887, 03032, 04563, 04827-04860, 05005, 05097, 08495-09324, 10949-11597**

L13

AFT Cargo Ventilation Cargo Ventilation AFT ISOL VALVE AFT CRG VENT AFT CRG VENT FAULT AFT Cargo isol valves FWD(AFT) CARGO DUCT OVHT FWD(AFT) CRG HEAT FWD(AFT) CRG HEAT FAULT FWD(AFT) CRG ISOL VALVE FWD(AFT) CRG VENT FAULT FWD(AFT) CRG VENT Forward (aft) cargo isolation valves isolation valves	VENT	Yes

33 Ident.: GEN-IFIT-00016522.0001001 / 23 JUN 15

Applicable to: MSN 11531

Aileron Anti Droop	F/CTL	No

Ident.: GEN-IFIT-00016522.0002001 / 23 JUN 15

34 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

Aileron Anti Droop	F/CTL	Yes

Ident.: GEN-IFIT-00015919.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

L13

Air Conditioning System Controller (ACSC) ACSC ACSC 1 ACSC 2 Air Conditioning System Controllers	COND	No

Ident.: GEN-IFIT-00015919.0002001 / 21 MAR 16

35 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Air Conditioning System Controller (ACSC) ACSC ACSC 1 ACSC 2 Air Conditioning System Controllers	COND	Yes

Ident.: GEN-IFIT-00016523.0001001 / 04 JUN 19
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

L13

AP/FD TCAS AP/FD TCAS function	AUTO FLT	No

Ident.: GEN-IFIT-00016523.0002001 / 04 JUN 19
36 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

L13

AP/FD TCAS AP/FD TCAS function	AUTO FLT	Yes

Ident.: GEN-IFIT-00016640.0001001 / 21 MAR 16
Applicable to: ALL

L13

ATSAW ADS-B IN	SURV	No

Ident.: GEN-IFIT-00016524.0002001 / 23 JUN 15
Applicable to: ALL

Automatic FD Bar Engagement	AUTO FLT	Yes

Ident.: GEN-IFIT-00018780.0001001 / 21 MAR 16
Applicable to: MSN 02321, 02887

L13

Avail Indication During Engine Start AVAIL Indication	ENG	No

Ident.: GEN-IFIT-00018780.0002001 / 21 MAR 16
37 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Avail Indication During Engine Start AVAIL Indication	ENG	Yes

Ident.: GEN-IFIT-00016681.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

L13

Backup Navigation Function of the MCDU BACK UP NAV	AUTO FLT	No

Ident.: GEN-IFIT-00016681.0002001 / 21 MAR 16
38 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Backup Navigation Function of the MCDU BACK UP NAV	AUTO FLT	Yes

Ident.: GEN-IFIT-00016525.0002001 / 21 MAR 16
Applicable to: ALL

L13

BARO/RADIO Instead of MDA/MDH/DH BARO BARO/RADIO	NAV	Yes

Ident.: GEN-IFIT-00016526.0002001 / 21 MAR 16
39 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Brake Fans Brake cooling fans BRK FAN Brake Fan Brake fans 1, 2, 3 and 4 Brake fans 5, 6, 7 and 8	BRAKE	Yes

Ident.: GEN-IFIT-00016526.0001001 / 21 MAR 16
Applicable to: MSN 01251

L13

Brake Fans Brake cooling fans BRK FAN Brake Fan Brake fans 1, 2, 3 and 4 Brake fans 5, 6, 7 and 8	BRAKE	No

Ident.: GEN-IFIT-00015875.0001001 / 21 MAR 16
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

L13

Bulk Cargo Door Bulk Cargo Compartment Door Bulk Door	DOORS	No

Ident.: GEN-IFIT-00015875.0002001 / 21 MAR 16
40 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Bulk Cargo Door Bulk Cargo Compartment Door Bulk Door	DOORS	Yes

Ident.: GEN-IFIT-00018781.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-04192

L13

BUSS Backup Speed/Altitude Scale Backup Speed Scale	NAV	No

Ident.: GEN-IFIT-00018781.0002001 / 21 MAR 16
41 **Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

BUSS Backup Speed/Altitude Scale Backup Speed Scale	NAV	Yes

42 Ident.: GEN-IFIT-00022270.0001001 / 09 MAR 18
Applicable to: MSN 11531

L13

Cabin Door 3 Door 3	DOORS	Yes

Ident.: GEN-IFIT-00021488.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02896-03002, 03035-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

L13

Cargo ventilation system Cargo isolation valves Extraction fan	VENT	No

Ident.: GEN-IFIT-00021488.0002001 / 17 MAR 17
43 **Applicable to: MSN 02014-02321, 02734-02887, 03032, 04563, 04827-04860, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**

L13

Cargo ventilation system Cargo isolation valves Extraction fan	VENT	Yes

Ident.: GEN-IFIT-00016535.0001001 / 22 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

L13

Center Fuel Tank Transfer Valves Center Tank Transfer Valves L CTR TK XFR valve CTR TK XFR valve R	FUEL	No

Ident.: GEN-IFIT-00016535.0004001 / 22 MAR 17

44 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**

L13

Center Fuel Tank Transfer Valves Center Tank Transfer Valves L CTR TK XFR valve CTR TK XFR valve R	FUEL	Yes

Ident.: GEN-IFIT-00021220.0004001 / 22 MAR 17

45 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**

L13

Center Fuel Tank Pumps CTR TK PUMP 1 CTR TK PUMP 2	FUEL	No

Ident.: GEN-IFIT-00021220.0001001 / 22 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

L13

Center Fuel Tank Pumps CTR TK PUMP 1 CTR TK PUMP 2	FUEL	Yes

Ident.: GEN-IFIT-00015930.0002001 / 21 MAR 16

46 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02887, 04563, 04827-04860, 05005, 05097, 05883, 05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Chemical Oxygen System 22 min Chemical Oxygen System 22 min	OXY	Yes

Ident.: GEN-IFIT-00015930.0003001 / 21 MAR 16

Applicable to: MSN 01459, 02014, 02734, 02896-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05752, 05947

L13

Chemical Oxygen System 15 min Chemical Oxygen System 15 min	OXY	Yes

Ident.: GEN-IFIT-00016625.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

L13

CIDS-SDF CIDS 1 SMOKE DETECT Smoke Detection Function (SDF)	SMOKE	No

Ident.: GEN-IFIT-00016625.0002001 / 17 MAR 17

47 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

CIDS-SDF CIDS 1 SMOKE DETECT Smoke Detection Function (SDF)	SMOKE	Yes

Ident.: GEN-IFIT-00015929.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02924-03035, 03058-03111

L13

Cockpit Door Deadbolt Deadbolt	EQUIPMENT	No

Ident.: GEN-IFIT-00015929.0002001 / 17 MAR 17

48 **Applicable to: MSN 02734, 02896-02904, 03047, 03180-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Cockpit Door Deadbolt Deadbolt	EQUIPMENT	Yes

Ident.: GEN-IFIT-00018782.0001001 / 21 MAR 16

Applicable to: MSN 01143-01251, 01518, 01593-01628

Cockpit Door Escape Panel	DOOR	No

Ident.: GEN-IFIT-00018782.0002001 / 21 MAR 16

49 **Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Cockpit Door Escape Panel	DOOR	Yes

Ident.: GEN-IFIT-00016690.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

L13

Cockpit Fixed Second Oxygen Bottle Two	OXY	No

Ident.: GEN-IFIT-00016690.0002001 / 21 MAR 16

50 **Applicable to: MSN 08495-09324, 10949-11597**

L13

Cockpit Fixed Second Oxygen Bottle Two	OXY	Yes

Ident.: GEN-IFIT-00016612.0001001 / 23 JUN 15

Applicable to: ALL

Cockpit Foot Heater	COND	No

Ident.: GEN-IFIT-00016639.0001001 / 17 MAR 17
Applicable to: ALL

L13

Cockpit Foot Warmer Foot Warmer System Foot Warmer ON/OFF Control Switch	EQUIPMENT	No

Ident.: GEN-IFIT-00021875.0001001 / 25 JUL 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734

L13

Cockpit Power Outlet Power Outlet	EQUIPMENT	No

Ident.: GEN-IFIT-00021875.0002001 / 30 AUG 18
51 **Applicable to: MSN 02887-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Cockpit Power Outlet Power Outlet	EQUIPMENT	Yes

Ident.: GEN-IFIT-00016614.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628

L13

COMMERCIAL pb COMMERCIAL	ELEC	No

Ident.: GEN-IFIT-00016614.0002001 / 21 MAR 16
52 **Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

COMMERCIAL pb COMMERCIAL	ELEC	Yes

Ident.: GEN-IFIT-00016615.0001001 / 23 JUN 15
53 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

CVR Datalink Function	COM	No

Ident.: GEN-IFIT-00016626.0001001 / 04 SEP 18
Applicable to: ALL

CVR ERASE Function	COM	Yes

Ident.: GEN-IFIT-00025082.0001001 / 09 NOV 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

L13

Data Loading Selector Unit DLSU	DATA LOADING	No

Ident.: GEN-IFIT-00025082.0002001 / 09 NOV 21

54 **Applicable to: MSN 10949-11597**

L13

Data Loading Selector Unit DLSU	DATA LOADING	Yes

Ident.: GEN-IFIT-00016647.0001001 / 21 MAR 17

Applicable to: ALL

L13

DC BUS Entertainment TR Entertainment DC BUS Ent DC BUS Entertainment TR Ent TR Ent.	ELEC	No

Ident.: GEN-IFIT-00016527.0001001 / 21 MAR 16

55 **Applicable to: MSN 04827-04860, 05005, 05097, 05528, 05749-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

L13

DDRMI Digital Distance and Radio Magnetic Indicator	NAV	No

Ident.: GEN-IFIT-00016527.0002001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-04974, 05066, 05101-05345, 05591-05643, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

L13

DDRMI Digital Distance and Radio Magnetic Indicator	NAV	Yes

Ident.: GEN-IFIT-00023538.0002001 / 28 MAY 20

56 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597**

L13

DECEL Message on the PFD DECEL	EIS	Yes

Ident.: GEN-IFIT-00023538.0001001 / 28 MAY 20

57 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**

L13

DECEL Message on the PFD DECEL	EIS	No

Ident.: GEN-IFIT-00016528.0001001 / 21 MAR 16

Applicable to: ALL

L13

Derated Takeoff DERATE	ENG	No

Ident.: GEN-IFIT-00019730.0003001 / 06 JUN 16

58 **Applicable to: MSN 08495-09324, 10949-11597**

L13

Descent Profile Optimization DPO	AUTO FLT	Yes

Ident.: GEN-IFIT-00019730.0002001 / 06 JUN 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

L13

Descent Profile Optimization DPO	AUTO FLT	No

Ident.: GEN-IFIT-00016580.0001001 / 21 MAR 16

59 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 11531**

L13

Display of Delta ISA Delta ISA	EIS	No

Ident.: GEN-IFIT-00016580.0002001 / 21 MAR 16

60 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

L13

Display of Delta ISA Delta ISA	EIS	Yes

Ident.: GEN-IFIT-00024932.0001001 / 09 NOV 21

Applicable to: ALL

Drain Mast	WATER	No

Ident.: GEN-IFIT-00016529.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Dual Ice Detection System	ICE	No

Ident.: GEN-IFIT-00016529.0002001 / 23 JUN 15

61 **Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

Dual Ice Detection System	ICE	Yes

Ident.: GEN-IFIT-00016574.0002001 / 23 JUN 15

Applicable to: ALL

Dual Navigation Lights	LIGHTS	Yes

62 Ident.: GEN-IFIT-00025910.0002001 / 03 NOV 22

Applicable to: ALL

Single Navigation Lights	LIGHTS	No

Ident.: GEN-IFIT-00016628.0001001 / 13 MAR 18
Applicable to: MSN 04827-04860

EGPWS	SURV	No

Ident.: GEN-IFIT-00016628.0002001 / 13 MAR 18
63 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

EGPWS	SURV	Yes

Ident.: GEN-IFIT-00016530.0001001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Electrical Alternate Braking	L/G	No

Ident.: GEN-IFIT-00016530.0002001 / 23 JUN 15
64 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Electrical Alternate Braking	L/G	Yes

Ident.: GEN-IFIT-00016575.0002001 / 23 JUN 15
Applicable to: ALL

ELT sw	COM	Yes

Ident.: GEN-IFIT-00022409.0001001 / 05 MAR 19
Applicable to: ALL

Enhanced RTA RTA MISSED	AUTO FLT	No

Ident.: GEN-IFIT-00020758.0002001 / 18 MAY 17
Applicable to: ALL
L13

EVAC Panel COMMAND PB (guarded) COMMAND PB Evacuation (EVAC) signalling EVAC HORN HORN SHUT OFF PB CAPT and PURS/CAPT SW	COM	Yes

Ident.: GEN-IFIT-00021713.0002001 / 10 MAY 21
Applicable to: MSN 04827-04860
L13

Expedite function EXP CLB EXP DES EXPED pb	AUTO FLT	No

Ident.: GEN-IFIT-00021713.0001001 / 10 MAY 21

65 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Expedite function EXP CLB EXP DES EXPED pb	AUTO FLT	Yes

Ident.: GEN-IFIT-00015918.0001001 / 23 JUN 15

Applicable to: ALL

Extended FLEX Takeoff	ENG	No

Ident.: GEN-IFIT-00016531.0002001 / 21 MAR 16

Applicable to: ALL

L13

External Ice Detector Light ICE IND	ICE	Yes

Ident.: GEN-IFIT-00021527.0001001 / 30 AUG 18

66 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

FANS A+ DCDU ATC MSG pb	FANS	No

Ident.: GEN-IFIT-00022629.0001001 / 20 NOV 18

Applicable to: ALL

L13

FANS A+B DCDU ATC MSG pb	FANS	No

Ident.: GEN-IFIT-00021529.0001001 / 30 AUG 18

Applicable to: ALL

L13

FANS B DCDU ATC MSG pb	FANS	No

Ident.: GEN-IFIT-00021530.0002001 / 30 AUG 18

Applicable to: MSN 04827-04974

L13

FANS B+ DCDU ATC MSG pb	FANS	Yes

Ident.: GEN-IFIT-00021530.0001001 / 30 AUG 18

67 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

FANS B+ DCDU ATC MSG pb	FANS	No

Ident.: GEN-IFIT-00022627.0001001 / 20 NOV 18

Applicable to: ALL

L13

FANS C DCDU ATC MSG pb	FANS	No

Ident.: GEN-IFIT-00015909.0001001 / 21 MAR 16

Applicable to: ALL

L13

Fan Speed Controller (FSC) Two Operating Speeds	VENT	No

Ident.: GEN-IFIT-00016629.0001001 / 21 MAR 16

Applicable to: MSN 01459

L13

Fire Extinguishing in the AFT Cargo SMOKE FWD(AFT) CRG BTL 1(2) FAULT Forward (aft) cargo fire extinguishing	FIRE	No

Ident.: GEN-IFIT-00016629.0003001 / 21 MAR 16

68 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Fire Extinguishing in the AFT Cargo SMOKE FWD(AFT) CRG BTL 1(2) FAULT Forward (aft) cargo fire extinguishing	FIRE	Yes

Ident.: GEN-IFIT-00016630.0001001 / 21 MAR 16

Applicable to: MSN 01459

L13

Fire Extinguishing in the FWD Cargo SMOKE FWD(AFT) CRG BTL 1(2) FAULT Forward (aft) cargo fire extinguishing	FIRE	No

Ident.: GEN-IFIT-00016630.0005001 / 21 MAR 16

69 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Fire Extinguishing in the FWD Cargo SMOKE FWD(AFT) CRG BTL 1(2) FAULT Forward (aft) cargo fire extinguishing	FIRE	Yes

Ident.: GEN-IFIT-00016578.0001001 / 23 JUN 15

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

Fixed Cabin Gaseous Oxygen System	OXY	No

Ident.: GEN-IFIT-00015898.0001001 / 21 MAR 17

70 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

L13

FLS F-G/S F-G/S BASED ON ISA F-G/S-F-LOC F-G/S-LOC F-LOC F-LOC*/F-LOC FLS 1 FLS 2 FLS function NO FLS FOR THIS APPR	AUTO FLT	No

71 Ident.: GEN-IFIT-00015898.0002001 / 21 MAR 17

Applicable to: MSN 11531

L13

FLS F-G/S F-G/S BASED ON ISA F-G/S-F-LOC F-G/S-LOC F-LOC F-LOC*/F-LOC FLS 1 FLS 2 FLS function NO FLS FOR THIS APPR	AUTO FLT	Yes

72 Ident.: GEN-IFIT-00022411.0002001 / 04 SEP 18

Applicable to: MSN 11531

FLS/FINAL APP - Coexistence	AUTO FLT	Yes

Ident.: GEN-IFIT-00022411.0001001 / 04 SEP 18

73 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

FLS/FINAL APP - Coexistence	AUTO FLT	No

Ident.: GEN-IFIT-00016579.0001001 / 23 JUN 15

Applicable to: MSN 01459

FMS Crossload	AUTO FLT	No

Ident.: GEN-IFIT-00016579.0002001 / 23 JUN 15

74 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

FMS Crossload	AUTO FLT	Yes

Ident.: GEN-IFIT-00015617.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593, 02321, 03035-03047, 03111, 03733

FTIS	FUEL	No

Ident.: GEN-IFIT-00015617.0002001 / 23 JUN 15

75 **Applicable to: MSN 01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03032, 03058, 03180-03710, 03761-05987, 06097, 06121, 06139-09324, 10949-11597**

FTIS	FUEL	Yes

Ident.: GEN-IFIT-00016532.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05345, 05591-05883

Fuel Leak Detection	FUEL	No

Ident.: GEN-IFIT-00016532.0002001 / 23 JUN 15

76 **Applicable to: MSN 04827-04860, 05528, 05947-05987, 06097, 06121, 06139-09324, 10949-11597**

Fuel Leak Detection	FUEL	Yes

Ident.: GEN-IFIT-00016533.0001001 / 23 JUN 15

77 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05591, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

Fuel Tank Overflow Alert	FUEL	No

Ident.: GEN-IFIT-00016533.0002001 / 23 JUN 15

78 **Applicable to: MSN 05621-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

Fuel Tank Overflow Alert	FUEL	Yes

Ident.: GEN-IFIT-00015893.0001001 / 21 MAR 16
Applicable to: ALL

L13

FWD Cargo Heating Temperature Selector FWD(AFT) CARGO DUCT OVHT FWD(AFT) CRG HEAT FWD(AFT) CRG HEAT FAULT FWD CRG HEAT Cargo Heat Cargo Temperature Regulation CRG HEAT Forward (aft) cargo heat controller HOT AIR Fwd cargo heat controller	COND	No

Ident.: GEN-IFIT-00015925.0001001 / 21 MAR 16
Applicable to: MSN 01459

L13

FWD Cargo Smoke Detector SMOKE FWD CARGO SMOKE FWD CARGO SMOKE SMOKE FWD CRG DET FAULT FWD CRG DET	FIRE	No

Ident.: GEN-IFIT-00015925.0002001 / 21 MAR 16
79 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

FWD Cargo Smoke Detector SMOKE FWD CARGO SMOKE FWD CARGO SMOKE SMOKE FWD CRG DET FAULT FWD CRG DET	FIRE	Yes

Ident.: GEN-IFIT-00015932.0001001 / 21 MAR 16
80 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

L13

FWD Cargo Ventilation FWD Cargo Outlet Isolation Valve Cargo Ventilation FWD ISOL Valve FWD CRG VENT FWD CARGO ISOL VALVE Forward (aft) cargo isolation valves isolation valves Fwd cargo isol valves	VENT	No

Ident.: GEN-IFIT-00015932.0002001 / 21 MAR 16
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

L13

FWD Cargo Ventilation FWD Cargo Outlet Isolation Valve Cargo Ventilation FWD ISOL Valve FWD CRG VENT FWD CARGO ISOL VALVE Forward (aft) cargo isolation valves Fwd cargo isol valves	VENT	Yes

Ident.: GEN-IFIT-00016617.0001001 / 21 MAR 16
81 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

L13

Galley Bus Automatic Shedding Galley Load Automatic Shedding	ELEC	No

Ident.: GEN-IFIT-00016617.0002001 / 21 MAR 16
82 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

L13

Galley Bus Automatic Shedding Galley Load Automatic Shedding	ELEC	Yes

Ident.: GEN-IFIT-00016618.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

L13

GAPCU Ground and Auxiliary Power Control Unit	ELEC	No

Ident.: GEN-IFIT-00016618.0002001 / 21 MAR 16
83 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

GAPCU Ground and Auxiliary Power Control Unit	ELEC	Yes

Ident.: GEN-IFIT-00019705.0001001 / 13 MAY 16
84 **Applicable to: MSN 02321, 04827, 05005**

L13

Gaseous Oxygen Generators in lavatories Gaseous Generators	OXY	No

Ident.: GEN-IFIT-00019705.0002001 / 13 MAY 16

85 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03710, 03733-04773, 04860-04974, 05066-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Gaseous Oxygen Generators in lavatories Gaseous Generators	OXY	Yes

Ident.: GEN-IFIT-00016534.0001001 / 21 MAR 16

86 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

L13

GLS GLS Autoland GLS1 GLS2	AUTO FLT	No

Ident.: GEN-IFIT-00016534.0002001 / 21 MAR 16

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

L13

GLS GLS Autoland GLS1 GLS2	AUTO FLT	Yes

Ident.: GEN-IFIT-00016649.0002001 / 21 MAR 16

Applicable to: ALL

L13

GPS FM/GPS POS DISAGREE GPS 1(2) FAULT GPS 1 GPS 2 GPS 1+2	NAV	Yes

Ident.: GEN-IFIT-00016650.0002001 / 21 MAR 16

Applicable to: ALL

L13

GPS PRIMARY Function GPS PRIMARY	NAV	Yes

Ident.: GEN-IFIT-00020297.0002001 / 17 MAR 17

Applicable to: MSN 03035-03111, 03222-03229, 03294, 03588, 03630-03710, 03733-04358, 04734-04773, 04953-04974, 05066, 05101

GSM Onboard	COM	Yes

Ident.: GEN-IFIT-00020297.0001001 / 17 MAR 17

87 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03032, 03180-03211, 03266-03284, 03313-03565, 03595, 04389-04662, 04827-04860, 05005, 05097, 05107-05987, 06097, 06121, 06139-09324, 10949-11597**

GSM Onboard	COM	No

Ident.: GEN-IFIT-00015911.0001001 / 30 AUG 18

88 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

L13

HF Datalink HF 1(2) DATA FAULT HF DATA LINK	COM	No

Ident.: GEN-IFIT-00015911.0002001 / 30 AUG 18

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

L13

HF Datalink HF 1(2) DATA FAULT HF DATA LINK	COM	Yes

Ident.: GEN-IFIT-00020132.0002001 / 22 MAR 17

Applicable to: ALL

L13

HF System HF HF1 HF2	COM	Yes

Ident.: GEN-IFIT-00016644.0001001 / 21 MAR 16

Applicable to: MSN 01459, 02734, 03002-03032, 04827-04860

L13

HIALT pb Operation on High Altitude Airfields HI ALT LANDING pb-sw HI ALT LANDING pb-sw	OXY	No

Ident.: GEN-IFIT-00016644.0002001 / 21 MAR 16

89 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02924, 03035-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

HIALT pb Operation on High Altitude Airfields HI ALT LANDING pb-sw HI ALT LANDING pb-sw	OXY	Yes

Ident.: GEN-IFIT-00018783.0001001 / 03 NOV 21

Applicable to: ALL

L13

HUD HUDs	SURV	No

Ident.: GEN-IFIT-00016651.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-02904

IRS Alignment Based on GPS Position	NAV	No

Ident.: GEN-IFIT-00016651.0002001 / 23 JUN 15

90 **Applicable to: MSN 02887, 02924-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

IRS Alignment Based on GPS Position	NAV	Yes

Ident.: GEN-IFIT-00015618.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

ISIS	NAV	No

Ident.: GEN-IFIT-00015618.0002001 / 23 JUN 15

91 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ISIS	NAV	Yes

Ident.: GEN-IFIT-00020693.0001001 / 17 MAR 17

Applicable to: ALL

L13

ITP ATSA ITP ITP TRAFFIC LIST page IN TRAIL PROCEDURE IN TRAIL PROCEDURE page	SURV	No

Ident.: GEN-IFIT-00016594.0002001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05240, 05345

LAF	F/CTL	No

Ident.: GEN-IFIT-00016594.0001001 / 23 JUN 15

92 **Applicable to: MSN 04827-04860, 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**

LAF	F/CTL	Yes

Ident.: GEN-IFIT-00016596.0001001 / 21 MAR 16

93 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

LAT DEV SCALE pb L/DEV deviation scale	NAV	No

Ident.: GEN-IFIT-00016600.0001001 / 18 MAY 22

Applicable to: ALL

L13

LOCB/C LOC B/C*	AUTO FLT	No

Ident.: GEN-IFIT-00016602.0002001 / 21 MAR 16
Applicable to: ALL
L13

Logo Light LOGO Logo Lights	LIGHTS	Yes

Ident.: GEN-IFIT-00020306.0001001 / 17 MAR 17
94 **Applicable to: MSN 02321, 02887-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Man-made Obstacle Function	SURV	Yes

Ident.: GEN-IFIT-00020306.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734

Man-made Obstacle Function	SURV	No

Ident.: GEN-IFIT-00016604.0001001 / 23 JUN 15
Applicable to: ALL

Manual Flush Control	WATER	No

Ident.: GEN-IFIT-00016605.0002001 / 21 MAR 16
Applicable to: ALL

Manual Shutoff Valves	WATER	Yes

Ident.: GEN-IFIT-00016688.0001001 / 23 JUN 15
95 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Metric Altitude Indications on the PFD	EIS	No

Ident.: GEN-IFIT-00016688.0002001 / 23 JUN 15
Applicable to: MSN 04827-04860

Metric Altitude Indications on the PFD	EIS	Yes

Ident.: GEN-IFIT-00016536.0001001 / 21 MAR 16
Applicable to: ALL
L13

MLS MLS1 MLS2	AUTO FLT	No

Ident.: GEN-IFIT-00022761.0002001 / 04 JUN 19
Applicable to: MSN 04827-04860
L13

MORA Minimum Off Route Altitude (MORA)	AUTO FLT	Yes

Ident.: GEN-IFIT-00022761.0001001 / 04 JUN 19

96 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

MORA Minimum Off Route Altitude (MORA)	AUTO FLT	No

Ident.: GEN-IFIT-00016603.0001001 / 23 JUN 15

Applicable to: MSN 01376

NAV Mode automatically Engaged (Armed) in Go-Around	AUTO FLT	No

Ident.: GEN-IFIT-00016603.0002001 / 23 JUN 15

97 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

NAV Mode automatically Engaged (Armed) in Go-Around	AUTO FLT	Yes

Ident.: GEN-IFIT-00016645.0002001 / 23 JUN 15

Applicable to: ALL

OEB Reminder	EIS	Yes

Ident.: GEN-IFIT-00021528.0001001 / 03 NOV 22

98 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Optional Applications: A623 ATS623 OCL DCL D-ATIS	FANS	No

Ident.: GEN-IFIT-00016597.0001001 / 18 OCT 22

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

L12

Overwing Emergency Exit Overwing Escape Route FWD EMER EXIT AFT EMER EXIT	DOORS	No

Ident.: GEN-IFIT-00016597.0002001 / 26 OCT 22

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

L12

1 Pair of Overwing Emergency Exit Overwing Escape Route FWD EMER EXIT	DOORS	Yes

Ident.: GEN-IFIT-00016597.0004001 / 26 OCT 22

99 **Applicable to: MSN 04827-04860, 11531**

L12

1 Pair of Overwing Emergency Exit Overwing Escape Route AFT EMER EXIT	DOORS	Yes

Ident.: GEN-IFIT-00016597.0003001 / 26 OCT 22

00 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139, 11572-11597**

L12

2 Pairs of Overwing Emergency Exit Overwing Escape Route FWD EMER EXIT AFT EMER EXIT	DOORS	Yes

Ident.: GEN-IFIT-00016538.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04465

L13

Parking Brake Monitoring PARK BRK FAULT	BRAKE	No

Ident.: GEN-IFIT-00016538.0002001 / 21 MAR 16

01 **Applicable to: MSN 04544-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Parking Brake Monitoring PARK BRK FAULT	BRAKE	Yes

Ident.: GEN-IFIT-00024889.0001001 / 09 NOV 21

Applicable to: ALL

PAX Oxygen Discharge Indicator	OXY	No

Ident.: GEN-IFIT-00021553.0002001 / 17 MAR 17

Applicable to: ALL

Predictive GPWS	SURV	Yes

Ident.: GEN-IFIT-00016608.0001001 / 22 MAR 16

Applicable to: MSN 01459

L13

Printer Function in FMS PRINT FUNCTIONFMS PRINTER NOT AVAILABLE FMS	AUTO FLT	No

Ident.: GEN-IFIT-00016608.0002001 / 22 MAR 16

02 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Printer Function in FMS PRINT FUNCTION PRINTER NOT AVAILABLE	AUTO FLT	Yes

Ident.: GEN-IFIT-00016609.0002001 / 21 MAR 16

Applicable to: ALL

Push to Level Off	AUTO FLT	Yes

Ident.: GEN-IFIT-00016648.0001001 / 17 MAR 17

Applicable to: MSN 01459

L13

PWS Windshear DET WINDSHEAR DETECTION PRED W/S DETFAULT W/S AHEAD WINDSHEAR AHEAD Windshear PRED W/S DET predictive windshear system PWS SCAN	SURV	No

Ident.: GEN-IFIT-00016648.0002001 / 17 MAR 17

03 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

PWS Windshear DET WINDSHEAR DETECTION PRED W/S DET FAULT W/S AHEAD WINDSHEAR AHEAD Windshear PRED W/S DET predictive windshear system PWS SCAN	SURV	Yes

Ident.: GEN-IFIT-00016695.0001001 / 23 JUN 15

04 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

QAR	RECORDING	No

Ident.: GEN-IFIT-00016643.0001001 / 21 MAR 16
Applicable to: ALL

L13

QFE BARO Setting QFE OPTION	NAV	No

Ident.: GEN-IFIT-00016610.0001001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

RAAS	SURV	No

Ident.: GEN-IFIT-00016610.0002001 / 23 JUN 15
05 **Applicable to: MSN 08495-09324, 10949-11597**

RAAS	SURV	Yes

Ident.: GEN-IFIT-00016539.0003001 / 21 MAR 16
Applicable to: ALL

L13

Rain Repellent System Rain Repellent RAIN RPLNT pb RAIN RPLNT	RAIN	Yes

Ident.: GEN-IFIT-00016737.0001001 / 23 JUN 15
Applicable to: ALL

RMP Load Function	COM	No

Ident.: GEN-IFIT-00016581.0001001 / 23 JUN 15
Applicable to: ALL

RNP pb	NAV	No

Ident.: GEN-IFIT-00016582.0001001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

L13

ROW/ROPS ROW/ROP ROW	SURV	No

Ident.: GEN-IFIT-00016582.0002001 / 28 MAY 20
06 **Applicable to: MSN 08495-09324, 10949-11597**

L13

ROW/ROPS ROW/ROP ROW	SURV	Yes

Ident.: GEN-IFIT-00016583.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

RPCU	CAB PR	No

Ident.: GEN-IFIT-00016583.0002001 / 23 JUN 15

07 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

RPCU	CAB PR	Yes

Ident.: GEN-IFIT-00016642.0001001 / 22 MAR 17

08 **Applicable to: MSN 01459, 02014-02321, 02887, 03032, 04563, 05005, 05097, 05947-05987, 06097, 06121, 06139-06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**

L13

SATCOM SATCOM DATA FAULT SATCOM FAULT Satellite Communications (SATCOM) SATCOM System	COM	No

Ident.: GEN-IFIT-00016642.0002001 / 12 MAR 18

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

L13

SATCOM SATCOM DATA FAULT SATCOM FAULT Satellite Communications (SATCOM) SATCOM System	COM	Yes

09 Ident.: GEN-IFIT-00026476.0002001 / 24 FEB 23

Applicable to: ALL

SBAS	NAV	NO

Ident.: GEN-IFIT-00016646.0001001 / 17 MAR 17

10 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

SDCU Smoke Detection Control Unit SDCU	SMOKE	No

Ident.: GEN-IFIT-00016646.0002001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

L13

SDCU Smoke Detection Control Unit SDCU	SMOKE	Yes

Ident.: GEN-IFIT-00016584.0001001 / 23 JUN 15

11 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

Second Fire Extinguishing Bottle	FIRE	No

Ident.: GEN-IFIT-00016584.0002001 / 23 JUN 15

12 **Applicable to: MSN 02014, 04827-04860, 11531**

Second Fire Extinguishing Bottle	FIRE	Yes

Ident.: GEN-IFIT-00024807.0001001 / 12 MAY 22

Applicable to: ALL

SLS	AUTO FLT	No

Ident.: GEN-IFIT-00018784.0002001 / 04 DEC 17

13 **Applicable to: MSN 08495-09324, 10949-11597**

L13

Soft go-around GA SOFT	ENG	Yes

Ident.: GEN-IFIT-00018784.0001001 / 04 DEC 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

L13

Soft go-around GA SOFT	ENG	No

Ident.: GEN-IFIT-00018785.0001001 / 21 MAR 16

Applicable to: ALL

L13

Steep Approach Capability STEEP APPR	NAV	No

Ident.: GEN-IFIT-00022422.0001001 / 03 DEC 19

Applicable to: ALL

SYNCHRO AVIONICS	Information	No

Ident.: GEN-IFIT-00016586.0001001 / 23 JUN 15

Applicable to: ALL

T2CAS	SURV	No

Ident.: GEN-IFIT-00016587.0001001 / 23 JUN 15

14 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

T3CAS	SURV	No

Ident.: GEN-IFIT-00016587.0002001 / 23 JUN 15

Applicable to: MSN 04827-04860

T3CAS	SURV	Yes

Ident.: GEN-IFIT-00016588.0001001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

L13

Tail Strike Pitch Limit Indicator Tailstrike Pitch Limit Indicator	EIS	No

Ident.: GEN-IFIT-00016588.0002001 / 21 MAR 17
15 **Applicable to: MSN 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**

L13

Tail Strike Pitch Limit Indicator Tailstrike Pitch Limit Indicator	EIS	Yes

Ident.: GEN-IFIT-00018786.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Temperature Control Panel	COND	No

Ident.: GEN-IFIT-00018786.0002001 / 21 MAR 16
16 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Temperature Control Panel	COND	Yes

Ident.: GEN-IFIT-00016541.0001001 / 23 JUN 15
Applicable to: ALL

Thrust Bump	ENG	No

Ident.: GEN-IFIT-00024888.0002001 / 09 NOV 21
Applicable to: ALL

Toilet Servicing Door	WATER	No

Ident.: GEN-IFIT-00016011.0001001 / 21 MAR 16
Applicable to: ALL

L13

TPIS TYRE LO PR	WHEEL	No

Ident.: GEN-IFIT-00017055.0001001 / 30 AUG 18
17 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

L13

HZD switch ON Weather Hazard Prediction Function WX+T+H WX+T+HZD	SURV	No

18 Ident.: GEN-IFIT-00017055.0002001 / 30 AUG 18
Applicable to: MSN 11531

L13

HZD switch ON Weather Hazard Prediction Function WX+T+H WX+T+HZD	SURV	Yes

Ident.: GEN-IFIT-00020783.0001001 / 20 DEC 16
Applicable to: ALL

Weight and Balance System (WBS)	EIS	No

Ident.: GEN-IFIT-00024931.0002001 / 09 NOV 21
Applicable to: ALL

Wing Leading Edge Ventilation Intake	VENT	No

Ident.: GEN-IFIT-00016543.0001001 / 21 MAR 16
Applicable to: ALL

L13

Wiper Intermittent Position Intermittent Sweep Function Intermittent Sweeping	RAIN	No

AIRBUS COPYRIGHT

Ident.: GEN-00024289.0001001 / 05 MAY 22
Applicable to: ALL

This Manual has been reviewed under European Export control Regulations (EU) 2021/821 and was determined as EU_Not in Export Control List.
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MAIN FCOM CHANGES

Ident.: GEN-00012867.0001001 / 03 AUG 17
Applicable to: ALL

The purpose of the Main FCOM Changes is to provide operators with general information about the most significant changes that are introduced in the current revision of the manual.
The main FCOM changes are available on the Airbus World portal, under the path: Content Library / Flight Operations / Manuals / Main FCOM - FCTM - MMEL Changes.

In addition, every revised Documentary Unit (DU) has a revision highlight (HL) that:
- Indicates the change(s) made to the DU
- Can be found in the associated “Preliminary Pages – Summary of Highlights” subchapter.

In addition to the Main FCOM Changes, the Modification Operational Impact (MOI) documents available on the Airbus World portal provide the operational impact linked to a MOD number.

FCOM PURPOSE

Ident.: GEN-00012627.0001001 / 22 NOV 21
Applicable to: ALL

FCOM PURPOSE

The Flight Crew Operating Manual is a support document for flight crew.

The purpose of the FCOM is to:
- Provide all necessary operating limitations, procedures, performance and system information the flight crew needs to safely and efficiently operate A320 family aircraft during normal, abnormal, and emergency situations
- Serve directly as Flight Crew Operating Manual, or as a basis for Operators to develop their own customized Airline Operations Manual, in accordance with applicable requirements
- Serve as a comprehensive reference guide during initial and refresher flight crew training.

Note: *This manual is not designed:*

- *To teach basic piloting skills*
- *To provide basic piloting techniques applicable to jet aircraft, or information, that are considered as basic airmanship for trained flight crews who are familiar with that type of aircraft and its general handling characteristics.*

The FCOM complements the Airplane Flight Manual.
If the FCOM data differs from the AFM data, the AFM remains the reference.
As a supplement to the FCOM, the FCTM may provide additional information that the flight crew should read in conjunction with the FCOM. For more information, *Refer to FCTM/GI FCTM Purpose*.

For any questions or comments related to this manual, the Operator's Flight Operations Management can contact the Airbus Flight Operations Support & Training Standards department.

FCOM CONTENTS

The FCOM has four sections:

- Aircraft Systems : This section is divided into ATA chapters for each aircraft system. This section includes a specific description of each system and its associated cockpit interfaces.
  When several layouts are possible for the same cockpit interface (e.g. when the position of the ON/OFF label of a switch changes depending on the aircraft configuration), the FCOM may describe only one typical layout.
- Procedures : This section contains the following chapters:
  - Abnormal and Emergency Procedures
  - Normal Procedures that include the SOP, the SUP, and the SRP
  - Special Operations.
- Limitations : This section provides the aircraft and system limitations that the flight crew must know or refer to in operations.
- Performance : This section includes the performance computation description for each flight phase.

DOCUMENTARY UNITS

The FCOM is made of Documentary Units. The DU is the smallest part of information with a technical content.
The DUs are listed on a separate "List of Effective Documentary Units" (LEDU). *Refer to the General section*.

Note: *1. DUs can be grouped into Group of DU (GDU)*
2. Temporary information may be provided via Temporary DU (TDU).

IDENTIFICATION STRIP

Below the title of the DU, the identification strip provides:
- The list of MSN the DU is applicable to
- For TDU, the reference to the DU impacted by the TDU.

LIST OF EFFECTIVE SECTIONS/SUBSECTIONS (LESS) - PAPER ONLY

Ident.: GEN-00013786.0001001 / 23 JUN 15
Applicable to: ALL

The List of Effective Sections/Subsections (LESS) summarizes all the sections and subsections contained in the FCOM. For each revision, a new LESS is issued when at least one DU of the section/subsection is changed.

The LESS consists of:

- The "M" field that may provide the following evolution code:
  - The "N" letter indicates a new section introduced by the revision
  - The "R" letter indicates a section in which the content has been revised
  - The "E" letter indicates an aircraft validity change within the section
  - The "M” letter indicates a section that have move within the FCOM
- The “Localization” field that allows localizing the section within the manual with the product structure
- The “Subsection title” field
- The “Rev. Date” field that indicated the date at which the section was changed.

LIST OF EFFECTIVE DOCUMENTARY UNITS (LEDU) - PAPER ONLY

Ident.: GEN-00013789.0001001 / 23 MAR 11
Applicable to: ALL

For each revision, a new List of Effective Documentary Units (LEDU) is issued at the section level. The LEDU provides information about the DU localization, applicability, identification and issue date.

The LEDU consists of:

- The "M" field that may provide the following Evolution Code:
  - The "N" letter indicates a new DU introduced by the revision
  - The "R" letter indicates a revised DU: The content of the DU is updated by the revision. A vertical line in the margin of the DU locates the modified part
  - The "E" letter indicates an aircraft validity change for the DU: The list of MSNs for which the DU is effective has been changed compared to the previous LEDU, by addition or deletion of one or several MSN
- The “Localization” field that allows localizing the DU in the manual with the product structure of the manual
- The "T" field (Temporary Information) that contains a cross if the associated DU is a TDU
- The "DU title" that provides the title of the DU
- The “DU identification” that identifies the DU with its own unique identification number or the GDU with its own unique code.

- The “DU date” that indicates when the DU has been released
- The DU criteria which lists the technical or operational criteria for which the DU and solution is applicable to.
- The “Applicable to” which provides the list of aircraft this DU and solution is applicable to
- The “Impacted by TDU” which is the identification of the TDU superseding the DU

LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS (LETDU) - PAPER ONLY

Ident.: GEN-00013803.0001001 / 23 JUN 15
Applicable to: ALL

The List of Effective Temporary Documentary Units (LETDU) provides a summary of the Temporary DU impacting the section.

The LETDU consists of:
- The "M" field that may provide the following Evolution Code:
  - The "N" letter indicates a new TDU introduced by the revision
  - The "R" letter indicates a revised TDU: The content of the TDU is updated by the revision. A vertical line in the margin of the TDU locates the modified part
  - The "E" letter indicates an aircraft validity change for the TDU: The list of MSNs the TDU is applicable to has been changed compared to the previous LETDU, by addition or deletion of one or several MSN
- The “Localization” field that allows localizing the TDU in the manual with the product structure of the manual
- The “TDU Title” that provides the title of the TDU
- The “TDU identification” that identifies the TDU with its identification number with its own unique code
- The “TDU date” that indicates when the TDU has been released
- The TDU criteria which lists the technical or operational criteria, the it is applicable to
- The “Applicable to” which provides the list of aircraft this TDU is applicable to
- The “Impacted DU” which is the Identification of DU superseded by the TDU
- The “Reason for issue” of the TDU

Note: *1. TDU is displayed on a yellow background*
2. within the QRH the TDU replaces the impacted DU

AIRCRAFT ALLOCATION TABLE (AAT) - PAPER ONLY

Ident.: GEN-00013804.0001001 / 23 JUN 15
Applicable to: ALL

The Aircraft Allocation Table (AAT) provides a view of the fleet covered in the FCOM. For each aircraft, the AAT provides its MSN, its registration number and the model.

LIST OF MODIFICATIONS (LOM) - PAPER ONLY

Ident.: GEN-00013805.0001001 / 23 JUN 15
Applicable to: ALL

The List of Modifications (LOM) lists the criteria (Modification Proposal (MP) or Service Bulletins (SB)) which the installation on the aircraft affects the FCOM.

Note: *Each MP has one or more associated MODs. The MP/MOD correlation is available in AirN@v / Engineering.*

The LOM also indicates:
- The title of the criteria
- The date of incorporation of the criteria in the FCOM
- The list of aircraft that have the criteria
- The "M" field that may indicate the following evolution code
  - The "E" letter indicates an aircraft validity change of the criteria. The list of aircraft to which the criteria applies has changed compared to the previous FCOM revision, by addition or deletion of one or several aircraft.
  - The "N" letter indicates new criteria added by this FCOM revision
  - The "R" letter indicates a change in the criteria title or associated SB

FCOM USE AND ORGANIZATION

Ident.: GEN-00012688.0001001 / 21 MAR 16
Applicable to: ALL

DEFINITIONS OF WARNINGS, CAUTIONS AND NOTES

The following are the official definitions of warnings, cautions and notes taken directly from the JAR25/CS-25 and applicable to Airbus flight operation documentation:

WARNING	An operating procedure, technique, etc. that may result in personal injury or loss of life if not followed.
CAUTION	An operating procedure, technique, etc. that may result in damage to equipment if not followed.

NOTE	An operating procedure, technique, etc. considered essential to emphasize. Information contained in notes may also be safety related.

INFORMATION TYPE AND LAYERS

The FCOM has technical information that may be used for:
- Flight crew operations in flight, or on ground
- Airlines operations on ground
- Training.

To take the above-noted objectives into account, the FCOM is organized in three layers as follows:
- Layer 1: "Need to know"
  Layer 1 presents information that is necessary in the cockpit.
- Layer 2: "Nice to know"
  Layer 2 presents information that is used as a reference, in order to fully understand the logic of the aircraft and pilot interfaces.
- Layer 3: Detailed information
  Layer 3 provides more detailed explanations, that are not necessarily needed in flight.

Note: *For paper only, the following examples show the visual characteristics of each kind of layer*

EXAMPLE	- Text in layer 1 Layer 1 is the default layer. No symbology when not following layer 2 or layer 3 information.

L2

EXAMPLE	- Text in layer 2

L3

EXAMPLE	- Text in layer 3

L1

EXAMPLE	- Text in layer 1 (as this text follows a text in layer 2 or 3, symbology "L1")

OPTIONAL EQUIPMENT

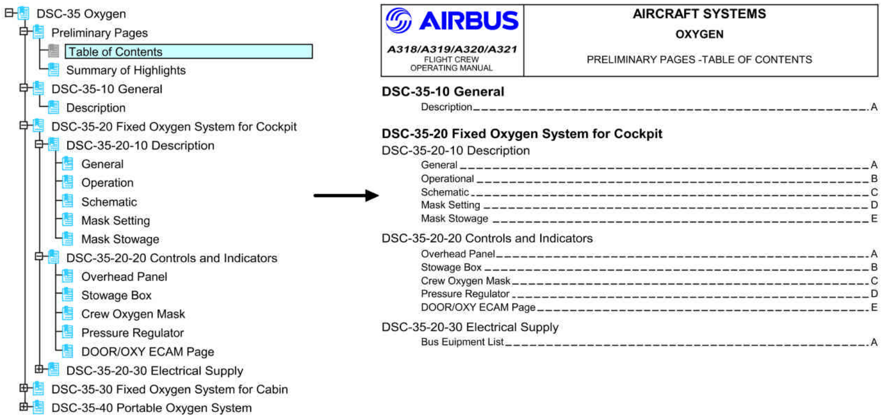
The legend ◁✻ (if installed) indicates that a paragraph or an illustration is applicable only if the related optional equipment is installed.

FCOM FORMAT AND STYLE INFORMATION - PAPER ONLY

Ident.: GEN-00013793.0001001 / 09 NOV 20
Applicable to: ALL

TABLE OF CONTENTS

Each TOC entry has an alphabetical index that identifies this TOC entry within its subsection. The manual user can easily find a TOC entry content within the manual thanks to this alphabetical index and the subsection identification. Both are indicated in the TOC and both cross-refer to the paper page footer (see the TOC indexing part below).



- DSC-35 Oxygen
  - Preliminary Pages
    - Table of Contents
    - Summary of Highlights
  - DSC-35-10 General
    - Description
  - DSC-35-20 Fixed Oxygen System for Cockpit
    - DSC-35-20-10 Description
      - General
      - Operation
      - Schematic
      - Mask Setting
      - Mask Stowage
    - DSC-35-20-20 Controls and Indicators
      - Overhead Panel
      - Stowage Box
      - Crew Oxygen Mask
      - Pressure Regulator
      - DOOR/OXY ECAM Page
    - DSC-35-20-30 Electrical Supply
  - DSC-35-30 Fixed Oxygen System for Cabin
  - DSC-35-40 Portable Oxygen System

AIRBUS
A318/A319/A320/A321
FLIGHT CREW
OPERATING MANUAL

AIRCRAFT SYSTEMS
OXYGEN
PRELIMINARY PAGES -TABLE OF CONTENTS

DSC-35-10 General

Description ______ A

DSC-35-20 Fixed Oxygen System for Cockpit

DSC-35-20-10 Description

General ______ A
Operational ______ B
Schematic ______ C
Mask Setting ______ D
Mask Stowage ______ E

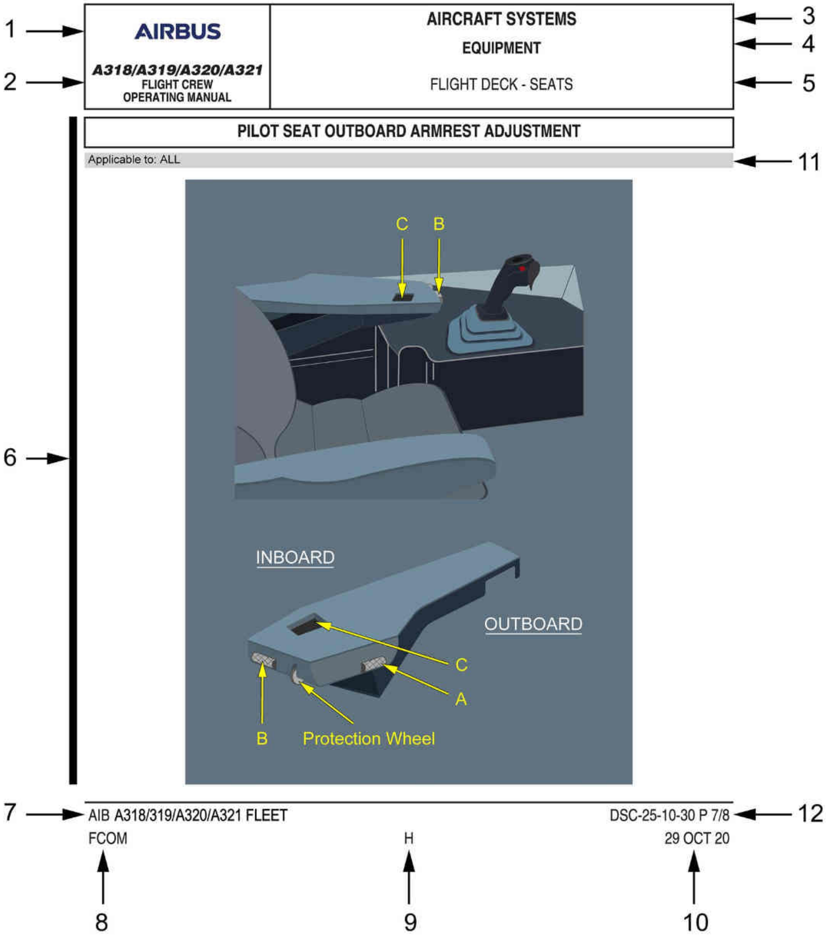
DSC-35-20-20 Controls and Indicators

Overhead Panel ______ A
Stowage Box ______ B
Crew Oxygen Mask ______ C
Pressure Regulator ______ D
DOOR/OXY ECAM Page ______ E

DSC-35-20-30 Electrical Supply

Bus Euipment List ______ A

HEADER AND FOOTER



AIRBUS
A318/A319/A320/A321
FLIGHT CREW
OPERATING MANUAL

AIRCRAFT SYSTEMS
EQUIPMENT
FLIGHT DECK - SEATS

PILOT SEAT OUTBOARD ARMREST ADJUSTMENT

Applicable to: ALL

AIB A318/319/A320/A321 FLEET
FCOM

H

DSC-25-10-30 P 7/8
29 OCT 20

1
2
3
4
5
6
7
8
9
10
11
12
C
B
INBOARD
OUTBOARD
C
A
B
Protection Wheel

1. Airline logo
2. Aircraft types and manual
3. Level 2 chapter (Section level 2: GEN, DSC, PRO, LIM, PER)
4. Level 3 chapter
5. Level 4 chapter

6. Revision mark
7. Key product (document identification and aircraft designation)
8. Key product (manual code)
9. Page index
10. Last evolution date
11. Identification strip (list of impacted aircraft)
12. Section path

REVISION MARK

In the paper format, a vertical bar in the margin of the DU identifies the modified part. Each vertical bar has a numerical index that refers to the associated reason of the change in the Summary of Highlight.
This Summary of Highlight lists all the changes and associated reasons of the change (if necessary) that the revision has introduced.

TOC INDEXING

In the paper page footer, the TOC indexing is of the following type:

A	:	The paper page contains the whole "A" TOC entry content
A to B	:	The paper page contains the whole "A" and "B" TOC entries contents
A →	:	The "A" TOC entry content starts on this paper page and continues on the following paper page
← A	:	The "A" TOC entry content starts on a previous paper page and finishes on this paper page
← A →	:	The "A" TOC entry content starts on a previous paper page and continues on the following paper page
A to C→	:	The paper page contains the whole "A" and "B" TOC entries contents but the "C" TOC entry content starts on this paper page and continues on the following paper page
← A to C	:	The paper page contains the whole "B" and "C" TOC entries contents but the "A" TOC entry content starts on a previous paper page and finishes on this paper page
← A to C →	:	The paper page contains the whole "B" TOC entry content but the "A" TOC entry content starts on a previous paper page and finishes on this paper page and the "C" TOC entry content starts on this paper page and continues on the following paper page

Note: *1. The indexes follow the alphabetical order: A, B, C, ..., Z, AA, AB, AC, ..., AZ, BA, BB, BC, ...*
2. For each subsection, the index starts again from A.
3. When a TOC entry content continues on the following paper page, the text "Continued on the following page" is also indicated.

FCOM REVISIONS

Ident.: GEN-00012634.0001001 / 09 NOV 20
Applicable to: ALL

FCOM REVISION

FCOM revisions are issued to add, update, or revise information. The Operator determines the revision periodicity.
When necessary, a revision may be issued in between the defined periodicity (e.g. need for urgent update).
A vertical bar appears to the left of all revised parts of the manual.

TEMPORARY INFORMATION

Some FCOM sections may need a temporary update (e.g. to explain a system behavior that will be modified by a future standard). In such cases, the applicable FCOM section is updated with a TDU.
Information contained in the TDU is highlighted in the manual and the initial content of the FCOM remains available for consultation and comparison and is highlighted (identification strip) as being impacted by the TDU.
A LEDU is provided in the FCOM.

OEB GENERAL DESCRIPTION

Applicable to: ALL

Ident.: GEN-A-00022458.0001001 / 09 NOV 20

DEFINITION

An Operations Engineering Bulletin is published to inform Operators of any deviations from initial design objectives that have a significant operational impact. An OEB provides the Operators with technical information and temporary operational procedures that take into account these deviations.

An OEB:
- Is temporary and usually focuses on one operational subject only
- Is included in the OEB section of the QRH so that the flight crew can easily access it
- At any time during the flight, if the OEB conditions are applicable, the flight crew must apply the operational procedure(s) that is in the QRH OEB section.

Ident.: GEN-A-00022459.0001001 / 09 NOV 20

TYPE OF OEB

OEBs can either be red or white, depending on their level of priority.

- RED OEBs are published to indicate that non-compliance with the recommended procedures may have a significant impact on the safe operation of the aircraft. The Operators shall provide all flight crews with these OEBs or their content without delay.
- WHITE OEBs are published to indicate that non-compliance with the recommended procedures may have a significant impact on aircraft operation. Airbus recommends that the Operators apply these OEBs within 30 days from the date of publication of these OEBs.

The information in OEBs is recommended by Airbus. If the OEB has an impact on the airworthiness of the aircraft, Airbus also issues a Temporary Revision of the Airplane Flight Manual. If the procedures contained in the red OEB differ from the procedures in the AFM TR, the approved AFM TR remains the reference.
Airbus recommends that all operators rapidly incorporate the corrective Service Bulletins that cancel the OEB when they become available.

Ident.: GEN-A-00022460.0001001 / 09 NOV 20

OEB CONTENT AND MANAGEMENT

OEB IN THE QRH

Each OEB includes all of the following items:
- The title of the OEB PROC
- The “ECAM ENTRY" field:
  This section identifies if one of the possible conditions to apply the OEB PROC is an ECAM warning/caution.
  The flight crew must disregard the ECAM procedure and/or STATUS of the ECAM alerts listed in the "ECAM ENTRY" field and must apply the QRH’s OEB procedure instead.
- The OEB operational procedure(s) that the flight crew must apply
- The technical explanation of the deviation from the initial design objectives.

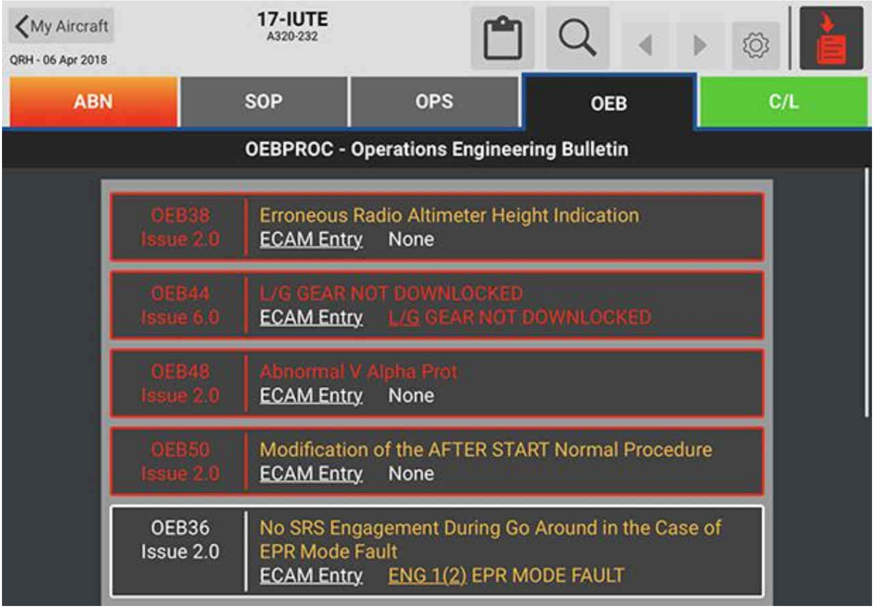
OEB IMMEDIATE ACTIONS

OEB Immediate Actions are actions that the flight crew must memorize, in order to be able to rapidly apply them, without referring the OEB.

OEB Immediate Actions are surrounded by a box in the OEB procedure, in order to enable the flight crew to easily identify them and are preceded by the phrase ‘IMMEDIATELY APPLY’.

QRH LIST OF EFFECTIVE OEBS

The LEOEB enables the flight crew to identify all the OEBs that are applicable to one specific aircraft.



OEBPROC - Operations Engineering Bulletin

OEB38 Issue 2.0	Erroneous Radio Altimeter Height Indication ECAM Entry None
OEB44 Issue 6.0	L/G GEAR NOT DOWNLOCKED ECAM Entry L/G GEAR NOT DOWNLOCKED
OEB48 Issue 2.0	Abnormal V Alpha Prot ECAM Entry None
OEB50 Issue 2.0	Modification of the AFTER START Normal Procedure ECAM Entry None
OEB36 Issue 2.0	No SRS Engagement During Go Around in the Case of EPR Mode Fault ECAM Entry ENG 1(2) EPR MODE FAULT

The QRH LEOEB includes:

- The "Identification" field that identifies the OEB number and its issue number. The identification number and title of red OEBs are in red font in the eQRH. The identification number and title of white OEBs are in white font in the eQRH. This identification field enables the flight crew to easily identify the applicable OEBs before flight.

  Note: *OEBs are listed in numerical order and red OEBs are displayed before white OEBs.*

- The "Title" field provides the OEB title and the "ECAM Entry" part of the OEB PROC. This enables the flight crew to easily identify the ECAM procedure that is affected by the OEB.

CAUTION	When Airbus provides the Operator with the LEOEB, the information “ECAM Entry ” does not necessarily mean that (for Operators that use the OEB REMINDER function) the Operator’s maintenance personnel activated the OEB REMINDER codes for this OEB onboard the aircraft. It is the Operator’s responsibility to define an appropriate process to provide the flight crew with confirmation that the OEB REMINDER codes are activated for the ECAM alerts affected by OEBs.

TDU GENERAL DESCRIPTION

Ident.: GEN-00023795.0001001 / 29 NOV 19
Applicable to: ALL

A TDU in the FCOM informs the flight crew about a temporary change in a normal Standard Operating Procedure, Advisory or Limitations. The TDU contains the reason for change in order to better understand and memorize this temporary change.

The TDU contains several indications:
- The date of application of the new or revised content
- The reason for change explains why the section is updated with a short general description of the malfunction
- The yellow dash line indicates the affected documentary unit
- When applicable, the arrow link provides a link to the previous content.

TAB GENERAL DESCRIPTION

Ident.: GEN-00023794.0001001 / 29 NOV 19
Applicable to: ALL

A TAB is a description of a system behavior that temporarily deviates from the intended system design and that the flight crew can notice.
The TAB enables the flight crew to better recognize, understand and if applicable, react to the abnormal system behavior in order to avoid any undue operational delay.
When applicable, temporary abnormal behaviors are described in the related section of the Aircraft System in a dedicated product folder identified as "Temporary Abnormal Behaviors".
Each TAB contains a description of the malfunction with alternative instruction called "Operational recommendation" (if applicable).

ABBREVIATIONS

Ident.: GEN-00012598.0001001 / 26 OCT 22
Applicable to: ALL

A

Abbreviation	Term
A/BRK	Autobrake
A/C	Aircraft
A/L	Airline
A/SKID	Anti-skid
A/THR	Autothrust
AA	Airworthiness Authorities
AAL	Above Aerodrome Level
AAT	Aircraft Allocation Table
ABCU	Alternate Braking Control Unit
ABN	Abnormal
ABV	Above
AC	Alternating Current
ACARS	ARINC Communication Addressing and Reporting System
ACAS	Airborne Collision Avoidance System
ACC	Active Clearance Control
ACCEL	Acceleration
ACCU	Accumulator
ACD	Airworthiness Compliance Document
ACK	Acknowledge
ACP	Audio Control Panel
ACSC	Air Conditioning System Controller
ACT	Additional Center Tank
ADC	Air Data Computer
ADF	Automatic Direction Finder
ADIRS	Air Data Inertial Reference System
ADIRU	Air Data Inertial Reference Unit
ADM	Air Data Module
ADR	Air Data Reference
ADS	Automatic Dependent Surveillance
ADS-B	Automatic Dependent Surveillance - Broadcast
ADS-C	Automatic Dependent Surveillance - Contract
ADT	Autonomous Distress Tracking
ADV	Advisory
AEO	All Engines Operative
AEVC	Avionic Equipment Ventilation Controller
AFE	Above Field Elevation

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Continued from the previous page

Abbreviation	Term
AFM	Airplane Flight Manual
AFMC	Auxiliary Fuel Management Computer
AFMS	Auxiliary Fuel Management System
AFS	Auto Flight System
AGL	Above Ground Level
AIDS	Aircraft Integrated Data System
AIL	Aileron
AIME	Autonomous Integrity Monitoring Extrapolation
AIP	Attendant Indication Panel
AIRAC	Aeronautical Information Regulation And Control
ALD	Actual Landing Distance
ALT	Altitude
ALTN	Alternate
ALTSM	Altimeter Setting Monitor
AMC	Acceptable Means of Compliance
AMI	Airline Modifiable Information
AMM	Aircraft Maintenance Manual
AMU	Audio Management Unit
ANT	Antenna
AOA	Angle of Attack
AOC	Airline Operational Control
AP	Autopilot
APP	Approach
APPR	Approach
APPU	Asymmetry Position Pick-off Unit
APU	Auxiliary Power Unit
AR	Authorization Required
ARINC	Aeronautical Radio Incorporated
ARN	Aircraft Registration Number
ARPT	Airport
ARR	Arrival
ARS	Automatic Retraction System
ASAP	As Soon As Possible
ASD	Accelerate Stop Distance
ASDA	Accelerate Stop Distance Available
ASI	Air Speed Indicator
ATA	Air Transport Association
ATC	Air Traffic Control
ATIS	Automatic Terminal Information System
ATM	Air Traffic Management

Continued on the following page

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Abbreviation	Term
ATN	Aeronautical Telecommunications Network
ATS	Air Traffic Service
ATSAW	Airborne Traffic Situational Awareness
ATSU	Air Traffic Service Unit
ATT	Attitude
AUTO	Automatic
AVNCS	Avionics
AWY	Airway

B

Abbreviation	Term
B/C	Back Course
BACF	Braking Action Computation Function
BACV	Buffer Air Check Valve
BARO	Barometric
BASOV	Buffer Air Shut Off Valve
BAT	Battery
BCL	Battery Charge Limiter
BCU	Backup Control Unit
BDDV	Brake Dual Distribution Valve
BFO	Beat Frequency Oscillator
BITE	Built-In Test Equipment
BKUP	Backup
BLW	Below
BMC	Bleed Monitoring Computer
BPS	Back-Up Power Supply
BRG	Bearing
BRK	Brake
BRT	Bright
BSCU	Brake and Steering Control Unit
BTC	Bus Tie Contactor
BTL	Bottle
BTS	Bleed Temperature Sensor
BUS	Busbar
BUSS	Back Up Speed Scale

C

Abbreviation	Term
C/B	Circuit Breaker
C/L	Checklist

Continued on the following page

Continued from the previous page

Abbreviation	Term
CAB	Cabin
CAPT	Captain, Capture
CAS	Calibrated Airspeed
CAT	Category
CCD	Cursor Control Device
CDA	Continuous Descent Approach
CDL	Configuration Deviation List
CDLS	Cockpit Door Locking System
CDO	Continuous Descent Operations
CDSS	Cockpit Door Surveillance System
CDU	Control Display Unit
CF	Cost of Fuel
CFDIU	Centralized Fault Display Interface Unit
CFDS	Centralized Fault Display System
CFIT	Controlled Flight Into Terrain
CG	Center of Gravity
CHAN	Channel
CHG	Change
CI	Cost Index
CIDS	Cabin Intercommunication Data System
CIDS-SDF	Cabin Intercommunication Data System - Smoke Detection Function
CINS	Cabin Information Network System
CKPT	Cockpit
CL	Climb, Checklist
CLB	Climb
CLR	Clear
CM1	Crewmember 1 (left seat)
CM2	Crewmember 2 (right seat)
CMS	Centralized Maintenance System, Constant Mach Segment
CO	Company
CO RTE	Company Route
COM	Communication
COMM	Communication
COND	Conditioning
CONF	Configuration
CONFIG	Configuration
CONT	Continuous
CP	Control Panel
CPC	Cabin Pressure Controller
CPDLC	Controller-Pilot Datalink Communication

Continued on the following page

Continued from the previous page

Abbreviation	Term
CRC	Continuous Repetitive Chime
CRG	Cargo
CRS	Course
CRT	Cathode Ray Tube
CRZ	Cruise
CSAS	Conditioned Service Air System
CST	Constraint
CSTR	Constraint
CT	Cost of Time
CTL	Control
CTL PNL	Control Panel
CTR	Center
CVR	Cockpit Voice Recorder

D

Abbreviation	Term
DA	Drift Angle
DAC	Double Annular Combustor
D-ATIS	Datalink Automatic Terminal Information Service
DBUS	Digital Backup Speed
DC	Direct Current
DCDU	Datalink Control and Display Unit
DCL	Digital Cabin Logbook
DCMS	Doors Control and Monitoring System
DDRMI	Digital Distance and Radio Magnetic Indicator
DECEL	Deceleration
DES	Descent
DEST	Destination
DET	Detection, Detector
DEV	Deviation
DFDR	Digital Flight Data Recorder
DH	Decision Height
DIR	Direction
DIR TO	Direct To
DISC	Disconnect
DIST	Distance
DLSU	Data Loading Selector Unit
DMC	Display Management Computer
DME	Distance Measuring Equipment
DMU	Data Management Unit (Aids)

Continued on the following page

Continued from the previous page

Abbreviation	Term
DN	Down
DPO	Descent Profile Optimization
DSDL	Dedicated Serial Datalink
DTG	Distance To Go
DTO	Derated Takeoff
DU	Display Unit, Documentary Unit

E

Abbreviation	Term
E/WD	Engine/Warning Display
EASA	European Union Aviation Safety Agency
ECAM	Electronic Centralized Aircraft Monitoring
ECB	Electronic Control Box (APU)
ECM	Engine Condition Monitoring
ECON	Economic
ECP	ECAM Control Panel
ECU	Engine Control Unit
EDP	Engine-Driven Pump
EEC	Electronic Engine Computer
EFB	Electronic Flight Bag
EFF	Electronic Flight Folder
EFIS	Electronic Flight Instruments System
eFLSCU	Enhanced Fuel Level Sensing Control Unit
EFOB	Estimated Fuel On Board
EGPWS	Enhanced Ground Proximity Warning System
EGT	Exhaust Gas Temperature
EIS	Electronic Instruments System
EIU	Engine Interface Unit
EIVMU	Engine Interface and Vibration Monitoring Unit
ELAC	Elevator Aileron Computer
ELEC	Electrics
ELEV	Elevator
ELT	Emergency Locator Transmitter
ELV	Elevation
EMER	Emergency
EMER GEN	Emergency Generator
ENG	Engine
ENR	En-Route
EO	Engine-Out
EOSID	Engine-Out Standard Instrument Departure

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Abbreviation	Term
EPE	Estimated Position Error
EPR	Engine Pressure Ratio
EPU	Emergency Power Unit, Estimated Position Uncertainty
EQPT	Equipment
ESS	Essential
ETA	Estimated Time of Arrival
ETOC	Enhanced Takeoff Configuration
ETOPS	Extended Twin Operations
ETP	Equal Time Point
ETT	Estimated Time of Takeoff
EVAC	Evacuation
EVMU	Engine Vibration Monitoring Unit
EWD	Engine/Warning Display
EXP	Expedite
EXT PWR	External Power
EXTN	Extension

F

Abbreviation	Term
F	Fuel
F/CTL	Flight Control
F/O	First Officer
FAA	Federal Aviation Administration
FAC	Flight Augmentation Computer
FADEC	Full Authority Digital Engine Control System
FAF	Final Approach Fix
FANS	Future Air Navigation System
FAP	Flight Attendant Panel, Forward Attendant Panel, Final Approach Point
FAR	Federal Aviation Regulations
FAS	Final Approach Segment
FCDC	Flight Control Data Concentrator
FCOM	Flight Crew Operating Manual
FCTM	Flight Crew Techniques Manual
FCU	Flight Control Unit
FD	Flight Director
FDGS	Fan Drive Gear System
FDIMU	Flight Data Interface and Management Unit
FDIU	Flight Data Interface Unit
FDP	Final Descent Point
FDR	Flight Data Recorder

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Abbreviation	Term
FDU	Fire Detection Unit
FEP	Final End Point
FF	Fuel Flow
FG	Flight Guidance
F-G/S	FLS Glide Slope
FL	Flight Level
FLB	Flight Logbook
FLD	Factored In-Flight Landing Distance
FLEX	Flexible
F-LOC	FLS Localizer
FLRF	Flap Load Relief Function
FLS	FMS Landing System
FLSCU	Fuel Level Sensing Control Unit
FLT	Flight
FLX	Flexible
FLXTO	Flexible Takeoff
FM	Flight Management
FMA	Flight Mode Annunciator
FMC	Flight Management Computer
FMGC	Flight Management and Guidance Computer
FMGS	Flight Management and Guidance System
FMS	Flight Management System
FMV	Fuel Metering Valve
FOB	Fuel On Board
FOD	Foreign Object Debris, Foreign Object Damage
FOHE	Fuel Oil Heat Exchanger
FOM	Figure Of Merit
FPA	Flight Path Angle
FPD	Flight Path Director
F-PLN	Flight Plan
FPPU	Feedback Position Pick-off Unit
FPV	Flight Path Vector
FQ	Fuel Quantity
FQI	Fuel Quantity Indication
FQIC	Fuel Quantity Indication Computer
FQMS	Fuel Quantity and Management System
FREQ	Frequency
FRV	Fuel Return Valve
FTIS	Fuel Tank Inerting System
FU	Fuel Used

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Continued from the previous page

Abbreviation	Term
FWC	Flight Warning Computer
FWD	Forward
FWS	Flight Warning System

G

Abbreviation	Term
G/S	Glideslope
GA	Go-Around
GAPCU	Ground and Auxiliary Power Control Unit
GBAS	Ground Based Augmentation System
GCAS	Ground Collision Avoidance System
GCS	Ground Clutter Suppression
GCU	Generator Control Unit
GDU	Group of Documentary Unit
GE	General Electric
GEN	Generator
GES	Ground Earth Station
GLC	Generator Line Contactor
GLS	GBAS Landing System, GNSS Landing System
GMT	Greenwich Mean Time
GND	Ground
GND TEMP	Ground Temperature
GNSS	Global Navigation Satellite System
GPCU	Ground Power Control Unit
GPIRS	Global Positioning and Inertial Reference System
GPS	Global Positioning System
GPSSU	GPS Sensor Unit
GPU	Ground Power Unit
GPWS	Ground Proximity Warning System
GRND	Ground
GRVTY	Gravity
GS	Ground Speed
GSM	Global System for Mobile Communication
GW	Gross Weight

H

Abbreviation	Term
HCU	Hydraulic Control Unit, HUD Combiner Unit
HDG	Heading
HF	High Frequency

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Abbreviation	Term
HI	High
HM	Holding Pattern with a Manual Termination
HMU	Hydrau-Mechanical Unit
HP	High Pressure
HPA	Hectopascal
HPC	High Pressure Compressor
HPFD	Harmonized Primary Flight Display
HPSOV	High Pressure Shut-off Valve
HPT	High Pressure Turbine
HPV	High Pressure Valve
HUD	Head Up Display
HUDC	Head Up Display Computer
HYD	Hydraulic

I

Abbreviation	Term
I/P	Input or Intercept Profile
IAF	Initial Approach Fix
IAS	Indicated Airspeed
IATA	International Air Transport Association
ICAO	International Air Transport Organization
ID	Identification
IDENT	Identification
IDG	Integrated Drive Generator
IFE	In Flight Entertainment
IFPC	Integrated Fuel Pump and Control
IFR	Instrument Flight Rules
IGGS	Inert Gas Generation System
IGN	Ignition
IGV	Inlet Guide Vanes
ILS	Instrument Landing System
IM	Inner Marker
IMC	Instrument Meteorological Conditions
IMM	Immediate
INB	Inbound
IND	Indicator
INIT	Initialization
INOP	Inoperative
INR	Inner
INST	Instrument

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Continued from the previous page

Abbreviation	Term
INT	Interphone, Internal, Integrated, Interior
INTCP	Intercept
INTCPT	Intercept
INV	Inverter
IP	Intermediate Pressure
IPPU	Instrumentation Position Pick-off Unit
IR	Inertial Reference
IRS	Inertial Reference System
ISA	International Standard Atmosphere
ISIS	Integrated Standby Instrument System
ISOL	Isolation
ISPSS	In-Seat Power Supply System
ISPSU	In-Seat Power Supply Unit
ITP	In-Trail Procedure

J

Abbreviation	Term
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements

K

Abbreviation	Term

L

Abbreviation	Term
L/DEV	Lateral Deviation
L/G	Landing Gear
LAF	Load Alleviation Function
LAT	Lateral, Latitude
LAT REV	Lateral Revision
LAV	Lavatory
LCD	Liquid Crystal Display
LDA	Landing Distance Available, Localizer Directional Aid
LDG	Landing
LDS	Laptop Docking Station
LED	Light Emitting Diode
LEDU	List of Effective Documentary Units
LEOEB	List of Effective Operations Engineering Bulletins
LESS	List of Effective Section/Subsections
LGCIU	Landing Gear Control Interface Unit

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Abbreviation	Term
LH	Left-Hand
LIM	Limitation
LK	Lock
LL	Latitude/Longitude
LNAV	Lateral Navigation
LO	Low
LOC	Localizer
LONG	Longitude
LP	Low Pressure, Localizer Performance
LPC	Low Pressure Compressor
LPT	Low Pressure Turbine
LPV	Localizer Performance with Vertical guidance
LRU	Line Replaceable Unit
LS	Loudspeaker
LSK	Line Select Key
LT	Light
LVL	Level
LVL/CH	Level Change
LVR	Lever
LW	Landing Weight

M

Abbreviation	Term
MAC	Mean Aerodynamic Chord
MAG	Magnetic
MAINT	Maintenance
MAN	Manual
MAP	Missed Approach Point
MAX	Maximum
MCDU	Multipurpose Control and Display Unit
MCT	Maximum Continuous Thrust
MDA	Minimum Descent Altitude
MDCD	Main Deck Cargo Door
MDDU	Multifunction Disk Drive Unit
MDH	Minimum Descent Height
MEA	Minimum En Route Altitude
MECH	Mechanic
MED	Medium
MEL	Minimum Equipment List
MEM	Memory

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Continued from the previous page

Abbreviation	Term
MFRL	Multi-Functional Runway Light
MGB	Main Gearbox
MID	Middle
MIN	Minimum
MKR	Marker
MLB	Maintenance Logbook
MLG	Main Landing Gear
MLS	Microwave Landing System
MLW	Maximum Landing Weight
MM	Middle Marker
MMEL	Master Minimum Equipment List
MMO	Mach Maximum Operational
MMR	Multi Mode Receiver
MN	Mach number
MOD	Modification
MORA	Minimum Off Route Altitude
MP	Modification Proposal
MRP	Map Reference Point
MSA	Minimum Safe Altitude
MSG	Message
MSL	Mean Sea Level
MSN	Manufacturer Serial Number
MTOW	Maximum Takeoff Weight
MZFW	Maximum Zero Fuel Weight

N

Abbreviation	Term
N/A	Not Applicable
N1	Low Pressure Rotor Speed (in %)
N2	High Pressure Rotor Speed (in %)
NAI	Engine Nacelle Anti-Ice
NAV	Navigation
NAVAID	Navigation Aid
NBR	Number
NCD	Non Computed Data
ND	Navigation Display
NDB	Non Directional Beacon
NEA	Nitrogen Enriched Air
NLG	Nose Landing Gear
NORM	Normal

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Continued from the previous page

Abbreviation	Term
NOTAM	Notice To Airmen
NPA	Non Precision Approach
NW	Nosewheel
NWS	Nosewheel Steering

O

Abbreviation	Term
OANS	On-board Airport Navigation System
OAT	Outside Air Temperature
OCL	Oceanic Clearance
OEB	Operations Engineering Bulletin
OEI	One Engine Inoperative
OFST	Offset
OFV	Outflow Valve
OIT	Onboard Information Terminal
OLB	OPS Library Browser
OM	Outer Marker
OP	Open
OPP	Opposite
OPS	Operations
OPT	Optimum
OVHD	Overhead
OVHT	Overheat
OVRD	Override
OXY	Oxygen

P

Abbreviation	Term
P/B	Pushbutton
P/N	Part Number
PA	Passenger Address
PAC	Path Attenuation Compensation
PAX	Passenger
PB	Pushbutton
PBCS	Performance-Based Communication and Surveillance
PBE	Portable Breathing Equipment
PBN	Performance Based Navigation
PCU	Power Control Unit
PED	Portable Electronic Device
PERF	Performance

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Abbreviation	Term
PES	Passenger Entertainment System
PF	Pilot Flying
PFC	Porous Friction Course
PFD	Primary Flight Display
PGE	Page
PHC	Probes Heat Computer
PIREP	Pilot Report
PM	Pilot Monitoring
PMV	Pilot Metering Valve
PNL	Panel
POB	Pressure Off Brake
POS	Position
PPOS	Present Position
PPU	Position Pick-off Unit
PR	Pressure
PRAM	Pre-recorded Announcement and Music
PRED	Prediction
PRESS	Pressure, Pressurization
PREV	Previous
PROC	Procedure
PROG	Progress
PROT	Protection
PROTEC	Protection
PRSOV	Pressure Regulating and Shut-Off Valve
PRV	Pressure Regulating Valve
PSCU	Proximity Switch Control Unit
PTT	Push To Talk
PTU	Power Transfer Unit (Hydraulic)
PVI	Paravisual Indicator
PWR	Power
PWS	Predictive Windshear System

Q

Abbreviation	Term
QAR	Quick Access Recorder
QCCU	Quantity Calculation Control Unit
QFE	Field Elevation Atmosphere Pressure
QFU	Runway Heading
QNH	Sea Level Atmosphere Pressure
QRH	Quick Reference Handbook

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Continued from the previous page

Abbreviation	Term
QT	Quart (US)
QTY	Quantity

R

Abbreviation	Term
RA	Radio Altimeter, Resolution Advisory
RAAS	Runway Awareness and Advisory System
RACC	Rotor Active Clearance Control
RAD	Radio
RAIM	Receiver Autonomous Integrity Monitoring
RAT	Ram Air Turbine
RCAM	Runway Condition Assessment Matrix
RCP	Required Communication Performance
RCT	Rear Centre Tank
REAC	Reactive
REC	Recommended
RED	Reduction
REF	Reference, Refer
REG	Regulation
REL	Release
REQ	Request, Require, Required
REV	Reverse
RF	Radio Frequency
RFCF	Runway Field Clearance Floor
RH	Right-Hand
RLD	Required Landing Distance
RMI	Radio Magnetic Indicator
RMP	Radio Management Panel
RNAV	Area Navigation
RNG	Range
RNP	Required Navigation Performance
ROP	Runway Overrun Protection
ROPS	Runway Overrun Prevention System
ROW	Runway Overrun Warning
RPCU	Residual Pressure Control Unit
RPLNT	Repellent
RPTG	Repeating, Reporting
RQRD	Required
RSP	Required Surveillance Performance
RSV	Reserves

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Abbreviation	Term
RSVR	Reservoir
RTA	Required Time of Arrival
RTE	Route
RTO	Rejected Takeoff
RTOW	Regulatory Takeoff Weight
RUD	Rudder
RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minimum
RWY	Runway
RWYCC	Runway Condition Code

S

Abbreviation	Term
S	South
S/C	Step Climb
S/D	Step Descent, Shut Down
S/F	Slats/Flaps
SAAAR	Special Aircrew and Aircraft Authorization Required
SAC	Single Annular Chamber
SAL	System Address Label
SAR	Search And Rescue
SAT	Static Air Temperature
SATCOM	Satellite Communication
SAV	Starter Air Valve
SB	Service Bulletin
SBAS	Satellite Based Augmentation System
SC	Single Chime
SCA/SVU	Split Control Unit/Servo Valve Assembly
SD	System Display
SDAC	System Data Acquisition Concentrator
SDCU	Smoke Detection Control Unit
SDF	Smoke Detection Function, Simplified Directional Facility
SDU	Satellite Data Unit
SEC	Spoiler Elevator Computer, Secondary
SEL	Selector
SELCAL	Selective Calling
SFCC	Slat/Flap Control Computer
SI	Slip Indicator
SID	Standard Instrument Departure
SLS	SBAS Landing System

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Abbreviation	Term
SOP	Standard Operating Procedure
SPD	Speed
SPD LIM	Speed Limit
SPLR	Spoiler
SQWK	Squawk
SRS	Speed Reference System
STAR	Standard Terminal Arrival Route
STAT	Static
STAT INV	Static Inverter
STBY	Standby
STD	Standard
STRG	Steering
STS	Status
SURV	Surveillance
sw	Switch
SWTG	Switching
SYS	System

T

Abbreviation	Term
T/C	Top of Climb
T/D	Top of Descent
T/O	Takeoff
T2CAS	Traffic and Terrain Collision Avoidance System
T3CAS	Traffic and Terrain Collision Avoidance System
TA	Traffic Advisory
TAB	Temporary Abnormal Behavior
TAC	Taxiing Aid Camera
TACAN	Tactical Air Navigation
TAD	Terrain Awareness Display
TAS	True Air Speed
TAT	Total Air Temperature
TAU	Time to intercept
TAWS	Terrain Awareness and Warning System
TBD	To Be Determined
TBV	Transient Bleed Valve
TCA	Turbine Cooling Air
TCAS	Traffic Alert and Collision Avoidance System
TCC	Turbine Case Cooling
TCF	Terrain Clearance Floor

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Abbreviation	Term
TCM	Thrust Control Malfunction
TCMA	Thrust Control Malfunction Accommodation
TDU	Temporary Documentary Unit
TEL	Telephone
TEMP	Temperature
TERR	Terrain
TFLEX	Flexible Temperature
TGT	Target
THR	Thrust
THRT	Threat
THS	Trimmable Horizontal Stabilizer
THSA	Trimmable Horizontal Stabilizer Actuator
TK	Tank, Track
TLA	Throttle Lever Angle
TLU	Travel Limitation Unit
TMPY	Temporary
TMR	Timer
TO	Takeoff
TOC	Table of Contents
TOD	Takeoff Distance
TODA	Takeoff Distance Available
TOGA	Takeoff - Go-Around
TOR	Takeoff Run
TORA	Takeoff Run Available
TOS	Takeoff Surveillance
TOW	Takeoff Weight
T-P	Turn Point
TPIS	Tire Pressure Indicating System
TR	Transformer Rectifier
TRANS	Transition
TREF	Flat Rating Temperature
TRK	Track
TROPO	Tropopause
TRU	Transformer Rectifier Unit
TRV	Travel
TSM	Trouble Shooting Manual
TTG	Time to Go
TVMC	Minimum Control Speed Temperature
TWY	Taxiway

U

Abbreviation	Term
UNLK	Unlock
UP	Up, Upper
USB	Universal Serial Bus
UTC	Universal Coordinated Time

V

Abbreviation	Term
V/DEV	Vertical Deviation
V/S	Vertical Speed
V1	Decision Speed
V2	Takeoff Safety Speed
VAPP	Approach Speed
VBV	Variable Bypass Valve
VDEV	Vertical Deviation
VDL	VHF Datalink
VERT	Vertical
VERT REV	Vertical Revision
VFE	Maximum Speed for each Flap configuration
VFTO	Final Takeoff Speed
VHF	Very High Frequency
VIB	Vibration
VIP	Vertical Intersection Point
VLE	Maximum Landing Gear Extended Speed
VLS	Lowest Selectable Speed
VM	Maneuvering Speed
VMAX	Maximum Allowable Speed
VMC	Visual Meteorological Conditions
VMCA	Minimum Control Speed in the Air
VMCG	Minimum Control Speed on Ground
VMCL	Minimum Control Speed at Landing
VMIN	Minimum Operating Speed
VMO	Maximum Operating Speed
VMU	Minimum Unstick Speed
VNAV	Vertical Navigation
VOR	VHF Omnidirectional Range
VOR-D	VOR-DME
VR	Rotation Speed
VREF	Landing Reference Speed
VS	Reference Stalling Speed

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Abbreviation	Term
VS1G	Stall Speed at 1g load factor
VSC	Vacuum System Controller
VSI	Vertical Speed Indicator
VSV	Variable Stator Vane
VSW	Stall Warning Speed
VU	Visual Unit, Virtual Unit

W

Abbreviation	Term
W/S	Wind Shear
WAI	Wing Anti-Ice
WARN	Warning
WBC	Weight and Balance Computer
WBS	Weight and Balance System
WD	Warning Display
WHC	Window Heat Computer
WPT	Waypoint
WS	Windshear
WSHLD	Windshield
WT	Weight
WTB	Wing Tip Brake
WX	Weather
WXR	Weather Radar

X

Abbreviation	Term
XFR	Transfer
xLS	x Landing System (e.g. ILS, GLS, ...)
XPDR	Transponder
XPNDR	Transponder
XTK	Crosstrack Error

Y

Abbreviation	Term

Z

Abbreviation	Term
ZFCG	Zero Fuel Center of Gravity
ZFW	Zero Fuel Weight
ZFWCG	Zero Fuel Weight Center of Gravity field

SYMBOLS

Abbreviation	Term
<	less than
>	more than
≤	less than or equal to
≥	more than or equal to
=	equal to

AIRCRAFT SYSTEMS

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DSC-20 Aircraft General

DSC-21 Air Conditioning / Pressurization / Ventilation

DSC-22_10 Auto Flight - General

DSC-22_20 Auto Flight - Flight Management

DSC-22_30 Auto Flight - Flight Guidance

DSC-22_40 Auto Flight - Flight Augmentation

DSC-22_45 Auto Flight - AOC Functions

DSC-22_46 Auto Flight - Print Interface

DSC-23 Communications

DSC-24 Electrical

DSC-25 Equipment

DSC-26 Fire Protection

DSC-27 Flight Controls

DSC-28 Fuel

DSC-29 Hydraulic

DSC-30 Ice and Rain Protection

DSC-31 Indicating/Recording Systems

DSC-32 Landing Gear

DSC-33 Lights

DSC-34-NAV Navigation

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DSC-34-SURV Surveillance

DSC-35 Oxygen

DSC-36 Pneumatic

DSC-38 Water / Waste

DSC-45 Maintenance System

DSC-46 Information Systems

DSC-49 APU

DSC-52 Doors

DSC-56 Cockpit Windows

DSC-70 Engines

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-20-10		**General**	00000284.0001001	22 MAR 16
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-20-10		**General**	00000284.0002001	13 DEC 10
E	Criteria: SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-20-10		**General**	00000284.0003001	13 DEC 10
	Criteria: SA, A319 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345**				
	DSC-20-10		**Engines**	00000285.0001001	13 DEC 10
	Criteria: SA **Applicable to: ALL**				
E	DSC-20-10		**Cockpit**	00000286.0002001	13 DEC 10
E	Criteria: P0040, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-20-10		**Cabin**	00000287.0007001	05 FEB 15
	Criteria: SA **Applicable to: ALL**				
	DSC-20-10		**Cargo**	00000289.0001001	13 DEC 10
	Criteria: SA **Applicable to: ALL**				
	DSC-20-20		**General Arrangement**	00000290.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-20-20		**Principal Dimensions**	00000291.0024001	12 MAY 22
E	Criteria: PW1100G-JM, J3283, SA, A320 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	DSC-20-20		**Principal Dimensions**	00000291.0015001	26 OCT 22
	Criteria: IAE, SA, A319 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	DSC-20-20		**Principal Dimensions**	00000291.0014001	26 OCT 22
	Criteria: IAE, SA, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	DSC-20-20		**Principal Dimensions**	00000291.0013001	07 MAY 13
	Criteria: 57-1187, IAE, J3448, SA, A321 **Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165**				

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Continued from the previous page

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-20-20		**Principal Dimensions**	00000291.0012001	24 FEB 17
	Criteria: J3448, SA, A321				
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
N	DSC-20-20		**Principal Dimensions**	00000291.0026001	02 MAY 23
	Criteria: PW1100G-JM, J3448, SA, A321				
	Applicable to: MSN 11531				
	DSC-20-20		**Principal Dimensions**	00000291.0008001	26 OCT 22
	Criteria: 57-1173, J3283, SA, A320				
	Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-20-20		**Principal Dimensions**	00000291.0001001	26 OCT 22
	Criteria: SA, A320				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240				
	DSC-20-20		**Principal Dimensions**	00000291.0002001	26 OCT 22
	Criteria: SA, A319				
	Applicable to: MSN 03733, 04734-04756, 05005, 05097				
	DSC-20-20		**Principal Dimensions**	00000291.0006001	22 MAY 12
	Criteria: IAE, SA, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662				
	DSC-20-20		**Unpressurized Compartments**	00000292.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-20-20		**Antenna Locations**	00000293.0001001	28 JUL 14
	Criteria: SA				
	Applicable to: ALL				
E	DSC-20-20		**Ground Service Connections and Panels**	00000295.0001001	09 OCT 12
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-20-20		**Ground Service Connections and Panels**	00000295.0002001	06 APR 18
	Criteria: K2113, SA				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-20-20		**Ground Service Connections and Panels**	00000295.0003001	09 OCT 12
	Criteria: K3154, SA				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345				
E	DSC-20-30		**Taxiing**	00000294.0010001	28 MAY 20
	Criteria: 57-1187, J3448, K2113, SA				
E	**Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-20-30		**Taxiing**	00000294.0007001	01 JUN 17
E	Criteria: 57-1173, J3283, SA **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-20-30		**Taxiing**	00000294.0002001	01 JUN 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240**				
	DSC-20-30		**Taxiing**	00000294.0005001	28 MAY 20
	Criteria: K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662**				
	DSC-20-30		**Taxiing**	00000294.0006001	01 JUN 17
	Criteria: K3154, SA **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345**				
E	DSC-20-30		**180 degrees Turn on Runway**	00021674.0002001	06 APR 18
E	Criteria: K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-20-30		**180 degrees Turn on Runway**	00021674.0001001	06 JUN 17
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-20-30		**180 degrees Turn on Runway**	00021674.0004001	06 JUN 17
	Criteria: K3154, SA **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345**				
N	DSC-20-40		**Ground Clearance Diagram**	00018435.0010001	26 NOV 19
	Criteria: 321-271NX, A321 **Applicable to: MSN 11531**				
	DSC-20-40		**Ground Clearance Diagram**	00018435.0003001	26 NOV 19
	Criteria: A319 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345**				
	DSC-20-40		**Ground Clearance Diagram**	00018435.0004001	26 NOV 19
	Criteria: A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
E	DSC-20-40		**Ground Clearance Diagram**	00018435.0006001	26 NOV 19
E	Criteria: 320-271N, A320 **Applicable to: MSN 10949-11522, 11572-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-20-40		**Ground Clearance Diagram**	00018435.0001001	26 NOV 19
	Criteria: A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324**				
	DSC-20-50		**ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry**	00019878.0008001	22 FEB 17
	Criteria: IAE, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-20-50		**ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry**	00019878.0011001	22 FEB 17
	Criteria: G-CFM56-5B6, A319 **Applicable to: MSN 03733, 04734-04756, 05005, 05097**				
	DSC-20-50		**ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry**	00019878.0007001	22 FEB 17
	Criteria: IAE, A319 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
E	DSC-20-50		**ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry**	00019878.0001001	22 FEB 17
E	Criteria: IAE, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-20-50		**ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry**	00019878.0005001	06 APR 18
E	Criteria: A321 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-20-50		**Minimum Visual Ground Segments (Flare Phase)**	00019879.0011001	22 FEB 17
	Criteria: G-CFM56-5B6, A319 **Applicable to: MSN 03733, 04734-04756, 05005, 05097**				
	DSC-20-50		**Minimum Visual Ground Segments (Flare Phase)**	00019879.0007001	22 FEB 17
	Criteria: IAE, A319 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
E	DSC-20-50		**Minimum Visual Ground Segments (Flare Phase)**	00019879.0001001	22 FEB 17
	Criteria: IAE, A320				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-20-50		**Minimum Visual Ground Segments (Flare Phase)**	00019879.0005001	06 APR 18
	Criteria: A321				
E	**Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-20-50		**Minimum Visual Ground Segments (Flare Phase)**	00019879.0008001	22 FEB 17
	Criteria: IAE, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-20-60		**Visual Ground Geometry**	00010294.0001001	22 MAY 12
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-21-10-10		**General**	00017767.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-21-10-10		**Architecture**	00000297.0001001	22 MAY 12
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-21-10-10		**Architecture**	00000297.0003001	22 MAY 12
E	Criteria: K6443, SA **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-21-10-10		**Architecture**	00000297.0005001	22 MAY 12
	Criteria: K2113, K6443, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
N	DSC-21-10-10		**Architecture**	00000297.0015001	20 DEC 16
	Criteria: K17996, K2113, K6443, SA **Applicable to: MSN 11531**				
	DSC-21-10-20		**Air Conditioning Pack**	00017768.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-21-10-20		**Pack Schematic (Simplified)**	00000299.0003001	22 MAY 12
	Criteria: K4793, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
	DSC-21-10-20		**Pack Schematic (Simplified)**	00000299.0007001	21 NOV 11
	Criteria: K2113, K4793, K6443, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
E	DSC-21-10-20		**Pack Schematic (Simplified)**	00000299.0008001	22 MAY 12
E	Criteria: K10405, K4793, K6443, K8734, SA **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
N	DSC-21-10-20		**Pack Schematic (Simplified)**	00000299.0013001	10 MAY 21
	Criteria: K17996, K2113, K4793, K6443, SA **Applicable to: MSN 11531**				
	DSC-21-10-20		**Pack Flow Control Valve**	00017769.0001001	24 AUG 18
	Criteria: SA **Applicable to: ALL**				
	DSC-21-10-20		**Emergency Ram Air**	00000301.0001001	20 DEC 16
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-21-10-20		**Mixer Unit**	00000302.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-10-20		**Hot-Air Pressure-Regulating Valve**	00000303.0002001	05 MAY 22
	Criteria: K3599, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-21-10-20		**Hot-Air Pressure-Regulating Valve**	00000303.0003001	05 MAY 22
	Criteria: K3599, K6443, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-21-10-20		**Trim Air Valves**	00017771.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-10-30		**General**	00017772.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-10-30		**Pack Controller**	00000306.0002001	15 FEB 11
	Criteria: K4793, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-21-10-30		**Zone Controller**	00000307.0001001	05 MAR 19
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-21-10-30		**Temperature Regulation**	00017773.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-21-10-30		**Air Conditioning System Controllers**	00017775.0001001	20 DEC 16
	Criteria: K30725, K6443, A319, A320, A321, 320-200N, 321-200NX				
E	**Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**				
	DSC-21-10-30		**Air Conditioning System Controllers**	00017775.0019001	20 DEC 16
	Criteria: K6443, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-21-10-40		**General**	00000309.0001001	15 FEB 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-21-10-40		**General**	00000309.0002001	21 MAR 16
	Criteria: K6443, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-21-10-40		**Zone Controller**	00000310.0001001	15 FEB 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-21-10-40		**Pack Controllers**	00000311.0001001	15 FEB 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-21-10-40		**Air Conditioning System Controllers** ◁	00018747.0001001	21 MAR 16
	Criteria: A319, A320, A321				
	Applicable to: ALL				
	DSC-21-10-40		**Air Cycle Machine Failure**	00000312.0002001	15 FEB 11
	Criteria: K4793, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-21-10-40		**Air Cycle Machine Failure**	00000312.0003001	21 MAR 16
	Criteria: K4793, K6443, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-21-10-40		**Hot Air Pressure Regulating Valve Failure**	00000313.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-10-40		**Trim Air Valve Failure**	00000314.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-10-50		**Controls on Overhead Panel**	00000315.0002001	20 DEC 16
	Criteria: P1906, P3704, P5459, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-21-10-50		**Controls on Overhead Panel**	00000315.0006001	20 DEC 16
	Criteria: K2113, P1906, P3704, P5459, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
E	DSC-21-10-50		**Controls on Overhead Panel**	00000315.0018001	25 JAN 17
	Criteria: K17996, K2113, K30725, P5459, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
N	DSC-21-10-50		**ECAM BLEED Page**	00000316.0006001	03 NOV 22
	Criteria: K4574, K6443, P6578, SA				
	Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597				
N	DSC-21-10-50		**ECAM BLEED Page**	00000316.0004001	03 NOV 22
	Criteria: K4574, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-21-10-50		**ECAM COND Page**	00000317.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-21-10-50		**ECAM COND Page**	00000317.0004001	09 OCT 12
	Criteria: K6443, P6578, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-21-10-50		**ECAM CAB PRESS Page**	00000318.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-10-50		**ECAM Cruise Page**	00000319.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-21-10-50		**ECAM Cruise Page**	00000319.0002001	09 OCT 12
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-21-10-50		**Engine Warning Display**	00015934.0001001	06 SEP 16
	Criteria: 320-200N, 321-200NX				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-21-10-50		**Memo Display**	00016760.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-10		**General**	00017903.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-10		**Automatic Operation**	00000323.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-10		**Manual Operation**	00000324.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-10		**SCHEMATICS**	00000325.0002001	21 MAR 16
	Criteria: P2963, SA				
	Applicable to: ALL				
	DSC-21-20-20		**Cabin Pressure Controllers**	00000326.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-20		**Outflow Valve**	00000327.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-20		**Safety Valves**	00000328.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-20		**Residual Pressure Control Unit (RPCU ◁*)**	00017788.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-21-20-30		**Automatic Pressure Control Mode**	00000329.0001001	04 DEC 18
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-30		**Pressurization Flight Profile**	00000331.0001001	08 SEP 15
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-30		**Manual Pressure Control Mode**	00000332.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-20-30		**Ditching**	00017789.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-21-20-40		**Overhead Panel**	00000334.0003001	07 MAY 13
	Criteria: P2963, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-21-20-40		**Overhead Panel**	00000334.0004001	07 MAY 13
	Criteria: K0066, P2963, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-21-20-40		**ECAM CAB PRESS Page**	00000335.0003001	26 OCT 22
	Criteria: 31-1576, P20664, P6578, SA				
E	**Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 10949-11597**				
E	DSC-21-20-40		**ECAM CAB PRESS Page**	00000335.0001001	26 OCT 22
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**				
N	DSC-21-20-40		**ECAM CAB PRESS Page**	00000335.0005001	26 OCT 22
	Criteria: (SA and 31-1603)				
	Applicable to: MSN 02321				
E	DSC-21-20-40		**ECAM CAB PRESS Page**	00000335.0002001	26 OCT 22
	Criteria: P6578, SA				
E	**Applicable to: MSN 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**				
	DSC-21-20-40		**ECAM Cruise Page**	00000336.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-21-20-40		**ECAM Cruise Page**	00000336.0002001	26 OCT 22
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139, 11531-11597**				
	DSC-21-20-40		**ECAM DOOR/OXY Page**	00000337.0001001	02 JUN 20
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-21-20-40		**ECAM DOOR/OXY Page**	00000337.0003001	02 JUN 20
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-21-20-40		**Memo Display**	00016761.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-30-10		**General**	00017790.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-30-20		**General**	00000341.0001001	24 FEB 11
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-30-20		**Main Components**	00017791.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
N	DSC-21-30-20		**Normal Operation, Open-Circuit Configuration**	00000343.0004001	01 FEB 22
	Criteria: K16128, K33563, SA				
	Applicable to: MSN 11531				
E	DSC-21-30-20		**Normal Operation, Open-Circuit Configuration**	00000343.0003001	11 JAN 22
	Criteria: 21-1216, K16128, SA				
E	**Applicable to: MSN 01459, 01832, 02321, 03035-03047, 03266-03284, 03313, 03662, 03761, 04000, 04171, 04563, 04734, 05591, 05752-05883, 05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
E	DSC-21-30-20		**Normal Operation, Open-Circuit Configuration**	00000343.0001001	11 JAN 22
	Criteria: SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01837-01855, 02014, 02734-03032, 03058-03229, 03294, 03391-03658, 03710, 03733, 03816, 04163, 04192-04544, 04570-04662, 04756-05528, 05621-05749, 05947**				
E	DSC-21-30-20		**Normal Operation, Close-Circuit Configuration**	00000345.0004001	11 JAN 22
	Criteria: 21-1216, K16128, SA				
E	**Applicable to: MSN 01459, 01832, 02321, 03035-03047, 03266-03284, 03313, 03662, 03761, 04000, 04171, 04563, 04734, 05591, 05752-05883, 05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	DSC-21-30-20		**Normal Operation, Close-Circuit Configuration**	00000345.0003001	01 FEB 22
	Criteria: K16128, K33563, SA				
	Applicable to: MSN 11531				
E	DSC-21-30-20		**Normal Operation, Close-Circuit Configuration**	00000345.0001001	09 OCT 12
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01837-01855, 02014, 02734-03032, 03058-03229, 03294, 03391-03658, 03710, 03733, 03816, 04163, 04192-04544, 04570-04662, 04756-05528, 05621-05749, 05947**				
N	DSC-21-30-20		**Normal Operation, Intermediate Configuration**	00000344.0003001	01 FEB 22
	Criteria: K33563, SA **Applicable to: MSN 11531**				
E	DSC-21-30-20		**Normal Operation, Intermediate Configuration**	00000344.0001001	09 OCT 12
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-21-30-20		**Abnormal Operation**	NG00042	
	DSC-21-30-20		**Abnormal Operation - Blower Fault or Extract Fault Alert**	00000346.0001001	20 JAN 15
	Criteria: SA **Applicable to: ALL**				
	DSC-21-30-20		**Abnormal Operation - Smoke Configuration**	00000347.0001001	09 OCT 12
	Criteria: SA **Applicable to: ALL**				
	DSC-21-30-20		**Abnormal Operation - Controller failure**	00000348.0001001	10 MAY 21
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-21-30-40		**Battery Ventilation**	00000350.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-21-30-50		**Lavatory and Galley**	00000351.0001001	09 OCT 12
	Criteria: SA **Applicable to: ALL**				
	DSC-21-30-60		**Overhead Panel**	00000352.0001001	24 FEB 11
	Criteria: SA **Applicable to: ALL**				
	DSC-21-30-60		**ECAM CAB PRESS Page**	00000353.0001001	03 APR 13
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-21-30-60		**ECAM CAB PRESS Page**	00000353.0006001	03 APR 13
	Criteria: 31-1433, P12697, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-21-40-10		**General**	00017795.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-40-10		**Schematic**	00000357.0001001	22 MAY 12
	Criteria: K0066				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-21-40-10		**Schematic**	00000357.0002001	22 MAY 12
	Criteria: K0070				
E	**Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495-09324, 10949-11597**				
	DSC-21-40-10		**Schematic**	00000357.0004001	22 MAY 12
	Criteria: K0070, K0071				
	Applicable to: MSN 02014, 02734, 03032, 04827-04860				
	DSC-21-40-20		**FWD Cargo Ventilation** ◁	00017796.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-40-20		**AFT Cargo Ventilation** ◁	00017797.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-40-20		**AFT Cargo Heating** ◁	00017798.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-21-40-20		**FWD Cargo Heating** ◁	00017799.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-21-40-30		**Overhead Panel**	00017800.0001001	20 MAR 17
	Criteria: K0066, K0070				
E	**Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**				
	DSC-21-40-30		**Overhead Panel**	00017800.0006001	04 JUN 19
	Criteria: K0070, K0071				
	Applicable to: MSN 02014, 02734, 03032, 04827-04860				
	DSC-21-40-35		**ECAM COND Page**	00006005.0003001	22 MAY 12
	Criteria: K0070, K0071, P2546, P2547, P2878				
	Applicable to: MSN 02014, 02734, 03032, 04827-04860				
	DSC-21-40-35		**ECAM COND Page**	00006005.0009001	22 MAY 12
	Criteria: K0066, P2546, P2547, P2879				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-21-40-35		**ECAM COND Page**	00006005.0002001	22 MAY 12
	Criteria: K0070, P2546, P2547, P2878				
E	**Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_10-10		**FMGC Standard**	00022442.0004001	03 SEP 18
E	Criteria: 22-1270 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
E	DSC-22_10-10		**FMGC Standard**	00022442.0043001	03 SEP 18
E	Criteria: 22-1269, 22-1359, 22-1523, P10762, P10801 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05752**				
E	DSC-22_10-10		**FMGC Standard**	00022442.0055001	03 SEP 18
E	Criteria: 22-1270, 22-1379, 22-1547, P10763 **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528**				
E	DSC-22_10-10		**FMGC Standard**	00022442.0126001	03 SEP 18
E	Criteria: P10762, P11355, P13321, P14946 **Applicable to: MSN 06895**				
E	DSC-22_10-10		**FMGC Standard**	00022442.0131001	03 SEP 18
E	Criteria: 22-1610, P10762, P11355, P13321, P14946 **Applicable to: MSN 05883, 06139, 06173-06876, 06949-07098**				
	DSC-22_10-10		**FMGC Standard**	00022442.0062001	03 SEP 18
	Criteria: 22-1606, 22-1676, P10763, P11356, P13322, P14095, P15372, P20385 **Applicable to: MSN 01459, 05947-05987, 06097, 06121, 06163-06165, 08495-09324**				
	DSC-22_10-10		**FMGC Standard**	00022442.0058001	03 SEP 18
	Criteria: 22-1360, 22-1462, 22-1545, 22-1590, P10762, P10785, P12060, P12092 **Applicable to: MSN 04827-04860**				
E	DSC-22_10-10		**FMGC Standard**	00022418.0016001	25 MAY 21
E	Criteria: P20467, P20604, P21566 **Applicable to: MSN 10949-11597**				
	DSC-22_10-10		**Preamble**	00010067.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_10-10		**Description**	00010068.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_10-10		**General Philosophy**	00010069.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
E	DSC-22_10-10		**Flight Management Guidance Computer (FMGC)**	00010073.0005001	04 SEP 18
E	Criteria: P20467, P7520, SA **Applicable to: MSN 10949-11597**				
	DSC-22_10-10		**Flight Management Guidance Computer (FMGC)**	00010073.0002001	28 MAY 20
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_10-10		**Flight Management Guidance Computer (FMGC)**	00010073.0004001	28 MAY 20
	Criteria: P7373, P7519, SA **Applicable to: MSN 04827-04860**				
	DSC-22_10-10		**Multipurpose Control and Display Unit (MCDU)**	00010074.0001001	17 AUG 10
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662**				
E	DSC-22_10-10		**Multipurpose Control and Display Unit (MCDU)**	00010074.0002001	17 AUG 10
 E	Criteria: P9522, SA **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-10		**Flight Control Unit (FCU)**	00010075.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_10-10		**Flight Augmentation Computer (FAC)**	00010076.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_10-10		**Other Flight Crew Interfaces**	NG00703	
	DSC-22_10-10		**Other Flight Crew Interfaces - Thrust Levers**	00010077.0001001	23 JUN 15
	Criteria: SA **Applicable to: ALL**				
	DSC-22_10-10		**Other Flight Crew Interfaces - Electronic Flight Instruments (EFIS)**	00010078.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_10-10		**Other Flight Crew Interfaces - Primary Flight Displays**	00010079.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_10-10		**Other Flight Crew Interfaces - Navigation Displays**	00010080.0002001	17 AUG 10
	Criteria: P4539, SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_10-10		**Flight Crew Interface with FMGC**	00010082.0001001	05 MAR 19
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
E	DSC-22_10-20		**System Interface Diagram**	00010084.0001001	01 OCT 12
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-22_10-20		**System Interface Diagram**	00010084.0003001	01 OCT 12
	Criteria: P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-22_10-30		**General**	00010085.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
E	DSC-22_10-30		**General**	00010085.0002001	17 AUG 10
	Criteria: P9522, SA				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-30		**Dual Mode**	00010086.0001001	01 OCT 12
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_10-30		**Independent Mode**	00010087.0001001	01 OCT 12
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-30		**Independent Mode**	00010087.0002001	01 OCT 12
	Criteria: P7373, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_10-30		**Single Mode**	00010088.0001001	01 OCT 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-22_10-30		**Single Mode**	00010088.0004001	01 OCT 12
	Criteria: 31-1276, P9824, SA				
E	**Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-30		**Single Mode**	00010088.0016001	01 OCT 12
	Criteria: P7373, P9824, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_10-30		**Back Up Navigation Mode**	00010089.0001001	01 OCT 12
	Criteria: P9522				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-05		**General**	00010083.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_10-40-10		**MCDU**	NG00781	
	DSC-22_10-40-10		**MCDU - MCDU Interface**	00010090.0002001	14 MAY 12
	Criteria: P5314, SA				
	Applicable to: MSN 01459, 02014				
	DSC-22_10-40-10		**MCDU - MCDU Interface**	00010090.0008001	14 MAY 12
	Criteria: P5314, P5622, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03002-03032				
E	DSC-22_10-40-10		**MCDU - MCDU Interface**	00010090.0003001	14 MAY 12
	Criteria: P5314, P5486, P9038, SA				
E	**Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - General**	00010091.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03002-03032				
E	DSC-22_10-40-10		**MCDU - General**	00010091.0002001	13 DEC 12
	Criteria: P5486, P9038, SA				
E	**Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - Line Select Keys**	00010092.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-10		**MCDU - Keyboard**	00010093.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: MSN 01459, 02014				
E	DSC-22_10-40-10		**MCDU - Keyboard**	00010093.0002001	17 AUG 10
	Criteria: P5486, P5622, P9038, SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - Annunciators (On the Side of the Keyboard)**	00010094.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: MSN 01459, 02014				
E	DSC-22_10-40-10		**MCDU - Annunciators (On the Side of the Keyboard)**	00010094.0002001	17 AUG 10
	Criteria: P5486, P5622, P9038, SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - Annunciators (On the Top of the Keyboard)**	00010757.0001001	17 AUG 10
	Criteria: P5622				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03002-03032				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_10-40-10		**MCDU - Annunciators (On the Top of the Keyboard)**	00010757.0002001	17 AUG 10
	Criteria: P5486, P9038				
E	**Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_10-40-10		**MCDU - BRT and DIM Keys**	00010750.0001001	17 AUG 10
	Criteria: P5486, P9038				
E	**Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - BRT Knob**	00010095.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03002-03032				
	DSC-22_10-40-10		**MCDU - Data Entry**	00010097.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-10		**MCDU - MCDU Entry Format**	00010098.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-10		**MCDU - Messages**	00010099.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-10		**MCDU - Characters**	00010101.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_10-40-10		**MCDU - Colors**	00010102.0001001	17 AUG 10
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - Colors**	00010102.0002001	23 JUN 15
	Criteria: P9652, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_10-40-10		**MCDU - Screen Prompts**	00010103.0001001	14 MAY 12
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - Screen Prompts**	00010103.0003001	14 MAY 12
	Criteria: P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_10-40-10		**MCDU - MCDU Function Keys**	00010104.0002001	23 JUN 15
	Criteria: P5314, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_10-40-10		**MCDU - MCDU Function Keys**	00010104.0009001	23 JUN 15
	Criteria: P5314, P5486, P8483, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
	DSC-22_10-40-10		**MCDU - MCDU Display**	00010107.0005001	01 OCT 12
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, P8014, SA				
	Applicable to: ALL				
	DSC-22_10-40-20		**FCU**	00010112.0003001	03 AUG 17
	Criteria: P3202, P4054, P4055, P4539, SA				
	Applicable to: ALL				
	DSC-22_10-40-20		**FCU Philosophy**	00010113.0002001	14 MAY 12
	Criteria: P3202, SA				
	Applicable to: ALL				
	DSC-22_10-40-20		**Speed/Mach Control Area**	00010114.0002001	14 MAY 12
	Criteria: P3202, SA				
	Applicable to: ALL				
E	DSC-22_10-40-20		**Lateral Control Area**	00010115.0007001	14 MAY 12
	Criteria: P3202, P4054, P4055, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	DSC-22_10-40-20		**Lateral Control Area**	00010115.0008001	14 MAY 12
	Criteria: P20596, P3202, P4054, SA				
	Applicable to: MSN 11531				
	DSC-22_10-40-20		**AP-A/THR Control Area**	00010116.0001001	14 MAY 12
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_10-40-20		**Vertical Control Area**	00010117.0030001	12 MAY 22
	Criteria: P20596, P3102, P3202, P3379, SA				
	Applicable to: MSN 11531				
E	DSC-22_10-40-20		**Vertical Control Area**	00010117.0006001	18 MAY 22
	Criteria: 22-1230, P3102, P3202, P3379, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11522, 11572-11597**				
	DSC-22_10-40-20		**Vertical Control Area**	00010117.0012001	28 MAY 20
	Criteria: P3102, P3202, P3379, P3401, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_10-40-20		**Vertical Control Area**	00010117.0019001	18 MAY 22
	Criteria: P3102, P3202, P3379, P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-22_10-40-30		**Thrust Levers**	00010119.0001001	14 MAY 12
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_10-40-40		**PFD**	00010677.0001001	05 MAR 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-50		**ND**	00010123.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-50		**Arc Mode**	00010124.0001001	14 MAY 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-50		**Plan Mode**	00010125.0001001	01 OCT 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-40-50		**Rose Modes**	00010126.0022001	09 MAR 15
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_10-40-50		**Flight Plan Display Colors**	00010127.0005001	04 SEP 18
	Criteria: P20596, P7520, SA				
	Applicable to: MSN 11531				
	DSC-22_10-40-50		**Flight Plan Display Colors**	00010127.0001001	17 AUG 10
	Criteria: P7373, P7519, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_10-40-50		**Flight Plan Display Colors**	00010127.0002001	17 AUG 10
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-22_10-50-10		**General**	00020369.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0027001	03 DEC 19
	Criteria: J3448, A321, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0004001	03 DEC 19
	Criteria: J3283, P8572, 320-200N				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0026001	03 DEC 19
	Criteria: 57-1187, IAE, J3448, P8572, A321				
	Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0007001	03 DEC 19
	Criteria: CFMI, J3448, P8572, A321				
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0012001	03 DEC 19
	Criteria: 57-1173, CFMI, J3283, P8572				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0008001	03 DEC 19
	Criteria: CFMI, IAE, A319				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345				
	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0005001	03 DEC 19
	Criteria: IAE, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662				
	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0001001	03 DEC 19
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904				
	DSC-22_10-50-20		**Characteristic Speeds**	00020370.0002001	03 DEC 19
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240				
	DSC-22_10-50-30		**Limit Speeds**	00020383.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_10-50-40		**Protection Speeds**	00020382.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_10-50-50		**Other Speeds**	00020384.0004001	05 DEC 17
	Criteria: P4089, SA				
E	**Applicable to: MSN 01143-01459, 02014, 02734, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-22_10-50-50		**Other Speeds**	00020384.0002001	28 MAY 20
	Criteria: K2113, K3154, SA				
E	**Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-22_10-50-50		**Other Speeds**	00020384.0006001	05 DEC 17
	Criteria: 22-1159, P4089, P8211, SA				
	Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-10		**General**	00010128.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_20-20-05		**Navigation**	00010129.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_20-20-10		**General**	00010130.0002001	16 MAR 11
	Criteria: P5168, P6054, P6183, SA				
	Applicable to: ALL				
R	DSC-22_20-20-10		**MIX IRS Position**	00010131.0002001	03 NOV 22
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
	Applicable to: ALL				
E	DSC-22_20-20-10		**GPS Position**	00010132.0002001	23 JUN 15
	Criteria: P5168, P6054, P6183, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-20-10		**GPS Position**	00010132.0015001	23 JUN 15
	Criteria: P5168, P7373, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-20-10		**Radio Position**	00010669.0020001	01 OCT 12
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, P5168, P6054, P6183, SA				
	Applicable to: ALL				
	DSC-22_20-20-10		**FM Position**	00010135.0017001	17 AUG 10
	Criteria: 22-1090, 22-1676, P5168, P6054, P6183, P7519, P7520, SA				
	Applicable to: ALL				
E	DSC-22_20-20-10		**Position Monitor**	00010136.0016001	07 MAY 13
	Criteria: 22-1090, 22-1676, P5168, P6054, P6183, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-20-10		**Position Monitor**	00010136.0019001	07 MAY 13
	Criteria: P5168, P7373, P7519, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-20-10		**Takeoff Update**	00010137.0017001	04 AUG 16
	Criteria: 22-1090, 22-1676, P5168, P6054, P6183, P7519, P7520, SA				
	Applicable to: ALL				
E	DSC-22_20-20-10		**Navigation Modes**	00010138.0001001	12 MAY 22
	Criteria: P4663, P4880, P4954, P5168, P5180, P6054, P6183, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-22_20-20-10		**Navigation Modes**	00010138.0087001	16 MAR 11
	Criteria: P4954, P5168, P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_20-20-20		**General**	00010448.0023001	27 MAY 13
E	Criteria: 22-1090, 22-1676, P4663, P4880, P4954, P5168, P5180, P6054, P6183, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-20-20		**General**	00010448.0044001	27 MAY 13
	Criteria: P4954, P5168, P7519, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-20-20		**Estimated Position Uncertainty**	00010499.0077001	23 JUN 15
	Criteria: 22-1462, 31-1373, 31-1414, P10527, P5168, P7519, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-20-20		**Estimated Position Uncertainty**	00010499.0076001	01 OCT 12
E	Criteria: 22-1090, 22-1676, 31-1335, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10527, P11819, P5168, P6054, P6183, P7519, P7520, P8500, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-20-20		**Estimated Position Uncertainty**	00010499.0017001	01 OCT 12
	Criteria: 22-1090, P5168, SA **Applicable to: MSN 01251**				
	DSC-22_20-20-20		**FM/GPS Position Disagreement**	00010500.0011001	17 AUG 10
	Criteria: 31-1257, P5168, P5706, P6054, P6183, P6437 **Applicable to: ALL**				
	DSC-22_20-20-30		**General**	00010478.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-20-30		**Architecture**	00010479.0001001	31 AUG 17
	Criteria: P8500, SA **Applicable to: ALL**				
	DSC-22_20-20-30		**VOR**	00010480.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-20-30		**DME**	00010481.0001001	17 AUG 10
	Criteria: P7373, P7519, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-20-30		**DME**	00010481.0002001	17 AUG 10
E	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-20-30		**ADF**	00010482.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-20-30		**ILS**	00010483.0001001	17 AUG 10
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_20-20-30		**GLS**	00012868.0001001	16 MAR 11
	Criteria: P8500				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-22_20-20-30		**Selection of Navaids on MCDU Pages**	00010485.0032001	31 AUG 17
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, SA				
	Applicable to: ALL				
E	DSC-22_20-20-30		**Manual Tuning**	00010486.0002001	01 MAR 17
	Criteria: 22-1087, 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-20-30		**Manual Tuning**	00010486.0057001	01 MAR 17
	Criteria: P10762, P10785, P7373, P7519, P8014, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-20-30		**Navaid Identification**	00010487.0001001	12 MAY 22
	Criteria: P8500, SA				
	Applicable to: ALL				
	DSC-22_20-20-40		**Alignment of Inertial Reference System**	00010143.0002001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
E	DSC-22_20-20-40		**Alignment of Inertial Reference System**	00010143.0013001	01 OCT 12
	Criteria: P5253, P7519, P7520, SA				
E	**Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-20-40		**Alignment of Inertial Reference System**	00010143.0029001	01 OCT 12
	Criteria: P5253, P7373, P7519, P8483, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-20-40		**Polar Navigation**	00010145.0001001	27 MAY 13
	Criteria: P9351				
	Applicable to: MSN 02887				
	DSC-22_20-20-50		**General**	00010410.0001001	09 MAR 15
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_20-20-60		**General**	00013736.0001001	18 MAR 11
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_20-20-60		**FLS Beam Computation**	NG01217	
N	DSC-22_20-20-60		**FLS Beam Computation - General**	00013743.0001001	29 MAY 13
	Criteria: P20596				
	Applicable to: MSN 11531				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
N	DSC-22_20-20-60		**FLS Beam Computation - Baro Correction of the FLS Vertical Deviation**	00013744.0001001	18 MAR 11
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_20-20-60		**Temperature Correction of the FLS Vertical Deviation**	00013745.0001001	18 MAR 11
	Criteria: P20596				
	Applicable to: MSN 11531				
	DSC-22_20-30-05		**Flight Planning**	00010492.0002001	17 AUG 10
	Criteria: P3204, P3208, SA				
	Applicable to: ALL				
E	DSC-22_20-30-10-05		**General**	00011075.0005001	25 MAY 21
	Criteria: P21566, P7520, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-30-10-05		**General**	00011075.0002001	05 MAR 19
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_20-30-10-05		**General**	00011075.0004001	05 MAR 19
	Criteria: P7519, P8483, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-05		**Manual Legs**	00010629.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_20-30-10-05		**Flight Plan Construction**	00011076.0032001	04 JUN 19
	Criteria: 22-1083, 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P4954, P5180, P6986, P6987, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-30-10-05		**Flight Plan Construction**	00011076.0042001	04 JUN 19
	Criteria: P10762, P10785, P4954, P6987, P7519, P8014, P8483, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-30-10-05		**Flight Plan Capacity**	00010631.0009001	30 AUG 18
	Criteria: P20467, P5180, P6986, P7520, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-30-10-05		**Flight Plan Capacity**	00010631.0002001	04 NOV 20
	Criteria: 22-1083, 22-1090, 22-1676, P4954, P5180, P6986, P6987, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_20-30-10-05		**Flight Plan Capacity**	00010631.0008001	17 AUG 10
	Criteria: P4954, P6987, P7373, P7519, P8483, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
E	DSC-22_20-30-10-05		**Lateral Revisions**	00010632.0002001	07 APR 17
E	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-30-10-05		**Lateral Revisions**	00010632.0005001	23 JUN 15
	Criteria: P7519, P8483, P9652, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-30-10-15		**General**	00005067.0001001	26 OCT 22
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Temporary F-PLN (TMPY)**	00000460.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
R	DSC-22_20-30-10-15		**Inserting an Airway with "Via"**	NG01127	
E	DSC-22_20-30-10-15		**Inserting an Airway with "Via" - General**	00012828.0001001	14 MAY 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
R	DSC-22_20-30-10-15		**Inserting an Airway with "Via" - Successive Airway Segments from a Waypoint**	00012829.0001001	02 MAY 23
	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139**				
E	DSC-22_20-30-10-15		**Inserting an Airway with "Via" - The Pilot Wishes to Insert One Airway Segment to an Ending Waypoint**	00012830.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting an Airway with "Via" - Flight Plan Insertion**	00012831.0001001	09 FEB 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting a Waypoint**	NG01128	
E	DSC-22_20-30-10-15		**Inserting a Waypoint - General**	00012832.0001001	09 FEB 11
	Criteria: 22-1090, 22-1676, P7519, P7520				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting a Waypoint - Waypoint Identification**	00012833.0001001	09 FEB 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting a Waypoint - Waypoint Inserted Directly in the Flight Plan**	00012834.0001001	14 MAY 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting a Waypoint - Along Track Waypoint Insertion**	00012835.0001001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting a Waypoint - Waypoint Inserted Through the Use of "Next Waypoint"**	00012836.0001001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting a Waypoint - Latitude/Longitude Crossing Waypoint Insertion**	00012837.0001001	14 MAY 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

E	DSC-22_20-30-10-15		**Fix Info**	NG01129	
E	DSC-22_20-30-10-15		**Fix Info - General**	00012838.0008001	09 FEB 11
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Fix Info - Inserting a Radial Intercept Waypoint**	00012839.0008001	10 MAY 21
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Fix Info - Inserting a Circle Intercept Waypoint**	00012840.0001001	01 OCT 12
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Fix Info - Inserting an Abeam Intercept Waypoint**	00012841.0008001	01 OCT 12
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Inserting a New Destination**	00000471.0001001	14 MAY 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Holding Pattern**	NG00586	
E	DSC-22_20-30-10-15		**Holding Pattern - General**	00007222.0001001	09 FEB 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Holding Pattern - Hold to Fix (HF)**	00007163.0001001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Holding Pattern - Hold to Altitude (HA)**	00007182.0001001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-30-10-15		**Holding Pattern - Hold with Manual Termination (HM)**	00007206.0013001	26 OCT 22
	Criteria: 22-1090, 22-1266, 22-1269, 22-1270, 22-1676, P10686, P10762, P10763, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139				
E	DSC-22_20-30-10-15		**Holding Pattern - Procedure to Insert a Hold (Hold with Manual Termination)**	00007220.0001001	09 FEB 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Holding Pattern - Procedure to Delete a Hold (Hold with Manual Termination)**	00007219.0001001	09 FEB 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_20-30-10-15		**Offset**	NG00587	
E	DSC-22_20-30-10-15		**Offset - General**	00007230.0009001	14 MAY 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Offset - Inserting an Offset**	00007207.0010001	01 OCT 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Offset - Manual Cancellation of an Offset**	00007218.0009001	14 MAY 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Alternate Function**	NG00588	
E	DSC-22_20-30-10-15		**Alternate Function - General**	00007240.0001001	09 FEB 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Alternate Function - Review and Selection of Alternate Airport**	00007217.0009001	23 JUN 15
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Enable ALTN**	00000467.0009001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7218 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**DIR Key (Direct-to-Function)**	NG00589	
E	DSC-22_20-30-10-15		**DIR Key (Direct-to-Function) - General**	00007243.0001001	30 MAR 18
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**DIR Key (Direct-to-Function) - Procedure for DIR TO Waypoint**	00007216.0001001	14 MAY 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**DIR Key (Direct-to-Function) - Particular Cases for Use of DIR TO**	00007215.0001001	30 JUN 20
	Criteria: 22-1090, 22-1676, P7519, P7520				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**DIR Key (Direct-to-Function) - Procedure for DIR TO/ABEAM**	00007208.0009001	22 OCT 13
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**DIR Key (Direct-to-Function) - Procedure for DIR TO/Intercept**	00007221.0001001	14 MAY 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**OVFY (Overfly) Key**	00000469.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**POSITION update at**	00000470.0003001	04 JUN 19
E	Criteria: 22-1090, 22-1523, 22-1547, 22-1676, P13321, P13322, P7519, P7520 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-10-15		**Update at**	00000470.0001001	04 JUN 19
E	Criteria: 22-1090, P7520 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
	DSC-22_20-30-10-18		**General**	00005068.0004001	03 NOV 21
	Criteria: 22-1462, P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Temporary F-PLN (TMPY)**	00000472.0002001	23 JUN 15
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Inserting an Airway with "VIA"**	NG00592	
	DSC-22_20-30-10-18		**Inserting an Airway with "Via" - General**	00000473.0003001	01 OCT 12
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Inserting an Airway with "Via " - To Insert Successive Airway Segments from a Waypoint**	00009501.0003001	01 OCT 12
	Criteria: P8483, P9652 **Applicable to: MSN 04827-04860**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-30-10-18		**Inserting an Airway with "Via" - To Insert One Airway Segment to an Ending Waypoint**	00009502.0003001	01 OCT 12
	Criteria: P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Inserting an Airway with "Via" - Flight Plan Insertion**	00009503.0003001	24 JAN 11
	Criteria: P8483, P9652 **Applicable to: MSN 04827-04860**				

M	Localization	T	DU Title	DU identification	DU date
	DSC-22_20-30-10-18		**Inserting a Waypoint**	NG00593	
	DSC-22_20-30-10-18		**Inserting a Waypoint - General**	00000474.0007001	24 JAN 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Inserting a Waypoint - Waypoint Identification**	00009504.0001001	24 JAN 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Inserting a Waypoint - Along Track Offset Waypoint Insertion**	00009505.0001001	14 MAY 12
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Inserting a Waypoint - Waypoint Inserted by Using the "Next Waypoint"**	00009507.0001001	14 MAY 12
	Criteria: P7373 **Applicable to: MSN 04827-04860**				

M	Localization	T	DU Title	DU identification	DU date
	DSC-22_20-30-10-18		**Fix Info**	NG01126	
	DSC-22_20-30-10-18		**Fix Info - General**	00012787.0001001	24 JAN 11
	Criteria: P10785 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Fix Info - Inserting a Radial Intercept Waypoint**	00012788.0001001	01 OCT 12
	Criteria: P10785 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Fix Info - Inserting a Circle Intercept Waypoint**	00012789.0001001	01 OCT 12
	Criteria: P10785 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Fix Info - Inserting an ABEAM Intercept Waypoint**	00012790.0001001	01 OCT 12
	Criteria: P10785 **Applicable to: MSN 04827-04860**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-30-10-18		**Inserting a New Destination**	00000475.0001001	01 OCT 12
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Holding Pattern**	NG00590	
	DSC-22_20-30-10-18		**Holding Pattern - General**	00000476.0001001	24 JAN 11
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Holding Pattern - Hold to Fix (HF)**	00009509.0001001	01 OCT 12
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Holding Pattern - Hold to Altitude (HA)**	00009513.0001001	19 DEC 12
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Holding Pattern - Hold with Manual Termination (HM)**	00009514.0015001	26 OCT 22
	Criteria: P10785, P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Holding Pattern - Procedure to Insert a Hold (Hold with Manual Termination)**	00009515.0015001	01 OCT 12
	Criteria: P10785, P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Holding Pattern - Procedure to Delete a Hold (Hold with Manual Termination)**	00009516.0002001	24 JAN 11
	Criteria: P7373, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Offset**	NG00591	
	DSC-22_20-30-10-18		**Offset - General**	00000477.0003001	17 MAY 21
	Criteria: P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Offset - Inserting an Offset**	00009517.0003001	01 OCT 12
	Criteria: P7373, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Offset - Manual Cancellation of an Offset**	00009518.0002001	14 MAY 12
	Criteria: P7373, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Alternate Function**	NG00652	
	DSC-22_20-30-10-18		**Alternate Function - General**	00000478.0002001	24 JAN 11
	Criteria: P7373, P9652				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-10-18		**Alternate Function - Review and Selection of Alternate Airport**	00009519.0003001	13 DEC 12
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Enable ALTN**	00000479.0002001	01 OCT 12
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**DIR Key (DIRECT-TO-FUNCTION)**	NG00654	
	DSC-22_20-30-10-18		**DIR Key (Direct-to-Function) - General**	00000480.0003001	30 MAR 18
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**DIR Key (Direct-to-Function) - Procedure for DIR TO Waypoint**	00009520.0001001	01 OCT 12
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**DIR Key (DIRECT-TO-FUNCTION) - Particular Cases for Use of DIR TO**	00009521.0001001	05 JUN 18
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**DIR Key (DIRECT-TO-FUNCTION) - Procedure for DIR TO/ABEAM**	00009525.0002001	01 OCT 12
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**DIR Key (DIRECT-TO-FUNCTION) - Procedure for DIR TO/Intercept**	00009526.0002001	01 OCT 12
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**OVFY (Overfly) Key**	00000481.0001001	01 OCT 12
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**POSITION UPDATE AT**	00000482.0003001	04 JUN 19
	Criteria: 22-1462, P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-10-18		**Changing the Departure/Arrival**	00000483.0003001	23 JUN 15
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-05		**General**	00010939.0001001	01 OCT 12
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_20-30-20-05		**Vertical Flight Planning**	00011065.0002001	17 AUG 10
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
	Applicable to: ALL				
R	DSC-22_20-30-20-05		**Flight Phases**	00011024.0014001	03 NOV 22
	Criteria: P10763, P20467, P7520, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-30-20-05		**Flight Phases**	00011024.0011001	17 SEP 13
	Criteria: 22-1462, P10762, P7519, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-20-05		**Flight Phases**	00011024.0007001	22 MAR 16
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
E	DSC-22_20-30-20-05		**Vertical Revision**	00011025.0002001	17 AUG 10
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-30-20-05		**Vertical Revision**	00011025.0004001	17 AUG 10
	Criteria: P7519, P8483, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-30-20-05		**Vertical Constraints (Speed, Altitude, Time)**	00012689.0006001	05 MAR 19
	Criteria: P10763, P20467, P7520, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-30-20-05		**Vertical Constraints (Speed, Altitude, Time)**	00012689.0005001	18 FEB 15
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_20-30-20-05		**Vertical Constraints (Speed, Altitude, Time)**	00012689.0004001	18 FEB 15
	Criteria: P10762, P7373, P7519, P8014, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-30-20-25		**General**	00009323.0008001	14 MAY 12
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Required Time of Arrival (RTA)**	NG00635	
E	DSC-22_20-30-20-25		**Required Time of Arrival (RTA) - General**	00009324.0004001	26 NOV 19
	Criteria: P20467, P7520				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-30-20-25		**Required Time of Arrival (RTA) - General**	00009324.0001001	24 JAN 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
E	DSC-22_20-30-20-25		**Required Time of Arrival (RTA) - Entering a Required Time of Arrival**	00000489.0010001	26 NOV 19
	Criteria: P10763, P20467, P7520				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-30-20-25		**Required Time of Arrival (RTA) - Entering a Required Time of Arrival**	00000489.0008001	14 MAY 12
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				

E	DSC-22_20-30-20-25		**Wind - Temperature - QNH**	NG00636	
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - General**	00000490.0001001	24 JAN 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Trip Wind and Temperature During F-PLN Initialization**	00009327.0001001	24 JAN 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Wind and Temperature During F-PLN Initialization**	00009328.0008001	01 MAR 18
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Cruise Winds and Temperatures**	00009329.0001001	01 MAR 18
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Effect of Wind Entries On Optimum Flight Level**	00009330.0001001	24 JAN 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Descent Winds**	00009331.0001001	14 MAY 12
	Criteria: 22-1090, 22-1270, 22-1676, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Descent Winds**	00009331.0016001	14 MAY 12
E	Criteria: 22-1269, 22-1270, P10762, P10763, P7519, P7520, P8671 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Alternate Wind**	00009332.0001001	24 JAN 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Approach Wind Temperature and QNH**	00009333.0001001	14 MAY 12
	Criteria: 22-1090, 22-1270, 22-1676, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-22_20-30-20-25		**Wind - Temperature - QNH - Entering the Approach Wind Temperature and QNH**	00009333.0016001	14 MAY 12
E	Criteria: 22-1269, 22-1270, P10762, P10763, P7519, P7520, P8671 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Constant Mach Segment**	NG00637	
E	DSC-22_20-30-20-25		**Constant Mach Segment - General**	00009334.0001001	14 MAY 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-30-20-25		**Constant Mach Segment - Entering a Constant Mach Segment**	00000491.0008001	01 OCT 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-30-20-28		**General**	00000492.0002001	01 OCT 12
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Time Constraint/RTA**	NG00649	
	DSC-22_20-30-20-28		**Time Constraint/RTA - General**	00000493.0002001	09 FEB 11
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-30-20-28		**Time Constraint/RTA - Entering a Required Time of Arrival**	00009483.0006001	01 OCT 12
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH**	NG00650	
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - General**	00009484.0002001	09 FEB 11
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - Entering the Trip Wind and Temperature During F-PLN Initialization**	00009485.0013001	01 OCT 12
	Criteria: P10785, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - Entering the Wind and Temperature During F-PLN Initialization**	00009486.0019001	01 OCT 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - Entering the Cruise Winds and Temperature**	00009487.0019001	01 OCT 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - Effect of Wind Entries on Optimum Flight Level**	00009488.0002001	09 FEB 11
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - Entering the Descent Winds**	00009489.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P8671 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - Entering the Alternate Wind**	00009490.0001001	09 FEB 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Wind - Temperature - QNH - Entering the Approach Wind**	00009491.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P8671 **Applicable to: MSN 04827-04860**				
	DSC-22_20-30-20-28		**Constant Mach**	NG00651	
	DSC-22_20-30-20-28		**Constant Mach - General**	00009492.0006001	09 FEB 11
	Criteria: P8483, P9652				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-20-28		**Constant Mach - Entering a Constant Mach Segment**	00009493.0006001	14 MAY 12
	Criteria: P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-30-20-28		**Constant Mach - Deleting a Constant Mach**	00009494.0006001	23 JUN 15
	Criteria: P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-40-10		**General**	00011077.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_20-40-10		**Optimization**	00011084.0029001	23 JUN 15
	Criteria: 22-1083, 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P4954, P5180, P6986, P6987, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-40-10		**Optimization**	00011084.0038001	23 JUN 15
	Criteria: P10762, P10785, P4954, P6987, P7373, P7519, P8014, P9652, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-40-20		**Cost Index (CI)**	00011041.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_20-40-30		**General**	00011080.0002001	17 AUG 10
	Criteria: P3204, P3208, P3693, P3694, SA				
	Applicable to: ALL				
	DSC-22_20-40-30		**Predictions for the Primary Flight Plan**	00011085.0001001	17 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_20-40-30		**Computation of Predictions**	00011086.0001001	17 AUG 10
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-40-30		**Computation of Predictions**	00011086.0002001	17 AUG 10
	Criteria: P8483, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-40-30		**Predictions Displayed on the Navigation Display**	00011090.0002001	17 AUG 10
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-40-30		**Predictions Displayed on the Navigation Display**	00011090.0004001	20 JAN 15
	Criteria: P7519, P8483, SA **Applicable to: MSN 04827-04860**				
	DSC-22_20-40-30		**Predictions Displayed on the MCDU**	00011093.0001001	14 MAY 12
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**Type of Predictions**	00011113.0002001	18 MAR 11
	Criteria: P5168, P6054, P6183, SA **Applicable to: ALL**				
E	DSC-22_20-40-30		**Examples of MCDU Predictions**	00011120.0001001	14 MAY 12
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-40-30		**Examples of MCDU Predictions**	00011120.0002001	14 MAY 12
	Criteria: P8483, SA **Applicable to: MSN 04827-04860**				
	DSC-22_20-40-30		**Constraint Symbols (Star)**	00011150.0001001	14 MAY 12
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**Vertical Deviation**	00011139.0001001	29 SEP 15
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**Operation Rules Concerning Predictions**	00011140.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				

E	DSC-22_20-40-30		**Other Computations**	NG00897	
E	DSC-22_20-40-30		**Other Computations - Engine-out Case**	00011141.0002001	17 AUG 10
E	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-40-30		**Other Computations - Engine-out Case**	00011141.0004001	17 AUG 10
	Criteria: P7519, P8483, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-40-30		**Other Computations - Recommended Maximum Altitude (REC MAX)**	00011142.0001001	17 AUG 10
E	Criteria: 22-1090, 320-271N, P15809, P6201, P7373, P7519, P7520, SA **Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-40-30		**Other Computations - Recommended Maximum Altitude (REC MAX)**	00011142.0003001	17 AUG 10
	Criteria: 22-1090, 22-1676, SA **Applicable to: MSN 01143-01459**				
	DSC-22_20-40-30		**Other Computations - Predictions for Alternates**	00011250.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**Return-to-Trajectory Assumptions**	00011148.0001001	19 DEC 12
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**Energy Circle**	00011144.0001001	17 AUG 10
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**Introduction to PERF and IDLE Factors**	00014856.0001001	31 JAN 13
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**PERF Factor**	NG00898	
	DSC-22_20-40-30		**PERF Factor - General**	00011145.0001001	30 JAN 13
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**IDLE Factor**	NG01281	
	DSC-22_20-40-30		**IDLE Factor - General**	00014861.0001001	29 SEP 15
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**IDLE Factor - Impact on Vertical Profile**	00014862.0001001	23 JUN 15
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**IDLE Factor - Impact on Guidance**	00014863.0001001	30 JAN 13
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-40-30		**Procedure to Modify the PERF and IDLE Factors**	00014857.0001001	30 JAN 13
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	DSC-22_20-45-10		**Takeoff Surveillance Function**	NG01835	
	DSC-22_20-45-10		**Takeoff Surveillance Function**	00022107.0001001	05 JUN 18
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785				
	Applicable to: ALL				
R	DSC-22_20-45-10			00022108.0001001	03 NOV 22
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785				
	Applicable to: ALL				
R	DSC-22_20-45-10			00022109.0003001	03 NOV 22
	Criteria: P10763, P13487, P14628, P20467				
E	**Applicable to: MSN 10949-11597**				
R	DSC-22_20-45-10			00022109.0002001	03 NOV 22
	Criteria: 22-1269, 22-1270, 22-1462, 22-1676, 31-1482, 31-1492, P10762, P10763, P10785, P13487, P14628				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				

E	DSC-22_20-45-10		**Associated Alerts and Messages**	NG01838	
E	DSC-22_20-45-10		**Associated Alerts**	00022142.0003001	05 JUN 18
	Criteria: P13487, P14628, P20467, P20610				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-45-10		**Associated Messages**	00022143.0002001	05 JUN 18
	Criteria: 22-1269, 22-1270, 22-1462, 22-1676, P10762, P10763, P10785				
	Applicable to: ALL				

E	DSC-22_20-50-10-25		**General**	00000556.0001001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-50-10-25		**MCDU MENU Page**	00000557.0001001	14 MAY 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
E	DSC-22_20-50-10-25		**MCDU MENU Page**	00000557.0010001	14 MAY 12
	Criteria: P7519, P7520, P9522				
E	**Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**INIT A Page**	00000558.0011001	25 MAY 21
	Criteria: P10763, P20467, P21566, P7520				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-50-10-25		**INIT A Page**	00000558.0009001	01 MAR 18
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-22_20-50-10-25		**Route Selection Page**	00000559.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**IRS INIT Page**	00013511.0051001	14 MAY 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P5168, P6054, P6183, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**WIND Pages**	00000560.0010001	26 NOV 19
E	Criteria: P10763, P20467, P7520 **Applicable to: MSN 10949-11597**				
	DSC-22_20-50-10-25		**WIND Pages**	00000560.0009001	01 MAR 18
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-50-10-25		**INIT FUEL PRED Page**	00000561.0010001	05 MAY 22
E	Criteria: P10763, P20467, P7520 **Applicable to: MSN 10949-11597**				
	DSC-22_20-50-10-25		**INIT B Page**	00000561.0009001	01 MAR 18
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-50-10-25		**Fuel Prediction Page**	00000562.0009001	01 MAR 18
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Flight Plan Pages**	00000563.0009001	26 NOV 19
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-50-10-25		**Lateral Revision Pages**	00000564.0009001	26 OCT 22
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139**				
E	DSC-22_20-50-10-25		**Fix Info Page**	00000565.0009001	14 MAY 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Offset Page**	00013512.0019001	17 MAY 21
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-50-10-25		**Airways Page**	00000566.0009001	14 MAY 12
E	Criteria: 22-1090, 22-1248, 22-1269, 22-1270, 22-1676, P10439, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Departure Pages**	00000567.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Hold Pages**	00000568.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Direct TO Page**	00000569.0001001	23 JUN 15
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
N	DSC-22_20-50-10-25		**ARRIVAL Pages**	00000570.0024001	04 NOV 22
	Criteria: P10763, P20467, P21566, P7520 **Applicable to: MSN 10949-11597**				
N	DSC-22_20-50-10-25		**ARRIVAL Pages**	00000570.0017001	04 NOV 22
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-50-10-25		**Alternate Page**	00000571.0003001	30 AUG 18
E	Criteria: P20467, P7520 **Applicable to: MSN 10949-11597**				
R	DSC-22_20-50-10-25		**Alternate Page**	00000571.0001001	02 MAY 23
	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-50-10-25		**Route Selection Page for Alternate**	00000572.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**VERTICAL REVISION Pages**	00000573.0001001	04 DEC 18
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P20467, P7519, P7520, P8500 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Step ALTS Page**	00000574.0009001	14 MAY 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-50-10-25		**RTA Page**	00000575.0009001	14 MAY 12
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-50-10-25		**RTA Page**	00000575.0011001	26 NOV 19
E	Criteria: P10763, P20467, P7520 **Applicable to: MSN 10949-11597**				
E	DSC-22_20-50-10-25		**Data Index Pages**	00000576.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Waypoint/Stored Waypoint/New Waypoint Pages**	00000577.0001001	30 AUG 18
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**NAVAID/Stored NAVAID/New NAVAID Pages**	00000578.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-22_20-50-10-25		**Runways/Stored Runways/New Runway Pages**	00000579.0004001	17 MAR 11
	Criteria: P7519, P8500 **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	DSC-22_20-50-10-25		**Runways/Stored Runways/New Runway Pages**	00000579.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Route/Stored Route/New Route Pages**	00000580.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Aircraft Status Page**	00000581.0003001	25 MAY 21
E	Criteria: P21566, P7520 **Applicable to: MSN 10949-11597**				
	DSC-22_20-50-10-25		**Aircraft Status Page**	00000581.0001001	28 APR 14
	Criteria: 22-1090, 22-1676, P7519, P7520				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
E	DSC-22_20-50-10-25		**P/N XLOAD Page**	00000582.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**P/N Status Pages**	00000583.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-50-10-25		**Duplicate Names Page**	00000584.0003001	01 OCT 12
	Criteria: P7519, P8500 **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	DSC-22_20-50-10-25		**Duplicate Names Page**	00000584.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Position Monitor Page**	00000585.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Position Monitor and Position Frozen Page**	00009133.0001001	29 MAR 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Selected NAVAIDS Page**	00000586.0014001	03 APR 13
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520, P8500 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**IRS Monitor Page**	00000587.0010001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P3040, P3044, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
R	DSC-22_20-50-10-25		**GPS Monitor Page** ◁	00000588.0001001	02 MAY 23
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Closest Airports Pages**	00000589.0001001	17 MAR 11
	Criteria: 22-1090, 22-1676, P7519, P7520				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Equi-Time Point Page**	00000590.0001001	18 DEC 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Print Function Pages**	00000591.0001001	01 OCT 12
E	Criteria: 22-1090, P4205, P7519, P7520 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**ACARS Function Page**	00000592.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**ACARS Function Page 1**	00000593.0001001	01 MAR 18
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Uplink TO Data REQ Pages**	00000594.0009001	14 MAY 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Uplink MAX TO Data Pages**	00000595.0010001	01 OCT 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Uplink FLX TO Data Pages**	00000596.0001001	05 JUN 18
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**ACARS Function Page 2**	00000597.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**PERF Page**	00000598.0001001	17 MAR 11
E	Criteria: 22-1090, 22-1676, P7218 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**PERF Takeoff Page**	00000599.0010001	08 JUL 15
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-22_20-50-10-25		**PERF Climb Page**	00000600.0001001	14 MAY 12
E	Criteria: 22-1090, 22-1676, P20467, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**PERF Cruise Page**	00000601.0009001	30 MAR 15
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P20467, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-50-10-25		**PERF Descent Page**	00000602.0011001	23 JUN 15
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-50-10-25		**PERF Descent Page**	00000602.0029001	30 AUG 18
E	Criteria: P10763, P20467, P7520 **Applicable to: MSN 10949-11597**				
E	DSC-22_20-50-10-25		**PERF APPR Page**	00016132.0015001	10 MAY 21
E	Criteria: P20467, P4089, P7520, A321 **Applicable to: MSN 10949-11597**				
	DSC-22_20-50-10-25		**PERF APPR Page**	00016132.0010001	10 MAY 21
	Criteria: 22-1090, 22-1676, P4089, P7519, P7520, A319, A321 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-50-10-25		**PERF Go Around Page**	00000604.0002001	01 OCT 12
E	Criteria: 22-1090, 22-1203, 22-1676, P7519, P7520, P8708, P9126 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-50-10-25		**PROG Pages**	00000605.0046001	10 MAY 22
	Criteria: 22-1090, 22-1270, P5168 **Applicable to: MSN 01143-01376**				
E	DSC-22_20-50-10-25		**PROG Pages**	00000605.0051001	10 MAY 22
E	Criteria: 22-1090, 22-1269, 22-1270, P10762, P10763, P5168, P6054, P6183, P6201, P7519, P7520 **Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Predictive GPS Pages**	00009139.0001001	31 AUG 17
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P5168, P5726, P6054, P6183, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-50-10-25		**Report Page**	00000606.0009001	14 MAY 12
E	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-50-10-25		**Radio NAV Page**	00000607.0009001	06 APR 16
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-22_20-50-10-25		**Radio NAV Page**	00000607.0015001	06 APR 16
	Criteria: P10762, P7519, P8500				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-22_20-50-10-25		**Secondary Pages**	00000608.0010001	30 AUG 18
	Criteria: P10763, P20467, P7520				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-50-10-25		**Secondary Pages**	00000608.0009001	13 FEB 13
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
E	DSC-22_20-50-10-25		**Back Up NAV Pages**	00013508.0019001	29 JAN 13
	Criteria: P7519, P7520, P9522				
E	**Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

E	DSC-22_20-50-10-25		**TEMP Pages**	NG01857	
E	DSC-22_20-50-10-25		**General**	00022370.0001001	30 AUG 18
	Criteria: P20467				
E	**Applicable to: MSN 10949-11597**				
E	DSC-22_20-50-10-25		**CRZ TEMP Page**	00022371.0001001	30 AUG 18
	Criteria: P20467				
E	**Applicable to: MSN 10949-11597**				

	DSC-22_20-50-10-28		**GENERAL**	00000813.0001001	14 MAY 12
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**MCDU MENU Page**	00000814.0012001	16 MAR 11
	Criteria: P7373, P8483, P9522				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**INIT A Page**	00000815.0021001	17 MAY 21
	Criteria: P10785, P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**ROUTE SELECTION Page**	00000818.0001001	16 MAR 11
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**IRS INIT Page**	00009556.0052001	30 AUG 18
	Criteria: P10785, P5168, P7373, P8483				
	Applicable to: MSN 04827-04860				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-50-10-28		**WIND Pages**	00009557.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**INIT B Page**	00000824.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**FUEL PREDICTION Page**	00000825.0022001	10 MAY 21
	Criteria: 22-1590, P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**FLIGHT PLAN Pages**	NG00069	
	DSC-22_20-50-10-28		**FLIGHT PLAN PAGES - GENERAL**	00000826.0001001	16 MAR 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**FLIGHT PLAN Pages - FLIGHT PLAN A Page**	00000827.0009001	06 AUG 19
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**FLIGHT PLAN Pages - FLIGHT PLAN B Page**	00000828.0001001	28 MAY 20
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**LATERAL REVISION Pages**	NG00070	
	DSC-22_20-50-10-28		**LATERAL REVISION Pages - General**	00000829.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**LATERAL REVISION Pages - Temporary Revision**	00000830.0002001	14 MAY 12
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**AIRWAYS Page**	00000831.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**DEPARTURE Pages**	00000832.0004001	01 OCT 12
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**HOLD Pages**	00000833.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-50-10-28		**DIRECT TO Page**	00000834.0004001	01 OCT 12
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**ARRIVAL Pages**	00000835.0025001	17 MAY 21
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**ALTERNATE Page**	00000836.0002001	03 NOV 21
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**ROUTE SELECTION Page for Alternate**	00000837.0002001	05 JUN 18
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**VERTICAL REVISION Pages**	00000838.0004001	16 MAR 11
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**STEP ALTS Page**	00000839.0004001	14 MAY 12
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				

	DSC-22_20-50-10-28		**DATA INDEX Pages**	NG00071	
	DSC-22_20-50-10-28		**DATA INDEX Pages - General**	00000841.0002001	01 OCT 12
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**DATA INDEX Pages - DATA INDEX 1/2 Page**	00000842.0002001	16 MAR 11
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**DATA INDEX PAGES - DATA INDEX 2/2 PAGE**	00000843.0001001	23 JUN 15
	Criteria: P7373 **Applicable to: MSN 04827-04860**				

	DSC-22_20-50-10-28		**WAYPOINT/PILOTS WAYPOINT/NEW WAYPOINT Pages**	00000844.0002001	04 SEP 18
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**NAVAID/PILOTS' NAVAID/NEW NAVAID Pages**	00000845.0002001	01 OCT 12
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-50-10-28		**RUNWAYS/PILOTS' RUNWAYS/NEW RUNWAY PAGES**	00000846.0002001	14 MAY 12
	Criteria: P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**ROUTE/PILOTS' ROUTE/NEW ROUTE PAGES**	00000847.0001001	01 OCT 12
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**AIRCRAFT STATUS Page**	00000848.0001001	24 SEP 14
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**P/N XLOAD PAGE**	00000849.0001001	10 DEC 09
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**P/N STATUS PAGES**	00000850.0001001	01 OCT 12
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**POSITION MONITOR Page**	00000853.0008001	14 MAY 12
	Criteria: P10785, P7373, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**SELECTED NAVAIDS Page**	00000854.0003001	14 MAY 12
	Criteria: P10785, P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**IRS MONITOR Page**	00000856.0003001	23 JUN 15
	Criteria: P3044, P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**DUPLICATE NAMES PAGE**	00000852.0001001	23 JUN 15
	Criteria: P10785, P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**GPS MONITOR PAGE** ◁	00000858.0001001	26 JAN 22
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PRINT FUNCTION Pages**	00009558.0001001	16 MAR 11
	Criteria: P4155, P4205, P4502, P7373, P7519 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**AOC FUNCTION Page (If installed)**	NG00659	
	DSC-22_20-50-10-28		**AOC FUNCTION PAGE (If Installed) - GENERAL**	00000896.0001001	16 MAR 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-50-10-28		**AOC FUNCTION PAGE - AOC FUNCTION PAGE 1 (If Installed)**	00000897.0001001	28 MAR 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**AOC FUNCTION PAGE - UPLINK TO DATA REQ PAGES (If Installed)**	00000898.0001001	14 MAY 12
	Criteria: P7373, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**AOC FUNCTION Page (If Installed) - UPLINK MAX TO DATA Pages (If Installed)**	00000900.0021001	18 MAR 11
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**AOC FUNCTION PAGE - UPLINK FLX TO DATA PAGES (If Installed)**	00000901.0001001	16 MAR 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**AOC FUNCTION PAGE - AOC FUNCTION PAGE 2 (If Installed)**	00000902.0001001	16 MAR 11
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PERF Page**	NG00660	
	DSC-22_20-50-10-28		**PERF PAGE - GENERAL**	00000903.0001001	01 OCT 12
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PERF Page - PERF Takeoff**	00000904.0004001	30 AUG 18
	Criteria: 22-1462, P10785, P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PERF Page - PERF Climb**	00000905.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PERF Page - PERF Cruise**	00000906.0004001	03 NOV 21
	Criteria: P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PERF Page - PERF Descent**	00000907.0025001	01 OCT 12
	Criteria: P10785, P7373, P8483, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PERF Page - PERF APPR**	00016135.0012001	10 MAY 21
	Criteria: 22-1462, P4089, P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-50-10-28		**PERF Page - PERF Go Around**	00000909.0002001	16 MAR 11
	Criteria: P7373, P7977				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**PROG Pages**	NG00661	
	DSC-22_20-50-10-28		**PROG Pages - General**	00000910.0030001	17 NOV 20
	Criteria: 22-1462, P10785, P6201, P7373, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**PROG Pages - Predictive GPS Page (If Installed)**	00000911.0001001	04 DEC 18
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**PROG Pages - REPORT PAGE**	00000912.0001001	16 MAR 11
	Criteria: P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**RADIO NAV Page**	00000913.0002001	01 OCT 12
	Criteria: P10785, P7373				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**SECONDARY Pages**	00000914.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**RADIAL FIX INFO Pages**	00009559.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**CLOSEST AIRPORTS Pages**	00009560.0001001	16 MAR 11
	Criteria: P7373, P8483				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**EQUI - TIME POINT Page**	00009561.0004001	18 MAR 11
	Criteria: P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**RTA Page**	00009562.0021001	14 MAY 12
	Criteria: P10785, P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**CONSTANT MACH Page**	00009563.0004001	01 OCT 12
	Criteria: P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**BACK UP NAV Pages**	NG01190	
	DSC-22_20-50-10-28		**BACK UP NAV Pages - General**	00013272.0006001	16 MAR 11
	Criteria: P8483, P9522				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**BACK UP NAV Pages - B/UP F-PLN Page**	00013273.0006001	23 JUL 12
	Criteria: P8483, P9522				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**BACK UP NAV Pages - B/UP F-PLN (DIR TO) Page**	00013275.0006001	14 MAY 12
	Criteria: P8483, P9522				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**BACK UP NAV Pages - B/UP PROG Page**	00013276.0006001	21 MAR 16
	Criteria: P8483, P9522				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**BACK UP NAV Pages - B/UP IRS 1 or 2 or 3 Page**	00013278.0006001	14 MAY 12
	Criteria: P8483, P9522				
	Applicable to: MSN 04827-04860				
	DSC-22_20-50-10-28		**BACK UP NAV Pages - B/UP GPS (If Installed)**	00013279.0006001	14 MAY 12
	Criteria: P8483, P9522				
	Applicable to: MSN 04827-04860				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	DSC-22_20-50-20-35		**MCDU Message List**	00000918.0040001	12 MAY 22
	Criteria: P10763, P20467, P20596, P6578, P7520				
	Applicable to: MSN 11531				
E	DSC-22_20-50-20-35		**MCDU Message List**	00000918.0037001	28 NOV 19
	Criteria: P10763, P20467, P6578, P7520				
E	**Applicable to: MSN 10949-11522, 11572-11597**				
	DSC-22_20-50-20-35		**MCDU Message List**	00000918.0034001	28 NOV 19
	Criteria: P10762, P6578, P7519, P8500				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-22_20-50-20-35		**MCDU Message List**	00000918.0020001	28 NOV 19
	Criteria: 22-1269, 22-1270, P10762, P10763, P6578, P7519, P7520				
	Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324				
	DSC-22_20-50-20-35		**MCDU Message List**	00000918.0009001	28 NOV 19
	Criteria: 22-1090, 22-1270, 22-1676, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-22_20-50-20-38		**MCDU Message List**	00000919.0070001	28 NOV 19
	Criteria: 22-1462, P10785, P6578, P7373, P8483, P9652				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-50-30		**MCDU Data Format List**	00000920.0085001	25 MAY 21
	Criteria: P10763, P11473, P20467, P21566, P7520, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-50-30		**MCDU Data Format List**	00000920.0082001	21 MAR 16
	Criteria: 22-1462, P10762, P10785, P11473, P12092, P7373, P7519, P8014, P8483, P9652, SA				
	Applicable to: MSN 04827-04860				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-50-30		**MCDU Data Format List**	00000920.0051001	21 MAR 16
	Criteria: 22-1090, 22-1269, 22-1270, 22-1315, 22-1614, 22-1676, P10762, P10763, P11473, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_20-60-10		**GENERAL**	00000921.0001001	10 DEC 09
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-60-10		**MCDU Altitude Predictions**	NG00072	
	DSC-22_20-60-10		**MCDU ALTITUDE PREDICTIONS - GENERAL**	00000922.0001001	10 DEC 09
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_20-60-10		**MCDU ALTITUDE PREDICTIONS - ON THE GROUND**	00000927.0001001	10 DEC 09
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_20-60-10		**MCDU Altitude Predictions - In Flight**	00000924.0001001	16 FEB 11
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-10		**MCDU Altitude Predictions - In Flight**	00000924.0002001	16 FEB 11
	Criteria: P7373, SA				
	Applicable to: MSN 04827-04860				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-60-10		**Target Altitude on PFD**	00000925.0001001	01 OCT 12
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-10		**Target Altitude on PFD**	00000925.0002001	01 OCT 12
	Criteria: P7373, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-60-10		**Procedures**	00000928.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_20-60-20		**Clearing the Scratchpad of Data or Messages**	00000929.0001001	16 FEB 11
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_20-60-20		**Clearing Data Fields**	00000930.0001001	16 FEB 11
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-20		**Clearing Data Fields**	00000930.0002001	16 FEB 11
	Criteria: P7373, SA **Applicable to: MSN 04827-04860**				
	DSC-22_20-60-30		**General**	00000932.0002001	16 FEB 11
	Criteria: 22-1090, 22-1676, P7373, P7519, P7520, P8483, SA **Applicable to: ALL**				
	DSC-22_20-60-30		**Diversion to Preplanned Alternate Airport**	00000933.0003001	16 FEB 11
	Criteria: P7373, P7519, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-60-30		**En Route Diversion with Several Airports Available**	00009508.0002001	16 FEB 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-30		**En Route Diversion with Several Airports Available**	00009508.0004001	16 FEB 11
	Criteria: P7373, P7519, P8483 **Applicable to: MSN 04827-04860**				
	DSC-22_20-60-30		**En Route Diversion over Oceanic or Desertic Area**	00009528.0001001	16 FEB 11
	Criteria: 22-1090, 22-1676, P7373, P7519, P7520, P8483 **Applicable to: ALL**				
E	DSC-22_20-60-30		**Diversion Preparation on the Secondary Flight Plan**	00009530.0002001	16 FEB 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-30		**Miscellaneous**	00009531.0002001	16 FEB 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-30		**Execution of the Diversion**	00009532.0001001	16 FEB 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-30		**Diversion to the Alternate Airport**	00009537.0001001	16 FEB 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-60-30		**Using the Secondary Flight Plan Function**	00000935.0002001	19 DEC 12
	Criteria: P7373, P7519, P8483, SA **Applicable to: MSN 04827-04860**				
	DSC-22_20-60-30		**Using New Destination Function**	00000936.0004001	01 OCT 12
	Criteria: P7373, P7519, P8483, SA **Applicable to: MSN 04827-04860**				
	DSC-22_20-60-40		**General**	00000937.0001001	16 FEB 11
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-60-40		**Flight Management Part**	00000938.0030001	16 MAR 11
	Criteria: P10321, P7519, P9652, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-60-40		**Flight Management Part**	00000938.0026001	16 MAR 11
E	Criteria: 22-1090, 22-1289, 22-1484, 22-1676, P10321, P7519, P7520, SA, 320-200N, 321-200NX **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03284, 03313-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04953-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-06876, 06949-09324, 10949-11597**				
	DSC-22_20-60-40		**Flight Management Part**	00000938.0002001	16 FEB 11
	Criteria: P7519, P7520, SA **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03294, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 06895**				
	DSC-22_20-60-40		**Flight Guidance Part**	00000939.0002001	04 JUL 17
	Criteria: 22-1090, 22-1676, P7218, P7666, SA **Applicable to: ALL**				
	DSC-22_20-60-40		**Autothrust**	00000940.0001001	16 FEB 11
	Criteria: SA **Applicable to: ALL**				
E	DSC-22_20-60-40		**Engine-Out Conditions**	00000941.0001001	16 FEB 11
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
R	DSC-22_20-60-40		**Engine-Out Conditions**	00000941.0002001	02 MAY 23
	Criteria: P7373, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-60-40		**Engine-Out SID**	NG00074	
E	DSC-22_20-60-40		**Engine-Out SID - General**	00000942.0001001	14 MAY 12
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-60-40		**Engine-Out SID - General**	00000942.0002001	18 NOV 13
	Criteria: P7373, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-40		**Engine-Out SID - Before the Diversion Point**	00000943.0001001	14 MAY 12
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-40		**Engine-Out SID - Before the Diversion Point**	00000943.0002001	14 MAY 12
	Criteria: P7373, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-60-40		**Engine-Out SID - After the Diversion Point**	00000944.0001001	14 MAY 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_20-60-40		**Engine-Out SID - Below THR Red Altitude**	00000945.0002001	14 MAY 12
	Criteria: P3202, P3379, SA				
	Applicable to: ALL				
	DSC-22_20-60-40		**Engine-Out SID - Above THR Red Altitude**	00000946.0006001	16 FEB 11
	Criteria: P3202, P3379, P4320, SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-60-40		**Engine-Out in CLB Phase (above acceleration altitude)**	NG00075	
	DSC-22_20-60-40		**Engine-Out in CLB Phase (above acceleration altitude) - Aircraft is Actually Climbing**	00000947.0003001	16 FEB 11
	Criteria: P3202, P4320, SA				
	Applicable to: ALL				
E	DSC-22_20-60-40		**Engine-Out in CLB Phase (above acceleration altitude) - Aircraft is Flying**	00000948.0001001	16 FEB 11
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-60-40		**Engine-Out in Cruise Phase**	00000949.0001001	17 NOV 20
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-60-40		**Engine-Out in Cruise Phase**	00000949.0002001	17 NOV 20
	Criteria: P9652, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-40		**Engine-Out in Descent Phase**	00000951.0001001	16 FEB 11
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-40		**Engine-Out in Descent Phase**	00000951.0004001	16 FEB 11
	Criteria: P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-60-40		**Engine-Out In Approach Phase**	00000952.0001001	04 JUL 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_20-60-40		**Engine-Out in Go-Around Phase**	00000953.0002001	16 FEB 11
	Criteria: P4320, P8483, P9652, SA				
	Applicable to: ALL				
	DSC-22_20-60-50		**Secondary Flight Plan**	00000954.0004001	14 MAY 12
	Criteria: P10762, P7373, P8014, P8483, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-50		**Secondary Flight Plan**	00000954.0011001	14 MAY 12
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-60		**Pilots Route Function**	00000955.0003001	01 OCT 12
	Criteria: P7373, P7519, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-60		**Stored Route Function**	00000955.0002001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-70		**General**	00006017.0001001	16 FEB 11
	Criteria: 22-1090, 22-1676, P7373, P7519, P7520				
	Applicable to: ALL				
E	DSC-22_20-60-70		**Report Page Access**	00009524.0008001	29 SEP 15
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-70		**Report Page Acces**	00009524.0010001	14 MAY 12
	Criteria: P10762, P10785, P7373, P7519, P8014				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-80		**Closest Airports**	00006018.0001001	07 APR 11
	Criteria: 22-1090, 22-1676, P7519, P7520				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-80		**Closest Airports**	00006018.0002001	23 MAR 11
	Criteria: P7373, P7519, P8483				
	Applicable to: MSN 04827-04860				
	DSC-22_20-60-90		**General**	00006019.0001001	16 FEB 11
	Criteria: 22-1090, 22-1676, P7373, P7519, P7520, P8483				
	Applicable to: ALL				
E	DSC-22_20-60-90		**How to Insert a Time Marker**	00009522.0001001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-90		**How to Insert a Time Marker**	00009522.0002001	01 OCT 12
	Criteria: P7373, P7519, P8483				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-100		**Step Climb/Step Descent**	00006020.0012001	12 APR 17
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-100		**Step Climb/Step Descent**	00006020.0011001	28 MAY 20
	Criteria: P10762, P7373, P7519, P8014, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-60-110		**General**	00006021.0001001	01 OCT 12
	Criteria: 22-1090, 22-1676, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_20-60-110		**General**	00006021.0011001	01 OCT 12
	Criteria: P7373, P7519, P8483, P9652				
	Applicable to: MSN 04827-04860				
	DSC-22_20-60-110		**Estimated Takeoff Time (ETT)**	00009523.0001001	23 JUN 15
	Criteria: 22-1090, 22-1676, P7519, P7520				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_20-60-110		**Estimated Takeoff Time (ETT)**	00009523.0011001	23 JUN 15
	Criteria: P7373, P7519, P8483, P9652				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-120		**Equitime Point**	00006015.0001001	16 MAR 11
	Criteria: 22-1090, 22-1676, P7519, P7520				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-120		**Equitime Point**	00006015.0002001	18 MAR 11
	Criteria: P7373, P7519, P8483				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-120		**Equitime Point Entry**	00009536.0001001	01 OCT 12
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-120		**Equitime Point Entry**	00009536.0002001	01 OCT 12
	Criteria: P7373, P7519, P8483 **Applicable to: MSN 04827-04860**				
E	DSC-22_20-60-130		**General**	00012906.0011001	24 FEB 14
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_20-60-130		**Back Up NAV Selection**	NG01133	
E	DSC-22_20-60-130		**Back Up NAV Selection - FM F-PLN Download in MCDU**	00012907.0011001	16 FEB 11
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Selection - Example of Downloaded F-PLN**	00012908.0011001	14 MAY 12
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_20-60-130		**Back Up NAV Operation**	NG01134	
E	DSC-22_20-60-130		**Back Up NAV Operation - AP and A/THR**	00012909.0011001	16 FEB 11
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - Navigation Monitoring**	00012910.0011001	16 FEB 11
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - Flight Planning**	00012911.0011001	16 FEB 11
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - Waypoint Insertion**	00012912.0011001	23 JUN 15
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - Waypoint Deletion**	00012913.0011001	16 FEB 11
E	Criteria: P7373, P7519, P7520, P8483, P9522 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-60-130		**Back Up NAV Operation - Overfly Insertion/Deletion**	00012914.0011001	16 FEB 11
	Criteria: P7373, P7519, P7520, P8483, P9522				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-130		**Back Up NAV Operation - Direct to a Waypoint**	00012915.0006001	23 JUN 15
	Criteria: P7373, P7519, P8483, P9522				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-60-130		**Back Up NAV Operation - Direct to a Waypoint**	00012915.0011001	23 JUN 15
	Criteria: P7519, P7520, P9522				
E	**Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - CLR Waypoint/Discontinuity**	00012916.0011001	14 MAY 12
	Criteria: P7373, P7519, P7520, P8483, P9522				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - Approaches**	00012917.0011001	23 DEC 14
	Criteria: P7373, P7519, P7520, P8483, P9522				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - End of Descent**	00012918.0011001	16 FEB 11
	Criteria: P7373, P7519, P7520, P8483, P9522				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - Non ILS Approaches**	00012919.0011001	23 JUN 15
	Criteria: P7373, P7519, P7520, P8483, P9522				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-60-130		**Back Up NAV Operation - ILS Approaches**	00012920.0011001	16 FEB 11
	Criteria: P7373, P7519, P7520, P8483, P9522				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-60-140		**GENERAL**	00006025.0001001	16 FEB 11
	Criteria: P8162				
	Applicable to: MSN 02887				
	DSC-22_20-60-140		**DESCRIPTION**	00009534.0001001	01 OCT 12
	Criteria: P8162				
	Applicable to: MSN 02887				
	DSC-22_20-60-140		**PROCEDURES**	00009535.0001001	23 DEC 14
	Criteria: P8162				
	Applicable to: MSN 02887				
	DSC-22_20-60-150		**Descent Profile Optimization** ◁	00019723.0001001	07 JUN 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_20-65		**General**	00013372.0001001	15 FEB 11
	Criteria: P9351				
	Applicable to: MSN 02887				
R	DSC-22_20-65		**Description**	NG01200	
	DSC-22_20-65		**Description - ADIRS**	00013373.0001001	27 MAY 13
	Criteria: P9351				
	Applicable to: MSN 02887				
R	DSC-22_20-65		**Description - FMGS**	00013374.0001001	02 MAY 23
	Criteria: P9351				
	Applicable to: MSN 02887				
	DSC-22_20-65		**Description - EIS PFD/ND**	00013375.0003001	27 MAY 13
	Criteria: 31-1335, 31-1433, P9351				
	Applicable to: MSN 02887				
	DSC-22_20-65		**Description - ADF and VOR Bearing Display**	00013377.0001001	15 FEB 11
	Criteria: P9351				
	Applicable to: MSN 02887				
	DSC-22_20-65		**Description - DDRMI**	00013378.0001001	15 FEB 11
	Criteria: P9351				
	Applicable to: MSN 02887				
	DSC-22_20-65		**Procedures - Flight**	00013430.0001001	23 DEC 14
	Criteria: P9351				
	Applicable to: MSN 02887				
E	DSC-22_20-70		**Flight Plan Initialization Through ACARS**	00000956.0007001	17 MAY 21
	Criteria: 22-1269, 22-1270, P10762, P10763, P4155				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-70		**Flight Plan Initialization Through ACARS (if installed)**	00000956.0014001	01 OCT 12
	Criteria: P10762, P10785, P4155, P8014, P8483, P9652				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-70		**Takeoff Data**	NG00076	
E	DSC-22_20-70		**Takeoff Data - General**	00000957.0001001	15 FEB 11
	Criteria: P4155				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-70		**Takeoff Data - Request For Takeoff Data**	00000958.0006001	15 FEB 11
	Criteria: P4155, P8483, P9652				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04860				
	DSC-22_20-70		**Takeoff Data - Procedure to Insert Uplink Takeoff Data**	00000959.0005001	23 JUN 15
	Criteria: P4155, P9652				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-70		**Takeoff Data - Procedure to Insert Uplink Takeoff Data**	00000959.0001001	10 MAY 21
	Criteria: P4155				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-70		**Wind Data**	NG00077	
E	DSC-22_20-70		**Wind Data - Request for Wind Data**	00000961.0001001	01 OCT 12
	Criteria: P4155				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-70		**Wind Data - Request for Wind Data**	00000961.0006001	01 OCT 12
	Criteria: P10785, P4155, P8483				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-70		**Wind Data - Procedure to Insert Wind Data**	00000962.0054001	26 NOV 19
	Criteria: P10763, P20467, P4155				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_20-70		**Wind Data - Procedure to Insert Wind Data**	00000962.0020001	14 MAY 12
	Criteria: 22-1269, 22-1270, P10762, P10763, P4155				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
R	DSC-22_20-70		**Wind Data - Procedure to Insert Wind Data**	00000962.0022001	02 MAY 23
	Criteria: P10762, P10785, P4155, P7373, P8014, P8483				
	Applicable to: MSN 04827-04860				
	DSC-22_20-80		**Print Function**	00000964.0011001	18 MAR 11
	Criteria: P4205, P7373, P7519				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-80		**Print Function**	00000964.0009001	18 MAR 11
	Criteria: 22-1090, P4205, P7519, P7520				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-80		**Print Function Access**	00000965.0004001	01 OCT 12
	Criteria: 22-1090, P4205, P7519, P7520				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-80		**Print Function Access**	00000965.0018001	01 OCT 12
	Criteria: P4205, P7373, P7519, P8483				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-80		**On Ground Before Engine Start**	00000966.0001001	23 JUN 15
	Criteria: P4205				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-80		**On Ground Before Engine Start**	00000966.0008001	18 MAR 11
	Criteria: P4205, P8483, P9652				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-80		**Example (FM Preflight Report)**	00000967.0001001	18 MAR 11
	Criteria: P4205				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-80		**In Flight**	00000968.0012001	18 MAR 11
	Criteria: P4205, P7373, P7519, P8483, P9652				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-80		**In Flight**	00000968.0007001	18 MAR 11
	Criteria: 22-1090, P4205, P7519, P7520				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-80		**Example (FM Inflight Report)**	00000969.0001001	18 MAR 11
	Criteria: P4205				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-80		**Reaching the Gate After Landing**	00000970.0012001	18 MAR 11
	Criteria: P4205, P7373, P7519, P8483, P9652				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-80		**Reaching the Gate After Landing**	00000970.0007001	18 MAR 11
	Criteria: 22-1090, P4205, P7519, P7520				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-80		**Example (FM Postflight Report)**	00000971.0001001	18 MAR 11
	Criteria: P4205				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-85		**How to Change T.O Data or Departure Runway after Rejected Takeoff**	00023074.0001001	04 NOV 20
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	DSC-22_20-85		**Insertion of Approach Minima**	NG01312	
N	DSC-22_20-85		**QNH Use for Aircraft NOT Equipped with QFE Option**	00015220.0027001	04 SEP 18
	Criteria: P10763, P20596, P8671, SA **Applicable to: MSN 11531**				
E	DSC-22_20-85		**QNH Use for Aircraft NOT Equipped with QFE Option**	00015220.0001001	21 MAR 17
E	Criteria: 22-1270, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**				
E	DSC-22_20-85		**QNH Use for Aircraft NOT Equipped with QFE Option**	00015220.0011001	21 MAR 17
E	Criteria: 22-1269, 22-1270, 22-1676, 31-1421, 31-1602, P10762, P10763, P10785, P8671, SA **Applicable to: MSN 01459, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	DSC-22_20-85		**QNH Use for Aircraft Equipped with QFE Option**	00015221.0035001	04 SEP 18
	Criteria: P10763, P20596, P8671, SA **Applicable to: MSN 11531**				
	DSC-22_20-85		**QFE Use for Aircraft NOT Equipped with QFE Option**	00015222.0001001	21 MAR 17
	Criteria: 22-1269, 22-1270, 22-1676, 31-1421, 31-1602, P10762, P10763, P10785, P20596, P8671, SA **Applicable to: ALL**				
R	DSC-22_20-90-10		**Automatic FMGC Reset and Resynchronization**	NG01119	
E	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - FM Reset**	00012661.0001001	04 NOV 20
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - FM Reset**	00012661.0003001	04 NOV 20
	Criteria: P7373, P8483, SA **Applicable to: MSN 04827-04860**				
E	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - FM Resynchronization**	00012662.0001001	10 JAN 11
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - FM Resynchronization**	00012662.0002001	19 AUG 10
	Criteria: P7373, P8483, SA				
	Applicable to: MSN 04827-04860				
E	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - FMGC Status During a Reset/Resynchronization**	00012663.0001001	29 SEP 15
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - FMGC Status During a Reset/Resynchronization**	00012663.0002001	10 JAN 11
	Criteria: P7373, P8483, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Single Reset or Dual Reset with Autorecovery**	00012664.0001001	10 JAN 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Single Reset or Dual Reset with Autorecovery**	00012664.0002001	10 JAN 11
	Criteria: 31-1276, P9824, SA				
E	**Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Single Reset or Dual Reset with Autorecovery**	00012664.0019001	10 JAN 11
	Criteria: P7373, P8483, P9824, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Single Latch**	00012665.0001001	10 JAN 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Single Latch**	00012665.0002001	16 NOV 11
	Criteria: 31-1276, P9824, SA				
E	**Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Single Latch**	00012665.0033001	10 JAN 11
	Criteria: P10785, P7373, P8483, P9824, SA				
	Applicable to: MSN 04827-04860				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Single Latch with AP and FD still Available in Managed Modes on both Sides**	00014936.0001001	21 MAR 17
	Criteria: 22-1462, P7373				
	Applicable to: MSN 04827-04860				
R	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Dual Reset with Loss of Data and Autorecovery**	00012666.0001001	03 NOV 22
	Criteria: 22-1090, 22-1676, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
R	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Dual Reset with Loss of Data and Autorecovery**	00012666.0012001	03 NOV 22
	Criteria: 31-1276, P7519, P7520, P9824, SA				
E	**Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Dual Reset with Loss of Data and Autorecovery**	00012666.0083001	03 NOV 22
	Criteria: P7519, P8500, P9824, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - Dual Reset with Loss of Data and Autorecovery**	00012666.0059001	03 NOV 22
	Criteria: P10785, P7373, P7519, P8483, P9824, SA				
	Applicable to: MSN 04827-04860				
	DSC-22_20-90-10		**Automatic FMGS Reset and Resynchronization - FMS Degraded Mode**	00012667.0001001	10 JAN 11
	Criteria: P8483				
	Applicable to: MSN 04827-04860				
	DSC-22_20-90-10		**Automatic FMGC Reset and Resynchronization - Dual Latch**	00012668.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
E	DSC-22_20-90-10		**Automatic FMGC Reset and Resynchronization - Dual Latch**	00012668.0013001	17 MAR 17
	Criteria: P7373, P7519, P7520, P8483, P8500, P9522, SA				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_20-90-10		**Manual FMGC Reset**	NG01752	
E	DSC-22_20-90-10		**Manual FMGS Reset - General**	00012669.0001001	10 JAN 11
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-90-10		**Manual FMGS Reset - General**	00012669.0002001	01 APR 14
	Criteria: P7373, SA **Applicable to: MSN 04827-04860**				
	DSC-22_20-90-10		**Manual FMGS Reset Procedure**	00020857.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-90-10		**Manual FMGC Reset - Manual Reset of Both FMGC**	00012671.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-90-20		**"CHECK WEIGHT" Message**	00012677.0001001	04 JUN 19
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P9652 **Applicable to: ALL**				
	DSC-22_20-90-30		**Erroneous Predictions**	00012672.0001001	28 MAY 20
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-90-30		**Spurious Engine Out Indication**	00012673.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-22_20-100-20		**Incorrect Management Of SPD CSTR For Arrival Procedure Holds**	00013647.0001001	16 MAR 11
	Criteria: 22-1090, 22-1676, P7218 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Misalignment Of FMS F-PLN Legs For ILS Approaches**	00013650.0001001	23 JUN 15
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Incorrect Management Of ETA Entry On Predictive GPS Page**	00013652.0001001	22 MAY 12
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Flight Number Erased Upon AOC Flight Plan Uplink**	00013653.0001001	16 MAR 11
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
E	DSC-22_20-100-20		**Loss Of FMS Position Further To IRS Loss**	00013654.0001001	23 JUN 15
E	Criteria: 22-1203 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
E	DSC-22_20-100-20		**Erroneous Fuel Prediction In The Case Of Descent With Two Altitude Constraints**	00013655.0001001	16 MAR 11
E	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_20-100-20		**Unexpected Switch Of Speed Target When RTA Is Used**	00013659.0001001	16 NOV 11
	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-100-20		**Undue AP Disconnection or Reversion to V/S during Climb and Descent**	00014436.0017001	23 JUN 15
E	Criteria: 22-1090, 22-1270, P7520 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
	DSC-22_20-100-20		**VOR/DME and VOR/TACAN Not Automatically Tuned**	00014440.0001001	04 MAY 12
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Optimum Target Speeds not Updated following the Automatic Deletion of a Step Climb**	00014756.0001001	04 NOV 20
	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Erroneous Lateral Guidance in NAV Mode with LOC Mode Armed during Approach**	00015035.0001001	26 OCT 22
	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Undue Reduction of the Speed Target in case of DIR TO/ABEAM while Flying a Constant Mach Segment**	00015532.0003001	18 MAR 14
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324				
	DSC-22_20-100-20		**Loss of Fuel and Time Predictions During Takeoff Data Insertion**	00015602.0001001	05 AUG 14
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Erroneous Trajectory during Procedures with a Turn Direction on a Leg with an Altitude Termination**	00015748.0001001	09 SEP 14
	Criteria: 22-1090, 22-1676, P7519, P7520 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-100-20		**Erroneous Trajectory while in HDG (TRK) Mode during Procedures with a Turn Direction on a Leg with an Altitude Termination**	00023728.0001001	26 NOV 19
E	Criteria: P20467 **Applicable to: MSN 10949-11597**				
	DSC-22_20-100-20		**Erroneous Vertical Profile during LOC B/C Approaches with a MAP Located Before the Runway Threshold**	00019782.0001001	25 JUL 16
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Erroneous Vertical Guidance in Approach Subsequent to a DIR TO Performed when Near the Top of Descent**	00022771.0001001	05 MAR 19
	Criteria: 22-1090, 22-1676, P7218 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
E	DSC-22_20-100-20		**No Engagement of the PRESEL SPD TARGET in Climb**	00023539.0002001	26 NOV 19
E	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_20-100-20		**Erroneous CF Leg Computation following FMS NEW RUNWAY with LS IDENT creation**	00023647.0001001	26 NOV 19
E	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_20-100-20		**Unexpected ILS Auto-tuning**	00024029.0001001	28 MAY 20
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	DSC-22_20-100-20		**Erroneous Managed Approach Speed after Descent Wind Uplink**	00024052.0003001	28 MAY 20
	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
N	DSC-22_20-100-20		**Loss of FMS Predictions in Low Density of Airports**	00026317.0001001	03 NOV 22
	Criteria: P20467 **Applicable to: MSN 10949-11597**				
	DSC-22_20-100-30		**MCDU Frozen After the Flight Crew Accesses the "DIR TO", "HOLD" or "OFFSET" Function**	00012686.0001001	21 MAR 17
	Criteria: P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Erroneous Cross Track Error/FD Display Orders After a Dir TO on Aligned Waypoint**	00013636.0002001	26 NOV 19
	Criteria: P10785, P12092, P8014, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Erroneous Fuel Predictions In The Case of Descent With Two Altitude Constraints**	00013638.0001001	16 MAR 11
	Criteria: P8014, P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Erroneous Lateral Guidance in NAV Mode with LOC Mode Armed during Approach**	00015036.0001001	05 JUN 18
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Erroneous Trajectory Computation while in HDG/TRK Mode during Procedures with a Turn Direction on a Leg With an Altitude Termination**	00019778.0001001	08 JUL 16
	Criteria: P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Uncommanded Climb near the Top of Descent (T/D)**	00021871.0001001	28 MAY 20
	Criteria: P12092 **Applicable to: MSN 04827-04860**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_20-100-30		**Erroneous Altitude Constraint after SID or STAR Selection Change**	00022414.0001001	24 AUG 18
	Criteria: P7373, P7666 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Waypoint Not Sequenced After DIR TO RADIAL IN**	00022530.0001001	18 SEP 18
	Criteria: P7373 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Unusable MIN DEST FOB Value in the Secondary Flight Plan**	00022951.0001001	26 NOV 19
	Criteria: 22-1462 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Unexpected DECELERATE displayed on MCDU (and "T/D REACHED" on PFD) during Climb**	00023137.0001001	04 JUN 19
	Criteria: P9652 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Missing or Incorrect Insert UPLINK Prompt on UPLINK T.O DATA Page**	00023494.0001001	26 NOV 19
	Criteria: P7373, P7666 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**FMS Reset upon crossing the 180th Meridian**	00023697.0001001	26 NOV 19
	Criteria: P10785 **Applicable to: MSN 04827-04860**				
	DSC-22_20-100-30		**Dual FMS Reset with Loss of Data upon DIR TO/ABEAM Insertion with 3 STEP ALTS**	00023710.0001001	26 NOV 19
	Criteria: P10785 **Applicable to: MSN 04827-04860**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-10		**General**	00025187.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-10		**General**	00025400.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-20		**Manual Engagement**	00025401.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-20		**Automatic Engagement**	NG02039	
	DSC-22_30-20-20		**Automatic Engagement**	00025402.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-20		**Note for FD display on SRS GA engagement**	00025403.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-20		**Engagement Annunciation**	00025404.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-30		**FD Symbology - Display**	00025405.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-40		**FD Symbology - Non Display**	00025406.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-50		**General**	00025359.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-50		**Manual Disengagement**	00025360.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-50		**Automatic Disengagement**	NG02031	
	DSC-22_30-20-50		**Automatic Disengagement**	00025361.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-20-50		**Automatic Disengagement**	00025362.0001001	18 MAY 22
	Criteria: P4320 **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-20-50		**Disengagement Annunciation**	00025363.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-20-60		**FD Bars Flashing**	00025365.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-20-60		**FD Flag**	00025366.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-10		**General**	00025195.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-20		**Introduction**	00025196.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-20		**Engagement Conditions**	NG02019	
	DSC-22_30-30-20		**Engagement of one AP**	00025197.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-20		**Engagement of both APs**	00025198.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-20		**Engagement Annunciation**	00025199.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-30		**Manual Disengagement**	NG02020	
	DSC-22_30-30-30		**Manual Disengagement**	00025200.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-30		**Manual Disengagement 2**	00025201.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-30		**Manual Disengagement 3**	00025202.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-30		**Automatic Disengagement**	NG02021	
	DSC-22_30-30-30		**Automatic Disengagement 1**	00025203.0001001	18 MAY 22
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-30-30		**Automatic Disengagement N**	00025204.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-30		**Automatic Disengagement 4**	00025205.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-30-30		**Disengagement Annunciations and Warnings**	00025206.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**Introduction**	00025207.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**AP/FD Lateral Modes**	NG02023	
	DSC-22_30-40-10		**AP/FD Lateral Modes 1**	00025212.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**AP/FD Lateral Modes 2**	00025215.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**AP/FD Vertical Modes**	NG02024	
	DSC-22_30-40-10		**AP/FD Vertical Modes 1**	00025217.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**AP/FD Vertical Modes 2**	00025224.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**AP/FD Vertical Modes 3**	00025225.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**AP/FD Common Modes**	NG02026	
	DSC-22_30-40-10		**AP/FD Common Modes 1**	00025227.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-10		**AP/FD Common Modes 2**	00025237.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-40-10		**AP/FD Mode Status and Display**	00025226.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-20-10		**General**	00025902.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-20-20		**General**	NG02029	
	DSC-22_30-40-20-20		**General**	00025335.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_30-40-20-20		**General - Pitch**	00025341.0002001	18 MAY 22
	Criteria: P15372, SA, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-22_30-40-20-20		**General - Pitch**	00025341.0001001	18 MAY 22
	Criteria: 22-1606, 22-1676, P15372, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-22_30-40-20-20		**General - Speed Protection**	00025342.0001001	18 MAY 22
	Criteria: 22-1090, 22-1676, P7519, P7520				
	Applicable to: ALL				
	DSC-22_30-40-20-20		**General - Speed Target**	00025344.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-20-20		**Engagement Conditions**	00025337.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-20-20		**Disengagement Conditions**	NG02028	
	DSC-22_30-40-20-20		**Disengagement Conditions**	00025338.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-20-20		**Reversions**	00025339.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-20-20		**Reversions - Triple Click**	00025340.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-40-20-30 Criteria: SA **Applicable to: ALL**		**General**	00025240.0001001	18 MAY 22
	DSC-22_30-40-20-30 Criteria: SA **Applicable to: ALL**		**Engagement Conditions**	00025241.0001001	18 MAY 22
	DSC-22_30-40-20-30 Criteria: SA **Applicable to: ALL**		**Disengagement Conditions**	00025242.0001001	18 MAY 22
	DSC-22_30-40-20-40 Criteria: SA **Applicable to: ALL**		**General**	00025243.0001001	18 MAY 22
	DSC-22_30-40-20-40 Criteria: SA **Applicable to: ALL**		**Engagement Conditions**	00025244.0001001	18 MAY 22
	DSC-22_30-40-20-40 Criteria: SA **Applicable to: ALL**		**Disengagement Conditions**	00025245.0001001	18 MAY 22
	DSC-22_30-40-30-10 Criteria: SA **Applicable to: ALL**		**General**	00025898.0001001	18 MAY 22
E	DSC-22_30-40-30-10		**Engagement Conditions**	NG02081	
	DSC-22_30-40-30-10 Criteria: SA **Applicable to: ALL**		**Engagement Conditions**	00025881.0001001	18 MAY 22
	DSC-22_30-40-30-10 Criteria: SA **Applicable to: ALL**		**Engagement Conditions 2**	00025882.0001001	18 MAY 22
	DSC-22_30-40-30-10 Criteria: SA **Applicable to: ALL**		**Engagement Conditions 3**	00025883.0001001	18 MAY 22
	DSC-22_30-40-30-10 Criteria: P20596, SA **Applicable to: ALL**		**Engagement Conditions 4**	00025884.0001001	18 MAY 22
	DSC-22_30-40-30-10 Criteria: SA **Applicable to: ALL**		**Engagement Conditions 5**	00025885.0001001	18 MAY 22
	DSC-22_30-40-30-10 Criteria: P20596, SA **Applicable to: ALL**		**Engagement Conditions 6**	00025886.0001001	18 MAY 22
E	DSC-22_30-40-30-10 Criteria: SA		**Engagement Conditions 7**	00025887.0001001	18 MAY 22

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-22_30-40-30-10		**Engagement Conditions 8**	00025888.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-30-10		**Reversion to HDG/TRK**	00025889.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-30-10		**Reversions - Triple Click**	00025890.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-30-10		**HDG-V/S / TRK-FPA Selection**	00025891.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-30-10		**HDG/TRK Preset**	NG02080	
	DSC-22_30-40-30-10		**HDG/TRK Preset**	00025892.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-30-10		**HDG/TRK Preset**	00025893.0002001	18 MAY 22
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, SA				
	Applicable to: ALL				
E	DSC-22_30-40-30-10		**HDG/TRK Preset (at Go Around) NAV mode in GA**	00025894.0001001	18 MAY 22
	Criteria: 22-1296, 22-1614, 34-1403, P10694, P20596				
E	**Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-40-30-10		**HDG/TRK Preset 3**	00025895.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-30-10		**Disengagement Conditions**	00025896.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-30-10		**Synchronize the HDG/TRK Window of the FCU**	00025897.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-30-20		**General**	00025463.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_30-40-30-20		**Arming Conditions**	00025464.0002001	18 MAY 22
E	Criteria: 22-1296, 22-1614, 34-1403, P10694, P20596, SA **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-40-30-20		**Arming Conditions**	00025464.0001001	18 MAY 22
	Criteria: SA **Applicable to: MSN 01376**				
	DSC-22_30-40-30-20		**Disarming Conditions**	00025465.0001001	18 MAY 22
	Criteria: SA **Applicable to: MSN 01376**				
E	DSC-22_30-40-30-20		**Disarming Conditions**	00025465.0003001	18 MAY 22
E	Criteria: 22-1296, 22-1614, 34-1403, P10694, P20596, SA **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-40-30-20		**Engagement Conditions**	00025466.0001001	18 MAY 22
	Criteria: SA **Applicable to: MSN 01376**				
E	DSC-22_30-40-30-20		**Engagement Conditions**	00025466.0002001	18 MAY 22
E	Criteria: 22-1296, 22-1614, 34-1403, P10694, SA **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-40-30-20		**Disengagement Conditions**	NG02047	
	DSC-22_30-40-30-20		**Disengagement Conditions**	00025467.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-30-20		**Reversions - Triple Click**	00025468.0001001	18 MAY 22
	Criteria: 22-1123, P7790 **Applicable to: ALL**				
	DSC-22_30-40-30-20		**Interactions with Vertical Modes**	00025469.0001001	18 MAY 22
	Criteria: P20596, SA **Applicable to: ALL**				
	DSC-22_30-40-40-10		**General**	00025470.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-40-10		**Arming Conditions**	00025471.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-40-10		**Disarming Conditions**	00025472.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-40-40-10		**Engagement Conditions**	NG02049	
	DSC-22_30-40-40-10		**Engagement Conditions**	00025473.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-10		**Reversions**	00025475.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-10		**Reversions - Triple Click**	00025476.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-40-10		**OP CLB Association with Altitude Modes**	00025474.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-10		**Disengagement Conditions**	NG02048	
	DSC-22_30-40-40-10		**Disengagement Conditions**	00025477.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-10		**Reversions**	00025478.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-10		**Reversions - Triple Click**	00025479.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-40-20		**General**	00025582.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-20		**Arming Conditions**	00025583.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-20		**Disarming Conditions**	00025584.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-20		**Engagement Conditions**	00025585.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-20		**CLB Association with Altitude Modes**	00025586.0001001	18 MAY 22
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-40-40-20		**Disengagement Conditions**	NG02058	
	DSC-22_30-40-40-20		**Disengagement Conditions**	00025587.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-20		**Reversions**	00025588.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-40-20		**Reversions - Triple Click**	00025589.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
E	DSC-22_30-40-40-30		**General**	00025501.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-40-30		**Engagement Conditions**	00025502.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-40-30		**Disengagement Conditions**	NG02052	
E	DSC-22_30-40-40-30		**Disengagement Conditions**	00025503.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-40-30		**Reversions**	00025504.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-40-30		**Reversions - Triple Click**	00025505.0001001	18 MAY 22
	Criteria: 22-1123, 22-1230, P3401, P7790, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-50-10		**General**	NG02076	
	DSC-22_30-40-50-10		**General**	00025809.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**General - Global Speed Protection**	00025864.0001001	18 MAY 22
	Criteria: P4320				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
E	DSC-22_30-40-50-10		**General - TCAP**	00025856.0001001	18 MAY 22
	Criteria: P20604				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-40-50-10		**General - Note**	00025858.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Arming Conditions**	00025812.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Disarming Conditions**	00025816.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT* Engagement Conditions**	00025818.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT* Disengagement Conditions**	NG02071	
	DSC-22_30-40-50-10		**ALT* Disengagement Conditions**	00025821.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**Reversions**	00025823.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**Triple Click**	00025825.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Engagement Conditions**	00025830.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Disengagement Conditions**	NG02075	
	DSC-22_30-40-50-10		**ALT Disengagement Conditions**	00025841.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Disengagement conditions 2**	00025842.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-40-50-10		**ALT Disengagement Conditions - Automatic Disengagement**	00025903.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Disengagement Conditions 4 - Automatic Disengagement**	00025843.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Disengagement Conditions 5 - Automatic Disengagement**	00025844.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-10		**ALT Disengagement - Additional Scenarios**	00025845.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_30-40-50-20		**General**	NG02077	
	DSC-22_30-40-50-20		**General**	00025810.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-20		**General - Global Speed Protection**	00025865.0001001	18 MAY 22
	Criteria: P4320				
	Applicable to: ALL				
E	DSC-22_30-40-50-20		**General - TCAP**	00025861.0001001	18 MAY 22
	Criteria: P20604				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-40-50-20		**General - Note**	00025862.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-40-50-20		**ALT CST Arming Conditions**	00025814.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-20		**ALT CST Disarming Conditions**	00025817.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-20		**ALT CST* Engagement Conditions**	00025820.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-40-50-20		**ALT CST* Disengagement Conditions**	NG02073	
	DSC-22_30-40-50-20		**ALT CST* Disengagement Conditions**	00025827.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**Reversions**	00025828.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**Triple Click**	00025829.0001001	18 MAY 22
	Criteria: 22-1123, P7790 **Applicable to: ALL**				
	DSC-22_30-40-50-20		**ALT CST Engagement Conditions**	00025831.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**ALT CST Disengagement Conditions**	NG02078	
	DSC-22_30-40-50-20		**ALT CST Disengagement Conditions**	00025853.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**ALT CST Disengagement Conditions 2 - Manual Disengagement**	00025854.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**ALT CST Disengagement Conditions 3 - Automatic Disengagement**	00025855.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**ALT CST Disengagement Conditions 4 - Automatic Disengagement**	00025857.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**ALT CST Disengagement Conditions 5 - Automatic Disengagement**	00025859.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-40-50-20		**ALT CST Disengagement Conditions 6 - Automatic Disengagement**	00025860.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
E	DSC-22_30-40-50-30		**General**	NG02079	
	DSC-22_30-40-50-30		**General**	00025808.0001001	18 MAY 22
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-40-50-30		**General - Global Speed Protection**	00025866.0001001	18 MAY 22
	Criteria: P4320				
	Applicable to: ALL				
E	DSC-22_30-40-50-30		**General - TCAP**	00025867.0001001	18 MAY 22
	Criteria: P20604				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-40-50-30		**General - Note**	00025868.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**ALT CRZ Arming conditions**	00025811.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**ALT CRZ Disarming Conditions**	00025815.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**ALT CRZ* Engagement Conditions**	00025819.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**ALT CRZ* Disengagement Conditions**	NG02072	
	DSC-22_30-40-50-30		**ALT CRZ* Disengagement Conditions**	00025822.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**Reversions**	00025824.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**Reversions - Triple Click**	00025826.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**ALT CRZ Engagement Conditions**	00025832.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-50-30		**ALT CRZ Disengagement Conditions**	00025863.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-10		**General**	00025590.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-40-60-20		**General**	00025591.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Engagement Conditions**	00025592.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Disengagement Conditions**	NG02059	
	DSC-22_30-40-60-20		**Manual Disengagement Conditions**	00025593.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Automatic Disengagement 1**	00025594.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Automatic Disengagement Conditions 2**	00025595.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Automatic Disengagement Conditions 3**	00025596.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Disengagement Conditions**	00025597.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Automatic Disengagement 1**	00025598.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Reversion**	00025599.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-20		**Reversion - Triple Click**	00025600.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**General**	00025601.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Arming Conditions**	00025602.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Disarming Conditions**	00025603.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-40-60-30		**Engagement Conditions**	00025604.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Disengagement Conditions**	NG02060	
	DSC-22_30-40-60-30		**Manual Disengagement Conditions**	00025605.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Automatic Disengagement Conditions 1**	00025606.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Automatic Disengagement Conditions 2**	00025607.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Automatic Disengagement Conditions 3**	00025608.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Disengagement Conditions 4**	00025609.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Automatic Disengagement Conditions 5**	00025610.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Reversions**	00025611.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-60-30		**Reversions - Triple Click**	00025612.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
E	DSC-22_30-40-60-40		**General**	00025538.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-60-40		**Engagement Conditions**	00025540.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-60-40		**Disengagement Conditions**	NG02057	
E	DSC-22_30-40-60-40		**Disengagement Conditions**	00025543.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-60-40		**Reversions**	00025546.0001001	18 MAY 22
	Criteria: 22-1230, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-40-60-40		**Reversions - Triple Click**	00025548.0001001	18 MAY 22
	Criteria: 22-1123, 22-1230, P3401, SA				
	Applicable to: MSN 02014				
	DSC-22_30-40-70		**General**	00025759.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**Engagement Conditions**	NG02064	
	DSC-22_30-40-70		**Engagement Conditions**	00025760.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**ReversionS to V/S / FPA**	00025761.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**Reversions - Triple Click**	00025762.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-70		**Disengagement Conditions**	NG02063	
	DSC-22_30-40-70		**Manual Disengagement**	00025763.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**Automatic Disengagement Conditions 1**	00025764.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**Automatic Disengagement Conditions 2**	00025765.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**Automatic Disengagement Conditions 3**	00025766.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**Automatic Disengagement**	00025768.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-70		**Automatic Disengagement Conditions 5**	00025769.0001001	18 MAY 22
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
E	DSC-22_30-40-80-00		**General**	NG02067	
	DSC-22_30-40-80-00		**Approach Overview**	00025795.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-00		**Approach Selection**	00025796.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-00		**Approach Selection - Manual Tuning on FMS**	00025797.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
E	DSC-22_30-40-80-00		**Approach Selection - Manual Tuning on FMS**	00025797.0002001	18 MAY 22
	Criteria: P20467, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-40-80-00		**Approach Selection - Manual Tuning on the RMP (backup)**	00025798.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-00		**Approach Selection - Selection in the MMRs**	00025799.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-00		**ILS/GLS (If Installed)/SLS (If Installed) Guidance Mode**	NG02068	
	DSC-22_30-40-80-00		**ILS Guidance Mode**	00025800.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-00		**GLS ◁ Guidance Mode**	00025801.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-00		**SLS ◁ Guidance Mode**	00025802.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_30-40-80-00		**FLS Guidance Mode**	NG02069	
N	DSC-22_30-40-80-00		**Guidance Selection**	00025803.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	DSC-22_30-40-80-00		**FLS Function Availability**	00025804.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-00		**Approaches flown with Lateral and Vertical FLS Guidance**	00025805.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-00		**Approaches flown with Vertical FLS Guidance**	00025806.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
	DSC-22_30-40-80-00		**FINAL APP Guidance Mode**	00025906.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**General**	00025415.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**LOC Arming Conditions**	00025416.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-80-10		**LOC Disarming Conditions**	00025417.0002001	18 MAY 22
	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, P10801, P13321, P13322, SA				
E	**Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-80-10		**LOC Disarming Conditions**	00025417.0001001	18 MAY 22
	Criteria: SA				
E	**Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
	DSC-22_30-40-80-10		**LOC* Engagement Conditions**	NG02040	
	DSC-22_30-40-80-10		**LOC* Engagement Conditions**	00025418.0002001	18 MAY 22
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**LOC* Engagement Conditions - Capture Zone of the LOC Beam**	00025420.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**LOC* Engagement Conditions - LOC Convergence Function**	00025421.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-40-80-10		**LOC* Disengagement Conditions**	NG02041	
	DSC-22_30-40-80-10		**LOC* Disengagement Conditions**	00025422.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**Reversions**	00025423.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**Reversions - Triple Click**	00025424.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**LOC Engagement Conditions**	00025425.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**LOC Disengagement Conditions**	NG02042	
	DSC-22_30-40-80-10		**LOC Disengagement Conditions**	00025426.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**Reversions**	00025427.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-10		**Reversions - Triple Click**	00025428.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**General**	00025429.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**G/S Arming Conditions**	00025430.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-80-20		**G/S Disarming Conditions**	00025431.0002001	18 MAY 22
	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, P10801, P13321, P13322, SA				
E	**Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-40-80-20		**G/S Disarming Conditions**	00025431.0001001	18 MAY 22
	Criteria: SA				
E	**Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
	DSC-22_30-40-80-20		**G/S* Engagement Conditions**	00025432.0001001	18 MAY 22
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-40-80-20		**G/S* Disengagement Conditions**	NG02043	
	DSC-22_30-40-80-20		**G/S* Disengagement Conditions**	00025433.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**Reversions**	00025434.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**Reversions - Triple Click**	00025435.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**G/S Engagement Conditions**	00025436.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**G/S Disengagement Conditions**	NG02044	
	DSC-22_30-40-80-20		**G/S Disengagement Conditions**	00025437.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**Reversions**	00025438.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-20		**Reversions - Triple Click**	00025439.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-80-30		**General**	00025440.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-30		**Engagement Conditions**	00025441.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-30		**Disengagement Conditions**	00025442.0002001	18 MAY 22
	Criteria: 22-1090, 22-1676, P7218, P7666, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-40		**General**	00025443.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-40		**Engagement Conditions**	00025445.0001001	18 MAY 22
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-40-80-40		**Disengagement Conditions**	00025446.0002001	18 MAY 22
	Criteria: 22-1090, 22-1676, P7218, P7666, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-50		**General**	00025447.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-50		**Engagement Conditions**	00025448.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-80-50		**Disengagement Conditions**	00025449.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_30-40-80-60		**General**	00025450.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-60		**F-LOC Arming Conditions**	00025480.0003001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-60		**F-LOC Disarming Conditions**	00025481.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-60		**F-LOC* Engagement Conditions**	00025451.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-60		**F-LOC* Disengagement Conditions**	NG02051	
N	DSC-22_30-40-80-60		**F-LOC* Disengagement Conditions**	00025482.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-60		**Reversions**	00025483.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-60		**Reversions - Triple Click**	00025484.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-60		**F-LOC Engagement Conditions**	00025485.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
N	DSC-22_30-40-80-60		**F-LOC Disengagement Conditions**	NG02050	
N	DSC-22_30-40-80-60		**F-LOC Disengagement Conditions**	00025486.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-60		**Reversions**	00025487.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-60		**Reversions - Triple Click**	00025488.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**General**	00025506.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**F-G/S Arming Conditions**	00025507.0003001	18 MAY 22
	Criteria: P20596, SA **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**F-G/S Disarming Conditions**	00025508.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**F-G/S* Engagement Conditions**	00025509.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**F-G/S* Disengagement Conditions**	NG02054	
N	DSC-22_30-40-80-70		**F-G/S* Disengagement Conditions**	00025510.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**Reversions**	00025511.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**Reversions - Triple Click**	00025512.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**F-G/S Engagement Conditions**	00025513.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
N	DSC-22_30-40-80-70		**F-G/S Disengagement Conditions**	NG02053	
N	DSC-22_30-40-80-70		**F-G/S Disengagement Conditions**	00025515.0001001	18 MAY 22
	Criteria: P20596				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-70		**Reversions**	00025516.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-80-70		**Reversions - Triple Click**	00025517.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
	DSC-22_30-40-80-90		**General**	00025519.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-90		**APP NAV and FINAL Arming Conditions**	00025520.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
E	DSC-22_30-40-80-90		**APP NAV and FINAL Disarming Conditions**	00025521.0001001	18 MAY 22
	Criteria: SA				
E	**Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
E	DSC-22_30-40-80-90		**APP NAV and FINAL Disarming Conditions**	00025521.0002001	18 MAY 22
	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, P10801, P13321, P13322, P20596, SA				
E	**Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-40-80-90		**APP NAV Engagement Conditions**	00025522.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-90		**APP NAV Disengagement Conditions**	00025523.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
E	DSC-22_30-40-80-90		**FINAL APP Engagement Conditions**	NG02056	
N	DSC-22_30-40-80-90		**FINAL APP Engagement Conditions**	00025524.0001001	18 MAY 22
	Criteria: P10763, P20596, SA				
	Applicable to: MSN 11531				
E	DSC-22_30-40-80-90		**FINAL APP Engagement Conditions**	00025524.0002001	18 MAY 22
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	DSC-22_30-40-80-90		**FINAL APP Engagement Conditions**	00025525.0001001	18 MAY 22
	Criteria: P10763, P20596, SA				
	Applicable to: MSN 11531				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_30-40-80-90		**FINAL APP Engagement Conditions**	00025525.0002001	18 MAY 22
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-22_30-40-80-90		**Final Descent Point**	00025526.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				

E	DSC-22_30-40-80-90		**FINAL APP Disengagement Conditions**	NG02055	
	DSC-22_30-40-80-90		**FINAL APP Disengagement Conditions**	00025527.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-90		**Disengagement Conditions-V/S or FPA engagement**	00025528.0002001	18 MAY 22
	Criteria: 22-1090, 22-1676, P20596, P7218, P7666, SA				
	Applicable to: ALL				
	DSC-22_30-40-80-90		**Disengagement Conditions-Auto-disengagement**	00025529.0002001	18 MAY 22
	Criteria: 22-1315, 22-1614, P11856, P20596, SA				
	Applicable to: ALL				
E	DSC-22_30-40-80-90		**Reversions**	00025530.0001001	18 MAY 22
	Criteria: P13322, P20596, SA				
E	**Applicable to: MSN 01143-01251, 01801, 01826, 01855, 11531**				
E	DSC-22_30-40-80-90		**Reversions**	00025530.0002001	18 MAY 22
	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, P10801, P13321, P13322, SA				
E	**Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-22_30-40-80-90		**Reversions - Triple Click**	00025531.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				

	DSC-22_30-40-90-10		**General**	00025614.0002001	18 MAY 22
	Criteria: P4319, SA				
	Applicable to: MSN 01376				
E	DSC-22_30-40-90-10		**General**	00025614.0004001	18 MAY 22
	Criteria: 22-1142, 22-1296, 22-1614, 34-1403, P10694, P4319, P6197, SA				
E	**Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

N	DSC-22_30-40-90-20		**General**	NG02084	
E	DSC-22_30-40-90-20		**General**	00025615.0002001	18 MAY 22
	Criteria: 22-1090, 22-1606, 22-1676, P15372, P7218, P7666, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	DSC-22_30-40-90-20		**General**	00025615.0014001	18 MAY 22
	Criteria: P15372, P7218, SA, 321-200NX				
	Applicable to: MSN 11531				
	DSC-22_30-40-90-20		**Speed Target**	00025622.0002001	18 MAY 22
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, SA				
	Applicable to: ALL				
	DSC-22_30-40-90-20		**Engagement Conditions**	00025616.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-90-20		**Disengagement Conditions**	NG02085	
	DSC-22_30-40-90-20		**Disengagement Conditions**	00025617.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-90-20		**Reversions -Triple Click**	00025618.0001001	18 MAY 22
	Criteria: 22-1123, P7790				
	Applicable to: ALL				
	DSC-22_30-40-90-30		**General**	00025619.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-90-30		**Engagement Conditions**	00025620.0002001	18 MAY 22
	Criteria: 22-1296, 22-1614, 34-1403, P10694, SA				
E	**Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-40-90-30		**Engagement Conditions**	00025620.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01376				
	DSC-22_30-40-90-30		**Disengagement Conditions**	00025621.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-100		**General**	00025773.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**AP/FD TCAS Mode Availability**	00025774.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Arming Conditions**	00025775.0001001	18 MAY 22
	Criteria: 22-1472, P11363				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Disarming Conditions**	00025776.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Engagement Conditions**	00025777.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Disengagement Conditions**	00025778.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a TA is triggered**	00025779.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered**	NG02065	
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered**	00025780.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered - Consequence on AP and FD**	00025781.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered - Consequence on AP/FD Lateral Mode**	00025782.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered - Consequence on AP/FD Vertical Mode**	00025783.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered - AP/FD Vertical Mode Engaged At Occurence of the RA**	00025784.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered - AP/FD Vertical Mode Armed at Occurrence of the RA**	00025785.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered - Consequence on A/THR and Speed/Mach Control**	00025786.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When a RA is triggered - Consequence on ALPHA FLOOR**	00025787.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-100		**Normal Operations - When Clear of Conflict**	00025788.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-40-110		**AP/FD Mode Reversions**	NG02066	
	DSC-22_30-40-110		**Reversion due to FCU Altitude Changes**	00025789.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-110		**Reversion due to the Loss of NAV Mode**	00025790.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-110		**Speed Protection when FD Orders not followed**	00025791.0002001	18 MAY 22
	Criteria: P4320, SA				
	Applicable to: ALL				
	DSC-22_30-40-110		**Speed Protection due to Excessive V/S**	00025792.0004001	18 MAY 22
	Criteria: 22-1123, P4320, P7790, SA				
	Applicable to: ALL				
E	DSC-22_30-40-110		**Speed Protection due to Excessive V/S Target (AP/FD TCAS mode engaged)**	00025793.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
	DSC-22_30-40-120-20		**Takeoff with NAV**	00025278.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-40-120-20		**Takeoff with HDG/TRK Preset**	00025280.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-30		**At the Acceleration Altitude**	00025281.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-30		**The Flight Crew Pulls the ALT Knob**	00025282.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-30		**NAV Disengages**	00025283.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-40		**At the Acceleration Altitude**	00025284.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-40		**Climbing toward an Altitude Constraint**	00025285.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-50		**CLB and ALT - Example 1**	00025286.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-50		**CLB and ALT - Example 2**	00025287.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-50		**OP CLB and ALT**	00025288.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-120-50		**ALT in Descent with TCAS TA**	00025290.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
	DSC-22_30-40-120-60		**CLB and ALT CST**	00025291.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-70		**CLB and ALT CRZ**	00025292.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-40-120-70		**OP CLB and ALT CRZ**	00025293.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-40-120-70		**ALT CRZ with TCAS TA**	00025294.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-40-120-80		**ILS Approach and Autoland**	00025296.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_30-40-120-80		**VOR Approach Flown with FLS Function**	00025297.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-40-120-80		**LOC only Approach Flown with FLS Function**	00025298.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
	DSC-22_30-40-120-80		**VOR Approach Flown with FINAL APP Guidance Mode**	00025299.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-50-10		**General**	00025367.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-20		**Thrust Levers**	00025369.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-50-30		**Preliminary Conditions required for A/THR Arming and Activation**	NG02032	
	DSC-22_30-50-30		**Required Systems**	00025370.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_30-50-30		**A/THR Arming**	NG02033	
	DSC-22_30-50-30		**Arming Conditions**	00025374.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-50-30		**Arming Conditions**	00025631.0001001	18 MAY 22
	Criteria: P21566				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-50-30		**Arming Conditions**	00025632.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-30		**Annunciation**	00025376.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_30-50-30		**A/THR Activation**	NG02034	
	DSC-22_30-50-30		**Introduction**	00025377.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-30		**Activation Conditions**	00025378.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-30		**Annunciation**	00025379.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-50-30		**A/THR Engagement In Overspeed**	00025848.0001001	18 MAY 22
	Criteria: P21566				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-50-30		**Effect of thrust lever movement when the A/THR is active**	00025380.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_30-50-40		**A/THR Disconnection**	NG02035	
	DSC-22_30-50-40		**A/THR Disconnection**	00025381.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-50-40		**A/THR Disconnection**	00025633.0002001	18 MAY 22
	Criteria: P20604				
E	**Applicable to: MSN 10949-11597**				
E	DSC-22_30-50-40		**A/THR Disconnection**	00025634.0001001	18 MAY 22
	Criteria: P21566				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-50-40		**A/THR Disconnection**	00025635.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-40		**Thrust Lock Function**	00025382.0002001	18 MAY 22
	Criteria: P3420, SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-50-40		**A/THR Annunciation and Warnings**	NG02036	
	DSC-22_30-50-40		**Standard Disconnection**	00025383.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-40		**Non-Standard Disconnection**	00025384.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-50-50		**General**	00025386.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-50		**THRUST mode**	00025387.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-50-50		**Speed/Mach Mode**	NG02037	
	DSC-22_30-50-50		**SPEED/MACH mode**	00025388.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-50-50		**Speed/Mach Target**	00025389.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-50		**Speed/Mach Changeover**	00025390.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-50-50		**A/THR Soft Mode**	00025391.0001001	18 MAY 22
	Criteria: 320-214, A319, A321, 320-200N				
E	**Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 02924-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-50-50		**RETARD mode**	00025393.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-50-50		**A/THR Mode Reversions**	00025368.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-50-50		**ALPHA FLOOR**	00025394.0002001	18 MAY 22
	Criteria: P20604, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-50-50		**ALPHA FLOOR**	00025394.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
	DSC-22_30-50-60		**From Takeoff to Thrust Reduction Altitude**	00025349.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
R	DSC-22_30-50-60		**From Soft Go-around to Thrust Reduction Altitude**	00025350.0001001	03 NOV 22
	Criteria: P13922				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-22_30-60-10		**General**	00025742.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-60-20		**General**	00025743.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-60-20		**Engagement Conditions**	00025744.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-60-20		**Managed Speed/Mach Target**	NG02061	
	DSC-22_30-60-20		**Managed Speed/Mach Target**	00025745.0002001	18 MAY 22
	Criteria: 22-1090, 22-1676, P7218, P7666, SA				
	Applicable to: ALL				
	DSC-22_30-60-20		**Managed Speed Target Memorization**	00025746.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-60-20		**Ground Speed Mini Function**	NG02062	
	DSC-22_30-60-20		**Ground Speed Mini Function**	00025747.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-60-20		**Managed Speed Target Computation**	00025748.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-60-20		**Managed Speed Target Computation - VAPP Computation**	00025749.0002001	18 MAY 22
	Criteria: P4089, SA, A319, A321				
	Applicable to: ALL				
E	DSC-22_30-60-20		**Managed Speed Target Computation**	00025750.0004001	18 MAY 22
	Criteria: P21566, P7218, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-22_30-60-20		**Managed Speed Target Computation**	00025750.0002001	18 MAY 22
	Criteria: 22-1090, 22-1676, P7218, P7666, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
	DSC-22_30-60-20		**Disengagement Conditions**	00025751.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-22_30-60-30		**General**	00025752.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-60-30		**Engagement Conditions**	00025753.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-60-30		**Disengagement Conditions**	00025754.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-60-40		**Speed/MACH FCU Window Synchronization**	00025755.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
N	DSC-22_30-70		**General**	NG02074	
	DSC-22_30-70		**General**	00025834.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-70		**List of Approach and Landing Capabilities - ILS/GLS ◁ /SLS ◁**	00025835.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
N	DSC-22_30-70		**List of Approach and Landing Capabilities - FLS**	00025837.0001001	18 MAY 22
	Criteria: P20596 **Applicable to: MSN 11531**				
E	DSC-22_30-70		**List of Approach and Landing Capabilities - FLS - Disconnect AP for Landing**	00025838.0001001	18 MAY 22
E	Criteria: 31-1576, 31-1577, P20611 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-08495, 08596, 10949-11597**				
	DSC-22_30-70		**Fail Concept**	00025839.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-70		**Display**	00025840.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
E	DSC-22_30-80-10		**Autoland Warning Light**	00012386.0005001	18 MAY 22
E	Criteria: 31-1558, P13322, P14095, P20466, SA **Applicable to: MSN 08635, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_30-80-10		**Autoland Warning Light**	00012386.0003001	18 MAY 22
E	Criteria: 22-1359, 22-1360, 22-1523, 22-1545, 22-1606, 22-1610, 22-1676, P10801, P13321, P13322, P14095, P14946, SA **Applicable to: MSN 01459, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05987, 06097, 06121, 06139-08596, 09190-09324**				
E	DSC-22_30-80-10		**Autoland Warning Light**	00012386.0002001	09 APR 15
E	Criteria: 22-1379, 22-1547, SA **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528**				
E	DSC-22_30-80-10		**Autoland Warning Light**	00012386.0001001	03 JUN 14
E	Criteria: SA **Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
E	DSC-22_30-80-20		**FMA Display**	00025412.0001001	18 MAY 22
E	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**				
E	DSC-22_30-80-20		**FMA Display**	00025412.0002001	18 MAY 22
E	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**				
	DSC-22_30-80-20		**- FD 2**	00025514.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**1 FD -**	00025740.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**1 FD 2**	00025518.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**A.FLOOR**	00025533.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**ALT (armed)**	00025534.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**ALT (engaged)**	00025535.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**ALT***	00025536.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**ALT CRZ (armed)**	00025539.0001001	18 MAY 22
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**ALT CRZ (engaged)**	00025541.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**ALT CRZ***	00025542.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**ALT CST (armed)**	00025544.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**ALT CST (engaged)**	00025545.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**ALT CST***	00025547.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**AP1**	00025549.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**AP1+2**	00025550.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**AP2**	00025551.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: P20596, SA **Applicable to: ALL**		**APP NAV (armed)**	00025553.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: P20596, SA **Applicable to: ALL**		**APP NAV (engaged)**	00025554.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**APPR1 (SLS ◁)**	00025741.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**A/THR (activated)**	00025555.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA **Applicable to: ALL**		**A/THR (armed)**	00025556.0001001	18 MAY 22
	DSC-22_30-80-20 Criteria: SA		**AUTO LAND (GLS ◁)**	00025557.0001001	18 MAY 22

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-80-20		**BARO XXXXX**	00025734.0002001	18 MAY 22
	Criteria: 22-1315, 22-1614, P11473, SA				
	Applicable to: ALL				
E	DSC-22_30-80-20		**BRK LO (armed)**	00025677.0001001	18 MAY 22
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA				
E	**Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-22_30-80-20		**BRK LO (activated)**	00025678.0001001	18 MAY 22
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA				
E	**Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-22_30-80-20		**BRK MAX (activated)**	00025680.0001001	18 MAY 22
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA				
E	**Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-22_30-80-20		**BRK MAX (armed) on Line 2**	00025681.0001001	18 MAY 22
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA				
E	**Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-22_30-80-20		**BRK MAX (armed) on Line 3**	00025682.0001001	18 MAY 22
	Criteria: J4030, P13630, P20375, P20664, SA				
E	**Applicable to: MSN 10949-11597**				
E	DSC-22_30-80-20		**BRK MED (armed)**	00025683.0001001	18 MAY 22
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA				
E	**Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-22_30-80-20		**BRK MED (activated)**	00025684.0001001	18 MAY 22
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA				
E	**Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**				
	DSC-22_30-80-20		**CAT1**	00025559.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**CAT2**	00025558.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**CAT3 DUAL**	00025560.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**CAT3 SINGLE**	00025561.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-80-20		**CHECK APP SEL**	00025685.0001001	18 MAY 22
	Criteria: SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**				
E	DSC-22_30-80-20		**CHECK APPR SELECTION**	00025723.0001001	18 MAY 22
	Criteria: 31-1421, 31-1602, P6578, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01459, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-80-20		**CHECK SPEED MODE**	00025686.0002001	18 MAY 22
	Criteria: 31-1482, P14628, SA				
E	**Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-80-20		**CLB (armed)**	00025562.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**CLB (engaged)**	00025563.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**DECELERATE**	00025687.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974				
	DSC-22_30-80-20		**DES (armed)**	00025564.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**DES (engaged)**	00025565.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-80-20		**DISCONNECT AP FOR LDG**	00025690.0001001	18 MAY 22
	Criteria: 31-1335, 31-1372, 31-1421, 31-1433, 31-1602, P10527				
E	**Applicable to: MSN 01459, 02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08529, 08635-09324**				
E	DSC-22_30-80-20		**DISCONNECT AP FOR LDG**	00025690.0002001	18 MAY 22
	Criteria: 31-1433, 31-1576, 31-1577, P10527, P20611				
E	**Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-08495, 08596, 10949-11597**				
E	DSC-22_30-80-20		**EXP CLB**	00025691.0001001	18 MAY 22
	Criteria: 22-1230, P3401, P4055, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_30-80-20		**EXP DES**	00025692.0001001	18 MAY 22
	Criteria: 22-1230, P3401, P4055, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
N	DSC-22_30-80-20		**F-APP**	00025693.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-80-20		**F-APP + RAW**	00025694.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	DSC-22_30-80-20		**F-G/S (armed)**	00025758.0002001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-80-20		**F-G/S (engaged)**	00025697.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-80-20		**F-G/S***	00025698.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
	DSC-22_30-80-20		**FINAL (armed)**	00025699.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**FINAL APP**	00025700.0001001	18 MAY 22
	Criteria: P20596, SA				
	Applicable to: ALL				
E	DSC-22_30-80-20		**FINAL APP SELECTED**	00025701.0001001	18 MAY 22
	Criteria: P20596				
E	**Applicable to: MSN 11531**				
	DSC-22_30-80-20		**FLARE**	00025702.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
N	DSC-22_30-80-20		**F-LOC (armed)**	00025704.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-80-20		**F-LOC (engaged)**	00025724.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
N	DSC-22_30-80-20		**F-LOC***	00025725.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
E	DSC-22_30-80-20		**FOR GA: SET TOGA**	00025726.0002001	18 MAY 22
	Criteria: 22-1523, 22-1545, 22-1547, 22-1606, 22-1610, 31-1482, P14095, P14628, P14946				
E	**Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-80-20		**FPA**	00025707.0002001	18 MAY 22
	Criteria: 22-1123, P7790, SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**GA TRK**	00025566.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**G/S (armed)**	00025567.0001001	18 MAY 22
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-80-20		**G/S (engaged)**	00025568.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**G/S***	00025569.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**HDG**	00025570.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**LAND**	00025571.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**LOC (armed)**	00025572.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**LOC (engaged)**	00025573.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**LOC***	00025574.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**LVR ASYM**	00025575.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**LVR CLB**	00025712.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
E	DSC-22_30-80-20		**LVR CLB**	00025712.0002001	18 MAY 22
	Criteria: P20604, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-80-20		**LVR MCT**	00025727.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
E	DSC-22_30-80-20		**LVR MCT**	00025727.0002001	18 MAY 22
	Criteria: P20604, SA				
E	**Applicable to: MSN 10949-11597**				
R	DSC-22_30-80-20		**LVR TOGA**	00025398.0035001	15 NOV 22
	Criteria: P14095, P20604, P20611, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	DSC-22_30-80-20		**LVR TOGA**	00025398.0003001	15 NOV 22
	Criteria: 22-1606, 22-1610, 31-1576, 31-1577, P14095, P14946, SA, 320-200N				
E	**Applicable to: MSN 05947-05987, 06634, 06871, 07081-09324**				
R	DSC-22_30-80-20		**LVR TOGA**	00025398.0001001	15 NOV 22
	Criteria: 22-1606, 22-1610, 22-1676, 31-1576, P14946, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005**				
	DSC-22_30-80-20		**MACH**	00025714.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-80-20		**MACH (with a flashing amber box)**	00025728.0001001	18 MAY 22
	Criteria: P21566				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-80-20		**MACH SEL:.XX**	00025640.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**MAN FLX XX**	00025771.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-80-20		**MAN GA SOFT**	00025641.0001001	18 MAY 22
	Criteria: P13922				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-22_30-80-20		**MAN MCT**	00025642.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**MAN PITCH TRIM ONLY**	00025643.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**MAN THR**	00025644.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**MAN TOGA**	00025645.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**MORE DRAG**	00025717.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**NAV (armed)**	00025647.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**NAV (engaged)**	00025648.0001001	18 MAY 22
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-22_30-80-20		**NO DH**	00025649.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**OP CLB (armed)**	00025652.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**OP CLB (engaged)**	00025653.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**OP DES**	00025654.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**RADIO XXX**	00025738.0001001	18 MAY 22
	Criteria: 22-1315, 22-1614, P11473, SA				
	Applicable to: ALL				
N	DSC-22_30-80-20		**RAW ONLY**	00025720.0001001	18 MAY 22
	Criteria: P20596				
	Applicable to: MSN 11531				
	DSC-22_30-80-20		**ROLL OUT**	00025655.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**RWY**	00025656.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**RWY TRK**	00025657.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**SET GREEN DOT SPEED**	00025658.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**SET HOLD SPEED**	00025659.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**SET MANAGED SPEED**	00025660.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974				
	DSC-22_30-80-20		**SPEED**	00025661.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_30-80-20		**SPEED with a flashing amber box**	00025731.0001001	18 MAY 22
	Criteria: P21566				
E	**Applicable to: MSN 10949-11597**				
	DSC-22_30-80-20		**SPEED SEL:XXX**	00025662.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**SRS**	00025663.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_30-80-20		**TCAS (armed)**	00025664.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-80-20		**TCAS (engaged)**	00025665.0001001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-80-20		**TCAS RA INHIBITED**	00025666.0004001	18 MAY 22
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
E	DSC-22_30-80-20		**T/D REACHED**	00025667.0002001	18 MAY 22
	Criteria: 31-1482, P14628, SA				
E	**Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_30-80-20		**THR CLB**	00025668.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**THR IDLE**	00025669.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**THR LK**	00025670.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**THR LVR**	00025671.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**THR MCT**	00025672.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_30-80-20		**TOGA LK**	00025721.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_30-80-20		**TRK**	00025673.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
E	DSC-22_30-80-20		**TRK FPA DESELECTED**	00025722.0001001	18 MAY 22
E	Criteria: 22-1472, P11363 **Applicable to: MSN 01459, 08495-09324, 10949-11597**				
	DSC-22_30-80-20		**USE MAN PITCH TRIM**	00025674.0001001	18 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_30-80-20		**V/S**	00025675.0002001	18 MAY 22
	Criteria: 22-1123, P7790, SA **Applicable to: ALL**				
	DSC-22_30-110		**Misbehaviour of the Enhanced LOC Capture Function**	00023202.0001001	10 MAY 21
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785 **Applicable to: ALL**				
	DSC-22_30-110		**Unexpected G/S mode armed**	00022028.0001001	12 JUL 18
	Criteria: SA **Applicable to: ALL**				
E	DSC-22_30-110		**Left Turn Not Expected while in HDG or TRK Mode**	00015029.0001001	08 AUG 13
E	Criteria: SA **Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
E	DSC-22_30-110		**Spurious CAT 2 INOP**	00022057.0001001	10 MAY 21
E	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, P10801, P13321 **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05752, 06895**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-22_40-10		**GENERAL**	00000840.0001001	24 FEB 15
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_40-20		**YAW DAMPING**	00000851.0001001	18 MAR 11
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_40-20		**RUDDER TRIM**	00000855.0001001	09 DEC 09
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_40-20		**RUDDER TRAVEL LIMITATION**	00000857.0004001	28 MAY 20
	Criteria: SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-22_40-20		**RUDDER TRAVEL LIMITATION**	00000857.0001001	01 OCT 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-07098				
	DSC-22_40-20		**RUDDER TRAVEL LIMITATION**	00000857.0003001	01 OCT 12
	Criteria: K3154, SA				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345				
	DSC-22_40-30		**GENERAL**	00000859.0001001	09 DEC 09
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_40-30		**PFD Speed Scale Management**	00000860.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05240, 05345				
E	DSC-22_40-30		**PFD Speed Scale Management**	00000860.0002001	10 MAY 21
	Criteria: 57-1173, 57-1187, J3283, J3448, P8572, SA				
E	**Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-22_40-30		**Alpha-Floor Protection**	NG02018	
	DSC-22_40-30		**Alpha-Floor Protection**	00025190.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-22_40-30		**Alpha-Floor Protection - Inhibition Conditions - General**	00025194.0001001	05 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	DSC-22_40-30		**Alpha-Floor Protection - Inhibition Conditions - FAC**	00025191.0001001	05 MAY 22
	Criteria: 22-1553, 22-1554, P13476				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01376-01459, 01593-01628, 01825, 02014-02321, 02734-03111, 03211-03284, 03313-03662, 03733-04563, 04662-04974, 05066, 05101-05987, 06097, 06121, 06139-06871, 06895-09324, 10949-11597**				
	DSC-22_40-30		**Alpha-Floor Protection - Inhibition Conditions - IAE**	00025192.0001001	05 MAY 22
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-22_40-30		**Alpha-Floor Protection - Inhibition Conditions - Common**	00025193.0001001	05 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-22_40-30		**Low - Energy Aural Alert**	00006197.0001001	03 NOV 21
	Criteria: P3511, P3686 **Applicable to: ALL**				
	DSC-22_40-40		**Windshear Detection Function**	00006194.0001001	07 JUL 11
	Criteria: P2316 **Applicable to: ALL**				
	DSC-22_40-40		**WINDSHEAR DETECTION PRINCIPLES**	00006195.0001001	23 JUN 15
	Criteria: P2316 **Applicable to: ALL**				
	DSC-22_40-50		**FAC ENGAGEMENT**	00000861.0001001	09 DEC 09
	Criteria: SA **Applicable to: ALL**				
	DSC-22_40-50		**RUDDER TRIM OPERATION**	00000862.0001001	09 DEC 09
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_45		**General**	00000864.0001001	18 MAR 11
E	Criteria: P4155 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_45		**Flight Plan Initialization Function**	00000865.0001001	18 MAR 11
E	Criteria: P4155 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_45		**Flight Plan Initialization Function**	00000865.0010001	18 MAR 11
	Criteria: P4155, P8483, P9652 **Applicable to: MSN 04827-04860**				
E	DSC-22_45		**Takeoff Data Function**	00000866.0001001	03 NOV 21
E	Criteria: P4155 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_45		**Wind Data Function**	00000867.0001001	17 MAY 21
E	Criteria: P4155 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-22_45		**Flight Reports**	00000868.0001001	10 MAY 22
E	Criteria: P4155 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-22_46		**Print Function**	00000869.0003001	01 APR 11
E	Criteria: 22-1090, P4205, P7519, P7520 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-22_46		**Print Function**	00000869.0004001	01 APR 11
	Criteria: P4205, P7373, P7519 **Applicable to: MSN 04827-04860**				
E	DSC-22_46		**AOC/Printer Programming Options** ◁	00000870.0002001	11 FEB 11
E	Criteria: P4155, P4205 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-23-10-10		**Introduction**	00022672.0001001	25 MAY 20
	Criteria: SA **Applicable to: ALL**				
N	DSC-23-10-10		**Communication System Architecture**	00018503.0002001	18 MAY 21
	Criteria: P20240, P20323, SA **Applicable to: MSN 11482-11597**				
E	DSC-23-10-10		**Communication System Architecture**	00018503.0001001	18 MAY 21
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
E	DSC-23-10-20		**Description**	00018494.0001001	17 MAY 21
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
	DSC-23-10-20		**Radio Management Panel**	00018495.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05345, 05591-05752**				
E	DSC-23-10-20		**Radio Management Panel**	00018495.0002001	17 MAR 17
E	Criteria: P7407, SA **Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05528, 05883-05987, 06097, 06121, 06139-09324, 10949-11293**				

N	DSC-23-10-20		**RMP Architecture**	NG01867	
N	DSC-23-10-20		**Description**	00024135.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
N	DSC-23-10-20		**RMP**	00022684.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
N	DSC-23-10-20		**RMP synchronization**	00022674.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
N	DSC-23-10-20		**Active communication**	00022675.0001001	18 MAY 21
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
N	DSC-23-10-20		**Standby Control**	00022676.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				

	DSC-23-10-30		**Audio Management System**	00018496.0002001	17 MAR 17
	Criteria: P7148, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-23-10-30		**Audio Management System**	00018496.0001001	17 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11293**				
N	DSC-23-10-30		**Audio Management System**	00018496.0003001	09 NOV 21
	Criteria: P20240, P20323, SA				
	Applicable to: MSN 11482-11597				
	DSC-23-10-30		**Cabin Intercommunication Data System**	00018497.0001001	03 OCT 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-23-10-30		**Cabin Intercommunication Data System**	00018497.0002001	10 MAY 22
	Criteria: K8400, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
N	DSC-23-10-40		**Description**	00018569.0011001	13 DEC 22
	Criteria: K30988, P0415, P11592, P12083, P20240, SA				
	Applicable to: MSN 11482-11597				
E	DSC-23-10-40		**Description**	00018569.0007001	10 MAY 21
	Criteria: K30988, P0415, P11592, P12083, SA				
E	**Applicable to: MSN 10949-11293**				
	DSC-23-10-40		**Description**	00018569.0001001	10 MAY 21
	Criteria: P0415, P6267, SA				
	Applicable to: MSN 01459				
	DSC-23-10-40		**Description**	00018569.0002001	10 MAY 21
	Criteria: P0415, P11592, P12083, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
	DSC-23-10-40		**Controls and Indicators**	00018570.0001001	04 SEP 18
	Criteria: SA				
	Applicable to: ALL				
E	DSC-23-10-50		**Audio Control Panel**	00018498.0001001	05 MAY 22
	Criteria: P7976, SA				
E	**Applicable to: MSN 01459, 02014-02321, 02887, 03032, 04563, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11293**				
	DSC-23-10-50		**Audio Control Panel**	00018498.0002001	05 MAY 22
	Criteria: P5685, P7976, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-23-10-50		**Side Stick Radio Selector**	00018499.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-23-10-50		**Loudspeaker Volume Knob**	00018500.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
E	DSC-23-10-50		**Audio Switching**	00018501.0001001	17 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
	DSC-23-20-10		**Flight Interphone**	00019716.0001001	18 MAY 21
	Criteria: P21875, SA				
	Applicable to: ALL				
E	DSC-23-20-20		**Introduction**	00018481.0001001	20 JUL 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-23-20-20		**Cabin Interphone**	00018481.0002001	25 MAY 20
	Criteria: P20240, P20323, SA				
	Applicable to: MSN 11482-11597				
E	DSC-23-20-20		**Cabin Call System**	NG01485	
	DSC-23-20-20		**Calls from the Cockpit**	00018482.0001001	19 MAY 21
	Criteria: SA				
	Applicable to: ALL				
E	DSC-23-20-20		**Calls from the Cabin**	00018483.0003001	17 MAR 17
	Criteria: 23-1397, K12405, K2113, K3154, K5070, SA				
E	**Applicable to: MSN 03035-03111, 03222-03229, 03294, 03588, 03630-03710, 03733-03816, 04163-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-23-20-20		**Calls from the Cabin**	00018483.0002001	17 MAR 17
	Criteria: K3154, K5070, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-03032, 03180-03211, 03266-03284, 03313-03565, 03595, 04000				
	DSC-23-20-20		**Calls from the Cabin**	00018483.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01459, 02734				
	DSC-23-20-30		**Introduction**	00018485.0001001	18 MAY 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-23-20-30		**Ground Mechanic Call System**	NG01486	
	DSC-23-20-30		**Controls on the Overhead Panel**	00018486.0001001	05 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-23-20-30		**Controls on the External Power Panel**	00018487.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	DSC-23-20-40		**Description**	00018685.0002001	05 MAY 22
	Criteria: P20240, P20323, SA				
	Applicable to: MSN 11482-11597				
E	DSC-23-20-40		**Description**	00018685.0001001	05 MAY 22
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
E	DSC-23-20-40		**Controls and Indicators**	00018686.0001001	20 JUL 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-23-20-40		**Controls and Indicators**	00018686.0002001	25 MAY 20
	Criteria: P20240, P20323, SA				
	Applicable to: MSN 11482-11597				
E	DSC-23-30-10		**Description**	00018475.0001001	17 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-23-30-10		**Description**	00018475.0002001	25 MAY 20
	Criteria: P20240, P20323, SA				
	Applicable to: MSN 11482-11597				
E	DSC-23-30-10		**VHF**	00018472.0001001	27 APR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-23-30-10		**VHF**	00018472.0002001	25 MAY 20
	Criteria: P20240, P20323, SA				
	Applicable to: MSN 11482-11597				
E	DSC-23-30-10		**HF**	00018473.0001001	27 OCT 17
	Criteria: P0033, P0034, P0197, P4613, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11293**				
E	DSC-23-30-10		**HF**	00018473.0003001	27 OCT 17
	Criteria: P0033, P0034, P0197, P20240, P7148, SA				
E	**Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11482-11597**				
E	DSC-23-30-10		**SELCAL (Selective calling)**	00018476.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-23-30-10		**SELCAL**	00018476.0002001	25 MAY 20
	Criteria: P20240, P20323, SA **Applicable to: MSN 11482-11597**				
	DSC-23-30-20-10		**General**	00019717.0001001	17 MAR 17
	Criteria: P13389, P5905 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-23-30-20-20		**ACP Interface**	00019718.0001001	17 MAR 17
	Criteria: P5905 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-23-30-20-20		**MCDU Interface**	NG01700	
	DSC-23-30-20-20		**MCDU Interface - SATCOM MAIN MENU Page**	00019719.0003001	17 MAR 17
	Criteria: P13390, P5687, P5905 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-23-30-20-20		**MCDU Interface - SATCOM MAIN MENU Page**	00019719.0001001	17 MAR 17
	Criteria: P5905 **Applicable to: MSN 01801, 01826, 01837-01855**				
	DSC-23-30-20-20		**MCDU Interface - SATCOM DIRECTORY Page**	00019720.0001001	17 MAR 17
	Criteria: P13390, P5687 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-23-30-20-20		**MCDU Interface - SATCOM CATEGORY NUMBERS Page**	00019721.0001001	17 MAR 17
	Criteria: P13390, P5687 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-23-30-20-20		**MCDU Interface - SATCOM MANUAL DIAL Page**	00019722.0001001	17 MAR 17
	Criteria: P13390, P5687				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-23-30-20-20		**MCDU Interface - SATCOM STATUS Page**	00021870.0001001	03 AUG 17
	Criteria: P13390, P5687				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				

	DSC-23-40-10		**Controls and Indicators**	00018468.0001001	18 MAY 17
	Criteria: SA				
	Applicable to: ALL				
R	DSC-23-40-30		**Controls and Indicators**	00018516.0007001	08 NOV 22
	Criteria: K10143, K13015				
	Applicable to: MSN 04827-04860				
	DSC-23-40-30		**Controls and Indicators**	00018516.0003001	17 MAR 17
	Criteria: 23-1157, K5638, K9230, K9234				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03002-03032, 04563, 05005, 05097				
E	DSC-23-40-30		**Controls and Indicators**	00018516.0002001	17 MAR 17
	Criteria: K11694, K32247, K9231				
E	**Applicable to: MSN 02924, 03035-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05987, 06097, 06121, 06139-09324, 10949-11597**				
N	DSC-23-45-10		**HF ◁ Page**	00022708.0001001	25 MAY 20
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				
N	DSC-23-45-10		**MENU Page**	00024139.0005001	18 MAY 21
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				
N	DSC-23-45-10		**RMP External Communication**	00022706.0001001	25 MAY 20
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				
N	DSC-23-45-10		**RMP Overview**	00022705.0001001	18 MAY 21
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				
N	DSC-23-45-10		**VHF Page**	00022707.0001001	25 MAY 20
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				
N	DSC-23-45-20		**RMP Messages on the RMP Page Area**	00024140.0001001	25 MAY 20
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	DSC-23-45-20		**RMP Messages on the RMP Message Area**	00022683.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
	DSC-23-50		**ACARS ◁**	00018505.0001001	31 AUG 17
	Criteria: SA **Applicable to: ALL**				
	DSC-23-50		**ATSU ◁**	00018506.0001001	31 AUG 17
	Criteria: SA **Applicable to: ALL**				
E	DSC-23-50		**AUDIO 3 XFRD**	00018507.0001001	17 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
E	DSC-23-50		**SATCOM ◁**	00018508.0002001	03 APR 18
	Criteria: 31-1558, P20466, SA				
E	**Applicable to: MSN 08635, 10949-11597**				
	DSC-23-50		**SATCOM ◁**	00018508.0001001	31 AUG 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324**				
N	DSC-23-50		**Loudspeakers**	00025038.0001001	03 NOV 21
	Criteria: P20240 **Applicable to: MSN 11482-11597**				

E	DSC-23-60		**VHF, HF Utilization**	NG00115	
E	DSC-23-60		**VHF, HF Utilization - Tuning**	00002211.0001001	05 MAR 18
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
	DSC-23-60		**VHF, HF Utilization - Transmission and Reception**	00002212.0001001	05 MAR 18
	Criteria: P5956, P6588, SA **Applicable to: MSN 01459**				
E	DSC-23-60		**VHF, HF Utilization - Transmission and Reception**	00002212.0004001	28 MAY 20
	Criteria: 46-1009, 46-1121, P0143, P6588, P9486, SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-24-10-10		**General**	00017750.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-24-10-20		**AC Generators**	00017751.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-24-10-20		**DC Generation**	00017752.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-24-10-20		**Circuit Breakers (C/Bs)**	00000874.0002001	15 FEB 11
	Criteria: K2113, K3154, P5768, SA				
	Applicable to: ALL				
	DSC-24-10-30-10		**General**	00017759.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-24-10-30-20		**In Flight**	00000876.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-24-10-30-20		**In Flight**	00000876.0002001	09 OCT 12
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-10-30-20		**On Ground**	00000877.0001001	22 MAY 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-24-10-30-20		**On Ground**	00000877.0002001	22 MAY 12
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-24-10-30-30		**Failure of One Engine Generator**	00017760.0002001	21 MAR 16
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-10-30-30		**Failure of One Engine Generator**	00017760.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-24-10-30-30		**Failure of AC BUS 1**	00017761.0002001	21 MAR 16
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-10-30-30		**Failure of AC BUS 1**	00017761.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-24-10-30-30		**Failure of One TR**	00000880.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-24-10-30-30		**Failure of One TR**	00000880.0002001	21 MAR 16
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-10-30-30		**Failure of TR 1 and TR 2**	00000881.0001001	04 JUN 19
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-24-10-30-30		**Failure of TR 1 and TR 2**	00000881.0002001	04 JUN 19
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-10-30-30		**Emergency Generation after Loss of All Main Generators**	00000882.0002001	21 MAR 16
	Criteria: K2113, K3154, P5768, SA				
	Applicable to: ALL				
	DSC-24-10-30-30		**EMER GEN Running**	00000883.0001001	04 JUN 19
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-24-10-30-30		**EMER GEN Running**	00000883.0002001	04 JUN 19
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-10-30-30		**EMER GEN Running (Cont'd)**	00000884.0002001	21 MAR 16
	Criteria: K2113, K3154, P5768, SA				
	Applicable to: ALL				
	DSC-24-10-30-30		**Flight with Batteries Only**	00017762.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-24-10-30-30		**On Ground, Batteries Only (Speed < 50 kt)**	00017763.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-24-10-30-30		**Smoke Configuration**	00017764.0002001	21 MAR 16
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-10-30-30		**Smoke Configuration**	00017764.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-24-10-30-40		**Distribution Table**	00017765.0002001	10 MAY 21
	Criteria: K2113, K3154, P5768, SA				
	Applicable to: ALL				
	DSC-24-20		**Overhead Panel**	00017766.0004001	28 MAY 20
	Criteria: P1390, P1485, SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-24-20		**Overhead Panel (Cont'd)**	00017778.0002001	21 MAR 17
	Criteria: K2113, K3154, P5768, SA				
	Applicable to: ALL				
	DSC-24-20		**External Power Panel**	00000891.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-24-20		**Forward Cabin**	00000892.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: ALL				
E	DSC-24-20		**ECAM ELEC Page**	00017780.0002001	28 MAY 20
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-24-20		**ECAM ELEC Page**	00017780.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-24-20		**Memo Display**	00016808.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-25-10-10 Criteria: SA **Applicable to: ALL**		**General**	00020853.0001001	17 MAR 17
	DSC-25-10-10 Criteria: SA **Applicable to: ALL**		**Principles For Pushbuttons With Integrated Indications**	00000983.0001001	21 MAR 16
	DSC-25-10-10 Criteria: SA **Applicable to: ALL**		**General Arrangement**	00018419.0001001	17 MAR 17
	DSC-25-10-20 Criteria: SA **Applicable to: ALL**		**General**	00017002.0001001	17 MAR 17
	DSC-25-10-20 Criteria: SA **Applicable to: ALL**		**Right Rear Corner**	00000986.0001001	06 DEC 16
	DSC-25-10-20 Criteria: SA **Applicable to: ALL**		**Left Rear Corner**	00018428.0001001	17 MAR 17
	DSC-25-10-30 Criteria: P2493, SA **Applicable to: ALL**		**Pilot Seats**	00018429.0002001	26 NOV 19
	DSC-25-10-30 Criteria: SA **Applicable to: ALL**		**Pilot Seat Mechanical Adjustment**	00000989.0001001	26 NOV 19
	DSC-25-10-30 Criteria: SA **Applicable to: ALL**		**Pilot Seat Electrical Adjustment** ◁	00018405.0001001	26 NOV 19
	DSC-25-10-30 Criteria: SA **Applicable to: ALL**		**Head Rest Adjustment** ◁	00018406.0001001	17 MAR 17
	DSC-25-10-30 Criteria: SA **Applicable to: ALL**		**Armrest Adjustment**	00000993.0001001	21 MAR 17
	DSC-25-10-30 Criteria: SA **Applicable to: ALL**		**Observer Seat**	00018430.0001001	17 MAR 17
	DSC-25-10-30 Criteria: SA **Applicable to: ALL**		**Observer Seat Adjustment**	00000995.0001001	21 MAR 17
	DSC-25-10-30 Criteria: SA **Applicable to: ALL**		**Pilot Seat Outboard Armrest Adjustment**	00018431.0001001	26 NOV 19

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-25-10-40		**Main Instrument Panel - Captain Side**	00020851.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
E	DSC-25-10-40		**Main Instrument Panel - First Officer Side**	00020852.0002001	28 MAY 20
E	Criteria: P20473, SA **Applicable to: MSN 10949-11597**				
	DSC-25-10-40		**Main Instrument Panel - First Officer Side**	00020852.0001001	25 MAR 20
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
N	DSC-25-10-50		**Pedestal**	00020854.0004001	05 MAY 22
	Criteria: P20240, P20440, SA **Applicable to: MSN 11482-11597**				
E	DSC-25-10-50		**Pedestal**	00020854.0003001	05 MAY 22
E	Criteria: P20440, SA **Applicable to: MSN 10949-11293**				
	DSC-25-10-50		**Pedestal**	00020854.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
N	DSC-25-10-60		**Overhead Panel**	00020855.0007001	28 MAY 20
	Criteria: P20240, P20323, P21486, SA **Applicable to: MSN 11482-11597**				
E	DSC-25-10-60		**Overhead Panel**	00020855.0005001	03 NOV 22
E	Criteria: P21486, SA **Applicable to: MSN 10949-11293**				
R	DSC-25-10-60		**Overhead Panel**	00020855.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
	DSC-25-10-70		**C/B Panels**	00018436.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-25-10-80		**General**	00017009.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-25-10-80		**Controls**	00017008.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-25-20		**Emergency Equipment**	NG01833	
	DSC-25-20		**Overview**	00022066.0001001	04 DEC 17
	Criteria: SA **Applicable to: ALL**				
	DSC-25-20		**Cockpit Emergency Equipment**	00022067.0001001	04 DEC 18
	Criteria: SA **Applicable to: ALL**				
	DSC-25-20		**Cabin Emergency Equipment**	00022068.0001001	04 DEC 17
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-26-10		**Description**	00021387.0006001	17 MAR 17
	Criteria: K0035, K0036, K0037, SA **Applicable to: ALL**				
	DSC-26-20-10		**Fire Detection**	00021393.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-10		**Extinguishing**	00021395.0001001	04 JUL 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-10		**Fire Detection and Detection Fault Logic**	00021394.0001001	26 OCT 22
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-26-20-20		**FIRE Panel**	NG01797	
	DSC-26-20-20		**FIRE Panel**	00021396.0002001	05 MAY 22
	Criteria: P2205, SA **Applicable to: ALL**				
	DSC-26-20-20		**ENG 1(2) FIRE pb-sw**	00021415.0001001	10 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**AGENT 1(2) pb**	00021420.0001001	10 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**ENG 1(2) FIRE TEST pb**	00021421.0001001	10 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**APU FIRE pb-sw**	00021423.0001001	10 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**AGENT pb**	00021424.0001001	10 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**APU FIRE TEST pb**	00021425.0001001	10 MAY 22
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-26-20-20		**ENG MASTER Panel**	NG01800	
	DSC-26-20-20		**ENG MASTER Panel**	00021427.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**ENG 1(2) FIRE Light**	00021428.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-26-20-20		**EXTERNAL POWER Panel**	NG01801	
	DSC-26-20-20		**EXTERNAL POWER Panel**	00021429.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**APU FIRE Light**	00021430.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**APU SHUT OFF pb**	00021431.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**MAINTENANCE Panel**	NG01802	
	DSC-26-20-20		**MAINTENANCE Panel**	00021432.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**TEST pb-sw**	00021435.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-20-20		**RESET pb**	00021436.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-30-10		**Smoke Detection**	00021401.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-30-20		**EMER ELEC PWR Panel**	NG01803	
	DSC-26-30-20		**EMER ELEC PWR Panel**	00021439.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-30-20		**GEN 1 LINE pb-sw**	00021440.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-30-20		**VENTILATION Panel**	NG01799	
	DSC-26-30-20		**VENTILATION Panel**	00021402.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-30-20		**BLOWER pb-sw**	00021437.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-26-30-20		**EXTRACT pb-sw**	00021438.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-40-10		**Smoke Detection**	00021441.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-26-40-10		**Wastebin Fire Extinguishing**	00001034.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-26-50-10		**Smoke Detection**	00021442.0004001	17 MAR 17
E	Criteria: K0035, K0036, K2106 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-26-50-10		**Smoke Detection**	00021442.0003001	17 MAR 17
E	Criteria: K0035, K0036 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
N	DSC-26-50-10		**Fire Extinguishing**	00021443.0024001	22 MAR 18
	Criteria: J4530, K0035, K0036, K0037, K1688, K30673, K4277 **Applicable to: MSN 11531**				
	DSC-26-50-10		**Fire Extinguishing**	00021443.0007001	17 MAR 17
	Criteria: K0035, K0036, K0037, K10575, K1688 **Applicable to: MSN 02014, 04827-04860**				
E	DSC-26-50-10		**Fire Extinguishing**	00021443.0005001	17 MAR 17
E	Criteria: K0035, K0036, K0037 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
E	DSC-26-50-20		**CARGO SMOKE Panel**	NG01804	
	DSC-26-50-20		**CARGO SMOKE Panel**	00021446.0007001	17 MAR 17
	Criteria: K0035, K0036, K0037, K10575, K1688 **Applicable to: MSN 02014, 04827-04860**				
N	DSC-26-50-20		**CARGO SMOKE Panel**	00021446.0015001	22 MAR 18
	Criteria: J4530, K0035, K0036, K0037, K1688, K30673 **Applicable to: MSN 11531**				
E	DSC-26-50-20		**CARGO SMOKE Panel**	00021446.0005001	17 MAR 17
E	Criteria: K0035, K0036, K0037 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-26-50-20		**SMOKE Light**	00021450.0001001	17 MAR 17
E	Criteria: SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597				
E	DSC-26-50-20		**TEST pb**	00021451.0002001	17 MAR 17
E	Criteria: K0037, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597				
E	DSC-26-50-20		**DISCH Light**	00021452.0001001	17 MAR 17
E	Criteria: K0037				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597				
E	DSC-26-50-20		**DISCH pb**	00021454.0001001	17 MAR 17
E	Criteria: J4530, K0037, K1688, K30673				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597				
	DSC-26-50-20		**DISCH AGENT 2 Light**	00021455.0001001	17 MAR 17
	Criteria: K10575, K1688				
	Applicable to: MSN 02014, 04827-04860				
	DSC-26-50-20		**DISCH sw**	00021456.0001001	17 MAR 17
	Criteria: K10575, K1688				
	Applicable to: MSN 02014, 04827-04860				
N	DSC-26-50-20		**BTL Light**	00022194.0001001	22 MAR 18
	Criteria: J4530, K30673				
	Applicable to: MSN 11531				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-27-10-10		**General**	00001043.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-10		**Basic Principle**	00001044.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-10		**Control Surfaces**	00001045.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-10		**Cockpit Controls**	00001046.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-10		**Computers**	00001047.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**General Architecture**	00001048.0002001	13 JAN 14
	Criteria: J1617, K2113, K3154, SA				
	Applicable to: ALL				
	DSC-27-10-20		**Pitch Control**	NG00080	
	DSC-27-10-20		**Pitch Control - General**	00001049.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Pitch Control - Electrical Control**	00001050.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Pitch Control - Mechanical Control**	00001051.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Pitch Control - Actuation**	00001053.0002001	21 MAR 16
	Criteria: P1850, SA				
	Applicable to: ALL				
	DSC-27-10-20		**Pitch Control - Schematic**	00001054.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
E	DSC-27-10-20		**Roll Control**	NG00081	
	DSC-27-10-20		**Roll Control - General**	00001055.0002001	09 OCT 12
	Criteria: K2113, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
N	DSC-27-10-20		**Roll Control - General**	00001055.0005001	14 OCT 14
	Criteria: K2113, SA, 321-200NX				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 11531				
E	DSC-27-10-20		**Roll Control - General**	00001055.0003001	09 OCT 12
	Criteria: J1617, K3154, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-27-10-20		**Roll Control - Electric Control**	00001056.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Roll Control - Actuation**	00001057.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-27-10-20		**Speed Brakes and Ground Spoilers**	NG00082	
	DSC-27-10-20		**Speed Brakes and Ground Spoilers - Speed Brake Control**	00001058.0017001	28 NOV 19
	Criteria: 27-1219, P12125, P3660, P3830, P5138, SA				
	Applicable to: MSN 04441-04544, 04827-04974, 05066, 05101-05222, 05342, 05591-05643				
E	DSC-27-10-20		**Speed Brakes and Ground Spoilers - Speed Brake Control**	00001058.0011001	10 MAY 21
	Criteria: P3660, P3830, P5138, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 05240, 05749-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-27-10-20		**Speed Brakes and Ground Spoilers - Speed Brake Control**	00001058.0013001	10 MAY 21
	Criteria: 27-1219, K2113, P12125, P3660, P3830, P5138, SA				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-27-10-20		**Speed Brakes and Ground Spoilers - Speed Brake Control**	00001058.0014001	10 MAY 21
	Criteria: 27-1219, K3154, P3660, P3830, P5138, SA				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345				
	DSC-27-10-20		**Speed Brakes and Ground Spoilers - Ground Spoiler Control**	00017787.0002001	03 NOV 21
	Criteria: 27-1219, 27-1230, P11744, SA				
	Applicable to: ALL				
	DSC-27-10-20		**Speed Brakes and Ground Spoilers - Roll Control - Schematic**	00001060.0002001	22 MAY 12
	Criteria: J1617, K2113, K3154, SA				
	Applicable to: ALL				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-27-10-20		**Yaw Control**	NG00083	
	DSC-27-10-20		**Yaw Control - General**	00001061.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Yaw Control - Electrical Rudder Control**	00001062.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Yaw Control - Mechanical Rudder Control**	00001063.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Yaw Control - Rudder Actuation**	00001064.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Yaw Control - Rudder Travel Limit**	00001065.0003001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Yaw Control - Relationship Between Sideslip/Rudder Deflection/Rudder Pedal Travel**	00015506.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Yaw Control - Rudder Trim**	00001066.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-10-20		**Yaw Control - Schematic**	00001067.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-27-10-20		**Short Airfield Package (SHARP)**	00021696.0003001	01 JUN 17
	Criteria: 320-271N, 320-273N, P15599				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
N	DSC-27-20-10-10		**General**	00001068.0006001	04 JUN 19
	Criteria: P20427, SA, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-27-20-10-10		**General**	00001068.0005001	04 JUN 19
	Criteria: 27-1284, P20427, SA, 320-200N				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	DSC-27-20-10-10		**General**	00001068.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-27-20-10-20		**Ground Mode**	00001069.0005001	10 MAY 21
	Criteria: SA, A319				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345				
E	DSC-27-20-10-20		**Ground Mode**	00001069.0001001	10 MAY 21
	Criteria: SA, A320, A321				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-27-20-10-20		**Rotation Mode**	00023155.0002001	26 OCT 22
	Criteria: SA, 320-200N				
	Applicable to: MSN 08495-09324, 10949-11139				
N	DSC-27-20-10-20		**Flight Mode**	00001070.0007001	05 MAY 22
	Criteria: K2113, P13482, P6901, SA, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-27-20-10-20		**Flight Mode**	00001070.0004001	28 MAY 20
	Criteria: 27-1160, 27-1251, K2113, K3154, P13482, P6901, SA				
E	**Applicable to: MSN 01855, 04352-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-27-20-10-20		**Flight Mode**	00001070.0001001	28 MAY 20
	Criteria: 27-1160, K2113, K3154, P6901, SA				
	Applicable to: MSN 01801, 01826, 01837, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04192				
R	DSC-27-20-10-20		**Flight Mode**	00001070.0003001	02 MAY 23
	Criteria: 27-1154, 27-1160, P6901, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662				
N	DSC-27-20-10-20		**Flare Mode**	00001071.0005001	03 NOV 21
	Criteria: P20427, SA, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-27-20-10-20		**Flare Mode**	00001071.0001001	21 MAR 16
	Criteria: 27-1284, P20427, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				

M	Localization	T	DU Title	DU identification	DU date
E	DSC-27-20-10-20		**Protections**	NG00084	
	DSC-27-20-10-20		**Protections - General**	00001072.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-10-20		**Protections - Load Factor Protection**	00001073.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-27-20-10-20		**Protections - Pitch Attitude Protection**	00001074.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-27-20-10-20		**Protections - High Angle of Attack Protection**	00024137.0001001	05 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-27-20-10-20		**Protections - High Speed Protection - Activation Condition**	00024649.0001001	03 MAY 21
	Criteria: SA **Applicable to: ALL**				
E	DSC-27-20-10-20		**Protections - High Speed Protection - Pitch Trim Setting**	00024650.0001001	03 MAY 21
E	Criteria: 27-1160, P6901, SA, A319, A321 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-27-20-10-20		**Protections - High Speed Protection - Pitch Trim Setting**	00024650.0002001	03 MAY 21
E	Criteria: 27-1154, 27-1160, P6901, SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-27-20-10-20		**Protections - High Speed Protection - Procedures**	00024651.0001001	03 MAY 21
	Criteria: SA **Applicable to: ALL**				
E	DSC-27-20-10-20		**Protections - High Speed Protection - Overspeed**	00024652.0001001	18 MAY 22
E	Criteria: P21566 **Applicable to: MSN 10949-11597**				
	DSC-27-20-10-20		**Protections - Low Energy Aural Alert**	00001077.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-27-20-10-30		**Normal Law**	00001078.0006001	04 NOV 20
E	Criteria: 27-1284, P15599, P20427, P20608, SA, 320-200N **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
N	DSC-27-20-10-30		**Normal Law**	00001078.0002001	28 MAY 20
	Criteria: P20427, P20608, SA, 321-200NX **Applicable to: MSN 11531**				
	DSC-27-20-10-30		**Normal Law**	00001078.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-27-20-10-30		**Bank Angle Protection**	00001079.0004001	11 MAR 20
	Criteria: 27-1284, P20608, SA, 320-200N				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
E	DSC-27-20-10-30		**Bank Angle Protection**	00001079.0001001	17 MAR 17
	Criteria: P20608, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098, 11531**				
E	DSC-27-20-10-40		**Load Alleviation Function (LAF)**	00001080.0006001	27 NOV 12
	Criteria: 57-1173, 57-1187, J1617, J3283, J3448, K2113, P11140, SA				
E	**Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-27-20-10-40		**Load Alleviation Function (LAF)**	00001080.0005001	15 FEB 11
	Criteria: J1617, P11140, SA				
	Applicable to: MSN 04827-04860				
	DSC-27-20-10-50		**Sideslip Target**	00001081.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-10-70		**AIRCRAFT TRIMMING**	00002179.0001001	09 DEC 09
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-20		**General**	00001082.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-20		**Flight Controls Law Reconfiguration**	00024057.0001001	10 MAY 21
	Criteria: 27-1182, 27-1234, 27-1238, 27-1243, P10443, P10493, A319, A321				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345				
	DSC-27-20-20		**Flight Controls Law Reconfiguration**	00024057.0005001	10 MAY 21
	Criteria: 27-1182, 27-1188, 27-1234, 27-1238, 27-1243, J1617, P10443, P10493, A320				
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05240				
E	DSC-27-20-20		**Flight Controls Law Reconfiguration**	00024057.0047001	10 MAY 21
	Criteria: 27-1225, 27-1234, 27-1243, 57-1173, J1617, J3283, P10443, P10493, P11140, P12127, P21765, A320				
E	**Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-27-20-20		**Flight Controls Law Reconfiguration**	00024057.0065001	10 MAY 21
	Criteria: 27-1234, 27-1243, J1617, P10443, P10493, P11140, A320				
	Applicable to: MSN 04827-04860				
E	DSC-27-20-20		**Flight Controls Law Reconfiguration**	00024057.0061001	10 MAY 21
	Criteria: 27-1225, 27-1234, 27-1243, 57-1187, J3448, P10443, P10493, P12127, P21765, A321				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-27-20-20		**Alternate Law**	00001084.0001001	29 MAY 20
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974				
E	DSC-27-20-20		**Alternate Law**	00001084.0005001	18 NOV 21
	Criteria: P14628, P20611, P20738, P21265, SA				
E	**Applicable to: MSN 10949-11597**				
E	DSC-27-20-20		**Alternate Law**	00001084.0002001	29 MAY 20
	Criteria: 22-1736, 22-1737, 31-1482, 31-1576, P14628, SA				
E	**Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08529, 08635-09324**				
N	DSC-27-20-20		**Alternate Law**	00001084.0003001	29 MAY 20
	Criteria: 22-1736, 22-1737, 31-1482, 31-1576, 31-1577, P14628, SA				
	Applicable to: MSN 05947-05987, 06634, 06871, 07081-08495, 08596				
	DSC-27-20-20		**Alternate Law Without Reduced Protection**	00001085.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-20		**Direct Law**	00001086.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-20		**Abnormal Attitude Laws**	00001087.0004001	16 MAY 22
	Criteria: 27-1160, 27-1234, 27-1238, 27-1243, P13619, P6901, SA, A320				
	Applicable to: ALL				
	DSC-27-20-20		**Mechanical Back-Up**	00001088.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-30		**Pedestal**	00001090.0002001	08 JUL 15
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-30		**Lateral Consoles**	00001091.0004001	18 MAY 22
	Criteria: 27-1113, 31-1115, 31-1264, P4170, P4977, SA				
	Applicable to: ALL				
R	DSC-27-20-30		**Glareshield**	00001092.0002001	02 MAY 23
	Criteria: 27-1113, P4170, SA				
E	**Applicable to: MSN 01143-11293**				
	DSC-27-20-30		**Overhead Panel**	00017869.0001001	19 SEP 16
	Criteria: K3154, SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-27-20-30		**Side Stick Indications On PFD**	00001094.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-30		**ECAM F/CTL Page**	00001095.0002001	15 OCT 12
	Criteria: 22-1102, 22-1226, J1617, K3154, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
N	DSC-27-20-30		**ECAM F/CTL Page**	00001095.0006001	29 NOV 19
	Criteria: K2113, P6578, P6954, P8256, SA, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-27-20-30		**ECAM F/CTL Page**	00001095.0004001	15 OCT 12
	Criteria: J1617, K2113, K3154, P6578, P6954, P8256, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-27-20-30		**ECAM Wheel Page**	00001096.0001001	15 FEB 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-27-20-30		**ECAM Wheel Page**	00001096.0002001	15 FEB 11
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-27-20-30		**Memo Display**	NG01407	
	DSC-27-20-30		**GND SPLRS ARMED**	00016860.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-27-20-30		**SPEED BRK**	00016859.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
R	DSC-27-30-10		**General**	NG01995	
	DSC-27-30-10		**General - Introduction**	00024875.0001001	26 OCT 22
	Criteria: SA				
	Applicable to: ALL				
R	DSC-27-30-10		**General - Slat Flap surface**	00024876.0002001	04 NOV 21
	Criteria: SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
R	DSC-27-30-10		**General - Slat Flap surface**	00024876.0001001	04 NOV 21
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-27-30-10		**General - Main components**	00024877.0001001	04 NOV 21
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
E	DSC-27-30-10		**Architecture**	00001099.0001001	21 MAR 16
	Criteria: K3154, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-27-30-10		**Architecture**	00001099.0002001	21 MAR 16
	Criteria: K2113, SA				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-27-30-10		**Configurations**	00001100.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: ALL				
E	DSC-27-30-10		**Alpha/Speed Lock Function (Slats)**	00001101.0001001	13 SEP 16
	Criteria: K3154, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-27-30-10		**Alpha/Speed Lock Function (Slats)**	00001101.0002001	02 MAY 17
	Criteria: K2113, SA				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
N	DSC-27-30-20		**Pedestal**	00001102.0004001	03 NOV 21
	Criteria: IAL, K2113, SA, 321-200NX				
	Applicable to: MSN 11531				
R	DSC-27-30-20		**Pedestal**	00001102.0001001	02 MAY 23
	Criteria: CFMI, SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
R	DSC-27-30-20		**Pedestal**	00001102.0002001	02 MAY 23
	Criteria: CFMI, IAE, IAL, K3154, SA, 320-200N				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 08495-09324, 10949-11139				
R	DSC-27-30-20		**Pedestal**	00001102.0003001	02 MAY 23
	Criteria: CFMI, IAE, K2113, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-27-30-20		**ECAM Upper Display**	00001103.0001001	18 MAR 11
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-27-30-20		**ECAM Upper Display**	00001103.0002001	14 NOV 11
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-28-10-10		**GENERAL**	00001107.0001001	13 NOV 13
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
E	DSC-28-10-10		**GENERAL**	00001107.0002001	10 DEC 09
E	Criteria: SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-10-10		**General**	00001107.0003001	13 NOV 13
E	Criteria: J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	DSC-28-10-20		**Tanks**	NG01720	
N	DSC-28-10-20		**Tanks**	00020195.0005001	05 JUN 18
	Criteria: J4530, SA, A321 **Applicable to: MSN 11531**				
	DSC-28-10-20		**Tanks**	00020195.0003001	17 MAR 17
	Criteria: SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
E	DSC-28-10-20		**Tanks**	00020195.0001001	17 MAR 17
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
N	DSC-28-10-20		**Usable Fuel**	00020196.0017001	04 SEP 18
	Criteria: J2887, J4530, SA, A321, 321-200NX **Applicable to: MSN 11531**				
E	DSC-28-10-20		**Usable Fuel**	00020196.0015001	17 MAR 17
E	Criteria: J2816, J3282, SA, 320-200N **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-10-20		**Usable Fuel**	00020196.0009001	17 MAR 17
	Criteria: J2887, SA, A321 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-28-10-20		**Usable Fuel**	00020196.0008001	17 MAR 17
	Criteria: J2816, J3282, SA **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	DSC-28-10-20		**Usable Fuel**	00020196.0004001	17 MAR 17
	Criteria: J2887, J2888, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-28-10-20		**Usable Fuel**	00020196.0003001	17 MAR 17
	Criteria: J2816, SA **Applicable to: MSN 03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05240**				
	DSC-28-10-20		**Usable Fuel**	00020196.0001001	17 MAR 17
	Criteria: J2816, J2817, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03180, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
E	DSC-28-10-30		**GENERAL**	00001109.0001001	13 NOV 13
E	Criteria: J0006, J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-10-30		**GENERAL**	00001109.0002001	10 DEC 09
	Criteria: J0006, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
E	DSC-28-10-30		**GENERAL**	00001109.0003001	10 DEC 09
E	Criteria: J0006, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-10-30		**Main Components**	NG00085	
E	DSC-28-10-30		**MAIN COMPONENTS - TANK PUMPS**	00001110.0001001	10 DEC 09
E	Criteria: J0006, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-28-10-30		**MAIN COMPONENTS - TANK PUMPS**	00001110.0002001	01 FEB 13
	Criteria: J0006, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
E	DSC-28-10-30		**Main Components - Tank Pumps**	00001110.0003001	13 NOV 13
E	Criteria: J0006, J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-10-30		**MAIN COMPONENTS - INTERTANK TRANSFER VALVES**	00001111.0001001	31 JAN 13
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-28-10-30		**MAIN COMPONENTS - CROSS FEED VALVE**	00001112.0001001	10 DEC 09
	Criteria: SA **Applicable to: ALL**				
	DSC-28-10-30		**MAIN COMPONENTS - ENGINE LP VALVES**	00001113.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				
E	DSC-28-10-30		**MAIN COMPONENTS - SUCTION VALVES**	00001114.0001001	13 NOV 13
E	Criteria: J0006, J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-10-30		**MAIN COMPONENTS - SUCTION VALVES**	00001114.0002001	29 MAR 12
	Criteria: J0006, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
E	DSC-28-10-30		**MAIN COMPONENTS - SUCTION VALVES**	00001114.0003001	29 MAR 12
E	Criteria: J0006, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
N	DSC-28-10-30		**Engine Feed**	00001115.0017001	20 NOV 18
	Criteria: J0006, J4530, SA, A321 **Applicable to: MSN 11531**				
	DSC-28-10-30		**Engine Feed**	00001115.0002001	18 MAR 14
	Criteria: J0006, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
	DSC-28-10-30		**Engine Feed**	00001115.0003001	18 MAR 14
	Criteria: J0006, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
E	DSC-28-10-30		**Engine Feed**	00001115.0013001	18 MAR 14
E	Criteria: J0006, J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-10-30		**Fuel Feed Sequence**	00021263.0001001	28 MAY 20
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
N	DSC-28-10-30		**Fuel Feed Sequence**	00021263.0013001	20 NOV 18
	Criteria: PW1100G-JM, J4530, SA, A321				
	Applicable to: MSN 11531				
E	DSC-28-10-30		**Fuel Feed Sequence**	00021263.0010001	21 MAR 17
	Criteria: PW1100G-JM, J3527, SA				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-10-30		**Fuel Feed Sequence**	00021263.0004001	21 MAR 17
	Criteria: J3527, SA				
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-10-30		**Fuel Feed Sequence**	00021263.0003001	21 MAR 17
	Criteria: SA, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
N	DSC-28-10-40		**General**	00009208.0003001	20 NOV 18
	Criteria: J4530				
	Applicable to: MSN 11531				
N	DSC-28-10-40		**Automatic Transfer**	00009209.0007001	04 JUN 19
	Criteria: J4530				
	Applicable to: MSN 11531				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	DSC-28-10-40		**Manual Transfer**	NG00616	
N	DSC-28-10-40		**Manual Transfer - General**	00009210.0001001	05 JUN 18
	Criteria: J4530				
	Applicable to: MSN 11531				
N	DSC-28-10-40		**Manual Transfer - Ecam Indication**	00009211.0005001	05 JUN 18
	Criteria: J4530, P6578				
	Applicable to: MSN 11531				
N	DSC-28-10-40		**Manual Transfer - ACT System Architecture**	00009212.0002001	05 JUN 18
	Criteria: J4530				
	Applicable to: MSN 11531				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-28-10-50		**APU FEED**	00001120.0001001	10 DEC 09
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-28-10-60		**Fuel Recirculation System**	NG01721	
E	DSC-28-10-60		**Fuel Recirculation System**	00020316.0002001	05 MAY 22
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-10-60		**Fuel Recirculation System**	00020316.0001001	05 MAY 22
	Criteria: SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-10-60		**Fuel Recirculation System - Description**	00020317.0010001	28 NOV 17
	Criteria: IAL, J3527				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-10-60		**Fuel Recirculation System - Description**	00020317.0004001	17 MAR 17
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173				
	DSC-28-10-60		**Fuel Recirculation System - Description**	00020317.0007001	28 NOV 17
	Criteria: CFMI, J3527				
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-10-60		**Fuel Recirculation System - Description**	00020317.0005001	31 AUG 17
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345				
E	DSC-28-10-60		**Fuel Recirculation System - Description**	00020317.0006001	28 NOV 17
	Criteria: CFMI, IAE, IAL, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
N	DSC-28-10-70		**Refueling - Defueling**	00021235.0010001	04 SEP 18
	Criteria: J4530, SA, A321				
	Applicable to: MSN 11531				
	DSC-28-10-70		**Refueling - Defueling**	00021235.0007001	21 MAR 17
	Criteria: J0022, J3527, SA				
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-28-10-70		**Refueling - Defueling**	00021235.0005001	21 MAR 17
	Criteria: J3527, SA				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-10-70		**Refueling - Defueling**	00021235.0004001	21 MAR 17
	Criteria: SA, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-28-10-70		**Refueling - Defueling**	00021235.0002001	21 MAR 17
	Criteria: J0022, SA				
	Applicable to: MSN 03032, 06139, 06173				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-28-10-70		**Refueling - Defueling**	00021235.0001001	21 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883**				
	DSC-28-10-80		**Fuel Quantity Indication (FQI) System**	00001123.0008001	14 JAN 16
	Criteria: 28-1233, J3702, J4209, K2113, SA **Applicable to: MSN 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-28-10-80		**Fuel Quantity Indication (FQI) System**	00001123.0007001	14 JAN 16
	Criteria: 28-1233, J3703, J4209, SA **Applicable to: MSN 06689-06712, 06800-06876**				
E	DSC-28-10-80		**FUEL QUANTITY INDICATION (FQI) SYSTEM**	00001123.0001001	10 DEC 09
E	Criteria: J3896, J4376, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 08495-09324, 10949-11522, 11572-11597**				
N	DSC-28-10-80		**FUEL QUANTITY INDICATION (FQI) SYSTEM**	00001123.0004001	05 JUN 18
	Criteria: J3702, J4209, J4376, J4530, K2113, SA **Applicable to: MSN 11531**				
	DSC-28-10-80		**FUEL QUANTITY INDICATION (FQI) SYSTEM**	00001123.0003001	10 DEC 09
	Criteria: K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592**				
E	DSC-28-10-80		**FUEL LEVEL SENSING CONTROL UNIT (FLSCU)**	00001124.0001001	16 MAR 15
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-10-80		**Fuel Level Sensing Control Unit (FLSCU)**	00001124.0002001	16 MAR 15
E	Criteria: K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
N	DSC-28-10-80		**AUXILIARY FUEL MANAGEMENT SYSTEM (AFMS)**	00009213.0001001	05 JUN 18
	Criteria: J4530 **Applicable to: MSN 11531**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	DSC-28-10-80		**AUXILIARY LEVEL SENSE CONTROL UNIT (ALSCU)**	00009214.0001001	10 DEC 09
	Criteria: J4530 **Applicable to: MSN 11531**				
E	DSC-28-10-80		**Fuel System Architecture**	00001125.0001001	22 MAY 12
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	DSC-28-10-80		**Fuel System Architecture**	00001125.0002001	22 MAY 12
	Criteria: J4530, SA **Applicable to: MSN 11531**				
E	DSC-28-10-90		**Fuel Tank Inerting System**	00013692.0001001	18 MAR 11
E	Criteria: 47-1026, 47-1035, 47-1041, J2879 **Applicable to: MSN 01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03032, 03058, 03180-03710, 03761-05987, 06097, 06121, 06139-09324, 10949-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-28-20		**Overhead Panel**	NG01715	
E	DSC-28-20		**Overhead Panel**	00020183.0002001	17 MAR 17
E	Criteria: J3527, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**				
	DSC-28-20		**Overhead Panel**	00020183.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
E	DSC-28-20		**L(R) TK PUMPS 1(2) pb-sw**	00020239.0002001	17 MAR 17
E	Criteria: J3527, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**				
	DSC-28-20		**L(R) TK PUMPS 1(2) pb-sw**	00020239.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
E	DSC-28-20		**MODE SEL pb-sw**	00020240.0003001	17 MAR 17
E	Criteria: J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-20		**MODE SEL pb-sw**	00020240.0002001	17 MAR 17
E	Criteria: SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-28-20		**MODE SEL pb-sw**	00020240.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
E	DSC-28-20		**CTR TK PUMP 1(2) pb-sw**	00020256.0002001	17 MAR 17
	Criteria: J3527, SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**				
	DSC-28-20		**CTR TK PUMP 1(2) pb-sw**	00020256.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
	DSC-28-20		**X FEED pb-sw**	00020257.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
E	DSC-28-20		**ACT pb-sw**	00020258.0001001	17 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				

N	DSC-28-20		**ACT Control Panel**	NG01716	
N	DSC-28-20		**ACT Control Panel**	00020184.0008001	04 JUN 19
	Criteria: J4337, J4530				
	Applicable to: MSN 11531				
N	DSC-28-20		**ACT XFR MODE SEL pb-sw**	00020261.0002001	05 JUN 18
	Criteria: J4530				
	Applicable to: MSN 11531				
N	DSC-28-20		**ACT XFR rotary Selector**	00020262.0002001	03 NOV 22
	Criteria: J4337				
	Applicable to: MSN 11531				
N	DSC-28-20		**ALL ACT pb-sw**	00020263.0001001	17 MAR 17
	Criteria: J4530				
	Applicable to: MSN 11531				

N	DSC-28-20		**Refueling Control Panel**	NG01717	
N	DSC-28-20		**Refueling Control Panel**	00020185.0008001	30 MAR 18
	Criteria: J4337, J4530, SA				
	Applicable to: MSN 11531				
E	DSC-28-20		**Refueling Control Panel**	00020185.0001001	17 MAR 17
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-28-20		**FUEL QUANTITY Indicator**	00020265.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
N	DSC-28-20		**ACT QUANTITY Indicator**	00020279.0001001	21 MAR 17
	Criteria: J4530				
	Applicable to: MSN 11531				
N	DSC-28-20		**TOTAL ACT Indicator**	00020281.0001001	21 MAR 17
	Criteria: J4530				
	Applicable to: MSN 11531				
	DSC-28-20		**HI LVL Light**	00020266.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**REFUEL VALVES Selector**	00020267.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**MODE SELECT sw**	00020268.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**OPEN Light**	00020270.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**TEST sw**	00020271.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**PRESELECTED Display**	00020272.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**Preselector sw**	00020273.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**ACTUAL Display**	00020274.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**END Light**	00020275.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**CKPT Light**	00020276.0002001	21 MAR 17
	Criteria: J0022, SA				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-28-20		**CKPT Light**	00020276.0001001	21 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-28-20		**BATT POWER Toggle Switch**	00020277.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
N	DSC-28-20		**ACT Selector**	00020283.0001001	21 MAR 17
	Criteria: J4530				
	Applicable to: MSN 11531				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-28-20		**Maintenance Panel**	NG01718	
	DSC-28-20		**Maintenance Panel**	00020187.0007001	17 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-20		**PRESELECTED Display**	00020286.0001001	21 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-20		**ACTUAL Display**	00020287.0001001	21 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-20		**Preselector sw**	00020288.0001001	17 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-20		**END Light**	00020289.0001001	21 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-20		**PWR pb-sw**	00020290.0001001	17 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-20		**CTL pb-sw**	00020291.0001001	17 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-28-20		**CKPT Light**	00020294.0001001	21 MAR 17
	Criteria: J0022				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-28-20		**ECAM Fuel Page**	NG01726	
N	DSC-28-20		**ECAM Fuel Page**	00020188.0009001	04 MAY 18
	Criteria: J4530, P6578, SA, A321				
	Applicable to: MSN 11531				
E	DSC-28-20		**ECAM Fuel Page**	00020188.0008001	17 MAR 17
	Criteria: J3527, P6578, P7092, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-20		**ECAM Fuel Page**	00020188.0007001	17 MAR 17
	Criteria: P6578, P7092, SA, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-28-20		**ECAM Fuel Page**	00020188.0004001	17 MAR 17
	Criteria: P6578, P7092, SA				
	Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
	DSC-28-20		**ECAM Fuel Page**	00020188.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-28-20		**Wing Pump Indications**	00020213.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-28-20		**CTR Tanks Pumps Indications**	00020214.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
E	DSC-28-20		**CTR Tanks Valves Indications**	00020214.0001001	17 MAR 17
	Criteria: J3527, SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**				
	DSC-28-20		**LP Valve (ENG-APU) Indications**	00020216.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-28-20		**LP Valve (ENG) Indications**	00020216.0001001	17 MAR 17
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-28-20		**X Feed Indications**	00020217.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
E	DSC-28-20		**Transfer Valve Indications**	00020218.0005001	17 MAR 17
	Criteria: J3527, P6578, SA				
E	**Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-20		**Transfer Valve Indications**	00020218.0004001	17 MAR 17
	Criteria: P6578, SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-28-20		**Transfer Valve Indications**	00020218.0002001	17 MAR 17
	Criteria: P6578, SA				
	Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
	DSC-28-20		**Transfer Valve Indications**	00020218.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-28-20		**APU Indications**	00020219.0001001	17 MAR 17
	Criteria: P6578				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-28-20		**Fuel Temperature Indication**	00020220.0002001	17 MAR 17
	Criteria: SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-20		**Fuel Temperature Indication**	00020220.0001001	17 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-20		**Fuel Quantity Indication**	00020221.0004001	17 MAR 17
	Criteria: P6578, SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-20		**Fuel Quantity Indication**	00020221.0002001	17 MAR 17
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-20		**Fuel Quantity Indication**	00020221.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-28-20		**Boxed Indications**	00020340.0003001	17 MAR 17
	Criteria: J3527, SA				
E	**Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-20		**Boxed Indications**	00020340.0002001	17 MAR 17
	Criteria: SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-28-20		**Boxed Indications**	00020340.0001001	17 MAR 17
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
E	DSC-28-20		**Overflow Indication**	00020341.0001001	17 MAR 17
E	Criteria: 31-1433, P12697, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-20		**Overflow Indication**	00020341.0002001	17 MAR 17
E	Criteria: 31-1433, J3559, P12697 **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-20		**Advisory**	00020345.0002001	17 MAR 17
E	Criteria: SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-20		**Advisory**	00020345.0001001	17 MAR 17
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-20		**Fuel On Board (FOB) Indication**	00020346.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-28-20		**Fuel On Board (FOB) Indication**	00020346.0006001	17 MAR 17
E	Criteria: P6578, SA, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-28-20		**Fuel On Board (FOB) Indication**	00020346.0003001	17 MAR 17
E	Criteria: P6578, SA **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-20		**Fuel Used Indication**	00020347.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
N	DSC-28-20		**ACT ◁ to Center Tank Fuel Transfer Indication**	00020348.0003001	26 SEP 18
	Criteria: J4530, P6578, SA **Applicable to: MSN 11531**				
E	DSC-28-20		**ACT ◁ to Center Tank Fuel Transfer Indication**	00020348.0002001	17 MAR 17
	Criteria: P6578, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-28-20		**ACT ◁ to Center Tank Fuel Transfer Indication**	00020348.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-28-20		**Fuel Flow Indication**	00020351.0001001	17 MAR 17
	Criteria: P7092				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				

E	DSC-28-20		**ECAM Upper Display**	NG01724	
E	DSC-28-20		**ECAM Upper Display**	00020189.0002001	17 MAR 17
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-28-20		**ECAM Upper Display**	00020189.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-28-20		**Total Fuel Indication**	00020193.0003001	17 MAR 17
	Criteria: J3527, SA				
E	**Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-28-20		**Total Fuel Indication**	00020193.0002001	17 MAR 17
	Criteria: SA, A321				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	DSC-28-20		**Total Fuel Indication**	00020193.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
	DSC-28-20		**Memo Display**	00020194.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

E	DSC-28-20		**Memo Display**	NG01400	
	DSC-28-20		**CTR TK FEEDG**	00016777.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
N	DSC-28-20		**FOB BELOW 3T (6600 LBS)**	00016780.0002001	30 MAR 18
	Criteria: P20466, A321				
	Applicable to: MSN 11531				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-28-20		**FOB BELOW 3T (6600 LBS)**	00016780.0001001	21 MAR 16
	Criteria: A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-28-20		**FUEL X FEED**	00016778.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-28-20		**OUTR TK FUEL XFRD**	00016776.0001001	21 MAR 16
E	Criteria: A319, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-28-20		**REFUELG**	00016779.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-29-10-10		**General**	00001133.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Green System Pump**	00001134.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Blue System Pumps**	00001135.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Yellow System Pumps**	00001136.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Power Transfer Unit (PTU)**	00001137.0001001	04 DEC 18
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Ram Air Turbine (RAT)**	00001138.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**System Accumulators**	00001139.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Priority Valves**	00001141.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Fire Shutoff Valves**	00001142.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Leak Measurement Valves**	00001143.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Filters**	00001144.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Generation**	00001145.0001001	08 FEB 13
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Reservoir Pressurization**	00001146.0001001	08 FEB 13
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-10-20		**Indications**	00001147.0002001	09 OCT 12
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-29-10-30		**Distribution**	00001148.0002001	08 FEB 13
	Criteria: J1617, K3154, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-29-10-30		**Distribution**	00001148.0003001	08 FEB 13
	Criteria: J1617, K2113, K3154, P4576, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-29-20		**Overhead Panel**	00001149.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-20		**Maintenance Panel**	00001150.0001001	21 MAR 16
	Criteria: P1752, SA				
	Applicable to: ALL				
	DSC-29-20		**ECAM HYD Page**	00001151.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-29-20		**ECAM HYD Page**	00001151.0002001	23 JUN 15
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-29-20		**Memo Display**	NG01402	
	DSC-29-20		**HYD PTU**	00016787.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-29-20		**RAT OUT**	00016786.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-30-10-10		**General**	00001154.0001001	16 MAR 11
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-10-10		**Anti-Ice**	00001155.0001001	29 MAR 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-10-10		**Rain Removal**	00017416.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-20-10		**Description**	00017417.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-20-20		**Overhead Panel**	00017418.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-30-20-20		**Overhead Panel**	00017418.0002001	21 MAR 16
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-30-20-20		**ECAM BLEED Page**	00001159.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-30-20-20		**Engine Warning Display**	00017421.0001001	06 SEP 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-30-20-20		**Memo Display**	NG01410	
E	DSC-30-20-20		**ICE NOT DET**	00016938.0001001	21 MAR 16
	Criteria: P2650, P5981, SA				
E	**Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-30-20-20		**WING A.ICE**	00016939.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-30-30-10		**Description**	00017422.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-30-30-10		**Description**	00017422.0002001	04 JUL 17
	Criteria: P13491, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-30-30-20		**Overhead Panel**	00017425.0001001	21 MAR 16
	Criteria: P1312, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-30-30-20		**Overhead Panel**	00017425.0003001	21 MAR 16
	Criteria: P1312, P7919, P8069, SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-30-30-20		**Overhead Panel**	00017425.0004001	14 JAN 20
	Criteria: P1312, P13491, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-30-30-20		**Engine Warning Display**	00017457.0001001	06 SEP 16
	Criteria: P13491				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

E	DSC-30-30-20		**Memo Display**	NG01411	
	DSC-30-30-20		**ENG A.ICE**	00016945.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-30-30-20		**ICE NOT DET**	00016949.0001001	21 MAR 16
	Criteria: P2650, P5981, SA				
E	**Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				

	DSC-30-40-10		**Description**	00017458.0001001	15 NOV 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-40-20		**Overhead Panel**	00001165.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-50-10		**Description**	00017459.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-50-20		**Overhead Panel**	00017460.0001001	15 NOV 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-60-10		**Wipers**	00017461.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-60-10		**Rain Repellent** ◁	00017462.0001001	01 JUN 17
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-30-60-20		**Overhead Panel**	00017466.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-60-20		**Rain Repellent ◁ System Indicators**	00017587.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-30-70-10		**Visual Ice Indicator**	00017471.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-30-70-10		**Ice Detection System**	00017472.0001001	21 MAR 16
	Criteria: P2650				
E	**Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-31-05-10		**Introduction**	00001182.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
E	DSC-31-05-10		**Introduction**	00001182.0002001	09 OCT 14
E	Criteria: SA, 320-200N, 321-200NX **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-31-05-20		**Cockpit Arrangement**	00001183.0001001	09 OCT 12
	Criteria: SA **Applicable to: ALL**				
	DSC-31-05-30		**Display Unit (DU)**	00001184.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-31-05-30		**Display Unit (DU)**	00001184.0002001	21 MAR 16
E	Criteria: P6578, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-05-30		**Display Management Computer (DMC)**	00001185.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-31-05-30		**Display Management Computer (DMC)**	00001185.0002001	20 DEC 10
E	Criteria: P6578, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-05-30		**System Data Acquisition Concentrator (SDAC)**	00001186.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-31-05-30		**Flight Warning Computer (FWC)**	00001187.0001001	13 JAN 14
	Criteria: SA **Applicable to: ALL**				
	DSC-31-05-30		**Attention - Getters**	00001188.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-31-05-30		**Loudspeaker**	00001189.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-31-05-30		**EIS Block Diagram**	00001190.0001001	06 JUL 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-31-05-30		**EIS Block Diagram**	00001190.0002001	06 JUL 17
E	Criteria: P6578, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-05-40		**ECAM Control Panel (ECP)**	00001191.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-31-05-40		**EIS DMC Switching Selector**	00001192.0001001	22 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-05-40		**ECAM/ND Switching**	00001193.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-05-40		**EFIS Switching**	00001194.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-05-50		**Reconfiguring the Display Management Computer (DMC)**	00001195.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-31-05-50		**Reconfiguring the Display Management Computer (DMC)**	00001195.0002001	21 MAR 16
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-05-60		**Failure of Upper ECAM DU (or CTL/Brightness Knob Turned to Off)**	00001196.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-05-60		**Failure of Lower ECAM DU (or CTL/Brightness Knob Turned to Off)**	00001197.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-05-60		**Failure of both ECAM DUs**	00001198.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-05-60		**PFDU/NDU Reconfiguration**	00001199.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-05-60		**DU Reconfiguration**	00001200.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-31-05-60		**General**	00012844.0001001	20 DEC 10
	Criteria: P6578				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-31-05-60		**Failure of a DU**	00012846.0001001	20 DEC 10
	Criteria: P6578				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-31-05-60		**Feedback Messages**	00012847.0001001	20 DEC 10
	Criteria: P6578				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-05-60		**Side1/Side2 Discrepancy Messages**	00012848.0003001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
E	DSC-31-05-60		**DU Reset**	00012849.0001001	20 DEC 10
	Criteria: P6578				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-31-10		**ECAM DU Arrangement**	00017519.0002001	21 MAR 16
	Criteria: SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-31-10		**ECAM DU Arrangement**	00017519.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
	DSC-31-10		**Color Code**	00001202.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-10		**Warning/Caution Classification**	00001203.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-10		**Priority Rules**	00001204.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-10		**Types of Failures**	00001205.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

E	DSC-31-10		**Audio Indicators**	NG01319	
	DSC-31-10		**Audio Indicators - CONTINUOUS REPETITIVE CHIME**	00015446.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	DSC-31-10		**Audio Indicators - SINGLE CHIME**	00015447.0001001	22 JUL 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	DSC-31-10		**Audio Indicators - CAVALRY CHARGE**	00015448.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
E	DSC-31-10		**Audio Indicators - TRIPLE CLICK**	00015449.0006001	22 JUL 16
	Criteria: 22-1123, 31-1335, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10527, P11819, P5168, P6054, P6183, P7790, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	DSC-31-10		**Audio Indicators - CRICKET and STALL Message**	00015450.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	DSC-31-10		**Audio Indicators - BUZZER**	00015451.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	DSC-31-10		**Audio Indicators - CONTINUOUS BUZZER**	00015452.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
E	DSC-31-10		**Audio Indicators - WINDSHEAR**	00015453.0002001	06 APR 17
	Criteria: P20442, P4308, P4642, P4647, P4766, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-31-10		**Audio Indicators - C CHORD**	00015454.0001001	04 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	DSC-31-10		**Audio Indicators - AUTO CALL OUT**	00015455.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	DSC-31-10		**Audio Indicators - GROUND PROXIMITY WARNING**	00015456.0001001	21 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	DSC-31-10		**Audio Indicators - PRIORITY LEFT and PRIORITY RIGHT**	00015457.0001001	04 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	DSC-31-10		**Audio Indicators - RETARD**	00015458.0001001	04 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
R	DSC-31-10		**Audio Indicators - RETARD RETARD**	00015459.0001001	02 MAY 23
E	Criteria: 31-1334, 31-1414, P10383 **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	DSC-31-10		**Audio Indicators - TCAS**	00015460.0001001	04 FEB 14
	Criteria: P2590, P2859, P3112				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	DSC-31-10		**Audio Indicators - SPEED, SPEED, SPEED**	00015461.0001001	04 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	DSC-31-10		**Audio Indicators - DUAL INPUT**	00015463.0001001	04 FEB 14
	Criteria: 31-1115, 31-1264, P4977 **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
E	DSC-31-10		**Audio Indicators - STOP RUDDER INPUT**	00015466.0001001	04 FEB 14
	Criteria: 22-1480, P13357				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-31-10		**Audio Indicators**	NG01319	
	DSC-31-10		**Audio Indicators - CONTINUOUS REPETITIVE CHIME**	00015446.0001001	22 JUL 16
	Criteria: SA **Applicable to: MSN 01251**				
	DSC-31-10		**Audio Indicators - SINGLE CHIME**	00015447.0001001	22 JUL 16
	Criteria: SA **Applicable to: MSN 01251**				
	DSC-31-10		**Audio Indicators - CAVALRY CHARGE**	00015448.0001001	04 FEB 14
	Criteria: SA **Applicable to: MSN 01251**				
	DSC-31-10		**Audio Indicators - TRIPLE CLICK**	00015449.0011001	22 JUL 16
	Criteria: 22-1123, P5168, SA **Applicable to: MSN 01251**				
	DSC-31-10		**Audio Indicators - CRICKET and STALL Message**	00015450.0001001	04 FEB 14
	Criteria: SA **Applicable to: MSN 01251**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-31-10		**Audio Indicators - BUZZER**	00015451.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - CONTINUOUS BUZZER**	00015452.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01251				
E	DSC-31-10		**Audio Indicators - WINDSHEAR**	00015453.0002001	06 APR 17
	Criteria: P20442, P4308, P4642, P4647, P4766, SA				
E	**Applicable to: MSN 01251**				
	DSC-31-10		**Audio Indicators - C CHORD**	00015454.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - AUTO CALL OUT**	00015455.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - GROUND PROXIMITY WARNING**	00015456.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - PRIORITY LEFT and PRIORITY RIGHT**	00015457.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - RETARD**	00015458.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - TCAS**	00015460.0001001	04 FEB 14
	Criteria: P2590, P2859, P3112				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - SPEED, SPEED, SPEED**	00015461.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-31-10		**Audio Indicators - DUAL INPUT**	00015463.0001001	04 FEB 14
	Criteria: 31-1115, 31-1264, P4977				
	Applicable to: MSN 01251				
E	DSC-31-10		**Audio Indicators**	NG01319	
	DSC-31-10		**Audio Indicators - CONTINUOUS REPETITIVE CHIME**	00015446.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 01459				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-31-10		**Audio Indicators - SINGLE CHIME**	00015447.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - CAVALRY CHARGE**	00015448.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01459				
E	DSC-31-10		**Audio Indicators - TRIPLE CLICK**	00015449.0006001	22 JUL 16
	Criteria: 22-1123, 31-1335, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10527, P11819, P5168, P6054, P6183, P7790, SA				
E	**Applicable to: MSN 01459**				
	DSC-31-10		**Audio Indicators - CRICKET and STALL Message**	00015450.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - BUZZER**	00015451.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - CONTINUOUS BUZZER**	00015452.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - WINDSHEAR**	00015453.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - C CHORD**	00015454.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - AUTO CALL OUT**	00015455.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - GROUND PROXIMITY WARNING**	00015456.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - PRIORITY LEFT and PRIORITY RIGHT**	00015457.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - RETARD**	00015458.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01459				
R	DSC-31-10		**Audio Indicators - RETARD RETARD**	00015459.0001001	02 MAY 23
	Criteria: 31-1334, 31-1414, P10383				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01459**				
	DSC-31-10		**Audio Indicators - TCAS**	00015460.0001001	04 FEB 14
	Criteria: P2590, P2859, P3112				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - SPEED, SPEED, SPEED**	00015461.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01459				
	DSC-31-10		**Audio Indicators - DUAL INPUT**	00015463.0001001	04 FEB 14
	Criteria: 31-1115, 31-1264, P4977				
	Applicable to: MSN 01459				
E	DSC-31-10		**Audio Indicators - STOP RUDDER INPUT**	00015466.0001001	04 FEB 14
	Criteria: 22-1480, P13357				
E	**Applicable to: MSN 01459**				
	DSC-31-10		**Audio Indicators**	NG01319	
	DSC-31-10		**Audio Indicators - CONTINUOUS REPETITIVE CHIME**	00015446.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - SINGLE CHIME**	00015447.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - CAVALRY CHARGE**	00015448.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - CRICKET and STALL Message**	00015450.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - BUZZER**	00015451.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - CONTINUOUS BUZZER**	00015452.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-31-10		**Audio Indicators - C CHORD**	00015454.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - AUTO CALL OUT**	00015455.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - GROUND PROXIMITY WARNING**	00015456.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - PRIORITY LEFT and PRIORITY RIGHT**	00015457.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - RETARD**	00015458.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - TCAS**	00015460.0001001	04 FEB 14
	Criteria: P2590, P2859, P3112				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - SPEED, SPEED, SPEED**	00015461.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	DSC-31-10		**Audio Indicators - DUAL INPUT**	00015463.0001001	04 FEB 14
	Criteria: 31-1115, 31-1264, P4977				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	DSC-31-10		**Audio Indicators**	NG01319	
	DSC-31-10		**Audio Indicators - CONTINUOUS REPETITIVE CHIME**	00015446.0001001	22 JUL 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - SINGLE CHIME**	00015447.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - CAVALRY CHARGE**	00015448.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	DSC-31-10		**Audio Indicators - TRIPLE CLICK**	00015449.0006001	22 JUL 16
	Criteria: 22-1123, 31-1335, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10527, P11819, P5168, P6054, P6183, P7790, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	DSC-31-10		**Audio Indicators - CRICKET and STALL Message**	00015450.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - BUZZER**	00015451.0001001	23 JUN 15
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - CONTINUOUS BUZZER**	00015452.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	DSC-31-10		**Audio Indicators - WINDSHEAR**	00015453.0002001	06 APR 17
	Criteria: P20442, P4308, P4642, P4647, P4766, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	DSC-31-10		**Audio Indicators - C CHORD**	00015454.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - AUTO CALL OUT**	00015455.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - GROUND PROXIMITY WARNING**	00015456.0001001	21 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - PRIORITY LEFT and PRIORITY RIGHT**	00015457.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - RETARD**	00015458.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
R	DSC-31-10		**Audio Indicators - RETARD RETARD**	00015459.0001001	02 MAY 23
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	DSC-31-10		**Audio Indicators - TCAS**	00015460.0001001	04 FEB 14
	Criteria: P2590, P2859, P3112				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - SPEED, SPEED, SPEED**	00015461.0001001	04 FEB 14
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	DSC-31-10		**Audio Indicators - DUAL INPUT**	00015463.0001001	04 FEB 14
	Criteria: 31-1115, 31-1264, P4977				
	Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	DSC-31-10		**Audio Indicators - PITCH, PITCH**	00015465.0001001	04 FEB 14
	Criteria: 22-1259, P9895				
E	**Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
E	DSC-31-10		**Audio Indicators - STOP RUDDER INPUT**	00015466.0001001	04 FEB 14
	Criteria: 22-1480, P13357				
E	**Applicable to: MSN 03222, 03229, 03294, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

E	DSC-31-10		**Audio Indicators**	NG01319	
	DSC-31-10		**Audio Indicators - CONTINUOUS REPETITIVE CHIME**	00015446.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - SINGLE CHIME**	00015447.0001001	22 JUL 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - CAVALRY CHARGE**	00015448.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-31-10		**Audio Indicators - TRIPLE CLICK**	00015449.0006001	22 JUL 16
	Criteria: 22-1123, 31-1335, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10527, P11819, P5168, P6054, P6183, P7790, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	DSC-31-10		**Audio Indicators - CRICKET and STALL Message**	00015450.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - BUZZER**	00015451.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - CONTINUOUS BUZZER**	00015452.0001001	23 JUN 15
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	DSC-31-10		**Audio Indicators - WINDSHEAR**	00015453.0002001	06 APR 17
	Criteria: P20442, P4308, P4642, P4647, P4766, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	DSC-31-10		**Audio Indicators - C CHORD**	00015454.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - AUTO CALL OUT**	00015455.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - GROUND PROXIMITY WARNING**	00015456.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - PRIORITY LEFT and PRIORITY RIGHT**	00015457.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - RETARD**	00015458.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
R	DSC-31-10		**Audio Indicators - RETARD RETARD**	00015459.0001001	02 MAY 23
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	DSC-31-10		**Audio Indicators - TCAS**	00015460.0001001	04 FEB 14
	Criteria: P2590, P2859, P3112				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-31-10		**Audio Indicators - SPEED, SPEED, SPEED**	00015461.0001001	04 FEB 14
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	DSC-31-10		**Audio Indicators - DUAL INPUT**	00015463.0001001	04 FEB 14
	Criteria: 31-1115, 31-1264, P4977				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	DSC-31-10		**Audio Indicators - PITCH, PITCH**	00015465.0001001	04 FEB 14
	Criteria: 22-1259, P9895				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	DSC-31-10		**Audio Indicators - STOP RUDDER INPUT**	00015466.0001001	04 FEB 14
	Criteria: 22-1480, P13357				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	DSC-31-10		**Audio Indicators - BANK BANK**	00024814.0002001	18 NOV 21
	Criteria: P20738, P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-31-15		**General**	00001207.0002001	21 MAR 17
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-31-15		**General**	00001207.0004001	21 MAR 17
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-31-15		**General**	00001207.0003001	21 MAR 17
	Criteria: CFMI, P6578				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-31-15		**General**	00001207.0007001	21 MAR 17
	Criteria: PW1100G-JM, P6578				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-31-15		**Independent Failure**	00001208.0001001	03 FEB 11
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-15		**Primary and Secondary Failure**	00001209.0001001	03 FEB 11
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-15		**Flight Phases**	00001210.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-31-15		**Memos**	NG00087	
	DSC-31-15		**Memos - Display**	00001211.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-31-15		**Memos - TO and LDG Memos**	00001212.0010001	09 FEB 18
	Criteria: 31-1558, P20466, P5706, SA				
E	**Applicable to: MSN 08635, 10949-11597**				
	DSC-31-15		**Memos - TO and LDG Memos**	00001212.0002001	22 APR 16
	Criteria: 31-1257, P5706, P6437, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324**				
E	DSC-31-15		**Configuration Warnings**	00001214.0019001	05 MAR 19
	Criteria: 31-1575, IAL, P10383, P11819, P12697, P14628, P14629, P20467, P20610, P9107, SA				
E	**Applicable to: MSN 08635, 10949-11597**				
	DSC-31-15		**Configuration Warnings**	00001214.0058001	05 MAR 19
	Criteria: 22-1462, 31-1373, 31-1414, 31-1433, 31-1482, 31-1492, CFMI, P10383, P9107, SA **Applicable to: MSN 04827-04860**				
	DSC-31-15		**Configuration Warnings**	00001214.0024001	05 MAR 19
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1433, 31-1482, 31-1492, IAE, IAL, P10383, P11819, P12697, P14628, P14629, P9107, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-08596, 09190-09324**				
	DSC-31-15		**Configuration Warnings**	00001214.0025001	05 MAR 19
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1433, 31-1482, 31-1492, CFMI, P10383, P11819, P12697, P9107, SA **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05883, 06139, 06173-07098**				
	DSC-31-15		**Configuration Warnings**	00001214.0004001	03 FEB 11
	Criteria: 31-1267, 31-1300, IAE, SA **Applicable to: MSN 01251**				
	DSC-31-20		**General**	00001215.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-31-20		**System Pages**	00001216.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-31-20		**System Pages**	00001216.0002001	10 MAY 21
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-31-20		**Status Page**	00001217.0001001	12 APR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-20		**Permanent Data**	00017520.0002001	25 JUL 16
	Criteria: 22-1090, 22-1676, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-31-20		**Permanent Data**	00017520.0011001	17 MAY 21
	Criteria: P6578, P7519, P7520, SA				
E	**Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-20		**Permanent Data**	00017520.0025001	25 JUL 16
	Criteria: P6071, P6578, P7373, P7519, SA				
	Applicable to: MSN 04827-04860				
	DSC-31-20		**Amber Crosses "XX" on the SD**	00013602.0001001	18 MAR 11
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-20		**Amber dashes on the SD**	00015526.0001001	01 APR 14
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-25-10		**General**	00001219.0001001	22 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-25-20		**1 - The Ecam Detects No Failure**	00001220.0002001	09 OCT 12
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-31-25-20		**1 - The Ecam Detects No Failure**	00001220.0003001	09 OCT 12
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-31-25-20		**1 - The Ecam Detects No Failure**	00001220.0004001	09 OCT 12
	Criteria: CFMI, IAL, P6578				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-31-25-20		**2 - The Ecam Detects A Failure**	00001221.0002001	09 OCT 12
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-31-25-20		**2 - The Ecam Detects A Failure**	00001221.0003001	09 OCT 12
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-31-25-20		**2 - The ECAM Detects a Failure**	00001221.0004001	09 OCT 12
	Criteria: CFMI, IAL, P6578				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-31-25-20		**3 - The Flight Crew Follows the Instruction Displayed on the E/WD**	00001222.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
R	DSC-31-25-20		**3 - The Flight Crew Follows the Instruction Displayed on the E/WD**	00001222.0002001	02 MAY 23
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-25-20		**4 - One of the Pilots Pushes the CLR Pushbutton on The ECP**	00001223.0002001	09 OCT 12
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-31-25-20		**4 - One of the Pilots Pushes the CLR Pushbutton on The ECP**	00001223.0004001	09 OCT 12
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-31-25-20		**4 - One of the Pilots Pushes the CLR Pushbutton on the ECP**	00001223.0003001	09 OCT 12
	Criteria: CFMI, IAL, P6578				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-31-25-20		**5 - One of the Pilots Pushes the CLR Pushbutton a Second Time**	00001224.0002001	09 OCT 12
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-31-25-20		**5 - One of the Pilots Pushes the CLR Pushbutton a Second Time**	00001224.0004001	09 OCT 12
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-31-25-20		**5 - One of the Pilots Pushes the CLR Pushbutton a Second Time**	00001224.0003001	09 OCT 12
	Criteria: CFMI, IAL, P6578				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-31-25-20		**6 - One of the Pilots Pushes the CLR Pushbutton a Third Time**	00001225.0002001	09 OCT 12
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				

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M$^{(1)}$	Localization	T$^{(2)}$	DU Title	DU identification	DU date
	DSC-31-25-20		**6 - One of the Pilots Pushes the CLR Pushbutton a Third Time**	00001225.0004001	09 OCT 12
	Criteria: IAE, P6578 **Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
E	DSC-31-25-20		**6 - One of the Pilots Pushes the CLR Pushbutton a Third Time**	00001225.0003001	09 OCT 12
E	Criteria: CFMI, IAL, P6578 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-31-27		**General**	00001226.0001001	09 NOV 20
	Criteria: 31-1113, 31-1264, 31-1373, 31-1414, P11819, P4287 **Applicable to: ALL**				
	DSC-31-27		**Description**	00001227.0001001	09 NOV 20
	Criteria: P4287 **Applicable to: MSN 01251**				
E	DSC-31-27		**Description**	00001227.0003001	09 NOV 20
E	Criteria: 31-1113, 31-1264, 31-1334, 31-1373, 31-1414, P10383, P11819, P4287 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-31-30		**ECAM Control Panel**	00001229.0002001	03 NOV 21
E	Criteria: P6578, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-30		**ECAM Control Panel**	00001229.0001001	03 NOV 21
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
R	DSC-31-30		**Switching Panel**	00001230.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
R	DSC-31-30		**Switching Panel**	00001230.0002001	02 MAY 23
E	Criteria: P6578, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-30		**Attention Getters**	00001231.0001001	09 OCT 12
	Criteria: SA **Applicable to: ALL**				
E	DSC-31-30		**Memo Display**	00018053.0004001	18 NOV 21
E	Criteria: P15825, P21265, SA **Applicable to: MSN 10949-11597**				
R	DSC-31-30		**Memo Display**	00018053.0001001	02 MAY 23
	Criteria: P15825, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	DSC-31-40		**General**	00017531.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
	DSC-31-40		**General**	00017531.0003001	12 MAY 22
	Criteria: P6578, SA **Applicable to: MSN 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222**				
R	DSC-31-40		**General**	00017531.0005001	02 MAY 23
E	Criteria: 34-1375, 34-1480, P10870, P11256, P11569, P11570, P15572, P6578, SA **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-40		**Specific Ground Indications**	00001233.0001001	13 JAN 14
	Criteria: SA **Applicable to: ALL**				
	DSC-31-40		**Attitude Data**	00001234.0004001	09 OCT 12
	Criteria: 22-1102, 22-1203, 22-1226, 22-1676, 31-1576, IAE, P8256, P9126 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
E	DSC-31-40		**Attitude Data**	00001234.0003001	09 OCT 12
E	Criteria: 31-1576, 31-1577, CFMI, IAL, P20611, P8014, P8256, P8625, P8708, P9126 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-31-40		**Airspeed**	00001235.0002001	03 MAY 21
	Criteria: 22-1090, 22-1676, 31-1374, 31-1450, 32-1432, P5567, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-31-40		**Airspeed**	00001235.0004001	03 MAY 21
E	Criteria: 31-1374, 31-1450, 32-1432, J4030, P11955, P13630, P5567, P6578, P7519, P7520, SA **Applicable to: MSN 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**				
E	DSC-31-40		**Airspeed**	00001235.0009001	03 MAY 21
E	Criteria: 31-1374, 31-1450, 31-1576, 32-1432, J4030, P11955, P13630, P20375, P5567, P6578, P7519, P7520, SA **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-31-40		**Altitude**	00001237.0065001	10 MAY 22
E	Criteria: P10527, P10763, P20375, P20467, P5567, P6578, P8671, SA **Applicable to: MSN 10949-11597**				
E	DSC-31-40		**Altitude**	00001237.0064001	10 MAY 22
E	Criteria: 22-1270, 31-1433, 31-1576, P10527, P10762, P10763, P10785, P5567, P6071, P6578, P8671, SA **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098**				
E	DSC-31-40		**Altitude**	00001237.0049001	29 OCT 13
	Criteria: 22-1269, 22-1270, 31-1335, 31-1372, 31-1433, P10527, P10762, P10763, P5567, P6578, P8671, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**				
	DSC-31-40		**Altitude**	00001237.0001001	27 JUN 12
	Criteria: 22-1270, 22-1676, P5567, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-31-40		**Altitude (CONT'D)**	00006121.0001001	13 JAN 14
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-31-40		**Altitude (CONT'D)**	00006121.0002001	13 JAN 14
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-40		**Vertical Speed**	00001239.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-31-40		**Vertical Speed**	00001239.0002001	21 MAR 17
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-40		**Heading**	00001240.0001001	22 MAY 12
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-31-40		**Heading**	00001240.0002001	07 MAY 13
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-40		**Flight Path Vector**	00001241.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40		**Guidance**	00001242.0001001	13 JAN 14
	Criteria: SA				
	Applicable to: ALL				

E	DSC-31-40		**Trajectory Deviation**	NG00088	
	DSC-31-40		**Trajectory Deviation - ILS Approach**	00017532.0001001	12 MAY 22
	Criteria: P4539, P6578, SA				
	Applicable to: ALL				
E	DSC-31-40		**Trajectory Deviation - ILS Approach (CONT'D)**	00017533.0004001	12 MAY 22
	Criteria: P4539, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-40		**Trajectory Deviation - ILS Approach (CONT'D)**	00017533.0001001	21 MAR 16
	Criteria: P4539, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-31-40		**Trajectory Deviation - RNP-RNAV Non Precision Approach**	00001245.0040001	23 JUN 15
E	Criteria: 34-1375, 34-1480, P10870, P11256, P11569, P11570, P15572, P4539, P5168, P6578, P8500, P9464, SA **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-40		**Trajectory Deviation - Non Precision Approach**	00001245.0021001	09 OCT 12
	Criteria: P4539, P5168, P6054, P6183, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
	DSC-31-40		**Trajectory Deviation - Non Precision Approach**	00001245.0022001	09 OCT 12
	Criteria: P4539, P5168, P6578, SA **Applicable to: MSN 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222**				
N	DSC-31-40		**Trajectory Deviation - Non Precision Approach using FLS**	00022369.0001001	04 SEP 18
	Criteria: P20596 **Applicable to: MSN 11531**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-31-40		**Flight Mode Annunciator**	00001246.0002001	18 MAY 22
	Criteria: P3379, SA **Applicable to: ALL**				
	DSC-31-40		**Tailstrike Pitch Limit Indicator** ◁	00017534.0003001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-31-40		**Altitude Alert**	00001247.0002001	22 MAY 12
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
E	DSC-31-40		**Altitude Alert**	00001247.0003001	22 MAY 12
E	Criteria: 22-1472, 31-1267, 31-1300, P11363, P9107, SA **Applicable to: MSN 01459, 08495-09324, 10949-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-31-40		**Flags and Messages Displayed on PFD**	NG01735	
	DSC-31-40			00020521.0001001	04 NOV 21
	Criteria: SA **Applicable to: ALL**				
	DSC-31-40			00020531.0001001	04 NOV 21
	Criteria: SA **Applicable to: ALL**				
	DSC-31-40			00020533.0001001	04 NOV 21
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-31-40			00020522.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
E	DSC-31-40			00024338.0004001	04 NOV 21
	Criteria: 22-1736, 22-1737, 31-1576, 31-1577, P20611, P20738, SA				
E	**Applicable to: MSN 05947-05987, 06634, 06871, 07081-08495, 08596, 10949-11597**				
	DSC-31-40			00020523.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020547.0002001	04 NOV 21
	Criteria: P6758, SA				
	Applicable to: MSN 01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
	DSC-31-40			00020538.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020543.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020526.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020525.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020539.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40		**FLAGS AND MESSAGES DISPLAYED ON PFD**	00020544.0001001	12 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020550.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020549.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020535.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020541.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-31-40			00020537.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020524.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020527.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020529.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020528.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
E	DSC-31-40			00020548.0002001	04 NOV 21
	Criteria: 31-1482, 31-1602, P14628, SA				
E	**Applicable to: MSN 02321, 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-31-40			00024316.0004001	04 NOV 21
	Criteria: 22-1480, 31-1482, P13357, P14825, SA				
E	**Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-40			00020542.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020536.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020534.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020530.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020545.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-40			00020546.0001001	04 NOV 21
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	DSC-31-45		**General**	00001249.0002001	03 NOV 22
	Criteria: P4539, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-31-45		**General**	00001249.0003001	21 MAR 16
	Criteria: P4539, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-45		**ROSE Modes**	00001250.0001001	19 MAY 14
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-31-45		**ROSE Modes**	00001250.0002001	19 MAY 14
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-45		**ROSE Modes**	00001250.0004001	19 MAY 14
	Criteria: P6578, P9351, SA				
	Applicable to: MSN 02887				
E	DSC-31-45		**ROSE LS Mode**	00009584.0065001	24 NOV 15
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, 31-1286, P10762, P10763, P10785, P4539, P7004, P7519, P7520, P8500, P8671				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	DSC-31-45		**ROSE LS Mode**	00009584.0104001	12 MAY 22
	Criteria: P10763, P20596, P4539, P7520, P8671				
	Applicable to: MSN 11531				
	DSC-31-45		**Rose VOR Mode**	00001252.0029001	05 NOV 15
	Criteria: 22-1269, 22-1270, 22-1676, 31-1286, P10762, P10763, P10785, P5168, P6054, P6183, P7004, P8671, SA				
	Applicable to: ALL				
R	DSC-31-45		**ROSE NAV Mode/ARC Mode**	NG01913	
	DSC-31-45		**ROSE NAV Mode/ARC Mode**	00023604.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**RANGE Marks and Values**	00023605.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**Flight Plan**	00023606.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**Waypoint**	00023608.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**TO waypoint**	00023609.0001001	26 NOV 19
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-31-45		**Indication on ND/NAVAIDS**	00023629.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**NAVAIDS**	00023610.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**Airport**	00023611.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**ILS Course**	00023612.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**ILS/GLS Marker Beacons**	00023614.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
E	DSC-31-45		**Cross Track Error**	00023615.0002001	26 NOV 19
	Criteria: 31-1276, 31-1421, 31-1433, 31-1602, P10527, P9824, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222, 11531**				
R	DSC-31-45		**Cross Track Error**	00023615.0001001	03 NOV 22
	Criteria: 31-1276, 31-1335, 31-1372, 31-1433, 34-1480, P10527, P9464, P9824, SA				
E	**Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-31-45		**Track Line**	00023616.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**Procedure turns and holding patterns**	00023617.0001001	26 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**Minimum Off Route Altitude (MORA)**	00023618.0002001	26 NOV 19
	Criteria: P7613, SA				
	Applicable to: MSN 04827-04860				
N	DSC-31-45		**FLS Beam**	00023619.0002001	26 NOV 19
	Criteria: P20596				
	Applicable to: MSN 11531				

N	DSC-31-45		**Plan Mode**	00001254.0003001	29 NOV 19
	Criteria: P20596, P7520, SA				
	Applicable to: MSN 11531				
E	DSC-31-45		**Plan Mode**	00001254.0002001	29 NOV 19
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	DSC-31-45		**Weather Radar indications**	00015503.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-31-45		**PWS ◁ indications**	00015504.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-31-45		**EGPWS**	00009586.0056001	08 AUG 13
	Criteria: P10960, P11614, P12094, P12095, P13061, P13937, P14313, P14314, P4885, P5224, P5567, P6578, P7186, P7188, P8751, P9654, P9867, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	DSC-31-45		**EGPWS**	00009586.0055001	08 AUG 13
	Criteria: P10960, P11614, P12094, P12095, P13061, P13937, P14313, P14314, P4885, P5567, P6578, P7186, P7188, P8751, P9654, P9867, SA				
E	**Applicable to: MSN 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-31-45		**EGPWS**	00009586.0001001	22 MAY 12
	Criteria: P4885, P5567, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855**				
	DSC-31-45		**EGPWS**	00009586.0010001	22 MAY 12
	Criteria: P4885, P5224, P5567, SA **Applicable to: MSN 02014**				
	DSC-31-45		**EGPWS**	00009586.0011001	08 AUG 13
	Criteria: 31-1433, P4885, P5567, P6578, P7186, SA **Applicable to: MSN 02734**				
	DSC-31-45		**EGPWS**	00009586.0012001	08 AUG 13
	Criteria: 31-1433, P10960, P11614, P12094, P12095, P13937, P14313, P14314, P4885, P5567, P6578, P7186, P7188, P8751, P9654, P9867, SA **Applicable to: MSN 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414**				
	DSC-31-45		**EGPWS**	00009586.0008001	08 AUG 13
	Criteria: 34-1345, P4885, P5567, SA **Applicable to: MSN 02321**				
	DSC-31-45		**EGPWS**	00009586.0013001	08 AUG 13
	Criteria: P11614, P13937, P4885, P5224, P5567, P6578, P7186, P7188, P8751, SA **Applicable to: MSN 06139, 06173**				
	DSC-31-45		**GPWS**	00009586.0044001	08 AUG 13
	Criteria: 31-1433, P10960, P12094, P12095, P4885, P5567, P6578, P7186, P7188, P8751, P9654, P9867, SA **Applicable to: MSN 04827-04860**				

E	DSC-31-45		**Flags and Messages Displayed on ND**	NG01948	
E	DSC-31-45		**Flags and Messages Displayed on ND**	00023766.0002001	28 MAY 20
	Criteria: P6578, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
E	DSC-31-45		**Flags and Messages Displayed on ND**	00023766.0001001	28 MAY 20
	Criteria: P20596, P6578, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 11531**				
	DSC-31-45			00023991.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
E	DSC-31-45			00023992.0002001	28 MAY 20
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-45			00023981.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45			00023979.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45			00023984.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45			00023989.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45			00023985.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45			00023987.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
E	DSC-31-45			00023966.0002001	28 MAY 20
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-45			00023966.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-31-45			00023842.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45		**G/S or F-G/S**	00023983.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-45			00023990.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-31-45			00023988.0002001	04 NOV 20
	Criteria: P9351, SA				
	Applicable to: MSN 02887				
E	DSC-31-45			00023988.0001001	04 NOV 20
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-31-50		**EFIS Control Panel**	NG01955	
	DSC-31-50			00024124.0001001	03 JUN 20
	Criteria: P4539, SA				
	Applicable to: ALL				
E	DSC-31-50			00024125.0001001	10 MAY 21
	Criteria: PW1100G-JM, P8243, SA				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-31-50			00024125.0002001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-31-50			00024126.0001001	03 JUN 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-50			00024127.0002001	10 MAY 21
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-50			00024128.0001001	03 JUN 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-50		**EFIS CONTROL PANEL**	00024143.0001001	12 MAY 22
	Criteria: P4539, SA				
	Applicable to: ALL				
	DSC-31-50			00024141.0001001	03 JUN 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-50			00024131.0001001	03 JUN 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-50			00024132.0001001	03 JUN 20
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-31-50			00024133.0001001	03 JUN 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-50			00024134.0001001	03 JUN 20
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-31-50		**Other EFIS Controls**	00001258.0002001	15 FEB 11
	Criteria: P4885, SA				
	Applicable to: ALL				
	DSC-31-50		**Chronometer**	00001259.0001001	15 FEB 11
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-55-10		**General**	00001260.0001001	21 MAR 16
	Criteria: P5465, P6119, SA				
	Applicable to: MSN 01459				
E	DSC-31-55-10		**General**	00001260.0002001	21 MAR 16
	Criteria: P5465, SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-55-20		**General**	00001261.0002001	21 MAR 16
	Criteria: P3594, P5465, P6119, SA				
	Applicable to: MSN 01459				
E	DSC-31-55-20		**General**	00001261.0003001	04 JUN 19
	Criteria: P3594, P5465, SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-31-55-20		**Operation in Internal Mode**	00007126.0001001	21 MAR 17
	Criteria: P5465				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-55-20		**Updating Day, Month and Year**	00007135.0001001	21 MAR 16
	Criteria: P3594, P5465, P6119, SA				
	Applicable to: MSN 01459				
	DSC-31-55-20		**Updating of Hour and Minute**	00007136.0001001	21 MAR 16
	Criteria: P3594, P5465, P6119, SA				
	Applicable to: MSN 01459				
E	DSC-31-60-10		**Description**	00001262.0003001	05 NOV 20
	Criteria: K30988, K5446, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-31-60-10		**Description**	00001262.0001001	09 OCT 12
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628				
	DSC-31-60-10		**Description**	00001262.0002001	09 OCT 12
	Criteria: K5446, SA				
	Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
	DSC-31-60-20		**Overhead Panel**	00001263.0001001	04 SEP 18
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-60-20		**Pedestal**	00001264.0001001	22 MAY 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-31-60-30		**Description**	00005369.0001001	09 OCT 12
	Criteria: K0052				
	Applicable to: MSN 01143-01518, 01593-01628				
E	DSC-31-60-30		**Description**	00005369.0002001	09 OCT 12
	Criteria: K0052, K30988, K5446				
E	**Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-31-60-30		**Controls On Pedestal**	00005370.0001001	20 DEC 10
	Criteria: K0052				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-32-10-10		**General**	00018598.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-10		**Main Landing Gear (MLG)**	00018599.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-10		**Nose Landing Gear (NLG)**	00018600.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-10		**Landing Gear Extension and Retraction Equipment**	00018601.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-10		**Landing Gears and Doors Operation**	NG00089	
	DSC-32-10-10		**Landing Gears and Doors Operation - Normal Operation**	00018602.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-10		**Landing Gears and Doors Operation - Landing Gear Gravity Extension**	00018603.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-20		**Landing Gear Control Interface Unit (LGCIU)**	NG00090	
	DSC-32-10-20		**Landing Gear Control Interface Unit (LGCIU) - General**	00018604.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-20		**Landing Gear Control Interface Unit (LGCIU) - Landing Gear Information**	00018605.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-20		**Landing Gear Control Interface Unit (LGCIU) - Cargo Doors Information**	00018606.0001001	17 MAY 21
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-20		**Landing Gear Control Interface Unit (LGCIU) - Landing Flaps Information**	00018607.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-32-10-20		**Proximity Detector Output Signals**	00001278.0001001	22 MAY 12
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-20		**Proximity Detector Output Signals (Cont'd)**	00001279.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-30		**GENERAL**	00001285.0001001	10 DEC 09
	Criteria: SA **Applicable to: ALL**				
R	DSC-32-10-30		**Proximity Detectors on Shock Absorbers**	00018608.0001001	02 MAY 23
	Criteria: 49-1067, 49-1082, G0553, G1213, K10494, K2450, K4457, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-06685, 06712-06813, 06895-09324, 10949-11597**				
R	DSC-32-10-30		**Proximity Detectors on Shock Absorbers**	00018608.0003001	02 MAY 23
	Criteria: K10494, K2450, SA **Applicable to: MSN 02321, 06689, 06871-06876**				
	DSC-32-10-30		**Proximity Detectors on Uplocks**	00018610.0002001	21 MAR 16
	Criteria: K2113, K3154, P5768, SA **Applicable to: ALL**				
	DSC-32-10-30		**Proximity Detectors on Doors**	00018611.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-30		**Proximity Detectors on Downlocks**	00018613.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-30		**Proximity Detectors on Cargo Doors**	00018614.0001001	10 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-30		**Proximity Detectors on Flaps Attachments**	00001291.0001001	22 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-40		**Landing Gear Indicator Panel**	00018615.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-32-10-40		**Landing Gear Selector Lever**	00018616.0001001	20 MAY 16
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-32-10-40		**Landing Gear Gravity Extension**	00018617.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-32-10-40		**WHEEL SD Page**	00018618.0007001	21 MAR 16
	Criteria: 31-1335, 31-1372, 31-1433, P10527, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-10-40		**WHEEL SD Page**	00018618.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-32-10-40		**Memo Display**	00018778.0001001	05 MAY 22
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-32-20-10		**Description**	00018619.0007001	28 FEB 18
	Criteria: P4576, P4808, P8076, P8866, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-20-10		**Description**	00018619.0002001	21 MAR 16
	Criteria: 32-1305, 32-1335, P4808, P8076, SA				
	Applicable to: MSN 02321				
	DSC-32-20-10		**Description**	00018619.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014				
	DSC-32-20-10		**Architecture**	00001298.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-32-20-10		**Architecture**	00001298.0002001	21 MAR 16
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-20-20		**Side Consoles**	00018620.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-32-20-20		**WHEEL SD Page**	00018622.0004001	21 MAR 16
	Criteria: P4576, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-20-20		**WHEEL SD Page**	00018622.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-32-20-20		**Memo Display**	00016853.0001001	04 JUN 19
	Criteria: SA				
	Applicable to: ALL				
E	DSC-32-30-10		**General**	00018623.0002001	21 MAR 16
	Criteria: P4576, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-30-10		**General**	00018623.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-32-30-10		**Anti-Skid System**	00018624.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-32-30-10		**Auto Brake**	NG00092	
	DSC-32-30-10		**Auto Brake - General**	00018625.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-32-30-10		**Auto Brake - System Arming**	00018626.0003001	09 NOV 17
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, P4808, P8076, P8866, P9655, SA				
E	**Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-32-30-10		**Auto Brake - System Arming**	00018626.0002001	21 MAR 16
	Criteria: 31-1450, 32-1305, 32-1335, 32-1336, 32-1432, J4030, P13630, P4808, P8076, P8866, P9655, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**				
E	DSC-32-30-10		**Auto Brake - System Activation**	00018627.0003001	09 NOV 17
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, P4808, P8076, P8866, P9655, SA				
E	**Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597**				
E	DSC-32-30-10		**Auto Brake - System Activation**	00018627.0002001	17 OCT 17
	Criteria: 31-1450, 32-1305, 32-1335, 32-1336, 32-1432, J4030, P13630, P4808, P8076, P8866, P9655, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**				
	DSC-32-30-10		**Auto Brake - System Deactivation**	00018628.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-32-30-10		**Auto Brake - System Disarming**	00018629.0002001	09 NOV 17
	Criteria: 32-1305, 32-1335, 32-1336, P3588, P4808, P8076, P8866, P9655, SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-32-30-10		**Braking Modes**	NG00093	
	DSC-32-30-10		**Braking Modes - General**	00018630.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-32-30-10		**Braking Modes - Normal Braking**	00018631.0001001	21 MAR 16
	Criteria: 32-1201, P4576, P6375, SA				
	Applicable to: ALL				
E	DSC-32-30-10		**Braking Modes - Alternate Braking with Anti-Skid**	00018632.0002001	17 MAR 17
	Criteria: P4576, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-30-10		**Braking Modes - Alternate Braking with Anti-Skid**	00018632.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-32-30-10		**Braking Modes - Alternate Braking without Anti-Skid**	00018633.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-30-10		**Braking Modes - Alternate Braking without Anti-Skid**	00018633.0001001	28 SEP 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-32-30-10		**Braking Modes - Parking Brake**	00018634.0002001	21 MAR 16
	Criteria: P4576, P6375, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-30-10		**Braking Modes - Parking Brake**	00018634.0001001	21 MAR 16
	Criteria: 32-1201, P6375, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
	DSC-32-30-10		**Braking Schematic**	00001316.0004001	09 OCT 12
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-32-30-10		**Braking Schematic**	00001316.0003001	09 OCT 12
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-32-30-20		**Center Instrument Panel**	00018635.0002001	04 NOV 20
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-32-30-20		**Center Instrument Panel**	00018635.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	DSC-32-30-20		**Auto BRK Panel**	00018636.0004001	21 MAR 16
	Criteria: 32-1464, 32-1476, J4231, P1302, P3451, P3452, P8148, SA				
E	**Applicable to: MSN 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-06876, 06949-09324, 10949-11597**				
	DSC-32-30-20		**Auto BRK Panel**	00018636.0002001	21 MAR 16
	Criteria: P1302, SA **Applicable to: MSN 01143-01158, 01251, 04827-04974, 06895**				
	DSC-32-30-20		**Brake Fan**	00018637.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-32-30-20		**Pedestal**	00018638.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-32-30-20		**WHEEL SD Page**	00018639.0015001	04 NOV 20
	Criteria: 31-1421, 31-1602, 32-1242, P4507, SA				
E	**Applicable to: MSN 01459, 02321**				
E	DSC-32-30-20		**WHEEL SD Page**	00018639.0008001	21 MAR 16
	Criteria: K2113, P3341, P4576, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-32-30-20		**WHEEL SD Page**	00018639.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**				
E	DSC-32-30-20		**Audio Indicators**	00025022.0001001	09 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949-11597**				

E	DSC-32-30-20		**Memo Display**	NG01405	
	DSC-32-30-20		**AUTO BRK LO/MED/MAX**	00016854.0001001	22 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-32-30-20		**AUTO BRK OFF**	00016855.0002001	09 NOV 21
	Criteria: P21265, SA				
E	**Applicable to: MSN 10949-11597**				
	DSC-32-30-20		**AUTO BRK OFF**	00016855.0001001	22 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
	DSC-32-30-20		**BRK FAN**	00016856.0001001	22 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-32-30-20		**PARK BRK**	00016857.0001001	22 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, P10383, P11819, P5706, P6437, P7125, P9107, SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-33-10-10		**General**	00017615.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-33-10-20		**Description**	00017616.0001001	11 SEP 18
	Criteria: SA **Applicable to: ALL**				
	DSC-33-10-20		**Schematic**	00001336.0002001	11 SEP 18
	Criteria: SA **Applicable to: ALL**				
	DSC-33-10-30		**Overhead Panel**	00017617.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-33-10-30		**Maintenance Panel**	00001338.0001001	22 MAY 12
	Criteria: SA **Applicable to: ALL**				
	DSC-33-10-30		**Lateral Window**	00001339.0002001	05 FEB 14
	Criteria: P3004, SA **Applicable to: ALL**				
	DSC-33-10-30		**Pedestal**	00017619.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-33-10-30		**Glareshield**	00001341.0002001	21 JAN 14
	Criteria: SA **Applicable to: ALL**				
	DSC-33-10-30		**Main Inst Panel**	00017620.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-33-20-10		**General**	00017621.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-33-20-20		**Schematic**	00017622.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-33-20-20		**Overhead Panel**	00017623.0004001	21 MAR 16
	Criteria: P1237, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	DSC-33-20-20		**Overhead Panel**	00017623.0001001	21 MAR 16
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-33-20-20		**Memo Display**	NG01401	
	DSC-33-20-20		**LDG LT**	00016785.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-33-20-20		**STROBE LT OFF**	00016784.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-33-30-10		**General**	00017632.0001001	27 FEB 18
	Criteria: SA				
	Applicable to: ALL				
N	DSC-33-30-10		**Proximity Emergency Escape Path Marking System/Exit Signs**	00017646.0017001	09 MAR 18
	Criteria: K30154, A321, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-33-30-10		**Proximity Emergency Escape Path Marking System/Exit Signs**	00017646.0013001	21 MAR 16
	Criteria: A320				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-33-30-10		**Proximity Emergency Escape Path Marking System/Exit Signs**	00017646.0012001	21 MAR 16
	Criteria: 52-1157, A319, A320				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345				
	DSC-33-30-10		**Proximity Emergency Escape Path Marking System/Exit Signs**	00017646.0009001	21 MAR 16
	Criteria: A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-33-30-20		**Controls and Indicators**	00017708.0003001	26 NOV 19
	Criteria: K0344, K4402, K7072, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02896-03002				
E	DSC-33-30-20		**Controls and Indicators**	00017708.0027001	26 NOV 19
	Criteria: K10359, K17120, K4402, K4509, K5104, K5355, K7072, K7253, SA				
E	**Applicable to: MSN 02321, 02734-02887, 03032-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-33-30-20		**Controls and Indicators**	00017708.0063001	26 NOV 19
	Criteria: K10359, K7072, K9009, SA				
	Applicable to: MSN 04827-04860				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-33-40-10 Criteria: SA **Applicable to: ALL**		**Overhead Panel**	00017709.0001001	21 MAR 16
	DSC-33-40-10 Criteria: SA **Applicable to: ALL**		**Memo Display**	00016783.0001001	05 MAY 22

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-34-NAV-10-10		**General**	00018524.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-NAV-10-10		**Probes Location**	00018525.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-NAV-10-10		**Probes Schematic**	00018526.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-NAV-10-10		**ADIRS Schematic**	00018527.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-34-NAV-10-20		**Overhead Panel**	00018528.0002001	04 NOV 20
	Criteria: P5253, SA				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-NAV-10-20		**Overhead Panel**	00018528.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
	DSC-34-NAV-10-20		**Pedestal**	00018529.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-34-NAV-10-20		**Memo Display**	NG01412	
E	DSC-34-NAV-10-20		**ADIRS SWTG**	00025044.0001001	18 NOV 21
	Criteria: P15825				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-34-NAV-10-20		**IR IN ATT ALIGN**	00017043.0002001	21 MAR 16
	Criteria: P5253, SA				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-NAV-10-20		**IRS IN ALIGN**	00017042.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
	DSC-34-NAV-10-20		**IRS IN ALIGN X MN**	00017041.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
E	DSC-34-NAV-10-20		**IRS IN ALIGN X MN**	00017041.0002001	21 MAR 16
	Criteria: P5253, SA				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-34-NAV-10-20		**Maximum Differences Between Speed/Mach Indications**	00021130.0001001	10 MAY 21
	Criteria: P5583, SA **Applicable to: MSN 01143-01251, 01459**				
E	DSC-34-NAV-10-20		**Maximum Differences Between Speed/Mach Indications**	00021130.0002001	10 MAY 21
E	Criteria: 34-1252, P5583, P7268, SA **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-NAV-10-20		**ADIRS Operations - Status Messages**	00021988.0001001	09 NOV 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662**				
	DSC-34-NAV-10-30-10		**Backup Speed/Altitude Scale - General**	00019127.0002001	20 MAR 17
	Criteria: P15825, P9171 **Applicable to: MSN 08495-09324**				
	DSC-34-NAV-10-30-10		**Backup Speed/Altitude Scale - General**	00019127.0001001	16 MAY 17
	Criteria: 34-1397, P9171 **Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-07098**				
	DSC-34-NAV-10-30-10		**Backup Speed/Altitude Scale - Backup Speed Scale**	00019128.0001001	21 MAR 16
	Criteria: 34-1397, P9171 **Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-09324**				
E	DSC-34-NAV-10-30-20		**Speed Monitoring Function**	00023357.0001001	03 NOV 21
E	Criteria: P20614 **Applicable to: MSN 10949-11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-34-NAV-10-30-20		**Associated Alerts and Status**	NG01899	
E	DSC-34-NAV-10-30-20		**Asscociated Alerts and Messages**	00023358.0001001	03 NOV 21
E	Criteria: P20614 **Applicable to: MSN 10949-11597**				
E	DSC-34-NAV-10-30-20		**Speed Monitoring Status**	00023359.0001001	03 NOV 21
E	Criteria: P20614 **Applicable to: MSN 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-34-NAV-10-30-20		**Digital Backup Speed/Altitude**	NG01977	
E	DSC-34-NAV-10-30-20		**Digital Backup Speed/Altitude - General**	00023371.0001001	21 JAN 21
E	Criteria: P20614 **Applicable to: MSN 10949-11597**				
E	DSC-34-NAV-10-30-20		**Digital Backup Speed/Altitude - Digital Backup Speed**	00023373.0001001	21 JAN 21
E	Criteria: P20614 **Applicable to: MSN 10949-11597**				

M	Localization	T	DU Title	DU identification	DU date
	DSC-34-NAV-10-40		**Undue inhibition of NAV BKUP SPD/ALT ON CAPT (F/O) PFD**	00024631.0003001	10 DEC 20
	Criteria: 22-1737, 31-1575, P15825 **Applicable to: MSN 08635**				
	DSC-34-NAV-15-10		**Description**	00018530.0001001	21 MAR 16
	Criteria: P5168, P6054, P6183 **Applicable to: ALL**				
	DSC-34-NAV-20		**Compass**	00001367.0001001	19 DEC 12
	Criteria: SA **Applicable to: ALL**				
E	DSC-34-NAV-20		**Description of the ISIS**	00018543.0002001	21 MAR 16
E	Criteria: 34-1335, P5638, P8626, P9196 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-NAV-20		**Attitude**	00018575.0002001	21 MAR 16
E	Criteria: P5638, SA **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-NAV-20		**Attitude**	00018575.0001001	19 SEP 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321**				
E	DSC-34-NAV-20		**Airspeed**	00018576.0002001	21 MAR 16
E	Criteria: P5638, SA **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-NAV-20		**Airspeed**	00018576.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321**				
E	DSC-34-NAV-20		**Altimeter**	00018577.0002001	21 MAR 16
E	Criteria: P5638, SA **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-NAV-20		**Altimeter**	00018577.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-34-NAV-20		**Landing System Function**	00001377.0005001	12 MAY 22
	Criteria: P5638				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-NAV-20		**Bugs Function**	00018578.0001001	21 MAR 16
	Criteria: P5638				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-NAV-20		**Flags**	00018580.0002001	21 MAR 16
	Criteria: 34-1335, P5638, P8626, P9196				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-NAV-30-10		**General**	00018581.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-34-NAV-30-10		**Architecture**	00018582.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-34-NAV-30-20		**VOR**	00018657.0002001	28 SEP 18
	Criteria: P15847, SA				
	Applicable to: MSN 11522-11597				
E	DSC-34-NAV-30-20		**VOR**	00018657.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11482**				
	DSC-34-NAV-30-20		**ILS/GLS ◁ /MLS ◁**	00018658.0001001	29 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-NAV-30-20		**ADF ◁**	00018659.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-NAV-30-20		**DME**	00018660.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
N	DSC-34-NAV-30-20		**Marker Beacon**	00001389.0002001	28 SEP 18
	Criteria: P15847, SA				
	Applicable to: MSN 11522-11597				
E	DSC-34-NAV-30-20		**Marker Beacon**	00001389.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11482**				
N	DSC-34-NAV-30-30		**ADF ◁ Page**	00022694.0001001	25 MAY 20
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	DSC-34-NAV-30-30		**LS Page**	00022693.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
N	DSC-34-NAV-30-30		**NAV Page**	00022709.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
N	DSC-34-NAV-30-30		**VOR Page**	00022710.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
	DSC-34-NAV-30-30		**Digital Distance and Radio Magnetic Indicator ◁∗ (DDRMI)**	00018583.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-34-NAV-30-30		**Radio Management Panel (RMP)**	00018584.0001001	17 MAY 21
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
	DSC-34-NAV-40-10		**General**	00018585.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-34-NAV-40-10		**Automatic Callout**	00018656.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-34-SURV-10-10		**Principle**	00020602.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03058, 04563, 05005, 05097**				
E	DSC-34-SURV-10-10		**Principle**	00020602.0002001	17 MAR 17
E	Criteria: 34-1369, 34-1711, P14160, P14828, P9207, SA **Applicable to: MSN 03032, 03111-03710, 03733-04544, 04570-04974, 05066, 05101-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-34-SURV-10-10		**Principle**	00020602.0003001	25 MAY 20
	Criteria: P14160, P14828, P20240, SA **Applicable to: MSN 11531**				
N	DSC-34-SURV-10-10		**Principle**	00020602.0004001	25 MAY 20
	Criteria: P14160, P14828, P20240, P9207, SA **Applicable to: MSN 11482-11522, 11572-11597**				
E	DSC-34-SURV-10-10		**ADS-B OUT**	00020606.0002001	17 MAR 17
E	Criteria: 34-1595, 34-1630, 34-1663, 34-1711, P14155, P14582, SA **Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11597**				
N	DSC-34-SURV-10-20		**ATC Page**	00024211.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482-11597**				
E	DSC-34-SURV-10-20		**Control Panels**	00020607.0027001	04 NOV 20
E	Criteria: 34-1663, 34-1711, P13843, P13844, P14160, P14828, P2218, P3964, P5239, SA **Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266-03284, 04827-04860, 08495-09324, 10949-11293**				
	DSC-34-SURV-10-20		**Control Panels**	00020607.0009001	04 NOV 20
	Criteria: P13843, P14160, P14828, P2218, P3964, P5239, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02887-02904, 03032-03047, 03111, 03222-03229, 03294-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-07098**				
	DSC-34-SURV-10-20		**Control Panels**	00020607.0012001	17 MAR 17
	Criteria: P2218, P3964, P5020, P5239, SA **Applicable to: MSN 01459**				
	DSC-34-SURV-30-10		**Description**	00014867.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563**				
E	DSC-34-SURV-30-10		**Description**	00014867.0002001	17 MAY 21
E	Criteria: 34-1571, P11652, P12173, P12994, P20441, P7929, SA **Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-30-20		**General**	00020942.0004001	17 MAR 17
E	Criteria: P11652, P12173, P20441, P20442, P4642, P4647, P4766, P7929 **Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-34-SURV-30-20		**General**	00020942.0001001	17 MAR 17
	Criteria: P4308, P4647, P4766				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563				
	DSC-34-SURV-30-20		**Windshear Alerts During Takeoff Roll, Up to 100 knots**	00020944.0003001	17 MAR 17
	Criteria: P4308				
	Applicable to: MSN 02014				
E	DSC-34-SURV-30-20		**Windshear Alerts During Takeoff Roll, Up to 100 knots**	00020944.0001001	17 MAR 17
	Criteria: P11652, P20441, P20442, P4642, P4647, P4766				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-30-20		**Windshear Alerts Above 50 feet**	00006422.0001001	28 MAY 20
	Criteria: P11652, P20441, P20442, P4642, P4647, P4766				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-30-20		**Windshear Alerts Above 50 feet**	00006422.0003001	28 MAY 20
	Criteria: P4308				
	Applicable to: MSN 02014				
E	DSC-34-SURV-30-20		**Windshear Alerts Inhibition**	00006426.0002001	20 JUL 15
	Criteria: P11652, P20441, P20442, P4308, P4642, P4647, P4766				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-30-30		**Control Panel**	00014841.0012001	28 NOV 17
	Criteria: P11652, P12171, P12173, P12637, P20441, P20444, P4682, P7929				
E	**Applicable to: MSN 05066-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-30-30		**Control Panel**	00001402.0010001	01 MAR 18
	Criteria: P4191, P4763, P4770, P5241, P6027, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02887, 04563				
	DSC-34-SURV-30-30		**Control Panel**	00001402.0002001	28 NOV 17
	Criteria: K11855, P4191, P4770, P5241, P7929, SA				
	Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05005				
	DSC-34-SURV-30-30		**Control Panel**	00001402.0096001	01 MAR 18
	Criteria: P4191, P4682, P4770, P6027, SA				
	Applicable to: MSN 02014				
	DSC-34-SURV-30-30		**Weather Radar indication on ND**	00001255.0001001	28 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-34-SURV-30-30		**Weather Radar indication on ND**	00001255.0002001	28 FEB 14
	Criteria: 31-1482, P6578, SA				
	Applicable to: MSN 02887, 04563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-34-SURV-30-30		**Weather Radar indication on ND**	00001255.0007001	21 MAR 16
	Criteria: P6578, P7929, SA				
	Applicable to: MSN 03035-03047, 03111, 04953-04974				
E	DSC-34-SURV-30-30		**Weather Radar indication on ND**	00001255.0014001	21 MAR 17
	Criteria: 31-1482, P11652, P12173, P14628, P14825, P20441, P6578, P7929, SA				
E	**Applicable to: MSN 02734, 02896-03032, 03058, 03180-03710, 03733-04544, 04570-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-30-30		**PWS ⩤ indication on PFD and ND**	00020941.0002001	01 MAR 18
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-30-30		**PWS ⩤ indication on PFD and ND**	00020941.0001001	01 MAR 18
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
N	DSC-34-SURV-30-30		**Weather Hazard Prediction Function Indication on ND**	00016149.0001001	17 MAY 21
	Criteria: P14161				
	Applicable to: MSN 11531				
E	DSC-34-SURV-30-30		**Memo Display**	00017051.0001001	21 MAR 16
	Criteria: P20442, P4308, P4642, P4647, P4766				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-40-10		**Overview**	00021292.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-SURV-40-10		**Principle**	00021293.0001001	17 MAR 17
	Criteria: P10960, P14313, P4885, SA				
	Applicable to: ALL				
	DSC-34-SURV-40-20		**Mode 1 : Excessive Rate of Descent**	00015115.0001001	13 JAN 14
	Criteria: P1631, P2223, P4885, P8310, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321				
E	DSC-34-SURV-40-20		**Mode 1 : Excessive Rate of Descent**	00015115.0004001	13 JAN 14
	Criteria: P10960, P14313, P1631, P2223, P4885, SA				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-40-20		**Mode 2 : Excessive Terrain Closure Rate**	00015116.0001001	23 JUN 15
	Criteria: P1631, P2223, P4885, P8310, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321				
E	DSC-34-SURV-40-20		**Mode 2 : Excessive Terrain Closure Rate**	00015116.0004001	03 AUG 17
	Criteria: P10960, P14313, P1631, P2223, P4885, SA				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-40-20		**Mode 3 : Altitude Loss After Takeoff**	00015117.0004001	19 SEP 13
	Criteria: P10960, P14313, P1631, P2223, P4885, SA				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-34-SURV-40-20		**Mode 3 : Altitude Loss After Takeoff**	00015117.0001001	19 SEP 13
	Criteria: P1631, P2223, P4885, P8310, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321				
	DSC-34-SURV-40-20		**Mode 4 : Unsafe Terrain Clearance when Not in Landing Configuration**	00015118.0003001	13 JAN 14
	Criteria: P1631, P2223, P4885, P8310, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321				
	DSC-34-SURV-40-20		**Mode 4 : Unsafe Terrain Clearance when Not in Landing Configuration**	00015118.0004001	19 SEP 13
	Criteria: P10960, P1631, P2223, P4885, SA				
	Applicable to: MSN 04827-04860				
E	DSC-34-SURV-40-20		**Mode 4 : Unsafe Terrain Clearance when Not in Landing Configuration**	00015118.0005001	13 JAN 14
	Criteria: P10960, P14313, P1631, P2223, P4885, SA				
E	**Applicable to: MSN 02014, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-40-20		**Mode 5 : Descent Below Glideslope**	00015119.0004001	19 SEP 13
	Criteria: P10960, P14313, P1631, P2223, P4885, SA				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-40-20		**Mode 5 : Descent Below Glideslope**	00015119.0001001	19 SEP 13
	Criteria: P1631, P2223, P4885, P8310, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321				
	DSC-34-SURV-40-35		**Terrain Awareness and Display**	00001417.0277001	16 NOV 20
	Criteria: P10960, P14313, P14314, P4885, P5224, P5567, P5895, P6578, P7187, P7188, P8751, P8799, P9034, P9050, P9654, P9867				
	Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-34-SURV-40-35		**Terrain Awareness and Display**	00001417.0275001	16 NOV 20
	Criteria: 34-1345, 34-1351, 34-1352, P10960, P14313, P14314, P4885, P5567, P5895, P6578, P7187, P7188, P8310, P8751, P8799, P9034, P9050, P9233, P9654, P9867				
E	**Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-34-SURV-40-35		**Terrain Awareness and Display**	00001417.0002001	30 JUN 20
	Criteria: P4885, P5567, P5895				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855				
	DSC-34-SURV-40-35		**Terrain Awareness and Display**	00001417.0108001	30 JUN 20
	Criteria: P4885, P5224, P5567, P5895				
	Applicable to: MSN 02014				
	DSC-34-SURV-40-35		**Terrain Awareness and Display**	00001417.0109001	30 JUN 20
	Criteria: P4885, P5567, P5895, P6578, P7187				
	Applicable to: MSN 02734				
	DSC-34-SURV-40-35		**Terrain Awareness and Display**	00001417.0114001	30 JUN 20
	Criteria: P4885, P5224, P5567, P5895, P6578, P7187, P7188, P8751, P8799				
	Applicable to: MSN 06139, 06173				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-34-SURV-40-35		**Terrain Caution and Warning Envelope**	00006161.0002001	19 DEC 12
E	Criteria: P10960, P14313, P4885 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-40-35		**Terrain Clearance Floor**	00006162.0002001	28 MAY 20
E	Criteria: P10960, P14313, P4885 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-40-35		**Runway Field Clearance Floor**	00006163.0002001	28 MAY 20
E	Criteria: P14314, P4885, P7187, P9034, P9233 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-40-35		**Runway Awareness and Advisory System**	00013214.0001001	17 MAR 11
E	Criteria: P13901 **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-34-SURV-40-35		**General**	00006159.0003001	13 JAN 14
	Criteria: P10960, SA **Applicable to: MSN 04827-04860**				
	DSC-34-SURV-40-35		**Alerts**	00006160.0014001	30 JUN 20
	Criteria: P10960, P9050, P9051 **Applicable to: MSN 04827-04860**				
	DSC-34-SURV-40-35		**Alerts Envelopes**	00006166.0007001	14 MAY 12
	Criteria: P10960 **Applicable to: MSN 04827-04860**				
	DSC-34-SURV-40-35		**Inhibition Logic of the GPWS Predictive Functions in Approach**	00013669.0002001	17 MAR 17
	Criteria: P10960 **Applicable to: MSN 04827-04860**				
N	DSC-34-SURV-40-40		**Overhead Panel**	00001418.0009001	03 NOV 22
	Criteria: P10960, P14313, P15323, P2223, P4885, SA **Applicable to: MSN 08495-09324, 10949-11597**				
R	DSC-34-SURV-40-40		**Overhead Panel**	00001418.0007001	03 NOV 22
E	Criteria: P10960, P14313, P2223, P4885, P8500, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
E	DSC-34-SURV-40-40		**Instrument Panels**	00001419.0029001	28 MAY 20
E	Criteria: P10960, P14313, P1631, P4885, P5895, P7185, P9050, SA **Applicable to: MSN 04827-04860, 06409-09324, 10949-11597**				
	DSC-34-SURV-40-40		**Instrument Panels**	00001419.0009001	28 MAY 20
	Criteria: P1631, P4885, P5895, P7185, SA **Applicable to: MSN 02014, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06173**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-34-SURV-40-40		**Instrument Panels**	00001419.0003001	28 MAY 20
	Criteria: P1631, P4885, P5895, P7185, P8310, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321				
E	DSC-34-SURV-40-40		**Memo Display**	NG01415	
	DSC-34-SURV-40-40		**GPWS FLAP 3**	00017057.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-SURV-40-40		**GPWS FLAP MODE OFF**	00017058.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-SURV-40-40		**TERR OFF**	00017060.0004001	21 MAR 16
	Criteria: 31-1267, 31-1300, 34-1352, P10960, P14313, P14314, P4885, P8799, P9107, P9654				
	Applicable to: ALL				
	DSC-34-SURV-40-40		**TERR STBY**	00017059.0007001	21 MAR 16
	Criteria: 31-1267, 31-1300, 34-1352, P2223, P4885, P8799, P9107, SA				
	Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06173				
E	DSC-34-SURV-40-40		**TERR STBY**	00017059.0004001	21 MAR 16
	Criteria: P10960, P14313, P14314, P2223, P4885, P8799, P9107, SA				
E	**Applicable to: MSN 04827-04860, 06409-09324, 10949-11597**				
	DSC-34-SURV-40-40		**TERR STBY**	00017059.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, P2223, P4885, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734				
E	DSC-34-SURV-50-10		**General**	00015123.0001001	28 MAY 20
	Criteria: P15323				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-34-SURV-50-20		**Description**	00015124.0008001	03 NOV 22
	Criteria: P13476, P15323, P20473, P21486				
E	**Applicable to: MSN 10949-11597**				
R	DSC-34-SURV-50-20		**Description**	00015124.0005001	03 NOV 22
	Criteria: P13476, P15323				
	Applicable to: MSN 08495-09324				
E	DSC-34-SURV-50-30		**Controls and Indicators**	00015132.0005001	28 MAY 20
	Criteria: P15323, P20473, P21486				
E	**Applicable to: MSN 10949-11597**				
	DSC-34-SURV-50-30		**Controls and Indicators**	00015132.0001001	29 JUL 13
	Criteria: P15323				
	Applicable to: MSN 08495-09324				
	DSC-34-SURV-60-10		**Overview**	00020407.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-34-SURV-60-10		**Principle**	00020408.0001001	05 JUN 18
	Criteria: SA **Applicable to: ALL**				
E	DSC-34-SURV-60-10		**Main Components**	00020409.0001001	21 MAR 17
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-34-SURV-60-10		**Main Components**	00020409.0002001	25 MAY 20
	Criteria: P20240, P20323, SA **Applicable to: MSN 11482-11597**				
	DSC-34-SURV-60-10		**Intruder Detection Categories**	00020410.0001001	28 NOV 19
	Criteria: SA **Applicable to: ALL**				
N	DSC-34-SURV-60-10		**TCAS Modes**	NG01731	
E	DSC-34-SURV-60-10		**TCAS Modes**	00020411.0001001	21 MAR 17
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
N	DSC-34-SURV-60-10		**TCAS Modes**	00020411.0002001	25 MAY 20
	Criteria: P20240, P20323, SA **Applicable to: MSN 11482-11597**				
	DSC-34-SURV-60-10		**Traffic Advisory/Resolution Advisory (TA/RA) Mode**	00020412.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-34-SURV-60-10		**Traffic Advisory Only (TA ONLY) Mode**	00020413.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-34-SURV-60-10		**Standby Mode**	00020414.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
E	DSC-34-SURV-60-10		**AP/FD TCAS**	00020415.0002001	18 MAY 22
E	Criteria: 22-1472, P11363, SA **Applicable to: MSN 01459, 08495-09324, 10949-11597**				
	DSC-34-SURV-60-10		**Advisory Inhibition**	00020416.0007001	05 MAY 22
	Criteria: 22-1472, 34-1206, P11363, P2590, P2859, P3112, P5613, P5669, P6167, P6316, P8025 **Applicable to: ALL**				
	DSC-34-SURV-60-10		**TCAS INTRUDER WITH NO REPORTED ALTITUDE**	00022303.0001001	05 JUN 18
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
E	DSC-34-SURV-60-20		**ATC/TCAS Panel**	00001429.0004001	01 OCT 12
	Criteria: P2218, P2590, P2859, P3112, P3964, P5239				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
	DSC-34-SURV-60-20		**ATC/TCAS Panel**	00001429.0064001	01 OCT 12
	Criteria: P2218, P2590, P3964, P5020, P5239				
	Applicable to: MSN 01459				
N	DSC-34-SURV-60-20		**ATC Page**	00024212.0001001	25 MAY 20
	Criteria: P20240, P20323				
	Applicable to: MSN 11482-11597				
	DSC-34-SURV-60-20		**ND Indications**	00020418.0002001	05 JUN 18
	Criteria: P5567, SA				
	Applicable to: ALL				
	DSC-34-SURV-60-20		**TCAS Messages**	00020419.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-34-SURV-60-20		**PFD Indications**	00020420.0003001	17 MAR 17
	Criteria: 31-1286, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-34-SURV-60-20		**PFD Indications**	00020420.0005001	17 MAR 17
	Criteria: 31-1276, P6578, P9225, P9824, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-34-SURV-60-20		**Aural Messages**	00001433.0018001	08 FEB 13
	Criteria: 34-1206, 34-1506, 34-1517, 34-1532, 34-1667, P10960, P11510, P12330, P12746, P14306, P14307, P2590, P2859, P3112, P5613, P5669, P6167, P6316, P8025				
E	**Applicable to: MSN 01158-01246, 01376, 01518, 01593-01628, 01801, 01826, 01837-01855, 02321, 02734, 02896-02904, 03002-03047, 03111, 03391, 04441, 04827-04860, 05184-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-60-20		**Aural Messages**	00001433.0002001	15 FEB 11
	Criteria: 34-1206, P2590, P2859, P3112, P5613, P5669, P6167, P8025				
	Applicable to: MSN 01143, 01251, 01459, 01825, 01832, 02014, 02887, 02924, 03058, 03180-03313, 03565-03710, 03733-04389, 04446-04773, 04953-05107				
E	DSC-34-SURV-60-20		**Memo Display**	00020422.0002001	04 NOV 20
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-34-SURV-60-20		**Memo Display**	00020422.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251				
	DSC-34-SURV-60-30		**Undue NAV TCAS FAULT**	00024314.0003001	10 MAY 21
	Criteria: 31-1373, 31-1414, P11819, P12746, P14306, P14307, P2590, P5669, P6316				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02014, 06561				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-35-10		**Description**	00001448.0001001	20 DEC 10
	Criteria: SA				
	Applicable to: ALL				
E	DSC-35-20-10		**General**	00017801.0002001	21 MAR 16
	Criteria: K17059, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-35-20-10		**General**	00017801.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
	DSC-35-20-10		**Operation**	00001450.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-35-20-10		**Schematic**	00017802.0002001	21 MAR 16
	Criteria: K17059, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-35-20-10		**Schematic**	00017802.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
	DSC-35-20-10		**Mask Setting**	00016919.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-20-10		**Mask Stowage**	00001453.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-20-20		**Overhead Panel**	00017803.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-20-20		**Stowage Box**	00001455.0001001	22 MAY 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-20-20		**Crew Oxygen Mask**	00001456.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-20-20		**Pressure Regulator**	00001457.0001001	24 NOV 15
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-20-20		**ECAM DOOR/OXY Page**	00001458.0001001	21 MAR 17
	Criteria: 31-1421, P0160, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-35-20-20		**ECAM DOOR/OXY Page**	00001458.0004001	21 MAR 17
	Criteria: P7278, P9824, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	DSC-35-20-20		**ECAM DOOR/OXY Page**	00001458.0005001	21 MAR 17
	Criteria: 31-1276, P0160, P7062, P7278, P9824, SA				
	Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
E	DSC-35-20-20		**ECAM DOOR/OXY Page**	00001458.0006001	21 MAR 17
	Criteria: K17059, P7278, P9824, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
N	DSC-35-20-30		**How to Test the Mask**	00024268.0003001	04 NOV 20
	Criteria: P20240, P20323, SA				
	Applicable to: MSN 11482-11597				
E	DSC-35-20-30		**How to Test the Mask**	00024268.0001001	04 NOV 20
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**				
	DSC-35-30-10		**General**	00017804.0001001	13 MAY 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-30-10		**Operation**	00016920.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-30-10		**Schematic**	00001461.0001001	16 MAY 12
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-30-20		**Overhead Panel**	00017805.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-35-30-20		**Overhead Maintenance Panel**	00001463.0001001	11 FEB 11
	Criteria: SA				
	Applicable to: ALL				

E	DSC-35-30-20		**Memo Display**	NG01406	
E	DSC-35-30-20		**HI ALT SET**	00016865.0001001	21 MAR 16
	Criteria: P5228				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02924, 03035-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-35-30-20		**OXY PAX ON**	00016866.0006001	21 MAR 16
	Criteria: K13046, P11819, P11955				
E	**Applicable to: MSN 05987, 06097, 06121, 06139-09324, 10949-11597**				

	DSC-35-40-10		**Flight Crews Portable Oxygen System**	00001465.0003001	17 MAR 11
	Criteria: P2588, P4956, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03710, 03733-04544				
	DSC-35-40-10		**Flight Crews Portable Oxygen System**	00001465.0005001	20 DEC 16
	Criteria: P2588, SA **Applicable to: MSN 01459, 02014-02321, 02887, 04563, 05005, 05097**				
E	DSC-35-40-10		**Flight Crews Portable Oxygen System**	00001465.0007001	17 MAR 11
E	Criteria: K18256, P2588, P4654, P9057, SA **Applicable to: MSN 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-35-40-10		**Flight Crews Portable Oxygen System**	00001465.0004001	17 MAR 11
	Criteria: P2588, P4786, SA **Applicable to: MSN 04570-04974, 05066, 05101-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	DSC-35-40-10		**Using the Hood**	00006226.0003001	22 MAY 12
	Criteria: P2588, P4956, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03710, 03733-04544**				
	DSC-35-40-10		**Using the Hood**	00006226.0005001	03 MAR 17
	Criteria: P2588, SA **Applicable to: MSN 01459, 02014-02321, 02887, 04563, 05005, 05097**				
E	DSC-35-40-10		**Using the Hood**	00006226.0012001	22 MAY 12
E	Criteria: K18256, P2588, P4654, P9057, SA **Applicable to: MSN 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	DSC-35-40-10		**Using the Hood**	00006226.0004001	22 MAY 12
	Criteria: P2588, P4786, SA **Applicable to: MSN 04570-04974, 05066, 05101-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-36-10-10		**General**	00020804.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-36-10-20		**General**	00001469.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-36-10-20		**Architecture**	00001470.0005001	15 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
E	DSC-36-10-20		**Architecture**	00001470.0006001	15 MAR 17
E	Criteria: PW1100G-JM, SA **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-36-10-20		**Air Bleed Selection**	00001471.0003001	05 MAR 19
	Criteria: P6578, SA **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173-07098**				
	DSC-36-10-20		**Air Bleed Selection**	00001471.0002001	09 OCT 12
	Criteria: IAE, SA, A319 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
	DSC-36-10-20		**Air Bleed Selection**	00001471.0004001	05 MAR 19
	Criteria: IAE, P6578, SA, A319 **Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
E	DSC-36-10-20		**Air Bleed Selection**	00001471.0011001	05 MAR 19
E	Criteria: PW1100G-JM, G1142, G1220, P6578, SA **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-36-10-20		**Pressure Regulation and Limitation**	00001472.0001001	09 NOV 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02896, 03032-03180**				
E	DSC-36-10-20		**Pressure Regulation and Limitation**	00001472.0004001	09 NOV 17
E	Criteria: P8850, SA **Applicable to: MSN 03211-03222, 03266-03391, 03588-03710, 03733, 03816-04192, 04358-04446, 04544-05987, 06097, 06121, 06163-06409, 06528, 06561-06658, 06685-07005, 07098**				
E	DSC-36-10-20		**Pressure Regulation and Limitation**	00001472.0007001	12 NOV 20
E	Criteria: 36-1057, 36-1075, P8850, SA **Applicable to: MSN 02734, 02904-03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081**				
E	DSC-36-10-20		**Pressure Regulation and Limitation**	00001472.0003001	10 MAY 21
E	Criteria: PW1100G-JM, P8850, SA **Applicable to: MSN 08495-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-36-10-20		**Temperature Regulation and Limitation**	00001473.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-36-10-20		**Temperature Regulation and Limitation**	00001473.0002001	28 NOV 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-36-10-30		**General**	00001474.0001001	09 NOV 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-36-10-40		**General**	00001476.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-36-10-40		**ECAM Indication**	00001478.0001001	17 MAR 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-36-10-40		**ECAM Indication**	00001478.0002001	21 MAR 16
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-36-10-50		**Leak Detection**	00001479.0001001	15 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-36-10-50		**Leak Detection**	00001479.0002001	15 MAR 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-36-10-60		**BMC Failure**	00001480.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-36-10-60		**BMC Failure**	00001480.0002001	21 MAR 16
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-36-20		**Overhead Panel**	00001481.0001001	09 NOV 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02896, 03032-03222, 03266-03391, 03588-03710, 03733, 03816-04192, 04358-04446, 04544-05987, 06097, 06121, 06163-06409, 06528, 06561-06658, 06685-07005, 07098**				
E	DSC-36-20		**Overhead Panel**	00001481.0004001	12 NOV 20
	Criteria: 36-1075, SA				
E	**Applicable to: MSN 02734, 02904-03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-36-20		**Overhead Panel**	00001481.0002001	09 NOV 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-36-20		**ECAM Bleed Page**	00001482.0003001	04 NOV 20
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-36-20		**ECAM Bleed Page**	00001482.0004001	04 NOV 20
	Criteria: 31-1433, P12697, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-36-20		**Memo Display**	00016746.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-38-10		**General**	00017274.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-38-10		**Potable Water**	NG01428	
E	DSC-38-10		**Potable Water**	00017286.0001001	28 MAY 20
E	Criteria: K1014, K3566, SA **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	DSC-38-10		**Potable Water**	00017286.0002001	28 MAY 20
E	Criteria: K1014, SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-38-10		**Potable Water - Schematic**	00017435.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-38-10		**Wastewater System**	00017287.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-38-10		**Toilet System**	00017288.0002001	21 MAR 16
	Criteria: K0082, SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-45-10		**General**	00001490.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-10		**Components**	00001491.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-10		**Modes of Operation**	00001492.0001001	22 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-10		**Architecture**	00001493.0001001	24 APR 12
	Criteria: P4502, P5956, P6777, SA **Applicable to: MSN 01459**				
E	DSC-45-10		**Architecture**	00001493.0002001	19 DEC 12
E	Criteria: 46-1121, P4502, P6777, P9486, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-45-10		**Failure/Fault Classification**	00017082.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-10		**Functions of the Centralized Fault Display System (CFDS)**	00001495.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251-01459**				
E	DSC-45-10		**Functions of the Centralized Fault Display System (CFDS)**	00001495.0002001	21 MAR 16
E	Criteria: 31-1150, P6589, SA **Applicable to: MSN 01143-01246, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-45-10		**Cockpit/CFDS Interface**	00001496.0001001	22 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-20		**Maintenance Menu**	00001497.0001001	14 MAY 12
	Criteria: P4502, P5956, P6777, SA **Applicable to: MSN 01459**				
E	DSC-45-20		**Maintenance Menu**	00001497.0002001	14 MAY 12
E	Criteria: 46-1121, P4502, P6777, P9486, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-45-20		**Last (or Current) Leg Report**	00001498.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-45-20		**Last (or Current) Leg ECAM Report**	NG00095	
	DSC-45-20		**Last (or Current) Leg ECAM Report-General**	00001499.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	DSC-45-20		**Last (or Current) Leg ECAM Report - Post Flight Report Print**	00001500.0001001	14 MAY 12
E	Criteria: SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-45-20		**Last (or Current) Leg ECAM Report - Post Flight Report Print**	00001500.0002001	21 MAR 16
	Criteria: P0283, SA **Applicable to: MSN 01459**				
	DSC-45-20		**Previous Leg Report**	00001501.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-20		**Avionics Status**	00001502.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-20		**System Report/Test**	00001503.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-20		**GMT/Date Initialization**	00001504.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-20		**Backup Mode**	00017066.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-20		**ACARS Print Program**	00005361.0001001	14 FEB 11
	Criteria: 23-1184, P2875, P4502, P6687, P6688, P6777 **Applicable to: ALL**				
	DSC-45-25		**General**	00001506.0001001	10 JAN 11
	Criteria: P4151 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
E	DSC-45-25		**General**	00001506.0003001	09 NOV 21
E	Criteria: P20440, P4151 **Applicable to: MSN 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-45-25		**Data Loading Selector on the Overhead Panel**	00001507.0001001	19 DEC 12
	Criteria: P4151 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
	DSC-45-30		**General**	00001508.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-45-30		**System Description**	00001509.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-46-10-10		**Overview**	00020333.0001001	26 NOV 19
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-46-10-10		**Overview**	00020333.0002001	26 NOV 19
	Criteria: 46-1095, 46-1121, P11844, SA **Applicable to: MSN 04827-04974**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-46-10-10		**Architecture**	NG01722	
	DSC-46-10-10		**Architecture**	00020332.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
	DSC-46-10-10		**ADIRS**	00020323.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
	DSC-46-10-10		**ATSU**	00020329.0001001	17 MAR 17
	Criteria: P4502 **Applicable to: ALL**				
	DSC-46-10-10		**DCDU**	00020330.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
	DSC-46-10-10		**FMS**	00020326.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
	DSC-46-10-10		**FWS**	00020331.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
	DSC-46-10-10		**GPS**	00021433.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
E	DSC-46-10-10		**HF**	00020322.0001001	17 MAR 17
E	Criteria: 46-1013, 46-1095, 46-1121, P11844, P6832 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-46-10-10		**MCDU**	00020328.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
	DSC-46-10-10		**Printer**	00021339.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				
	DSC-46-10-10		**RMP**	00020327.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844 **Applicable to: MSN 04827-04974**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-46-10-10		**RMP Upload**	00021236.0002001	21 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**Satcom**	00020319.0001001	17 MAR 17
	Criteria: P4502				
	Applicable to: ALL				
	DSC-46-10-10		**SURV**	00020324.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**VHF**	00020321.0001001	28 MAY 20
	Criteria: 46-1095, 46-1121, P11844, P4502				
	Applicable to: MSN 04827-04974				
E	DSC-46-10-10		**VHF**	00020321.0002001	28 MAY 20
	Criteria: P4502				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				

	DSC-46-10-10		**Cockpit Interface**	00020373.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

	DSC-46-10-10		**Datalink Message**	NG01765	
	DSC-46-10-10		**MSG Reception**	00020966.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**Uplink MSG Reception**	00020374.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**MSG Response**	00020968.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**MSG RESPONSE - LACK**	00021222.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**Downlink MSG Creation**	00020970.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**MSG Close**	00021458.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-10		**MSG Removal**	00020972.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-46-10-10		**MSG Auto-Close**	00021192.0001001	21 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-20-10		**General**	00020385.0001001	17 MAR 17
	Criteria: P4502				
	Applicable to: ALL				
R	DSC-46-10-30-10		**Notification**	00020375.0001001	03 NOV 22
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-30-20		**General**	NG01772	
	DSC-46-10-30-20		**CPDLC**	00020376.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-30-20		**CPDLC Functions**	00021043.0002001	05 JUN 18
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-30-20		**Connect**	00020998.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-30-20		**Request**	00021000.0002001	01 MAR 18
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-30-20		**Edit**	00021013.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-30-20		**Message Timer**	00021031.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-30-70		**Message Record**	00020377.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-10		**ATC MSG Pb**	00021077.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-20		**DCDU**	NG01783	
	DSC-46-10-40-20		**Datalink Control and Display Unit (DCDU)**	00021076.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-20		**Datalink Message Area**	00021243.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-20		**Message Status**	00021241.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-20		**Function Keys**	00021242.0004001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-20		**Message Information Area**	00021240.0004001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-20		**Time**	00021244.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-20		**Others**	00021245.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**Introduction**	NG01780	
	DSC-46-10-40-30		**Introduction**	00021078.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**MCDU Page Tree**	00021195.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**COMM MENU Page Tree**	00021463.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**ATC MENU**	NG01777	
	DSC-46-10-40-30		**ATC MENU**	00021079.0004001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
E	DSC-46-10-40-30		**ATSU DATALINK**	00021081.0003001	17 MAR 17
	Criteria: P4502				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-46-10-40-30		**ATSU DATALINK**	00021081.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844, P4502				
	Applicable to: MSN 04827-04974				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-46-10-40-30		**COMM CONFIG**	00021253.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
E	DSC-46-10-40-30		**COMM MENU**	00021090.0003001	17 MAR 17
	Criteria: P4502				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-46-10-40-30		**COMM MENU**	00021090.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844, P4502				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**CONNECTION**	00021104.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**CONNECTION STATUS**	00021101.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**DATALINK STATUS**	00021091.0002001	05 MAR 19
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**EDIT**	00021107.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**FREQUENCY REPORTING**	00021099.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**MSG RECORD**	00021098.0004001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**NOTIFICATION**	00021100.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**REQUEST**	00021113.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**TEXT**	00021096.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**VHF3 DATA MODE**	00021252.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-30		**VHF3 SCAN SELECT**	00021254.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844, P4502				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
E	DSC-46-10-40-40		**MCDU Scratchpad Messages**	NG01788	
	DSC-46-10-40-40		**Common for all FANS**	00021084.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-40-40		**Scratchpad Messages**	00021338.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844, P4502				
	Applicable to: MSN 04827-04974				
E	DSC-46-10-40-40		**Scratchpad Messages**	00021338.0001001	17 MAR 17
	Criteria: P4502				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-46-10-40-50		**MCDU Data Entry Format**	NG01789	
	DSC-46-10-40-50		**Data Entry Format**	00021085.0003001	21 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
E	DSC-46-10-40-60		**Memo Display**	NG01409	
E	DSC-46-10-40-60		**COMPANY ALERT**	00016906.0001001	21 MAR 16
	Criteria: 46-1013, 46-1062, P11247, P6832				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-46-10-40-60		**COMPANY CALL**	00016904.0001001	21 MAR 16
	Criteria: 46-1013, 46-1062, P11247, P6832				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-46-10-40-60		**COMPANY DATALINK STBY**	00016903.0001001	21 MAR 16
	Criteria: 46-1013, 46-1062, P11247, P6832				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-46-10-40-60		**COMPANY MSG**	00016905.0001001	21 MAR 16
	Criteria: 46-1013, 46-1062, P11247, P6832				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-46-10-50		**Introduction**	00021191.0002001	17 MAR 17
	Criteria: P4502				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-46-10-50		**Introduction**	00021191.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844, P4502				
	Applicable to: MSN 04827-04974				
E	DSC-46-10-50		**How to Initialize**	00021142.0002001	17 MAR 17
	Criteria: P4502				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-46-10-50		**How to Initialize**	00021142.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844, P4502				
	Applicable to: MSN 04827-04974				
	DSC-46-10-50		**How to Notify**	00021143.0001001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-50		**How to Connect**	NG01782	
	DSC-46-10-50		**CPDLC**	00021239.0003001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-50		**How to Send Request to ATC**	00021188.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-50		**How to Answer**	NG01778	
	DSC-46-10-50		**ATC Clearance**	00021187.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-50		**ATC Negotiation MSG**	00021221.0001001	04 JUN 19
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-50		**ATC Request of Navigation Parameter**	00021190.0002001	17 MAR 17
	Criteria: 46-1095, 46-1121, P11844				
	Applicable to: MSN 04827-04974				
	DSC-46-10-50		**How to Modify FLT Plan**	00021153.0001001	21 MAR 17
	Criteria: P4502				
	Applicable to: ALL				
E	DSC-46-10-60		**ATC MSG RECORD NOT RELIABLE - Displayed at ATSU Power-up**	00024038.0001001	28 MAY 20
	Criteria: P8629				
E	**Applicable to: MSN 02734, 02924, 03032-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**Introduction**	00021223.0001001	04 JUN 19
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**General**	00021224.0001001	20 MAR 17
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**Landing Application**	00021225.0001001	20 MAR 17
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**Takeoff Application**	00021226.0001001	20 MAR 17
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**In-flight Application**	00023257.0001001	04 JUN 19
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**Loadsheet Application**	00021227.0001001	20 MAR 17
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**OPS Library Application**	00021228.0001001	20 MAR 17
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**Electronic QRH Application**	00021515.0001001	04 JUN 19
	DSC-46-20-20 Criteria: SA **Applicable to: ALL**		**Manager Application**	00021229.0001001	20 MAR 17
	DSC-46-40-10 Criteria: SA **Applicable to: ALL**		**General**	00017604.0001001	04 MAY 18
	DSC-46-40-20 Criteria: SA **Applicable to: ALL**		**IN SEAT POWER SUPPLY SYSTEM** ◁	00017606.0001001	04 MAY 18
	DSC-46-40-30 Criteria: SA **Applicable to: ALL**		**MOBILE COM PB-SW** ◁	00017631.0001001	04 MAY 18
	DSC-46-40-30 Criteria: SA **Applicable to: ALL**		**DISC IN PROG Light** ◁	00019278.0001001	21 MAR 17
	DSC-46-40-30 Criteria: SA **Applicable to: ALL**		**CINS RESET PB** ◁	00017630.0001001	10 NOV 15

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-46-40-30		**PAX COM PB-SW** ◁	00021654.0001001	05 JUN 18
	Criteria: SA **Applicable to: ALL**				
	DSC-46-40-30		**PAX SYS PB-SW** ◁	00017735.0001001	05 JUN 18
	Criteria: SA **Applicable to: ALL**				
	DSC-46-40-30		**PAX PERSONAL ELEC SPLY PB-SW** ◁	00017629.0001001	04 MAY 18
	Criteria: SA **Applicable to: ALL**				
	DSC-46-40-30		**MEMO DISPLAY**	00017628.0001001	05 MAY 22
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-49-10-10		**General**	NG01425	
	DSC-49-10-10		**General**	00017436.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-10-10		**Architecture**	00017437.0002001	21 MAR 16
	Criteria: K10494, K2450, SA				
E	**Applicable to: MSN 06871-06876**				
E	DSC-49-10-10		**Architecture**	00017437.0003001	21 MAR 16
	Criteria: 49-1067, 49-1082, G0553, G1213, K10494, K2450, K4457, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
	DSC-49-10-20		**APU Engine**	00001528.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-10-20		**Electronic Control Box**	00001529.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-10-20		**Air Intake System**	00001530.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-10-20		**Starter**	00001531.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-10-20		**Fuel System**	00001532.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-10-20		**Oil System**	00001533.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-10-20		**Inlet Guide Vanes (IGV)**	00001534.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-10-20		**Air Bleed System**	00001535.0002001	03 FEB 11
	Criteria: K10494, K2450, SA				
E	**Applicable to: MSN 06871-06876**				
E	DSC-49-10-20		**Air Bleed System**	00001535.0003001	03 FEB 11
	Criteria: 49-1067, 49-1082, G0553, K10494, K2450, K4457, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
	DSC-49-10-20		**Controls**	00001536.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-49-10-20		**Ground Operation Safety Devices**	00001537.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-20		**Overhead Panel**	NG01426	
	DSC-49-20		**Overhead Panel - Illustration**	00017438.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-20		**O.verhead Panel - Master SW pb-sw**	00017685.0002001	28 MAY 20
	Criteria: 49-1067, 49-1070, 49-1082, G0553, K10003, K10494, K2450, K4457, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
E	DSC-49-20		**Overhead Panel - Master SW pb-sw**	00017685.0003001	28 MAY 20
	Criteria: K10003, K10494, K2450, SA				
E	**Applicable to: MSN 06871-06876**				
E	DSC-49-20		**Overhead Panel - Start pb-sw**	00017439.0002001	28 MAY 20
	Criteria: K10494, K2450, SA				
E	**Applicable to: MSN 06871-06876**				
E	DSC-49-20		**Overhead Panel - Start pb-sw**	00017439.0003001	28 MAY 20
	Criteria: 49-1067, 49-1082, G0553, K10494, K2450, K4457, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
	DSC-49-20		**External Controls**	00001539.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-20		**ECAM APU Page**	NG01427	
	DSC-49-20		**ECAM - APU Page**	00017440.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-20		**ECAM - AVAIL**	00017441.0002001	21 MAR 16
	Criteria: K10494, K2450, SA				
E	**Applicable to: MSN 06871-06876**				
E	DSC-49-20		**ECAM - AVAIL**	00017441.0001001	21 MAR 16
	Criteria: 49-1067, 49-1082, G0553, K10494, K2450, K4457, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
	DSC-49-20		**ECAM - APU Bleed Air Valve Position**	00017442.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-20		**ECAM - APU Bleed Air Pressure**	00017443.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	DSC-49-20		**ECAM - APU GEN Line Contactor Indication**	00017444.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-20		**ECAM - APU GEN Parameters**	00017445.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-49-20		**ECAM - FUEL LO PR**	00017446.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-20		**ECAM - FLAP OPEN**	00017447.0001001	21 MAR 16
	Criteria: 49-1067, 49-1082, K10494, K2450, K4457, P6578, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 06871-06876**				
E	DSC-49-20		**ECAM - FLAP OPEN**	00017447.0003001	21 MAR 16
	Criteria: 49-1082, G0553, K10494, K2450, K4457, P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
	DSC-49-20		**ECAM - APU N**	00017448.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-49-20		**ECAM - APU EGT**	00017449.0002001	06 SEP 16
	Criteria: K10494, K2450, SA				
E	**Applicable to: MSN 06871-06876**				
E	DSC-49-20		**ECAM - APU EGT**	00017449.0003001	06 SEP 16
	Criteria: 49-1067, 49-1082, G0553, K10494, K2450, K4457, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
	DSC-49-20		**ECAM - LOW OIL LEVEL**	00017450.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

	DSC-49-20		**Memo Display**	00016689.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	DSC-52-10-10		**Description**	00001544.0023001	03 NOV 21
	Criteria: K0024, K2113, K30154, SA, 321-200NX **Applicable to: MSN 11531**				
E	DSC-52-10-10		**Description**	00001544.0002001	22 MAY 12
E	Criteria: K0024, SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-52-10-10		**Description**	00001544.0004001	22 MAY 12
	Criteria: K3154, SA **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345**				
	DSC-52-10-10		**Description**	00001544.0007001	22 MAY 12
	Criteria: K0024, K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	DSC-52-10-10		**Description**	00001544.0016001	02 JUL 12
	Criteria: 52-1157, K0024, SA **Applicable to: MSN 04827-04860**				
	DSC-52-10-20		**General**	00017564.0001001	12 MAY 22
	Criteria: SA **Applicable to: ALL**				
	DSC-52-10-20		**Outside**	00017565.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-52-10-20		**Inside**	00001547.0002001	22 MAY 12
	Criteria: P4497, SA **Applicable to: ALL**				
	DSC-52-10-30		**Cockpit**	00017567.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
N	DSC-52-10-30		**Cabin**	00017568.0011001	09 MAR 18
	Criteria: K30154, A321, 321-200NX **Applicable to: MSN 11531**				
E	DSC-52-10-30		**Cabin**	00017568.0001001	06 DEC 16
E	Criteria: A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-52-10-30		**Cabin**	00017568.0002001	20 MAR 17
	Criteria: 52-1157, A319, A320 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-52-10-30		**Cabin**	00017568.0004001	06 DEC 16
	Criteria: A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-52-10-40		**General**	00017569.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-52-10-40		**Fwd and Aft Cargo Doors**	00017570.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-52-10-40		**Bulk Cargo Door** ◁	00017571.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-52-10-40		**Location of Service Panels**	00020676.0002001	17 MAR 17
	Criteria: K2938, SA				
	Applicable to: ALL				
	DSC-52-10-50		**Avionics Compartment Access Door**	00017579.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-52-10-60		**Cockpit Door**	00017573.0002001	21 MAR 17
	Criteria: 25-1305, K7755, K7790, SA				
E	**Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-52-10-60		**Cockpit Door**	00017573.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01251, 01518, 01593-01628				
	DSC-52-10-80		**Door Slides**	00001555.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: ALL				
N	DSC-52-10-80		**Wing Slides**	00001556.0008001	09 MAR 18
	Criteria: K2113, K30154, SA, 321-200NX				
	Applicable to: MSN 11531				
E	DSC-52-10-80		**Wing Slides**	00001556.0001001	09 OCT 12
	Criteria: SA, A320				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	DSC-52-10-80		**Wing Slides**	00001556.0002001	09 MAR 18
	Criteria: 52-1157, K3154, SA, A320				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-52-10-80		**Escape Slide Arrangement**	00017577.0001001	26 NOV 19
	Criteria: A320				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
N	DSC-52-10-80		**Escape Slide Arrangement**	00017577.0011001	09 MAR 18
	Criteria: K30154, A321, 321-200NX				
	Applicable to: MSN 11531				
	DSC-52-10-80		**Escape Slide Arrangement**	00017577.0004001	26 NOV 19
	Criteria: A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-52-10-80		**Escape Slide Arrangement**	00017577.0003001	21 MAR 16
	Criteria: 52-1157, A319, A320				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345				
N	DSC-52-20		**DOOR/OXY SD Page**	00017645.0008001	28 MAY 20
	Criteria: A321, 321-200NX				
	Applicable to: MSN 11531				
	DSC-52-20		**DOOR/OXY SD Page**	00017645.0004001	28 MAY 20
	Criteria: A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
E	DSC-52-20		**DOOR/OXY SD Page**	00017645.0001001	28 MAY 20
	Criteria: A319, A320				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	DSC-52-40-10		**Cockpit Door Description**	00017010.0001001	17 MAR 17
	Criteria: 25-1305, K7755, K7790				
E	**Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-52-40-20		**COCKPIT DOOR LOCKING SYSTEM (CDLS)**	00001007.0001001	21 MAR 17
	Criteria: 25-1305, K7755, K7790				
E	**Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-52-40-20		**Controls**	NG00078	
E	DSC-52-40-20		**Controls - Keypad**	00001008.0001001	21 MAR 17
	Criteria: 25-1305, K7755, K7790				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-52-40-20		**Central Pedestal Cockpit Door Panel**	00018437.0001001	17 MAR 17
	Criteria: 25-1305, K7755, K7790				
E	**Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-52-40-20		**Controls - Overhead Control Panel**	00001010.0001001	09 OCT 12
	Criteria: 25-1305, K7755, K7790				
E	**Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	DSC-52-40-30		**General**	00018415.0002001	17 MAR 17
	Criteria: 23-1208, 23-1695, K7778				
E	**Applicable to: MSN 01459, 02321, 02734, 04827-04860, 05005, 05097, 08635-09324, 10949-11522, 11572-11597**				
E	DSC-52-40-30		**General**	00018415.0001001	17 MAR 17
	Criteria: K11047				
E	**Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11531**				
E	DSC-52-40-30		**Controls**	NG01753	
E	DSC-52-40-30		**Central Pedestal**	00018416.0004001	17 MAR 17
	Criteria: 23-1695, 31-1276, K7778, K9920, P9824				
E	**Applicable to: MSN 02321, 02734, 04827-04860, 05005, 05097, 08635-09324, 10949-11522, 11572-11597**				
E	DSC-52-40-30		**Central Pedestal**	00018416.0003001	17 MAR 17
	Criteria: K11047, P9824				
E	**Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11531**				
	DSC-52-40-30		**Central Pedestal**	00018416.0001001	17 MAR 17
	Criteria: 23-1208				
	Applicable to: MSN 01459				
E	DSC-52-40-30		**Overhead Panel**	00018417.0001001	17 MAR 17
	Criteria: 23-1208, 23-1695, 31-1276, K11047, K7778, K9920, P9824, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 04827-04860, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08635-09324, 10949-11597**				
	DSC-52-50		**How to Operate the Cockpit Door**	00020495.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-52-50		**How to Operate the Fwd and Aft Cargo Door**	00020574.0003001	17 MAR 17
	Criteria: K1420, K4725, SA				
	Applicable to: ALL				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-52-50		**How to Operate the Fwd and Aft Cargo Doors (Auxiliary Operation)**	00020577.0002001	17 MAR 17
	Criteria: K2938, SA **Applicable to: ALL**				
	DSC-52-70		**Erroneous Activation of the Cabin Pressure Warning Lights without Residual differential Pressure**	00023541.0001001	02 DEC 19
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-56-10		**General**	00000998.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-56-20		**Fixed Windows**	00000999.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-56-30		**Sliding Windows**	00018432.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	DSC-56-40		**Description**	00013772.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-70-05		**Overview**	NG01471	
E	DSC-70-05		**Overview**	00018242.0007001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-05		**Overview**	00018242.0004001	21 MAR 16
	Criteria: V2500-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-05		**Overview**	00018242.0002001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-05		**Architecture**	00018265.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-10		**Engine**	00018361.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-70-10		**Engine**	00018362.0007001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-10		**Engine**	00018362.0004001	21 MAR 16
	Criteria: V2500-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-10		**Engine**	00018362.0002001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-10		**LP Compressor Turbine Assembly**	00018289.0007001	04 JUN 19
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-10		**LP Compressor Turbine Assembly**	00018289.0004001	21 MAR 16
	Criteria: V2500-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-10		**LP Compressor Turbine Assembly**	00018289.0002001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-70-10		**HP Compressor Turbine Assembly**	00018290.0007001	09 JAN 18
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-10		**HP Compressor Turbine Assembly**	00018290.0003001	21 MAR 16
	Criteria: V2500-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-10		**HP Compressor Turbine Assembly**	00018290.0001001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-10		**Combustion Chamber**	00018292.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-10		**Accessory Gearbox**	00018364.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-20		**General**	00020869.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-20		**Architecture**	00001566.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	DSC-70-20		**Architecture**	00001566.0014001	25 FEB 14
	Criteria: PW1100G-JM, K6443				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-20		**Architecture**	00001566.0005001	21 MAR 16
	Criteria: CFMI, K6443, P2294				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-20		**Architecture**	00001566.0006001	21 MAR 16
	Criteria: IAE, K6443				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-20		**Functions**	00001567.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-20		**Functions**	00001567.0003001	21 MAR 16
	Criteria: 73-1075, P7876, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-20		**Functions**	00001567.0004001	16 NOV 15
E	Criteria: PW1100G-JM, SA **Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-20		**Idle Control**	00015374.0002001	03 DEC 15
E	Criteria: PW1100G-JM, SA **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-20		**Idle Control**	00015374.0001001	17 NOV 14
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
E	DSC-70-30-10		**General**	00020872.0002001	17 MAR 17
E	Criteria: CFMI, IAL, P2196 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
E	DSC-70-30-20		**Thrust Levers**	00020873.0002001	28 MAY 20
E	Criteria: CFMI, IAL, P2196 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
E	DSC-70-30-30		**Thrust Rating Limit**	00001571.0002001	04 DEC 17
E	Criteria: IAL, P13922 **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-30-30		**Thrust Rating Limit**	00001571.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
R	DSC-70-30-40		**Manual Mode**	00001572.0002001	02 MAY 23
E	Criteria: IAL, P13922 **Applicable to: MSN 08495-09324, 10949-11597**				
R	DSC-70-30-40		**Manual Mode**	00001572.0001001	02 MAY 23
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
E	DSC-70-30-40		**Automatic Mode**	00020874.0003001	18 MAY 22
E	Criteria: CFMI, IAL, P3379 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
E	DSC-70-30-40		**Thrust Control Malfunction Logic**	00005364.0003001	16 NOV 15
E	Criteria: IAL **Applicable to: MSN 08495-09324, 10949-11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-70-35-10		**General**	00020875.0001001	17 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-20		**General**	00001576.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-20		**EPR Mode**	00020876.0001001	17 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-20		**N1 Modes**	00020877.0001001	10 MAY 21
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-20		**EPR Recovery Logic**	00001579.0001001	03 APR 13
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-30		**Thrust Levers**	00020878.0002001	04 NOV 20
	Criteria: IAE, P2196 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-40		**Thrust Rating Limit**	00001581.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-50		**Manual Mode**	00001582.0001001	03 NOV 21
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-35-50		**Automatic Mode**	00001583.0003001	18 MAY 22
	Criteria: IAE, P3379				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-40		**General**	00020868.0001001	17 MAR 17
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-40		**Fuel pump Unit**	00001586.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-40		**Shut-Off Valves**	00001587.0001001	12 MAY 16
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-40		**Hydromechanical Unit**	NG01818	
	DSC-70-40		**General**	00001588.0001001	17 MAR 17
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-40		**Fuel Flow**	00020880.0001001	17 MAR 17
	Criteria: CFMI, P2294 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-40		**Overspeed Governor System**	00001590.0001001	17 MAR 17
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-40		**Fuel Hydraulic Signals**	00001592.0002001	17 MAR 17
	Criteria: CFMI, P7919, P8069 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-40		**IDG Cooling System**	00001593.0001001	26 JUL 12
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	DSC-70-40		**IDG Cooling System**	00001593.0002001	26 JUL 12
	Criteria: CFMI, K2113 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-70-45		**General**	00001594.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-45		**Fuel Pump Unit**	00001595.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-45		**Fuel Oil Heat Exchanger**	00001596.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-45		**Fuel Metering Unit**	00020882.0002001	17 MAR 17
	Criteria: IAE, P3106 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-45		**Fuel Filter**	00001599.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				

	DSC-70-45		**IDG Cooling Recirculation System**	NG01817	
	DSC-70-45		**General**	00020885.0001001	17 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-45		**Two Returns to Tank Modes**	00001601.0001001	17 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-45		**Two No-Returns to Tank Modes**	00001602.0001001	17 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-70-48		**General**	00015367.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-48		**Integrated Fuel Pump and Control (IFPC)**	00015368.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-48		**Fuel Oil Heat Exchanger**	00015369.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-48		**Fuel Filter**	00015370.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-48		**IDG Cooling Recirculation System**	00020917.0001001	17 MAR 17
E	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-50		**General**	00001603.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-50		**General**	00001603.0003001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
E	DSC-70-50		**General**	00001603.0004001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-60		**General**	00001604.0002001	21 MAR 17
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-60		**Cooling**	00001605.0002001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-65		**General**	00012945.0001001	21 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-65		**Cooling**	00012946.0001001	20 DEC 10
	Criteria: IAE				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-65		**Engine Stability**	00012947.0001001	20 DEC 10
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-68		**General**	00015397.0001001	21 MAR 17
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-68		**Cooling**	00015398.0001001	16 NOV 15
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-68		**Engine Stability**	00015399.0001001	06 JAN 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-70		**General**	00020918.0006001	17 MAR 17
	Criteria: PW1100G-JM, P4121				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-70		**General**	00020918.0004001	17 MAR 17
	Criteria: IAE, P4121				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-70		**General**	00020918.0003001	17 MAR 17
	Criteria: CFMI, P4121				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-70		**Actuation Logic**	00020920.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-70		**Protection**	00020921.0006001	17 MAR 17
	Criteria: IAE, P4121				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-70		**Protection**	00020921.0004001	17 MAR 17
	Criteria: PW1100G-JM, P4121				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-70		**Protection**	00020921.0002001	17 MAR 17
	Criteria: CFMI, P4281, P4528				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-70		**Schematic**	00020919.0014001	17 MAR 17
	Criteria: CFMI, K2113, P4121				
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	DSC-70-70		**Schematic**	00020919.0006001	17 MAR 17
	Criteria: CFMI, P4121				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	DSC-70-70		**Schematic**	00020919.0005001	17 MAR 17
	Criteria: IAE, PW1100G-JM, K2113, P4121				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**				
	DSC-70-80-10		**General**	00020922.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
E	DSC-70-80-20		**Architecture**	00001617.0001001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-80-20		**Architecture**	00001617.0002001	21 MAR 16
	Criteria: CFMI, IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
	DSC-70-80-30		**General**	00020923.0001001	17 MAR 17
	Criteria: CFMI, IAE, IAL				
	Applicable to: ALL				
	DSC-70-80-30		**Ignition for Starting**	00020924.0001001	28 MAY 20
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-80-30		**Ignition for Starting**	00020924.0002001	28 MAY 20
	Criteria: G-CFM56-5B3, G-CFM56-5B4				
	Applicable to: MSN 04441-04465, 04827-04860, 05184, 05591, 05752, 06139, 06173, 06414				
	DSC-70-80-30		**Ignition for Starting**	00020924.0018001	28 MAY 20
	Criteria: 73-1103, 73-1112, G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6, P14708				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04544, 04734-04756, 04953-05107, 05222-05342, 05621-05749, 05883, 06409, 06528-07098				
E	DSC-70-80-30		**Ignition for Starting**	00020924.0017001	28 MAY 20
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-70-80-30		**Continuous Ignition**	00001620.0004001	04 SEP 18
	Criteria: CFMI, P7919, P8069				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-80-30		**Continuous Ignition**	00001620.0003001	04 SEP 18
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-80-30		**Continuous Ignition**	00001620.0005001	04 SEP 18
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-80-40		**General**	00001621.0001001	21 MAR 16
	Criteria: CFMI, IAE, PW1100G-JM				
	Applicable to: ALL				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	DSC-70-80-40		**Automatic Starting**	NG01759	
	DSC-70-80-40		**General**	00020932.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-80-40		**Protection**	00020933.0008001	04 NOV 20
	Criteria: IAE, P4985, P5577				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-80-40		**Protection**	00020933.0001001	04 NOV 20
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-80-40		**Protection**	00020933.0004001	04 NOV 20
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-80-40		**Dry Cranking**	00020934.0003001	21 MAR 17
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-80-40		**Dry Cranking**	00020934.0002001	21 MAR 17
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-80-40		**Windmilling**	00020935.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-70-80-40		**Automatic Starting Sequence**	NG01758	
	DSC-70-80-40		**Sequence of the Automatic Start**	00020925.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-80-40		**Initial Configuration of the Controls**	00020926.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-80-40		**First Step**	00020927.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-80-40		**Second Step**	00020928.0005001	28 MAY 20
	Criteria: IAE, P5577				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-80-40		**Second Step**	00020928.0004001	28 MAY 20
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-80-40		**Second Step**	00020928.0001001	28 MAY 20
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-80-40		**Third Step**	00020929.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-80-40		**Interruption of the Automatic Start**	00020930.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-70-80-40		**Manual Starting**	00020937.0004001	28 MAY 20
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-80-40		**Manual Starting**	00020937.0002001	28 MAY 20
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-80-40		**Manual Starting**	00020937.0001001	28 MAY 20
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	DSC-70-80-40		**Engine Ventilation (Dry Cranking)**	00020938.0001001	21 MAR 17
	Criteria: CFMI, IAE, IAL				
	Applicable to: ALL				
E	DSC-70-80-40		**Engine Cooling**	00020228.0004001	21 OCT 16
	Criteria: PW1100G-JM, P15967, P15994				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-80-40		**Automatic Engine Start with Dual Cooling - Envelope**	00020229.0020001	04 JUN 19
	Criteria: K4457, P15967, P20189, P20300				
	Applicable to: MSN 08529				
E	DSC-70-80-40		**Automatic Engine Start with Dual Cooling - Envelope**	00020229.0023001	04 JUN 19
	Criteria: K10494, K2450, K4457, P15967, P20189, P20300, P21030, P21650				
E	**Applicable to: MSN 08495, 08596-09324, 10949-11597**				
E	DSC-70-90-10		**ENG MAN START Panel**	NG01474	
E	DSC-70-90-10		**ENG MAN START Panel**	00018366.0003001	21 OCT 16
	Criteria: P15967, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-10		**ENG MAN START Panel**	00018366.0002001	21 MAR 16
	Criteria: IAE, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-10		**ENG MAN START Panel**	00018366.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-90-10		**ENG MAN START pb-sw**	00018370.0001001	12 MAY 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-10		**ENG N1 MODE Panel**	NG01477	
	DSC-70-90-10		**ENG N1 MODE Panel**	00018374.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-10		**ENG N1 MODE pb-sw**	00018375.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	DSC-70-90-10		**ENG DUAL COOLING Panel**	NG01706	
E	DSC-70-90-10		**ENG DUAL COOLING Panel**	00020022.0001001	21 OCT 16
	Criteria: P15967				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-90-10		**ENG DUAL COOLING pb-sw**	00020023.0001001	21 OCT 16
	Criteria: P15967				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-70-90-20		**ENG MODE Selector and ENG MASTER Levers**	NG01475	
	DSC-70-90-20		**ENG MODE Selector and ENG MASTER Levers**	00018367.0001001	12 OCT 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-20		**ENG MODE Selector**	00018373.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-20		**ENG MASTER Lever**	00018371.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-20		**ENG 1(2) FAULT / FIRE Light**	00018372.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-70-90-20		**Thrust Levers**	NG01476	
	DSC-70-90-20		**Overview**	00018368.0001001	28 JUL 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-20		**Thrust Levers**	00018376.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-20		**Thrust Detents and Stops**	00018377.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-20		**Thrust Reverser Levers**	00018378.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-20		**A/THR Instinctive Disconnect pb**	00018379.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-70-90-30		**ENG FADEC GND PWR Panel**	NG01473	
	DSC-70-90-30		**ENG FADEC GND PWR Panel**	00018365.0001001	12 OCT 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-30		**ENG FADEC GND PWR pb-sw**	00018369.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-70-90-40		**Engine/Warning Display**	NG01449	
E	DSC-70-90-40		**Engine Warning Display**	00017843.0006001	12 OCT 16
	Criteria: PW1100G-JM, P15967, P15994, P6578				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**Engine Warning Display**	00017843.0004001	12 OCT 16
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-40		**Engine Warning Display**	00017843.0003001	12 OCT 16
	Criteria: CFMI, P6578				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-90-40		**Engine Warning Display**	00017843.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-70-90-40		**A FLOOR Indication**	00017845.0001001	18 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Thrust Rating Mode and Thrust Limit Value**	00017846.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Thrust Rating Mode and Thrust Limit Value**	00017847.0004001	12 OCT 16
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**Thrust Rating Mode and Thrust Limit Value**	00017847.0003001	21 MAR 16
	Criteria: CFMI, IAL, P13922, P6578				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-70-90-40		**Thrust Rating Mode and Thrust Limit Value**	00017847.0002001	21 MAR 16
	Criteria: IAE				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-70-90-40		**Thrust Rating Modes**	00018201.0001001	05 MAR 19
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Thrust Limit Value**	00018203.0002001	21 MAR 16
	Criteria: IAE, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**Thrust Limit Value**	00018203.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
E	DSC-70-90-40		**Flex Temperature**	00017849.0002001	12 MAY 16
	Criteria: PW1100G-JM, P14628, P14825, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**Flex Temperature**	00017849.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-70-90-40		**Bleed Air Configuration**	00017851.0001001	18 MAY 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**IDLE Indication**	00018209.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**AVAIL Indication**	00018210.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**REV Indication**	00018211.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**EGT Indicator**	00018213.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Current EGT**	00018216.0002001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-90-40		**Current EGT**	00018216.0003001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-70-90-40		**Current EGT**	00018216.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
E	DSC-70-90-40		**EGT Limit**	00018218.0008001	18 MAY 18
	Criteria: PW1100G-JM, P20903				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**EGT Limit**	00018218.0007001	21 MAR 16
	Criteria: IAE, G-V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	DSC-70-90-40		**EGT Limit**	00018218.0003001	21 MAR 16
	Criteria: CFM56-5B **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-90-40		**EGT Limit**	00018218.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	DSC-70-90-40		**EGT Exceedance**	00018219.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	DSC-70-90-40		**EGT Red Line**	00018220.0007001	21 MAR 16
	Criteria: IAE, V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
E	DSC-70-90-40		**EGT Red Line**	00018220.0006001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**EGT Red Line**	00018220.0003001	21 MAR 16
	Criteria: CFM56-5B **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	DSC-70-90-40		**EGT Red Line**	00018220.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	DSC-70-90-40		**EPR Indicator**	00018221.0005001	12 OCT 16
	Criteria: IAE, P6578 **Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-70-90-40		**EPR Indicator**	00018221.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-70-90-40		**Current EPR**	00018222.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-40		**EPR Trend**	00018223.0001001	21 MAR 16
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-40		**EPR Command**	00018224.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-40		**Transient EPR**	00018225.0002001	21 MAR 16
	Criteria: IAE, P6578				
	Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-40		**Transient EPR**	00018225.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-70-90-40		**Thrust Lever Position**	00018226.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-40		**EPR Limit**	00018227.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	DSC-70-90-40		**N1 Indicator**	00018228.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**N1 Indicator**	00018228.0001001	21 MAR 16
	Criteria: CFMI, IAL				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	DSC-70-90-40		**Current N1**	00018229.0006001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**Current N1**	00018229.0003001	04 JUL 17
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-90-40		**Current N1**	00018229.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**N1 Trend**	00018231.0001001	21 MAR 16
	Criteria: P6578				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
E	DSC-70-90-40		**N1 Command**	00018232.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
E	DSC-70-90-40		**Transient N1**	00018233.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-70-90-40		**Thrust Lever Position**	00018235.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**Thrust Lever Position**	00018235.0001001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**Thrust Lever Position**	00018235.0003001	28 MAY 20
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-90-40		**N1 Limit**	00018236.0002001	21 MAR 16
	Criteria: IAE, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**N1 Limit**	00018236.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				
	DSC-70-90-40		**N1 Exceedance**	00018237.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**N1 Red Line**	00018238.0003001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-90-40		**N1 Red Line**	00018238.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**				
	DSC-70-90-40		**N2**	00018239.0002001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-90-40		**N2**	00018239.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**				
	DSC-70-90-40		**Fuel Flow**	00018243.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Thrust Bump Indication**	00018244.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-70-90-40		**Cooling Indication**	00018563.0003001	16 JUN 16
	Criteria: PW1100G-JM, P15994				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

E	DSC-70-90-40		**ENG SD Page**	NG01465	
	DSC-70-90-40		**ENG SD Page**	00018259.0006001	21 MAR 16
	Criteria: CFM56-5B, P6578				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-90-40		**ENG SD Page**	00018259.0005001	21 MAR 16
	Criteria: IAE, IAL, P6578				
E	**Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**				

Continued on the following page

Continued from the previous page

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	DSC-70-90-40		**ENG SD Page**	00018259.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-70-90-40		**Fuel Used Indication**	00018230.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Fuel Filter CLOG Indication**	00018260.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-70-90-40		**Oil Quantity**	00018262.0006001	22 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**Oil Quantity**	00018262.0002001	22 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-90-40		**Oil Quantity**	00018262.0001001	22 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**Oil Pressure**	00018261.0006001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**Oil Pressure**	00018261.0002001	28 MAY 20
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	DSC-70-90-40		**Oil Pressure**	00018261.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**Oil Temperature**	00018263.0007001	30 AUG 18
	Criteria: 31-1576, CFM56-5B				
E	**Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098**				
E	DSC-70-90-40		**Oil Temperature**	00018263.0006001	21 MAR 16
	Criteria: PW1100G-JM, P20664				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	DSC-70-90-40		**Oil Temperature**	00018263.0002001	21 MAR 16
	Criteria: CFM56-5B				
E	**Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05883, 06139, 06173-06632, 06658-06813, 06876-07005**				

Continued on the following page

Continued from the previous page

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-70-90-40		**Oil Temperature**	00018263.0001001	21 MAR 16
	Criteria: 31-1576, IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-40		**Oil Filter CLOG Indication**	00018266.0002001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**				
	DSC-70-90-40		**Oil Filter CLOG Indication**	00018266.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-90-40		**N1, N2 Vibrations**	00018267.0003001	14 MAR 17
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-40		**N1, N2 Vibrations**	00018267.0001001	21 MAR 16
	Criteria: IAE, CFM56-5B				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	DSC-70-90-40		**Starting Sequence Indication**	00018268.0002001	21 MAR 16
	Criteria: P6578, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	DSC-70-90-40		**Starting Sequence Indication**	00018268.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
	DSC-70-90-40		**Ignition Indication**	00018269.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Start Valve**	00018270.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Starter Inlet Pressure**	00018271.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	DSC-70-90-40		**Nacelle Temperature Indication**	00018272.0006001	21 MAR 16
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
E	DSC-70-90-40		**Nacelle Temperature Indication**	00018272.0003001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

Continued on the following page

Continued from the previous page

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	DSC-70-90-40		**Nacelle Temperature Indication**	00018272.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	DSC-70-90-50		**Memo Display**	NG01696	
E	DSC-70-90-50		**ENG 1(2) COWL**	00019566.0001001	13 MAY 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	DSC-70-90-50		**IGNITION**	00018777.0001001	13 MAY 16
	Criteria: SA				
	Applicable to: ALL				
E	DSC-70-90-50		**DUAL COOLING**	00020037.0003001	09 APR 18
	Criteria: 31-1558, P15967, P20466				
E	**Applicable to: MSN 08635, 10949-11597**				
	DSC-70-90-50		**DUAL COOLING**	00020037.0001001	21 OCT 16
	Criteria: P15967				
	Applicable to: MSN 08495-08596, 09190-09324				
E	DSC-70-95		**Erroneous Detection of Engine Fuel Leak**	00024094.0001001	28 MAY 20
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS

M	Localization	DU Title	DU identification	DU date

No Temporary Documentary Unit

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AIRCRAFT SYSTEMS

AIRCRAFT GENERAL

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DSC-20-10 Overview

General....A
Engines....B
Cockpit....C
Cabin....D
Cargo....E

DSC-20-20 Description

General Arrangement....A
Principal Dimensions....B
Unpressurized Compartments....C
Antenna Locations....D
Ground Service Connections and Panels....E

DSC-20-30 Ground Handling

Taxiing....A
180 degrees Turn on Runway....B

DSC-20-40 Ground Clearance Diagram

Ground Clearance Diagram....A

DSC-20-50 Landing Geometry

ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry....A
Minimum Visual Ground Segments (Flare Phase)....B

DSC-20-60 Visual Ground Geometry

Visual Ground Geometry....A

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Localization Title	Toc Index	ID	Reason
DSC-20-20 Principal Dimensions	B	2	Documentation update: Addition of "Principal Dimensions" documentary unit
DSC-20-40 Ground Clearance Diagram	A	1	Documentation update: Addition of "Ground Clearance Diagram" documentary unit

DSC-20-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-10 General	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-20-10 Cockpit	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-20-20 Principal Dimensions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-20 Ground Service Connections and Panels	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-20 Ground Service Connections and Panels	E	4	Effectivity update: The information now also applies to MSN 11531.
DSC-20-30 Taxiing	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-20-30 Taxiing	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-30 180 degrees Turn on Runway	B	3	Effectivity update: The information now also applies to MSN 11531.
DSC-20-30 180 degrees Turn on Runway	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-40 Ground Clearance Diagram	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-50 ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-50 ILS/GLS ◁ /MLS ◁ Final Approach and Landing Geometry	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-20-50 Minimum Visual Ground Segments (Flare Phase)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-20-50 Minimum Visual Ground Segments (Flare Phase)	B	4	Effectivity update: The information now also applies to MSN 11531.

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GENERAL

Ident.: DSC-20-10-00000284.0001001 / 22 MAR 16

1 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

The A320 is a subsonic, medium-range, civil transport aircraft.

GENERAL

Ident.: DSC-20-10-00000284.0002001 / 13 DEC 10

2 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

The A321 is a subsonic, medium-range, civil transport aircraft.

GENERAL

Ident.: DSC-20-10-00000284.0003001 / 13 DEC 10

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

The A319 is a subsonic, medium-range, civil transport aircraft.

ENGINES

Ident.: DSC-20-10-00000285.0001001 / 13 DEC 10

Applicable to: ALL

The aircraft has two high bypass turbofan engines mounted under the wings.

COCKPIT

Ident.: DSC-20-10-00000286.0002001 / 13 DEC 10

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The cockpit is designed for a two-member crew. It also has a place for 2 observers.

CABIN

Ident.: DSC-20-10-00000287.0007001 / 05 FEB 15

Applicable to: ALL

The passenger seating layout may vary, depending on operating requirements.

CARGO

Ident.: DSC-20-10-00000289.0001001 / 13 DEC 10

Applicable to: ALL

Two cargo compartments are under the cabin floor.

GENERAL ARRANGEMENT

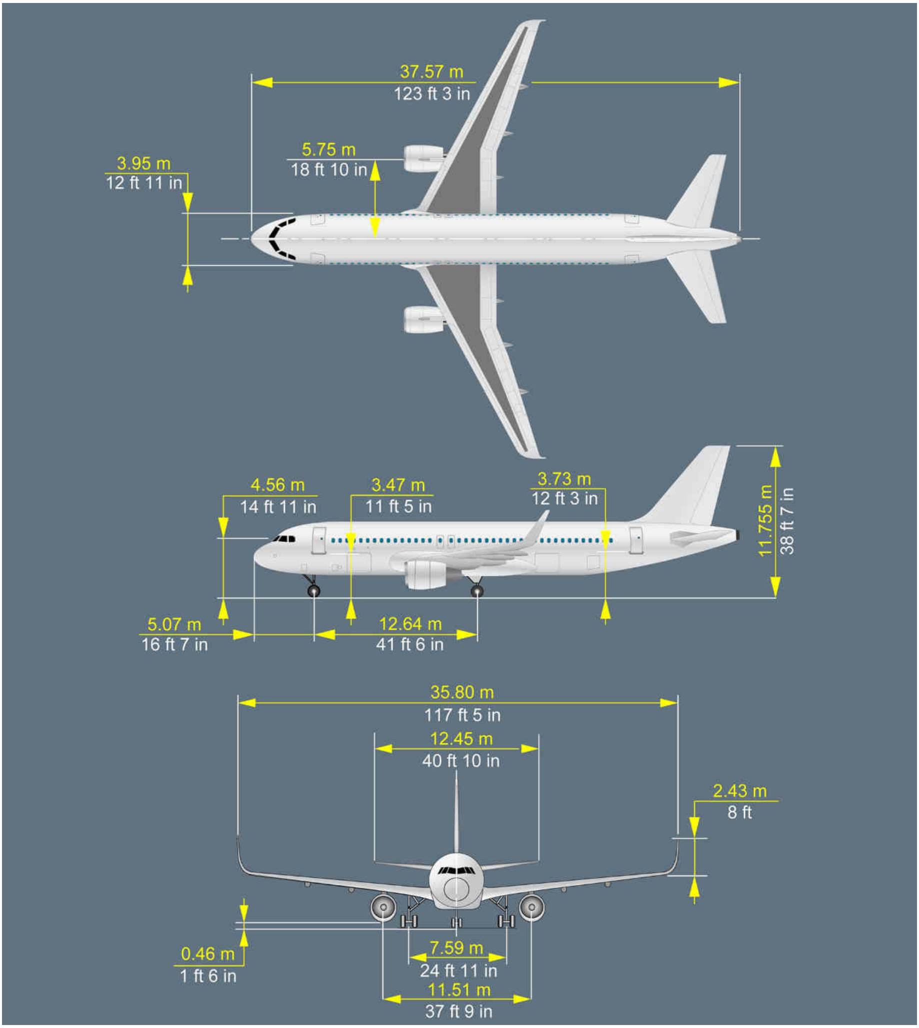
Ident.: DSC-20-20-00000290.0001001 / 21 MAR 16
Applicable to: ALL

This subchapter gives the principal aircraft dimensions, location of unpressurized areas, antennas, ground service connections, and ground maneuvering characteristics.

PRINCIPAL DIMENSIONS

Ident.: DSC-20-20-00000291.0024001 / 12 MAY 22

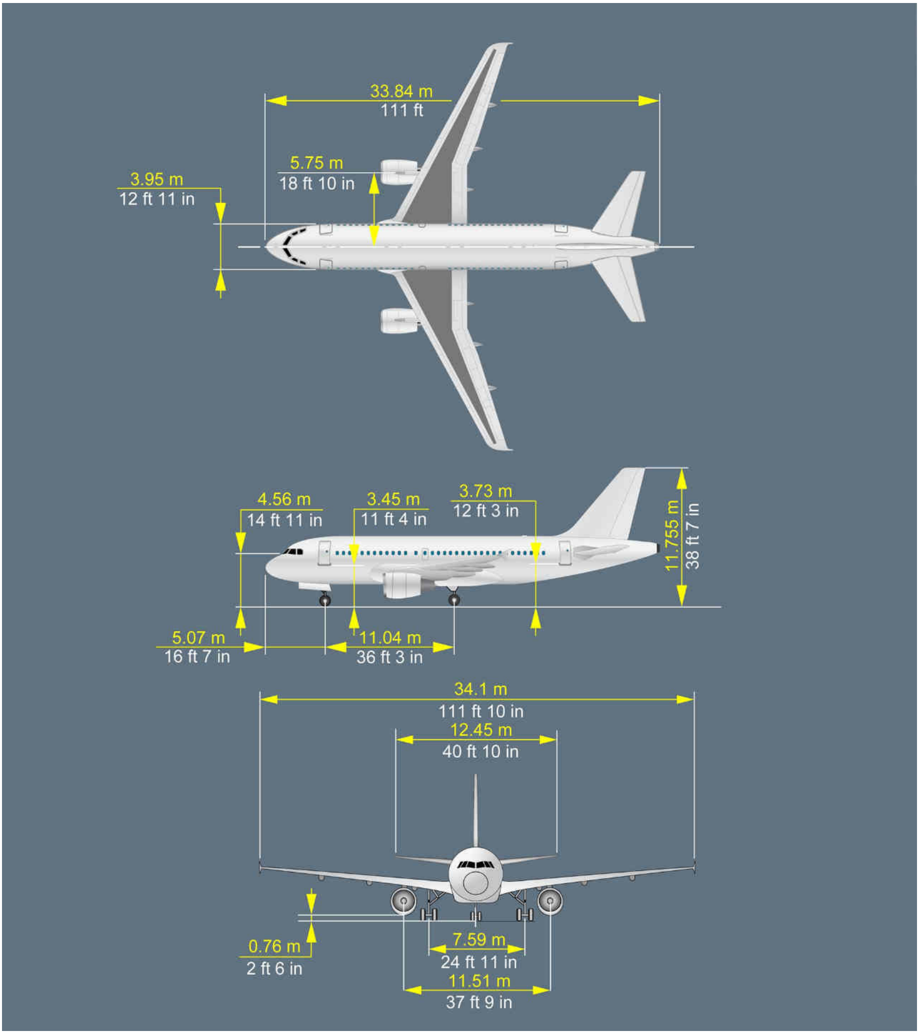
1 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**


37.57 m
123 ft 3 in
5.75 m
18 ft 10 in
3.95 m
12 ft 11 in
4.56 m
14 ft 11 in
3.47 m
11 ft 5 in
3.73 m
12 ft 3 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
12.64 m
41 ft 6 in
35.80 m
117 ft 5 in
12.45 m
40 ft 10 in
2.43 m
8 ft
0.46 m
1 ft 6 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

PRINCIPAL DIMENSIONS

Ident.: DSC-20-20-00000291.0015001 / 26 OCT 22

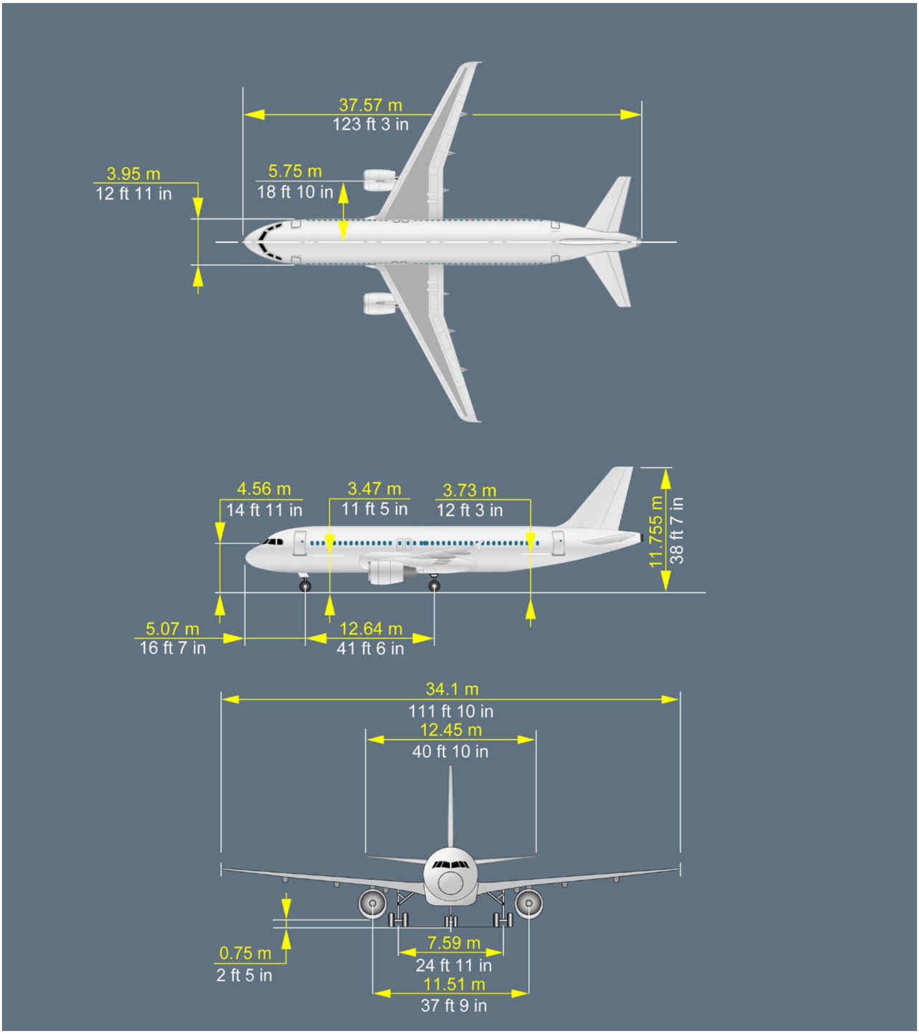
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345


33.84 m
111 ft
5.75 m
18 ft 10 in
3.95 m
12 ft 11 in
4.56 m
14 ft 11 in
3.45 m
11 ft 4 in
3.73 m
12 ft 3 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
11.04 m
36 ft 3 in
34.1 m
111 ft 10 in
12.45 m
40 ft 10 in
0.76 m
2 ft 6 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

PRINCIPAL DIMENSIONS

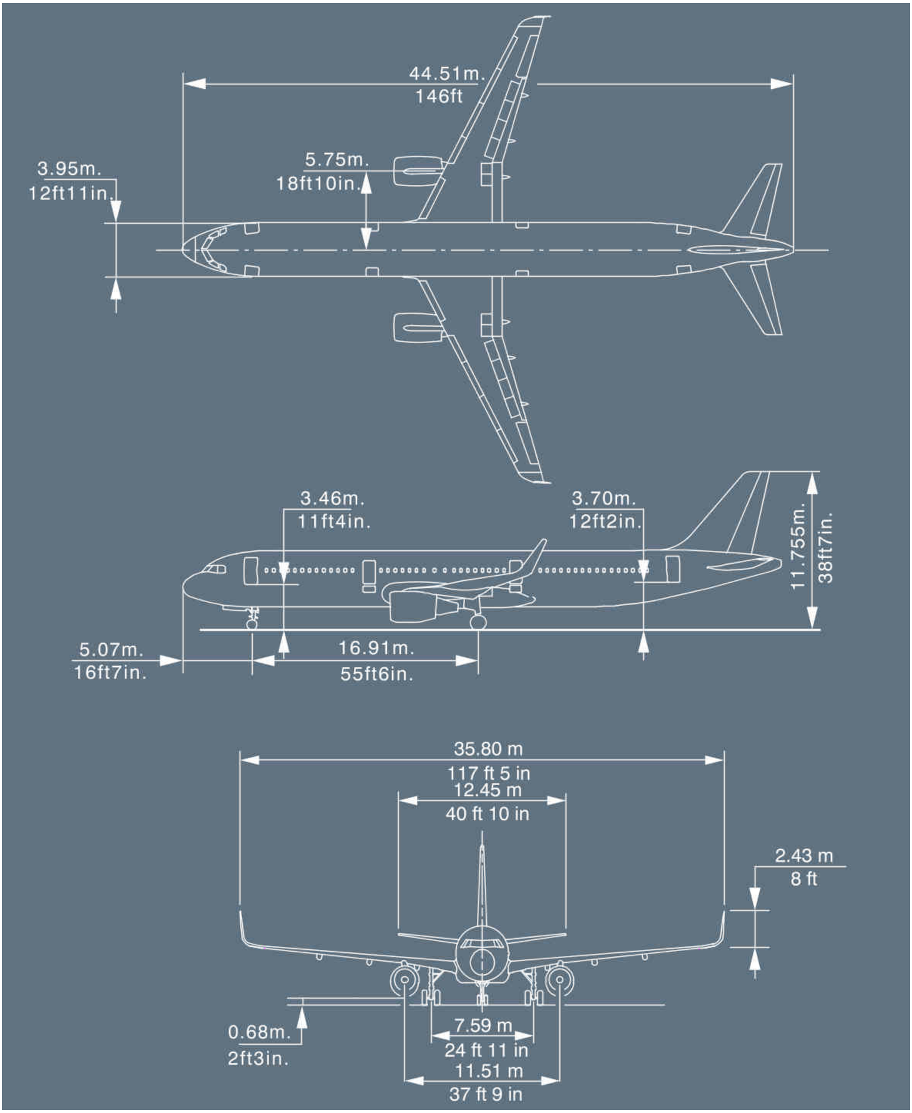
Ident.: DSC-20-20-00000291.0014001 / 26 OCT 22

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904


37.57 m
123 ft 3 in
3.95 m
12 ft 11 in
5.75 m
18 ft 10 in
4.56 m
14 ft 11 in
3.47 m
11 ft 5 in
3.73 m
12 ft 3 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
12.64 m
41 ft 6 in
34.1 m
111 ft 10 in
12.45 m
40 ft 10 in
0.75 m
2 ft 5 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

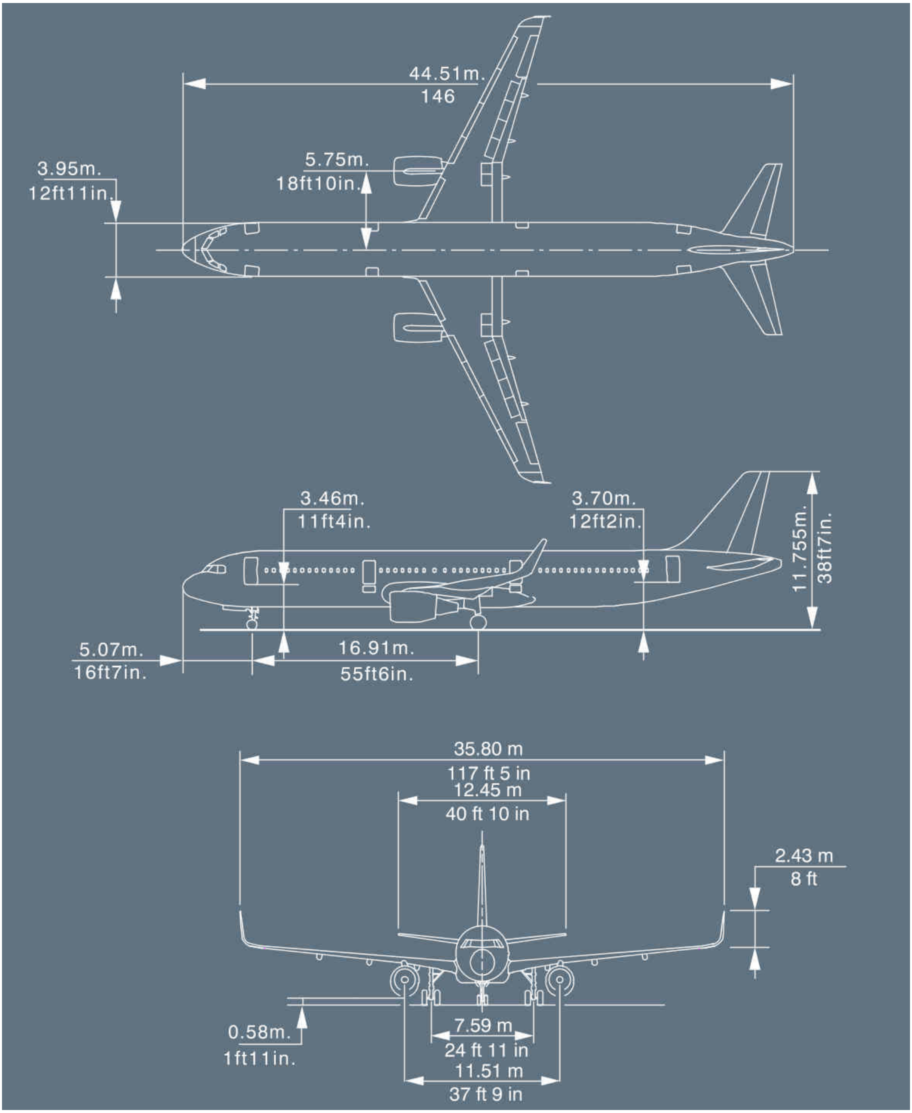
PRINCIPAL DIMENSIONS

Ident.: DSC-20-20-00000291.0013001 / 07 MAY 13


44.51m.
146ft
3.95m.
12ft11in.
5.75m.
18ft10in.
3.46m.
11ft4in.
3.70m.
12ft2in.
11.755m.
38ft7in.
5.07m.
16ft7in.
16.91m.
55ft6in.
35.80 m
117 ft 5 in
12.45 m
40 ft 10 in
2.43 m
8 ft
0.68m.
2ft3in.
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

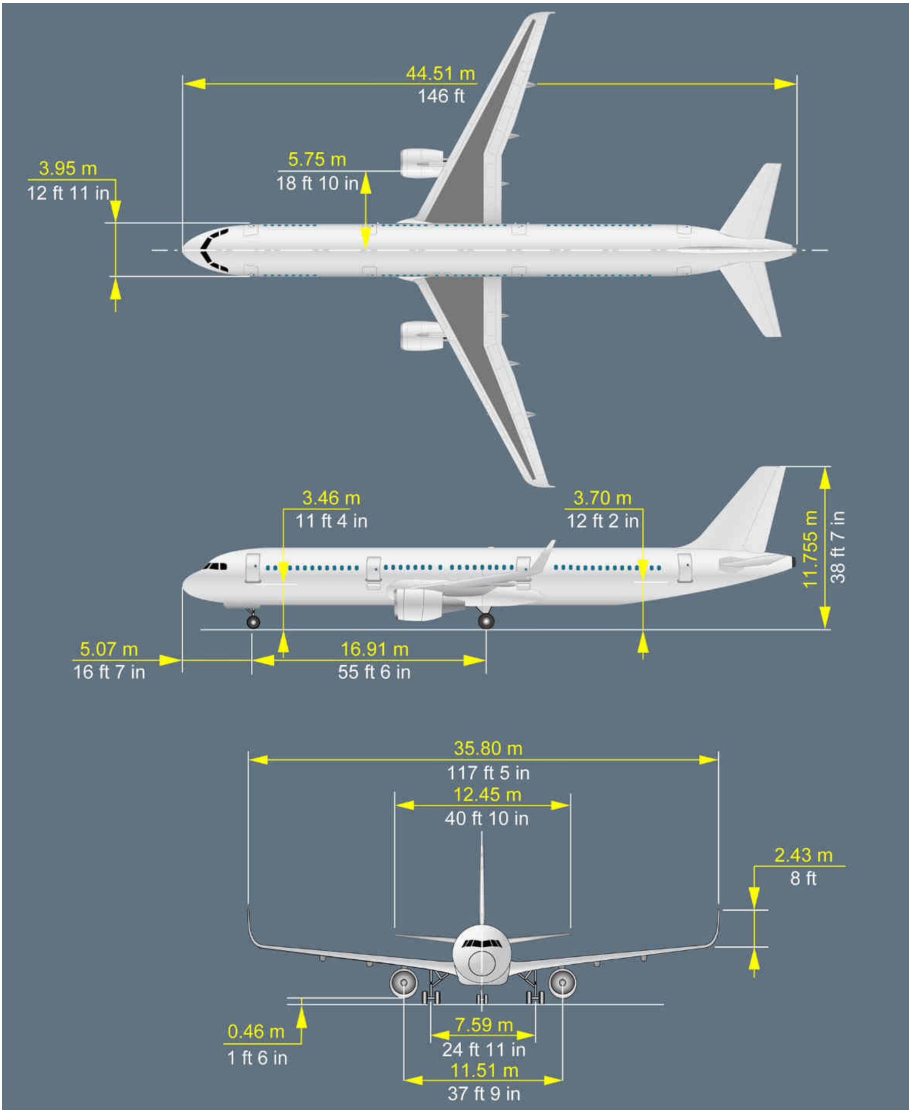
PRINCIPAL DIMENSIONS

Ident.: DSC-20-20-00000291.0012001 / 24 FEB 17


44.51m.
146
3.95m.
12ft11in.
5.75m.
18ft10in.
3.46m.
11ft4in.
3.70m.
12ft2in.
11.755m.
38ft7in.
5.07m.
16ft7in.
16.91m.
55ft6in.
35.80 m
117 ft 5 in
12.45 m
40 ft 10 in
2.43 m
8 ft
0.58m.
1ft11in.
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

PRINCIPAL DIMENSIONS

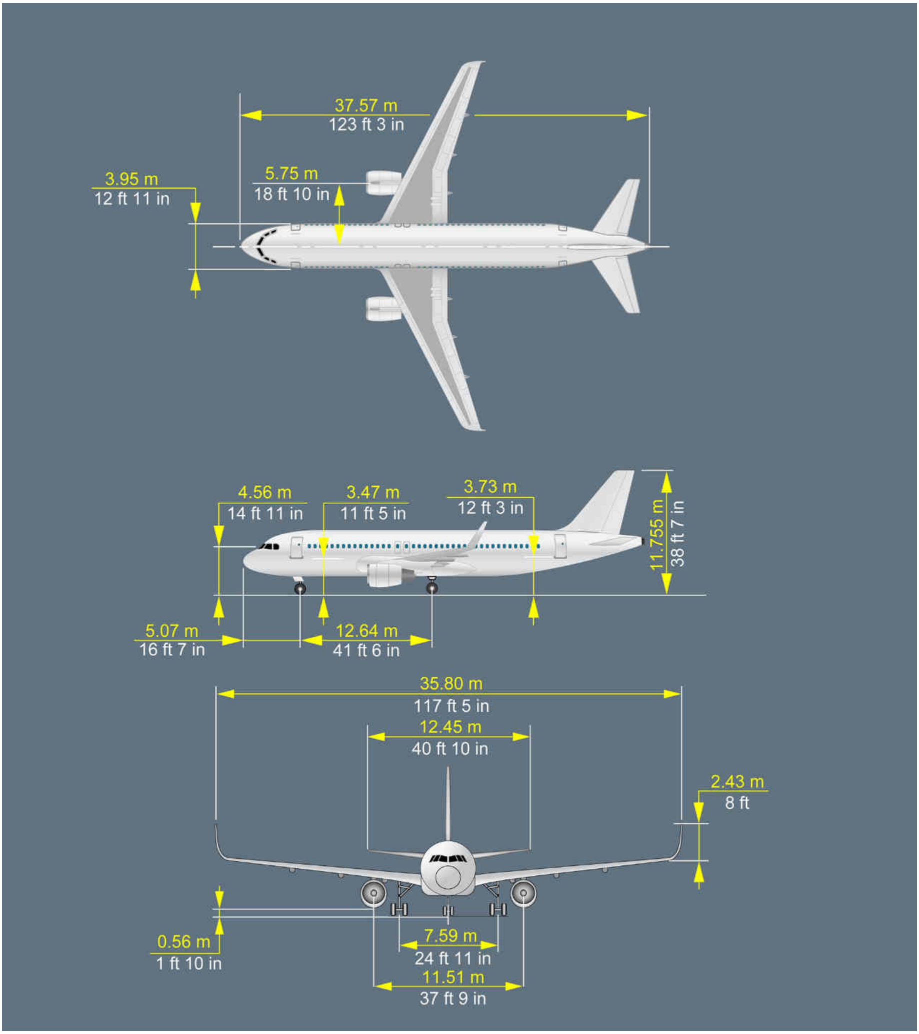
2 Ident.: DSC-20-20-00000291.0026001 / 02 MAY 23
Applicable to: MSN 11531


44.51 m
146 ft
3.95 m
12 ft 11 in
5.75 m
18 ft 10 in
3.46 m
11 ft 4 in
3.70 m
12 ft 2 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
16.91 m
55 ft 6 in
35.80 m
117 ft 5 in
12.45 m
40 ft 10 in
2.43 m
8 ft
0.46 m
1 ft 6 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

PRINCIPAL DIMENSIONS

Ident.: DSC-20-20-00000291.0008001 / 26 OCT 22

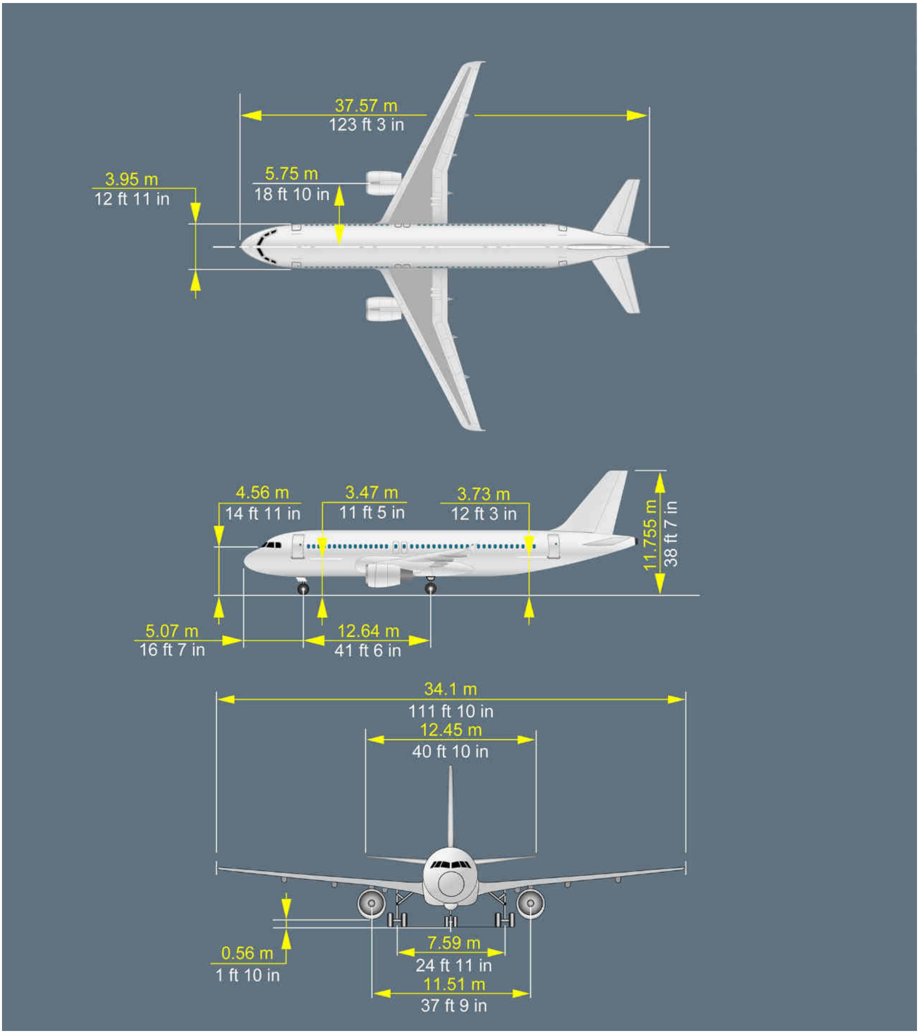
Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


37.57 m
123 ft 3 in
3.95 m
12 ft 11 in
5.75 m
18 ft 10 in
4.56 m
14 ft 11 in
3.47 m
11 ft 5 in
3.73 m
12 ft 3 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
12.64 m
41 ft 6 in
35.80 m
117 ft 5 in
12.45 m
40 ft 10 in
2.43 m
8 ft
0.56 m
1 ft 10 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

PRINCIPAL DIMENSIONS

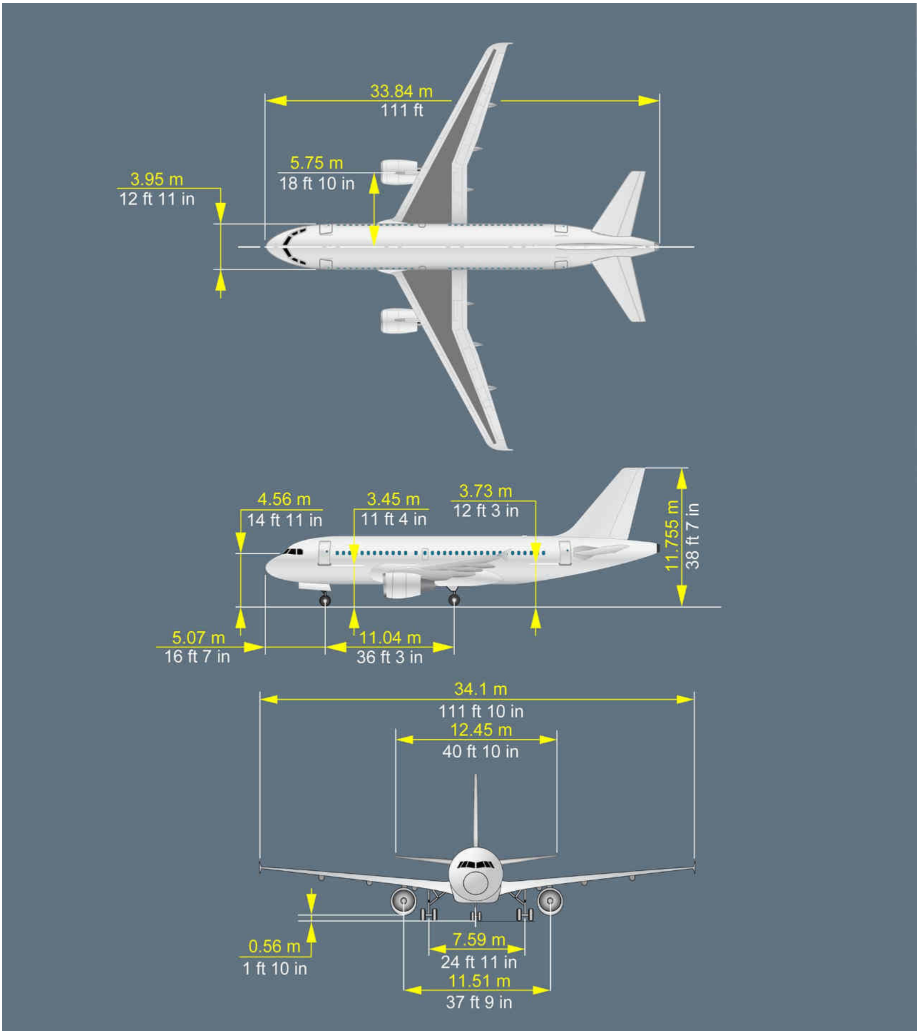
Ident.: DSC-20-20-00000291.0001001 / 26 OCT 22

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240


37.57 m
123 ft 3 in
5.75 m
18 ft 10 in
3.95 m
12 ft 11 in
4.56 m
14 ft 11 in
3.47 m
11 ft 5 in
3.73 m
12 ft 3 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
12.64 m
41 ft 6 in
34.1 m
111 ft 10 in
12.45 m
40 ft 10 in
0.56 m
1 ft 10 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

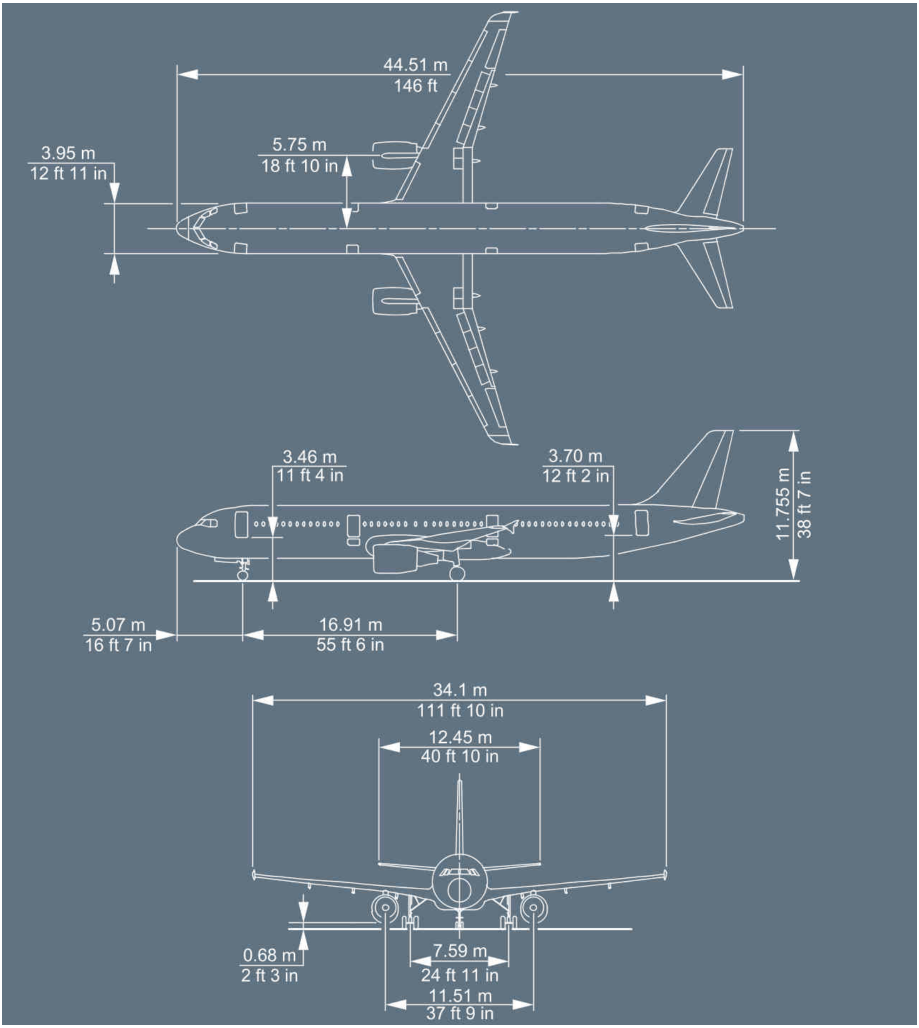
PRINCIPAL DIMENSIONS

Ident.: DSC-20-20-00000291.0002001 / 26 OCT 22
Applicable to: MSN 03733, 04734-04756, 05005, 05097


33.84 m
111 ft
5.75 m
18 ft 10 in
3.95 m
12 ft 11 in
4.56 m
14 ft 11 in
3.45 m
11 ft 4 in
3.73 m
12 ft 3 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
11.04 m
36 ft 3 in
34.1 m
111 ft 10 in
12.45 m
40 ft 10 in
0.56 m
1 ft 10 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

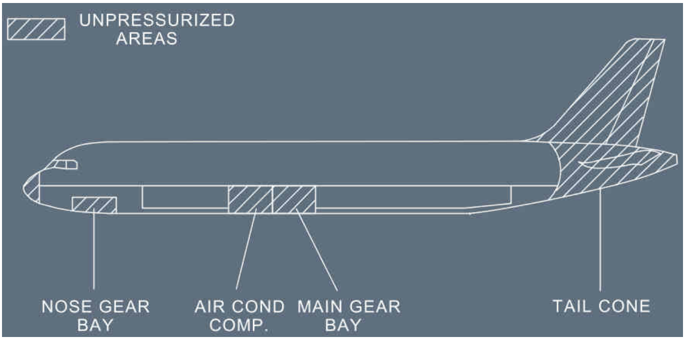
PRINCIPAL DIMENSIONS

Ident.: DSC-20-20-00000291.0006001 / 22 MAY 12
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662


44.51 m
146 ft
5.75 m
18 ft 10 in
3.95 m
12 ft 11 in
3.46 m
11 ft 4 in
3.70 m
12 ft 2 in
11.755 m
38 ft 7 in
5.07 m
16 ft 7 in
16.91 m
55 ft 6 in
34.1 m
111 ft 10 in
12.45 m
40 ft 10 in
0.68 m
2 ft 3 in
7.59 m
24 ft 11 in
11.51 m
37 ft 9 in

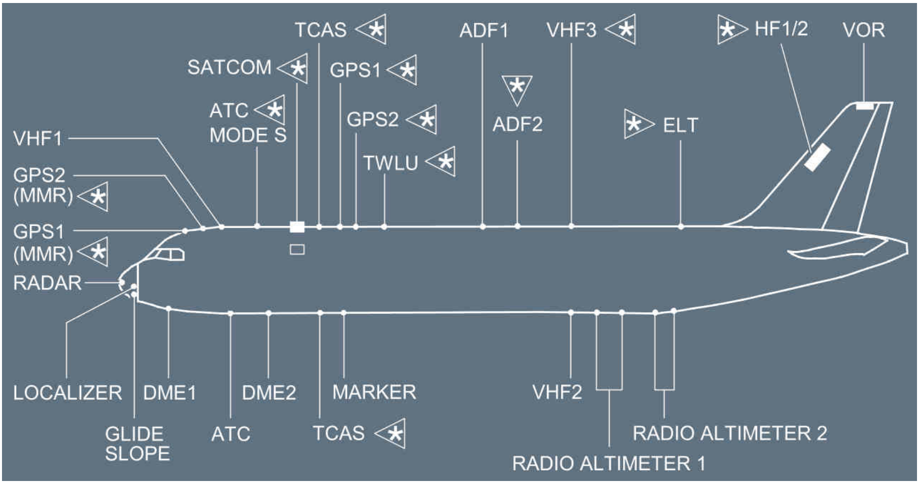
UNPRESSURIZED COMPARTMENTS

Ident.: DSC-20-20-00000292.0001001 / 21 MAR 16
Applicable to: ALL


UNPRESSURIZED AREAS
NOSE GEAR BAY
AIR COND COMP.
MAIN GEAR BAY
TAIL CONE

ANTENNA LOCATIONS

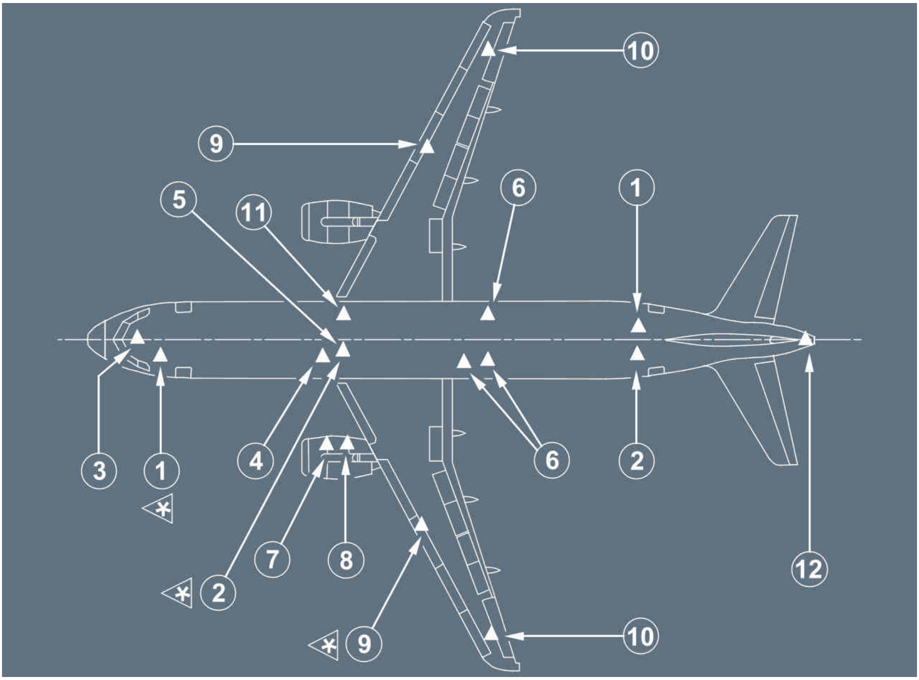
Ident.: DSC-20-20-00000293.0001001 / 28 JUL 14
Applicable to: ALL


TCAS
SATCOM
ATC MODE S
GPS1
GPS2
TWLU
ADF1
ADF2
VHF3
ELT
HF1/2
VOR
VHF1
GPS2 (MMR)
GPS1 (MMR)
RADAR
LOCALIZER
GLIDE SLOPE
DME1
ATC
DME2
TCAS
MARKER
VHF2
RADIO ALTIMETER 1
RADIO ALTIMETER 2

GROUND SERVICE CONNECTIONS AND PANELS

Ident.: DSC-20-20-00000295.0001001 / 09 OCT 12

3 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**



(1) Toilet servicing

(2) Water filling and/or draining

(3) Electrical ground power receptacle

(4) LP ground air supply connector

(5) HP ground air supply connector

(6) Hydraulic

(7) IDG oil filling

(8) Engine oil filling

(9) Refueling/defueling

(10) Gravity filling panels

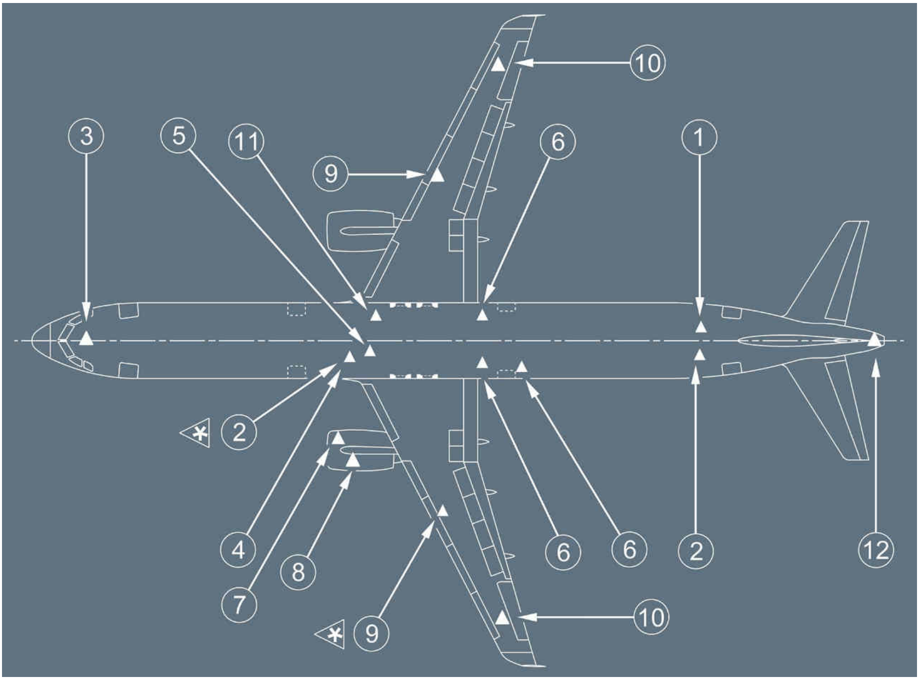
(11) Refueling/defueling panel

(12) APU oil filling

GROUND SERVICE CONNECTIONS AND PANELS

Ident.: DSC-20-20-00000295.0002001 / 06 APR 18

4 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**



(1) Toilet servicing

(2) Water filling and/or draining

(3) Electrical ground power receptacle

(4) LP ground air supply connector

(5) HP ground air supply connector

(6) Hydraulic

(7) IDG oil filling

(8) Engine oil filling

(9) Refueling/defueling

(10) Gravity filling panels

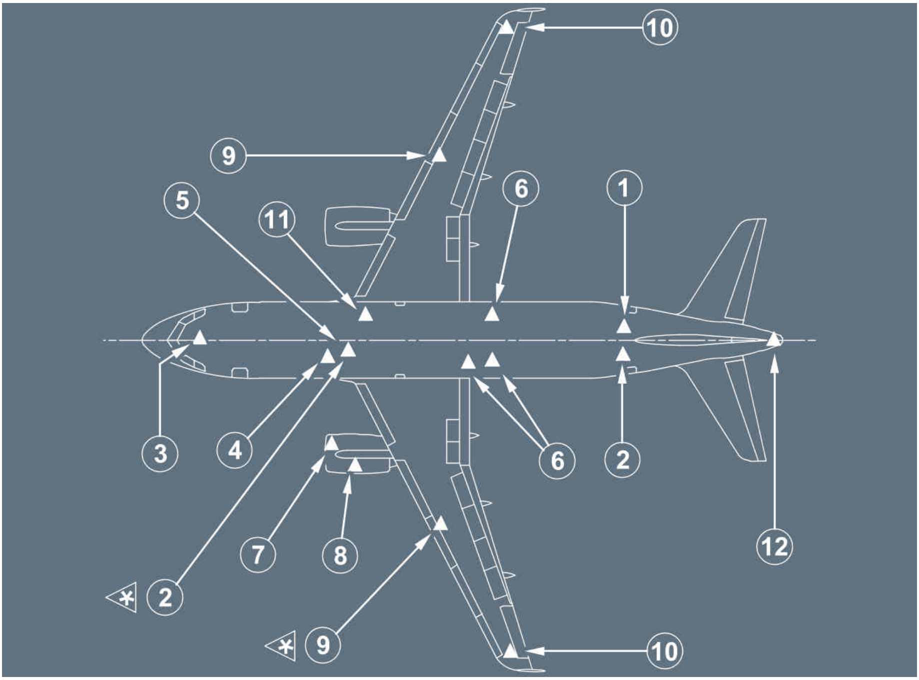
(11) Refueling/defueling panel

(12) APU oil filling

GROUND SERVICE CONNECTIONS AND PANELS

Ident.: DSC-20-20-00000295.0003001 / 09 OCT 12

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345



(1) Toilet servicing

(2) Water filling and/or draining

(3) Electrical ground power receptacle

(4) LP ground air supply connector

(5) HP ground air supply connector

(6) Hydraulic

(7) IDG oil filling

(8) Engine oil filling

(9) Refueling/defueling

(10) Gravity filling panels

(11) Refueling/defueling panel

(12) APU oil filling

Intentionally left blank

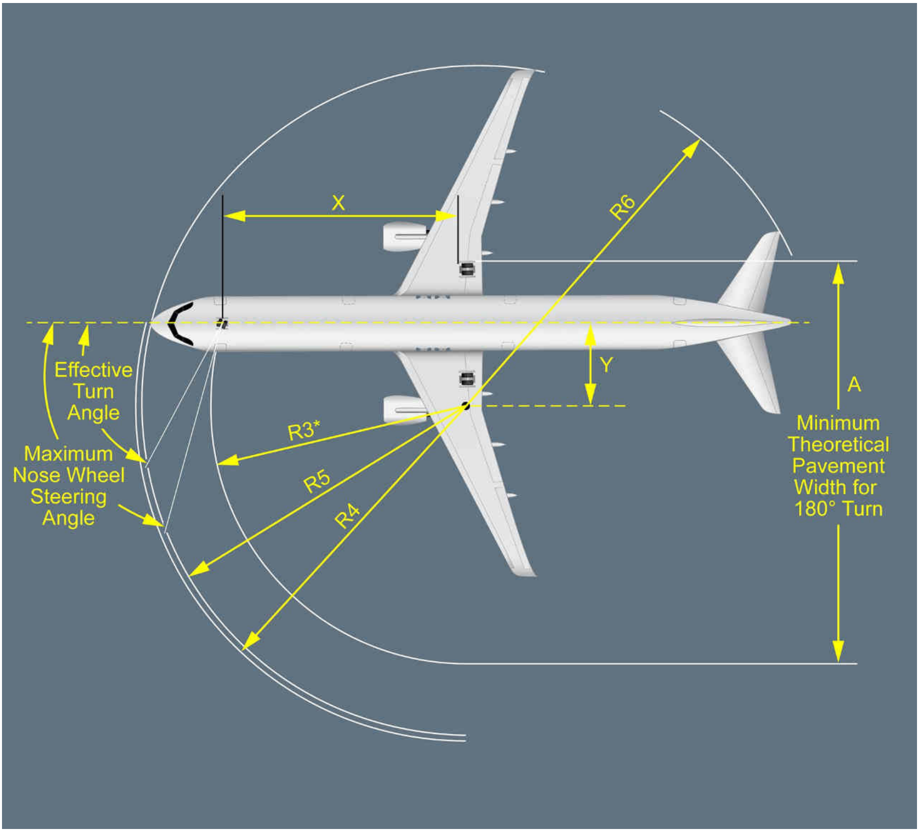
TAXIING

Ident.: DSC-20-30-00000294.0010001 / 28 MAY 20

1 **Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

Theoritical center of turn for minimum turning radius:

- Slow continuous turning
- Symmetrical thrust
- No differential braking
- Dry surface.


X
R6
Y
A
Effective
Turn
Angle
Maximum
Nose Wheel
Steering
Angle
R3*
R5
R4
Minimum
Theoretical
Pavement
Width for
180° Turn

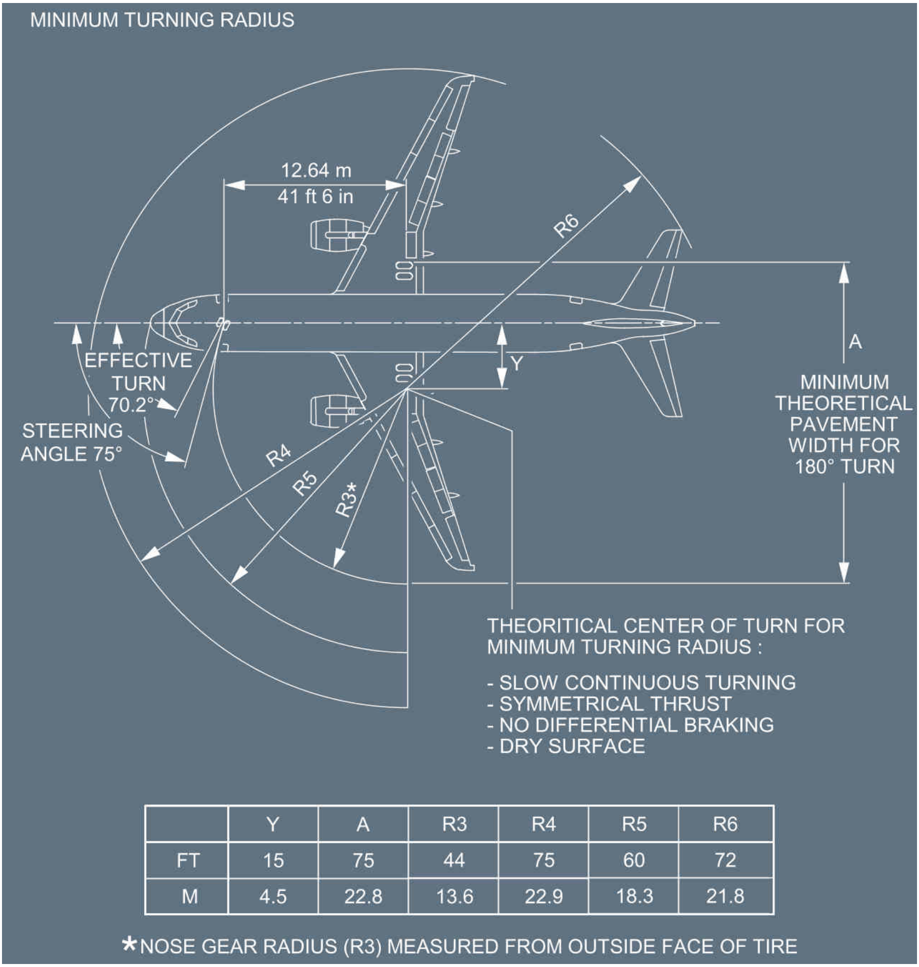
Maximum Nose Wheel Steering Angle	Effective Turn Angle	X	Y	A	R3	R4	R5	R6
75 °	71.6 °	55 ft 6 in 16.91 m	18 ft 5.6 m	93 ft 28.3 m	59 ft 17.9 m	78 ft 23.9 m	74 ft 22.7 m	81 ft 24.7 m

Note: *Nose Gear Radius (R3) measured from outside face of tire.*

TAXIING

Ident.: DSC-20-30-00000294.0007001 / 01 JUN 17

2 **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


MINIMUM TURNING RADIUS
12.64 m
41 ft 6 in
R6
A
Y
MINIMUM THEORETICAL PAVEMENT WIDTH FOR 180° TURN
EFFECTIVE TURN 70.2°
STEERING ANGLE 75°
R4
R5
R3*

THEORITICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS :

- SLOW CONTINUOUS TURNING
- SYMMETRICAL THRUST
- NO DIFFERENTIAL BRAKING
- DRY SURFACE

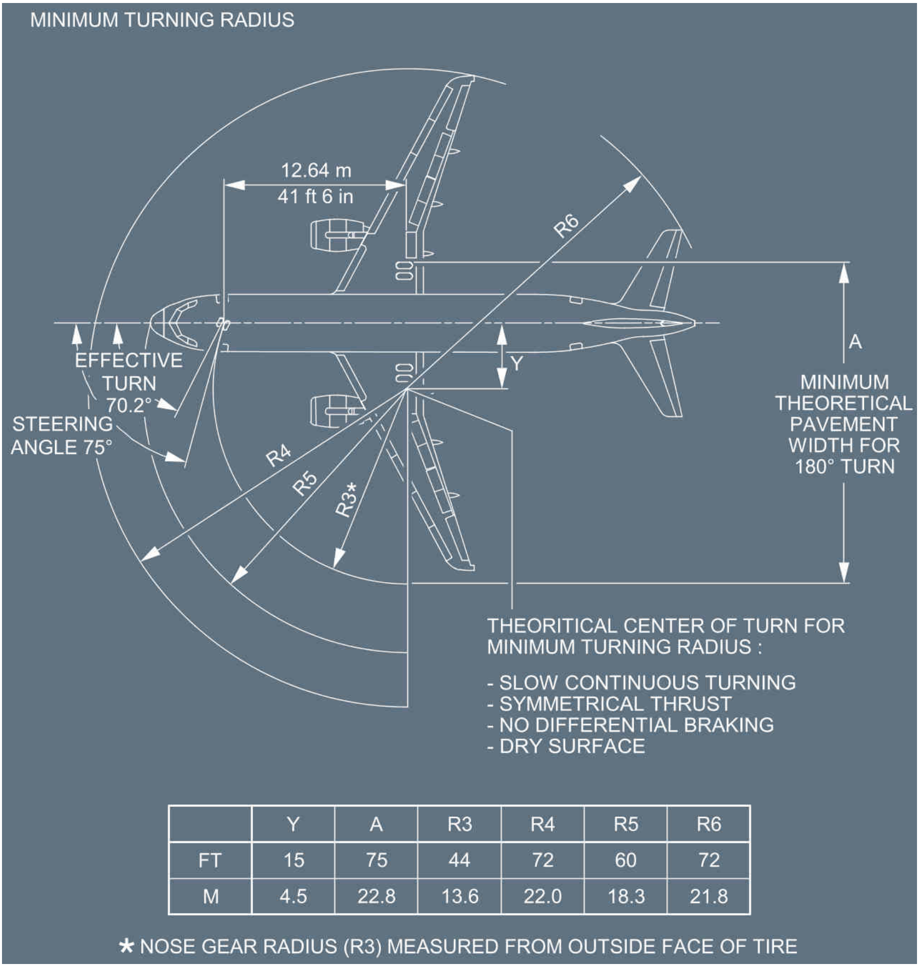
	Y	A	R3	R4	R5	R6
FT	15	75	44	75	60	72
M	4.5	22.8	13.6	22.9	18.3	21.8

*NOSE GEAR RADIUS (R3) MEASURED FROM OUTSIDE FACE OF TIRE

TAXIING

Ident.: DSC-20-30-00000294.0002001 / 01 JUN 17

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240


MINIMUM TURNING RADIUS
12.64 m
41 ft 6 in
R6
A
MINIMUM THEORETICAL PAVEMENT WIDTH FOR 180° TURN
Y
EFFECTIVE TURN 70.2°
STEERING ANGLE 75°
R4
R5
R3*

THEORITICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS :

- SLOW CONTINUOUS TURNING
- SYMMETRICAL THRUST
- NO DIFFERENTIAL BRAKING
- DRY SURFACE

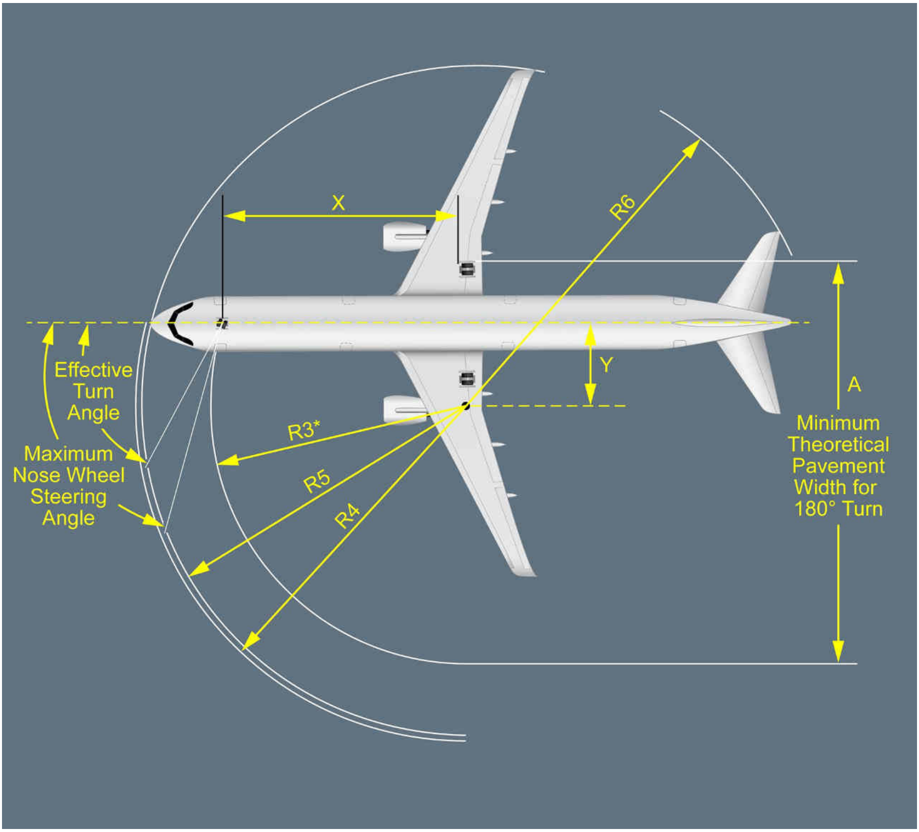
	Y	A	R3	R4	R5	R6
FT	15	75	44	72	60	72
M	4.5	22.8	13.6	22.0	18.3	21.8

★ NOSE GEAR RADIUS (R3) MEASURED FROM OUTSIDE FACE OF TIRE

TAXIING

Ident.: DSC-20-30-00000294.0005001 / 28 MAY 20
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662

Theoritical center of turn for minimum turning radius:
- Slow continuous turning
- Symmetrical thrust
- No differential braking
- Dry surface.


X
R6
Y
A
Effective
Turn
Angle
Maximum
Nose Wheel
Steering
Angle
R3*
R5
R4
Minimum
Theoretical
Pavement
Width for
180° Turn

Maximum Nose Wheel Steering Angle	Effective Turn Angle	X	Y	A	R3	R4	R5	R6
75 °	71.6 °	55 ft 6 in 16.91 m	18 ft 5.6 m	93 ft 28.3 m	59 ft 17.9 m	76 ft 23.1 m	74 ft 22.7 m	81 ft 24.7 m

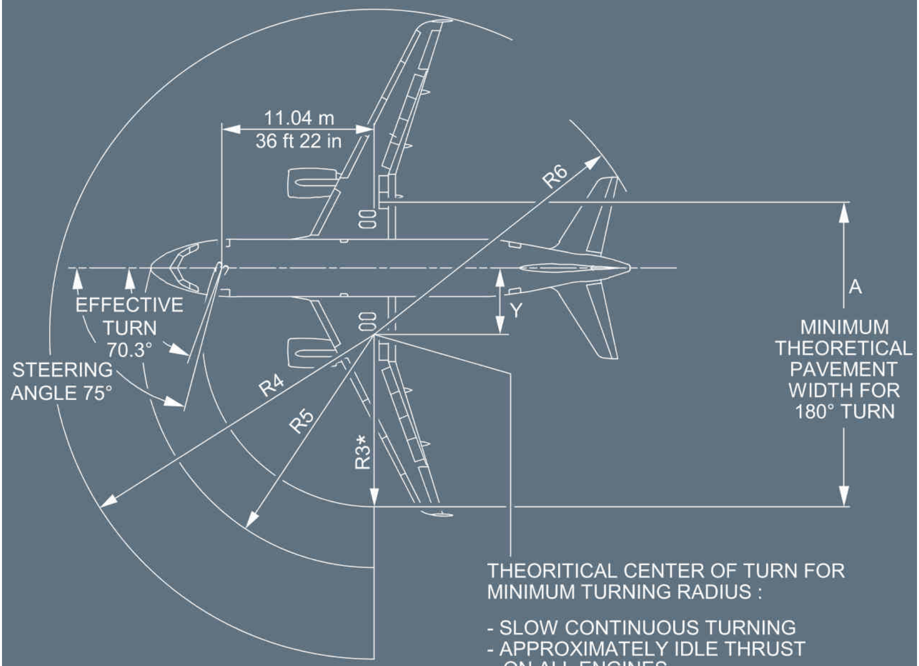
Note: *Nose Gear Radius (R3) measured from outside face of tire.*

TAXIING

Ident.: DSC-20-30-00000294.0006001 / 01 JUN 17

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

MINIMUM TURNING RADIUS


11.04 m
36 ft 22 in
R6
A
MINIMUM THEORETICAL PAVEMENT WIDTH FOR 180° TURN
Y
EFFECTIVE TURN 70.3°
STEERING ANGLE 75°
R4
R5
R3*

THEORITICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS :

- SLOW CONTINUOUS TURNING
- APPROXIMATELY IDLE THRUST ON ALL ENGINES
- NO DIFFERENTIAL BRAKING
- DRY SURFACE

	Y	A	R3	R4	R5	R6
FT	13	67	39	70	54	65
M	3.9	20.5	11.8	21.4	16.6	19.7

★ NOSE GEAR RADIUS (R3) MEASURED FROM OUTSIDE FACE OF TIRE

180 DEGREES TURN ON RUNWAY

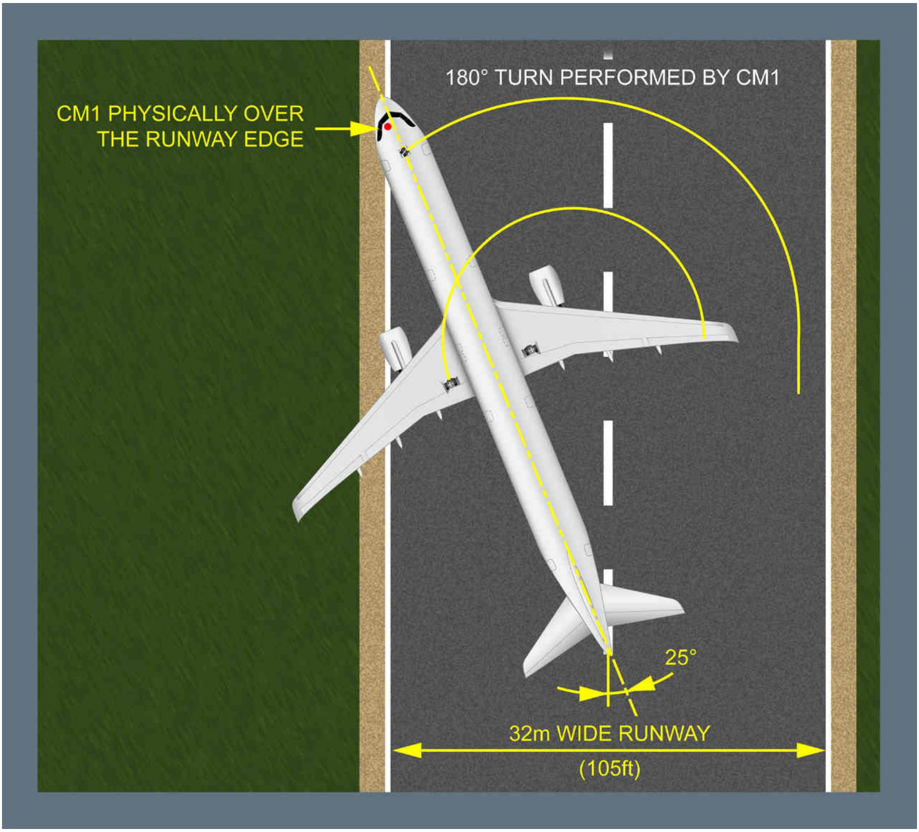
Ident.: DSC-20-30-00021674.0002001 / 06 APR 18

3 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

With the recommended 180 ° turn technique, on dry runway, the approximate turn width is 30 m (99 ft) without margin.

Note: *The flight crew should consider additional margin when the runway is wet or contaminated.*

For more information about the 180 ° Turn Technique, *Refer to FCTM/PR-NP-SOP-100 180 degrees Turn on Runway*.


180° TURN PERFORMED BY CM1
CM1 PHYSICALLY OVER THE RUNWAY EDGE
25°
32m WIDE RUNWAY
(105ft)

180 DEGREES TURN ON RUNWAY

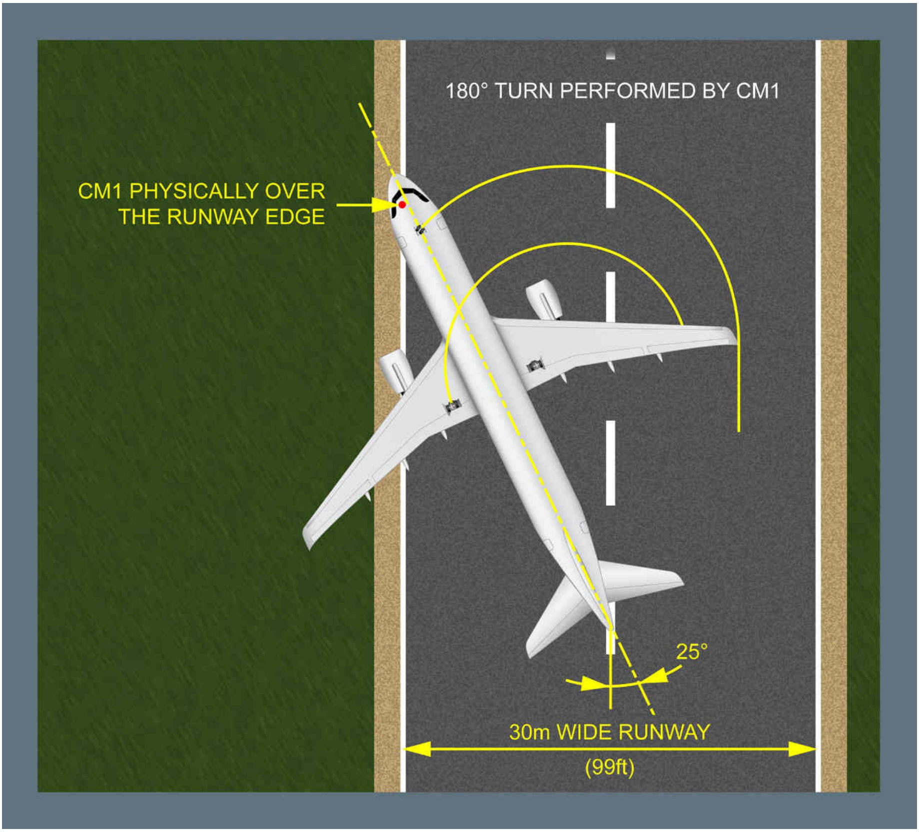
Ident.: DSC-20-30-00021674.0001001 / 06 JUN 17

4 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

With the recommended 180 ° turn technique, on dry runway, the approximate turn width is 24 m (79 ft) without margin.

Note: *The flight crew should consider additional margin when the runway is wet or contaminated.*

For more information about the 180 ° Turn Technique, *Refer to FCTM/PR-NP-SOP-100 180 degrees Turn on Runway*.


180° TURN PERFORMED BY CM1
CM1 PHYSICALLY OVER THE RUNWAY EDGE
25°
30m WIDE RUNWAY
(99ft)

180 DEGREES TURN ON RUNWAY

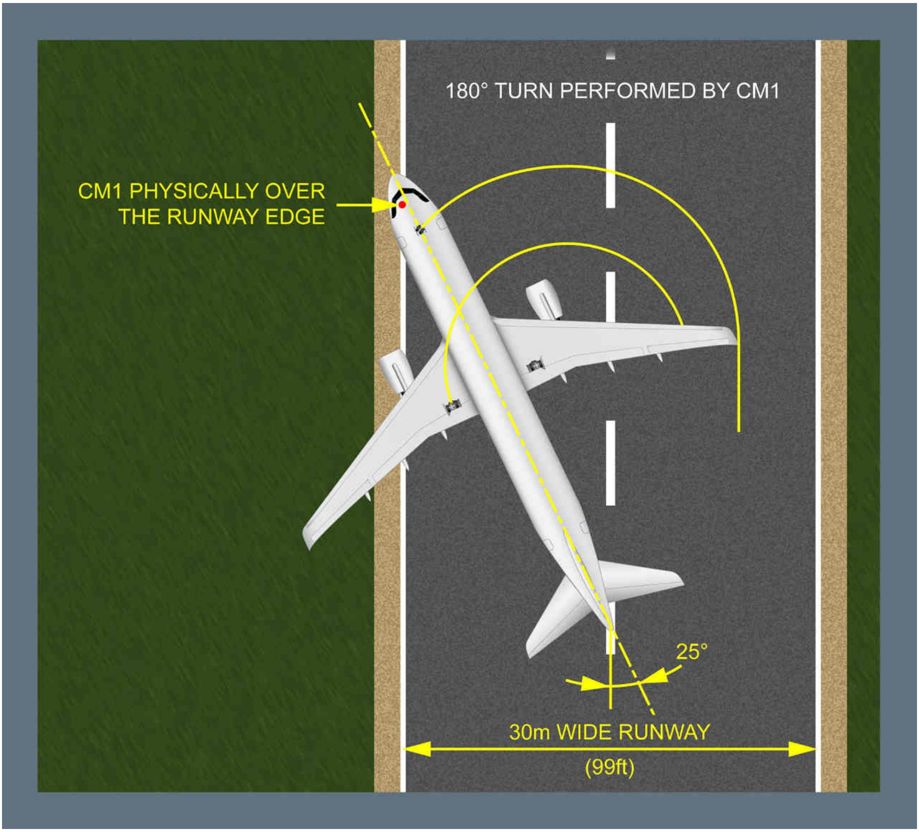
Ident.: DSC-20-30-00021674.0004001 / 06 JUN 17

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

With the recommended 180 ° turn technique, on dry runway, the approximate turn width is 21 m (69 ft) without margin.

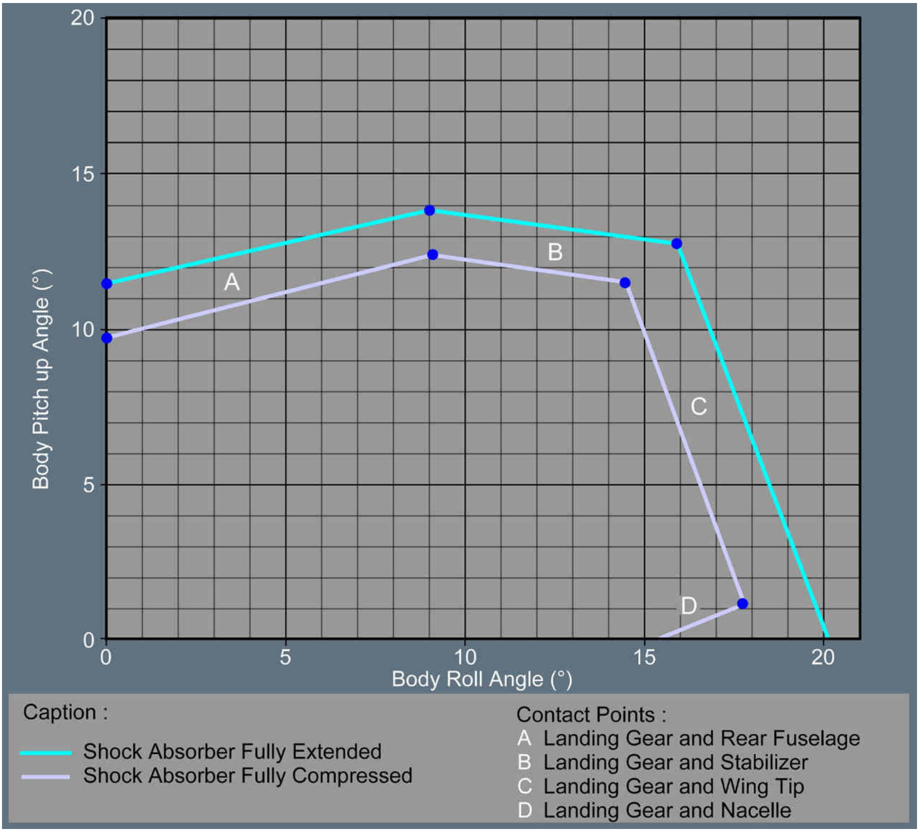
Note: *The flight crew should consider additional margin when the runway is wet or contaminated.*

For more information about the 180 ° Turn Technique, *Refer to FCTM/PR-NP-SOP-100 180 degrees Turn on Runway*.


180° TURN PERFORMED BY CM1
CM1 PHYSICALLY OVER THE RUNWAY EDGE
25°
30m WIDE RUNWAY
(99ft)

GROUND CLEARANCE DIAGRAM

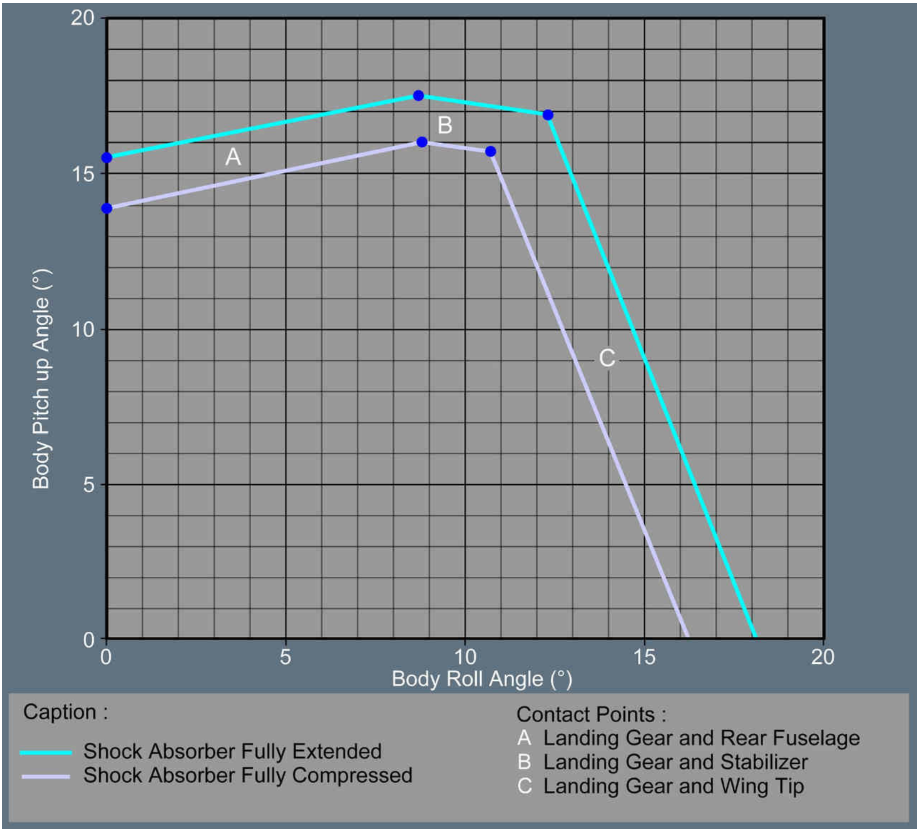
1 Ident.: DSC-20-40-00018435.0010001 / 26 NOV 19
Applicable to: MSN 11531



GROUND CLEARANCE DIAGRAM

Ident.: DSC-20-40-00018435.0003001 / 26 NOV 19

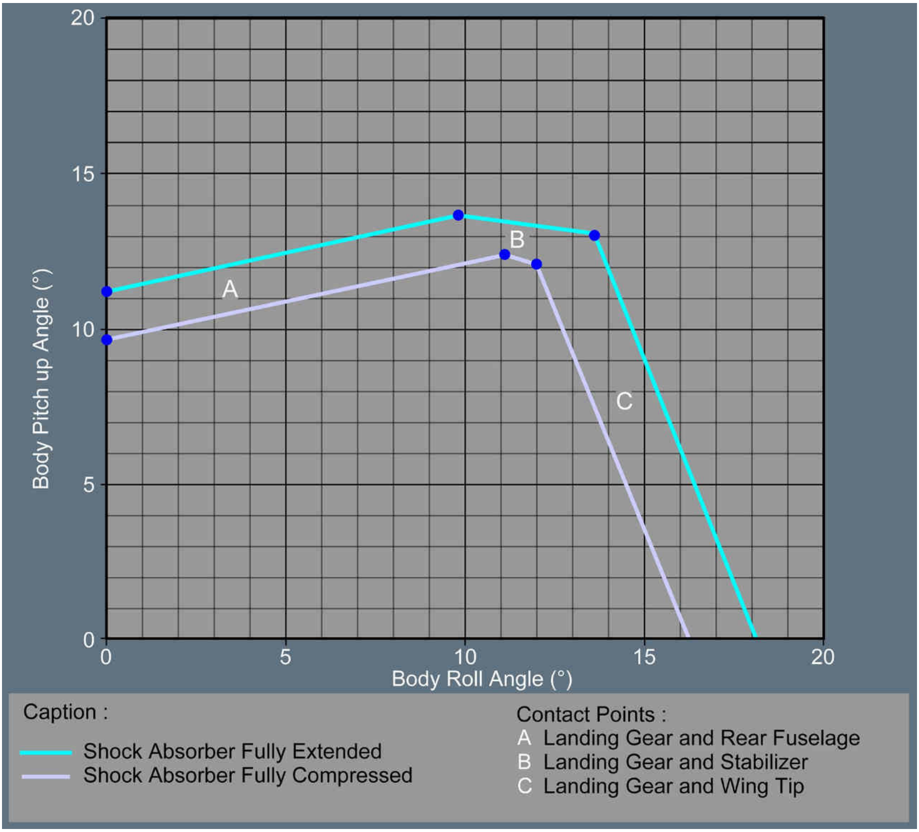
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345



GROUND CLEARANCE DIAGRAM

Ident.: DSC-20-40-00018435.0004001 / 26 NOV 19

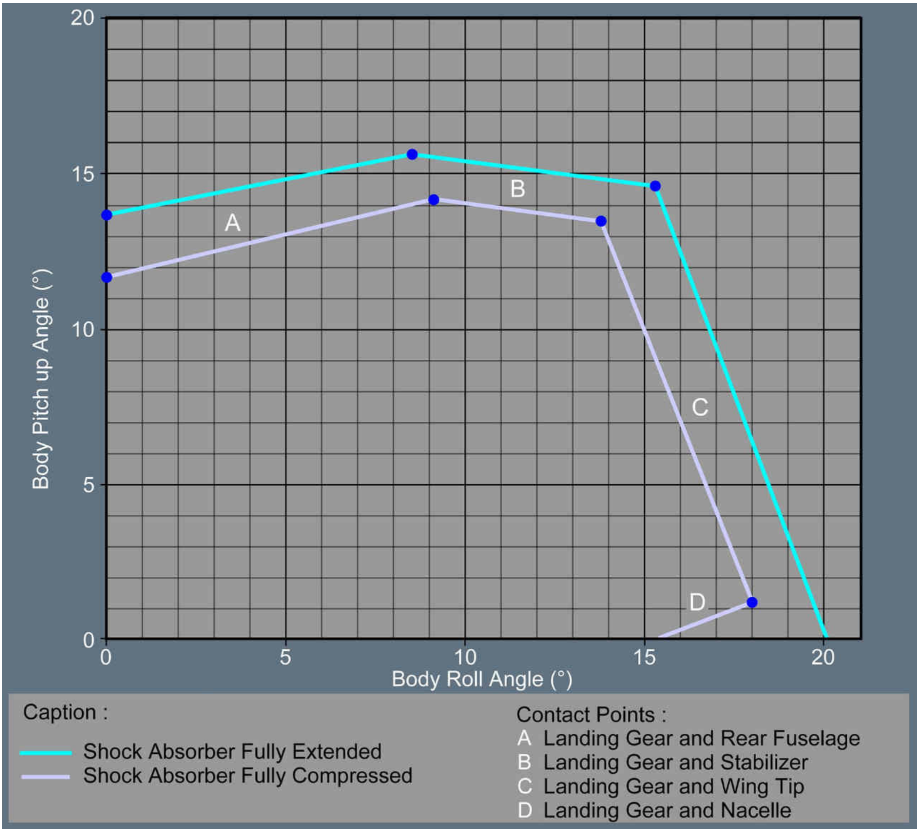
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098



GROUND CLEARANCE DIAGRAM

Ident.: DSC-20-40-00018435.0006001 / 26 NOV 19

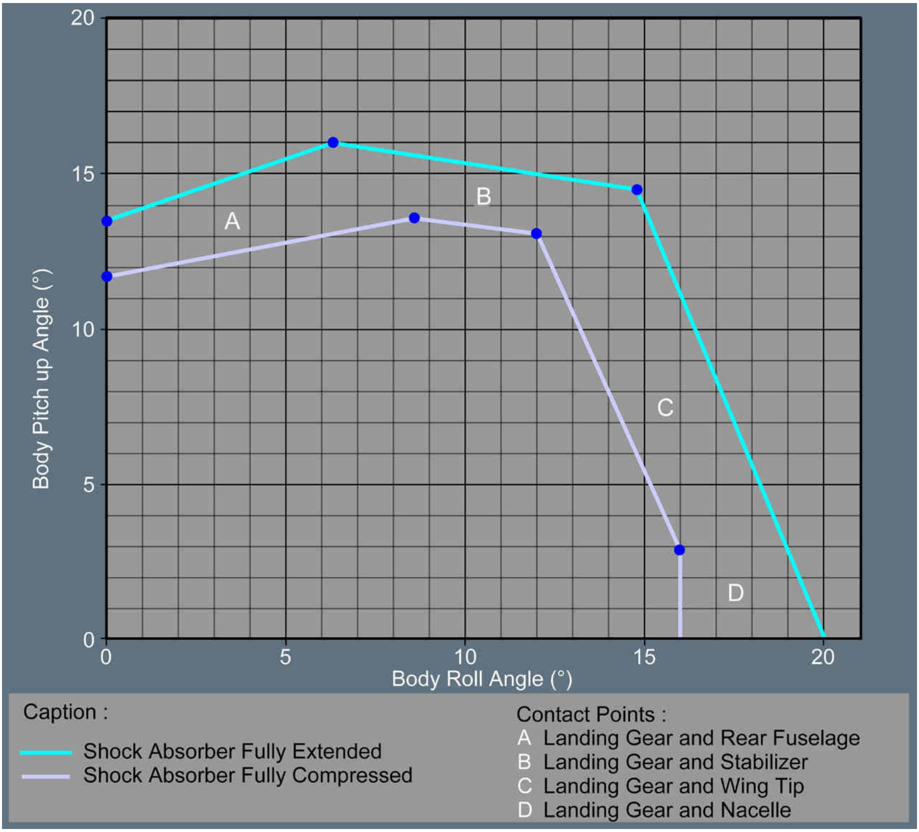
2 **Applicable to: MSN 10949-11522, 11572-11597**



GROUND CLEARANCE DIAGRAM

Ident.: DSC-20-40-00018435.0001001 / 26 NOV 19

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324



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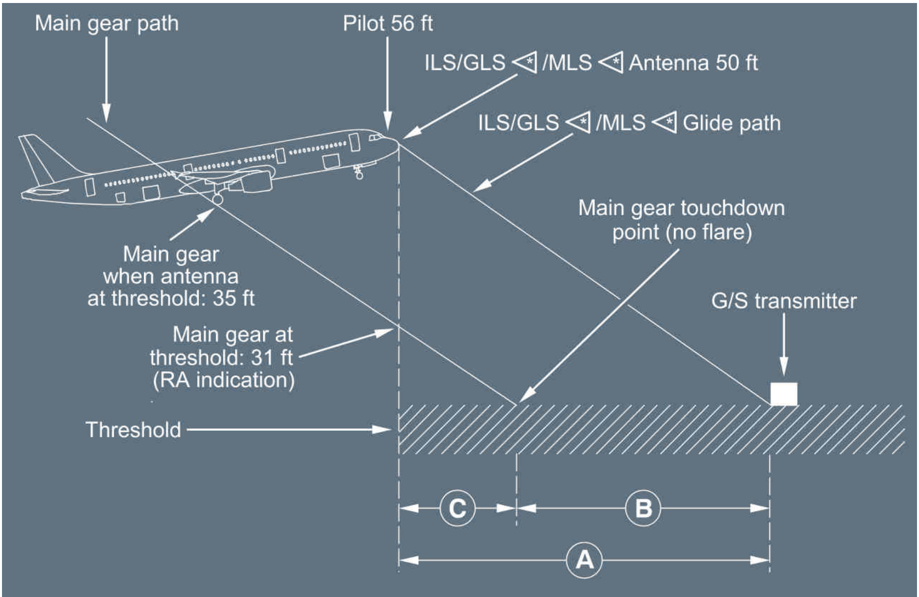
ILS/GLS ◁ /MLS ◁ FINAL APPROACH AND LANDING GEOMETRY

Ident.: DSC-20-50-00019878.0008001 / 22 FEB 17

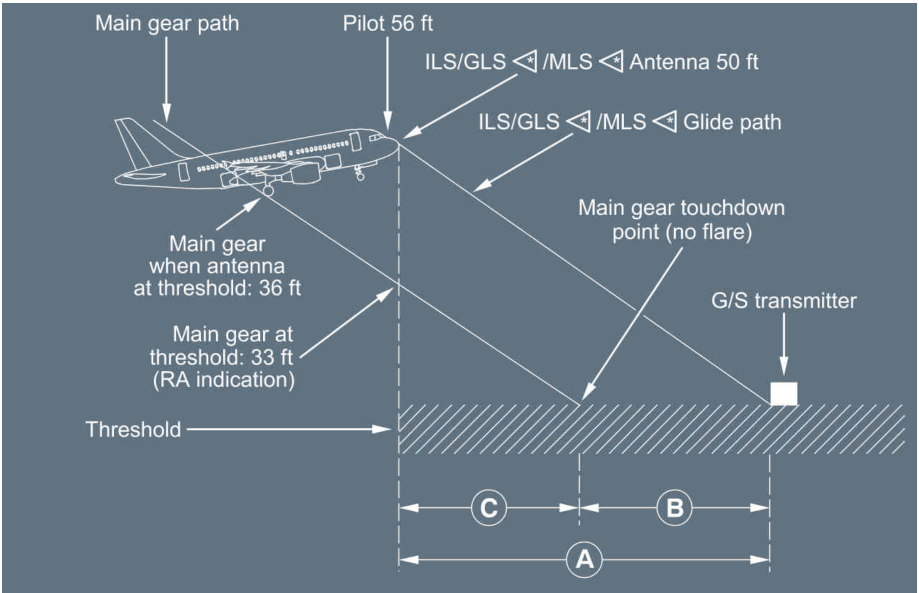
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165


Main gear path
Pilot 56 ft
ILS/GLS ◁ /MLS ◁ Antenna 50 ft
ILS/GLS ◁ /MLS ◁ Glide path
Main gear touchdown point (no flare)
G/S transmitter
Main gear when antenna at threshold: 35 ft
Main gear at threshold: 31 ft (RA indication)
Threshold
Ⓒ
Ⓑ
Ⓐ

CONDITIONS : – FLAPS FULL	PITCH ANGLE	GLIDE PATH (°)	Ⓐ	Ⓑ	TOUCHDOWN POINT Ⓒ
– ILS ANTENNA AT 50 ft AT THRESHOLD	3°7	2°5	349 m 1145 ft	120 m 395 ft	229 m 751 ft
– NO FLARE	4°2	3°	291 m 954 ft	109 m 355 ft	182 m 599 ft

ILS/GLS ◁ /MLS ◁ FINAL APPROACH AND LANDING GEOMETRY

Ident.: DSC-20-50-00019878.0011001 / 22 FEB 17
Applicable to: MSN 03733, 04734-04756, 05005, 05097

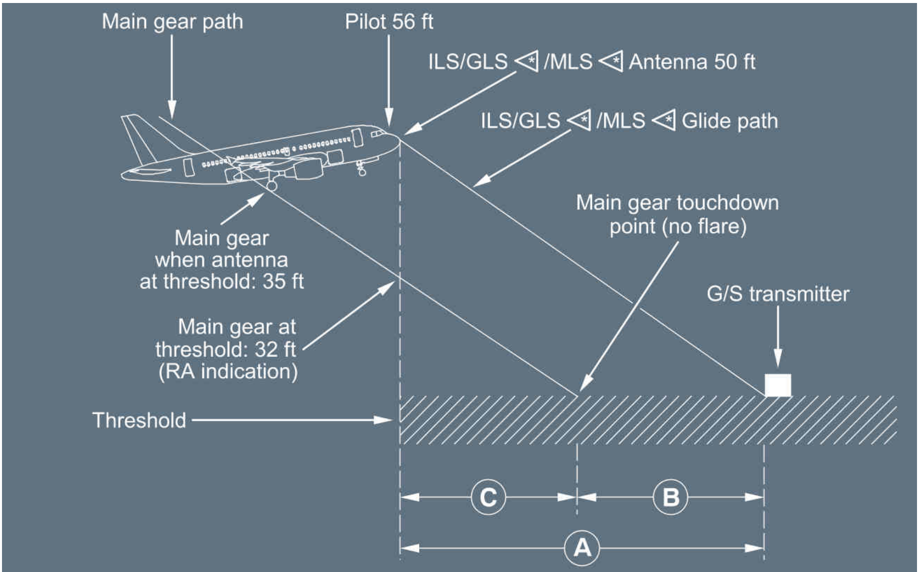

Main gear path
Pilot 56 ft
ILS/GLS ◁ /MLS ◁ Antenna 50 ft
ILS/GLS ◁ /MLS ◁ Glide path
Main gear touchdown point (no flare)
Main gear when antenna at threshold: 36 ft
G/S transmitter
Main gear at threshold: 33 ft (RA indication)
Threshold
C
B
A

CONDITIONS : – FLAPS FULL	PITCH ANGLE	GLIDE PATH (°)	A	B	TOUCHDOWN POINT C
– ILS ANTENNA AT 50 ft AT THRESHOLD	4°8	2°5	349 m 1145 ft	114 m 375 ft	235 m 771 ft
– NO FLARE	5°3	3°	291 m 954 ft	100 m 329 ft	191 m 625 ft

ILS/GLS ◁ /MLS ◁ FINAL APPROACH AND LANDING GEOMETRY

Ident.: DSC-20-50-00019878.0007001 / 22 FEB 17

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

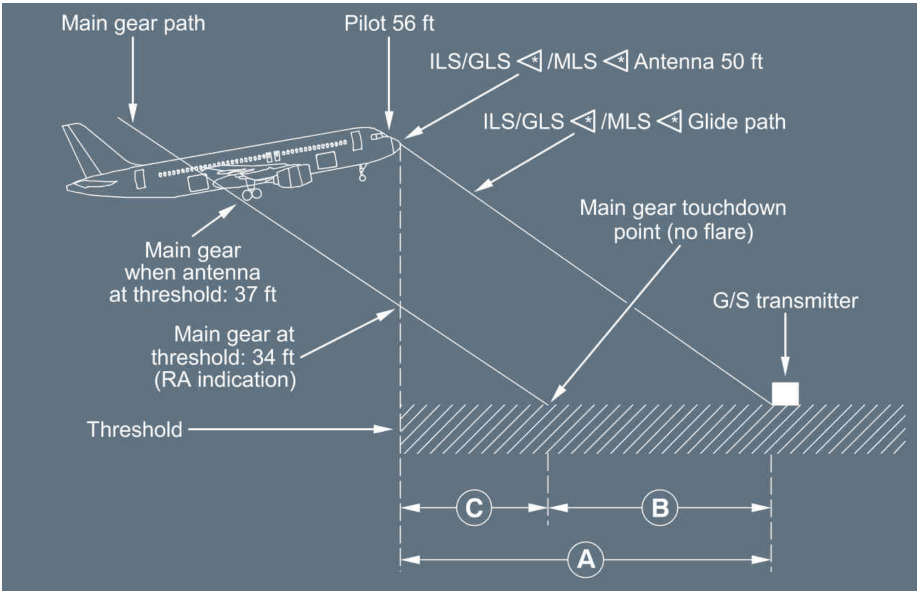

Main gear path
Pilot 56 ft
ILS/GLS ◁ /MLS ◁ Antenna 50 ft
ILS/GLS ◁ /MLS ◁ Glide path
Main gear touchdown point (no flare)
G/S transmitter
Main gear when antenna at threshold: 35 ft
Main gear at threshold: 32 ft (RA indication)
Threshold
C
B
A

CONDITIONS : – FLAPS FULL	PITCH ANGLE	GLIDE PATH (°)	A	B	TOUCHDOWN POINT C
– ILS ANTENNA AT 50 ft AT THRESHOLD	5°7	2°5	349 m 1145 ft	122 m 399 ft	227 m 746 ft
– NO FLARE	6°2	3°	291 m 954 ft	104 m 342 ft	187 m 612 ft

ILS/GLS ◁ /MLS ◁ FINAL APPROACH AND LANDING GEOMETRY

Ident.: DSC-20-50-00019878.0001001 / 22 FEB 17

1 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

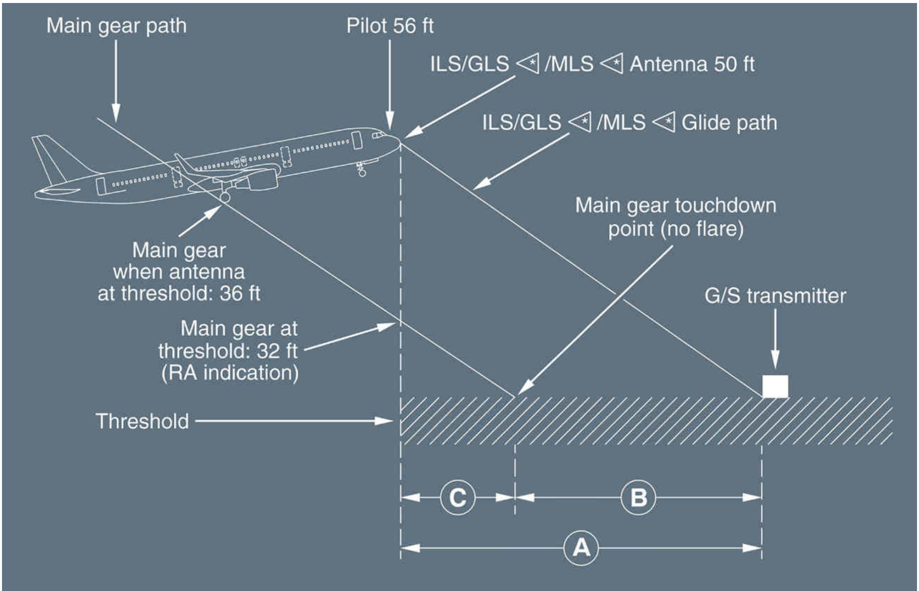

Main gear path
Pilot 56 ft
ILS/GLS ◁ /MLS ◁ Antenna 50 ft
ILS/GLS ◁ /MLS ◁ Glide path
Main gear touchdown point (no flare)
Main gear when antenna at threshold: 37 ft
G/S transmitter
Main gear at threshold: 34 ft (RA indication)
Threshold
Ⓒ
Ⓑ
Ⓐ

CONDITIONS :	GLIDE PATH (°)	Ⓐ	Ⓑ	TOUCHDOWN POINT Ⓒ
– FLAPS FULL – ILS ANTENNA AT 50 ft AT THRESHOLD – NO FLARE – PITCH ANGLE : 4°	2°5	348 m 1145 ft	112 m 366 ft	236 m 779 ft
	3°	291 m 954 ft	93 m 306 ft	198 m 648 ft

ILS/GLS ◁ /MLS ◁ FINAL APPROACH AND LANDING GEOMETRY

Ident.: DSC-20-50-00019878.0005001 / 06 APR 18

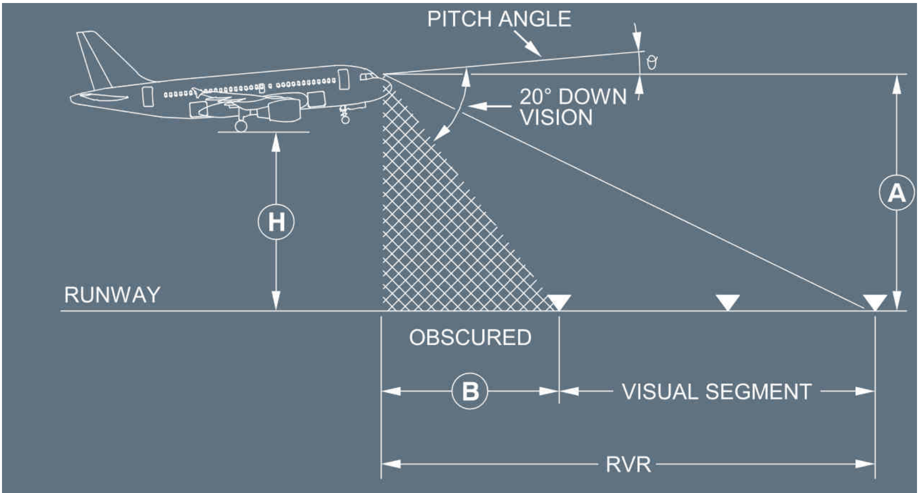
2 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**


Main gear path
Pilot 56 ft
ILS/GLS ◁ /MLS ◁ Antenna 50 ft
ILS/GLS ◁ /MLS ◁ Glide path
Main gear touchdown point (no flare)
G/S transmitter
Main gear when antenna at threshold: 36 ft
Main gear at threshold: 32 ft (RA indication)
Threshold
C
B
A

CONDITIONS : – FLAPS FULL	PITCH ANGLE	GLIDE PATH (°)	Ⓐ	Ⓑ	TOUCHDOWN POINT Ⓒ
– ILS ANTENNA AT 50 ft AT THRESHOLD	3°5	2°5	349 m 1145 ft	119 m 389 ft	230 m 756 ft
– NO FLARE	3°9	3°	291 m 954 ft	105 m 345 ft	186 m 609 ft

MINIMUM VISUAL GROUND SEGMENTS (FLARE PHASE)

Ident.: DSC-20-50-00019879.0011001 / 22 FEB 17
Applicable to: MSN 03733, 04734-04756, 05005, 05097



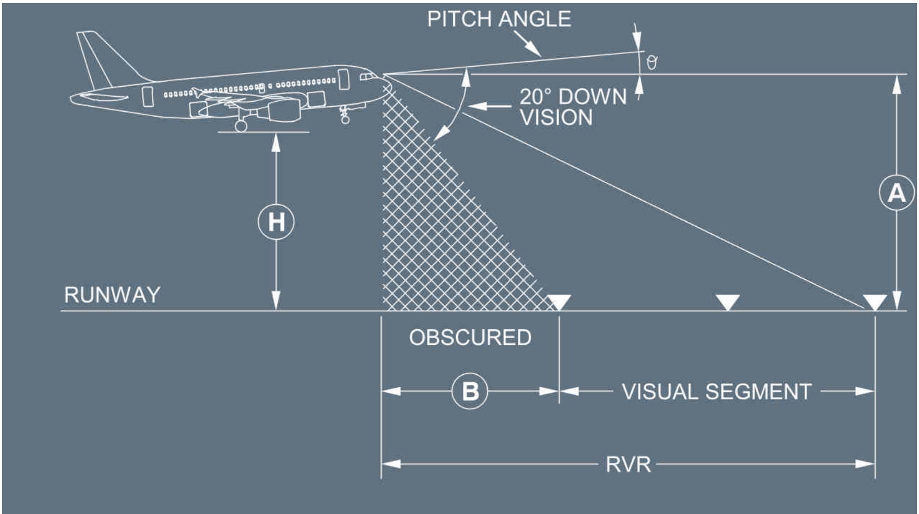
	CAT III		CAT II
Ⓗ	15 ft (θ = 4.9°)	50 ft (θ = 5.3°)	100 ft (θ = 5.3°)
VISUAL SEGMENT	60 m (197 ft)		120 m (394 ft)
Ⓐ	35 ft	71 ft	121 ft
OBSCURED Ⓑ	40 m (131 ft)	82 m (269 ft)	140 m (460 ft)
MINIMUM RVR	100 m (328 ft)	142 m (466 ft)	260 m (854 ft)

Note: *This drawing illustrates that, for a CAT III landing (60 m minimum visual segment), the minimum Runway Visual Range (RVR) is 100 m at 15 ft.*

MINIMUM VISUAL GROUND SEGMENTS (FLARE PHASE)

Ident.: DSC-20-50-00019879.0007001 / 22 FEB 17

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345



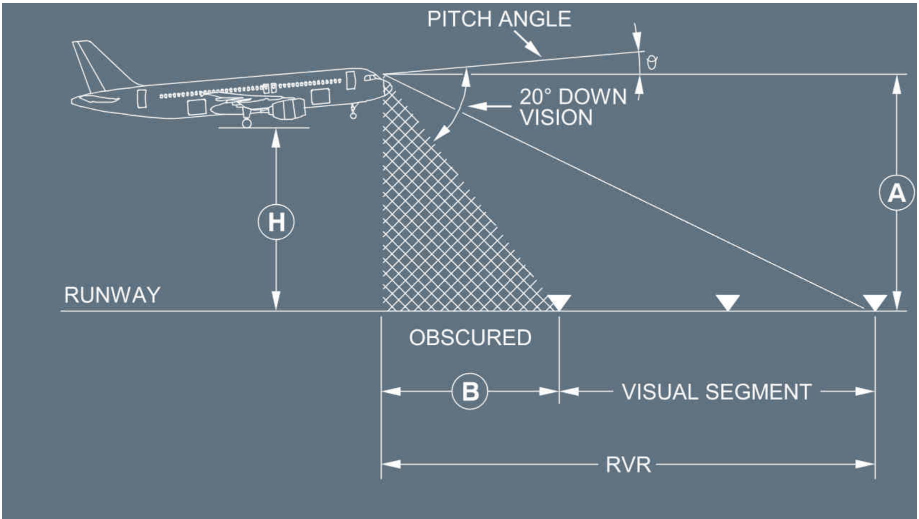
	CAT III		CAT II
Ⓗ	15 ft (θ = 6.6°)	50 ft (θ = 6.2°)	100 ft (θ = 6.2°)
VISUAL SEGMENT	60 m (197 ft)		120 m (394 ft)
Ⓐ	37 ft	71 ft	121 ft
OBSCURED Ⓑ	47 m (154 ft)	88 m (290 ft)	151 m (494 ft)
MINIMUM RVR	107 m (351 ft)	148 m (487 ft)	271 m (888 ft)

Note: This drawing illustrates that, for a CAT III landing (60 m minimum visual segment), the minimum Runway Visual Range (RVR) is 107 m at 15 ft.

MINIMUM VISUAL GROUND SEGMENTS (FLARE PHASE)

Ident.: DSC-20-50-00019879.0001001 / 22 FEB 17

3 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**



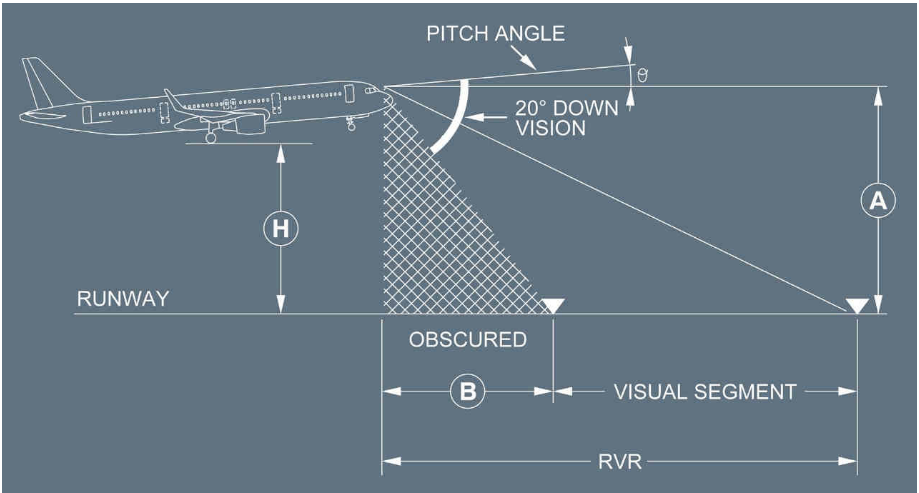
	CAT III		CAT II
H	15 ft (θ = 5.4°)	50 ft (θ = 4.7°)	100 ft (θ = 4.7°)
VISUAL SEGMENT	60 m (197 ft)		120 m (394 ft)
A	36 ft	71 ft	121 ft
OBSCURED B	43 m (140 ft)	79 m (259 ft)	134 m (442 ft)
MINIMUM RVR	103 m (337 ft)	139 m (456 ft)	254 m (836 ft)

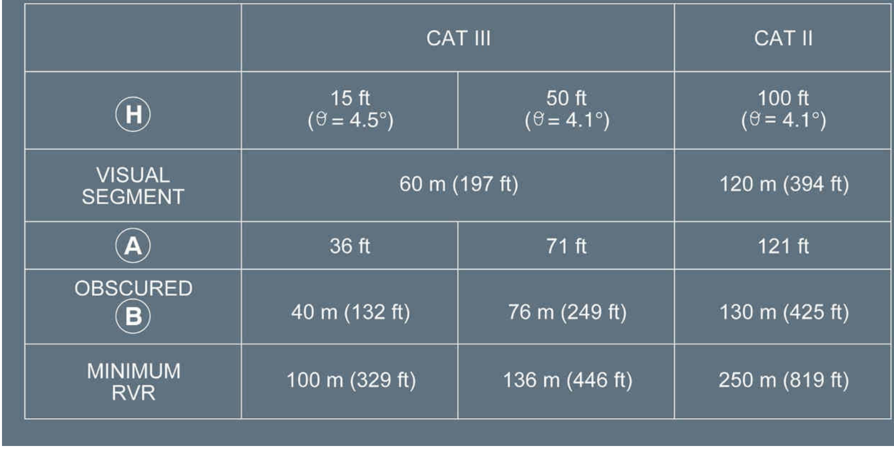
Note: *This drawing illustrates that, for a CAT III landing (60 m minimum visual segment), the minimum Runway Visual Range (RVR) is 103 m at 15 ft.*

MINIMUM VISUAL GROUND SEGMENTS (FLARE PHASE)

Ident.: DSC-20-50-00019879.0005001 / 06 APR 18

4 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**



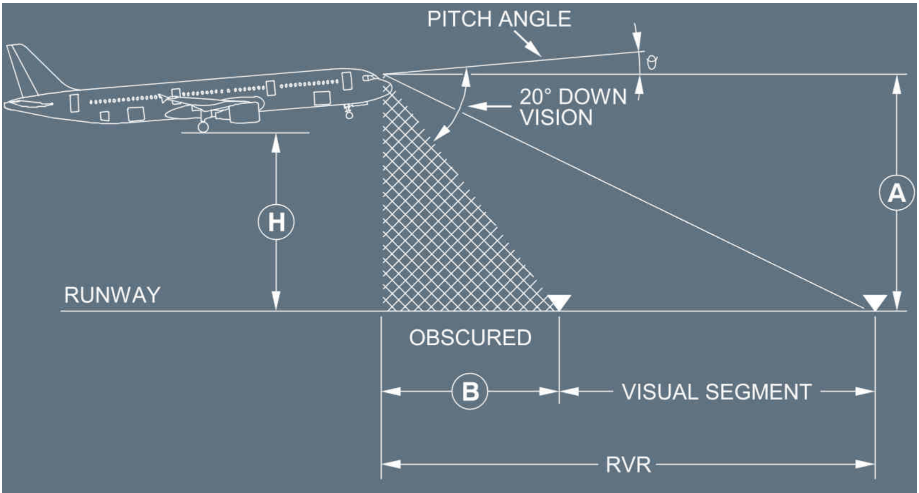


	CAT III		CAT II
H	15 ft (θ = 4.5°)	50 ft (θ = 4.1°)	100 ft (θ = 4.1°)
VISUAL SEGMENT	60 m (197 ft)		120 m (394 ft)
A	36 ft	71 ft	121 ft
OBSCURED B	40 m (132 ft)	76 m (249 ft)	130 m (425 ft)
MINIMUM RVR	100 m (329 ft)	136 m (446 ft)	250 m (819 ft)

Note: *This drawing illustrates that, for a CAT III landing (60 m minimum visual segment), the minimum Runway Visual Range (RVR) is 100 m at 15 ft.*

MINIMUM VISUAL GROUND SEGMENTS (FLARE PHASE)

Ident.: DSC-20-50-00019879.0008001 / 22 FEB 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165



	CAT III		CAT II
H	15 ft (θ = 4.9°)	50 ft (θ = 4.4°)	100 ft (θ = 4.4°)
VISUAL SEGMENT	60 m (197 ft)		120 m (394 ft)
A	37 ft	71 ft	121 ft
OBSCURED B	42 m (137 ft)	78 m (256 ft)	133 m (435 ft)
MINIMUM RVR	102 m (334 ft)	138 m (453 ft)	253 m (829 ft)

Note: *This drawing illustrates that, for a CAT III landing (60 m minimum visual segment), the minimum Runway Visual Range (RVR) is 102 m at 15 ft.*

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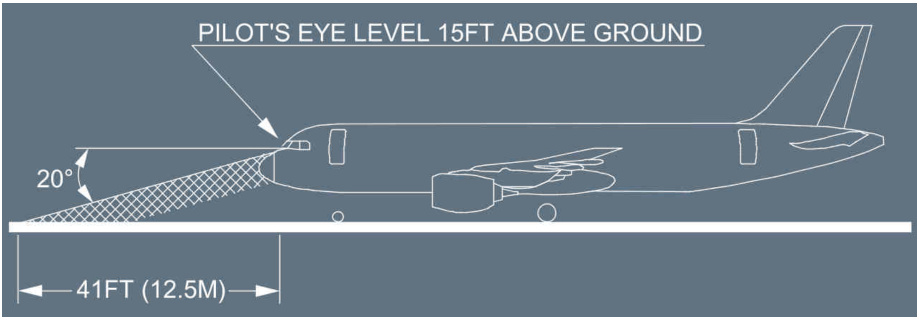
VISUAL GROUND GEOMETRY

Ident.: DSC-20-60-00010294.0001001 / 22 MAY 12
Applicable to: ALL


PILOT'S EYE LEVEL 15FT ABOVE GROUND
20°
41FT (12.5M)

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AIRCRAFT SYSTEMS

AIR CONDITIONING / PRESSURIZATION / VENTILATION

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DSC-21-10 Air Conditioning

DSC-21-10-10 General

General....A
Architecture....B

DSC-21-10-20 Main Components

Air Conditioning Pack....A
Pack Schematic (Simplified)....B
Pack Flow Control Valve....C
Emergency Ram Air....D
Mixer Unit....E
Hot-Air Pressure-Regulating Valve....F
Trim Air Valves....G

DSC-21-10-30 Temperature and Flow Regulation

General....A
Pack Controller....B
Zone Controller....C
Temperature Regulation....D
Air Conditioning System Controllers....E

DSC-21-10-40 System Operation under Failure Condition

General....A
Zone Controller....B
Pack Controllers....C
Air Conditioning System Controllers....D
Air Cycle Machine Failure....E
Hot Air Pressure Regulating Valve Failure....F
Trim Air Valve Failure....G

1 DSC-21-10-50 Controls and Indicators

Controls on Overhead Panel....A
ECAM BLEED Page....B
ECAM COND Page....C
ECAM CAB PRESS Page....D
ECAM Cruise Page....E
Engine Warning Display....F
Memo Display....G

Continued on the following page

Continued from the previous page

DSC-21-20 Pressurization

DSC-21-20-10 General

General....A
Automatic Operation....B
Manual Operation....C
SCHEMATICS....D

DSC-21-20-20 Main Components

Cabin Pressure Controllers....A
Outflow Valve....B
Safety Valves....C
Residual Pressure Control Unit (RPCU ◁)....D

DSC-21-20-30 System Operation

Automatic Pressure Control Mode....A
Pressurization Flight Profile....B
Manual Pressure Control Mode....C
Ditching....D

DSC-21-20-40 Controls and Indicators

Overhead Panel....A
ECAM CAB PRESS Page....B
ECAM Cruise Page....C
ECAM DOOR/OXY Page....D
Memo Display....E

DSC-21-30 Ventilation

DSC-21-30-10 General

General....A

DSC-21-30-20 Avionics Ventilation

General....A
Main Components....B
Normal Operation, Open-Circuit Configuration....C
Normal Operation, Close-Circuit Configuration....D
Normal Operation, Intermediate Configuration....E
Abnormal Operation....F

DSC-21-30-40 Battery Ventilation

Battery Ventilation....A

Continued on the following page

Continued from the previous page

DSC-21-30-50 Lavatory and Galley Ventilation

Lavatory and Galley....................A

DSC-21-30-60 Controls and Indicators

Overhead Panel....................A
ECAM CAB PRESS Page....................B

DSC-21-40 Cargo

DSC-21-40-10 General

General....................A
Schematic....................B

DSC-21-40-20 System Operation

FWD Cargo Ventilation ◁ ....A
AFT Cargo Ventilation ◁ ....B
AFT Cargo Heating ◁ C
FWD Cargo Heating ◁ ....D

DSC-21-40-30 Controls and Indicators

Overhead Panel....................A

DSC-21-40-35 ECAM Cond Page

ECAM COND Page....................A

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Localization Title	Toc Index	ID	Reason
DSC-21-PLP-TOC Controls and Indicators		1	Documentation update: Deletion of the "00000316.0001001 ECAM BLEED Page" documentary unit.
			Documentation update: Deletion of the "00000316.0003001 ECAM BLEED Page" documentary unit.
DSC-21-10-10 Architecture	B	2	Documentation update: Addition of "Architecture" documentary unit
DSC-21-10-20 Pack Schematic (Simplified)	B	2	Documentation update: Addition of "Pack Schematic (Simplified)" documentary unit
DSC-21-10-50 ECAM BLEED Page	B	2	Documentation update: Addition of "ECAM BLEED Page" documentary unit
DSC-21-10-50 ECAM BLEED Page	B	3	Documentation update: Addition of "ECAM BLEED Page" documentary unit
DSC-21-20-40 ECAM CAB PRESS Page	B	4	Documentation update: Addition of "ECAM CAB PRESS Page" documentary unit
DSC-21-30-20 Normal Operation, Open-Circuit Configuration	C	1	Documentation update: Addition of "Normal Operation, Open-Circuit Configuration" documentary unit
DSC-21-30-20 Normal Operation, Close-Circuit Configuration	D	5	Documentation update: Addition of "Normal Operation, Close-Circuit Configuration" documentary unit
DSC-21-30-20 Normal Operation, Intermediate Configuration	E	7	Documentation update: Addition of "Normal Operation, Intermediate Configuration" documentary unit

DSC-21-10-10 Architecture	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-10-20 Pack Schematic (Simplified)	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-10-20 Hot-Air Pressure-Regulating Valve	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-30 Air Conditioning System Controllers	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-40 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-40 Air Cycle Machine Failure	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-50 Controls on Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-50 ECAM COND Page	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-10-50 ECAM Cruise Page	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-21-10-50 Engine Warning Display	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-20-40 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-20-40 ECAM CAB PRESS Page	B	2	Effectivity update: The information now also applies to MSN 05947, 05987, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-20-40 ECAM CAB PRESS Page	B	3	Effectivity update: The information no longer applies to MSN 02321.
DSC-21-20-40 ECAM CAB PRESS Page	B	5	Effectivity update: The information no longer applies to MSN 05947, 05987.
DSC-21-20-40 ECAM Cruise Page	C	6	Effectivity update: The information now also applies to MSN 11531, 11572, 11597.
DSC-21-20-40 ECAM DOOR/OXY Page	D	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-30-20 Normal Operation, Open-Circuit Configuration	C	2	Effectivity update: The information now also applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-30-20 Normal Operation, Open-Circuit Configuration	C	3	Effectivity update: The information no longer applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883.
DSC-21-30-20 Normal Operation, Close-Circuit Configuration	D	4	Effectivity update: The information now also applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-21-30-20 Normal Operation, Close-Circuit Configuration	D	6	Effectivity update: The information no longer applies to MSN 01459, 01832, 02321, 03035, 03047, 03266, 03284, 03313, 03662, 04000, 04734, 05591, 05752, 05883.
DSC-21-30-20 Normal Operation, Intermediate Configuration	E	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097,

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Localization Title	Toc Index	ID	Reason
			06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-21-30-60 ECAM CAB PRESS Page	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-40-10 Schematic	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-40-30 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-21-40-35 ECAM COND Page	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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GENERAL

Ident.: DSC-21-10-10-00017767.0001001 / 21 MAR 16
Applicable to: ALL

The air conditioning system is fully automatic.
It provides continuous air renewal and maintains a constant, selected temperature in the following three zones : COCKPIT, FWD CABIN, AFT CABIN. These three zones are independently controlled.

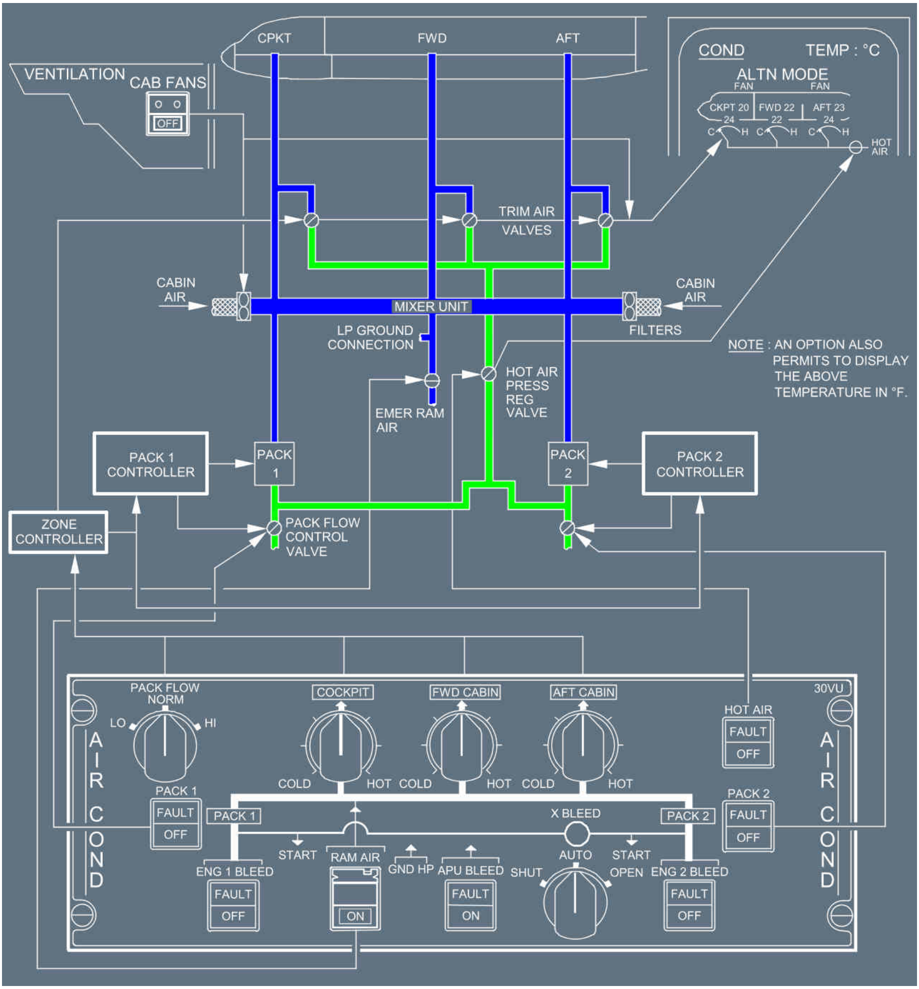
Air is supplied by the pneumatic system, via:
- Two pack flow control valves,
- Two packs,
- The mixing unit, which mixes the air that comes from the cabin and the packs.

Air is then distributed to the cockpit and the cabin.
In an emergency, a ram air inlet can provide ambient air to the mixing unit.
The temperature in the flight deck and in the cabin can be selected from the cockpit's AIR COND panel. Temperature regulation of the temperature is ensured by a zone controller and two pack controllers, or two Air Conditioning System Controller (ACSC) ◁❄ .
Temperature regulation is optimized via the hot air pressure regulating valve, and the trim air valves that add hot air, tapped upstream of the packs, to the air coming from the mixing unit.
A temperature control panel ◁❄ is also available on the Forward Attendant Panel (FAP). During cruise, the cabin crew can modify each cabin zone temperature that is selected from the cockpit, with a limited authority of ± 2.5 °C. (± 4.5 °F).
Low-pressure air is supplied to the mixing unit by a ground connection.

ARCHITECTURE

Ident.: DSC-21-10-10-00000297.0001001 / 22 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

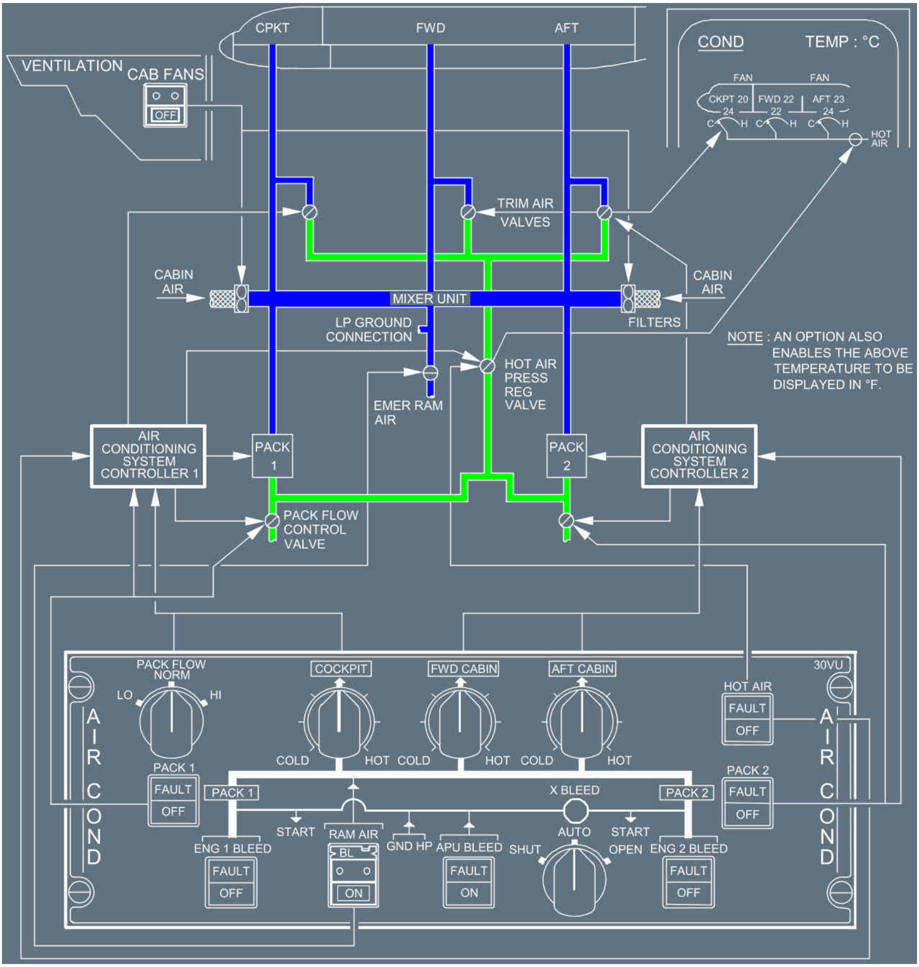

CPKT
FWD
AFT
VENTILATION
CAB FANS
OFF
COND
TEMP : °C
ALTN MODE
FAN
FAN
CKPT 20
FWD 22
AFT 23
24
22
24
C
H
C
H
C
H
HOT AIR
TRIM AIR
VALVES
CABIN AIR
MIXER UNIT
CABIN AIR
FILTERS
LP GROUND CONNECTION
HOT AIR PRESS REG VALVE
EMER RAM AIR
PACK 1 CONTROLLER
PACK 1
PACK 2
PACK 2 CONTROLLER
ZONE CONTROLLER
PACK FLOW CONTROL VALVE
PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
30VU
HOT AIR
FAULT
OFF
AIR COND
COLD
HOT
COLD
HOT
COLD
HOT
PACK 1
FAULT
OFF
PACK 1
X BLEED
PACK 2
PACK 2
FAULT
OFF
START
RAM AIR
GND HP
APU BLEED
AUTO
START
ENG 1 BLEED
SHUT
OPEN
ENG 2 BLEED
FAULT
OFF
ON
FAULT
ON
FAULT
OFF
AIR COND

NOTE : AN OPTION ALSO PERMITS TO DISPLAY THE ABOVE TEMPERATURE IN °F.

ARCHITECTURE

Ident.: DSC-21-10-10-00000297.0003001 / 22 MAY 12

1 **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

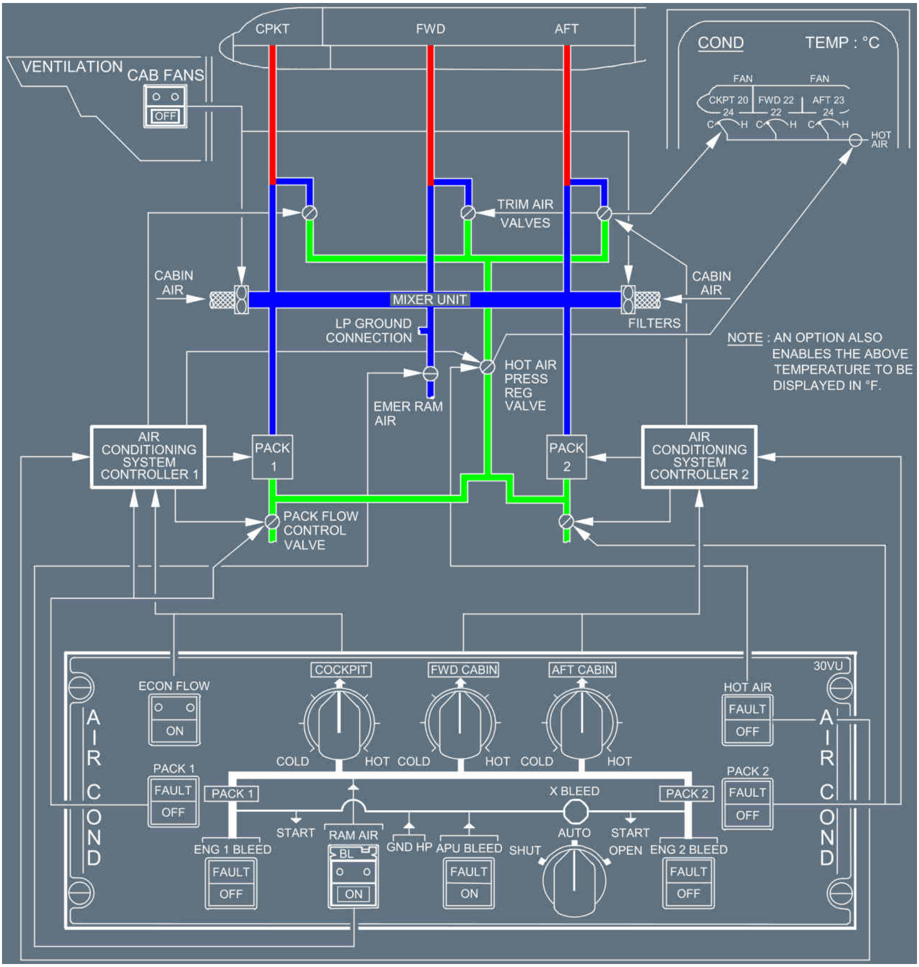

CPKT
FWD
AFT
VENTILATION
CAB FANS
OFF
COND
TEMP : °C
FAN
FAN
CKPT 20
FWD 22
AFT 23
24
22
24
C
H
C
H
C
H
HOT AIR
TRIM AIR VALVES
CABIN AIR
CABIN AIR
MIXER UNIT
FILTERS
LP GROUND CONNECTION
HOT AIR PRESS REG VALVE
EMER RAM AIR
AIR CONDITIONING SYSTEM CONTROLLER 1
PACK 1
PACK 2
AIR CONDITIONING SYSTEM CONTROLLER 2
PACK FLOW CONTROL VALVE
PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
COLD
HOT
COLD
HOT
COLD
HOT
30VU
HOT AIR
FAULT
OFF
AIR COND
AIR COND
PACK 1
FAULT
OFF
PACK 1
X BLEED
PACK 2
PACK 2
FAULT
OFF
START
RAM AIR
GND HP
APU BLEED
SHUT
AUTO
START
OPEN
ENG 1 BLEED
FAULT
OFF
BL
ON
FAULT
ON
ENG 2 BLEED
FAULT
OFF

NOTE : AN OPTION ALSO ENABLES THE ABOVE TEMPERATURE TO BE DISPLAYED IN °F.

ARCHITECTURE

Ident.: DSC-21-10-10-00000297.0005001 / 22 MAY 12

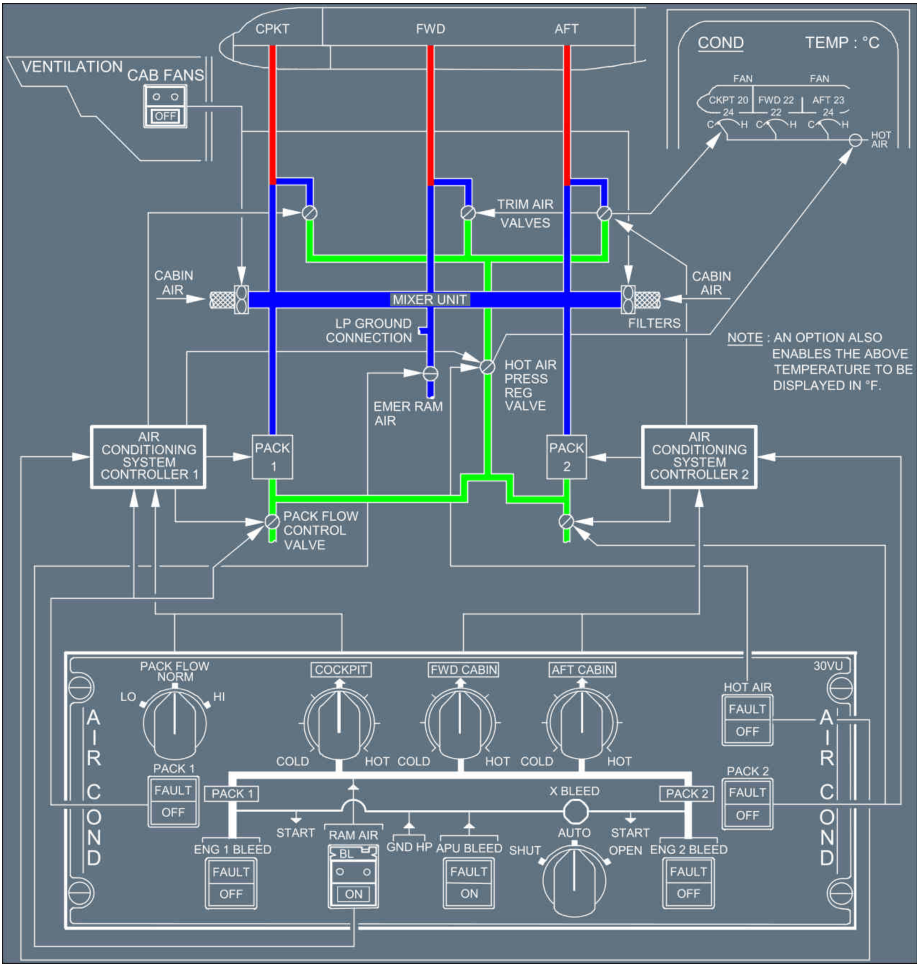
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098


CPKT
FWD
AFT
VENTILATION
CAB FANS
OFF
COND
TEMP : °C
FAN
FAN
CKPT 20
FWD 22
AFT 23
24
22
24
C
H
C
H
C
H
HOT AIR
TRIM AIR VALVES
CABIN AIR
MIXER UNIT
CABIN AIR
FILTERS
LP GROUND CONNECTION
HOT AIR PRESS REG VALVE
EMER RAM AIR
AIR CONDITIONING SYSTEM CONTROLLER 1
PACK 1
PACK 2
AIR CONDITIONING SYSTEM CONTROLLER 2
PACK FLOW CONTROL VALVE
ECON FLOW
ON
COCKPIT
FWD CABIN
AFT CABIN
COLD
HOT
COLD
HOT
COLD
HOT
30VU
HOT AIR
FAULT
OFF
AIR COND
AIR COND
PACK 1
FAULT
OFF
PACK 1
X BLEED
PACK 2
PACK 2
FAULT
OFF
START
RAM AIR
GND HP
APU BLEED
SHUT
AUTO
OPEN
START
ENG 1 BLEED
FAULT
OFF
BL
ON
FAULT
ON
ENG 2 BLEED
FAULT
OFF

NOTE : AN OPTION ALSO ENABLES THE ABOVE TEMPERATURE TO BE DISPLAYED IN °F.

ARCHITECTURE

2 Ident.: DSC-21-10-10-00000297.0015001 / 20 DEC 16
Applicable to: MSN 11531


CPKT
FWD
AFT
VENTILATION
CAB FANS
OFF
COND
TEMP : °C
FAN
FAN
CKPT 20
FWD 22
AFT 23
24
22
24
C H
C H
C H
HOT AIR
TRIM AIR
VALVES
CABIN
AIR
MIXER UNIT
CABIN
AIR
FILTERS
LP GROUND
CONNECTION
HOT AIR
PRESS
REG
VALVE
EMER RAM
AIR
AIR
CONDITIONING
SYSTEM
CONTROLLER 1
PACK
1
PACK
2
AIR
CONDITIONING
SYSTEM
CONTROLLER 2
PACK FLOW
CONTROL
VALVE
PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
30VU
COLD
HOT
COLD
HOT
COLD
HOT
HOT AIR
FAULT
OFF
A I R C O N D
A I R C O N D
PACK 1
FAULT
OFF
PACK 1
X BLEED
PACK 2
PACK 2
FAULT
OFF
START
RAM AIR
ENG 1 BLEED
FAULT
OFF
BL
ON
GND HP
APU BLEED
FAULT
ON
SHUT
AUTO
OPEN
START
ENG 2 BLEED
FAULT
OFF

NOTE : AN OPTION ALSO ENABLES THE ABOVE TEMPERATURE TO BE DISPLAYED IN °F.

Intentionally left blank

AIR CONDITIONING PACK

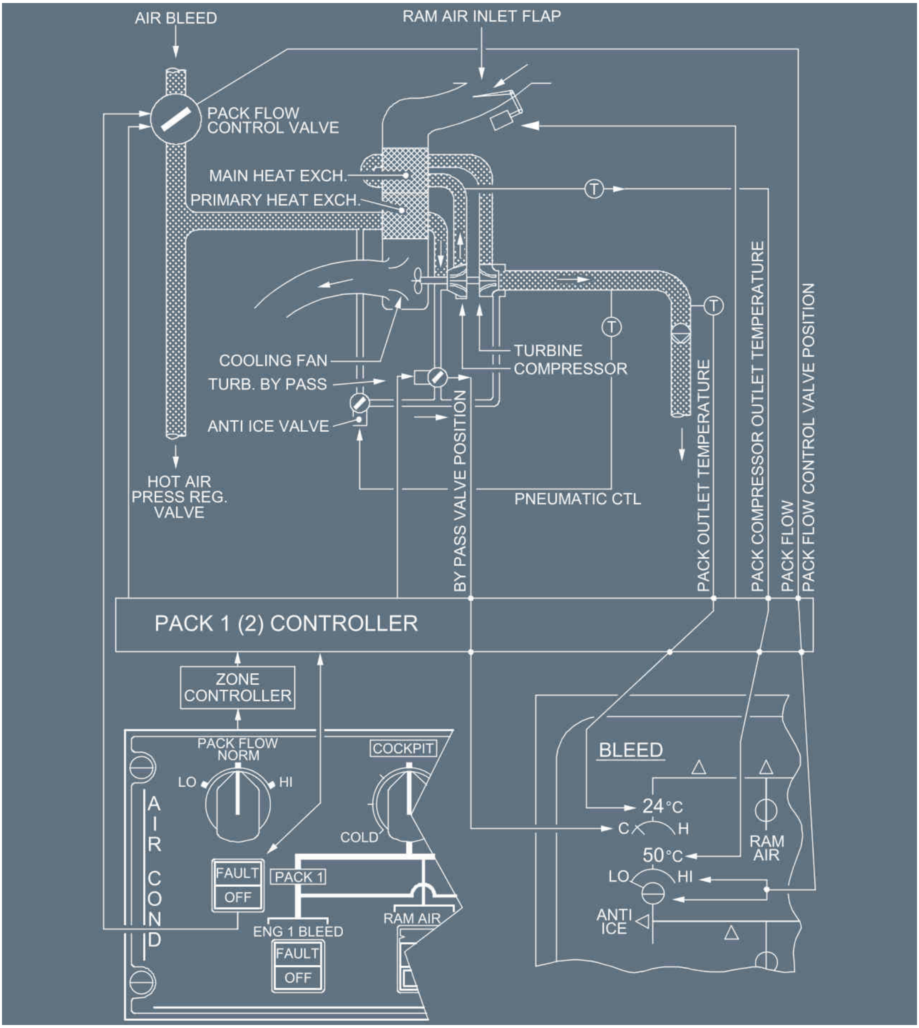
Ident.: DSC-21-10-20-00017768.0001001 / 21 MAR 16
Applicable to: ALL

The two packs operate automatically and independently of each other. Pack operation is controlled by signals coming from the pack controller or the Air Conditioning System Controller (ACSC) ◁✳ .
Warm pre-conditioned bleed air enters the cooling path via the pack flow control valve, and is ducted to the primary heat exchanger.
Then, the cooled bleed air enters the compressor section of the air-cycle machine and is compressed to a higher pressure and temperature.
It is cooled again in the main heat exchanger and enters the turbine section, where it expands and, in expanding, generates power to drive the compressor and cooling air fan.
The removal of energy during this process reduces air temperature, resulting in very low air temperature at turbine discharge.
L3 A water separator system dries the air before it enters the turbine section.

PACK SCHEMATIC (SIMPLIFIED)

Ident.: DSC-21-10-20-00000299.0003001 / 22 MAY 12

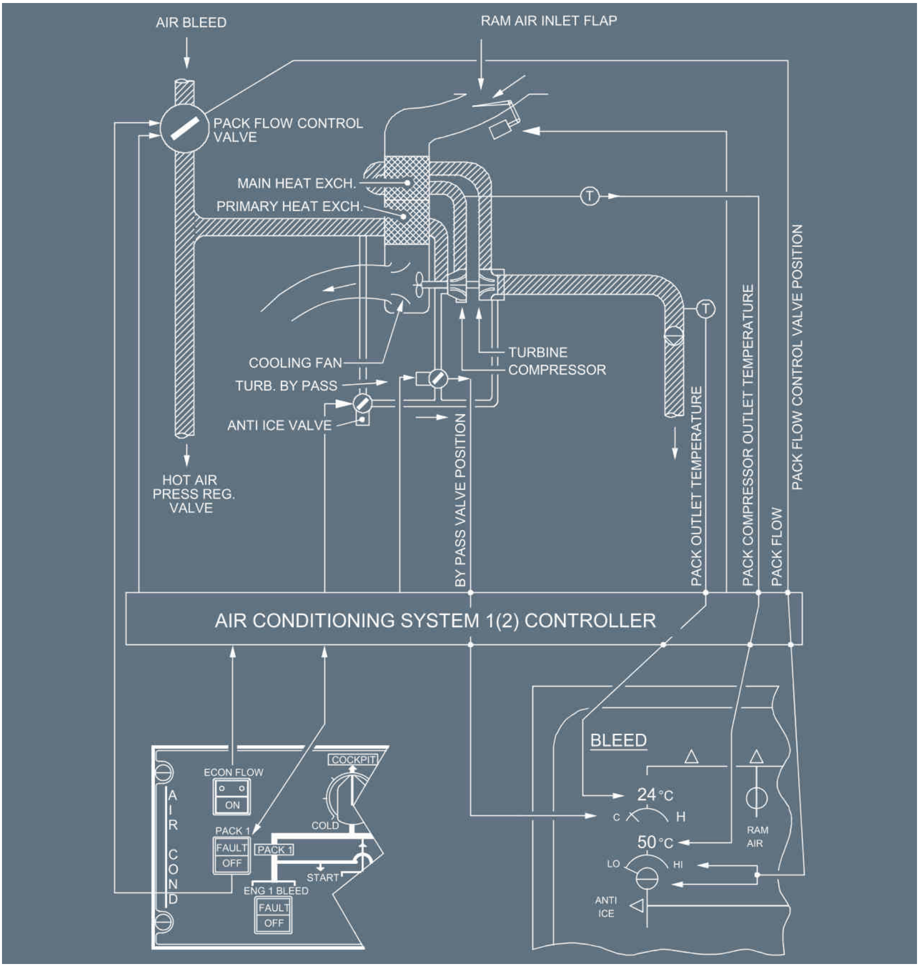
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


AIR BLEED
RAM AIR INLET FLAP
PACK FLOW CONTROL VALVE
MAIN HEAT EXCH.
PRIMARY HEAT EXCH.
T
COOLING FAN
TURB. BY PASS
ANTI ICE VALVE
TURBINE
COMPRESSOR
T
T
HOT AIR PRESS REG. VALVE
PNEUMATIC CTL
BY PASS VALVE POSITION
PACK OUTLET TEMPERATURE
PACK COMPRESSOR OUTLET TEMPERATURE
PACK FLOW
PACK FLOW CONTROL VALVE POSITION
PACK 1 (2) CONTROLLER
ZONE CONTROLLER
PACK FLOW
NORM
LO
HI
A I R C O N D
FAULT
OFF
COCKPIT
COLD
PACK 1
ENG 1 BLEED
FAULT
OFF
RAM AIR
BLEED
24°C
C
H
50°C
LO
HI
RAM AIR
ANTI ICE

PACK SCHEMATIC (SIMPLIFIED)

Ident.: DSC-21-10-20-00000299.0007001 / 21 NOV 11

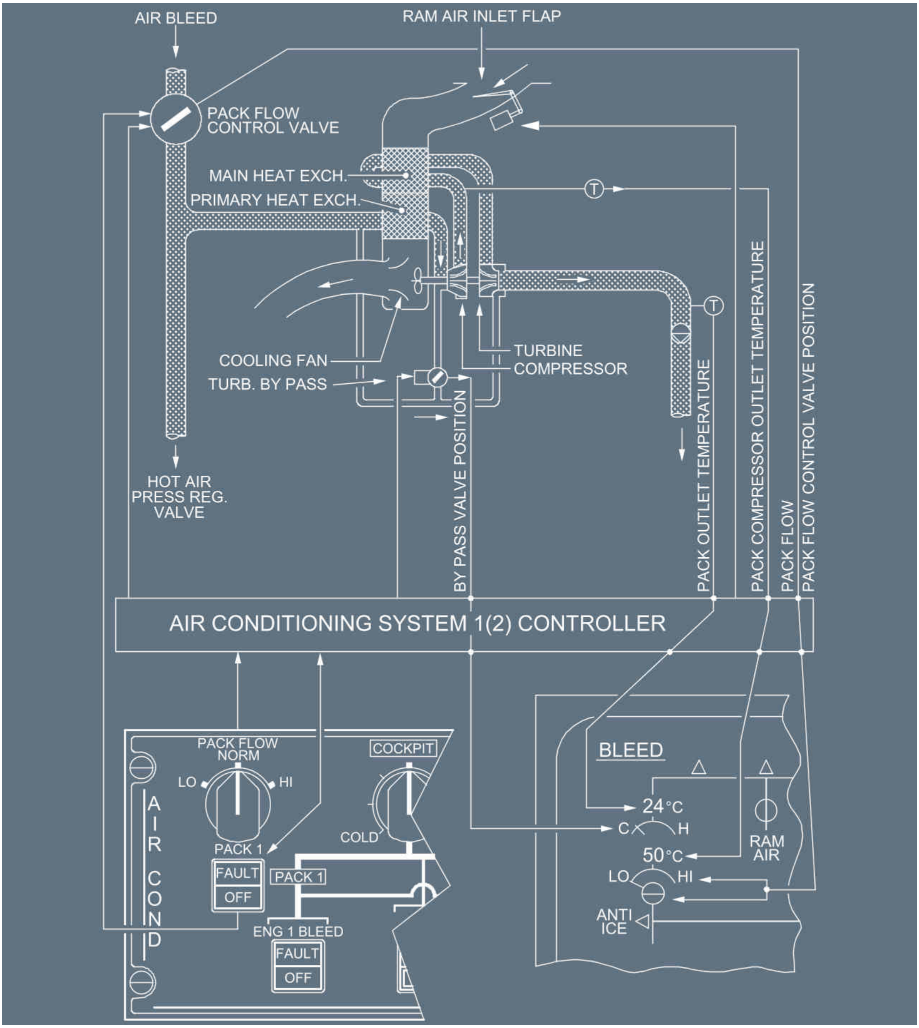
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098


AIR BLEED
RAM AIR INLET FLAP
PACK FLOW CONTROL VALVE
MAIN HEAT EXCH.
PRIMARY HEAT EXCH.
T
T
COOLING FAN
TURB. BY PASS
ANTI ICE VALVE
TURBINE
COMPRESSOR
HOT AIR PRESS REG. VALVE
BY PASS VALVE POSITION
PACK OUTLET TEMPERATURE
PACK COMPRESSOR OUTLET TEMPERATURE
PACK FLOW
PACK FLOW CONTROL VALVE POSITION
AIR CONDITIONING SYSTEM 1(2) CONTROLLER
AIR COND
ECON FLOW
ON
COCKPIT
COLD
PACK 1
FAULT
OFF
PACK 1
START
ENG 1 BLEED
FAULT
OFF
BLEED
24 °C
C
H
50 °C
LO
HI
RAM AIR
ANTI ICE

PACK SCHEMATIC (SIMPLIFIED)

Ident.: DSC-21-10-20-00000299.0008001 / 22 MAY 12

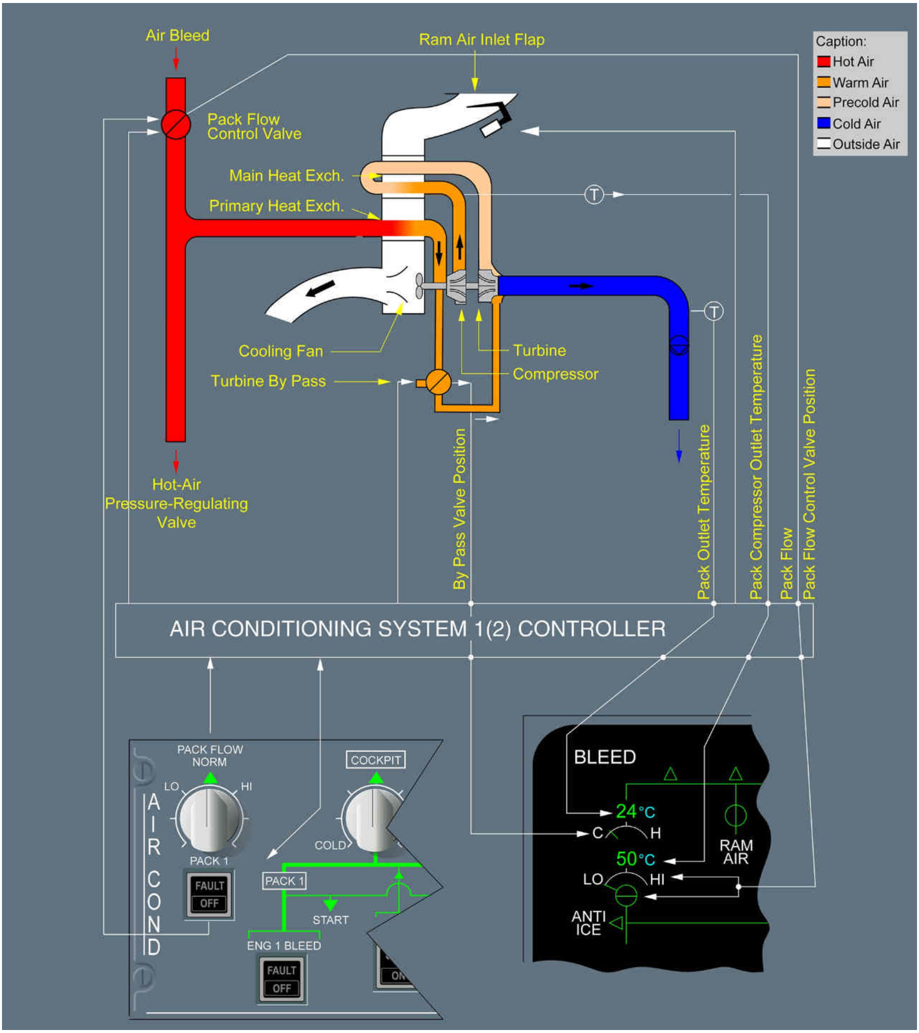
1 **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


AIR BLEED
RAM AIR INLET FLAP
PACK FLOW CONTROL VALVE
MAIN HEAT EXCH.
PRIMARY HEAT EXCH.
T
COOLING FAN
TURB. BY PASS
TURBINE
COMPRESSOR
HOT AIR PRESS REG. VALVE
BY PASS VALVE POSITION
PACK OUTLET TEMPERATURE
PACK COMPRESSOR OUTLET TEMPERATURE
PACK FLOW
PACK FLOW CONTROL VALVE POSITION
AIR CONDITIONING SYSTEM 1(2) CONTROLLER
PACK FLOW
NORM
LO
HI
COCKPIT
COLD
A I R C O N D
PACK 1
FAULT
OFF
PACK 1
ENG 1 BLEED
FAULT
OFF
BLEED
24°C
C
H
50°C
LO
HI
RAM AIR
ANTI ICE

PACK SCHEMATIC (SIMPLIFIED)

2 Ident.: DSC-21-10-20-00000299.0013001 / 10 MAY 21

Applicable to: MSN 11531


Air Bleed
Ram Air Inlet Flap
Caption:
🟥 Hot Air
🟧 Warm Air
Precold Air
🟦 Cold Air
☐ Outside Air
Pack Flow Control Valve
Main Heat Exch.
Primary Heat Exch.
Cooling Fan
Turbine By Pass
Turbine
Compressor
Hot-Air Pressure-Regulating Valve
By Pass Valve Position
Pack Outlet Temperature
Pack Compressor Outlet Temperature
Pack Flow
Pack Flow Control Valve Position
T
T
AIR CONDITIONING SYSTEM 1(2) CONTROLLER
PACK FLOW
NORM
LO
HI
PACK 1
FAULT
OFF
COCKPIT
COLD
PACK 1
START
ENG 1 BLEED
FAULT
OFF
ON
AIR COND
BLEED
24°C
C
H
50°C
LO
HI
RAM AIR
ANTI ICE

PACK FLOW CONTROL VALVE

Ident.: DSC-21-10-20-00017769.0001001 / 24 AUG 18
Applicable to: ALL

This valve is pneumatically-operated and electrically-controlled. It regulates the air flow in accordance with signals received from the pack controllers or the ACSC ◁✱ .
In the absence of air pressure, a spring keeps the valve closed.
The valve closes automatically in case of pack overheat (on ground only), engine start, or operation of the fire or ditching pushbutton. The valve is controlled from the AIR COND panel.

EMERGENCY RAM AIR

Ident.: DSC-21-10-20-00000301.0001001 / 20 DEC 16
Applicable to: ALL

An emergency ram air inlet ventilates the cockpit and cabin to remove smoke, or if both packs fail.
The emergency ram air inlet valve is controlled by the RAM AIR pushbutton on the AIR COND panel.
This pushbutton opens the ram air valve, provided that ditching is not selected.
When the RAM AIR pushbutton is ON : The outflow valve opens about 50 %, provided that it is under automatic control and ΔP is less than 1 PSI. The outflow valve does not automatically open if it is under manual control, even if ΔP is less than 1 PSI. If ΔP is greater than 1 PSI, the check valve located downstream the ram air door will not open, even if the ram air door has been selected open.
No airflow will then be supplied.

MIXER UNIT

Ident.: DSC-21-10-20-00000302.0001001 / 21 MAR 16
Applicable to: ALL

This unit mixes cold fresh air from the packs with the cabin air being recirculated through recirculation fans. The mixer unit is also connected to the emergency ram air inlet and the low pressure ground inlets.

HOT-AIR PRESSURE-REGULATING VALVE

Ident.: DSC-21-10-20-00000303.0002001 / 05 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

This valve regulates the pressure of hot air, tapped upstream of the packs.
It is pneumatically-operated and electrically-controlled from the HOT AIR pb-sw on the AIR COND panel. In the absence of air, a spring keeps the valve closed.

The valve closes automatically, if:
- The duct overheats, or
- The cockpit trim air valve fails, or
- The zone controller fails.

The valve remains operative, even if either the forward or aft cabin trim air valve fails.

HOT-AIR PRESSURE-REGULATING VALVE

Ident.: DSC-21-10-20-00000303.0003001 / 05 MAY 22
3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

This valve regulates the pressure of hot air, tapped upstream of the packs.
It is pneumatically-operated and electrically-controlled from the HOT AIR pb-sw on the AIR COND panel. The ACSC 1 regulates this valve. In the absence of air, a spring keeps the valve closed.

The valve closes automatically, if:
- Both lanes of ACSC 1 or ACSC 2 fail, or
- The duct overheats, or
- At least two trim air valves fail.

The valve remains operative, even if either the forward or aft cabin trim air valve fails.

TRIM AIR VALVES

Ident.: DSC-21-10-20-00017771.0001001 / 21 MAR 16
Applicable to: ALL

These valves are electrically-controlled by the zone controller or the ACSC ◁ . A trim air valve, associated with each zone, adjusts the temperature by adding hot air.
The cockpit trim air valve is controlled by the ACSC 1 ◁ , and the cabin trim air valves are controlled by the ACSC 2 ◁ .

Intentionally left blank

GENERAL

Ident.: DSC-21-10-30-00017772.0001001 / 21 MAR 16
Applicable to: ALL

Temperature regulation is automatic and controlled by one zone controller and two pack controllers, or the ACSC ◁ .

PACK CONTROLLER

Ident.: DSC-21-10-30-00000306.0002001 / 15 FEB 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Each pack controller regulates the temperature of its associated pack, in accordance with a demand signal from the zone controller, by modulating the bypass valve and the ram air inlet flaps.
The ram air inlet flaps close during takeoff and landing to avoid ingestion of foreign matter.

Note: *During takeoff, the ram air inlet flaps close when TO power is set and the main landing gear struts are compressed.*
During landing they close as soon as the main landing gear struts are compressed, as long as speed is at or above 70 kt.
They open 20 s after the speed drops below 70 kt.

The pack controllers also regulate flow by modulating the associated pack flow control valve.

ZONE CONTROLLER

Ident.: DSC-21-10-30-00000307.0001001 / 05 MAR 19
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

PACK FLOW CONTROL

The crew can use the PACK FLOW selector to adjust the pack flow for the number of passengers and for external conditions.

Whatever the crew selects, the system delivers higher flow for any of the following circumstances:
- In single-pack operation,
- When the APU is supplying bleed air.

The system delivers normal flow if the crew selects LO flow and the temperature demand cannot be satisfied.

ENGINE PRESSURE DEMAND

When the cooling demand in one zone cannot be satisfied, if the bleed pressure is too low, the zone controller sends a pressure demand signal to both Engine Interface Units (EIU) to increase the minimum idle and to raise the bleed pressure.

APU FLOW DEMAND

When the APU bleed valve is open, the zone controller signals the APU's Electronic Control Box (ECB) to increase the APU flow output when any zone temperature demand cannot be satisfied.

TEMPERATURE REGULATION

Ident.: DSC-21-10-30-00017773.0001001 / 21 MAR 16
Applicable to: ALL

Temperature regulation is achieved by the zone controller or the ACSC ◁ .
The zone controller regulates the temperature of the two cabin zones and the cockpit. The ACSC 2 ◁ regulates the temperature of the two cabin zones, and the ACSC 1 ◁ regulates the cockpit temperature.

BASIC TEMPERATURE REGULATION

The flight crew uses the temperature selectors on the air conditioning panel to select the reference temperatures. The zone controller or the ACSC ◁ computes a temperature demand from the selected temperature and the actual temperature. The reference temperatures are then fine tuned for each cabin zone through the temperature control panel ◁ installed on the FAP.

The actual temperature is measured by sensors:
- In the cockpit, for the cockpit zone;
- In the lavatory extraction circuit and galley ventilation system, for the cabin.

A signal corresponding to the lowest demanded zone temperature goes to the pack controller or the ACSC ◁ , which then make both packs supply the required outlet temperature.

OPTIMIZED TEMPERATURE REGULATION

The zone controller or the ACSC ◁ optimizes temperature by acting on the trim air valves.
The temperature selection range is from 18 °C (64 °F) to 30 °C (86 °F).

AIR CONDITIONING SYSTEM CONTROLLERS

Ident.: DSC-21-10-30-00017775.0001001 / 20 DEC 16
Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597

Each air conditioning system controller regulates the temperature of its associated pack, by modulating the bypass valve and the ram air inlet flap.
The ram air inlet flap closes during takeoff and landing to avoid the ingestion of foreign matter.

Note: *During takeoff, the ram air inlet flap closes when takeoff power is set, and the main landing gear struts are compressed.*
During landing, it closes as soon as the main landing gear struts are compressed, as long as speed is at or above 70 kt.
It opens 20 s after the speed drops below 70 kt.

The air conditioning system controllers also regulate flow by modulating the associated pack flow control valve.

PACK FLOW CONTROL

The flight crew can use the PACK FLOW selector to adjust the pack flow for the number of passengers and for external conditions.

Whatever the crew selects, the system delivers higher flow for any of the following circumstances:
- In single-pack operation,
- When the APU is supplying bleed air.

The system delivers normal flow if the flight crew selects LO flow and the temperature demand cannot be satisfied.

ENGINE PRESSURE DEMAND

When the cooling demand in one zone cannot be satisfied, if the bleed pressure is too low, the air conditioning system controller sends a pressure demand signal to both Engine Interface Units (EIU) to increase the minimum idle and to raise the bleed pressure.

APU FLOW DEMAND

When the APU bleed valve is open, the air conditioning system controller signals the APU's Electronic Control Box (ECB) to increase the APU flow output when any zone temperature demand cannot be satisfied.

AIR CONDITIONING SYSTEM CONTROLLERS

Ident.: DSC-21-10-30-00017775.0019001 / 20 DEC 16
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Each air conditioning system controller regulates the temperature of its associated pack, by modulating the bypass valve and the ram air inlet flap.
The ram air inlet flap closes during takeoff and landing to avoid the ingestion of foreign matter.

Note: *During takeoff, the ram air inlet flap closes when takeoff power is set, and the main landing gear struts are compressed.*
During landing, it closes as soon as the main landing gear struts are compressed, as long as speed is at or above 70 kt.
It opens 20 s after the speed drops below 70 kt.

The air conditioning system controllers also regulate flow by modulating the associated pack flow control valve.

PACK FLOW CONTROL

The flight crew can use the ECON FLOW pb to adjust the pack flow for the number of passengers and for external conditions.

Whatever the crew selects, the system delivers higher flow for any of the following circumstances:
- In single-pack operation,
- When the APU is supplying bleed air.

The system delivers normal flow if the flight crew selects ECON flow and the temperature demand cannot be satisfied.

ENGINE PRESSURE DEMAND

When the cooling demand in one zone cannot be satisfied, if the bleed pressure is too low, the air conditioning system controller sends a pressure demand signal to both Engine Interface Units (EIU) to increase the minimum idle and to raise the bleed pressure.

APU FLOW DEMAND

When the APU bleed valve is open, the air conditioning system controller signals the APU's Electronic Control Box (ECB) to increase the APU flow output when any zone temperature demand cannot be satisfied.

GENERAL

Ident.: DSC-21-10-40-00000309.0001001 / 15 FEB 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Each controller consists of a primary channel that is normally in control and a secondary channel that acts as a backup if the primary channel fails.

GENERAL

Ident.: DSC-21-10-40-00000309.0002001 / 21 MAR 16
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Each controller is comprised of two lanes. One lane controls the system, the other takes over full control, in case of an active lane failure.

ZONE CONTROLLER

Ident.: DSC-21-10-40-00000310.0001001 / 15 FEB 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

PRIMARY CHANNEL FAILURE

The secondary channel operates as backup.
The flow setting function and optimized temperature regulation are not available. HOT AIR and TRIM AIR valves close.
The zones are controlled to 24 °C (76 °F) (backup regulation). Pack 1 controls the cockpit temperature. Pack 2 controls the FWD and AFT cabin temperatures.
ALTN MODE appears on the ECAM (Electronic Centralized Aircraft Monitoring) COND page.

SECONDARY CHANNEL FAILURE

This has no effect on zone temperature regulation.
Backup mode is lost.

PRIMARY AND SECONDARY CHANNEL FAILURE

Optimized and backup temperature regulation is lost.
The packs deliver a fixed temperature: 20 °C (68 °F) for pack 1, 10 °C (50 °F) for pack 2. The failure removes all information from the ECAM COND page, which then displays PACK REG.

PACK CONTROLLERS

Ident.: DSC-21-10-40-00000311.0001001 / 15 FEB 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

PRIMARY CHANNEL FAILURE

The secondary computer operates as a backup.

Regulation is not optimized.
Pack flow is fixed at the previous setting.

SECONDARY CHANNEL FAILURE

This failure has no effect on pack regulation. Backup mode is lost.
ECAM signals related to the corresponding pack are lost.

PRIMARY AND SECONDARY CHANNEL FAILURE

As a backup, corresponding pack outlet temperature is controlled by the anti-ice valve and is stabilized to a temperature between 5 °C (41 °F) and 30 °C (86 °F) in a maximum of 6 min.
ECAM signals, related to the corresponding pack, are lost.

AIR CONDITIONING SYSTEM CONTROLLERS ⧏

Ident.: DSC-21-10-40-00018747.0001001 / 21 MAR 16
Applicable to: ALL

ONE LANE FAILURE

No effect, as the second lane takes over.

BOTH LANES FAILURE

The related pack is lost, and the hot air pressure-regulating valve and associated trim air valves close.

AIR CYCLE MACHINE FAILURE

Ident.: DSC-21-10-40-00000312.0002001 / 15 FEB 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

If the Air Cycle Machine (ACM) fails (compressor/turbine seizure), the affected pack may be operated in heat exchanger cooling mode.
Warm pre-conditioned bleed air enters the cooling path via the pack valve and goes to the primary heat exchanger. Then, the main part of the cooled air goes directly downstream of ACM turbine through the bypass valve, and the rest goes through the failed ACM.
The ACM seizure reduces the pack flow.

As for normal pack operation:
- The pack controller regulates temperature, in accordance with zone controller demand, by modulating the bypass valve and the ram air inlet flap.
- The zone controller regulates the hot air flow through the hot air valves to optimize cockpit/cabin temperature regulation. Hot air flow is lower than in normal pack operation, because pack flow is reduced.

AIR CYCLE MACHINE FAILURE

Ident.: DSC-21-10-40-00000312.0003001 / 21 MAR 16
2 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

If the Air Cycle Machine (ACM) fails (compressor/turbine seizure), the affected pack may be operated in heat exchanger cooling mode.
Warm pre-conditioned bleed air enters the cooling path via the pack valve and goes to the primary heat exchanger. Then, the main part of the cooled air goes directly downstream of ACM turbine through the bypass valve, and the rest goes through the failed ACM.
The ACM seizure reduces the pack flow.

As for normal pack operation :
- The air conditioning system controller regulates temperature by modulating the bypass valve and the ram air inlet flap.
- The air conditioning system controller regulates the hot air flow through the trim air valves to optimize cockpit/cabin temperature regulation. Hot air flow is lower than in normal pack operation, because pack flow is reduced.

HOT AIR PRESSURE REGULATING VALVE FAILURE

Ident.: DSC-21-10-40-00000313.0001001 / 21 MAR 16
Applicable to: ALL

Failed open : No effect.

Failed closed : Optimized regulation is lost. Trim air valves are driven to the fully closed position. Pack 1 controls the cockpit temperature to the selected value and pack 2 controls the cabin temperature (FWD and AFT) to the mean value of the selected temperatures.

TRIM AIR VALVE FAILURE

Ident.: DSC-21-10-40-00000314.0001001 / 21 MAR 16
Applicable to: ALL

Optimized temperature regulation of the corresponding zone is lost.

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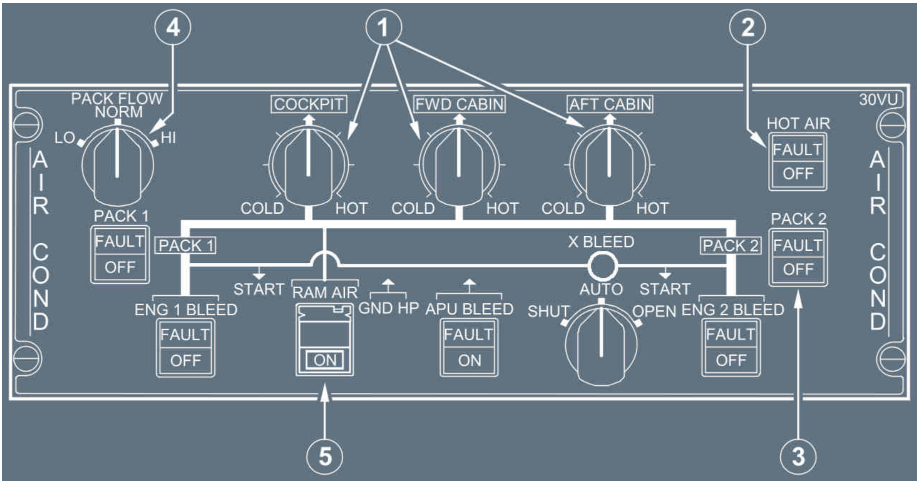
CONTROLS ON OVERHEAD PANEL

Ident.: DSC-21-10-50-00000315.0002001 / 20 DEC 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


4
1
2
PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
30VU
HOT AIR
FAULT
OFF
AIR COND
COLD
HOT
COLD
HOT
COLD
HOT
PACK 1
FAULT
OFF
PACK 1
X BLEED
PACK 2
PACK 2
FAULT
OFF
AIR COND
START
RAM AIR
GND HP
APU BLEED
AUTO
START
SHUT
OPEN
ENG 1 BLEED
FAULT
OFF
ON
FAULT
ON
ENG 2 BLEED
FAULT
OFF
5
3

(1) Zone temperature selector

- 12 o'clock position: 24 °C (76 °F)
- COLD position: 18 °C (64 °F)
- HOT position: 30 °C (86 °F).

(2) HOT AIR pb

ON :	The valve regulates hot air pressure.
OFF :	The valve closes, and the trim air valves close. The FAULT circuit is reset.
FAULT :	The FAULT light comes on amber, along with an associated ECAM caution, when duct overheat is detected. The fault circuit detects an overheat when the duct temperature reaches 88 °C (190 °F) once. The valve and trim air valves close automatically. The FAULT light goes off when the temperature drops below 70 °C (158 °F), and the flight crew selects OFF.

(3) PACK pb-sw

ON : The pack flow control valve is automatically-controlled.

It opens, except in the following cases:

- Upstream pressure below minimum
- Compressor outlet overheat
- Engine start sequence:

1. If the crossbleed valve is closed, the valve located on the starting engine side immediately closes, when the MODE selector is set to IGN (or CRK)
2. It remains closed on the starting engine side (provided the crossbleed valve is closed) when:
   - The MASTER sw is set to ON (or MAN START pb is set to ON)
   - The start valve is open
   - N2 < 50 %.

   Note: *If the crossbleed valve is open at engine start, both pack flow control valves close.*
3. On ground, reopening of the valves is delayed for 30 s to avoid a supplementary pack closure cycle during second engine start.

- FIRE pb, of the engine on the related side, is pressed
- Ditching is selected.

OFF : The pack flow control valve closes.

FAULT lt : Comes on amber, and a caution appears on the ECAM, if the pack flow control valve position disagrees with the selected position, or in the case of compressor outlet overheat or pack outlet overheat.

(4) PACK FLOW selector

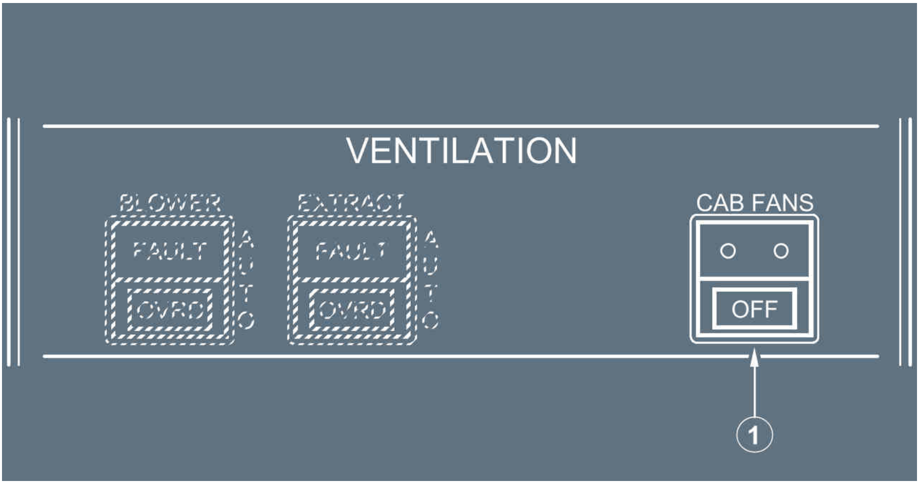
- Permits the selection of pack valve flow, according to the number of passengers and ambient conditions (smoke removal, hot or wet conditions)
  LO (80 %) – NORM (100 %) – HI (120 %)
- Manual selection is irrelevant in single pack operation, or with APU bleed supply. In these cases, HI is automatically selected
- If LO is selected, the pack flow can be automatically selected up to 100 % when the cooling demand cannot be satisfied.

(5) RAM AIR pb (guarded)

ON : The ON light comes on white.

If the DITCHING pb, on the CABIN PRESS panel, is in normal position:
- The emergency ram air inlet opens
- If Δp ≥ 1 PSI: The outflow valve control remains normal. No emergency ram air flows in
- If Δp < 1 PSI: The outflow valve opens to about 50 % when under automatic control. It does not automatically open when it is under manual control. Emergency ram airflow is directly supplied to the mixer unit.

OFF: The emergency ram air inlet closes.



(1) CAB FAN pb

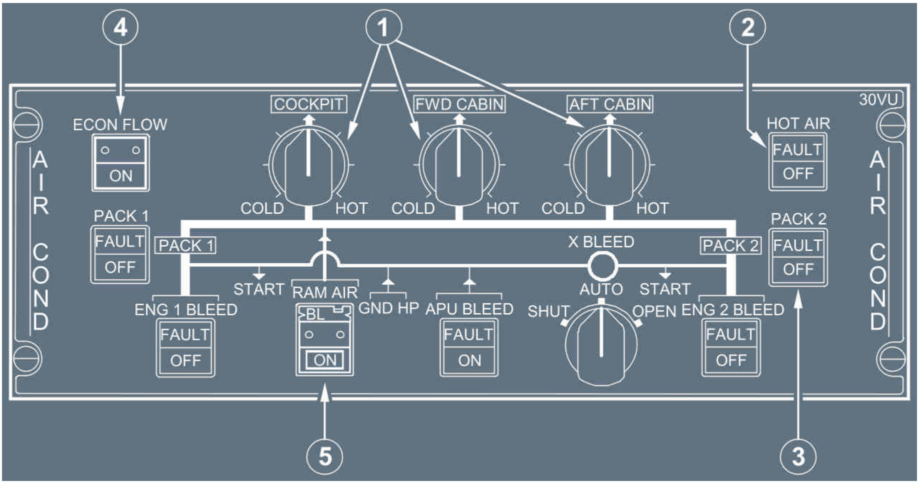
ON : The two cabin fans are on.

OFF: The two cabin fans are off.

CONTROLS ON OVERHEAD PANEL

Ident.: DSC-21-10-50-00000315.0006001 / 20 DEC 16

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098


4
1
2
30VU
ECON FLOW
ON
COCKPIT
FWD CABIN
AFT CABIN
HOT AIR
FAULT
OFF
AIR COND
COLD
HOT
COLD
HOT
COLD
HOT
PACK 1
FAULT
OFF
PACK 1
X BLEED
PACK 2
PACK 2
FAULT
OFF
START
RAM AIR
GND HP
APU BLEED
AUTO
START
SHUT
OPEN
ENG 1 BLEED
FAULT
OFF
BL
ON
FAULT
ON
ENG 2 BLEED
FAULT
OFF
AIR COND
5
3

(1) Zone temperature selector

- 12 o'clock position: 24 °C (76 °F)
- COLD position: 18 °C (64 °F)
- HOT position: 30 °C (86 °F).

(2) HOT AIR pb

ON : The valve regulates hot air pressure.

OFF : The valve closes, and the trim air valves close.
The FAULT circuit is reset.

FAULT : The FAULT light comes on amber, along with an associated ECAM caution, when duct overheat is detected. The fault circuit detects an overheat when the duct temperature reaches 88 °C (190 °F).
The valve and trim air valves close automatically.
The FAULT light goes off when the temperature drops below 70 °C (158 °F), and the flight crew selects OFF.

(3) PACK pb-sw

ON : The pack flow control valve is automatically-controlled.

It opens, except in the following cases:
- Upstream pressure below minimum
- Compressor outlet overheat
- Engine start sequence:
    1. If the crossbleed valve is closed, the valve located on the starting engine side immediately closes, when the MODE selector is set to IGN (or CRK)
    2. It remains closed on the starting engine side (provided the crossbleed valve is closed) when:
        - The MASTER sw is set to ON (or MAN START pb is set to ON)
        - The start valve is open
        - N2 < 50 %.

        Note: *If the crossbleed valve is open at engine start, both pack flow control valves close.*
    3. On ground, reopening of the valves is delayed for 30 s to avoid a supplementary pack closure cycle during second engine start.
- FIRE pb, of the engine on the related side, is pressed
- Ditching is selected.

OFF : The pack flow control valve closes.

FAULT lt : Comes on amber, and a caution appears on the ECAM, if the pack flow control valve position disagrees with the selected position, or in the case of compressor outlet overheat or pack outlet overheat.

(4) ECON FLOW pb-sw

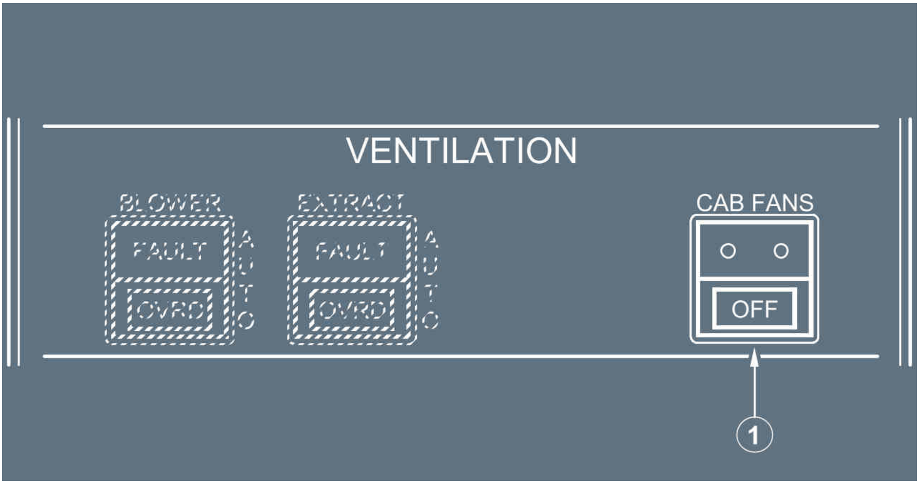
- Permits selection of ECON or normal pack valve flow according to number of passengers and ambient conditions (smoke removal, hot or wet conditions)
  ON ECON flow is selected, provides 80 % of the normal flow.
  OFF 100 % of the normal flow.
- The manual selection is irrelevant in single pack operation or with APU bleed supply. In these cases, the system delivers 120 % of the normal flow
- If ECON FLOW pb-sw is set to ON, the pack flow can be automatically selected up to 100 % (normal flow) when the cooling demand cannot be satisfied.

(5) RAM AIR pb (guarded)

ON : The ON light comes on white.

If the DITCHING pb, on the CABIN PRESS panel, is in normal position:
- The emergency ram air inlet opens
- If $\Delta p \geq 1$ PSI: The outflow valve control remains normal. No emergency ram air flows in
- If $\Delta p < 1$ PSI: The outflow valve opens to about 50 % when under automatic control. It does not automatically open when it is under manual control. Emergency ram airflow is directly supplied to the mixer unit.

OFF: The emergency ram air inlet closes.



(1) CAB FAN pb

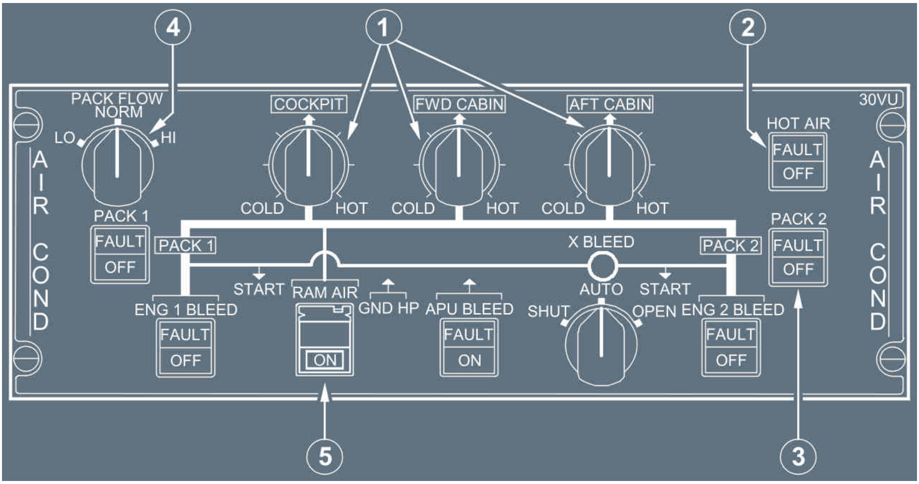
ON : The two cabin fans are on.

OFF: The two cabin fans are off.

CONTROLS ON OVERHEAD PANEL

Ident.: DSC-21-10-50-00000315.0018001 / 25 JAN 17

1 **Applicable to: MSN 08495-09324, 10949-11597**


4
1
2
PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
30VU
HOT AIR
FAULT
OFF
AIR COND
COLD
HOT
COLD
HOT
COLD
HOT
PACK 1
FAULT
OFF
PACK 1
X BLEED
PACK 2
PACK 2
FAULT
OFF
START
RAM AIR
GND HP
APU BLEED
AUTO
START
ENG 1 BLEED
FAULT
OFF
ON
FAULT
ON
SHUT
OPEN
ENG 2 BLEED
FAULT
OFF
AIR COND
5
3

(1) Zone temperature selector

- 12 o'clock position: 24 °C (76 °F)
- COLD position: 18 °C (64 °F)
- HOT position: 30 °C (86 °F).

(2) HOT AIR pb

ON : The valve regulates hot air pressure.

OFF : The valve closes, and the trim air valves close.
The FAULT circuit is reset.

FAULT : The FAULT light comes on amber, along with an associated ECAM caution, when duct overheat is detected. The fault circuit detects an overheat when the duct temperature reaches 88 °C (190 °F) once.
The valve and trim air valves close automatically.
The FAULT light goes off when the temperature drops below 70 °C (158 °F), and the flight crew selects OFF.

(3) PACK pb-sw

ON : The pack flow control valve is automatically-controlled.
PACKS appears on the Engine Warning Display when the thrust levers are in the TOGA or FLX/MCT detent.

It opens, except in the following cases:
- Upstream pressure below minimum
- Compressor outlet overheat
- Engine start sequence:
    1. If the crossbleed valve is closed, the valve located on the starting engine side immediately closes, when the MODE selector is set to IGN (or CRK)
    2. It remains closed on the starting engine side (provided the crossbleed valve is closed) when:
        - The MASTER sw is set to ON (or MAN START pb is set to ON)
        - The start valve is open
        - N2 < 50 %.

      Note: *If the crossbleed valve is open at engine start, both pack flow control valves close.*
    3. On ground, reopening of the valves is delayed for 60 s to avoid a supplementary pack closure cycle during second engine start.
- FIRE pb, of the engine on the related side, is pressed
- Ditching is selected.

OFF : The pack flow control valve closes.

FAULT lt : Comes on amber, and a caution appears on the ECAM, if the pack flow control valve position disagrees with the selected position, or in the case of compressor outlet overheat or pack outlet overheat.

(4) PACK FLOW selector

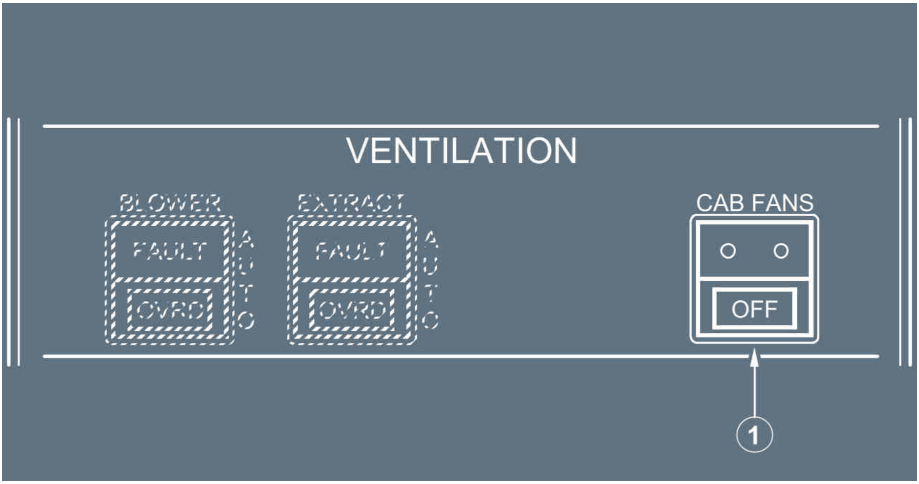
- Permits the selection of pack valve flow, according to the number of passengers and ambient conditions (smoke removal, hot or wet conditions)
  LO (80 %) – NORM (100 %) – HI (120 %)
- Manual selection is irrelevant in single pack operation, or with APU bleed supply. In these cases, HI is automatically selected
- If LO is selected, the pack flow can be automatically selected up to 100 % when the cooling demand cannot be satisfied.

(5) RAM AIR pb (guarded)

ON : The ON light comes on white.

If the DITCHING pb, on the CABIN PRESS panel, is in normal position:
- The emergency ram air inlet opens
- If Δp ≥ 1 PSI: The outflow valve control remains normal. No emergency ram air flows in
- If Δp < 1 PSI: The outflow valve opens to about 50 % when under automatic control. It does not automatically open when it is under manual control. Emergency ram airflow is directly supplied to the mixer unit.

OFF: The emergency ram air inlet closes.



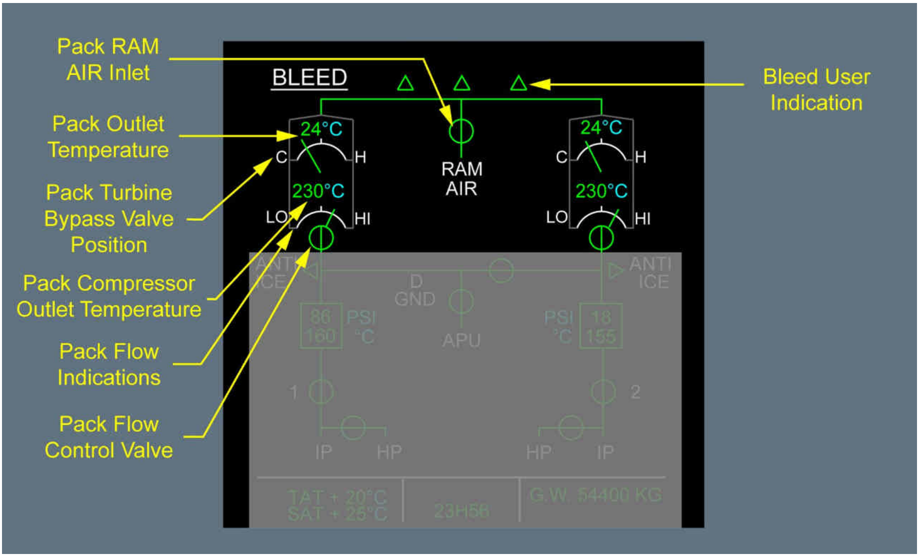
(1) CAB FAN pb

ON : The two cabin fans are on.

OFF: The two cabin fans are off.

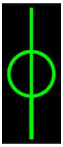
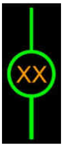
ECAM BLEED PAGE

2 Ident.: DSC-21-10-50-00000316.0006001 / 03 NOV 22
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

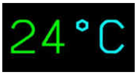
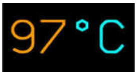
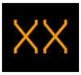

Pack RAM AIR Inlet
Pack Outlet Temperature
Pack Turbine Bypass Valve Position
Pack Compressor Outlet Temperature
Pack Flow Indications
Pack Flow Control Valve
Bleed User Indication
BLEED
24°C
C
H
230°C
LO
HI
RAM AIR
24°C
C
H
230°C
LO
HI
ANTI ICE
D GND
APU
86 PSI
160 °C
PSI 18
°C 155
1
2
IP
HP
HP
IP
TAT + 20°C
SAT + 25°C
23H56
G.W. 54400 KG

PACK RAM AIR INLET

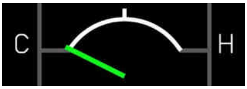
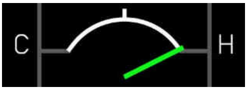
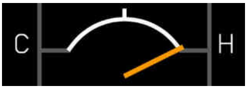
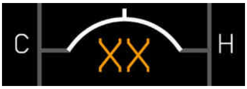
⊖	The valve is normally closed.
⊘	The valve is partially open.
⦶	The valve is fully open on ground.

	The valve is fully open in flight.
	The information is not valid.

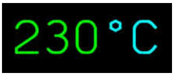
PACK OUTLET TEMPERATURE

	The pack outlet temperature is normal.
	The pack outlet temperature is above 90 °C.
	The information is not valid.

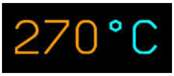
PACK TURBINE BYPASS VALVE POSITION

	The bypass valve is closed.
	The bypass valve is fully opened.
	The bypass valve information is not reliable.
	The information is not valid.

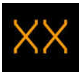
PACK COMPRESSOR OUTLET TEMPERATURE



The pack compressor outlet temperature is normal.

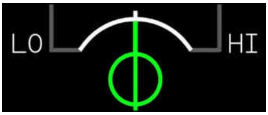


The pack compressor outlet temperature is above 260 °C.

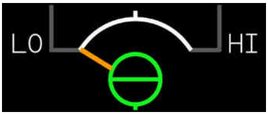


The information is not valid.

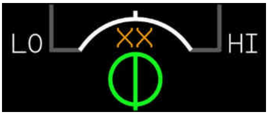
PACK FLOW INDICATIONS



The pack flow is normal.

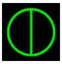


There is no flow rate. The pack flow control valve is closed.

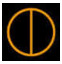


The information is not valid.

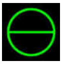
PACK FLOW CONTROL VALVE



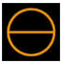
The valve is open.



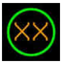
The valve is open, and disagrees with the control position.



The valve is fully closed.

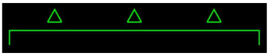


The value is fully closed, and disagrees with the control position.

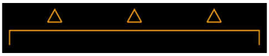


The information is not valid.

BLEED USER INDICATION



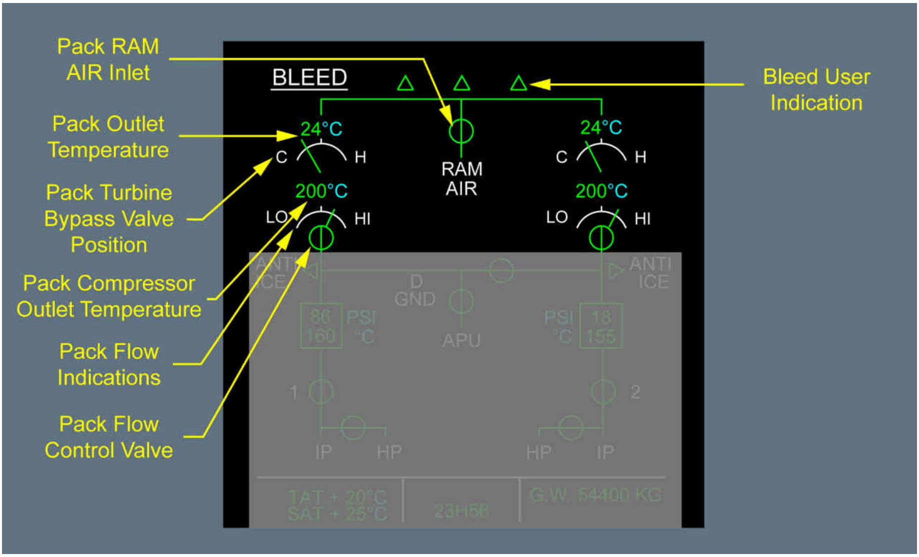
User indication is normal.



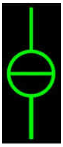
RAM AIR valve and both pack flow control valves are fully closed.

ECAM BLEED PAGE

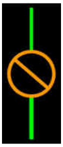
3 Ident.: DSC-21-10-50-00000316.0004001 / 03 NOV 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


Pack RAM AIR Inlet
Pack Outlet Temperature
Pack Turbine Bypass Valve Position
Pack Compressor Outlet Temperature
Pack Flow Indications
Pack Flow Control Valve
Bleed User Indication
BLEED
24°C
C
H
RAM AIR
24°C
C
H
200°C
LO
HI
200°C
LO
HI
ANTI ICE
D GND
ANTI ICE
86 PSI
160 °C
APU
PSI 18
°C 155
1
2
IP
HP
HP
IP
TAT +20°C
SAT +25°C
23H56
G.W. 54400 KG

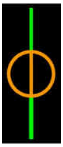
PACK RAM AIR INLET



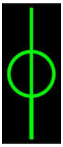
The valve is normally closed.



The valve is partially open.

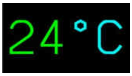


The valve is fully open on ground.

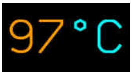


The valve is fully open in flight.

PACK OUTLET TEMPERATURE

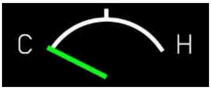


The pack outlet temperature is normal.

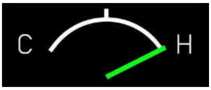


The pack outlet temperature is above 90 °C.

PACK TURBINE BYPASS VALVE POSITION

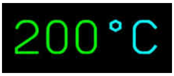


The bypass valve is closed.

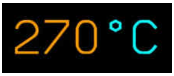


The bypass valve is fully opened.

PACK COMPRESSOR OUTLET TEMPERATURE

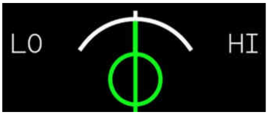


The pack compressor outlet temperature is normal.

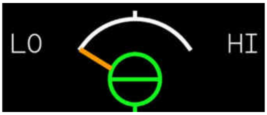


The pack compressor outlet temperature is above 230 °C.

PACK FLOW INDICATIONS

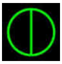


The pack flow is normal.

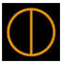


There is no flow rate. The pack flow control valve is closed.

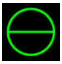
PACK FLOW CONTROL VALVE



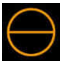
The valve is open.



The valve is open, and disagrees with the control position.

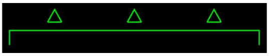


The valve is fully closed.

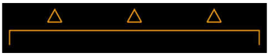


The valve is fully closed, and disagrees with the control position.

BLEED USER INDICATION



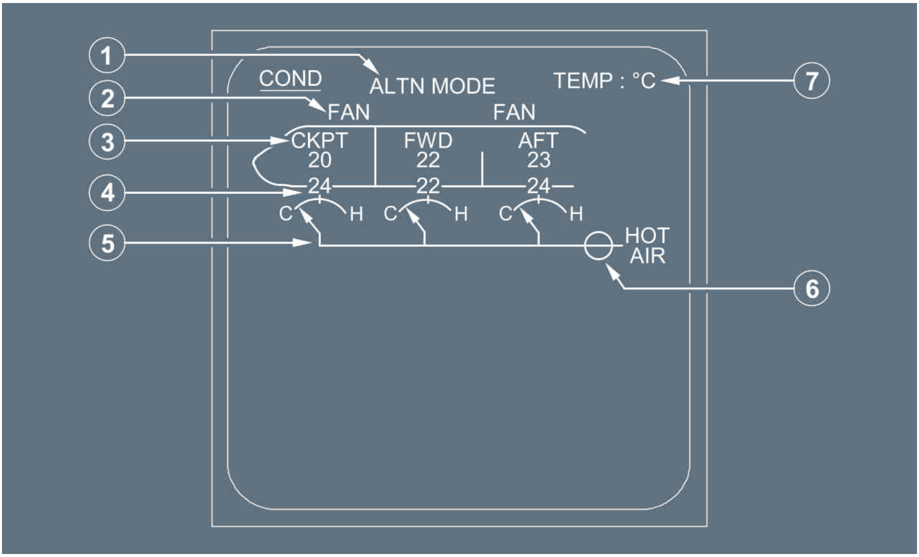
User indication is normal.



RAM AIR valve and both pack flow control valves are fully closed.

ECAM COND PAGE

Ident.: DSC-21-10-50-00000317.0001001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



(1) Zone controller fault indication

ALTN MODE : Primary zone controller fault (green).

PACK REG : Zone controller fault (basic regulation by packs only) (green).

No indication : Zone controller normal operation.

(2) Cabin FAN fault indication

It appears in amber, if the recirculation fan is detected as faulty.

(3) Zone temperature indication

It is in green.

(4) Zone duct temperature

It appears in green, and becomes amber at 80 °C (176 °F).

(5) Zone trim air valve position indication

The arrow is green. It is replaced by amber crosses (“XX”) if the valve fails.

C = Cold valve fully closed.

H = Hot valve fully open.

(6) Hot air pressure regulating valve

In line - Green	:	The valve is open.
In line - Amber	:	The valve is not closed; disagrees with the control position.
Crossline - Green	:	The valve is fully closed, and the pushbutton is at auto.
Crossline - Amber	:	The valve is closed, and pushbutton is OFF, or the valve disagree is closed.

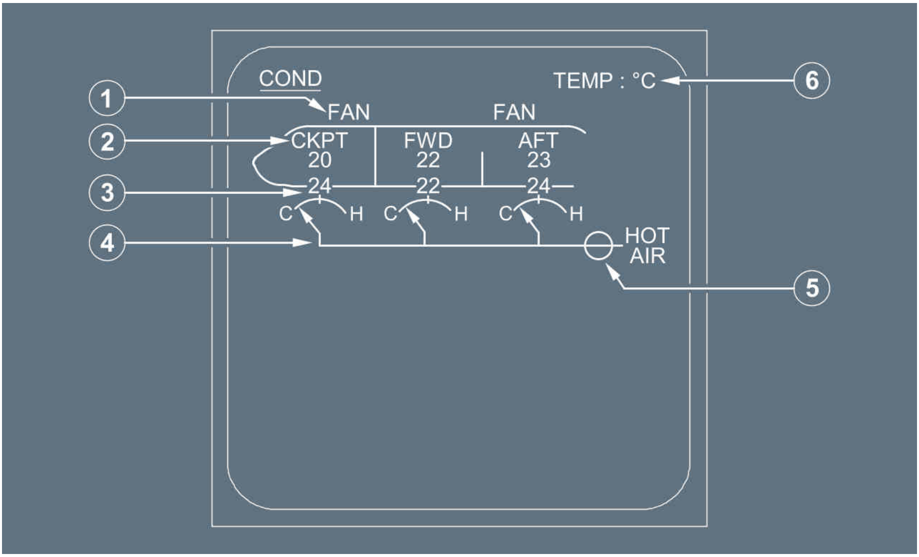
(7) TEMP
Unit of measure (°C or °F) is indicated in cyan.

Note: *When the hot air valve is closed, a spurious FWD CRG HEAT message may appear in the INOP SYS list, even if the system remains operative.*

ECAM COND PAGE

Ident.: DSC-21-10-50-00000317.0004001 / 09 OCT 12

4 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**



(1) Cabin FAN fault indication
It appears in amber, if the recirculation fan is detected as faulty.

(2) Zone temperature
It is in green.

(3) Zone duct temperature
It appears in green, and becomes amber at 80 °C (176 °F).

(4) Zone trim air valve position
The arrow is green. It is replaced by amber crosses (“XX”) if the valve fails.

C = Cold valve fully closed.

H = Hot valve fully open.

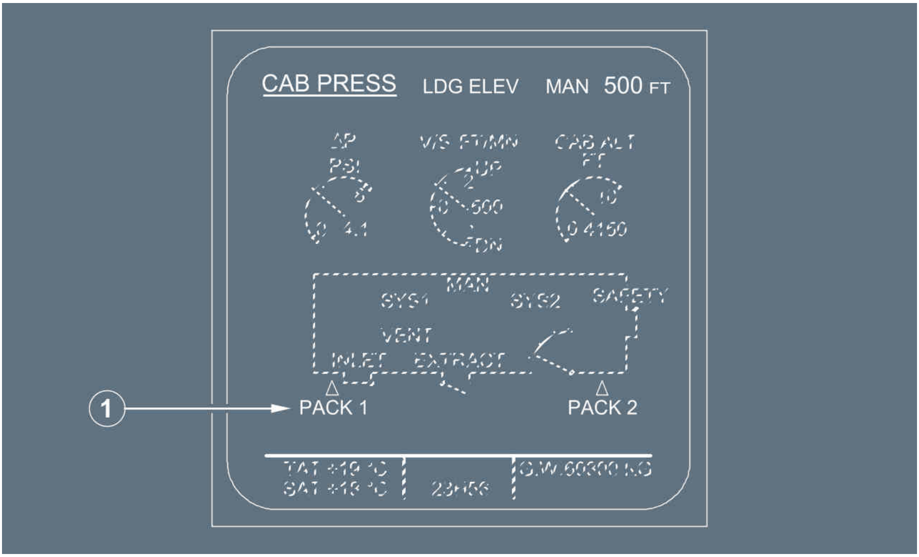
(5) Hot air pressure regulating valve

In line - Green	:	Valve is normally open.
In line - Amber	:	Valve is abnormally open (disagrees with control position).
Crossline - Green	:	Valve is normally fully closed.
Crossline - Amber	:	Valve is closed and pushbutton OFF, or valve position disagrees with control position.

(6) TEMP
Unit of measure (°C or °F) is indicated in cyan.

ECAM CAB PRESS PAGE

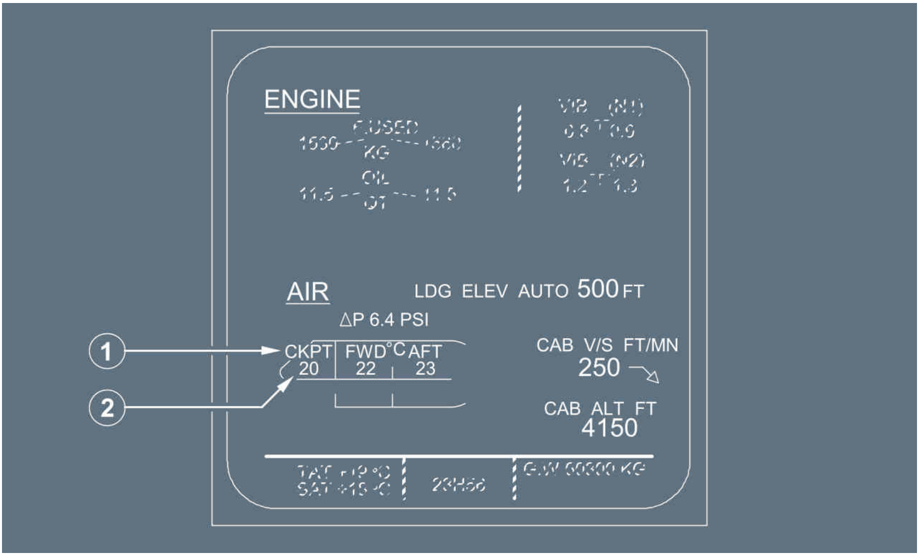
Ident.: DSC-21-10-50-00000318.0001001 / 09 OCT 12
Applicable to: ALL


CAB PRESS
LDG ELEV
MAN 500 FT
ΔP
PSI
8
0
4.1
V/S FT/MN
UP
2
0
500
DN
CAB ALT
FT
10
0 4150
MAN
SYS1
SYS2
SAFETY
VENT
INLET
EXTRACT
1
PACK 1
PACK 2
TAT +19 °C
SAT +18 °C
23 H 56
G.W. 60300 KG

(1) PACK indication
Triangle normally green, PACK 1(2) indication normally white. Both become amber when pack flow control valve is closed with associated engine running.

ECAM CRUISE PAGE

Ident.: DSC-21-10-50-00000319.0001001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


ENGINE
F.USED
KG
1500
1500
OIL
QT
11.5
11.5
VIB (N1)
0.9 0.9
VIB (N2)
1.2 1.3
AIR
LDG ELEV AUTO 500 FT
ΔP 6.4 PSI
1
2
CKPT
FWD
°C
AFT
20
22
23
CAB V/S FT/MN
250
CAB ALT FT
4150
TAT +19 °C
SAT +19 °C
23H56
G.W 60300 KG

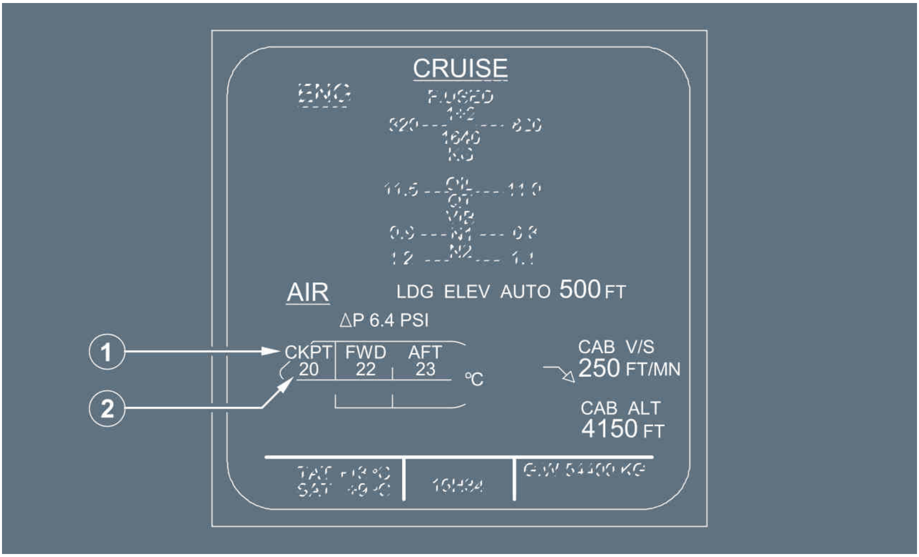
(1) Zone indication
This field also displays the temperature scale in use (°C or °F).

(2) Zone temperature

ECAM CRUISE PAGE

Ident.: DSC-21-10-50-00000319.0002001 / 09 OCT 12

5 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


CRUISE
ENG
F.USED
1+2
320
320
1640
KG
11.5
OIL
11.0
QT
VIB
0.9
N1
0.9
1.2
N2
1.1
AIR
LDG ELEV AUTO 500 FT
ΔP 6.4 PSI
1
2
CKPT
20
FWD
22
AFT
23
°C
CAB V/S
250 FT/MN
CAB ALT
4150 FT
TAT +19 °C
SAT +9 °C
10H34
G.W 54400 KG

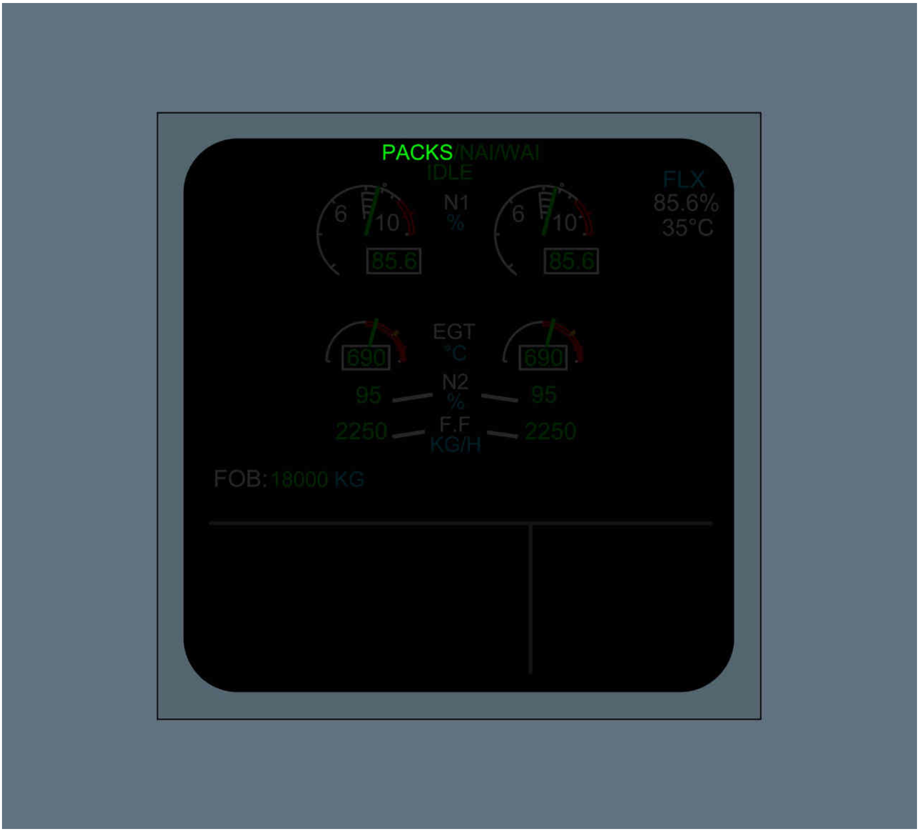
(1) Zone indication
This field also displays the temperature scale in use (°C or °F).

(2) Zone temperature

ENGINE WARNING DISPLAY

Ident.: DSC-21-10-50-00015934.0001001 / 06 SEP 16

6 **Applicable to: MSN 08495-09324, 10949-11597**


PACKS
NAI/WAI
IDLE
FLX
85.6%
35°C
N1
%
6
10
85.6
6
10
85.6
EGT
°C
690
690
N2
%
95
95
F.F
KG/H
2250
2250
FOB: 18000 KG

For more information, *Refer to DSC-70-90-40 Bleed Air Configuration*

PACKS status

For more information, *Refer to DSC-70-90-40 Bleed Air Configuration*

MEMO DISPLAY

Ident.: DSC-21-10-50-00016760.0001001 / 21 MAR 16

Applicable to: ALL

RAM AIR ON : This memo appears in green, if the RAM AIR pb-sw is ON.

GENERAL

Ident.: DSC-21-20-10-00017903.0001001 / 21 MAR 16
Applicable to: ALL

The cabin pressurization system has four general functions:
- Ground function : Fully opens the outflow valve on ground
- Prepressurization : During takeoff, increases cabin pressure to avoid a surge in cabin pressure during rotation
- Pressurization in flight : Adjusts cabin altitude, and rate of change to provide passengers with a comfortable flight
- Depressurization : After touchdown, gradually releases residual cabin overpressure before the ground function fully opens the outflow valve.

The system consists of:
- Two Cabin Pressure Controllers (CPC)
- One Residual Pressure Control Unit (RPCU ◁)
- One outflow valve, with an actuator that incorporates three motors (two for automatic operation, one for manual operation)
- One control panel
- Two safety valves.

Any one of the three independent electric motors may power the outflow valve.
Normally, one of the two cabin pressure controllers operates the outflow valve by means of its associated automatic motor.
In case of ditching, an override switch on the control panel allows the flight crew to close the outflow valve and all valves below the flotation line.
The flight crew can set the system to operate automatically, semi-automatically, or manually.
In normal operation, cabin pressurization is fully automatic.

AUTOMATIC OPERATION

Ident.: DSC-21-20-10-00000323.0001001 / 21 MAR 16
Applicable to: ALL

The flight crew monitors the operation of the system, but does nothing to control it. Air pressure in the cabin follows external schedules that the system receives as signals from the Flight Management and Guidance System (FMGS).
When FMGS data is not available for automatic pressurization, the crew only needs to select the landing field elevation.
The pressurization system then uses the manually-selected landing field elevation for internal schedules.

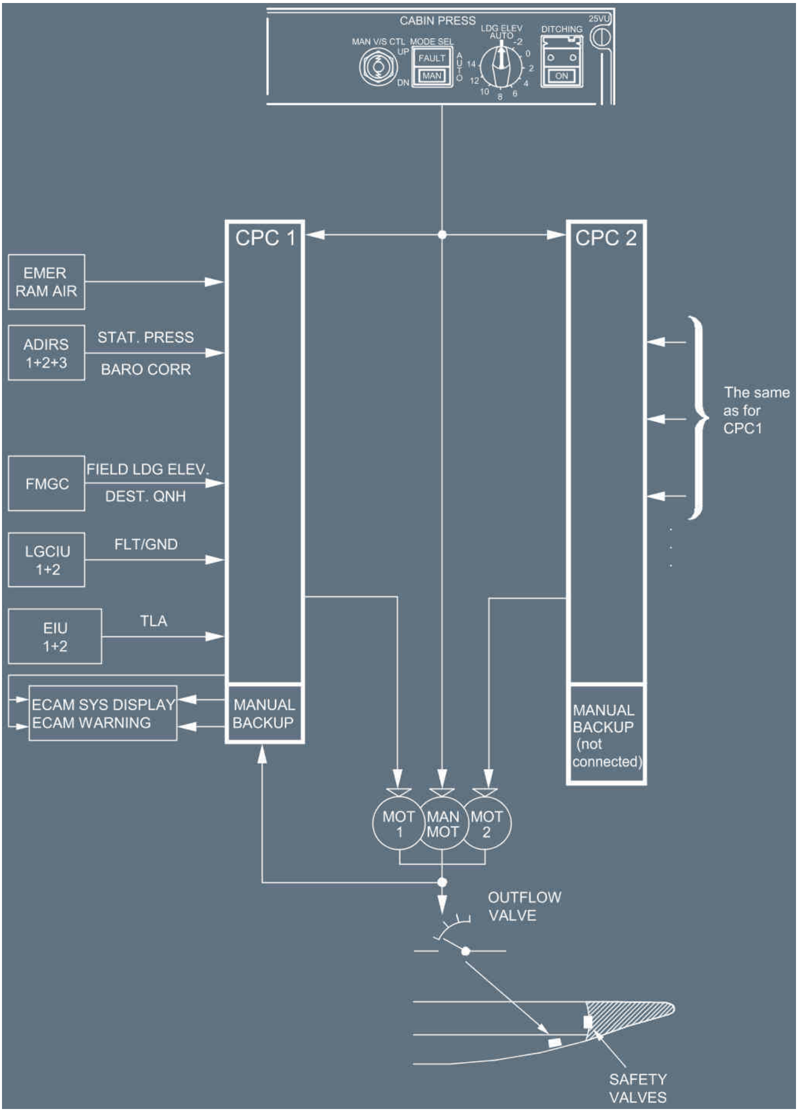
MANUAL OPERATION

Ident.: DSC-21-20-10-00000324.0001001 / 21 MAR 16
Applicable to: ALL

In manual mode, the flight crew controls the cabin altitude via the manual motor of the outflow valves, by operating controls on the pressurization control panel.

SCHEMATICS

Ident.: DSC-21-20-10-00000325.0002001 / 21 MAR 16


CABIN PRESS
MAN V/S CTL
UP
DN
MODE SEL
FAULT
MAN
AUTO
LDG ELEV
AUTO
-2
0
2
4
6
8
10
12
14
DITCHING
ON
25VU
CPC 1
CPC 2
EMER
RAM AIR
ADIRS
1+2+3
STAT. PRESS
BARO CORR
FMGC
FIELD LDG ELEV.
DEST. QNH
LGCIU
1+2
FLT/GND
EIU
1+2
TLA
ECAM SYS DISPLAY
ECAM WARNING
MANUAL
BACKUP
MANUAL
BACKUP
(not
connected)
The same
as for
CPC1
MOT
1
MAN
MOT
MOT
2
OUTFLOW
VALVE
SAFETY
VALVES

CABIN PRESSURE CONTROLLERS

Ident.: DSC-21-20-20-00000326.0001001 / 21 MAR 16
Applicable to: ALL

Two identical, independent, digital controllers automatically control the system, by maintaining the proper cabin pressure. They receive signals from the Air Data Inertial Reference System (ADIRS), the Flight Management and Guidance Computer (FMGC), the Engine Interface Unit (EIU), and the Landing Gear Control Interface Unit (LGCIU).

When the system is in automatic or semi-automatic mode, one controller is active, the other is on standby.

The controllers also generate signals for the Electronic Centralized Aircraft Monitoring (ECAM).

For operation in manual mode, each controller has a backup section, which is powered by an independent power supply in the controller N°1 position. This section also has a pressure sensor that generates the cabin altitude and pressure signal for the ECAM, when MAN mode is selected.

The controllers communicate with each other via a cross-channel link.

OUTFLOW VALVE

Ident.: DSC-21-20-20-00000327.0001001 / 21 MAR 16
Applicable to: ALL

The outflow valve is on the right-hand side of fuselage, behind the aft cargo compartment and below the flotation line.

The outflow valve assembly consists of a flush, skin-mounted, rectangular frame, carrying inward and outward opening flaps linked to the actuator. The actuator contains the drives of the two automatic motors and the manual motor. Either of two automatic motors operates the valve in automatic mode, and the manual motor operates it in manual mode.

In automatic mode, the operating controller signals the position of the valve to the ECAM.

In manual mode, the backup section of the N° 1 controller signals the position of the valve to the ECAM.

Note: *When the RAM AIR pushbutton is ON, and Δp is below 1 PSI, the system drives the outflow valve about 50 % open if it is under automatic control. If the system is under manual control, the outflow valve does not automatically open, even if Δp is below 1 PSI.*

SAFETY VALVES

Ident.: DSC-21-20-20-00000328.0001001 / 21 MAR 16
Applicable to: ALL

Two independent pneumatic safety valves prevent cabin pressure from going too high (8.6 PSI above ambient) or too low (1 PSI below ambient).

They are located on the rear pressure bulkhead, above the flotation line.

RESIDUAL PRESSURE CONTROL UNIT (RPCU ◁)

Ident.: DSC-21-20-20-00017788.0001001 / 21 MAR 16
Applicable to: ALL

The RPCU automatically depressurizes the aircraft in case of abnormal residual pressure on ground.
It automatically opens the outflow valve, when:
- The outflow valve is not fully open, and
- Both CPCs are failed, or manual mode is selected, and
- The aircraft is on ground, and
- All engines are shutdown, or all ADIRS indicate an airspeed below 100 kt.

AUTOMATIC PRESSURE CONTROL MODE

Ident.: DSC-21-20-30-00000329.0001001 / 04 DEC 18
Applicable to: ALL

GENERAL

- Two identical, independent, automatic systems (each consisting of a controller and its associated motors) control cabin pressure.
  Either system controls the single outflow valve.
  Only one controller operates at a time.

  An automatic transfer occurs:
  - 70 s after each landing.
  - If the operating system fails.
- The controller automatically controls the cabin pressure. It limits the cabin pressure to approximately 8 000 ft maximum during CRUISE mode and is optimized to support high airfield operations up to a pressure of 14 100 ft during ground, climb and descent phases.
- The controller normally uses the landing elevation and the QNH from the FMGC, and the pressure altitude from ADIRS.
  If FMGC data are not available, the controller uses the captain BARO Reference from the ADIRS and the LDG ELEV selection.
- Pressurization is assumed through the following modes:

GROUND (GN)

Before takeoff, and 55 s after landing, the outflow valve fully opens to ensure that there is no residual cabin pressure. At touchdown, any remaining cabin pressure is released at a cabin vertical speed of 500 ft/min.

TAKEOFF (TO)

To avoid a pressure surge at rotation, the controller pre-pressurizes the aircraft at a rate of 400 ft/min, until the ΔP reaches 0.1 PSI. At liftoff, the controller initiates the climb phase.

CLIMB (CL)

During climb, the cabin altitude varies according to a fixed pre-programmed law that takes into account the aircraft's actual rate of climb.

CRUISE (CR)

During cruise, the controller maintains cabin altitude at the level-off value, or at the landing field elevation, whichever is higher, but the cabin altitude target is limited to a maximum of approximately 8 000 ft.

DESCENT (DE)

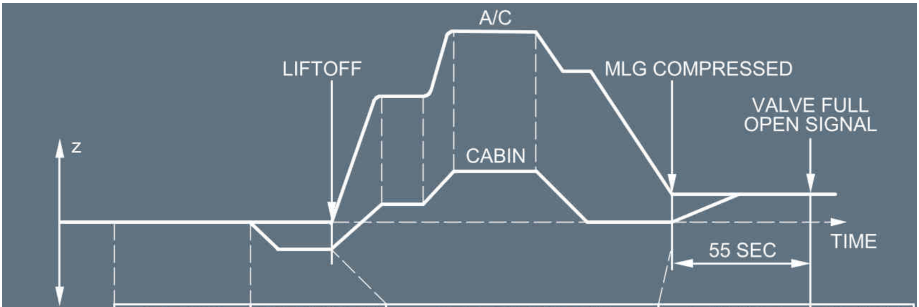
During descent, the controller maintains a cabin rate of descent, such that the cabin pressure is equal to the landing field pressure +0.1 PSI, shortly before landing.
The maximum descent rate is 750 ft/min.

ABORT (AB)

If the aircraft does not climb after takeoff, the abort mode prevents the cabin altitude from climbing.
Cabin pressure is set back to the takeoff altitude +0.1 PSI.

PRESSURIZATION FLIGHT PROFILE

Ident.: DSC-21-20-30-00000331.0001001 / 08 SEP 15
Applicable to: ALL



	GROUND	PREPRESSU	PRESSURIZATION	DEPRESS	GROUND
CABIN V/S	/	-400 ft/min		+500 ft/min	/
CABIN ΔP	/	+0.1 PSI	⩽8.06 PSI	+0.1 PSI	/

MANUAL PRESSURE CONTROL MODE

Ident.: DSC-21-20-30-00000332.0001001 / 21 MAR 16
Applicable to: ALL

If both automatic systems fail, the flight crew may use the CABIN PRESS control panel to take over manual control of cabin pressurization.

- Release the MODE SEL pushbutton to select MAN, and
- Push the MAN V/S CTL switch UP or DN to increase or decrease cabin altitude.

The first of these actions cuts off power to the AUTO motors, and enables the MAN motor to control the outflow valve.

Note: 1. *Due to the slow operation of the outflow valves in manual mode, and the limited resolution of the outflow valves' position on the ECAM, the visual ECAM indication of a change in the outflow valves' position can take up to 5 s.*
2. *As the pressurization system is manually-controlled, the outflow valve does not open automatically at touchdown.*

DITCHING

Ident.: DSC-21-20-30-00017789.0001001 / 21 MAR 16
Applicable to: ALL

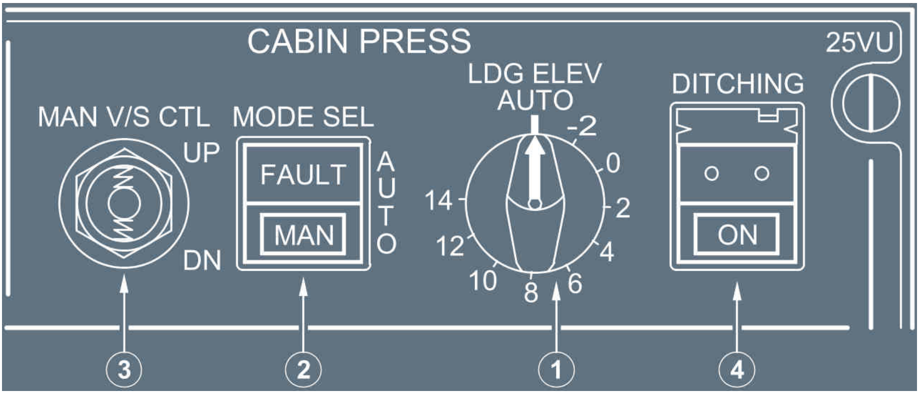
To prepare for ditching, the flight crew must press the DITCHING pb on the CABIN PRESS control panel to close the outflow valve, the emergency ram air inlet, the avionics ventilation inlet and extract valves, the pack flow control valves, and the FWD cargo outlet isolation valve ◁ .

Intentionally left blank

OVERHEAD PANEL

Ident.: DSC-21-20-40-00000334.0003001 / 07 MAY 13

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**



(1) LDG ELEV knob

AUTO : The pressurization system uses the FMGS data to construct an optimized pressure schedule.
To exit the AUTO position, pull out and turn the selector.

Other positions : The pressurization schedule does not use the landing elevation from the FMGS, but instead uses the landing elevation selected with this knob (from -2 000 to +14 000 ft) as its reference.

Note: *The LDG ELEV knob scale is only given as an indication; refer to the ECAM information for accurate adjustment.*

(2) MODE SEL pb

AUTO : Automatic mode is operating. One of the two systems controls the outflow valve.

MAN : This legend appears in white, and FAULT does not come on. The flight crew then uses the MAN V/S CTL selector to control the outflow valve.

Note: *Switching the MODE SEL pb to MAN, for at least 10 s, then returning it to AUTO will select the other system.*

FAULT lt : This legend appears in amber and the ECAM caution light comes on only when both automatic systems are faulty.

Note: The pilot may notice a variation in the CAB ALT indication on the ECAM PRESS page, when the system switches from the cabin pressure control AUTO mode to MAN mode, due to the reduced resolution of the backup pressure sensor.

(3) MAN V/S CTL toggle switch

The switch, springloaded to neutral controls the outflow valve position through operation of the MAN motor, when the MODE SEL pb is in the MAN position.

UP : The valve moves towards the open position.

DN : The valve moves towards the closed position.

Note: To target precise cabin vertical speed rate, only short inputs should be applied on the toggle switch.

(4) DITCHING guarded pushbutton

Normal : The system functions normally.

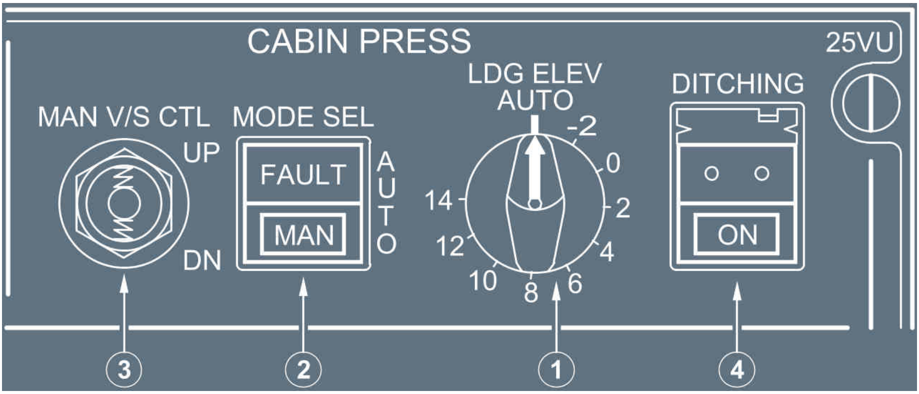
ON : The operating system sends a “close” signal to the outflow valve, emergency ram air inlet, avionics ventilation inlet and extract valves, pack flow control valves.

Note: The outflow valve will not close automatically, if it is under manual control.

CAUTION	If the ditching pb is set to ON, with the low pressure ground cart connected and all doors closed, a differential pressure will build up.

OVERHEAD PANEL

Ident.: DSC-21-20-40-00000334.0004001 / 07 MAY 13
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876



(1) LDG ELEV knob

AUTO : The pressurization system uses the FMGS data to construct an optimized pressure schedule.
To exit the AUTO position, pull out and turn the selector.

Other positions : The pressurization schedule does not use the landing elevation from the FMGS, but instead uses the landing elevation selected with this knob (from -2 000 to +14 000 ft) as its reference.

Note: *The LDG ELEV knob scale is only given as an indication; refer to the ECAM information for accurate adjustment.*

(2) MODE SEL pb

AUTO : Automatic mode is operating. One of the two systems controls the outflow valve.

MAN : This legend appears in white, and FAULT does not come on. The flight crew then uses the MAN V/S CTL selector to control the outflow valve.

Note: *Switching the MODE SEL pb to MAN, for at least 10 s, then returning it to AUTO will select the other system.*

FAULT lt : This legend appears in amber and the ECAM caution light comes on only when both automatic systems are faulty.

Note: *The pilot may notice a variation in the CAB ALT indication on the ECAM PRESS page, when the system switches from the cabin pressure control AUTO mode to MAN mode, due to the reduced resolution of the backup pressure sensor.*

(3) MAN V/S CTL selector

The switch is springloaded to neutral and controls the outflow valve position through operation of the MAN motor, when the MODE SEL pb is in the MAN position.

UP : The valve moves towards the open position.

DN : The valve moves towards the closed position.

Note: *To target precise cabin vertical speed rate, only short inputs should be applied on the selector.*

(4) DITCHING pb (guarded)

Normal : The system functions normally.

ON : The operating system sends a “close” signal to the outflow valve, emergency ram air inlet, avionics ventilation inlet and extract valves, pack flow control valves, and forward cargo isolation outlet valve.
The cargo extract fans stop automatically.

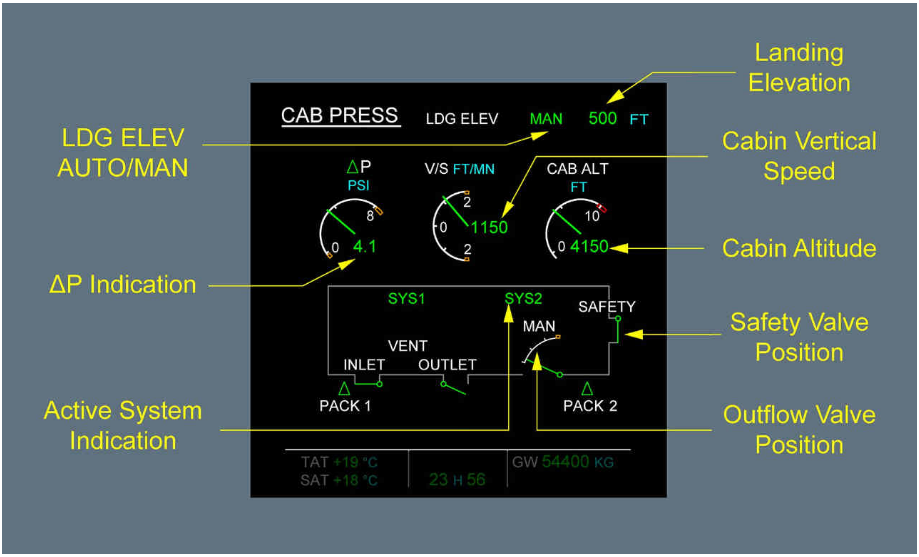
Note: *The outflow valve will not close automatically, if it is under manual control.*

CAUTION	On ground, If the ditching pushbutton is set to ON, with the low pressure ground cart connected and all doors closed, a differential pressure will build up.

ECAM CAB PRESS PAGE

Ident.: DSC-21-20-40-00000335.0003001 / 26 OCT 22

2 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 10949-11597**


Landing Elevation
LDG ELEV AUTO/MAN
Cabin Vertical Speed
ΔP Indication
Cabin Altitude
Safety Valve Position
Active System Indication
Outflow Valve Position
CAB PRESS
LDG ELEV
MAN
500 FT
ΔP PSI
V/S FT/MN
CAB ALT FT
8
0
4.1
2
0
1150
2
10
0
4150
SYS1
SYS2
SAFETY
MAN
VENT
INLET
OUTLET
PACK 1
PACK 2
TAT +19 °C
SAT +18 °C
23 H 56
GW 54400 KG

LDG ELEV AUTO/MAN

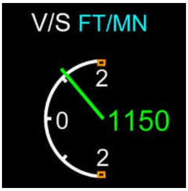
LDG ELEV AUTO	The LDG ELEV selector is in AUTO.
LDG ELEV MAN	The LDG ELEV selector is not in AUTO.

Neither appears when the indications from SDAC are not valid.

LANDING ELEVATION

500 FT	Selected either automatically by the FMGS or manually by the flight crew (but not when the MODE SEL pb-sw is in MAN).

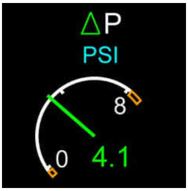
CABIN VERTICAL SPEED



Cabin vertical speed is in the normal range.

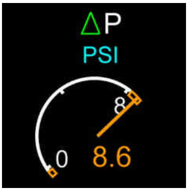
It flashes when the cabin vertical speed reaches 1 750 ft/min and stop flashing when returning below 1 650 ft/min.

ΔP INDICATION



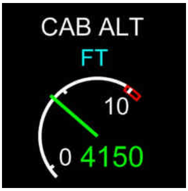
ΔP is in the normal range.

It flashes if ΔP is more than 1.5 PSI and stop flashing when returning at 1 PSI during flight phase 7. (*Refer to DSC-31-15 Flight Phases*).



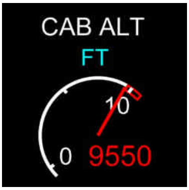
ΔP is out of normal range (≤ –0.4 PSI or ≥ 8.5 PSI).

CABIN ALTITUDE



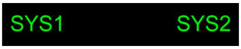
Cabin altitude is in normal range.

It flashes when the cabin altitude reaches 8 800 ft and stop flashing when returning below 8 600 ft.

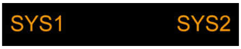


Cabin altitude is at or above 9 550 ft.

ACTIVE SYSTEM INDICATION

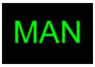


SYS 1 or SYS 2 is active.



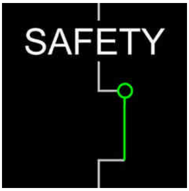
SYS 1 or SYS 2 is faulty.

When either system is inactive, its title does not appear.

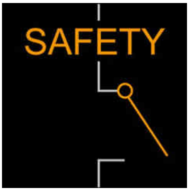


MODE SEL pb-sw is in MAN.

SAFETY VALVE POSITION



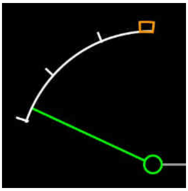
Both safety valves are fully closed.



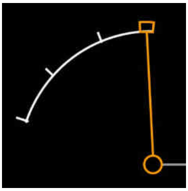
Either safety valve is open.

Note: *The safety valve opens when the indicated ΔP is between 8.9 and 9.7 PSI. The range is due to the reduced accuracy of ΔP measurements (in MAN mode), combined with the decrease in ΔP that occurs immediately after the safety valves open.*

OUTFLOW VALVE POSITION



The valve is operating normally.

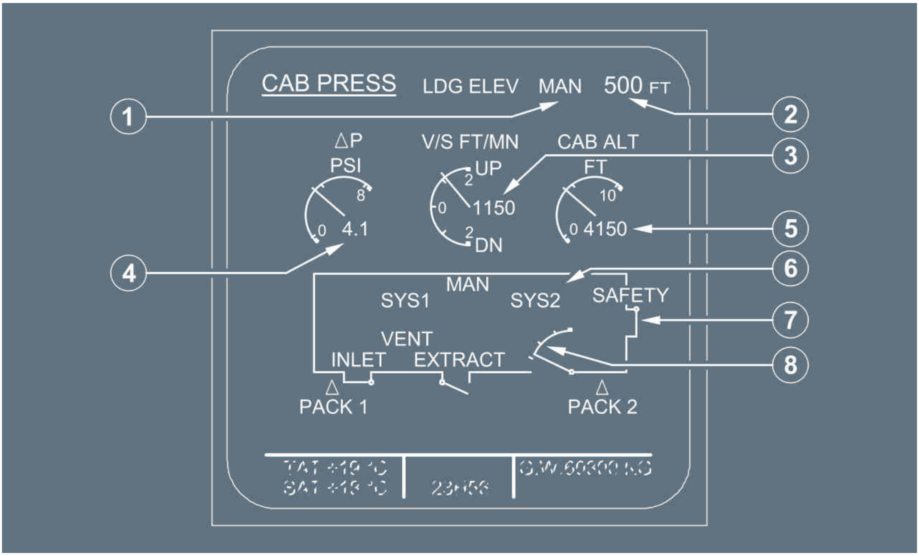


In automatic mode, the valve opens more than 95 % during flight.

ECAM CAB PRESS PAGE

Ident.: DSC-21-20-40-00000335.0001001 / 26 OCT 22

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**


CAB PRESS
LDG ELEV
MAN
500 FT
1
2
ΔP
PSI
8
0
4.1
V/S FT/MN
UP
2
0
1150
2
DN
CAB ALT
FT
10
0
4150
3
4
5
6
MAN
SYS1
SYS2
SAFETY
7
VENT
INLET
EXTRACT
8
PACK 1
PACK 2
TAT +19 °C
SAT +18 °C
23H56
G.W. 60300 KG

(1) LDG ELEV AUTO/MAN

- LDG ELEV AUTO: appears in green when the LDG ELEV selector is in AUTO.
- LDG ELEV MAN: appears in green when the LDG ELEV selector is not in AUTO.

Neither appears when the MODE SEL pushbutton switch is in MAN.

(2) Landing elevation
The landing elevation selected either automatically by the FMGS or manually by the pilot appears in green (but not when the MODE SEL pushbutton switch is in MAN).

(3) V/S FT/MIN (cabin vertical speed)
The analog and digital presentations appear in green when V/S is in the normal range.
They appear in amber when V/S ≥ 2 000 ft/min.
The digital presentation pulses when V/S > 1 800 ft/min (resets at 1 600 ft/min).

(4) ΔP PSI (cabin differential pressure)
The analog and digital presentations appear in green when ΔP is in the normal range.
They appear in amber when ΔP ≤ –0.4 PSI or ≥ 8.5 PSI.
The digital presentation pulses if Δp > 1.5 PSI (resets at 1 PSI) during flight phase 7. (*Refer to DSC-31-15 Flight Phases*).

(5) CAB ALT FT (cabin altitude)
The analog and digital presentations appear in green, in normal range.
They appear in red if the cabin altitude goes above 9 550 ft.
The digital presentation pulses if the cabin altitude is at or above 8 800 ft (resets at 8 600 ft).

(6) Active system indication (SYS 1 or SYS 2 or MAN)
SYS 1 or SYS 2 appears in green when active and in amber when faulty. When either system is inactive, its title does not appear.
MAN appears in green when the MODE SEL switch is in MAN.

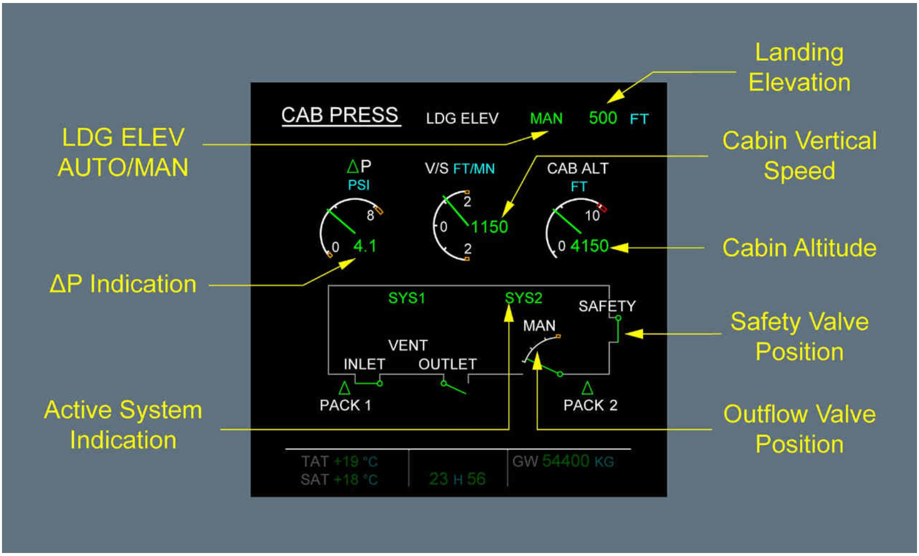
(7) Safety valve position
SAFETY appears in white and the diagram in green when both safety valves are fully closed.
SAFETY and the diagram appear in amber when either valve is not closed.

Note: *The safety valve opens when the cabin differential pressure is between 8.2 and 8.9 PSI. The range is due to the reduced accuracy of ΔP measurements (in MAN mode), combined with the decrease in cabin differential pressure that occurs immediately after the safety valves open.*

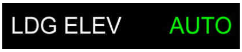
(8) Outflow valve position
The diagram is green when the valve is operating normally.
The diagram becomes amber when the valve opens more than 95 % during flight.

ECAM CAB PRESS PAGE

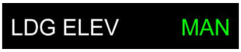
4 Ident.: DSC-21-20-40-00000335.0005001 / 26 OCT 22
Applicable to: MSN 02321


Landing Elevation
LDG ELEV AUTO/MAN
Cabin Vertical Speed
Cabin Altitude
ΔP Indication
Safety Valve Position
Active System Indication
Outflow Valve Position
CAB PRESS
LDG ELEV
MAN
500 FT
ΔP PSI
V/S FT/MN
CAB ALT FT
8
0
4.1
2
0
1150
2
10
0
4150
SYS1
SYS2
SAFETY
MAN
VENT
INLET
OUTLET
PACK 1
PACK 2
TAT +19 °C
SAT +18 °C
23 H 56
GW 54400 KG

LDG ELEV AUTO/MAN


LDG ELEV AUTO

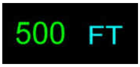
The LDG ELEV selector is in AUTO position.


LDG ELEV MAN

The LDG ELEV selector is not in AUTO position.

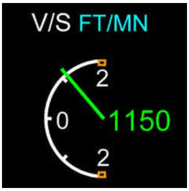
Neither AUTO nor MAN appears when the indications from SDAC are not valid.

LANDING ELEVATION

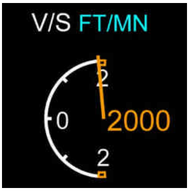

500 FT

Selected either automatically by the FMGS or manually by the flight crew (but not when the MODE SEL pb-sw is in MAN position).

CABIN VERTICAL SPEED

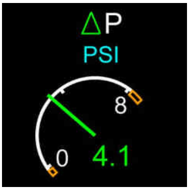


Cabin vertical speed is in the normal range.
It flashes when the cabin vertical speed reaches 1 800 ft/min and stops flashing when it decreases below 1 600 ft/min.

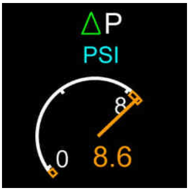


Cabin vertical speed is at or above 2 000 ft/min.

∆P INDICATION

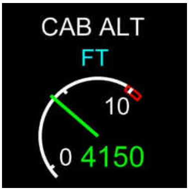


∆P is in the normal range.
It flashes if ∆P is more than 1.5 PSI and stops flashing when it decreases down to 1 PSI during flight phase 7 (*Refer to DSC-31-15 Flight Phases*).

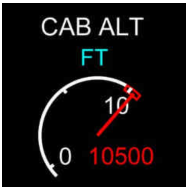


∆P is out of normal range (≤ –0.4 PSI or ≥ 8.5 PSI).

CABIN ALTITUDE

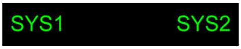


Cabin altitude is in normal range.
It flashes when the cabin altitude reaches 8 800 ft and stops flashing when it decreases below 8 600 ft.

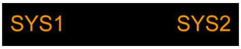


Cabin altitude is above 9 550 ft.

ACTIVE SYSTEM INDICATION

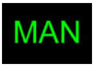


SYS 1 or SYS 2 is active.



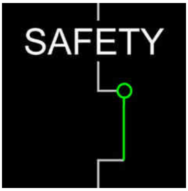
SYS 1 or SYS 2 is faulty.

When either system is inactive, its title does not appear.

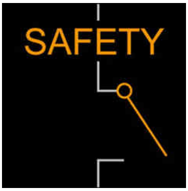


MODE SEL pb-sw is in MAN position.

SAFETY VALVE POSITION



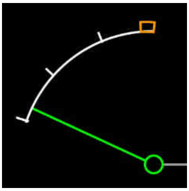
Both safety valves are fully closed.



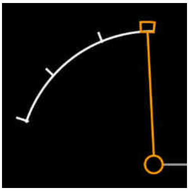
Either safety valve is open.

Note: *The safety valve opens when the indicated ∆P is between 8.2 and 8.9 PSI. The range is due to the reduced accuracy of ∆P measurements (in MAN mode), combined with the decrease in ∆P that occurs immediately after the safety valves open.*

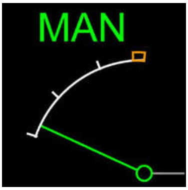
OUTFLOW VALVE POSITION



The outflow valve operates normally under automatic control.



The outflow valve has a position of more than 95 % in flight, under automatic control.

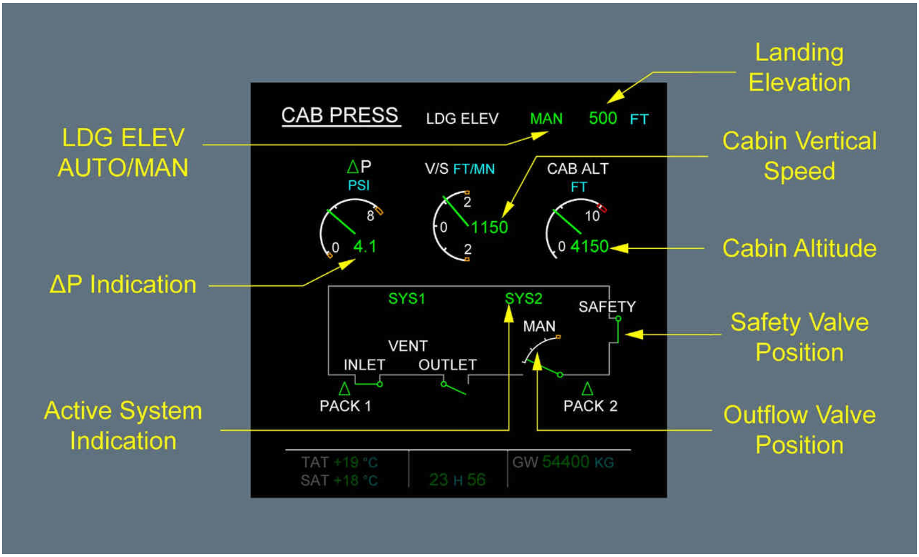


The outflow valve operates under manual control.

ECAM CAB PRESS PAGE

Ident.: DSC-21-20-40-00000335.0002001 / 26 OCT 22

5 **Applicable to: MSN 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**


Landing Elevation
LDG ELEV AUTO/MAN
Cabin Vertical Speed
Cabin Altitude
ΔP Indication
Safety Valve Position
Active System Indication
Outflow Valve Position
CAB PRESS
LDG ELEV
MAN
500 FT
ΔP
PSI
8
0
4.1
V/S FT/MN
2
0
1150
2
CAB ALT
FT
10
0
4150
SYS1
SYS2
SAFETY
MAN
VENT
INLET
OUTLET
PACK 1
PACK 2
TAT +19 °C
SAT +18 °C
23 H 56
GW 54400 KG

LDG ELEV AUTO/MAN

LDG ELEV AUTO

The LDG ELEV selector is in AUTO.

LDG ELEV MAN

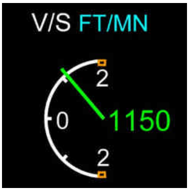
The LDG ELEV selector is not in AUTO.

Neither appears when the indications from SDAC are not valid.

LANDING ELEVATION

Selected either automatically by the FMGS or manually by the flight crew (but not when the MODE SEL pb-sw is in MAN).

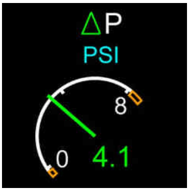
CABIN VERTICAL SPEED



Cabin vertical speed is in the normal range.

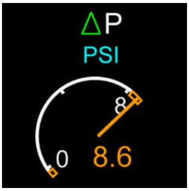
It flashes when the cabin vertical speed reaches 1 750 ft/min and stop flashing when returning below 1 650 ft/min.

∆P INDICATION



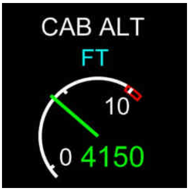
∆P is in the normal range.

It flashes if ∆P is greater than 1.5 PSI and stop flashing when returning at 1 PSI during flight phase 7. (*Refer to DSC-31-15 Flight Phases*).



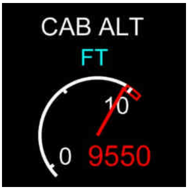
∆P is out of normal range (≤ –0.4 PSI or ≥ 8.5 PSI).

CABIN ALTITUDE



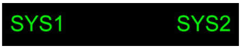
Cabin altitude is in normal range.

It flashes when the cabin altitude reaches 8 800 ft and stop flashing when returning below 8 600 ft.

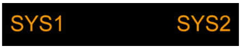


Cabin altitude is at or above 9 550 ft.

ACTIVE SYSTEM INDICATION

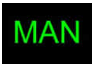


SYS 1 or SYS 2 is active.



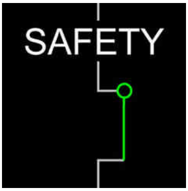
SYS 1 or SYS 2 is faulty.

When either system is inactive, its title does not appear.

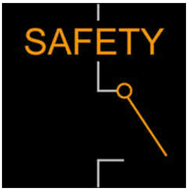


MODE SEL pb-sw is in MAN.

SAFETY VALVE POSITION



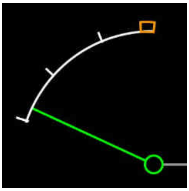
Both safety valves are fully closed.



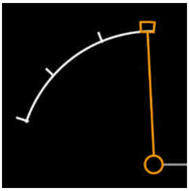
Either safety valve is open.

Note: *The safety valve opens when the indicated ΔP is between 8.9 and 9.7 PSI. The range is due to the reduced accuracy of ΔP measurements (in MAN mode), combined with the decrease in ΔP that occurs immediately after the safety valves open.*

OUTFLOW VALVE POSITION



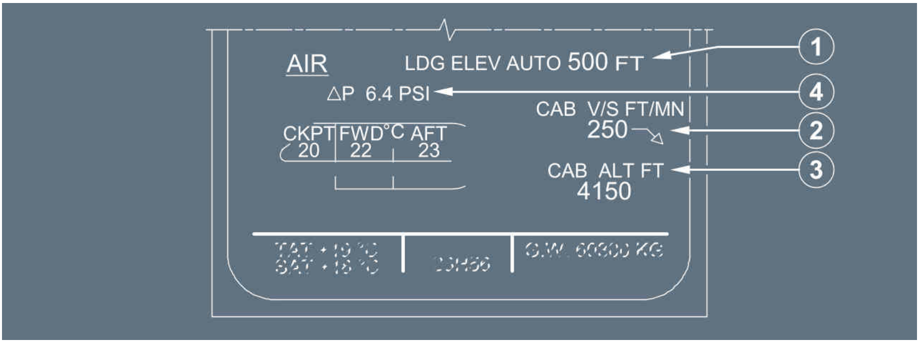
The valve is operating normally.



The valve opens more than 95 % during flight.

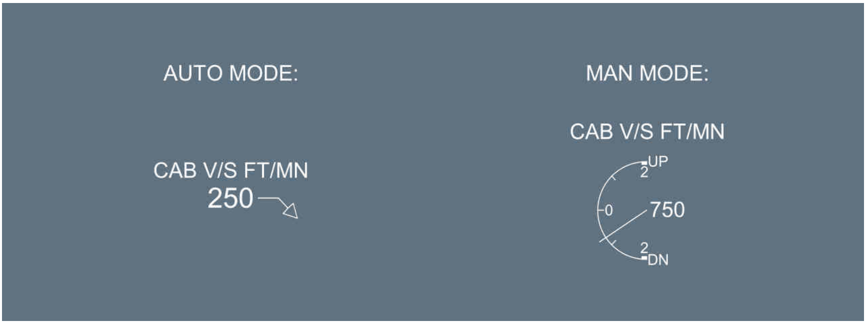
ECAM CRUISE PAGE

Ident.: DSC-21-20-40-00000336.0001001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


AIR
LDG ELEV AUTO 500 FT
ΔP 6.4 PSI
CAB V/S FT/MN
250
CKPT FWD °C AFT
20 22 23
CAB ALT FT
4150
TAT +19 °C
SAT +18 °C
23H56
G.W. 60300 KG
1
4
2
3

(1) LDG ELEV AUTO/MAN
Identifical to the CAB PRESS page.

(2) CAB V/S FT/MIN (cabin vertical speed)
Green, in normal range.
Amber, when out of normal range : V/S ≥ 2 000 ft/min
Pulses, when the V/S > 1 800 ft/min (resets at 1 600 ft/min).


AUTO MODE:
CAB V/S FT/MN
250
MAN MODE:
CAB V/S FT/MN
UP
2
0
750
2
DN

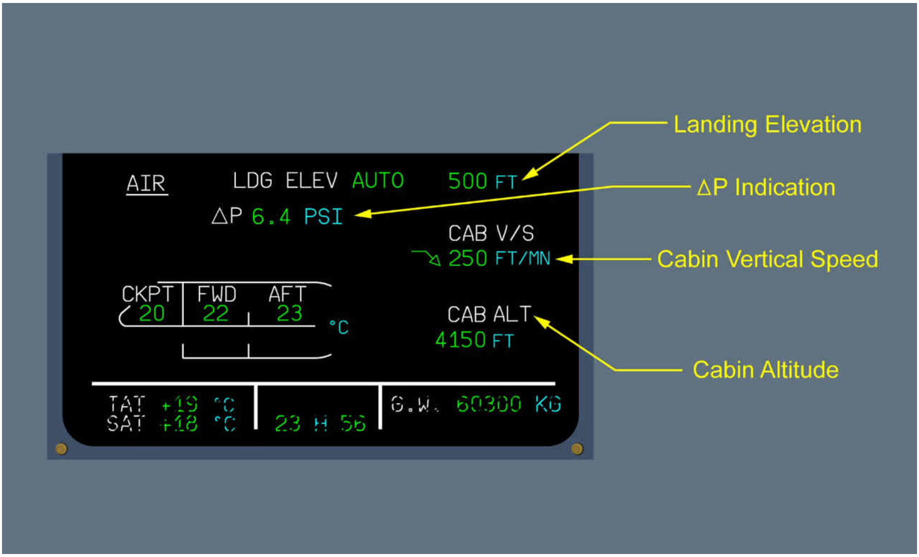
(3) CAB ALT FT (cabin altitude)
Green, in normal range.
Red, for excessive cabin altitude : ≥ 9 550 ft.
Pulses for cabin altitude at, or above, 8 800 ft (resets at 8 600 ft).

(4) ΔP indication
It is normally green.
It becomes amber, when out of normal range Δp ≤ -0.4 PSI or ≥ 8.5 PSI.

ECAM CRUISE PAGE

Ident.: DSC-21-20-40-00000336.0002001 / 26 OCT 22

6 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139, 11531-11597**

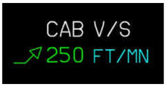

AIR
LDG ELEV AUTO 500 FT
ΔP 6.4 PSI
CAB V/S
250 FT/MN
CKPT FWD AFT
20 22 23
°C
CAB ALT
4150 FT
TAT +19 °C
SAT +18 °C
23 H 56
G.W. 60300 KG
Landing Elevation
ΔP Indication
Cabin Vertical Speed
Cabin Altitude

LANDING ELEVATION

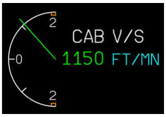
LDG ELEV AUTO 500 FT

Refer to DSC-21-20-40 ECAM CAB PRESS Page.

CABIN VERTICAL SPEED


CAB V/S
250 FT/MN

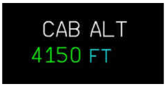
Cabin vertical speed in AUTO mode.


2
0
2
CAB V/S
1150 FT/MN

Cabin vertical speed in MAN mode.

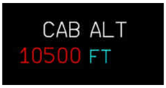
It flashes when the cabin vertical speed reaches 1 750 ft/min and stop flashing when returning below 1 650 ft/min.

CABIN ALTITUDE


CAB ALT
4150 FT

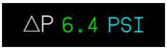
The cabin altitude is in normal range.

It flashes when the cabin altitude reaches 8 800 ft and stop flashing when returning below 8 600 ft.


CAB ALT
10500 FT

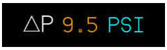
The cabin altitude is at or above 9 550 ft.

ΔP INDICATION



ΔP is in normal range.

It flashes if ΔP is more than 1.5 PSI.

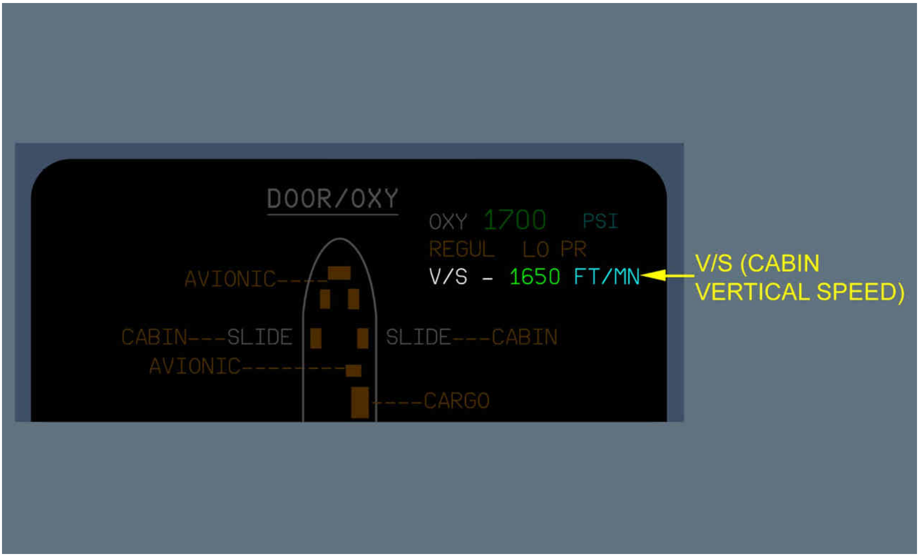


ΔP is out of normal range (≤ -0.4 PSI or ≥ 8.5 PSI).

ECAM DOOR/OXY PAGE

Ident.: DSC-21-20-40-00000337.0001001 / 02 JUN 20

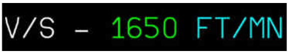
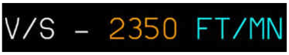
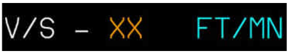
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


DOOR/OXY
OXY 1700 PSI
REGUL LO PR
V/S - 1650 FT/MN
AVIONIC
CABIN---SLIDE
SLIDE---CABIN
AVIONIC
CARGO

V/S (CABIN VERTICAL SPEED)

V/S (CABIN VERTICAL SPEED)

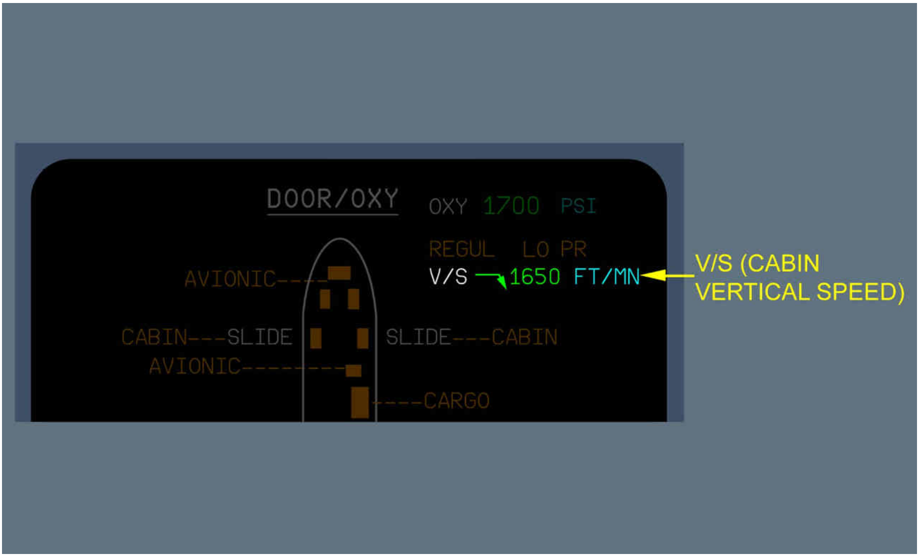
The cabin vertical speed is displayed during flight phases 5, 6 and 7. (*Refer to DSC-31-15 Flight Phases* for flight phase definitions).

 V/S - 1650 FT/MN	When the V/S is not greater than 2 000 ft/min, or not less than -2 000 ft/min.
 V/S - 2350 FT/MN	When the V/S is greater than 2 000 ft/min, or less than -2 000 ft/min.
 V/S - XX FT/MN	When the V/S data are invalid.

ECAM DOOR/OXY PAGE

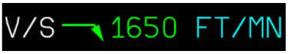
Ident.: DSC-21-20-40-00000337.0003001 / 02 JUN 20

7 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


DOOR/OXY
OXY 1700 PSI
REGUL LO PR
V/S 1650 FT/MN
AVIONIC
CABIN---SLIDE
SLIDE---CABIN
AVIONIC
CARGO
V/S (CABIN VERTICAL SPEED)

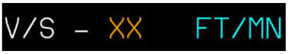
V/S (CABIN VERTICAL SPEED)

The cabin vertical speed is displayed during flight phases 5, 6 and 7. (*Refer to DSC-31-15 Flight Phases* for flight phase definitions).



V/S ↘ 1650 FT/MN

The V/S indication is within the normal range.
The V/S arrow and digital indication pulses in green, when the absolute value of V/S is greater than 1 800 ft/min during more than 5.5 s and stops pulsing, when less than 1 600 ft/min.



V/S - XX FT/MN

When the V/S data are invalid.

MEMO DISPLAY

Ident.: DSC-21-20-40-00016761.0001001 / 21 MAR 16
Applicable to: ALL

MAN LDG ELEV : This memo appears in green, if the LDG ELEV knob is not in the AUTO position.

GENERAL

Ident.: DSC-21-30-10-00017790.0001001 / 21 MAR 16
Applicable to: ALL

The ventilation system includes ventilation for:

- The avionics, controlled by the Avionics Equipment Ventilation Controller (AEVC),
- The batteries,
- The lavatories and galleys.

Note: *For more information about cargo ventilation* ◁* , *Refer to DSC-21-40-10 General.*

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GENERAL

Ident.: DSC-21-30-20-00000341.0001001 / 24 FEB 11
Applicable to: ALL

The avionics ventilation system is fully automatic.
It cools the electrical and electronic components in the avionics compartment and on the flight deck, including the instrument and circuit breaker panels. It uses two electric fans to force the circulation of cooling air.
Whatever the configuration of the avionics ventilation system is, a part of the avionics ventilation air is sucked from the cockpit through the different cockpit panels.

MAIN COMPONENTS

Ident.: DSC-21-30-20-00017791.0001001 / 21 MAR 16
Applicable to: ALL

FANS

Two electric fans continuously circulate air around the avionics equipment, when the aircraft is electrically supplied.
The Fan Speed Controller (FSC) ◁ controls the avionics ventilation fan speed as a function of temperature::

1. High speed when the ventilation air temperature is above +40 °C (104 °F)
2. Low speed when the ventilation air temperature is below +35 °C (95 °F)

SKIN AIR INLET AND OUTLET VALVES

These valves admit air from outside the aircraft and evacuate hot air from the avionics equipment.

SKIN EXCHANGE INLET AND OUTLET BYPASS VALVES

These valves enable air to circulate between the avionics bay and the space under the cargo compartment floor.

AIR CONDITIONING INLET VALVE

This valve opens to enable the air conditioning circuit to supply fresh air to the avionics bay.

SKIN EXCHANGE ISOLATION VALVE

This valve connects or isolates the skin heat exchanger.

AVIONICS EQUIPMENT VENTILATION CONTROLLER (AEVC)

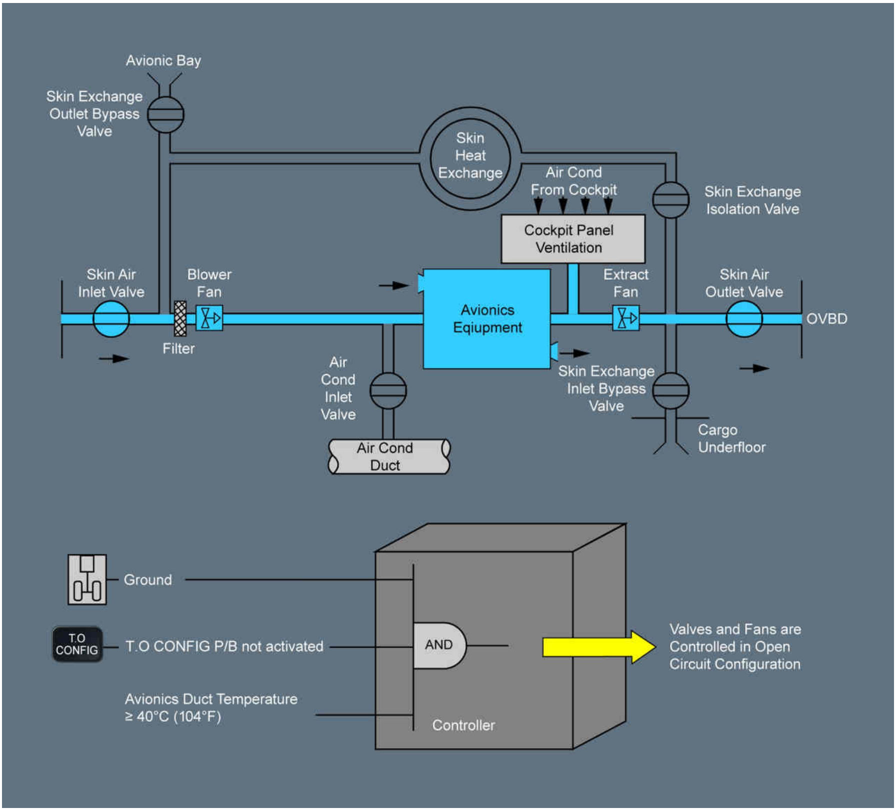
The AEVC controls the operation of all fans and valves in the avionics ventilation system.

NORMAL OPERATION, OPEN-CIRCUIT CONFIGURATION

1 Ident.: DSC-21-30-20-00000343.0004001 / 01 FEB 22
Applicable to: MSN 11531

GROUND OPERATIONS

The open-circuit configuration operates when the avionics duct temperature is equal or above 40 °C (104 °F).


Avionic Bay
Skin Exchange Outlet Bypass Valve
Skin Heat Exchange
Air Cond From Cockpit
Skin Exchange Isolation Valve
Cockpit Panel Ventilation
Skin Air Inlet Valve
Blower Fan
Filter
Avionics Eqiupment
Extract Fan
Skin Air Outlet Valve
OVBD
Air Cond Inlet Valve
Air Cond Duct
Skin Exchange Inlet Bypass Valve
Cargo Underfloor
Ground
T.O CONFIG
T.O CONFIG P/B not activated
Avionics Duct Temperature ≥ 40°C (104°F)
AND
Controller
Valves and Fans are Controlled in Open Circuit Configuration

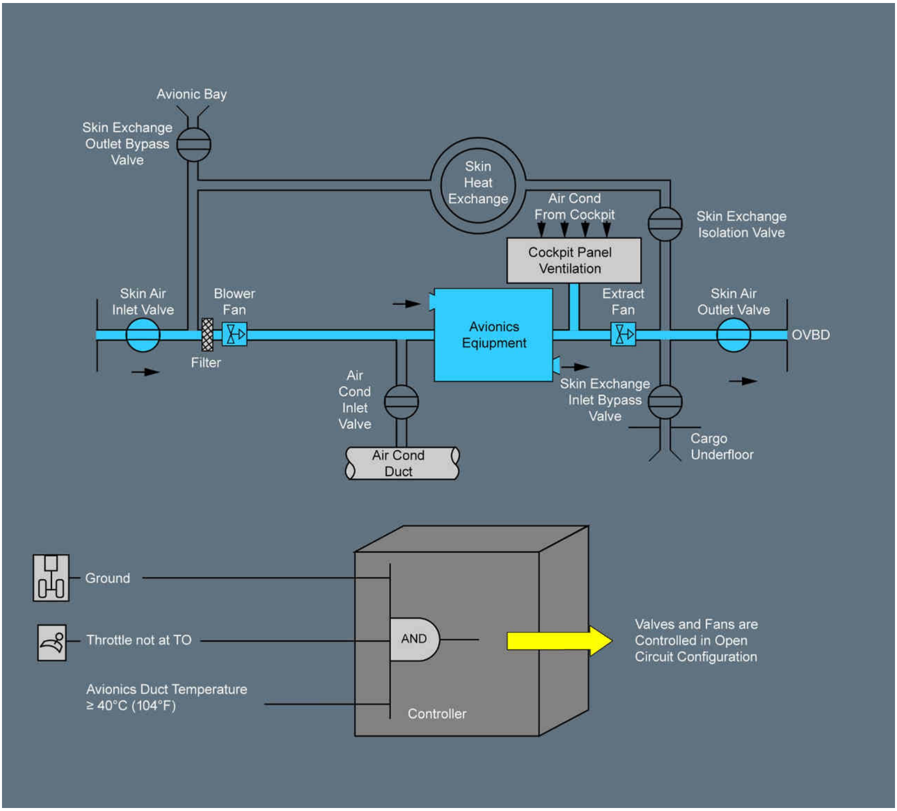
NORMAL OPERATION, OPEN-CIRCUIT CONFIGURATION

Ident.: DSC-21-30-20-00000343.0003001 / 11 JAN 22

2 **Applicable to: MSN 01459, 01832, 02321, 03035-03047, 03266-03284, 03313, 03662, 03761, 04000, 04171, 04563, 04734, 05591, 05752-05883, 05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

GROUND OPERATIONS

The open-circuit configuration operates when the avionics duct temperature is equal or above 40 °C (104 °F).


Avionic Bay
Skin Exchange Outlet Bypass Valve
Skin Heat Exchange
Air Cond From Cockpit
Skin Exchange Isolation Valve
Cockpit Panel Ventilation
Skin Air Inlet Valve
Blower Fan
Extract Fan
Skin Air Outlet Valve
OVBD
Filter
Avionics Eqiupment
Air Cond Inlet Valve
Skin Exchange Inlet Bypass Valve
Cargo Underfloor
Air Cond Duct
Ground
Throttle not at TO
Avionics Duct Temperature ≥ 40°C (104°F)
AND
Controller
Valves and Fans are Controlled in Open Circuit Configuration

NORMAL OPERATION, OPEN-CIRCUIT CONFIGURATION

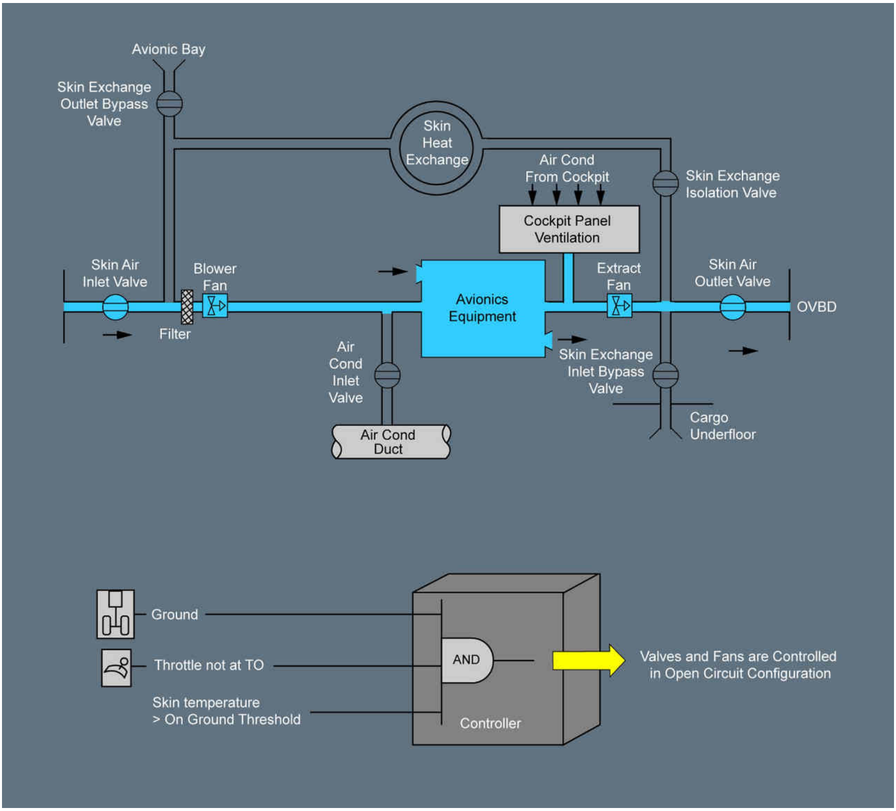
Ident.: DSC-21-30-20-00000343.0001001 / 11 JAN 22

3 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01837-01855, 02014, 02734-03032, 03058-03229, 03294, 03391-03658, 03710, 03733, 03816, 04163, 04192-04544, 04570-04662, 04756-05528, 05621-05749, 05947**

GROUND OPERATIONS

The open-circuit configuration operates when skin temperature is above the on-ground threshold.

On-ground threshold = +12 °C (53 °F), temperature increasing, or
+9 °C (48 °F), temperature decreasing.


Avionic Bay
Skin Exchange Outlet Bypass Valve
Skin Heat Exchange
Air Cond From Cockpit
Skin Exchange Isolation Valve
Cockpit Panel Ventilation
Skin Air Inlet Valve
Blower Fan
Filter
Avionics Equipment
Extract Fan
Skin Air Outlet Valve
OVBD
Air Cond Inlet Valve
Skin Exchange Inlet Bypass Valve
Air Cond Duct
Cargo Underfloor
Ground
Throttle not at TO
Skin temperature > On Ground Threshold
AND
Controller
Valves and Fans are Controlled in Open Circuit Configuration

NORMAL OPERATION, CLOSE-CIRCUIT CONFIGURATION

Ident.: DSC-21-30-20-00000345.0004001 / 11 JAN 22

4 **Applicable to: MSN 01459, 01832, 02321, 03035-03047, 03266-03284, 03313, 03662, 03761, 04000, 04171, 04563, 04734, 05591, 05752-05883, 05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

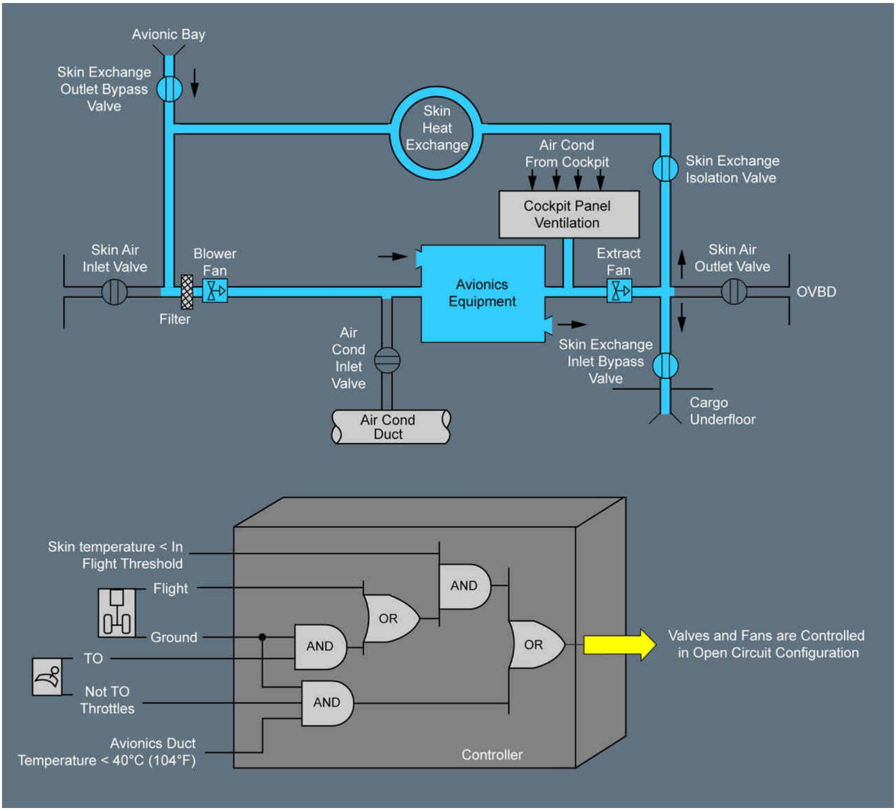
FLIGHT OPERATIONS

The close-circuit configuration operates when skin temperature is beneath the in-flight threshold.

In flight threshold = +35 °C (95 °F), temperature increasing, or
+32 °C (90 °F), temperature decreasing.

GROUND OPERATIONS

The close-circuit configuration operates when the avionics duct temperature is below 40 °C (104 °F).


Avionic Bay
Skin Exchange Outlet Bypass Valve
Skin Heat Exchange
Air Cond From Cockpit
Skin Exchange Isolation Valve
Cockpit Panel Ventilation
Skin Air Inlet Valve
Blower Fan
Filter
Avionics Equipment
Extract Fan
Skin Air Outlet Valve
OVBD
Air Cond Inlet Valve
Skin Exchange Inlet Bypass Valve
Cargo Underfloor
Air Cond Duct
Skin temperature < In Flight Threshold
Flight
Ground
TO
Not TO Throttles
Avionics Duct Temperature < 40°C (104°F)
AND
OR
AND
AND
OR
Controller
Valves and Fans are Controlled in Open Circuit Configuration

NORMAL OPERATION, CLOSE-CIRCUIT CONFIGURATION

5 Ident.: DSC-21-30-20-00000345.0003001 / 01 FEB 22
Applicable to: MSN 11531

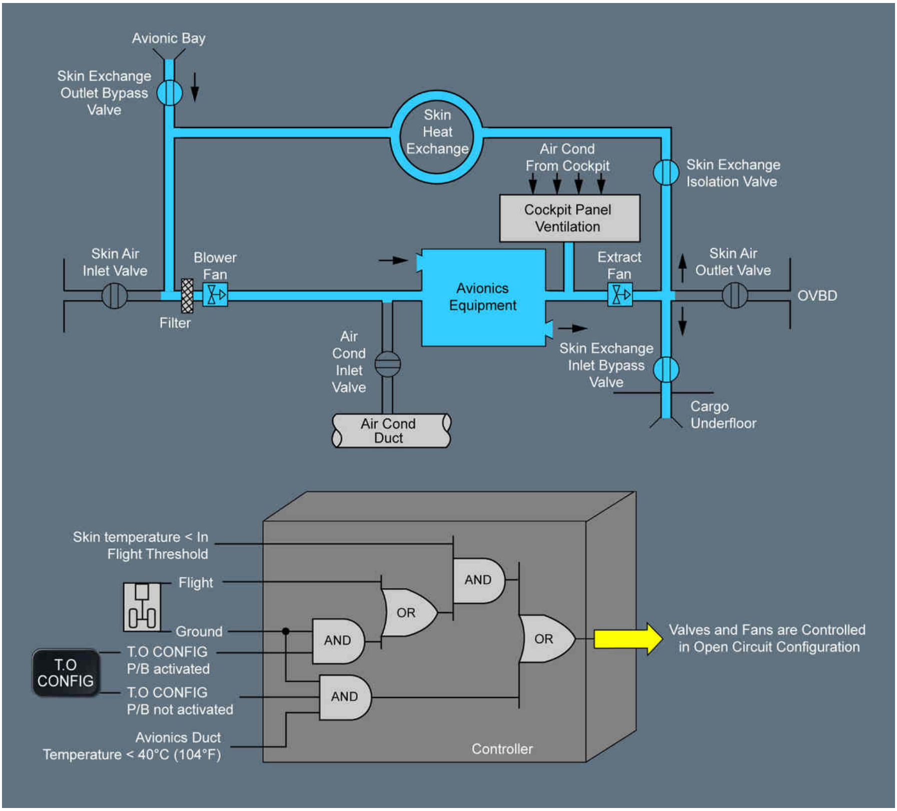
FLIGHT OPERATIONS

The close-circuit configuration operates when skin temperature is beneath the in-flight threshold.

In flight threshold = +35 °C (95 °F), temperature increasing, or
+32 °C (90 °F), temperature decreasing.

GROUND OPERATIONS

The close-circuit configuration operates when the avionics duct temperature is below 40 °C (104 °F).


Avionic Bay
Skin Exchange Outlet Bypass Valve
Skin Heat Exchange
Air Cond From Cockpit
Skin Exchange Isolation Valve
Cockpit Panel Ventilation
Skin Air Inlet Valve
Blower Fan
Avionics Equipment
Extract Fan
Skin Air Outlet Valve
OVBD
Filter
Air Cond Inlet Valve
Skin Exchange Inlet Bypass Valve
Cargo Underfloor
Air Cond Duct
Skin temperature < In Flight Threshold
Flight
Ground
AND
OR
AND
OR
AND
AND
T.O CONFIG
T.O CONFIG P/B activated
T.O CONFIG P/B not activated
Avionics Duct Temperature < 40°C (104°F)
Controller
Valves and Fans are Controlled in Open Circuit Configuration

NORMAL OPERATION, CLOSE-CIRCUIT CONFIGURATION

Ident.: DSC-21-30-20-00000345.0001001 / 09 OCT 12

6 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01837-01855, 02014, 02734-03032, 03058-03229, 03294, 03391-03658, 03710, 03733, 03816, 04163, 04192-04544, 04570-04662, 04756-05528, 05621-05749, 05947**

FLIGHT OPERATIONS

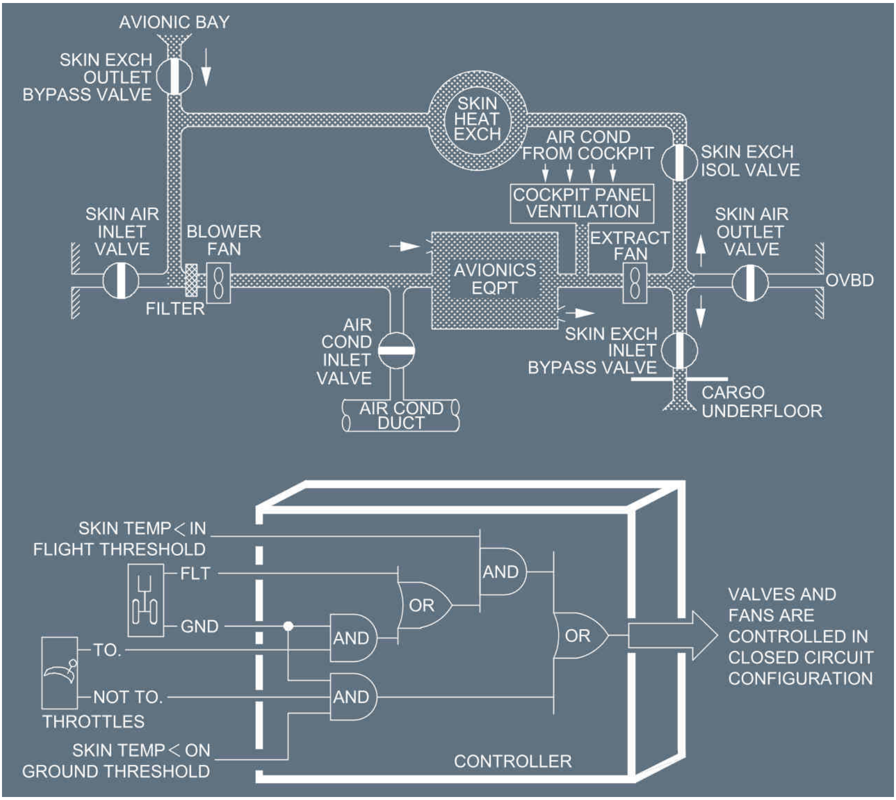
The close-circuit configuration operates when skin temperature is beneath the in-flight threshold.

In flight threshold = +35 °C (95 °F), temperature increasing, or
+32 °C (90 °F), temperature decreasing.

GROUND OPERATIONS

The close-circuit configuration operates when skin temperature is beneath the on-ground threshold.

On ground threshold = +12 °C (53 °F), temperature increasing, or
+9 °C (48 °F), temperature decreasing.


AVIONIC BAY
SKIN EXCH OUTLET BYPASS VALVE
SKIN HEAT EXCH
AIR COND FROM COCKPIT
SKIN EXCH ISOL VALVE
COCKPIT PANEL VENTILATION
SKIN AIR INLET VALVE
BLOWER FAN
EXTRACT FAN
SKIN AIR OUTLET VALVE
AVIONICS EQPT
OVBD
FILTER
AIR COND INLET VALVE
SKIN EXCH INLET BYPASS VALVE
AIR COND DUCT
CARGO UNDERFLOOR
SKIN TEMP < IN FLIGHT THRESHOLD
FLT
GND
TO.
NOT TO.
THROTTLES
SKIN TEMP < ON GROUND THRESHOLD
AND
OR
AND
AND
OR
CONTROLLER
VALVES AND FANS ARE CONTROLLED IN CLOSED CIRCUIT CONFIGURATION

NORMAL OPERATION, INTERMEDIATE CONFIGURATION

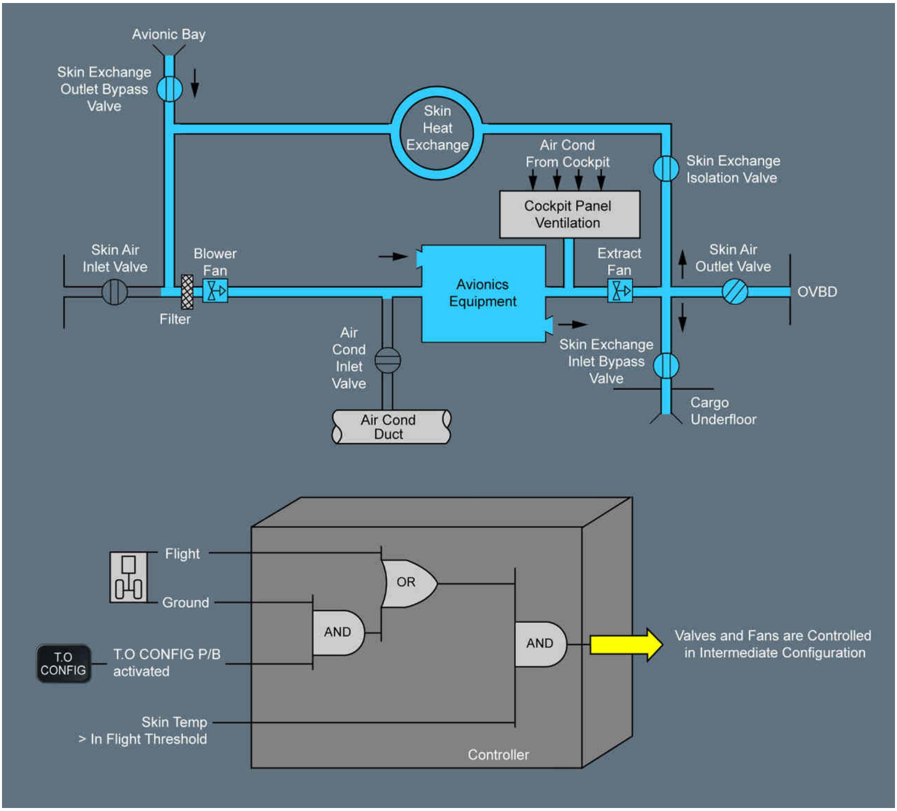
7 Ident.: DSC-21-30-20-00000344.0003001 / 01 FEB 22
Applicable to: MSN 11531

FLIGHT OPERATIONS

The intermediate configuration operates when skin temperature is above the in-flight threshold.

In flight threshold = +35 °C (95 °F), temperature increasing, or
+32 °C (90 °F), temperature decreasing.

Note: *The measuring range of the skin temperature sensed is between -50 °C and 80 °C. Outside of this range, the AEVC sets the avionics ventilation configuration to the intermediate configuration (partially open) until the temperature is within the operation range again.*


Avionic Bay
Skin Exchange Outlet Bypass Valve
Skin Heat Exchange
Air Cond From Cockpit
Skin Exchange Isolation Valve
Cockpit Panel Ventilation
Skin Air Inlet Valve
Blower Fan
Avionics Equipment
Extract Fan
Skin Air Outlet Valve
OVBD
Filter
Air Cond Inlet Valve
Skin Exchange Inlet Bypass Valve
Cargo Underfloor
Air Cond Duct
Flight
Ground
OR
AND
T.O CONFIG
T.O CONFIG P/B activated
AND
Valves and Fans are Controlled in Intermediate Configuration
Skin Temp > In Flight Threshold
Controller

NORMAL OPERATION, INTERMEDIATE CONFIGURATION

Ident.: DSC-21-30-20-00000344.0001001 / 09 OCT 12

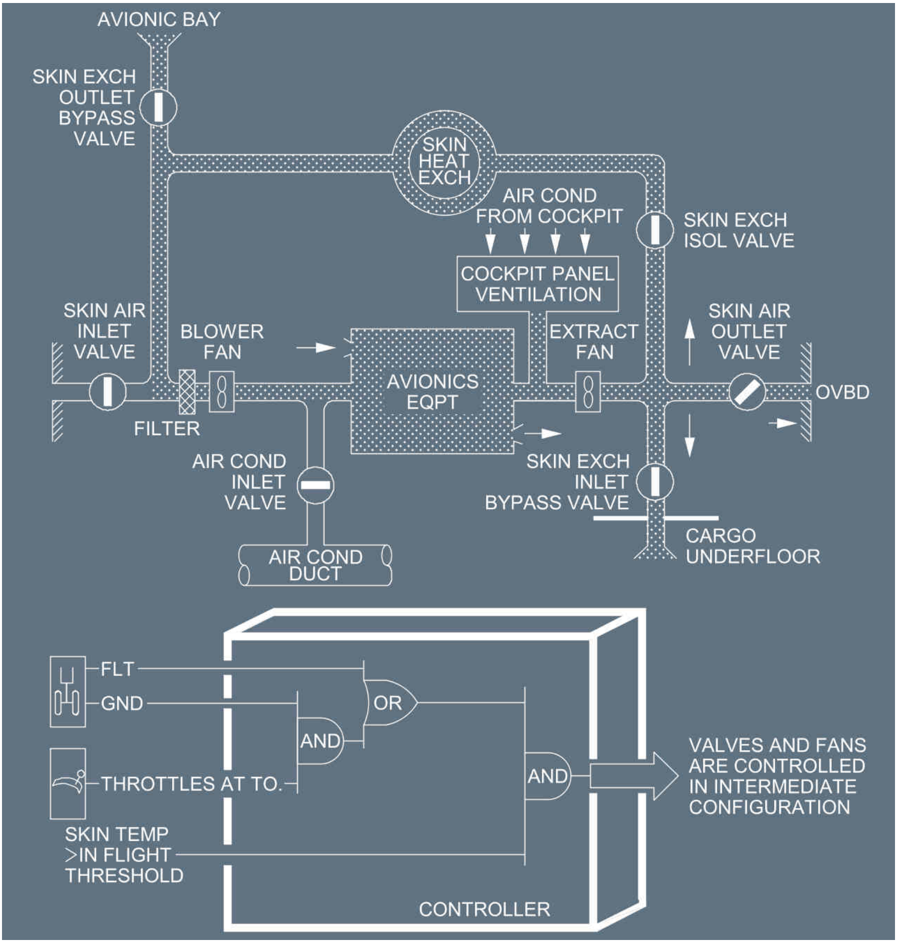
8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

FLIGHT OPERATIONS

The intermediate configuration operates when skin temperature is above the in-flight threshold.

In flight threshold = +35 °C (95 °F), temperature increasing, or
+32 °C (90 °F), temperature decreasing.

Note: *The measuring range of the skin temperature sensed is between -50 °C and 80 °C. Outside of this range, the AEVC sets the avionics ventilation configuration to the intermediate configuration (partially open) until the temperature is within the operation range again.*


AVIONIC BAY
SKIN EXCH OUTLET BYPASS VALVE
SKIN HEAT EXCH
AIR COND FROM COCKPIT
SKIN EXCH ISOL VALVE
COCKPIT PANEL VENTILATION
SKIN AIR INLET VALVE
BLOWER FAN
EXTRACT FAN
SKIN AIR OUTLET VALVE
AVIONICS EQPT
OVBD
FILTER
AIR COND INLET VALVE
SKIN EXCH INLET BYPASS VALVE
CARGO UNDERFLOOR
AIR COND DUCT
FLT
GND
OR
AND
THROTTLES AT TO.
AND
VALVES AND FANS ARE CONTROLLED IN INTERMEDIATE CONFIGURATION
SKIN TEMP >IN FLIGHT THRESHOLD
CONTROLLER

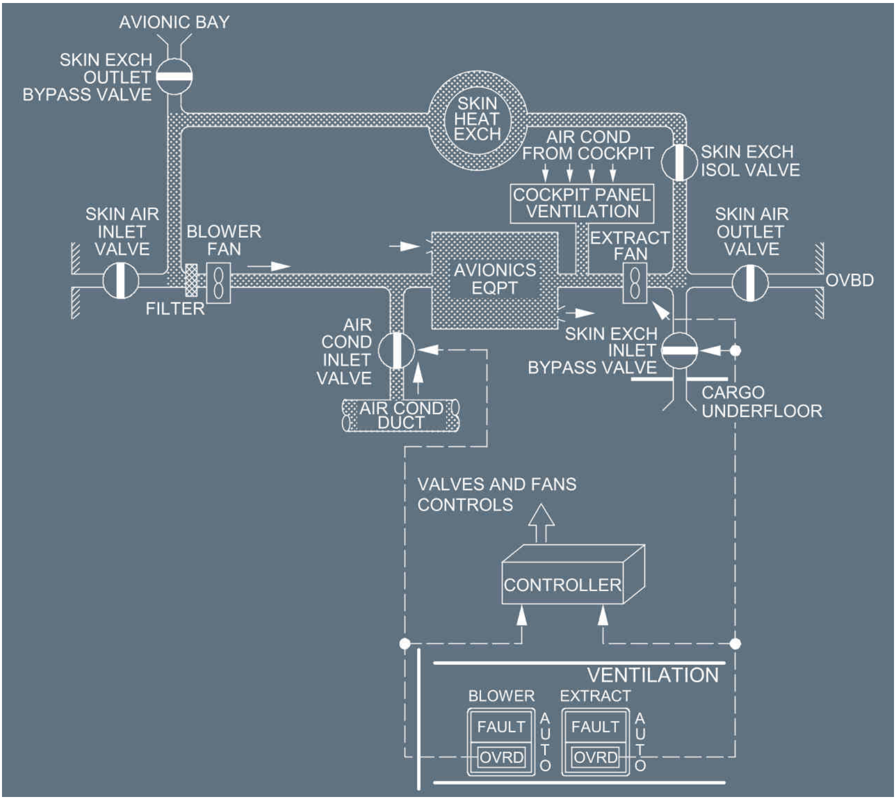
ABNORMAL OPERATION

Applicable to: ALL

Ident.: DSC-21-30-20-A-00000346.0001001 / 20 JAN 15

BLOWER FAULT OR EXTRACT FAULT ALERT

When the BLOWER or the EXTRACT pushbutton switch is set at the OVRD (override) position, the system is in closed-circuit configuration and adds air from the air conditioning system to the ventilation air.

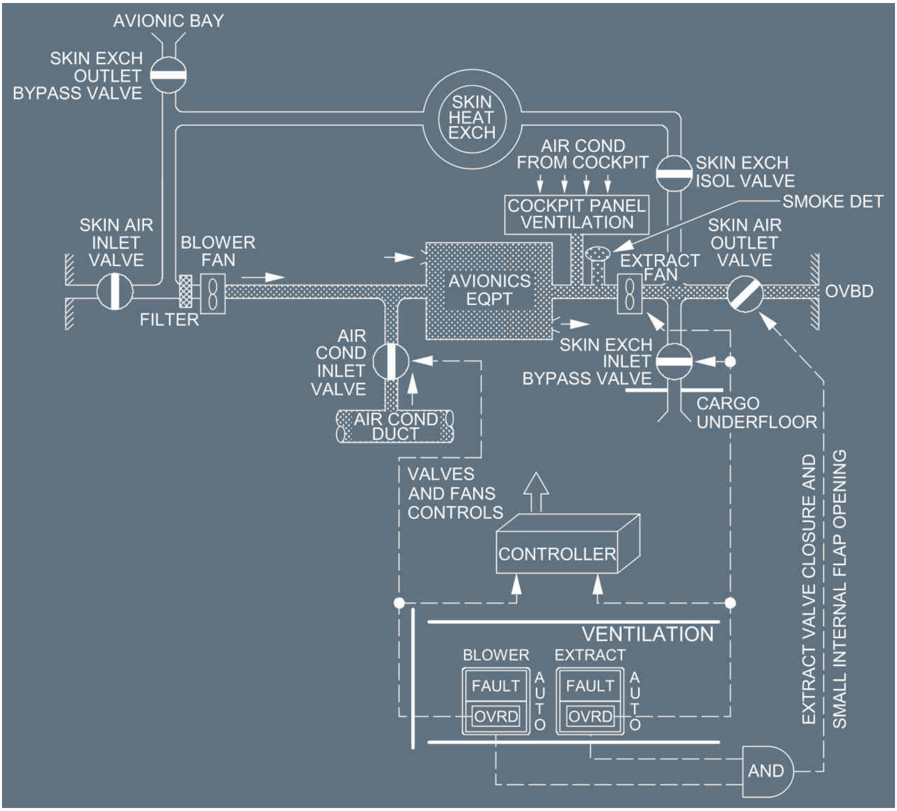

AVIONIC BAY
SKIN EXCH
OUTLET
BYPASS VALVE
SKIN
HEAT
EXCH
AIR COND
FROM COCKPIT
SKIN EXCH
ISOL VALVE
COCKPIT PANEL
VENTILATION
SKIN AIR
INLET
VALVE
BLOWER
FAN
EXTRACT
FAN
SKIN AIR
OUTLET
VALVE
AVIONICS
EQPT
OVBD
FILTER
AIR
COND
INLET
VALVE
SKIN EXCH
INLET
BYPASS VALVE
AIR COND
DUCT
CARGO
UNDERFLOOR
VALVES AND FANS
CONTROLS
CONTROLLER
VENTILATION
BLOWER
EXTRACT
FAULT
OVRD
AUTO
FAULT
OVRD
AUTO

When the BLOWER pushbutton switch is set at OVRD, the blower fan is stopped and the extract fan continues to run.
When the EXTRACT pushbutton switch is set at OVRD, the extract fan is controlled directly from the pushbutton. Both fans continue to run.

Ident.: DSC-21-30-20-A-00000347.0001001 / 09 OCT 12

SMOKE CONFIGURATION

When the smoke detector detects smoke in the avionics ventilation air the BLOWER and the EXTRACT FAULT lights come on.
When both the BLOWER and the EXTRACT pushbuttons are set to the OVRD position, the air conditioning system supplies cooling air, which is then exhausted overboard. The blower fan stops.


AVIONIC BAY
SKIN EXCH OUTLET BYPASS VALVE
SKIN HEAT EXCH
AIR COND FROM COCKPIT
SKIN EXCH ISOL VALVE
COCKPIT PANEL VENTILATION
SMOKE DET
SKIN AIR INLET VALVE
BLOWER FAN
SKIN AIR OUTLET VALVE
EXTRACT FAN
AVIONICS EQPT
OVBD
FILTER
AIR COND INLET VALVE
SKIN EXCH INLET BYPASS VALVE
CARGO UNDERFLOOR
AIR COND DUCT
VALVES AND FANS CONTROLS
CONTROLLER
EXTRACT VALVE CLOSURE AND SMALL INTERNAL FLAP OPENING
VENTILATION
BLOWER
EXTRACT
FAULT
OVRD
AUTO
FAULT
OVRD
AUTO
AND

Ident.: DSC-21-30-20-A-00000348.0001001 / 10 MAY 21

CONTROLLER FAILURE

In case of a controller failure, the BLOWER and the EXTRACT FAULT lights come on and both the BLOWER and the EXTRACT push-buttons are set to the OVRD position.

The controller failure configuration is the same as the SMOKE configuration concerning the blower fan, the skin exchange inlet bypass valve and the skin air outlet valve.
The skin air inlet valve, the skin exchange isolation valve and the skin exchange outlet bypass valve remain in the last position checked before the failure occurred.
The extract fan keeps running.

BATTERY VENTILATION

Ident.: DSC-21-30-40-00000350.0001001 / 21 MAR 16
Applicable to: ALL

A venturi in the skin of the aircraft draws air from the space around the batteries and vents it overboard. The resulting airflow ventilates the batteries.

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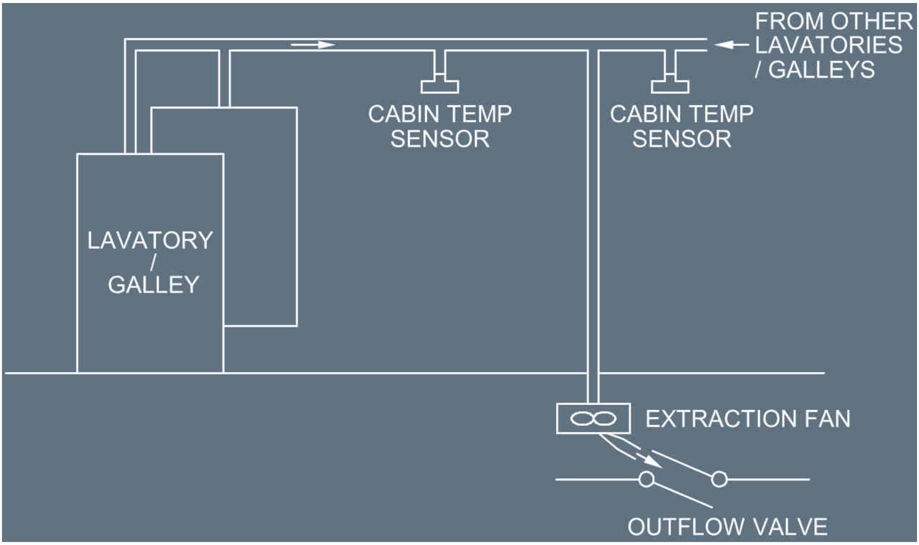
LAVATORY AND GALLEY

Ident.: DSC-21-30-50-00000351.0001001 / 09 OCT 12
Applicable to: ALL

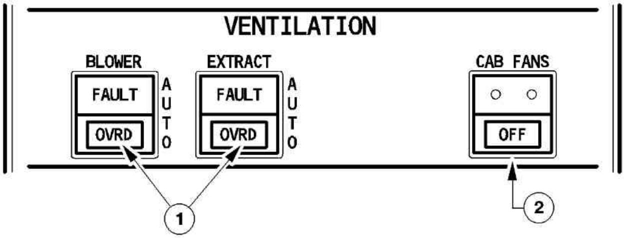
An extraction fan draws ambient cabin air through the lavatories and galleys and exhausts it near the outflow valve.
The extraction fan runs continually when electric power is available.


FROM OTHER LAVATORIES / GALLEYS
CABIN TEMP SENSOR
CABIN TEMP SENSOR
LAVATORY / GALLEY
EXTRACTION FAN
OUTFLOW VALVE

Intentionally left blank

OVERHEAD PANEL

Ident.: DSC-21-30-60-00000352.0001001 / 24 FEB 11
Applicable to: ALL



(1) BLOWER pb-sw and EXTRACT pb-sw

AUTO: : When both pushbutton switches are on AUTO:
- On the ground before the application of TO power, the ventilation system is in open circuit configuration (closed configuration when the skin temperature is below the ground threshold).
- On the ground after the application of TO power, and in flight, the ventilation system is in closed circuit configuration.

OVRD: : When either pushbutton switch is on OVRD:
- The system goes to closed circuit configuration.
- Air from the air conditioning system is added to ventilation air. (The blower fan stops if the BLOWER pushbutton switch is in the OVRD position).

When both pushbutton switches are on OVRD:
- Air flows from the air conditioning system and then overboard.
- The extract fan continues to run.

FAULT lt: : Lights up amber (and ECAM activates)

in the blower switch, if :
- blowing pressure is low (See *)
- duct overheats (See *)
- computer power supply fails
- smoke warning is activated

in the extract switch, if :
- extract pressure is low (See *)
- computer power supply fails
- smoke warning is activated.

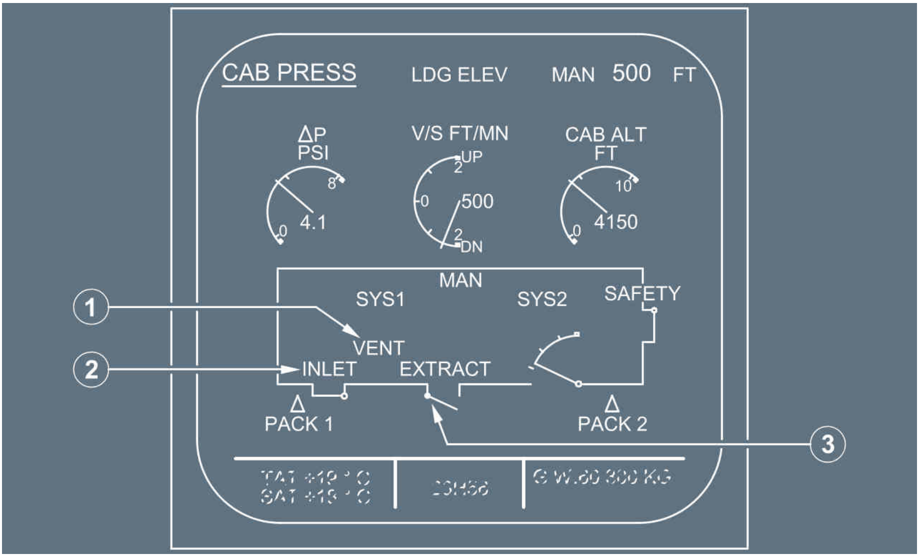
* If the warning occurs on the ground when the engines are stopped, the external horn sounds.

(2) *Refer to DSC-21-10-50 Controls on Overhead Panel*

ECAM CAB PRESS PAGE

Ident.: DSC-21-30-60-00000353.0001001 / 03 APR 13

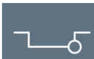
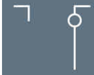
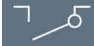
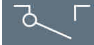
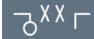
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


CAB PRESS
LDG ELEV
MAN 500 FT
ΔP
PSI
8
0
4.1
V/S FT/MN
UP
2
0
500
2
DN
CAB ALT
FT
10
0
4150
MAN
SYS1
SYS2
SAFETY
VENT
INLET
EXTRACT
Δ
PACK 1
Δ
PACK 2
1
2
3
TAT +19 °C
SAT +18 °C
23H56
G.W.60 300 KG

(1) VENT
This normally appears in white. It becomes amber, if there is a BLOWER FAULT, EXTRACT FAULT, or AVNCS SYS FAULT.

(2) INLET and EXTRACT Indications
Normally white. The corresponding indication becomes amber, in case of a BLOWER FAULT or EXTRACT FAULT.

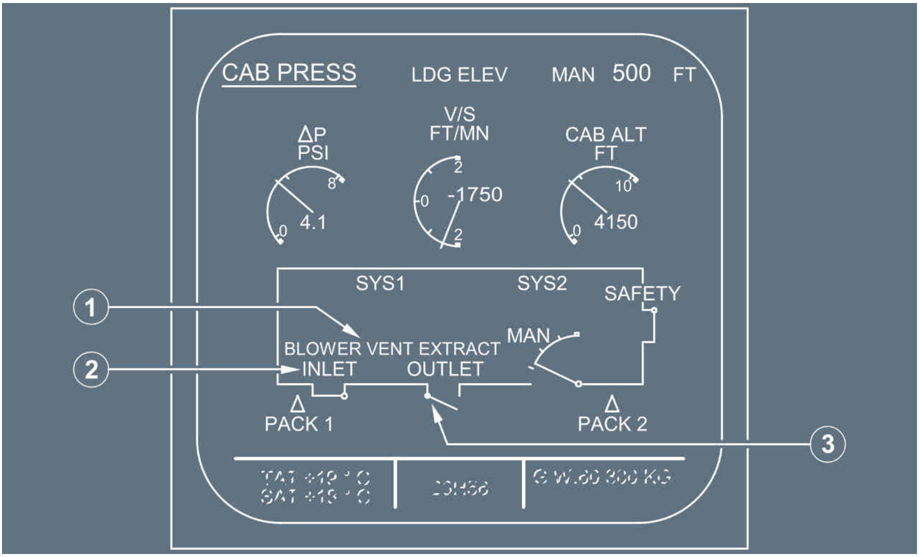
(3) INLET and EXTRACT Valve Diagrams

	This indicates that the valve is fully closed. It is normally green, but is amber if there is a disagreement.
	This indicates that the valve is fully open. It is normally green, but is amber if there is a disagreement. NOTE: Because of the accuracy of the temperature sensors, on the ground the closed or open indication may become amber when the temperature is close to the valve opening or closing threshold.
	This indicates that the inlet valve is in transit (inlet valve only). It is amber.
	This indicates that the outlet valve is partially open (the outlet valve is closed but a small internal flap is open).
	If the valve position is not available or the received status for the valve is inconsistent, XX appears in amber.

ECAM CAB PRESS PAGE

Ident.: DSC-21-30-60-00000353.0006001 / 03 APR 13

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


CAB PRESS
LDG ELEV
MAN 500 FT
ΔP
PSI
8
0
4.1
V/S
FT/MN
2
0
-1750
2
CAB ALT
FT
10
0
4150
SYS1
SYS2
SAFETY
BLOWER VENT EXTRACT
MAN
INLET
OUTLET
PACK 1
PACK 2
1
2
3

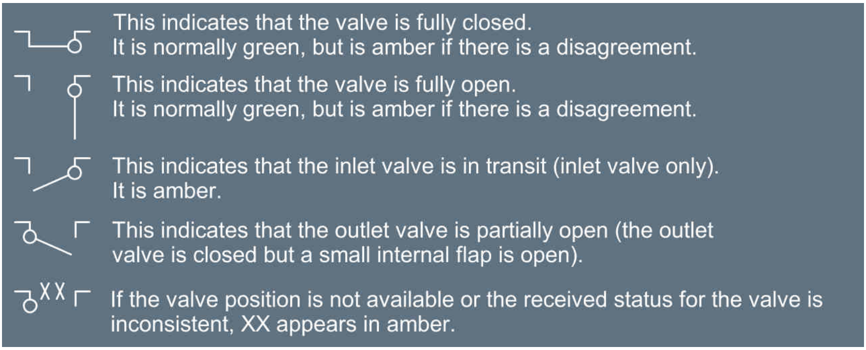
(1) BLOWER, VENT and EXTRACT Indications

VENT message normally appears in white. It becomes amber, if there is a BLOWER FAULT, EXTRACT FAULT, or AVNCS SYS FAULT.
BLOWER message appears in amber if there is a BLOWER FAULT.
EXTRACT message appears in amber if there is an EXTRACT FAULT.

(2) INLET and OUTLET Indications

Normally white. The corresponding indication becomes amber, when the inlet valve or the outlet valve is failed.

(3) INLET and OUTLET Valve Diagrams



This indicates that the valve is fully closed.
It is normally green, but is amber if there is a disagreement.

This indicates that the valve is fully open.
It is normally green, but is amber if there is a disagreement.

This indicates that the inlet valve is in transit (inlet valve only).
It is amber.

This indicates that the outlet valve is partially open (the outlet valve is closed but a small internal flap is open).

If the valve position is not available or the received status for the valve is inconsistent, XX appears in amber.

GENERAL

Ident.: DSC-21-40-10-00017795.0001001 / 21 MAR 16
Applicable to: ALL

CARGO VENTILATION ◁

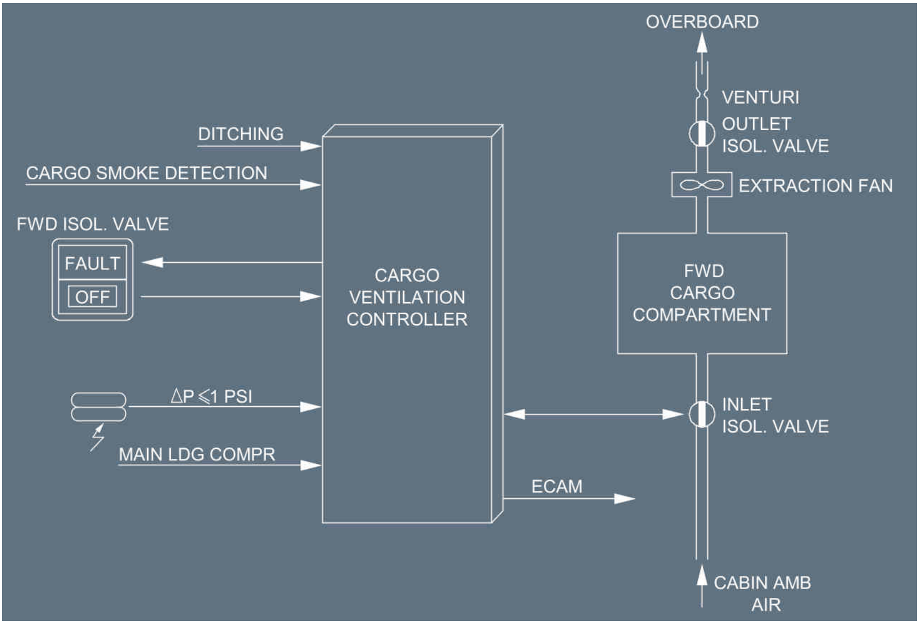
An extraction fan draws air from forward cargo compartment or aft cargo compartment, and exhausts it overboard. Air from the cabin replaces the exhausted air, thus ventilating the cargo compartments.

CARGO TEMPERATURE REGULATION ◁

The system can mix hot bleed air with the air coming from the cabin, therefore giving the flight crew control of the temperature in the forward or aft cargo compartment.

SCHEMATIC

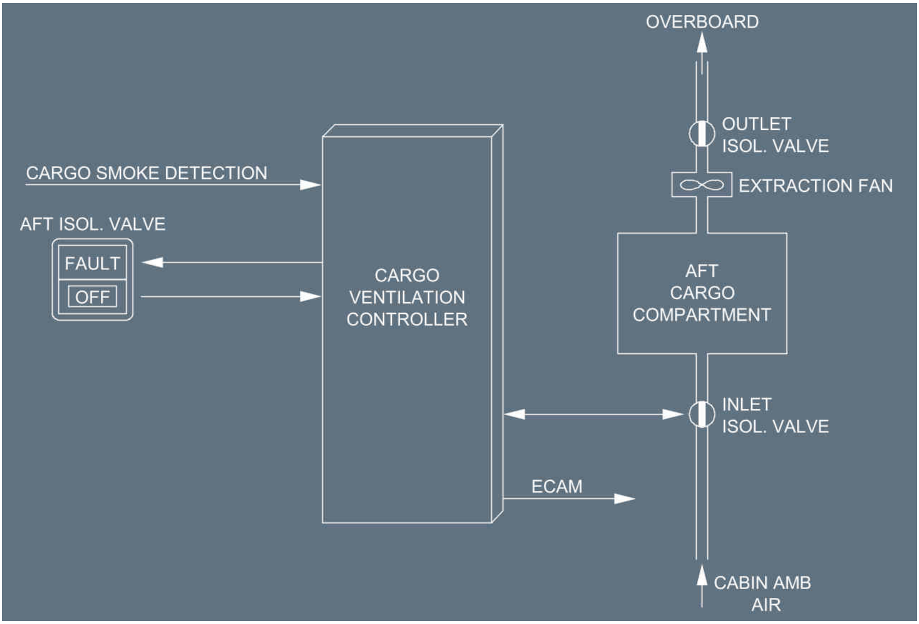
Ident.: DSC-21-40-10-00000357.0001001 / 22 MAY 12
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


OVERBOARD
VENTURI
OUTLET ISOL. VALVE
EXTRACTION FAN
DITCHING
CARGO SMOKE DETECTION
FWD ISOL. VALVE
FAULT
OFF
CARGO VENTILATION CONTROLLER
FWD CARGO COMPARTMENT
ΔP ⩽1 PSI
MAIN LDG COMPR
INLET ISOL. VALVE
ECAM
CABIN AMB AIR

SCHEMATIC

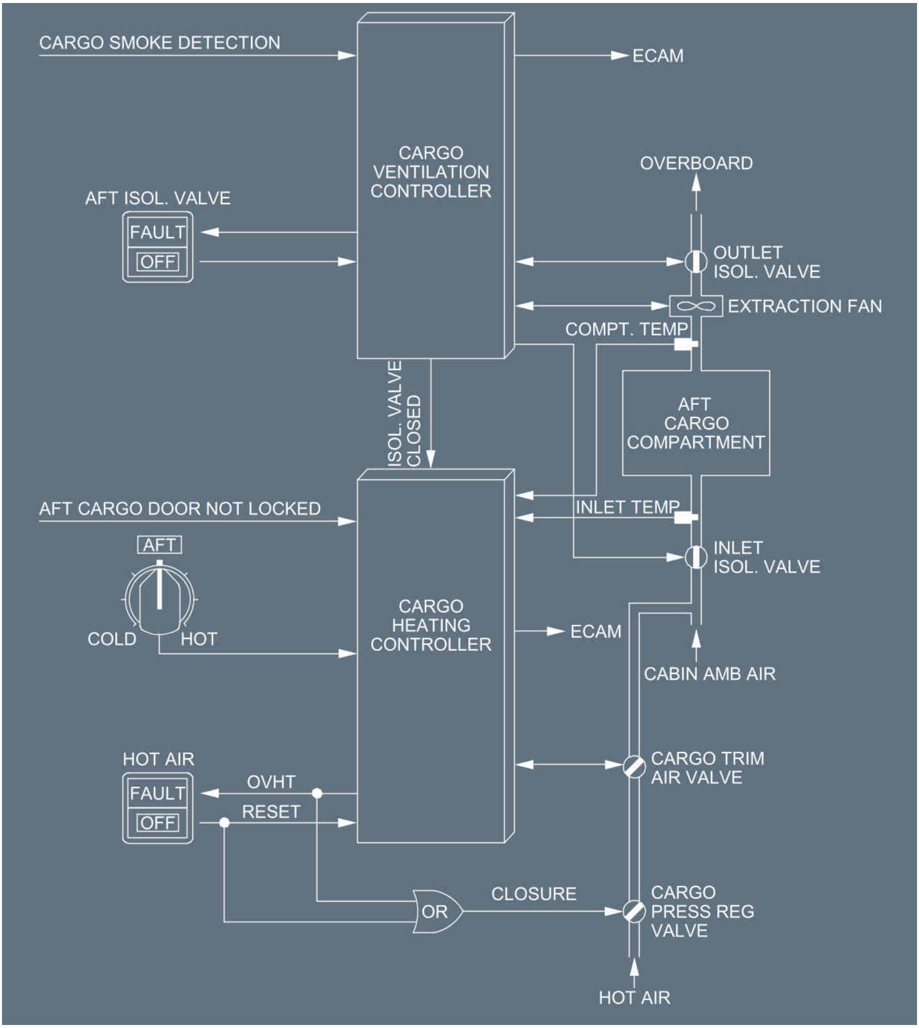
Ident.: DSC-21-40-10-00000357.0002001 / 22 MAY 12

1 **Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495-09324, 10949-11597**


OVERBOARD
OUTLET ISOL. VALVE
EXTRACTION FAN
CARGO SMOKE DETECTION
AFT ISOL. VALVE
FAULT
OFF
CARGO VENTILATION CONTROLLER
AFT CARGO COMPARTMENT
INLET ISOL. VALVE
ECAM
CABIN AMB AIR

SCHEMATIC

Ident.: DSC-21-40-10-00000357.0004001 / 22 MAY 12
Applicable to: MSN 02014, 02734, 03032, 04827-04860


CARGO SMOKE DETECTION
ECAM
CARGO VENTILATION CONTROLLER
OVERBOARD
AFT ISOL. VALVE
FAULT
OFF
OUTLET ISOL. VALVE
EXTRACTION FAN
COMPT. TEMP
ISOL. VALVE CLOSED
AFT CARGO COMPARTMENT
AFT CARGO DOOR NOT LOCKED
INLET TEMP
AFT
INLET ISOL. VALVE
COLD
HOT
CARGO HEATING CONTROLLER
ECAM
CABIN AMB AIR
HOT AIR
CARGO TRIM AIR VALVE
FAULT
OVHT
RESET
OFF
CLOSURE
OR
CARGO PRESS REG VALVE
HOT AIR

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FWD CARGO VENTILATION ⊲

Ident.: DSC-21-40-20-00017796.0001001 / 21 MAR 16
Applicable to: ALL

Air from the cabin goes via the inlet isolation valve to the forward cargo compartment, driven either by an extraction fan or by differential pressure in flight. A skin-mounted venturi discharges the air overboard via the outlet isolation valve. The cargo ventilation controller controls the operation of the inlet and outlet isolation valves and the extraction fan.

The ventilation system operates in two modes:
- On the ground or when $\Delta P \leq 1$ PSI in flight, the controller opens the isolation valves, then starts the extraction fan
- In flight when $\Delta P > 1$ PSI, the controller stops the fan, and differential pressure maintains the ventilation.

The controller closes the isolation valves and stops the extraction fan when:
- The flight crew sets the FWD ISOL VALVE pb-sw to OFF, or
- The forward cargo smoke detection unit detects smoke.

The outlet valve closes and the extraction fan stops when the flight crew sets the DITCHING pb-sw to ON.

AFT CARGO VENTILATION ⊲

Ident.: DSC-21-40-20-00017797.0001001 / 21 MAR 16
Applicable to: ALL

Air from the cabin goes via the inlet isolation valve to the aft cargo compartment, driven by an extraction fan. Air is controlled by the outlet isolation valve and then goes outboard through the outflow valve.
The cargo ventilation controller controls the operation of the inlet and outlet isolation valves and the extraction fan.
When the isolation valves are fully open, the extraction fan operates continuously when the aircraft is on the ground and during flight.

The controller closes the isolation valves and stops the extraction fan when:
- The flight crew sets the AFT ISOL VALVE pb-sw to OFF, or
- The aft cargo smoke detection unit detects smoke.

AFT CARGO HEATING

Ident.: DSC-21-40-20-00017798.0001001 / 21 MAR 16
Applicable to: ALL

The ventilation system for the aft cargo compartment uses hot engine bleed air (upstream of the packs), mixing it with the ambient cabin air that flows through the cargo compartment.
The cargo regulating valve regulates the pressure of this hot air supply, and the trim air valve, which is modulated electrically by the controller, controls the flow.
The cargo pressure regulating valve is pneumatically operated and electrically controlled from the HOT AIR pb on the CARGO HEAT panel.
The hot air is controlled by the cargo trim air valve which is modulated electrically by the controller.
The hot air is then mixed with air from the cabin and supplied to the cargo compartment through the ventilation inlet isolation valve.
According to the temperature selector demand, the controller regulates the amount of hot air added by the trim air valve, until the desired temperature is reached.
If the inlet temperature exceeds 70 °C, the controller closes the trim air valve.
If the inlet temperature exceeds 88 °C, the controller interprets this as a duct overheat and closes the pressure regulating valve. This valve then remains closed until the flight crew resets the system by pressing the HOT AIR pb — which it cannot do until the temperature drops below 70 °C.

FWD CARGO HEATING

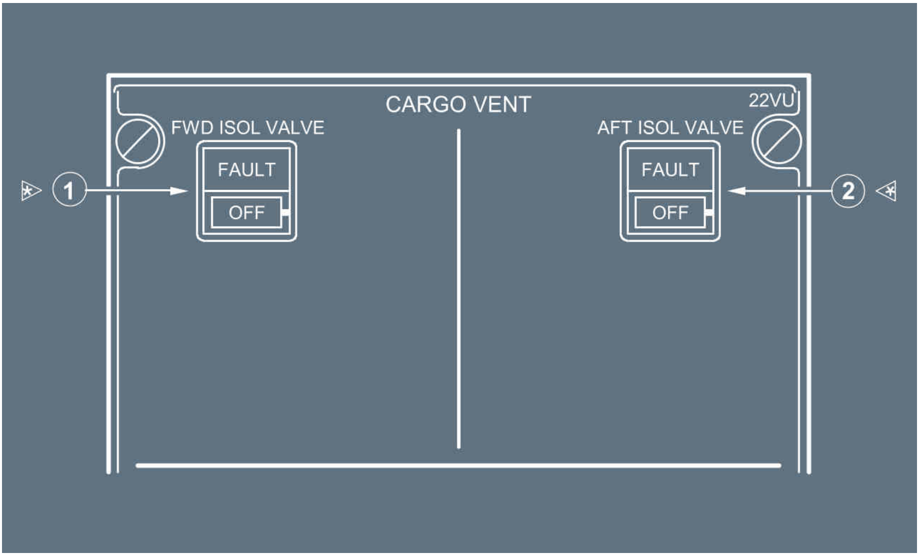
Ident.: DSC-21-40-20-00017799.0001001 / 21 MAR 16
Applicable to: ALL

The ventilation system for the forward cargo compartment uses hot engine bleed air, which is also used for cockpit and cabin temperature control, mixing it with the ambient cabin air that flows through the cargo compartment.
The cockpit and cabin hot air pressure regulating valve regulates the pressure of this hot air supply, and the cargo trim air valve, which is modulated electrically by the controller, controls the flow.
The hot air mixes with air from the cabin as it supplied to the cargo compartment through the ventilation inlet isolation valve.
The controller regulates the amount of hot air added by the trim air valve to get the desired temperature, per the temperature selector.
If the inlet temperature exceeds 70 °C, the controller closes the trim air valve. If the inlet temperature reaches 88 °C, the controller interprets this as a duct overhead and closes the pressure regulating valve. This valve then remains closed until the flight crew resets the system by pressing the HOT AIR pb - which it cannot do until the temperature drops below 70 °C.

OVERHEAD PANEL

Ident.: DSC-21-40-30-00017800.0001001 / 20 MAR 17

1 **Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**



(1) FWD ISOL VALVE pb-sw ◁

The switch controls the forward isolation valves and the extraction fan.

Auto : The inlet and outlet isolation valves open, extraction fan runs if there is no smoke detected in the fwd cargo bay.

OFF : The inlet and outlet isolation valves and the trim air valve close, the extraction fan stops.

FAULT lt : The light, associated with the ECAM caution, comes on amber when either inlet or outlet valve is not in the selected position.

(2) AFT ISOL VALVE pb-sw ◁

The switch controls the isolation valves and the extraction fan.

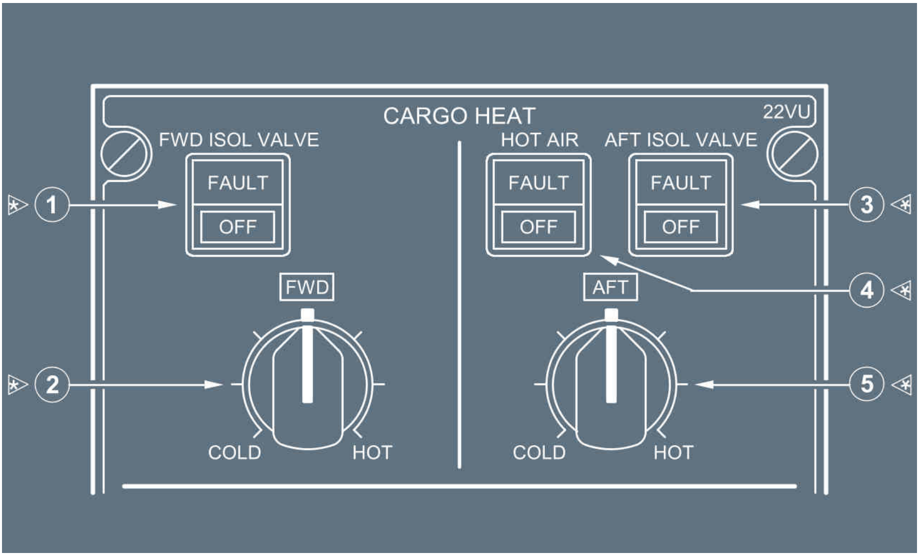
Auto : The inlet and outlet isolation valves open, extraction fan runs if there is no smoke detected in the aft cargo bay.

OFF : The inlet and outlet isolation valves and the trim air valve close, the extraction fan stops.

FAULT lt : The light, associated with the ECAM caution, comes on amber when either inlet or outlet valve is not in the selected position.

OVERHEAD PANEL

Ident.: DSC-21-40-30-00017800.0006001 / 04 JUN 19
Applicable to: MSN 02014, 02734, 03032, 04827-04860


CARGO HEAT
22VU
FWD ISOL VALVE
HOT AIR
AFT ISOL VALVE
FAULT
OFF
FAULT
OFF
FAULT
OFF
FWD
AFT
COLD
HOT
COLD
HOT
1
2
3
4
5

(1) FWD ISOL VALVE pb-sw

The switch controls the forward isolation valves and the extraction fan.

Auto : The inlet and outlet isolation valves open, extraction fan runs if there is no smoke detected in the fwd cargo bay.

OFF : The inlet and outlet isolation valves and the trim air valve close, the extraction fan stops.

FAULT lt : The light, associated with the ECAM caution, comes on amber when either inlet or outlet valve is not in the selected position.

(2) FWD temperature selector ❄

- COLD position : Approximately 5 °C (41 °F)
- HOT position : Approximately 26 °C (79 °F)
- Middle position : Approximately 15 °C (59 °F).

Note: The cargo compartment temperature may vary, depending on external factors (flight duration, outside temperature...).

(3) AFT ISOL VALVE pb-sw ❄

The switch controls the isolation valves and the extraction fan.

Auto : The inlet and outlet isolation valves open, extraction fan runs if there is no smoke detected in the aft cargo bay.

OFF : The inlet and outlet isolation valves and the trim air valve close, the extraction fan stops.

FAULT lt : The light, associated with the ECAM caution, comes on amber when either inlet or outlet valve is not in the selected position.

(4) HOT AIR pb ❄

Auto : The pressure regulating valve regulates the hot air pressure.

OFF : The pressure regulating valves and the trim air valve close. The fault circuit is reset.

FAULT lt : The amber light and ECAM caution come on, when a duct overheat is detected 88 °C (190 °F).
The light goes out, when the temperature drops below 70 °C (158 °F), and OFF is selected. Then, if the pushbutton is set to on, the system resets.

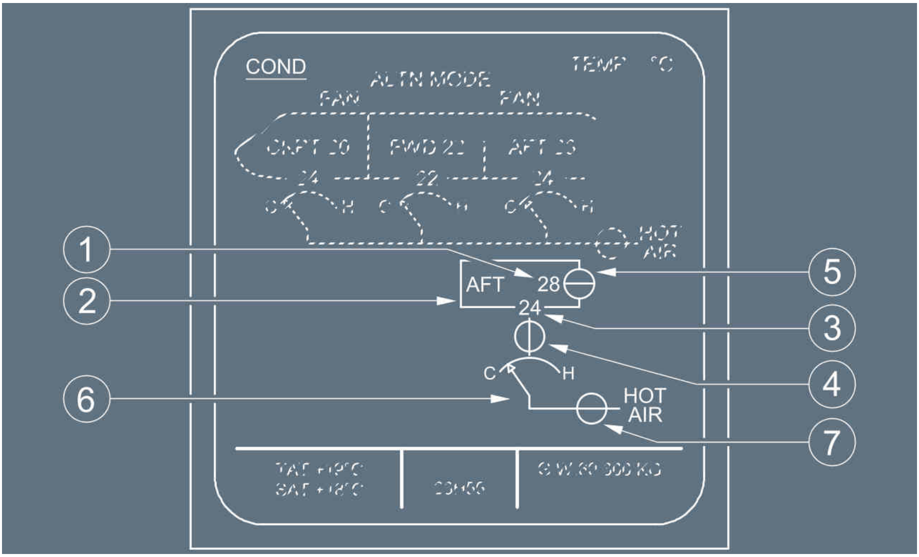
(5) AFT temperature selector ❄

- COLD position : Approximately 5 °C (41 °F)
- HOT position : Approximately 26 °C (79 °F)
- Middle position : Approximately 15 °C (59 °F).

Note: 1. *The cargo compartment temperature may vary, depending on external factors (flight duration, outside temperature...).*
2. *The actual bulk cargo compartment temperature may be 10 °C (18 °F) lower than the selected temperature.*

ECAM COND PAGE

Ident.: DSC-21-40-35-00006005.0003001 / 22 MAY 12
Applicable to: MSN 02014, 02734, 03032, 04827-04860


COND
ALTN MODE
TEMP °C
FAN
FAN
CKPT 20
FWD 22
AFT 23
24
22
24
C
H
C
H
C
H
HOT AIR
1
2
6
AFT
28
24
C
H
HOT AIR
5
3
4
7
TAT +19°C
SAT +18°C
23H56
G.W. 60 300 KG

(1) Cargo compartment temperature
This indication is green.

(2) Zone indication
It is white.

(3) Duct inlet temperature
This is normally green, it becomes amber when T ≥ 80 °C.

(4) Inlet isolation valve

In line – Green : Valve is open.

Crossline – Amber : Valve is closed.

(5) Outlet isolation valve

Crossline – Green : Valve is open.

In line – Amber : Valve is closed.

(6) Trim air valve

H - Hot (Green) : Valve is open.

C - Cold (Green) : Valve is closed.

(7) Hot air pressure regulating valve

In line and green : valve is open.

In line and amber : valve failed open.

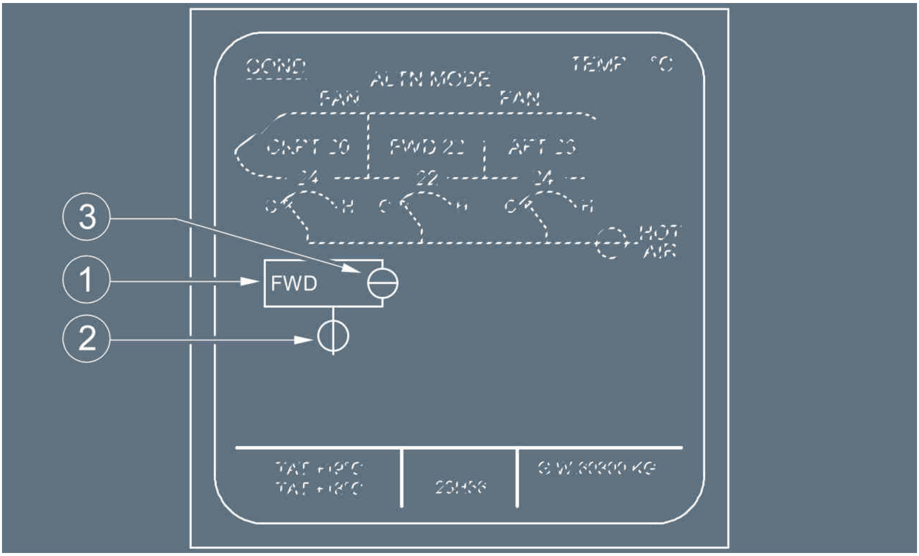
Cross line and green : valve normally closed with the pushbutton in ON position.

Cross line and amber : valve is closed and the pushbutton in OFF position.

ECAM COND PAGE

Ident.: DSC-21-40-35-00006005.0009001 / 22 MAY 12

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


COND
TEMP °C
ALTN MODE
FAN
FAN
CKPT 20
FWD 22
AFT 23
24
22
24
C
H
C
H
C
H
HOT
AIR
3
1
2
FWD
TAT +19°C
SAT +18°C
23H56
G.W. 60300 KG

(1) Zone indication
It is white.

(2) Inlet isolation valve

In line – Green : Valve is open.

Crossline – Amber : Valve is closed.

(3) Outlet isolation valve

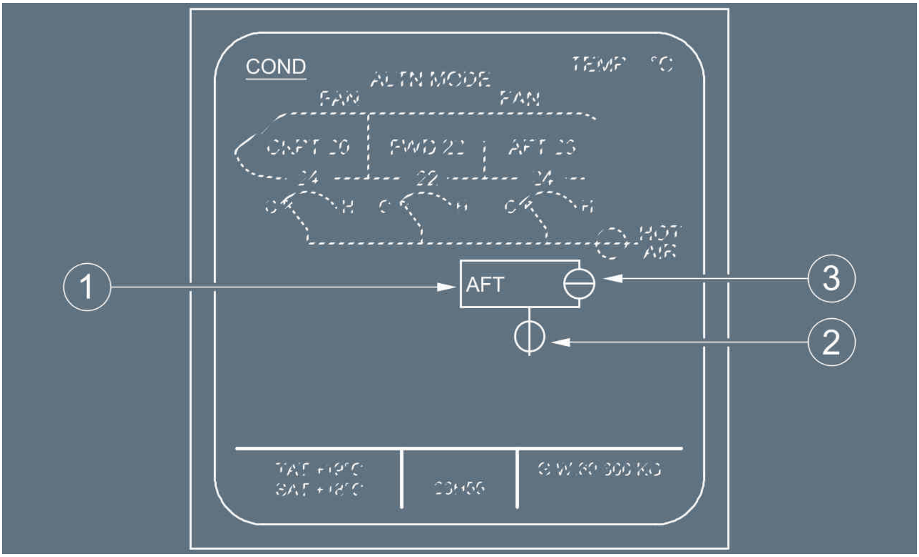
Crossline – Green : Valve is open.

In line – Amber : Valve is closed.

ECAM COND PAGE

Ident.: DSC-21-40-35-00006005.0002001 / 22 MAY 12

1 **Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**


COND
TEMP °C
ALTN MODE
FAN
FAN
CKPT 20
FWD 22
AFT 23
24
22
24
C
H
C
H
C
H
HOT AIR
AFT
TAT +19°C
SAT +18°C
23H56
G.W. 60 300 KG
1
2
3

(1) Zone indication
It is white.

(2) Inlet isolation valve

In line – Green : Valve is open.

Crossline – Amber : Valve is closed.

(3) Outlet isolation valve

Crossline – Green : Valve is open.

In line – Amber : Valve is closed.

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AIRCRAFT SYSTEMS

AUTO FLIGHT - GENERAL

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1 DSC-22_10-10 Description

FMGC Standard....A
FMGC Standard....B
Preamble....C
Description....D
General Philosophy....E
Flight Management Guidance Computer (FMGC)....F
Multipurpose Control and Display Unit (MCDU)....G
Flight Control Unit (FCU)....H
Flight Augmentation Computer (FAC)....I
Other Flight Crew Interfaces....J
Flight Crew Interface with FMGC....K

DSC-22_10-20 System Interface Diagram

System Interface Diagram....A

DSC-22_10-30 FMGS Modes of Operation

General....A
Dual Mode....B
Independent Mode....C
Single Mode....D
Back Up Navigation Mode....E

DSC-22_10-40 Pilot Interface

DSC-22_10-40-05 Management of the Displays

General....A

DSC-22_10-40-10 MCDU

MCDU....A

DSC-22_10-40-20 FCU

FCU....A
FCU Philosophy....B
Speed/Mach Control Area....C
Lateral Control Area....D
AP-A/THR Control Area....E
Vertical Control Area....F

DSC-22_10-40-30 Thrust Levers

Thrust Levers....A

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DSC-22_10-40-40 Primary Flight Display

PFD....................A

DSC-22_10-40-50 Navigation Display

ND....................A
Arc Mode....................B
Plan Mode....................C
Rose Modes....................D
Flight Plan Display Colors....................E

DSC-22_10-50 Speeds Definition

DSC-22_10-50-10 General

General....................A

DSC-22_10-50-20 Characteristic Speeds

Characteristic Speeds....................A

DSC-22_10-50-30 Limit Speeds

Limit Speeds....................A

DSC-22_10-50-40 Protection Speeds

Protection Speeds....................A

DSC-22_10-50-50 Other Speeds

Other Speeds....................A

Localization Title	Toc Index	ID	Reason
DSC-22_10-PLP-TOC Description		1	Documentation update: Deletion of the "00022442.0002001 FMGC Standard" documentary unit.
DSC-22_10-40-20 Lateral Control Area	D	2	Documentation update: Addition of "Lateral Control Area" documentary unit
DSC-22_10-40-20 Vertical Control Area	F	3	Documentation update: Addition of "Vertical Control Area" documentary unit
DSC-22_10-40-50 Flight Plan Display Colors	E	1	Documentation update: Addition of "Flight Plan Display Colors" documentary unit
DSC-22_10-50-20 Characteristic Speeds	A	1	Documentation update: Addition of "Characteristic Speeds" documentary unit
DSC-22_10-10 FMGC Standard	A	1	Effectivity update: The information no longer applies to MSN 02014.
DSC-22_10-10 FMGC Standard	A	2	Effectivity update: The information now also applies to MSN 03002, 03284, 03313, 03565, 03630, 03662, 04544, 04734.
DSC-22_10-10 FMGC Standard	A	3	Effectivity update: The information now also applies to MSN 02014.
DSC-22_10-10 FMGC Standard	A	4	Effectivity update: The information no longer applies to MSN 06798, 06949, 07005, 07081, 07098.
DSC-22_10-10 FMGC Standard	A	5	Effectivity update: The information now also applies to MSN 06798, 06949, 07005, 07081, 07098.
DSC-22_10-10 FMGC Standard	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-10 Flight Management Guidance Computer (FMGC)	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-10 Multipurpose Control and Display Unit (MCDU)	G	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-20 System Interface Diagram	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 Independent Mode	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 Single Mode	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-30 Back Up Navigation Mode	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - MCDU Interface	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-22_10-40-10 MCDU - General	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Keyboard	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Annunciators (On the Side of the Keyboard)	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Annunciators (On the Top of the Keyboard)	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - BRT and DIM Keys	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Colors	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - Screen Prompts	A	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-10 MCDU - MCDU Function Keys	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_10-40-20 Lateral Control Area	D	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_10-40-20 Vertical Control Area	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_10-40-50 Flight Plan Display Colors	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-22_10-50-20 Characteristic Speeds	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_10-50-50 Other Speeds	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_10-50-50 Other Speeds	A	2	Effectivity update: The information now also applies to MSN 11531.

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FMGC STANDARD

Ident.: DSC-22_10-10-00022442.0004001 / 03 SEP 18

1 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

The aircraft is equipped with FMS2 HONEYWELL Release 1A H2 and FG I11.

FMGC STANDARD

Ident.: DSC-22_10-10-00022442.0043001 / 03 SEP 18

2 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05752**

The aircraft is equipped with FMS2 HONEYWELL Release 1A H2C and FG C14.

FMGC STANDARD

Ident.: DSC-22_10-10-00022442.0055001 / 03 SEP 18

3 **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528**

The aircraft is equipped with FMS2 HONEYWELL Release 1A H2C and FG I15.

FMGC STANDARD

Ident.: DSC-22_10-10-00022442.0126001 / 03 SEP 18

4 **Applicable to: MSN 06895**

The aircraft is equipped with FMS2 HONEYWELL Release 1A H2C and FG PC14.

FMGC STANDARD

Ident.: DSC-22_10-10-00022442.0131001 / 03 SEP 18

5 **Applicable to: MSN 05883, 06139, 06173-06876, 06949-07098**

The aircraft is equipped with FMS2 HONEYWELL Release 1A H2C and FG PC18.

FMGC STANDARD

Ident.: DSC-22_10-10-00022442.0062001 / 03 SEP 18

Applicable to: MSN 01459, 05947-05987, 06097, 06121, 06163-06165, 08495-09324

The aircraft is equipped with FMS2 HONEYWELL Release 1A H2C and FG PI16.

FMGC STANDARD

Ident.: DSC-22_10-10-00022442.0058001 / 03 SEP 18

Applicable to: MSN 04827-04860

The aircraft is equipped with FMS2 THALES Release 1A S7B and FG C14.

FMGC STANDARD

Ident.: DSC-22_10-10-00022418.0016001 / 25 MAY 21

6 **Applicable to: MSN 10949-11597**

The aircraft is equipped with FMS2 Honeywell Release 2 H4 and FG PI18.

PREAMBLE

Ident.: DSC-22_10-10-00010067.0001001 / 17 AUG 10

Applicable to: ALL

This section gives a general description of the Auto Flight System and its functions:

- Architecture
- Function description
- Basic principle of systems:
  - Reversion
  - Protection
  - Managed and selected guidance modes.
- Mode information
- Display characteristics
- Operational principles
- Flight crew interface (MCDU pages)
- Degraded modes of operations.

DESCRIPTION

Ident.: DSC-22_10-10-00010068.0001001 / 17 AUG 10

Applicable to: ALL

The Flight Management Guidance System (FMGS) contains the following units:

- Two Flight Management Guidance Computers (FMGC)
- Two Multipurpose Control and Display Units (MCDU) (third MCDU optional)
- One Flight Control Unit (FCU)
- Two Flight Augmentation Computers (FAC).

GENERAL PHILOSOPHY

Ident.: DSC-22_10-10-00010069.0001001 / 17 AUG 10

Applicable to: ALL

The Flight Management and Guidance System (FMGS) provides predictions of flight time, mileage, speed, economy profiles and altitude.
It reduces cockpit workload, improves efficiency, and eliminates many routine operations generally performed by the flight crew.

The Flight Management Guidance System (FMGS) operates as follows:
- During cockpit preparation the flight crew uses the Multipurpose Control and Display Unit (MCDU) to insert a preplanned route from origin to destination. This route includes SID, EN ROUTE, WAYPOINTS, STAR, APPROACH, MISSED APPR, and ALTN route as available from the navigation database.
- Subsequently the system defines a vertical profile and a speed profile, taking into account ATC requirements and performance criteria.

Either FMGC performs all operations, if one FMGC fails.
The FMGS computes the aircraft position continually, using stored aircraft performance data and navigation data. Therefore it can steer the aircraft along a preplanned route and vertical and speed profiles. This type of guidance is said to be “managed”.
If the flight crew wants to modify any flight parameter (SPD, V/S, HDG, etc.) temporarily, they may do so by using the various Flight Control Unit (FCU) selectors. The FMGS then guides the aircraft to the target value of this parameter that they have selected. This type of guidance is said to be “selected”.

The two available types of guidance, then, are:
- Managed guidance guides the aircraft along the preplanned route and the vertical and speed/Mach profile. (The FMGS computes the target values of the various flight parameters).
- Selected guidance guides the aircraft to the target values of the various flight parameters the flight crew selects by using the FCU selectors.

Selected guidance always has priority over managed guidance.

FLIGHT MANAGEMENT GUIDANCE COMPUTER (FMGC)

Ident.: DSC-22_10-10-00010073.0005001 / 04 SEP 18

7 **Applicable to: MSN 10949-11597**

Each FMGC is divided into two main parts:
- The Flight Management (FM) part controls the following functions:
  - Navigation and management of navigation radios
  - Management of flight planning
  - Prediction and optimization of performance
  - Display management.
- The Flight Guidance (FG) part performs the following functions:
  - Autopilot (AP) command
  - Flight Director (FD) command
  - Autothrust (A/THR) command.

Each FMGC has its own set of databases. The individual databases can be independently loaded into their respective FMGC, or independently copied from one FMGC to the other.

Each FMGC contains these main databases:

1. The Navigation database contains standard navigation data: Navaids, waypoints, airways, enroute information, holding patterns, airports, runways, procedures (SIDs, STARs, etc.), company routes, alternates.
   The airline updates this part every 28 days, and is responsible for defining, acquiring, updating, loading, and using this data. The updating operation takes 20 min to complete or 5 min if cross loaded from the opposite FMGC.
2. The Airline Modifiable Information (AMI), also described as the FM Airline Configuration file, contains:
   - Airline policy values: THR RED altitude, ACC altitude, EO ACC altitude, PERF factor, IDLE factor.
   - Fuel policy values: Fuel for taxi, % of route reserve, maximum and minimum values of route reserve, etc.
   - AOC functions customization.
3. The Aircraft Performance database includes the Engine model, Aerodynamical model, and Performance model. The airline cannot modify this database.
4. The Magnetic Variation database.
5. Each FMGC contains elements stored by the flight crew that enable them to create 99 waypoints, 10 runways, 20 navaids, and 5 routes.

FLIGHT MANAGEMENT GUIDANCE COMPUTER (FMGC)

Ident.: DSC-22_10-10-00010073.0002001 / 28 MAY 20

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

Each FMGC is divided into two main parts:

- The Flight Management (FM) part controls the following functions:
  - Navigation and management of navigation radios
  - Management of flight planning
  - Prediction and optimization of performance
  - Display management.
- The Flight Guidance (FG) part performs the following functions:
  - Autopilot (AP) command
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   - Airline policy values: THR RED altitude, ACC altitude, EO ACC altitude, PERF factor, IDLE factor.
   - Fuel policy values: Fuel for taxi, % of route reserve, maximum and minimum values of route reserve, etc.
   - AOC functions customization.
3. The Aircraft Performance database includes the Engine model, Aerodynamical model, and Performance model. The airline cannot modify this database.
4. The Magnetic Variation database.
5. Each FMGC contains elements stored by the flight crew that enable them to create 20 waypoints, 10 runways, 20 navaids, and 5 routes.

FLIGHT MANAGEMENT GUIDANCE COMPUTER (FMGC)

Ident.: DSC-22_10-10-00010073.0004001 / 28 MAY 20
Applicable to: MSN 04827-04860

Each FMGC is divided into two main parts:

- The Flight Management (FM) part controls the following functions:
  - Navigation and management of navigation radios
  - Management of flight planning
  - Prediction and optimization of performance
  - Display management.
- The Flight Guidance (FG) part performs the following functions:
  - Autopilot (AP) command
  - Flight Director (FD) command
  - Autothrust (A/THR) command.

Each FMGC has its own set of databases. The individual databases can be independently loaded into their respective FMGC, or independently copied from one FMGC to the other.

Each FMGC contains these main databases:

1. The Navigation database contains standard navigation data: Navaids, waypoints, airways, enroute information, holding patterns, airports, runways, procedures (SIDs, STARs, etc.), company routes, alternates.
   The airline updates this part every 28 days, and is responsible for defining, acquiring, updating, loading, and using this data. The updating operation takes 20 min to complete or 5 min if cross loaded from the opposite FMGC.
2. The Airline Modifiable Information (AMI), also described as the FM Airline Configuration file, contains:
   - Airline policy values: THR RED altitude, ACC altitude, EO ACC altitude, PERF factor, IDLE factor.
   - Fuel policy values: Fuel for taxi, % of route reserve, maximum and minimum values of route reserve, etc.
   - AOC functions customization.
3. The Aircraft Performance database includes the Engine model, Aerodynamical model, and Performance model. The airline cannot modify this database.
4. The Magnetic Variation database.
5. Each FMGC contains elements stored by the flight crew that enable them to create 20 waypoints, 10 runways, 20 navaids, and 5 routes.

MULTIPURPOSE CONTROL AND DISPLAY UNIT (MCDU)

Ident.: DSC-22_10-10-00010074.0001001 / 17 AUG 10
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

Two MCDUs are installed on the pedestal for flight crew loading and display of data. The use of the MCDU allows the flight crew to interface with the FMGC by selection of a flight plan for lateral and vertical trajectories and speed profiles. The flight crew may also modify selected navigation or performance data and specific functions of Flight Management (revised flight plan, engine-out, secondary flight plan, etc.). Additional data from peripherals (Centralized Fault Display System (CFDS), ARINC Communication Addressing and Reporting System (ACARS), Air Traffic Service Unit (ATSU)...) can also be displayed. Data that is entered into the MCDU that is illogical or beyond the aircraft capabilities will either be disregarded or will generate an advisory message.

MULTIPURPOSE CONTROL AND DISPLAY UNIT (MCDU)

Ident.: DSC-22_10-10-00010074.0002001 / 17 AUG 10
8 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Two MCDUs are installed on the pedestal for flight crew loading and display of data. The use of the MCDU allows the flight crew to interface with the FMGC by selection of a flight plan for lateral and vertical trajectories and speed profiles. The flight crew may also modify selected navigation

or performance data and specific functions of Flight Management (revised flight plan, engine-out, secondary flight plan, etc.). Additional data from peripherals (Centralized Fault Display System (CFDS), ARINC Communication Addressing and Reporting System (ACARS), Air Traffic Service Unit (ATSU)...) can also be displayed. Data that is entered into the MCDU that is illogical or beyond the aircraft capabilities will either be disregarded or will generate an advisory message.
The MCDUs allow the activation of the back–up navigation in the case of a dual FM Failure.

FLIGHT CONTROL UNIT (FCU)

Ident.: DSC-22_10-10-00010075.0001001 / 17 AUG 10
Applicable to: ALL

The FCU located on the glareshield, is the short-term interface between the flight crew and the FMGC. It is used to select any flight parameters or modify those selected in the MCDU. The autopilots and autothrust functions may be engaged or disengaged. Different guidance modes can be selected to change various targets (speed, heading, track, altitude, flight path angle, vertical speed).

FLIGHT AUGMENTATION COMPUTER (FAC)

Ident.: DSC-22_10-10-00010076.0001001 / 17 AUG 10
Applicable to: ALL

The FAC controls rudder, rudder trim and yaw damper inputs. It computes data for the flight envelope and speed functions. The FAC also provides warning for low-energy and windshear detection if these functions are installed.

OTHER FLIGHT CREW INTERFACES

Applicable to: ALL

Ident.: DSC-22_10-10-A-00010077.0001001 / 23 JUN 15

THRUST LEVERS

The thrust levers are the main interface between the Flight Management Guidance Computer (FMGC), the Full Authority Digital Engine Control System (FADEC), and the flight crew.

The thrust levers:
- Arm the autothrust at takeoff, when FLX or TOGA is selected
- Limit the maximum thrust by their position when autothrust is active
- Disconnect the autothrust system when the flight crew sets them to IDLE
- Command the thrust manually when autothrust is not active
- Engage the common modes (takeoff or go-around) when TOGA (or FLX for takeoff) is set
- Set the autothrust to the active mode when they are between IDLE and CL detent (MCT in engine out).

Ident.: DSC-22_10-10-A-00010078.0001001 / 17 AUG 10

ELECTRONIC FLIGHT INSTRUMENTS (EFIS)

Two Primary Flight Displays (PFD) and Navigation Displays (ND) provide the flight crew with full-time flight guidance, navigation and system advisory information for all flight phases. An EFIS control panel is located at each end of the glareshield and is used to control both Primary and Navigation Displays. This panel includes controls to select various modes within the PFD. A selector allows the barometric altimeter setting to be displayed on the PFD. Various distance ranges can be selected on the ND, and two switches allow either the left or right VOR/ADF bearing pointers to be displayed on the ND.

Ident.: DSC-22_10-10-A-00010079.0001001 / 17 AUG 10

PRIMARY FLIGHT DISPLAYS

The PFDs combine several conventional flight instrument indications on one color display panel, for centralized reference of flight data.

This centralized color display includes:
- Flight Director attitude guidance targets
- Armed and engaged modes
- Navigation and instrument approach information
- Altimeter setting
- Barometric altitude
- System messages.

Ident.: DSC-22_10-10-A-00010080.0002001 / 17 AUG 10

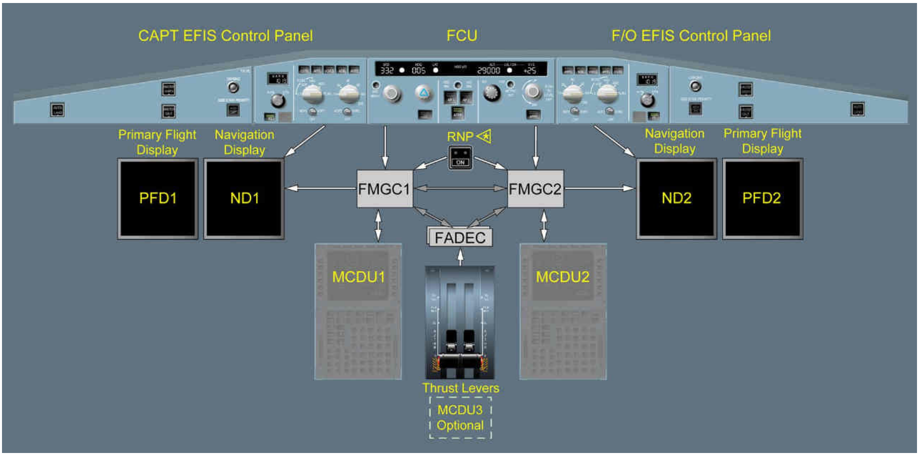
NAVIGATION DISPLAYS

Five different color navigation compass displays can be selected:
- ARC (map mode)
- ROSE NAV (map mode)
- ROSE VOR
- ROSE LS
- PLAN.

Information displayed on these modes uses the aircraft’s position as a reference point for the flight plan navigation data (lateral and vertical information).

FLIGHT CREW INTERFACE WITH FMGC

Ident.: DSC-22_10-10-00010082.0001001 / 05 MAR 19
Applicable to: ALL


CAPT EFIS Control Panel
FCU
F/O EFIS Control Panel
Primary Flight Display
Navigation Display
RNP
ON
Navigation Display
Primary Flight Display
PFD1
ND1
FMGC1
FMGC2
ND2
PFD2
FADEC
MCDU1
MCDU2
Thrust Levers
MCDU3 Optional

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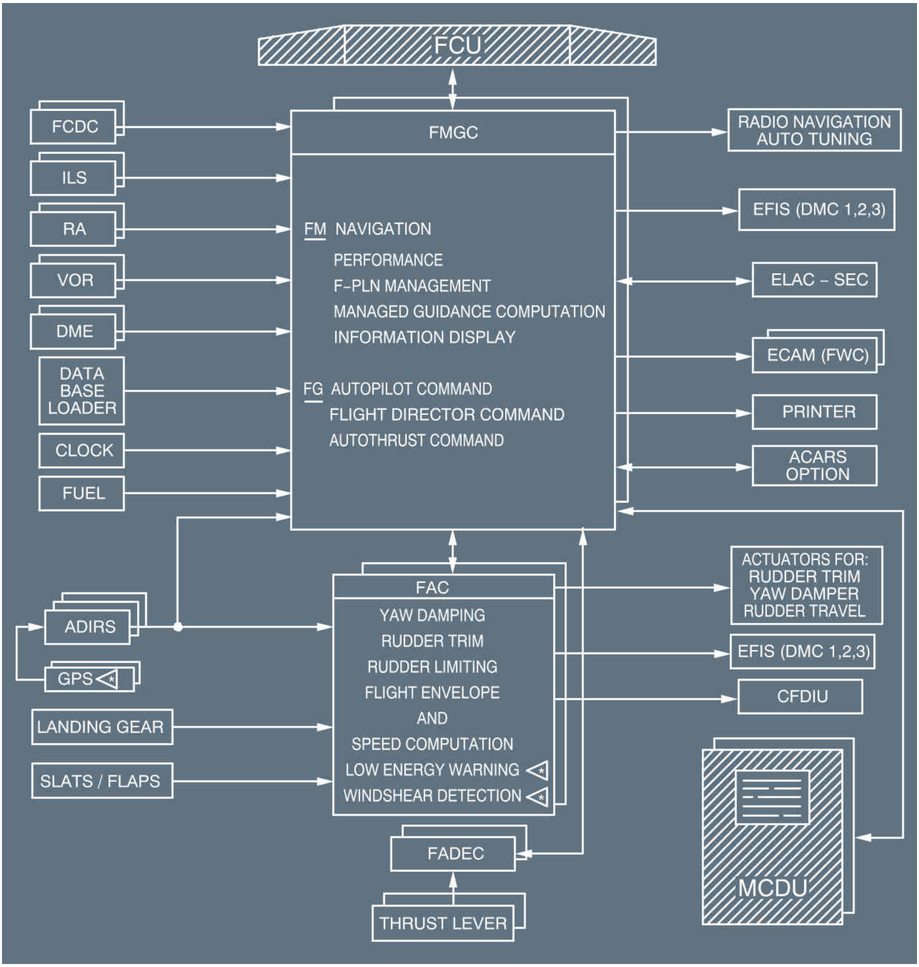
SYSTEM INTERFACE DIAGRAM

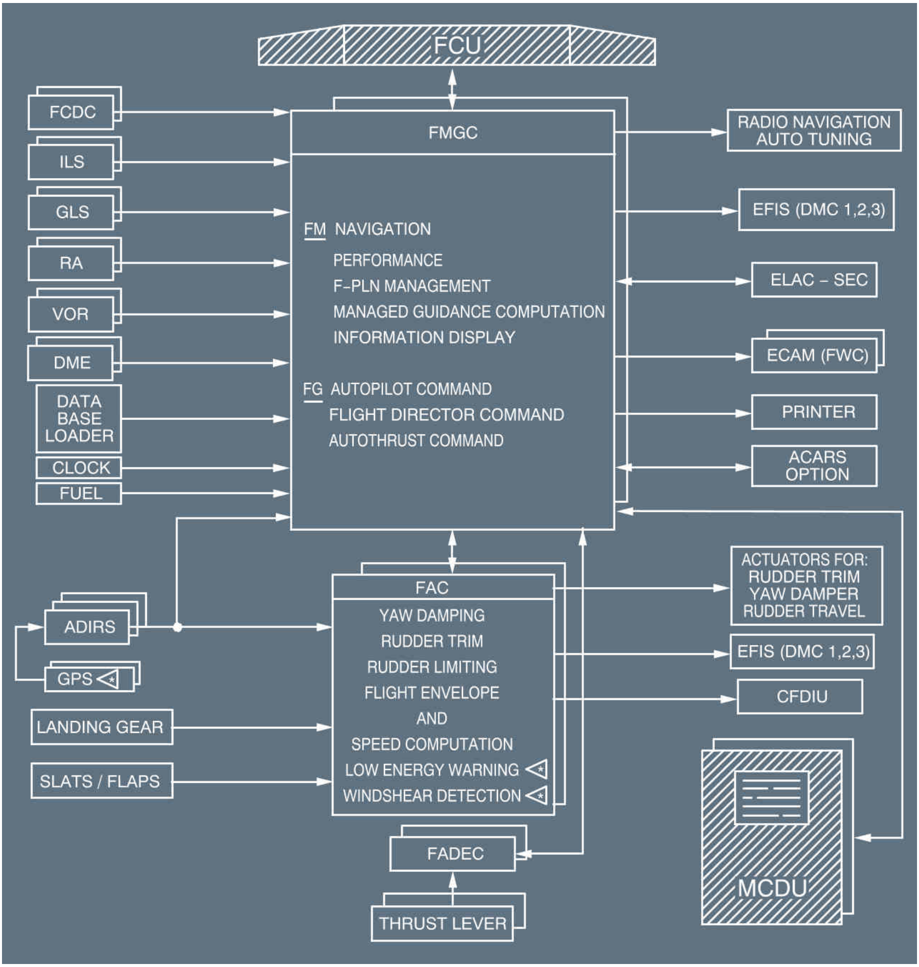
Ident.: DSC-22_10-20-00010084.0001001 / 01 OCT 12

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**


FCU
FCDC
ILS
RA
VOR
DME
DATA BASE LOADER
CLOCK
FUEL
FMGC
FM NAVIGATION
PERFORMANCE
F-PLN MANAGEMENT
MANAGED GUIDANCE COMPUTATION
INFORMATION DISPLAY
FG AUTOPILOT COMMAND
FLIGHT DIRECTOR COMMAND
AUTOTHRUST COMMAND
RADIO NAVIGATION AUTO TUNING
EFIS (DMC 1,2,3)
ELAC – SEC
ECAM (FWC)
PRINTER
ACARS OPTION
ADIRS
GPS
LANDING GEAR
SLATS / FLAPS
FAC
YAW DAMPING
RUDDER TRIM
RUDDER LIMITING
FLIGHT ENVELOPE
AND
SPEED COMPUTATION
LOW ENERGY WARNING
WINDSHEAR DETECTION
ACTUATORS FOR:
RUDDER TRIM
YAW DAMPER
RUDDER TRAVEL
EFIS (DMC 1,2,3)
CFDIU
FADEC
THRUST LEVER
MCDU

SYSTEM INTERFACE DIAGRAM

Ident.: DSC-22_10-20-00010084.0003001 / 01 OCT 12
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


FCU
FCDC
ILS
GLS
RA
VOR
DME
DATA BASE LOADER
CLOCK
FUEL
FMGC
FM NAVIGATION
PERFORMANCE
F-PLN MANAGEMENT
MANAGED GUIDANCE COMPUTATION
INFORMATION DISPLAY
FG AUTOPILOT COMMAND
FLIGHT DIRECTOR COMMAND
AUTOTHRUST COMMAND
RADIO NAVIGATION AUTO TUNING
EFIS (DMC 1,2,3)
ELAC – SEC
ECAM (FWC)
PRINTER
ACARS OPTION
ADIRS
GPS
LANDING GEAR
SLATS / FLAPS
FAC
YAW DAMPING
RUDDER TRIM
RUDDER LIMITING
FLIGHT ENVELOPE
AND
SPEED COMPUTATION
LOW ENERGY WARNING
WINDSHEAR DETECTION
ACTUATORS FOR:
RUDDER TRIM
YAW DAMPER
RUDDER TRAVEL
EFIS (DMC 1,2,3)
CFDIU
FADEC
THRUST LEVER
MCDU

GENERAL

Ident.: DSC-22_10-30-00010085.0001001 / 17 AUG 10
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

The FMGS has three modes of operation:
- Dual mode (the normal mode)
- Independent mode. Each FMGC being controlled by its associated MCDU
- Single mode (using one FMGC only).

GENERAL

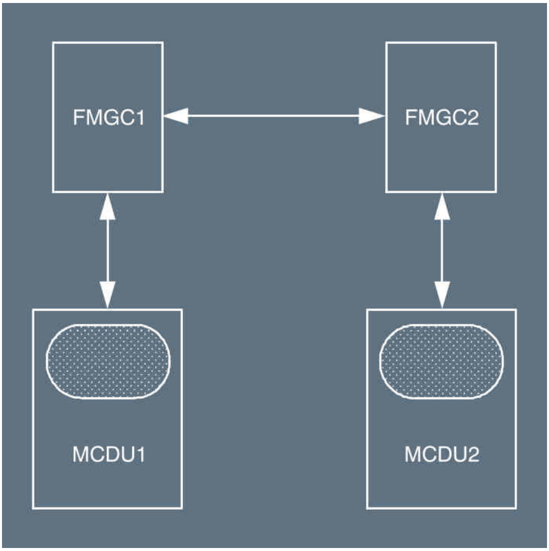
Ident.: DSC-22_10-30-00010085.0002001 / 17 AUG 10
1 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The FMGS has four modes of operation:
- Dual mode (the normal mode)
- Independent mode. Each FMGC being controlled by its associated MCDU
- Single mode (using one FMGC only)
- Back–up navigation mode.

DUAL MODE

Ident.: DSC-22_10-30-00010086.0001001 / 01 OCT 12
Applicable to: ALL

This is the normal mode. The two FMGCs are synchronized: each performs its own computations and exchanges data with the other through a crosstalk bus.
One FMGC is the master, the other the slave, so that some data in the slave FMGC comes from the master.
All data inserted into any MCDU is transferred to both FMGCs and to all peripherals.



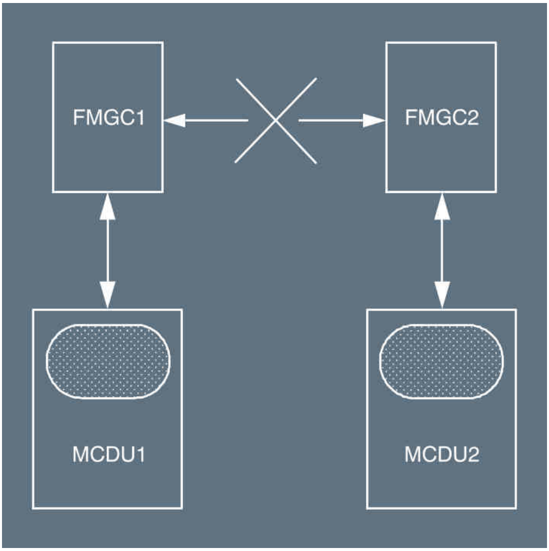
MASTER FMGC LOGIC

- If one autopilot (AP) is engaged, the related FMGC is master:
  - It uses the onside FD for guidance
  - It controls the A/THR
  - It controls the FMA 1 and 2.
- If two APs are engaged, FMGC1 is master.
- If no AP is engaged, and
  - The FD1 pb is on, then FMGC1 is master
  - The FD1 pb is off, and FD2 pb on then FMGC2 is master.
- If no AP/FD is engaged, A/THR is controlled by FMGC1.

INDEPENDENT MODE

Ident.: DSC-22_10-30-00010087.0001001 / 01 OCT 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**



The system automatically selects this degraded mode under specific abnormal conditions (e.g. different database validity on both FMGCs).
Both FMGCs work independently and are linked only to peripherals on their own sides of the flight deck ("onside" peripherals).
When this occurs, the "INDEPENDENT OPERATION" message is displayed on both MCDU scratchpads.
Each MCDU transmits data it receives from its onside FMGC. It affects only the onside EFIS (Electronic Flight Instrument System) and RMP (Radio Management Panel).
On the POS MONITOR page (and GPS MONITOR page ◁), FMGS position (and GPS position ◁) from the opposite FMGC is not displayed.
On the RAD NAV page (and PROG page, if the FMGS GPS is not installed), navaids tuned on the opposite MCDU are not displayed. Corresponding fields are blank.

PROCEDURES ON GROUND

- **If each FMGC is loaded with a different database,** the FMGS will only operate in independent mode.

CHECK the database number and validity.

CROSSLOAD ◁ the database to restore the dual operation.

Crossload function is available on ground only (in preflight or done phase), when an independent operation is detected.

PROCEDURES IN FLIGHT

DO NOT SWITCH the navigation databases.
MAKE the same entries on both MCDUs to have both AP/FDs similar orders.

Both FGs being valid, 2 APs may be engaged for CAT II or CAT III operations.

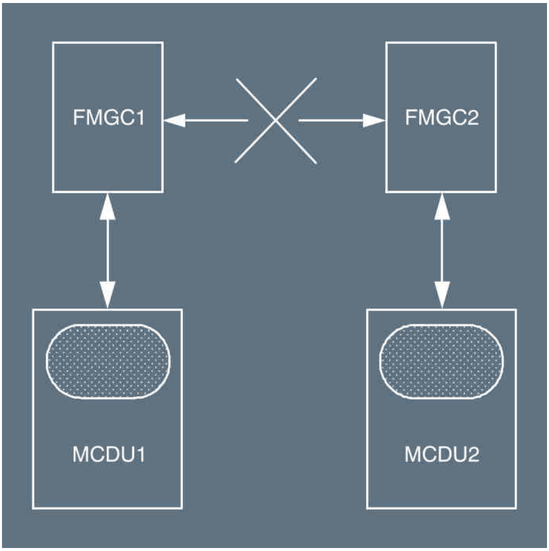
- **In the event of a go-around and when the second AP is disconnected:**

  ENSURE that the FMGC in command has correct flight plan orders and an updated nav database.

  Airbus does not recommend pulling one FMGC circuit breaker to force the system to operate in SINGLE mode.

INDEPENDENT MODE

Ident.: DSC-22_10-30-00010087.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860



The system automatically selects this degraded mode under specific abnormal conditions (e.g. different database validity on both FMGCs).

Both FMGCs work independently and are linked only to peripherals on their own sides of the flight deck ("onside" peripherals).
When this occurs, the "INDEPENDENT OPERATION" message is displayed on both MCDU scratchpads. "IND" annunciator on top of the MCDU is lit.
Each MCDU transmits data it receives from its onside FMGC. It affects only the onside EFIS (Electronic Flight Instrument System) and RMP (Radio Management Panel).
On the POS MONITOR page (and GPS MONITOR page ◁✱), FMGS position (and GPS position ◁✱) from the opposite FMGC is not displayed.
On the RAD NAV page, navaids tuned on the opposite MCDU are not displayed. Corresponding fields are blank.

PROCEDURES ON GROUND

- **If each FMGC is loaded with a different database,** the FMGS will only operate in independent mode.

  CHECK the database number and validity.

  CROSSLOAD the database to restore the dual operation.

  Crossload function is available on ground only (in preflight or done phase), when an independent operation is detected.

PROCEDURES IN FLIGHT

DO NOT SWITCH the navigation databases.
MAKE the same entries on both MCDUs to have both AP/FDs similar orders.

Both FGs being valid, 2 APs may be engaged for CAT II or CAT III operations.

- **In the event of a go-around and when the second AP is disconnected:**

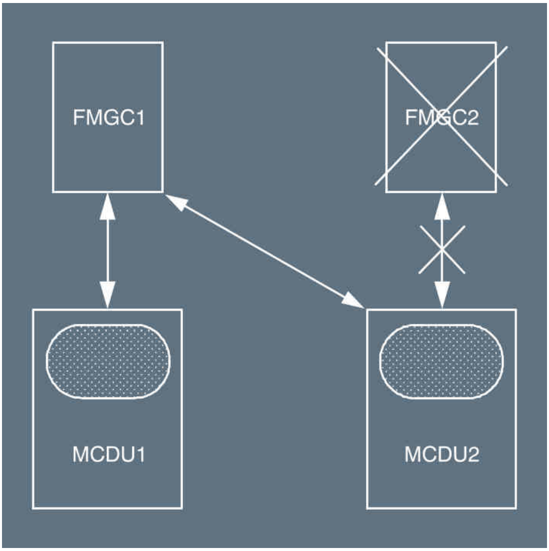
  ENSURE that the FMGC in command has correct flight plan orders and an updated nav database.

  Airbus does not recommend pulling one FMGC circuit breaker to force the system to operate in SINGLE mode.

SINGLE MODE

Ident.: DSC-22_10-30-00010088.0001001 / 01 OCT 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



The system automatically selects this degraded mode when one FMGC fails.
When this occurs, the failed FMGC displays “OPP FMGC IN PROCESS” in white on the MCDU scratchpad.
The corresponding ND displays the “SELECT OFFSIDE RNG/MODE” amber message.
Both POS MONITOR pages display the same position (operative FMGC position).
Both FDs are driven by the same FMGC. Any entry on either MCDU is sent to the operative FMGC.

PROCEDURES

- **If a transient failure triggers a single mode of operation:**

  DO NOT USE the MCDU(s) until the PLEASE WAIT message is suppressed.

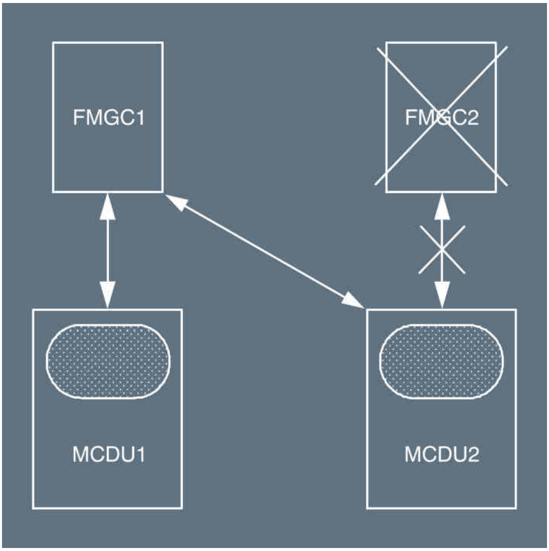
  SET both NDs on the same range and mode to display the same information from the operative FMGC.

  When convenient, RESET the failed FMGC. (*Refer to DSC-22_20-90-10 Manual FMGC Reset - General*).

SINGLE MODE

Ident.: DSC-22_10-30-00010088.0004001 / 01 OCT 12

3 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**



The system automatically selects this degraded mode when one FMGC fails.
When this occurs, the failed FMGC displays “OPP FMGC IN PROCESS” in white on the MCDU scratchpad.

On the ND usually associated with the failed FM:
- If the NDs are not both in the same mode or range, the associated ND displays "MAP NOT AVAIL" and "SET OFFSIDE RNG/MODE".
- If the NDs are in the same mode and range, the associated ND displays the "OFFSIDE FM CONTROL" amber message.

Both POS MONITOR pages display the same position (operative FMGC position).
Both FDs are driven by the same FMGC. Any entry on either MCDU is sent to the operative FMGC.

PROCEDURES

- **If a transient failure triggers a single mode of operation:**

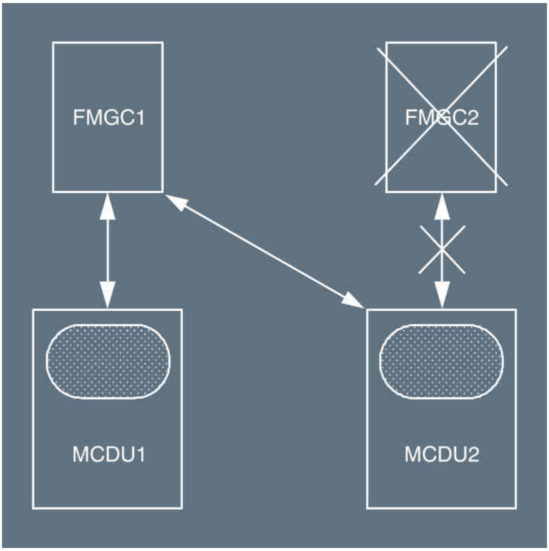
  DO NOT USE the MCDU(s) until the PLEASE WAIT message is suppressed.

  SET both NDs on the same range and mode to display the same information from the operative FMGC.

When convenient, RESET the failed FMGC. (*Refer to DSC-22_20-90-10 Manual FMGC Reset - General*).

SINGLE MODE

Ident.: DSC-22_10-30-00010088.0016001 / 01 OCT 12
Applicable to: MSN 04827-04860



The system automatically selects this degraded mode when one FMGC fails.
When this occurs, the MCDU on the side of the failed FMGC reverts to MCDU MENU page, and a prompt to connect the MCDU on the opposite FMGC is displayed. When this prompt is pressed, the "OPP FMGC IN PROCESS" message is displayed in white on the MCDU scratchpad.

On the ND usually associated with the failed FM:
- If the NDs are not both in the same mode or range, the associated ND displays "MAP NOT AVAIL" and "SET OFFSIDE RNG/MODE".
- If the NDs are in the same mode and range, the associated ND displays the "OFFSIDE FM CONTROL" amber message.

Both POS MONITOR pages display the same position (operative FMGC position).
Both FDs are driven by the same FMGC. Any entry on either MCDU is sent to the operative FMGC.

PROCEDURES

- **If a transient failure triggers a single mode of operation:**

  DO NOT USE the MCDU(s) until the PLEASE WAIT message is suppressed.

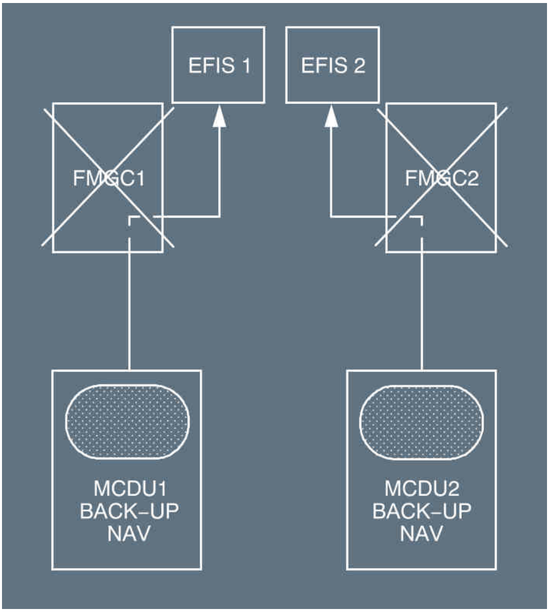
  SET both NDs on the same range and mode to display the same information from the operative FMGC.

  When convenient, RESET the failed FMGC. (*Refer to DSC-22_20-90-10 Manual FMGC Reset - General*).

BACK UP NAVIGATION MODE

Ident.: DSC-22_10-30-00010089.0001001 / 01 OCT 12

4 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**



The flight crew selects on the MCDU MENU page this degraded mode when both FMGCs fail. They recover the navigation function through the MCDU and IRS/GPS ◁ .
The MCDU continuously memorizes the active flight plan in its memory.

If both FMGCs fail, the back up navigation provides the following functions:
- Flight Planning
- Aircraft position using onside IRS, IRS3, or GPIRS position (if GPS ◁)

- F-PLN display on ND
- No AP/FD NAV mode
- Limited lateral revision
- F-PLN automatic sequencing.

GENERAL

Ident.: DSC-22_10-40-05-00010083.0001001 / 17 AUG 10

Applicable to: ALL

The flight management system displays navigation, performance and guidance information on the:

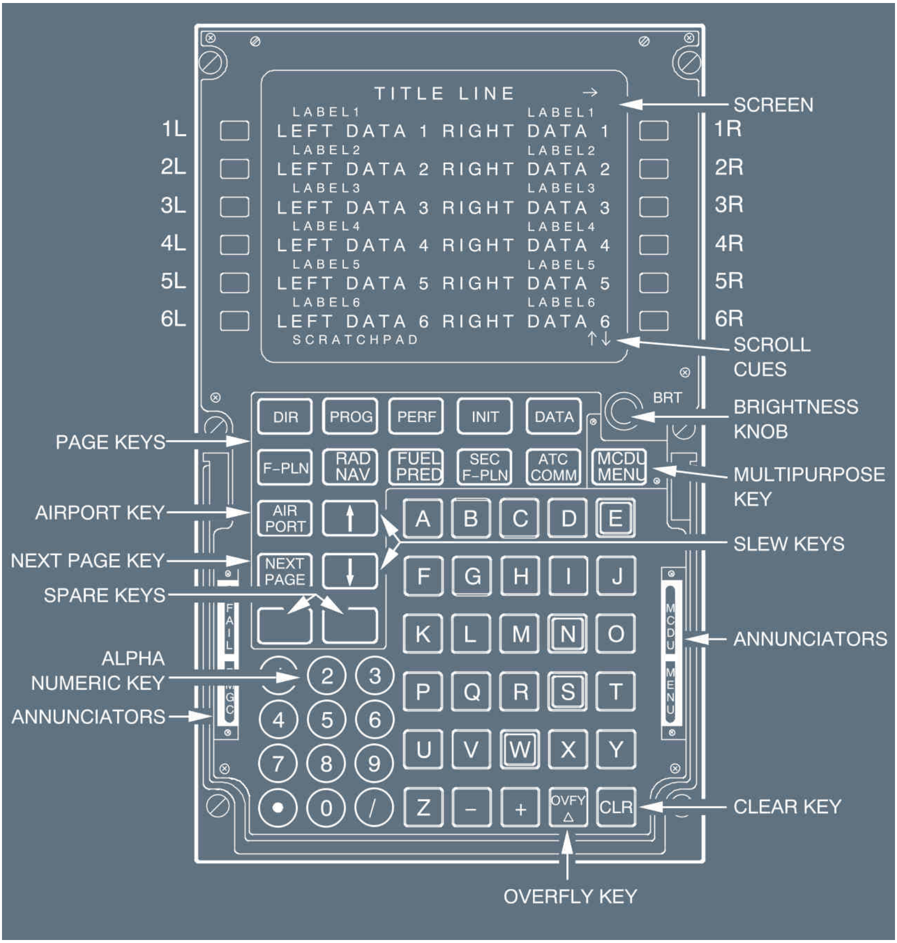
- Multipurpose Control and Display Unit (MCDU)
- Navigation Display (ND) of the Electronic Flight Instrument System (EFIS)
- Primary Flight Display (PFD) of the EFIS.

Intentionally left blank

MCDU

Ident.: DSC-22_10-40-10-A-00010090.0002001 / 14 MAY 12
Applicable to: MSN 01459, 02014

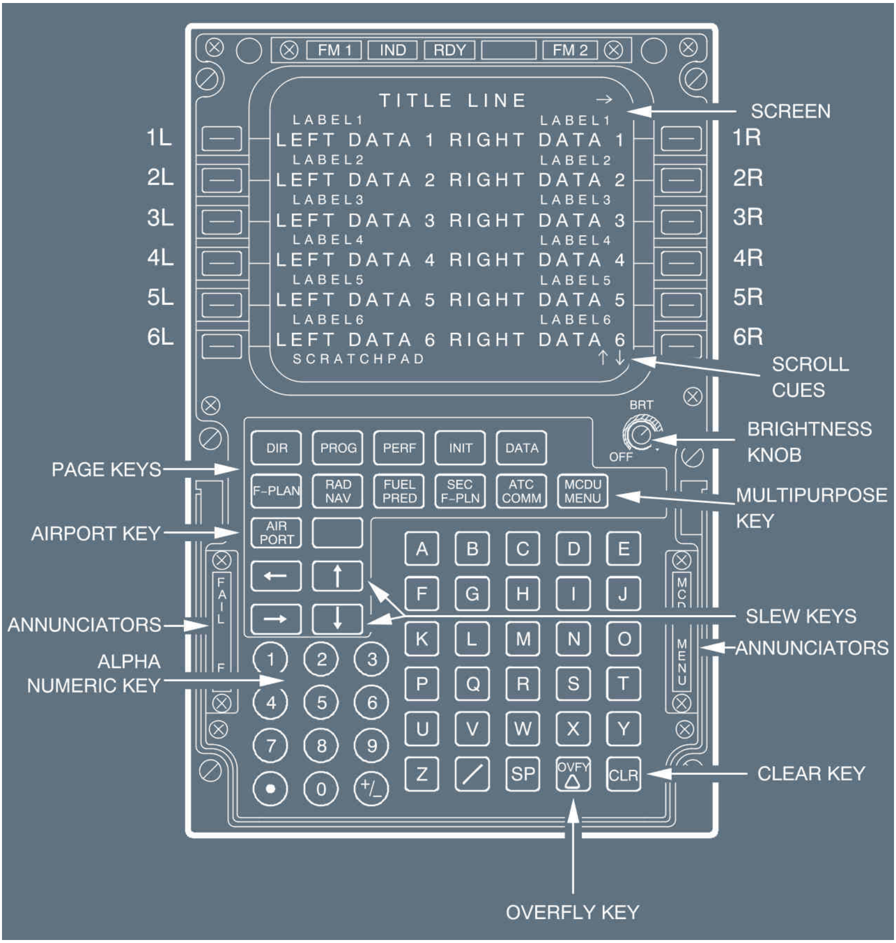
MCDU INTERFACE


TITLE LINE →
LABEL1 LABEL1
LEFT DATA 1 RIGHT DATA 1
LABEL2 LABEL2
LEFT DATA 2 RIGHT DATA 2
LABEL3 LABEL3
LEFT DATA 3 RIGHT DATA 3
LABEL4 LABEL4
LEFT DATA 4 RIGHT DATA 4
LABEL5 LABEL5
LEFT DATA 5 RIGHT DATA 5
LABEL6 LABEL6
LEFT DATA 6 RIGHT DATA 6
SCRATCHPAD ↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
SCREEN
SCROLL CUES
BRT
BRIGHTNESS KNOB
DIR
PROG
PERF
INIT
DATA
F-PLN
RAD NAV
FUEL PRED
SEC F-PLN
ATC COMM
MCDU MENU
MULTIPURPOSE KEY
AIR PORT
NEXT PAGE
A B C D E
F G H I J
K L M N O
P Q R S T
U V W X Y
Z – + OVFY △ CLR
1 2 3 4 5 6 7 8 9 • 0 /
FAIL
FMGC
MCDU MENU
PAGE KEYS
AIRPORT KEY
NEXT PAGE KEY
SPARE KEYS
SLEW KEYS
ALPHA NUMERIC KEY
ANNUNCIATORS
ANNUNCIATORS
CLEAR KEY
OVERFLY KEY

Ident.: DSC-22_10-40-10-A-00010090.0008001 / 14 MAY 12

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03002-03032

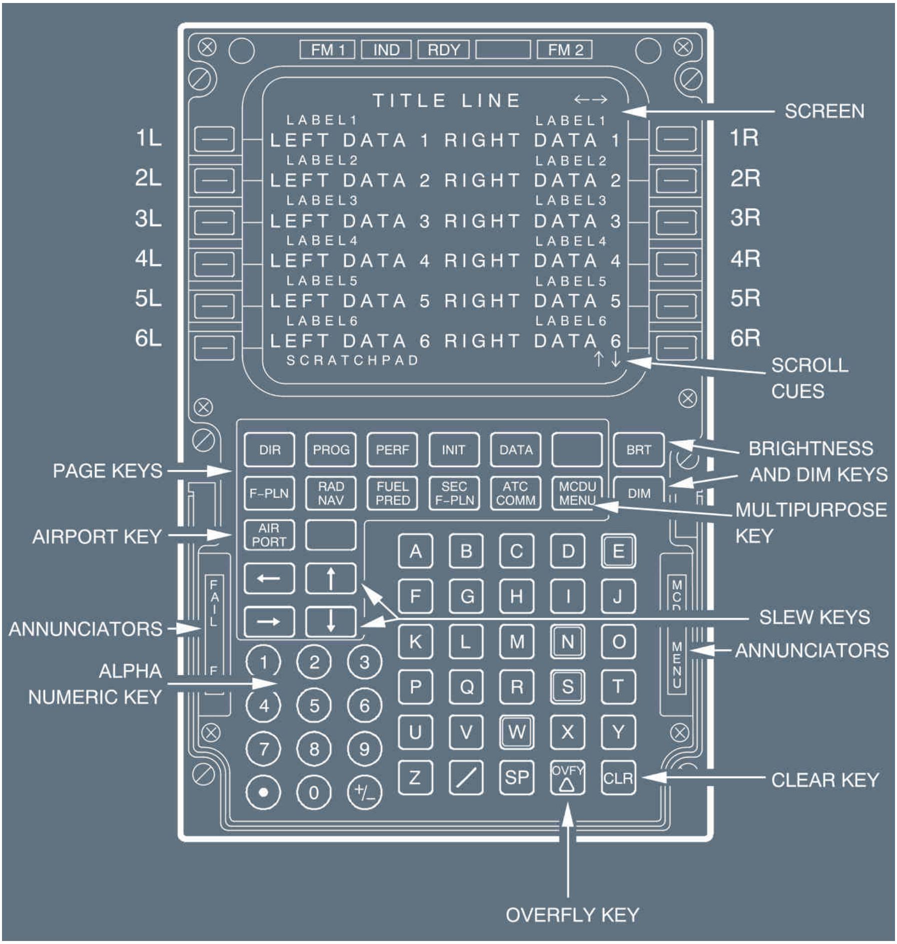
MCDU INTERFACE


FM 1
IND
RDY
FM 2
TITLE LINE
LABEL1
LEFT DATA 1 RIGHT DATA 1
LABEL2
LEFT DATA 2 RIGHT DATA 2
LABEL3
LEFT DATA 3 RIGHT DATA 3
LABEL4
LEFT DATA 4 RIGHT DATA 4
LABEL5
LEFT DATA 5 RIGHT DATA 5
LABEL6
LEFT DATA 6 RIGHT DATA 6
SCRATCHPAD
1L
2L
3L
4L
5L
6L
SCREEN
1R
2R
3R
4R
5R
6R
SCROLL CUES
BRT
OFF
BRIGHTNESS KNOB
DIR
PROG
PERF
INIT
DATA
F-PLAN
RAD NAV
FUEL PRED
SEC F-PLN
ATC COMM
MCDU MENU
AIR PORT
PAGE KEYS
AIRPORT KEY
MULTIPURPOSE KEY
FAIL
MCDU MENU
ANNUNCIATORS
ALPHA NUMERIC KEY
SLEW KEYS
ANNUNCIATORS
1 2 3 4 5 6 7 8 9 0 +/-
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
SP
OVFY
CLR
CLEAR KEY
OVERFLY KEY

Ident.: DSC-22_10-40-10-A-00010090.0003001 / 14 MAY 12

Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

MCDU INTERFACE


FM 1
IND
RDY
FM 2
TITLE LINE
LABEL1
LEFT DATA 1 RIGHT DATA 1
LABEL2
LEFT DATA 2 RIGHT DATA 2
LABEL3
LEFT DATA 3 RIGHT DATA 3
LABEL4
LEFT DATA 4 RIGHT DATA 4
LABEL5
LEFT DATA 5 RIGHT DATA 5
LABEL6
LEFT DATA 6 RIGHT DATA 6
SCRATCHPAD
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
SCREEN
SCROLL CUES
DIR
PROG
PERF
INIT
DATA
BRT
F-PLN
RAD NAV
FUEL PRED
SEC F-PLN
ATC COMM
MCDU MENU
DIM
AIR PORT
FAIL
MCDU
MENU
PAGE KEYS
AIRPORT KEY
ANNUNCIATORS
ALPHA NUMERIC KEY
BRIGHTNESS AND DIM KEYS
MULTIPURPOSE KEY
SLEW KEYS
ANNUNCIATORS
CLEAR KEY
OVERFLY KEY
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
SP
OVFY
CLR
1 2 3 4 5 6 7 8 9 0
+/-

Ident.: DSC-22_10-40-10-A-00010091.0001001 / 17 AUG 10
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03002-03032

GENERAL

The Multipurpose Control and Display Unit (MCDU) is a cathode ray tube that generates 14 lines of 24 characters each, including:

- A title line that gives the name of the current page in large letters
- Six label lines, each of which names the data displayed just below it (on the data field line)
- Six data field lines that display computed data or data inserted by the flight crew
- The scratchpad line that displays:
  - Specific messages
  - Information the flight crew has entered by means of the number and letter keys and which can then be moved to one of the data fields.

Ident.: DSC-22_10-40-10-A-00010091.0002001 / 13 DEC 12
2 **Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

GENERAL

The Multipurpose Control and Display Unit (MCDU) has a Liquid Crystal Display (LCD) with 14 lines of 24 characters each, including:

- A title line that gives the name of the current page in large letters
- Six label lines, each of which names the data displayed just below it (on the data field line)
- Six data field lines that display computed data or data inserted by the flight crew
- The scratchpad line that displays:
  - Specific messages
  - Information the flight crew has entered by means of the number and letter keys and which can then be moved to one of the data fields.

Ident.: DSC-22_10-40-10-A-00010092.0001001 / 17 AUG 10
Applicable to: ALL

LINE SELECT KEYS

There is a column of Line Select Keys (LSKs) on each side of the screen.

The flight crew uses these keys to:

- Move a parameter they have entered in the scratchpad to the appropriate line on the main screen
- Call up a specific function page indicated by a prompt displayed on the adjacent line
- Call up lateral or vertical revision pages from the flight plan page.

Ident.: DSC-22_10-40-10-A-00010093.0001001 / 17 AUG 10
Applicable to: MSN 01459, 02014

KEYBOARD

The keyboard includes:

- Function and Page keys

Function and Page keys	Call up functions and pages the flight crew uses for flight management functions and computations.
↑ ↓ (or SLEW) keys	Move a page up or down to display portions that are off the screen.
NEXT PAGE key	Moves to the next page of a multi-page element. An arrow in the top right corner indicates that another page is available.
AIRPORT key	Calls up the flight plan page that contains the next airport along the current flight plan. Successive pushes on the key show the alternate airport, the origin airport (before takeoff), and the next airport again.

- Number and letter keys allow the flight crew to insert data in the scratchpad so that they can use a line select key to enter it in the main display.
- Two keys have special functions:

CLR (clear) key	Erases material (messages or inserted data) from the scratchpad or from certain areas of displayed pages.
OVFY (overfly) key	Allows the aircraft to overfly a selected waypoint.

Ident.: DSC-22_10-40-10-A-00010093.0002001 / 17 AUG 10
3 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

KEYBOARD

The keyboard includes:

- Function and Page keys

Function and Page keys	Call up functions and pages the flight crew uses for flight management functions and computations.
↑ ↓ (or SLEW) keys	Move a page up or down to display portions that are off the screen.
← → keys	Moves to the next page of a multi-page element. An arrow in the top right corner indicates that another page is available.
AIRPORT key	Calls up the flight plan page that contains the next airport along the current flight plan. Successive pushes on the key show the alternate airport, the origin airport (before takeoff), and the next airport again.

- Number and letter keys allow the flight crew to insert data in the scratchpad so that they can use a line select key to enter it in the main display.
- Three keys have special functions:

CLR (clear) key	Erases material (messages or inserted data) from the scratchpad or from certain areas of displayed pages.
OVFY (overfly) key	Allows the aircraft to overfly a selected waypoint.
SP (space) key	Allows to insert a space in specific message.

Ident.: DSC-22_10-40-10-A-00010094.0001001 / 17 AUG 10
Applicable to: MSN 01459, 02014

ANNUNCIATORS (ON THE SIDE OF THE KEYBOARD)

FAIL (amber)	Indicates that the Multipurpose Control and Display Unit (MCDU) has failed.
MCDU MENU (white)	Indicates that the flight crew should call up a peripheral linked to the MCDU (such as ACARS, ATSU or CFDS).
FMGC (white)	Comes on while the flight crew is using the MCDU to display peripherals. This light tells the flight crew that the FMGC has an important message to deliver. The flight crew accesses the message by pressing the MCDU MENU key and the line select key adjacent to the FMGC prompt.

Ident.: DSC-22_10-40-10-A-00010094.0002001 / 17 AUG 10
4 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ANNUNCIATORS (ON THE SIDE OF THE KEYBOARD)

FAIL (amber)	Indicates that the Multipurpose Control and Display Unit (MCDU) has failed.
MCDU MENU (white)	Indicates that the flight crew should call up a peripheral linked to the MCDU (such as ACARS, ATSU or CFDS).
FM (white)	Comes on while the flight crew is using the MCDU to display peripherals. This light tells the flight crew that the FMGC has an important message to deliver. The flight crew accesses the message by pressing the MCDU MENU key and the line select key adjacent to the FMGC prompt.

Ident.: DSC-22_10-40-10-A-00010757.0001001 / 17 AUG 10
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03002-03032

ANNUNCIATORS (ON THE TOP OF THE KEYBOARD)

FM 1 and FM 2 (amber)	The onside FM is failed
IND (amber)	The onside FM detects an independent mode of operation while both FM are healthly.
RDY (green)	MCDU has passed its power up test after its BRT knob was turned to OFF.

Ident.: DSC-22_10-40-10-A-00010757.0002001 / 17 AUG 10
5 **Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ANNUNCIATORS (ON THE TOP OF THE KEYBOARD)

FM 1 and FM 2 (amber)	The onside FM is failed

IND (amber)	The onside FM detects an independent mode of operation while both FM are healthly.
RDY (green)	MCDU has passed its power up test after it was turned off using its DIM key.

Ident.: DSC-22_10-40-10-A-00010750.0001001 / 17 AUG 10

6 **Applicable to: MSN 02924, 03035-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

BRT AND DIM KEYS

Control the light intensity of the entire MCDU. MCDU power up is performed with the BRT key and MCDU shut down is performed with the DIM key.

Ident.: DSC-22_10-40-10-A-00010095.0001001 / 17 AUG 10

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03002-03032

BRT knob

Controls the light intensity of the entire MCDU.

Ident.: DSC-22_10-40-10-A-00010097.0001001 / 17 AUG 10

Applicable to: ALL

DATA ENTRY

The flight crew enters data by typing it into the scratchpad on the MCDU. Next, pressing the line select key (LSK) will load the data from the scratchpad into the desired field. An error message displays if the data is out of range or not formatted correctly. To correct data, the flight crew may clear the message with the clear (CLR) key and then retype the message into the scratchpad. Pressing the CLR key when the scratchpad is empty displays “CLR”. To clear data from a field, select CLR from the scratchpad to the data field to be cleared.

Ident.: DSC-22_10-40-10-A-00010098.0001001 / 17 AUG 10

Applicable to: ALL

MCDU ENTRY FORMAT

The flight crew enters information into the MCDU at the bottom line of the scratchpad. When data has lead zeros, they may be omitted if desired. For example a three-digit wind direction of 060 may be typed as 60. The display will still show 060. To enter an altitude below 1 000 ft, the lead zero must be added as 0400 for 400 ft. This differentiates the altitude from a flight level.
To enter a double data entry such a speed/altitude, the separating slash must be used. If entering only the first part of a double entry, omit the slash. To enter only the second part of a double entry, a leading slash must be used i.e. /0400.

Ident.: DSC-22_10-40-10-A-00010099.0001001 / 17 AUG 10
Applicable to: ALL

MESSAGES

The scratchpad displays various messages for flight crew information. Theses messages are prioritized by importance to the flight crew as either amber or white.

Amber messages are:
- Navigation messages
- Data entry messages
- EFIS repeat messages.

Amber messages are categorized into two types:
- Type 1 message that is a direct result of a flight crew action. Type 1 messages are displayed immediately in the scratchpad ahead of other messages.
- Type 2 messages inform the flight crew of a given situation or request a specific action. Stored in “last in”, “first out” message queue that holds maximum of 5 messages.
  Type 2 messages are displayed in the scratchpad only if there are no Type 1 messages or other data and will remain until all the messages have been viewed and cleared with the CLR key.

White messages are advisory only.

Ident.: DSC-22_10-40-10-A-00010101.0001001 / 17 AUG 10
Applicable to: ALL

CHARACTERS

Small and large fonts are displayed according to the following rules:
- The title line and the scratchpad are displayed in large font
- Datafields are usually displayed in large font
- Label lines are displayed in small font
- Flight crew entries and modifiable data are displayed in large font
- Defaulted/computed and non modifiable data are displayed in small font.

Ident.: DSC-22_10-40-10-A-00010102.0001001 / 17 AUG 10

7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

COLORS

DATA	MCDU COLOR
TITLES, COMMENTS, <, >, ↑ ↓, ← →, DASHES, MINOR MESSAGES	WHITE
- MODIFIABLE DATA - SELECTABLE DATA - BRACKETS	BLUE
- NON MODIFIABLE DATA - ACTIVE DATA	GREEN
- MANDATORY DATA (BOXES) - FLIGHT CREW ACTION REQUIRED - IMPORTANT MESSAGES - MISSED CONSTRAINT	AMBER
- CONSTRAINTS - MAX ALTITUDE	MAGENTA
PRIMARY F-PLN	GREEN WAYPOINTS, WHITE LEGS
TEMPORARY F-PLN	YELLOW WAYPOINTS, WHITE LEGS
SECONDARY F-PLN	WHITE WAYPOINTS AND LEGS
MISSED APPROACH (not active)	BLUE WAYPOINTS, WHITE LEGS
ALTERNATE F-PLN (not active)	BLUE WAYPOINTS, WHITE LEGS
OFFSET	GREEN WAYPOINTS, WHITE LEGS, OFST DISPLAYED IN THE TITLE OF THE F-PLN PAGE
TUNED NAVAID	BLUE
"TO" WAYPOINT AND DESTINATION	WHITE

Ident.: DSC-22_10-40-10-A-00010102.0002001 / 23 JUN 15

Applicable to: MSN 04827-04860

COLORS

DATA	MCDU COLOR
TITLES, COMMENTS, <, >, ↑ ↓, ← →, DASHES, MINOR MESSAGES	WHITE
- MODIFIABLE DATA - SELECTABLE DATA - BRACKETS	BLUE

Continued on the following page

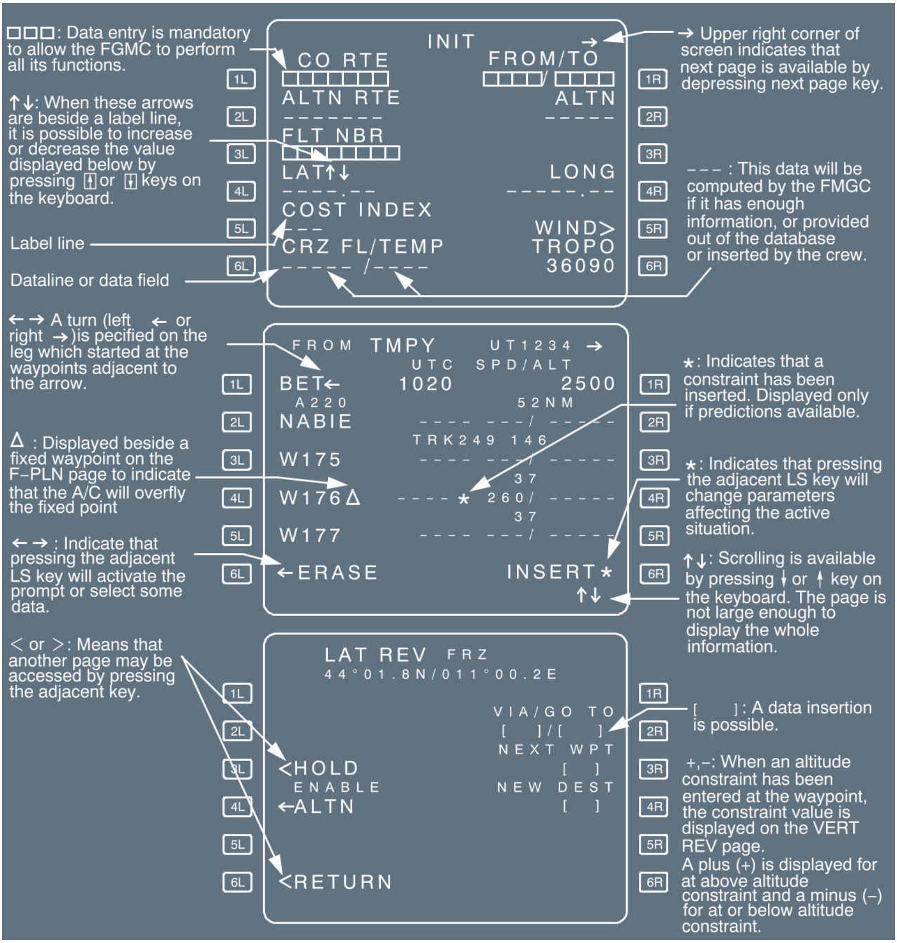
Continued from the previous page

DATA	MCDU COLOR
- NON MODIFIABLE DATA - ACTIVE DATA	GREEN
- MANDATORY DATA (BOXES) - FLIGHT CREW ACTION REQUIRED - IMPORTANT MESSAGES - MISSED CONSTRAINT	AMBER
- CONSTRAINTS - MAX ALTITUDE	MAGENTA
PRIMARY F-PLN	GREEN WAYPOINTS, WHITE LEGS
TEMPORARY F-PLN	YELLOW WAYPOINTS, WHITE LEGS
SECONDARY F-PLN	WHITE WAYPOINTS AND LEGS
MISSED APPROACH (not active), INCLUDING IN TMPY F-PLN	BLUE WAYPOINTS, WHITE LEGS
ALTERNATE F-PLN (not active), INCLUDING IN TMPY F-PLN	BLUE WAYPOINTS, WHITE LEGS
OFFSET	GREEN WAYPOINTS, WHITE LEGS, OFST DISPLAYED IN THE TITLE OF THE F-PLN PAGE
TUNED NAVAID	BLUE
"TO" WAYPOINT AND DESTINATION	WHITE

Ident.: DSC-22_10-40-10-A-00010103.0001001 / 14 MAY 12

8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

SCREEN PROMPTS


INIT
→
CO RTE
□□□□□□□□
FROM/TO
□□□□/□□□□
ALTN RTE

ALTN

FLT NBR
□□□□□□□□
LAT↑↓
----.--
LONG
-----.--
COST INDEX

WIND>
CRZ FL/TEMP
----- /----
TROPO
36090
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
FROM TMPY
UT1234 →
UTC
SPD/ALT
BET←
1020
2500
A220
52NM
NABIE
---- ---/ -----
TRK249 146
W175
---- ---/ -----
37
W176Δ
---- * 260/ -----
37
W177
---- ---/ -----
←ERASE
INSERT*
↑↓
LAT REV FRZ
44°01.8N/011°00.2E
VIA/GO TO
[ ]/[ ]
NEXT WPT
<HOLD
[ ]
ENABLE
NEW DEST
←ALTN
[ ]
<RETURN

□□□: Data entry is mandatory to allow the FGMC to perform all its functions.

↑↓: When these arrows are beside a label line, it is possible to increase or decrease the value displayed below by pressing ↑ or ↓ keys on the keyboard.

Label line

Dataline or data field

←→ A turn (left ← or right →)is pecified on the leg which started at the waypoints adjacent to the arrow.

Δ : Displayed beside a fixed waypoint on the F–PLN page to indicate that the A/C will overfly the fixed point

←→ : Indicate that pressing the adjacent LS key will activate the prompt or select some data.

< or >: Means that another page may be accessed by pressing the adjacent key.

→ Upper right corner of screen indicates that next page is available by depressing next page key.

--- : This data will be computed by the FMGC if it has enough information, or provided out of the database or inserted by the crew.

*: Indicates that a constraint has been inserted. Displayed only if predictions available.

*: Indicates that pressing the adjacent LS key will change parameters affecting the active situation.

↑↓: Scrolling is available by pressing ↓ or ↑ key on the keyboard. The page is not large enough to display the whole information.

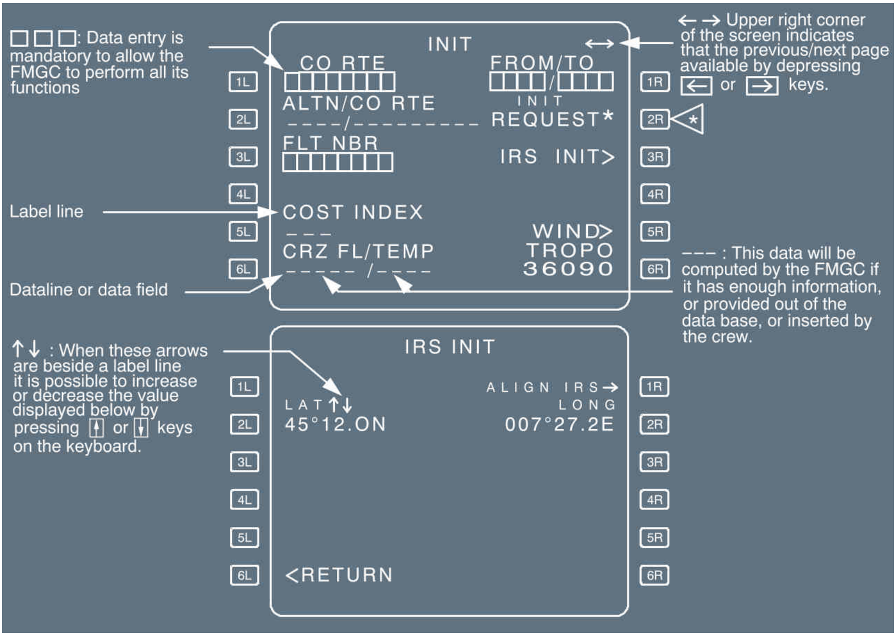
[ ]: A data insertion is possible.

+,–: When an altitude constraint has been entered at the waypoint, the constraint value is displayed on the VERT REV page. A plus (+) is displayed for at above altitude constraint and a minus (–) for at or below altitude constraint.

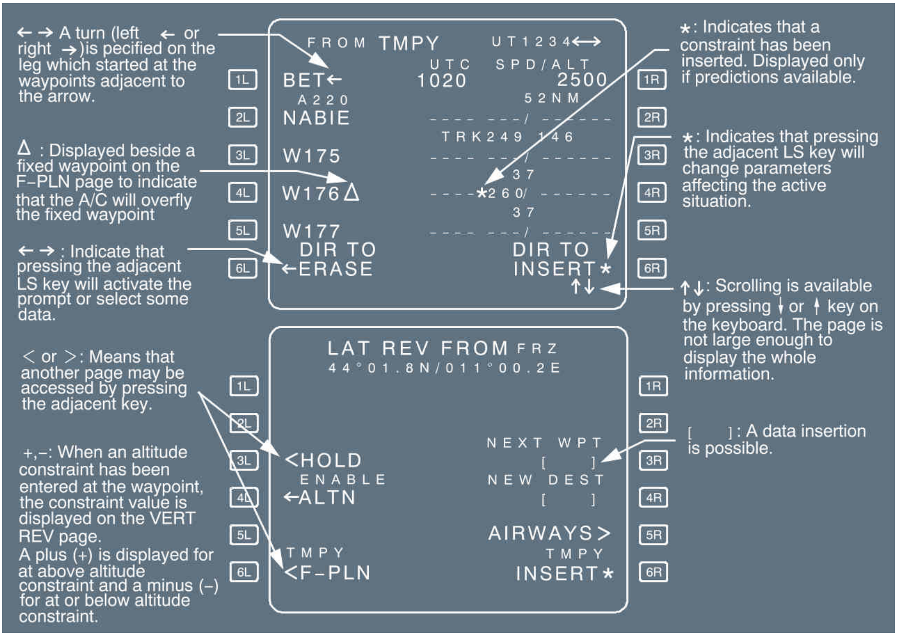
Ident.: DSC-22_10-40-10-A-00010103.0003001 / 14 MAY 12

Applicable to: MSN 04827-04860

SCREEN PROMPTS


☐☐☐: Data entry is mandatory to allow the FMGC to perform all its functions
Label line
Dataline or data field
↑↓ : When these arrows are beside a label line it is possible to increase or decrease the value displayed below by pressing ↑ or ↓ keys on the keyboard.
←→ Upper right corner of the screen indicates that the previous/next page available by depressing ← or → keys.
--- : This data will be computed by the FMGC if it has enough information, or provided out of the data base, or inserted by the crew.
INIT ↔
CO RTE
☐☐☐☐☐☐☐☐☐☐
FROM/TO
☐☐☐☐/☐☐☐☐
ALTN/CO RTE
----/---------
INIT
REQUEST*
FLT NBR
☐☐☐☐☐☐☐☐
IRS INIT>
COST INDEX

WIND>
CRZ FL/TEMP
----- /----
TROPO
36090
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
IRS INIT
ALIGN IRS→
LAT↑↓
45°12.0N
LONG
007°27.2E
<RETURN


← → A turn (left ← or right →)is pecified on the leg which started at the waypoints adjacent to the arrow.
Δ : Displayed beside a fixed waypoint on the F–PLN page to indicate that the A/C will overfly the fixed waypoint
← → : Indicate that pressing the adjacent LS key will activate the prompt or select some data.
< or >: Means that another page may be accessed by pressing the adjacent key.
+,–: When an altitude constraint has been entered at the waypoint, the constraint value is displayed on the VERT REV page.
A plus (+) is displayed for at above altitude constraint and a minus (–) for at or below altitude constraint.
FROM TMPY
UT1234↔
UTC
SPD/ALT
BET←
1020
2500
A220
52NM
NABIE
---- ---/ ------
TRK249 146
W175
---- ---/ ------
37
W176Δ
----*260/ ------
37
W177
---- ---/ ------
DIR TO
DIR TO
←ERASE
INSERT*
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
*: Indicates that a constraint has been inserted. Displayed only if predictions available.
*: Indicates that pressing the adjacent LS key will change parameters affecting the active situation.
↑↓: Scrolling is available by pressing ↓ or ↑ key on the keyboard. The page is not large enough to display the whole information.
[ ] : A data insertion is possible.
LAT REV FROM FRZ
44°01.8N/011°00.2E
NEXT WPT
<HOLD
[ ]
ENABLE
NEW DEST
←ALTN
[ ]
AIRWAYS>
TMPY
TMPY
<F–PLN
INSERT*

Ident.: DSC-22_10-40-10-A-00010104.0002001 / 23 JUN 15

9 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

MCDU FUNCTION KEYS

The function keys on the Multipurpose Control and Display Units allow the flight crew to call up MCDU pages quickly.
The following is a summary of the purpose of each key:

DIR	Calls up the DIR TO page, and enables the flight crew to proceed directly from the present position to any waypoint, entered manually or selected in the active flight plan.
PROG	Calls up the progress page corresponding to the phase of the active flight plan that is in progress. This page displays navigation information and active data such as the optimum and maximum recommended cruise flight levels. It enables the flight crew to update the FMGS position and to obtain a bearing and distance to any location.

PERF	Calls up the performance pages, that display the optimum speed or Mach number for each phase. The flight crew can amend these pages. The first page to be displayed is the one corresponding to the current flight phase (except for preflight and done phases). The flight crew can then use the appropriate 6L or 6R LSK to call up pages corresponding to future flight phases.
INIT	Calls up the flight plan initialization A page, which also gives the flight crew access to the B page. The flight crew uses the INIT pages to initialize Flight Management for the flight. The flight crew uses the INIT A page primarily to insert his flight plan and to align the inertial reference system. The flight crew uses the INIT B page to insert aircraft weight, fuel on board, CG and various fuel requirements. The FMGS uses this data to compute predictions and fuel planning parameters. The flight crew has access to the INIT A page only in the preflight phase. INIT B page (not accessible after engine start) is called up by pressing the "NEXT PAGE" key.
DATA	Calls up the data index page. This gives the flight crew access to various reference pages that show aircraft position, aircraft status, runways, waypoints, navaids, routes, and data stored by the flight crew.
F-PLN	Calls up the flight plan A and B pages, which contain a leg-by-leg description of the active primary flight plan. The flight crew can use the slewing keys to review the entire active flight plan. They can make all lateral and vertical revisions to the flight plan through these pages, using the left LSKs for lateral revision and the right keys for vertical revision.
RAD NAV	Calls up the radio navigation page. This page displays the Radio Navaids tuned automatically or manually through the FMGC.
FUEL PRED	Calls up the fuel prediction page. Once the engines are started, this page displays the fuel predicted to be remaining at the destination and the alternate, as well as fuel management data.
SEC F-PLN	Calls up the index page for the secondary flight plan. The flight crew can use this page to call up the secondary flight plan and all the functions related to it (copying, deleting, reviewing, activating, and the INIT and PERF pages).
ATC COMM	Calls up the ATC applications (not activated).

MCDU MENU	Calls up the MCDU MENU page, which displays the subsystems currently addressed via the MCDU. The key next to the name of a subsystem enables the flight crew to select that subsystem. When the MCDU MENU annunciator lights up, the flight crew should press the MCDU MENU key. The menu will have [REQ] displayed next to the name of the subsystem that requires attention.

Ident.: DSC-22_10-40-10-A-00010104.0009001 / 23 JUN 15
Applicable to: MSN 04827-04860

MCDU FUNCTION KEYS

The function keys on the Multipurpose Control and Display Units allow the flight crew to call up MCDU pages quickly.
The following is a summary of the purpose of each key:

DIR	Calls up the DIR TO page, and enables the flight crew to proceed directly from the present position to any waypoint, entered manually or selected in the active flight plan.
PROG	Calls up the progress page corresponding to the phase of the active flight plan that is in progress. This page displays navigation information and active data such as the optimum and maximum recommended cruise flight levels. It enables the flight crew to update the FMGS position and to obtain a bearing and distance to any location.
PERF	Calls up the performance pages, that display the optimum speed or Mach number for each phase. The flight crew can amend these pages. The first page to be displayed is the one corresponding to the current flight phase (except for preflight and done phases). The flight crew can then use the appropriate 6L or 6R LSK to call up pages corresponding to future flight phases.

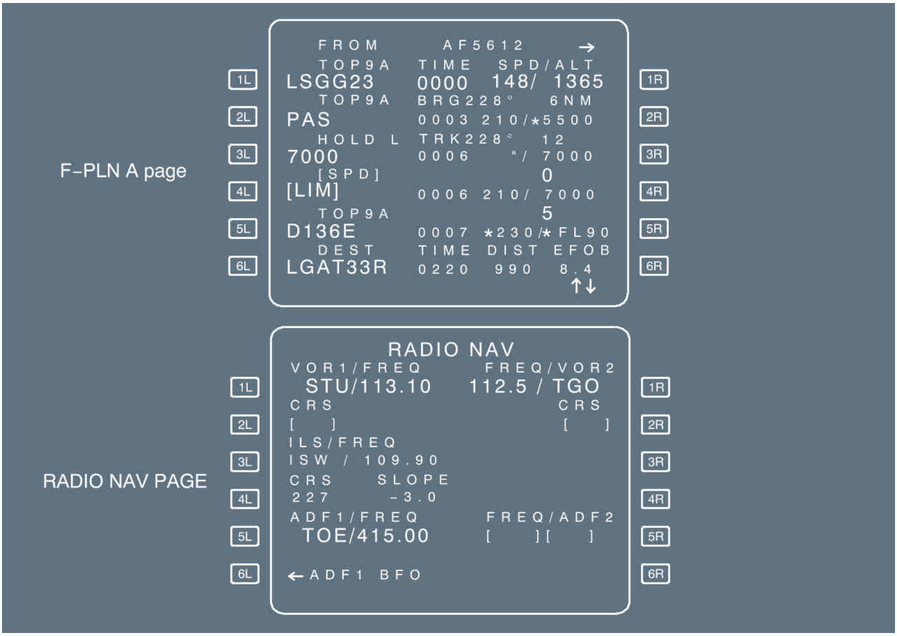
INIT	Calls up the flight plan initialization (INIT) A page, that also gives access to the INIT B page and the IRS INIT page. The flight crew uses the INIT pages to initialize the Flight Management System for the flight. The flight crew uses the INIT A page to initialize the flight plan, set the departure and arrival airports, and the main flight parameters (for example, cruise FL, Cost Index). The IRS INIT page enables the alignment of the Inertial Reference System (IRS). The flight crew then uses the INIT B page to insert the aircraft weight, block fuel, Center of Gravity (CG), and other fuel requirements. The FMGS uses this data to compute predictions and other fuel planning parameters. The INIT A page is accessed in pre-flight phase to initialize the flight plan. It can also be accessed in flight. The IRS INIT page is accessed via the “IRS INIT” prompt on the INIT A page. The INIT B page is accessed from the INIT A page, by pressing the “←” or “→” scroll keys. It can only be accessed in the pre-flight phase; pressing the scroll keys in flight will revert to the FUEL PRED page.
DATA	Calls up the data index page. This gives the flight crew access to various reference pages that show aircraft position, aircraft status, runways, waypoints, navaids, routes, and data stored by the flight crew.
F-PLN	Calls up the flight plan A and B pages, which contain a leg-by-leg description of the active primary flight plan. The flight crew can use the slewing keys to review the entire active flight plan. They can make all lateral and vertical revisions to the flight plan through these pages, using the left LSKs for lateral revision and the right keys for vertical revision.
RAD NAV	Calls up the radio navigation page. This page displays the Radio Navaids tuned automatically or manually through the FMGC.
FUEL PRED	Calls up the fuel prediction page. Once the engines are started, this page displays the fuel predicted to be remaining at the destination and the alternate, as well as fuel management data.
SEC F-PLN	Calls up the index page for the secondary flight plan. The flight crew can use this page to call up the secondary flight plan and all the functions related to it (copying, deleting, reviewing, activating, and the INIT and PERF pages).
ATC COMM	Calls up the ATC applications (not activated).

MCDU MENU	Calls up the MCDU MENU page, which displays the subsystems currently addressed via the MCDU. The key next to the name of a subsystem enables the flight crew to select that subsystem. When the MCDU MENU annunciator lights up, the flight crew should press the MCDU MENU key. The menu will have [REQ] displayed next to the name of the subsystem that requires attention.

Ident.: DSC-22_10-40-10-A-00010107.0005001 / 01 OCT 12
Applicable to: ALL

MCDU DISPLAY

The MCDUs display:
- Position and accuracy information
- Tuned navaids
- Lateral and vertical flight plans (waypoints, pseudo waypoints, constraints)
- Predictions (SPD, TIME, ALT, WIND)
- Fuel predictions and fuel management information (estimated fuel on board, extra fuel)
- Performance data.



```
   FROM        AF5612        →
    TOP9A    TIME    SPD/ALT
LSGG23       0000    148/ 1365
    TOP9A    BRG228°     6NM
PAS          0003 210/*5500
    HOLD L   TRK228°    12
7000         0006    "/ 7000
    [SPD]               0
[LIM]        0006  210/ 7000
    TOP9A               5
D136E        0007 *230/*FL90
    DEST     TIME  DIST  EFOB
LGAT33R      0220   990   8.4
                           ↑↓
```

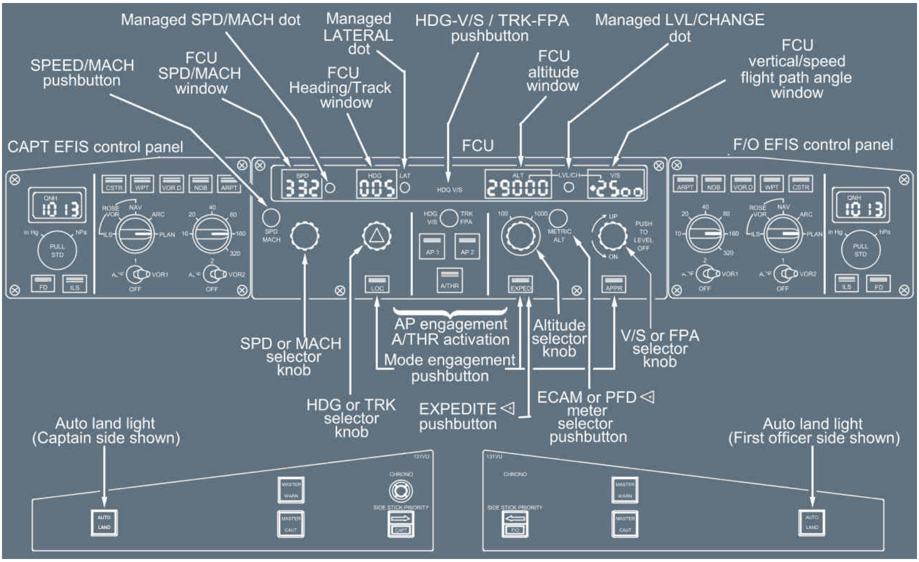
```
          RADIO NAV
VOR1/FREQ         FREQ/VOR2
 STU/113.10      112.5 / TGO
CRS                     CRS
[   ]                 [    ]
ILS/FREQ
ISW / 109.90
CRS      SLOPE
227       -3.0
ADF1/FREQ         FREQ/ADF2
 TOE/415.00       [    ][    ]

←ADF1 BFO
```

Intentionally left blank

FCU

Ident.: DSC-22_10-40-20-00010112.0003001 / 03 AUG 17
Applicable to: ALL

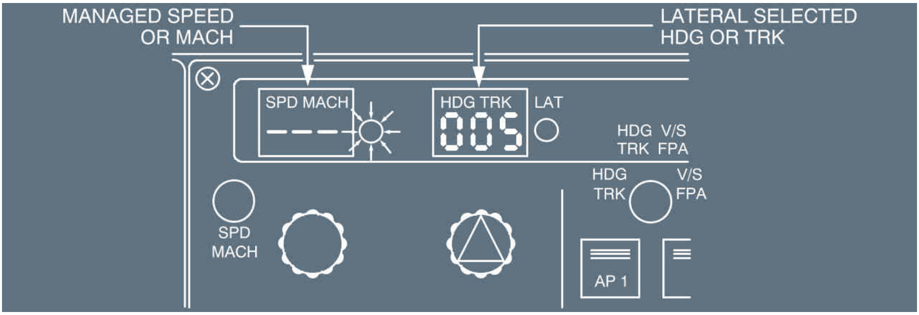
The Flight Control Unit (FCU) is located on the glareshield and is constituted of three control panels: One for the automatic flight controls and two for the Electronic Flight Instrument System (EFIS). The FCU has two channels, each of which can independently command the central control panel. If one channel fails, the other channel can control all the functions.


Managed SPD/MACH dot
Managed LATERAL dot
HDG-V/S / TRK-FPA pushbutton
Managed LVL/CHANGE dot
SPEED/MACH pushbutton
FCU SPD/MACH window
FCU Heading/Track window
FCU altitude window
FCU vertical/speed flight path angle window
CAPT EFIS control panel
FCU
F/O EFIS control panel
SPD 332
HDG 005
LAT
HDG V/S
ALT 29000
LVL/CH
V/S 2500
SPD MACH
LOC
AP 1
AP 2
A/THR
EXPED
APPR
METRIC ALT
PUSH TO LEVEL OFF
QNH 1013
PULL STD
FD
ILS
CSTR
WPT
VOR.D
NDB
ARPT
ROSE
NAV
ARC
PLAN
VOR1
VOR2
OFF
AP engagement A/THR activation
Mode engagement pushbutton
SPD or MACH selector knob
HDG or TRK selector knob
EXPEDITE pushbutton
Altitude selector knob
V/S or FPA selector knob
ECAM or PFD meter selector pushbutton
Auto land light (Captain side shown)
Auto land light (First officer side shown)
AUTO LAND
MASTER WARN
MASTER CAUT
CHRONO
SIDE STICK PRIORITY
CAPT
F/O
131VU

FCU PHILOSOPHY

Ident.: DSC-22_10-40-20-00010113.0002001 / 14 MAY 12
Applicable to: ALL

The flight crew can use two types of guidance to control the aircraft in auto flight. One type is managed by the Flight Management Guidance System (FMGS). The other uses target quantities which are manually entered by the flight crew.
When the aircraft uses target quantities from the FMGS (managed guidance), the FCU windows display dashes and the white dots next to those windows light up. When the aircraft uses target quantities, entered by the flight crew (selected guidance), the windows display the selected numbers and the white dots do not light up.



Note: *The altitude window always displays an altitude selected by the flight crew (never dashes).*

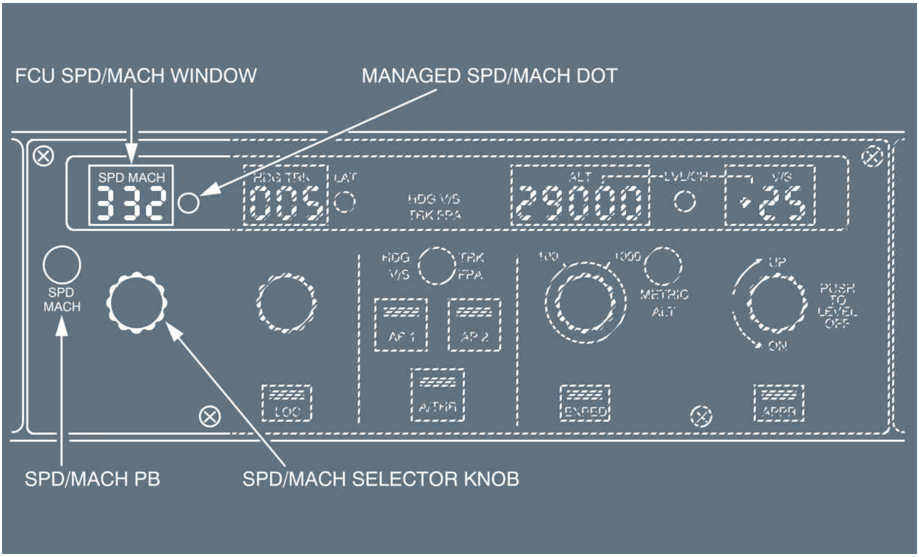
The FCU has four knobs:
- SPD-MACH
- HDG-TRK
- ALT
- V/S-FPA.

The knobs can be rotated, pushed in, and pulled out:
- In order to arm or engage managed guidance for a given mode, the flight crew pushes in the associated knob. If, for example, they push in the HDG knob, they engage or arms the NAV mode.
- In order to engage a selected guidance mode, the flight crew turns the knob to set the desired value, then pulls the knob out to engage the mode with a target value equal to the selected value.

Note: *In managed guidance (lateral, vertical guidance or managed speed), the corresponding window is dashed. Turning a knob without pulling it, displays a value that is the sum of the current target and the turn action value. The display remains 45 s on the HDG/TRK and V/S windows and 10 s on the SPD/MACH window before the dashes reappear. This rule does not apply to the ALT knob/window.*

SPEED/MACH CONTROL AREA

Ident.: DSC-22_10-40-20-00010114.0002001 / 14 MAY 12
Applicable to: ALL


FCU SPD/MACH WINDOW
MANAGED SPD/MACH DOT
SPD MACH
332
HDG TRK
LAT
005
HDG V/S
TRK FPA
ALT
LVL/CH
V/S
29000
-25
SPD
MACH
HDG
V/S
TRK
FPA
100
1000
METRIC
ALT
UP
PUSH
TO
LEVEL
OFF
ON
AP 1
AP 2
LOC
A/THR
EXPED
APPR
SPD/MACH PB
SPD/MACH SELECTOR KNOB

SPD/MACH knob

Display range: between 100 and 399 kt for speed, between 0.10 and 0.99 for Mach number. One rotation of the knob corresponds to approximately 32 kt or M 0.32.

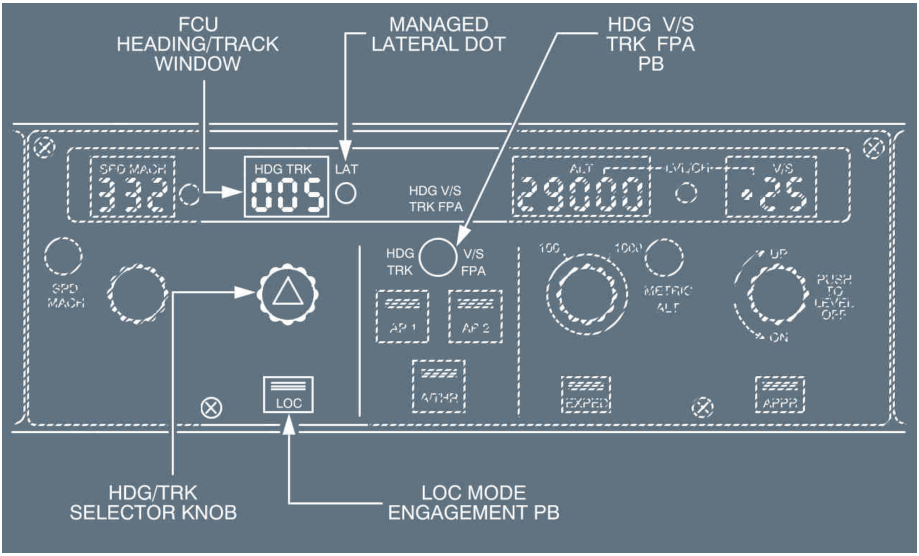
SPD/MACH pb

Pushing this pushbutton changes the SPD target to the corresponding MACH target and vice versa.

LATERAL CONTROL AREA

Ident.: DSC-22_10-40-20-00010115.0007001 / 14 MAY 12

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**


FCU HEADING/TRACK WINDOW
MANAGED LATERAL DOT
HDG V/S TRK FPA PB
SPD MACH
332
HDG TRK
005
LAT
HDG V/S
TRK FPA
ALT
LVL/CH
V/S
29000
-25
HDG
TRK
V/S
FPA
100
1000
METRIC ALT
UP
PUSH TO LEVEL OFF
ON
SPD MACH
AP 1
AP 2
A/THR
LOC
EXPED
APPR
HDG/TRK SELECTOR KNOB
LOC MODE ENGAGEMENT PB

HDG/TRK knob

Display range: between 0 ° and 359 °.
One rotation of the knob corresponds to 32 ° (1 ° per click).

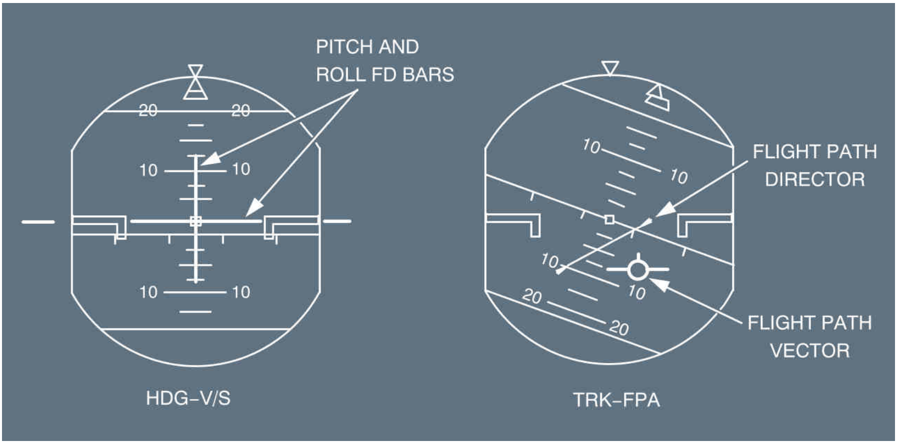
LOC pb

Pushing this pushbutton arms, engages, or disengages the LOC mode.

HDG V/S – TRK FPA pb

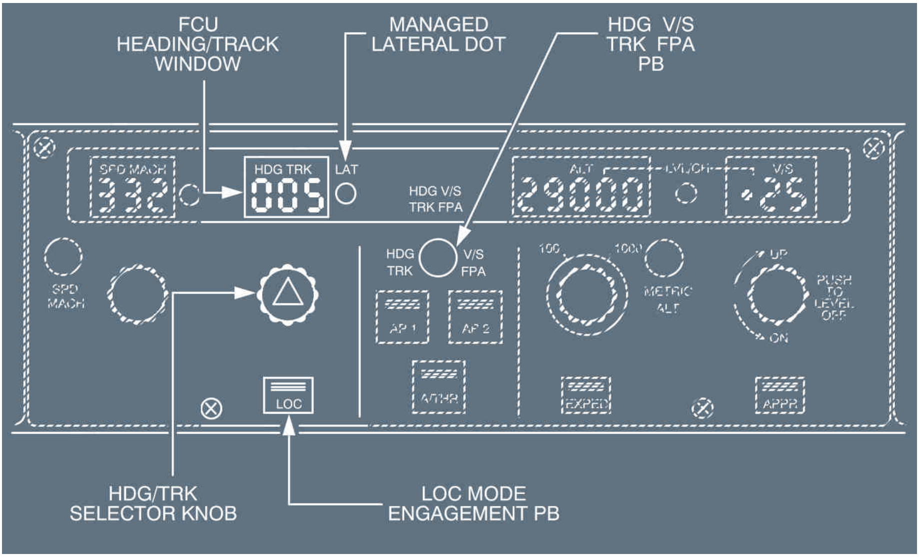
The flight crew uses this pushbutton to select HDG (associated with V/S) or TRK (associated with FPA). Pushing it:

- Displays the Flight Path Vector (FPV) on the Primary Flight Display (PFD) or deletes it.
- On the PFD, changes the FD crossbar display (with the aircraft attitude as its reference) to the aircraft Flight Path Director (with the flight path vector as its reference) and vice versa.
- Changes heading reference into track reference in the HDG/TRK window and vice versa.
- Changes vertical speed reference target into flight path angle reference target in the V/S-FPA window and vice versa.


PITCH AND
ROLL FD BARS
20
20
10
10
10
10
HDG–V/S
FLIGHT PATH
DIRECTOR
10
10
10
10
20
20
FLIGHT PATH
VECTOR
TRK–FPA

LATERAL CONTROL AREA

2 Ident.: DSC-22_10-40-20-00010115.0008001 / 14 MAY 12
Applicable to: MSN 11531


FCU
HEADING/TRACK
WINDOW
MANAGED
LATERAL DOT
HDG V/S
TRK FPA
PB
SPD MACH
332
HDG TRK
005
LAT
HDG V/S
TRK FPA
ALT
29000
LVL/CH
V/S
-25
SPD
MACH
HDG
TRK
V/S
FPA
AP 1
AP 2
A/THR
100
1000
METRIC
ALT
UP
PUSH
TO
LEVEL
OFF
ON
LOC
EXPED
APPR
HDG/TRK
SELECTOR KNOB
LOC MODE
ENGAGEMENT PB

HDG/TRK knob

Display range: between 0 ° and 359 °.
One rotation of the knob corresponds to 32 ° (1 ° per click).

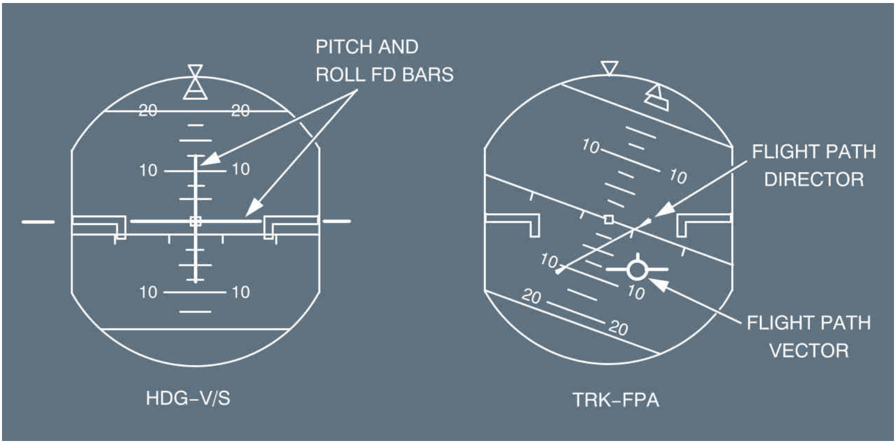
LOC pb

Pushing this pushbutton arms, engages, or disengages the LOC mode or the F-LOC mode.

HDG V/S – TRK FPA pb

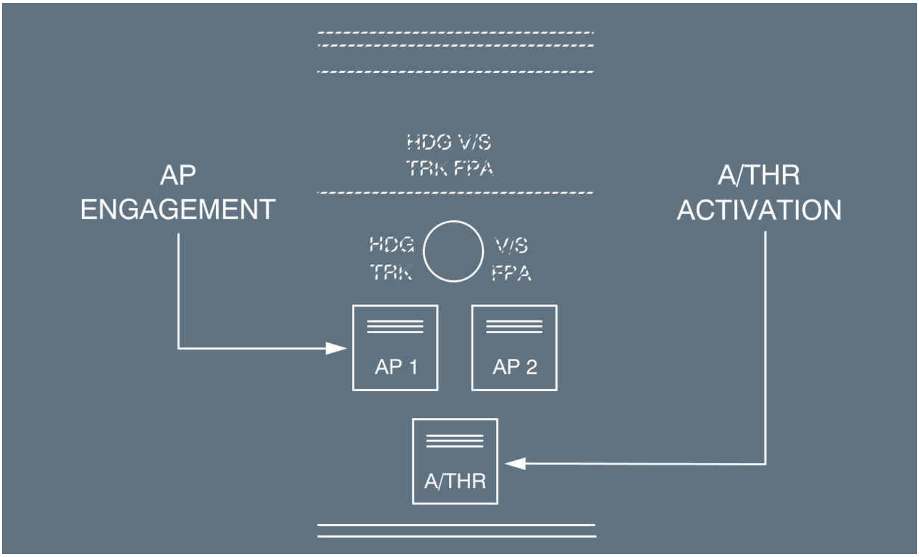
The flight crew uses this pushbutton to select HDG (associated with V/S) or TRK (associated with FPA). Pushing it:

- Displays the Flight Path Vector (FPV) on the Primary Flight Display (PFD) or deletes it.
- On the PFD, changes the FD crossbar display (with the aircraft attitude as its reference) to the aircraft Flight Path Director (with the flight path vector as its reference) and vice versa.
- Changes heading reference into track reference in the HDG/TRK window and vice versa.
- Changes vertical speed reference target into flight path angle reference target in the V/S-FPA window and vice versa.


PITCH AND
ROLL FD BARS
20
20
10
10
10
10
HDG–V/S
10
10
10
10
20
20
FLIGHT PATH
DIRECTOR
FLIGHT PATH
VECTOR
TRK–FPA

AP-A/THR CONTROL AREA

Ident.: DSC-22_10-40-20-00010116.0001001 / 14 MAY 12
Applicable to: ALL



AP1 pb AND AP2 pb

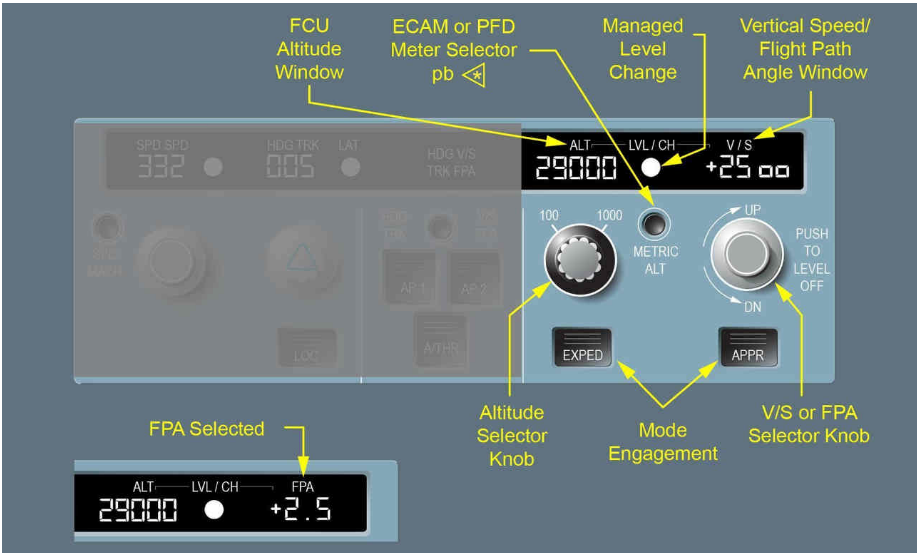
The flight crew uses these pushbuttons to engage or disengage the autopilots. The buttons illuminate green when the autopilot is engaged.

A/THR pb

The flight crew uses this pushbutton to arm, activate, or disconnect the autothrust (A/THR). This button illuminates green if the A/THR is armed or active.

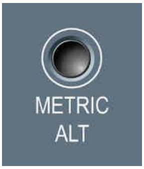
VERTICAL CONTROL AREA

3 Ident.: DSC-22_10-40-20-00010117.0030001 / 12 MAY 22
Applicable to: MSN 11531


FCU Altitude Window
ECAM or PFD Meter Selector pb
Managed Level Change
Vertical Speed/ Flight Path Angle Window
ALT
LVL / CH
V / S
29000
+25 oo
100
1000
METRIC ALT
UP
PUSH TO LEVEL OFF
DN
EXPED
APPR
FPA Selected
Altitude Selector Knob
Mode Engagement
V/S or FPA Selector Knob
ALT
LVL / CH
FPA
29000
+2.5

The FCU altitude window always displays a target value selected by the flight crew. It never displays dashes.

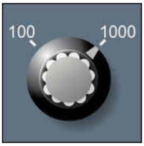
METER SELECTOR - METRIC ALT pb



- Displays the target altitude (either the FCU - selected altitude, or the FMaltitude constraint) and the current altitude in meters on the PFD.

ALTITUDE SELECTOR knob (INNER AND OUTER)

When turned, sets the target altitude in the FCU window.



: Display range: 100 to 49 000 ft
- The outer knob has two positions: 100 and 1000
- The inner knob sets the altitude in the FCU window, in increments of 100 or 1 000 ft , depending upon the position of the outer knob.

V/S or FPA SELECTOR knob

UP
PUSH
TO
LEVEL
OFF
DN

: - Range (V/S) : – 6 000 to + 6 000 ft/min
2 clicks = 100 ft/min
If the flight crew turns the knob slowly, each click equals 100 ft/min.

Range (FPA) : – 9.9 ° to + 9.9 °
1 click = 0.1 °.

The flight crew turns this knob to set the value of V/S or FPA to be displayed in the V/S or FPA window (they choose which, V/S or FPA, is to be displayed by pushing the HDG V/S - TRK FPA pb).

One rotation of the knob corresponds to 32 clicks. One complete rotation sets:
FPA = 3.2 °
V/S = 1 600 ft/min.

When turned, if in V/S or FPA mode, selects a vertical speed or flight path angle target. If not in V/S or FPA mode (V/S / FPA window is dashed), preselects a vertical speed or flight path angle target. When the V/S or FPA mode engages (flight crew action or mode reversion), this preselected value becomes the target.

Note: *If the V/S or FPA mode is not engaged within 45 s after preselection, the preselected value is cancelled and the dashes reappear.*

When the flight crew pushes the V/S or FPA knob, the system commands an immediate level-off by engaging the V/S or FPA mode with a target of zero. When the aircraft V/S or FPA becomes zero, the FMA displays V/S = 0. If the flight crew then turns the knob to set a new value for V/S or FPA, the aircraft changes flight path accordingly.

MODE ENGAGEMENT - EXPED pb

- This pushbutton is used to engage the expedite mode (*Refer to DSC-22_30-80-20 EXP CLB*, *Refer to DSC-22_30-80-20 EXP DES*).

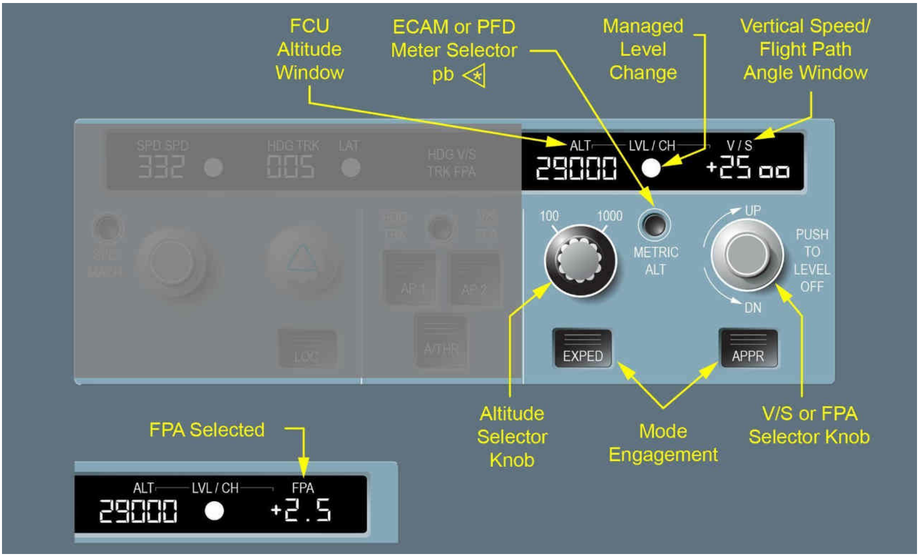
MODE ENGAGEMENT - APPR pb

: When pushed arms, disarms, engages, or disengages the approach modes:
- LOC and G/S modes if an ILS/ GLS / SLS approach is selected in the active F-PLN
- F-LOC and F-G/S modes, if a VOR, VOR/DME, NDB, NDB/DME, or RNAV(GNSS) approach is selected in the active F-PLN, and if FLS guidance is selected in the PERF APPR page
- LOC and F-G/S modes, if a LOC only approach is selected in active F-PLN, and if FLS guidance is selected in the PERF APPR page
- APP NAV-FINAL modes, if a VOR, VOR/DME, NDB, NDB/DME, or RNAV(GNSS) approach is selected in the active F-PLN, and FINAL APP guidance mode is selected in the PERF APPR page.

VERTICAL CONTROL AREA

Ident.: DSC-22_10-40-20-00010117.0006001 / 18 MAY 22

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11522, 11572-11597**


FCU Altitude Window
ECAM or PFD Meter Selector pb
Managed Level Change
Vertical Speed/ Flight Path Angle Window
SPD SPD
332
HDG TRK
LAT
005
HDG V/S
TRK FPA
ALT
LVL / CH
V / S
29000
+25 oo
100
1000
METRIC ALT
UP
PUSH TO LEVEL OFF
DN
AP 1
AP 2
LOC
A/THR
EXPED
APPR
FPA Selected
Altitude Selector Knob
Mode Engagement
V/S or FPA Selector Knob
ALT
LVL / CH
FPA
29000
+2.5

The FCU altitude window always displays a target value selected by the flight crew. It never displays dashes.

Altitude knob (INNER AND OUTER)

Display range: 100 to 49 000 ft

- The outer knob has two positions: 100 and 1000
- The inner knob sets the altitude in the FCU window in increments of 100 or 1 000 ft, depending upon the position of the outer knob.

EXPED pb

This pushbutton is used to engage the expedite mode (*Refer to DSC-22_30-80-20 EXP CLB*, *Refer to DSC-22_30-80-20 EXP DES*).

METRIC ALT pb

This pushbutton is used to display the FCU altitude target in meters on the ECAM, or the current altitude and FCU/FM altitude target in meters on the PFD .

V/S or FPA knob

Range (V/S) : –6 000 to +6 000 ft/min
2 clicks = 100 ft/min
If the flight crew turns the knob slowly, each click equals 100 ft/min.

Range (FPA) : –9.9 ° to +9.9 °
1 click = 0.1 °

The flight crew turns this knob to set the value of V/S or FPA to be displayed in the V/S or FPA window (they choose which, V/S or FPA, is to be displayed by pushing the HDG V/S - TRK FPA pb).

One rotation of the knob corresponds to 32 clicks. One complete rotation sets:
FPA = 3.2 °
V/S = 1 600 ft/min

When turned, if in V/S or FPA mode, selects a vertical speed or flight path angle target. If not in V/S or FPA mode (V/S / FPA window is dashed), preselects a vertical speed or flight path angle target. When the V/S or FPA mode engages (flight crew action or mode reversion), this preselected value becomes the target.

Note: *If the V/S or FPA mode is not engaged within 45 s after preselection, the preselected value is cancelled and the dashes reappear.*

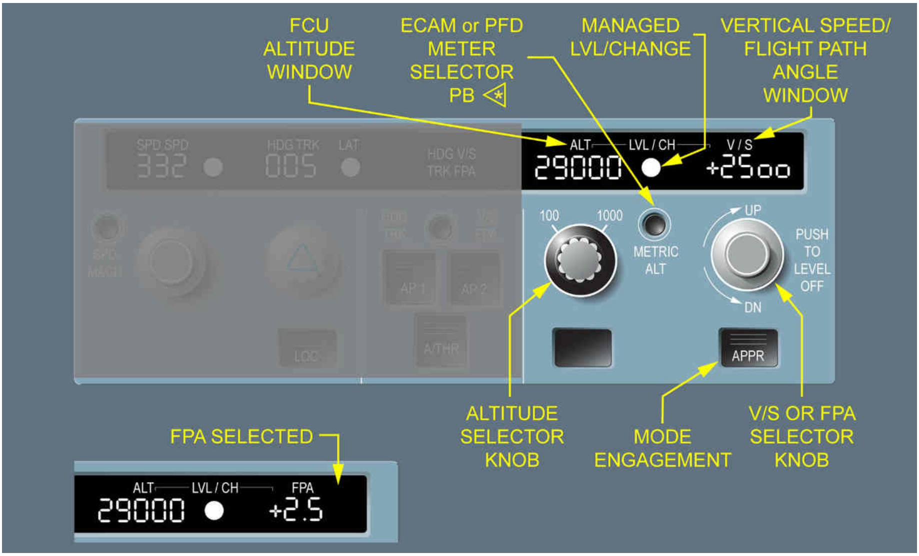
When the flight crew pushes the V/S or FPA knob, the system commands an immediate level-off by engaging the V/S or FPA mode with a target of zero. When the aircraft V/S or FPA becomes zero, the FMA displays V/S = 0. If the flight crew then turns the knob to set a new value for V/S or FPA, the aircraft changes flight path accordingly.

APPR pb

This pushbutton arms, disarms, engages, or disengages the approach modes:
- LOC and G/S modes, if an ILS approach is selected in the active F-PLN.
- APP NAV-FINAL modes, if a non precision approach is selected in the active F-PLN.

VERTICAL CONTROL AREA

Ident.: DSC-22_10-40-20-00010117.0012001 / 28 MAY 20
Applicable to: MSN 04827-04860


FCU ALTITUDE WINDOW
ECAM or PFD METER SELECTOR PB ✱
MANAGED LVL/CHANGE
VERTICAL SPEED/ FLIGHT PATH ANGLE WINDOW
SPD SPD
332
HDG TRK
LAT
005
HDG V/S
TRK FPA
ALT
LVL / CH
V / S
29000
+25oo
SPD MACH
HDG TRK
V/S FPA
100
1000
METRIC ALT
UP
DN
PUSH TO LEVEL OFF
AP 1
AP 2
LOC
A/THR
APPR
ALTITUDE SELECTOR KNOB
MODE ENGAGEMENT
V/S OR FPA SELECTOR KNOB
FPA SELECTED
ALT
LVL / CH
FPA
29000
+2.5

The FCU altitude window always displays a target value selected by the flight crew. It never displays dashes.

Altitude knob (INNER AND OUTER)

Display range: 100 to 49 000 ft
- The outer knob has two positions: 100 and 1000
- The inner knob sets the altitude in the FCU window in increments of 100 or 1 000 ft, depending upon the position of the outer knob.

METRIC ALT pb

This pushbutton is used to display the FCU altitude target in meters on the ECAM, or the current altitude and FCU/FM altitude target in meters on the PFD ◁✱ .

V/S or FPA knob

Range (V/S) : –6 000 to +6 000 ft/min
2 clicks = 100 ft/min
If the flight crew turns the knob slowly, each click equals 100 ft/min.

Range (FPA) : –9.9 ° to +9.9 °
1 click = 0.1 °

The flight crew turns this knob to set the value of V/S or FPA to be displayed in the V/S or FPA window (they choose which, V/S or FPA, is to be displayed by pushing the HDG V/S - TRK FPA pb).

One rotation of the knob corresponds to 32 clicks. One complete rotation sets:
FPA = 3.2 °
V/S = 1 600 ft/min

When turned, if in V/S or FPA mode, selects a vertical speed or flight path angle target. If not in V/S or FPA mode (V/S / FPA window is dashed), preselects a vertical speed or flight path angle target. When the V/S or FPA mode engages (flight crew action or mode reversion), this preselected value becomes the target.

Note: *If the V/S or FPA mode is not engaged within 45 s after preselection, the preselected value is cancelled and the dashes reappear.*

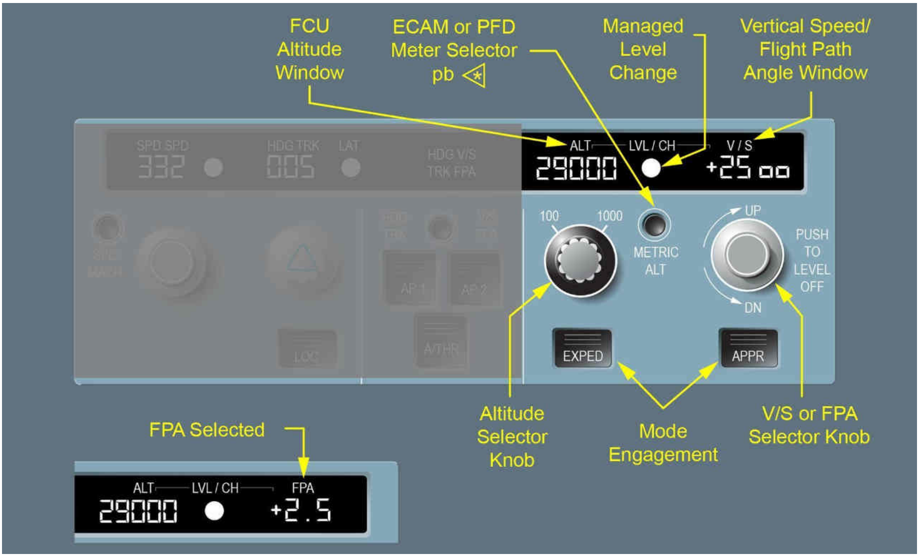
When the flight crew pushes the V/S or FPA knob, the system commands an immediate level-off by engaging the V/S or FPA mode with a target of zero. When the aircraft V/S or FPA becomes zero, the FMA displays V/S = 0. If the flight crew then turns the knob to set a new value for V/S or FPA, the aircraft changes flight path accordingly.

APPR pb

This pushbutton arms, disarms, engages, or disengages the approach modes:
- LOC and G/S modes, if an ILS approach is selected in the active F-PLN.
- APP NAV-FINAL modes, if a non precision approach is selected in the active F-PLN.

VERTICAL CONTROL AREA

Ident.: DSC-22_10-40-20-00010117.0019001 / 18 MAY 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


FCU Altitude Window
ECAM or PFD Meter Selector pb ◁
Managed Level Change
Vertical Speed/ Flight Path Angle Window
SPD SPD
332
HDG TRK
LAT
005
HDG V/S
TRK FPA
ALT
LVL / CH
V / S
29000
+25 oo
100
1000
METRIC ALT
UP
PUSH TO LEVEL OFF
DN
SPD MACH
AP 1
AP 2
A/THR
LOC
EXPED
APPR
FPA Selected
Altitude Selector Knob
Mode Engagement
V/S or FPA Selector Knob
ALT
LVL / CH
FPA
29000
+2.5

The FCU altitude window always displays a target value selected by the flight crew. It never displays dashes.

Altitude knob (INNER AND OUTER)

Display range: 100 to 49 000 ft
- The outer knob has two positions: 100 and 1000
- The inner knob sets the altitude in the FCU window in increments of 100 or 1 000 ft, depending upon the position of the outer knob.

EXPED pb

This pushbutton is used to engage the expedite mode (*Refer to DSC-22_30-80-20 EXP CLB*, *Refer to DSC-22_30-80-20 EXP DES*).

METRIC ALT pb

This pushbutton is used to display the FCU altitude target in meters on the ECAM, or the current altitude and FCU/FM altitude target in meters on the PFD ◁ .

V/S or FPA knob

Range (V/S) : –6 000 to +6 000 ft/min
2 clicks = 100 ft/min
If the flight crew turns the knob slowly, each click equals 100 ft/min.

Range (FPA) : –9.9 ° to +9.9 °
1 click = 0.1 °

The flight crew turns this knob to set the value of V/S or FPA to be displayed in the V/S or FPA window (they choose which, V/S or FPA, is to be displayed by pushing the HDG V/S - TRK FPA pb).

One rotation of the knob corresponds to 32 clicks. One complete rotation sets:
FPA = 3.2 °
V/S = 1 600 ft/min

When turned, if in V/S or FPA mode, selects a vertical speed or flight path angle target. If not in V/S or FPA mode (V/S / FPA window is dashed), preselects a vertical speed or flight path angle target. When the V/S or FPA mode engages (flight crew action or mode reversion), this preselected value becomes the target.

Note: *If the V/S or FPA mode is not engaged within 45 s after preselection, the preselected value is cancelled and the dashes reappear.*

When the flight crew pushes the V/S or FPA knob, the system commands an immediate level-off by engaging the V/S or FPA mode with a target of zero. When the aircraft V/S or FPA becomes zero, the FMA displays V/S = 0. If the flight crew then turns the knob to set a new value for V/S or FPA, the aircraft changes flight path accordingly.

APPR pb

This pushbutton arms, disarms, engages, or disengages the approach modes:
- LOC and G/S modes, if an ILS/GLS approach is selected in the active F-PLN.
- APP NAV-FINAL modes, if a non precision approach is selected in the active F-PLN.

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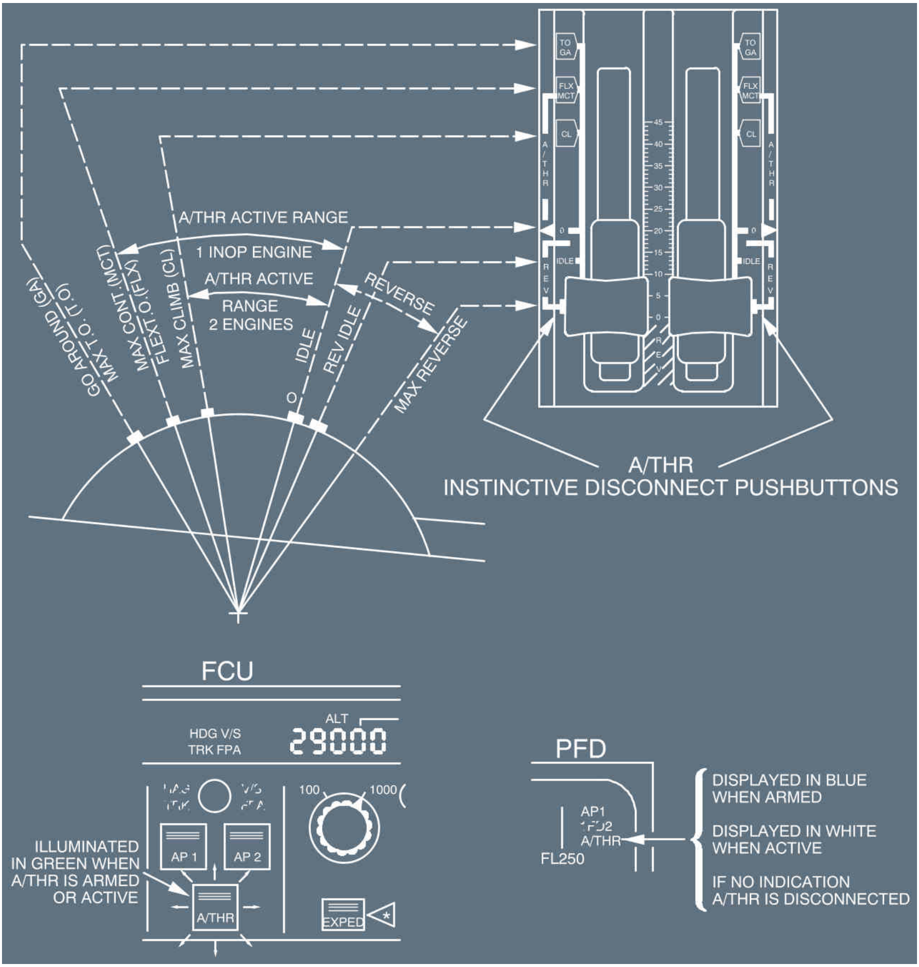
THRUST LEVERS

Ident.: DSC-22_10-40-30-00010119.0001001 / 14 MAY 12
Applicable to: ALL


A/THR ACTIVE RANGE
1 INOP ENGINE
A/THR ACTIVE
RANGE
2 ENGINES
GO AROUND (GA)
MAX T.O. (T.O)
MAX CONT.(MCT)
FLEX T.O.(FLX)
MAX CLIMB (CL)
IDLE
O
REV IDLE
REVERSE
MAX REVERSE
TO GA
FLX MCT
CL
A/THR
0
IDLE
REV
45
40
35
30
25
20
15
10
5
0
REV
A/THR
INSTINCTIVE DISCONNECT PUSHBUTTONS
FCU
HDG V/S
TRK FPA
ALT
29000
100
1000
AP 1
AP 2
A/THR
EXPED
ILLUMINATED
IN GREEN WHEN
A/THR IS ARMED
OR ACTIVE
PFD
AP1
1FD2
A/THR
FL250
DISPLAYED IN BLUE
WHEN ARMED
DISPLAYED IN WHITE
WHEN ACTIVE
IF NO INDICATION
A/THR IS DISCONNECTED

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PFD

Ident.: DSC-22_10-40-40-00010677.0001001 / 05 MAR 19
Applicable to: ALL

The FMGS generates the following information to the PFD:
- Armed and Engaged modes on the FMA
- FMGS guidance targets on the SPD, ALT, and HDG scales
- Vertical deviation from descent profile on the ALT scale
- Approach trajectory deviations
- Flight crew awareness messages.

For all details, *Refer to DSC-31_40 Indications on PFD*.

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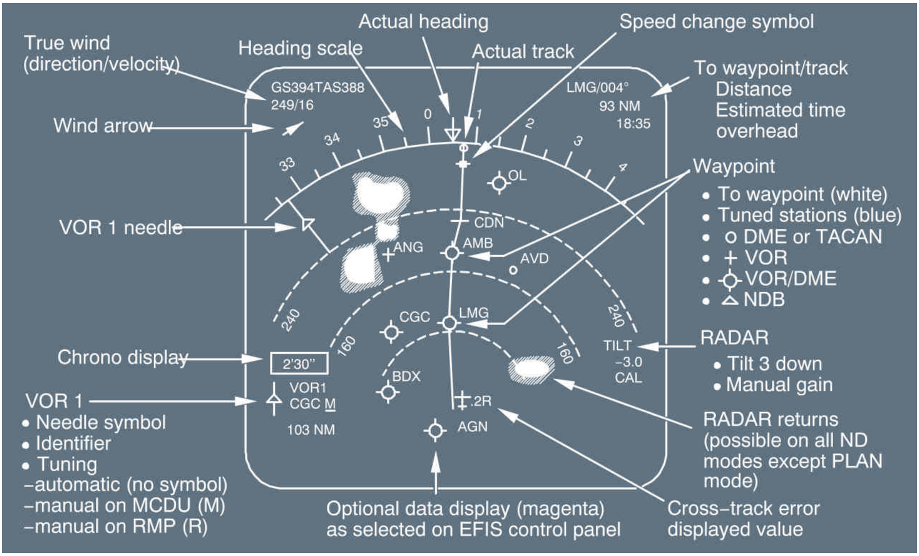
ND

Ident.: DSC-22_10-40-50-00010123.0001001 / 17 AUG 10
Applicable to: ALL

The FMGS generates the following information, displayed on the EFIS Navigation Displays:
- Flight plan (active secondary, temporary, dashed)
- Aircraft position and lateral deviation from the flight plan
- Pseudo-waypoints along the flight plan
- Raw data from tuned Navaids and type of selected approach
- Various display options (waypoints, Navaids, NDBs, airports, constraints)
- Wind information and various messages.

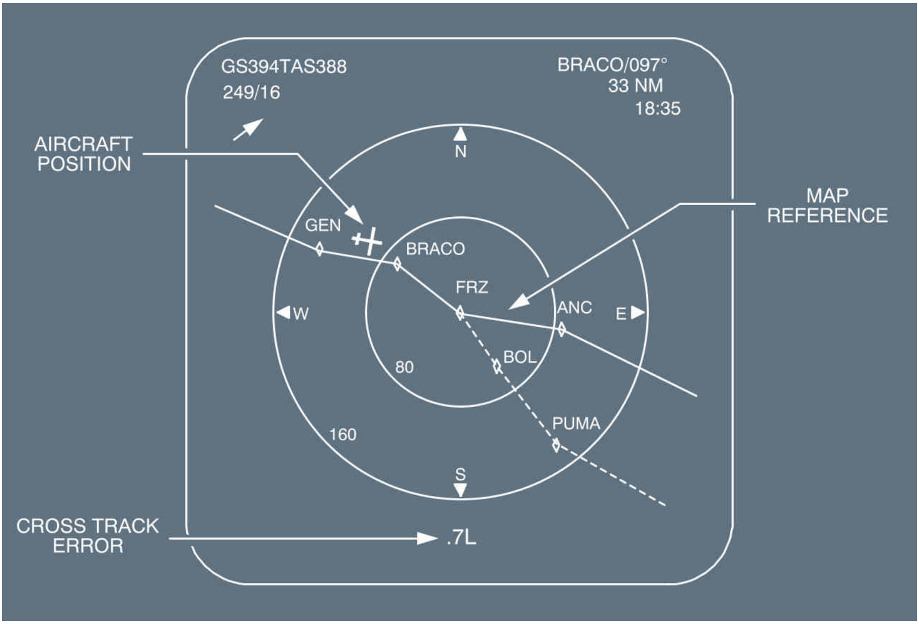
ARC MODE

Ident.: DSC-22_10-40-50-00010124.0001001 / 14 MAY 12
Applicable to: ALL


True wind
(direction/velocity)
Heading scale
Actual heading
Actual track
Speed change symbol
To waypoint/track
Distance
Estimated time
overhead
Wind arrow
GS394TAS388
249/16
LMG/004°
93 NM
18:35
35
0
1
2
3
4
34
33
OL
Waypoint
• To waypoint (white)
• Tuned stations (blue)
• o DME or TACAN
• + VOR
• VOR/DME
• NDB
VOR 1 needle
CDN
AMB
ANG
AVD
240
240
CGC
LMG
160
160
TILT
−3.0
CAL
RADAR
• Tilt 3 down
• Manual gain
Chrono display
2'30"
BDX
VOR 1
• Needle symbol
• Identifier
• Tuning
−automatic (no symbol)
−manual on MCDU (M)
−manual on RMP (R)
VOR1
CGC M
103 NM
.2R
AGN
RADAR returns
(possible on all ND
modes except PLAN
mode)
Optional data display (magenta)
as selected on EFIS control panel
Cross−track error
displayed value

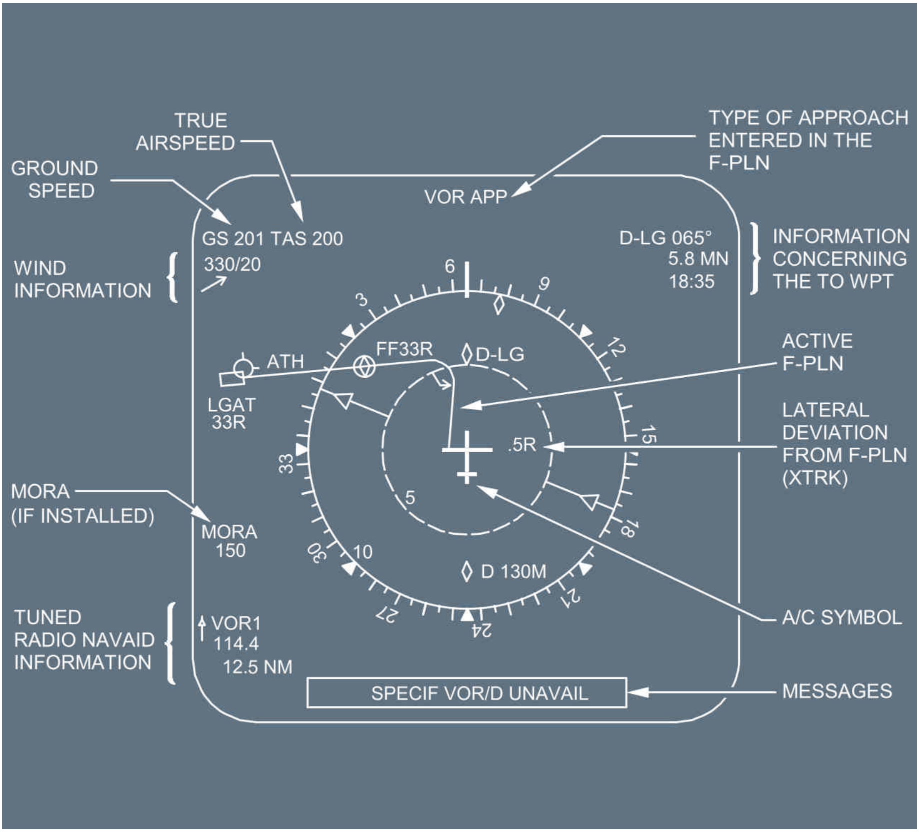
PLAN MODE

Ident.: DSC-22_10-40-50-00010125.0001001 / 01 OCT 12
Applicable to: ALL


GS394TAS388
249/16
BRACO/097°
33 NM
18:35
AIRCRAFT POSITION
MAP REFERENCE
N
W
E
S
GEN
BRACO
FRZ
ANC
BOL
PUMA
80
160
CROSS TRACK ERROR
.7L

ROSE MODES

Ident.: DSC-22_10-40-50-00010126.0022001 / 09 MAR 15
Applicable to: ALL


TRUE AIRSPEED
GROUND SPEED
TYPE OF APPROACH ENTERED IN THE F-PLN
VOR APP
GS 201 TAS 200
330/20
D-LG 065°
5.8 MN
18:35
INFORMATION CONCERNING THE TO WPT
WIND INFORMATION
6
9
3
12
15
33
30
18
21
24
27
FF33R
D-LG
ATH
LGAT
33R
ACTIVE F-PLN
.5R
5
10
LATERAL DEVIATION FROM F-PLN (XTRK)
MORA (IF INSTALLED)
MORA
150
D 130M
A/C SYMBOL
TUNED RADIO NAVAID INFORMATION
VOR1
114.4
12.5 NM
SPECIF VOR/D UNAVAIL
MESSAGES

FLIGHT PLAN DISPLAY COLORS

1 Ident.: DSC-22_10-40-50-00010127.0005001 / 04 SEP 18
Applicable to: MSN 11531

F-PLN	Color
Primary Flight Plan	- Managed mode: Steady green - Selected mode: Dashed green
Track line	Steady green
Alternate flight plan	Dashed blue
Missed approach	Steady blue
Offset flight plan	Steady green (Original flight plan: Dashed green)
Temporary flight plan	Dashed yellow
Engine-out SID (not inserted)	Steady yellow
Secondary flight plan	Steady dimmed white
Abeam/Radial	Dashed blue
FLS beam	Dashed magenta

FLIGHT PLAN DISPLAY COLORS

Ident.: DSC-22_10-40-50-00010127.0001001 / 17 AUG 10
Applicable to: MSN 04827-04860

F-PLN	Color
Primary Flight Plan	- Managed mode: Steady green - Selected mode: Dashed green
Track line	Steady green
Alternate flight plan	Dashed blue
Missed approach	Steady blue
Offset flight plan	Steady green (Original flight plan: Dashed green)
Temporary flight plan	Dashed yellow
Engine-out SID (not inserted)	Steady yellow
Secondary flight plan	Steady dimmed white

FLIGHT PLAN DISPLAY COLORS

Ident.: DSC-22_10-40-50-00010127.0002001 / 17 AUG 10
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

F-PLN	Color
Primary Flight Plan	- Managed mode: Steady green - Selected mode: Dashed green
Track line	Steady green
Alternate flight plan	Dashed blue
Missed approach	Steady blue
Offset flight plan	Steady green (Original flight plan: Dashed green)

Continued on the following page

Continued from the previous page

F-PLN	**Color**
Temporary flight plan	Dashed yellow
Engine-out SID (not inserted)	Steady yellow
Secondary flight plan	Steady dimmed white
Abeam/Radial	Dashed blue

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GENERAL

Ident.: DSC-22_10-50-10-00020369.0001001 / 17 MAR 17
Applicable to: ALL

This chapter shows the speed symbols and definitions.
The source of the computation is also given, when applicable.

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CHARACTERISTIC SPEEDS

1 Ident.: DSC-22_10-50-20-00020370.0027001 / 03 DEC 19
Applicable to: MSN 11531

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to the FMS weight data (for PFD/MCDU display consistency and accuracy purposes).
VLS (of normal landing configuration: CONF 3 or FULL), F, S and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors :

$V2 = 1.2 \times 0.94\ VS1g = 1.13\ VS1g$

$VREF = 1.3 \times 0.94\ VS1g = 1.23\ VS1g$

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320 and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC, based on FMS, and corresponds to 1.13 VS during takeoff, or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.
In landing configurations (CONF 3 and FULL) VLS is always equal to, or greater than, VMCL.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to 1.26 VS of CONF 1 + F, and limited to a minimum of 1.1 VMCA and VMCL + 15 kt.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to 1.23 VS of clean configuration, and limited to a minimum of VMCL + 20 kt.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 15 000 ft equal to 1.5 × weight (metric tons) +110

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0004001 / 03 DEC 19

2 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to the FMS weight data (for PFD/MCDU display consistency and accuracy purposes).
VLS (of normal landing configuration: CONF 3 or FULL), F, S and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors :
V2 = 1.2 × 0.94 VS1g = 1.13 VS1g
VREF = 1.3 × 0.94 VS1g = 1.23 VS1g

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320 and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC, based on FMS, and corresponds to 1.13 VS during takeoff, or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.
In landing configurations (CONF 3 and FULL) VLS is always equal to, or greater than, VMCL.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to 1.26 VS of CONF 1 + F, and limited to a minimum of 1.1 VMCA and VMCL + 15 kt.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to 1.23 VS of clean configuration, and limited to a minimum of VMCL + 20 kt.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 2 × weight (metric tons) +85
Above 20 000 ft, add 1 kt per 1 000 ft

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0026001 / 03 DEC 19
Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to the FMS weight data (for PFD/MCDU display consistency and accuracy purposes), and aerodynamic data as a backup.
VLS (of normal landing configuration: CONF 3 or FULL), F, S, and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors:

- V2 = 1.2 × 0.94 VS1g = 1.13 VS1g
- VREF = 1.3 × 0.94 VS1g = 1.23 VS1g

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320, and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC based on FMS weight data, and on aerodynamic data as a backup, and corresponds to 1.13 VS during takeoff or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to about 1.19 VS of CONF 1 + F.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to about 1.25 VS of clean configuration.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 1.5 × weight (metric tons) +110
Above 20 000 ft, add 1 kt per 1 000 ft

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0007001 / 03 DEC 19
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to the FMS weight data (for PFD/MCDU display consistency and accuracy purposes), and aerodynamic data as a backup.
VLS (of normal landing configuration: CONF 3 or FULL), F, S, and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors:

- V2 = 1.2 × 0.94 VS1g = 1.13 VS1g
- VREF = 1.3 × 0.94 VS1g = 1.23 VS1g

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320, and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC based on FMS weight data, and on aerodynamic data as a backup, and corresponds to 1.13 VS during takeoff or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to about 1.22 VS of CONF 1 + F.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to about 1.23 VS of clean configuration.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 1.5 × weight (metric tons) +110
Above 20 000 ft, add 1 kt per 1 000 ft

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0012001 / 03 DEC 19
Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to the FMS weight data (for PFD/MCDU display consistency and accuracy purposes), and aerodynamic data as a backup.
VLS (of normal landing configuration: CONF 3 or FULL), F, S, and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors:
- V2 = 1.2 × 0.94 VS1g = 1.13 VS1g
- VREF = 1.3 × 0.94 VS1g = 1.23 VS1g

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320, and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC based on FMS weight data, and on aerodynamic data as a backup, and corresponds to 1.13 VS during takeoff or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to about 1.18 VS to 1.22 VS of CONF 1 + F.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to about 1.22 VS to 1.25 VS of clean configuration.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 2 × weight (metric tons) +85
Above 20 000 ft, add 1 kt per 1 000 ft

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0008001 / 03 DEC 19
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to aerodynamic data.
VLS (of normal landing configuration: CONF 3 or FULL), F, S and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors :
V2 = 1.2 × 0.94 VS1g = 1.13 VS1g
VREF = 1.3 × 0.94 VS1g = 1.23 VS1g

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320 and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC, based on aerodynamic data, and corresponds to 1.13 VS during takeoff, or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to about 1.26 VS of CONF 1 + F.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to about 1.23 VS of clean configuration.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 2 × weight (metric tons) +85
Above 20 000 ft, add 1 kt per 1 000 ft

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0005001 / 03 DEC 19

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to aerodynamic data.
VLS (of normal landing configuration: CONF 3 or FULL), F, S and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors :

V2 = 1.2 × 0.94 VS1g = 1.13 VS1g
VREF = 1.3 × 0.94 VS1g = 1.23 VS1g

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320 and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC, based on aerodynamic data, and corresponds to 1.13 VS during takeoff, or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to about 1.19 VS of CONF 1 + F.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to about 1.25 VS of clean configuration.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 1.5 × weight (metric tons) +110
Above 20 000 ft, add 1 kt per 1 000 ft

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0001001 / 03 DEC 19
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to aerodynamic data.
VLS (of normal landing configuration: CONF 3 or FULL), F, S and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors :
V2 = 1.2 x 0.94 VS1g = 1.13 VS1g
VREF = 1.3 x 0.94 VS1g = 1.23 VS1g

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320 and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC, based on aerodynamic data, and corresponds to 1.13 VS during takeoff, or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to about 1.23 VS of CONF 1 + F.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to about 1.29 VS of clean configuration.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 2 × weight (metric tons) +80
Above 20 000 ft, add 1 kt per 1 000 ft

CHARACTERISTIC SPEEDS

Ident.: DSC-22_10-50-20-00020370.0002001 / 03 DEC 19

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240

The characteristic speeds displayed on the PFD are computed by the Flight Augmentation Computer (FAC), according to aerodynamic data.
VLS (of normal landing configuration: CONF 3 or FULL), F, S and Green Dot speeds are also displayed on the MCDU TAKEOFF and/or APPR pages.
The speeds displayed by the MCDU are computed by the FMS, based on the aircraft gross weight (which is computed according to the entered ZFW and the FOB), or the predicted gross weight (for approach or go-around).

VS : Stalling speed.
Not displayed.
For a conventional aircraft, the reference stall speed, VSmin, is based on a load factor that is less than 1 g. This gives a stall speed that is lower than the stall speed at 1 g. All operating speeds are expressed as functions of this speed (for example, VREF = 1.3 VSmin).
Because aircraft of the A320 family have a low-speed protection feature (alpha limit) that the flight crew cannot override, Airworthiness Authorities have reconsidered the definition of stall speed for these aircraft.
All the operating speeds must be referenced to a speed that can be demonstrated by flight tests. This speed is designated VS1g.

Airworthiness Authorities have agreed that a factor of 0.94 represents the relationship between VS1g for aircraft of the A320 family and VSmin for conventional aircraft types. As a result, Authorities allow aircraft of the A320 family to use the following factors :
$V2 = 1.2 \times 0.94\ VS1g = 1.13\ VS1g$
$VREF = 1.3 \times 0.94\ VS1g = 1.23\ VS1g$

These speeds are identical to those that the conventional 94 % rule would have defined for these aircraft. The A318, A319, A320 and A321 have exactly the same maneuver margin that a conventional aircraft would have at its reference speeds.
The FCOM uses VS for VS1g.

VLS : Lowest Selectable Speed.
Represented by the top of an amber strip along the airspeed scale on the PFD.
Computed by the FAC, based on aerodynamic data, and corresponds to 1.13 VS during takeoff, or following a touch and go.
Becomes 1.23 VS, after retraction of one step of flaps.
Becomes 1.28 VS, when in clean configuration.

Note: *If in CONF 0 VLS were 1.23 VS (instead of 1.28 VS), the alpha protection strip would hit the VLS strip on the PFD.*

Above 20 000 ft, VLS is corrected for Mach effect to maintain a buffet margin of 0.2 g.
In addition, VLS increases when the speedbrakes are extended.

F : Minimum speed at which the flaps may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 2 or CONF 3.
Represented by “F” on the PFD speed scale. Equal to about 1.18 VS to 1.22 VS of CONF 1 + F.

S : Minimum speed at which the slats may be retracted at takeoff.
In approach, used as a target speed when the aircraft is in CONF 1.
Represented by “S” on the PFD airspeed scale.
Equal to about 1.22 VS to 1.25 VS of clean configuration.

O : Green dot speed.
Engine-out operating speed in clean configuration.
(Best lift-to-drag ratio speed).
Also corresponds to the final takeoff speed.
Represented by a green dot on the PFD scale.
Below 20 000 ft equal to 2 × weight (metric tons) +85
Above 20 000 ft, add 1 kt per 1 000 ft

Intentionally left blank

LIMIT SPEEDS

Ident.: DSC-22_10-50-30-00020383.0001001 / 17 MAR 17
Applicable to: ALL

VA	:	Maximum design maneuvering speed. This corresponds to the maximum structural speed permitted for full control deflection, if alternate or direct law is active.
VMCG	:	Minimum speed, on the ground during takeoff, at which the aircraft can be controlled by only using the primary flight controls, after a sudden failure of the critical engine, the other engine remaining at takeoff thrust.
VMCA	:	Minimum control speed in flight at which the aircraft can be controlled with a maximum bank of 5 °, if one engine fails, the other engine remaining at takeoff thrust (takeoff flap setting, gear retracted).
VMCL	:	Minimum control speed in flight, at which the aircraft can be controlled with a maximum bank of 5 °, if one engine fails, the other engine remaining at takeoff thrust (approach flap setting).
VFE	:	Maximum speed for each flap configuration.
VLE	:	Maximum speed with landing gear extended.
VLO	:	Maximum speed for landing gear operation.
VMO	:	Maximum speed.
VFE NEXT	:	Maximum speed for the next (further extended) flap lever position.

Intentionally left blank

PROTECTION SPEEDS

Ident.: DSC-22_10-50-40-00020382.0001001 / 17 MAR 17
Applicable to: ALL

Vα PROT, Vα MAX and VSW are computed by the FAC, based on aerodynamic data. They are only used for display on the PFD, and not for flight control protection (the activation of the protections is computed by the ELAC).

Vα PROT	:	Angle of attack protection speed. Corresponds to the angle of attack at which the angle of attack protection becomes active. Represented by the top of a black and amber strip along the PFD speed scale, in normal law.
Vα MAX	:	Maximum angle of attack speed. Corresponds to the maximum angle of attack that may be reached in pitch normal law. Represented by the top of a red strip along the PFD speed scale, in normal law.
VSW	:	Stall warning speed. Represented by a red and black strip along the speed scale when the flight control normal law is inoperative.
VMAX	:	Represented by the bottom of a red and black strip along the speed scale. Determined by the FAC according to the aircraft configuration. Is equal to VMO (or speed corresponding to MMO), VLE or VFE.

Intentionally left blank

OTHER SPEEDS

Ident.: DSC-22_10-50-50-00020384.0004001 / 05 DEC 17

1 **Applicable to: MSN 01143-01459, 02014, 02734, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

V1	:	The highest speed, during takeoff, at which the flight crew has a choice between continuing the takeoff or stopping the aircraft. Represented by “1” on the airspeed scale (or the V1 value when it is off the airspeed scale). Inserted manually through the MCDU by the flight crew. Displayed on the MCDU TAKEOFF page.
VR	:	The speed at which the pilot rotates in order to reach V2 at an altitude of 35 ft at the latest after an engine failure. Inserted manually through the MCDU by the flight crew. Displayed on the MCDU TAKEOFF page.
V2	:	Takeoff safety speed that the aircraft attains at the latest at an altitude of 35 ft with one engine failed, and maintains during the second segment of the takeoff. Represented by the SPEED SELECT symbol on the speed scale. Minimum value equal to 1.13 VS for the corresponding configuration. Inserted manually through the MCDU by the flight crew. Displayed on the MCDU TAKEOFF page.
VREF	:	Reference speed used for normal final approach. Equal to 1.23 × VS of CONF FULL. Displayed on the MCDU APPR page, if landing is planned in CONF FULL (VLS CONF FULL).
VAPP	:	Final approach speed. Displayed on MCDU APPR page. Calculated by the FMGCs. Represents : VAPP = VLS + wind correction The wind correction is limited to a minimum of 5 kt and a maximum of 15 kt. The flight crew may modify VAPP through the MCDU. - During autoland or when A/THR is on or in case of ice accretion or gusty crosswind greater than 20 kt, VAPP must not be lower than VLS +5 kt.

OTHER SPEEDS

Ident.: DSC-22_10-50-50-00020384.0002001 / 28 MAY 20

2 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

V1 : The highest speed, during takeoff, at which the flight crew has a choice between continuing the takeoff or stopping the aircraft.
Represented by “1” on the airspeed scale (or the V1 value when it is off the airspeed scale).
Inserted manually through the MCDU by the flight crew.
Displayed on the MCDU TAKEOFF page.

VR : The speed at which the pilot rotates in order to reach V2 at an altitude of 35 ft at the latest after an engine failure.
Inserted manually through the MCDU by the flight crew.
Displayed on the MCDU TAKEOFF page.

V2 : Takeoff safety speed that the aircraft attains at the latest at an altitude of 35 ft with one engine failed, and maintains during the second segment of the takeoff.
Represented by the SPEED SELECT symbol on the speed scale.
Minimum value equal to 1.13 VS for the corresponding configuration.
Inserted manually through the MCDU by the flight crew.
Displayed on the MCDU TAKEOFF page.

VREF : Reference speed used for normal final approach.
Equal to 1.23 x VS of CONF FULL.
Displayed on the MCDU APPR page, if landing is planned in CONF FULL (VLS CONF FULL).

VAPP : Final approach speed.
Displayed on MCDU APPR page.
Calculated by the FMGCs.
Represents : VAPP = VLS + wind correction.
The wind correction is limited to a minimum of 5 kt and a maximum of 15 kt.
The flight crew may modify VAPP through the MCDU.

- During autoland or when A/THR is on or in case of ice accretion or gusty crosswind greater than 20 kt, VAPP must not be lower than VLS +5 kt.
- For landing in configuration 3 with ice accretion VAPP must not be lower than VLS +10 kt.

OTHER SPEEDS

Ident.: DSC-22_10-50-50-00020384.0006001 / 05 DEC 17
Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

V1	The highest speed, during takeoff, at which the flight crew has a choice between continuing the takeoff or stopping the aircraft. Represented by “1” on the airspeed scale (or the V1 value when it is off the airspeed scale). Inserted manually through the MCDU by the flight crew. Displayed on the MCDU TAKEOFF page.
VR	The speed at which the pilot rotates in order to reach V2 at an altitude of 35 ft at the latest after an engine failure. Inserted manually through the MCDU by the flight crew. Displayed on the MCDU TAKEOFF page.
V2	Takeoff safety speed that the aircraft attains at the latest at an altitude of 35 ft with one engine failed, and maintains during the second segment of the takeoff. Represented by the SPEED SELECT symbol on the speed scale. Minimum value equal to 1.13 VS for the corresponding configuration. Inserted manually through the MCDU by the flight crew. Displayed on the MCDU TAKEOFF page.
VREF	Reference speed used for normal final approach. Equal to 1.23 × VS of CONF FULL. Displayed on the MCDU APPR page, if landing is planned in CONF FULL (VLS CONF FULL).
VAPP	Final approach speed. Displayed on MCDU APPR page. Calculated by the FMGCs. Represents : VAPP = VLS + wind correction. The wind correction is limited to a minimum of 5 kt and a maximum of 15 kt. The flight crew may modify VAPP through the MCDU. - When A/THR is ON or in case of ice accretion or gusty crosswing greater than 20 kt, VAPP must not be lower than VLS +5 kt. - When autoland in CONF FULL is scheduled for the approach, add an increment of +7 kt to the VAPP displayed on the PERF APPR page.

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AIRCRAFT SYSTEMS

AUTO FLIGHT - FLIGHT MANAGEMENT

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DSC-22_20-20-05 General

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DSC-22_20-100-20 FMS2 HONEYWELL Temporary Abnormal Behaviors

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Localization Title	Toc Index	ID	Reason
DSC-22_20-PLP-TOC FMS2 Honeywell		1	Documentation update: Deletion of the "00000570.0015001 ARRIVAL Pages" documentary unit.
			Documentation update: Deletion of the "00000570.0009001 ARRIVAL Pages" documentary unit.
DSC-22_20-20-60 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-22_20-20-60 FLS Beam Computation - General	B	2	Documentation update: Addition of "FLS Beam Computation - General" documentary unit
DSC-22_20-20-60 FLS Beam Computation - Baro Correction of the FLS Vertical Deviation	B	3	Documentation update: Addition of "FLS Beam Computation - Baro Correction of the FLS Vertical Deviation" documentary unit
DSC-22_20-20-60 Temperature Correction of the FLS Vertical Deviation	B	4	Documentation update: Addition of "Temperature Correction of the FLS Vertical Deviation" documentary unit
DSC-22_20-30-10-15 Inserting an Airway with "Via" - Successive Airway Segments from a Waypoint	C	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-22_20-50-10-25 ARRIVAL Pages	R	16	Documentation update: Addition of "ARRIVAL Pages" documentary unit
DSC-22_20-50-10-25 ARRIVAL Pages	R	17	Documentation update: Addition of "ARRIVAL Pages" documentary unit
DSC-22_20-50-10-25 Alternate Page	S	19	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-22_20-50-10-25 GPS Monitor Page ◁	AK	38	Correction of a typo error.
			Wording enhancement. No technical change.
			Addition of information about SBAS (if installed) mode in the GPS MONITOR page.
DSC-22_20-50-20-35 MCDU Message List	A	1	Documentation update: Addition of "MCDU Message List" documentary unit
DSC-22_20-60-40 Engine-Out Conditions	E	3	**Wording enhancement. No technical change.**
			Update of the content in order to take into account the engine-out conditions for A318 and A320neo Family with PW engines.
DSC-22_20-65 Description - FMGS	B	1	**Layout improvement. No technical change.**
			Addition of a note to describe the behavior of the system in the case the approach is defined in magnetic references in the FMS navigation data base whereas the chart of the airport is defined in true references.
DSC-22_20-70	D	6	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

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Localization Title	Toc Index	ID	Reason
Wind Data - Procedure to Insert Wind Data			
DSC-22_20-85 QNH Use for Aircraft NOT Equipped with QFE Option	B	1	Documentation update: Addition of "QNH Use for Aircraft NOT Equipped with QFE Option" documentary unit
DSC-22_20-85 QNH Use for Aircraft Equipped with QFE Option	B	4	Documentation update: Addition of "QNH Use for Aircraft Equipped with QFE Option" documentary unit
DSC-22_20-100-20 Loss of FMS Predictions in Low Density of Airports	V	7	Documentation update: Addition of "Loss of FMS Predictions in Low Density of Airports" documentary unit
DSC-22_20-20-10 GPS Position	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-10 Position Monitor	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-10 Navigation Modes	H	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-20 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-20 Estimated Position Uncertainty	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-30 DME	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-30 Manual Tuning	I	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-20-40 Alignment of Inertial Reference System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 Flight Plan Construction	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 Flight Plan Capacity	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-05 Lateral Revisions	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Temporary F-PLN (TMPY)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-30-10-15 Inserting an Airway with "Via" - General	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting an Airway with "Via" - The Pilot Wishes to Insert One Airway Segment to an Ending Waypoint	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting an Airway with "Via" - Flight Plan Insertion	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - General	D	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Waypoint Identification	D	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Waypoint Inserted Directly in the Flight Plan	D	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Along Track Waypoint Insertion	D	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Waypoint Inserted Through the Use of "Next Waypoint"	D	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Inserting a Waypoint - Latitude/Longitude Crossing Waypoint Insertion	D	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - General	E	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - Inserting a Radial Intercept Waypoint	E	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - Inserting a Circle Intercept Waypoint	E	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Fix Info - Inserting an Abeam Intercept Waypoint	E	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-30-10-15 Inserting a New Destination	F	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - General	G	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - Hold to Fix (HF)	G	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - Hold to Altitude (HA)	G	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - Procedure to Insert a Hold (Hold with Manual Termination)	G	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Holding Pattern - Procedure to Delete a Hold (Hold with Manual Termination)	G	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Offset - General	H	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Offset - Inserting an Offset	H	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Offset - Manual Cancellation of an Offset	H	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Alternate Function - General	I	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Alternate Function - Review and Selection of Alternate Airport	I	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Enable ALTN	J	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - General	K	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Procedure for DIR TO Waypoint	K	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Particular Cases for Use of DIR TO	K	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Procedure for DIR TO/ABEAM	K	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Procedure for DIR TO/Intercept	K	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 OVFY (Overfly) Key	L	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 POSITION update at	M	35	Effectivity update: The information now also applies to MSN 02014, 03002, 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-10-15 Update at	N	36	Effectivity update: The information no longer applies to MSN 02014, 03002, 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_20-30-20-05 Flight Phases	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-05 Vertical Revision	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-05 Vertical Constraints (Speed, Altitude, Time)	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Required Time of Arrival (RTA) - General	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Required Time of Arrival (RTA) - Entering a Required Time of Arrival	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - General	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Trip Wind and Temperature During F-PLN Initialization	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Wind and Temperature During F-PLN Initialization	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Cruise Winds and Temperatures	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-30-20-25 Wind - Temperature - QNH - Effect of Wind Entries On Optimum Flight Level	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Descent Winds	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Alternate Wind	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Wind - Temperature - QNH - Entering the Approach Wind Temperature and QNH	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Constant Mach Segment - General	D	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-30-20-25 Constant Mach Segment - Entering a Constant Mach Segment	D	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-10 Optimization	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Computation of Predictions	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Predictions Displayed on the Navigation Display	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Examples of MCDU Predictions	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Other Computations - Engine-out Case	K	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-40-30 Other Computations - Recommended Maximum Altitude (REC MAX)	K	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-45-10	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-45-10 Associated Alerts	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-50-10-25 MCDU MENU Page	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 INIT A Page	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Route Selection Page	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 IRS INIT Page	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 WIND Pages	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 INIT FUEL PRED Page	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Fuel Prediction Page	I	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Flight Plan Pages	J	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Fix Info Page	L	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Offset Page	M	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Airways Page	N	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Departure Pages	O	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Hold Pages	P	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Direct TO Page	Q	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Alternate Page	S	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Route Selection Page for Alternate	T	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 VERTICAL REVISION Pages	U	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Step ALTS Page	V	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 RTA Page	W	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Data Index Pages	X	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-50-10-25 Waypoint/Stored Waypoint/New Waypoint Pages	Y	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 NAVAID/Stored NAVAID/New NAVAID Pages	Z	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Runways/Stored Runways/New Runway Pages	AA	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Route/Stored Route/New Route Pages	AB	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Aircraft Status Page	AC	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 P/N XLOAD Page	AD	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 P/N Status Pages	AE	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Duplicate Names Page	AF	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Position Monitor Page	AG	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Position Monitor and Position Frozen Page	AH	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Selected NAVAIDS Page	AI	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 IRS Monitor Page	AJ	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 GPS Monitor Page ◁	AK	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Closest Airports Pages	AL	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Equi-Time Point Page	AM	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Print Function Pages	AN	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 ACARS Function Page	AO	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 ACARS Function Page 1	AP	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-50-10-25 Uplink TO Data REQ Pages	AQ	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Uplink MAX TO Data Pages	AR	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Uplink FLX TO Data Pages	AS	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 ACARS Function Page 2	AT	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Page	AU	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Takeoff Page	AV	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Climb Page	AW	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Cruise Page	AX	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Descent Page	AY	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF APPR Page	AZ	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PERF Go Around Page	BA	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 PROG Pages	BB	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Predictive GPS Pages	BC	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Report Page	BD	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Radio NAV Page	BE	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Secondary Pages	BF	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 Back Up NAV Pages	BG	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 General	BH	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-10-25 CRZ TEMP Page	BH	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-50-20-35 MCDU Message List	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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DSC-22_20-50-30 MCDU Data Format List	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-10 MCDU Altitude Predictions - In Flight	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-10 Target Altitude on PFD	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-20 Clearing Data Fields	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 En Route Diversion with Several Airports Available	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 Diversion Preparation on the Secondary Flight Plan	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 Miscellaneous	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 Execution of the Diversion	G	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-30 Diversion to the Alternate Airport	H	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Flight Management Part	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out Conditions	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out SID - General	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out SID - Before the Diversion Point	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out in CLB Phase (above acceleration altitude) - Aircraft is Flying	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out in Cruise Phase	H	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-40 Engine-Out in Descent Phase	I	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-50 Secondary Flight Plan	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-60 Stored Route Function	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_20-60-70 Report Page Access	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-80 Closest Airports	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-90 How to Insert a Time Marker	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-100 Step Climb/Step Descent	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-120 Equitime Point	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-120 Equitime Point Entry	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Selection - FM F-PLN Download in MCDU	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Selection - Example of Downloaded F-PLN	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - AP and A/THR	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Navigation Monitoring	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Flight Planning	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Waypoint Insertion	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Waypoint Deletion	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Overfly Insertion/Deletion	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Direct to a Waypoint	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-60-130 Back Up NAV Operation - CLR Waypoint/Discontinuity	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Approaches	C	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - End of Descent	C	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - Non ILS Approaches	C	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-60-130 Back Up NAV Operation - ILS Approaches	C	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Flight Plan Initialization Through ACARS	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Takeoff Data - General	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Takeoff Data - Procedure to Insert Uplink Takeoff Data	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Wind Data - Request for Wind Data	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-70 Wind Data - Procedure to Insert Wind Data	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Print Function	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Print Function Access	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 On Ground Before Engine Start	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Example (FM Preflight Report)	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 In Flight	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Example (FM Inflight Report)	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_20-80 Reaching the Gate After Landing	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-80 Example (FM Postflight Report)	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-85 QNH Use for Aircraft NOT Equipped with QFE Option	B	2	Effectivity update: The information no longer applies to MSN 02321.
DSC-22_20-85 QNH Use for Aircraft NOT Equipped with QFE Option	B	3	Effectivity update: The information now also applies to MSN 02321, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - FM Reset	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - FM Resynchronization	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - FMGC Status During a Reset/Resynchronization	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - Single Reset or Dual Reset with Autorecovery	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - Single Latch	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGS Reset and Resynchronization - Dual Reset with Loss of Data and Autorecovery	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Automatic FMGC Reset and Resynchronization - Dual Latch	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-90-10 Manual FMGS Reset - General	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-100-20 Loss Of FMS Position Further To IRS Loss	E	1	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.

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Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-22_20-100-20 Erroneous Fuel Prediction In The Case Of Descent With Two Altitude Constraints	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-100-20 Undue AP Disconnection or Reversion to V/S during Climb and Descent	H	3	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_20-100-20 Erroneous Trajectory while in HDG (TRK) Mode during Procedures with a Turn Direction on a Leg with an Altitude Termination	O	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-100-20 No Engagement of the PRESEL SPD TARGET in Climb	R	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_20-100-20 Erroneous CF Leg Computation following FMS NEW RUNWAY with LS IDENT creation	S	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

GENERAL

Ident.: DSC-22_20-10-00010128.0001001 / 17 AUG 10
Applicable to: ALL

The flight management and guidance system (FMGS) performs navigation functions and lateral and vertical flight planning functions. It also computes performance parameters and guides the aircraft along a preplanned route.

The Flight Management (FM) part controls the following functions:
- Navigation
- Management of flight planning
- Prediction and optimization of performance
- Management of navigation radios
- Management of displays

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NAVIGATION

Ident.: DSC-22_20-20-05-00010129.0001001 / 17 AUG 10
Applicable to: ALL

Essential navigation functions are:
- Computation of position
- Evaluation of position accuracy
- Radio navigation tuning
- Alignment of Inertial Reference System.

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GENERAL

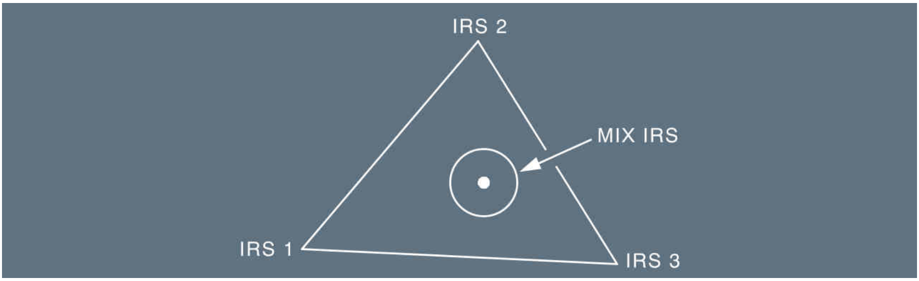
Ident.: DSC-22_20-20-10-00010130.0002001 / 16 MAR 11
Applicable to: ALL

Each FMGC computes its own aircraft position (called the "FM position") from a MIX IRS position and a computed radio position, or a GPS position.
The FMGS selects the most accurate position, considering the estimated accuracy and integrity of each positioning equipment.
GPS/INERTIAL is the basic navigation mode, provided GPS data is valid and successfully tested. Otherwise, navaids plus inertial or inertial only are used. (*Refer to DSC-22_20-20-10 Navigation Modes*).

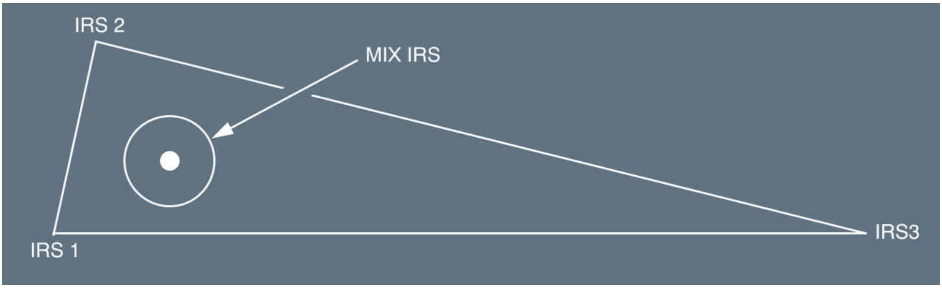
MIX IRS POSITION

Ident.: DSC-22_20-20-10-00010131.0002001 / 03 NOV 22
Applicable to: ALL

Each FMGC receives a position from each of the three IRS, and computes a mean-weighted average called the “MIX IRS” position:



- If one of the IRS drifts abnormally, the MIX IRS position uses an algorithm that decreases the influence of the drifting IRS within the MIX IRS position



- If one of the IRS fails, each FMGC uses only one IRS (onside IRS or IRS3). Each IRS position and inertial speed are continuously tested. If the test fails, the corresponding IRS is rejected.
- When each IRS position is compared to the FM position, and the difference is more than a threshold function of time, the CHECK IRS 1(2)(3)/FM POSITION message is displayed on the MCDU.

GPS POSITION

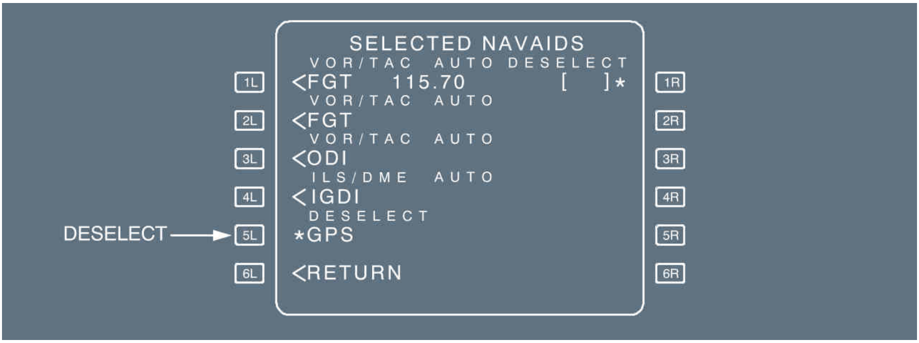
Ident.: DSC-22_20-20-10-00010132.0002001 / 23 JUN 15

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Each IRS computes a mixed IRS/GPS position called the GPIRS position. For this, each IRS can independently select their GPS source in order to maximize the availability of GPS data.
Of the three GPIRS positions that each FMGC receives, the FMS selects one GPIRS position based on a figure of merit and priority.

The FMS uses the following hierarchy to perform the selection:
- Onside GPIRS position
- GPIRS 3
- Opposite GPIRS position.

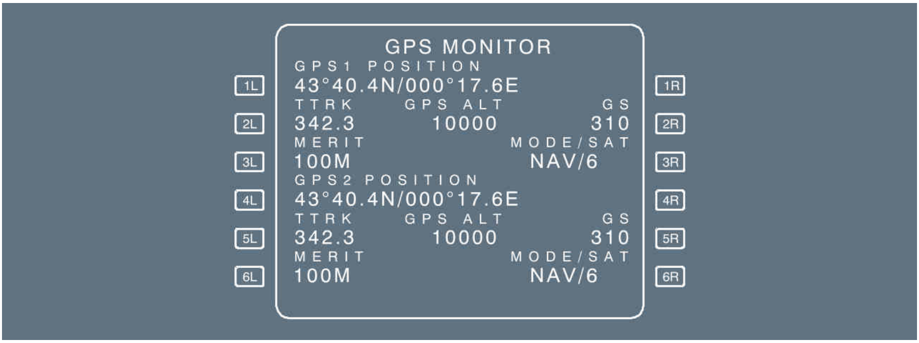
If the GPIRS data does not comply with an integrity criterion that is based on a Horizontal Integrity Limit (HIL) and on the automatic detection of failed satellites, the FMS rejects the GPS mode and uses the radio position update.
The flight crew can deselect/select the GPS position on the SELECTED NAVAIDS page, if necessary.



```
        SELECTED NAVAIDS
  VOR/TAC    AUTO DESELECT
<FGT    115.70        [   ]*
  VOR/TAC    AUTO
<FGT
  VOR/TAC    AUTO
<ODI
  ILS/DME    AUTO
<IGDI
  DESELECT
*GPS

<RETURN
```

Information about the GPS position is displayed on the GPS MONITOR page.



```
            GPS MONITOR
GPS1  POSITION
43°40.4N/000°17.6E
TTRK       GPS ALT          GS
342.3       10000          310
MERIT                 MODE/SAT
100M                     NAV/6
GPS2 POSITION
43°40.4N/000°17.6E
TTRK       GPS ALT          GS
342.3       10000          310
MERIT                 MODE/SAT
100M                     NAV/6
```

Note: *In nominal case, ADIRU1 selects GPS1 and ADIRU2 selects GPS2. The GPS selection by ADIRU3 depends on the position of the ATT HDG selector switch. If one of the GPS source is rejected by the ADIRUs, all ADIRUs will select the same GPS source. As a result, the data of the GPS that is not selected is dashed on the GPS MONITOR page. The "GPS PRIMARY LOST" message may not be displayed.*

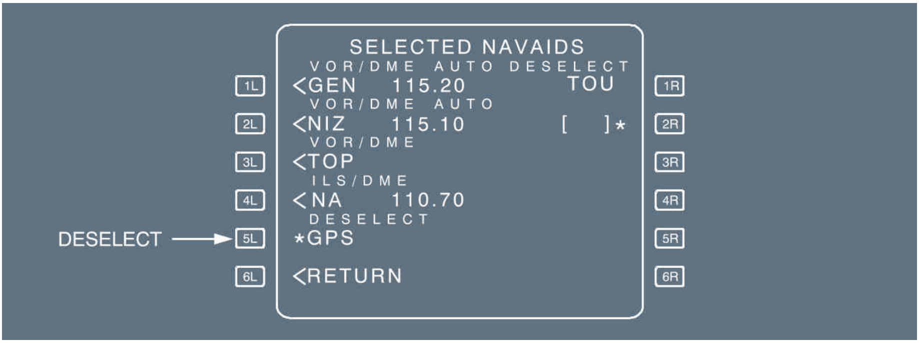
GPS POSITION

Ident.: DSC-22_20-20-10-00010132.0015001 / 23 JUN 15
Applicable to: MSN 04827-04860

Each IRS computes a mixed IRS/GPS position called the GPIRS position. For this, each IRS can independently select their GPS source in order to maximize the availability of GPS data.
Of the three GPIRS positions that each FMGC receives, the FMS selects one GPIRS position based on a figure of merit and priority.

The FMS uses the following hierarchy to perform the selection:
- Onside GPIRS position
- GPIRS 3
- Opposite GPIRS position.

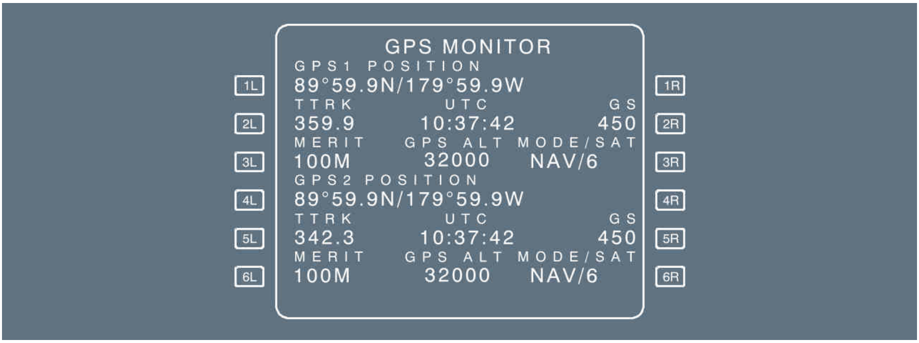
If the GPIRS data does not comply with an integrity criterion that is based on a Horizontal Integrity Limit (HIL) and on the automatic detection of failed satellites, the FMS rejects the GPS mode and uses the radio position update.
The flight crew can deselect/select the GPS position on the SELECTED NAVAIDS page, if necessary.



```
        SELECTED NAVAIDS
  VOR/DME  AUTO  DESELECT
<GEN     115.20        TOU
  VOR/DME  AUTO
<NIZ     115.10      [   ]*
  VOR/DME
<TOP
  ILS/DME
<NA      110.70
  DESELECT
*GPS

<RETURN
```

Information about the GPS position is displayed on the GPS MONITOR page.



```
         GPS MONITOR
GPS1 POSITION
89°59.9N/179°59.9W
TTRK        UTC          GS
359.9     10:37:42      450
MERIT    GPS ALT  MODE/SAT
100M      32000     NAV/6
GPS2 POSITION
89°59.9N/179°59.9W
TTRK        UTC          GS
342.3     10:37:42      450
MERIT    GPS ALT  MODE/SAT
100M      32000     NAV/6
```

Note: *In nominal case, ADIRU1 selects GPS1 and ADIRU2 selects GPS2. The GPS selection by ADIRU3 depends on the position of the ATT HDG selector switch. If one of the GPS source is rejected by the ADIRUs, all ADIRUs will select the same GPS source. As a result, the data of the GPS that is not selected is dashed on the GPS MONITOR page. The "GPS PRIMARY LOST" message may not be displayed.*

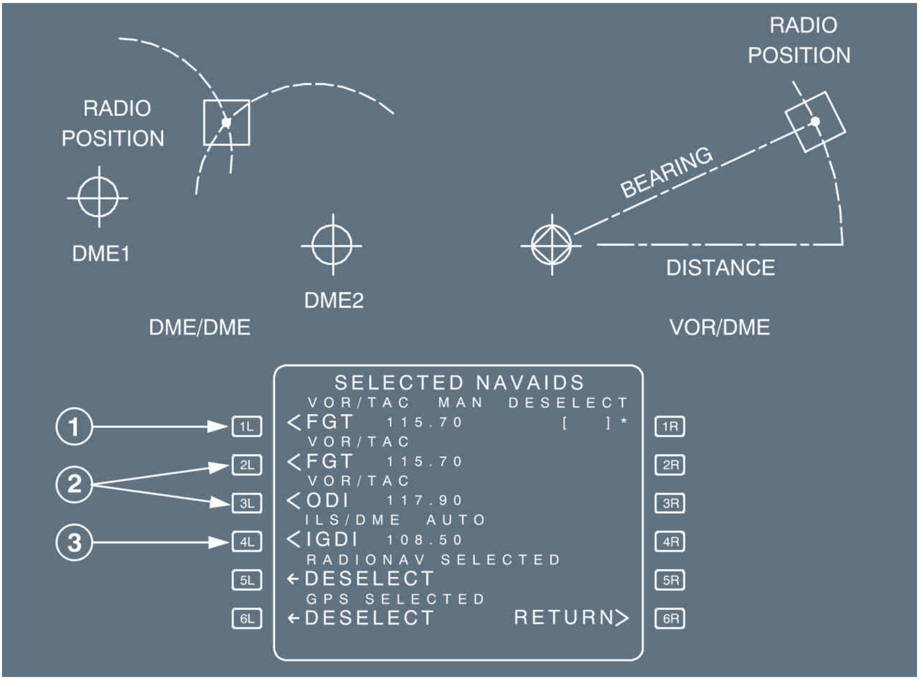
RADIO POSITION

Ident.: DSC-22_20-20-10-00010669.0020001 / 01 OCT 12
Applicable to: ALL

Each FMGC uses onside navaids to compute its own radio position. These navaids are displayed on the SELECTED NAVAIDS page.

The available navaids are:
- DME/DME
- VOR/DME
- LOC
- DME/DME-LOC
- VOR/DME-LOC.

It uses LOC to update the lateral position, using LOC beam during ILS approach.
LOC is also used for quick update, when in GPS/IRS mode.
If one or more navaids fail, each FMGC can use offside navaids to compute the VOR/DME, or the DME/DME radio position.
The radio navaid selection is displayed on the DATA "SELECTED NAVAIDS" page.



```
       SELECTED NAVAIDS
  VOR/TAC    MAN  DESELECT
<FGT    115.70      [   ]*
  VOR/TAC
<FGT    115.70
  VOR/TAC
<ODI    117.90
 ILS/DME   AUTO
<IGDI   108.50
 RADIONAV SELECTED
←DESELECT
 GPS SELECTED
←DESELECT           RETURN>
```

(1) VOR/DME selection (auto or manual) for display (onside VOR).

(2) DMEs automatic selection for DME/DME onside radio position.

(3) ILS selection (auto or manual) for LOC update computation.

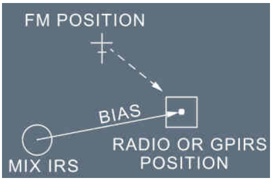
FM POSITION

Ident.: DSC-22_20-20-10-00010135.0017001 / 17 AUG 10
Applicable to: ALL

At flight initialization, each FMGC displays an FM position that is a MIX IRS/GPS position (GPIRS):

- At takeoff, when the FM position is updated to the runway threshold position as stored in the database, possibly corrected by the takeoff shift entered on PERF TO page.
- In flight, the FM position approaches the radio position or the GPS position at a rate depending upon the aircraft altitude.

Note: *The FM position update at takeoff is inhibited when GPS PRIMARY is active.*



BIAS

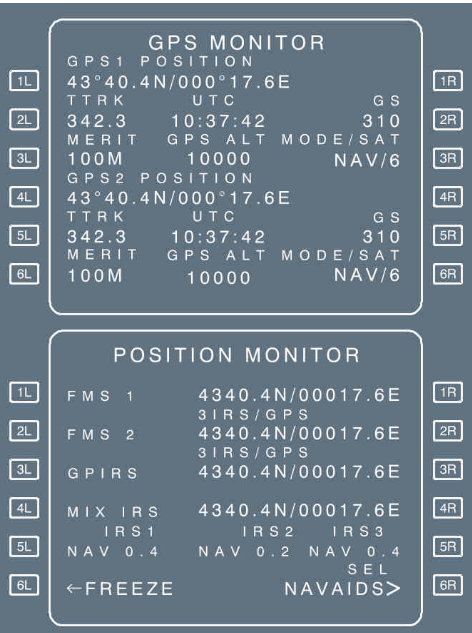
Each FMGC computes a vector from its MIX IRS position to the radio position or GPIRS position. This vector is called the “bias”.
Each FMGC updates its bias continuously as long as a radio position or a GPIRS position is available.
If an FMGC loses its radio/GPIRS position, it memorizes the bias and uses it to compute the FM position, which equals the MIX IRS position plus the bias. Until the radio or the GPIRS position is restored, the bias does not change.
The flight crew can update the FM position manually. This also updates the bias.

POSITION MONITOR

Ident.: DSC-22_20-20-10-00010136.0016001 / 07 MAY 13

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The flight crew may check the position computation using the GPS MONITOR or POSITION MONITOR page.



```
        GPS MONITOR
 GPS1 POSITION
 43°40.4N/000°17.6E
 TTRK        UTC          GS
 342.3    10:37:42       310
 MERIT   GPS ALT   MODE/SAT
 100M     10000        NAV/6
 GPS2 POSITION
 43°40.4N/000°17.6E
 TTRK        UTC          GS
 342.3    10:37:42       310
 MERIT   GPS ALT   MODE/SAT
 100M     10000        NAV/6
```

```
      POSITION MONITOR

 FMS 1        4340.4N/00017.6E
              3IRS/GPS
 FMS 2        4340.4N/00017.6E
              3IRS/GPS
 GPIRS        4340.4N/00017.6E

 MIX IRS      4340.4N/00017.6E
     IRS1         IRS2     IRS3
 NAV 0.4      NAV 0.2  NAV 0.4
                            SEL
 ←FREEZE               NAVAIDS>
```

1L FM POSITION (FMGC1)

2L FM POSITION (FMGC2)

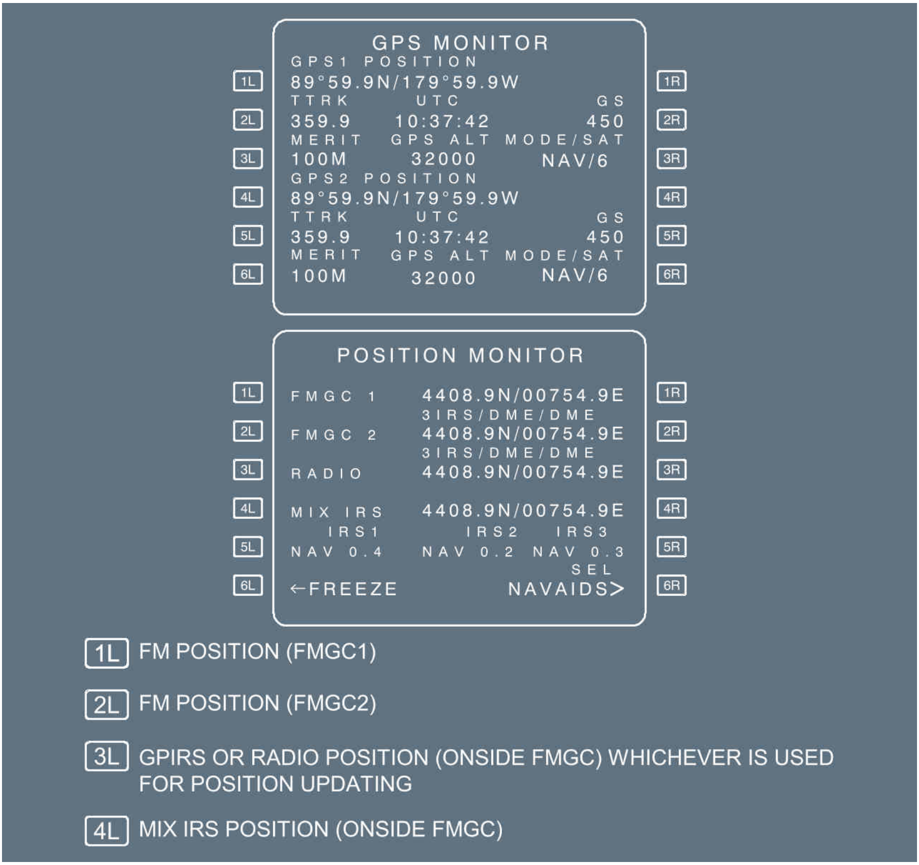
3L GPIRS OR RADIO POSITION (ONSIDE FMGC) WHICHEVER IS USED FOR POSITION UPDATING

4L MIX IRS POSITION (ONSIDE FMGC)

POSITION MONITOR

Ident.: DSC-22_20-20-10-00010136.0019001 / 07 MAY 13
Applicable to: MSN 04827-04860

The flight crew may check the position computation using the GPS MONITOR or POSITION MONITOR page.



```
            GPS MONITOR
1L  GPS1 POSITION                            1R
    89°59.9N/179°59.9W
    TTRK        UTC               GS
2L  359.9     10:37:42           450         2R
    MERIT     GPS ALT    MODE/SAT
3L  100M       32000        NAV/6            3R
    GPS2 POSITION
4L  89°59.9N/179°59.9W                       4R
    TTRK        UTC               GS
5L  359.9     10:37:42           450         5R
    MERIT     GPS ALT    MODE/SAT
6L  100M       32000        NAV/6            6R
```

```
          POSITION MONITOR
1L  FMGC 1       4408.9N/00754.9E            1R
                 3IRS/DME/DME
2L  FMGC 2       4408.9N/00754.9E            2R
                 3IRS/DME/DME
3L  RADIO        4408.9N/00754.9E            3R

4L  MIX IRS      4408.9N/00754.9E            4R
       IRS1         IRS2      IRS3
5L  NAV 0.4      NAV 0.2   NAV 0.3           5R
                               SEL
6L  ←FREEZE              NAVAIDS>            6R
```

1L FM POSITION (FMGC1)

2L FM POSITION (FMGC2)

3L GPIRS OR RADIO POSITION (ONSIDE FMGC) WHICHEVER IS USED FOR POSITION UPDATING

4L MIX IRS POSITION (ONSIDE FMGC)

TAKEOFF UPDATE

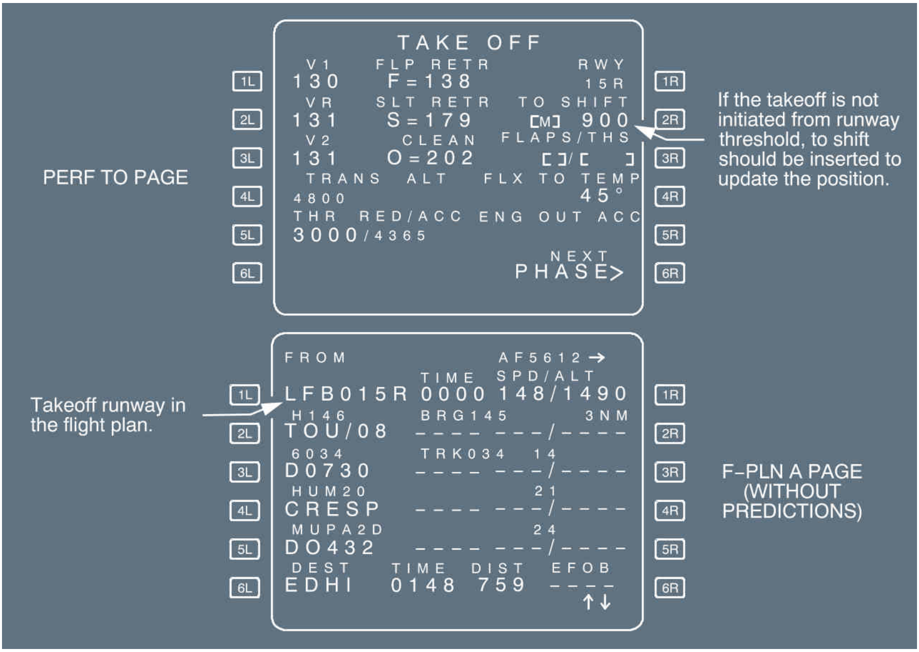
Ident.: DSC-22_20-20-10-00010137.0017001 / 04 AUG 16

Applicable to: ALL

A takeoff update requires that the takeoff runway be part of the flight plan. This provides the most accurate position update.

If the takeoff run starts at an intersection, enter a takeoff shift on the PERF TO page to refine the takeoff update.

An accurate takeoff update ensures a precise aircraft position during departure.



PERF TO PAGE

```
          TAKE OFF
 V1    FLP RETR          RWY
130    F=138             15R
 VR    SLT RETR     TO SHIFT
131    S=179        [M]  900
 V2       CLEAN   FLAPS/THS
131    O=202         [ ]/[  ]
 TRANS   ALT    FLX TO TEMP
4800                     45°
THR  RED/ACC  ENG OUT ACC
3000/4365
                     NEXT
                    PHASE>
```

If the takeoff is not initiated from runway threshold, to shift should be inserted to update the position.

Takeoff runway in the flight plan.

```
FROM                AF5612→
          TIME  SPD/ALT
LFB015R   0000  148/1490
 H146      BRG145      3NM
TOU/08    ---- ---/----
 6034      TRK034   14
D0730     ---- ---/----
 HUM20                21
CRESP     ---- ---/----
 MUPA2D               24
D0432     ---- ---/----
 DEST   TIME   DIST   EFOB
EDHI    0148   759    ----
                       ↑↓
```

F–PLN A PAGE (WITHOUT PREDICTIONS)

NAVIGATION MODES

Ident.: DSC-22_20-20-10-00010138.0001001 / 12 MAY 22

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

The FMGS updates the FM position via the use of radio navaids or GPS, if available. It can use four different FM navigation modes to make this update.

The decreasing order of priority is:
- IRS-GPS
- IRS-DME/DME
- IRS-VOR/DME
- IRS only.

During approach flown with ILS / MLS ⊲ / GLS ⊲ / SLS ⊲ / the system performs a temporary lateral update, via one of the following modes:
- IRS-GPS/LOC
- IRS-DME/DME-LOC

- IRS-VOR/DME-LOC
- IRS-LOC.

NAVIGATION MODES

Ident.: DSC-22_20-20-10-00010138.0087001 / 16 MAR 11
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

The FMGS updates the FM position via the use of radio navaids or GPS, if available. It can use four different FM navigation modes to make this update.

The decreasing order of priority is:
- IRS-GPS
- IRS-DME/DME
- IRS-VOR/DME
- IRS only.

During ILS/GLS approaches, the system performs a temporary lateral update, via one of the following modes:
- IRS-GPS/LOC
- IRS-DME/DME-LOC
- IRS-VOR/DME-LOC
- IRS-LOC.

Intentionally left blank

GENERAL

Ident.: DSC-22_20-20-20-00010448.0023001 / 27 MAY 13

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The FMGS continuously computes an Estimated Position Uncertainty (EPU).
It is an estimate of how much the FM position diverged, and it is a function of the navigation mode that the system uses.

CURRENT NAV MODE	**EPU (RATE or THRESHOLD)**	**REMARK**
IRS/GPS	$\sqrt{(FOM^2 + 100^2)}$ (in meters).	FOM = Figure of Merit of GPS. If above 0.28 NM, the FMS rejects the GPS position.
IRS/DME/DME	Moves toward 0.28 NM.	EPU decreases from initial value to 0.28 NM.
IRS/VOR/DME	0.1 NM + 0.05 X DME DIST. Minimum : 0.28 NM.	Dependent on the distance between the aircraft and the VOR/DME.
IRS ONLY	+8 nm/h for the first 30 min. 0 nm/h for the following 60 min. +4 nm/h for the following 30 min. 0 nm/h for the following 60 min. +2 nm/h after.	EPU increases continuously.

Note: *After an IRS alignment or at takeoff, the EPU is set to 0.2 NM.*

GENERAL

Ident.: DSC-22_20-20-20-00010448.0044001 / 27 MAY 13

Applicable to: MSN 04827-04860

The FMGS continuously computes an Estimated Position Uncertainty (EPU).
It is an estimate of how much the FM position diverged, and it is a function of the navigation mode that the system uses.

CURRENT NAV MODE	**EPU (RATE or THRESHOLD)**	**REMARK**
IRS/GPS	0.05 NM.	
IRS/DME/DME	0.27 NM - 0.37 NM.	
IRS/VOR/DME	0.30 NM - 0.42 NM.	Dependent on the distance between the aircraft and the VOR/DME.
IRS ONLY	+6 nm/h for the first 40 min. 0 nm/h for the following 50 min. +4 nm/h for the following 40 min. 0 nm/h for the following 45 min. +2 nm/h after.	EPU increases continuously.

Note: - *After an IRS alignment, the EPU is set at 5 NM.*
- *At takeoff, the EPU is set at 0.2 NM.*

ESTIMATED POSITION UNCERTAINTY

Ident.: DSC-22_20-20-20-00010499.0077001 / 23 JUN 15
Applicable to: MSN 04827-04860

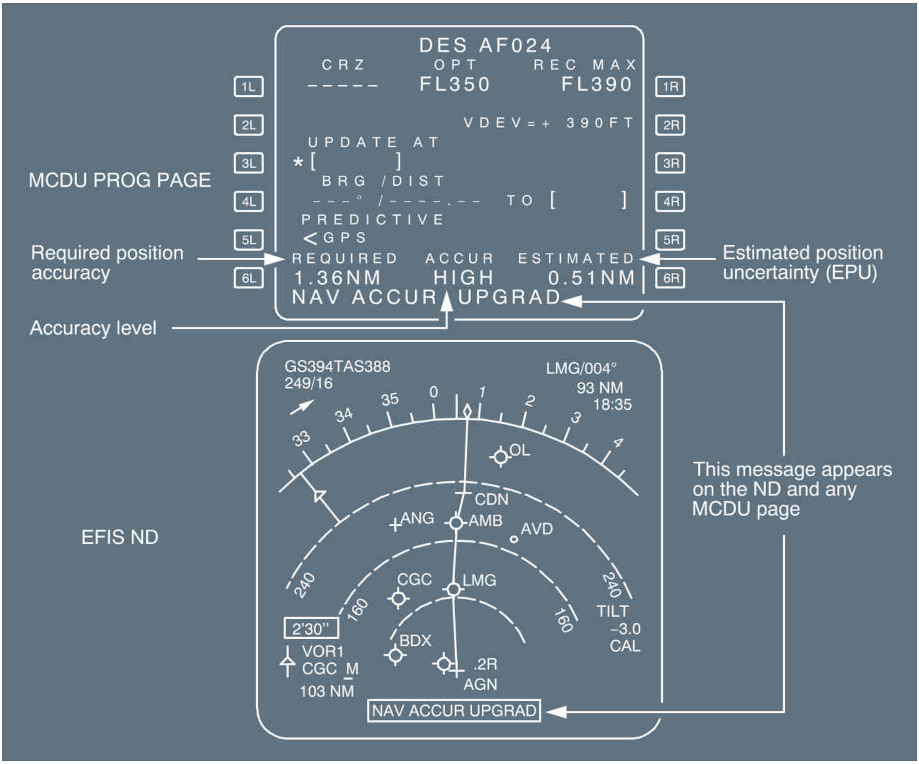
The FMS displays the EPU to the flight crew and compares it with the Required Navigation Performance (RNP):
- If the EPU does not exceed the RNP, accuracy is HIGH
- If the EPU exceeds the RNP, accuracy is LOW.

The RNP is displayed in the REQUIRED field of the PROG page. The displayed RNP is (in a decreasing order of priority):
- The value that the flight crew entered
- The navigation database procedure value
- The system's default value.

When a flight crew enters an RNP that is higher than the published value, one of the following messages is displayed : "PROCEDURE RNP IS XX.XX", or "AREA RNP IS XX.XX". When this occurs, the flight crew should verify the RNP value that was manually entered in the REQUIRED field of the PROG page, and clear or modify it if necessary.
The "AREA RNP IS XX.XX" message is also displayed at the change of flight area if the new RNP (default value) is smaller than the displayed RNP (manually entered).

DEFAULT AREA RNP VALUES	
EN ROUTE	2.0 NM
TERMINAL	1.0 NM
APPROACH	GPS / RNAV(GNSS) 0.3 NM OTHER CASES 0.5 NM

When one FMGC changes the NAV accuracy from LOW to HIGH (or HIGH to LOW), the MCDU and the ND display the "NAV ACCUR UPGRAD" (or DOWNGRAD) message.

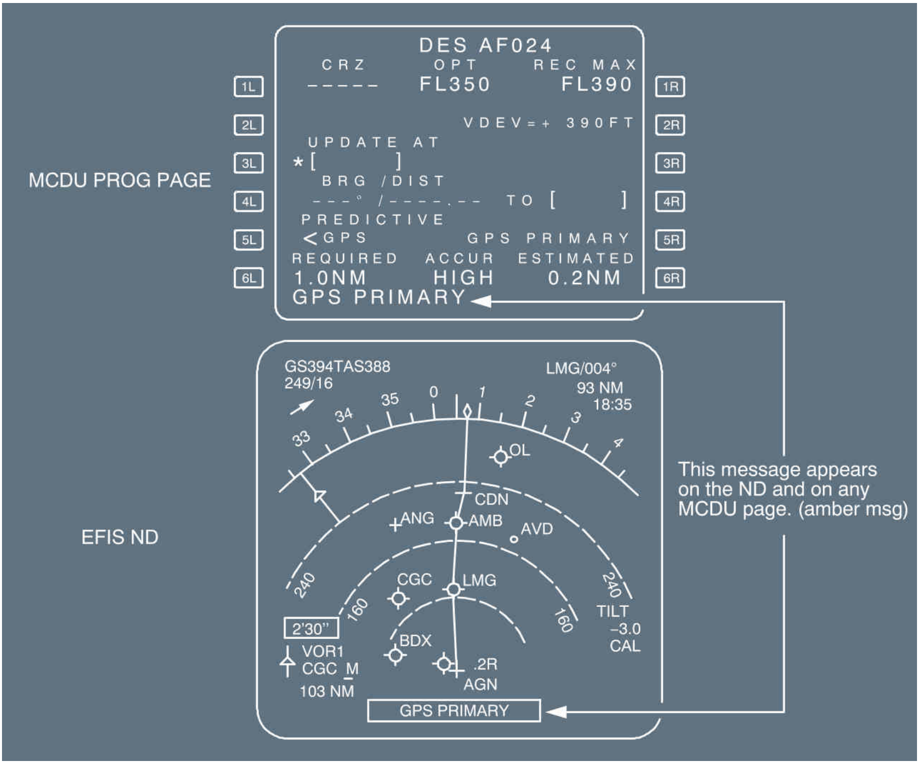

MCDU PROG PAGE
DES AF024
CRZ OPT REC MAX
----- FL350 FL390
VDEV=+ 390FT
UPDATE AT
*[ ]
BRG /DIST
---° /----.-- TO [ ]
PREDICTIVE
<GPS
REQUIRED ACCUR ESTIMATED
1.36NM HIGH 0.51NM
NAV ACCUR UPGRAD
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
Required position accuracy
Estimated position uncertainty (EPU)
Accuracy level
EFIS ND
GS394TAS388
249/16
LMG/004°
93 NM
18:35
33
34
35
0
1
2
3
4
OL
CDN
ANG
AMB
AVD
240
160
CGC
LMG
BDX
2'30"
VOR1
CGC M
103 NM
.2R
AGN
TILT
-3.0
CAL
NAV ACCUR UPGRAD
This message appears on the ND and any MCDU page

When in IRS/GPS mode, the GPS PRIMARY status combines two different criteria:

- The accuracy criterion previously described (HIGH/LOW accuracy)
- An integrity criterion: This is the capability to detect a failure and provide appropriate warning of it. This criterion indicates the confidence that the flight crew can have in the FMS position.

If the GPS PRIMARY status complies with both criteria, "GPS PRIMARY" is displayed on the MCDU (PROG page, [5R] field and scratchpad) and temporarily on the ND.
If the GPS PRIMARY status no longer complies with one of these criteria (Navigation downgraded or integrity lost), the GPS PRIMARY status is lost and the MCDU and the ND display the "GPS PRIMARY LOST" message. It is possible to clear the scratchpad message on the MCDU, but not on the ND.

CAUTION	"HIGH" or "LOW" on the PROG page indicates the FM position accuracy, based on estimated uncertainty. When GPS PRIMARY mode is lost, the flight crew must periodically check this position accuracy. In GPS PRIMARY mode, the position accuracy is always at HIGH.


MCDU PROG PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DES AF024
CRZ OPT REC MAX
----- FL350 FL390
VDEV=+ 390FT
UPDATE AT
*[ ]
BRG /DIST
---° /----.-- TO [ ]
PREDICTIVE
<GPS GPS PRIMARY
REQUIRED ACCUR ESTIMATED
1.0NM HIGH 0.2NM
GPS PRIMARY
EFIS ND
GS394TAS388
249/16
LMG/004°
93 NM
18:35
33
34
35
0
1
2
3
4
OL
CDN
ANG
AMB
AVD
240
160
CGC
LMG
TILT
-3.0
CAL
2'30"
VOR1
CGC M
103 NM
BDX
.2R
AGN
GPS PRIMARY

This message appears on the ND and on any MCDU page. (amber msg)

When the GPS is manually deselected, the "GPS IS DESELECTED" message is displayed on the MCDU, 80 NM before the T/D or at approach phase transition.

ESTIMATED POSITION UNCERTAINTY

Ident.: DSC-22_20-20-20-00010499.0076001 / 01 OCT 12

2 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

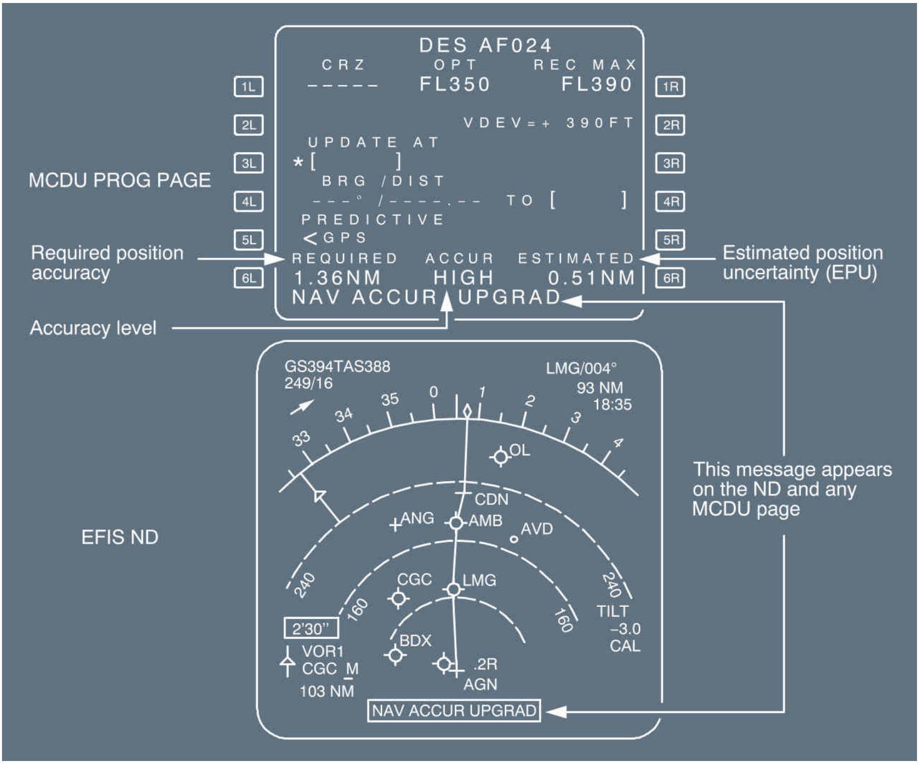
The FMS displays the EPU to the flight crew and compares it with the Required Navigation Performance (RNP):
- If the EPU does not exceed the RNP, accuracy is HIGH
- If the EPU exceeds the RNP, accuracy is LOW.

The RNP is displayed in the REQUIRED field of the PROG page. The displayed RNP is (in a decreasing order of priority):
- The value that the flight crew entered
- The navigation database procedure value
- The system’s default value.

When a flight crew enters an RNP that is higher than the published value, one of the following messages is displayed : "PROCEDURE RNP IS XX.XX", or "AREA RNP IS XX.XX". When this occurs, the flight crew should verify the RNP value that was manually entered in the REQUIRED field of the PROG page, and clear or modify it if necessary.
The "AREA RNP IS XX.XX" message is also displayed at the change of flight area if the new RNP (default value) is smaller than the displayed RNP (manually entered).

DEFAULT AREA RNP VALUES	
EN ROUTE	2.0 NM
TERMINAL	1.0 NM
APPROACH	GPS 0.3 NM OTHER CASES 0.5 NM

When one FMGC changes the NAV accuracy from LOW to HIGH (or HIGH to LOW), the MCDU and the ND display the "NAV ACCUR UPGRAD" (or DOWNGRAD) message.
These messages are inhibited when the navigation mode is IRS/GPS.


MCDU PROG PAGE
DES AF024
CRZ
OPT
REC MAX

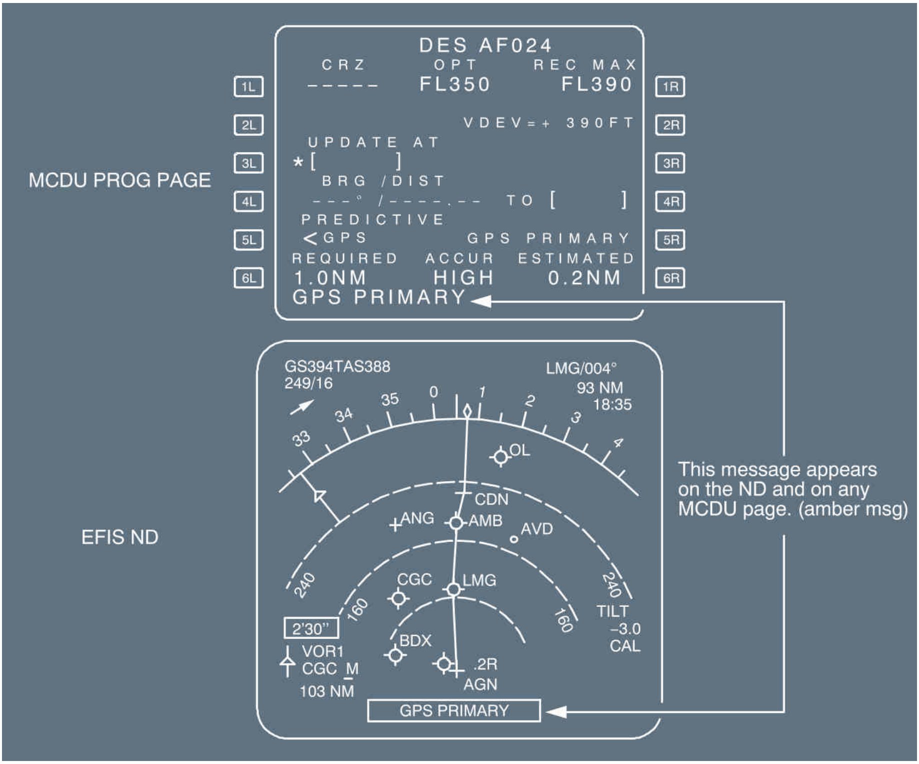
FL350
FL390
VDEV=+ 390FT
UPDATE AT
*[ ]
BRG /DIST
---° /----.--
TO [ ]
PREDICTIVE
<GPS
REQUIRED
ACCUR
ESTIMATED
1.36NM
HIGH
0.51NM
NAV ACCUR UPGRAD
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
Required position accuracy
Estimated position uncertainty (EPU)
Accuracy level
This message appears on the ND and any MCDU page
EFIS ND
GS394TAS388
249/16
LMG/004°
93 NM
18:35
33
34
35
0
1
2
3
4
OL
CDN
ANG
AMB
AVD
240
CGC
LMG
160
BDX
.2R
AGN
2'30"
VOR1
CGC M
103 NM
TILT
-3.0
CAL
NAV ACCUR UPGRAD

When in IRS/GPS mode, the GPS PRIMARY status combines two different criteria:

- The accuracy criterion previously described (HIGH/LOW accuracy)
- An integrity criterion: This is the capability to detect a failure and provide appropriate warning of it. This criterion indicates the confidence that the flight crew can have in the FMS position.

If the GPS PRIMARY status complies with both criteria, "GPS PRIMARY" is displayed on the MCDU (PROG page, [5R] field and scratchpad) and temporarily on the ND.
If the GPS PRIMARY status no longer complies with one of these criteria (Navigation downgraded or integrity lost), the GPS PRIMARY status is lost and the MCDU and the ND display the "GPS PRIMARY LOST" message. It is possible to clear the scratchpad message on the MCDU, but not on the ND.

CAUTION	"HIGH" or "LOW" on the PROG page indicates the FM position accuracy, based on estimated uncertainty. When GPS PRIMARY mode is lost, the flight crew must periodically check this position accuracy. In GPS PRIMARY mode, the position accuracy is always at HIGH.


MCDU PROG PAGE
DES AF024
CRZ
OPT
REC MAX

FL350
FL390
VDEV=+ 390FT
UPDATE AT
*[ ]
BRG /DIST
---° /----.-- TO [ ]
PREDICTIVE
<GPS
GPS PRIMARY
REQUIRED
ACCUR
ESTIMATED
1.0NM
HIGH
0.2NM
GPS PRIMARY
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
EFIS ND
GS394TAS388
249/16
LMG/004°
93 NM
18:35
OL
CDN
ANG
AMB
AVD
CGC
LMG
BDX
.2R
AGN
240
160
2'30"
VOR1
CGC M
103 NM
TILT
-3.0
CAL
GPS PRIMARY
This message appears on the ND and on any MCDU page. (amber msg)

When the GPS is manually deselected, the "GPS IS DESELECTED" message is displayed on the MCDU, 80 NM before the T/D or at approach phase transition.

ESTIMATED POSITION UNCERTAINTY

Ident.: DSC-22_20-20-20-00010499.0017001 / 01 OCT 12
Applicable to: MSN 01251

The FMS displays the EPU to the flight crew and compares it with the Required Navigation Performance (RNP):

- If the EPU does not exceed the RNP, accuracy is HIGH
- If the EPU exceeds the RNP, accuracy is LOW.

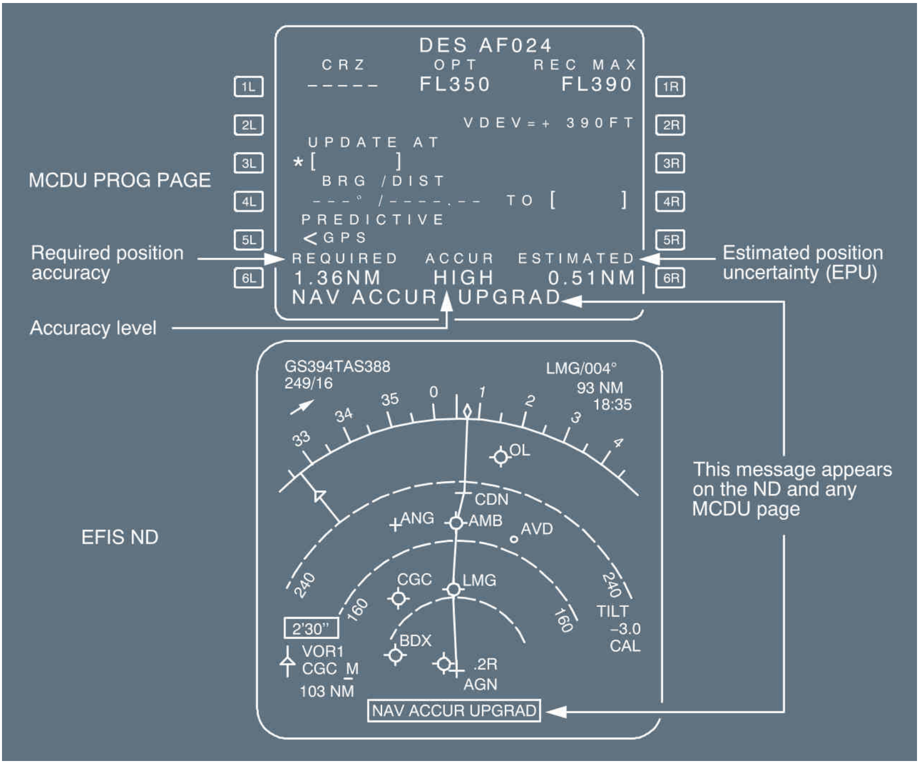
The RNP is displayed in the REQUIRED field of the PROG page. The displayed RNP is (in a decreasing order of priority):

- The value that the flight crew entered
- The navigation database procedure value
- The system’s default value.

When a flight crew enters an RNP that is higher than the published value, one of the following messages is displayed : "PROCEDURE RNP IS XX.XX", or "AREA RNP IS XX.XX". When this occurs, the flight crew should verify the RNP value that was manually entered in the REQUIRED field of the PROG page, and clear or modify it if necessary.
The "AREA RNP IS XX.XX" message is also displayed at the change of flight area if the new RNP (default value) is smaller than the displayed RNP (manually entered).

DEFAULT AREA RNP VALUES	
EN ROUTE	2.0 NM
TERMINAL	1.0 NM
APPROACH	GPS 0.3 NM OTHER CASES 0.5 NM

When one FMGC changes the NAV accuracy from LOW to HIGH (or HIGH to LOW), the MCDU and the ND display the "NAV ACCUR UPGRAD" (or DOWNGRAD) message.
These messages are inhibited when the navigation mode is IRS/GPS.

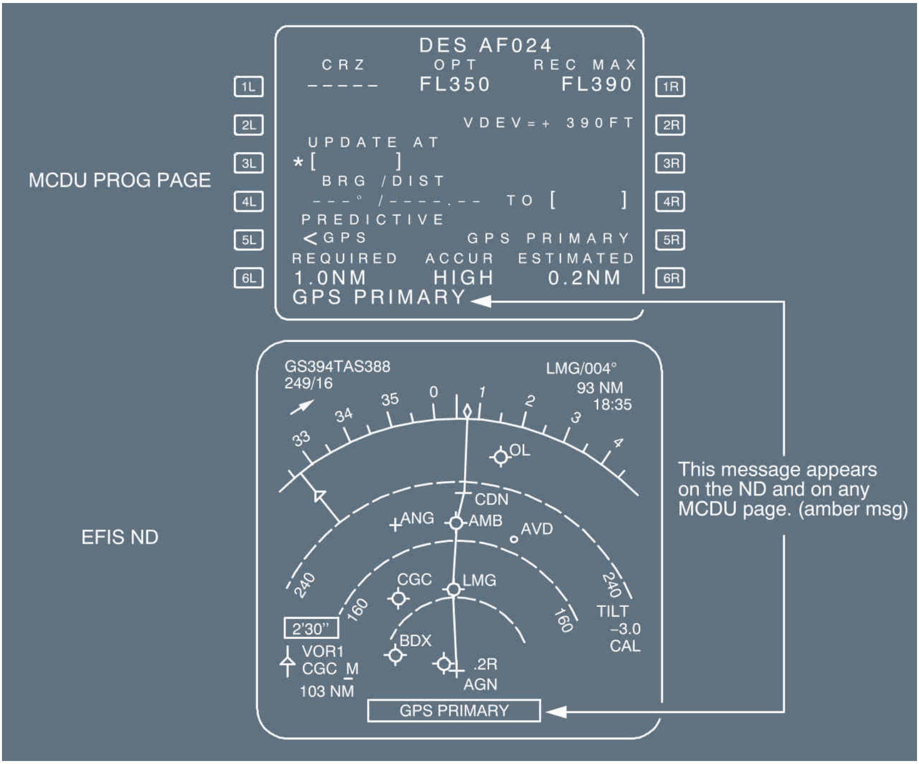

MCDU PROG PAGE
DES AF024
CRZ OPT REC MAX
----- FL350 FL390
VDEV=+ 390FT
UPDATE AT
*[ ]
BRG /DIST
---° /----.-- TO [ ]
PREDICTIVE
<GPS
REQUIRED ACCUR ESTIMATED
1.36NM HIGH 0.51NM
NAV ACCUR UPGRAD
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
Required position accuracy
Estimated position uncertainty (EPU)
Accuracy level
This message appears on the ND and any MCDU page
EFIS ND
GS394TAS388
249/16
LMG/004°
93 NM
18:35
OL
CDN
ANG
AMB
AVD
CGC
LMG
BDX
.2R
AGN
240
160
TILT
-3.0
CAL
2'30"
VOR1
CGC M
103 NM
NAV ACCUR UPGRAD

When in IRS/GPS mode, the GPS PRIMARY status combines two different criteria:

- The accuracy criterion previously described (HIGH/LOW accuracy)
- An integrity criterion: This is the capability to detect a failure and provide appropriate warning of it. This criterion indicates the confidence that the flight crew can have in the FMS position.

If the GPS PRIMARY status complies with both criteria, "GPS PRIMARY" is displayed on the MCDU (PROG page, [5R] field and scratchpad) and temporarily on the ND.
If the GPS PRIMARY status no longer complies with one of these criteria (Navigation downgraded or integrity lost), the GPS PRIMARY status is lost and the MCDU and the ND display the "GPS PRIMARY LOST" message. It is possible to clear the scratchpad message on the MCDU, but not on the ND. During a non-ILS approach, a triple-click aural warning is also triggered.

CAUTION	"HIGH" or "LOW" on the PROG page indicates the FM position accuracy, based on estimated uncertainty. When GPS PRIMARY mode is lost, the flight crew must periodically check this position accuracy. In GPS PRIMARY mode, the position accuracy is always at HIGH.


MCDU PROG PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
EFIS ND
GS394TAS388
249/16
LMG/004°
93 NM
18:35
33
34
35
0
1
2
3
4
OL
CDN
ANG
AMB
AVD
240
160
CGC
LMG
BDX
2'30"
VOR1
CGC M
103 NM
.2R
AGN
TILT
-3.0
CAL
GPS PRIMARY

```
            DES AF024
   CRZ         OPT        REC MAX
  -----       FL350        FL390
                   VDEV=+ 390FT
  UPDATE AT
*[         ]
  BRG /DIST
  ---° /----.--   TO [        ]
 PREDICTIVE
<GPS              GPS PRIMARY
REQUIRED     ACCUR    ESTIMATED
1.0NM        HIGH        0.2NM
GPS PRIMARY
```

This message appears on the ND and on any MCDU page. (amber msg)

When the GPS is manually deselected, the "GPS IS DESELECTED" message is displayed on the MCDU, 80 NM before the T/D or at approach phase transition.

FM/GPS POSITION DISAGREEMENT

Ident.: DSC-22_20-20-20-00010500.0011001 / 17 AUG 10
Applicable to: ALL

When the GPS PRIMARY function is active, and either of the FM positions deviate from the GPS positions 1 or 2 by more than:

- A longitude threshold that depends on the latitude:
  - 0.5' for latitudes below 55°
  - 0.9' for latitudes at or above 55°, and below 70°.
- A latitude threshold of 0.5', regardless of the latitude,

then, the lower ECAM displays the NAV FM/GPS POS DISAGREE amber caution. The master caution light comes on and the single chime sounds.
This amber caution is inhibited during the takeoff phase.
Above 70° of latitude, a longitude difference does not trigger the alarm.

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GENERAL

Ident.: DSC-22_20-20-30-00010478.0001001 / 17 AUG 10
Applicable to: ALL

Radio navaids are tuned for two different purposes: Display and computation.

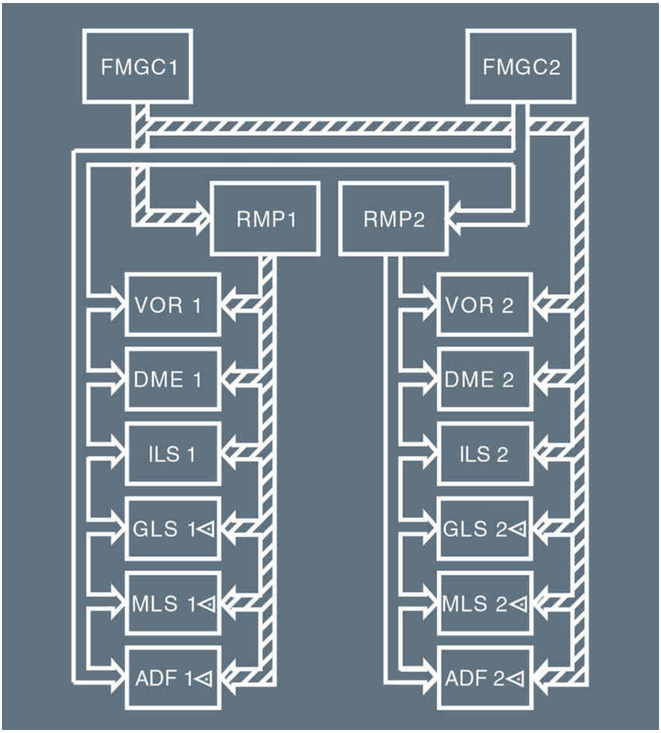
It is possible to perform tuning for display in three different ways:
- Automatic tuning via FMGC software
- Manual tuning via the MCDU RAD NAV page
- Manual tuning via the Radio Management Panel (RMP) if both FMGCs or both MCDUs fail.

The FMGS automatically tunes the radio navaids for computation of the radio position.

Note: *The manual selection of a VOR or VOR/DME may prevent the FMGS from automatically tuning a VOR/DME to compute position. In this case, the related MCDU displays “TUNE BBB FFF.FF” (BBB = ident, FFF.FF = frequency).*

ARCHITECTURE

Ident.: DSC-22_20-20-30-00010479.0001001 / 31 AUG 17
Applicable to: ALL



- In dual mode and independent mode, each FMGC simultaneously tunes the navaids on its own side (one VOR, one DME, one ILS, one GLS ◁ , one MLS ◁ and one ADF). In these modes, the flight crew can also manually tune the VOR (and associated DME), ILS, GLS ◁ , MLS ◁ and ADF ◁ .
- In single mode, the valid FMGC tunes navaids on both sides. The flight crew can also use the RAD NAV page to manually tune both VORs, both ADFs ◁ , and the ILS / GLS ◁ / MLS ◁ .

Manual tuning has priority over automatic tuning.

Note: *If one receiver fails, both FMGCs use the operative radio receiver to compute the position of the aircraft.*

VOR

Ident.: DSC-22_20-20-30-00010480.0001001 / 17 AUG 10
Applicable to: ALL

Each FMGC may tune only one VOR (manually or automatically).

Automatic tuning complies with the following priorities for tuning the VOR:
1. The specified navaid for the approach
2. The navaid that the flight crew should use to compute the current radio position
3. For display purposes:
   - A navaid specified for the active flight leg
   - The “TO” waypoint (TO WPT), if it is a navaid
   - The “FROM” waypoint (FROM WPT), if it is a navaid
   - A waypoint farther along the flight path, if it is a navaid
   - The navaid closest to the current position of the aircraft.

The scratchpad displays “SPECIFIC VOR-D UNAVAIL”, if the VOR or the VOR/DME that the flight crew requires for tuning is deselected.

DME

Ident.: DSC-22_20-20-30-00010481.0001001 / 17 AUG 10
Applicable to: MSN 04827-04860

Each FMGC automatically uses its five DME frequencies as follows:
- One DME frequency for display. It is possible to tune it manually or automatically.
- Two DME frequencies in DME/DME mode for calculating the radio position of the aircraft. The FMGC automatically tunes these as a function of their best accuracy. The flight crew does not receive any indication that this process is happening.
- One DME frequency automatically tuned for radio position. This occurs in the VOR/DME mode, when the DME/DME is not available and the flight crew complies with the conditions for a VOR/DME update. In this case, the VOR/DME that the flight crew uses for display, is identical to the VOR/DME navaid that the flight crew uses for computation of the radio position.
- One DME frequency is connected to the ILS/DME.

DME

Ident.: DSC-22_20-20-30-00010481.0002001 / 17 AUG 10
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Each FMGC automatically uses its four DME frequencies as follows:
- One DME frequency for display. It is possible to tune it manually or automatically. This DME frequency is also used for VOR/DME position computation.
- Two DME frequencies in DME/DME mode for calculating the radio position of the aircraft. The FMGC automatically tunes these as a function of their best accuracy. The flight crew does not receive any indication that this process is happening.
- One DME frequency is connected to the ILS/DME.

ADF

Ident.: DSC-22_20-20-30-00010482.0001001 / 17 AUG 10
Applicable to: ALL

The FMGC automatically tunes one ADF, when the flight plan specifies a Non Directional Beacon (NDB) approach and a fix in the approach is the “TO” waypoint.
The scratchpad displays “SPECIFIC NDB UNAVAIL”, if the NDB that the flight crew requires for autotuning is deselected.

ILS

Ident.: DSC-22_20-20-30-00010483.0001001 / 17 AUG 10
Applicable to: ALL

Each FMGC automatically tunes one ILS frequency:
- In the PREFLIGHT or TAKEOFF phase, when the takeoff runway has an associated ILS.
- In the CLIMB, CRUISE, DESCENT, APPROACH, or GO-AROUND phase, when the type of approach in the flight plan is ILS.

The scratchpad displays “RWY/ILS MISMATCH” when the flight crew manually tunes the ILS and the entered frequency does not agree with the ILS or the LOC IDENT/FREQ that the flight crew requests for automatic tuning. The FMGS logic does not enable the flight crew to modify the course of an ILS when its frequency is identical to the ILS selected in the F-PLN.

GLS

Ident.: DSC-22_20-20-30-00012868.0001001 / 16 MAR 11
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Each FMGC autotunes one GLS channel in the CLIMB, CRUISE, DESCENT, APPROACH, or GO-AROUND phase, when the type of approach in the flight plan is GLS.

The scratchpad displays “RWY/LS MISMATCH” when the flight crew has manually tuned the GLS and the entered channel does not match the GLS IDENT/CHAN requested for autotuning.
The FMGS logic does not allow the flight crew to modify the course of a GLS when its channel is identical to the GLS selected in the F-PLN.

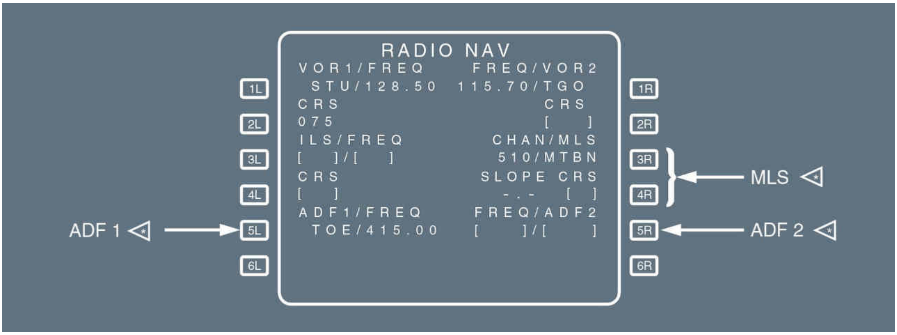
SELECTION OF NAVAIDS ON MCDU PAGES

Ident.: DSC-22_20-20-30-00010485.0032001 / 31 AUG 17
Applicable to: ALL

The MCDU displays the navaids tuned by the FMGC on two pages:
- RADIO NAV Page
- SELECTED NAVAIDS Page.

RADIO NAV PAGE

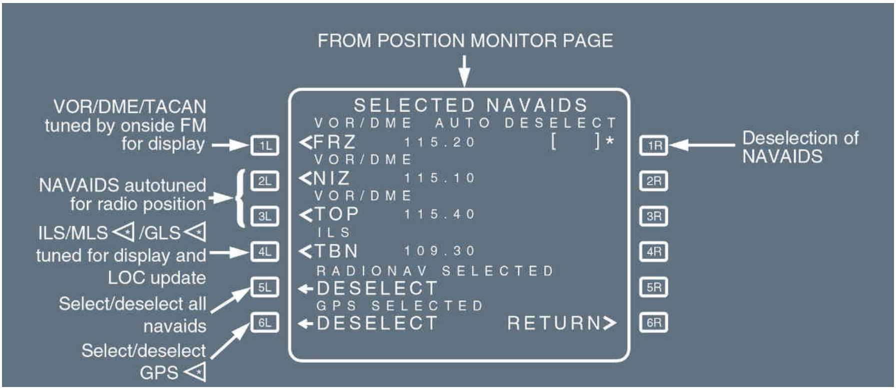
This page shows which navaids have been tuned automatically or manually for display purposes.



```
               RADIO NAV
VOR1/FREQ              FREQ/VOR2
 STU/128.50       115.70/TGO
CRS                          CRS
075                          [   ]
ILS/FREQ                CHAN/MLS
[   ]/[   ]             510/MTBN
CRS                   SLOPE CRS
[   ]                   -.-  [  ]
ADF1/FREQ              FREQ/ADF2
 TOE/415.00        [    ]/[     ]
```

SELECTED NAVAIDS PAGE

This page lists the navaids tuned by the onside FMGC. No navaids can be modified on this page. The flight crew may deselect navaids and or GPS ◁ for the whole flight.


FROM POSITION MONITOR PAGE
VOR/DME/TACAN tuned by onside FM for display
NAVAIDS autotuned for radio position
ILS/MLS ◁ /GLS ◁ tuned for display and LOC update
Select/deselect all navaids
Select/deselect GPS ◁
Deselection of NAVAIDS
SELECTED NAVAIDS
VOR/DME AUTO DESELECT
<FRZ 115.20 [ ]*
VOR/DME
<NIZ 115.10
VOR/DME
<TOP 115.40
ILS
<TBN 109.30
RADIONAV SELECTED
←DESELECT
GPS SELECTED
←DESELECT RETURN>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

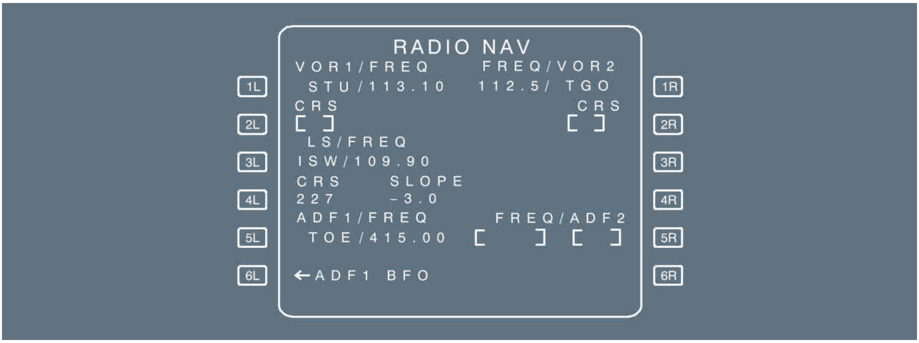
MANUAL TUNING

Ident.: DSC-22_20-20-30-00010486.0002001 / 01 MAR 17

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

INSERT the identifier on the RADIO NAV page.

Preferably use the identifier.


RADIO NAV
VOR1/FREQ FREQ/VOR2
STU/113.10 112.5/ TGO
CRS CRS
[ ] [ ]
LS/FREQ
ISW/109.90
CRS SLOPE
227 -3.0
ADF1/FREQ FREQ/ADF2
TOE/415.00 [ ] [ ]
←ADF1 BFO
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

Note: The RAD NAV page may differ according to option installed (ADF1, ADF2, xLS).

- **If the MCDU displays “NOT IN DATA BASE”:**
  INSERT the frequency.

DISREGARD the ident that appears in small font on the MCDU.

When a frequency is entered in the VOR field, the FMGC automatically associates to the tuned frequency the closest navaid identifier with the same frequency, and displays it on the RAD NAV page. This identifier may not correspond to the tuned navaid.
If the closest navaid, found in the database, is of a different type (e.g. VOR instead of VOR/DME), the flight crew will obtain a partial tuning (e.g. VOR indication instead of VOR/DME indication).

ENTER the course.

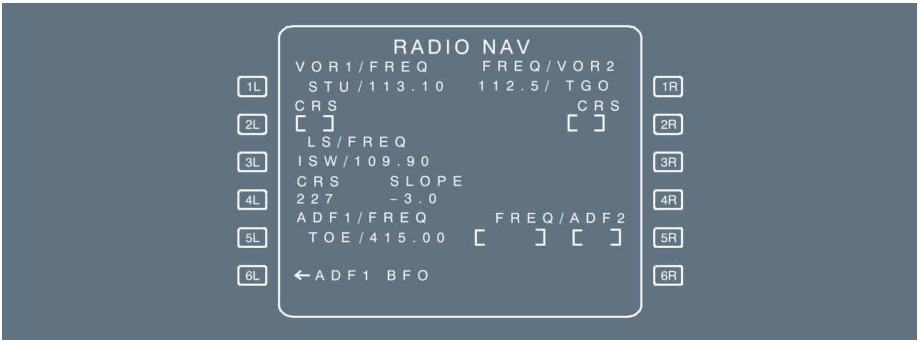
If the flight crew intends to manually tune an ILS that is not in the Navigation Database or to manually tune an ILS by its frequency (ident not entered), and if they do not enter the course, the flight crew will not be able to arm approach modes.

MANUAL TUNING

Ident.: DSC-22_20-20-30-00010486.0057001 / 01 MAR 17
Applicable to: MSN 04827-04860

INSERT the identifier on the RADIO NAV page.

Preferably use the identifier.



```
              RADIO NAV
 VOR1/FREQ            FREQ/VOR2
  STU/113.10       112.5/ TGO
 CRS                        CRS
 [ ]                        [ ]
   LS/FREQ
 ISW/109.90
 CRS        SLOPE
 227         -3.0
 ADF1/FREQ             FREQ/ADF2
  TOE/415.00       [    ]  [  ]

 ←ADF1  BFO
```

<u>*Note:*</u> *The RAD NAV page may differ according to option installed (ADF1, ADF2, xLS).*

- **If the MCDU displays "NOT IN DATA BASE":**

  INSERT the frequency.

  DISREGARD the ident that appears in small font on the MCDU.

  When a frequency is entered in the VOR field, the FMGC automatically associates to the tuned frequency the closest navaid identifier with the same frequency, and displays it on the RAD NAV page. This identifier may not correspond to the tuned navaid.

If the closest navaid, found in the database, is of a different type (e.g. VOR instead of VOR/DME), the flight crew will obtain a partial tuning (e.g. VOR indication instead of VOR/DME indication).

ENTER the course.

NAVAID IDENTIFICATION

Ident.: DSC-22_20-20-30-00010487.0001001 / 12 MAY 22
Applicable to: ALL

CHECK the xLS (ILS or GLS or MLS or SLS) identifier decoded on the PFD, and the VOR or ADF on the ND.
When the navaid identifier is decoded in agreement with that published, no audio check is necessary.
When the decoding is different from the published one, check the audio. Due to morse coding inaccuracy, wrong decoding may sometimes occur.
For GLS , the audio signal may be inaudible. However, the GLS identifier displayed on ND and PFD is raw data. Consequently, for GLS , no audio check is necessary.
For SLS , no audio signal is available.

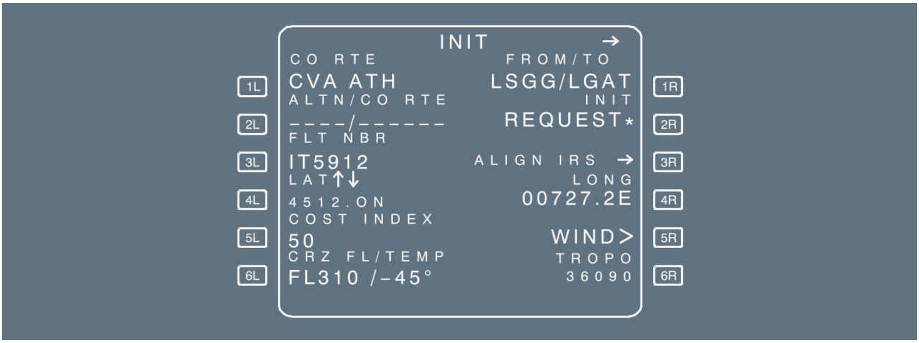
Note: *When a DME or a TACAN only is selected using either its identifier or its frequency, the NDs do not display the decoded indication.*

ALIGNMENT OF INERTIAL REFERENCE SYSTEM

Ident.: DSC-22_20-20-40-00010143.0002001 / 01 OCT 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

The FMGS uses the reference point coordinates of the departure airport to align the IRS.
It calls these up from the database automatically after the flight crew has entered a company route or an origin-destination city pair and pressed the ALIGN IRS key on the MCDU. The flight crew can adjust these coordinates manually to the gate position. A normal alignment takes 10 min, a fast alignment 30 s.
Fast alignment is used to refine a position when time is limited.



```
                  INIT                 →
CO RTE                     FROM/TO
CVA ATH                   LSGG/LGAT
ALTN/CO RTE                     INIT
----/------               REQUEST*
FLT NBR
IT5912                  ALIGN IRS →
LAT↑↓                           LONG
4512.0N                     00727.2E
COST INDEX
50                             WIND>
CRZ FL/TEMP                    TROPO
FL310 /-45°                    36090
```

Note: *If "ALIGN" flashes on the ADIRS overhead CDU during the alignment process, it indicates one of the following:*
- *It has detected excessive motion. (It automatically restarts the alignment)*
- *It has detected a disagreement between the position the MCDU has sent to the IRS, and the last memorized IRS position. The flight crew must enter new coordinates in the MCDU, and realign the IRS*
- *It has detected a disagreement between the latitude the MCDU has sent to the IRS, and the latitude the IRS has computed during the alignment*
- *The IRS has not received a position from the MCDU or the ADIRS overhead CDU.*

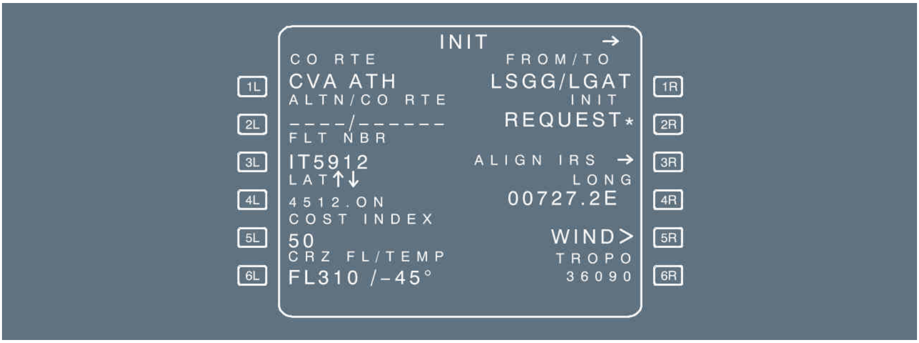
ALIGNMENT OF INERTIAL REFERENCE SYSTEM

Ident.: DSC-22_20-20-40-00010143.0013001 / 01 OCT 12

1 **Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The FMGS uses the reference point coordinates of the departure airport to align the IRS.
It calls these up from the database automatically after the flight crew has entered a company route or an origin-destination city pair and pressed the ALIGN IRS key on the MCDU. The flight crew can

adjust these coordinates manually to the gate position. A normal alignment takes 10 min, a fast alignment 30 s.
Fast alignment is used to refine a position when time is limited.



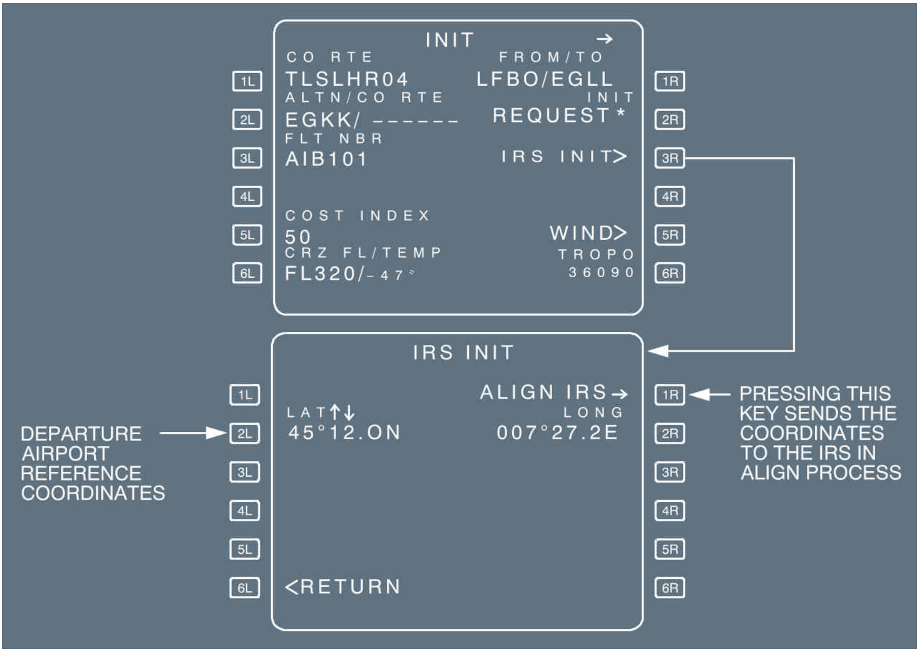
```
                 INIT              →
CO RTE                   FROM/TO
CVA ATH                LSGG/LGAT
ALTN/CO RTE                  INIT
----/------            REQUEST*
FLT NBR
IT5912               ALIGN IRS →
LAT↑↓                        LONG
4512.0N                 00727.2E
COST INDEX
50                         WIND>
CRZ FL/TEMP                TROPO
FL310 /-45°                36090
```

Note: *If the “IRS IN ALIGN” memo flashes on the E/WD during the alignment process, it indicates one of the following:*
- *It has detected excessive motion. (It automatically restarts the alignment)*
- *It has detected a disagreement between the position the MCDU has sent to the IRS, and the last memorized IRS position. The flight crew must enter new coordinates in the MCDU, and realign the IRS*
- *It has detected a disagreement between the latitude the MCDU has sent to the IRS, and the latitude the IRS has computed during the alignment*
- *The IRS has not received a position from the MCDU .*

ALIGNMENT OF INERTIAL REFERENCE SYSTEM

Ident.: DSC-22_20-20-40-00010143.0029001 / 01 OCT 12
Applicable to: MSN 04827-04860

The flight crew accesses the page dedicated to IRS alignment by pressing the [3R] key.
The FMGS uses the reference point coordinates of the departure airport to align the IRS. The flight crew can manually adjust these coordinates to the gate position. A normal alignment takes 10 min and a fast alignment takes 30 s.
Fast alignment is used to refine a position, when time is limited.



```
              INIT              →
 CO RTE               FROM/TO
 TLSLHR04           LFBO/EGLL
 ALTN/CO RTE               INIT
 EGKK/ ------      REQUEST *
 FLT NBR
 AIB101              IRS INIT>


 COST INDEX
 50                     WIND>
 CRZ FL/TEMP            TROPO
 FL320/-47°             36090
```

```
             IRS INIT
                    ALIGN IRS→
 LAT↑↓                    LONG
 45°12.0N           007°27.2E







 <RETURN
```

DEPARTURE AIRPORT REFERENCE COORDINATES

PRESSING THIS KEY SENDS THE COORDINATES TO THE IRS IN ALIGN PROCESS

Note: *If the “IRS IN ALIGN” memo flashes on the E/WD during the alignment process, it indicates one of the following:*

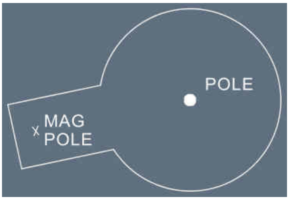
- *It has detected excessive motion. (It automatically restarts the alignment)*
- *It has detected a disagreement between the position the MCDU has sent to the IRS, and the last memorized IRS position. The flight crew must enter new coordinates in the MCDU, and realign the IRS*
- *It has detected a disagreement between the latitude the MCDU has sent to the IRS, and the latitude the IRS has computed during the alignment*
- *The IRS has not received a position from the MCDU .*

POLAR NAVIGATION

Ident.: DSC-22_20-20-40-00010145.0001001 / 27 MAY 13
Applicable to: MSN 02887

IRS are able to provide MAG HEADING between latitudes 82°N and 60°S, except in the vicinity of North magnetic pole.
The FMGC computes the aircraft position within polar area even at North pole using the MIX IRS position.

Note: *The IRS may be aligned up to latitude 73° without any particular procedures. Between 73° and 82° (North or South), the required alignment time is greater and a specific procedure has to be performed. Beyond 82° North or South, no ADIRS alignment is possible.*



As a general rule, the MCDU displays all parameters referenced to North according to the NORTH REF pb-sw position.
In order to provide the SAFEST and most FLEXIBLE operation, a MAG/TRUE NORTH REF pb-sw is available, with various messages provided on the EFIS ND, the MCDU, and the ECAM, indicating to the flight crew what reference should be applicable in the flight area the aircraft is located.

GENERAL

Ident.: DSC-22_20-20-50-00010410.0001001 / 09 MAR 15
Applicable to: ALL

Overall navigation performance is mainly based on two elements:
- The accuracy of the aircraft position calculation
- The validity of the flight path definition, as extracted from the navigation database.

The level of validation depends on the type of operations. For example, JAA TGL 10 requires that, for Precision RNAV in terminal area, providers and operators implement a quality assurance program for the navigation database, which may include a navigation database validation process. The highest level of validation is required for RNAV approach, with lateral and vertical navigation.
The navigation databases are revised every 28 days (AIRAC cycle). Flights should be conducted with a navigation database that is within its cycle. This should be checked on the AIRCRAFT STATUS MCDU page.

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GENERAL

1 Ident.: DSC-22_20-20-60-00013736.0001001 / 18 MAR 11
Applicable to: MSN 11531

The FMS Landing System (FLS) function allows the flight crew to fly VOR, VOR/DME, NDB, NDB/DME, RNAV or LOC only approaches, in managed lateral and vertical modes, and with an ILS-look alike way. This only applies to approaches stored in the navigation database.
The FMS computes a final approach path, called the FLS beam, and sends it to the MMR.
The MMR then computes the deviations between the aircraft position and the FLS beam, and sends these deviations to the FG for guidance purpose.
The flight crew can use the FLS function to fly an ILS approach with glideslope out, or a LOC only approach. In this case, the FG uses the ILS LOC beam for lateral guidance, associated to the FLS F-G/S beam.

FLS BEAM COMPUTATION

Applicable to: MSN 11531

2 Ident.: DSC-22_20-20-60-A-00013743.0001001 / 29 MAY 13

GENERAL

The FMS computes a FLS beam when the flight crew:
- Inserts a VOR, VOR/DME, NDB, NDB/DME, RNAV or LOC only approach, or
- Inserts an ILS approach and deselects the glideslope

The FLS beam represents the final approach leg of the non-precision approach.

The FLS beam is defined by:
- An anchor point
- A course
- A slope.

The aircraft can capture the FLS beam up to 100 NM from the destination.

CAUTION	The FLS beam is a virtual beam of 100 NM and may interfere with terrain obstacles outside the published approach. The obstacle clearance outside the published approach is the responsibility of the flight crew.

The FMS does not compute the FLS beam:
- For IGS without G/S, SDF and LDA approaches, or
- If the angle between the course of the final approach leg and the runway course is more than 50 °.

In such cases, the FLS function is not available and the MCDU displays the message “NO FLS FOR THIS APPR”.

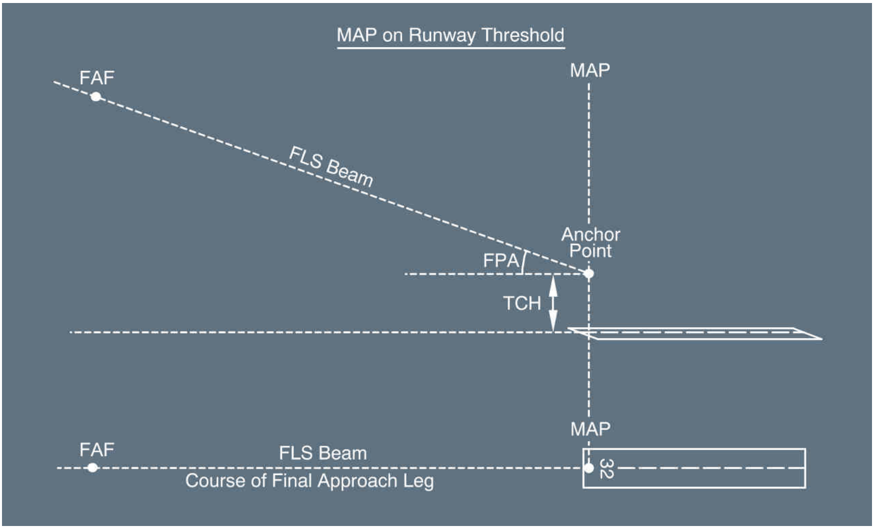
When FLS function is available and the flight crew presses the LS pb, the FMA displays the FLS capability and the FLS data. The FLS capability can be:
- F-APP, or
- F-APP + RAW, or
- RAW ONLY.

Note: *Prior to LS selection, the ECAM status info indicates any degradation of the FLS capability.*

The layout of the FLS beam is based on the relative position of the Missed Approach Point (MAP) to the runway threshold.

FLS BEAM COMPUTATION WHEN THE MAP IS ON THE RUNWAY THRESHOLD

When the MAP of the selected approach is defined on the runway threshold (+/- 0.14 NM):
- The anchor point is located on the runway threshold Crossing Height, TCH (or threshold height +50 ft if no threshold crossing height is stored in the database). The ident of the anchor point is RWYxxx, where xxx is the ident of the runway threshold (e.g. RWY33L)
- The course of the FLS beam in the course of the final approach leg
- The slope of the FLS beam is the Flight Path Angle (FPA), stored with the runway threshold in the navigation database.

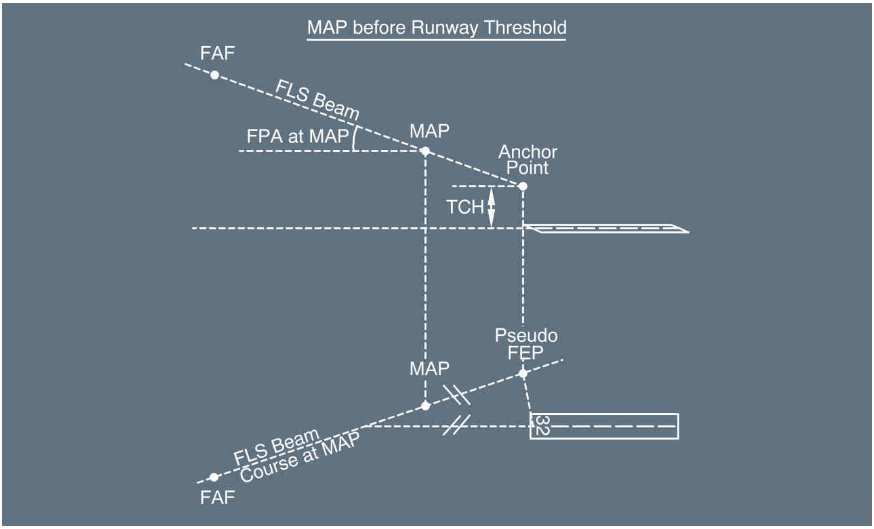


FLS BEAM COMPUTATION WHEN THE MAP IS BEFORE THE RUNWAY THRESHOLD

When the MAP of the selected approach is before the runway threshold:

- The anchor point is located on a pseudo final end point (that is computed by the FMS) at the Threshold Crossing Height, TCH (or threshold height +50 ft if no threshold crossing height is stored in the database).
  The ident of the anchor point is EPxxx, where EP stands for End Point, and xxx is the ident of the runway (e.g. EP33L).

  Note: *When the anchor point is closer than 0.1 NM to the runway threshold, the ident of the anchor point is RWYxxx.*
- The course of the FLS beam is the course that is stored with the MAP in the navigation database
- The slope of the FLS beam is the Flight Path Angle (FPA) stored with the MAP in the navigation database.

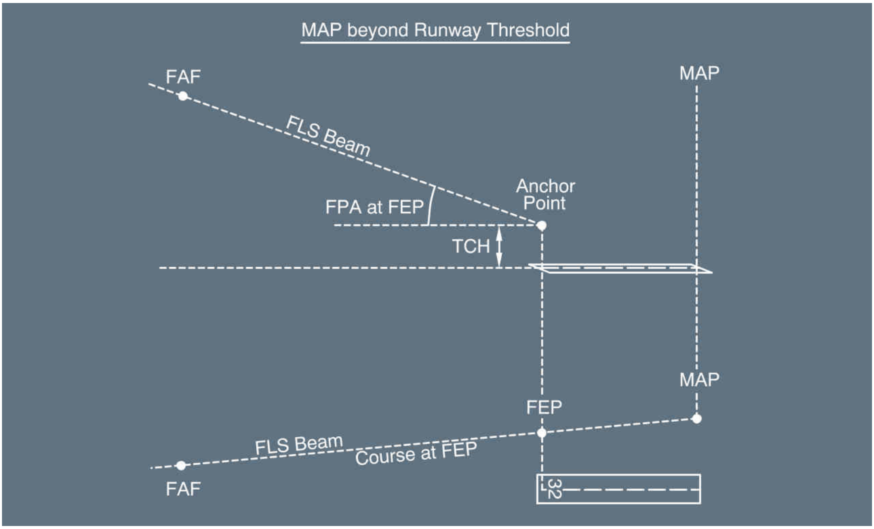

MAP before Runway Threshold
FAF
FLS Beam
FPA at MAP
MAP
Anchor Point
TCH
Pseudo FEP
MAP
32
FLS Beam Course at MAP
FAF

FLS BEAM COMPUTATION WHEN THE MAP IS BEYOND THE RUNWAY THRESHOLD

When the MAP of the selected approach is beyond the runway threshold:

- The anchor point is located on the final end point (that is stored in the navigation database) at the Threshold Crossing Height, TCH (or threshold height +50 ft if no threshold crossing height is stored in the database).
  The ident of the anchor point is the ident of the final en point (e.g. EP33L).

  Note: *When the anchor point is closer than 0.1 NM to the runway threshold, the ident of the anchor point is RWYxxx.*
- The course of the FLS beam is the course that is stored with the final end point in the navigation database
- The slope of the FLS beam is the Flight Path Angle (FPA) stored with the final end point in the navigation database.



3 Ident.: DSC-22_20-20-60-A-00013744.0001001 / 18 MAR 11

BARO CORRECTION OF THE FLS VERTICAL DEVIATION

When the baro setting is STD:

- The computation of the FLS beam and of the F-G/S deviation is based on the QNH that the flight crew entered on the PERF APPR page.
- FMS uses 1 013 hPa if the flight crew did not enter any value on the PERF APPR page. However, in such cases, no F-G/S deviation is computed.
  When the baro setting is QNH, the computation of the FLS beam and of the F-G/S deviation is based on the current QNH.

4 Ident.: DSC-22_20-20-60-A-00013745.0001001 / 18 MAR 11

COLD WEATHER CORRECTION OF THE FLS BEAM

When the temperature at destination (on the PERF APPR page) is below the ISA temperature, the computation of the FLS beam and of the F-G/S deviation is corrected with the entered temperature. If the flight crew did not enter any temperature, the FMS takes into account the ISA temperature.

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FLIGHT PLANNING

Ident.: DSC-22_20-30-05-00010492.0002001 / 17 AUG 10
Applicable to: ALL

The flight crew uses the MCDU to insert flight plans into the FMGS:
- A lateral flight plan that defines the intended horizontal flight path
- A vertical flight plan that defines the intended speed and altitude profile for the aircraft to follow while flying the lateral flight plan.

Note: *The flight planning function is available for both the primary and secondary flight plans.*

The FMGS can contain two different flight plans:
- The ACTIVE flight plan, which is the basis for:
  - Lateral and vertical guidance
  - MCDU and ND display
  - Radio navigation autotuning
  - Performance predictions
  - Fuel planning.
- The SECONDARY flight plan which the flight crew may use:
  - When an alternate takeoff runway is probable
  - To plan a diversion
  - To prepare the next flight
  - To compare predictions or evaluations.

Each flight plan is composed of the same elements:
- The primary flight plan, from origin to destination and missed approach
- The alternate flight plan, from destination to alternate destination.

The flight crew enters the flight plan in either of two ways:
- Automatically by selecting a company route. Such a selection will call all the elements of the route out of the database.
- Manually by selecting an ORIGIN/DEST pair, and then selecting all successive waypoints, procedures, and vertical constraints on the MCDU.

The flight crew may then modify the flight plan on the ground or in flight, by making lateral and vertical revisions.

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General

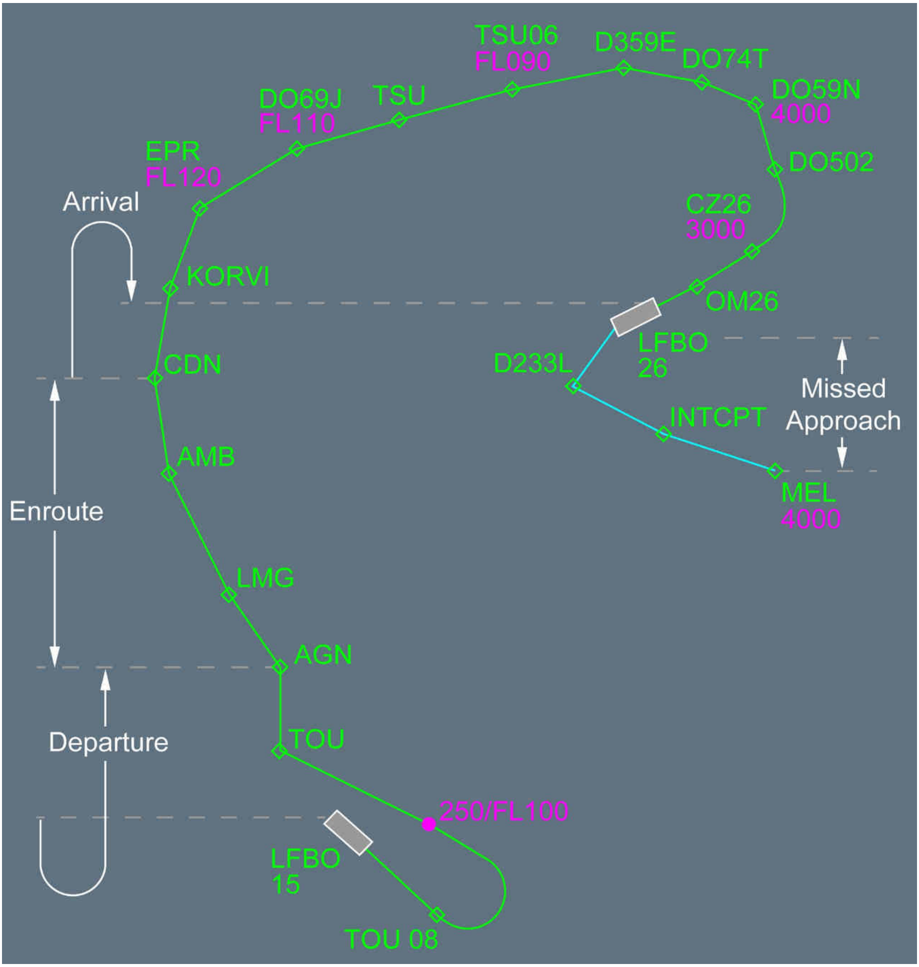
GENERAL

Ident.: DSC-22_20-30-10-05-00011075.0005001 / 25 MAY 21
1 **Applicable to: MSN 10949-11597**

To insert the lateral flight plan, the flight crew can use either a company route number or an ICAO four-letter city pair.

The lateral flight plan includes the following elements:
- Departure
  - Takeoff runway
  - SID
  - En route transition.
- En route
  - En route waypoints and airways.
- Arrival
  - En route transition
  - STARs/VIAs
  - Landing runway with selected approach
  - Missed approach.
- Alternate flight plan.

These elements are defined by waypoints and legs between the waypoints.


TSU06
FL090
D359E
DO74T
DO59N
4000
DO69J
FL110
TSU
EPR
FL120
DO502
Arrival
CZ26
3000
KORVI
OM26
LFBO
26
D233L
CDN
Missed
Approach
INTCPT
AMB
MEL
4000
Enroute
LMG
AGN
Departure
TOU
250/FL100
LFBO
15
TOU 08

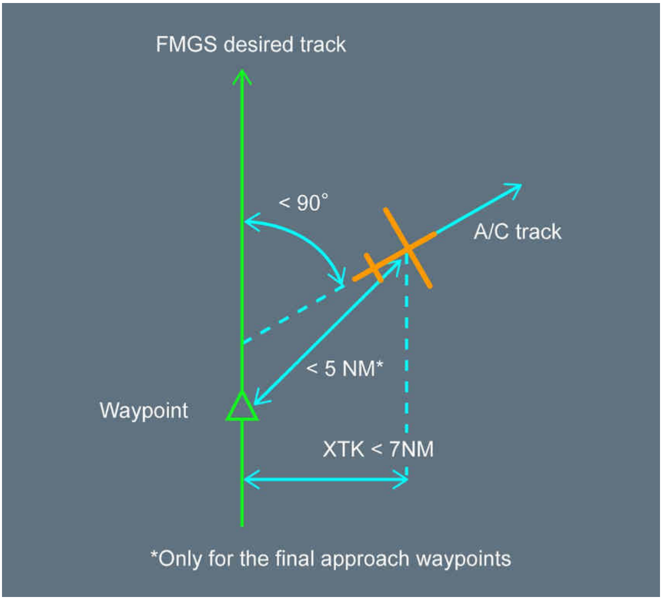
The FMGC strings the legs in sequence automatically.
The flight plan has a discontinuity if any two waypoints do not have a leg defined between them.
The computer assumes that the aircraft will fly a direct leg between the two waypoints that define the discontinuity.

Note: *When the aircraft enters a flight plan discontinuity, the NAV mode automatically switches to the HDG/TRK mode.*

In HDG/TRK mode, a flight plan waypoint is sequenced if the following conditions are met:
- The waypoint is behind the aircraft
- The cross track is less than 7 NM
- The angle between the current aircraft track and the track of the leg is less than 90 °.

Note: *If the waypoint is part of the final approach procedure, the waypoint is sequenced if all above conditions are met and the direct distance to the waypoint is less than 5 NM.*

The same conditions apply in NAV mode, except that no distance to the waypoint is taken into account.



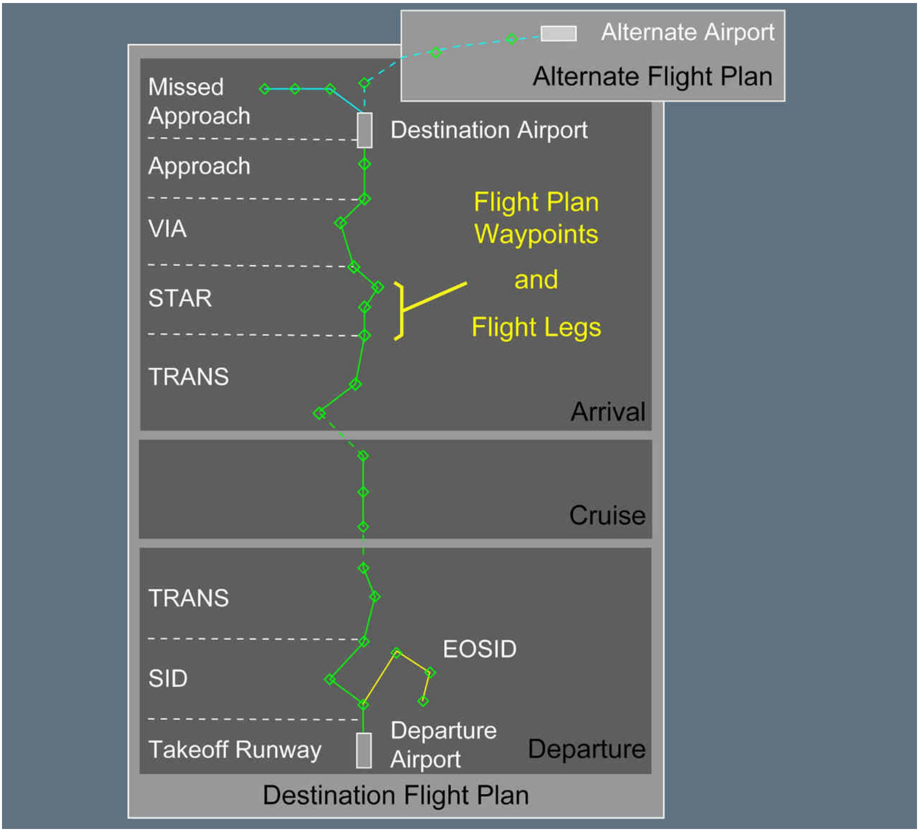
Note: *If the flight crew revises the lateral flight plan with the DIR TO INTERCEPT function, the waypoints of the revised flight plan are sequenced when the aircraft is in the above mentioned conditions.*

The FMGS automatically strings additional types of legs, when departure or arrival procedures (SID - STAR - TRANS) are defined.

Those strings correspond to specific patterns that are heading or track referenced and are defined in the database, such as:
- DME arc leg
- Holding pattern to a fix, or reverse turn

- Course-to-fix leg
- Radius-to-fix leg
- Heading leg
- MANUAL leg.

The flight crew cannot create these types of legs: they are part of the stored departure/arrival procedures they have selected.
The flight crew can only create direct legs between manually defined geographic points (navaids, airports, waypoints).


Alternate Airport
Alternate Flight Plan
Missed Approach
Destination Airport
Approach
Flight Plan Waypoints and Flight Legs
VIA
STAR
TRANS
Arrival
Cruise
TRANS
EOSID
SID
Takeoff Runway
Departure Airport
Departure
Destination Flight Plan

Note: *The departure and arrival procedures are defined in the database to minimize the amount of memory required.*

They are divided as follows:
- *DEPARTURE = SID + EN ROUTE TRANSITION*
- *ARRIVAL = APPR VIA + STAR + EN ROUTE TRANSITION*

The SID is the central common part of the departure procedure, as the STAR is for the arrival procedure. En route transitions are the various possible trajectories defined between the last point of the SID and the first en route waypoints, and between the last en route waypoint and the first fix of the STAR. "APPR VIAs" are the possible trajectories, defined between the last STAR point and the first point of the approach.

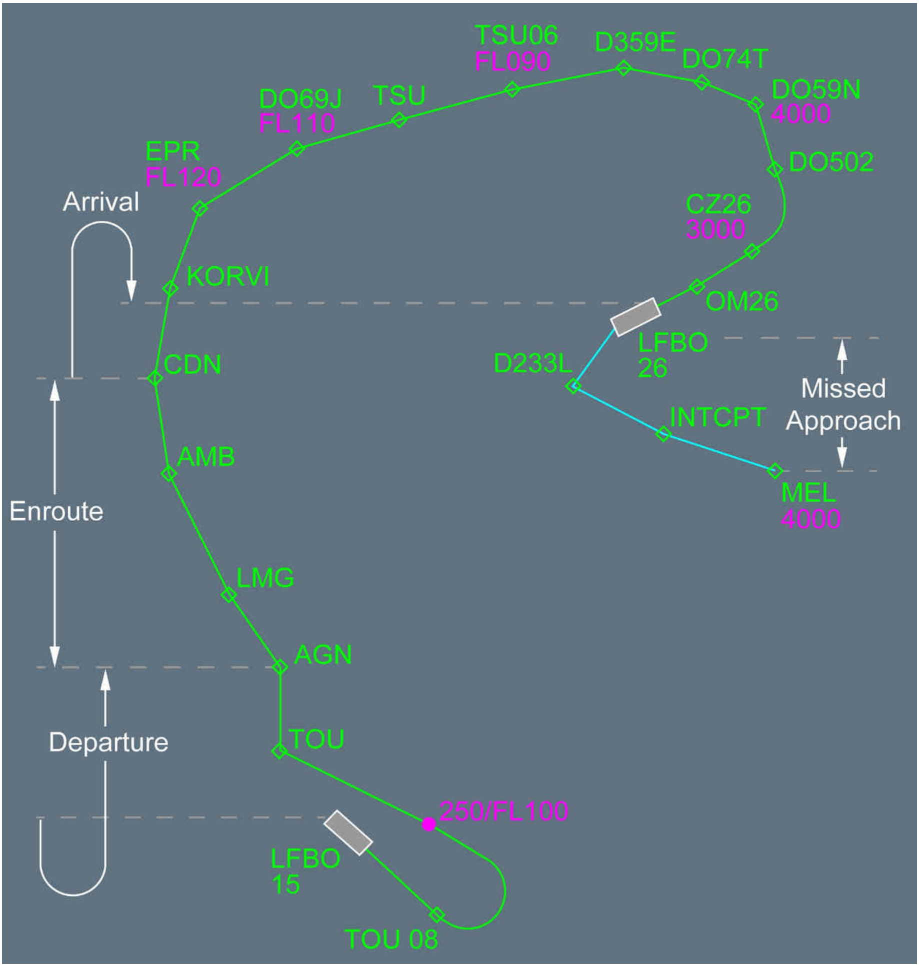
GENERAL

Ident.: DSC-22_20-30-10-05-00011075.0002001 / 05 MAR 19
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

To insert the lateral flight plan, the flight crew can use either a company route number or an ICAO four-letter city pair.

The lateral flight plan includes the following elements:
- Departure
  - Takeoff runway
  - SID
  - En route transition.
- En route
  - En route waypoints and airways.
- Arrival
  - En route transition
  - STARs/VIAs
  - Landing runway with selected approach
  - Missed approach.
- Alternate flight plan.

These elements are defined by waypoints and legs between the waypoints.


TSU06
FL090
D359E
DO74T
DO69J
FL110
TSU
DO59N
4000
EPR
FL120
DO502
Arrival
CZ26
3000
KORVI
OM26
CDN
D233L
LFBO
26
Missed
Approach
INTCPT
AMB
MEL
4000
Enroute
LMG
AGN
Departure
TOU
250/FL100
LFBO
15
TOU 08

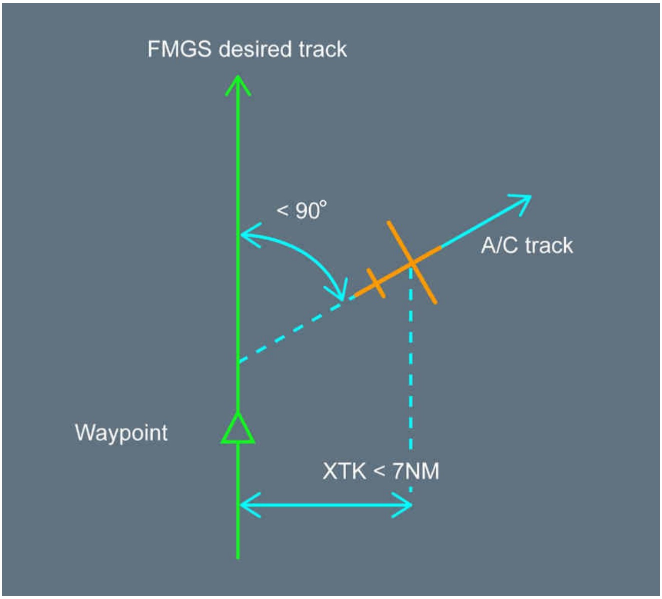
The FMGC automatically strings the legs in sequence.
The flight plan has a discontinuity if any two waypoints do not have a leg defined between them.
The computer assumes that the aircraft will fly a direct leg between the two waypoints that define the discontinuity.

Note: *When the aircraft overflies a flight plan discontinuity, the NAV mode automatically reverts to the HDG/TRK mode.*

In HDG/TRK mode, a flight plan waypoint is sequenced if the following conditions are met:

- The waypoint is behind the aircraft and the aircraft is less than 7 NM from it
- The angle between the current aircraft track and the track of the leg is less than 90 °.
- If the aircraft is flying a discontinuity towards a waypoint, this waypoint is sequenced when the aircraft is less than 5NM from it.

The same conditions apply in NAV mode, except that no distance to the waypoint is taken into account.



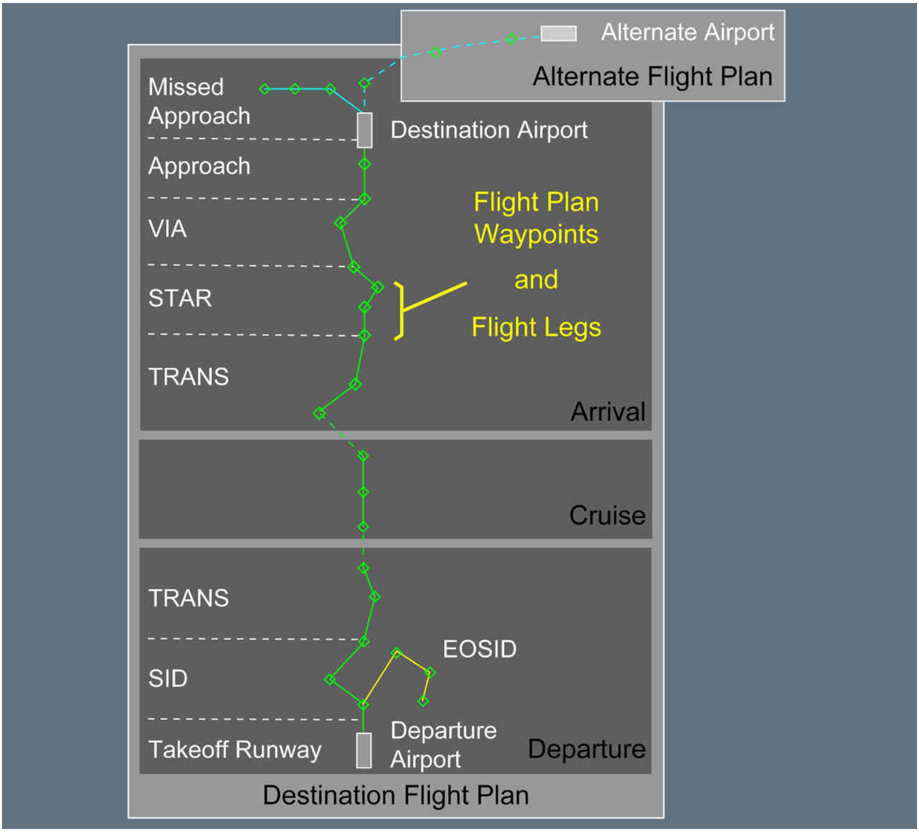
Note: *If the flight crew revises the lateral flight plan with the DIR TO INTERCEPT function, the waypoints of the revised flight plan are sequenced when the aircraft is in the above mentioned conditions.*

The FMGS automatically strings additional types of legs, when departure or arrival procedures (SID - STAR - TRANS) are defined.

Those strings correspond to specific patterns that are heading or track referenced and are defined in the database, such as:
- DME arc leg
- Holding pattern to a fix, or reverse turn
- Course-to-fix leg

- Radius-to-fix leg
- Heading leg
- MANUAL leg.

The flight crew cannot create these types of legs: They are part of the stored departure/arrival procedures they have selected.
The flight crew can only create direct legs between manually defined geographic points (navaids, airports, waypoints).


Alternate Airport
Alternate Flight Plan
Missed Approach
Destination Airport
Approach
Flight Plan Waypoints and Flight Legs
VIA
STAR
TRANS
Arrival
Cruise
TRANS
EOSID
SID
Takeoff Runway
Departure Airport
Departure
Destination Flight Plan

Note: *The departure and arrival procedures are defined in the database to minimize the amount of memory required.*

They are divided, as follows:
- *DEPARTURE = SID + EN ROUTE TRANSITION*
- *ARRIVAL = APPR VIA + STAR + EN ROUTE TRANSITION*

The SID is the central common part of the departure procedure, as the STAR is of the arrival procedure. Enroute transitions (TRANS) are the various possible trajectories defined between the last SID point and the first enroute waypoints, and between the last enroute waypoint and the first fix of the STAR. ”APPR VIAs” are the possible trajectories, defined between the last STAR point and the first point of the approach.

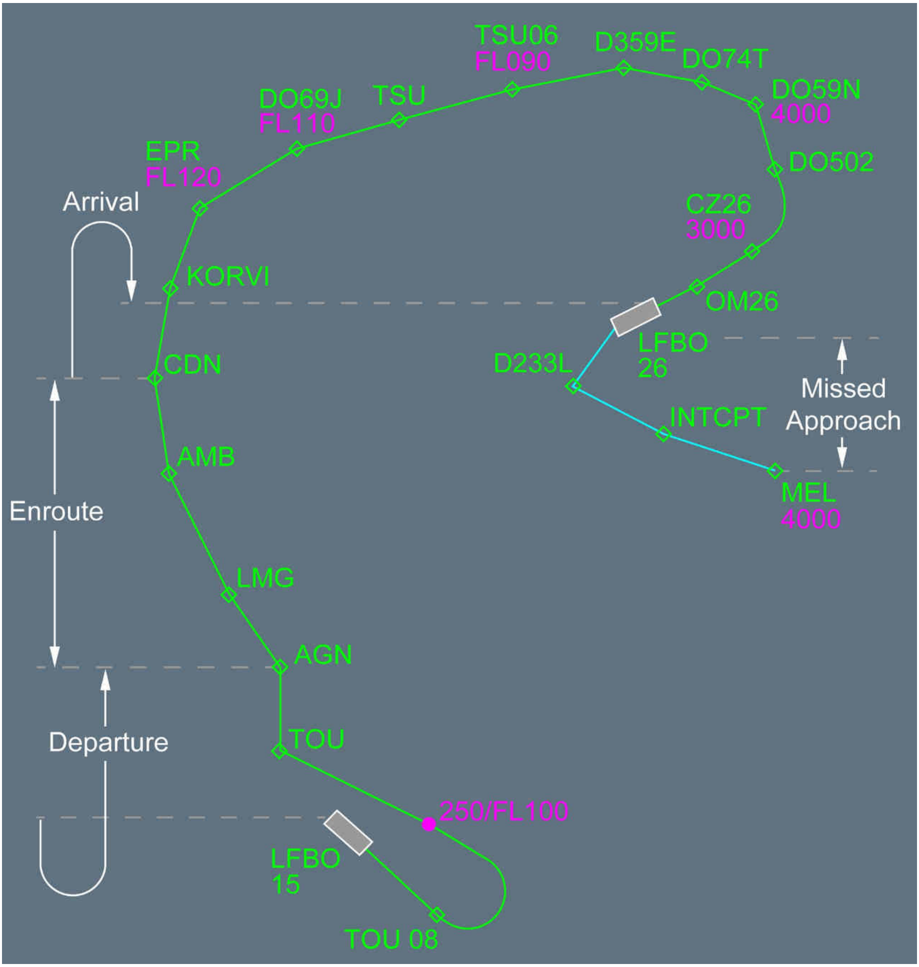
GENERAL

Ident.: DSC-22_20-30-10-05-00011075.0004001 / 05 MAR 19
Applicable to: MSN 04827-04860

To insert the lateral flight plan, the flight crew can use either a company route number or an ICAO four-letter city pair.

The lateral flight plan includes the following elements:
- Departure
  - Takeoff runway
  - SID
  - En route transition.
- En route
  - En route waypoints and airways.
- Arrival
  - En route transition
  - STARs/VIAs
  - Landing runway with selected approach
  - Missed approach.
- Alternate flight plan.

These elements are defined by waypoints and legs between the waypoints.

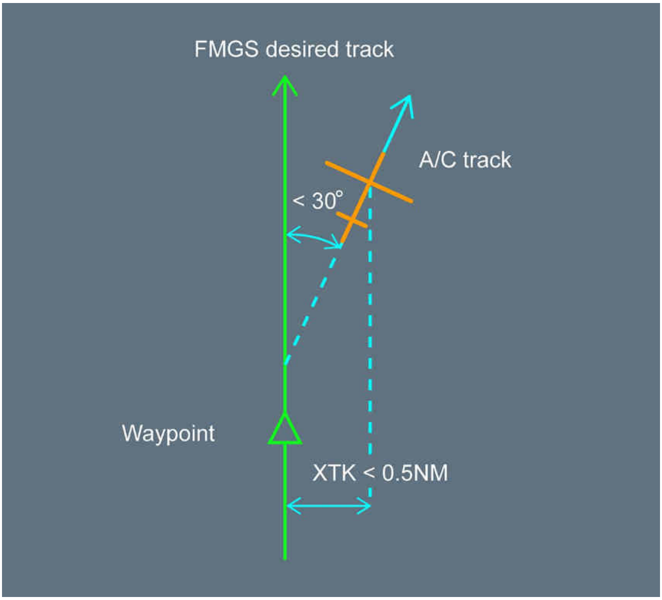

TSU06
FL090
D359E
DO74T
DO59N
4000
DO69J
FL110
TSU
EPR
FL120
DO502
Arrival
CZ26
3000
KORVI
OM26
LFBO
26
D233L
CDN
Missed
Approach
INTCPT
AMB
MEL
4000
Enroute
LMG
AGN
Departure
TOU
250/FL100
LFBO
15
TOU 08

The FMGC automatically strings the legs in sequence.
The flight plan has a discontinuity if any two waypoints do not have a leg defined between them.
The computer assumes that the aircraft will fly a direct leg between the two waypoints that define the discontinuity.

Note: *When the aircraft overflies a flight plan discontinuity, the NAV mode automatically reverts to the HDG/TRK mode.*

In HDG/TRK mode, a waypoint is sequenced when it passes behind the aircraft, and the aircraft is less than 5 NM from it. In addition, when the waypoint is the Destination Airport (DEST), the sequencing is inhibited, unless the following conditions are fulfilled within the 3 s following the general rules fulfilment:
- The cross-track is less than 0.5 NM
- The difference between the track of the aircraft and the track of the leg is less than 30 °.

The same conditions apply in NAV mode, except that no distance to the waypoint is taken into account.



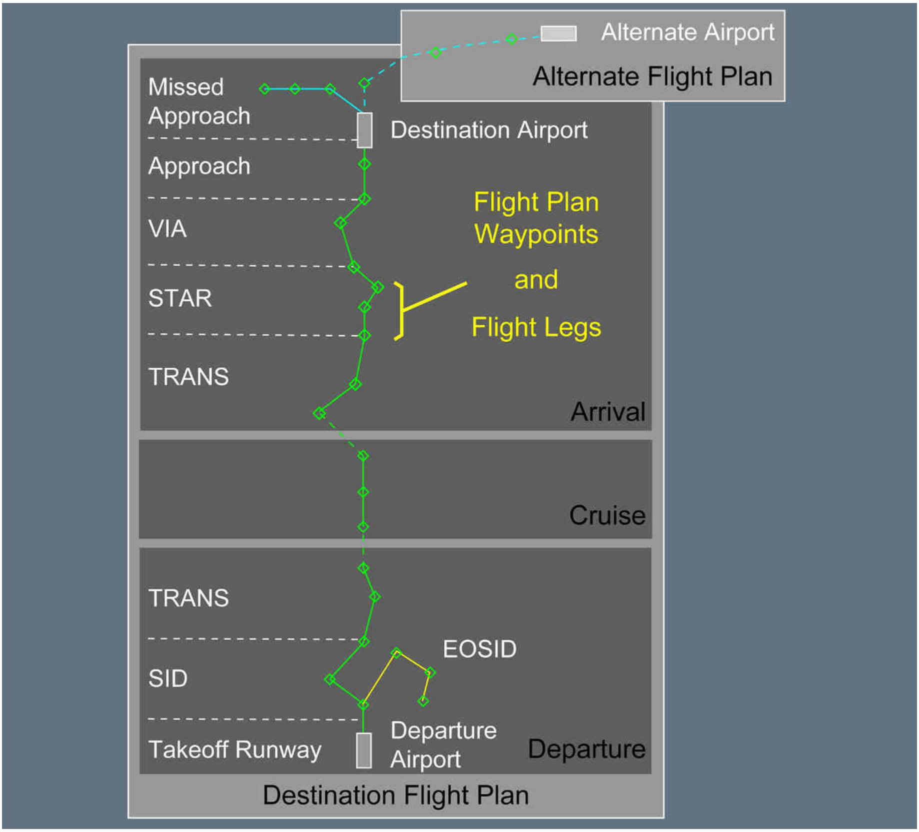
Note: *If the flight crew revises the lateral flight plan with the DIR TO INTERCEPT function, the waypoints of the revised flight plan are sequenced when the aircraft is in the above mentioned conditions.*

The FMGS automatically strings additional types of legs, when departure or arrival procedures (SID - STAR - TRANS) are defined.

Those strings correspond to specific patterns that are heading or track referenced and are defined in the database, such as:
- DME arc leg
- Holding pattern to a fix, or reverse turn

- Course-to-fix leg
- Radius-to-fix leg
- Heading leg
- MANUAL leg.

The flight crew cannot create these types of legs: They are part of the stored departure/arrival procedures they have selected.
The flight crew can only create direct legs between manually defined geographic points (navaids, airports, waypoints).


Alternate Airport
Alternate Flight Plan
Missed
Approach
Destination Airport
Approach
VIA
Flight Plan
Waypoints
and
Flight Legs
STAR
TRANS
Arrival
Cruise
TRANS
EOSID
SID
Takeoff Runway
Departure
Airport
Departure
Destination Flight Plan

Note: *The departure and arrival procedures are defined in the database to minimize the amount of memory required.*

They are divided, as follows:

- *DEPARTURE = SID + EN ROUTE TRANSITION*
- *ARRIVAL = APPR VIA + STAR + EN ROUTE TRANSITION*

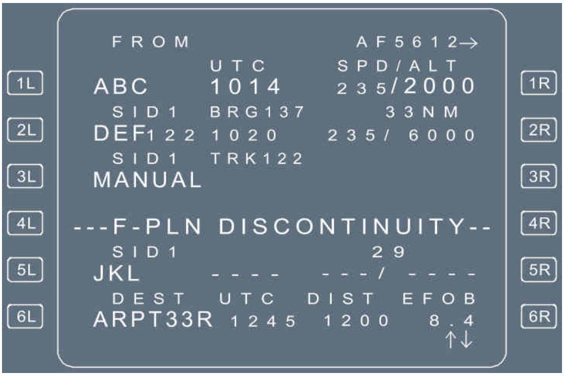
The SID is the central common part of the departure procedure, as the STAR is of the arrival procedure. Enroute transitions (TRANS) are the various possible trajectories defined between the last SID point and the first enroute waypoints, and between the last enroute waypoint and the first fix of the STAR. ”APPR VIAs” are the possible trajectories, defined between the last STAR point and the first point of the approach.

MANUAL LEGS

Ident.: DSC-22_20-30-10-05-00010629.0001001 / 17 AUG 10
Applicable to: ALL

A MANUAL leg stays on a constant TRK or HDG and has no termination point. The flight crew cannot insert it into a flight plan manually: it is part of a given procedure such as a SID or a STAR. When the aircraft is flying a MANUAL leg, the NAV mode remains engaged and predictions assume that the aircraft will fly a direct leg from its present position to the next waypoint (DIR TO). When the aircraft is cleared to fly to the next waypoint of the flight plan, the flight crew performs a DIR TO.

Note: *1. In NAV mode, a MANUAL leg is sequenced only by performing a DIR TO.*
2. The use of the descent mode (DES) on a MANUAL leg is not recommended.



```
  FROM                    AF5612→
              UTC       SPD/ALT
ABC           1014      235/2000
  SID1        BRG137       33NM
DEF122        1020      235/ 6000
  SID1        TRK122
MANUAL
---F-PLN DISCONTINUITY--
  SID1                      29
JKL           ----      ---/ ----
  DEST      UTC    DIST    EFOB
ARPT33R     1245   1200     8.4
                             ↑↓
```

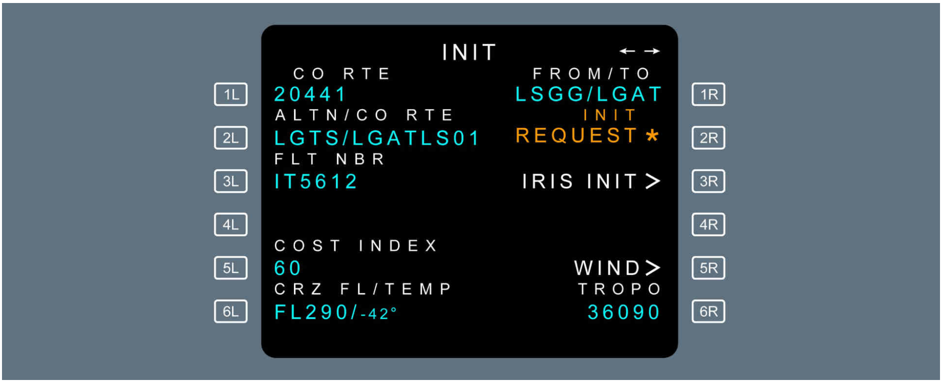
FLIGHT PLAN CONSTRUCTION

Ident.: DSC-22_20-30-10-05-00011076.0032001 / 04 JUN 19

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

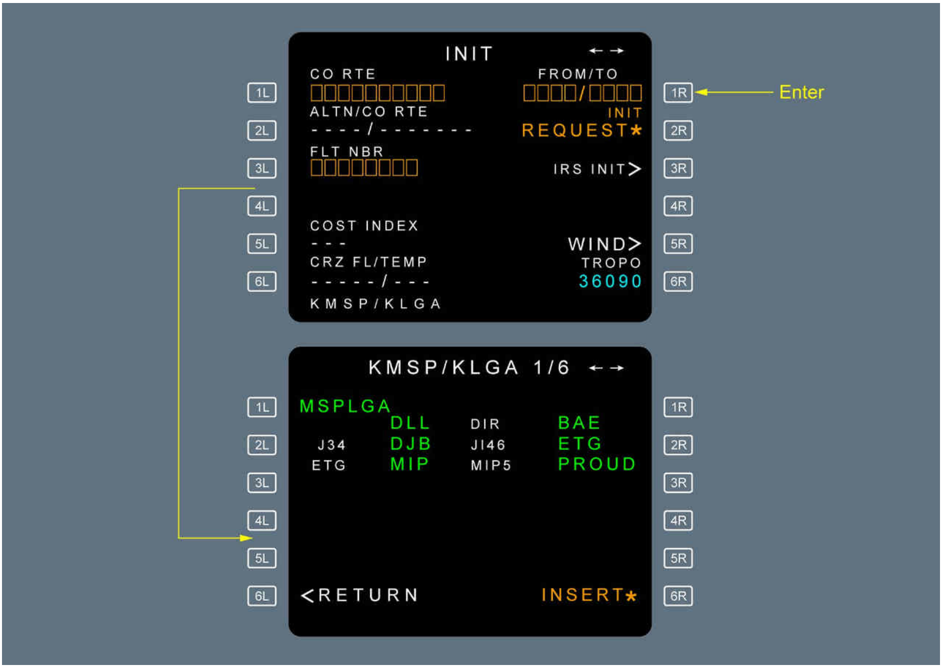
There are three ways of defining the route:

1. A company route, that is in the database, and is known by the flight crew.
   The flight crew enters the name of the CO RTE into the [1L] field of the INIT A page. This action enters all the elements of the flight plan. The database usually includes an alternate route associated with the destination.



```
                    INIT               ← →
   CO RTE                      FROM/TO
  20441                      LSGG/LGAT
  ALTN/CO RTE                    INIT
  LGTS/LGATLS01              REQUEST*
  FLT NBR
  IT5612                     IRIS INIT>

  COST INDEX
  60                             WIND>
  CRZ FL/TEMP                    TROPO
  FL290/-42°                     36090
```

2. A company route, that is in the database, but the flight crew does not know it is there.
   The flight crew enters a city pair in the [1R] field. The ROUTE SELECTION page automatically appears and enables the flight crew to review all stored routes between the two cities before selecting one of them.



```
              INIT               ←→
CO RTE                    FROM/TO
□□□□□□□□□□          □□□□/□□□□
ALTN/CO RTE                  INIT
----/--------          REQUEST*
FLT NBR
□□□□□□□□□              IRS INIT>

COST INDEX
---                        WIND>
CRZ FL/TEMP                TROPO
-----/---                  36090
KMSP/KLGA
```

```
        KMSP/KLGA  1/6  ←→
MSPLGA
            DLL     DIR      BAE
   J34      DJB     J146     ETG
   ETG      MIP     MIP5     PROUD



<RETURN                 INSERT*
```

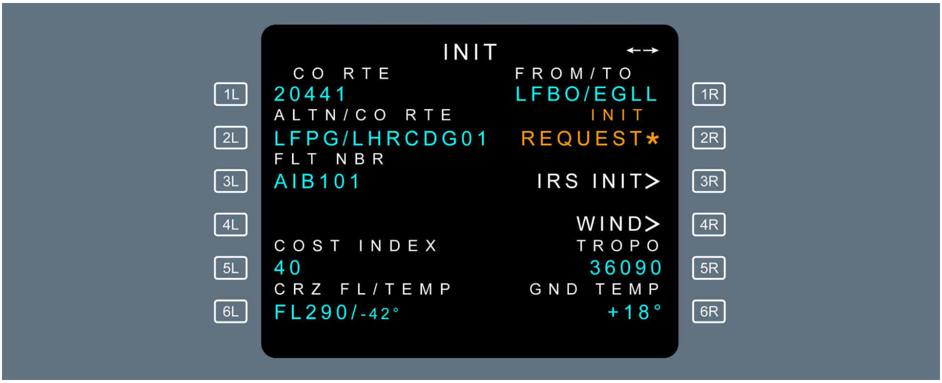
3. There is no company route between the two cities.
   The flight crew enters the city pair in the [1R] field. The ROUTE SELECTION page appears and displays “NONE”.
   The flight crew has to manually construct the entire flight plan.
   For procedure, *Refer to PRO-NOR-SRP-01-10 Flight Plan Initialization - General*.

FLIGHT PLAN CONSTRUCTION

Ident.: DSC-22_20-30-10-05-00011076.0042001 / 04 JUN 19
Applicable to: MSN 04827-04860

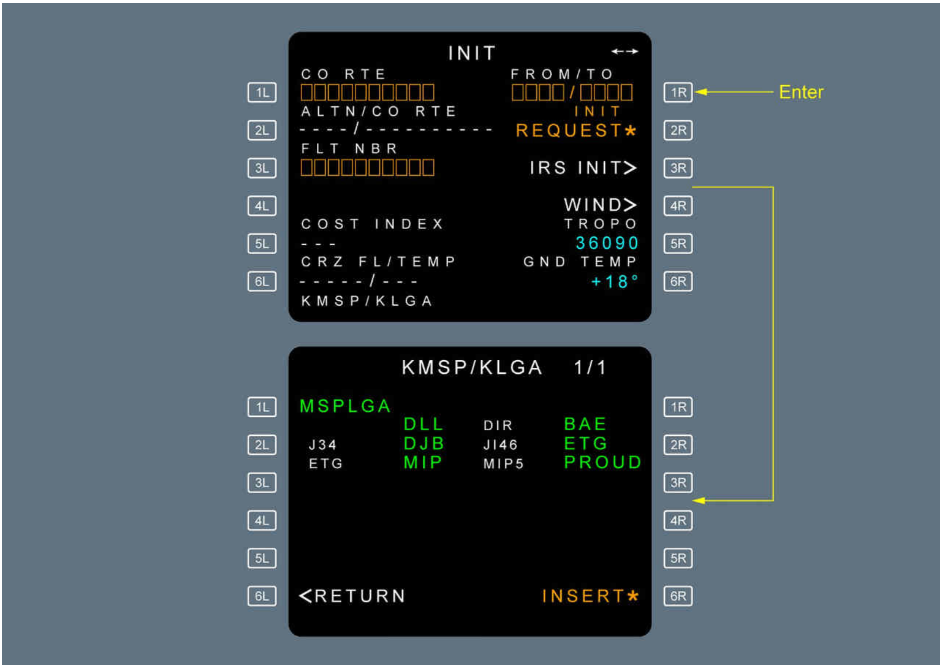
There are three ways of defining the route:

1. A company route, that is in the database, and is known by the flight crew.
   The flight crew enters the name of the CO RTE into the [1L] field of the INIT A page. This action enters all the elements of the flight plan. The database usually includes an alternate route associated with the destination.



```
                    INIT              ←→
  CO RTE                      FROM/TO
20441                       LFBO/EGLL
ALTN/CO RTE                      INIT
LFPG/LHRCDG01               REQUEST*
FLT NBR
AIB101                      IRS INIT>

                                WIND>
COST INDEX                      TROPO
40                              36090
CRZ FL/TEMP                  GND TEMP
FL290/-42°                       +18°
```

2. A company route, that is in the database, but the flight crew does not know it is there.
   The flight crew enters a city pair in the [1R] field. The ROUTE SELECTION page automatically appears and enables the flight crew to review all stored routes between the two cities before selecting one of them.


INIT
CO RTE
FROM/TO
ALTN/CO RTE
----/----------
INIT
REQUEST*
FLT NBR
IRS INIT>
WIND>
COST INDEX
TROPO

36090
CRZ FL/TEMP
GND TEMP
-----/---
+18°
KMSP/KLGA
Enter
KMSP/KLGA 1/1
MSPLGA
DLL
DIR
BAE
J34
DJB
J146
ETG
ETG
MIP
MIP5
PROUD
<RETURN
INSERT*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

3. There is no company route between the two cities.
   The flight crew enters the city pair in the [1R] field. "NONE" automatically appears in the CO RTE [1L] field, without automatically displaying the ROUTE SELECTION page.
   The flight crew has to manually construct the entire flight plan.
   For procedure, *Refer to PRO-NOR-SRP-01-10 Flight Plan Initialization - General*.

FLIGHT PLAN CAPACITY

Ident.: DSC-22_20-30-10-05-00010631.0009001 / 30 AUG 18

3 **Applicable to: MSN 10949-11597**

In terms of flight plan capacity, the FMS takes into account all the following flight plans:
- The active flight plan
- The secondary flight plan
- The temporary flight plan.

Each flight plan can contain up to 250 legs. If a flight plan contains 250 legs, and if the flight crew attempts to perform a lateral revision that increases the number of legs of this flight plan, the FMS rejects the revision and the MCDU displays the “F-PLN FULL” message. For the active and secondary flight plans, the primary parts must contain less than 215 legs, and the alternate parts must contain less than 35 legs.

FLIGHT PLAN CAPACITY

Ident.: DSC-22_20-30-10-05-00010631.0002001 / 04 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

In terms of flight plan capacity, the FMS takes into account 3 flight plans:
- The active flight plan
- The secondary flight plan
- The temporary flight plan.

Each flight plan can contain up to 200 legs. If a flight plan contains 200 legs, and if the flight crew attempts to perform a lateral revision that increases the number of legs of this flight plan, the FMS rejects the revision and the MCDU displays the F-PLN FULL message.
For the active and secondary flight plans, the primary parts must contain less than 165 legs, and the alternate parts must contain less than 35 legs.

FLIGHT PLAN CAPACITY

Ident.: DSC-22_20-30-10-05-00010631.0008001 / 17 AUG 10
Applicable to: MSN 04827-04860

In terms of flight plan capacity, the FMS takes into account 5 elements:
- The primary part of the active flight plan
- The alternate part of the active flight plan
- The primary part of the secondary flight plan
- The alternate part of the secondary flight plan
- The temporary flight plan.

Each element can contain up to 200 legs. If an element contains 200 legs, and if the flight crew attempts to perform a lateral revision that increases the number of legs of this element, the FMS rejects the revision and the MCDU displays the “F-PLN FULL” message.

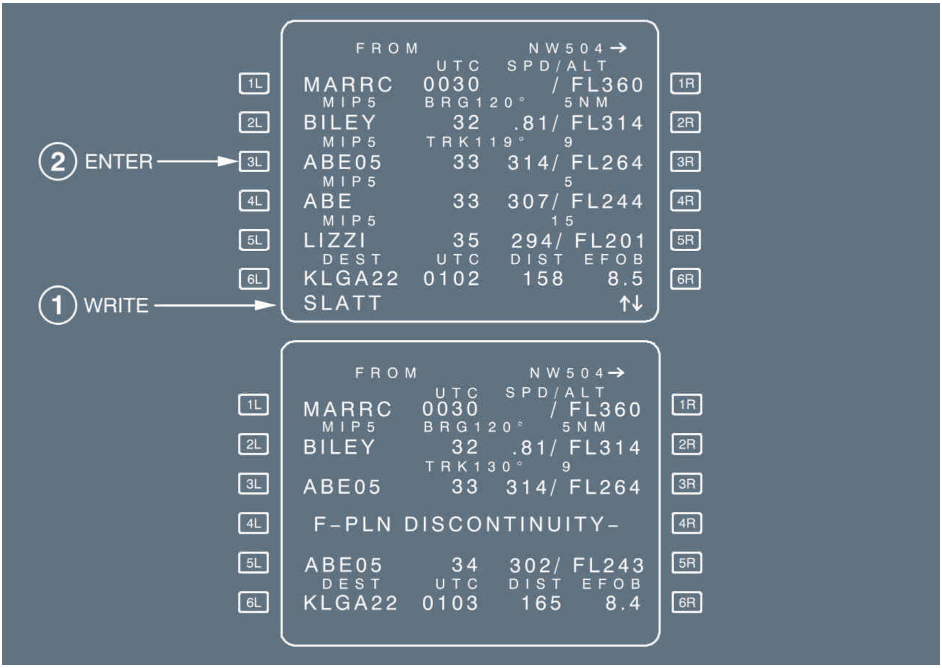
LATERAL REVISIONS

Ident.: DSC-22_20-30-10-05-00010632.0002001 / 07 APR 17

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The flight crew can revise the lateral flight plan following two types of revisions:

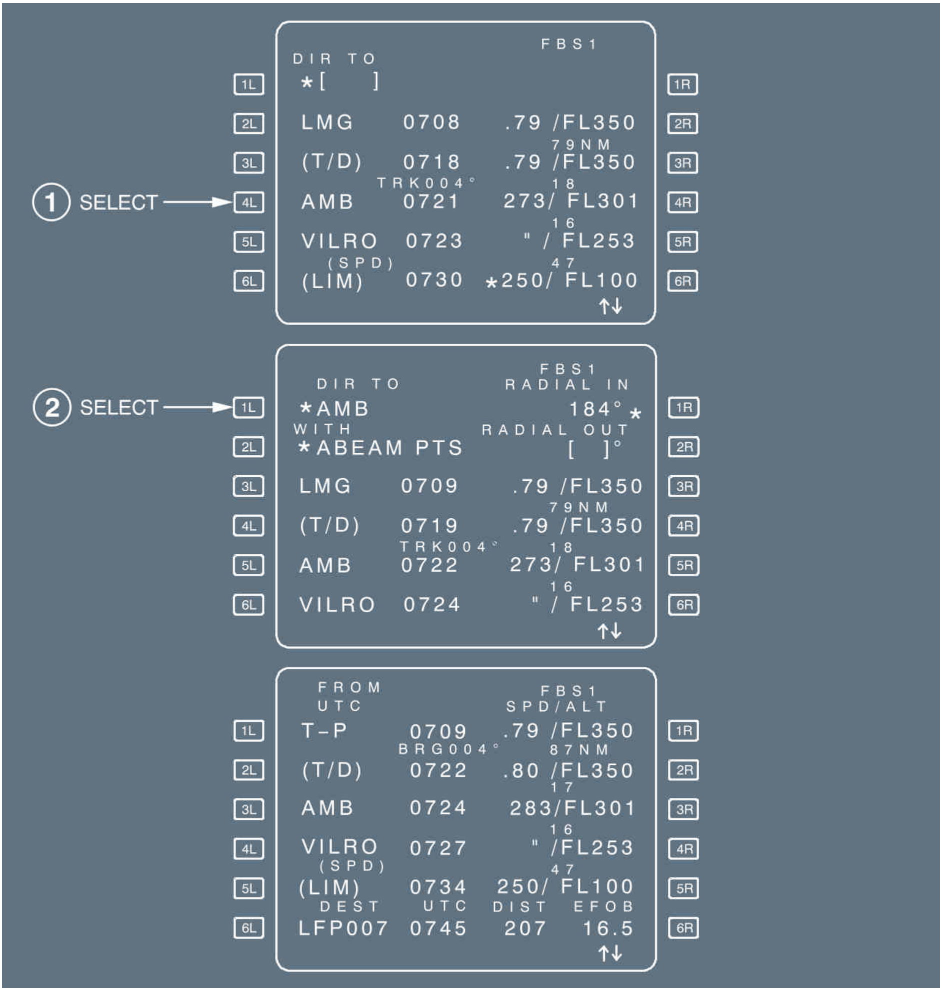
1. Lateral revisions that have an immediate effect on the active flight plan:
   - The flight crew inserts a new waypoint directly on the F-PLN page, deletes, or changes a waypoint from it:



```
        FROM               NW504→
                UTC    SPD/ALT
MARRC          0030      / FL360
  MIP5         BRG120°    5NM
BILEY            32   .81/ FL314
  MIP5         TRK119°    9
ABE05            33   314/ FL264
  MIP5                    5
ABE              33   307/ FL244
  MIP5                   15
LIZZI            35   294/ FL201
  DEST          UTC   DIST  EFOB
KLGA22         0102    158   8.5
SLATT                         ↑↓
```

```
        FROM               NW504→
                UTC    SPD/ALT
MARRC          0030      / FL360
  MIP5         BRG120°    5NM
BILEY            32   .81/ FL314
               TRK130°    9
ABE05            33   314/ FL264
  F-PLN DISCONTINUITY-

ABE05            34   302/ FL243
  DEST          UTC   DIST  EFOB
KLGA22         0103    165   8.4
```

   When the flight crew enters a new waypoint, which does not exist in the flight plan, the following waypoint moves down the flight plan, with a discontinuity shown after the new waypoint.
   - The flight crew adds a direct leg (DIR TO) from his present position to a selected waypoint: The flight crew can change the “TO” waypoint of the active leg. The DIR TO function gives access to DIR TO, DIR TO ABEAM, or DIR TO/INTERCEPT. The active leg then goes from the present position (T/P) to the waypoint selected or inserted as the new “TO” waypoint.



```
                              FBS1
 DIR TO
 *[     ]
 LMG       0708      .79 /FL350
                        79NM
 (T/D)     0718      .79 /FL350
              TRK004°    18
 AMB       0721      273/ FL301
                         16
 VILRO     0723        " / FL253
    (SPD)                47
 (LIM)     0730     *250/ FL100
                             ↑↓
```

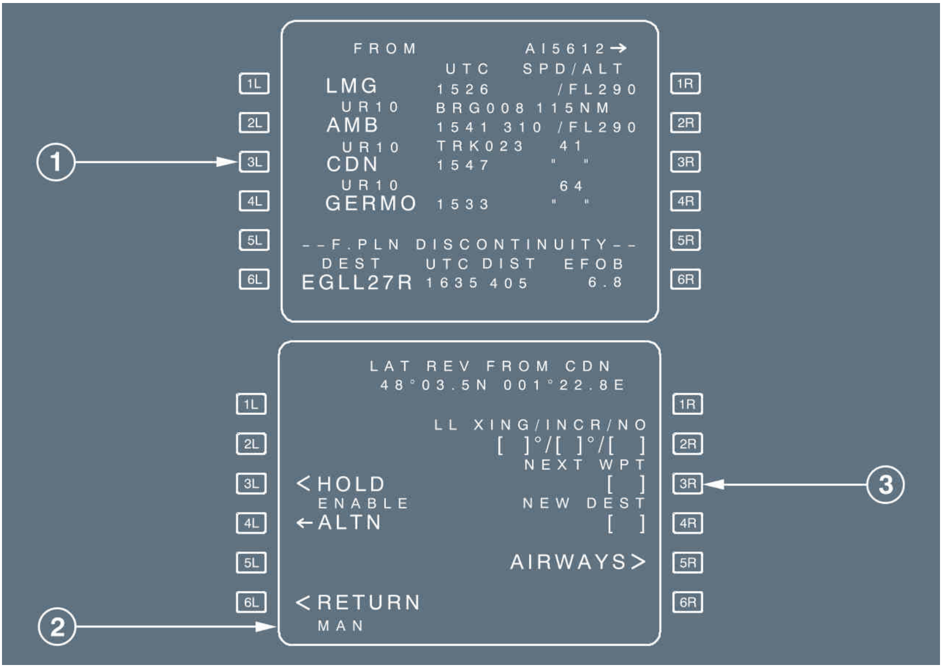
```
                              FBS1
   DIR TO                 RADIAL IN
 *AMB                       184° *
 WITH                   RADIAL OUT
 *ABEAM PTS                  [  ]°
 LMG       0709       .79 /FL350
                         79NM
 (T/D)     0719       .79 /FL350
               TRK004°    18
 AMB       0722       273/ FL301
                          16
 VILRO     0724         " / FL253
                              ↑↓
```

```
   FROM                       FBS1
   UTC                     SPD/ALT
 T-P        0709     .79 /FL350
             BRG004°     87NM
 (T/D)      0722     .80 /FL350
                         17
 AMB        0724     283/FL301
                         16
 VILRO      0727       " /FL253
   (SPD)                 47
 (LIM)      0734     250/ FL100
    DEST     UTC    DIST   EFOB
 LFP007     0745     207   16.5
                             ↑↓
```

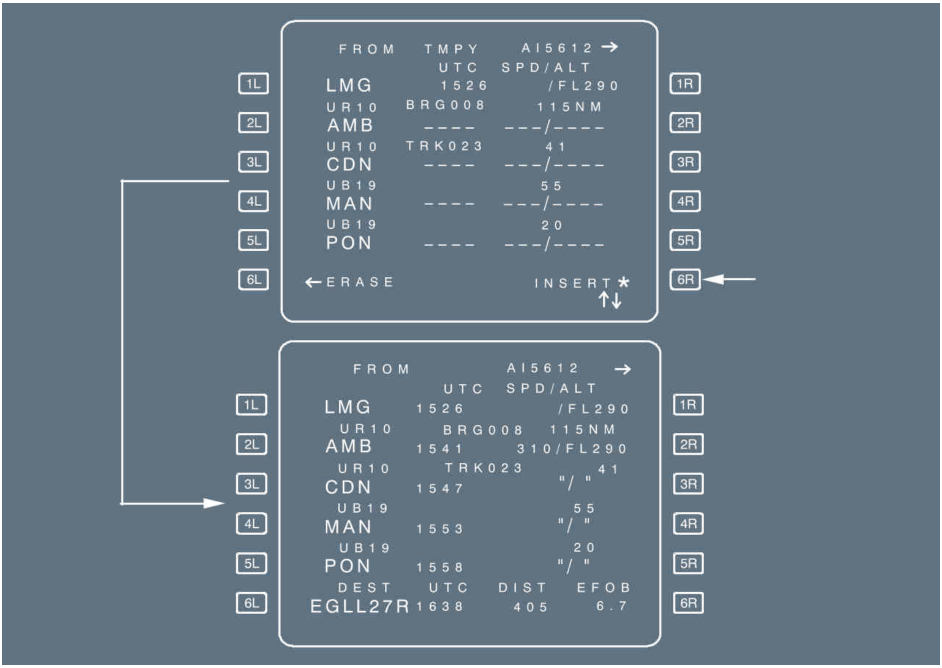
2. Lateral revisions that lead to a temporary flight plan (TMPY) before they take effect:
   The flight crew creates a temporary flight plan, then inserts it as a revision to the active flight plan. The flight crew does this when selecting, deleting, or modifying several waypoints of an airway or procedure at once (SID, STAR, HOLD, TAKEOFF or LANDING RWY). This modification is made on specific "LAT REV" pages from the flight plan page.

Possible revisions are:
- Insert or modify the departure procedure
- Insert or modify the arrival procedure
- Insert a waypoint
- Change the destination
- Insert an airway
- Insert an offset
- Insert a holding pattern
- Select or enable an alternate flight plan
- Fix information.

The purpose of the temporary flight plan is to allow the flight crew to check a revision on the MCDU and on the ND before inserting the changes into the active flight plan. It is a copy of the active flight plan that has been changed according to the flight crew revision. While it is displayed, the aircraft will continue to follow the original active flight plan.
No predictions are computed or displayed on the pages of the temporary flight plan.


FROM
AI5612→
UTC
SPD/ALT
LMG
1526
/FL290
UR10
BRG008 115NM
AMB
1541 310 /FL290
UR10
TRK023 41
CDN
1547 " "
UR10
64
GERMO
1533 " "
--F.PLN DISCONTINUITY--
DEST
UTC DIST
EFOB
EGLL27R
1635 405
6.8
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
LAT REV FROM CDN
48°03.5N 001°22.8E
LL XING/INCR/NO
[ ]°/[ ]°/[ ]
NEXT WPT
<HOLD
[ ]
ENABLE
NEW DEST
←ALTN
[ ]
AIRWAYS>
<RETURN
MAN
2
3

A temporary flight plan is displayed for a check and/or new modification. Inserting the temporary revision will modify the active flight plan.



```
   FROM     TMPY      AI5612 →
             UTC    SPD/ALT
 LMG         1526       /FL290
 UR10     BRG008       115NM
 AMB       ----     ---/----
 UR10     TRK023        41
 CDN       ----     ---/----
 UB19                   55
 MAN       ----     ---/----
 UB19                   20
 PON       ----     ---/----
←ERASE                INSERT*
                         ↑↓
```

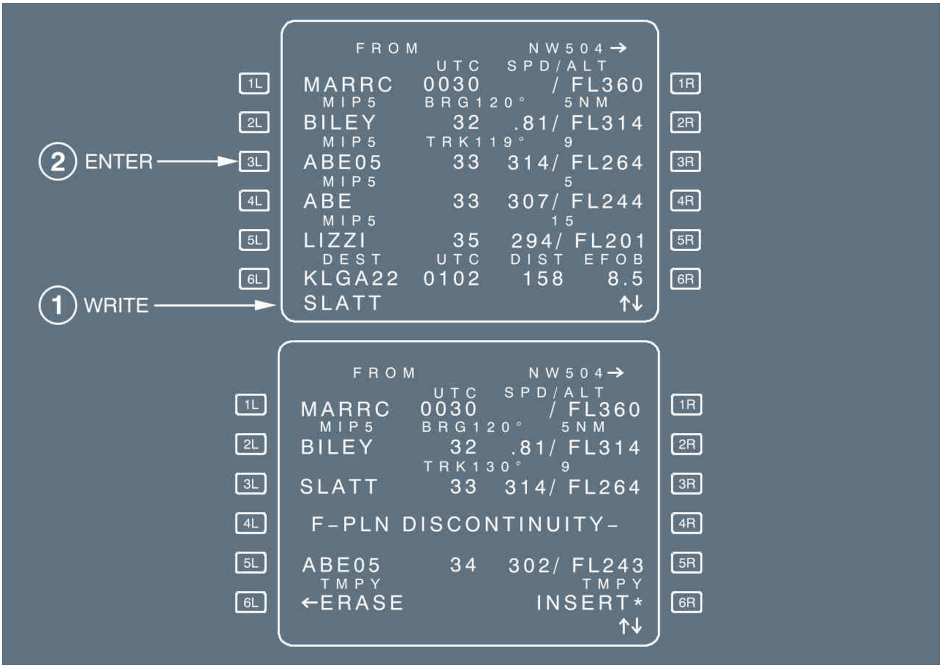
```
    FROM              AI5612    →
              UTC   SPD/ALT
 LMG      1526           /FL290
   UR10      BRG008    115NM
 AMB      1541       310/FL290
   UR10      TRK023          41
 CDN      1547           "/ "
   UB19                   55
 MAN      1553           "/ "
   UB19                   20
 PON      1558           "/ "
   DEST    UTC    DIST    EFOB
EGLL27R  1638     405      6.7
```

LATERAL REVISIONS

Ident.: DSC-22_20-30-10-05-00010632.0005001 / 23 JUN 15
Applicable to: MSN 04827-04860

The flight crew can revise the lateral flight plan in three ways. All lateral revisions of the F-PLN lead the FMS to create a temporary flight plan (TMPY) before they take effect:

- The flight crew inserts a new waypoint directly on the F-PLN page, deletes, or changes a waypoint from it:



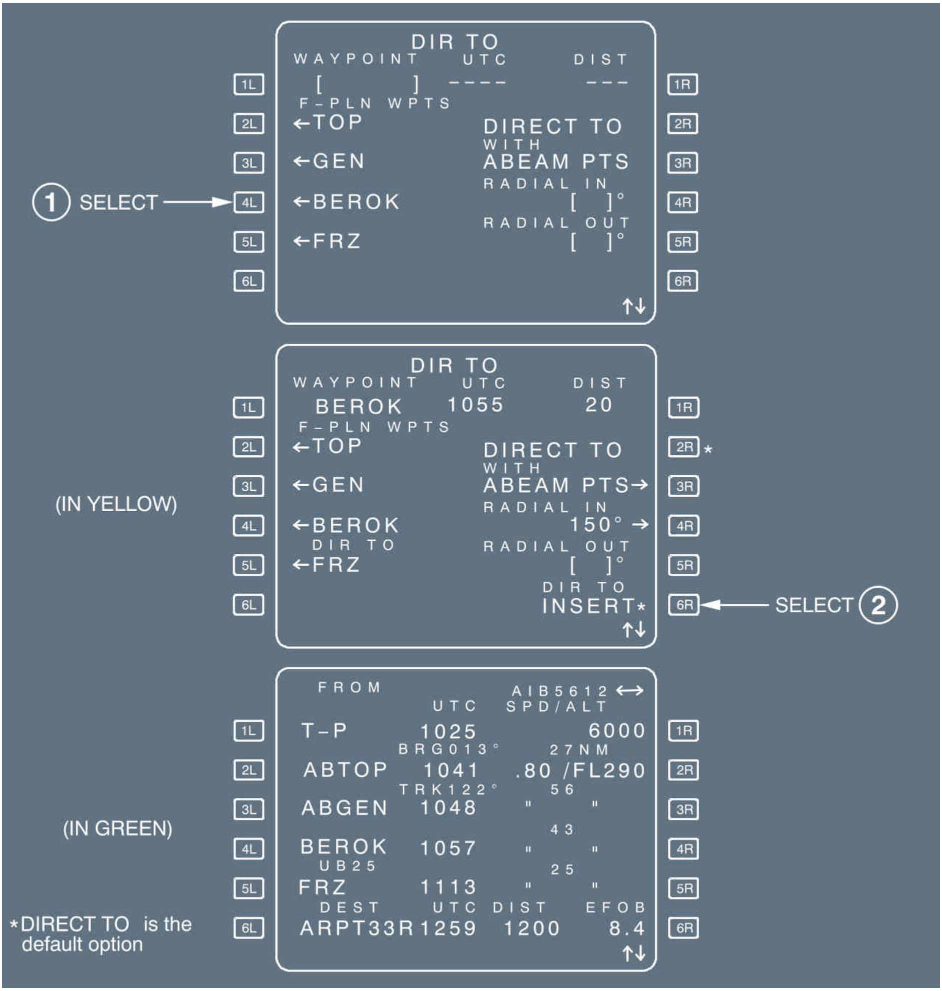
```
  FROM                  NW504→
           UTC     SPD/ALT
MARRC     0030        / FL360
  MIP5     BRG120°     5NM
BILEY       32     .81/ FL314
  MIP5     TRK119°     9
ABE05       33     314/ FL264
  MIP5                 5
ABE         33     307/ FL244
  MIP5                15
LIZZI       35     294/ FL201
  DEST     UTC     DIST  EFOB
KLGA22    0102     158    8.5
SLATT                       ↑↓
```

```
  FROM                  NW504→
           UTC     SPD/ALT
MARRC     0030        / FL360
  MIP5     BRG120°     5NM
BILEY       32     .81/ FL314
           TRK130°     9
SLATT       33     314/ FL264
   F-PLN DISCONTINUITY-
ABE05       34     302/ FL243
  TMPY                  TMPY
←ERASE               INSERT*
                            ↑↓
```

- After inserting a waypoint, a F-PLN discontinuity is inserted between the inserted waypoint and the following one.
- After deleting a waypoint, a F-PLN discontinuity is inserted between the preceding waypoint and the following one.

The flight crew should clear the discontinuity as appropriate, check the temporary F-PLN and insert it in the active F-PLN.

- The flight crew adds a direct leg (DIR TO):



```
           DIR TO
WAYPOINT     UTC          DIST
 [       ]   ----          ---
F-PLN WPTS
←TOP               DIRECT TO
                   WITH
←GEN               ABEAM PTS
                   RADIAL IN
←BEROK                  [   ]°
                   RADIAL OUT
←FRZ                    [   ]°

                            ↑↓
```

```
           DIR TO
WAYPOINT     UTC          DIST
  BEROK      1055          20
F-PLN WPTS
←TOP               DIRECT TO
                   WITH
←GEN               ABEAM PTS→
                   RADIAL IN
←BEROK                  150° →
  DIR TO           RADIAL OUT
←FRZ                    [   ]°
                      DIR TO
                      INSERT*
                            ↑↓
```

```
   FROM                 AIB5612 ↔
               UTC     SPD/ALT
T-P            1025         6000
           BRG013°        27NM
ABTOP          1041     .80 /FL290
           TRK122°        56
ABGEN          1048       "     "
                          43
BEROK          1057       "     "
  UB25                    25
FRZ            1113       "     "
  DEST         UTC  DIST     EFOB
ARPT33R1259   1200            8.4
                            ↑↓
```

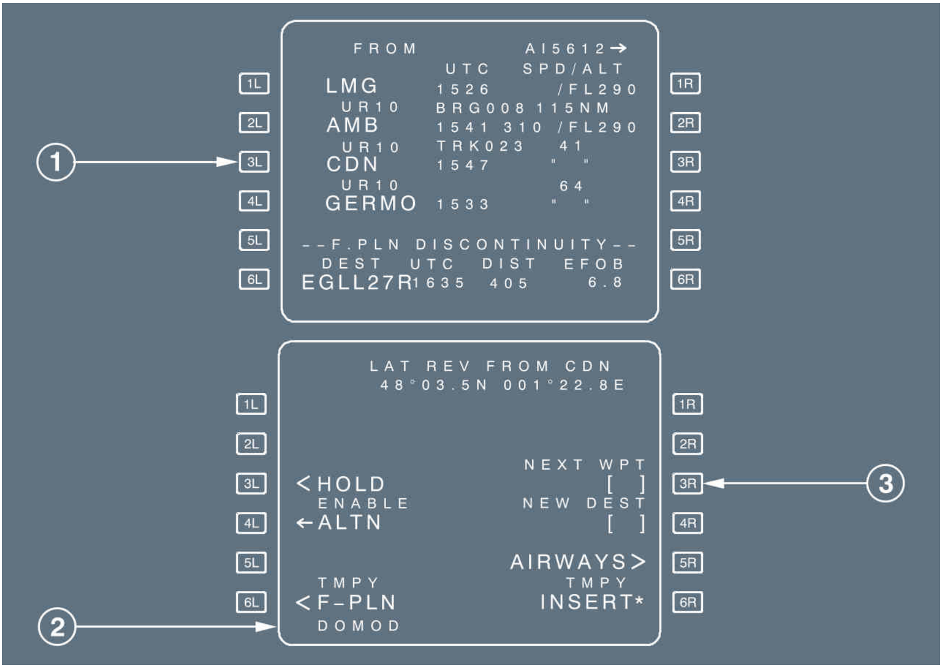
*DIRECT TO is the default option

The flight crew can perform a “DIR TO” to a waypoint in the F-PLN. Different options may be used to perform a “DIR TO”: DIRECT TO, DIR TO WITH ABEAM POINTS, RADIAL IN, RADIAL OUT. A single revision DIR TO temporary F-PLN specific to the DIR TO action is automatically created when the waypoint has been selected. After inserting the “DIR TO”, the active leg goes from present position (T/P) to the selected waypoint.

- The flight crew uses the LAT REV function. Possible revisions are:
  - Insert or modify the departure procedure
  - Insert or modify the arrival procedure
  - Insert a waypoint
  - Change the destination
  - Insert an airway
  - Insert an offset
  - Insert a holding pattern
  - Select or enable an alternate flight plan
  - Radial fix information
  - Insert LAT/LONG crosssing waypoint.

  The purpose of the temporary flight plan is to allow the flight crew to check a revision on the MCDU and on the ND before inserting the changes into the active flight plan. It is a copy of the active flight plan that has been changed according to the flight crew revision. While it is displayed, the aircraft will continue to follow the original active flight plan.

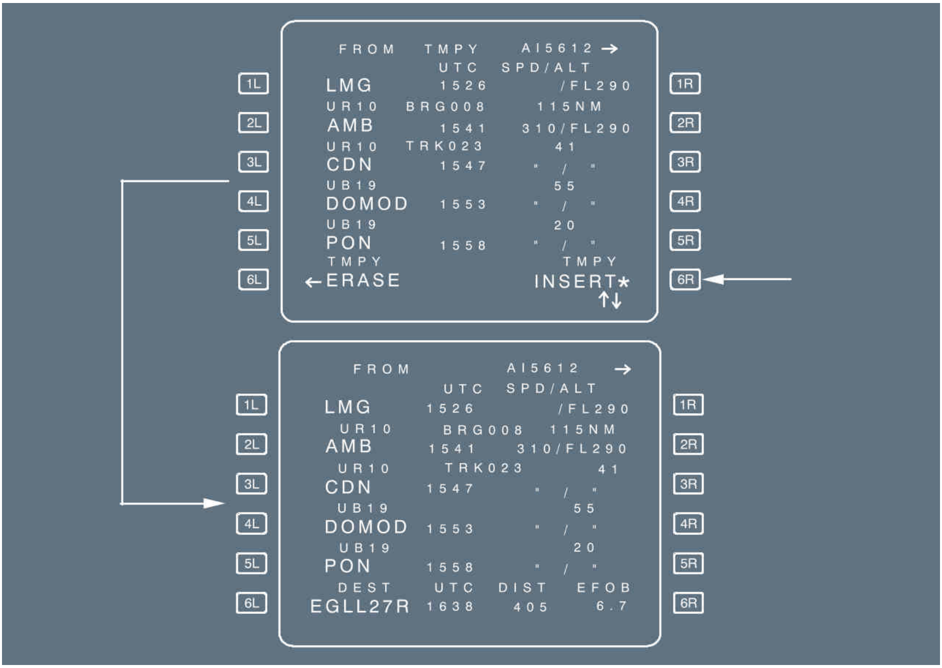
  Predictions are computed or displayed on the pages of the temporary flight plan.



```
      FROM            AI5612→
           UTC    SPD/ALT
LMG        1526      /FL290
  UR10     BRG008 115NM
AMB        1541  310 /FL290
  UR10     TRK023    41
CDN        1547      "   "
  UR10               64
GERMO      1533      "   "

--F.PLN DISCONTINUITY--
  DEST    UTC   DIST   EFOB
EGLL27R1635   405      6.8
```

```
      LAT REV FROM CDN
     48°03.5N 001°22.8E




                   NEXT WPT
<HOLD                [   ]
  ENABLE           NEW DEST
←ALTN                [   ]

                  AIRWAYS>
  TMPY               TMPY
<F-PLN             INSERT*
  DOMOD
```

A temporary flight plan is displayed for a check and/or new modification. Inserting the temporary revision will modify the active flight plan.



```
 FROM    TMPY    AI5612 →
          UTC    SPD/ALT
LMG       1526      /FL290
UR10  BRG008      115NM
AMB       1541   310/FL290
UR10  TRK023        41
CDN       1547     " / "
UB19                55
DOMOD     1553     " / "
UB19                20
PON       1558     " / "
TMPY               TMPY
←ERASE            INSERT*
                    ↑↓
```

```
 FROM           AI5612  →
         UTC    SPD/ALT
LMG      1526       /FL290
 UR10      BRG008   115NM
AMB      1541    310/FL290
 UR10      TRK023      41
CDN      1547     " / "
 UB19                  55
DOMOD    1553     " / "
 UB19                  20
PON      1558     " / "
 DEST    UTC   DIST   EFOB
EGLL27R  1638   405    6.7
```

FMS2 HONEYWELL

GENERAL

Ident.: DSC-22_20-30-10-15-00005067.0001001 / 26 OCT 22

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The lateral revision function allows the flight crew to create or modify the following parts of the flight plan:

- Airway
- Waypoint
- New destination
- Holding pattern
- Offset
- Alternate
- Fix information
  Each time the flight crew activates one of the above-listed revisions, the flight crew accesses a temporary flight plan that enables the modification to be checked before inserting it in the active flight plan. The flight crew selects these functions by pressing the left keys on F-PLN A or B.
- Direct to and overfly functions are accessed via the MCDU keys. No temporary flight plan is created with these functions.
- “Update at” capability is a specific function that manually updates the FM position. It does not use a temporary flight plan, but the flight crew must confirm its insertion before it is activated.

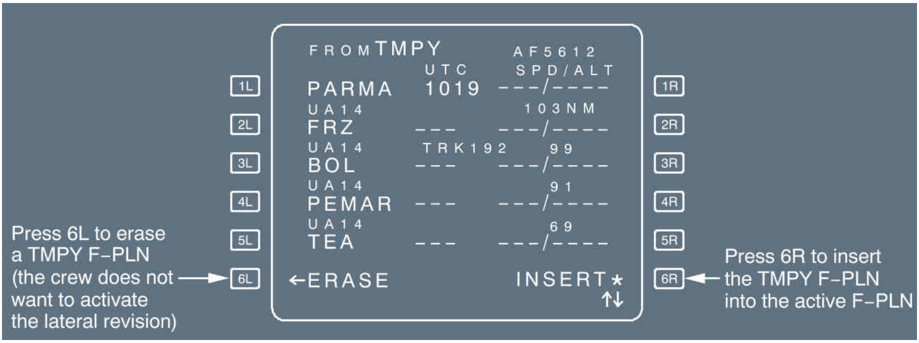
TEMPORARY F-PLN (TMPY)

Ident.: DSC-22_20-30-10-15-00000460.0001001 / 01 OCT 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

When a pilot makes a lateral revision to the F-PLN, the FMGS creates a temporary flight plan. This is a copy of the active F-PLN, but is corrected by the lateral revision in progress.
The aircraft continues to follow the active F-PLN, until the temporary revision is inserted.
The revision appears in yellow font on both MCDUs and NDs.

- Lateral and vertical revisions cannot be made to a temporary F-PLN.
- Only one temporary F-PLN may be accessed at a time.
- The “DIRECT TO” function, when used, erases a temporary F-PLN.
- When a DIR TO is in process, a temporary revision cannot be displayed on the other MCDU.
- A TMPY F-PLN changes the title of the flight plan pages. (TMPY appears in all titles).
- No predictions are computed for a temporary flight plan (dashes are displayed).



```
FROM TMPY           AF5612
         UTC        SPD/ALT
PARMA    1019       ---/----
UA14                 103NM
FRZ      ---        ---/----
UA14     TRK192       99
BOL      ---        ---/----
UA14                  91
PEMAR    ---        ---/----
UA14                  69
TEA      ---        ---/----
←ERASE              INSERT*
                          ↑↓
```

Press 6L to erase a TMPY F–PLN (the crew does not want to activate the lateral revision)

Press 6R to insert the TMPY F–PLN into the active F–PLN

Temporary data is displayed in yellow (ND and MCDU). Once inserted, it becomes active and is displayed in green.

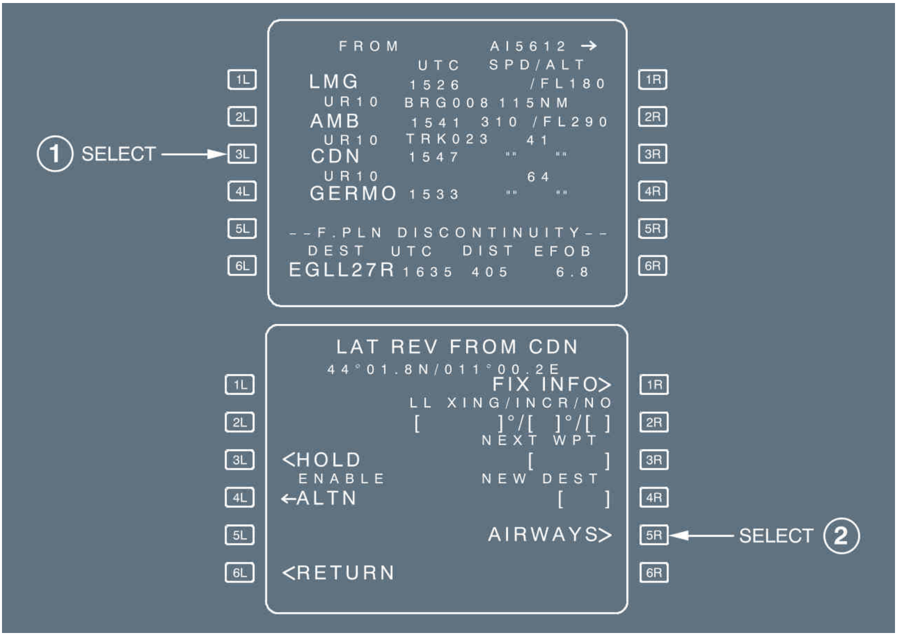
INSERTING AN AIRWAY WITH "VIA"

Ident.: DSC-22_20-30-10-15-E-00012828.0001001 / 14 MAY 12

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

GENERAL

In the active flight plan, the pilot can insert up to 5 successive airway segments, going from a revised waypoint or ending at a given waypoint of the flight plan.



```
  FROM                A I5612 →
            UTC   SPD/ALT
LMG        1526      /FL180
   UR10   BRG008 115NM
AMB        1541  310 /FL290
   UR10   TRK023    41
CDN        1547   "    "
   UR10             64
GERMO      1533   "    "

--F.PLN DISCONTINUITY--
 DEST    UTC   DIST  EFOB
EGLL27R 1635   405    6.8
```

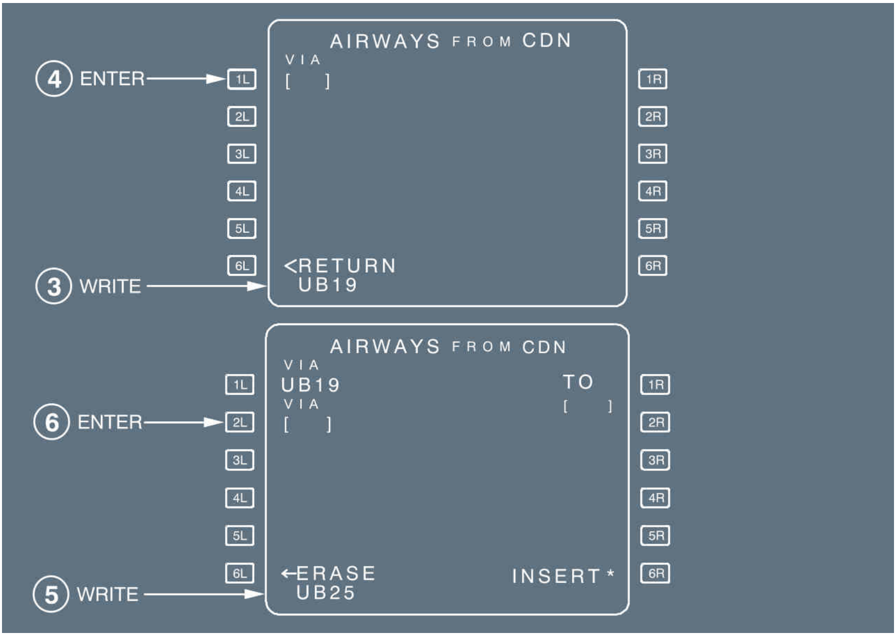
```
   LAT REV FROM CDN
  44°01.8N/011°00.2E
               FIX INFO>
         LL XING/INCR/NO
       [       ]°/[  ]°/[ ]
               NEXT WPT
<HOLD              [     ]
  ENABLE       NEW DEST
←ALTN                [   ]
               AIRWAYS>

<RETURN
```

SELECT the revised waypoint (here CDN).
PRESS [5R] to select the airways function.

Ident.: DSC-22_20-30-10-15-E-00012829.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139

4 THE FLIGHT CREW WISHES TO INSERT SUCCESSIVE AIRWAY SEGMENTS FROM A WAYPOINT

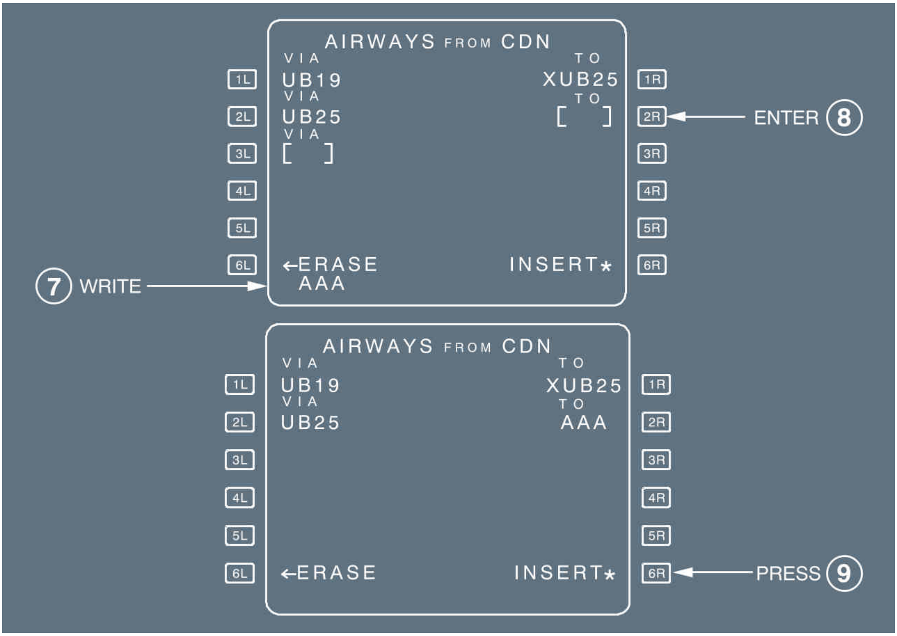
e.g. from CDN - Airways UB19 – Airways UB25 – Ending point AAA.


④ ENTER
③ WRITE
⑥ ENTER
⑤ WRITE
AIRWAYS FROM CDN
VIA
[ ]
<RETURN
UB19
AIRWAYS FROM CDN
VIA
UB19
TO
[ ]
VIA
[ ]
←ERASE
UB25
INSERT *
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

WRITE the first airway in the scratchpad (here UB19).
PRESS [1L] to insert it into the VIA field.
WRITE the second airway in the scratchpad (here UB25).
PRESS [2L] to insert it into the VIA field.

The system automatically determines the first downpath intersection point between the 2 airways.
- If the airways have a common waypoint, the system selects it as the ending point of the first VIA.
- If they have no common waypoint, but have a single intersection, the system creates this intersection as an FM-computed point and displays X followed by the airway IDENT (here XUB25).
- If they have no common waypoint or intersection, the system displays NO INTERSECTION FOUND in the scratchpad.

Once the flight crew has entered the required airways (up to 5), the flight crew must enter the ending point of the last selected airways:


AIRWAYS FROM CDN
VIA
UB19
TO
XUB25
VIA
UB25
TO
[ ]
VIA
[ ]
←ERASE
INSERT*
AAA
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
⑦ WRITE
ENTER ⑧
AIRWAYS FROM CDN
VIA
UB19
TO
XUB25
VIA
UB25
TO
AAA
←ERASE
INSERT*
PRESS ⑨

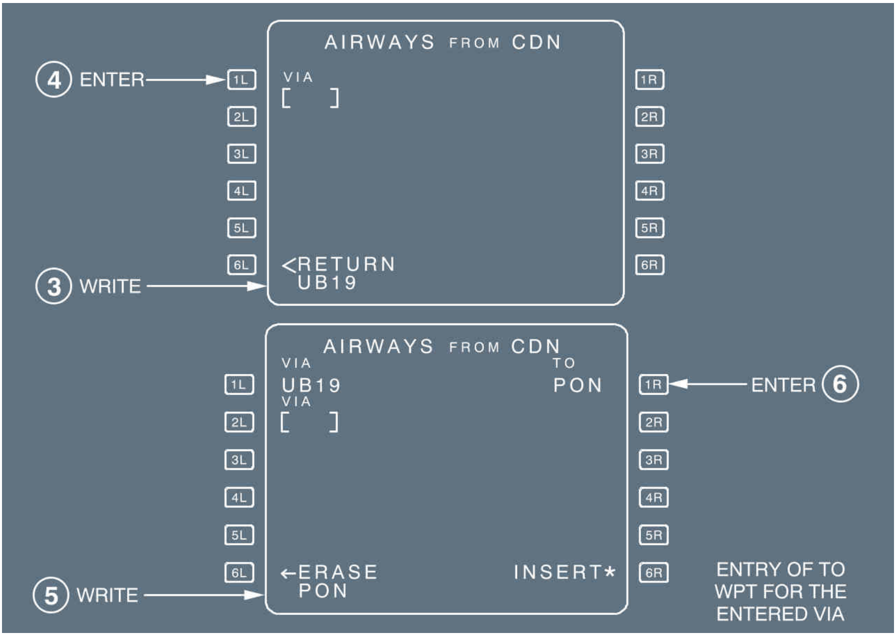
WRITE the ending waypoint in the scratchpad (here AAA).
PRESS [2R] to insert the ending waypoint into the TO field.

Note: *If two waypoints with the same IDENT belong to the same airway, the DUPLICATE NAMES page will not be called up, and the system selects the first one in the database.*

Ident.: DSC-22_20-30-10-15-E-00012830.0001001 / 01 OCT 12

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

THE PILOT WISHES TO INSERT ONE AIRWAY SEGMENT TO AN ENDING WAYPOINT


AIRWAYS FROM CDN
VIA
[ ]
<RETURN
UB19
④ ENTER
③ WRITE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
AIRWAYS FROM CDN
VIA
TO
UB19
PON
VIA
[ ]
←ERASE
PON
INSERT*
ENTER ⑥
⑤ WRITE
ENTRY OF TO WPT FOR THE ENTERED VIA

WRITE the airway IDENT in the scratchpad (here UB19).
PRESS [1L] to insert it into the VIA field.
WRITE the ending waypoint in the scratchpad (here PON).
PRESS [1R] to insert it into the TO field.

Note:
- *If the revise waypoint, or the ending waypoint, does not belong to the entered airway, the system displays AWY/WPT MISMATCH in the scratchpad.*
- *If two waypoints with the same IDENT belong to the same airway, the DUPLICATE NAMES page will not be called up and the system selects the first one in the database.*

Ident.: DSC-22_20-30-10-15-E-00012831.0001001 / 09 FEB 11

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

FLIGHT PLAN INSERTION

The flight crew either inserts the flight plan directly from the AIRWAYS page, or from the TMPY F-PLN page. In both cases:

PRESS [6R] to insert the temporary flight plan. Clear flight plan discontinuity, as needed.

INSERTING A WAYPOINT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_20-30-10-15-F-00012832.0001001 / 09 FEB 11

7

GENERAL

Waypoints can be inserted in two ways:
- Directly into the flight plan. All modifications go directly into the active flight plan. No temporary flight plan is created.
- By means of a lateral revision at the “NEXT WAYPOINT”, a process that creates a temporary flight plan.

The second method enables the temporary flight plan to be checked before it is inserted.

Ident.: DSC-22_20-30-10-15-F-00012833.0001001 / 09 FEB 11

8

WAYPOINT IDENTIFICATION

The pilot can identify a waypoint by:
- Its identifier (if it is in the navigation database).
- A Latitude/Longitude (LL).
- A Place/Bearing/Distance (PBD). The waypoint is defined by its bearing and distance from a place.
- A Place-Bearing/Place-Bearing (PBX). The waypoint is defined by the interception of 2 radials from 2 places.
- A Place/Distance (PD). The waypoint is defined by a distance from a place, along the F-PLN.

Note: *If a slash or a dash is not entered properly, the MCDU displays a “FORMAT ERROR” message.*

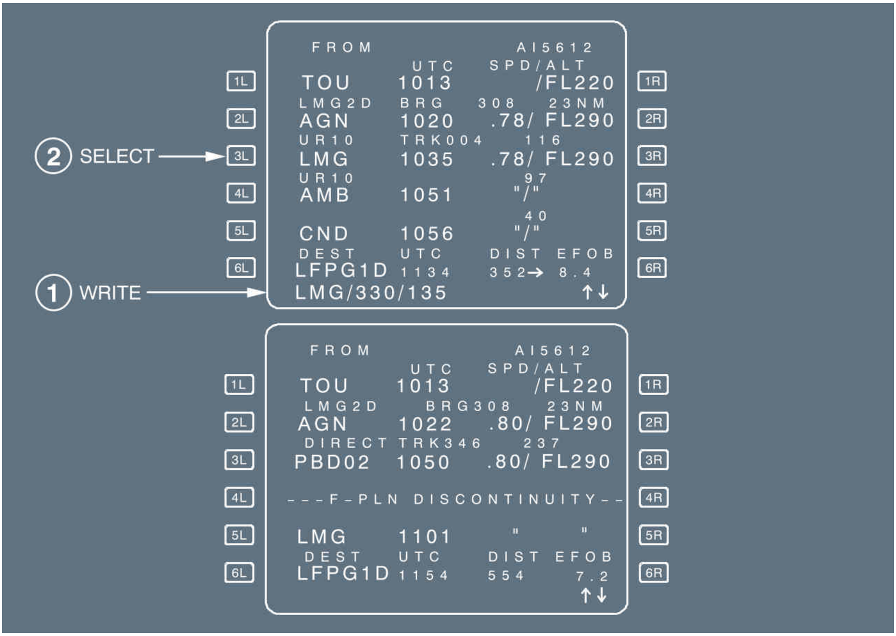
When the Flight Management Guidance System receives a waypoint that is not in the database, it identifies it as LLxx or PBD xx or PBX xx or PD xx (xx is a two-digit number between 01 and 20) and stores it in the stored waypoints file of the database.

<u>Note:</u> *When NAV mode is engaged, the crew cannot modify the "TO" waypoint (active leg) using the waypoint insertion function. If the crew wants to modify it, the DIR TO function will be used.*

Ident.: DSC-22_20-30-10-15-F-00012834.0001001 / 14 MAY 12

9

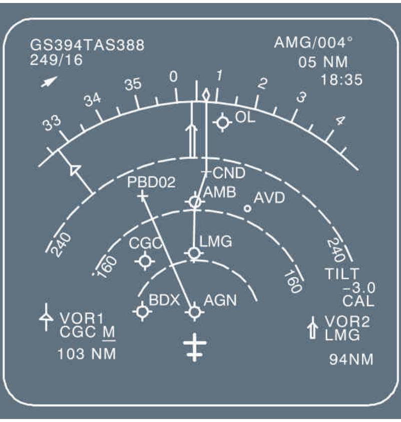
WAYPOINT INSERTED DIRECTLY IN THE FLIGHT PLAN



```
 FROM                    AI5612
              UTC    SPD/ALT
TOU          1013        /FL220
LMG2D        BRG   308     23NM
AGN          1020    .78/ FL290
UR10         TRK004     116
LMG          1035    .78/ FL290
UR10                     97
AMB          1051        "/"
                         40
CND          1056        "/"
DEST          UTC     DIST  EFOB
LFPG1D       1134     352→   8.4
LMG/330/135                   ↑↓
```

```
 FROM                    AI5612
              UTC    SPD/ALT
TOU          1013        /FL220
 LMG2D         BRG308      23NM
AGN          1022    .80/ FL290
 DIRECT     TRK346      237
PBD02        1050    .80/ FL290
---F-PLN DISCONTINUITY--
LMG          1101       "      "
 DEST         UTC     DIST  EFOB
LFPG1D       1154     554    7.2
                              ↑↓
```

CORRESPONDING ND


GS394TAS388
249/16
AMG/004°
05 NM
18:35
33
34
35
0
1
2
3
4
OL
PBD02
CND
AMB
AVD
240
160
CGC
LMG
BDX
AGN
TILT
-3.0
CAL
VOR1
CGC M
103 NM
VOR2
LMG
94NM

WRITE the waypoint identifier or LAT/LONG, Place/Bearing/Distance or Place-Bearing/Place-Bearing into the scratchpad. (Example: Place: LMG, Bearing: 330 °, Distance: 135 NM).
PRESS the appropriate key to enter the waypoint into the flight plan. The rule is that the new waypoint appears next to the pressed key, and the previous waypoint moves down the flight plan path.

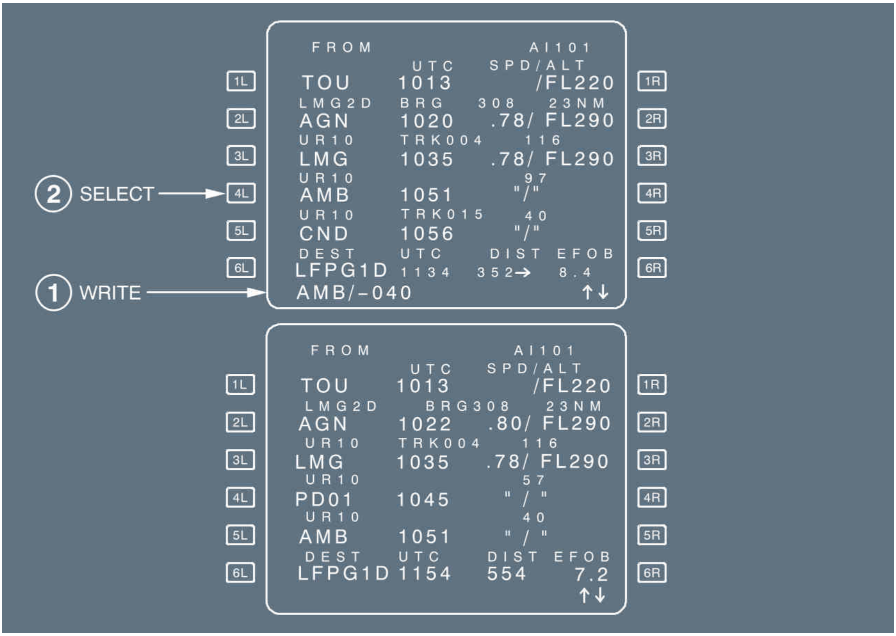
This operation creates a discontinuity between the new waypoint and the previous one.
The new flight plan will have to be cleared of the discontinuity and some waypoints erased.

Ident.: DSC-22_20-30-10-15-F-00012835.0001001 / 01 OCT 12

10

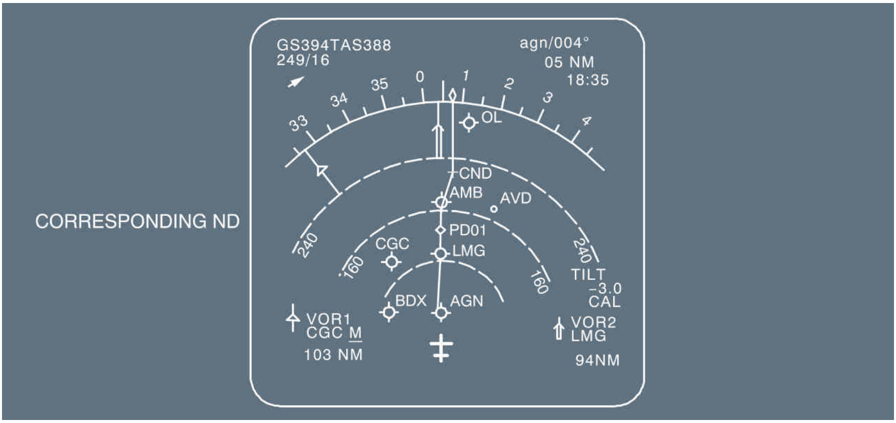
ALONG TRACK WAYPOINT INSERTION

On the F-PLN or STEP ALTS page, the pilot can enter an along track waypoint, defined as a place/distance waypoint.


② SELECT
① WRITE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
 FROM                    AI101
          UTC        SPD/ALT
 TOU      1013        /FL220
 LMG2D    BRG  308      23NM
 AGN      1020     .78/ FL290
 UR10     TRK004        116
 LMG      1035     .78/ FL290
 UR10                   97
 AMB      1051          "/"
 UR10     TRK015        40
 CND      1056          "/"
 DEST     UTC       DIST  EFOB
 LFPG1D   1134      352→   8.4
 AMB/-040                  ↑↓
```

```
 FROM                    AI101
          UTC        SPD/ALT
 TOU      1013        /FL220
  LMG2D     BRG308      23NM
 AGN      1022     .80/ FL290
  UR10    TRK004        116
 LMG      1035     .78/ FL290
  UR10                  57
 PD01     1045         " / "
  UR10                  40
 AMB      1051         " / "
  DEST    UTC       DIST  EFOB
 LFPG1D   1154      554    7.2
                           ↑↓
```


CORRESPONDING ND
GS394TAS388
249/16
agn/004°
05 NM
18:35
33
34
35
0
1
2
3
4
OL
CND
AMB
AVD
PD01
LMG
CGC
240
160
160
240
TILT
-3.0
CAL
BDX
AGN
VOR1
CGC M
103 NM
VOR2
LMG
94NM

WRITE the waypoint identifier and distance from this place.

According to the sign of the distance, the crew may define an along track waypoint before or after the revised place. (Example: AMB/-040).

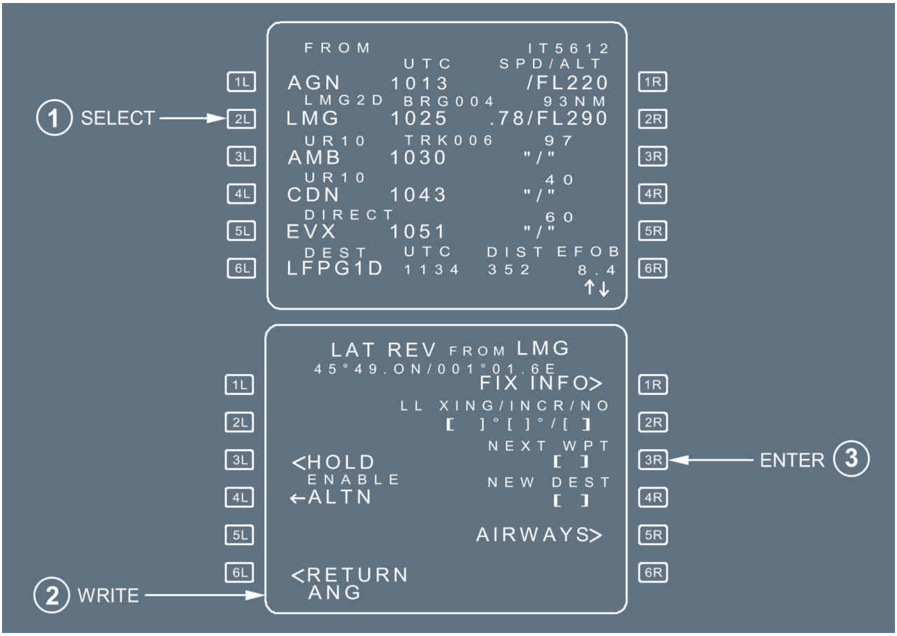
PRESS the appropriate key adjacent to the place identifier. The system automatically positions the waypoint in the flight plan.

This operation does not create any discontinuity.
The system does not accept an along track waypoint entered at the FROM waypoint.

Ident.: DSC-22_20-30-10-15-F-00012836.0001001 / 01 OCT 12

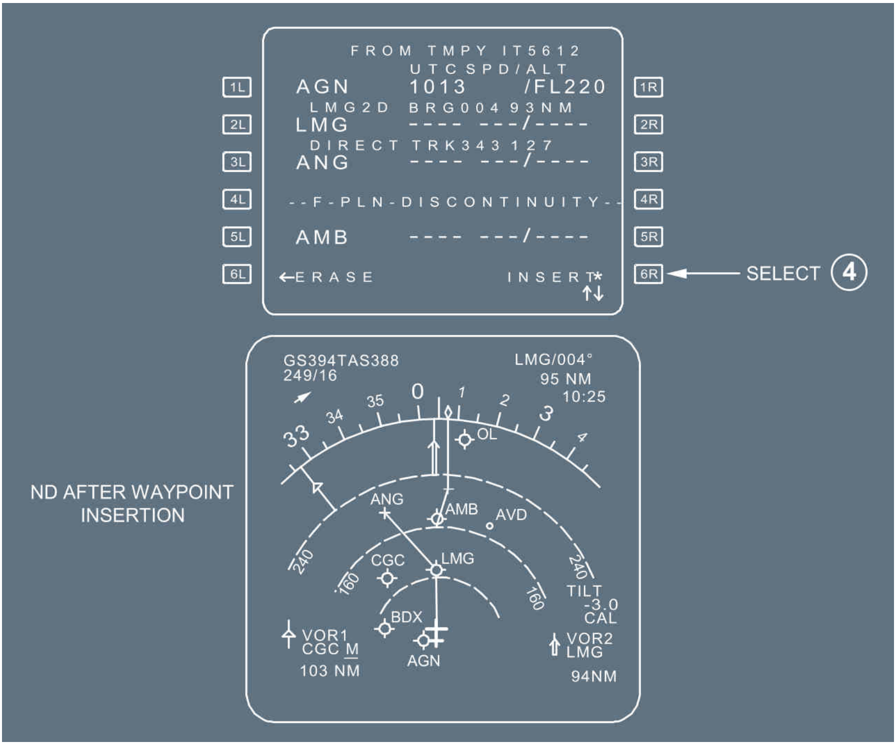
11

WAYPOINT INSERTED THROUGH THE USE OF “NEXT WAYPOINT”



```
 FROM                   IT5612
          UTC       SPD/ALT
AGN      1013        /FL220
 LMG2D    BRG004       93NM
LMG      1025     .78/FL290
 UR10     TRK006        97
AMB      1030          "/"
 UR10                   40
CDN      1043          "/"
 DIRECT                 60
EVX      1051          "/"
 DEST     UTC    DIST  EFOB
LFPG1D    1134    352   8.4
                          ↑↓
```

```
     LAT REV FROM LMG
   45°49.0N/001°01.6E
                 FIX INFO>
        LL XING/INCR/NO
            [  ]°[ ]°/[ ]
                 NEXT WPT
<HOLD                [  ]
 ENABLE          NEW DEST
←ALTN                [  ]

                 AIRWAYS>

<RETURN
 ANG
```


1L
2L
3L
4L
5L
6L
FROM TMPY IT5612
UTC SPD/ALT
AGN 1013 /FL220
LMG2D BRG004 93NM
LMG ---- ---/----
DIRECT TRK343 127
ANG ---- ---/----
--F-PLN-DISCONTINUITY--
AMB ---- ---/----
←ERASE
INSERT*
1R
2R
3R
4R
5R
6R
SELECT ④
ND AFTER WAYPOINT INSERTION
GS394TAS388
249/16
LMG/004°
95 NM
10:25
33
34
35
0
1
2
3
4
OL
ANG
AMB
AVD
CGC
LMG
BDX
AGN
240
160
TILT
-3.0
CAL
VOR1
CGC M
103 NM
VOR2
LMG
94NM

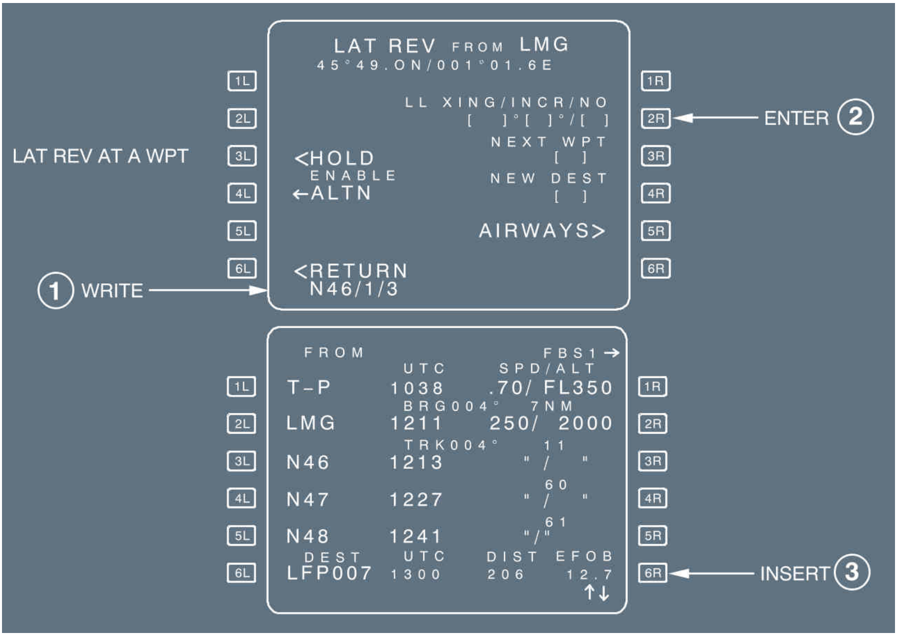
SELECT the lateral revision (LAT REV) function at an appropriate waypoint.
WRITE the waypoint identifier, or LAT/LONG, or Place/Bearing/Distance, or Place-Bearing / Place-Bearing into the scratchpad.
ENTER it in the brackets under NEXT WPT (next waypoint).
INSERT the temporary flight plan by pressing the [6R] key.
CLEAR the F-PLN discontinuity, as appropriate.

Ident.: DSC-22_20-30-10-15-F-00012837.0001001 / 14 MAY 12

12

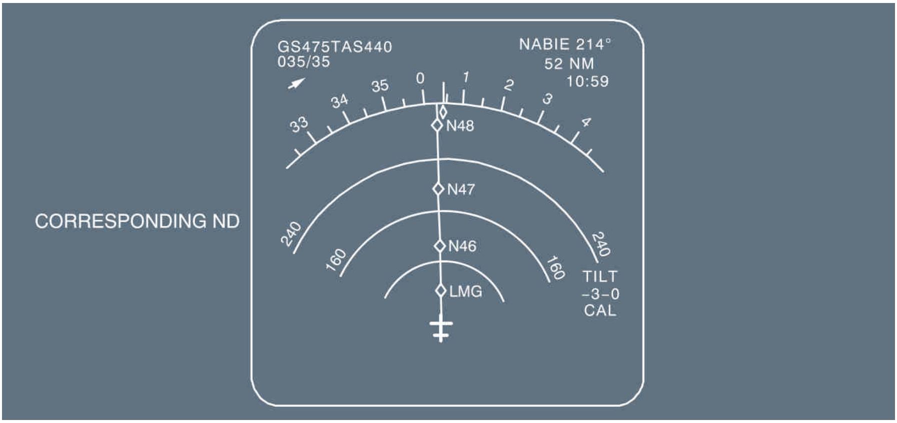
LATITUDE/LONGITUDE CROSSING WAYPOINT INSERTION

This function allows the insertion of one or several points along the flight-plan beyond the revised waypoint, at fixed latitude or longitude intervals (INCR) from a specified latitude or longitude. These waypoints are not considered as part of the pilot-defined elements. The system deletes them when sequenced.


LAT REV AT A WPT
1 WRITE
ENTER 2
INSERT 3
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
        LAT REV FROM LMG
      45°49.0N/001°01.6E
                 LL XING/INCR/NO
                  [   ]°[  ]°/[  ]
                        NEXT WPT
<HOLD                     [   ]
  ENABLE                NEW DEST
←ALTN                     [   ]
                      AIRWAYS>

<RETURN
 N46/1/3
```

```
  FROM                    FBS1→
           UTC      SPD/ALT
T-P        1038    .70/ FL350
           BRG004°     7NM
LMG        1211    250/ 2000
           TRK004°     11
N46        1213      " /  "
                       60
N47        1227      " /  "
                       61
N48        1241       "/"
  DEST     UTC     DIST  EFOB
LFP007     1300    206   12.7
                            ↑↓
```


CORRESPONDING ND
GS475TAS440
035/35
NABIE 214°
52 NM
10:59
33
34
35
0
1
2
3
4
N48
N47
N46
LMG
240
160
160
240
TILT
-3-0
CAL

WRITE the latitude (NXX, XXN, SXX or XXS), the required increment in degrees between the successive waypoints, and the number of required waypoints.

(Example: The pilot wants to obtain 3 points, every degree from latitude N46: He enters N46/1/3).

PRESS [2R] to insert it into the LL XING/INCR/NO field.
PRESS [6R] to insert the new waypoints in the flight plan without discontinuity.

The system does not store these waypoints in the database.

FIX INFO

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_20-30-10-15-G-00012838.0008001 / 09 FEB 11

13

GENERAL

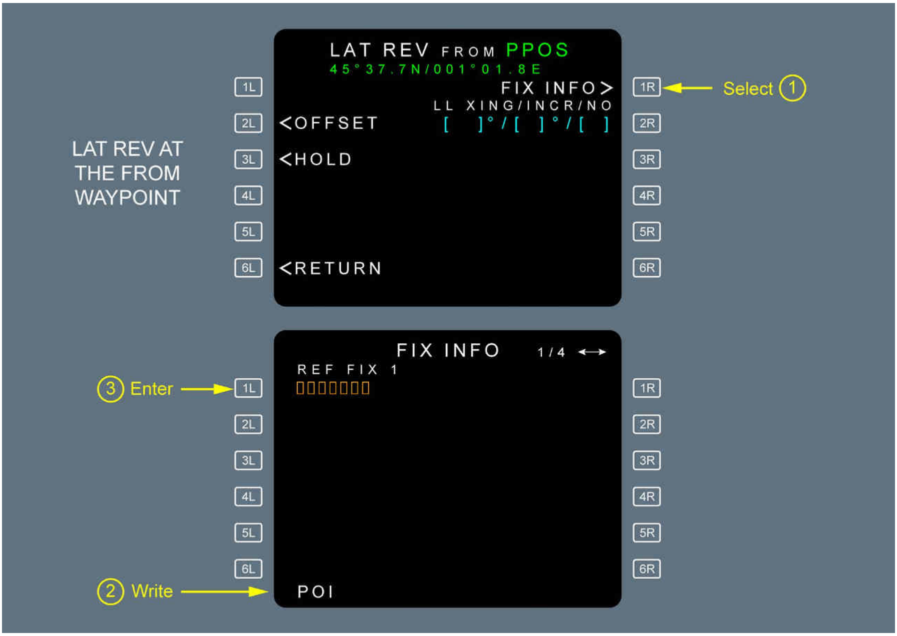
When using the FIX INFO function, the flight crew defines waypoint intersections of the flight plan with radials, circle or abeam associated to a fix.
When the flight crew inserts the intersection points, the system automatically identifies these points, but does not store them in the navigation database.

Ident.: DSC-22_20-30-10-15-G-00012839.0008001 / 10 MAY 21

14

INSERTING A RADIAL INTERCEPT WAYPOINT

The flight crew accesses the radial intercept function from the lateral revision page at the origin or “from” waypoint.



LAT REV AT THE FROM WAYPOINT

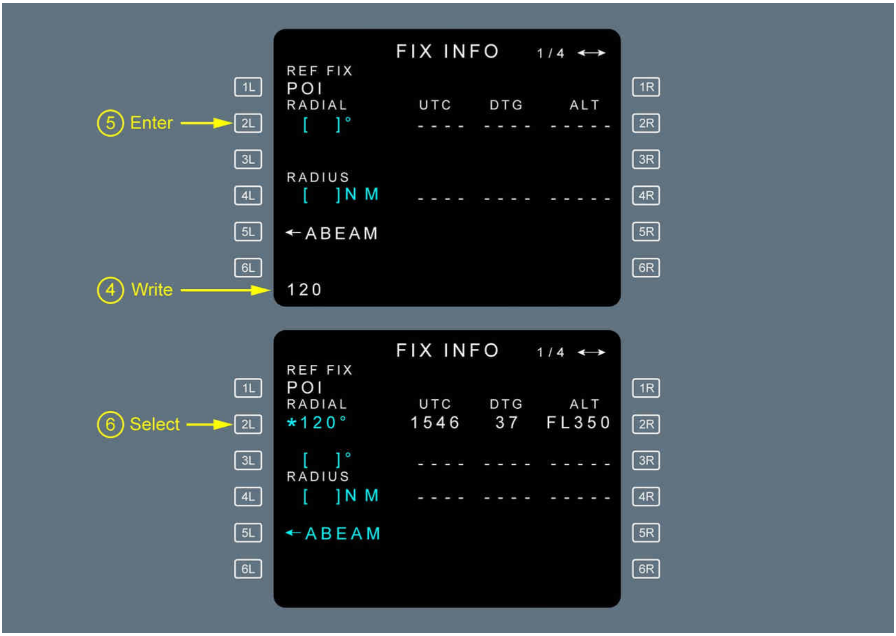
```
        LAT REV FROM PPOS
        45°37.7N/001°01.8E
                       FIX INFO>
                   LL XING/INCR/NO
<OFFSET           [   ]°/[  ]°/[  ]
<HOLD



<RETURN
```

Select ①

```
          FIX INFO      1/4 ←→
 REF FIX 1
 □□□□□□□






 POI
```

③ Enter

② Write


⑤ Enter
④ Write
⑥ Select
FIX INFO 1/4 ↔
REF FIX
POI
RADIAL
UTC DTG ALT
[ ]°
---- ---- -----
RADIUS
[ ]NM
←ABEAM
120
FIX INFO 1/4 ↔
REF FIX
POI
RADIAL
UTC DTG ALT
*120°
1546 37 FL350
[ ]°
RADIUS
[ ]NM
←ABEAM
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R

SELECT FIX INFO in [1R].
WRITE the reference fix IDENT into the scratchpad (for example, POI), and ENTER in [1L].

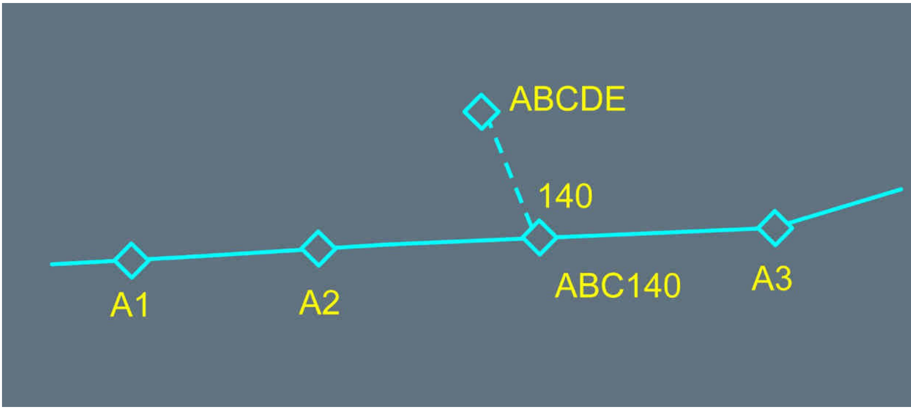
Note: *It may be any database or pilot-defined fix.*

WRITE the radial into the scratchpad (for example, 120 °) and ENTER in [2L].

Note:
- *The defined radial appears as a blue dashed line on the ND*
- *If the radial line intersects the active flight plan, an asterisk is displayed next to the entered radial and degree sign. The system computes the time, distance to go, and the altitude at the intersection point*
- *Up to two radials can be entered.*

SELECT in [2L] or [3L] the required radial to insert the associated waypoint into the flight plan.
When a radial has been inserted into the flight plan, an additional radial from the selected waypoint can be inserted as well in the flight plan.

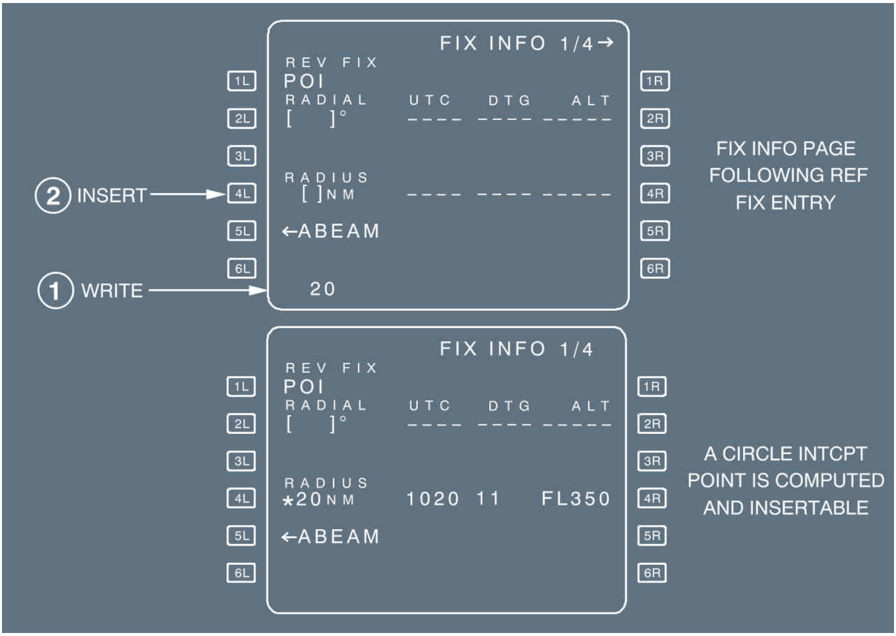
Note: *The system automatically assigns its IDENT as the three first characters of the reference fix IDENT, followed by the radial (for example, ABC 140). The blue dashed line disappears from the ND.*



Ident.: DSC-22_20-30-10-15-G-00012840.0001001 / 01 OCT 12

15

INSERTING A CIRCLE INTERCEPT WAYPOINT

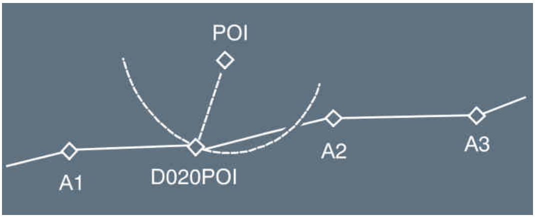

FIX INFO 1/4→
REV FIX
POI
RADIAL
[ ]°
UTC
DTG
ALT
---- ---- -----
RADIUS
[ ]NM
---- ---- -----
←ABEAM
20
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
② INSERT
① WRITE
FIX INFO PAGE FOLLOWING REF FIX ENTRY
FIX INFO 1/4
REV FIX
POI
RADIAL
[ ]°
UTC
DTG
ALT
---- ---- -----
RADIUS
*20NM
1020 11 FL350
←ABEAM
A CIRCLE INTCPT POINT IS COMPUTED AND INSERTABLE

WRITE the reference fix identifier into the scratchpad (here POI), and ENTER it [1L].
WRITE the circle radius in the scratchpad (here 20 NM), and ENTER it [4L]:

The defined circle appears as a blue dashed circle on the ND. If the circle intersects the active flight plan, the system computes the time, along path distance to go and altitude at the first intersection point from the current aircraft position.

SELECT the required radius to insert the associated waypoint into the flight plan (if needed).

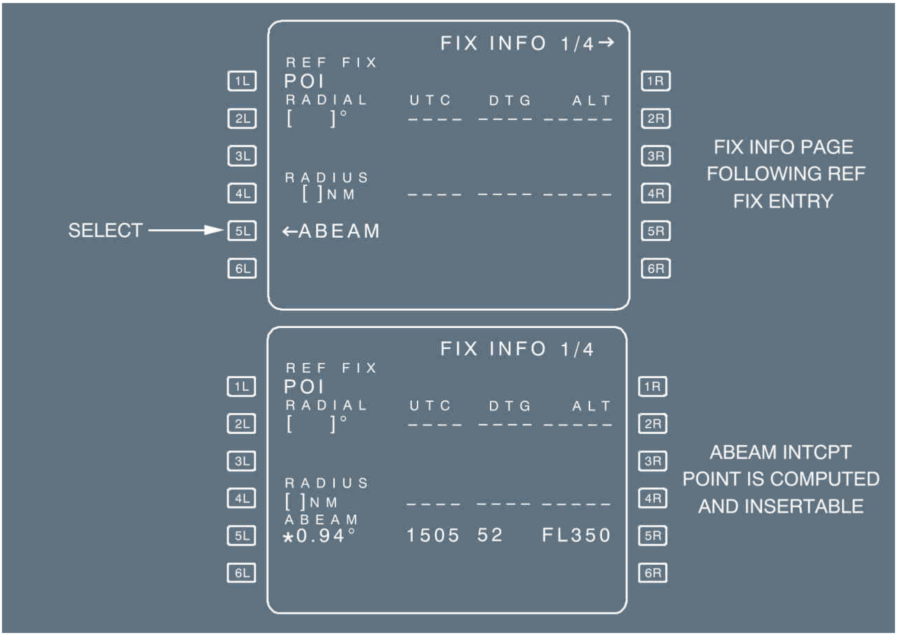
The system automatically assigns its IDENT as a D, followed by the radius, and followed by the three first characters of the reference fix IDENT (example D020 POI). The blue dashed circle disappears from the ND.


POI
A1
D020POI
A2
A3

Ident.: DSC-22_20-30-10-15-G-00012841.0008001 / 01 OCT 12

16

INSERTING AN ABEAM INTERCEPT WAYPOINT


FIX INFO 1/4→
REF FIX
POI
RADIAL UTC DTG ALT
[ ]° ---- ---- -----
RADIUS
[ ]NM ---- ---- -----
←ABEAM

FIX INFO 1/4
REF FIX
POI
RADIAL UTC DTG ALT
[ ]° ---- ---- -----
RADIUS
[ ]NM ---- ---- -----
ABEAM
*0.94° 1505 52 FL350

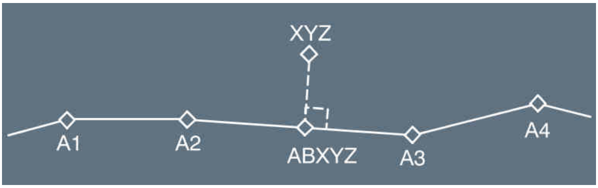
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
SELECT
FIX INFO PAGE FOLLOWING REF FIX ENTRY
ABEAM INTCPT POINT IS COMPUTED AND INSERTABLE

WRITE the reference fix identifier into the scratchpad (here POI), and ENTER it [1L]
SELECT the ABEAM prompt [5L]:

A blue dashed line from the reference fix and perpendicular to the flight plan appears on the ND. The system computes the radial, time, distance to go, altitude and predictions related to the waypoint abeam the reference fix.

SELECT [5L] to insert the abeam intercept waypoint into the flight plan (if needed):

The system automatically assigns its identifier as AB, followed by the first five characters of the reference fix identifier (Example ABXYZ). The blue dashed line disappears from the ND.

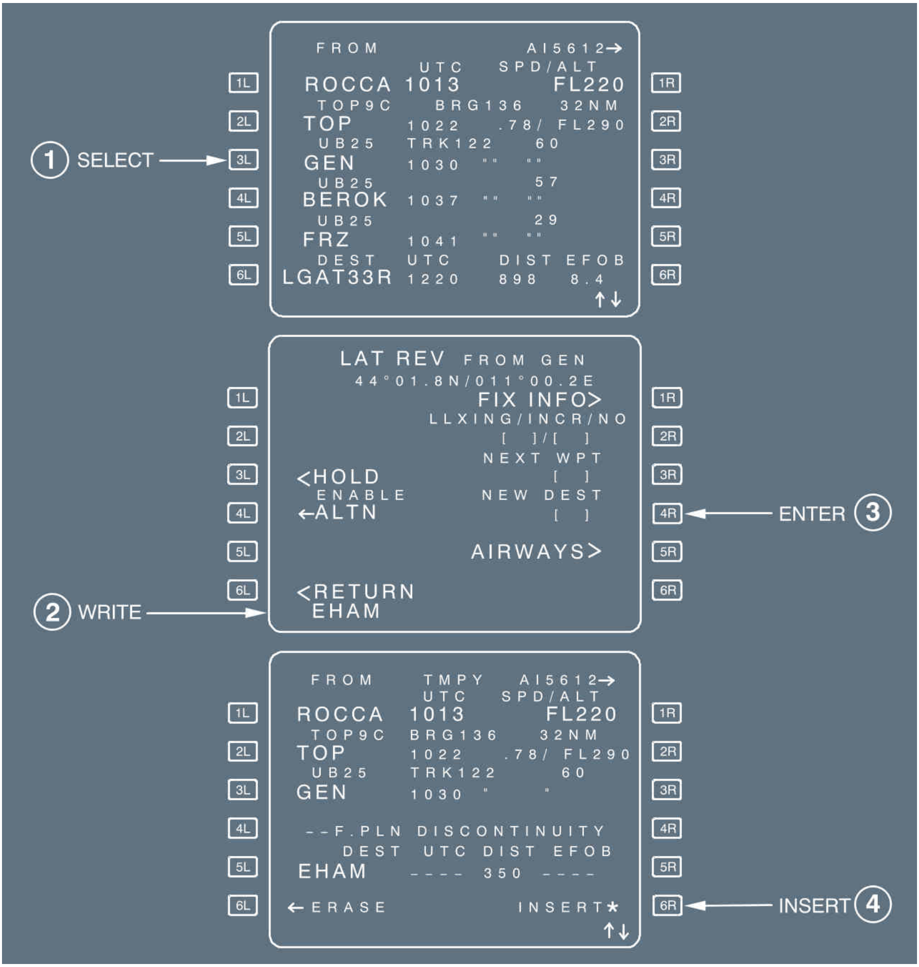


INSERTING A NEW DESTINATION

Ident.: DSC-22_20-30-10-15-00000471.0001001 / 14 MAY 12

17 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The pilot may define a new destination and insert it via the lateral revision page. The pilot may then call up the new destination from any waypoint along the flight plan, except the FROM waypoint, the destination, and the missed-approach waypoint. When the new destination has been inserted, a flight plan discontinuity appears between the revision waypoint and the new destination. All waypoints beyond the revision waypoint (including the previous destination and associated missed approach) are deleted.



```
 FROM                   AI5612→
            UTC     SPD/ALT
ROCCA      1013        FL220
 TOP9C      BRG136     32NM
TOP         1022    .78/ FL290
 UB25       TRK122     60
GEN         1030    ""   ""
 UB25                  57
BEROK       1037    ""   ""
 UB25                  29
FRZ         1041    ""   ""
 DEST       UTC     DIST EFOB
LGAT33R     1220    898   8.4
                            ↑↓
```

```
    LAT REV  FROM GEN
    44°01.8N/011°00.2E
                FIX INFO>
           LLXING/INCR/NO
                [  ]/[  ]
                 NEXT WPT
<HOLD                [  ]
 ENABLE          NEW DEST
←ALTN                [  ]

                 AIRWAYS>

<RETURN
 EHAM
```

```
 FROM      TMPY     AI5612→
           UTC     SPD/ALT
ROCCA     1013        FL220
 TOP9C     BRG136     32NM
TOP       1022     .78/ FL290
 UB25      TRK122      60
GEN       1030     "     "

 --F.PLN DISCONTINUITY
    DEST   UTC  DIST  EFOB
EHAM       ----  350  ----
←ERASE             INSERT*
                         ↑↓
```

SELECT the lateral revision function at an appropriate waypoint.
WRITE the new destination in the scratchpad.
Enter it in the brackets under “NEW DEST”.
INSERT the temporary flight plan ([6R] key), and complete the flight plan to the new destination.

HOLDING PATTERN

Ident.: DSC-22_20-30-10-15-A-00007222.0001001 / 09 FEB 11

18 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

GENERAL

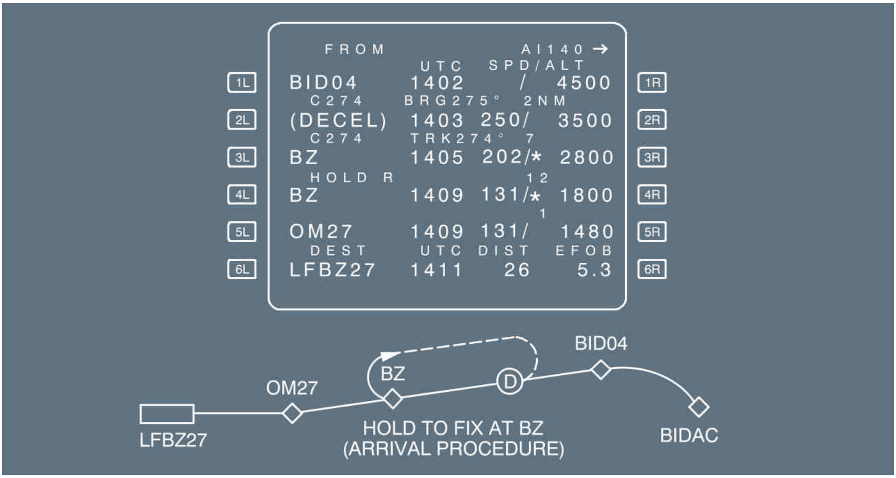
This section describes holding patterns, associated guidance and flight crew procedures.
The Flight Management and Guidance Computer (FMGC) has three types of holding patterns that the pilot can use in a flight plan.

Ident.: DSC-22_20-30-10-15-A-00007163.0001001 / 01 OCT 12

19 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

HOLD TO FIX (HF)

The holding pattern is always part of an arrival or departure procedure. The aircraft flies it once and then automatically exits the holding pattern at the fix. The predicted speed in the holding pattern is the lowest of the ICAO speed limit, max endurance speed, or any speed constraint. Guidance to the fix in the holding pattern is similar to that on any leg of a flight plan. The HF patterns are part of the navigation database and cannot be created by the crew.



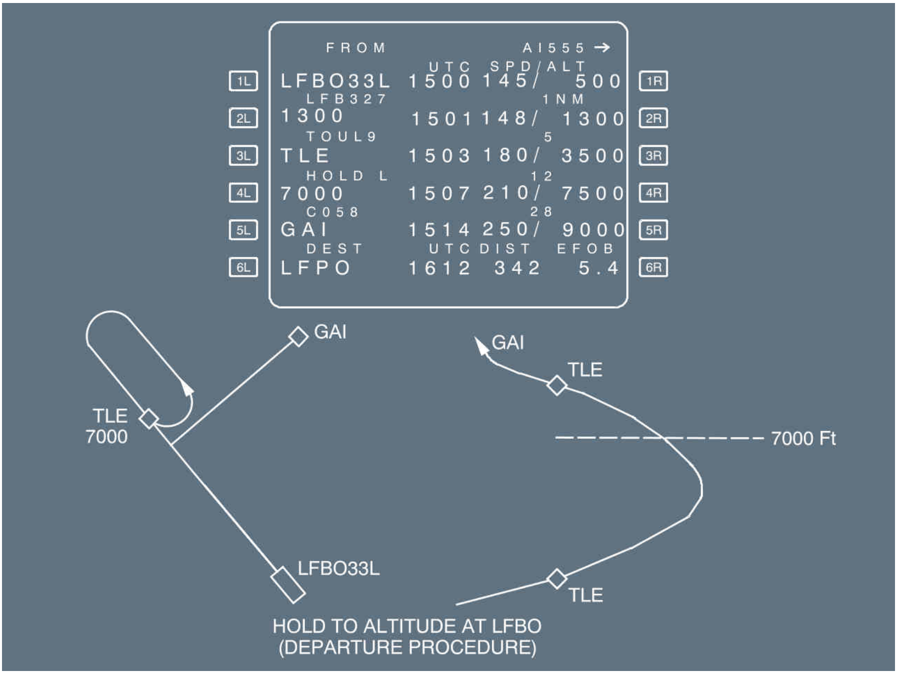
```
   FROM                    AI140 →
              UTC     SPD/ALT
BID04         1402     /   4500
   C274     BRG275°   2NM
(DECEL)       1403   250/  3500
   C274     TRK274°    7
BZ            1405   202/* 2800
   HOLD  R              12
BZ            1409   131/* 1800
                         1
OM27          1409   131/  1480
   DEST       UTC    DIST  EFOB
LFBZ27        1411     26   5.3
```

Ident.: DSC-22_20-30-10-15-A-00007182.0001001 / 01 OCT 12

20 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

HOLD TO ALTITUDE (HA)

The aircraft flies the hold until it reaches the specified altitude. Then, it automatically exits the hold at the fix.
The predicted speed for the holding pattern is the lowest of the ICAO speed limits, the max endurance speed, or any speed constraint.
The size of the holding pattern is a function of the predicted speed.
Guidance in a hold to altitude (HA) is similar to that for any leg of a flight plan.
The HAs are in the navigation database, as part of the arrival or departure procedures, and cannot be created by the crew.



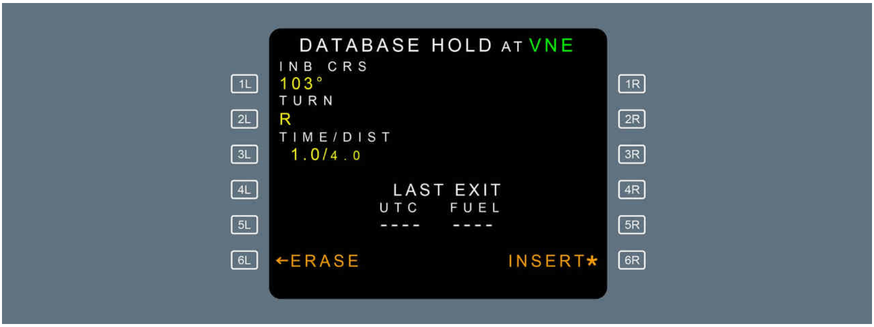
```
    FROM                  AI555 →
             UTC  SPD/ALT
LFBO33L      1500 145/   500
    LFB327             1NM
1300         1501 148/  1300
    TOUL9               5
TLE          1503 180/  3500
    HOLD L             12
7000         1507 210/  7500
    C058               28
GAI          1514 250/  9000
    DEST     UTC  DIST   EFOB
LFPO         1612  342    5.4
```

HOLD TO ALTITUDE AT LFBO
(DEPARTURE PROCEDURE)

HOLD WITH MANUAL TERMINATION (HM)

This type of holding pattern may be part of an arrival procedure, or the flight crew may enter it at the present position or at any flight plan waypoint.
The flight crew will use this type of holding pattern to comply with a defined procedure or a clearance limit, or to meet an operational need (such as losing altitude, holding for weather improvement, or absorbing an ATC delay).
This type of holding pattern is exited according to the flight crew's decision, not automatically.
There are 3 types of HMs, and all are modifiable.

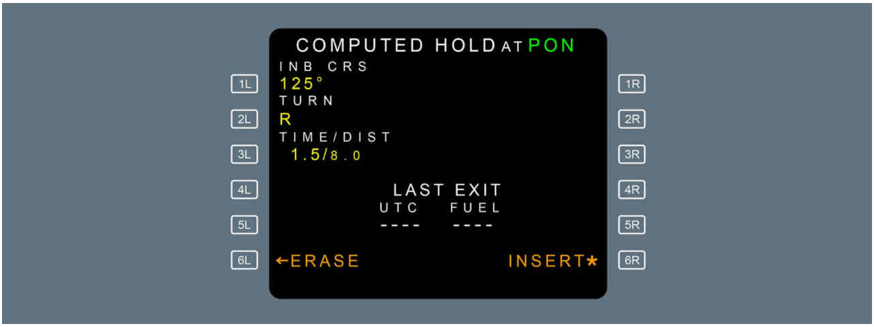
DATABASE HOLD



DATABASE HOLD AT VNE
INB CRS
103°
TURN
R
TIME/DIST
1.0/4.0
LAST EXIT
UTC FUEL
---- ----
←ERASE INSERT*

If the holding pattern is part of the database, all its associated data (inbound course, turn direction, time/distance) are defined in the database. The flight crew can modify this data.

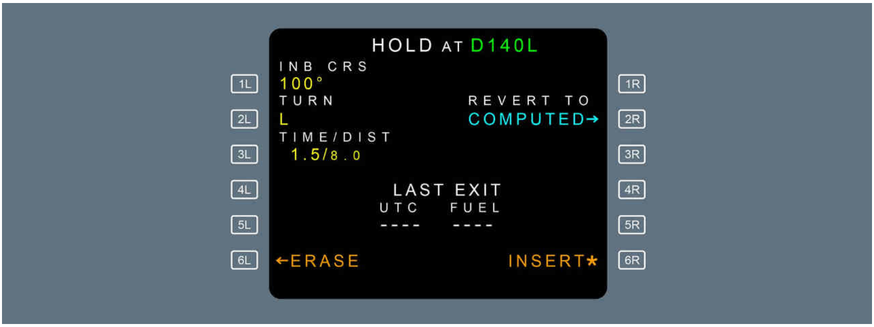
COMPUTED HOLD



COMPUTED HOLD AT PON
INB CRS
125°
TURN
R
TIME/DIST
1.5/8.0
LAST EXIT
UTC FUEL
---- ----
←ERASE INSERT*

If the holding pattern is not in the database, the FMS designs a holding pattern and proposes it to the flight crew. The associated data consists of default values that the flight crew can modify.

HOLD AT



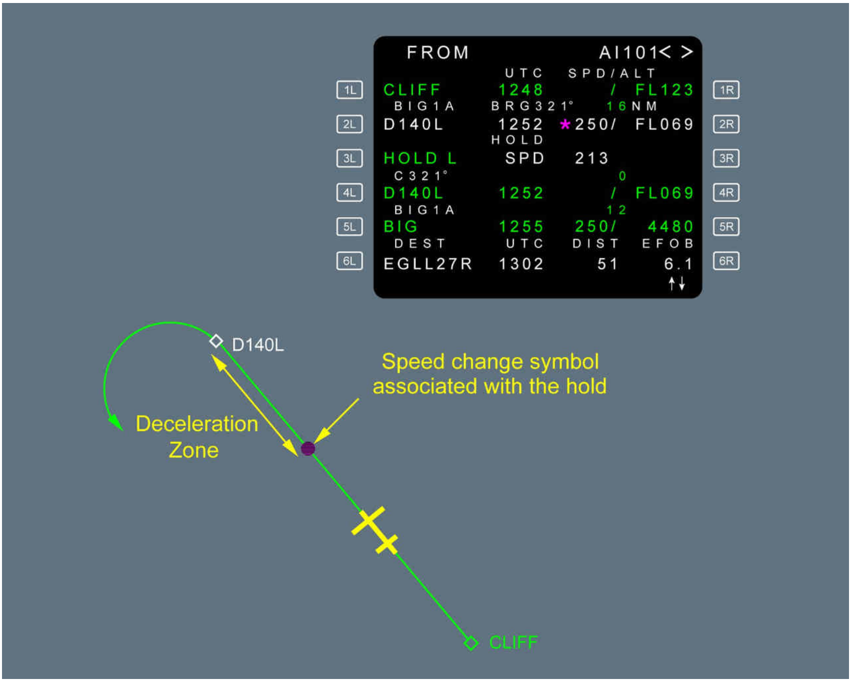
HOLD AT D140L
INB CRS
100°
TURN
L
REVERT TO
COMPUTED→
TIME/DIST
1.5/8.0
LAST EXIT
UTC FUEL
---- ----
←ERASE
INSERT*

If the flight crew inserts into the active F-PLN, a holding pattern that is manually corrected from a hold defined by the FMS, the HOLD AT page displays. The 2R field displays REVERT TO DATABASE or REVERT TO COMPUTED prompt for flight crew to restore the defined data by the FMS.

PREDICTIONS AND GUIDANCE ASSOCIATED WITH A HM HOLDING PATTERN (HOLD WITH MANUAL TERMINATION)

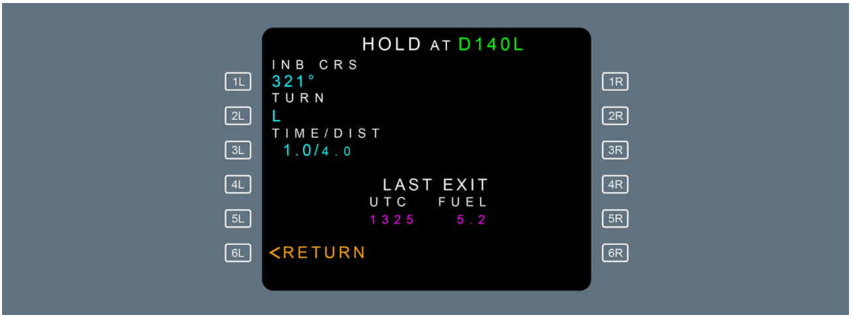
Before Deceleration

If an altitude constraint is defined at the hold entry fix, then the FMS duplicates this constraint on the hold exit.
However, different constraints may be inserted at entry and exit fixes.
Although the hold is inserted in the flight plan, the FMS does not take it into account for predictions until the aircraft enters the hold.
However, if the hold is not deleted by the flight crew, the FMS schedules a deceleration point and displays it on the ND.



```
 FROM                    AI101< >
          UTC    SPD/ALT
CLIFF     1248       /  FL123
 BIG1A    BRG321°     16NM
D140L     1252  *250/  FL069
          HOLD
HOLD L    SPD    213
 C321°                 0
D140L     1252       /  FL069
 BIG1A                 12
BIG       1255   250/   4480
 DEST     UTC    DIST   EFOB
EGLL27R   1302    51     6.1
                          ↑↓
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
D140L
Speed change symbol associated with the hold
Deceleration Zone
CLIFF



```
       HOLD AT D140L
INB CRS
321°
TURN
L
TIME/DIST
 1.0/4.0

         LAST EXIT
        UTC    FUEL
        1325    5.2

<RETURN
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

The FMS predicts the estimated time and amount of fuel remaining at which the aircraft must exit holding, so as to comply with the fuel policy specified on the FUEL PRED page.
When the aircraft enters the holding pattern, the FMS revises all predictions and assumes the aircraft will fly one turn of the holding pattern.

Each time the aircraft flies over the holding fix, the FMS updates the predictions for one more holding circuit.

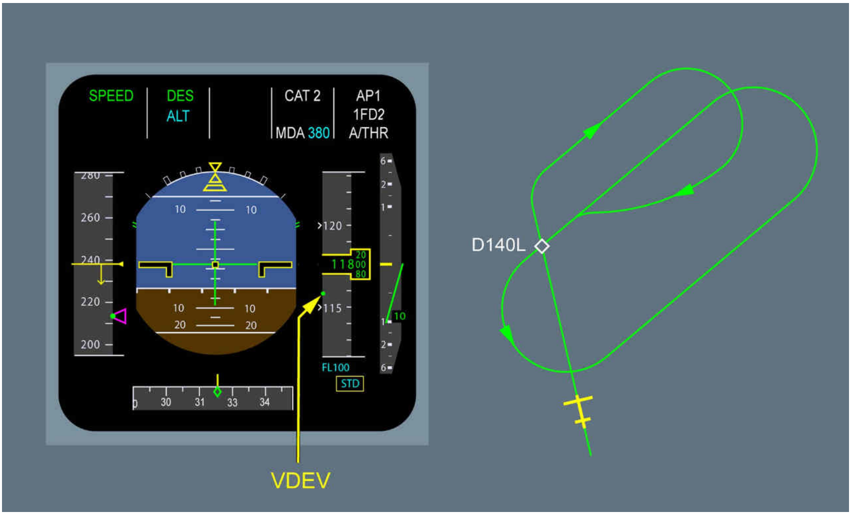
Upon Reaching the Speed Change Pseudo Waypoint

The FMS either causes the aircraft to decelerate to the hold speed (if managed speed is active and NAV mode engaged), or display SET HOLD SPEED on the MCDU and SET HOLD SPEED on the PFD, if the flight crew selected a speed target.

The default hold speed is the lowest of the following:
- Maximum endurance speed
- ICAO limit holding speed
- Speed constraint (if any).

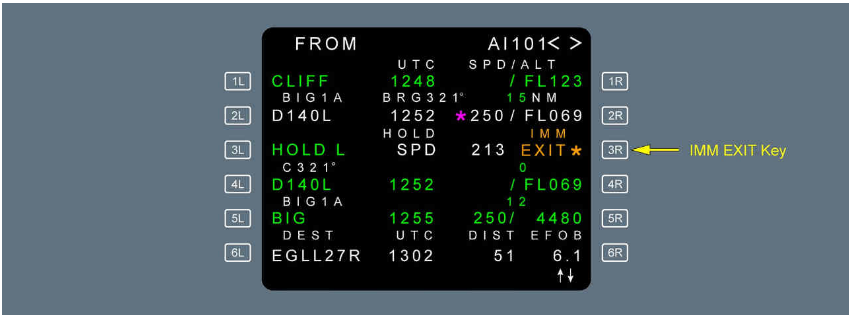
When no specific speed limit applies, the default hold speed is approximately equal to the following:
- Green Dot speed on the A318, A319, A320 (CFM or PW) and A321, or
- Green Dot +20 kt for altitude lower than 20 000 ft, on the A320 (IAE), or
- Green Dot +5 kt for altitude higher than 20 000 ft, on the A320 (IAE).

The flight plan predictions for time and fuel do not yet consider that the hold will be flown. However, the ND shows the hold entry and holding pattern trajectory.



Deceleration receives priority, so that when in DES mode, the aircraft will deviate above the descent path to decelerate. (VDEV becomes positive on the PROG page).
The F-PLN displays IMM EXIT prompt.

If the flight crew presses the key next to IMM EXIT, before arriving at the holding fix, the aircraft will not enter the holding pattern, but will resume its applicable manage speed of the current flight phase.



```
 FROM                  AI101< >
             UTC       SPD/ALT
CLIFF        1248        / FL123
 BIG1A      BRG321°     15NM
D140L        1252    *250/ FL069
            HOLD           IMM
HOLD L       SPD      213  EXIT*
 C321°                 0
D140L        1252        / FL069
 BIG1A                 12
BIG          1255     250/  4480
 DEST        UTC      DIST  EFOB
EGLL27R      1302       51   6.1
                             ↑↓
```

<u>After Reaching the Hold Entry Fix</u>

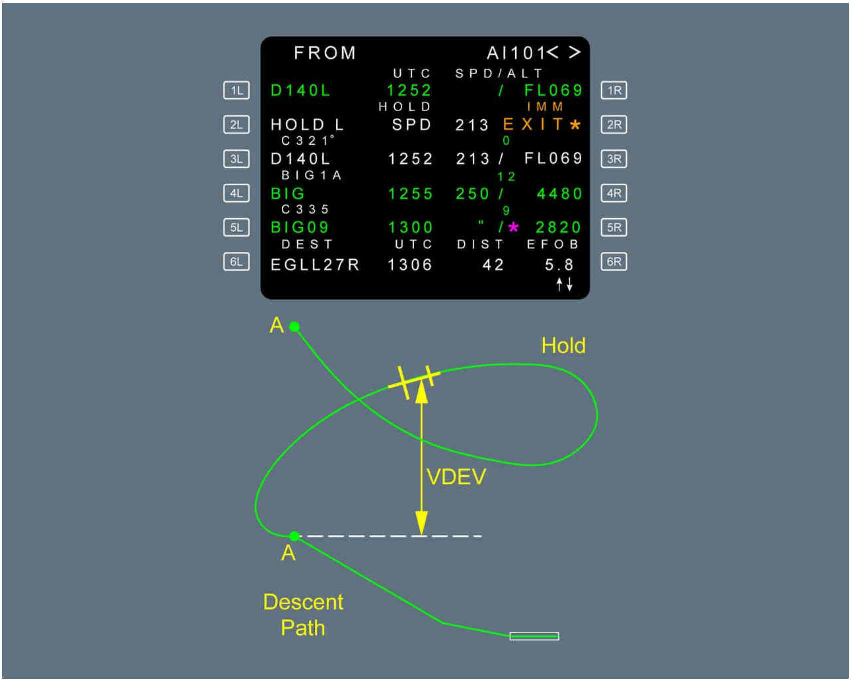
The aircraft enters the hold. The HOLD page displays the associated holding data:

- The inbound course (INB CRS)
- The TURN direction (L or R)
- The TIME/DIST
- The LAST EXIT time and the associated fuel to reach the alternate airport with no extra fuel.

The FMS assumes that the aircraft will fly one turn of the holding pattern, and revises the predictions accordingly.

When the holding pattern is defined by a leg time (and not a leg distance), the FMS revises the size of the hold as a function of the target speed:

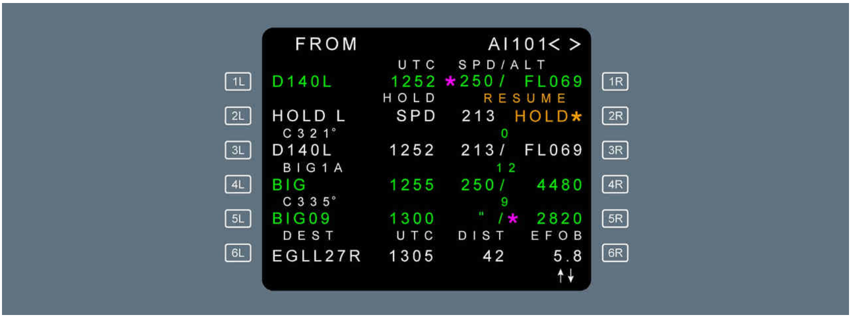
- If managed speed is active, the FMS uses the predicted holding speed to calculate the size of the holding pattern
- If the selected speed is active, the FMS uses the target speed selected by the flight crew at the entry fix sequencing to calculate the size of the holding pattern
- The VDEV displayed on the PFD and the PROG page, when the aircraft is flying in the HM is the difference between the aircraft’s current altitude and the altitude at which it should be when it reaches the hold exit fix in order to be correctly positioned on the descent path.



```
 FROM                  AI101< >
          UTC     SPD/ALT
D140L     1252       /  FL069
          HOLD          IMM
HOLD L    SPD     213  EXIT*
 C321°               0
D140L     1252    213 / FL069
 BIG1A              12
BIG       1255    250 /  4480
 C335                9
BIG09     1300     " /*  2820
 DEST     UTC     DIST   EFOB
EGLL27R   1306     42     5.8
                          ↑↓
```

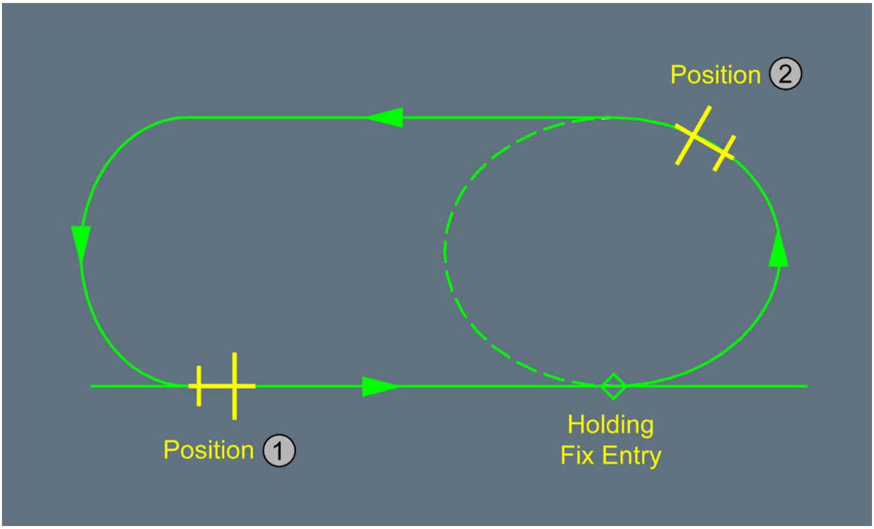
With IMM EXIT Pressed (Aircraft in the Holding Pattern)

The predictions and guidance assume that the aircraft is immediately returning to the hold fix. Sequencing the hold fix, the aircraft exits the holding pattern and resumes its navigation. The flight plan page displays RESUME HOLD instead of IMM EXIT.



```
 FROM                  AI101< >
          UTC     SPD/ALT
D140L     1252  *250/  FL069
          HOLD     RESUME
HOLD L    SPD     213  HOLD*
 C321°               0
D140L     1252    213/  FL069
 BIG1A              12
BIG       1255    250/   4480
 C335°               9
BIG09     1300     " /*  2820
 DEST     UTC     DIST   EFOB
EGLL27R   1305     42     5.8
                          ↑↓
```

HOLD EXIT PROCEDURE



At position (1), If the flight crew selects IMM EXIT, the aircraft will exit at the next fix overfly.
At position (2), If the flight crew selects IMM EXIT, the aircraft will make an immediate turn to the fix where the hold will be exited.

If managed speed is active, the FMS sets the target speed to the applicable speed of the current phase (for example, speed constraint, ECON speed, or speed limit).
The FMS then assumes that the flight crew will continue on the descent path, if the aircraft is in descent.

If DES mode is engaged, the following applies:
- The holding pattern is never included in the descent path computation
- The flight crew cannot enter altitude and speed constraints at the hold exit fix (this is only allowed at the hold entry fix)
- The vertical guidance in the HM, during the descent phase, is set to -1 000 ft/min but the FMS considers altitude constraints that will take effect farther down the flight path. The FMS will not allow the aircraft to descend below the next altitude constraint, neither to the FCU selected altitude. If the aircraft reaches the next altitude constraint, it will level off and the ALT CST mode will engage.

With RESUME HOLD Pressed

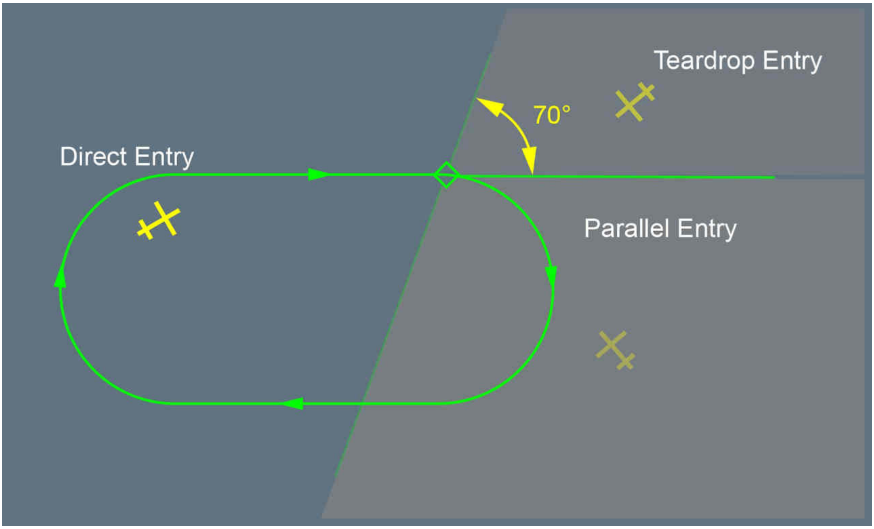
If the flight crew presses the key next to RESUME HOLD, the aircraft remains in the holding pattern, and IMM EXIT is displayed again.

After that, each time the aircraft flies over the holding fix, the FMS updates the predictions for one more holding circuit.

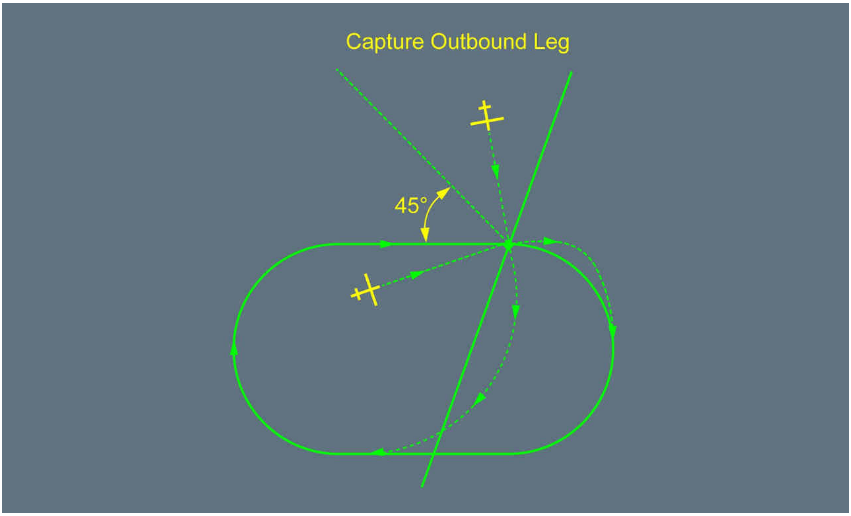
HOLDING PATTERN ENTRIES

The FMS offers three types of entry into holding patterns:

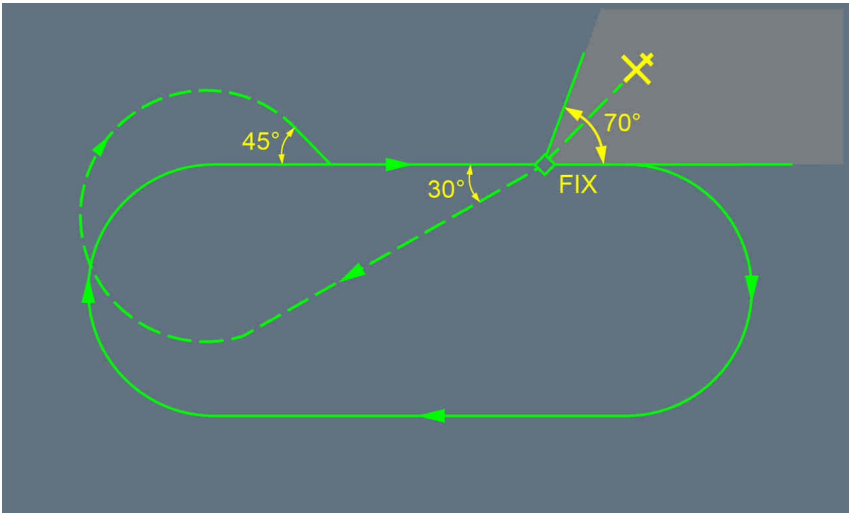
1. Direct entry
2. Teardrop entry
3. Parallel entry.



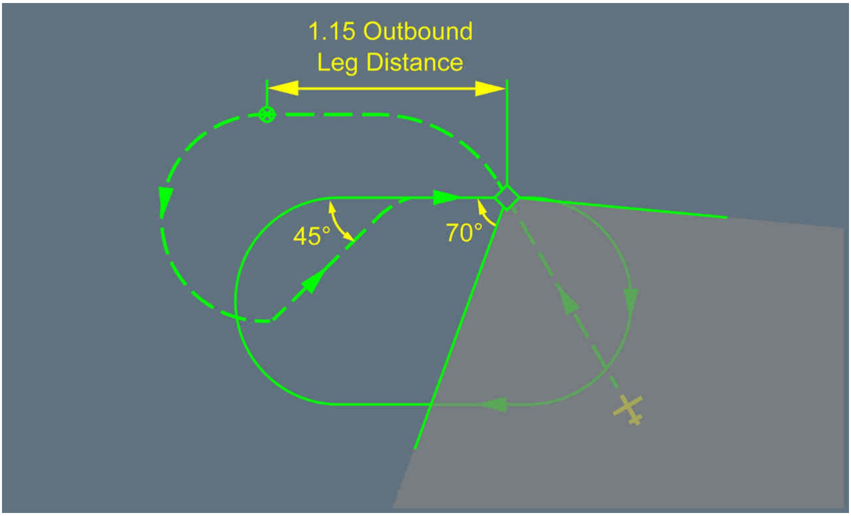
1. Direct entry


Capture Outbound Leg
45°

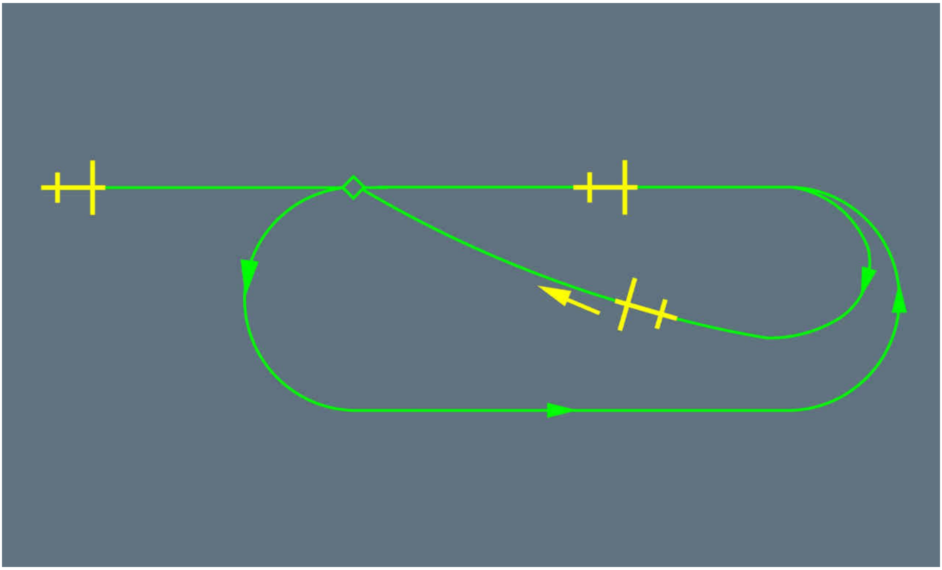
2. Teardrop entry



3. Parallel entry


1.15 Outbound
Leg Distance
45°
70°

Note: *If the leg the aircraft is flying toward the holding fix is on a "limit" between a teardrop entry and a parallel entry, the FMS may compute and display either of the two entries. The flight crew should keep this in mind, and should not assume that the FMS is malfunctioning.*
If the flight plan leg toward the hold entry fix is on a course that is the reciprocal of the inbound course of the holding pattern, the aircraft will fly a parallel entry.

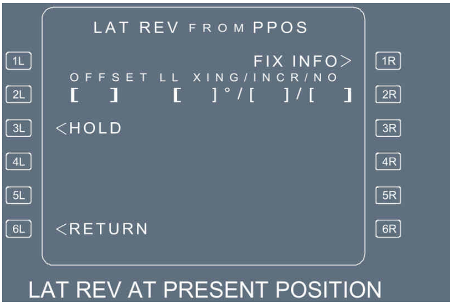


Ident.: DSC-22_20-30-10-15-A-00007220.0001001 / 09 FEB 11

21 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

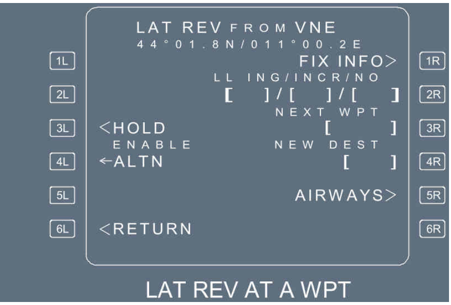
PROCEDURE TO INSERT A HOLD (HOLD WITH MANUAL TERMINATION)

The HOLD prompt allows the flight crew to enter a hold with manual termination (HM), at the revised waypoint or at the present position.
The flight crew accesses the HOLD page from a lateral revision at the present position (PPOS) or at a waypoint.



```
      LAT REV FROM PPOS
1L                          1R
                 FIX INFO>
  OFFSET LL XING/INCR/NO
2L [   ]   [   ]°/[   ]/[   ]  2R
3L <HOLD                    3R
4L                          4R
5L                          5R
6L <RETURN                  6R
```

LAT REV AT PRESENT POSITION



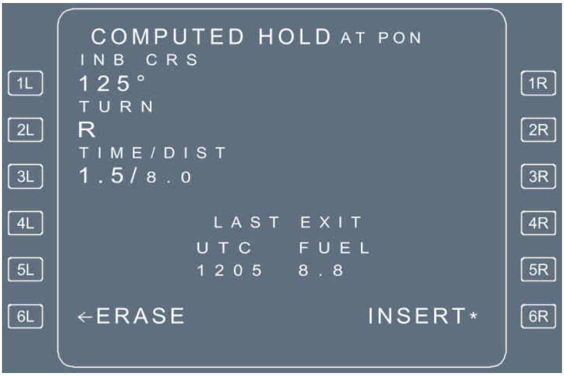
```
      LAT REV FROM VNE
      44°01.8N/011°00.2E
1L                 FIX INFO>  1R
             LL ING/INCR/NO
2L           [   ]/[   ]/[   ]  2R
                   NEXT WPT
3L <HOLD             [      ]  3R
    ENABLE         NEW DEST
4L ←ALTN              [     ]  4R
5L                  AIRWAYS>  5R
6L <RETURN                    6R
```

LAT REV AT A WPT

SELECT lateral revision at present position (PPOS), or an applicable waypoint.
PRESS the HOLD prompt [3L].

A TMPY F-PLN is created and if applicable, the database hold is proposed.
If no database hold is available, the computed hold is proposed.

CHECK and (if necessary) MODIFY the HOLD data.
CHECK the temporary flight plan and INSERT it, if appropriate.



```
   COMPUTED HOLD AT PON
   INB CRS
1L 125°                     1R
   TURN
2L R                        2R
   TIME/DIST
3L 1.5/8.0                  3R
            LAST  EXIT
4L          UTC   FUEL      4R
5L          1205  8.8       5R
6L ←ERASE          INSERT*  6R
```

Ident.: DSC-22_20-30-10-15-A-00007219.0001001 / 09 FEB 11

22 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

PROCEDURE TO DELETE A HOLD (HOLD WITH MANUAL TERMINATION)

CLEAR the HOLD directly in the flight plan, as can be done for a normal waypoint.

OFFSET

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_20-30-10-15-B-00007230.0009001 / 14 MAY 12

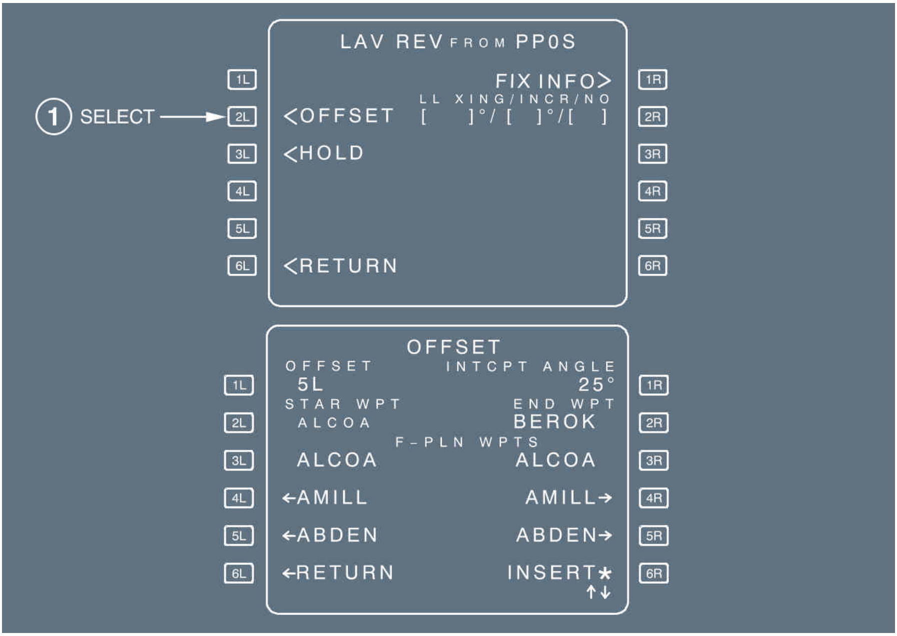
23

GENERAL

Offset allows the flight crew to define on offset of the active flight plan. The offset can be immediate or deferred to start on a downstream leg. The offset will end by default or at a pre-planned end waypoint. Additionally, the flight crew can specify the intercept angle used for the transitions to and from the offset path.
In most cases, the pilot will use it enroute because of an ATC clearance, or to avoid bad weather expected along the flight plan route.
This page is accessed from LAT REV page at the FROM waypoint or at any waypoint downpath the flight plan, except the destination airport.
After inserting the offset in the flight plan, the flight plan page shows OFST in its title, left or right arrows are displayed on every label line between the start and end waypoints of the offset, and the navigation display shows the offset flight plan with a solid green line and the original flight plan with a dashed green line.

The offset is cleared:
- Automatically (holding pattern, approach), or
- Manually with the clear (CLR) key, or by entering “o” in the offset value field [1L] or by using the delete prompt in the OFFSET page.

Note: *If the pilot enters an OFFSET when the aircraft is too close to the TO waypoint, the FMGS may refuse to accept it, in which case the MCDU displays the “ENTRY OUT OF RANGE” message.*

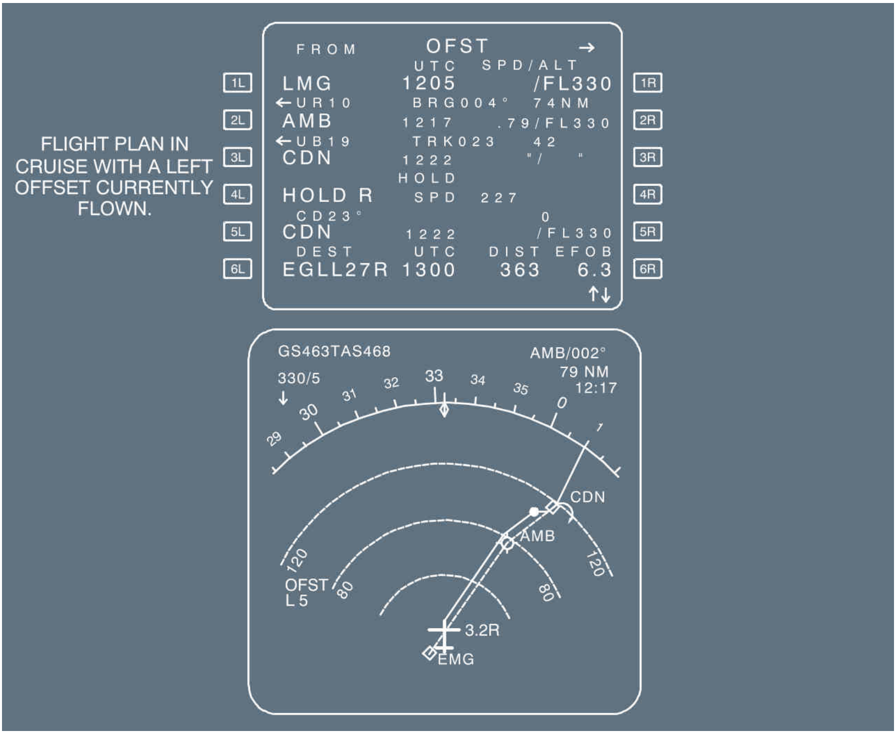

LAV REV FROM PPOS
① SELECT
1L
2L
3L
4L
5L
6L
FIX INFO>
LL XING/INCR/NO
<OFFSET
[ ]°/ [ ]°/[ ]
<HOLD
<RETURN
1R
2R
3R
4R
5R
6R
OFFSET
OFFSET
5L
INTCPT ANGLE
25°
STAR WPT
ALCOA
END WPT
BEROK
F-PLN WPTS
ALCOA
ALCOA
←AMILL
AMILL→
←ABDEN
ABDEN→
←RETURN
INSERT*
↑↓

Ident.: DSC-22_20-30-10-15-B-00007207.0010001 / 01 OCT 12

24

INSERTING AN OFFSET

SELECT LAT REV page at a waypoint.
SELECT OFFSET function by pressing [2L].
WRITE the required offset value and direction (for example, L5 or 5L), and enter it into [1L] field.
CHECK or INSERT the START WPT from the list in [3L] - [5L] fields or manually enter it.
CHECK or ENTER the INTCP ANGLE in [1R] field.
CHECK OR INSERT the END WPT from the list in [3R] - [5R] fields or manually enter it.
PRESS INSERT in [6R] field to activate the OFFSET.



FLIGHT PLAN IN CRUISE WITH A LEFT OFFSET CURRENTLY FLOWN.

```
  FROM          OFST             →
                UTC    SPD/ALT
LMG            1205     /FL330
←UR10           BRG004°   74NM
AMB            1217    .79/FL330
←UB19           TRK023    42
CDN            1222     "/   "
              HOLD
HOLD R          SPD   227
  CD23°                  0
CDN            1222     /FL330
  DEST          UTC   DIST  EFOB
EGLL27R        1300    363   6.3
                                ↑↓
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
GS463TAS468
AMB/002°
79 NM
12:17
330/5
29
30
31
32
33
34
35
0
1
CDN
AMB
120
80
OFST
L 5
3.2R
EMG

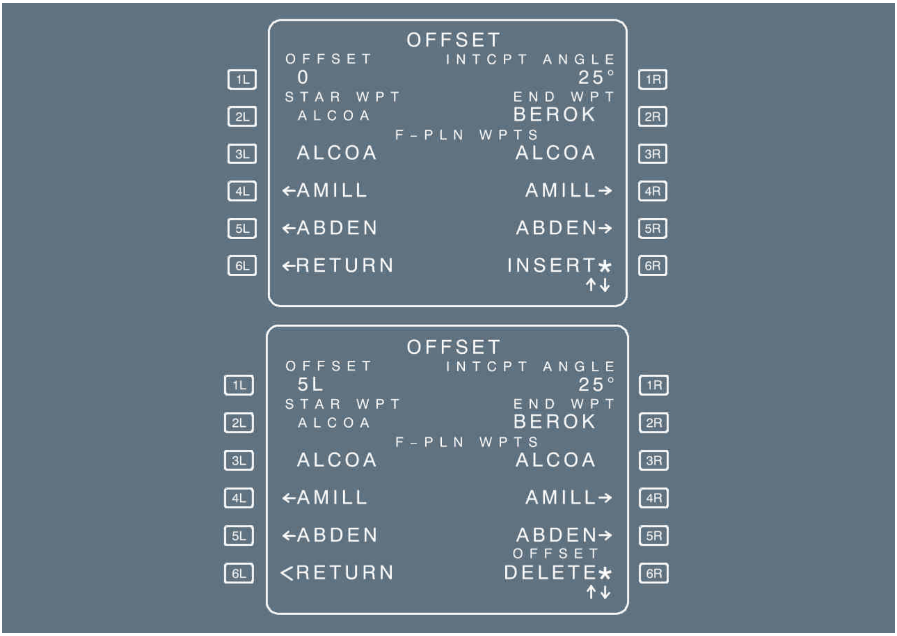
Ident.: DSC-22_20-30-10-15-B-00007218.0009001 / 14 MAY 12

25

MANUAL CANCELLATION OF AN OFFSET

There are two standard methods for cancelling an offset:
1. SELECT DIR TO a waypoint (the next waypoint, for example).
2. SELECT a Lateral Revision (LAT REV) at FROM WPT.

CLEAR the OFFSET field or enter “0” in the OFFSET value field [1L], and press INSERT* in [6R] to activate the temporary flight plan (cancelling OFFSET), or
PRESS the OFFSET DELETE prompt [6R] to activate the temporary flight plan (cancelling OFFSET).


OFFSET
OFFSET
0
INTCPT ANGLE
25°
STAR WPT
ALCOA
END WPT
BEROK
F-PLN WPTS
ALCOA
ALCOA
←AMILL
AMILL→
←ABDEN
ABDEN→
←RETURN
INSERT*
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
OFFSET
OFFSET
5L
INTCPT ANGLE
25°
STAR WPT
ALCOA
END WPT
BEROK
F-PLN WPTS
ALCOA
ALCOA
←AMILL
AMILL→
←ABDEN
ABDEN→
OFFSET
<RETURN
DELETE*
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

ALTERNATE FUNCTION

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_20-30-10-15-C-00007240.0001001 / 09 FEB 11

26

GENERAL

The ALTERNATE FUNCTION performs two actions:

- It reviews and defines alternate airports and inserts them into the flight plan.
- It allows a diversion to be activated through the ENABLE ALTN command.

Ident.: DSC-22_20-30-10-15-C-00007217.0009001 / 23 JUN 15

27

REVIEW AND SELECTION OF ALTERNATE AIRPORT

Several alternate airfields may be stored in the database and assigned to a destination. When the pilot selects a company route (CO RTE) (or a city pair), the computer strings the preferred alternate into the active flight plan.

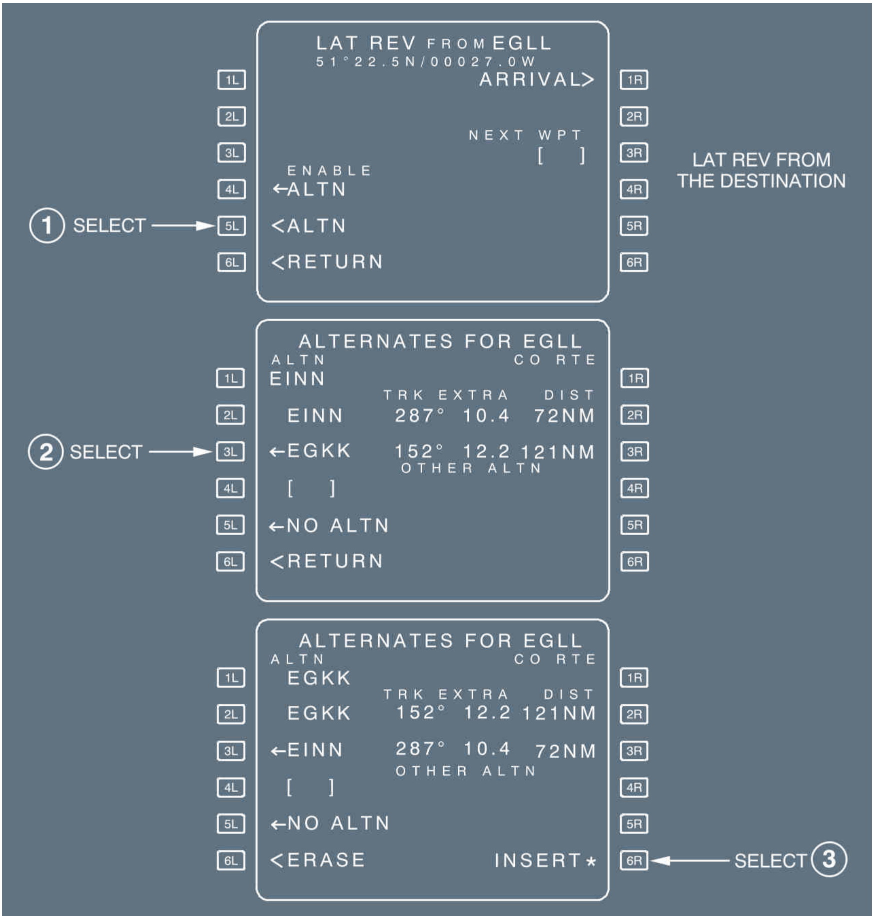
The pilot may review the alternate airports on the ALTN page and, if the one selected is not suitable because of weather or fuel considerations, another alternate may be strung into the active flight plan.
The pilot may define an additional alternate airport into the list, if necessary.
The ALTERNATE page shows the track and distance (airway or direct) between destination and alternate, as well as fuel management data (EXTRA fuel, assuming the associated airfield is the alternate airport). This data will help the pilot change the preferred alternate, if necessary.
Access the ALTERNATE page through the ALTN prompt on the LAT REV page at destination.
Alternate airfields are attached to the destination.

ENTERING NEW ALTERNATE INTO THE F-PLN

If the preferred alternate is unsuitable, proceed as follows:

SELECT F-PLN key on MCDU.
SELECT LAT REV at destination.
SELECT ALTN [5L].
SELECT an AIRFIELD IDENTIFIER.
INSERT the temporary flight plan.

Note: *If weather and destination airfield conditions permit, you may select “NO ALTN”. Fuel predictions will be computed without alternate fuel.*


LAT REV FROM EGLL
51°22.5N/00027.0W
ARRIVAL>
NEXT WPT
[ ]
ENABLE
←ALTN
<ALTN
<RETURN
LAT REV FROM THE DESTINATION
① SELECT
ALTERNATES FOR EGLL
ALTN CO RTE
EINN
TRK EXTRA DIST
EINN 287° 10.4 72NM
←EGKK 152° 12.2 121NM
OTHER ALTN
[ ]
←NO ALTN
<RETURN
② SELECT
ALTERNATES FOR EGLL
ALTN CO RTE
EGKK
TRK EXTRA DIST
EGKK 152° 12.2 121NM
←EINN 287° 10.4 72NM
OTHER ALTN
[ ]
←NO ALTN
<ERASE INSERT*
③ SELECT
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

SELECTION OF ANOTHER ALTERNATE

Fuel management information for flight to another alternate airfield may be obtained by selecting the OTHER ALTN field.

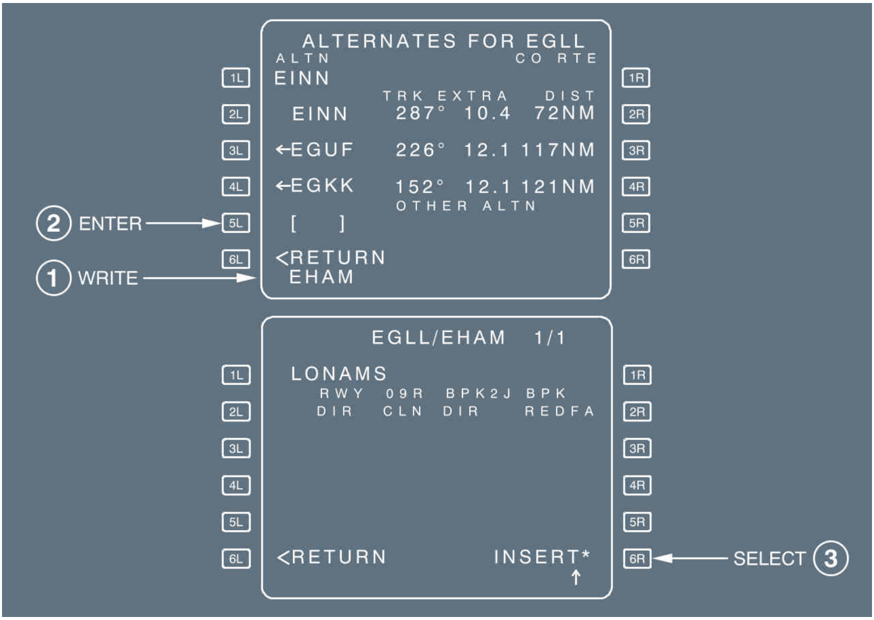
SELECT LAT REV at DESTINATION.
SELECT ALTN [5L].

ENTER the airfield identifier in the brackets.

- *If the airfield is not in the database, the NEW RUNWAY page automatically appears.*
- *If the airfield is in the database and there is a company route (CO RTE) to it, the ROUTE SELECTION page automatically appears.*

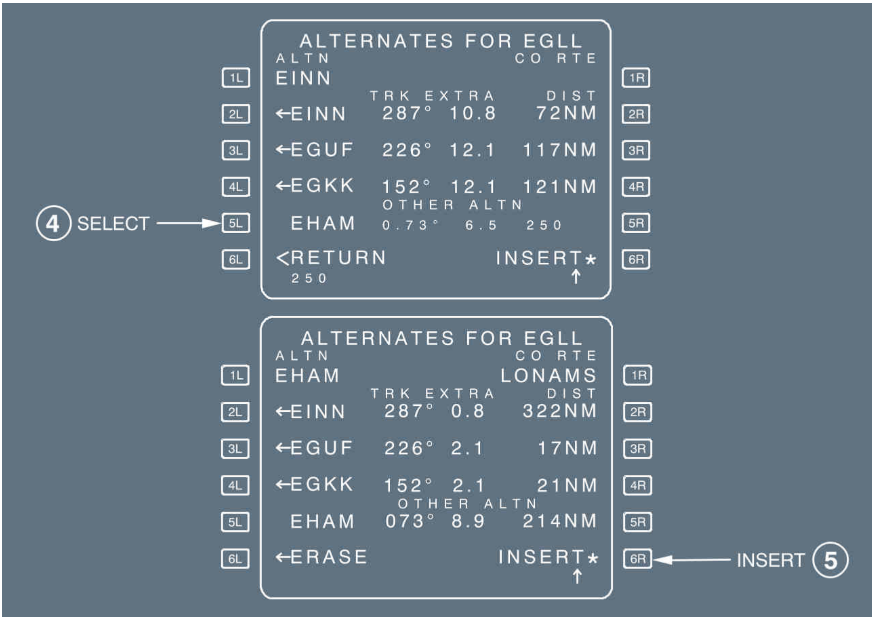
SELECT the route, as appropriate, or RETURN to the ALTN page.
ENTER the distance in the brackets (if required). XTRA fuel and track (TRK) will appear.
SELECT the other alternate (OTHER ALTN) as a primary alternate if convenient. (EXTRA fuel and DIST revert to AIRWAY distance).
INSERT it, if you want to have it as a primary alternate.

<u>Note:</u>
- *The pilot can always overwrite the “OTHER ALTN”. The new “OTHER ALTN” then replaces the previous one, which is lost.*
- *The pilot can select OTHER ALTN as a primary alternate (active flight plan), to replace any alternate on the initial list.*
- *If the pilot selects the other alternate as a primary alternate, and overwrites the OTHER ALTN field by entering a new airport, the first one will remain a primary alternate and the system will memorize a second OTHER ALTN.*



```
 ALTERNATES FOR EGLL
ALTN                  CO RTE
EINN
            TRK  EXTRA   DIST
 EINN       287°  10.4   72NM
←EGUF       226°  12.1  117NM
←EGKK       152°  12.1  121NM
            OTHER ALTN
 [   ]
<RETURN
 EHAM
```

```
      EGLL/EHAM   1/1

 LONAMS
   RWY   09R   BPK2J  BPK
   DIR   CLN   DIR    REDFA




<RETURN            INSERT*
                         ↑
```



```
   ALTERNATES FOR EGLL
ALTN                  CO RTE
EINN
        TRK EXTRA      DIST
←EINN   287°  10.8     72NM
←EGUF   226°  12.1    117NM
←EGKK   152°  12.1    121NM
         OTHER ALTN
 EHAM   0.73°  6.5     250
<RETURN              INSERT*
 250                       ↑
```

```
   ALTERNATES FOR EGLL
ALTN                  CO RTE
EHAM                  LONAMS
        TRK EXTRA      DIST
←EINN   287°  0.8     322NM
←EGUF   226°  2.1      17NM
←EGKK   152°  2.1      21NM
         OTHER ALTN
 EHAM   073°  8.9     214NM
←ERASE               INSERT*
                           ↑
```

The pilot may enter a distance in the OTHER ALTN field. The system will compute the extra fuel and the track for this distance.

PREDICTED DATA FOR ALTERNATE

Data predictions are based on:

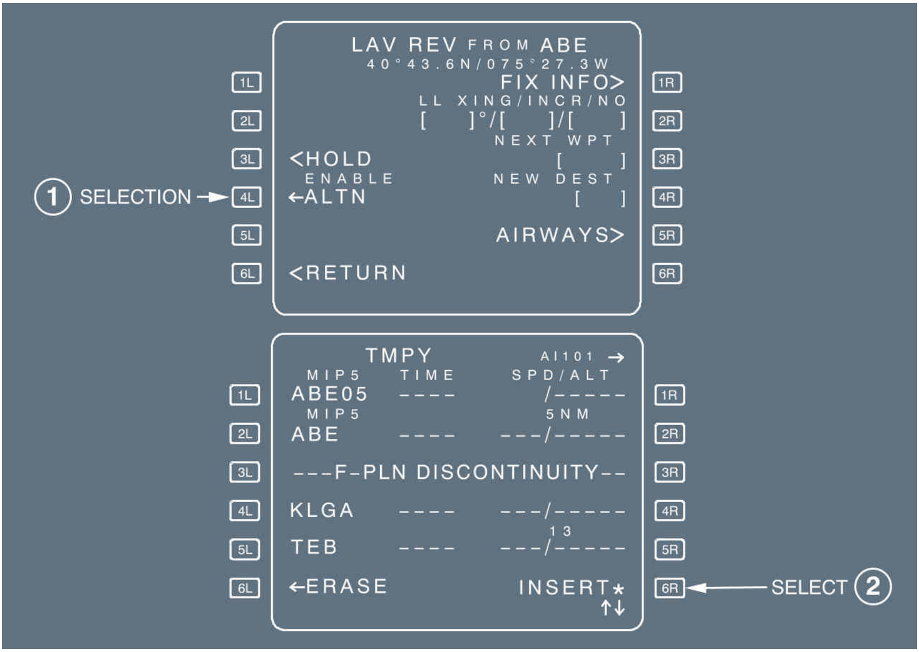
- Aircraft weight being equal to landing weight at primary destination.
- Flight at FL 100 if the alternate F-PLN length is less than 100 NM , at FL 220 if the alternate F-PLN length is comprised between 100 and 200 NM , or else at FL 310.
- Cost index 0.
- Constant wind (as entered in the alternate field of the DES WIND page).
- Constant delta ISA (equal to delta ISA at primary destination).
- The along flight path distance from the destination to the alternate airport. If the flight crew enters an ALTN fuel value, this value is the one taken into account.

ENABLE ALTN

Ident.: DSC-22_20-30-10-15-00000467.0009001 / 01 OCT 12

28 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This enables the pilot to initiate a diversion by entering the alternate flight plan just after the revision waypoint (with a discontinuity).
The pilot may have to adjust the resulting flight plan (use “direct to”, or add or suppress waypoints), depending on the circumstances.

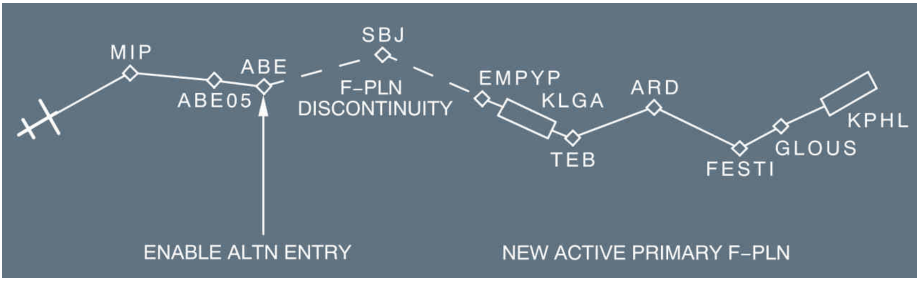


```
      LAV REV FROM ABE
   40°43.6N/075°27.3W
                FIX INFO>
          LL XING/INCR/NO
         [   ]°/[   ]/[   ]
                NEXT WPT
<HOLD           [       ]
 ENABLE         NEW DEST
←ALTN              [    ]

                AIRWAYS>

<RETURN
```

```
      TMPY          AI101 →
 MIP5     TIME      SPD/ALT
ABE05     ----       /-----
 MIP5                5NM
ABE       ----    ---/-----
---F-PLN DISCONTINUITY--
KLGA      ----    ---/-----
                     13
TEB       ----    ---/-----
←ERASE             INSERT*
                        ↑↓
```

TO ACTIVATE THE PRIMARY ALTN:

SELECT a LAT REV at the “TO” waypoint (or at another suitable waypoint).
PRESS the ENABLE ALTN key.
INSERT the temporary flight plan.
ENTER an appropriate waypoint in DIRECT TO and adjust the flight plan.
ADJUST the cost index on the PERF page and the defaulted cruise flight level (CRZ FL) on the PROG page, as required.



When ENABLE ALT is pressed at ABE, a flight plan discontinuity is created from ABE down to destination and the alternate route is linked to the active flight plan.

DIR KEY (DIRECT-TO-FUNCTION)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_20-30-10-15-D-00007243.0001001 / 30 MAR 18

29

GENERAL

The pilot uses the “Direct To” function to define a direct leg from the present position to any waypoint on the active flight plan or to any waypoint.

The designated waypoint may be entered by its identifier (if it is stored in the database) or by a latitude/longitude, place/bearing/distance, or a place-bearing/place-bearing.

Note: 1. *If the autopilot or flight director is in the heading/track or localizer mode, the DIR TO function engages the NAV mode.*
2. *A lateral revision of the flight plan obtained with a DIR TO may also affect the vertical profile of the flight plan.*

Three functions are available through the DIR TO key:

- The DIR TO defines a direct leg from the present position to a specified waypoint.
  NAV mode engages simultaneously to the DIR TO selection.
  When the pilot uses DIR TO, the present position (PPOS) becomes the “FROM” waypoint and the active flight plan shows it as the T-P (turn point).
- The DIR TO/ABEAM function, defines the abeam waypoints along the direct leg. These waypoints are the projection on the direct leg of the initial F-PLN waypoints located between the aircraft position and the specified waypoint.
  NAV mode engages simultaneously to the DIR TO/ABEAM selection.
- The DIR TO/INTCPT function allows the definition of a specified RADIAL INBOUND or OUTBOUND at an inserted waypoint. The current aircraft track is used to compute the INTCPT point with the specified radial.
  NAV mode is armed simultaneously to the DIR TO/INTCPT selection.

The ND displays the DIR TO leg as a temporary flight plan leg between current aircraft position and specified waypoint. In case of a DIR TO/INTCPT, the leg is not displayed when the angle between the current aircraft track and the intercept radial exceeds 160 °.

Ident.: DSC-22_20-30-10-15-D-00007216.0001001 / 14 MAY 12

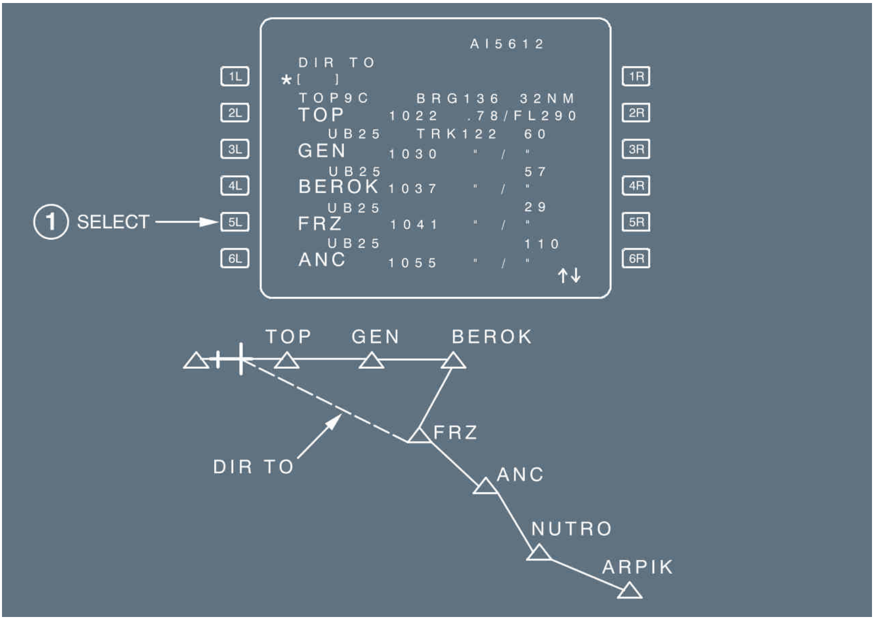
30

PROCEDURE FOR DIR TO WAYPOINT

CASE 1. THE “TO” WAYPOINT IS IN THE FLIGHT PLAN

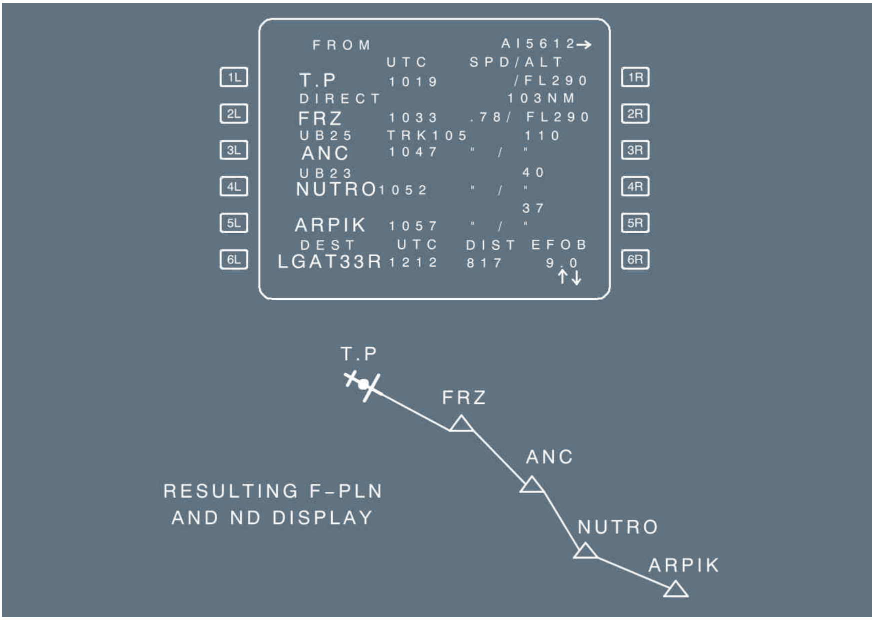
Example : DIR TO FRZ

PRESS the DIR key on the MCDU.
PRESS the line select key next to “FRZ”.



```
                    AI5612
 DIR TO
*[    ]
 TOP9C        BRG136  32NM
 TOP     1022    .78/FL290
     UB25     TRK122    60
 GEN     1030     "  /  "
     UB25               57
 BEROK   1037     "  /  "
     UB25               29
 FRZ     1041     "  /  "
     UB25              110
 ANC     1055     "  /  "
                         ↑↓
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
① SELECT
TOP
GEN
BEROK
FRZ
DIR TO
ANC
NUTRO
ARPIK



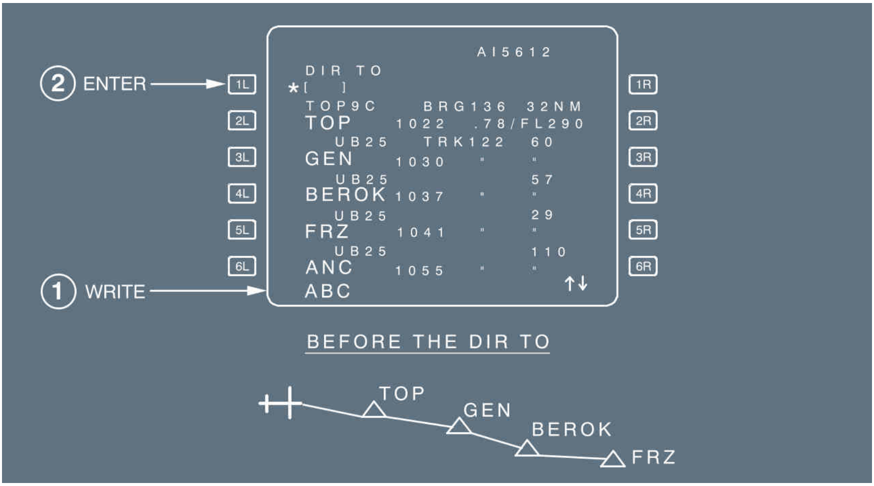
```
  FROM                  AI5612→
          UTC     SPD/ALT
 T.P      1019        /FL290
 DIRECT              103NM
 FRZ      1033    .78/ FL290
 UB25     TRK105       110
 ANC      1047     "  /  "
 UB23                  40
 NUTRO1052         "  /  "
                       37
 ARPIK    1057     "  /  "
 DEST      UTC    DIST  EFOB
LGAT33R  1212     817    9.0
                          ↑↓
```

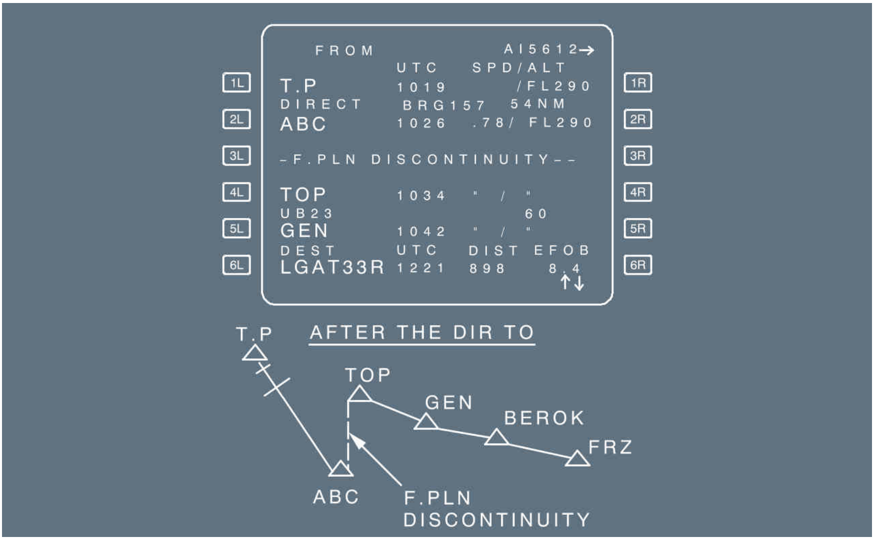
RESULTING F-PLN
AND ND DISPLAY

CASE 2. THE “TO” WAYPOINT DOES NOT BELONG TO THE FLIGHT PLAN

Example : Direct to ABC (ABC being an ident, LL or PBD or PBX (Place/Bearing-Place/Bearing)

PRESS the DIR key.
WRITE the waypoint identifier (e.g. ABC) into the scratchpad.
PRESS [1 L] to enter “ABC” in the “DIR TO” field.


AI5612
DIR TO
*[ ]
TOP9C BRG136 32NM
TOP 1022 .78/FL290
UB25 TRK122 60
GEN 1030 " "
UB25 57
BEROK 1037 " "
UB25 29
FRZ 1041 " "
UB25 110
ANC 1055 " "
ABC
② ENTER
① WRITE
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
BEFORE THE DIR TO
TOP
GEN
BEROK
FRZ

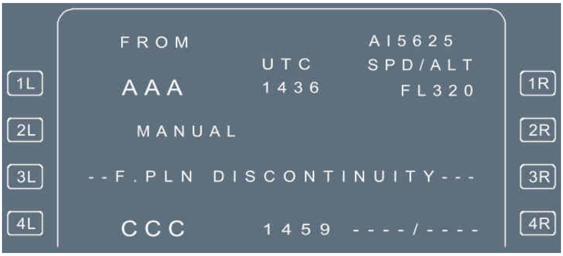

FROM AI5612→
UTC SPD/ALT
T.P 1019 /FL290
DIRECT BRG157 54NM
ABC 1026 .78/ FL290
-F.PLN DISCONTINUITY--
TOP 1034 " / "
UB23 60
GEN 1042 " / "
DEST UTC DIST EFOB
LGAT33R 1221 898 8.4
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
T.P
AFTER THE DIR TO
TOP
GEN
BEROK
FRZ
ABC
F.PLN
DISCONTINUITY

Clear the discontinuity and the waypoints that are not included in the new flight plan.

31

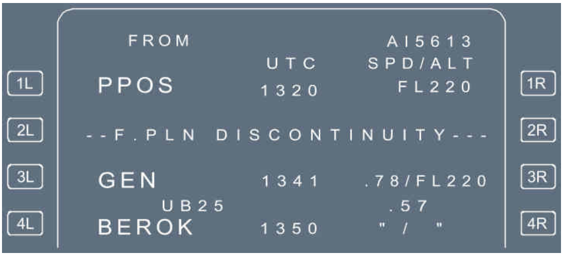
PARTICULAR CASES FOR USE OF DIR TO

- If the pilot is flying a manual leg (part of a SID or STAR), the flight plan page displays “F-PLN DISCONTINUITY”, preceded by “MANUAL” (see below).
  These legs are specific heading or track legs flown with no defined end waypoint.



```
     FROM                    AI5625
                   UTC      SPD/ALT
1L   AAA           1436       FL320    1R
      MANUAL                           
2L                                     2R
3L  --F.PLN DISCONTINUITY---           3R
4L   CCC           1459    ----/----   4R
```

- When the pilot encounters a flight plan discontinuity, or if a major reset occurs, the flight plan page displays “PPOS - F-PLAN DISCONTINUITY”, and the pilot looses managed guidance in both the lateral and vertical plans.
  The autopilot or flight director reverts to the basic HDG V/S (or TRK FPA) modes. Predictions remain available and are based on the assumption that the aircraft will fly a direct leg from its present position to the next waypoint.



```
     FROM                    AI5613
                   UTC      SPD/ALT
1L  PPOS           1320       FL220    1R
2L  --F.PLN DISCONTINUITY---           2R
3L  GEN            1341    .78/FL220   3R
         UB25               .57
4L  BEROK          1350     "  /  "    4R
```

- **In both of these cases, the only way to get back to a standard flight plan is to perform a “ DIR TO ” to a designated waypoint.**
- Following a DIR TO, the message “MAP PARTLY DISPLAYED” may appear on the NDs, if the new flight plan includes a very long leg, (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). When this message comes up, enter an intermediate waypoint to shorten the leg.

Note: *During cruise, the DIR TO function is not available as long as uplink wind data, received through ACARS ◁ , is not inserted or cancelled on the CRUISE WIND page.*

Ident.: DSC-22_20-30-10-15-D-00007208.0009001 / 22 OCT 13

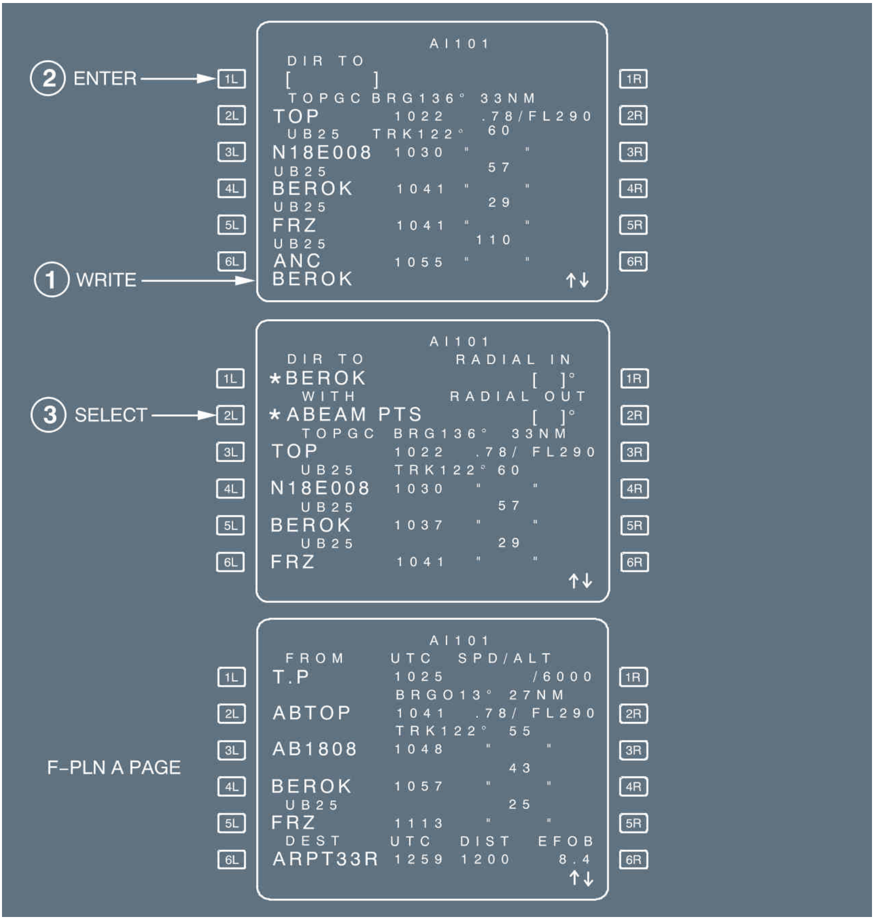
32

PROCEDURE FOR DIR TO/ABEAM

Example : DIR TO/ABEAM BEROK

PRESS the DIR on the MCDU.
WRITE the waypoint identifier into the scratchpad (Example : BEROK).
PRESS [1 L] to enter the waypoint in the DIR TO field.
SELECT the ABEAM PTS function.

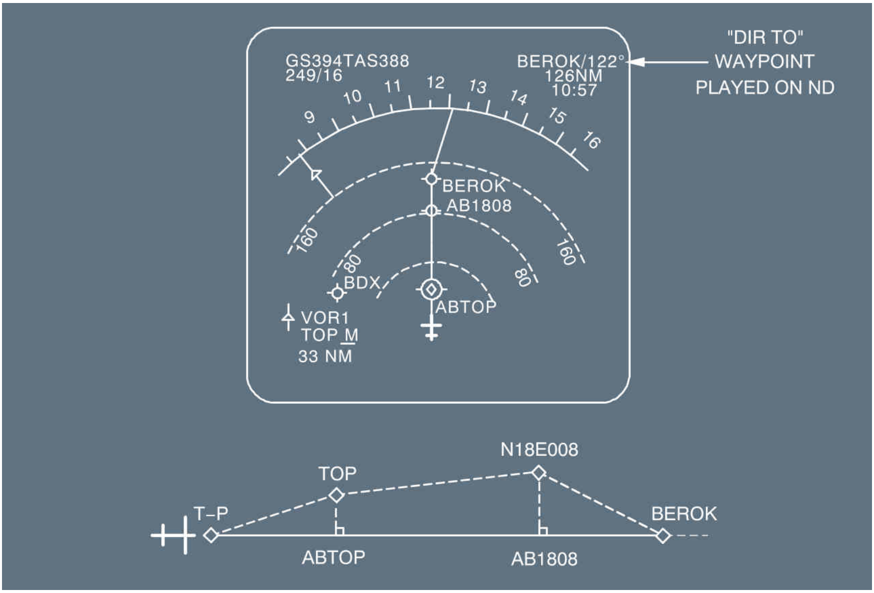
The display reverts to F-PLN A page.



```
              AI101
  DIR TO
 [          ]
  TOPGC BRG136°  33NM
TOP        1022    .78/FL290
  UB25     TRK122°  60
N18E008    1030  "        "
 UB25                57
BEROK      1041  "        "
 UB25                29
FRZ        1041  "        "
 UB25               110
ANC        1055  "        "
BEROK                        ↑↓
```

```
              AI101
  DIR TO          RADIAL IN
*BEROK                 [  ]°
    WITH         RADIAL OUT
*ABEAM PTS             [  ]°
    TOPGC  BRG136°  33NM
TOP        1022   .78/ FL290
    UB25   TRK122° 60
N18E008    1030   "     "
    UB25            57
BEROK      1037   "     "
    UB25            29
FRZ        1041   "     "
                             ↑↓
```

```
              AI101
  FROM     UTC  SPD/ALT
T.P        1025          /6000
           BRGO13°  27NM
ABTOP      1041   .78/ FL290
           TRK122°  55
AB1808     1048    "       "
                    43
BEROK      1057    "       "
  UB25              25
FRZ        1113    "       "
  DEST     UTC   DIST    EFOB
ARPT33R    1259  1200     8.4
                             ↑↓
```


GS394TAS388
249/16
BEROK/122°
126NM
10:57
"DIR TO" WAYPOINT PLAYED ON ND
9
10
11
12
13
14
15
16
BEROK
AB1808
160
80
BDX
ABTOP
160
80
VOR1
TOP M
33 NM
N18E008
TOP
T-P
BEROK
ABTOP
AB1808

Note: 1. *If, between two waypoints projected on the direct leg, there was a discontinuity in the original flight plan, this discontinuity disappears between the corresponding abeam points on the direct leg.*

2. *. Abeam waypoints computed from latitude/longitude-type waypoints are renamed by the system as "AB XXXXX", where "xxxxx" is an abbreviation in 5 characters, of the latitude and longitude of the initial waypoints.*

Ident.: DSC-22_20-30-10-15-D-00007221.0001001 / 14 MAY 12

33

PROCEDURE FOR DIR TO/INTERCEPT

PRESS the DIR key.
WRITE the waypoint identifier into the scratchpad.
PRESS [1L] to enter the waypoint in the DIR TO field.

In the [1R] and [2R] fields, the MCDU displays the functions radial inbound and radial outbound from the waypoint.
If the waypoint belongs to the flight plan, the system displays the flight plan track as the default inbound radial. The crew can modify it.

WRITE the required in or out radial into the scratchpad.
PRESS [1R] or [2R] to enter the radial in the required field.

The ND displays the entered radial as an amber dotted line : The pilot can still modify it.

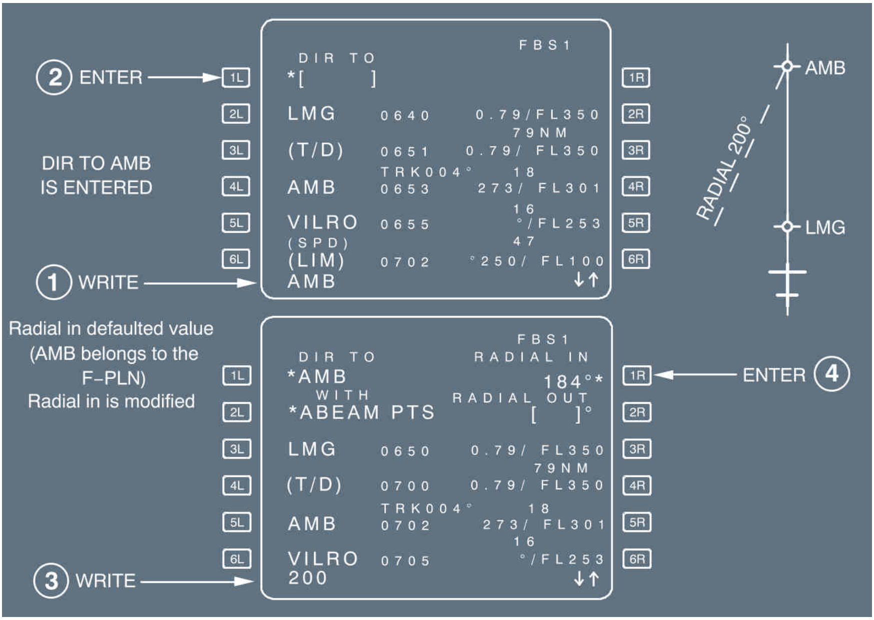
PRESS [1R] or [2R] to confirm the DIR TO/INTERCEPT selection.

The display reverts to the F-PLN A page, the system arms the NAV mode, and engages the HDG mode. The FROM waypoint is the aircraft position at the time of the DIR TO/INTERCEPT selection. The MCDU indicates it as INBND or OUTBND.

<u>*Note:*</u>
1. *If the waypoint does not belong to the flight plan, the system strings the DIR TO/INTERCEPT leg to this waypoint, and inserts a discontinuity following the waypoint.*
2. *A DIR TO/INTERCEPT cancels any active offset.*
3. *If the current AP/FD lateral mode is HDG or TRK, NAV becomes armed.* *If the NAV mode was engaged, NAV becomes armed. FCU HDG or TRK must be used to guide the aircraft.* *The ND displays an intercept point, if the intercept angle is less than 120 °. The system constantly updates it to reflect the current aircraft track and position with respect to the intercept radial. The NAV mode engages when reaching the intercept point.*

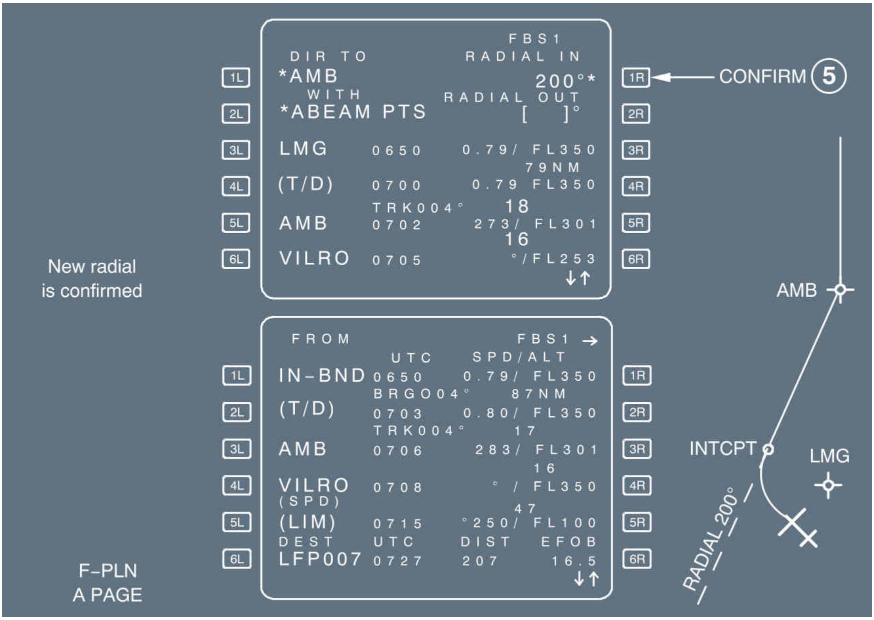
EXAMPLE: RADIAL INBND

DIR TO AMB - RADIAL 200 ° INBOUND


② ENTER
DIR TO AMB
IS ENTERED
① WRITE
Radial in defaulted value
(AMB belongs to the
F-PLN)
Radial in is modified
③ WRITE
ENTER ④
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
AMB
RADIAL 200°
LMG

```
 DIR TO                      FBS1
*[         ]
LMG      0640       0.79/FL350
                       79NM
(T/D)    0651     0.79/ FL350
         TRK004°        18
AMB      0653       273/ FL301
                        16
VILRO    0655          °/FL253
(SPD)                   47
(LIM)    0702      °250/ FL100
AMB                         ↓↑
```

```
 DIR TO                      FBS1
                        RADIAL IN
*AMB                        184°*
  WITH                 RADIAL OUT
*ABEAM PTS                [    ]°
LMG      0650      0.79/ FL350
                       79NM
(T/D)    0700      0.79/ FL350
         TRK004°         18
AMB      0702        273/ FL301
                        16
VILRO    0705          °/FL253
200                         ↓↑
```

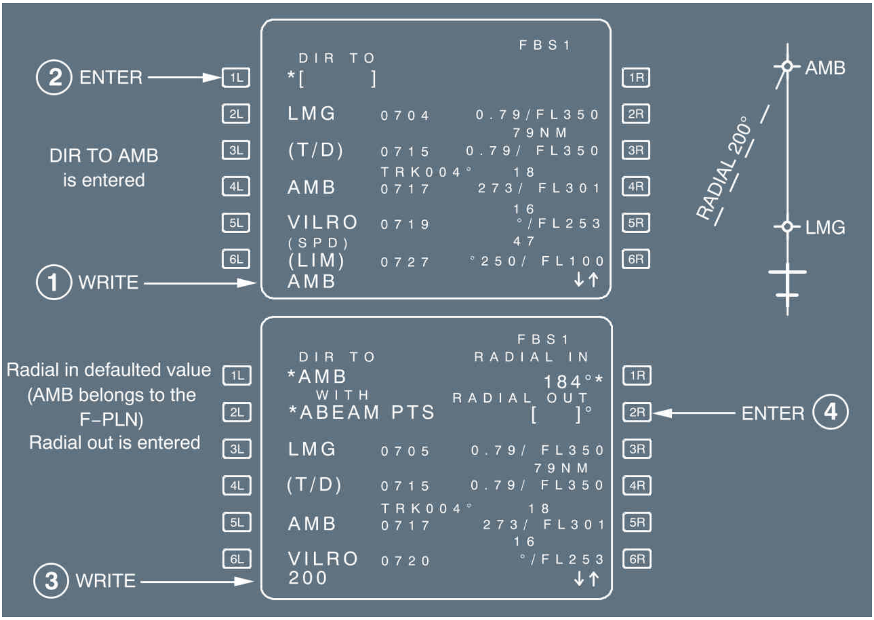

1L
2L
3L
4L
5L
6L
1R
CONFIRM
5
2R
3R
4R
5R
6R
New radial
is confirmed
AMB
INTCPT
LMG
RADIAL 200°
F-PLN
A PAGE

```
                 FBS1
DIR TO         RADIAL IN
*AMB              200°*
  WITH         RADIAL OUT
*ABEAM PTS        [   ]°
LMG     0650   0.79/ FL350
                   79NM
(T/D)   0700   0.79  FL350
        TRK004°    18
AMB     0702   273/ FL301
                   16
VILRO   0705      °/FL253
                       ↓↑
```

```
FROM                FBS1 →
         UTC     SPD/ALT
IN-BND  0650   0.79/ FL350
        BRG004°     87NM
(T/D)   0703   0.80/ FL350
        TRK004°     17
AMB     0706    283/ FL301
                     16
VILRO   0708      °  / FL350
(SPD)                47
(LIM)   0715   °250/ FL100
DEST    UTC    DIST    EFOB
LFP007  0727   207     16.5
                        ↓↑
```

EXAMPLE: RADIAL OUTBND

DIR TO AMB - RADIAL 200 ° OUTBOUND



② ENTER

DIR TO AMB is entered

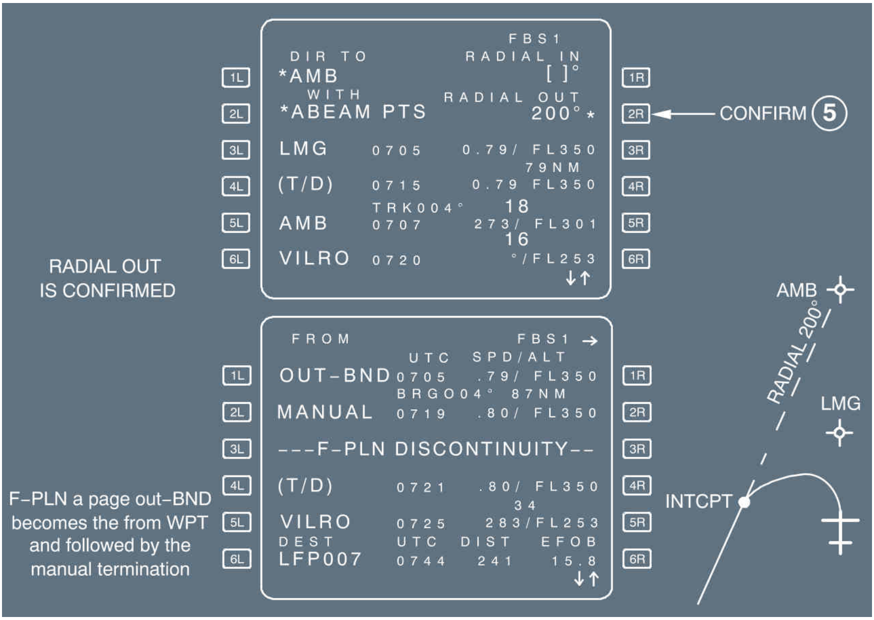
① WRITE

Radial in defaulted value (AMB belongs to the F–PLN)
Radial out is entered

③ WRITE

ENTER ④

FBS1
DIR TO
*[ ]
LMG 0704 0.79/FL350
79NM
(T/D) 0715 0.79/ FL350
TRK004° 18
AMB 0717 273/ FL301
16
VILRO 0719 °/FL253
(SPD) 47
(LIM) 0727 °250/ FL100
AMB ↓↑
FBS1
DIR TO
RADIAL IN
AMB 184°
WITH
RADIAL OUT
*ABEAM PTS [ ]°
LMG 0705 0.79/ FL350
79NM
(T/D) 0715 0.79/ FL350
TRK004° 18
AMB 0717 273/ FL301
16
VILRO 0720 °/FL253
200 ↓↑
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
AMB
RADIAL 200°
LMG



```
                    FBS1
 DIR TO           RADIAL IN
*AMB                  [ ]°
  WITH           RADIAL OUT
*ABEAM PTS           200°*
LMG      0705    0.79/ FL350
                   79NM
(T/D)    0715    0.79 FL350
         TRK004°    18
AMB      0707    273/ FL301
                    16
VILRO    0720      °/FL253
                         ↓↑
```

RADIAL OUT
IS CONFIRMED

```
 FROM                 FBS1 →
          UTC   SPD/ALT
OUT-BND 0705   .79/ FL350
        BRG004°  87NM
MANUAL  0719   .80/ FL350
---F-PLN DISCONTINUITY--
(T/D)   0721   .80/ FL350
                 34
VILRO   0725   283/FL253
DEST    UTC   DIST   EFOB
LFP007  0744   241   15.8
                       ↓↑
```

F-PLN a page out-BND
becomes the from WPT
and followed by the
manual termination

OVFY (OVERFLY) KEY

Ident.: DSC-22_20-30-10-15-00000469.0001001 / 01 OCT 12

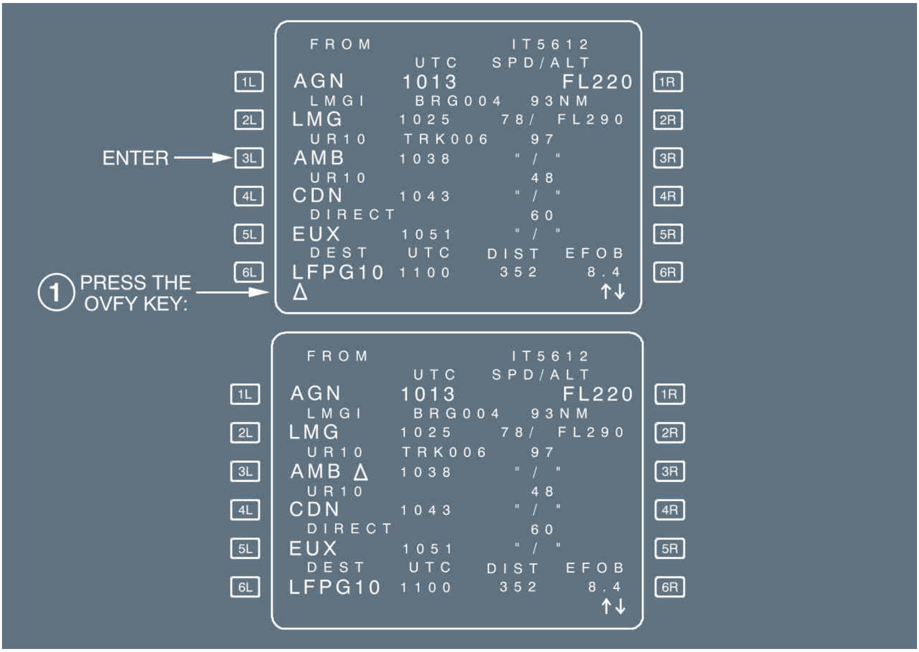
34 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The overfly key programs the Flight Management Guidance Computer to fly over a specific waypoint or NAVAID. To use it:

PRESS the “OVFY” key.

A “Δ” appears in the scratchpad.

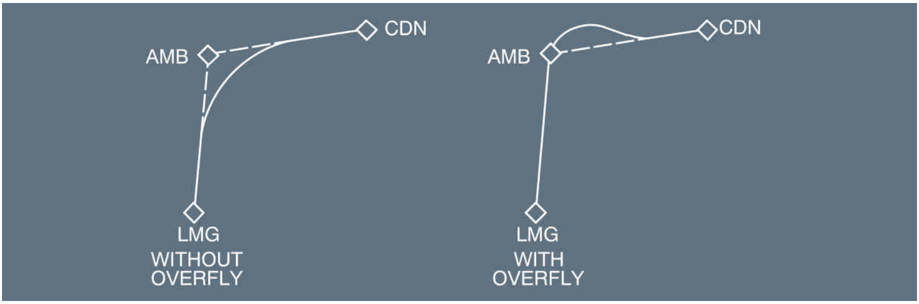
INSERT it by pressing the key adjacent to the waypoint to be overflown. [3L] in this example.


ENTER
① PRESS THE OVFY KEY:
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
  FROM                   IT5612
            UTC       SPD/ALT
AGN         1013          FL220
  LMGI      BRG004     93NM
LMG         1025      78/  FL290
  UR10      TRK006      97
AMB         1038        " / "
  UR10                  48
CDN         1043        " / "
  DIRECT                60
EUX         1051        " / "
  DEST      UTC     DIST    EFOB
LFPG10      1100     352     8.4
Δ                             ↑↓
```

```
  FROM                   IT5612
            UTC       SPD/ALT
AGN         1013          FL220
  LMGI      BRG004     93NM
LMG         1025      78/  FL290
  UR10      TRK006      97
AMB Δ       1038        " / "
  UR10                  48
CDN         1043        " / "
  DIRECT                60
EUX         1051        " / "
  DEST      UTC     DIST    EFOB
LFPG10      1100     352     8.4
                              ↑↓
```

The pilot cannot cancel the overfly program. If you do not want to fly over the point you have entered, use DIR TO (direct to) the next waypoint or engage the heading mode, whichever is more suitable.


AMB
CDN
LMG
WITHOUT
OVERFLY
AMB
CDN
LMG
WITH
OVERFLY

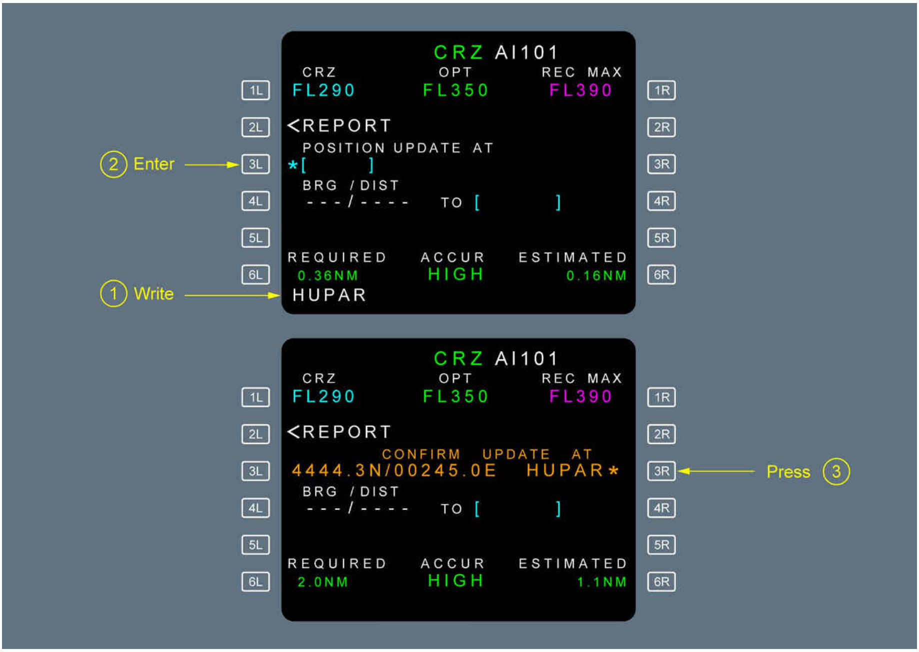
The overfly function allows you to fly over a specific waypoint, and return the aircraft to the great circle track.

POSITION UPDATE AT

Ident.: DSC-22_20-30-10-15-00000470.0003001 / 04 JUN 19

35 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

To manually change the position computed by the FMGC (FM position and bias), the pilot uses "POSITION UPDATE AT" on the progress page.
Use this facility with extreme caution: It is apt to be inaccurate, because it relies on the pilot's estimation of when a designated position has been reached.



```
          CRZ AI101
 CRZ        OPT       REC MAX
FL290      FL350       FL390
<REPORT
 POSITION UPDATE AT
*[      ]
 BRG / DIST
 ---/----        TO [        ]

REQUIRED     ACCUR    ESTIMATED
 0.36NM      HIGH        0.16NM
HUPAR
```

```
          CRZ AI101
 CRZ        OPT       REC MAX
FL290      FL350       FL390
<REPORT
         CONFIRM  UPDATE  AT
4444.3N/00245.0E    HUPAR*
 BRG / DIST
 ---/----        TO [        ]

REQUIRED     ACCUR    ESTIMATED
 2.0NM       HIGH         1.1NM
```

WRITE the ident for the NAVAID (or waypoint or airport), or the coordinates, or the PBD or PBX (Place/Bearing-Place/Bearing) at which the update is intended.
Press [3L] to ENTER the ident in the "POSITION UPDATE AT" field. The coordinates of the point, along with its identifier (or "ENTRY", if the identifier is not in the database), appear in that field.
PRESS [3R] to activate the update, when you estimate that you are at the position.

Note: *The system reinitializes the Estimated Position Error computation when a position update is performed. This may lead to the appearance of a "NAV ACCUR DOWNGRAD" or "NAV ACCUR UPGRAD" message.*

If the “POSITION UPDATE AT” does not properly take effect, it corrupts the FM position.

- In an area with good radio NAVAID coverage:
  - If the update error is small, subsequent radio position updating will correct the FM position.
  - If the update error is large, the system will reject any radio updating because its internal “reasonableness test” will reject the various NAVAIDs. Thus, the FM position will only be the MIX IRS position corrected by the position bias, determined at the time of the update, and the error will be maintained.
- In an area without proper NAVAID coverage, radio position updating will not be available and the FM position, if incorrect, will remain incorrect until a new manual update is performed.
- Therefore, the pilot should only use “POSITION UPDATE AT” in case of a major position problem, such as:
  - On the ground, no flight plan appears on the navigation display and ARC/ROSE NAV mode is selected.
  - A “CHECK IRS/FM POSITION” message appears on the MCDU.
  - A “FM/IR POSITION DISAGREE” message appears on the ECAM.

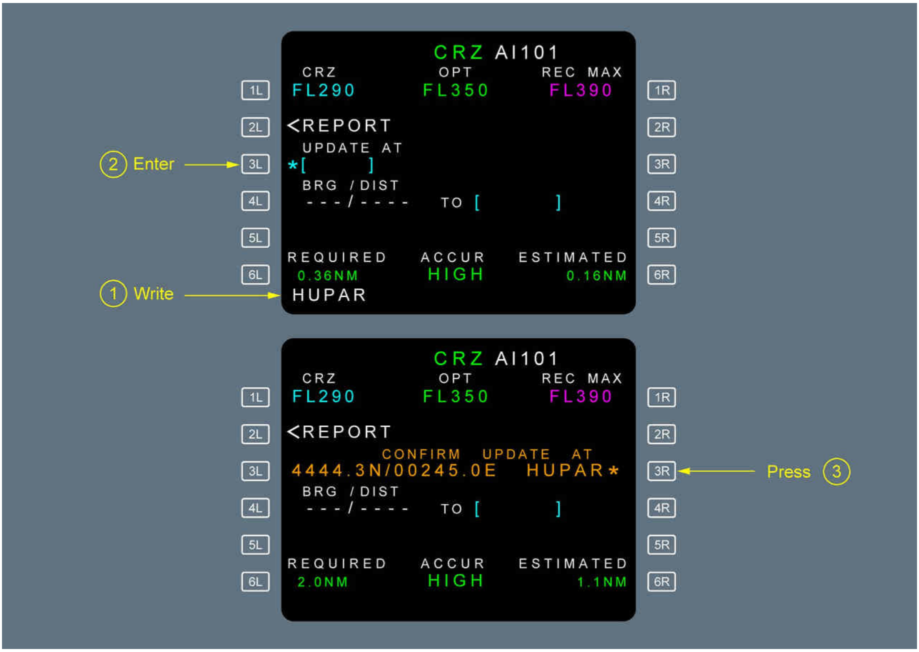
When the GPS PRIMARY ◁ is operative, the POSITION UPDATE AT is inhibited.

UPDATE AT

Ident.: DSC-22_20-30-10-15-00000470.0001001 / 04 JUN 19

36 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

To manually change the position computed by the FMGC (FM position and bias), the pilot uses “UPDATE AT” on the progress page.
Use this facility with extreme caution: It is apt to be inaccurate, because it relies on the pilot's estimation of when a designated position has been reached.



```
        CRZ AI101
 CRZ       OPT      REC MAX
FL290     FL350      FL390
<REPORT
 UPDATE AT
*[      ]
 BRG / DIST
 ---/----    TO [        ]

REQUIRED   ACCUR   ESTIMATED
 0.36NM    HIGH       0.16NM
HUPAR
```

```
        CRZ AI101
 CRZ       OPT      REC MAX
FL290     FL350      FL390
<REPORT
      CONFIRM  UPDATE  AT
4444.3N/00245.0E    HUPAR*
 BRG / DIST
 ---/----    TO [        ]

REQUIRED   ACCUR   ESTIMATED
 2.0NM     HIGH        1.1NM
```

WRITE the ident for the NAVAID (or waypoint or airport), or the coordinates, or the PBD or PBX (Place/Bearing-Place/Bearing) at which the update is intended.
Press [3L] to ENTER the ident in the “UPDATE AT” field. The coordinates of the point, along with its identifier (or “ENTRY”, if the identifier is not in the database), appear in that field.
PRESS [3R] to activate the update, when you estimate that you are at the position.

Note: *The system reinitializes the Estimated Position Error computation when a position update is performed. This may lead to the appearance of a “NAV ACCUR DOWNGRAD” or “NAV ACCUR UPGRAD” message.*

If the “UPDATE AT” does not properly take effect, it corrupts the FM position.

- In an area with good radio NAVAID coverage:
  - If the update error is small, subsequent radio position updating will correct the FM position.
  - If the update error is large, the system will reject any radio updating because its internal “reasonableness test” will reject the various NAVAIDs. Thus, the FM position will only be the MIX IRS position corrected by the position bias, determined at the time of the update, and the error will be maintained.
- In an area without proper NAVAID coverage, radio position updating will not be available and the FM position, if incorrect, will remain incorrect until a new manual update is performed.
- Therefore, the pilot should only use “UPDATE AT” in case of a major position problem, such as:
  - On the ground, no flight plan appears on the navigation display and ARC/ROSE NAV mode is selected.
  - A “CHECK IRS/FM POSITION” message appears on the MCDU.
  - A “FM/IR POSITION DISAGREE” message appears on the ECAM.

When GPS PRIMARY ◁ is operative, the FM position will always converge towards the GPS position at a rate depending on the aircraft altitude. Therefore, when GPS PRIMARY is operative, an inaccurate “update at” will have a temporary effect on the FM position.

Intentionally left blank

FMS2 Thales

GENERAL

Ident.: DSC-22_20-30-10-18-00005068.0004001 / 03 NOV 21
Applicable to: MSN 04827-04860

The lateral revision function enables the flight crew to create or modify the following parts of the flight plan:
- Airway
- Waypoint
- New destination
- Holding pattern
- Offset
- Alternate
- Fix information
  Each time the flight crew activates one of the above-listed revisions, the flight crew accesses a temporary flight plan that enables the modification to be checked before inserting it in the active flight plan. The flight crew selects these functions by pressing the left keys on F-PLN A or B.
- Direct to and overfly functions are accessed via the MCDU keys. No temporary flight plan is created with these functions.
- “Position Update at” capability is a specific function that manually updates the FM position. It does not use a temporary flight plan, but the flight crew must confirm its insertion before it is activated.

TEMPORARY F-PLN (TMPY)

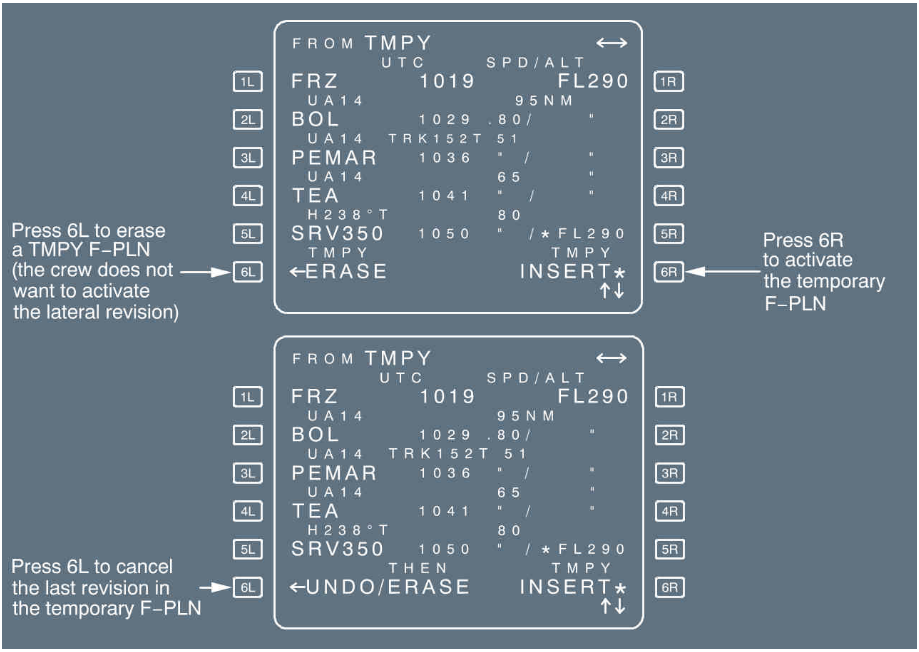
Ident.: DSC-22_20-30-10-18-00000472.0002001 / 23 JUN 15
Applicable to: MSN 04827-04860

A temporary F-PLN is created whenever a revision is performed on either of the following pages:
- The F-PLN A or B pages, or
- The LAT REV page, or
- The VERT REV page.

The flight crew can perform several revisions in the same temporary flight plan before inserting it.
The TMPY F-PLN is a copy of the active F-PLN, but is corrected by the lateral or vertical revisions in progress.
The UNDO function is available when there is more than one pending revision in the temporary F-PLN. It can only be used once by the crew to cancel the last revision in the temporary F-PLN.
The temporary F-PLN created subsequently to a DIR TO function can only be modified once.
The aircraft continues to follow the active F-PLN, until the temporary revision is inserted.
The temporary F-PLN is continually sequenced as the active F-PLN, until it diverges from the active F-PLN.

The revision data appears in yellow (except Missed approach and Alternate parts that are displayed in blue) on both MCDUs and NDs.

- Lateral and vertical revisions can be made on a temporary F-PLN
- Only one temporary F-PLN may be accessed at a time
- A TMPY F-PLN cannot be created when a DIR TO is already in process. (The “DIR TO IN PROCESS” message appears on the MCDU).
- A TMPY F-PLN changes the title of the flight plan pages. (TMPY appears in all titles)
- The predictions are continually updated for a temporary flight plan.



```
FROM TMPY                        ↔
        UTC        SPD/ALT
FRZ      1019        FL290
  UA14              95NM
BOL      1029   .80/     "
  UA14  TRK152T  51
PEMAR    1036    " /     "
  UA14           65      "
TEA      1041    " /     "
  H238°T         80
SRV350   1050    " /*FL290
  TMPY             TMPY
←ERASE            INSERT*
                       ↑↓
```

Press 6L to erase a TMPY F–PLN (the crew does not want to activate the lateral revision)

Press 6R to activate the temporary F–PLN

```
FROM TMPY                        ↔
        UTC        SPD/ALT
FRZ      1019        FL290
  UA14           95NM
BOL      1029   .80/     "
  UA14  TRK152T  51
PEMAR    1036    " /     "
  UA14           65      "
TEA      1041    " /     "
  H238°T         80
SRV350   1050    " /*FL290
        THEN       TMPY
←UNDO/ERASE       INSERT*
                       ↑↓
```

Press 6L to cancel the last revision in the temporary F–PLN

Once inserted temporary data becomes active and is displayed in green.
As soon as a TMPY F-PLN is created, "TMPY F-PLN and "TMPY INSERT" are displayed on most pages in [6L] and [6R] fields. "TMPY F-PLN" allows access to temporary flight plan page, and "TMPY INSERT" allows insertion of the TMPY F-PLN.
The temporary flight plan can be inserted from the TMPY F-PLN page or from some other MCDU pages through the TMPY INSERT prompt.
Prior to insertion the flight crew should check the temporary flight plan. This check can be performed through:

- A simple check of parameters entered on the MCDU (e.g. for altitude or speed constraints entries)
- A visual check of the TMPY F-PLN on ND (e.g. for holds and offsets insertions)
- An access to the TMPY F-PLN page and a precise review of all this flight plan (e.g. for departure or arrival entries).

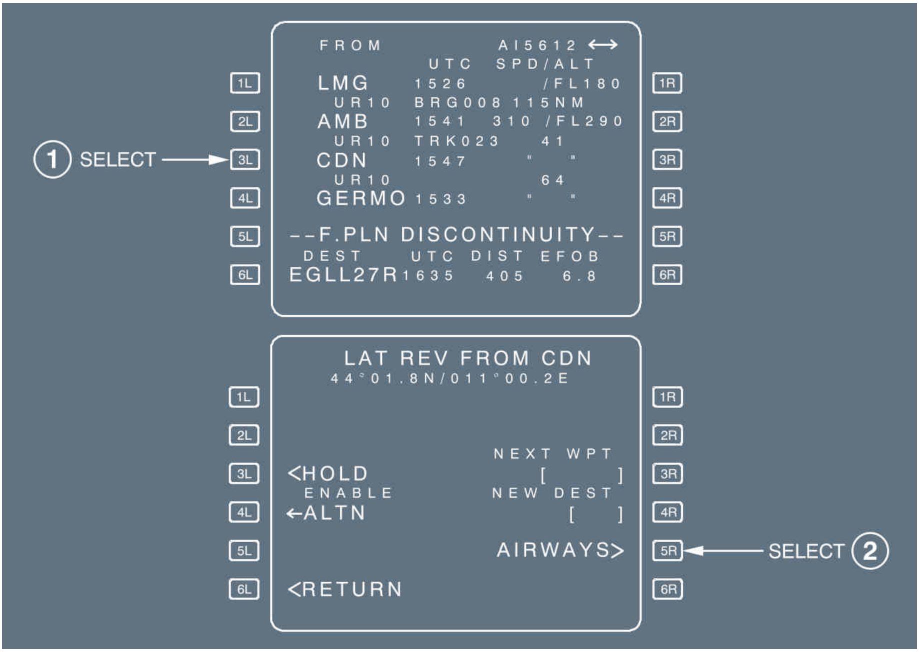
It is up to the flight crew to determine which check is necessary depending on the complexity of the revision and the moment when this revision is performed.

INSERTING AN AIRWAY WITH "VIA"

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-10-18-A-00000473.0003001 / 01 OCT 12

In the active F-PLN, the crew can insert up to 5 successive airway segments, going from a revised waypoint or ending at a given waypoint of the flight plan.

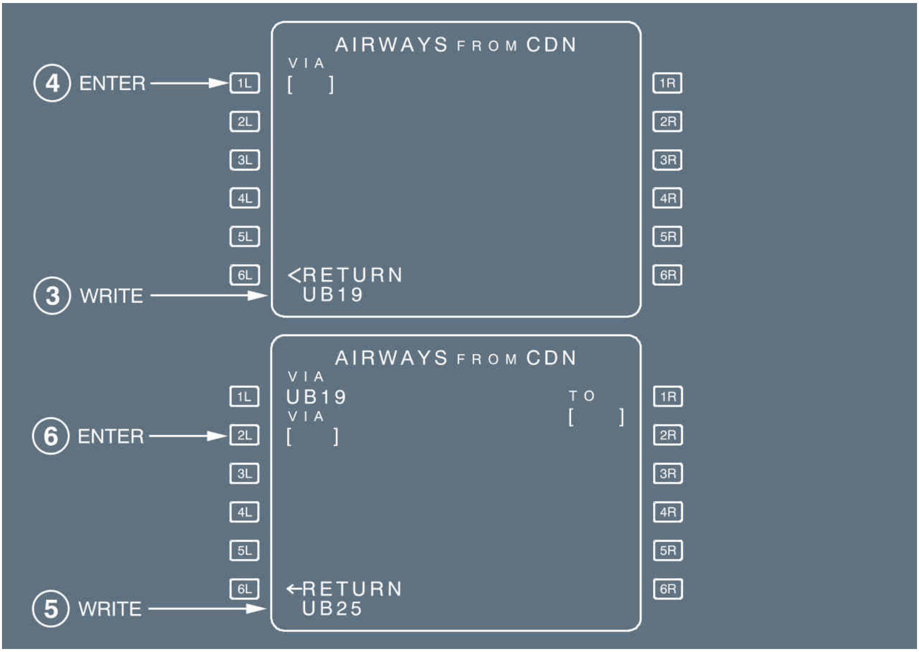


```
 FROM              AI5612 ↔
          UTC    SPD/ALT
LMG       1526       /FL180
  UR10    BRG008 115NM
AMB       1541   310 /FL290
  UR10    TRK023    41
CDN       1547      "    "
  UR10              64
GERMO     1533      "    "
--F.PLN DISCONTINUITY--
 DEST     UTC  DIST  EFOB
EGLL27R   1635  405   6.8
```

```
    LAT REV FROM CDN
   44°01.8N/011°00.2E



                 NEXT WPT
<HOLD            [      ]
  ENABLE         NEW DEST
←ALTN               [   ]
                 AIRWAYS>

<RETURN
```

SELECT the revised waypoint (Here: CDN).
PRESS [5R] to select the AIRWAYS prompt.

For example, from CDN - Airways UB19 - Airways UB25 - Ending point AAA.

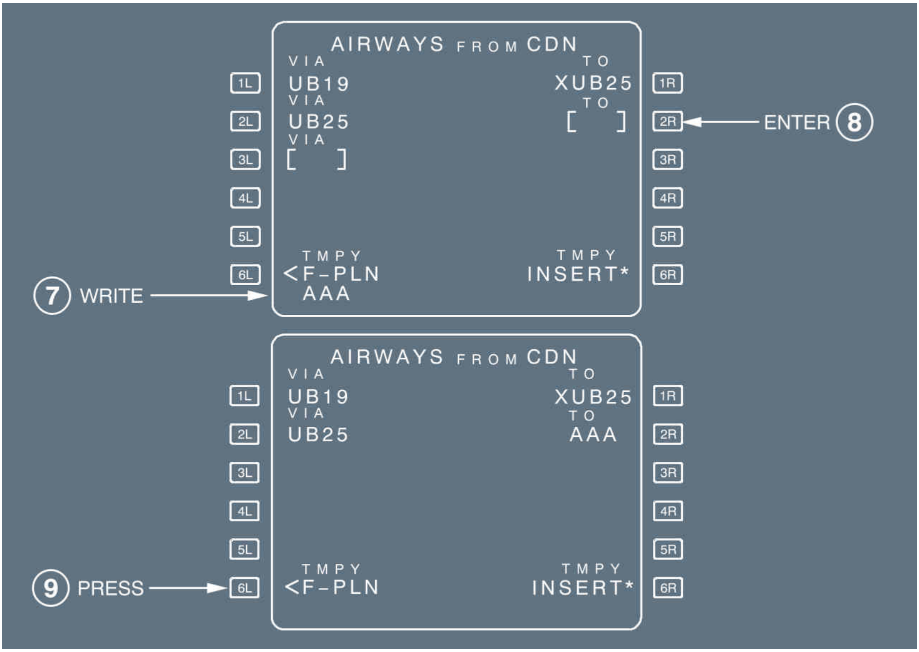

AIRWAYS FROM CDN
VIA
[ ]
4 ENTER
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
<RETURN
UB19
3 WRITE
AIRWAYS FROM CDN
VIA
UB19
TO
[ ]
VIA
[ ]
6 ENTER
←RETURN
UB25
5 WRITE

WRITE the first airway ident in the scratchpad (here: "UB19").
PRESS [1L] to insert it into the VIA field.
WRITE the second airway ident in the scratchpad (here: "UB25").
PRESS [2L] to insert it into the VIA field.

The system automatically determines the first downpath intersection point between the two airways.

- If the airways have a common waypoint, the system selects it as the ending point of the first airway.
- If they have no common waypoint, but have a single intersection, the system creates this intersection as an FM-computed point and displays “X”, followed by the second airway’s ident (here XUB25).
- If they have no common waypoint or intersection, the system displays NO INTERSECTION FOUND in the scratchpad.

When the required airways (up to 5) have been entered, the crew enters the ending point of the last selected airway :


AIRWAYS FROM CDN
VIA
UB19
TO
XUB25
VIA
UB25
TO
[ ]
VIA
[ ]
TMPY
<F-PLN
TMPY
INSERT*
AAA
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
ENTER 8
7 WRITE
AIRWAYS FROM CDN
VIA
UB19
TO
XUB25
VIA
UB25
TO
AAA
TMPY
<F-PLN
TMPY
INSERT*
9 PRESS

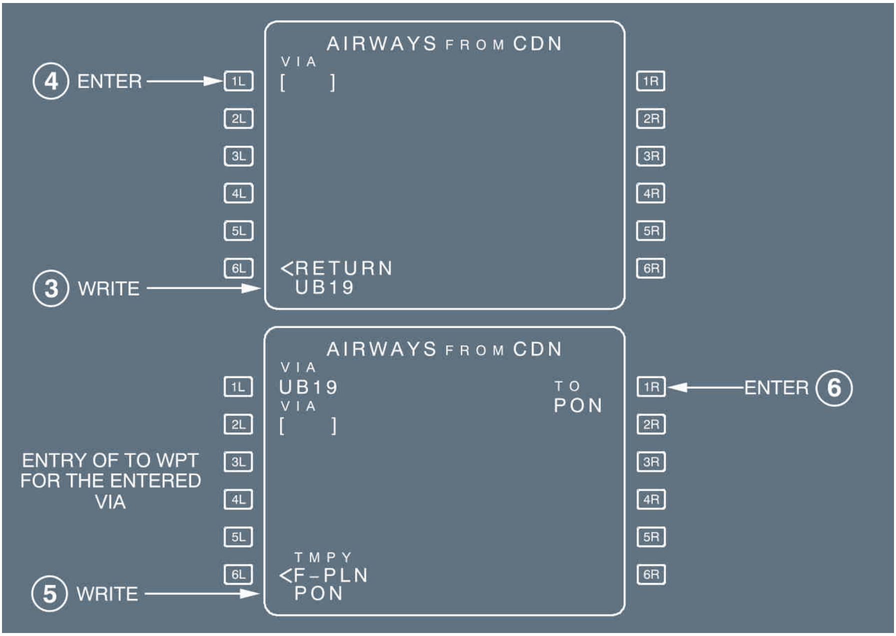
CHECK if autoselection of the intersection point is correct

If not, WRITE the ending waypoint of first airway in the scratchpad and PRESS [2R] to insert it.

WRITE the ending waypoint in the scratchpad (here: "AAA").
PRESS [2R] to insert the ending waypoint into the TO field.
CHECK and INSERT the TMPY F-PLN or continue with next revision.

Ident.: DSC-22_20-30-10-18-A-00009502.0003001 / 01 OCT 12

TO INSERT ONE AIRWAY SEGMENT TO AN ENDING WAYPOINT


AIRWAYS FROM CDN
VIA
[ ]
<RETURN
UB19
④ ENTER
③ WRITE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
AIRWAYS FROM CDN
VIA
UB19
TO
PON
VIA
[ ]
TMPY
<F-PLN
PON
ENTRY OF TO WPT FOR THE ENTERED VIA
⑤ WRITE
ENTER ⑥

WRITE the airway ident in the scratchpad (here UB19).
PRESS [1L] to insert it into the VIA field.
WRITE the ending waypoint in the scratchpad (here PON).
PRESS [1R] to insert it into the TO field.

Note:
- *If the revise waypoint, or the ending waypoint, does not belong to the entered airway, the system displays AWY/WPT MISMATCH in the scratchpad.*
- *If two waypoints with the same ident belong to the same airway, the DUPLICATE NAMES page will not be called up, and the system selects the first one in the database.*

Ident.: DSC-22_20-30-10-18-A-00009503.0003001 / 24 JAN 11

FLIGHT PLAN INSERTION

The flight crew uses the “< TMPY F-PLN” prompt to access and review the TMPY F-PLN. When the TMPY F-PLN has been checked, and if necessary modified, the crew inserts it.

CHECK and INSERT the TMPY F-PLN, or continue with the next revision

INSERTING A WAYPOINT

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-10-18-B-00000474.0007001 / 24 JAN 11

GENERAL

Waypoints can be inserted by means of a lateral revision at the “NEXT WAYPOINT”. This process creates a temporary flight plan. This method enables the temporary flight plan to be checked before it is inserted.

Ident.: DSC-22_20-30-10-18-B-00009504.0001001 / 24 JAN 11

WAYPOINT IDENTIFICATION

The pilot can identify a waypoint by :

- Its identifier (if it is in the navigation database).
- A Latitude/Longitude (LL).
- A Place/Bearing/Distance (PBD). The waypoint is defined by its bearing and distance from a place.
- A Place-Bearing/Place-Bearing (PBX). The waypoint is defined by the interception of 2 radials from 2 places.
- A Place/Distance (PD). The waypoint is defined by a distance from a place, along the F-PLN.

Note: *If a slash or a dash is not entered properly, the MCDU displays a “FORMAT ERROR” message.*

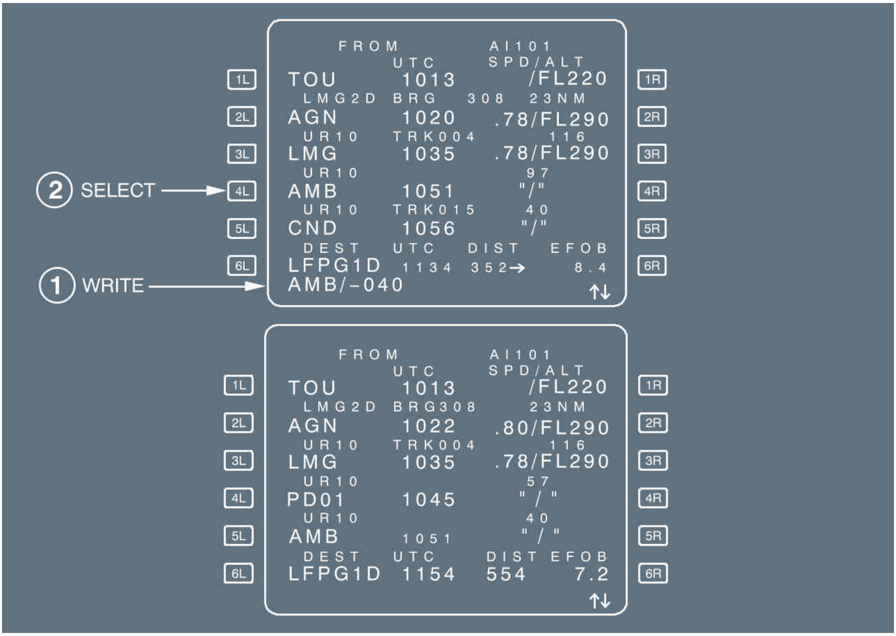
When the Flight Management Guidance System receives a pilot defined waypoint that is not in the database, it identifies it as LLxx, or PBD xx, or PBX xx, or PD xx (xx is a two-digit number between 01 and 20) and stores it in the stored waypoints file of the database.

Note: *When NAV mode is engaged, the crew cannot modify the "TO" waypoint (active leg) using the waypoint insertion function. If the crew wants to modify it, the DIR TO function will be used.*

Ident.: DSC-22_20-30-10-18-B-00009505.0001001 / 14 MAY 12

ALONG TRACK OFFSET WAYPOINT INSERTION

On the F-PLN or STEP ALTS page, the pilot can enter an along track offset waypoint, defined as a place/distance waypoint. This results in the creation of a temporary F-PLN. The function has no effect on the active F-PLN until the temporary F-PLN is inserted.

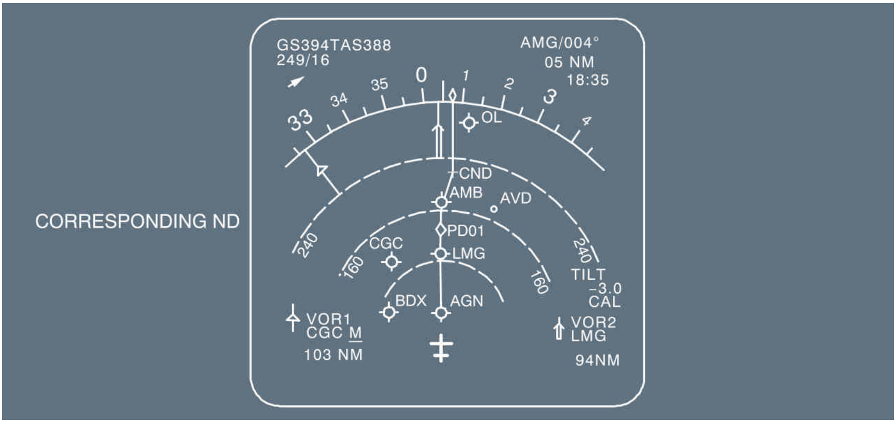


② SELECT → 4L

① WRITE

```
      FROM           AI101
            UTC      SPD/ALT
1L TOU      1013      /FL220   1R
    LMG2D  BRG   308  23NM
2L AGN      1020   .78/FL290   2R
    UR10   TRK004      116
3L LMG      1035   .78/FL290   3R
    UR10                97
4L AMB      1051        "/"    4R
    UR10   TRK015       40
5L CND      1056        "/"    5R
    DEST   UTC    DIST    EFOB
6L LFPG1D  1134   352→     8.4 6R
   AMB/-040                 ↑↓
```

```
      FROM           AI101
            UTC      SPD/ALT
1L TOU      1013      /FL220   1R
    LMG2D  BRG308     23NM
2L AGN      1022   .80/FL290   2R
    UR10   TRK004      116
3L LMG      1035   .78/FL290   3R
    UR10                57
4L PD01     1045       " / "   4R
    UR10                40
5L AMB      1051       " / "   5R
    DEST   UTC    DIST  EFOB
6L LFPG1D  1154   554    7.2   6R
                            ↑↓
```


CORRESPONDING ND
GS394TAS388
249/16
AMG/004°
05 NM
18:35
33
34
35
0
1
2
3
4
OL
CND
AMB
AVD
PD01
CGC
LMG
BDX
AGN
240
160
240
160
TILT
-3.0
CAL
VOR1
CGC M
103 NM
VOR2
LMG
94NM

WRITE the waypoint identifier and the distance from this place.

According to the sign of the distance, the crew may define an along track waypoint before or after the revised place (Example : AMB/-040).

PRESS the appropriate key adjacent to the place identifier. The system automatically positions the waypoint in the flight plan.

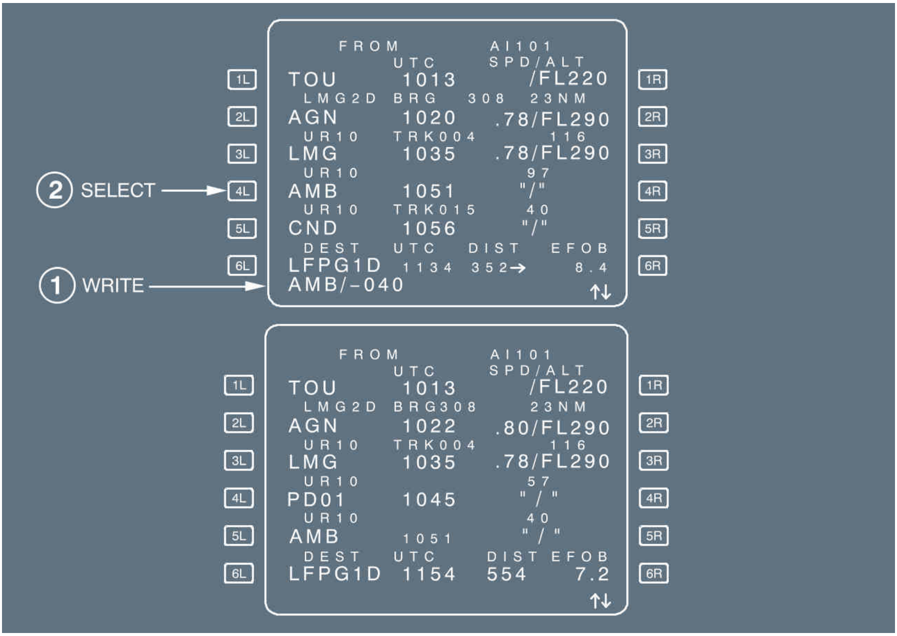
This operation does not create any discontinuity.
The system does not accept an along track waypoint entered at the FROM waypoint.

PRESS the [6L] key to access the temporary F-PLN. Revise as necessary.
PRESS the [6R] key to insert the temporary into the active F-PLN.

Ident.: DSC-22_20-30-10-18-B-00009507.0001001 / 14 MAY 12

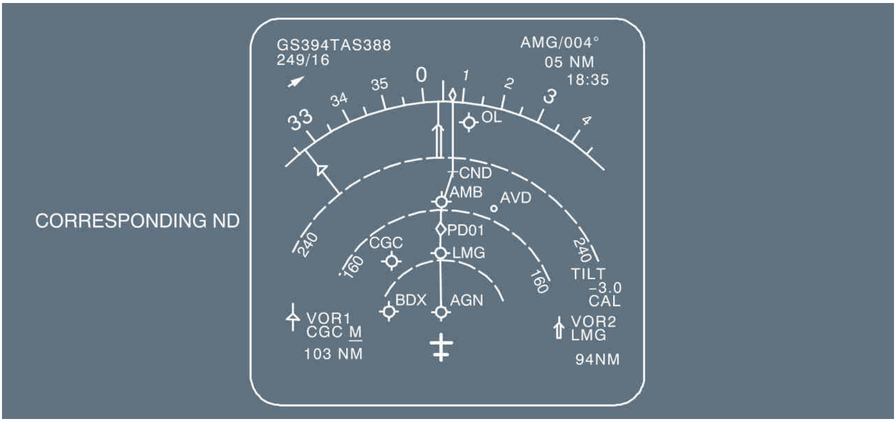
WAYPOINT INSERTED BY USING THE "NEXT WAYPOINT"

Use of the "NEXT WAYPOINT" function results in the creation of a temporary F-PLN. It has no effect on the active F-PLN, until the temporary F-PLN is inserted.



```
         FROM           AI101
             UTC        SPD/ALT
TOU          1013         /FL220
  LMG2D      BRG  308    23NM
AGN          1020      .78/FL290
  UR10       TRK004        116
LMG          1035      .78/FL290
  UR10                     97
AMB          1051         "/"
  UR10       TRK015        40
CND          1056         "/"
  DEST       UTC    DIST     EFOB
LFPG1D       1134   352→      8.4
AMB/-040                       ↑↓
```

```
         FROM           AI101
             UTC        SPD/ALT
TOU          1013         /FL220
  LMG2D      BRG308      23NM
AGN          1022      .80/FL290
  UR10       TRK004        116
LMG          1035      .78/FL290
  UR10                     57
PD01         1045         " / "
  UR10                     40
AMB          1051         " / "
  DEST       UTC        DIST  EFOB
LFPG1D       1154       554    7.2
                               ↑↓
```


CORRESPONDING ND
GS394TAS388
249/16
AMG/004°
05 NM
18:35
33
34
35
0
1
2
3
4
OL
CND
AMB
AVD
PD01
CGC
LMG
240
160
240
160
TILT
-3.0
CAL
BDX
AGN
VOR1
CGC M
103 NM
VOR2
LMG
94NM

SELECT the lateral revision (LAT REV) function at an appropriate waypoint.
WRITE the waypoint identifier, or LAT/LONG, or Place/Bearing/Distance, or Place-Bearing in the scratchpad.
ENTER it in the brackets under the NEXT WPT (next waypoint). A temporary F-PLN is automatically displayed.
CLEAR the F-PLN discontinuity, as appropriate, in the temporary F-PLN. Revise as necessary.
PRESS the [6R] key to insert the temporary into the active F-PLN.

FIX INFO

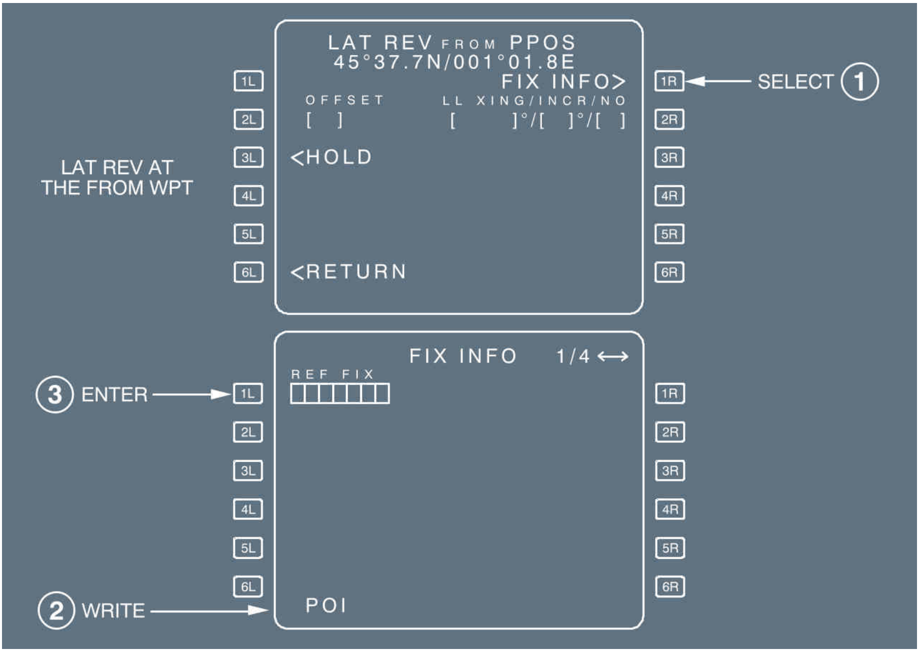
Applicable to: MSN 04827-04860

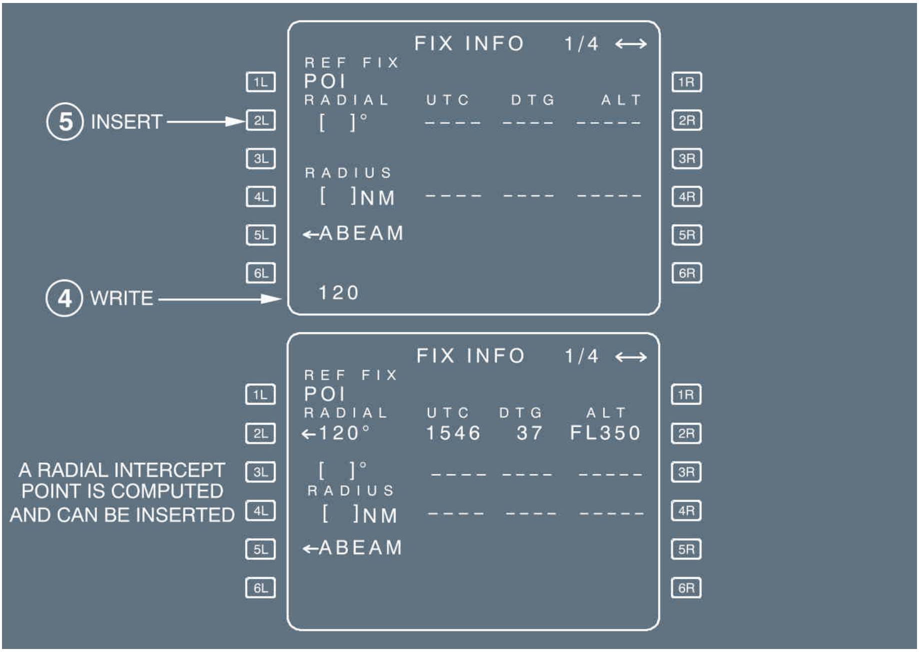
Ident.: DSC-22_20-30-10-18-H-00012787.0001001 / 24 JAN 11

When using the FIX INFO function, the flight crew defines waypoint intersections of the flight plan with radials, circle or abeam associated to a fix.
When the flight crew inserts the intersection points, the system automatically identifies these points, but does not store them in the navigation database.

Ident.: DSC-22_20-30-10-18-H-00012788.0001001 / 01 OCT 12

The flight crew accesses the radial intercept function from the LAT REV page at the origin, at the FROM waypoint, or at a waypoint.


LAT REV FROM PPOS
45°37.7N/001°01.8E
FIX INFO>
OFFSET
LL XING/INCR/NO
[ ]
[ ]°/[ ]°/[ ]
<HOLD
<RETURN
LAT REV AT
THE FROM WPT
SELECT ①
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
FIX INFO 1/4 ⟷
REF FIX
☐☐☐☐☐☐☐
POI
③ ENTER
② WRITE



```
            FIX INFO      1/4 ←→
REF FIX
POI
RADIAL       UTC    DTG    ALT
 [  ]°       ----   ----   -----

RADIUS
 [  ]NM      ----   ----   -----
←ABEAM


 120
```

```
            FIX INFO      1/4 ←→
REF FIX
POI
RADIAL       UTC    DTG    ALT
←120°        1546   37     FL350
 [  ]°       ----   ----   -----
RADIUS
 [  ]NM      ----   ----   -----
←ABEAM
```

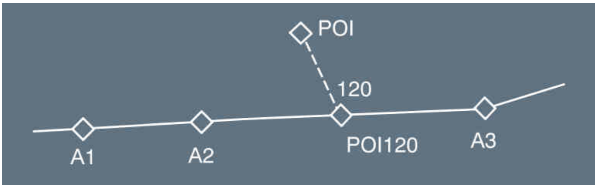
⑤ INSERT
④ WRITE
A RADIAL INTERCEPT POINT IS COMPUTED AND CAN BE INSERTED
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

WRITE the reference fix identifier into the scratchpad (here POI), and ENTER it [1L].
It may be any database or pilot-defined fix.
WRITE the radial in the scratchpad (here 120 °), and ENTER it [2L].

The defined radial appears as a blue dashed line on the ND.
If the radial line intersects the active flight plan, the system computes the time, the along path Distance (DIST), and the altitude at the intersection point.
Up to two radials can be entered.

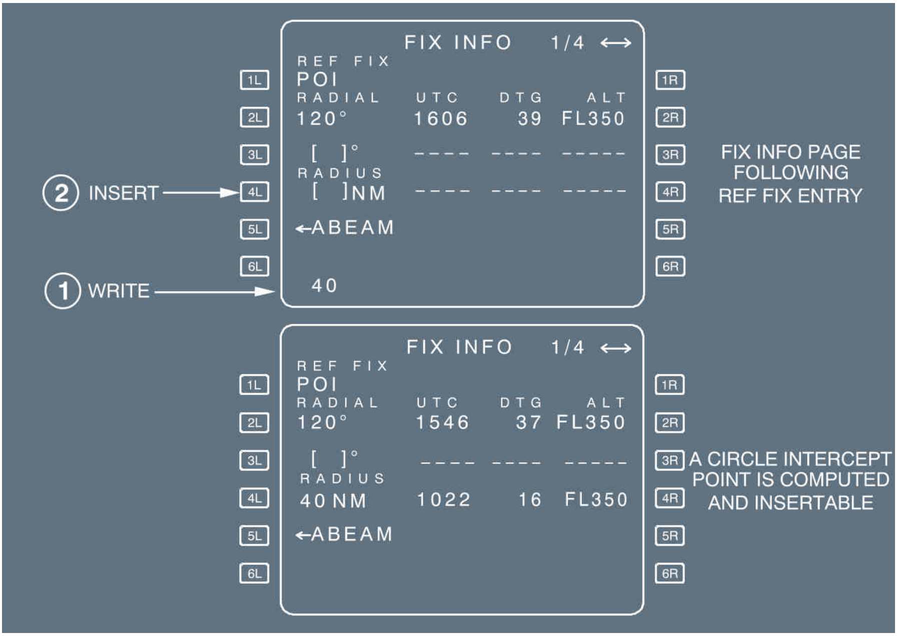
SELECT the required radial to insert the associated waypoint into the flight plan, if needed:

The system automatically assigns its ident as the three first characters of the reference fix ident, followed by the radial. (Example: POI120). The blue dashed line disappears from the ND.


POI
120
A1
A2
POI120
A3

Ident.: DSC-22_20-30-10-18-H-00012789.0001001 / 01 OCT 12

INSERTING A CIRCLE INTERCEPT WAYPOINT



```
      FIX INFO      1/4 ↔
REF FIX
POI
RADIAL     UTC    DTG    ALT
120°       1606    39  FL350

 [  ]°     ----   ----  -----
RADIUS
 [  ]NM    ----   ----  -----

←ABEAM


 40
```

```
      FIX INFO      1/4 ↔
REF FIX
POI
RADIAL     UTC    DTG    ALT
120°       1546    37  FL350

 [  ]°     ----   ----  -----
RADIUS
40NM       1022    16  FL350
←ABEAM
```

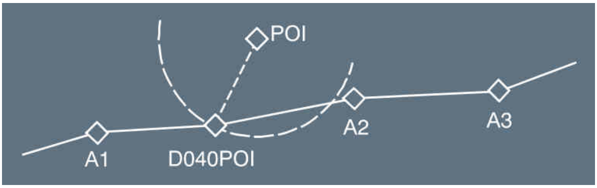
② INSERT
① WRITE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
FIX INFO PAGE FOLLOWING REF FIX ENTRY
A CIRCLE INTERCEPT POINT IS COMPUTED AND INSERTABLE

WRITE the reference fix identifier into the scratchpad (here POI), and ENTER it [1L].
WRITE the circle radius in the scratchpad (here 40 NM), and ENTER it [4L]:

The defined circle appears as a blue dashed circle on the ND. If the circle intersects the active flight plan, the system computes the time, along path distance and altitude at the first intersection point from the current aircraft position.

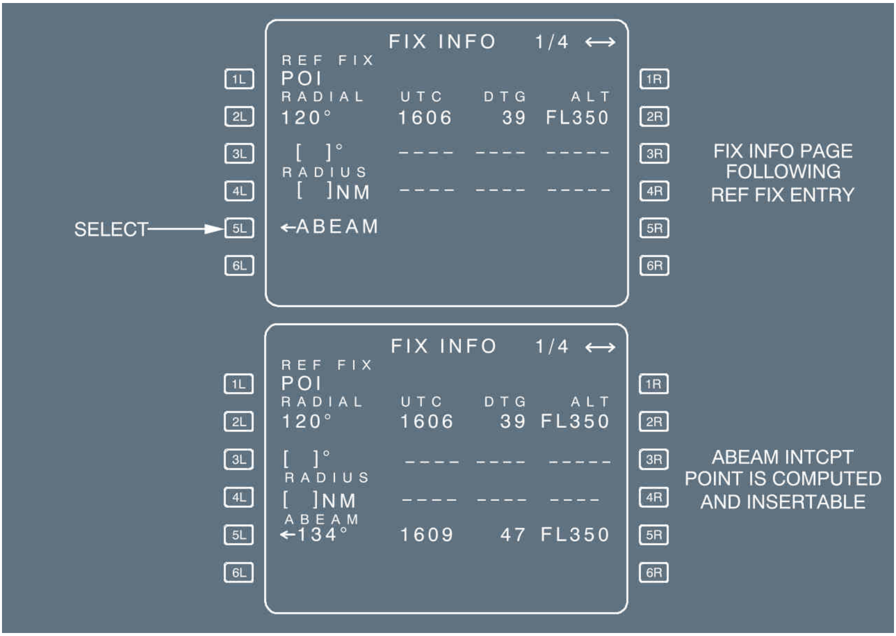
SELECT the required radius to insert the associated waypoint into the flight plan, if needed:

The system automatically assigns its ident as a D, followed by the radius, and followed by the three first characters of the reference fix ident. (Example: D040POI). The blue dashed circle disappears from the ND.



Ident.: DSC-22_20-30-10-18-H-00012790.0001001 / 01 OCT 12

INSERTING AN ABEAM INTERCEPT WAYPOINT



```
          FIX INFO      1/4 ⟷
REF FIX
POI
RADIAL     UTC    DTG    ALT
120°       1606    39  FL350
[  ]°      ----   ----  -----
RADIUS
[  ]NM     ----   ----  -----
←ABEAM
```

SELECT

FIX INFO PAGE FOLLOWING REF FIX ENTRY

```
          FIX INFO      1/4 ⟷
REF FIX
POI
RADIAL     UTC    DTG    ALT
120°       1606    39  FL350
[  ]°      ----   ----  -----
RADIUS
[  ]NM     ----   ----  ----
ABEAM
←134°      1609    47  FL350
```

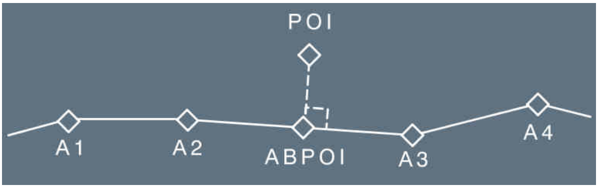
ABEAM INTCPT POINT IS COMPUTED AND INSERTABLE

WRITE the reference fix identifier into the scratchpad (here POI), and ENTER it [1L].
SELECT the ABEAM prompt [5L]:

A blue dashed line from the REF FIX and perpendicular to the flight plan appears on the ND. The system computes the radial, time, along path distance, altitude and predictions related to the waypoint abeam the reference fix.

SELECT [5L] to insert the abeam intercept waypoint into the flight plan, if needed:

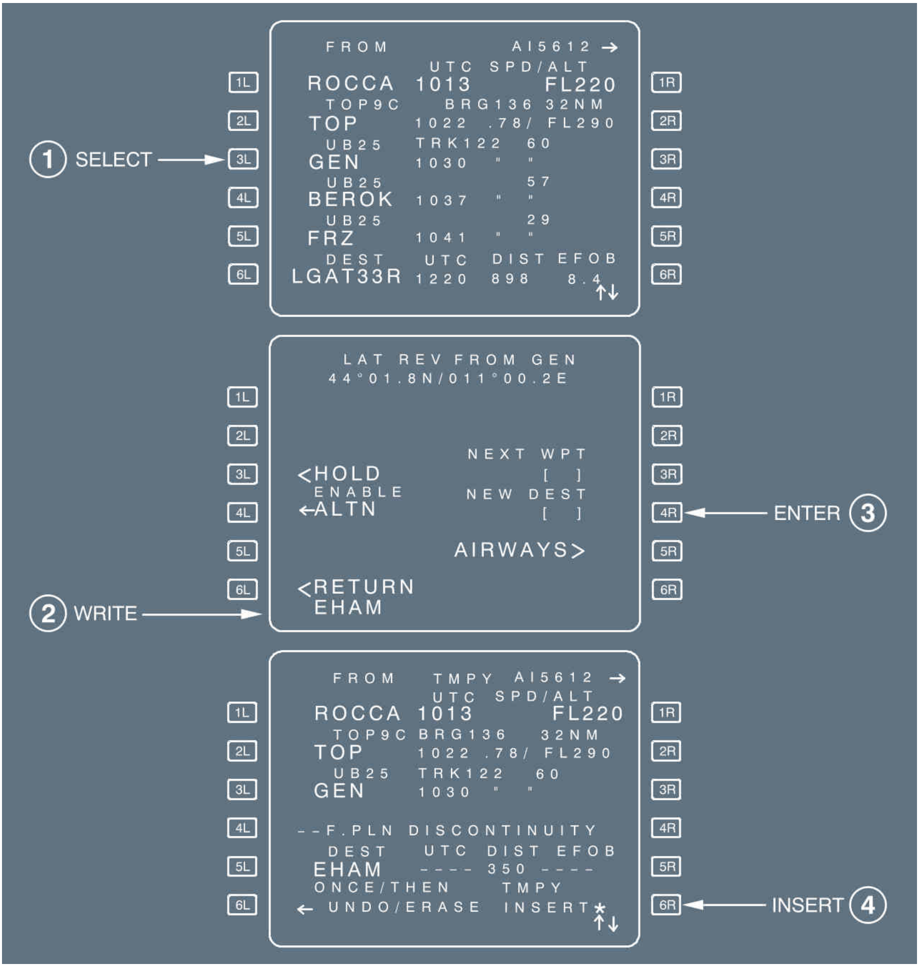
The system automatically assigns its identifier as AB, followed by the first five characters of the reference fix identifier (Example ABPOI). The blue dashed line disappears from the ND.



INSERTING A NEW DESTINATION

Ident.: DSC-22_20-30-10-18-00000475.0001001 / 01 OCT 12
Applicable to: MSN 04827-04860

The pilot may define a new destination, and insert it via the lateral revision page. This results in the creation of a temporary F-PLN. The function has no effect on the active F-PLN, until the temporary F-PLN is inserted. The pilot may then call up the new destination from any waypoint along the flight plan, except the FROM waypoint, the destination, and the missed-approach waypoint. When the new destination has been inserted, a flight plan discontinuity appears between the revision waypoint and the new destination. All waypoints beyond the revision waypoint (including the previous destination and associated missed approach) are deleted.



```
    FROM              AI5612 →
              UTC   SPD/ALT
ROCCA       1013       FL220
    TOP9C    BRG136  32NM
TOP          1022  .78/ FL290
    UB25     TRK122   60
GEN          1030   "   "
    UB25              57
BEROK        1037   "   "
    UB25              29
FRZ          1041   "   "
    DEST     UTC  DIST EFOB
LGAT33R     1220  898   8.4
                          ↑↓
```

```
      LAT REV FROM GEN
    44°01.8N/011°00.2E


                 NEXT WPT
<HOLD               [   ]
  ENABLE         NEW DEST
←ALTN               [   ]

                AIRWAYS>

<RETURN
 EHAM
```

```
  FROM      TMPY  AI5612 →
            UTC   SPD/ALT
ROCCA     1013       FL220
  TOP9C BRG136      32NM
TOP       1022 .78/ FL290
  UB25    TRK122    60
GEN       1030   "   "

--F.PLN DISCONTINUITY
   DEST    UTC  DIST EFOB
EHAM      ----  350  ----
ONCE/THEN       TMPY
← UNDO/ERASE   INSERT*
                     ↑↓
```

SELECT the lateral revision function at an appropriate waypoint.
WRITE the new destination in the scratchpad.
Enter it in the brackets under “NEW DEST”. A temporary F-PLN is automatically displayed.
CLEAR the F-PLN discontinuity in the temporary F-PLN. Revise as necessary.
PRESS the [6R] key to insert the temporary into the active F-PLN.

HOLDING PATTERN

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-10-18-C-00000476.0001001 / 24 JAN 11

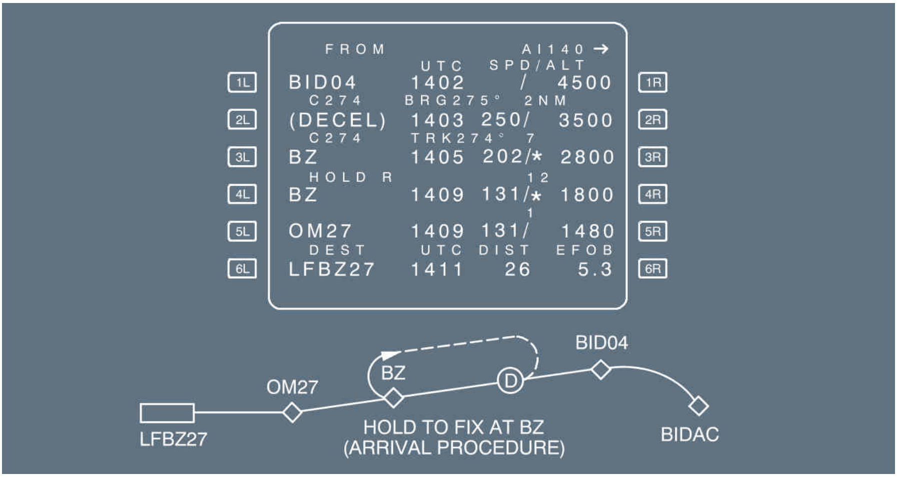
GENERAL

This section describes holding patterns, associated guidance and flight crew procedures. The Flight Management and Guidance Computer (FMGC) has three types of holding patterns that the pilot can use in a flight plan.

Ident.: DSC-22_20-30-10-18-C-00009509.0001001 / 01 OCT 12

HOLD TO FIX (HF)

The holding pattern is always part of an arrival or departure procedure. The aircraft flies it once, and then automatically exits the holding pattern at the fix. The predicted speed in the holding pattern is the lowest of the ICAO speed limit, max endurance speed, or any speed constraint. Guidance to the fix in the holding pattern is similar to that on any leg of a flight plan. The HF patterns are part of the navigation database and cannot be created by the crew.



```
     FROM                 AI140 →
              UTC   SPD/ALT
BID04         1402      /   4500
   C274       BRG275°   2NM
(DECEL)       1403 250/     3500
   C274        TRK274°  7
BZ            1405 202/*    2800
   HOLD R                12
BZ            1409 131/*    1800
                         1
OM27          1409 131/     1480
   DEST        UTC  DIST    EFOB
LFBZ27        1411     26    5.3
```

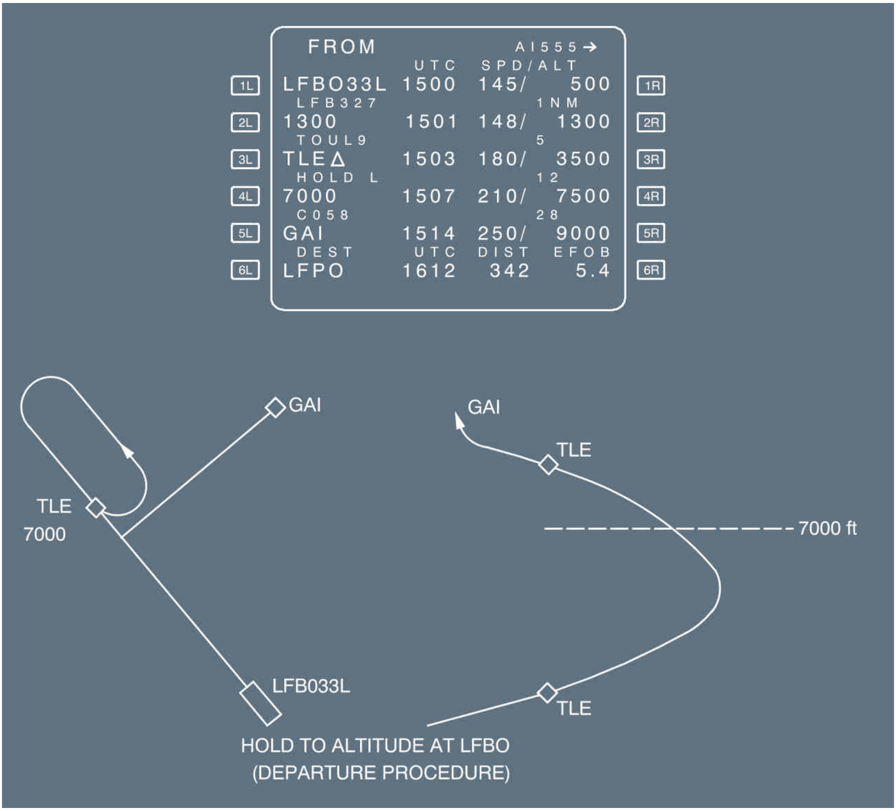
HOLD TO FIX AT BZ
(ARRIVAL PROCEDURE)

Ident.: DSC-22_20-30-10-18-C-00009513.0001001 / 19 DEC 12

HOLD TO ALTITUDE (HA)

The aircraft flies the hold until it reaches the specified altitude. Then, it automatically exits the hold at the fix.
The predicted speed for the holding pattern is the lowest of the ICAO speed limits, the max endurance speed, or any speed constraint.

The size of the holding pattern is a function of the predicted speed.
Guidance in a hold to altitude (HA) is similar to that for any leg of a flight plan.
The HAs are in the navigation database, as part of the arrival or departure procedures, and cannot be created by the crew.



```
   FROM                     AI555→
               UTC    SPD/ALT
LFBO33L        1500   145/    500
  LFB327                1NM
1300           1501   148/   1300
  TOUL9                 5
TLE∆           1503   180/   3500
  HOLD L                12
7000           1507   210/   7500
  C058                  28
GAI            1514   250/   9000
  DEST         UTC    DIST   EFOB
LFPO           1612   342     5.4
```

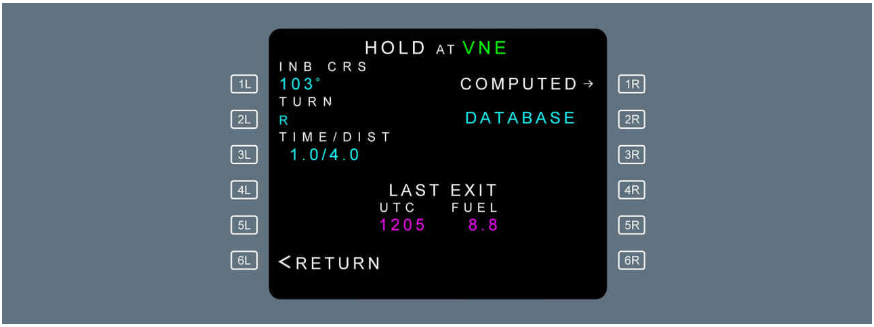
HOLD TO ALTITUDE AT LFBO
(DEPARTURE PROCEDURE)

HOLD WITH MANUAL TERMINATION (HM)

This type of holding pattern may be part of an arrival procedure, or the flight crew may enter it at the present position or at any flight plan waypoint.
The flight crew will use this type of holding pattern to comply with a defined procedure or a clearance limit, or to meet an operational need (such as losing altitude, holding for weather improvement, or absorbing an ATC delay).

This type of holding pattern is exited according to the flight crew’s decision, not automatically.
There are 3 types of HMs, and all are modifiable.

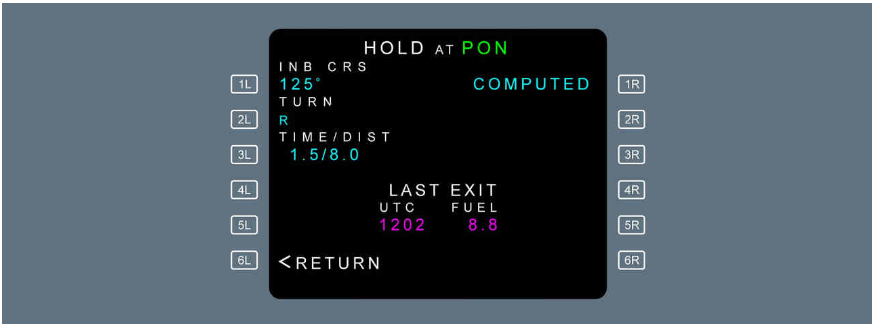
DATABASE HOLD



```
        HOLD AT VNE
INB CRS
103°                COMPUTED →
TURN
R                    DATABASE
TIME/DIST
 1.0/4.0

            LAST EXIT
            UTC    FUEL
            1205    8.8

<RETURN
```

If the holding pattern is part of the database, all its associated data (inbound course, turn direction, time/distance) are defined in the database. The flight crew can modify this data, leading to the creation of a temporary F-PLN.

COMPUTED HOLD



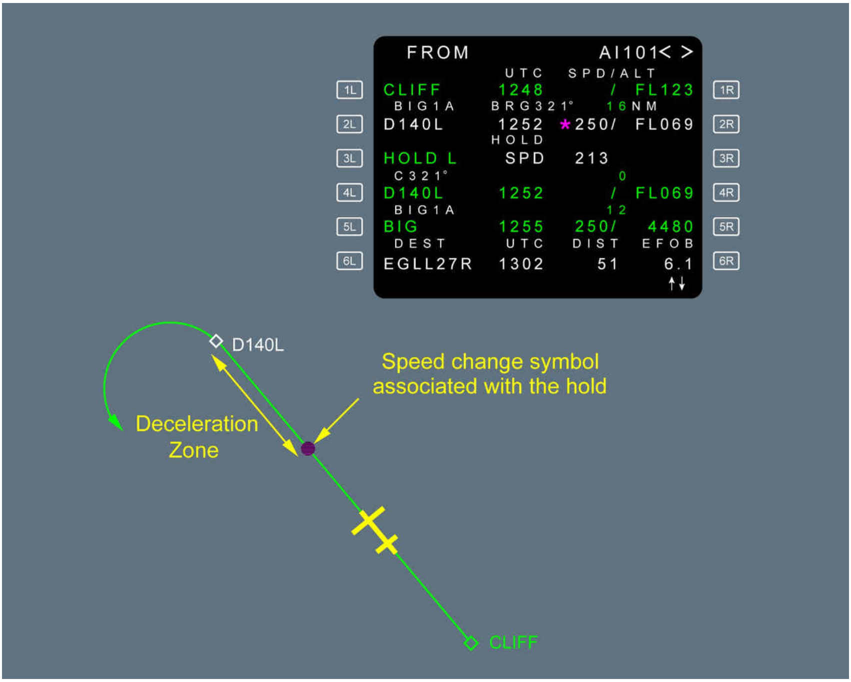
```
        HOLD AT PON
INB CRS
125°                  COMPUTED
TURN
R
TIME/DIST
 1.5/8.0

            LAST EXIT
            UTC    FUEL
            1202    8.8

<RETURN
```

If the holding pattern is not in the database, the FMS designs a holding pattern and proposes it to the flight crew. The associated data consists of default values that the flight crew can modify. This results in creating a temporary F-PLN.

PREDICTIONS AND GUIDANCE ASSOCIATED WITH A HM HOLDING PATTERN (HOLD WITH MANUAL TERMINATION)

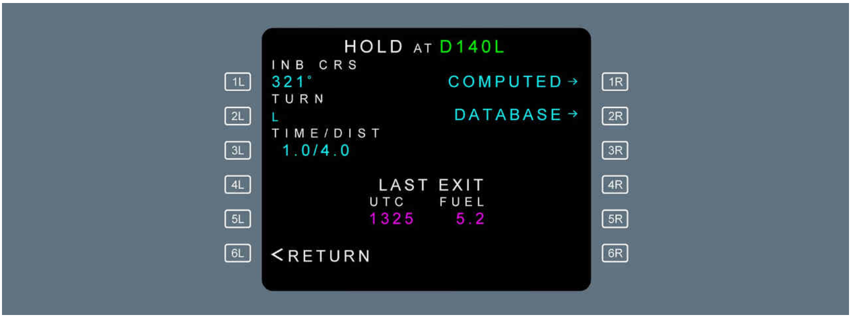
Before Deceleration

If an altitude constraint is defined at the hold entry fix, then the FMS duplicates this constraint on the hold exit.
However, different constraints may be inserted at entry and exit fixes.
Although the hold is inserted in the flight plan, the FMS does not take it into account for predictions until the aircraft enters the hold.
However, if the hold is not deleted by the flight crew, the FMS schedules a deceleration point and displays it on the ND.



```
 FROM                         AI101< >
                 UTC     SPD/ALT
CLIFF            1248          / FL123
 BIG1A          BRG321°    16NM
D140L            1252    *250/   FL069
                HOLD
HOLD L           SPD      213
 C321°                      0
D140L            1252          / FL069
 BIG1A                     12
BIG              1255     250/    4480
 DEST            UTC      DIST    EFOB
EGLL27R          1302       51     6.1
                                    ↑↓
```

Note: *The deceleration zone allows to decelerate from the current speed to the holding speed to reach the holding speed when overflying the hold entry fix. The deceleration zone is limited to a maximum length of 20 NM.*


HOLD AT D140L
INB CRS
321°
TURN
L
TIME/DIST
1.0/4.0
COMPUTED→
DATABASE→
LAST EXIT
UTC FUEL
1325 5.2
<RETURN

The FMS predicts the estimated time and amount of fuel remaining at which the aircraft must exit holding, so as to comply with the fuel policy specified on the FUEL PRED page.
When the aircraft enters the holding pattern, the FMS revises all predictions and assumes the aircraft will fly one turn of the holding pattern.
Each time the aircraft flies over the holding fix, the FMS updates the predictions for one more holding circuit.

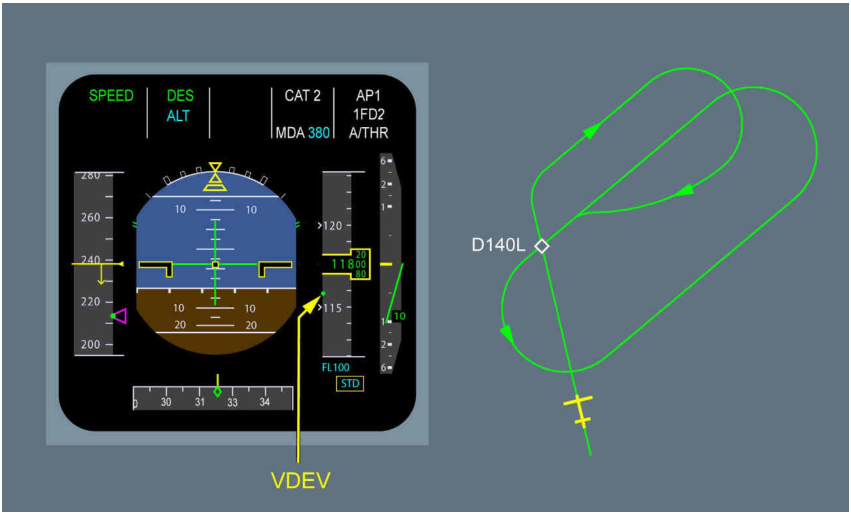
Upon Reaching the Speed Change Pseudo Waypoint

The FMS either causes the aircraft to decelerate to the hold speed (if managed speed is active and NAV mode engaged), or display SET HOLD SPEED on the MCDU and SET HOLD SPEED on the PFD, if the flight crew selected a speed target.

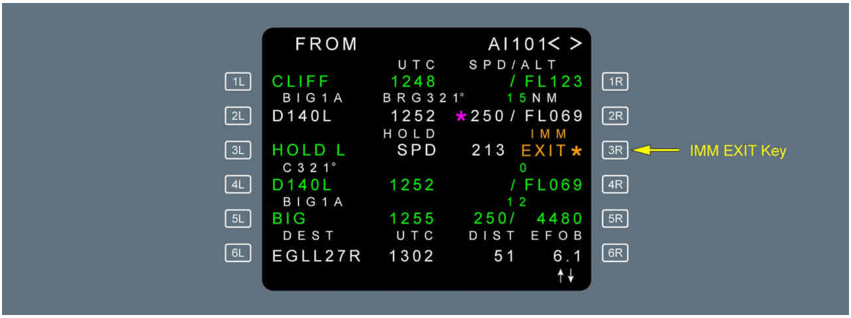
The default hold speed is the lowest of the following:
- Maximum endurance speed
- ICAO limit holding speed
- Speed constraint (if any).

When no specific speed limit applies, the default hold speed is approximately equal to the following:
- Green Dot speed on the A318, A319, A320 (CFM or PW) and A321, or
- Green Dot +20 kt on the A320 (IAE).

The flight plan predictions for time and fuel do not yet consider that the hold will be flown. However, the ND shows the hold entry and holding pattern trajectory.


SPEED
DES
ALT
CAT 2
MDA 380
AP1
1FD2
A/THR
280
260
240
220
200
10
20
120
115
11800
FL100
STD
30
31
33
34
VDEV
D140L

Deceleration receives priority, so that when in DES mode, the aircraft will deviate above the descent path to decelerate. (VDEV becomes positive on the PROG page).
The F-PLN displays IMM EXIT prompt.
If the flight crew presses the key next to IMM EXIT, before arriving at the holding fix, the aircraft will not enter the holding pattern, but will resume its applicable manage speed of the current flight phase.


1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
IMM EXIT Key

```
  FROM                  AI101< >
              UTC     SPD/ALT
CLIFF         1248       / FL123
  BIG1A     BRG321°       15NM
D140L         1252   *250/ FL069
             HOLD          IMM
HOLD L        SPD     213  EXIT*
  C321°                    0
D140L         1252       / FL069
  BIG1A                   12
BIG           1255    250/  4480
  DEST        UTC     DIST  EFOB
EGLL27R       1302      51   6.1
                              ↑↓
```

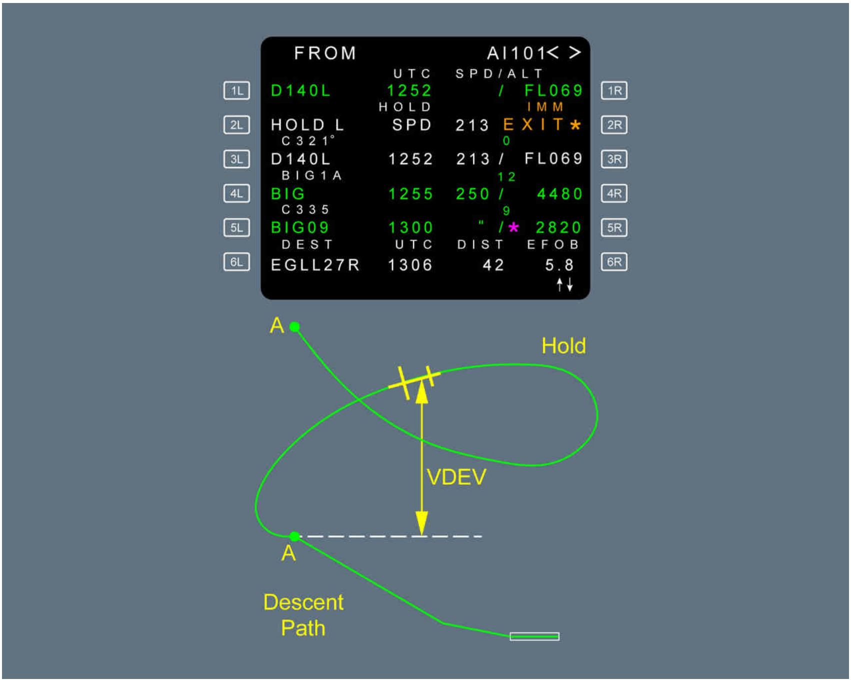
After Reaching the Hold Entry Fix

The aircraft enters the hold. The HOLD page displays the associated holding data:
- The inbound course (INB CRS)
- The TURN direction (L or R)

- The TIME/DIST
- The LAST EXIT time and the associated fuel to reach the alternate airport with no extra fuel.

The FMS assumes that the aircraft will fly one turn of the holding pattern, and revises the predictions accordingly.

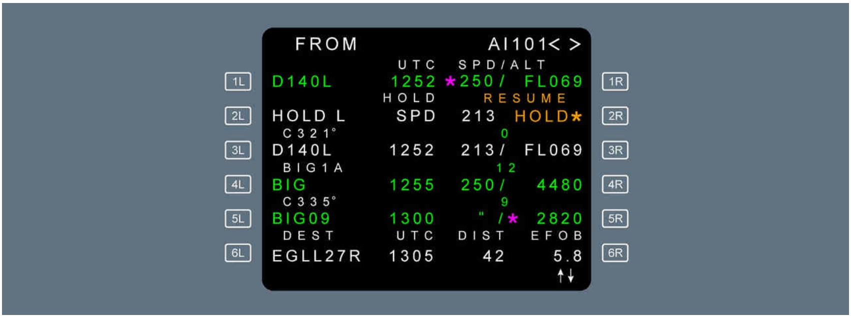
When the holding pattern is defined by a leg time (and not a leg distance), the FMS revises the size of the hold as a function of the target speed:
- If managed speed is active, the FMS uses the predicted holding speed to calculate the size of the holding pattern
- If the selected speed is active, the FMS uses the target speed selected by the flight crew at the entry fix sequencing to calculate the size of the holding pattern
- The VDEV displayed on the PFD and the PROG page, when the aircraft is flying in the HM is the difference between the aircraft's current altitude and the altitude at which it should be when it reaches the hold exit fix in order to be correctly positioned on the descent path.



```
  FROM                 AI101< >
          UTC    SPD/ALT
D140L     1252       /  FL069
          HOLD          IMM
HOLD L    SPD    213  EXIT*
 C321°                0
D140L     1252   213 /  FL069
 BIG1A                12
BIG       1255   250 /   4480
 C335                 9
BIG09     1300    " /*   2820
 DEST     UTC    DIST   EFOB
EGLL27R   1306    42     5.8
                          ↑↓
```

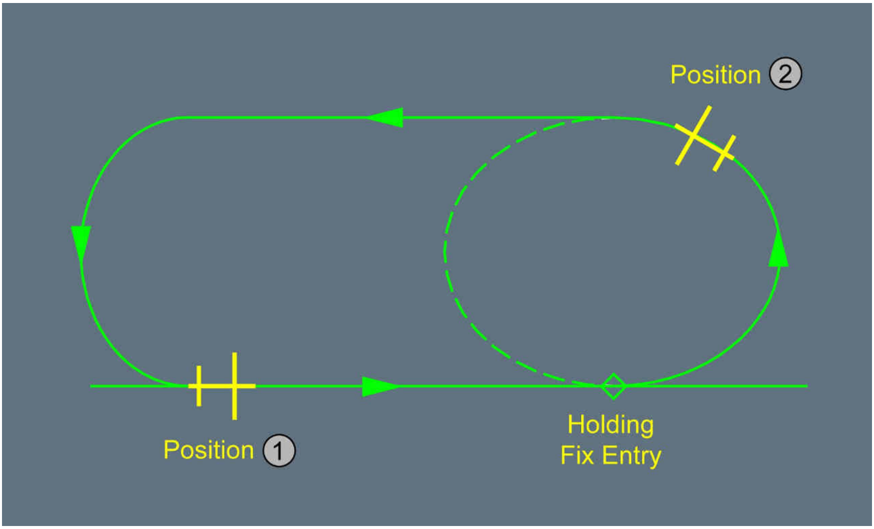
With IMM EXIT Pressed (Aircraft in the Holding Pattern)

The predictions and guidance assume that the aircraft is immediately returning to the hold fix. Sequencing the hold fix, the aircraft exits the holding pattern and resumes its navigation. The flight plan page displays RESUME HOLD, instead of IMM EXIT.



```
 FROM               AI101< >
             UTC   SPD/ALT
D140L        1252 *250/  FL069
            HOLD    RESUME
HOLD L       SPD   213  HOLD*
 C321°               0
D140L        1252  213/  FL069
 BIG1A               12
BIG          1255  250/   4480
 C335°               9
BIG09        1300   " /*  2820
 DEST        UTC   DIST   EFOB
EGLL27R      1305    42    5.8
                            ↑↓
```

HOLD EXIT PROCEDURE



At position (1), if the flight crew selects IMM EXIT, the aircraft will exit at the next fix overfly.
At position (2), if the flight crew selects IMM EXIT, the aircraft will make an immediate turn to the fix where the hold will be exited.

If managed speed is active, the FMS sets the target speed to the applicable speed of the current phase (for example, speed constraint, ECON speed, or speed limit).
The FMS then assumes that the flight crew will continue on the descent path, if the aircraft is in descent.

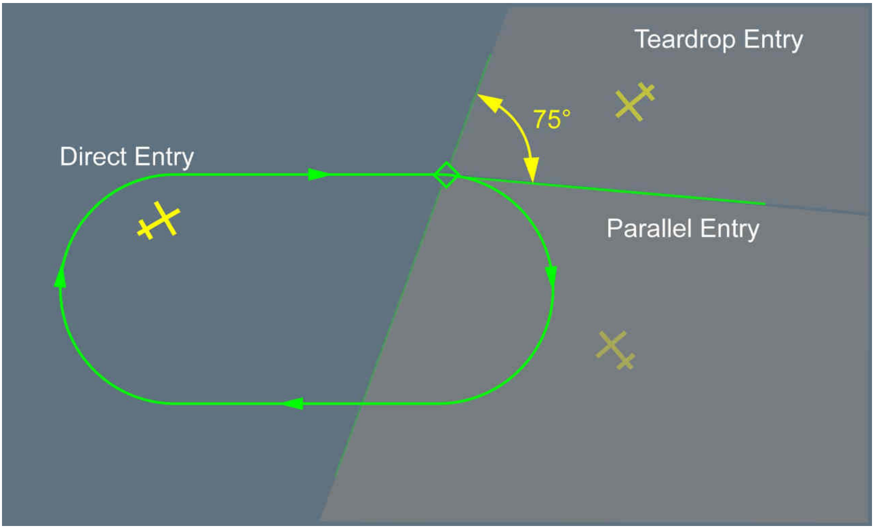
If DES mode is engaged, the following applies:
- The holding pattern is never included in the descent path computation
- The flight crew cannot enter altitude and speed constraints at the hold exit fix (This is only allowed at the hold entry fix)
- The vertical guidance in the HM, during the descent phase, is set to -1 000 ft/min but the FMS considers altitude constraints that will take effect farther down the flight path. The FMS will not allow the aircraft to descend below the next altitude constraint, neither to the FCU selected altitude. If the aircraft reaches the next altitude constraint, it will level off and the ALT CST mode will engage.

With RESUME HOLD Pressed

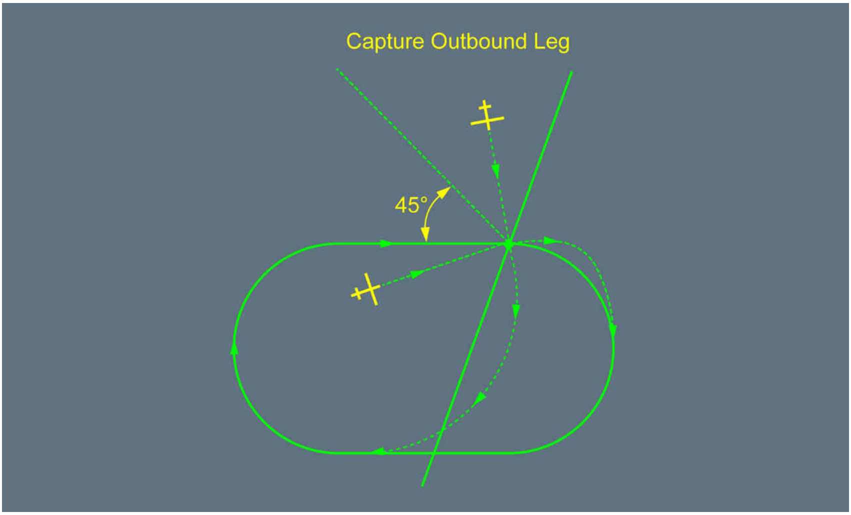
If the flight crew presses the key next to RESUME HOLD, the aircraft remains in the holding pattern, and IMM EXIT is displayed again.
After that, each time the aircraft flies over the holding fix, the FMS updates the predictions for one more holding circuit.

HOLDING PATTERN ENTRIES

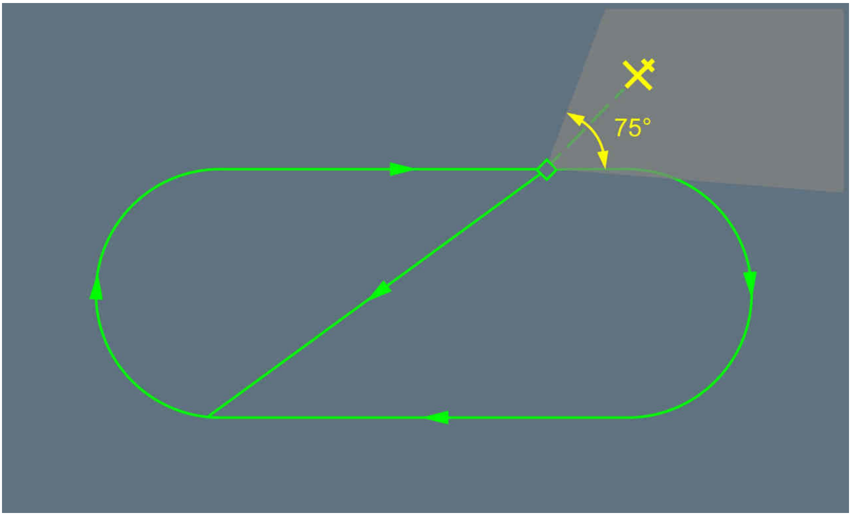
The FMS offers three types of entry into holding patterns:
1. Direct entry
2. Teardrop entry
3. Parallel entry.


Teardrop Entry
75°
Direct Entry
Parallel Entry

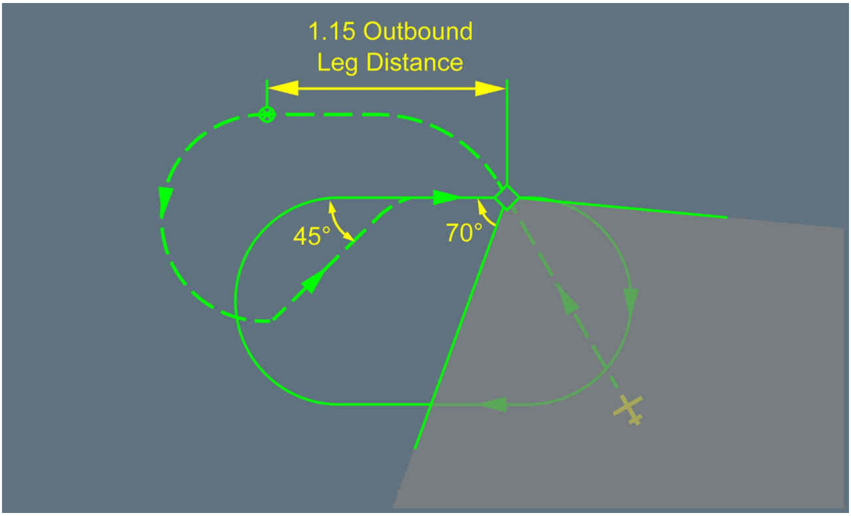
1. Direct entry


Capture Outbound Leg
45°

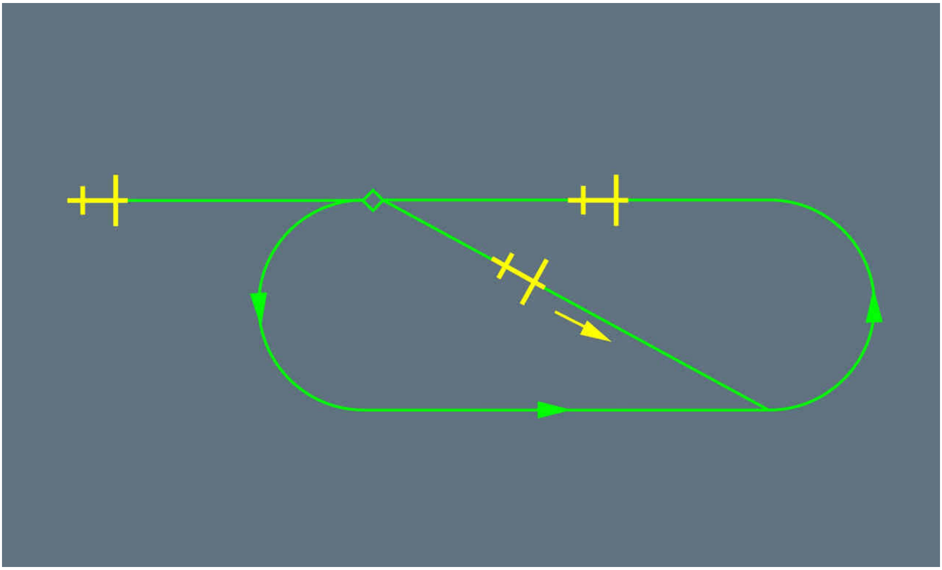
2. Teardrop entry



3. Parallel entry


1.15 Outbound
Leg Distance
45°
70°

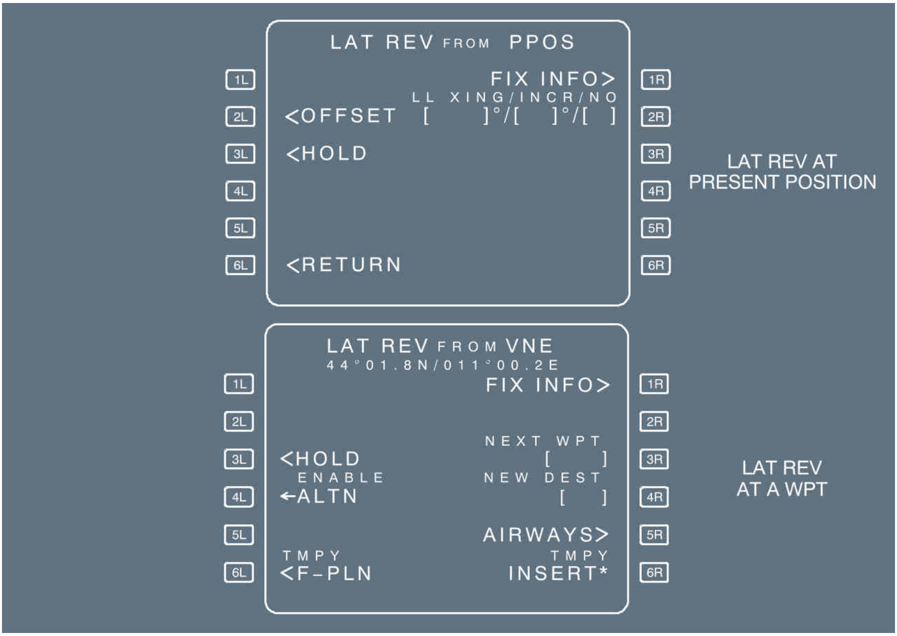
Note: *If the leg the aircraft is flying toward the holding fix is on a "limit" between a teardrop entry and a parallel entry, the FMS may compute and display either of the two entries. The flight crew should keep this in mind, and should not assume that the FMS is malfunctioning.*
If the flight plan leg toward the hold entry fix is on a course that is the reciprocal of the inbound course of the holding pattern, the aircraft will fly a teardrop entry.



Ident.: DSC-22_20-30-10-18-C-00009515.0015001 / 01 OCT 12

PROCEDURE TO INSERT A HOLD (HOLD WITH MANUAL TERMINATION)

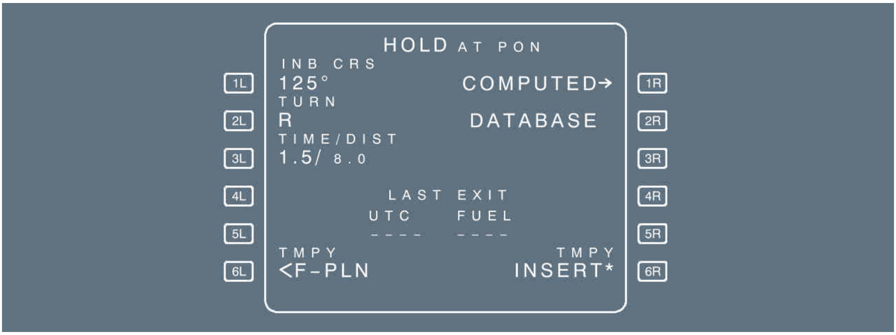
The HOLD prompt enables the crew to enter a holding pattern, with manual termination (HM), at the revised waypoint or at the present position.
The crew accesses the HOLD page from a lateral revision at the present position (PPOS), or at a waypoint. Using the HOLD function results in the creation of a temporary F-PLN. The function has no effect on the active F-PLN, until the temporary F-PLN is inserted.


LAT REV FROM PPOS
1L
2L
3L
4L
5L
6L
FIX INFO>
LL XING/INCR/NO
<OFFSET [ ]°/[ ]°/[ ]
<HOLD
<RETURN
1R
2R
3R
4R
5R
6R
LAT REV AT PRESENT POSITION
LAT REV FROM VNE
44°01.8N/011°00.2E
FIX INFO>
NEXT WPT
[ ]
<HOLD
ENABLE
←ALTN
NEW DEST
[ ]
AIRWAYS>
TMPY
<F-PLN
TMPY
INSERT*
LAT REV AT A WPT

SELECT a lateral revision at the applicable waypoint, or at the present position (PPOS),
PRESS the HOLD prompt [3L],

A TMPY F-PLN is created and a default hold is proposed: if applicable, the database hold is proposed. If no database hold is available, the computed hold is proposed.

CHECK the proposed hold. If not appropriate, SELECT COMPUTED [1R] or DATABASE [2R] (if applicable),
CHECK the hold parameters and MODIFY them if necessary
INSERT the TMPY F-PLN or continue with next revision.



```
1L        HOLD AT PON
      INB CRS
      125°            COMPUTED→     1R
      TURN
2L    R               DATABASE      2R
      TIME/DIST
3L    1.5/ 8.0                      3R
4L                                  4R
              LAST  EXIT
              UTC   FUEL
5L            ----  ----            5R
      TMPY                 TMPY
6L    <F-PLN           INSERT*      6R
```

Ident.: DSC-22_20-30-10-18-C-00009516.0002001 / 24 JAN 11

PROCEDURE TO DELETE A HOLD (HOLD WITH MANUAL TERMINATION)

CLEAR the HOLD directly in the flight plan, as can be done for a normal waypoint.
CHECK and INSERT the TMPY F-PLN or continue with next revision

Note: Only the constraint on the entry fix of the hold are preserved.

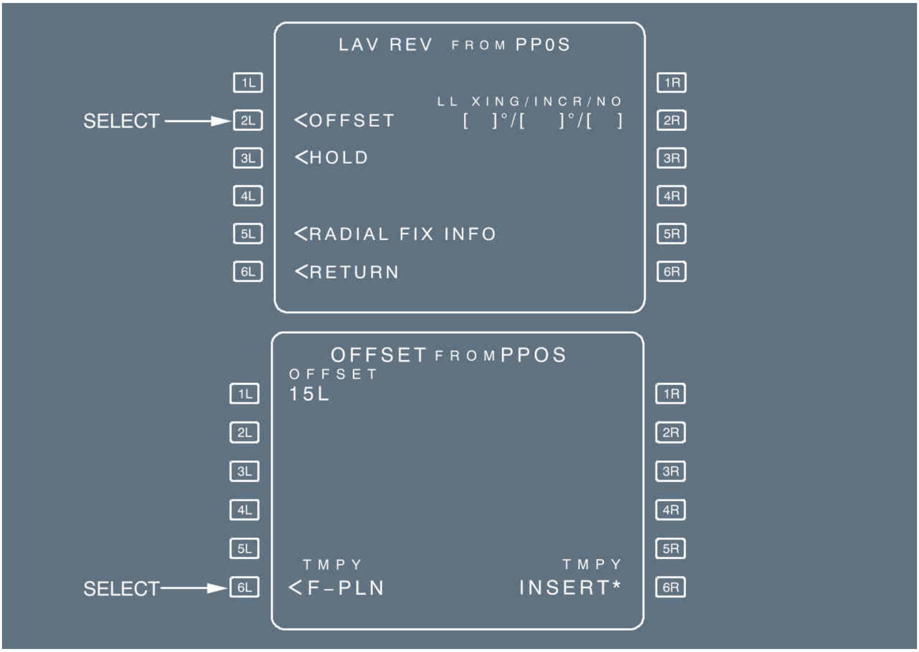
OFFSET

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-10-18-D-00000477.0003001 / 17 MAY 21

The OFFSET prompt enables the crew to define a lateral offset to the left or right of the active flight plan. Once inserted, the offset applies from the present position (PPOS) all along the flight plan to the first waypoint (WPT) at which a holding pattern is defined, or to the last waypoint before the runway. In most cases, the crew will use it en-route, because of an ATC clearance, or to avoid bad weather expected along the flight plan route. Accessed from a lateral revision (LAT REV) at the FROM waypoint, an offset may be defined between 1 and 50 NM in one-nautical-mile steps and starts at PPOS. Using the offset function results in the creation of a temporary F-PLN. The function leads to the creation of a temporary flight plan. Once this TMPY F-PLN is inserted, the flight plan page shows OFFSET in its title, and the navigation display shows the offset flight plan with a solid green line and the original flight plan with a dashed green line. The offset can be manually suppressed by clearing the offset value in [1L] or by performing a DIR TO.

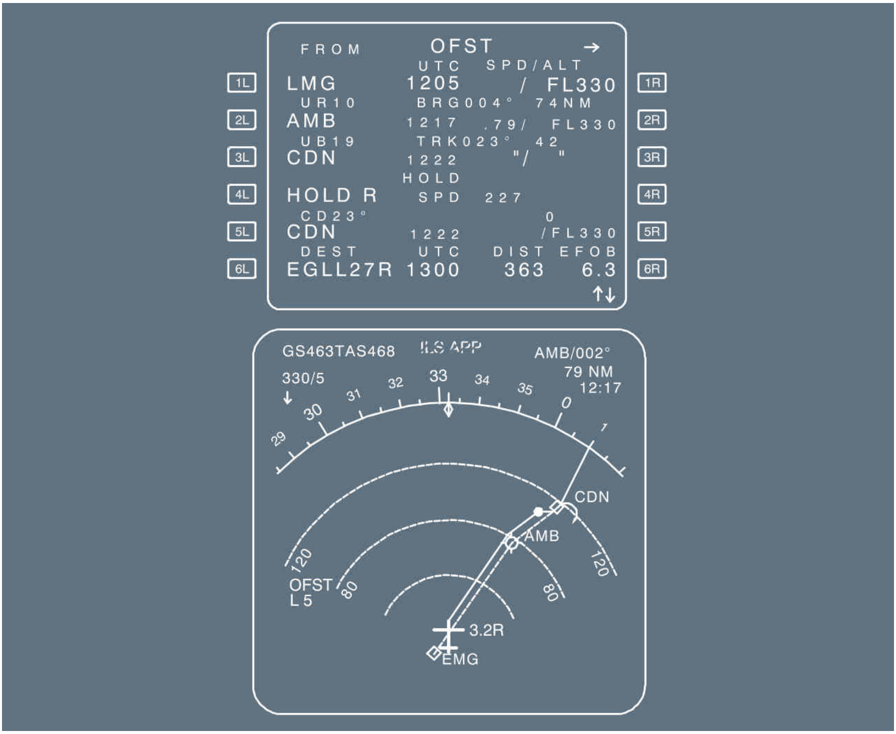
1. If a hold is inserted at PPOS, this hold is flown on the offset path. If a hold is inserted at another waypoint, the offset will be automatically deleted before the hold.
2. No offset can be computed on approach legs.
3. If the crew enters an OFFSET when the aircraft is too close to the TO waypoint, the FMGS may refuse to accept it, in which case the MCDU displays the “ENTRY OUT OF RANGE” message.


LAV REV FROM PPOS
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
SELECT
<OFFSET
LL XING/INCR/NO
[ ]°/[ ]°/[ ]
<HOLD
<RADIAL FIX INFO
<RETURN
OFFSET FROM PPOS
OFFSET
15L
SELECT
TMPY
<F-PLN
TMPY
INSERT*

Ident.: DSC-22_20-30-10-18-D-00009517.0003001 / 01 OCT 12

INSERTING AN OFFSET

SELECT LAT REV at the present position (PPOS).
SELECT the OFFSET prompt.
WRITE the required offset value and direction (Example : L15 or 15L).
PRESS [1L] to enter the offset in the OFFSET field.
CHECK and INSERT the TMPY F-PLN or continue with next revision.



```
  FROM            OFST            →
                UTC    SPD/ALT
LMG             1205       /  FL330
  UR10          BRG004°    74NM
AMB             1217    .79/  FL330
  UB19          TRK023°    42
CDN             1222        "/    "
               HOLD
HOLD R          SPD    227
  CD23°                        0
CDN             1222         /FL330
  DEST          UTC      DIST  EFOB
EGLL27R         1300     363    6.3
                                 ↑↓
```

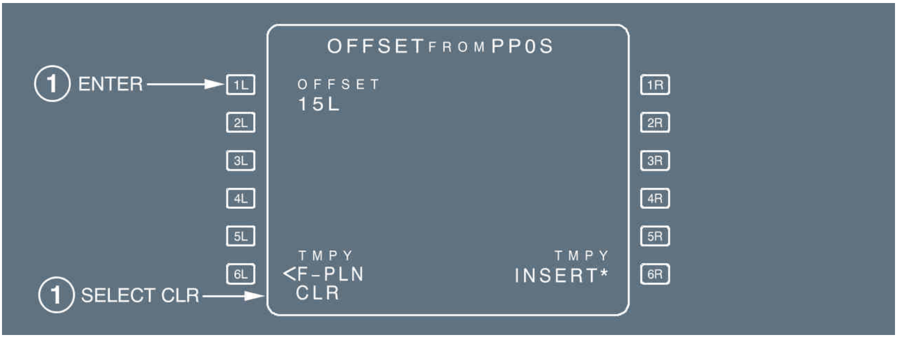
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
GS463TAS468
ILS APP
AMB/002°
79 NM
12:17
330/5
29
30
31
32
33
34
35
0
1
CDN
AMB
120
80
OFST
L5
120
80
3.2R
EMG

Ident.: DSC-22_20-30-10-18-D-00009518.0002001 / 14 MAY 12

MANUAL CANCELLATION OF AN OFFSET

There are two standard methods of cancelling an offset :
1. PERFORM DIR TO a waypoint (the next waypoint, for example).
2. SELECT a Lateral Revision (LAT REV) at FROM WPT.

SELECT the OFFSET prompt.
CLEAR the OFFSET field (or ENTER a zero value in the OFFSET field).
CHECK and INSERT the TMPY F-PLN or continue with next revision.



ALTERNATE FUNCTION

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-10-18-E-00000478.0002001 / 24 JAN 11

The ALTERNATE FUNCTION performs two actions:
- It reviews and defines alternate airports and inserts them into the flight plan
- It allows a diversion to be activated through the ENABLE ALTN command.

Using the ALTERNATE function results in the creation of a temporary F-PLN. The function has no effect on the active F-PLN until the temporary is inserted.
An alternate airport may also be entered or modified through the dedicated field on INIT A page. In this case, no TMPY F-PLN is created.

Ident.: DSC-22_20-30-10-18-E-00009519.0003001 / 13 DEC 12

REVIEW AND SELECTION OF ALTERNATE AIRPORT

Several alternate airfields may be stored in the database and assigned to a destination. When the pilot selects a company route (CO RTE) (or a city pair), the computer strings the preferred alternate into the active flight plan.
The pilot may review the alternate airports on the ALTN page and change the selected one if not suitable.
The ALTERNATE page shows the track and distance (airway or direct) between destination and alternate, as well as fuel management data (EXTRA fuel, assuming the associated airfield is the alternate airport). This data will help the pilot change the preferred alternate, if necessary.

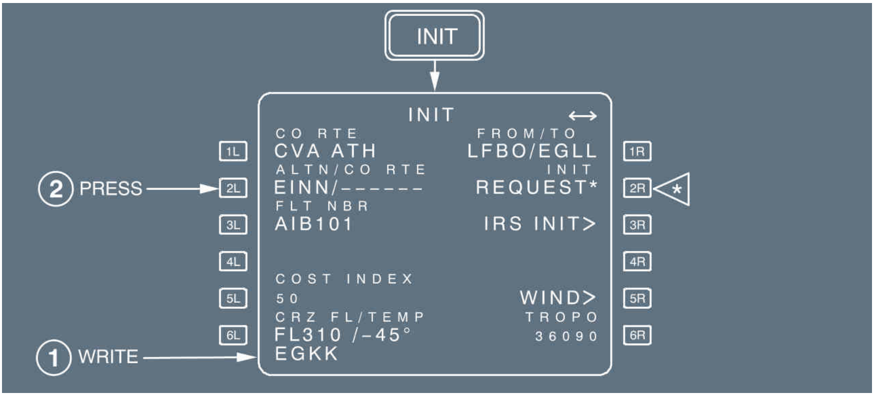
ENTERING NEW ALTERNATE INTO THE F-PLN

SELECT INIT key on the MCDU.
ENTER an AIRFIELD IDENTIFIER in [2L] field.

PRESS FUEL PRED key and CHECK or MODIFY the specified ALTN fuel.

Note: *If weather and destination airfield conditions permit, you may select "NO ALTN". Fuel predictions will be computed without alternate fuel.*

Note: *A new alternate may also be entered in the F-PLN by selection of LAT REV and then ALTN page. In this case, a temporary flight plan will be created before final insertion.*


INIT
INIT ↔
CO RTE
CVA ATH
FROM/TO
LFBO/EGLL
ALTN/CO RTE
EINN/------
INIT
REQUEST*
FLT NBR
AIB101
IRS INIT>
COST INDEX
50
WIND>
CRZ FL/TEMP
FL310 /-45°
TROPO
36090
EGKK
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
*
② PRESS
① WRITE

SELECTION OF ANOTHER ALTERNATE

Fuel management information for flight to another alternate airfield may be obtained by selecting the OTHER ALTN field.

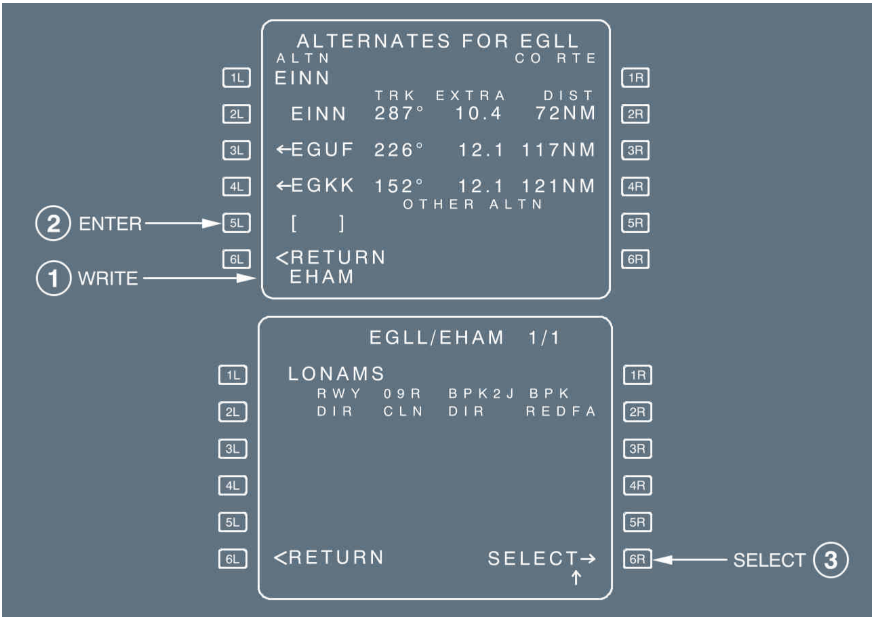
SELECT LAT REV at DESTINATION.
SELECT ALTN [3L].
ENTER the airfield identifier in the brackets.

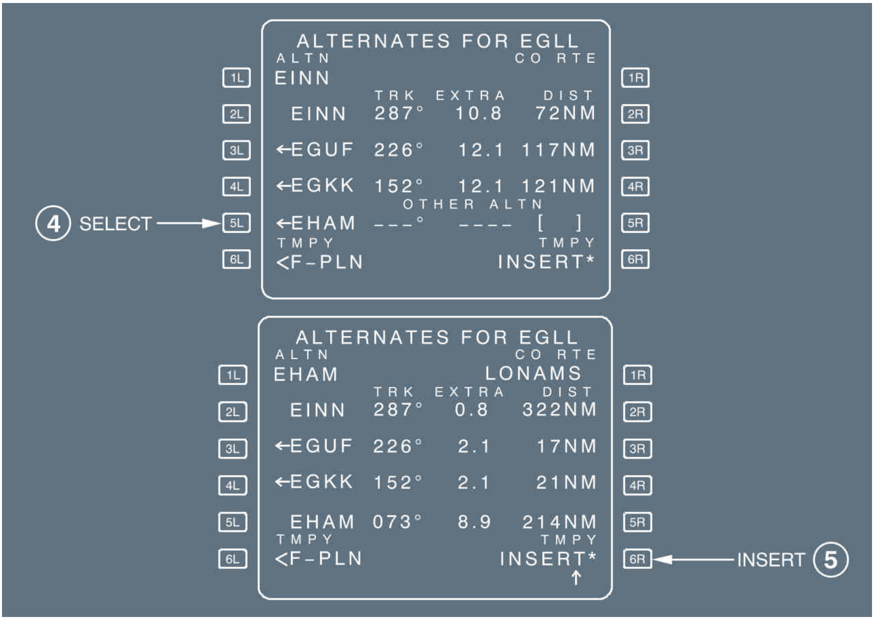
- If the airfield is not in the database, the NEW RUNWAY page automatically appears.
- If the airfield is in the database and there is a company route (CO RTE) to it, the ROUTE SELECTION page automatically appears.

SELECT the route, as appropriate, or RETURN to the ALTN page.
ENTER the distance in the brackets (if required). XTRA fuel and track (TRK) will appear.
SELECT the other alternate (OTHER ALTN) as a primary alternate, if convenient. (EXTRA fuel and DIST revert to AIRWAY distance).

CHECK and INSERT the TMPY F-PLN, or continue with next revision.

Note:
- *The pilot can always overwrite the "OTHER ALTN". The new "OTHER ALTN" then replaces the previous one, which is lost.*
- *The pilot can select OTHER ALTN as a primary alternate (active flight plan), to replace any alternate on the initial list.*
- *If the pilot selects the other alternate as a primary alternate, and overwrites the OTHER ALTN field by entering a new airport, the first one will remain a primary alternate and the system will memorize a second OTHER ALTN.*


ALTERNATES FOR EGLL
ALTN
CO RTE
EINN
TRK
EXTRA
DIST
EINN 287° 10.4 72NM
←EGUF 226° 12.1 117NM
←EGKK 152° 12.1 121NM
OTHER ALTN
[ ]
<RETURN
EHAM
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
② ENTER
① WRITE
EGLL/EHAM 1/1
LONAMS
RWY 09R BPK2J BPK
DIR CLN DIR REDFA
<RETURN
SELECT→
↑
SELECT ③



```
      ALTERNATES FOR EGLL
ALTN                     CO RTE
EINN
            TRK   EXTRA    DIST
  EINN      287°  10.8     72NM
←EGUF       226°  12.1    117NM
←EGKK       152°  12.1    121NM
               OTHER ALTN
←EHAM       ---°  ----    [   ]
TMPY                       TMPY
<F-PLN                  INSERT*
```

```
      ALTERNATES FOR EGLL
ALTN                     CO RTE
EHAM                    LONAMS
            TRK   EXTRA    DIST
  EINN      287°  0.8     322NM
←EGUF       226°  2.1      17NM
←EGKK       152°  2.1      21NM

  EHAM      073°  8.9     214NM
TMPY                       TMPY
<F-PLN                  INSERT*
                           ↑
```

The pilot may enter a distance in the OTHER ALTN field. The system will compute the extra fuel, and the track for this distance.
When the OTHER ALTN is selected as a primary alternate, the FMGC will also compute the predictions for the other alternate.

PREDICTED DATA FOR ALTERNATE

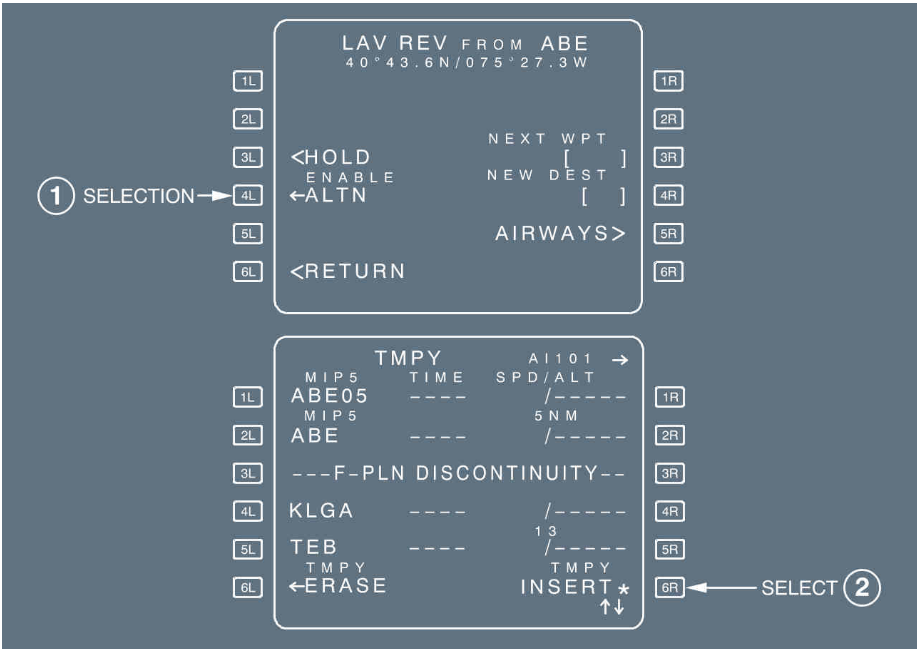
Data predictions can be based on:
- Aircraft weight being equal to landing weight at the primary destination.
- Flight at FL 100 if the alternate F-PLN length is less than 100 NM, at FL 220 if the alternate F-PLN length is comprised between 100 NM and 200 NM, or else at FL 310.
- Cost index 0.
- Constant wind (as entered in the alternate field of the DES WIND page).
- Constant delta ISA (equal to delta ISA at primary destination).
- The along flight plan distance from the destination to the alternate airport.

If the crew enters an ALTN fuel value, this value is the one taken into account.

ENABLE ALTN

Ident.: DSC-22_20-30-10-18-00000479.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860

This enables the flight crew to initiate a diversion by entering the alternate flight plan just after the revision waypoint (with a discontinuity). Using the ENABLE ALTN function results in the creation of a temporary F-PLN. This function has no effect on the active F-PLN until the temporary F-PLN is inserted.
The flight crew may have to adjust the resulting flight plan (add or delete waypoints), depending on the circumstances.


LAV REV FROM ABE
40°43.6N/075°27.3W
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
NEXT WPT
<HOLD
[ ]
ENABLE
NEW DEST
←ALTN
[ ]
① SELECTION
AIRWAYS>
<RETURN
TMPY
AI101 →
MIP5
TIME
SPD/ALT
ABE05

/-----
MIP5
5NM
ABE

/-----
---F-PLN DISCONTINUITY--
KLGA

/-----
13
TEB

/-----
TMPY
TMPY
←ERASE
INSERT*
↑↓
SELECT ②

TO ENABLE THE ALTN F-PLN:

SELECT LAT REV at the waypoint where the ALTN part is to be strung.
PRESS the ENABLE ALTN key

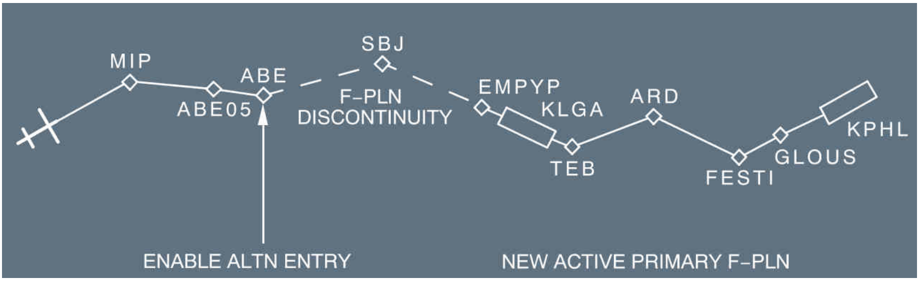
The temporary flight plan is created and displayed.

REVISE the temporary F-PLN as necessary.

INSERT the temporary F-PLN or continue with next revision.

The message “USING COST INDEX 0” is displayed in the scratchpad on the side where the ENABLE ALTN function was used.

If necessary, perform a DIR TO the first waypoint of the alternate.
ADJUST the cost index on the PERF page and the defaulted cruise flight level (CRZ FL) on the PROG page, as required.



When ENABLE ALTN is pressed at ABE, a flight plan discontinuity is created from ABE down to destination and the alternate route is linked to the active flight plan.

DIR KEY (DIRECT-TO-FUNCTION)

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-10-18-F-00000480.0003001 / 30 MAR 18

The pilot uses the “Direct To” function to define a direct leg, potentially with inbound/outbound course or abeam waypoint, from the present position to any waypoint on the active flight plan or to any waypoint.
The designated waypoint may be entered by its identifier (if it is stored in the navigation database), or as a pilot defined element, or by a latitude/longitude, place/bearing/distance, a place-bearing/place-bearing, or a place distance (PD) along the F-PLN.

Note:
1. *If the autopilot or flight director is in the heading/track or localizer mode, the “DIR TO” function engages the NAV mode.*
2. *A lateral revision of the flight plan obtained with a DIR TO may also affect the vertical profile of the flight plan.*

Three functions are available through the DIR TO key:
- DIR TO defines a direct leg from the present position to a specified waypoint.
  NAV mode simultaneously engages upon DIR TO selection.
  When the pilot uses DIR TO, the present position (PPOS) becomes the “FROM” waypoint and the active flight plan shows it as the T-P (turn point)
- The DIR TO/ABEAM function, computes the abeam waypoints along the direct leg. These waypoints are the projection on the direct leg of the initial F-PLN waypoints, located between the aircraft position and the specified waypoint.
  NAV mode simultaneously engages upon DIR TO/ABEAM selection
- The DIR TO/INTCPT function allows the definition of a specified RADIAL INBOUND or OUTBOUND at an inserted waypoint. The current aircraft track is used to compute the INTCPT point with the specified radial.

If the DIR TO waypoint is part of the F-PLN, the FMS computes and proposes a default radial in NAV mode is simultaneously armed upon DIR TO/INTCPT selection.
Using the DIRECT TO function results in the creation of a DIR TO temporary flight plan. This flight plan only reflects the insertion of the direct leg in the active flight plan.
A DIR TO TMPY F-PLN can be deleted with [6L] prompt DIR TO ERASE or inserted [6R] prompt DIR TO INSERT.

With the DIR TO TMPY F-PLN:
- The aircraft continues to follow the active F-PLN until the DIR TO is inserted
- The DIR TO TMPY F-PLN is displayed in yellow on both MCDUs and NDs
- A DIR TO TMPY F-PLN cannot be created when a multi-revisions TMPY F-PLN is already in process.

Note: *In the case a DIR TO/INTCPT is performed:*
- *When the angle between the current aircraft track and the intercept course exceeds 140 °, the transition is not displayed*
- *When the angle between the current aircraft track and the intercept course exceeds 160 °, the interception with the radial is not computed and the message NO NAV INTERCEPT is displayed.*

Note: *As soon as a designated waypoint is entered or selected, the DIRECT TO or DIRECT-TO-WITH ABEAM POINTS function is selected by default, and displayed (in yellow), depending on the Airline option on the AMI file.*
The following examples assume that the activated AMI default option is the “DIRECT TO” function.

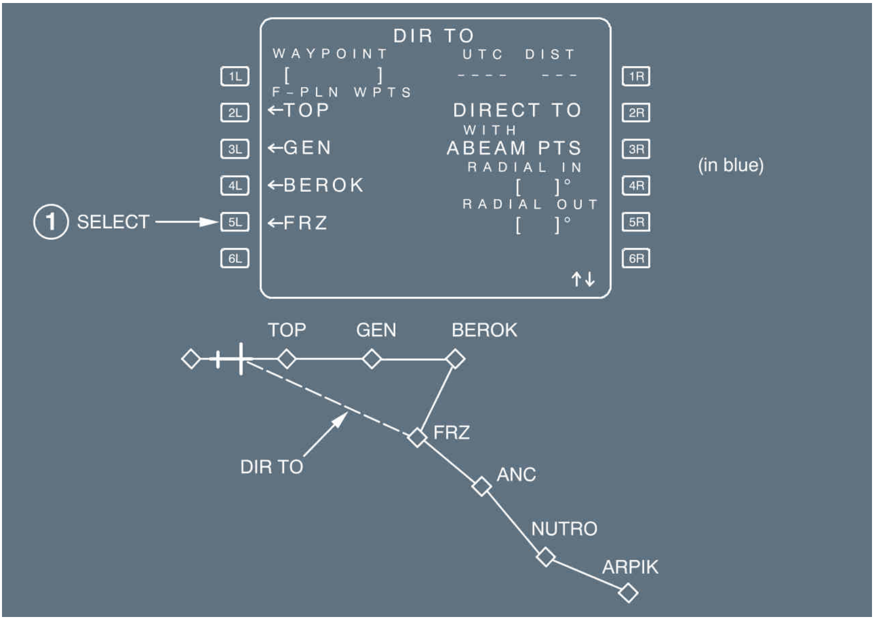
Ident.: DSC-22_20-30-10-18-F-00009520.0001001 / 01 OCT 12

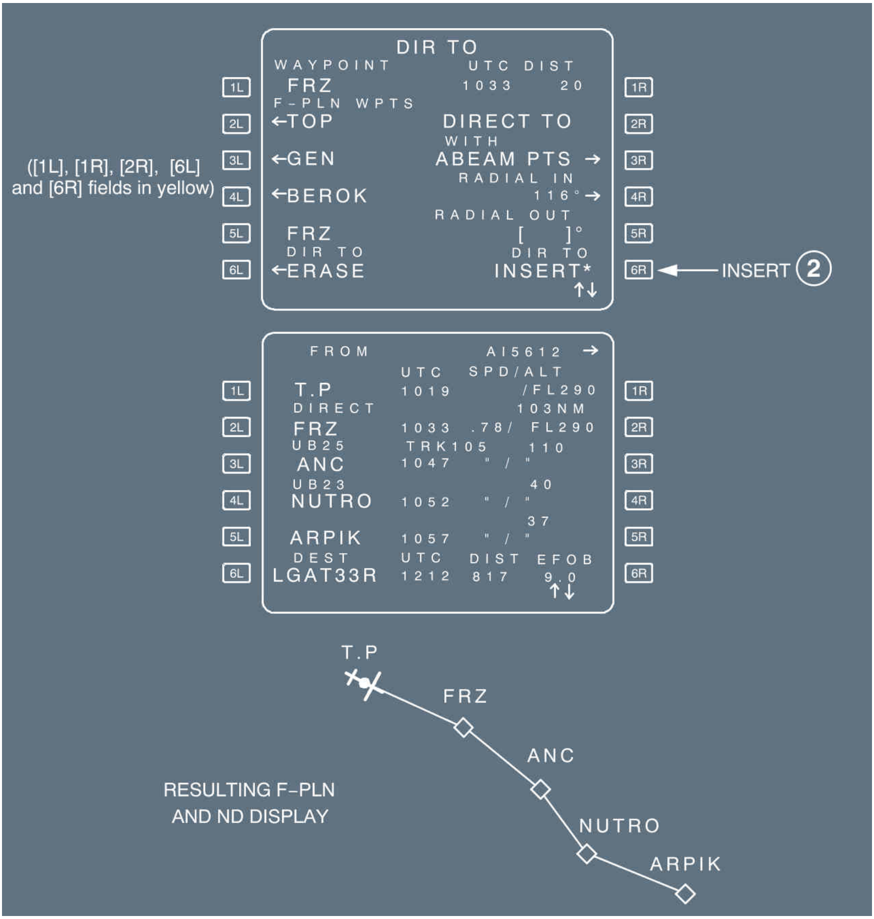
PROCEDURE FOR DIR TO WAYPOINT

CASE 1. THE "TO" WAYPOINT IS IN THE FLIGHT PLAN

Example: DIR TO FRZ (with the AMI default DIRECT TO option activated)

PRESS the DIR key on the MCDU.
PRESS the line select key next to “FRZ”.
CHECK that a temporary F-PLN is automatically displayed on both NDs.
INSERT the DIR TO in the active F-PLN.


DIR TO
WAYPOINT
UTC DIST
[ ]
---- ---
F-PLN WPTS
←TOP
DIRECT TO
WITH
←GEN
ABEAM PTS
RADIAL IN
←BEROK
[ ]°
RADIAL OUT
←FRZ
[ ]°
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
① SELECT
(in blue)
TOP
GEN
BEROK
FRZ
DIR TO
ANC
NUTRO
ARPIK



```
              DIR TO
 WAYPOINT             UTC  DIST
 FRZ                  1033   20
 F-PLN WPTS
←TOP             DIRECT TO
                   WITH
←GEN             ABEAM PTS →
                    RADIAL IN
←BEROK                 116°→
                 RADIAL OUT
 FRZ                    [   ]°
 DIR TO                 DIR TO
←ERASE                INSERT*
                            ↑↓
```

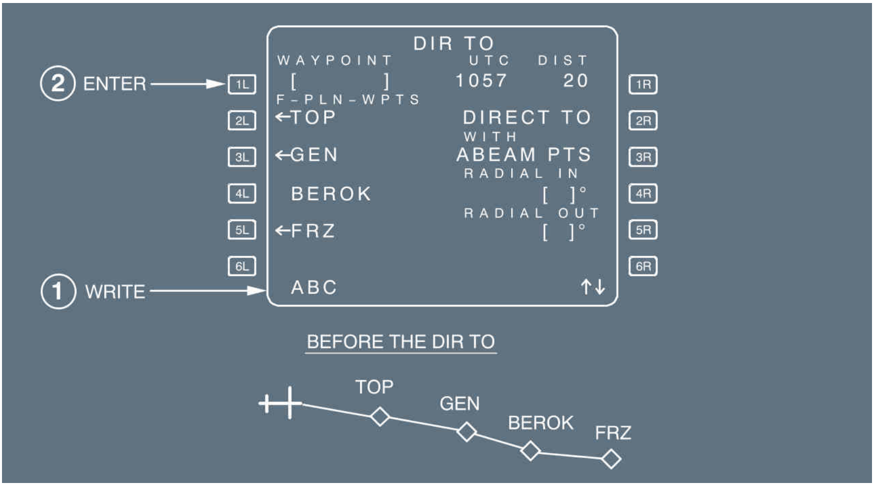
```
    FROM              AI5612   →
            UTC    SPD/ALT
 T.P        1019       /FL290
 DIRECT                103NM
 FRZ        1033  .78/ FL290
 UB25        TRK105     110
 ANC        1047   "  /  "
 UB23                   40
 NUTRO      1052   "  /  "
                        37
 ARPIK      1057   "  /  "
 DEST       UTC   DIST  EFOB
LGAT33R     1212  817    9.0
                          ↑↓
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
([1L], [1R], [2R], [6L] and [6R] fields in yellow)
INSERT ②
T.P
FRZ
ANC
NUTRO
ARPIK
RESULTING F-PLN AND ND DISPLAY

CASE 2. THE “TO” WAYPOINT DOES NOT BELONG TO THE FLIGHT PLAN

Example: Direct to ABC (ABC being an ident, LL or PBD, PB/PB or a PD), with the AMI default DIRECT TO option activated.

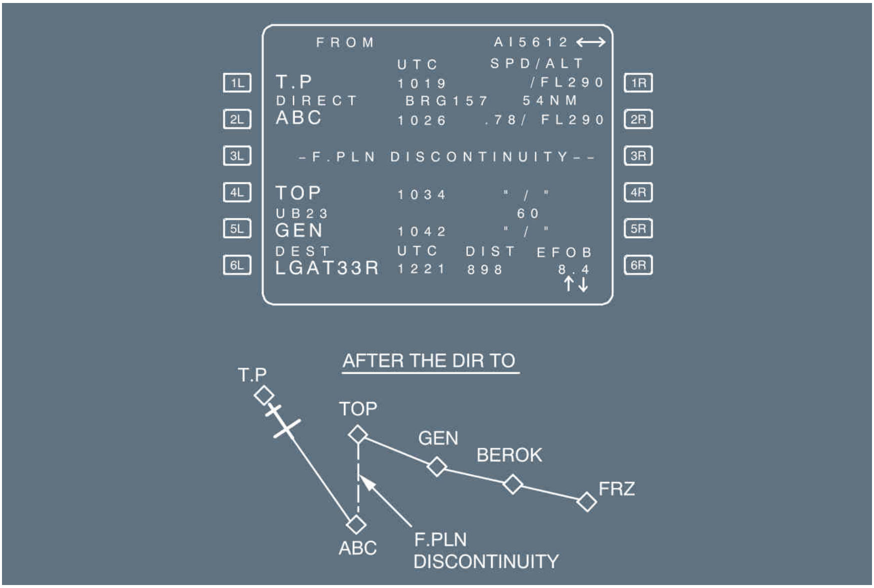
PRESS the DIR key.
WRITE the waypoint identifier (e.g. ABC) in the scratchpad.
PRESS [1 L] to enter “ABC” in the “WAYPOINT” field.
CHECK that a temporary F-PLN is automatically displayed on both NDs.
INSERT the DIR TO in the active F-PLN.



```
          DIR TO
WAYPOINT            UTC     DIST
[         ]        1057       20
F-PLN-WPTS
←TOP               DIRECT TO
                   WITH
←GEN               ABEAM PTS
                   RADIAL IN
 BEROK                    [  ]°
                   RADIAL OUT
←FRZ                      [  ]°

 ABC                          ↑↓
```

② ENTER
① WRITE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
TOP
GEN
BEROK
FRZ

BEFORE THE DIR TO



```
    FROM               AI5612 ↔
              UTC      SPD/ALT
T.P           1019      /FL290
DIRECT          BRG157    54NM
ABC           1026     .78/ FL290
   -F.PLN DISCONTINUITY--
TOP           1034       " / "
UB23                       60
GEN           1042       " / "
DEST          UTC   DIST   EFOB
LGAT33R       1221  898     8.4
                             ↑↓
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
T.P
TOP
GEN
BEROK
FRZ
ABC
F.PLN
DISCONTINUITY

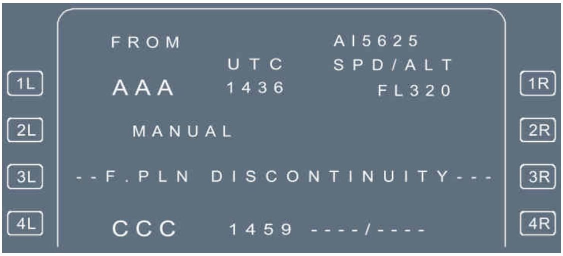
AFTER THE DIR TO

Clear the discontinuity and the waypoints that are not included in the new flight plan.

Ident.: DSC-22_20-30-10-18-F-00009521.0001001 / 05 JUN 18

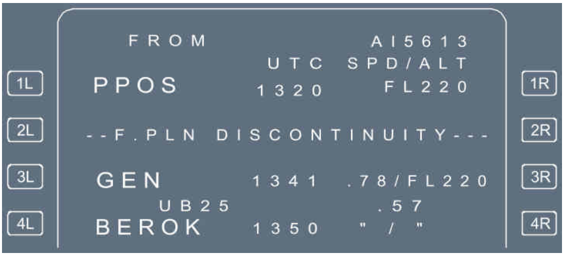
PARTICULAR CASES FOR USE OF DIR TO

- If the pilot is flying a manual leg (part of a SID or STAR), the flight plan page displays “F-PLN DISCONTINUITY”, preceded by “MANUAL” (see below).
  These legs are specific heading or track legs flown with no defined end waypoint.



```
  FROM               AI5625
           UTC      SPD/ALT
  AAA      1436        FL320
    MANUAL
--F.PLN DISCONTINUITY---
  CCC      1459   ----/----
```

- When the pilot encounters a flight plan discontinuity, or if a major reset occurs, the flight plan page displays "PPOS – F-PLN DISCONTINUITY”, and the pilot looses managed guidance in both the lateral and vertical plans.
  The autopilot or flight director reverts to the basic HDG V/S (or TRK FPA) modes. Predictions remain available and are based on the assumption that the aircraft will fly a direct leg from its present position to the next waypoint.



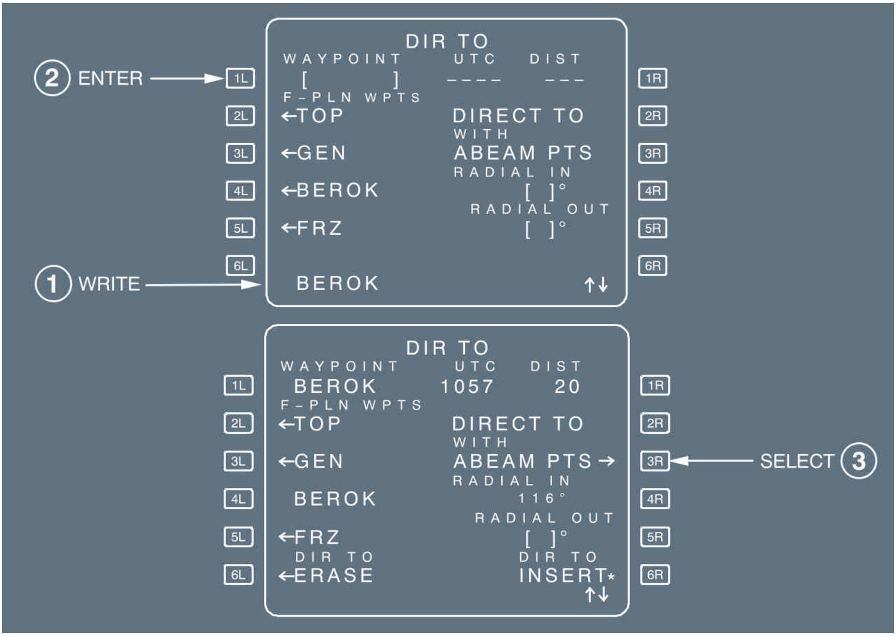
```
    FROM                AI5613
               UTC     SPD/ALT
  PPOS         1320       FL220
 --F.PLN DISCONTINUITY---
  GEN          1341  .78/FL220
       UB25               .57
  BEROK        1350    "  /  "
```

- In both of these cases, the only way to get back to a standard flight plan is to perform a "DIR TO" to a designated waypoint.
- Following a DIR TO, the “MAP PARTLY DISPLAYED” message may appear on the NDs, if the new flight plan includes a very long leg. When this message comes up, enter an intermediate waypoint to shorten the leg.
- If another lateral or vertical revision is attempted, while a DIR TO is pending, the MCDU message “DIR TO IN PROCESS” is displayed.

PROCEDURE FOR DIR TO/ABEAM

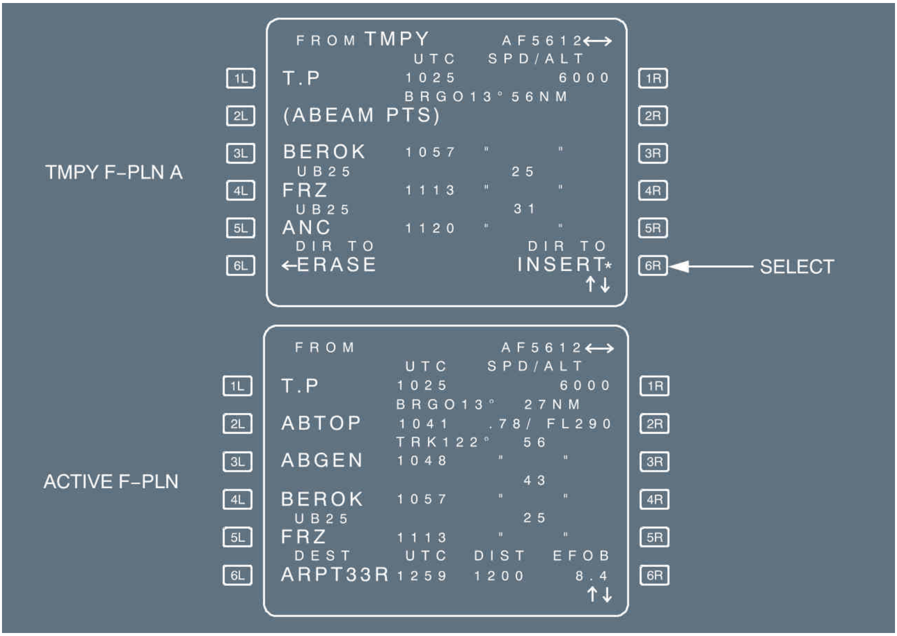
Example: DIR TO/ABEAM to BEROK (with the AMI default DIRECT TO option activated).

PRESS the DIR key on the MCDU.
WRITE the waypoint identifier in the scratchpad (Here: BEROK).
PRESS [1L] to enter the waypoint identifier in the WAYPOINT field.
SELECT the ABEAM PTS function, and CHECK that a TMPY F-PLN is displayed on both NDs.
INSERT the temporary F-PLN by pressing the [6R] key.



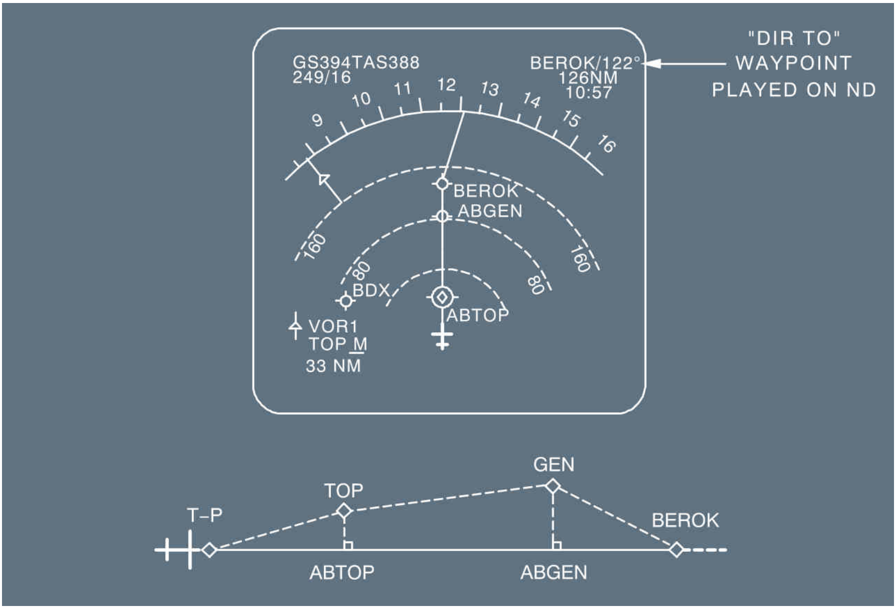
```
                 DIR TO
 WAYPOINT          UTC     DIST
 [          ]      ----    ---
 F-PLN WPTS
←TOP               DIRECT TO
                   WITH
←GEN               ABEAM PTS
                   RADIAL IN
←BEROK                  [  ]°
                    RADIAL OUT
←FRZ                    [  ]°

 BEROK                        ↑↓
```

```
                 DIR TO
 WAYPOINT          UTC     DIST
 BEROK            1057      20
 F-PLN WPTS
←TOP               DIRECT TO
                   WITH
←GEN               ABEAM PTS→
                   RADIAL IN
 BEROK                  116°
                    RADIAL OUT
←FRZ                    [  ]°
 DIR TO                 DIR TO
←ERASE                  INSERT*
                              ↑↓
```


TMPY F-PLN A
ACTIVE F-PLN
SELECT
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
 FROM TMPY         AF5612↔
           UTC    SPD/ALT
T.P        1025      6000
           BRG013°56NM
(ABEAM PTS)
BEROK      1057   "     "
 UB25               25
FRZ        1113   "     "
 UB25               31
ANC        1120   "     "
 DIR TO             DIR TO
←ERASE             INSERT*
                        ↑↓
```

```
 FROM              AF5612↔
          UTC     SPD/ALT
T.P       1025       6000
          BRG013°   27NM
ABTOP     1041    .78/ FL290
          TRK122°   56
ABGEN     1048     "     "
                    43
BEROK     1057     "     "
 UB25               25
FRZ       1113     "     "
 DEST     UTC    DIST    EFOB
ARPT33R   1259   1200     8.4
                        ↑↓
```


GS394TAS388
249/16
BEROK/122°
126NM
10:57
"DIR TO" WAYPOINT PLAYED ON ND
9
10
11
12
13
14
15
16
BEROK
ABGEN
160
80
BDX
ABTOP
VOR1
TOP M
33 NM
GEN
TOP
T-P
BEROK
ABTOP
ABGEN

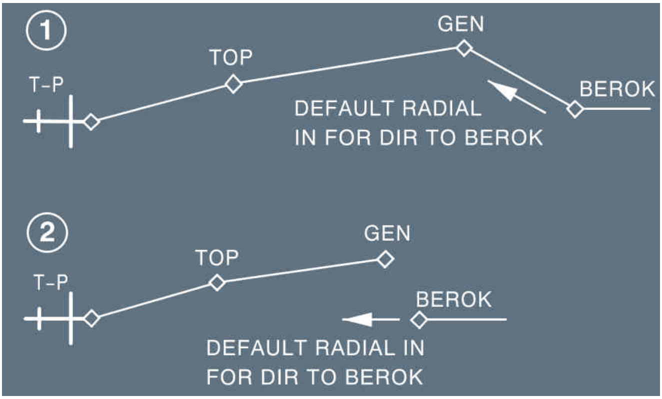
Note: 1. *The DIR TO waypoint is displayed on the top right corner of the ND.*
2. *Abeam waypoints computed from latitude/longitude-type waypoints are renamed by the system as "AB XXXXX", where "XXXXX" is an abbreviation in, 5 characters, of the latitude and longitude of the initial waypoints.*

Ident.: DSC-22_20-30-10-18-F-00009526.0002001 / 01 OCT 12

PROCEDURE FOR DIR TO/INTERCEPT

PRESS the DIR key.
WRITE the waypoint identifier in the scratchpad.
PRESS [1L] to enter the waypoint in the WAYPOINT field.

In the [4R] and [5R] fields, the MCDU displays the functions radial inbound and radial outbound from the waypoint. If the DIR TO waypoint belongs to the flight plan and is not preceded by a discontinuity, the system displays the flight plan track to the DIR TO waypoint as the default inbound radial (figure 1). If the DIR TO waypoint belongs to the flight plan and is preceded by a discontinuity, the system displays the flight plan track from the DIR TO waypoint as the default inbound radial (figure 2).



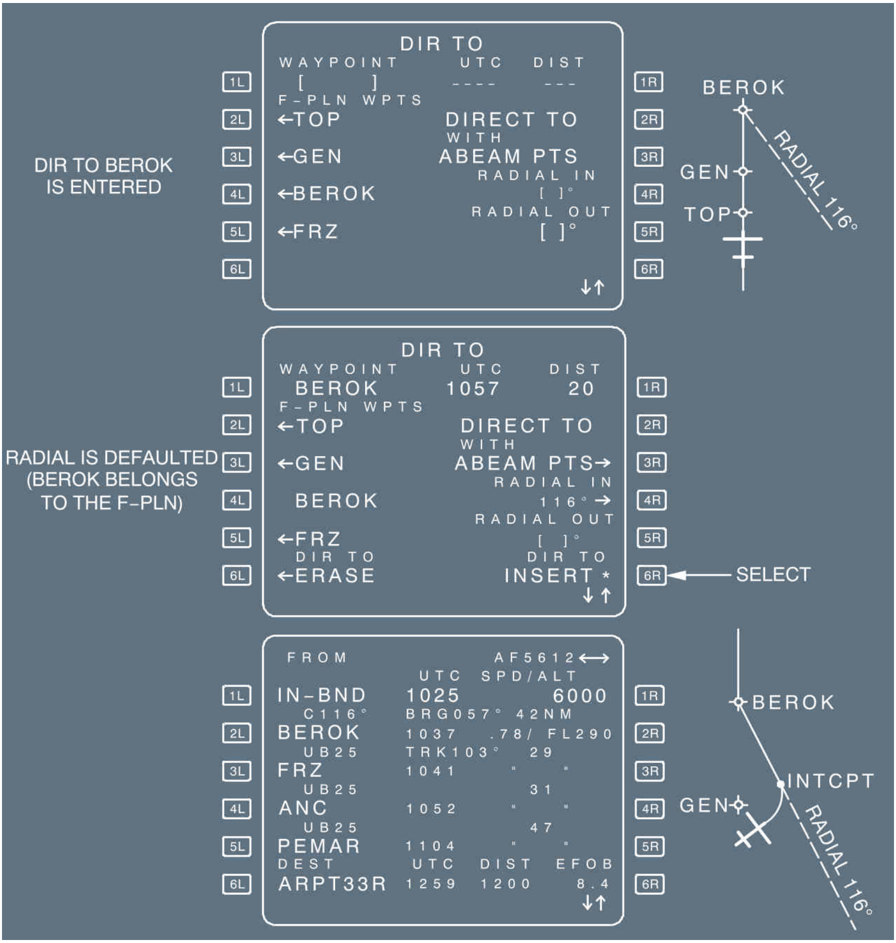
WRITE the required in or out radial in the scratchpad, as necessary.
PRESS [4R] or [5R] to enter the radial in the required field.

The ND displays the temporary F-PLN. The pilot can still modify it:

CHECK and INSERT the DIR TO/INTERCEPT into the active F-PLN by using the [6R] key.
The display reverts to the F-PLN A page, the system arms the NAV mode, and engages the HDG mode. The FROM waypoint is the aircraft position at the time of the DIR TO/INTERCEPT selection. The MCDU indicates it as INBND or OUTBND.

Note:
1. *If the waypoint does not belong to the flight plan, the system strings the DIR TO/INTERCEPT leg to this waypoint, and inserts a discontinuity following the waypoint.*
2. *A DIR TO/INTERCEPT cancels any active offset.*
3. *If the current AP/FD lateral mode is HDG or TRK, NAV becomes armed.*
   If the NAV mode was engaged, NAV becomes armed. FCU HDG or TRK must be used to guide the aircraft.
   The ND displays an intercept point, if the intercept angle is less than 160 °. The system constantly updates it to reflect the current aircraft track and position with respect to the intercept radial. The NAV mode engages when reaching the intercept point.

Example: RADIAL INBND
DIR TO BEROK-RADIAL 116 ° INBOUND



DIR TO BEROK IS ENTERED

```
          DIR TO
WAYPOINT         UTC    DIST
 [       ]       ----    ---
F-PLN WPTS
←TOP            DIRECT TO
                 WITH
←GEN            ABEAM PTS
                  RADIAL IN
←BEROK                [ ]°
                 RADIAL OUT
←FRZ                  [ ]°
                          ↓↑
```

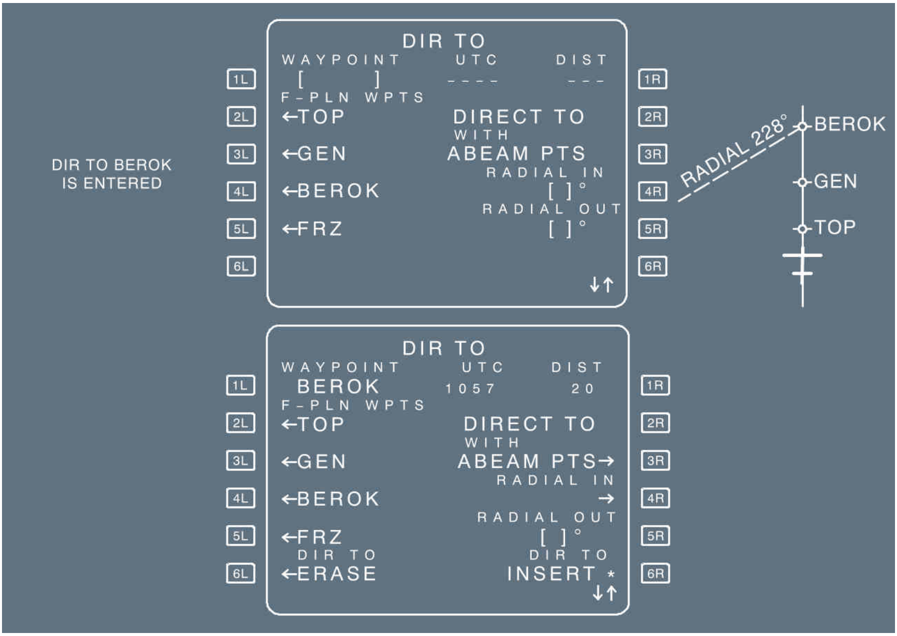
RADIAL IS DEFAULTED (BEROK BELONGS TO THE F-PLN)

```
          DIR TO
WAYPOINT        UTC      DIST
 BEROK          1057       20
F-PLN WPTS
←TOP             DIRECT TO
                  WITH
←GEN             ABEAM PTS→
                   RADIAL IN
 BEROK                116°→
                  RADIAL OUT
←FRZ                  [ ]°
 DIR TO            DIR TO
←ERASE            INSERT *
                        ↓↑
```

SELECT

```
 FROM                AF5612↔
             UTC   SPD/ALT
IN-BND       1025     6000
  C116°      BRG057° 42NM
BEROK        1037  .78/FL290
  UB25       TRK103°   29
FRZ          1041   "    "
  UB25                 31
ANC          1052   "    "
  UB25                 47
PEMAR        1104   "    "
DEST         UTC  DIST  EFOB
ARPT33R      1259  1200   8.4
                        ↓↑
```

Example: RADIAL OUTBND
DIR TO BEROK-RADIAL 228 ° OUTBOUND

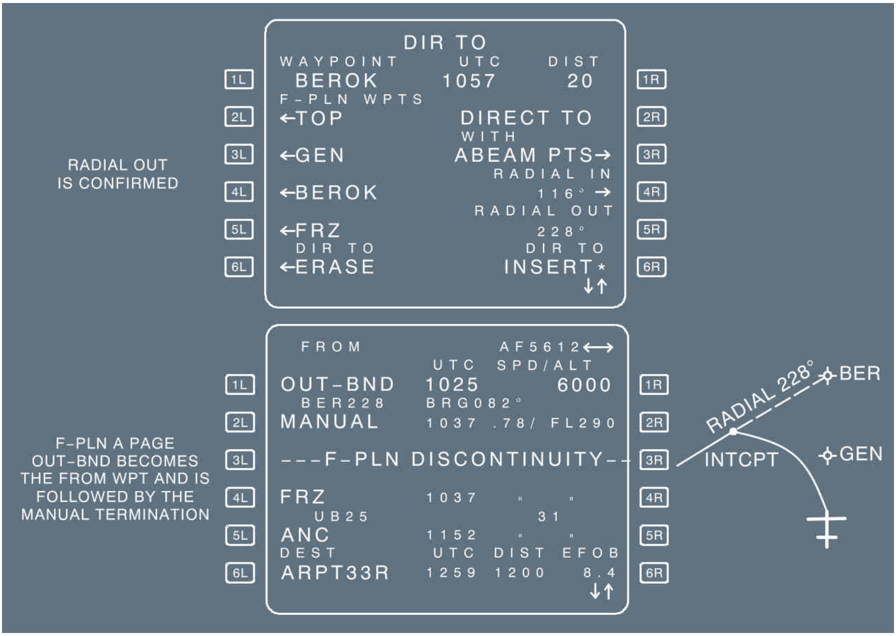


DIR TO BEROK
IS ENTERED

```
            DIR TO
WAYPOINT        UTC        DIST
 [       ]      ----        ---
F-PLN WPTS
←TOP              DIRECT TO
                   WITH
←GEN              ABEAM PTS
                    RADIAL IN
←BEROK                  [ ]°
                    RADIAL OUT
←FRZ                    [ ]°

                              ↓↑
```

```
            DIR TO
WAYPOINT        UTC        DIST
 BEROK          1057         20
F-PLN WPTS
←TOP               DIRECT TO
                    WITH
←GEN               ABEAM PTS→
                     RADIAL IN
←BEROK                        →
                    RADIAL OUT
←FRZ                    [ ]°
  DIR TO                  DIR TO
←ERASE                  INSERT *
                              ↓↑
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
RADIAL 228°
BEROK
GEN
TOP



```
                 DIR TO
WAYPOINT           UTC        DIST
 BEROK            1057          20
F-PLN WPTS
←TOP               DIRECT TO
                     WITH
←GEN              ABEAM PTS→
                     RADIAL IN
←BEROK                 116° →
                    RADIAL OUT
←FRZ                   228°
 DIR TO                 DIR TO
←ERASE               INSERT*
                              ↓↑
```

RADIAL OUT
IS CONFIRMED

```
 FROM               AF5612←→
              UTC   SPD/ALT
OUT-BND       1025      6000
 BER228       BRG082°
MANUAL        1037  .78/ FL290
---F-PLN DISCONTINUITY--
FRZ           1037    "    "
 UB25                 31
ANC           1152    "    "
DEST          UTC   DIST  EFOB
ARPT33R       1259  1200   8.4
                             ↓↑
```

F-PLN A PAGE
OUT-BND BECOMES
THE FROM WPT AND IS
FOLLOWED BY THE
MANUAL TERMINATION

OVFY (OVERFLY) KEY

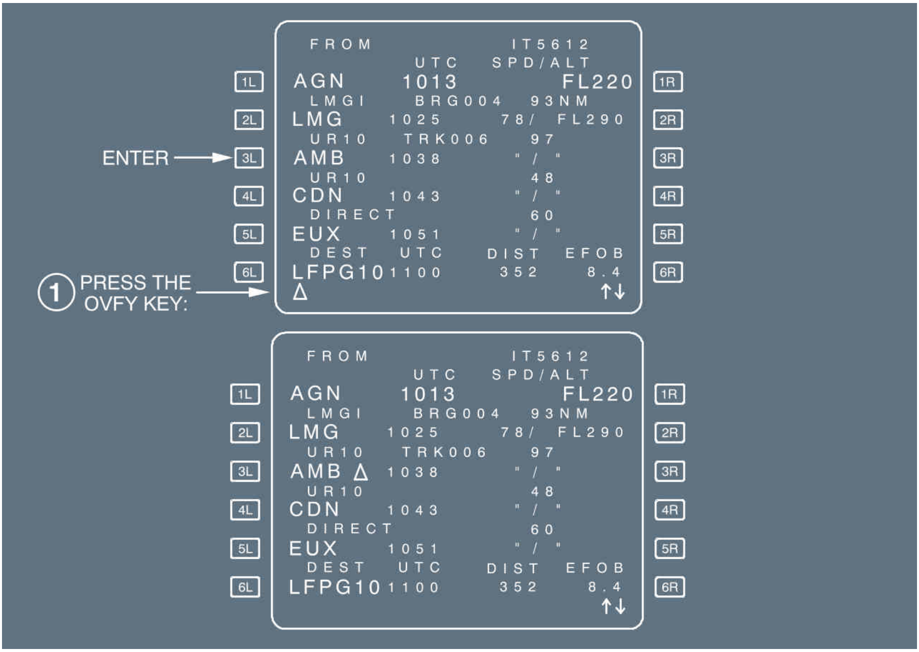
Ident.: DSC-22_20-30-10-18-00000481.0001001 / 01 OCT 12
Applicable to: MSN 04827-04860

The overfly key programs the Flight Management Guidance Computer to fly over a specific waypoint or navaid. Using the overfly function results in the creation of a temporary F-PLN. The function has no effect on the active F-PLN, until the temporary is inserted in the active F-PLN.

PRESS the “OVFY” key.

A “Δ” appears in the scratchpad.

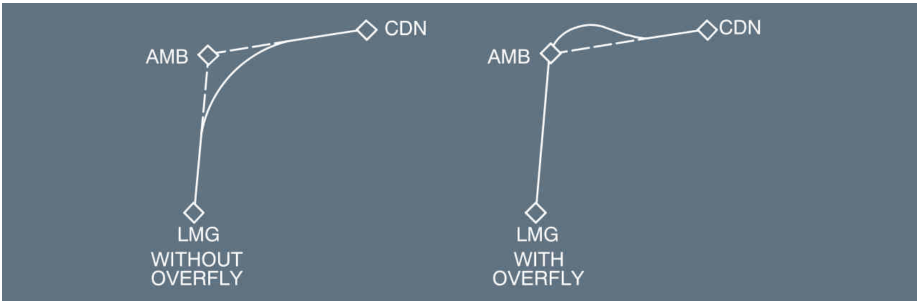
INSERT it, by pressing the key adjacent to the waypoint to be overflown. [3L], in this example.
INSERT the temporary into the active F-PLN.


ENTER
① PRESS THE OVFY KEY:
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
  FROM                 IT5612
            UTC      SPD/ALT
AGN        1013         FL220
  LMGI      BRG004    93NM
LMG        1025      78/  FL290
  UR10     TRK006     97
AMB        1038       " / "
  UR10                48
CDN        1043       " / "
  DIRECT              60
EUX        1051       " / "
  DEST     UTC     DIST   EFOB
LFPG10     1100    352    8.4
Δ                            ↑↓
```

```
  FROM                 IT5612
            UTC      SPD/ALT
AGN        1013         FL220
  LMGI      BRG004    93NM
LMG        1025      78/  FL290
  UR10     TRK006     97
AMB Δ      1038       " / "
  UR10                48
CDN        1043       " / "
  DIRECT              60
EUX        1051       " / "
  DEST     UTC     DIST   EFOB
LFPG10     1100    352    8.4
                             ↑↓
```

To cancel the overfly function, associated to a waypoint, press the OFFY △ "key again on the MCDU.

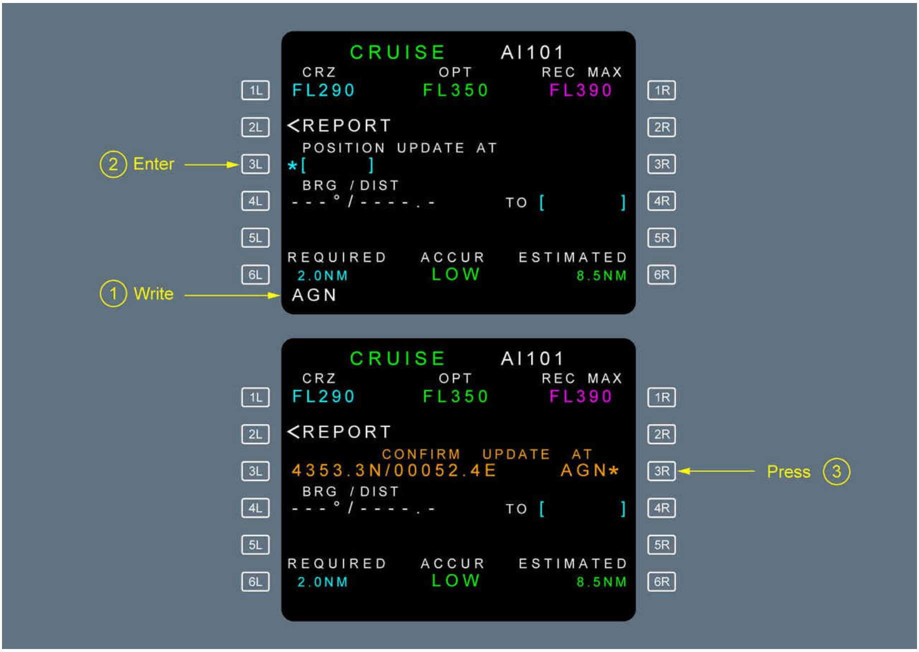

AMB
CDN
LMG
WITHOUT OVERFLY
AMB
CDN
LMG
WITH OVERFLY

The overfly function allows you to fly over a specific waypoint, and return the aircraft to the great circle track.

POSITION UPDATE AT

Ident.: DSC-22_20-30-10-18-00000482.0003001 / 04 JUN 19
Applicable to: MSN 04827-04860

To manually change the position computed by the FMGC (FM position and bias), the pilot uses “POSITION UPDATE AT” on the progress page.
<u>Use this function with extreme caution</u> : It is apt to be inaccurate, because it relies on the pilot's estimation of when a designated position has been reached.


```
    CRUISE       AI101
 CRZ       OPT       REC MAX
FL290     FL350      FL390
<REPORT
 POSITION UPDATE AT
*[       ]
 BRG / DIST
---°/----.-          TO [       ]

REQUIRED    ACCUR    ESTIMATED
 2.0NM       LOW        8.5NM
AGN
```

```
    CRUISE       AI101
 CRZ       OPT       REC MAX
FL290     FL350      FL390
<REPORT
       CONFIRM  UPDATE  AT
4353.3N/00052.4E      AGN*
 BRG / DIST
---°/----.-          TO [       ]

REQUIRED    ACCUR    ESTIMATED
 2.0NM       LOW        8.5NM
```

WRITE the IDENT at which the position update is intended. The identifier format are

- NAVAID
- Waypoint, Airport or runway identifier
- LAT / LONG coordinates
- PLACE BRG / PLACE BRG
- PLACE BRG DIST

Press [3L] to ENTER the IDENT in the “POSITION UPDATE AT” field. The coordinates of the point, along with its identifier (or “ENTRY”, if the identifier is not in the database), appear in that field.

PRESS [3R] to activate the update, when you estimate that you are at the position.

Note: *The system reinitializes the Estimated Position Error computation when a position update is performed. This may lead to the appearance of a "NAV ACCUR DOWNGRAD" or "NAV ACCUR UPGRAD" message.*

If the "POSITION UPDATE AT" does not properly take effect, it corrupts the FM position.

- In an area with good radio NAVAID coverage :
  - If the update error is small, subsequent radio position updating will correct the FM position.
  - If the update error is large, the system will reject any radio updating because its internal "reasonableness test" will reject the various NAVAIDs. Thus, the FM position will only be the MIX IRS position corrected by the position bias, determined at the time of the update, and the error will be maintained.
- In an area without proper NAVAID coverage, radio position updating will not be available and the FM position, if incorrect, will remain incorrect until a new manual update is performed.
- Therefore, the pilot should only use "POSITION UPDATE AT" in case of a major position problem, such as :
  - On the ground, no flight plan appears on the navigation display and ARC/ROSE NAV mode is selected .
  - A "CHECK IRS/FM POSITION" message appears on the MCDU.
  - A "FM/IR POSITION DISAGREE" message appears on the ECAM.

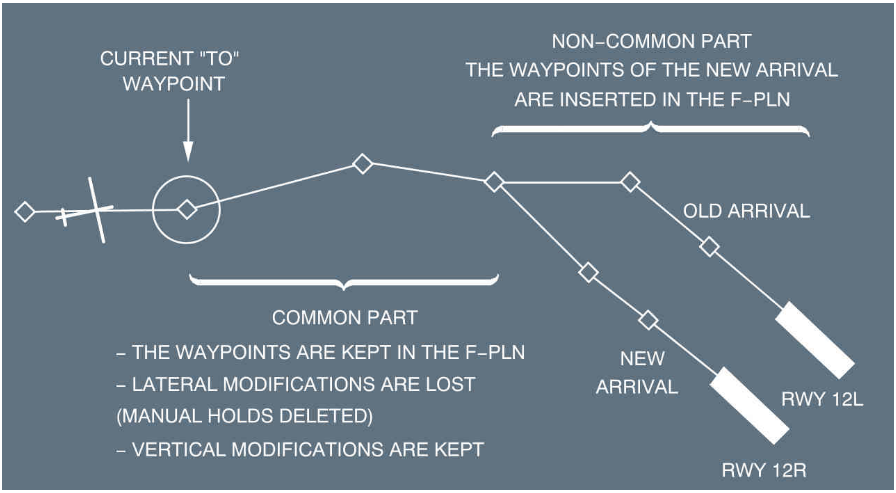
When the GPS PRIMARY ⊲ is operative, the POSITION UPDATE AT is inhibited.

CHANGING THE DEPARTURE/ARRIVAL

Ident.: DSC-22_20-30-10-18-00000483.0003001 / 23 JUN 15
Applicable to: MSN 04827-04860

CHANGING THE ARRIVAL

In approach, the flight crew may be assigned a new arrival procedure or landing runway, while already flying the initially selected arrival. Usually, at that point, the aircraft will still be in a part of the arrival that is common to the old and new procedure. When the new arrival or runway is selected, the FMS strings the remaining part of the new procedure, after the current "TO" waypoint, (see picture below).
All the lateral pilot modifications (including Holds) made to the previous arrival procedure are erased. This includes modifications made to the "TO" waypoint. The vertical pilot modifications (such as speed/altitude constraints) are kept on the waypoints in the common part (including the "TO" waypoint).
If a hold had been inserted in the old arrival procedure, it is deleted and the MCDU displays the "MANUAL HOLD DELETED" message in the scratchpad.


CURRENT "TO"
WAYPOINT
NON-COMMON PART
THE WAYPOINTS OF THE NEW ARRIVAL
ARE INSERTED IN THE F-PLN
OLD ARRIVAL
COMMON PART
- THE WAYPOINTS ARE KEPT IN THE F-PLN
- LATERAL MODIFICATIONS ARE LOST
(MANUAL HOLDS DELETED)
- VERTICAL MODIFICATIONS ARE KEPT
NEW
ARRIVAL
RWY 12L
RWY 12R

The crew should check and revise the TMPY F-PLN , as necessary, prior to inserting the TMPY F-PLN in the active F-PLN.

IF THE CURRENT “TO” WAYPOINT IS NOT COMMON TO THE OLD AND NEW PROCEDURE

Then, the FMS stacks the current active leg, and the entire new arrival procedure as follows:
- The active “TO” waypoint is kept,
- A “F-PLN DISCONTINUITY” is inserted,
- The entire new procedure is strung after the discontinuity.

The crew should check and revise the TMPY F-PLN, as necessary, prior to inserting the TMPY F-PLN in the active F-PLN.

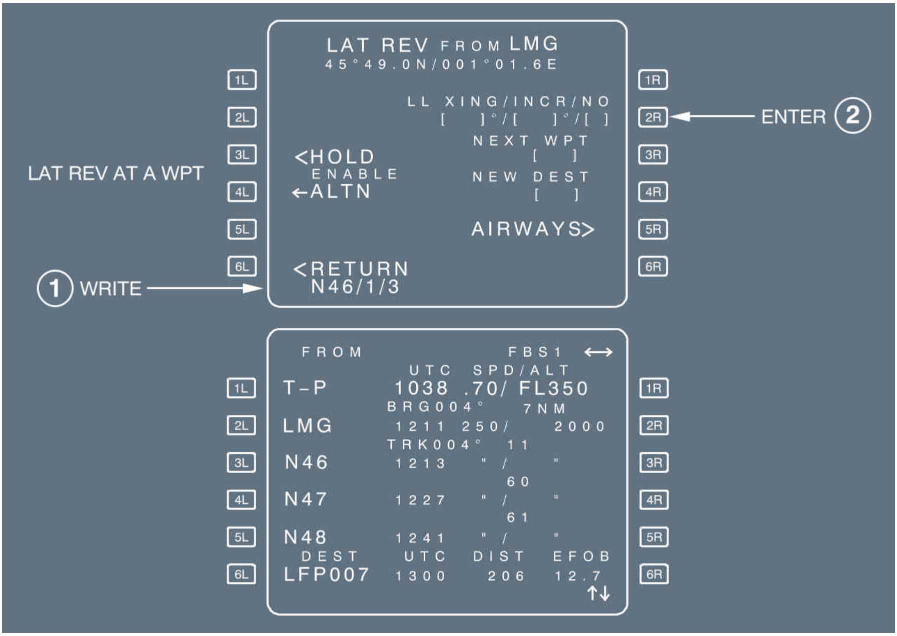
Note: *Depending on the actual progress of the flight, the flight crew may choose the NO STAR and/or NO VIA options on the ARRIVAL page, in order to string only the final part of the approach in the F-PLN.*

CHANGING THE DEPARTURE

If the flight crew changes the departure procedure, the FMS replaces the entire departure procedure by the new selected one .
However, if a lateral modification had been performed within the initially selected departure procedure, the waypoints following the modified waypoint are considered as “en-route” waypoints by the FMS. When a new runway or a new departure is selected, these “en-route” waypoints are kept in the F-PLN, and inserted after the new selected departure.

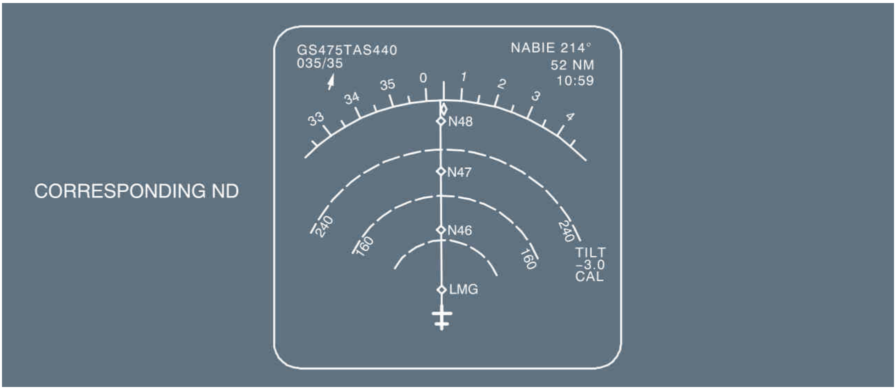
LATITUDE/LONGITUDE CROSSING WAYPOINT INSERTION

This function enables the crew to insert one or several points along the flight plan beyond the revised waypoint, at fixed latitude or longitude intervals (INCR), from a specified latitude or longitude.
These waypoints can be inserted in the F-PLN, and visualized on the ND. They are part of cruise only. They are not stored in the pilot-defined elements; the system deletes them when sequenced.



```
       LAT REV FROM LMG
      45°49.0N/001°01.6E
                  LL XING/INCR/NO
                    [   ]°/[   ]°/[ ]
                       NEXT WPT
 <HOLD                   [   ]
   ENABLE              NEW DEST
 ←ALTN                   [   ]

                       AIRWAYS>

 <RETURN
   N46/1/3
```

```
   FROM                 FBS1  ↔
              UTC   SPD/ALT
 T-P         1038  .70/ FL350
             BRG004°     7NM
 LMG         1211  250/    2000
             TRK004°   11
 N46         1213    "  /   "
                       60
 N47         1227    "  /   "
                       61
 N48         1241    "  /   "
   DEST       UTC    DIST   EFOB
 LFP007      1300     206   12.7
                             ↑↓
```


CORRESPONDING ND
GS475TAS440
035/35
NABIE 214°
52 NM
10:59
33
34
35
0
1
2
3
4
N48
N47
N46
LMG
240
160
240
160
TILT
-3.0
CAL

WRITE the latitude (NXX or XXN, SXX or XXS) or longitude (EXX, XXE, WXX, XXW), the required increment in degrees between the successive waypoints, and the number of required waypoints.

(Example: If the crew wants to obtain 3 points, at every degree of latitude from N46: Enter N46/1/3).

PRESS [2R] to insert it into the LL XING/INCR/NO field.

PRESS [6R] to insert the new waypoints in the flight plan without discontinuity.

The system does not store these waypoints in the database.

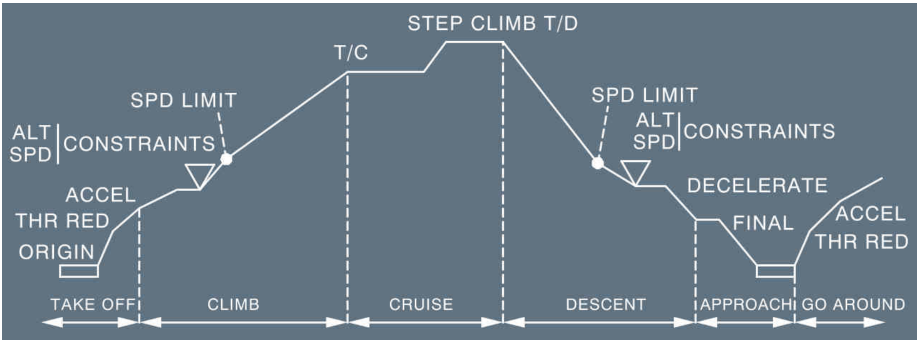
Note: *If one of the obtained waypoints corresponds to an already existing waypoint, it is not inserted.*

General

GENERAL

Ident.: DSC-22_20-30-20-05-00010939.0001001 / 01 OCT 12
Applicable to: ALL

The vertical flight plan is divided into the following flight phases:
Preflight - Takeoff - Climb - Cruise - Descent - Approach - Go-Around - Done.
All but “Preflight” and “Done” phases are associated with speed and altitude profiles.


STEP CLIMB T/D
T/C
SPD LIMIT
ALT
SPD
CONSTRAINTS
ACCEL
THR RED
ORIGIN
SPD LIMIT
ALT
SPD
CONSTRAINTS
DECELERATE
FINAL
ACCEL
THR RED
TAKE OFF
CLIMB
CRUISE
DESCENT
APPROACH
GO AROUND

Each phase has an assigned profile of target speeds. For each phase the FMGS computes an optimum (ECON) speed as a function of the strategic parameters (CI, CRZ FL, ZFW, ZFWCG, block FUEL) and performance criteria.
ECON speed is the basis of the managed speed profile.

The ECON speed can be modified by:
- Presetting a speed or Mach number on the MCDU (PERF page) for the next phase
- Selecting on the FCU a speed or a Mach number for the active phase
- Inserting speed constraints or speed limits on the MCDU vertical revision (VERT REV) page.

The vertical flight plan includes vertical constraints (altitude, speed, time) that may be stored in the data base or entered manually by the flight crew through vertical revision pages.
The flight crew may also define step climbs or step descents for cruise purposes. If the flight crew plans to climb to a higher flight level or descend to a lower level, they can use a vertical revision at any waypoint to insert the new level.
When all the vertical data has been defined, the FMGC computes the vertical profile and the managed speed/Mach profile from takeoff to landing.

VERTICAL FLIGHT PLANNING

Ident.: DSC-22_20-30-20-05-00011065.0002001 / 17 AUG 10
Applicable to: ALL

DATA ENTRY

The vertical flight plan provides the FMGS with all the data required to calculate performance and predictions. This data is either entered by the flight crew or calculated by the FMS.

There are three categories of data:

- Strategic data, that applies to the overall flight profile:
  - Cost Index (CI)
  - Cruise Flight Level (CRZ FL) and STEP ALTS if any
  - Zero-Fuel Weight (ZFW)
  - Zero-Fuel Weight Center of Gravity (ZFWCG)
  - Block Fuel.
- Weather data:
  - Winds (for climb, cruise, descent, approach)
  - Sea level atmospheric pressure (QNH) at destination
  - Surface temperature (TEMP) at destination
  - Temperature in cruise phase
  - The Tropopause altitude (TROPO).
- Tactical data for the flight phases:
  - Phase switching conditions:
    - Setting of the thrust levers to TOGA or FLEX positions
    - Reaching acceleration altitude (ACCEL ALT)
    - Entering cruise (T/C)
    - Initiation of descent (T/D)
    - Passing a deceleration pseudo waypoint (DECEL PSEUDO WPT)
    - Touchdown.
  - Speed profile:
    - V2
    - Economy climb speed or Mach (ECON CLB SPD/MACH)
    - Preselected speed or Mach (SPD/MACH PRESELECTION)
    - Economy cruise Mach (ECON CRZ MACH)
    - Constant Mach
    - Economy descent Mach or speed (ECON DES MACH/SPD)
    - Approach speed (VAPP).
  - Vertical limitations:
    - Speed limits (SPD LIMIT)
    - Speed and altitude constraints (SPD AND ALT CSTR)
    - Time constraints or Required Time of Arrival (RTA).

In addition to the data entered by the flight crew, the FMS uses some real flight data parameters (CRZ SAT, actual wind) to improve the accuracy of the computed predictions.

FLIGHT PHASES

Ident.: DSC-22_20-30-20-05-00011024.0014001 / 03 NOV 22

1 **Applicable to: MSN 10949-11597**

The vertical flight plan is divided into flight phases. For each phase, the FMS computes the optimum speed or Mach Profile. These flight phases are:
Preflight - Takeoff - Climb - Cruise - Descent - Approach - Go-Around - Done.

FLIGHT PHASES	OPTIMUM SPEED PROFILE	SWITCHING CONDITIONS TO NEXT PHASE
PREFLIGHT *(1)*	/	SRS takeoff mode engaged and N1 is more than 85 % (EPR is more than 1.25) or Ground Speed is more than 90 kt
TAKEOFF	V2 (V2 + 10)	At acceleration altitude or by engagement of another vertical mode.
CLIMB	ECON CLB SPD / MACH	Reaching CRZ FL

CRUISE	ECON CRZ MACH	The flight crew orders a descent below the current CRZ FL while one of the following conditions is applicable:
		- There is no step descent point ahead and
		  - The distance to the T/D is less than 40 NM, or
		  - The distance to destination is less than 200 NM, unless the FMS considers the level change as a step descent. *(2)*
		- All engines are operative and selected altitude below Max [FL 200, highest DES ALT CSTR].

DESCENT	ECON DES MACH / SPD	- Overflying (DECEL) pseudo waypoint with NAV (or LOC*/LOC) mode engaged - Manual activation of the Approach phase.
APPROACH	VAPP (GS Mini)	1. To Go-Around: when thrust levers at TOGA detent, or 2. To Done: 30 s after landing, or 3. To Climb: when inserting a new CRZ FL.

Continued on the following page

Continued from the previous page

FLIGHT PHASES	OPTIMUM SPEED PROFILE	SWITCHING CONDITIONS TO NEXT PHASE
GO-AROUND	VAPP or current SPD, whichever is greater. Green Dot at acceleration altitude	1. To Approach: manual activation of the Approach phase, or 2. To Climb: above acceleration altitude, modification of the destination airport by: - Selection of the ALTN, or - Insertion of a NEW DEST, or - Insertion of a SEC F-PLN with a destination airport different from the destination airport of the active F-PLN.
DONE (3)	/	To Preflight: when INIT or PERF key is pressed.

(1) In the Preflight flight phase, the flight crew inserts the flight plan, and all other data that is necessary for the flight.

(2) If the FMS predicts that the aircraft can reach the selected altitude before the T/D by using the step descent guidance (- 1 000 ft/min V/S), then the FMS considers the level change as a step descent and remains in Cruise phase. Altitude constraints ahead of the aircraft that are at or above the new CRZ FL are ignored and the FMS displays ALT CSTR ABOVE CRZ FL.

(3) In the Done phase, the FMS erases the data entered for the flight. If the Descent or the Approach phase is inadvertently activated (for example by manual activation of the Approach phase), the flight crew may reselect a CRZ FL on the PROG page to reactivate the Cruise phase.

FLIGHT PHASES

Ident.: DSC-22_20-30-20-05-00011024.0011001 / 17 SEP 13
Applicable to: MSN 04827-04860

The vertical flight plan is divided into flight phases. For each phase, the FMGS computes the optimum speed or Mach Profile. These flight phases are:
Preflight - Takeoff - Climb - Cruise - Descent - Approach - Go-Around - Done.

FLIGHT PHASES	OPTIMUM SPEED PROFILE	SWITCHING CONDITIONS TO NEXT PHASE
PREFLIGHT	/	SRS takeoff mode engaged and N1 > 85 %(EPR ≥ 1.25) or Ground Speed >90 kt
TAKEOFF	V2 (V2 + 10)	At acceleration altitude or by engagement of another vertical mode.
CLIMB	ECON CLB SPD / MACH	Reaching cruise FL

Continued on the following page

Continued from the previous page

FLIGHT PHASES	OPTIMUM SPEED PROFILE	SWITCHING CONDITIONS TO NEXT PHASE
CRUISE	ECON CRZ MACH	No step descent, and distance to destination < 200 NM, or all engines operative and selected altitude below Max [FL 200, highest DES ALT CSTR]
DESCENT	ECON DES MACH / SPD	- Overflying (DECEL) pseudo waypoint with NAV (or LOC*/LOC) mode engaged and altitude <9 500 ft AGL - Manual activation of the approach phase.
APPROACH	VAPP (GS Min)	1. To Go-Around: When thrust levers at TOGA detent, or 2. To Done: 30 s after landing, or 3. To Climb: When inserting a new CRZ FL.
GO-AROUND	VAPP or current SPD, whichever is greater. Green Dot at ACC ALT	1. To Approach: Manual activation of the approach phase, or 2. To Climb: Above acceleration altitude by - Selecting ALTN, or - inserting NEW DEST
DONE	/	To preflight: When INIT or PERF key depressed.

Note: *During the preflight phase, the flight crew inserts the flight plan, which includes all data needed for the flight.*
During the Done phase, the FMGC erases the data entered for the flight. If the descent or the approach phase is inadvertently activated (manual approach phase activation, for example), the flight crew may reselect a CRZ FL on the PROG page to reactivate the CRZ phase.

FLIGHT PHASES

Ident.: DSC-22_20-30-20-05-00011024.0007001 / 22 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The vertical flight plan is divided into flight phases. For each phase, the FMGS computes the optimum speed or Mach Profile. These flight phases are:
Preflight - Takeoff - Climb - Cruise - Descent - Approach - Go-Around - Done.

FLIGHT PHASES	OPTIMUM SPEED PROFILE	SWITCHING CONDITIONS TO NEXT PHASE
PREFLIGHT	/	SRS takeoff mode engaged and N1 > 85 %(EPR ≥ 1.25) or Ground Speed >90 kt
TAKEOFF	V2 (V2 + 10)	At acceleration altitude or by engagement of another vertical mode.
CLIMB	ECON CLB SPD / MACH	Reaching cruise FL
CRUISE	ECON CRZ MACH	No step descent, and distance to destination < 200 NM, or all engines operative and selected altitude below Max [FL 200, highest DES ALT CSTR]
DESCENT	ECON DES MACH / SPD	- Overflying (DECEL) pseudo waypoint with NAV (or LOC*/LOC) mode engaged and altitude <9 500 ft AGL - Manual activation of the approach phase.
APPROACH	VAPP (GS Min)	1. To Go-Around: When thrust levers at TOGA detent, or 2. To Done: 30 s after landing, or 3. To Climb: When inserting a new CRZ FL.
GO-AROUND	VAPP or current SPD, whichever is greater. Green Dot at ACC ALT	1. To Approach: Manual activation of the approach phase, or 2. To Climb: Above acceleration altitude, modification of the destination airport by: - Selection of the ALTN, or - Insertion of a NEW DEST, or - Insertion of a SEC F-PLN with a destination airport different from the destination airport of the active F-PLN.
DONE	/	To preflight: When INIT or PERF key depressed.

Note: *During the preflight phase, the flight crew inserts the flight plan, which includes all data needed for the flight.*
During the Done phase, the FMGC erases the data entered for the flight. If the descent or the approach phase is inadvertently activated (manual approach phase activation, for example), the flight crew may reselect a CRZ FL on the PROG page to reactivate the CRZ phase.

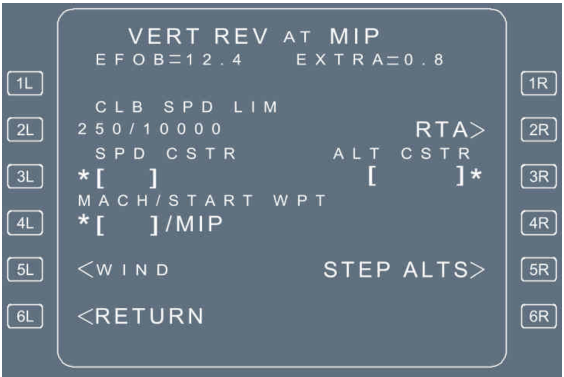
VERTICAL REVISION

Ident.: DSC-22_20-30-20-05-00011025.0002001 / 17 AUG 10

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The flight crew uses vertical revisions to enter or modify:
- The speed limit in the climb and descent phases
- An altitude or speed constraint at the revised waypoint
- A step climb or a step descent
- New wind data
- A time constraint.

The vertical revision page is accessed by pressing a right hand select key of the flight plan page.



```
          VERT REV AT MIP
   EFOB=12.4      EXTRA=0.8

   CLB SPD LIM
 250/10000                 RTA>
   SPD CSTR           ALT CSTR
*[    ]              [      ]*
 MACH/START WPT
*[    ]/MIP

<WIND                STEP ALTS>

<RETURN
```

VERT REV AT CRUISE WPT

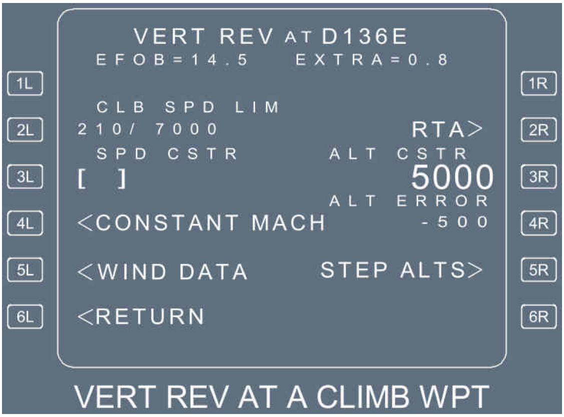
VERTICAL REVISION

Ident.: DSC-22_20-30-20-05-00011025.0004001 / 17 AUG 10

Applicable to: MSN 04827-04860

The flight crew uses vertical revisions to enter or modify:
- The speed limit in the climb and descent phases
- An altitude or speed constraint at the revised waypoint
- A time constraint (RTA)
- A Constant Mach value to be kept in cruise
- A step climb or a step descent
- New wind data.

The vertical revision page is accessed by pressing a right hand select key of the flight plan page.



```
VERT REV AT D136E
 EFOB=14.5     EXTRA=0.8

 CLB SPD LIM
210/ 7000                  RTA>
 SPD CSTR             ALT CSTR
[  ]                      5000
                     ALT ERROR
<CONSTANT MACH            -500

<WIND DATA          STEP ALTS>

<RETURN
```

VERT REV AT A CLIMB WPT

VERTICAL CONSTRAINTS (SPEED, ALTITUDE, TIME)

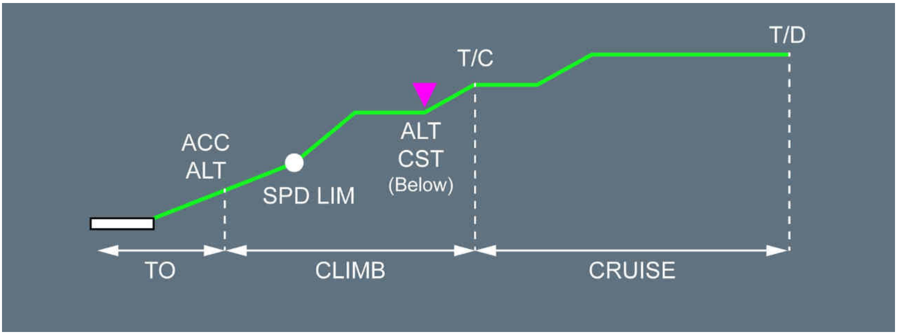
Ident.: DSC-22_20-30-20-05-00012689.0006001 / 05 MAR 19

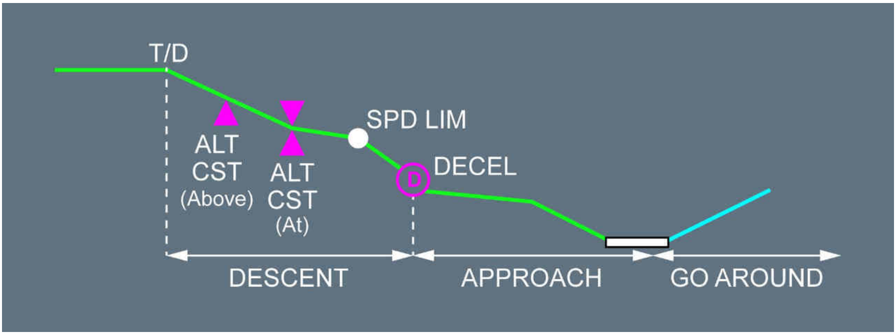
3 **Applicable to: MSN 10949-11597**

The flight crew enters speed, altitude and time constraint. These elements either comply with ATC requests and specified procedures, or with the decision of the flight crew, in response to operational variables.

SPEED LIMIT

A speed limit is associated with altitude as a maximum speed below a specified altitude (only one in climb and one in descent).





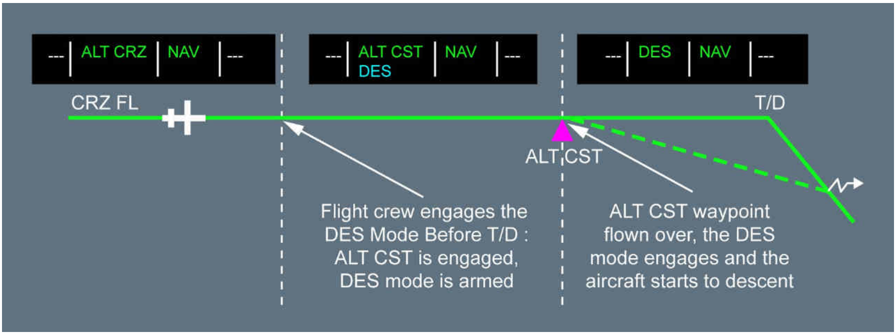
ALTITUDE CONSTRAINT

Specific waypoints may have altitude constraints in climb, descent, or approach phases. To comply with the altitude constraint, the aircraft must fly over the waypoint at an altitude that is equal to, above or below the altitude constraint, as specified by the flight crew or the database.

Note: *The database may contain an altitude constraint window. These are the two altitudes between which the aircraft must fly, over a specific waypoint. However, the flight crew cannot enter such a constraint manually.*

An altitude constraint is considered as missed if the system predicts more than 250 ft of difference between the constraint value and the predicted aircraft altitude.
Altitude constraints are observed in CLB, or DES, or APP NAV-FINAL APP modes.

The FMS automatically engages the ALT CST mode and arms the DES mode until the aircraft fly over the ALT CST waypoint when both of the following apply:
- There is an altitude constraints at the CRZ FL, and
- The flight crew engages the DES mode before the T/D computed by the FMS.

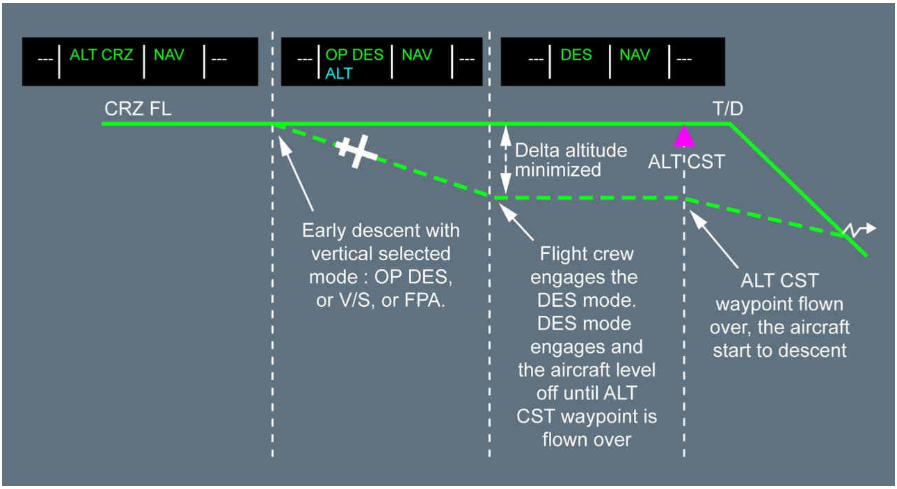


Flight crew engages the DES Mode Before T/D : ALT CST is engaged, DES mode is armed

ALT CST waypoint flown over, the DES mode engages and the aircraft starts to descent

During an early descent performed with a vertical selected mode (OP DES, or V/S, or FPA), the FMS automatically levels off the aircraft, when all of the following apply:
- There is an altitude constraint at the CRZ FL, and
- The aircraft is below the ALT CST, and
- The flight crew engages the DES mode.

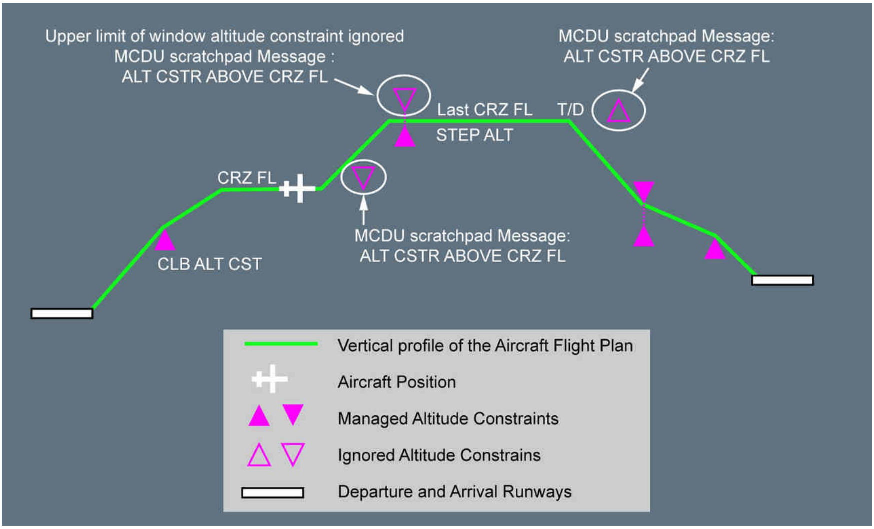
The level off is maintained until the ALT CST waypoint is flown over. This enables to minimize the delta altitude between aircraft altitude and ALT CST supposed to be respected at DES engagement:


--- | ALT CRZ | NAV | ---
--- | OP DES ALT | NAV | ---
--- | DES | NAV | ---
CRZ FL
T/D
Delta altitude minimized
ALT CST
Early descent with vertical selected mode : OP DES, or V/S, or FPA.
Flight crew engages the DES mode. DES mode engages and the aircraft level off until ALT CST waypoint is flown over
ALT CST waypoint flown over, the aircraft start to descent

IGNORED ALTITUDE CONSTRAINTS:

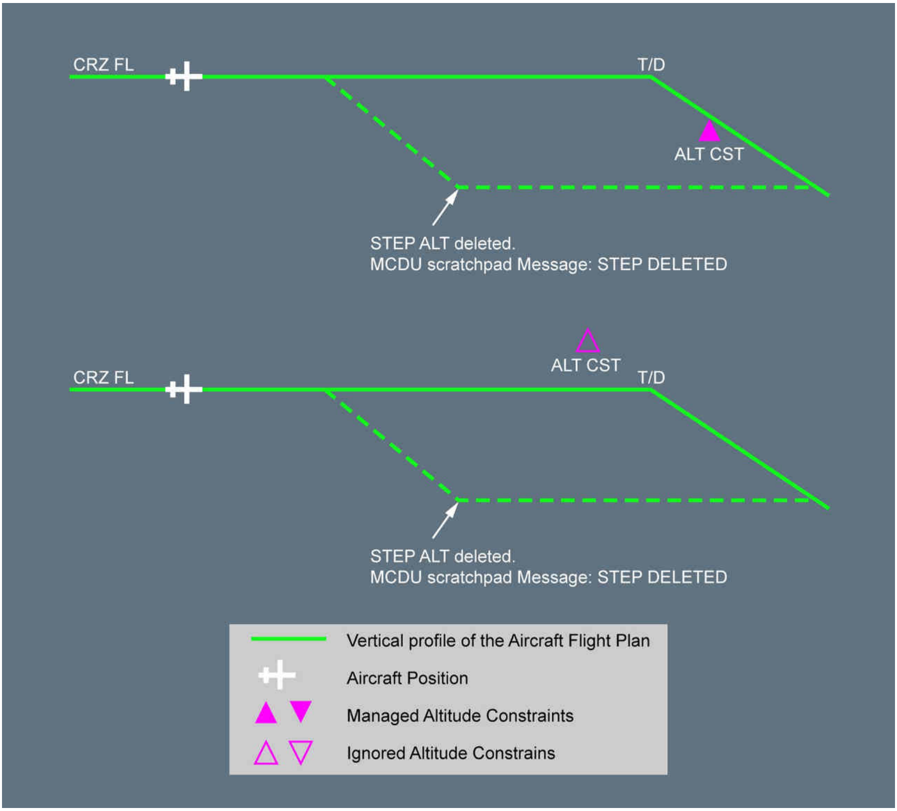
The FMS automatically disregards all of the following:
- The altitude constraints above CRZ FL (CRZ FL indicated in the FMS PROG page)
- The altitude constraints above the last STEP ALT.

In all these cases, the "ALT CSTR ABOVE CRZ FL" MCDU scratchpad message appears.


Upper limit of window altitude constraint ignored
MCDU scratchpad Message :
ALT CSTR ABOVE CRZ FL
MCDU scratchpad Message:
ALT CSTR ABOVE CRZ FL
Last CRZ FL
T/D
STEP ALT
CRZ FL
CLB ALT CST
MCDU scratchpad Message:
ALT CSTR ABOVE CRZ FL
Vertical profile of the Aircraft Flight Plan
Aircraft Position
Managed Altitude Constraints
Ignored Altitude Constrains
Departure and Arrival Runways

STEP ALT INSERTION

The FMS automatically prevents STEP ALT insertion, if the STEP DES altitude is below an altitude constraint. The associated "ENTRY OUT OF RANGE" MCDU scratchpad message appears.
The FMS automatically deletes STEP DES, if an altitude constraint is located at or above the STEP DES altitude, even if the altitude constraint is ignored by the FMS. The associated "STEP DELETED" MCDU scratchpad message appears.


CRZ FL
T/D
ALT CST
STEP ALT deleted.
MCDU scratchpad Message: STEP DELETED
ALT CST
CRZ FL
T/D
STEP ALT deleted.
MCDU scratchpad Message: STEP DELETED
Vertical profile of the Aircraft Flight Plan
Aircraft Position
Managed Altitude Constraints
Ignored Altitude Constrains

SPEED CONSTRAINT

Speed constraints may be attached to specific waypoints in the climb, descent or approach phases. To meet the speed constraint, the aircraft must fly over the waypoint with a speed equal to or less than the speed constraint.
A speed constraint is considered as missed if the system predicts an aircraft speed 10 kt higher than the speed constraint.
Speed constraints are observed when the NAV mode is engaged and the speed target is managed. In other cases, speed constraints are disregarded.

TIME CONSTRAINT

Any waypoint may have time constraints, except the FROM waypoint.

Note: There is no constraint associated to go-around waypoints.

VERTICAL CONSTRAINTS (SPEED, ALTITUDE, TIME)

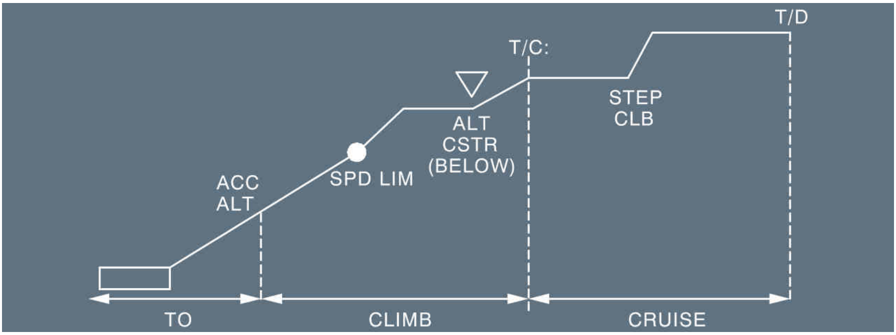
Ident.: DSC-22_20-30-20-05-00012689.0005001 / 18 FEB 15

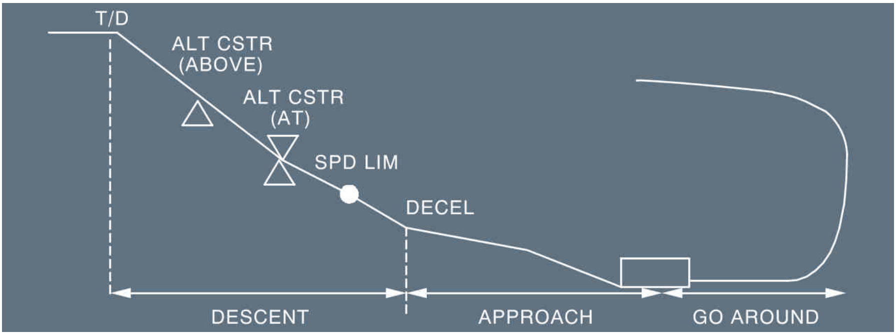
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The flight crew enters speed, altitude and time constraint, either to comply with ATC requests and specified procedures, or at the discretion of the flight crew, in response to operational variables.

SPEED LIMIT

A speed limit is associated with altitude as a maximum speed below a specified altitude (only one in climb and one in descent).


T/D
T/C:
STEP CLB
ALT CSTR (BELOW)
SPD LIM
ACC ALT
TO
CLIMB
CRUISE


T/D
ALT CSTR (ABOVE)
ALT CSTR (AT)
SPD LIM
DECEL
DESCENT
APPROACH
GO AROUND

ALTITUDE CONSTRAINT

Altitude constraints may be attached to specific waypoints in the climb, descent, or approach phases.

To meet the altitude constraint, the aircraft must fly over the waypoint at an altitude equal, above or below the altitude constraint as specified by the flight crew or the database.

Note: *The database may contain an altitude constraint window (two altitudes between which the aircraft must fly passing over a given waypoint), but the flight crew cannot enter such a constraint manually.*

An altitude constraint is considered as missed if the system predicts more than 250 ft of difference between the constraint value and the predicted aircraft altitude.
Altitude constraints are observed in CLB or DES or APP NAV-FINAL modes.

The FMS automatically deletes from the F-PLN:
- The altitude constraints ("AT", "AT OR ABOVE", or "AT OR BELOW") with values greater than the CRZ FL
- The altitude constraint windows with the upper constraint greater than the CRZ FL.

The MCDU and the ND no longer display the deleted altitude constraints. These altitude constraints are no longer used for the computation of the FMS climb and descent profile.
In that case, the scratchpad of the MCDU displays the "CSTR DEL ABOVE CRZ FL" message.
The FMS does not delete the altitude constraints at the CRZ FL. The FMS computes the T/D, in order to respect these altitude constraints. However these altitude constraints are not used for guidance. If the flight crew initiates the descent before reaching the T/D, the aircraft descents below the altitude constraints, and the altitude constraints are missed (amber on the MCDU and on the ND).

SPEED CONSTRAINT

Speed constraints may be attached to specific waypoints in the climb, descent or approach phases. To meet the speed constraint, the aircraft must fly over the waypoint with a speed equal or less than the speed constraint.
A speed constraint is considered as missed if the system predicts an aircraft speed 10 kt greater than the speed constraint.
Speed constraints are observed when NAV mode is engaged and speed target is managed. Otherwise speed constraints are disregarded.

TIME CONSTRAINT

Time constraint may be attached to any waypoint except the "from" waypoint.

Note: *No constraint can be associated with go-around waypoints.*

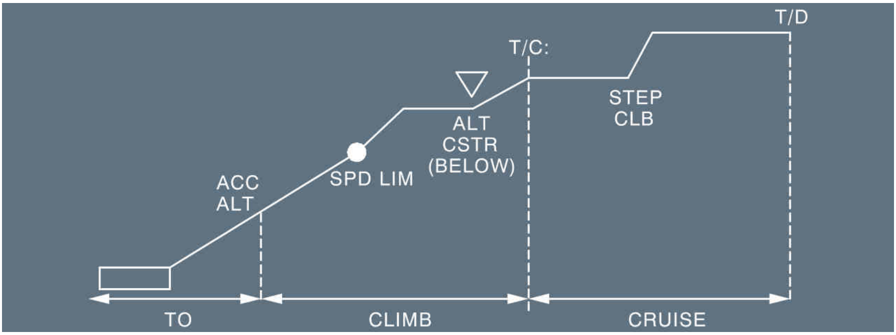
VERTICAL CONSTRAINTS (SPEED, ALTITUDE, TIME)

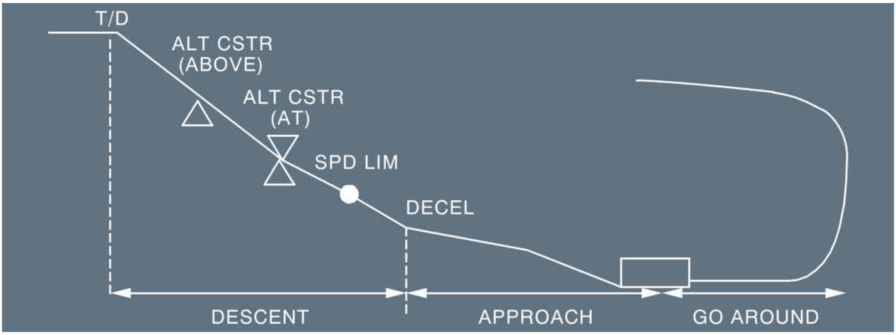
Ident.: DSC-22_20-30-20-05-00012689.0004001 / 18 FEB 15
Applicable to: MSN 04827-04860

The flight crew enters speed, altitude and time constraint, either to comply with ATC requests and specified procedures, or at the discretion of the flight crew, in response to operational variables.

SPEED LIMIT

A speed limit is associated with altitude as a maximum speed below a specified altitude (only one in climb and one in descent).


T/D
T/C:
STEP
CLB
ALT
CSTR
(BELOW)
SPD LIM
ACC
ALT
TO
CLIMB
CRUISE


T/D
ALT CSTR
(ABOVE)
ALT CSTR
(AT)
SPD LIM
DECEL
DESCENT
APPROACH
GO AROUND

ALTITUDE CONSTRAINT

Altitude constraints may be attached to specific waypoints in the climb, descent, or approach phases.
To meet the altitude constraint, the aircraft must fly over the waypoint at an altitude equal, above or below the altitude constraint as specified by the flight crew or the database.

Note: *The database may contain an altitude constraint window (two altitudes between which the aircraft must fly passing over a given waypoint), but the flight crew cannot enter such a constraint manually.*

An altitude constraint is considered as missed if the system predicts more than 250 ft of difference between the constraint value and the predicted aircraft altitude.
Altitude constraints are observed in CLB or DES or APP NAV-FINAL modes.

The FMS automatically deletes from the F-PLN:
- The altitude constraints ("AT", "AT OR ABOVE", or "AT OR BELOW") with values equal to the CRZ FL, or greater than the CRZ FL
- The altitude constraint windows with lower constraints equal to the CRZ FL, or greater than the CRZ FL
- The upper constraint of altitude constraint windows with upper constraints equal to the CRZ FL, or greater than the CRZ FL. If the lower constraint of the altitude constraint window is below the CRZ FL, the FMS deletes only the upper constraint of the altitude constraint window and keeps the lower constraint of the altitude constraint window.

The MCDU and the ND no longer display the deleted altitude constraints. These altitude constraints are no longer used for the computation of the FMS climb and descent profile.
In that case, the scratchpad of the MCDU displays the "CSTR DEL ABOVE CRZ FL" message.

SPEED CONSTRAINT

Speed constraints may be attached to specific waypoints in the climb, descent or approach phases. To meet the speed constraint, the aircraft must fly over the waypoint with a speed equal or less than the speed constraint.
A speed constraint is considered as missed if the system predicts an aircraft speed 10 kt greater than the speed constraint.
Speed constraints are observed when NAV mode is engaged and speed target is managed. Otherwise speed constraints are disregarded.

TIME CONSTRAINT

Time constraint may be attached to any waypoint except the "from" waypoint.

Note: *No constraint can be associated with go-around waypoints.*

Intentionally left blank

FMS2 Honeywell

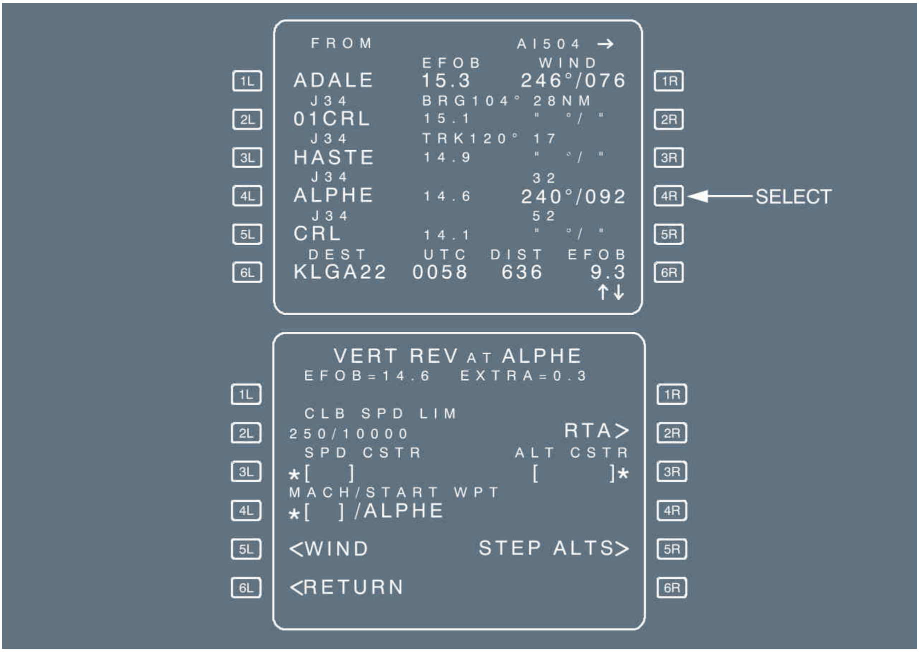
GENERAL

Ident.: DSC-22_20-30-20-25-00009323.0008001 / 14 MAY 12

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The vertical revision function allows the pilot to modify the following parts of the flight plan:
- Speed limit
- Speed and altitude constraints
- Time constraints
- Wind
- Step climb or step descent
- Constant Mach Segment

The pilot selects these functions by pressing the right key on flight plan A or B.



```
  FROM                     AI504 →
               EFOB        WIND
ADALE          15.3      246°/076
  J34          BRG104°  28NM
01CRL          15.1        "  °/ "
  J34          TRK120°  17
HASTE          14.9        "  °/ "
  J34                    32
ALPHE          14.6      240°/092
  J34                    52
CRL            14.1        "  °/ "
 DEST          UTC    DIST   EFOB
KLGA22        0058    636     9.3
                               ↑↓
```

SELECT

```
     VERT REV AT ALPHE
  EFOB=14.6    EXTRA=0.3

  CLB SPD LIM
250/10000                RTA>
  SPD CSTR           ALT CSTR
*[   ]               [     ]*
MACH/START WPT
*[   ]/ALPHE
<WIND              STEP ALTS>
<RETURN
```

Note: This vertical functions section only describes the following three functions: Wind and time constraints, and Constant Mach Segment.
For other vertical revision functions: Refer to the Systems Related Procedures section.

REQUIRED TIME OF ARRIVAL (RTA)

Ident.: DSC-22_20-30-20-25-A-00009324.0004001 / 26 NOV 19
2 **Applicable to: MSN 10949-11597**

GENERAL

A Required Time of Arrival (RTA) is a time requirement to be met over a specified waypoint of the lateral flight plan, including destination but excluding the origin and FROM waypoints. When the predictions are available, the time constraint value is replaced by the predicted time at the related waypoint, highlighted by a star (*):
- If the RTA is predicted as matched, the star (*) is in magenta
- If the RTA is predicted as missed, the star (*) is in amber.

When a RTA is defined, time constraint is displayed on ND with a 1 s resolution (HH:MM:SS).

Ident.: DSC-22_20-30-20-25-A-00009324.0001001 / 24 JAN 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

GENERAL

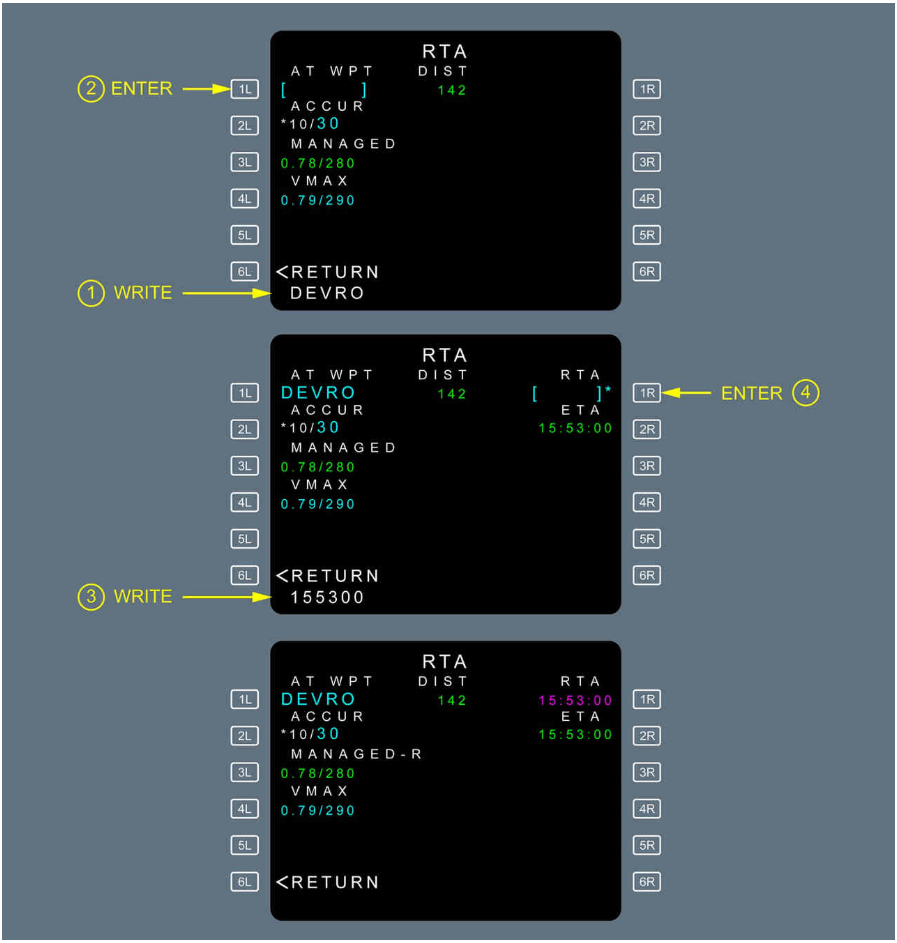
A Required Time of Arrival (RTA) is a time requirement to be met over a specified waypoint of the lateral flight plan, including destination but excluding the origin and FROM waypoints. When the predictions are available, the time constraint value is replaced by the predicted time at the related waypoint, highlighted by a star (*):
- If the RTA is predicted as matched, the star (*) is in magenta.
- If the RTA is predicted as missed, the star (*) is in amber.

No specific symbol is provided on the ND.
A time constraint is cleared in the same way as any other constraints. If a time constraint is automatically deleted. The MCDU displays an “RTA DELETED” message.

Ident.: DSC-22_20-30-20-25-A-00000489.0010001 / 26 NOV 19
3 **Applicable to: MSN 10949-11597**

HOW TO ENTER A REQUIRED TIME OF ARRIVAL

Access the RTA page via the F-PLN key, select VERT REV at any waypoint and then select RTA prompt [1R].


② ENTER
① WRITE
RTA
AT WPT
DIST
[ ]
142
ACCUR
*10/30
MANAGED
0.78/280
VMAX
0.79/290
<RETURN
DEVRO
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
RTA
AT WPT
DIST
RTA
DEVRO
142
[ ]*
ACCUR
ETA
*10/30
15:53:00
MANAGED
0.78/280
VMAX
0.79/290
<RETURN
155300
ENTER ④
③ WRITE
RTA
AT WPT
DIST
RTA
DEVRO
142
15:53:00
ACCUR
ETA
*10/30
15:53:00
MANAGED-R
0.78/280
VMAX
0.79/290
<RETURN

WRITE the identifier of the waypoint at which a time constraint is to be defined in the scratchpad and ENTER this identifier in the [1L] field.

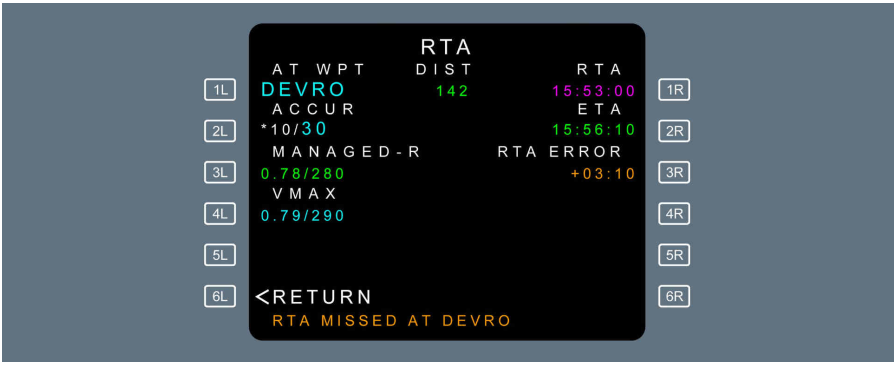
L2 *When accessing the RTA page, the [1L] field is defaulted to the waypoint at which the vertical revision has been performed.*

L1 WRITE the RTA in the scratchpad and ENTER the RTA in the [1R] field.

L2 *The format is +/- HHMMSS (entry of seconds is not mandatory).*

L1

CHECK the following field to determine whether the entered constraint can be met:
- RTA ERROR field [3R] (and associated RTA MISSED AT XXX message if displayed).



```
                      RTA
 AT WPT        DIST                 RTA
DEVRO           142            15:53:00
 ACCUR                              ETA
*10/30                         15:56:10
 MANAGED-R                    RTA ERROR
0.78/280                         +03:10
 VMAX
0.79/290


<RETURN
 RTA MISSED AT DEVRO
```

CANCELLATION AND SEQUENCING OF REQUIRED TIME OF ARRIVAL

The time constraint is cleared in the same way as any other constraint:
- On the F-PLN A page, using the CLR key. In this case all constraints on the point will be deleted.
- On the RTA page, using the CLR key.

The time constraint is automatically deleted in the following cases:
- Engine out, or
- When entering a holding pattern, or
- In the case of go-around, or
- A time constraint is entered at another waypoint, while another time constraint already exists, or
- The waypoint associated to the RTA is no more in the flight plan.

Note: *When a previously entered RTA is automatically deleted, the RTA DELETED scratchpad message is displayed.*

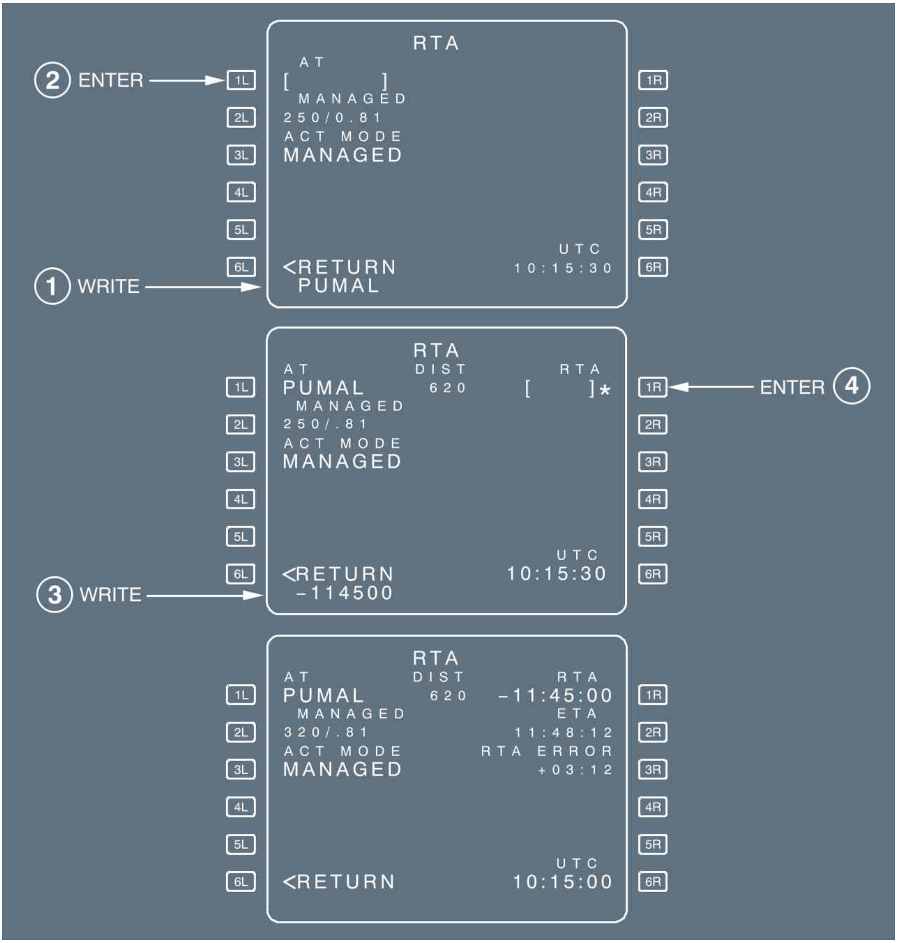
When the constrained waypoint is sequenced, the ECON SPD/MACH is resumed unless the constrained waypoint is located in the descent segment (in this case, the RTA speed is kept).

Ident.: DSC-22_20-30-20-25-A-00000489.0008001 / 14 MAY 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

ENTERING A REQUIRED TIME OF ARRIVAL

SELECT the F-PLN key on the MCDU.
SELECT a VERT REV at the revised waypoint.
SELECT the RTA prompt (2R).

CHECK, ENTER or MODIFY the identifier of the waypoint at which the time constraint is to be defined in the [1L] field.


② ENTER
① WRITE
RTA
AT
[ ]
MANAGED
250/0.81
ACT MODE
MANAGED
<RETURN
PUMAL
UTC
10:15:30
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
RTA
AT
PUMAL
DIST
620
RTA
[ ]*
ENTER ④
MANAGED
250/.81
ACT MODE
MANAGED
③ WRITE
<RETURN
-114500
UTC
10:15:30
RTA
AT
PUMAL
DIST
620
RTA
-11:45:00
MANAGED
320/.81
ETA
11:48:12
ACT MODE
MANAGED
RTA ERROR
+03:12
<RETURN
UTC
10:15:00

WRITE the required time of arrival.

The format is +/- HHMMSS (entry of seconds is not mandatory).

ENTER it in the 1R field.

CHECK the 2R and 3R fields to determine whether the entered constraint can be met.

WIND - TEMPERATURE - QNH

Ident.: DSC-22_20-30-20-25-B-00000490.0001001 / 24 JAN 11

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

GENERAL

In order to receive the best predictions, the pilot must enter wind and temperature values for the different phases and for the various waypoints of the cruise phase.
The system uses the temperature value at a given altitude, associated with the tropopause entered on the INIT A page, to optimize the temperature profile.

Ident.: DSC-22_20-30-20-25-B-00009327.0001001 / 24 JAN 11

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENTERING THE TRIP WIND AND TEMPERATURE DURING F-PLN INITIALIZATION

The trip wind is a mean wind component for the entire flight from origin to destination. The pilot can enter it on the INIT B page prior to engine start. It is usually defined by the airline's flight operations on the computerized flight plan.
The FMGS does not consider the trip wind for alternate predictions.
The trip wind is used as long as no winds are entered in the CLB, CRZ, and DES WIND pages.
When the pilot enters a CLB, CRZ or DES WIND, the FMGS disregards the trip wind.

PRESS the INIT key.
INSERT the temperature at cruise FL.
On the INIT B page, INSERT the TRIP WIND.
The trip wind is defined as a headwind component (HDXX, XXHD or –XX), or as a tailwind (TLXX, XXTL or +XX).
The FMGS uses the trip wind to compute preliminary performance, time and fuel predictions.
CHECK the predictions on the F-PLN B page.

Ident.: DSC-22_20-30-20-25-B-00009328.0008001 / 01 MAR 18

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENTERING THE WIND AND TEMPERATURE DURING F-PLN INITIALIZATION

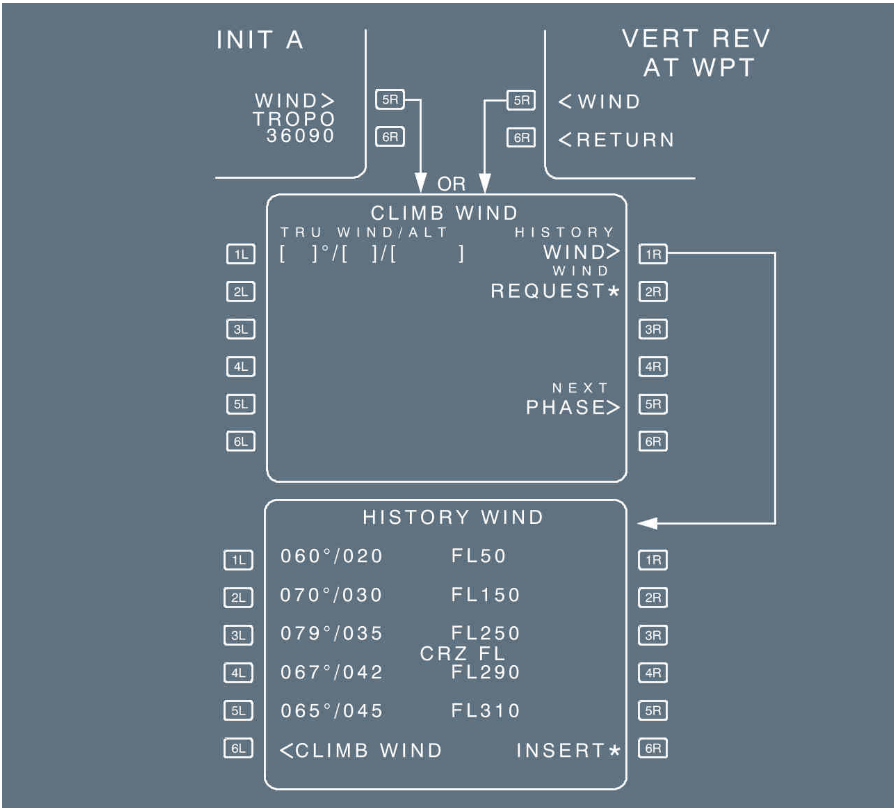
When completing the INIT A page, and once the wind and cruise FL temperature forecasts are available, the pilot may enter them, if significantly different, by pressing the wind prompt.
The pilot will access the different wind pages by using the NEXT PHASE and PREV PHASE prompts. He will slew the CRZ WIND page to access the various cruise wind waypoints.

The pilot will enter wind data as follows:

- For climb phase: By inserting either the HISTORY WIND data (as recorded during the last descent), or by inserting winds (at up to 5 altitudes) on the CLIMB WIND page.
- For cruise phase: By inserting winds (at up to 4 FL) at various CRZ waypoints on the CRZ WIND pages. The 4 levels are the same for all the cruise waypoints. The pilot may enter the temperature of each waypoint and at destination on this page.
- For descent phase: By inserting winds (at up to 5 FL/altitudes) on the DES WIND page.
- For the ALTN F-PLN, an average wind may be entered on the DES WIND page for alternate cruise flight level.

Note: *Wind can be automatically received (and inserted) through the ACARS system.*

Once a CLIMB, CRZ, or DESCENT WIND is entered, the system ignores the TRIP WIND.
Once temperature and winds are inserted, the FMGS computes the ISA profile, and the F-PLN B page displays the forescast wind profile (by linear interpolation and propagation).


INIT A
WIND>
TROPO
36090
5R
6R
VERT REV
AT WPT
<WIND
<RETURN
OR
CLIMB WIND
TRU WIND/ALT
[ ]°/[ ]/[ ]
HISTORY
WIND>
WIND
REQUEST*
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
HISTORY WIND
060°/020 FL50
070°/030 FL150
079°/035 FL250
CRZ FL
067°/042 FL290
065°/045 FL310
<CLIMB WIND
INSERT*

WIND ENTRY RULES

When a wind entry is performed from an empty field, direction/velocity/altitude (or flight level) must be entered simultaneously. One entry in each bracket.
Overwriting a wind cancels the previous one.
Entered wind data can be cleared: The field reverts to brackets.
Propagated wind cannot be cleared.
Entering a new altitude, over an existing altitude, replaces that existing altitude at all cruise waypoints. Any winds entered at the overwritten altitude are lost at all cruise waypoints.

ENTERING THE HISTORY WIND (F-PLN INITIALIZATION)

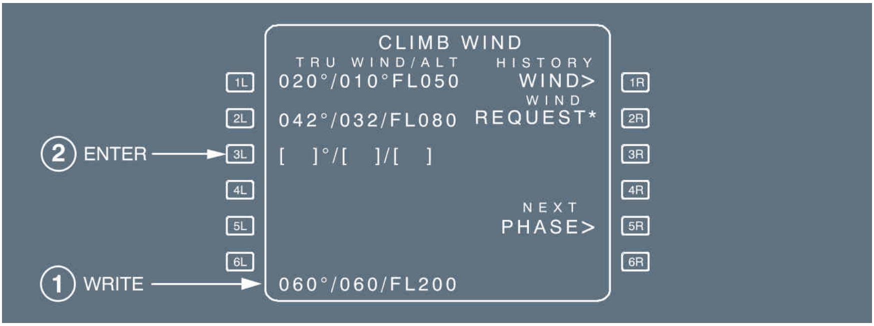
The pilot may insert the history wind, but cannot modify this page.

If convenient, PRESS the (6R) prompt to insert. After insertion, the [6R] prompt is suppressed, but the page still displays the wind values for information.

ENTERING THE CLIMB WIND (F-PLN INITIALIZATION)

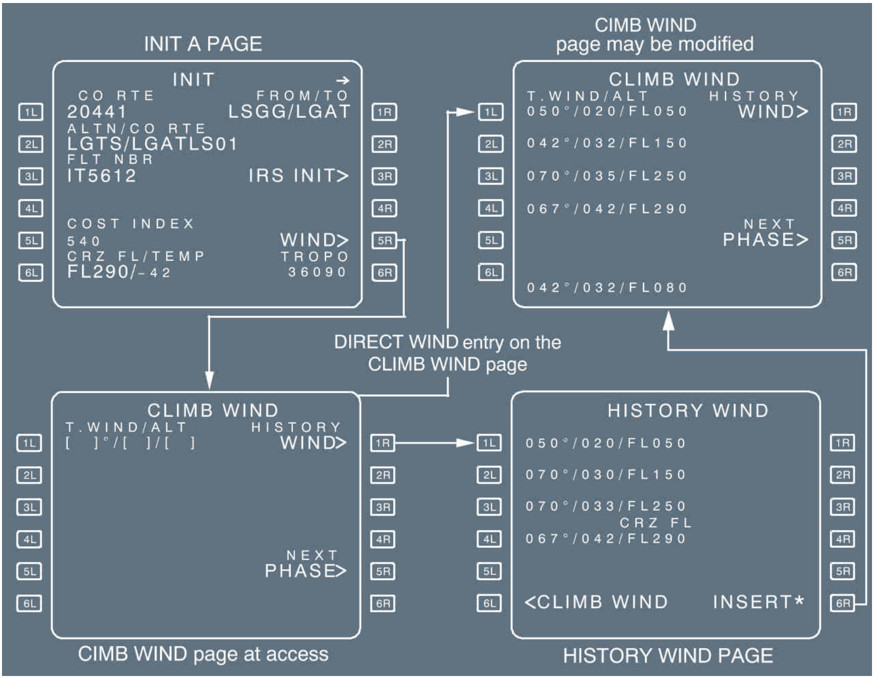
If history winds are not convenient:

SELECT CLIMB WIND page from INIT A page or VERT REV page.
WRITE new winds into the scratchpad and ENTER.



```
        CLIMB WIND
 TRU WIND/ALT       HISTORY
020°/010°FL050        WIND>
                     WIND
042°/032/FL080    REQUEST*
[  ]°/[  ]/[  ]

                     NEXT
                   PHASE>

060°/060/FL200
```

Winds entered on the CLIMB, CRZ, and DESCENT WIND pages are always true north referenced.
Tower wind, entered on PERF APPR page is magnetic-referenced.
The pilot can enter “GRND” in the altitude field for wind at destination.
CLIMB WIND cannot be modified when the climb phase is active.
At climb phase transition, wind data switches from blue to green, and any attempted modification will trigger the “NOT ALLOWED” message.
The system extrapolates the highest wind entry to all higher levels.
The system interpolates winds between 2 entered levels.


INIT A PAGE
CIMB WIND
page may be modified
INIT →
CO RTE
20441
FROM/TO
LSGG/LGAT
ALTN/CO RTE
LGTS/LGATLS01
FLT NBR
IT5612
IRS INIT>
COST INDEX
540
WIND>
CRZ FL/TEMP
FL290/-42
TROPO
36090
CLIMB WIND
T.WIND/ALT
050°/020/FL050
HISTORY
WIND>
042°/032/FL150
070°/035/FL250
067°/042/FL290
NEXT
PHASE>
042°/032/FL080
DIRECT WIND entry on the
CLIMB WIND page
CLIMB WIND
T.WIND/ALT
[ ]°/[ ]/[ ]
HISTORY
WIND>
NEXT
PHASE>
HISTORY WIND
050°/020/FL050
070°/030/FL150
070°/033/FL250
CRZ FL
067°/042/FL290
<CLIMB WIND
INSERT*
CIMB WIND page at access
HISTORY WIND PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

Ident.: DSC-22_20-30-20-25-B-00009329.0001001 / 01 MAR 18

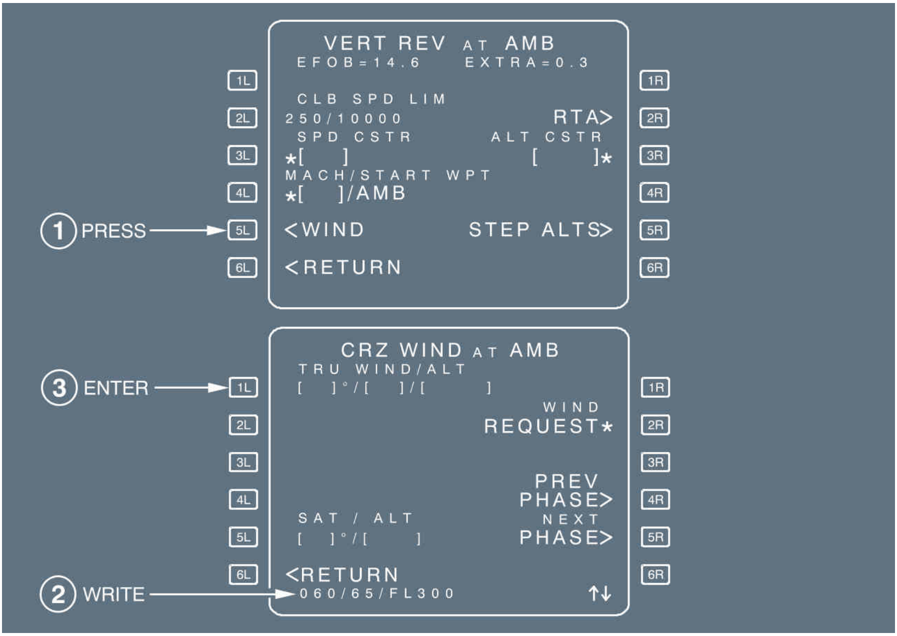
7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENTERING THE CRUISE WINDS AND TEMPERATURES

At flight plan initialization, the CRZ WIND page displays all cruise waypoints with empty brackets. In flight, only downpath waypoints are displayed.

SELECT VERT REV at WPT.
PRESS the WIND prompt.
SELECT NEXT PHASE.
SLEW until relevant waypoint is displayed.
WRITE and ENTER the new temperature into the scratchpad.
WRITE and ENTER the new wind data into the scratchpad.

WIND and temperature may be entered through the ACARS pages.


VERT REV AT AMB
EFOB=14.6
EXTRA=0.3
CLB SPD LIM
250/10000
RTA>
SPD CSTR
ALT CSTR
*[ ]
[ ]*
MACH/START WPT
*[ ]/AMB
<WIND
STEP ALTS>
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
① PRESS
CRZ WIND AT AMB
TRU WIND/ALT
[ ]°/[ ]/[ ]
WIND
REQUEST*
PREV
PHASE>
SAT / ALT
NEXT
PHASE>
[ ]°/[ ]
<RETURN
060/65/FL300
↑↓
③ ENTER
② WRITE

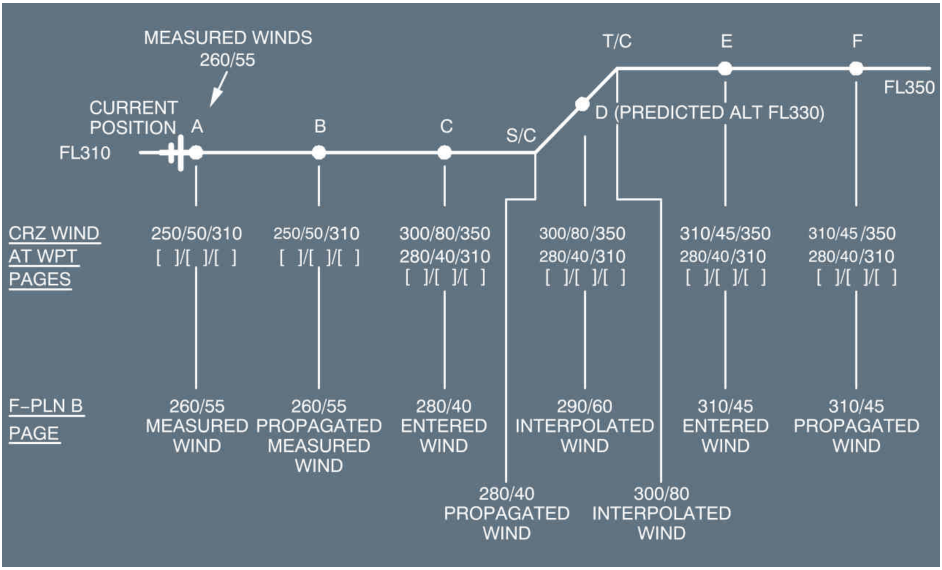
The crew will modify the entered winds and temperatures in flight, if a significant difference is expected (greater than 30 kt or 30 ° for the wind data and greater than 5 °C for the temperature). The system propagates the pilot's (or ACARS) wind and temperature entries downpath, until a waypoint for which a different temperature or wind has been entered (for the same flight level), or until the last cruise waypoint.

The forecast winds at a waypoint are determined as follows:
- If the predicted altitude at the waypoint matches an altitude defined in the CRZ WIND page, the forecast wind, is the corresponding entered or propagated wind, displayed at that waypoint on the CRZ WIND page.
- If the predicted altitude lies between two altitudes entered on the CRZ WIND page, the wind direction and velocity are linearly interpolated.
- If the predicted altitude is above or below the set of cruise altitudes, the forecast wind is a constant value extrapolated from the entered or propagated wind at the highest (or lowest) altitude displayed on the CRZ WIND page for that point.

Once in flight, the FMGS considers the actual measured wind up to 200 NM ahead of the aircraft to permanently update the wind profile. This updated wind profile is used to compute the predictions and the performance data, but is not displayed to the crew.

The CRZ WIND pages display the propagated values in small blue font, and the pilot (or ACARS) entries in large blue font.

Note: *The CRZ WIND page displays ACARS or crew-entered or propagated data. It never displays computed data (F-PLN B page only).*
Example:


MEASURED WINDS
260/55
T/C
E
F
FL350
CURRENT
POSITION
A
B
C
S/C
D (PREDICTED ALT FL330)
FL310
CRZ WIND
AT WPT
PAGES
250/50/310
[ ]/[ ]/[ ]
250/50/310
[ ]/[ ]/[ ]
300/80/350
280/40/310
[ ]/[ ]/[ ]
300/80/350
280/40/310
[ ]/[ ]/[ ]
310/45/350
280/40/310
[ ]/[ ]/[ ]
310/45 /350
280/40/310
[ ]/[ ]/[ ]
F-PLN B
PAGE
260/55
MEASURED
WIND
260/55
PROPAGATED
MEASURED
WIND
280/40
ENTERED
WIND
290/60
INTERPOLATED
WIND
310/45
ENTERED
WIND
310/45
PROPAGATED
WIND
280/40
PROPAGATED
WIND
300/80
INTERPOLATED
WIND

Ident.: DSC-22_20-30-20-25-B-00009330.0001001 / 24 JAN 11

8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

EFFECT OF WIND ENTRIES ON OPTIMUM FLIGHT LEVEL

The OPT FL computation considers the wind entries made at different altitudes (normally at the different CRZ FL).
When flying the subsequent CRZ FL, the OPT FL proposed by the PROG page may be affected by the wind entries made at the previous CRZ FL; these winds are automatically propagated and may be significantly different from the actual winds.
We recommend the following procedure: If the propagated winds at the lower altitudes are significantly different from the actual winds, enter the wind at these altitudes, or if not available, the wind measured at the current CRZ FL.

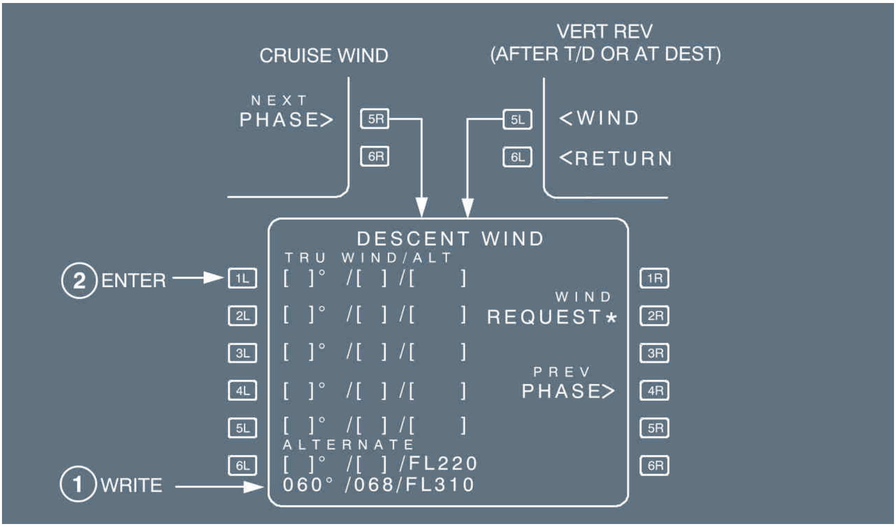
Ident.: DSC-22_20-30-20-25-B-00009331.0001001 / 14 MAY 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ENTERING THE DESCENT WINDS

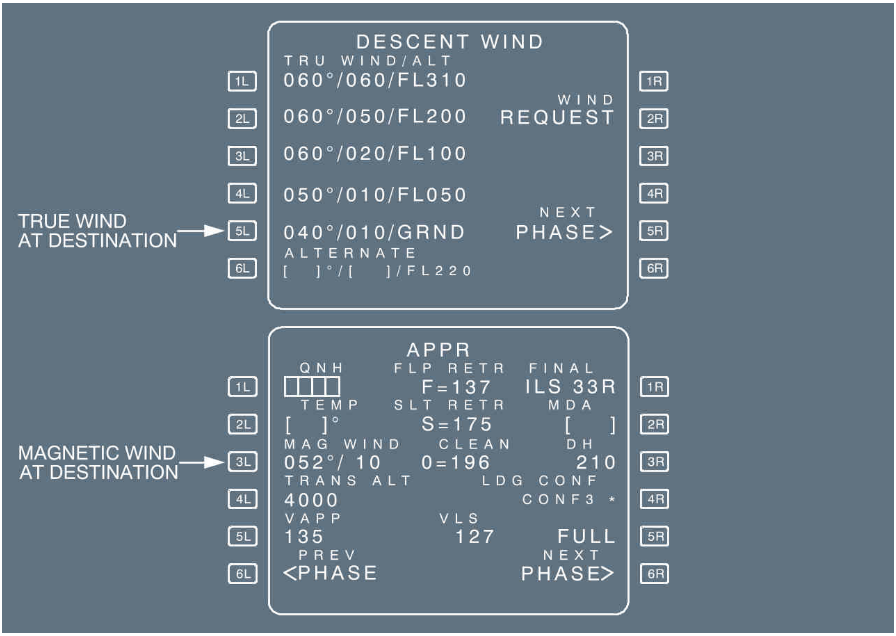
The pilot will enter as many as one wind at 5 different FL or altitudes. This wind data will be used for descent profile and prediction computation.

From the vertical revision page, or from the CRZ WIND page:

PRESS the WIND prompt.
SELECT the DESCENT WIND page.
ENTER up to 5 different “wind/altitude”.


CRUISE WIND
VERT REV
(AFTER T/D OR AT DEST)
NEXT PHASE>
5R
6R
5L
6L
<WIND
<RETURN
DESCENT WIND
TRU WIND/ALT
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
ALTERNATE
[ ]° /[ ] /FL220
060° /068/FL310
WIND REQUEST*
PREV PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
② ENTER
① WRITE

A wind is written as true direction/velocity/flight level or altitude in feet.
If the crew enters “GRND” in the altitude field, the system uses the associated wind as wind at destination.
The descent profile is corrected, as well as the tower wind entered in the PERF APPR page.



```
        DESCENT WIND
TRU WIND/ALT
060°/060/FL310
                        WIND
060°/050/FL200       REQUEST
060°/020/FL100
050°/010/FL050
                        NEXT
040°/010/GRND         PHASE>
ALTERNATE
[   ]°/[   ]/FL220
```

```
             APPR
 QNH      FLP RETR    FINAL
□□□□       F=137    ILS 33R
 TEMP     SLT RETR     MDA
[  ]°      S=175      [    ]
MAG WIND    CLEAN        DH
052°/ 10   O=196        210
TRANS ALT          LDG CONF
4000                CONF3 *
VAPP          VLS
135           127       FULL
 PREV                   NEXT
<PHASE                PHASE>
```

When the winds have been entered, the F-PLN B page displays the forecasted wind profile at all descent waypoints, using values it has interpolated from manual entries. Descent winds are not modifiable when the descent, approach, or go-around phase is active. At descent phase transition, wind data switches from blue to green, and any attempted modification will trigger the “NOT ALLOWED” message.

Ident.: DSC-22_20-30-20-25-B-00009331.0016001 / 14 MAY 12

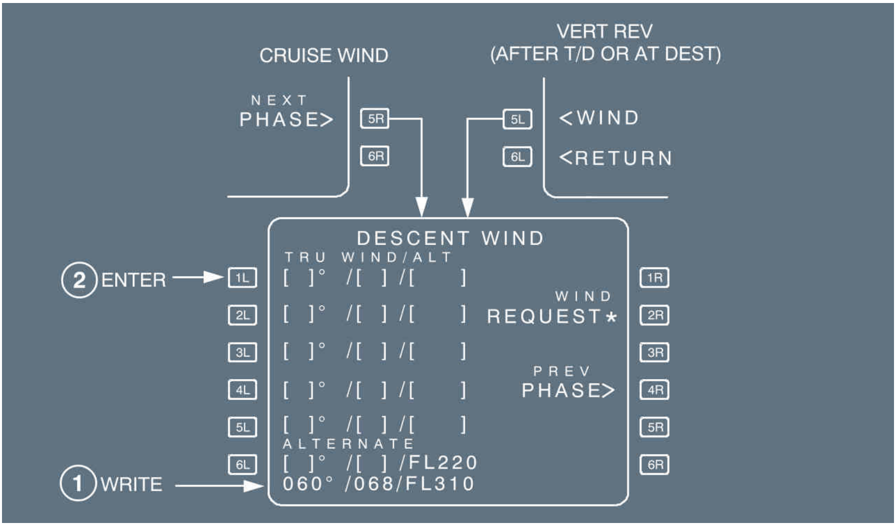
9 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENTERING THE DESCENT WINDS

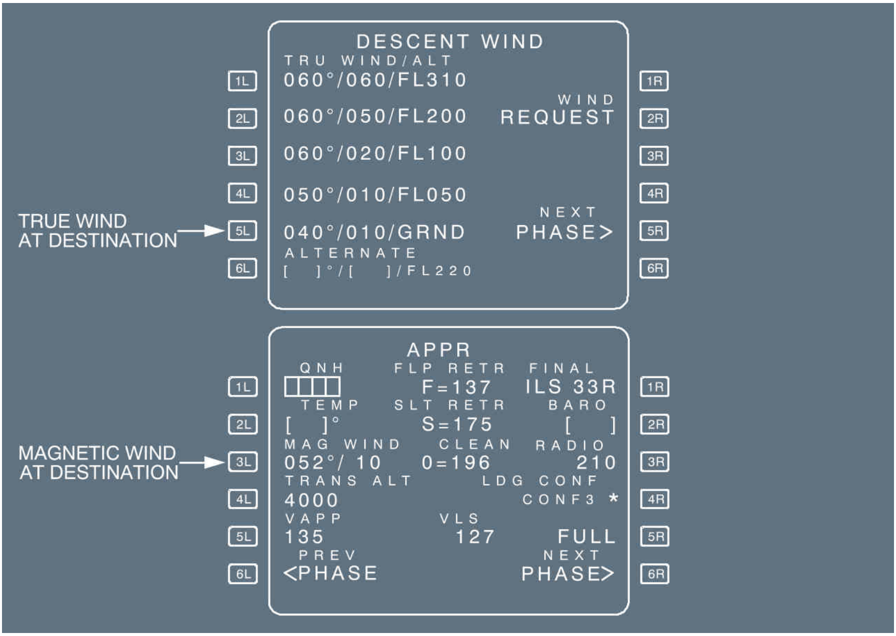
The pilot will enter as many as one wind at 5 different FL or altitudes. This wind data will be used for descent profile and prediction computation.

From the vertical revision page, or from the CRZ WIND page:

PRESS the WIND prompt.
SELECT the DESCENT WIND page.
ENTER up to 5 different “wind/altitude”.


CRUISE WIND
VERT REV
(AFTER T/D OR AT DEST)
NEXT
PHASE>
5R
6R
5L
6L
<WIND
<RETURN
DESCENT WIND
TRU WIND/ALT
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
[ ]° /[ ] /[ ]
ALTERNATE
[ ]° /[ ] /FL220
060° /068/FL310
WIND
REQUEST*
PREV
PHASE>
② ENTER
① WRITE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

A wind is written as true direction/velocity/flight level or altitude in feet.
If the crew enters “GRND” in the altitude field, the system uses the associated wind as wind at destination.
The descent profile is corrected, as well as the tower wind entered in the PERF APPR page.



DESCENT WIND
TRU WIND/ALT
060°/060/FL310
WIND
060°/050/FL200 REQUEST
060°/020/FL100
050°/010/FL050
NEXT
040°/010/GRND PHASE>
ALTERNATE
[ ]°/[ ]/FL220

APPR
QNH FLP RETR FINAL
□□□□ F=137 ILS 33R
TEMP SLT RETR BARO
[ ]° S=175 [ ]
MAG WIND CLEAN RADIO
052°/ 10 0=196 210
TRANS ALT LDG CONF
4000 CONF3 *
VAPP VLS
135 127 FULL
PREV NEXT
<PHASE PHASE>

When the winds have been entered, the F-PLN B page displays the forecasted wind profile at all descent waypoints, using values it has interpolated from manual entries. Descent winds are not modifiable when the descent, approach, or go-around phase is active. At descent phase transition, wind data switches from blue to green, and any attempted modification will trigger the “NOT ALLOWED” message.

Ident.: DSC-22_20-30-20-25-B-00009332.0001001 / 24 JAN 11

10 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENTERING THE ALTERNATE WIND

Alternate wind is entered on the DESCENT WIND page.

The alternate cruise (ALTN CRZ) level defaults to:
- FL 220 if the length of the ALTN F-PLN is less than 200 NM.
- FL 310 if the length of the ALTN F-PLN is greater than 200 NM.

If an alternate wind is not defined, the predictions are computed with a wind defaulted to zero. Alternate wind can be modified at any time.

The alternate wind profile is as follows:

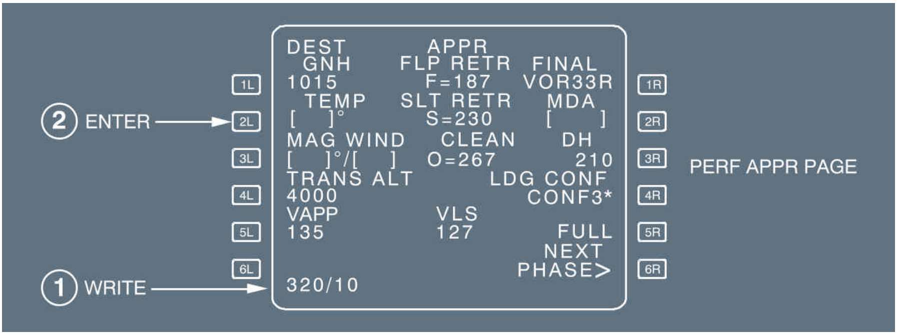
- ALTN CLB wind : Mean wind between ALTN CRZ wind (as entered on the DESCENT WIND page), and the wind at primary DEST (as entered on the PERF APPR page).
- ALTN CRZ wind : If no ALTN WIND has been entered on the DESCENT WIND page, the WIND at primary DEST (as entered on the PERF APPR page) is considered.
  In case no entry is made, zero wind is assumed.
- ALTN DES wind : Mean wind between ALTN CRZ WIND and wind at FL 100.
  Wind at FL 100 = Interpolation between wind at ALTN CRZ FL and zero at ALTN DEST.

Ident.: DSC-22_20-30-20-25-B-00009333.0001001 / 14 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ENTERING THE APPROACH WIND TEMPERATURE AND QNH

The wind at destination is entered in the 3L field of the PERF APPR page.
It is copied in true reference into the DESCENT WIND page at ground level (GRND), and F-PLN B page at destination. A ground entry on the DESCENT WIND page is, in the same way, automatically copied to F-PLN B page and the PERF APPR page.
This wind is modifiable in descent, approach, and go-around phases.



```
DEST          APPR
 QNH       FLP RETR   FINAL
1015         F=187   VOR33R
  TEMP     SLT RETR     MDA
[   ]°       S=230   [     ]
MAG WIND     CLEAN       DH
[   ]°/[  ]  O=267       210
TRANS ALT          LDG CONF
4000                 CONF3*
VAPP           VLS
135            127     FULL
                       NEXT
                     PHASE>
320/10
```

SELECT the PERF key on the MCDU.
PRESS NEXT PHASE (6R).
WRITE QNH and temperature, and enter them.
WRITE the surface wind in the scratchpad, and enter it.

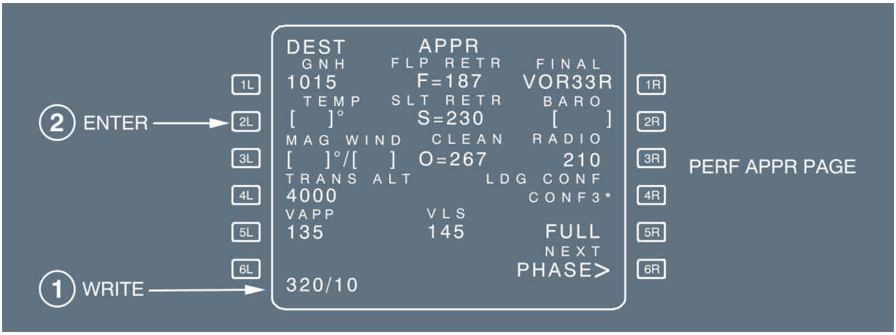
Note: *At each wind entry, the descent profile is recomputed. Therefore, it is recommended to enter all winds, temperature, and QNH at the same time in order to minimize recomputation time.*

Ident.: DSC-22_20-30-20-25-B-00009333.0016001 / 14 MAY 12

11 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENTERING THE APPROACH WIND TEMPERATURE AND QNH

The wind at destination is entered in the 3L field of the PERF APPR page.
It is copied in true reference into the DESCENT WIND page at ground level (GRND), and F-PLN B page at destination. A ground entry on the DESCENT WIND page is, in the same way, automatically copied to F-PLN B page and the PERF APPR page.
This wind is modifiable in descent, approach, and go-around phases.


DEST APPR
QNH
1015
TEMP
[ ]°
MAG WIND
[ ]°/[ ]
TRANS ALT
4000
VAPP
135
320/10
FLP RETR
F=187
SLT RETR
S=230
CLEAN
O=267
VLS
145
FINAL
VOR33R
BARO
[ ]
RADIO
210
LDG CONF
CONF3*
FULL
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
② ENTER
① WRITE
PERF APPR PAGE

SELECT the PERF key on the MCDU.
PRESS NEXT PHASE (6R).
WRITE QNH and temperature, and enter them.
WRITE the surface wind in the scratchpad, and enter it.

Note: *At each wind entry, the descent profile is recomputed. Therefore, it is recommended to enter all winds, temperature, and QNH at the same time in order to minimize recomputation time.*

CONSTANT MACH SEGMENT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_20-30-20-25-C-00009334.0001001 / 14 MAY 12

12

GENERAL

The pilot can enter the start and end points of a constant Mach segment, and its associated Mach number, from the VERT REV page.
Only one constant Mach segment may be defined in the active flight plan, and only one in the secondary flight plan. No constant Mach segment can be defined in the alternate flight plan.

Ident.: DSC-22_20-30-20-25-C-00000491.0008001 / 01 OCT 12

13

ENTERING A CONSTANT MACH SEGMENT

SELECT the F-PLN key on the MCDU.
SELECT VERT REV at a waypoint.

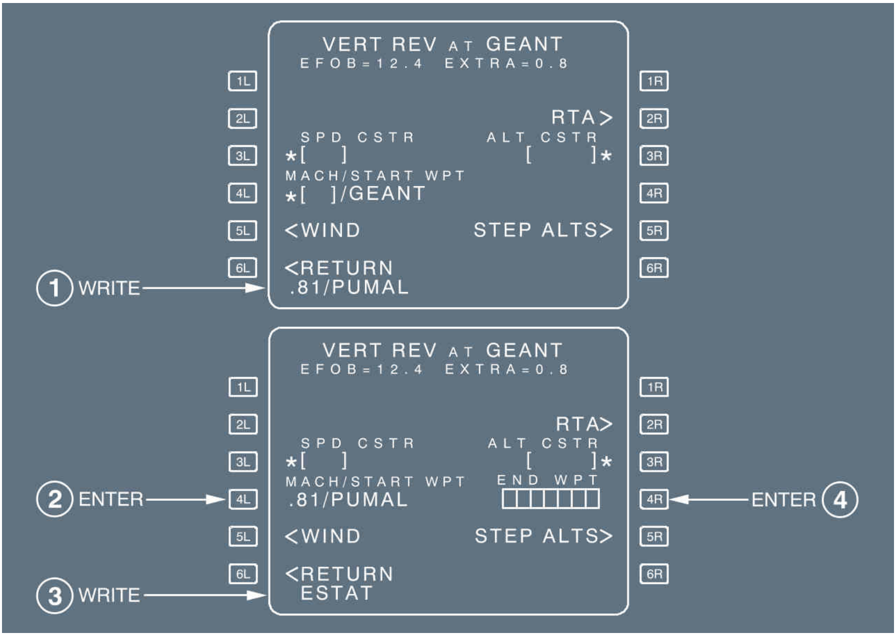
(Except the destination and alternate flight plan waypoint).

WRITE the Mach/start waypoint pair.

It is possible to enter only the Mach or the waypoint. But, for the first entry, a Mach entry is mandatory.
The waypoint must be located in front of the aircraft and must be part of the cruise.

ENTER it in the 4L field

The END WPT prompt appears in the 4R field.


VERT REV AT GEANT
EFOB=12.4 EXTRA=0.8
RTA>
SPD CSTR
ALT CSTR
*[ ]
[ ]*
MACH/START WPT
*[ ]/GEANT
<WIND
STEP ALTS>
<RETURN
.81/PUMAL
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
① WRITE
VERT REV AT GEANT
EFOB=12.4 EXTRA=0.8
RTA>
SPD CSTR
ALT CSTR
*[ ]
[ ]*
MACH/START WPT
END WPT
.81/PUMAL
<WIND
STEP ALTS>
<RETURN
ESTAT
② ENTER
③ WRITE
ENTER ④

WRITE the end waypoint.

The end waypoint must be part of the cruise.

ENTER it in the 4R field.

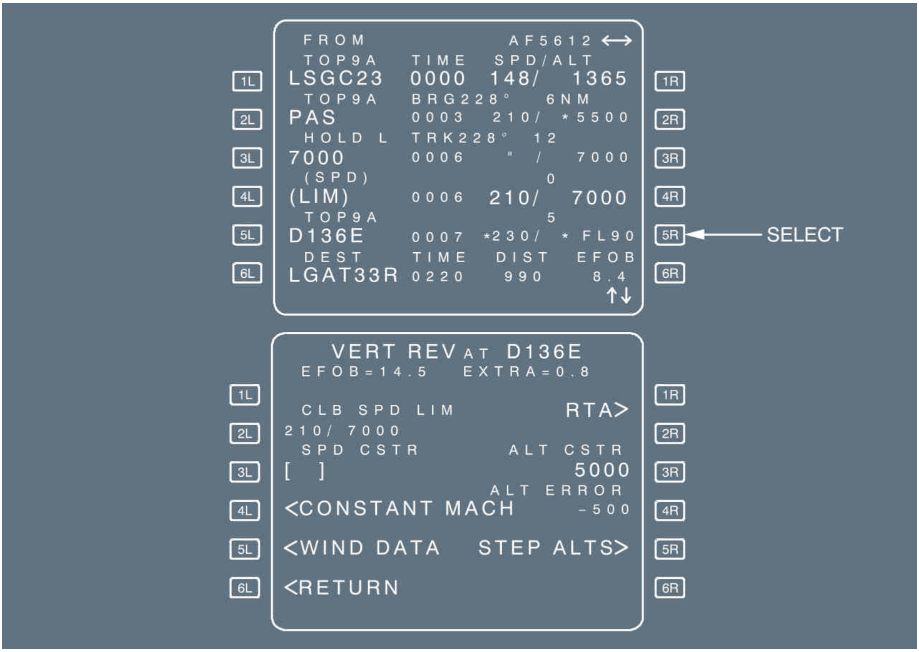
FMS2 Thales

GENERAL

Ident.: DSC-22_20-30-20-28-00000492.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860

The vertical revision function allows the crew to insert or modify the following items:
- The Speed limit (SPD LIM)
- Speed and altitude constraints
- Time constraints (RTA)
- Predicted Winds
- Step climb or step descent
- Constant Mach in cruise

The crew calls up the VERT REV page by pressing the right key on F-PLN A or B page.



```
  FROM                 AF5612 ↔
  TOP9A    TIME   SPD/ALT
LSGC23     0000   148/   1365
  TOP9A    BRG228°   6NM
PAS        0003   210/  *5500
  HOLD L   TRK228°   12
7000       0006    "  /   7000
  (SPD)              0
(LIM)      0006   210/   7000
  TOP9A              5
D136E      0007  *230/  *FL90
  DEST     TIME   DIST   EFOB
LGAT33R    0220   990     8.4
                          ↑↓
```

```
    VERT REV AT D136E
  EFOB=14.5   EXTRA=0.8

  CLB SPD LIM           RTA>
210/ 7000
  SPD CSTR          ALT CSTR
[   ]                   5000
                   ALT ERROR
<CONSTANT MACH          -500
<WIND DATA        STEP ALTS>
<RETURN
```

Note: *This vertical functions section only describes the following three functions: Wind and time constraints, and Constant Mach Segment.*
For other vertical revision functions: Refer to the Systems Related Procedures section.

TIME CONSTRAINT/RTA

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-20-28-A-00000493.0002001 / 09 FEB 11

GENERAL

A Required Time of Arrival (RTA) is a time requirement to be met over a specified waypoint of the lateral flight plan, including destination but excluding the origin and FROM waypoints.

Once the predictions are available, the time constraint value is replaced by the predicted time at the related waypoint, highlighted by a star (*):
- If the RTA is predicted as matched, the star (*) is in magenta.
- If the RTA is predicted as missed, the star (*) is in amber.

No specific symbol is provided on the ND.
A time constraint is cleared as any other constraints. If a time constraint is automatically deleted, a “RTA DELETED” message is displayed on the MCDU.

Ident.: DSC-22_20-30-20-28-A-00009483.0006001 / 01 OCT 12

TIME CSTR/RTA ENTRY - ENTERING A REQUIRED TIME OF ARRIVAL

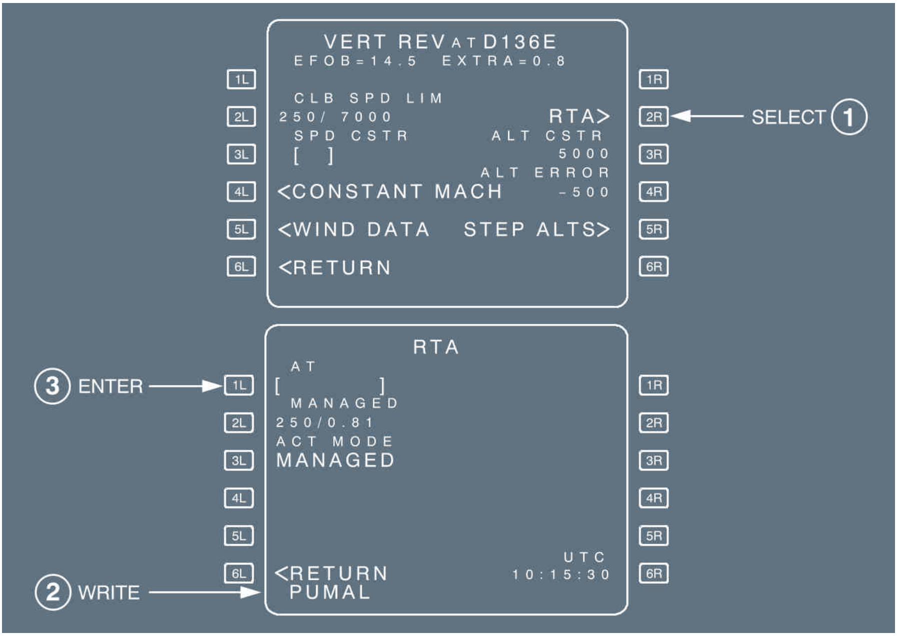
SELECT the F-PLN Key on the MCDU.
SELECT a VERT REV at any waypoint.
SELECT the RTA prompt (2R).

The MCDU displays the RTA page.

ENTER the waypoint where the time constraint has to be defined, in the [1L] prompt.

The RTA prompt and the distance indications appear.

CHECK and INSERT the TMPY F-PLN, or continue with next revision



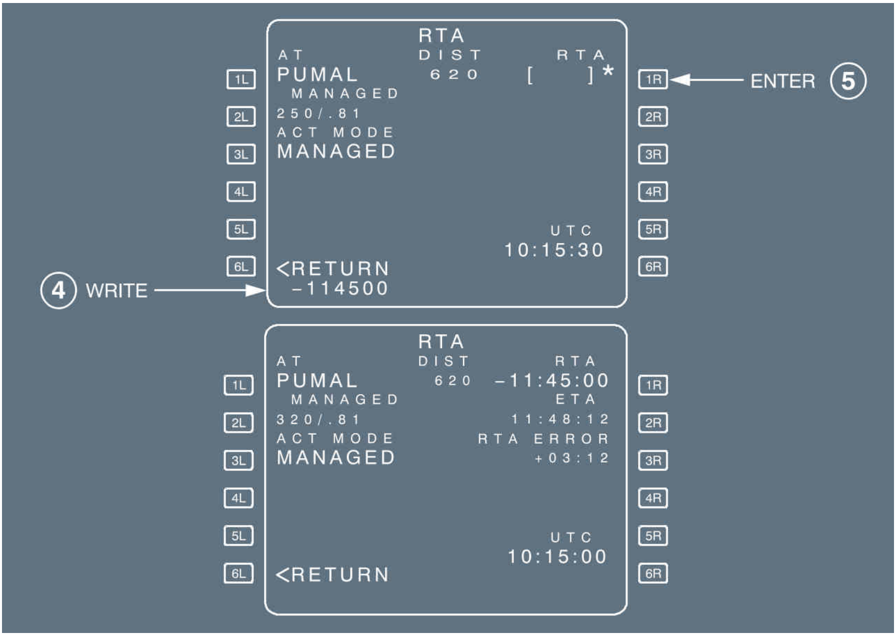
```
    VERT REV AT D136E
  EFOB=14.5    EXTRA=0.8

  CLB SPD LIM
 250/ 7000              RTA>
  SPD CSTR          ALT CSTR
  [   ]                 5000
                   ALT ERROR
<CONSTANT MACH          -500
<WIND DATA        STEP ALTS>
<RETURN
```

SELECT ① → 2R

```
            RTA
  AT
[            ]
  MANAGED
250/0.81
ACT MODE
MANAGED


                        UTC
<RETURN             10:15:30
 PUMAL
```

③ ENTER → 1L

② WRITE →



RTA
AT PUMAL MANAGED
DIST 620
RTA [ ]*
250/.81
ACT MODE MANAGED
UTC 10:15:30
<RETURN
-114500

RTA
AT PUMAL MANAGED
DIST 620
RTA -11:45:00
ETA 11:48:12
320/.81
RTA ERROR +03:12
ACT MODE MANAGED
UTC 10:15:00
<RETURN

ENTER the required time of arrival, in the [1R] field.

The format is +/- HHMMSS (entry of seconds is not mandatory).

CHECK the 2R and 3R fields to determine whether the entered constraint can be met.

WIND - TEMPERATURE - QNH

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-20-28-B-00009484.0002001 / 09 FEB 11

GENERAL

In order to obtain the best predictions, the crew must enter wind values for the different phases and for various waypoints of cruise phase.
The system uses the temperature value at a given altitude, associated with the tropopause entered on the INIT A page, to optimize the temperature profile.

Ident.: DSC-22_20-30-20-28-B-00009485.0013001 / 01 OCT 12

ENTERING THE TRIP WIND AND TEMPERATURE DURING F-PLN INITIALIZATION

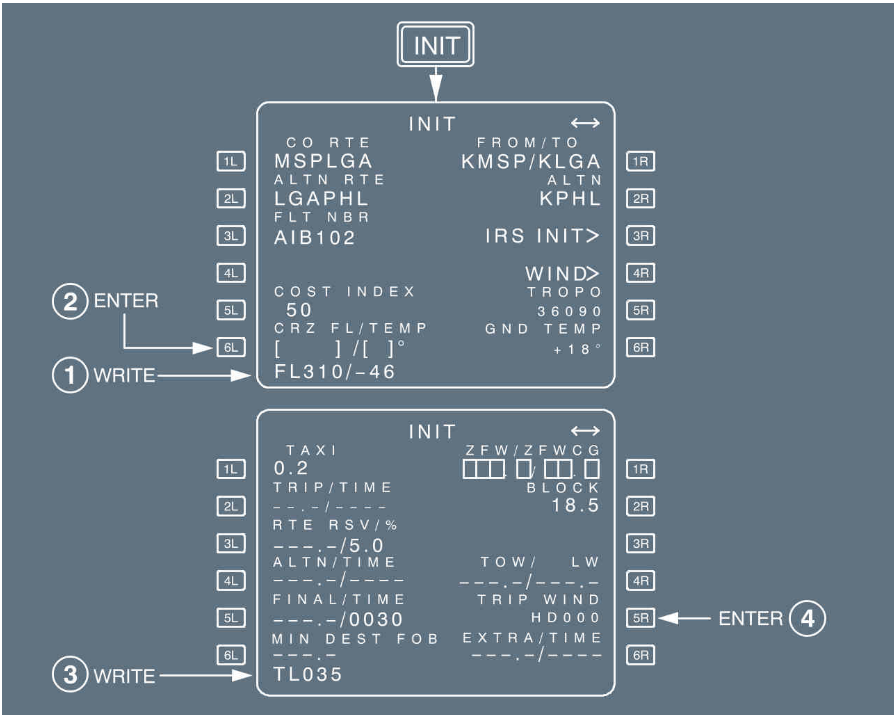
The trip wind is a mean wind component for the entire flight from origin to destination. The crew can enter it on the INIT B page before engine start. It is usually shown on the computerized flight plan.
The FMGS does not consider the trip wind for alternate predictions.
Trip wind function is intended for on-ground predictions only. If it is used for this purpose, the crew should then enter winds on WIND pages prior to departure. In this case, TRIP WIND field on INIT B page will be dashed.

PRESS the INIT key.
INSERT the temperature at CRZ FL (6L field).

This temperature is negative by default. As a consequence, entry of “50” is automatically converted by the FMS into “-50”.

On the INIT B page, INSERT the TRIP WIND (5R field).

The trip wind, is defined as a headwind component (HDXX, XXHD or - XX), or as a tailwind (TLXX, XXTL or + XX).
The FMGS uses the trip wind to compute preliminary performance, time and fuel predictions.



```
                INIT              ↔
  CO RTE              FROM/TO
MSPLGA             KMSP/KLGA
ALTN RTE                 ALTN
LGAPHL                   KPHL
FLT NBR
AIB102              IRS INIT>

                        WIND>
COST INDEX              TROPO
 50                     36090
CRZ FL/TEMP          GND TEMP
[     ]/[  ]°            +18°
FL310/-46
```

```
                INIT              ↔
  TAXI               ZFW/ZFWCG
0.2                 □□□.□/□□.□
TRIP/TIME                BLOCK
--.-/----                 18.5
RTE RSV/%
---.-/5.0
ALTN/TIME              TOW/  LW
---.-/----         ---.-/---.-
FINAL/TIME           TRIP WIND
---.-/0030               HD000
MIN DEST FOB        EXTRA/TIME
---.-               ---.-/----
TL035
```

Ident.: DSC-22_20-30-20-28-B-00009486.0019001 / 01 OCT 12

ENTERING THE WIND AND TEMPERATURE DURING F-PLN INITIALIZATION

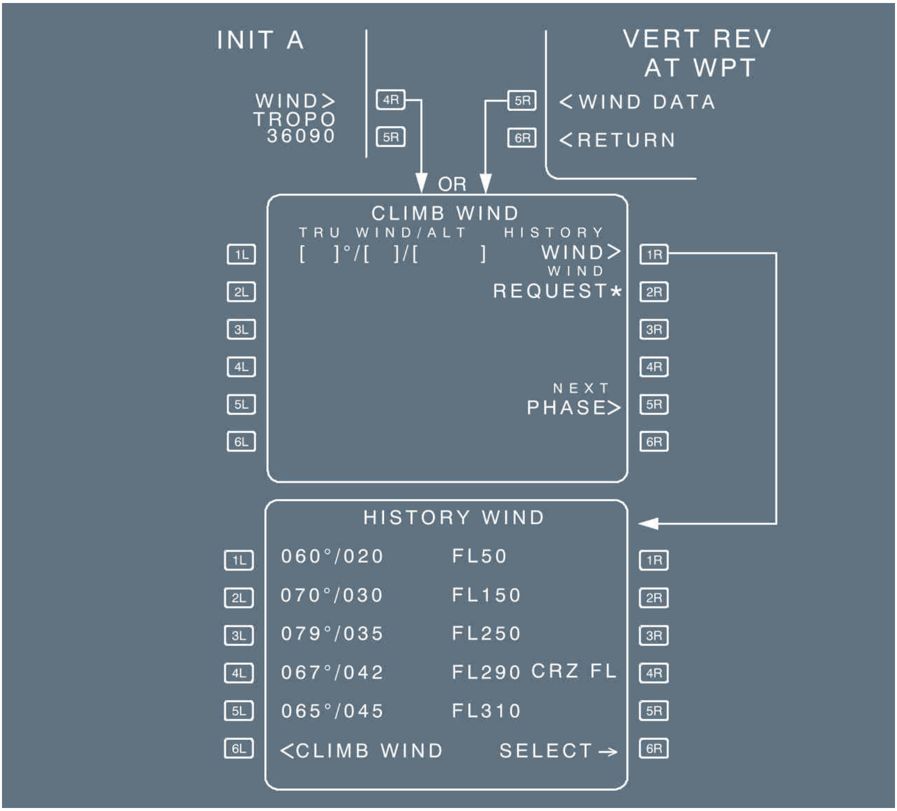
When completing the INIT A page, and once the wind and cruise FL temperatures forecasts are available, the crew can enter them, if significantly different, by pressing the wind prompt.
The crew accesses the various WIND pages by using the NEXT PHASE and PREV PHASE prompts. They can slew the CRZ WIND page to access the various wind values at each cruise waypoints.

The crew can enter wind data as follows:
- For climb phase: By inserting either the HISTORY WIND data (as recorded during the last descent), or by inserting winds (at up to 5 altitudes/FL) on the CLIMB WIND page
- For cruise phase: By inserting winds (at up to FL 4) at various CRZ waypoints on the CRZ WIND pages. The 4 levels are the same for all the cruise waypoints. The crew may enter the temperature at each waypoint on this page

- For descent phase: By inserting winds (at up to FL 5 /altitudes) on the DES WIND page
- For the ALTN F-PLN, an average wind may be entered on the DES WIND page for alternate cruise flight level.

Note: *Wind can be automatically received (and inserted) via the ACARS system. Refer to DSC-22_20 Auto Flight - Flight Management / 70 AOC Functions / B Wind Data / Wind Data - Request for Wind Data.*

Once a CLIMB, CRZ, or DESCENT WIND is entered, the system ignores the TRIP WIND. Once temperature and winds are inserted, the FMGS computes the ISA profile, and the F-PLN B page displays the forescast wind profile (by linear interpolation and propagation).


INIT A
WIND>
TROPO
36090
4R
5R
VERT REV
AT WPT
<WIND DATA
<RETURN
5R
6R
OR
CLIMB WIND
TRU WIND/ALT
HISTORY
[ ]°/[ ]/[ ]
WIND>
WIND
REQUEST*
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
HISTORY WIND
060°/020 FL50
070°/030 FL150
079°/035 FL250
067°/042 FL290 CRZ FL
065°/045 FL310
<CLIMB WIND
SELECT→

WIND ENTRY RULES

When a wind entry is performed from an empty field, direction/velocity/altitude (or flight level) must be entered simultaneously. One entry in each bracket.
Overwriting a wind cancels the previous one. Entered wind data can be cleared: The field reverts to brackets.
Propagated wind cannot be cleared.
Entering a new altitude, over an existing altitude, replaces that existing altitude at all cruise waypoints. Any winds entered at the overwritten altitude are lost at all cruise waypoints.

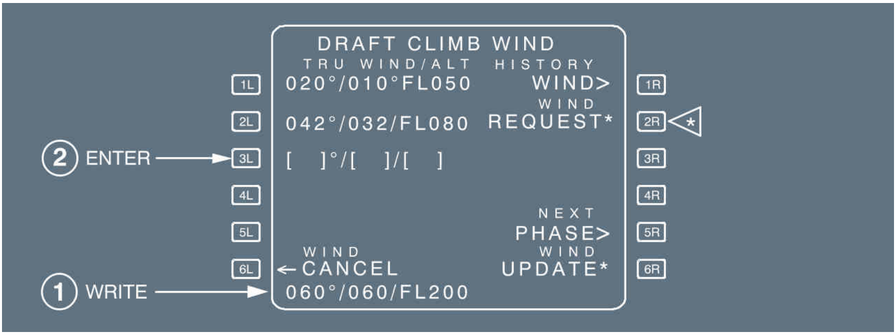
ENTERING THE HISTORY WIND (F-PLN INITIALIZATION)

The crew may insert the history winds, but cannot modify this page.

- **If convenient,** PRESS the (6R) prompt on the HISTORY WIND page to insert them. After insertion, the [6R] prompt is suppressed, but the page still displays the wind values for information.

ENTERING THE CLIMB WIND (F-PLN INITIALIZATION)

- **If history winds are not convenient:**
  SELECT CLIMB WIND page from INIT A page or VERT REV page.
  WRITE new winds in the scratchpad and ENTER them in the empty fields.

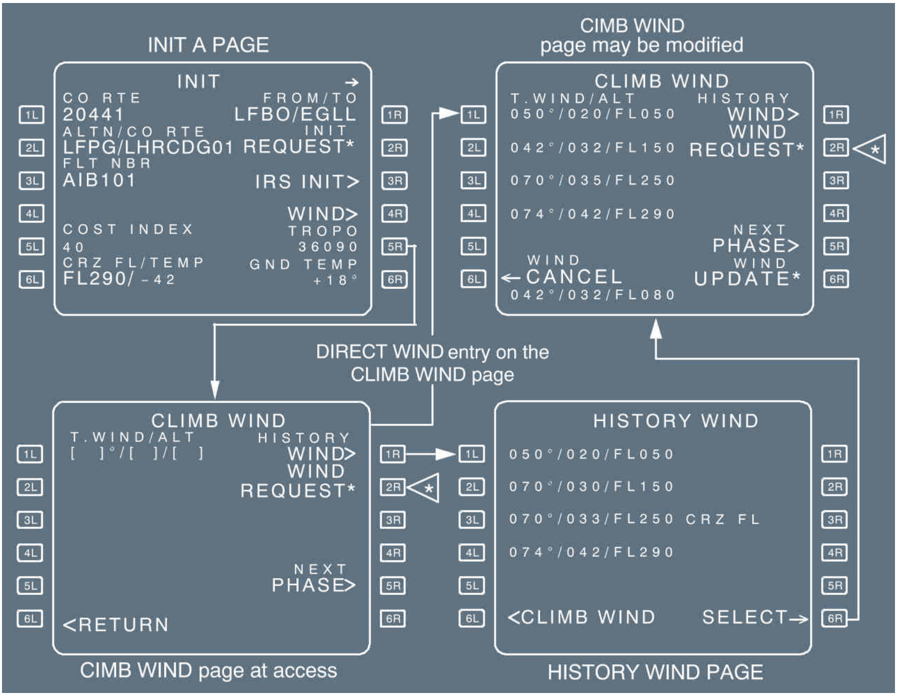


```
        DRAFT CLIMB WIND
 TRU WIND/ALT    HISTORY
020°/010°FLO50      WIND>
                    WIND
042°/032/FL080  REQUEST*
[   ]°/[   ]/[   ]



                    NEXT
                  PHASE>
 WIND               WIND
←CANCEL          UPDATE*
060°/060/FL200
```

PRESS WIND UPDATE [6R] to insert the winds.
"DRAFT" disappears and the wind data become blue.

The crew can enter "GRND" in the altitude field to specify the wind at ground level, at the departure airport.
CLIMB WIND cannot be modified when the climb phase is active.
At climb phase transition, wind data switches from blue to green colour and any attempted modification will trigger the "NOT ALLOWED" message.

The system interpolates winds between 2 entered levels.


INIT A PAGE
INIT →
CO RTE
FROM/TO
20441
LFBO/EGLL
ALTN/CO RTE
INIT
LFPG/LHRCDG01
REQUEST*
FLT NBR
AIB101
IRS INIT>
WIND>
COST INDEX
TROPO
40
36090
CRZ FL/TEMP
GND TEMP
FL290/ -42
+18°
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CIMB WIND
page may be modified
CLIMB WIND
T.WIND/ALT
HISTORY
050°/020/FL050
WIND>
WIND
042°/032/FL150
REQUEST*
070°/035/FL250
074°/042/FL290
NEXT
PHASE>
WIND
WIND
←CANCEL
UPDATE*
042°/032/FL080
DIRECT WIND entry on the
CLIMB WIND page
CLIMB WIND
T.WIND/ALT
HISTORY
[ ]°/[ ]/[ ]
WIND>
WIND
REQUEST*
NEXT
PHASE>
<RETURN
CIMB WIND page at access
HISTORY WIND
050°/020/FL050
070°/030/FL150
070°/033/FL250 CRZ FL
074°/042/FL290
<CLIMB WIND
SELECT→
HISTORY WIND PAGE

Ident.: DSC-22_20-30-20-28-B-00009487.0019001 / 01 OCT 12

ENTERING THE CRUISE WINDS AND TEMPERATURE

A flight plan initialization, the CRZ WIND page displays all cruise waypoints with empty brackets. Until predictions are available, all the waypoints not being part of a SID, STAR or approach are considered as cruise waypoints. In flight only downpath waypoints are displayed.

SELECT INIT or VERT REV at WPT.
PRESS the WIND DATA prompt.
SELECT NEXT PAGE, to reach the CRZ WIND page.

For each desired waypoint:

SCROLL until the waypoint is displayed.
WRITE the new temperature and altitude in the scratchpad, and ENTER it.

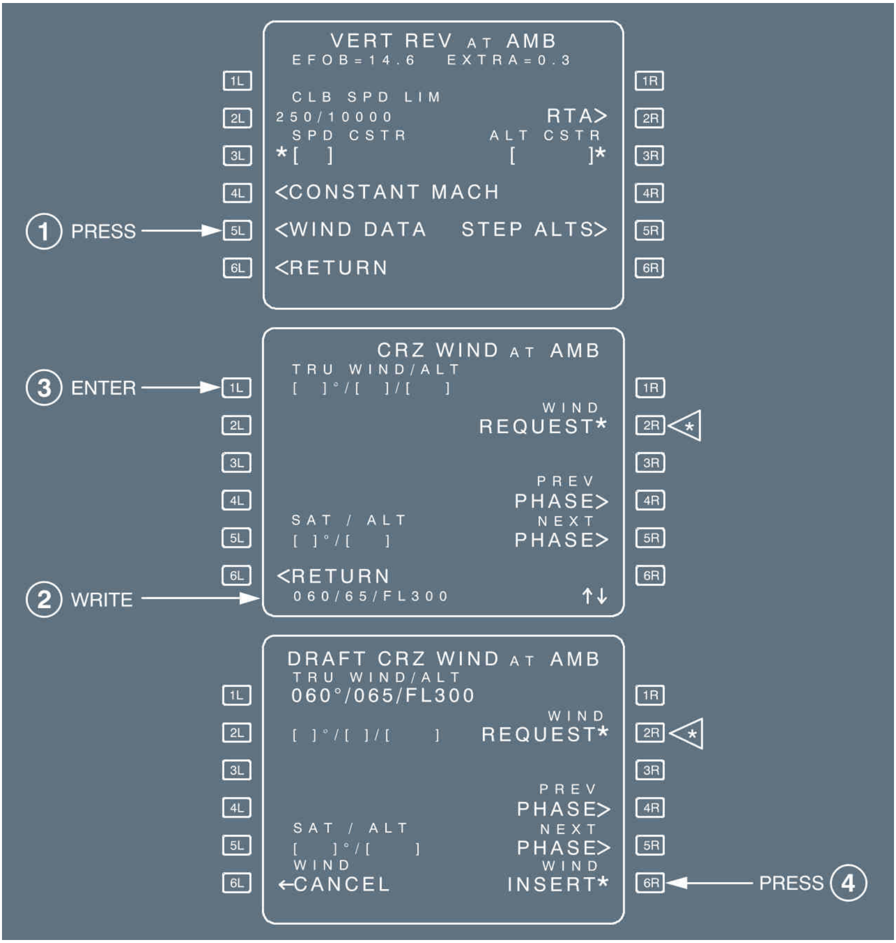
WRITE the new wind data and altitude in the scratchpad, and ENTER IT

WIND and temperature may be entered through the ACARS pages. Refer to DSC-22_20 Auto Flight - Flight Management / 70 AOC Functions / B Wind Data / Wind Data - Request for Wind Data..

Then, when wind update is complete for all these waypoints:

PRESS the UPDATE INSERT prompt.

The wind profile is updated and predictions are re-computed only once this prompt is pressed.


VERT REV AT AMB
EFOB=14.6 EXTRA=0.3
CLB SPD LIM
250/10000
RTA>
SPD CSTR
ALT CSTR
*[ ]
[ ]*
<CONSTANT MACH
<WIND DATA
STEP ALTS>
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
① PRESS
CRZ WIND AT AMB
TRU WIND/ALT
[ ]°/[ ]/[ ]
WIND
REQUEST*
PREV
PHASE>
SAT / ALT
[ ]°/[ ]
NEXT
PHASE>
<RETURN
060/65/FL300
↑↓
③ ENTER
② WRITE
DRAFT CRZ WIND AT AMB
TRU WIND/ALT
060°/065/FL300
[ ]°/[ ]/[ ]
WIND
REQUEST*
PREV
PHASE>
SAT / ALT
[ ]°/[ ]
NEXT
PHASE>
WIND
←CANCEL
WIND
INSERT*
PRESS ④

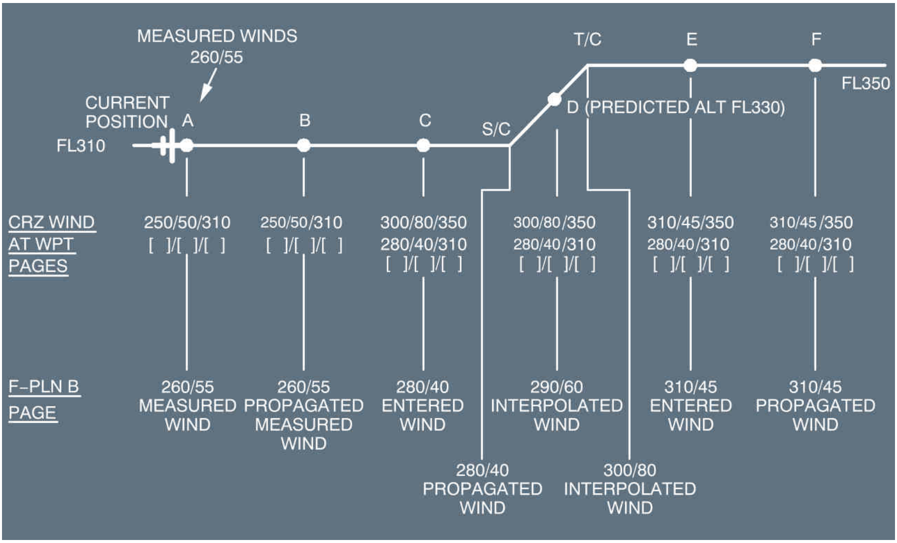
The crew should modify the entered winds and temperatures in flight, if a significant difference is expected (greater than 30 kt or 30 ° for the wind data and greater than 5 °C for the temperature). The FMS propagates the crew (or AOC) wind and temperature entries downpath, until a waypoint for which a different temperature or wind has been entered (for the same flight level), or until the last cruise waypoint.

The forecast winds at a waypoint are determined as follows:

- If the predicted altitude at the waypoint matches an altitude defined in the CRUISE WIND page, the forecast wind is the corresponding entered or propagated wind, displayed at that waypoint on the CRUISE WIND page
- If the predicted altitude lies between two altitudes entered on the CRUISE WIND page, the wind direction and velocity are linearly interpolated
- If the predicted altitude is above or below the set of CRUISE altitudes, the forecast wind is a constant value extrapolated from the entered or propagated wind at the highest (or lowest) altitude displayed on the CRUISE WIND page for that waypoint.

The CRUISE WIND pages display the propagated values in small cyan font, and the crew (or AOC) entries in large cyan font.

Note: *The CRUISE WIND page displays AOC data, crew-entered data or propagated data. It never displays computed data (displayed on the F-PLN B page only).*


MEASURED WINDS
260/55
CURRENT
POSITION
A
B
C
S/C
T/C
E
F
FL310
FL350
D (PREDICTED ALT FL330)
CRZ WIND
AT WPT
PAGES
250/50/310
[ ]/[ ]/[ ]
250/50/310
[ ]/[ ]/[ ]
300/80/350
280/40/310
[ ]/[ ]/[ ]
300/80/350
280/40/310
[ ]/[ ]/[ ]
310/45/350
280/40/310
[ ]/[ ]/[ ]
310/45/350
280/40/310
[ ]/[ ]/[ ]
F-PLN B
PAGE
260/55
MEASURED
WIND
260/55
PROPAGATED
MEASURED
WIND
280/40
ENTERED
WIND
290/60
INTERPOLATED
WIND
310/45
ENTERED
WIND
310/45
PROPAGATED
WIND
280/40
PROPAGATED
WIND
300/80
INTERPOLATED
WIND

Ident.: DSC-22_20-30-20-28-B-00009488.0002001 / 09 FEB 11

EFFECT OF WIND ENTRIES ON OPTIMUM FLIGHT LEVEL

The OPT FL computation considers the wind entries made at different altitudes (normally at the different CRZ FL).
When flying the subsequent CRZ FL, the OPT FL proposed by the PROG page may be affected by the wind entries made at the previous CRZ FL; these winds are automatically propagated and may be significantly different from the actual winds.
We recommended the following procedure:

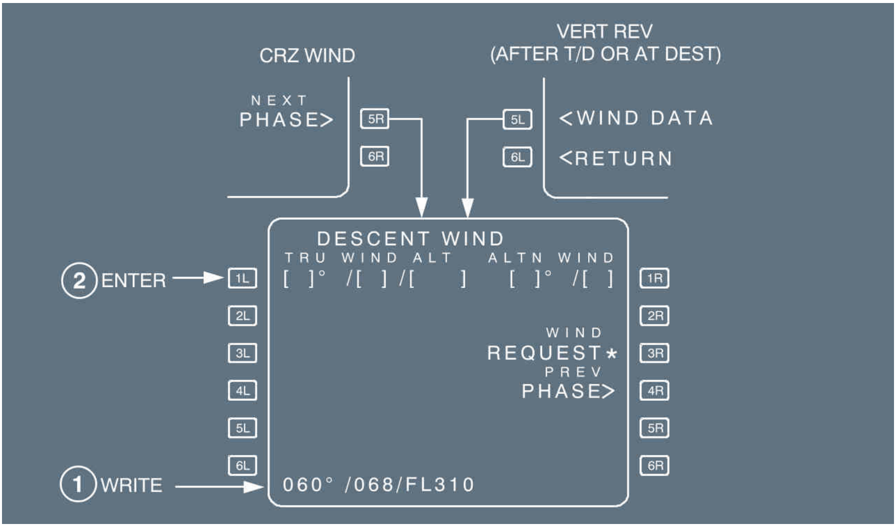
- **if the propagated winds at the lower altitudes are significantly different from the actual winds, enter the wind at these altitudes, or if not available, the wind measured at the current CRZ FL.**

Ident.: DSC-22_20-30-20-28-B-00009489.0021001 / 14 MAY 12

ENTERING THE DESCENT WINDS

The crew will enter as many as one wind at 5 different FL or altitudes. This wind data will be used for descent profile and prediction computation.
From the vertical revision page, or from the CRUISE WIND page:

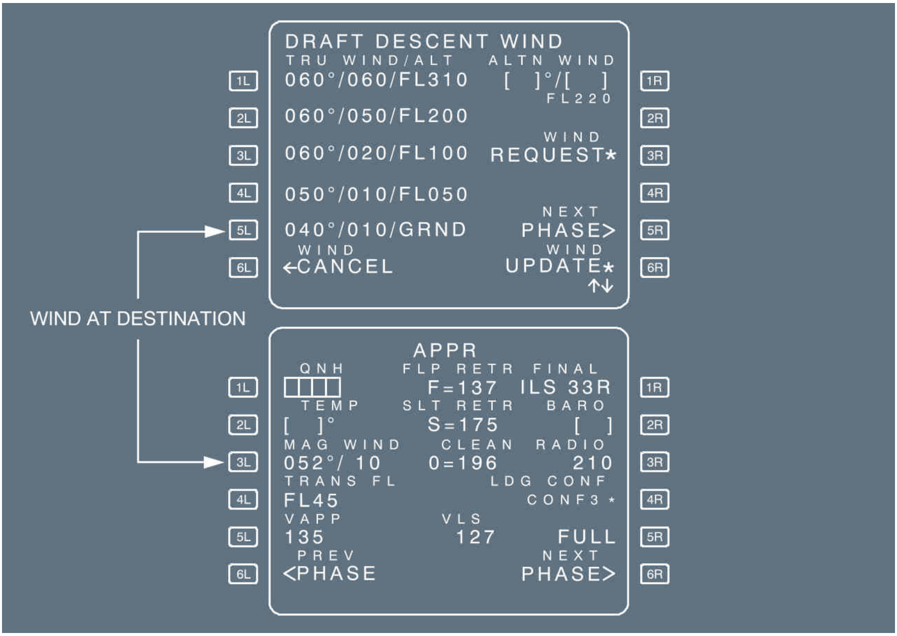
PRESS the WIND prompt.
SELECT the DESCENT WIND page.
ENTER up to 5 different "wind/altitude".


CRZ WIND
NEXT
PHASE>
5R
6R
VERT REV
(AFTER T/D OR AT DEST)
5L
6L
<WIND DATA
<RETURN
DESCENT WIND
TRU WIND ALT
ALTN WIND
[ ]° /[ ] /[ ]
[ ]° /[ ]
2 ENTER
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
WIND
REQUEST*
PREV
PHASE>
1 WRITE
060° /068/FL310

A wind is written as true direction/velocity/flight level or altitude in feet.

- **If the crew enters "GRND“ in the altitude field** , the system uses the associated wind as wind at destination.

The descent profile is corrected, as well as the tower wind entered in the PERF APPR page.



WIND AT DESTINATION

```
      DRAFT DESCENT WIND
       TRU WIND/ALT      ALTN WIND
1L    060°/060/FL310    [  ]°/[  ]    1R
                             FL220
2L    060°/050/FL200                  2R
                              WIND
3L    060°/020/FL100    REQUEST*      3R

4L    050°/010/FL050                  4R
                              NEXT
5L    040°/010/GRND        PHASE>     5R
       WIND                   WIND
6L    <CANCEL             UPDATE*     6R
                                ↑↓
```

```
                 APPR
       QNH     FLP RETR   FINAL
1L    □□□□      F=137   ILS 33R       1R
        TEMP    SLT RETR    BARO
2L    [  ]°     S=175       [  ]      2R
      MAG WIND    CLEAN    RADIO
3L    052°/ 10   O=196       210      3R
      TRANS FL         LDG CONF
4L    FL45                CONF3 *     4R
      VAPP         VLS
5L    135          127       FULL     5R
       PREV                  NEXT
6L    <PHASE               PHASE>     6R
```

When the winds have been entered, the F-PLN B page displays the forecast wind profile at all descent waypoints using values it has interpolated from manual entries. Descent winds are not modifiable when descent, approach or go around phase is active. At descent phase transition, wind data changes color from blue to green and any attempted modification triggers the “NOT ALLOWED” message.

Ident.: DSC-22_20-30-20-28-B-00009490.0001001 / 09 FEB 11

ENTERING THE ALTERNATE WIND

Alternate wind is entered in the DESCENT WIND page. The altitude is blanked if no alternate destination is defined.

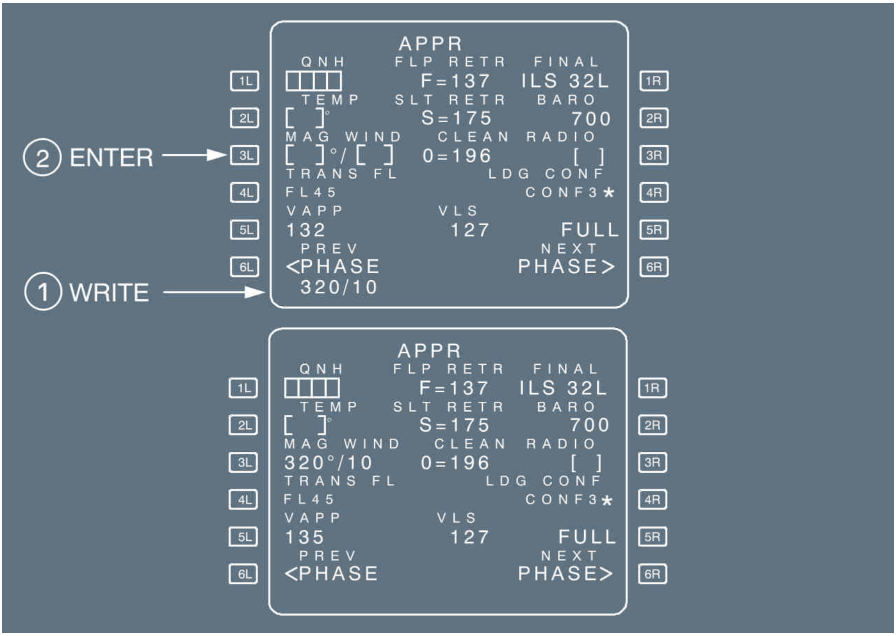
- **If an alternate wind is not defined, the predictions are computed with a wind defaulted to zero.**

Alternate wind can be modified at any time.

Ident.: DSC-22_20-30-20-28-B-00009491.0021001 / 14 MAY 12

ENTERING THE APPROACH WIND

The wind at destination is entered on the PERF APPR page, [3L] field. It is a magnetic referenced wind, copied in true reference into DESCENT WIND page at ground level (GRND) and F-PLN B page at destination. A ground entry on the DESCENT WIND page is in the same way, copied to F-PLN B page and PERF APPR page (Magnetic) automatically. This wind is modifiable in descent and approach and go-around phase.



```
         APPR
  QNH     FLP RETR   FINAL
□□□□      F=137    ILS 32L
  TEMP    SLT RETR   BARO
[  ]°     S=175       700
MAG WIND   CLEAN    RADIO
[  ]°/[  ] O=196     [  ]
TRANS FL         LDG CONF
FL45               CONF3*
VAPP        VLS
132         127      FULL
  PREV               NEXT
<PHASE             PHASE>
  320/10
```

```
         APPR
  QNH     FLP RETR   FINAL
□□□□      F=137    ILS 32L
  TEMP    SLT RETR   BARO
[  ]°     S=175       700
MAG WIND   CLEAN    RADIO
320°/10   O=196      [  ]
TRANS FL         LDG CONF
FL45               CONF3*
VAPP        VLS
135         127      FULL
  PREV               NEXT
<PHASE             PHASE>
```

SELECT the PERF key on the MCDU
PRESS the NEXT PHASE key [6R], to reach PERF APPR page.
WRITE the surface wind (magnetic) in the scratchpad and ENTER it in the [3L] field.

CONSTANT MACH

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-30-20-28-C-00009492.0006001 / 09 FEB 11

GENERAL

The crew can specify a part of the F-PLN to be flown at a given Mach value, using the Constant Mach function.
Only one Constant Mach segment may be defined in the active or temporary flight plan, and one in the secondary flight plan. No Constant Mach segment can be defined in the alternate flight plan.

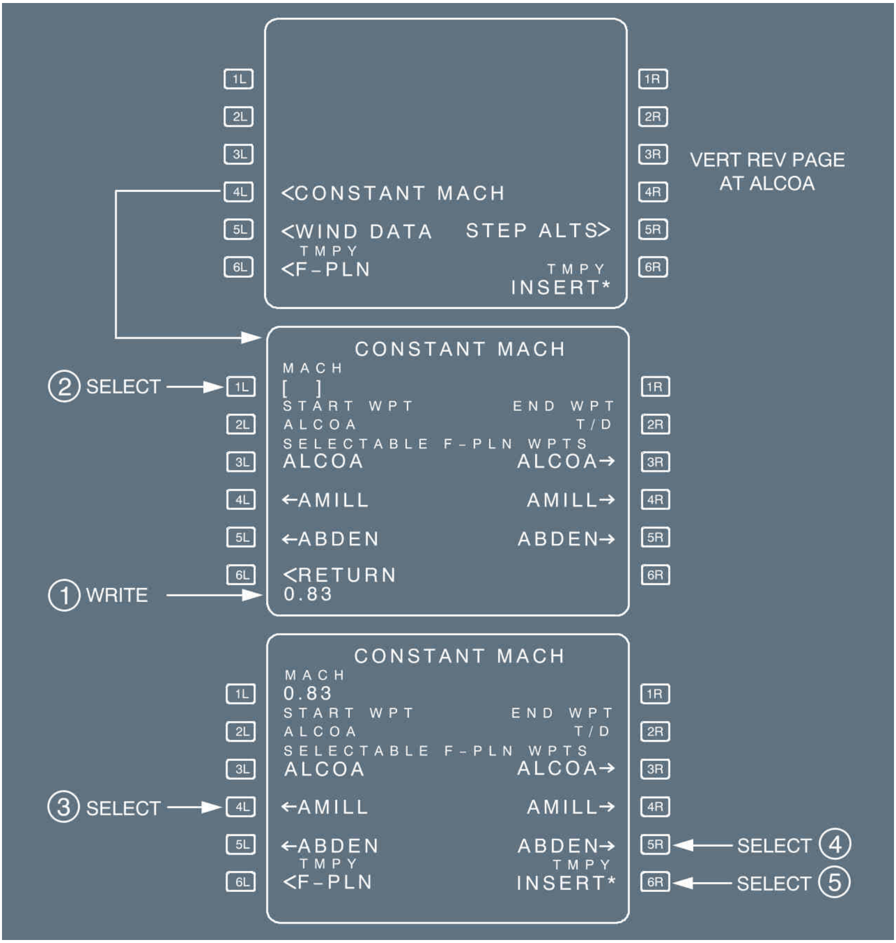
Ident.: DSC-22_20-30-20-28-C-00009493.0006001 / 14 MAY 12

ENTERING A CONSTANT MACH SEGMENT

SELECT the F-PLN key on the MCDU.
SELECT VERT REV at any cruise waypoint.
SELECT the CONSTANT MACH prompt [4L], to access the CONSTANT MACH page.
ENTER the desired Mach value in the [1L] field.
SELECT the Start waypoint [2L] and End waypoint [2R] within the list of selectable waypoint (3L → 5L, 3R → 5R, “SELECTABLE F-PLN WPTS”).

When accessing the CONSTANT MACH page, the Start waypoint is defaulted to the first downpath waypoint at which a CMS can be entered. The End waypoint is defaulted to the Top of Descent (T/D).

CHECK and INSERT the TMPY F-PLN, or continue with next revision.

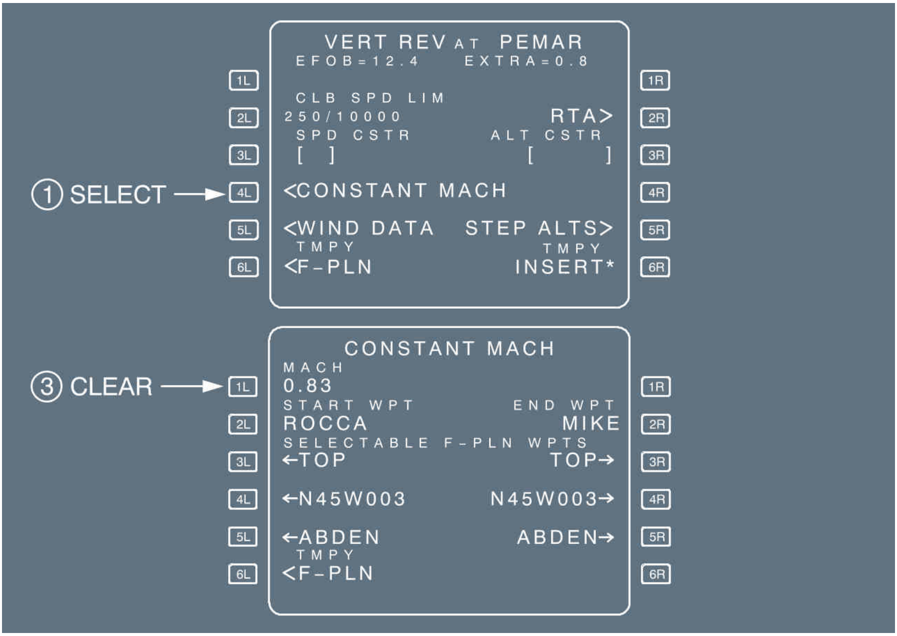

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
<CONSTANT MACH
<WIND DATA
STEP ALTS>
TMPY
<F-PLN
TMPY
INSERT*
VERT REV PAGE
AT ALCOA
CONSTANT MACH
MACH
[ ]
START WPT
END WPT
ALCOA
T/D
SELECTABLE F-PLN WPTS
ALCOA
ALCOA→
←AMILL
AMILL→
←ABDEN
ABDEN→
<RETURN
0.83
② SELECT
① WRITE
CONSTANT MACH
MACH
0.83
START WPT
END WPT
ALCOA
T/D
SELECTABLE F-PLN WPTS
ALCOA
ALCOA→
←AMILL
AMILL→
←ABDEN
ABDEN→
TMPY
<F-PLN
TMPY
INSERT*
③ SELECT
SELECT ④
SELECT ⑤

Ident.: DSC-22_20-30-20-28-C-00009494.0006001 / 23 JUN 15

DELETING A CONSTANT MACH

To delete a previously-entered Constant Mach:

SELECT the F-PLN key on the MCDU
SELECT VERT REV at any F-PLN waypoint
SELECT the CONSTANT MACH prompt (4L)



VERT REV AT PEMAR
EFOB=12.4 EXTRA=0.8
CLB SPD LIM
250/10000 RTA>
SPD CSTR ALT CSTR
[ ] [ ]
<CONSTANT MACH
<WIND DATA STEP ALTS>
TMPY TMPY
<F-PLN INSERT*

CONSTANT MACH
MACH
0.83
START WPT END WPT
ROCCA MIKE
SELECTABLE F-PLN WPTS
←TOP TOP→
←N45W003 N45W003→
←ABDEN ABDEN→
TMPY
<F-PLN

PRESS the CLR key on the MCDU control panel, then SELECT [1L]

The constant Mach is deleted, and no message is displayed to confirm the deletion.

CHECK and INSERT the TMPY F-PLN or continue with next revision.

Intentionally left blank

GENERAL

Ident.: DSC-22_20-40-10-00011077.0001001 / 17 AUG 10
Applicable to: ALL

The performance function:
- Optimizes a flight plan
- Computes predictions.

OPTIMIZATION

Ident.: DSC-22_20-40-10-00011084.0029001 / 23 JUN 15
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The FMGC minimizes cost by optimizing the following items:
- Takeoff, approach, and go-around speeds (F, S, Green Dot, VAPP)
- Target speed for CLB, CRZ and DES phases (ECON SPD/MACH)
- Flight Level (for flight crew's information)
- Descent profile from CRZ FL down to the destination airport.

These items depend on the data the flight crew inserts during lateral and vertical flight planning and revision procedures.
Most are displayed on the PERF pages associated with the appropriate flight phases.

WIND PROFILE

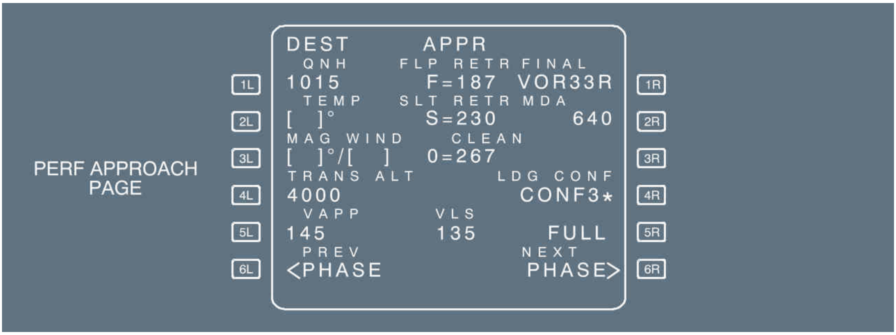
To obtain the best predictions, the flight crew must enter the wind for the various flight phases and specifically for waypoints in cruise.

- **ON GROUND:**
  During flight planning initialization, enter the winds for the climb and cruise phases using the HISTORY WIND and WIND pages. Enter, manually or with ACARS, different wind values in the climb and cruise phases. The system will compute a wind for all waypoints of the F-PLN using linear interpolation between manual/ACARS entries.
  The wind profile will be displayed on the F-PLN B page, and is called forecast wind profile. Flight crew or ACARS entries are displayed in large font, and system-computed winds in small font.
- **IN FLIGHT:**
  The system updates the predictions and the current ECON speed, using the measured wind at the present position. It combines actual wind and forecast winds to compute the wind ahead of the aircraft, but this is totally transparent to the flight crew.
  During cruise, the flight crew will enter the descent winds and the approach wind. The system will update the final predictions, compute the optimum descent profile and compute the optimum speed in descent and approach.

The forecast wind profile will be used to compute fuel and time predictions, as well as ECON speed/Mach targets.

OPTIMUM TAKEOFF, APPROACH AND GO-AROUND SPEEDS

The FMGC computes takeoff speeds (F, S, Green Dot) during the preflight and takeoff phases, using the performance model in the database and the takeoff weight.
The flight crew has to insert V1, VR, and V2 in the PERF TO page manually.
The FMGC uses the performance model and either the predicted landing weight or the current gross weight at transition to the approach phase to compute approach speeds (VLS, VAPP, F, S, Green Dot).
On the PERF APPR page, the selected LDG CONF determines the applicable VLS and VAPP, the latter being updated by the WIND correction that the flight crew enters on the same page. The FMGC uses the performance model and gross weight to compute go-around speeds (F, S, Green Dot).



```
DEST          APPR
  QNH       FLP RETR FINAL
1015          F=187  VOR33R
  TEMP      SLT RETR MDA
[  ]°         S=230     640
MAG WIND        CLEAN
[  ]°/[  ]    O=267
TRANS ALT          LDG CONF
4000                CONF3*
  VAPP        VLS
145           135      FULL
  PREV                NEXT
<PHASE               PHASE>
```

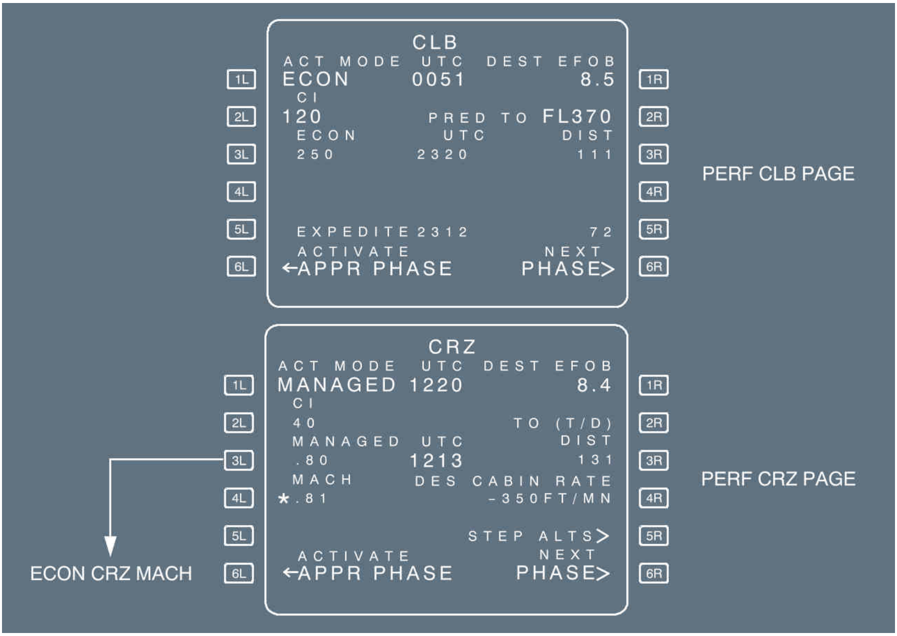
OPTIMUM TARGET SPEED FOR CLIMB, CRUISE AND DESCENT (ECON SPD/MACH)

The FMGS computes the optimum target speed (ECON SPD/MACH) as a function of:
- Cost index (CI)
- Cruise flight level (CRZ FL)
- Gross weight (GW)
- Wind and temperature models
- Performance factor.

The computer processes the ECON SPDs for the climb and descent phases before the initiation of the flight phase, and freezes the values once the flight phase becomes active.
When there is no time or speed constraint/limit, ECON SPEED is the optimum speed for the selected cost index. It refers to fuel and time cost and not directly to fuel saving.
The FM calculates ECON CLB, ECON DES and the associated top of climb and top of descent as a function of cost index, cruise FL, and meteo data.

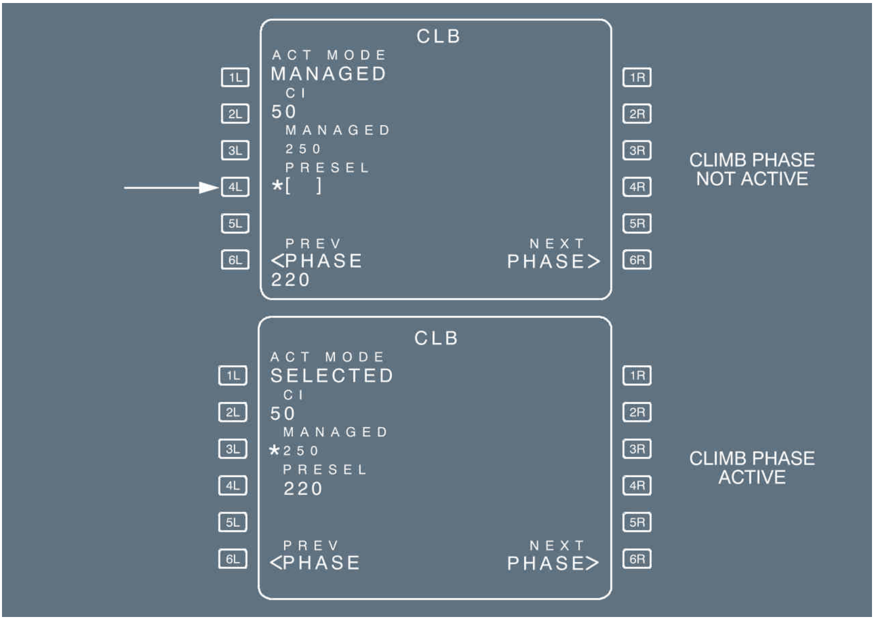
The computer continually updates ECON CRUISE MACH (SPD), taking into account current weather conditions and modifications to the flight plan.

Note: *If the cruise FL is below FL 250, ECON CRUISE SPEED is computed.*
If the cruise FL is above FL 250, ECON CRUISE MACH is computed.


CLB
ACT MODE
ECON
UTC
0051
DEST EFOB
8.5
CI
120
PRED TO FL370
ECON
250
UTC
2320
DIST
111
EXPEDITE 2312
72
ACTIVATE
←APPR PHASE
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PERF CLB PAGE
CRZ
ACT MODE
MANAGED
UTC
1220
DEST EFOB
8.4
CI
40
TO (T/D)
MANAGED
.80
UTC
1213
DIST
131
MACH
*.81
DES CABIN RATE
-350FT/MN
STEP ALTS>
ACTIVATE
←APPR PHASE
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PERF CRZ PAGE
ECON CRZ MACH

PRESET TARGET SPEED FOR CLB PHASE

The flight crew can preselect the climb speed before the CLB phase begins, by inserting a speed in the PRESEL field:



```
            CLB
ACT MODE
MANAGED
  CI
50
  MANAGED
  250
  PRESEL
*[    ]

  PREV                 NEXT
<PHASE               PHASE>
220
```

CLIMB PHASE NOT ACTIVE

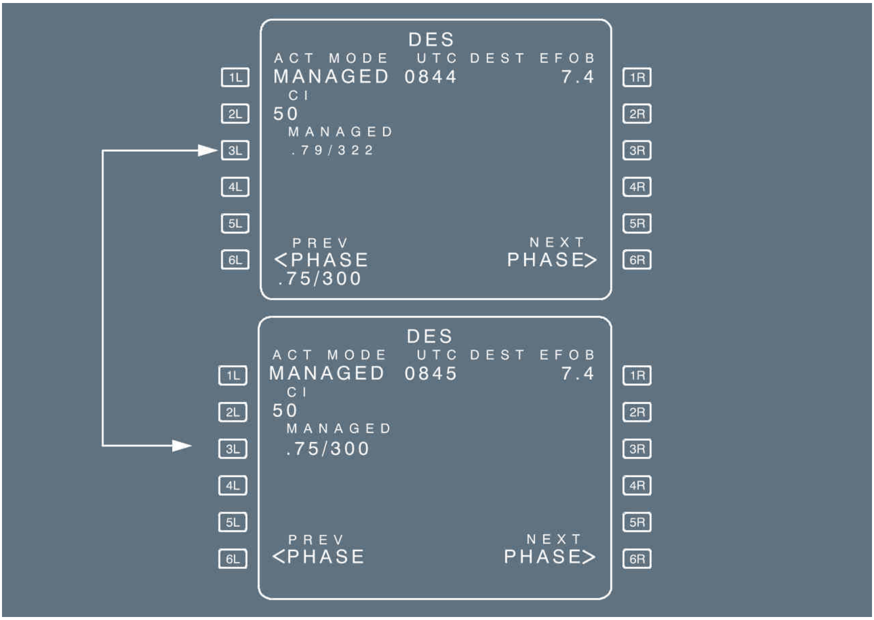
```
            CLB
ACT MODE
SELECTED
  CI
50
  MANAGED
*250
  PRESEL
  220

  PREV                 NEXT
<PHASE               PHASE>
```

CLIMB PHASE ACTIVE

The active mode field changes from MANAGED to SELECTED, and the FM will use the entered speed for climb predictions computation.
The flight crew can revert to managed mode by pressing the 3L key.

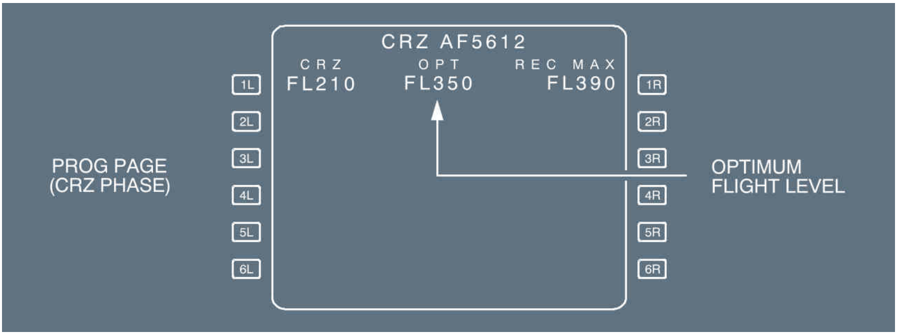
PRESET TARGET SPEED/MACH FOR DES PHASE

The flight crew can change the speed and/or Mach displayed in the MANAGED field by inserting a speed and/or Mach in the MANAGED field.
Although the entered speed is chosen by the flight crew, the FMGS uses it to compute the descent flight path and top of descent. It is therefore part of the managed descent profile.


DES
ACT MODE
MANAGED
UTC DEST EFOB
0844 7.4
CI
50
MANAGED
.79/322
PREV
<PHASE
.75/300
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DES
ACT MODE
MANAGED
UTC DEST EFOB
0845 7.4
CI
50
MANAGED
.75/300
PREV
<PHASE
NEXT
PHASE>

The flight crew can revert to the optimum speed/Mach by clearing the 3L field.

OPTIMUM FLIGHT LEVEL

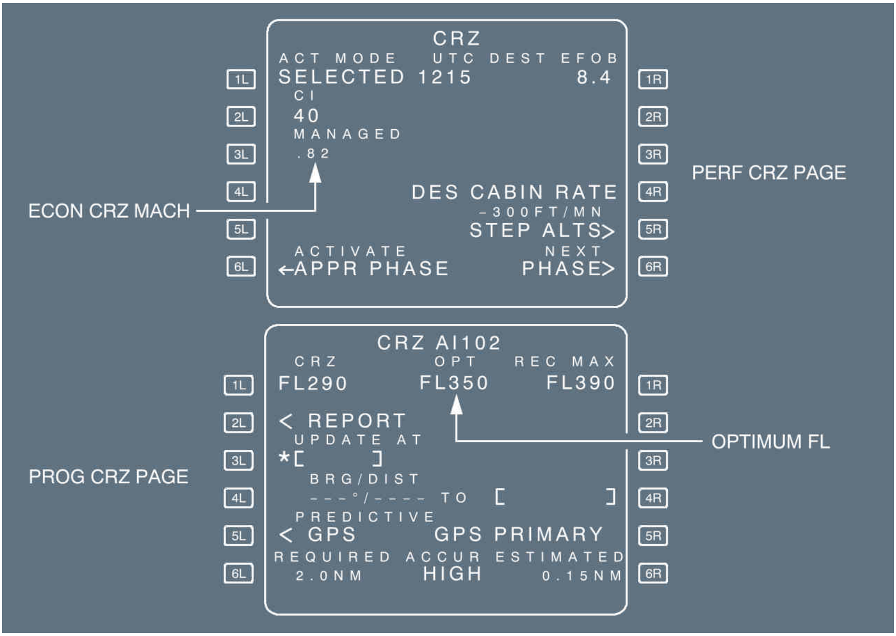

PROG PAGE
(CRZ PHASE)
CRZ AF5612
CRZ
FL210
OPT
FL350
REC MAX
FL390
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
OPTIMUM
FLIGHT LEVEL

The optimum flight level (OPT FL) indicates the most economic flight level for a given cost index, weight, weather data. It is continuously updated in flight. It requires a 5 min minimum cruise time, at a minimum cruise flight level of FL 100.

The OPT FL is a compromise between fuel and time saving. As a result, the flight crew may observe jumps in OPT FL due to GW, ISA, or wind changes. The computation of the OPT FL considers the wind entries made at the different altitudes (normally at the different CRZ FL). When flying the subsequent CRZ FL, the OPT FL proposed by the PROG page may be affected by the wind entries made at the previous CRZ FL; these winds are automatically propagated and may be significantly different from the actual winds.

Note: *For simplification purposes, the FCOM/QRH gives the OPT FL at a given Mach number. It does not consider the cost index, therefore the FMGS and the FCOM/QRH values are different.*

FM displays OPT FL on the PROG page. The PROG page displays dashes for this quantity when the system detects an engine-out condition.


CRZ
ACT MODE
UTC DEST EFOB
SELECTED 1215 8.4
CI
40
MANAGED
.82
DES CABIN RATE
-300FT/MN
STEP ALTS>
ACTIVATE
←APPR PHASE
NEXT
PHASE>
ECON CRZ MACH
PERF CRZ PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CRZ AI102
CRZ
OPT
REC MAX
FL290
FL350
FL390
< REPORT
UPDATE AT
*[ ]
BRG/DIST
---°/---- TO [ ]
PREDICTIVE
< GPS
GPS PRIMARY
REQUIRED ACCUR ESTIMATED
2.0NM HIGH 0.15NM
OPTIMUM FL
PROG CRZ PAGE

OPTIMUM DESCENT PATH

The vertical flight path is computed to minimize fuel consumption, while satisfying the various altitude constraints of the F-PLN and the descent speed profile, in order to reach VAPP at 1 000 ft.

The computer calculates the descent profile before the descent phase is initiated, taking into account:

- All lateral and vertical flight plan data
- The descent and approach winds, as inserted into the DESCENT WIND page and PERF APPR page, and the required maximum cabin rate of descent.

During descent, the descent profile is updated only if the flight plan is modified, or if data for the APPR phase (WIND, VAPP, or LDG CONF) are changed.

OPTIMIZATION

Ident.: DSC-22_20-40-10-00011084.0038001 / 23 JUN 15
Applicable to: MSN 04827-04860

The FMGC minimizes cost by optimizing the following items:

- Takeoff, approach, and go-around speeds (F, S, Green Dot, VAPP)
- Target speed for CLB, CRZ and DES phases (ECON SPD/MACH)
- Flight Level (for flight crew's information)
- Descent profile from CRZ FL down to the destination airport.

These items depend on the data the flight crew inserts during lateral and vertical flight planning and revision procedures.
Most are displayed on the PERF pages associated with the appropriate flight phases.

WIND PROFILE

To obtain the best predictions, the flight crew must enter the wind for the various flight phases and specifically for waypoints in cruise.

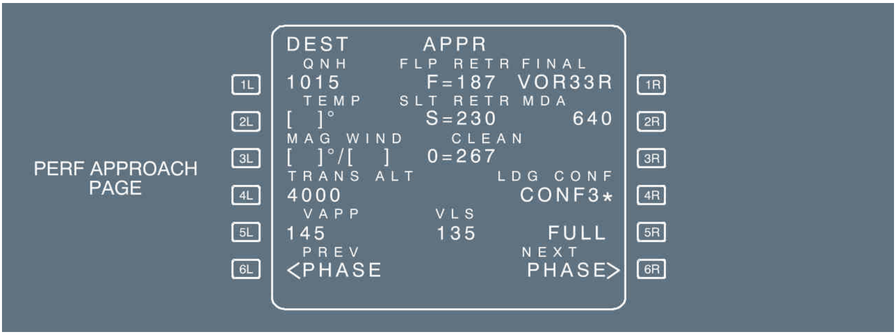
■ **ON GROUND:**
During flight planning initialization, enter the winds for the climb and cruise phases using the HISTORY WIND and WIND pages. Enter, manually or with AOC, different wind values in the climb and cruise phases. The system will compute a wind for all waypoints of the F-PLN using linear interpolation between manual/AOC entries.
The wind profile will be displayed on the F-PLN B page, and is called forecast wind profile.
Flight crew or AOC entries are displayed in large font, and system-computed winds in small font.

■ **IN FLIGHT:**
The system updates the predictions and the current ECON speed, using the measured wind at the present position. It combines actual wind and forecast winds to compute the wind ahead of the aircraft.
During cruise, the flight crew will enter the descent winds and the approach wind. The system will update the final predictions, compute the optimum descent profile and compute the optimum speed in descent and approach.

The forecast wind profile will be used to compute fuel and time predictions, as well as ECON speed/Mach targets.

OPTIMUM TAKEOFF, APPROACH AND GO-AROUND SPEEDS

The FMGC computes takeoff speeds (F, S, Green Dot) during the preflight and takeoff phases, using the performance model in the database and the takeoff weight.
The flight crew has to insert V1, VR, and V2 in the PERF TO page manually.
The FMGC uses the performance model and either the predicted landing weight or the current gross weight at transition to the approach phase to compute approach speeds (VLS, VAPP, F, S, Green Dot).
On the PERF APPR page, the selected LDG CONF determines the applicable VLS and VAPP, the latter being updated by the WIND correction that the flight crew enters on the same page. The FMGC uses the performance model and gross weight to compute go-around speeds (F, S, Green Dot).



```
DEST          APPR
 QNH        FLP RETR FINAL
1015          F=187  VOR33R
 TEMP       SLT RETR MDA
[  ]°         S=230     640
MAG WIND        CLEAN
[  ]°/[  ]    0=267
TRANS ALT             LDG CONF
4000                  CONF3*
 VAPP          VLS
145            135      FULL
 PREV                  NEXT
<PHASE                PHASE>
```

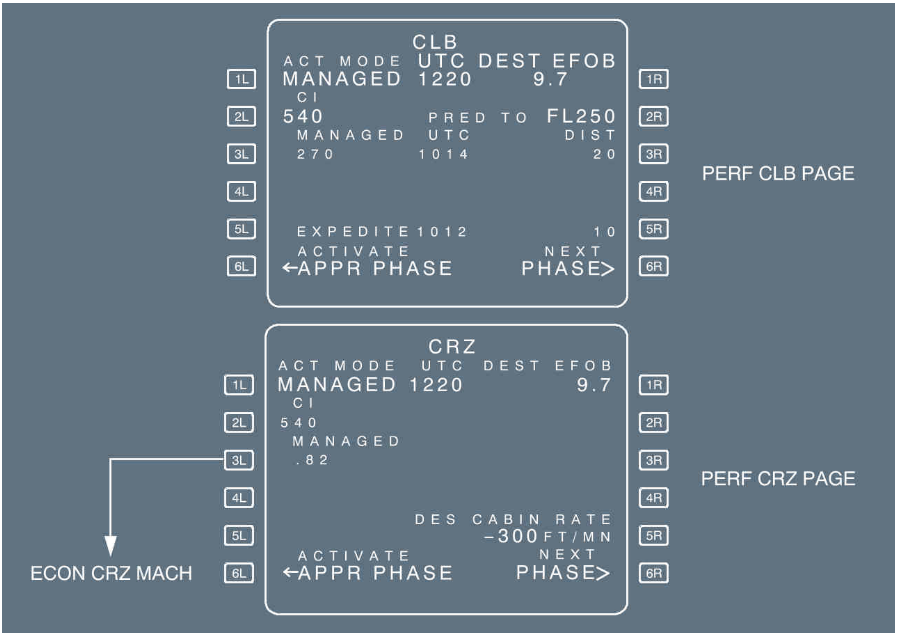
OPTIMUM TARGET SPEED FOR CLIMB, CRUISE AND DESCENT (ECON SPD/MACH)

The FMGS computes the optimum target speed (ECON SPD/MACH) as a function of:
- Cost index (CI)
- Cruise flight level (CRZ FL)
- Gross weight (GW)
- Wind and temperature models
- Performance factor.

The computer processes the ECON SPDs for the climb and descent phases before the initiation of the flight phase, and freezes the values once the flight phase becomes active.
When there is no time or speed constraint/limit, ECON SPEED is the optimum speed for the selected cost index. It refers to fuel and time cost and not directly to fuel saving.
The FM calculates ECON CLB, ECON DES and the associated top of climb and top of descent as a function of cost index, cruise FL, and meteo data.

The computer continually updates ECON CRUISE MACH (SPD), taking into account current weather conditions and modifications to the flight plan.

Note: *If the cruise FL is below FL 250, ECON CRUISE SPEED is computed.*
If the cruise FL is above FL 250, ECON CRUISE MACH is computed.



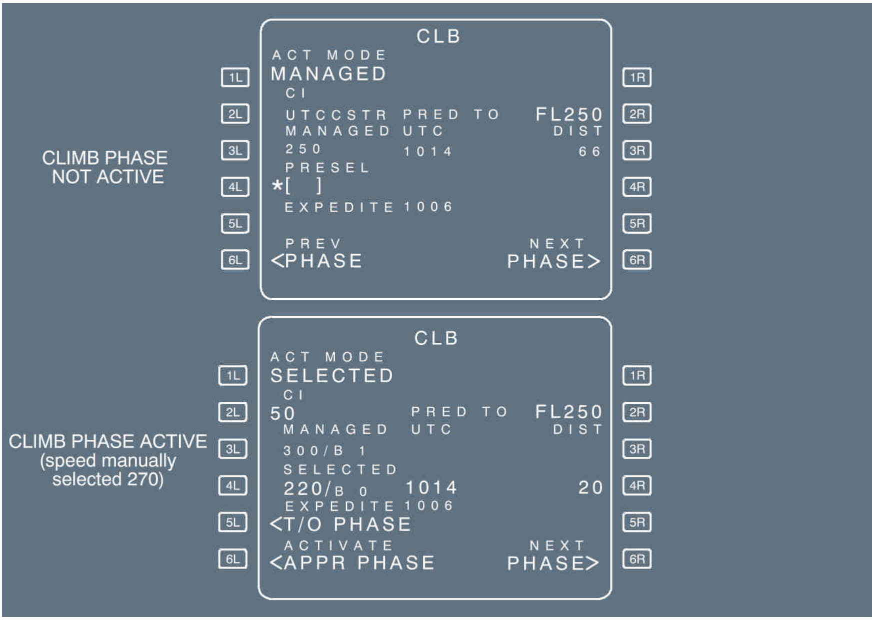
```
              CLB
ACT MODE  UTC DEST EFOB
MANAGED  1220       9.7
 CI
540          PRED TO FL250
 MANAGED     UTC      DIST
 270         1014       20


 EXPEDITE 1012          10
 ACTIVATE           NEXT
←APPR PHASE        PHASE>
```

```
              CRZ
ACT MODE   UTC  DEST EFOB
MANAGED  1220        9.7
 CI
540
 MANAGED
 .82

          DES CABIN RATE
              -300FT/MN
 ACTIVATE           NEXT
←APPR PHASE        PHASE>
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PERF CLB PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PERF CRZ PAGE
ECON CRZ MACH

PRESET TARGET SPEED FOR CLB PHASE

The flight crew can preselect the climb speed before the CLB phase begins, by inserting a speed in the PRESEL field:



CLIMB PHASE
NOT ACTIVE

```
                CLB
ACT MODE
MANAGED
 CI
 UTCCSTR  PRED TO          FL250
 MANAGED  UTC               DIST
 250      1014                66
 PRESEL
*[   ]
 EXPEDITE 1006

 PREV                       NEXT
<PHASE                    PHASE>
```

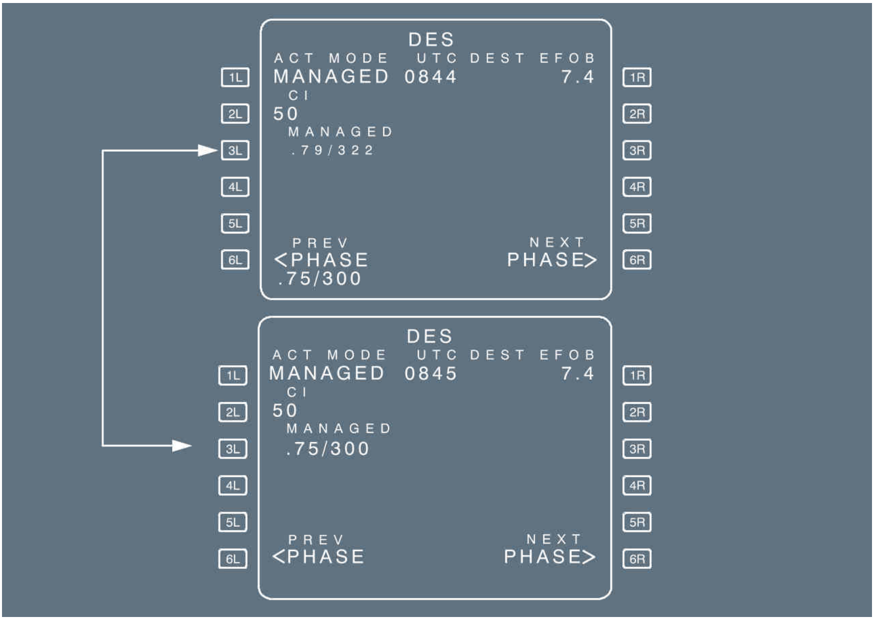
CLIMB PHASE ACTIVE
(speed manually
selected 270)

```
                CLB
ACT MODE
SELECTED
 CI
50         PRED TO         FL250
 MANAGED   UTC              DIST
 300/B 1
 SELECTED
 220/B 0    1014              20
 EXPEDITE 1006
<T/O PHASE
 ACTIVATE                   NEXT
<APPR PHASE               PHASE>
```

The active mode field changes from MANAGED to SELECTED, and the FM will use the entered speed for climb predictions computation.
The flight crew can revert to managed mode by pressing the 3L key.

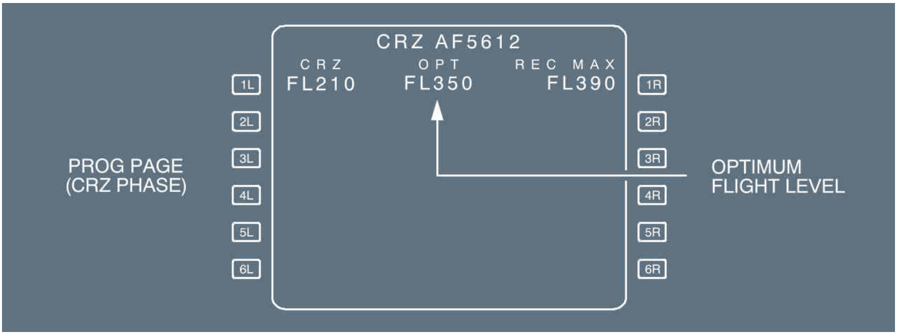
PRESET TARGET SPEED/MACH FOR DES PHASE

The flight crew can change the speed and/or Mach displayed in the MANAGED field by inserting a speed and/or Mach in the MANAGED field.
Although the entered speed is chosen by the flight crew, the FMGS uses it to compute the descent flight path and top of descent. It is therefore part of the managed descent profile.


DES
ACT MODE
MANAGED
UTC DEST EFOB
0844
7.4
CI
50
MANAGED
.79/322
PREV
<PHASE
.75/300
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DES
ACT MODE
MANAGED
UTC DEST EFOB
0845
7.4
CI
50
MANAGED
.75/300
PREV
<PHASE
NEXT
PHASE>

The flight crew can revert to the optimum speed/Mach by clearing the 3L field.

OPTIMUM FLIGHT LEVEL

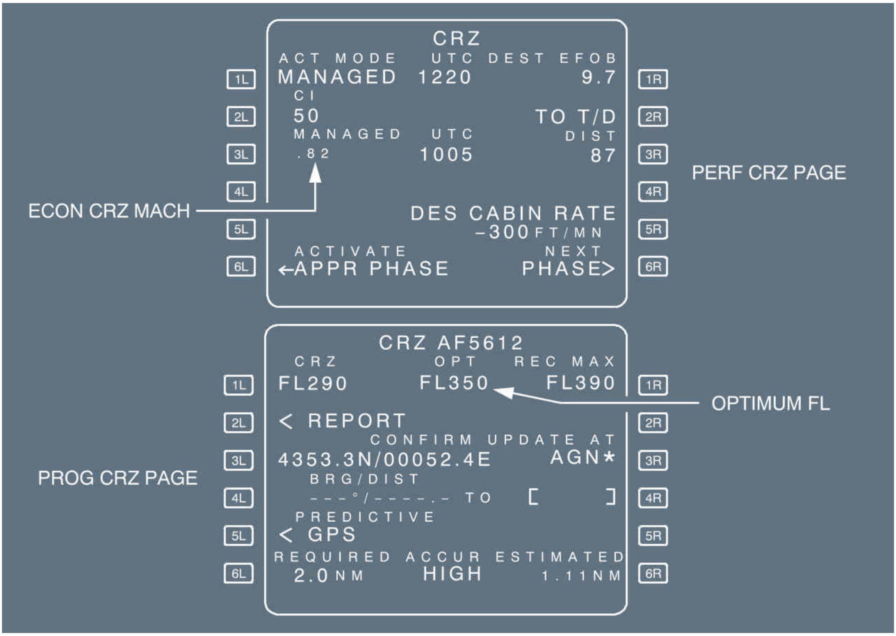

CRZ AF5612
CRZ
FL210
OPT
FL350
REC MAX
FL390
PROG PAGE
(CRZ PHASE)
OPTIMUM
FLIGHT LEVEL
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

The optimum flight level (OPT FL) indicates the most economic flight level for a given cost index, weight, weather data. It is continuously updated in flight. It requires a 5 min minimum cruise time, at a minimum cruise flight level of FL 100.

The OPT FL is a compromise between fuel and time saving. As a result, the flight crew may observe jumps in OPT FL due to GW, ISA, or wind changes. The computation of the OPT FL takes into account the wind entries made by the flight crew, as well as the winds propagated by the FMS from previously entered winds.

Note: *For simplification purposes, the FCOM/QRH gives the OPT FL at a given Mach number. It does not consider the cost index, therefore the FMGS and the FCOM/QRH values are different.*

FM displays OPT FL on the PROG page. The PROG page displays dashes for this quantity when the system detects an engine-out condition.



```
              CRZ
ACT MODE   UTC  DEST  EFOB
MANAGED    1220        9.7
 CI
 50                 TO T/D
 MANAGED   UTC        DIST
 .82       1005         87

          DES CABIN RATE
             -300FT/MN
 ACTIVATE             NEXT
←APPR PHASE         PHASE>
```

```
          CRZ AF5612
  CRZ       OPT    REC MAX
FL290      FL350     FL390
< REPORT
       CONFIRM UPDATE AT
4353.3N/00052.4E      AGN*
   BRG/DIST
   ---°/----.- TO  [      ]
  PREDICTIVE
< GPS
REQUIRED ACCUR ESTIMATED
 2.0NM      HIGH     1.11NM
```

OPTIMUM DESCENT PATH

The vertical flight path is computed to minimize fuel consumption, while satisfying the various altitude constraints of the F-PLN and the descent speed profile, in order to reach VAPP at 1 000 ft.

The computer calculates the descent profile before the descent phase is initiated, taking into account:
- All lateral and vertical flight plan data
- The descent and approach winds, as inserted into the DESCENT WIND page and PERF APPR page, and the required maximum cabin rate of descent.

During descent, the descent profile is updated only if the flight plan is modified, or if data for the APPR phase (WIND, VAPP, or LDG CONF) are changed.

Intentionally left blank

COST INDEX (CI)

Ident.: DSC-22_20-40-20-00011041.0001001 / 17 AUG 10
Applicable to: ALL

The cost index is a fundamental input for the ECON SPEED or ECON MACH computation. ECON SPEED and ECON MACH reduce the total flight cost in terms of flight time and fuel consumption (and not only in terms of fuel saving).
CI is the ratio of flight time cost (CT) to fuel cost (CF).
CI = CT/CF (kg/min or 100 lb/h).
CI = 0 corresponds to minimum fuel consumption (Max Range).
CI = 999 corresponds to minimum time.
CI = Long Range Cruise (*Refer to PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Cost Index for Long-Range Cruise*).

Note: *The airline's operations department usually defines the cost index, to optimize each company route. The flight crew does not ordinarily modify the cost index during a flight.*

Intentionally left blank

GENERAL

Ident.: DSC-22_20-40-30-00011080.0002001 / 17 AUG 10
Applicable to: ALL

The FMGC computes predictions for the primary and secondary flight plans and displays them on the Multipurpose Control and Display Units (MCDUs), and on the navigation display (ND) of the Electronic Flight Instrument System (EFIS).
The computations use the current state of the aircraft (GW, CG, position, altitude, speed, engaged mode of the autopilot or flight director, time, wind, temperature) for the active flight plan.
The computations use data entered by the flight crew for the secondary flight plan when it is not a copy of the active flight plan. When the secondary flight plan is a copy of the active flight plan, it uses the same data.

PREDICTIONS FOR THE PRIMARY FLIGHT PLAN

Ident.: DSC-22_20-40-30-00011085.0001001 / 17 AUG 10
Applicable to: ALL

The predictions displayed on the MCDU assume that the FMGS will guide the aircraft along the preplanned lateral and vertical flight plans.
The predictions displayed on the ND assume that the aircraft will continue to operate in the modes (selected or managed) that are currently active.
As long as the aircraft is flying the flight plan under managed guidance, the predictions on the MCDU will match those on the ND.

If the flight crew does not fly the flight plan, the MCDU predictions assume that:
- The flight crew will fly back towards the flight-planned route
- The flight crew will immediately resume flying the FMGC managed modes.

If the flight crew does not fly the managed speed profile, the MCDU predictions assume that they will maintain the selected speed until they reach:
- In the climb or descent phase, the next speed limit or speed constraint if any, or next phase
- In cruise, the top of descent.

Then, the predictions assume that the flight crew will revert to managed speed.

COMPUTATION OF PREDICTIONS

Ident.: DSC-22_20-40-30-00011086.0001001 / 17 AUG 10

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The system calculates various predictions for the active flight plan and updates them continually during flight as functions of:

- Revisions to the lateral and vertical flight plans
- Cost index
- Current winds and temperature
- Present position versus lateral and vertical flight plans
- Current guidance modes
- Speed control (managed/selected).

The MCDU and the ND show these predictions, each of which is based on specific assumptions.

Note: *During computation, prediction fields on the MCDU pages display dashes.*

COMPUTATION OF PREDICTIONS

Ident.: DSC-22_20-40-30-00011086.0002001 / 17 AUG 10

Applicable to: MSN 04827-04860

The system calculates various predictions for the active flight plan and updates them continually during flight as functions of:

- Revisions to the lateral and vertical flight plans
- Cost index
- Current winds and temperature
- Present position versus lateral and vertical flight plans
- Current guidance modes
- Cabin rate of descent
- ZFW/ZFWCG or GW/CG on the FUEL PRED page
- The engine anti-ice status during descent
- QNH on the PERF APPR page
- Speed control (managed/selected).

The MCDU and the ND show these predictions, each of which is based on specific assumptions.

Note: *During computation, prediction fields on the MCDU pages display dashes.*

PREDICTIONS DISPLAYED ON THE NAVIGATION DISPLAY

Ident.: DSC-22_20-40-30-00011090.0002001 / 17 AUG 10

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

These predictions consist of symbols positioned along the lateral flight plan (NAV mode engaged) or the track line (NAV mode not engaged). These symbols (named as pseudo waypoints) and their meanings are:

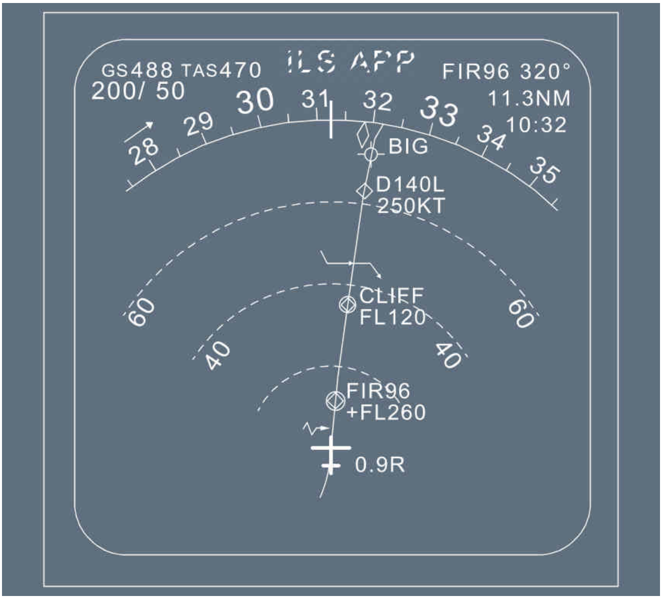
Pseudo waypoint	**Definition**
↗ ↘	Level symbol at the position (top of climb or level-off) where the aircraft will reach: - The FCU selected altitude (blue) or - The constrained altitude, if it is more restrictive than the FCU altitude and if appropriate modes are engaged (magenta).
↘	Top of descent or continue descent symbol: - Top of descent (always white) - Continue descent symbol (white if DES is not armed, blue if it is).
↗	Start of CLIMB symbol: - White if CLB is not armed - Blue if CLB is armed.
∿	Intercept point symbol: The point where the aircraft is predicted to intercept the descent path, if there is any vertical deviation when the aircraft is in DES mode (white if DES is not engaged, blue if it is).
•	Speed change symbol: The point at which the aircraft will initiate an automatic ACCEL or DECEL from current speed to a new computed speed if it encounters a SPD LIM, SPD CSTR, or HOLDING SPD (magenta).
Ⓓ	Decelerate point symbol: - Indicates the point at which the aircraft is predicted to decelerate for approach (and thus switch to the approach phase) - Magenta, if in managed speed and NAV or approach mode is engaged - White, if in selected speed or HDG/TRK mode - Automatic deceleration only occurs when displayed in magenta.
○	ALT CSTR symbol set around the constrained waypoint: - Magenta, when the ALT CSTR is predicted to be met - Amber, when the ALT CSTR is predicted to be missed - White, when the ALT CSTR is not taken into account by the FMGS, and the NAV mode is engaged.
○ (10 45) ○ (ETP)	Time marker and equitime point symbols appear in green to indicate where the aircraft reaches the time marker or equitime point.

Continued on the following page

Continued from the previous page

Pseudo waypoint	Definition
◠	Energy circle symbol (green arc) centered on the aircraft position and oriented to the current track line. Represents the Required Distance to Land. Only displayed if the lateral guidance mode is heading or track, and the current FMS flight phase is in cruise, descent or approach, and the aircraft is within 180 NM of the destination.
Crosstrack error XX.XR or XX.XL (X is a number)	The crosstrack error displays the lateral deviation between the aircraft position and the track of the F-PLN active leg. The value is limited to 99.9 NM left or right.
INTCPT	Intercept waypoint is displayed on the ND at the point at which the present track intercepts the F-PLN.

The predicted time of arrival at the TO WPT is located in the upper right-hand corner of the ND. It assumes direct distance from the aircraft position to the TO WPT and assumes current ground speed will be constant.



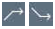
As a general rule, the ND indicates what the aircraft will fly, with the current active FG modes.

For example:
- The continuous green line on the ND represents the track the aircraft is currently flying:
  - If HDG/TRK is engaged, the track line is green and the flight plan is dashed
  - If NAV mode is engaged, the green line is the flight plan.
- If the speed target is manually selected, the speed-change symbol is no longer displayed because it will not be taken into account.
- When the aircraft is not following the vertical flight plan (OP CLB, OP DES, V/S) but the NAV mode is engaged, the system disregards any altitude constraints and puts white circles around the waypoints that have these constraints and positions level symbols accordingly.
- Pseudo waypoints are adjusted each time predictions are updated.

PREDICTIONS DISPLAYED ON THE NAVIGATION DISPLAY

Ident.: DSC-22_20-40-30-00011090.0004001 / 20 JAN 15
Applicable to: MSN 04827-04860

These predictions consist of symbols positioned along the lateral flight plan (NAV mode engaged) or the track line (NAV mode not engaged). These symbols (named as pseudo waypoints) and their meanings are:

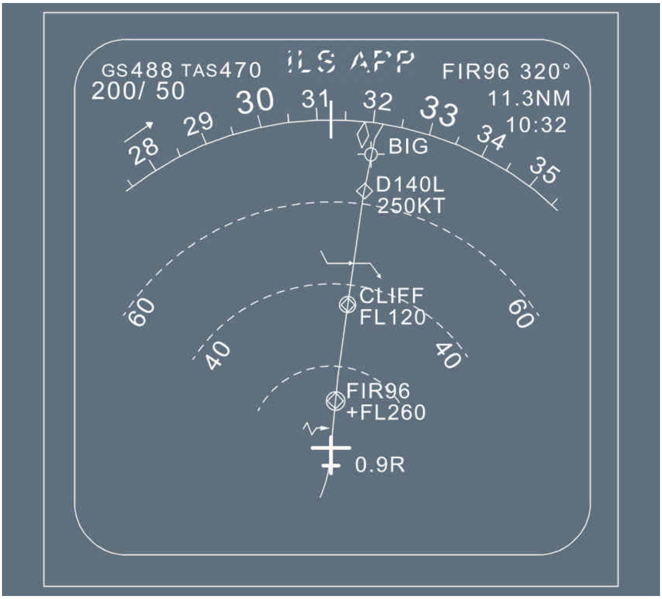
Pseudo waypoint	Definition
	Level symbol at the position (top of climb or level-off) where the aircraft will reach: - The FCU selected altitude (blue) or - The constrained altitude, if it is more restrictive than the FCU altitude and if appropriate modes are engaged (magenta).
	Top of descent or continue descent symbol: - Top of descent (always white) - Continue descent symbol (white if DES is not armed, blue if it is).
	Start of CLIMB symbol: - White if CLB is not armed - Blue if CLB is armed.
	Intercept point symbol: The point where the aircraft is predicted to intercept the descent path, if there is any vertical deviation when the aircraft is in DES mode (white if DES is not engaged, blue if it is).
•	Speed change symbol: The point at which the aircraft will initiate an automatic ACCEL or DECEL from current speed to a new computed speed if it encounters a SPD LIM, SPD CSTR, or HOLDING SPD (magenta).

Continued on the following page

Continued from the previous page

Pseudo waypoint	**Definition**
Ⓓ	Decelerate point symbol: - Indicates the point at which the aircraft is predicted to decelerate for approach (and thus switch to the approach phase) - Magenta, if in managed speed and NAV or approach mode is engaged - White, if in selected speed or HDG/TRK mode - Automatic deceleration only occurs when displayed in magenta.
○	ALT CSTR symbol set around the constrained waypoint: - Magenta, when the ALT CSTR is predicted to be met - Amber, when the ALT CSTR is predicted to be missed - White, when the ALT CSTR is not taken into account by the FMGS, and the NAV mode is engaged.
○ (10 45) ○ (ETP)	Time marker and equitime point symbols appear in green to indicate where the aircraft reaches the time marker or equitime point.
◠	Energy circle symbol (green arc) centered on the aircraft position and oriented to the current track line. Represents the Required Distance to Land. Only displayed in descent and approach phases when a selected lateral mode is engaged (HDG or TRK).
Crosstrack error XX.XR or XX.XL (X is a number)	The crosstrack error displays the lateral deviation between the aircraft position and the track of the F-PLN active leg. The value is limited to 99.9 NM left or right.
INTCPT	Intercept waypoint is displayed on the ND at the point at which the present track intercepts the F-PLN.

The predicted time of arrival at the TO WPT is located in the upper right-hand corner of the ND. It assumes direct distance from the aircraft position to the TO WPT and assumes current ground speed will be constant.



As a general rule, the ND indicates what the aircraft will fly, with the current active FG modes.

For example:

- The continuous green line on the ND represents the track the aircraft is currently flying:
  - If HDG/TRK is engaged, the track line is green and the flight plan is dashed
  - If NAV mode is engaged, the green line is the flight plan.
- If the speed target is manually selected, the speed-change symbol is no longer displayed because it will not be taken into account.
- When the aircraft is not following the vertical flight plan (OP CLB, OP DES, V/S) but the NAV mode is engaged, the system disregards any altitude constraints and puts white circles around the waypoints that have these constraints and positions level symbols accordingly.
- Pseudo waypoints are adjusted each time predictions are updated.

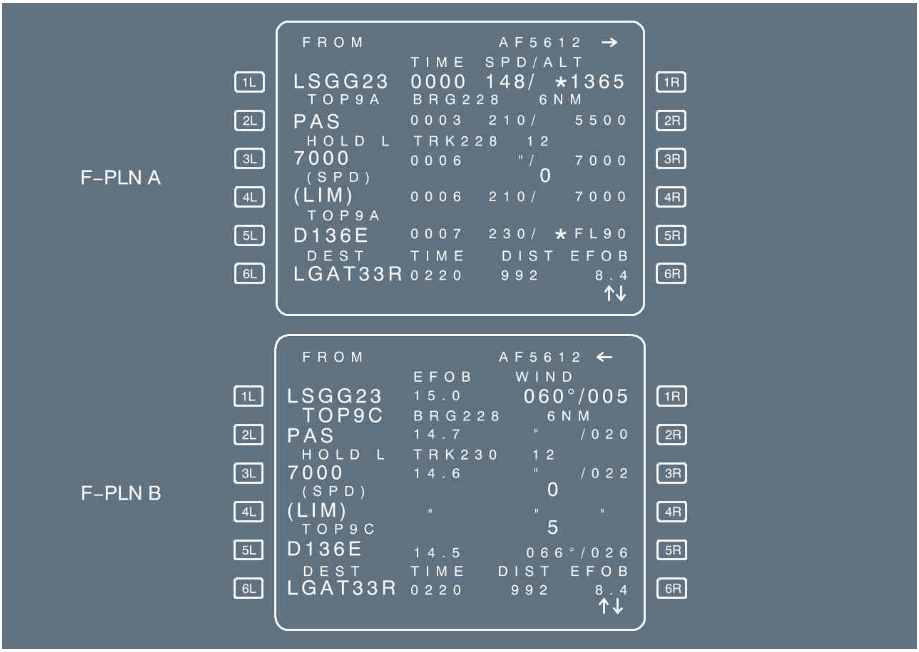
PREDICTIONS DISPLAYED ON THE MCDU

Ident.: DSC-22_20-40-30-00011093.0001001 / 14 MAY 12
Applicable to: ALL

The predictions displayed on the MCDU assume that AP (or FD order) is controlling the aircraft and flying it along the preplanned lateral and vertical flight plan.

Therefore:

- If the aircraft is guided along the flight plan (managed guidance), the MCDU predictions correspond exactly to what the aircraft is doing
- If the aircraft is not guided along the flight plan (selected guidance), the MCDU predictions assume that it will return immediately to the flight plan, intercepting at a predetermined angle, and will then proceed under managed guidance
- If the aircraft does not fly the managed speed profile (ECON, SPD CSTR...), the MCDU predictions assume that it will remain at the present selected speed/Mach until it reaches the next SPD CSTR or SPD LIM or enters the next flight phase.



```
 FROM                    AF5612 →
             TIME  SPD/ALT
LSGG23      0000  148/  *1365
 TOP9A      BRG228     6NM
PAS         0003  210/   5500
 HOLD L     TRK228    12
7000        0006    "/   7000
 (SPD)                0
(LIM)       0006  210/   7000
 TOP9A
D136E       0007  230/  *FL90
 DEST       TIME    DIST  EFOB
LGAT33R     0220    992    8.4
                            ↑↓
```

```
 FROM                    AF5612 ←
             EFOB      WIND
LSGG23       15.0     060°/005
 TOP9C       BRG228     6NM
PAS          14.7      "   /020
 HOLD L      TRK230    12
7000         14.6      "   /022
 (SPD)                 0
(LIM)          "       "     "
 TOP9C                 5
D136E        14.5     066°/026
 DEST        TIME    DIST  EFOB
LGAT33R      0220     992   8.4
                            ↑↓
```

<u>Note:</u> For secondary flight plan predictions, Refer to DSC-22_20-60-50 Secondary Flight Plan.

TYPE OF PREDICTIONS

Ident.: DSC-22_20-40-30-00011113.0002001 / 18 MAR 11
Applicable to: ALL

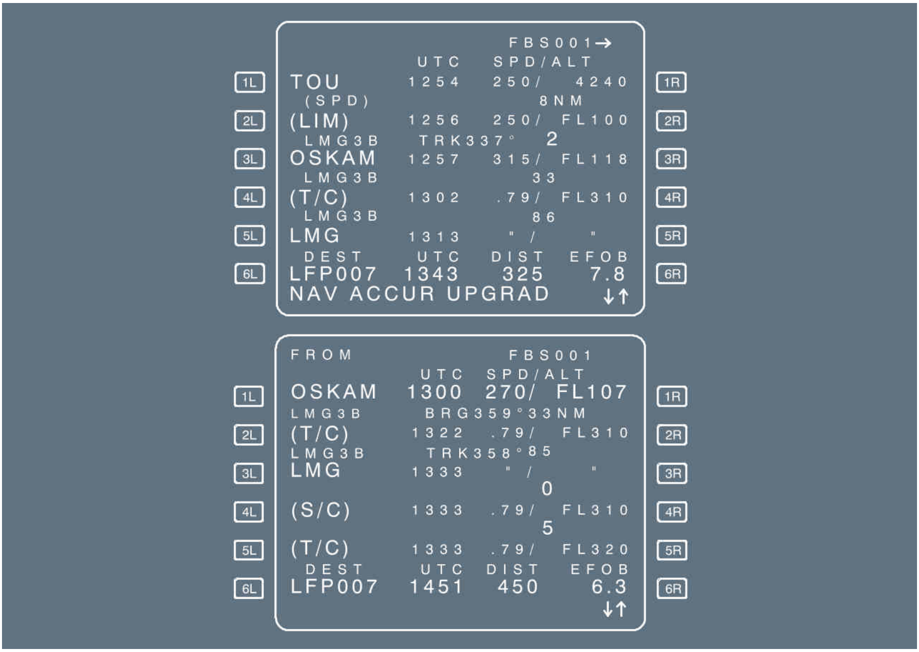
	MCDU PAGE
Pseudo waypoints: T/C, T/D, S/C, S/D, I/P, SPD LIM, DECEL	F-PLN A and B
TIME/SPD/ALT at each WPT and pseudo-WPT	F-PLN A
ETA/DIST TO DEST along F-PLN/EFOB at destination	F-PLN A and B
EFOB/T-WIND at each WPT and pseudo-WPT	F-PLN B
Constraint symbol * at each constrained WPT (TIME/SPD/ALT)	F-PLN A and B
Altitude error in case of missed ALT constraint	VERT REV
EFOB/EXTRA FUEL at each WPT	VERT REV
TIME/EFOB at destination	FUEL PRED/PERF CLB/CRZ/DES
TIME/DIST to a selected altitude	PERF CLB or DES
Fuel prediction prior engine start	INIT B
REC MAX FL	PROG
TIME/EFOB at Alternate	FUEL PRED
XTRA FUEL for various Alternates	ALTN
VDEV vertical deviation from vertical flight path	PROG

EXAMPLES OF MCDU PREDICTIONS

Ident.: DSC-22_20-40-30-00011120.0001001 / 14 MAY 12
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

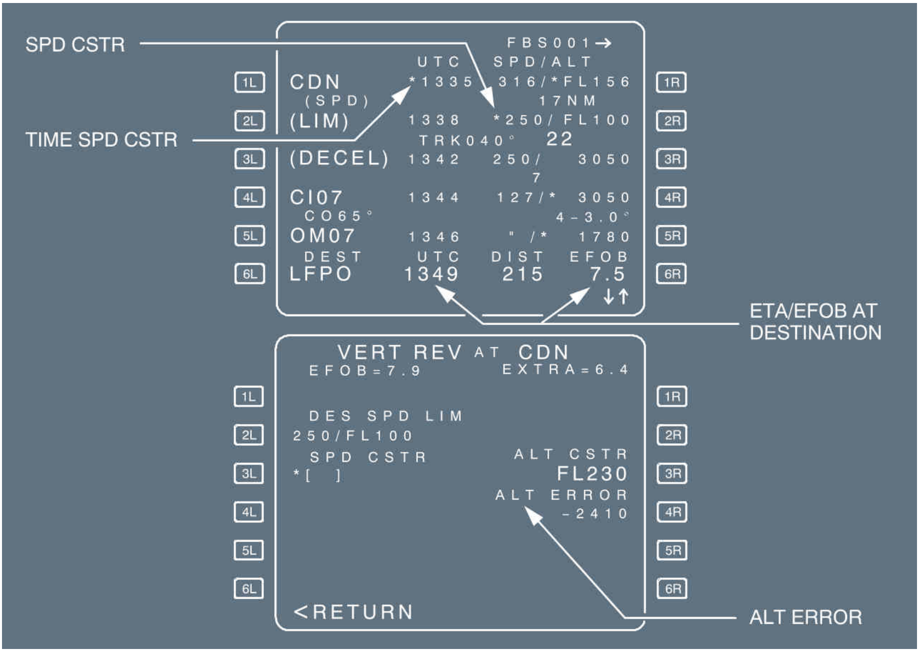
The following MCDU pages display some of the prediction types.

- Pseudo-waypoints:
  Top of Climb (T/C), Top-of-Descent (T/D), Start of Climb (S/C) or Start of Descent (S/D) for Step Climb/Descent, Speed Limit (SPD LIM), deceleration to approach phase (DECEL)
- Time, speed, and altitude predictions:
  TIME/SPD/ALT for all waypoints and pseudo-waypoints.



```
                          FBS001→
           UTC    SPD/ALT
TOU        1254   250/    4240
  (SPD)                  8NM
(LIM)      1256   250/  FL100
  LMG3B     TRK337°     2
OSKAM      1257   315/  FL118
  LMG3B                33
(T/C)      1302   .79/  FL310
  LMG3B                86
LMG        1313    "  /    "
  DEST     UTC    DIST   EFOB
LFP007    1343    325     7.8
NAV ACCUR UPGRAD          ↓↑
```

```
FROM                      FBS001
           UTC   SPD/ALT
OSKAM     1300   270/  FL107
LMG3B      BRG359°33NM
(T/C)     1322   .79/  FL310
LMG3B      TRK358°85
LMG       1333    "  /    "
                      0
(S/C)     1333   .79/  FL310
                      5
(T/C)     1333   .79/  FL320
  DEST     UTC   DIST   EFOB
LFP007    1451   450     6.3
                          ↓↑
```



```
                    FBS001→
          UTC     SPD/ALT
CDN       *1335   316/*FL156
  (SPD)            17NM
(LIM)      1338   *250/ FL100
          TRK040°   22
(DECEL)    1342   250/    3050
                   7
CI07       1344   127/*   3050
  CO65°              4-3.0°
OM07       1346    " /*   1780
  DEST     UTC    DIST   EFOB
LFPO       1349   215     7.5
                          ↓↑
```

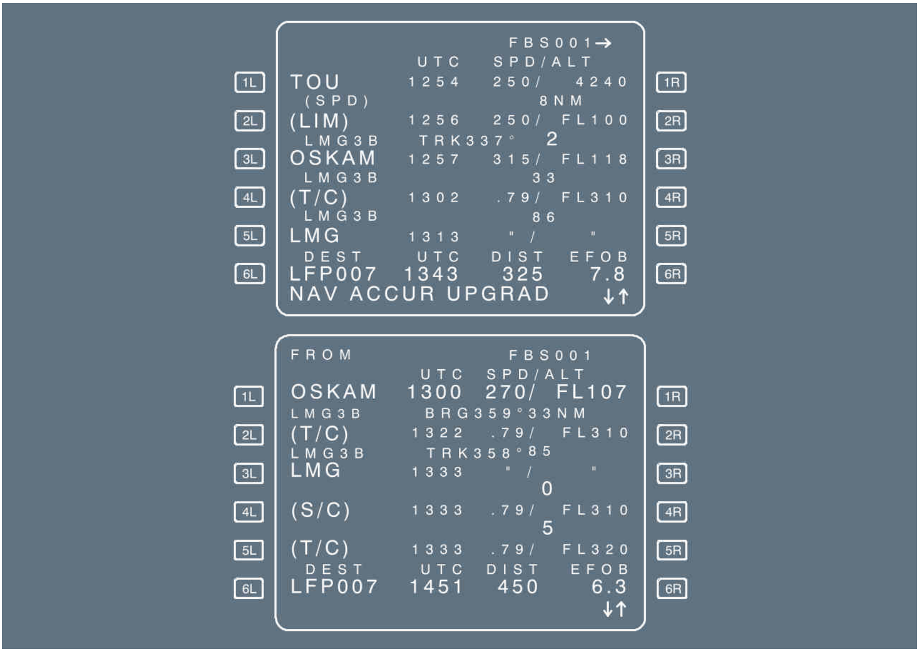
```
   VERT REV AT CDN
 EFOB=7.9        EXTRA=6.4

  DES SPD LIM
250/FL100
  SPD CSTR            ALT CSTR
*[   ]                  FL230
                      ALT ERROR
                        -2410



<RETURN
```

EXAMPLES OF MCDU PREDICTIONS

Ident.: DSC-22_20-40-30-00011120.0002001 / 14 MAY 12
Applicable to: MSN 04827-04860

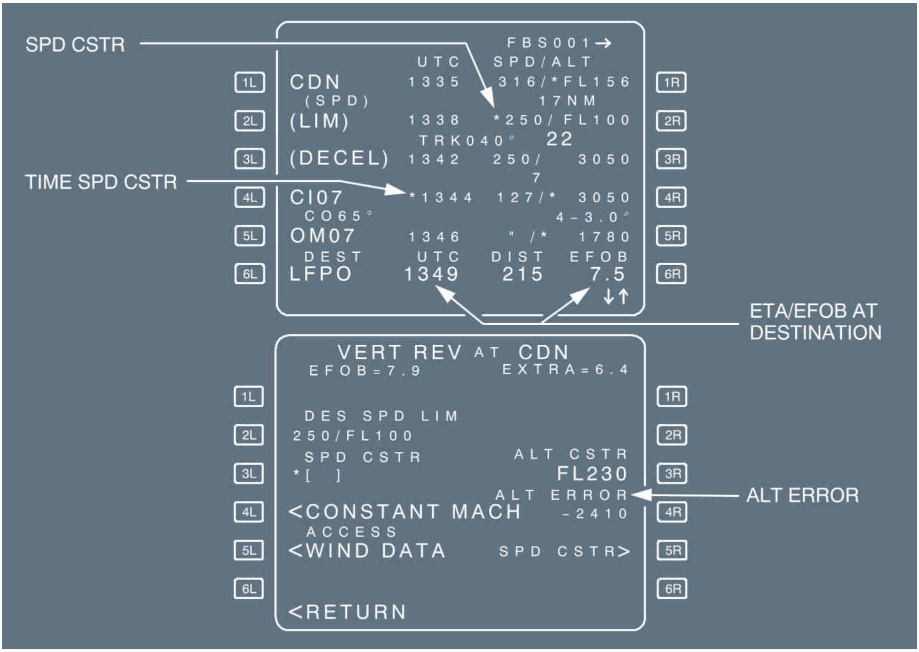
The following MCDU pages display some of the prediction types.

- Pseudo-waypoints:
  Top of Climb (T/C), Top-of-Descent (T/D), Start of Climb (S/C) or Start of Descent (S/D) for Step Climb/Descent, Speed Limit (SPD LIM), deceleration to approach phase (DECEL)
- Time, speed, and altitude predictions:
  TIME/SPD/ALT for all waypoints and pseudo-waypoints.



```
                   FBS001→
          UTC    SPD/ALT
TOU       1254   250/  4240
 (SPD)                8NM
(LIM)     1256   250/ FL100
 LMG3B     TRK337°    2
OSKAM     1257   315/ FL118
 LMG3B               33
(T/C)     1302   .79/ FL310
 LMG3B               86
LMG       1313    " /    "
 DEST     UTC    DIST  EFOB
LFP007    1343   325    7.8
NAV ACCUR UPGRAD         ↓↑
```

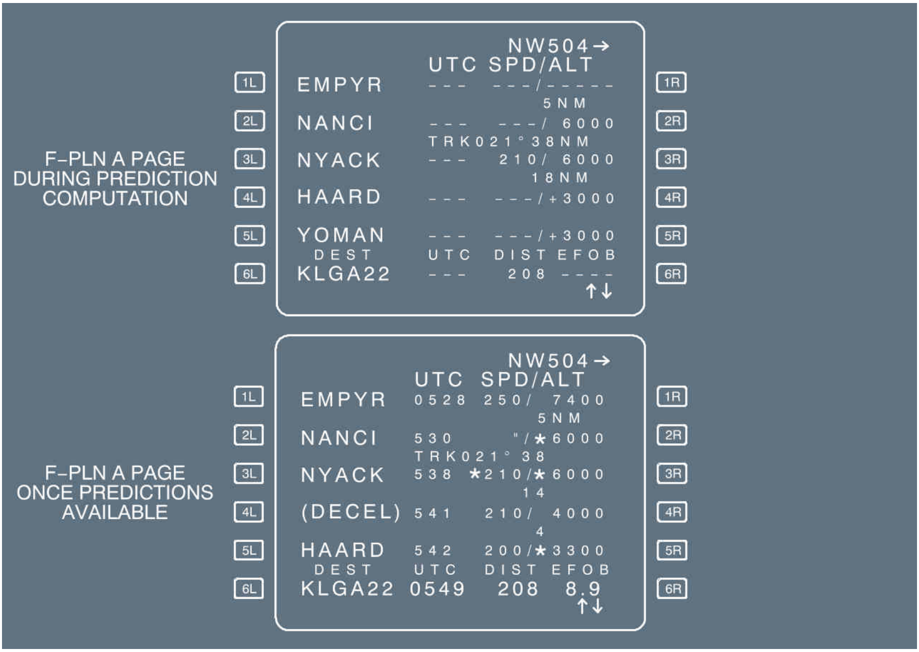
```
FROM               FBS001
          UTC   SPD/ALT
OSKAM     1300  270/ FL107
LMG3B      BRG359°33NM
(T/C)     1322  .79/ FL310
LMG3B      TRK358°85
LMG       1333   " /    "
                  0
(S/C)     1333  .79/ FL310
                  5
(T/C)     1333  .79/ FL320
 DEST     UTC   DIST  EFOB
LFP007    1451   450   6.3
                        ↓↑
```


SPD CSTR
TIME SPD CSTR
ETA/EFOB AT DESTINATION
ALT ERROR
FBS001→
UTC SPD/ALT
CDN 1335 316/*FL156
(SPD) 17NM
(LIM) 1338 *250/ FL100
TRK040° 22
(DECEL) 1342 250/ 3050
7
CI07 *1344 127/* 3050
CO65° 4-3.0°
OM07 1346 " /* 1780
DEST UTC DIST EFOB
LFPO 1349 215 7.5
↓↑
VERT REV AT CDN
EFOB=7.9 EXTRA=6.4
DES SPD LIM
250/FL100
SPD CSTR ALT CSTR
*[ ] FL230
ALT ERROR
<CONSTANT MACH -2410
ACCESS
<WIND DATA SPD CSTR>
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

CONSTRAINT SYMBOLS (STAR)

Ident.: DSC-22_20-40-30-00011150.0001001 / 14 MAY 12
Applicable to: ALL

When a time speed or an altitude constraint is part of the vertical flight plan, it appears on the F-PLN A page only at the time of insertion, or when predictions are not yet available.
Once available, the time speed and altitude predictions are displayed for all F-PLN waypoints: when a speed or an altitude constraint is at a waypoint, a star symbol appears adjacent to the speed or altitude prediction. If the star is magenta, the constraint is predicted to be matched. If the star is amber, the constraint is predicted to be missed.



F–PLN A PAGE DURING PREDICTION COMPUTATION

```
                  NW504→
         UTC SPD/ALT
EMPYR    ---  ---/-----
                   5NM
NANCI    ---  ---/ 6000
         TRK021°38NM
NYACK    ---  210/ 6000
                  18NM
HAARD    ---  ---/+3000
YOMAN    ---  ---/+3000
 DEST    UTC  DIST EFOB
KLGA22   ---   208 ----
                     ↑↓
```

F–PLN A PAGE ONCE PREDICTIONS AVAILABLE

```
                  NW504→
        UTC  SPD/ALT
EMPYR   0528 250/  7400
                  5NM
NANCI   530     "/★6000
        TRK021° 38
NYACK   538  ★210/★6000
                 14
(DECEL) 541  210/  4000
                 4
HAARD   542  200/★3300
 DEST   UTC  DIST  EFOB
KLGA22  0549  208   8.9
                    ↑↓
```

Note: *If an altitude constraint is predicted as missed, the system tells you what will be the error at the specific waypoint.*

VERTICAL DEVIATION

Ident.: DSC-22_20-40-30-00011139.0001001 / 29 SEP 15
Applicable to: ALL

During descent, the system indicates to the flight crew the vertical deviation from the computed descent profile (PFD and MCDU) and predicts where the flight crew can rejoin it.
VDEV on the PFD and PROG page, predictions on the MCDU F-PLN page, symbols on the ND, enable assessment to the vertical position versus the computed flight profile.

OPERATION RULES CONCERNING PREDICTIONS

Ident.: DSC-22_20-40-30-00011140.0001001 / 17 AUG 10
Applicable to: ALL

The flight crew must properly update the flight plan data during the flight, in order to obtain accurate and meaningful predictions.

The flight crew should rely on the ND for short-term predictions. It indicates what the aircraft will do under the currently engaged modes (selected or managed).
The flight crew should rely on the MCDU for long-term predictions, when managed guidance is active or about to be reengaged.

OTHER COMPUTATIONS

Ident.: DSC-22_20-40-30-A-00011141.0002001 / 17 AUG 10
4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENGINE-OUT CASE

The FMGS computes an engine-out target speed for each flight phase. It computes an engine-out maximum altitude at long-range cruise speed, and displays it on the PROG page.
The new speed target becomes Green Dot in climb, and EO CRZ SPD in cruise.
The system computes the flight plan predictions down to the primary destination. If the aircraft is above EO MAX ALT, the predictions are computed, assuming that a drift down descent will immediately be performed to reach EO MAX ALT.

Ident.: DSC-22_20-40-30-A-00011141.0004001 / 17 AUG 10
Applicable to: MSN 04827-04860

ENGINE-OUT CASE

The FMGS computes an engine-out target speed for each flight phase. It computes an engine-out maximum altitude at long-range cruise speed, and displays it on the PROG page.
The new speed target becomes Green Dot in climb, and EO CRZ SPD in cruise.
The system computes the flight plan predictions in all phases (except takeoff phase) down to the primary destination.

Ident.: DSC-22_20-40-30-A-00011142.0001001 / 17 AUG 10
5 **Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

RECOMMENDED MAXIMUM ALTITUDE (REC MAX)

The recommended maximum altitude is the lowest of the maximum altitude that:
- The aircraft can reach with a 0.3 g buffet margin
- The aircraft can fly in level flight at MAX CRZ rating
- The aircraft can maintain a V/S of 300 ft/min at MAX CLB thrust
- The aircraft can fly at a speed higher than Green Dot and lower than VMO/MMO
- The aircraft is certified at.

The REC MAX altitude is displayed on the PROG page.
Anti-ice is not taken into account for this computation. Refer to QRH graphs if icing conditions are expected.

A maximum altitude using a 0.2 g buffet margin is also computed. It is not displayed, but the system uses it to limit CRZ ALT entry.

Ident.: DSC-22_20-40-30-A-00011142.0003001 / 17 AUG 10
Applicable to: MSN 01143-01459

RECOMMENDED MAXIMUM ALTITUDE (REC MAX)

The recommended maximum altitude is the lowest of the maximum altitude that:
- The aircraft can reach with a 0.3 g buffet margin
- The aircraft can fly in level flight at MAX CRZ rating
- The aircraft can maintain a V/S of 300 ft/min at MAX CLB thrust
- The aircraft can fly at a speed higher than Green Dot and lower than VMO/MMO
- The aircraft is certified at.

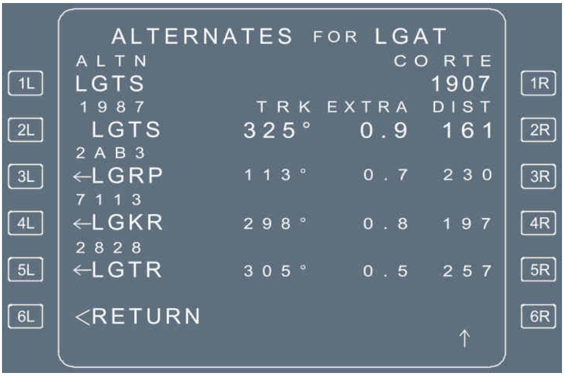
The REC MAX altitude is displayed on the PROG page.
Anti-ice is not taken into account for this computation. Refer to QRH graphs if icing conditions are expected.
A maximum altitude using a 0.2 g buffet margin is also computed. It is not displayed, but the system uses it to limit CRZ ALT entry.

Note: *A REC MAX value that exceeds FL 391 should be disregarded.*

Ident.: DSC-22_20-40-30-A-00011250.0001001 / 17 AUG 10
Applicable to: ALL

PREDICTIONS FOR ALTERNATES

Predictions for alternates are displayed on the ALTERNATES page.



```
   ALTERNATES FOR LGAT
ALTN                     CO RTE
LGTS                       1907
1987         TRK   EXTRA   DIST
 LGTS        325°    0.9    161
2AB3
←LGRP        113°    0.7    230
7113
←LGKR        298°    0.8    197
2828
←LGTR        305°    0.5    257

<RETURN
                          ↑
```

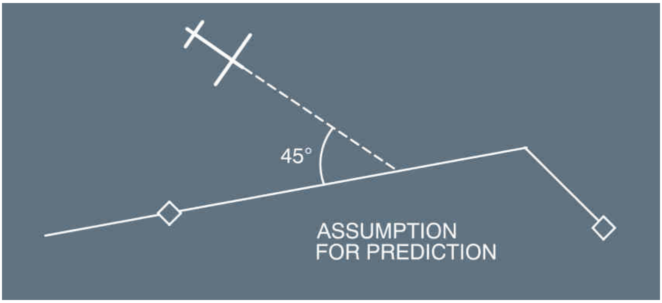
They are based on:
- A default cruise FL equal to 220, if the airway distance is less than 200 NM. Otherwise, it is FL 310
- Simplified wind/temperature models, based on flight crew entries:
  - ALT CRZ wind, as entered on the FUEL PRED page
  - CRZ temperature interpolated from the temperature model for the primary flight plan.
- Airway distance, or direct distance, as provided by the database (manual entry, if not in the database)
- Cost index = 0 (minimum fuel)
- Initial aircraft weight equal to landing weight at primary destination.

Note: *1. No step can be inserted in an alternate flight plan*
2. No predictions are displayed for the selected alternate on flight plan pages. However, the flight crew can read ALTN trip fuel and time on the INIT B page before engine start, and estimated time and estimated fuel on board at alternate on the FUEL PRED page after engine start.

RETURN-TO-TRAJECTORY ASSUMPTIONS

Ident.: DSC-22_20-40-30-00011148.0001001 / 19 DEC 12
Applicable to: ALL

If the aircraft is not on the lateral flight plan, predictions assume an immediate return to the active lateral leg with a 45 ° convergence angle, or that it will fly directly to the “TO” waypoint, when the required convergence angle is greater than 45 °.



ENERGY CIRCLE

Ident.: DSC-22_20-40-30-00011144.0001001 / 17 AUG 10
Applicable to: ALL

The energy circle is a green arc, centered on the aircraft's position and oriented towards the current track line. It is displayed on the NDs during descent, when HDG or TRK mode is selected. It represents the required distance to land from the aircraft's position down to airport elevation at VAPP speed, considering all speed constraints on the vertical profile.

INTRODUCTION TO PERF AND IDLE FACTORS

Ident.: DSC-22_20-40-30-00014856.0001001 / 31 JAN 13
Applicable to: ALL

The FMGS contains a performance database to compute the predictions and the performance data. This performance database has a model of several aircraft configurations (aircraft type/engine model) to tune the performance and the FMGS predictions. For some aircraft configurations, the model can differ from the real aircraft performance. In these cases, the FMGS has to correct the computation of the performance and the predictions. This is the aim of PERF and IDLE factors.
With time, the real aircraft drag and engine performance can deviate from the nominal model.
The airline Flight Operations should periodically revise the value of these factors to adapt FMGS predictions to actual aircraft performance.

Note: The IDLE factor is not available on aircraft with FMS1 Honeywell Legacy.

PERF FACTOR

Applicable to: ALL

Ident.: DSC-22_20-40-30-B-00011145.0001001 / 30 JAN 13

GENERAL

The FMGS uses the PERF factor to correct the predicted fuel flow that is used for the computation of the fuel predictions.

The PERF factor modifies the predicted fuel flow, according to the following formula:

$$\text{FFpred} = \text{FFmodel} \times \left(1 + \frac{\text{PERF FACTOR}}{100}\right)$$

FFpred is the FF used for prediction.
FFmodel is the FF from the aero-engine model.

This correction is applied throughout the entire flight, and modifies the performance predictions and the ECON speed or Mach.
For example: Entering a PERF factor of +1.5 means that Flight Operations have evaluated the aircraft fuel deviation as 1.5 %, compared to the basic performance model (0.0).

IDLE FACTOR

Applicable to: ALL

Ident.: DSC-22_20-40-30-D-00014861.0001001 / 29 SEP 15

GENERAL

The FMGS uses the IDLE factor to adjust the computation of the vertical profile during the descent phase (IDLE segment).

The FMGS computes the vertical profile and the predictions from the Top of Descent (T/D) to the first altitude constraint with the following assumptions:
- The aircraft has a given thrust
- The aircraft has a given speed (within the speed target range).

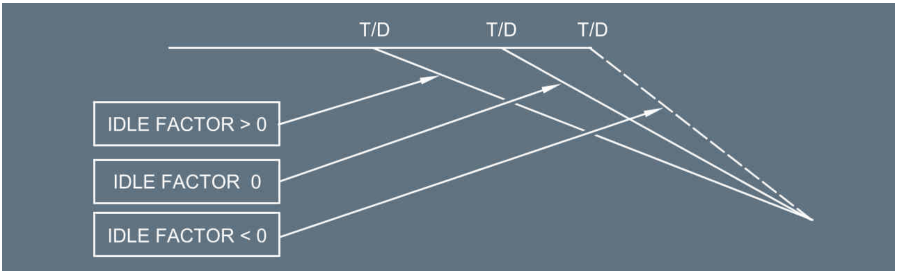
The IDLE Factor adjusts the value of the given thrust by an addition of a delta (DELTA) thrust to IDLE thrust. With this additional thrust, the IDLE Factor gives flexibility to maintain the aircraft on the computed vertical profile in case of external perturbations such as windy conditions (previously entered by the flight crew in WIND pages).
Depending on the IDLE factor value, the FMGS modifies the position of the T/D and computes a vertical profile in function of the given thrust (IDLE + DELTA).

Therefore, the IDLE factor has a direct impact on:
- The computation of vertical profile
- The capability of the aircraft to maintain the vertical profile.

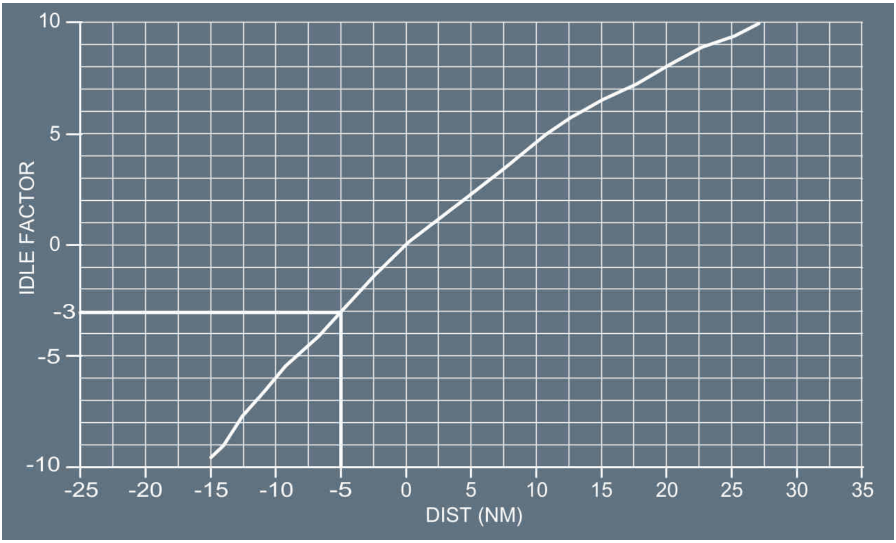
Ident.: DSC-22_20-40-30-D-00014862.0001001 / 23 JUN 15

IMPACT ON VERTICAL PROFILE

- If the IDLE factor is positive, the vertical profile is less steep than with IDLE factor 0. The descent phase starts earlier.
- If the IDLE factor is negative, the descent path is steeper than with IDLE factor 0. The descent phase start later.



The following graph provides an example (average values) of the IDLE factor's effect on descent length:

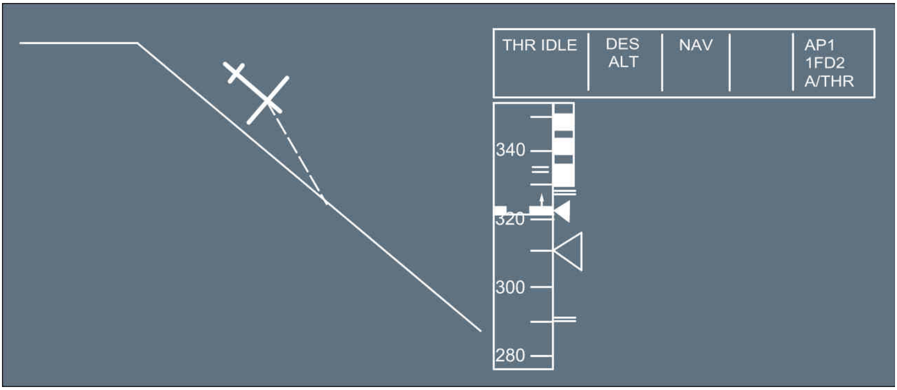


Example: An IDLE factor of -3 decreases the computed descent length by 5 NM.

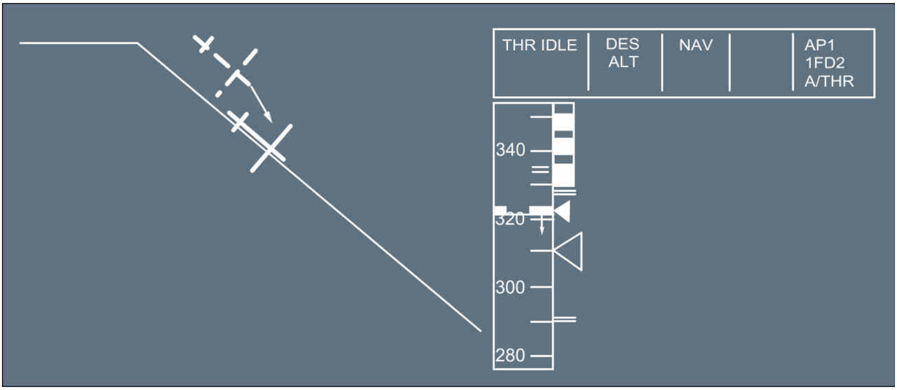
Ident.: DSC-22_20-40-30-D-00014863.0001001 / 30 JAN 13

IMPACT ON GUIDANCE

In DES mode, the FMGS maintains the aircraft on the vertical profile and keeps the IAS within the speed target range.
If the aircraft deviates above the profile, the IAS will increase to return to the vertical profile.


THR IDLE
DES
ALT
NAV
AP1
1FD2
A/THR
340
320
300
280

When the aircraft returns to the descent profile, the IAS will decrease to the target speed.


THR IDLE
DES
ALT
NAV
AP1
1FD2
A/THR
340
320
300
280

PROCEDURE TO MODIFY THE PERF AND IDLE FACTORS

Ident.: DSC-22_20-40-30-00014857.0001001 / 30 JAN 13
Applicable to: ALL

PROCEDURE TO MODIFY THE PERF AND IDLE FACTORS (ON GROUND ONLY)

- PRESS the MCDU DATA key and then the A/C STATUS prompt in order to access the A/C STATUS page
- For aircraft with FMS2 Honeywell or Thales:
  - ENTER the change code in the CHG CODE field.
    The default value for this code is “ARM” but it is possible to modify it on airline request.
    The applicable code is then coded in the Airline Modifiable Information (AMI).
    When a valid change code is entered, the IDLE and PERF factors are displayed in blue.
  - ENTER the new IDLE and PERF factors in the MCDU scratchpad separated by a "/".
    For example: "-2/+1"
  - PRESS the corresponding key to insert the new IDLE and PERF factors.

  The new IDLE and PERF factors are displayed in large blue font.

  Note: *Only authorized personnel should take the responsibility to update the IDLE and PERF factor values.*
- For aircraft with FMS1 Honeywell Legacy:
  - ENTER the new PERF factor in the MCDU scratchpad.
  - PRESS the corresponding key to insert the new PERF factor.

  The new PERF factor is displayed in large blue font.

  Note: *1. Only authorized personnel should take the responsibility to update the PERF factor value.*
  2. The IDLE Factor is not available on aircraft with FMS1 Honeywell Legacy.

TAKEOFF SURVEILLANCE FUNCTION

Ident.: DSC-22_20-45-10-10-00022107.0001001 / 05 JUN 18
Applicable to: ALL

The Takeoff Surveillance (TOS) function checks the takeoff data that the flight crew enters and selects on the FMS pages.
The takeoff surveillance function applies to the FMS pages that are associated with the active flight plan only.

The checks aim to ensure that the takeoff data is:
- Consistent
- Compatible with the aircraft performance data that is required for takeoff.

The FMS performs the following takeoff checks:
- The ZFW check
- The takeoff speeds check.

Ident.: DSC-22_20-45-10-10-00022108.0001001 / 03 NOV 22
Applicable to: ALL

ZFW CHECK

The FMS checks that the ZFW value that the flight crew enters on the FUEL PRED page is within the acceptable range.
If the entered ZFW is not within the acceptable range, the MCDU scratchpad displays the ENTRY OUT OF RANGE message.

Ident.: DSC-22_20-45-10-10-00022109.0003001 / 03 NOV 22

1 **Applicable to: MSN 10949-11597**

TAKEOFF SPEEDS CHECK

For the takeoff speeds (V1, VR, and V2) that the flight crew enters on the PERF TAKEOFF page of the MCDU:

- The FMS checks that the V1, VR, and V2 entry fields contain values.

  If the flight crew does not enter one or more of the takeoff speed values, the ECAM triggers the T.O SPEEDS NOT INSERTED alert, when:
  - The flight crew presses the T.O CONFIG pb, or
  - The engines are set to takeoff power.
- The FMS compares V1, VR, and V2.

  If the entered V1, VR, and V2 do not satisfy the condition V1≤VR≤V2:
  - The MCDU scratchpad displays the V1/VR/V2 DISAGREE message
  - The ECAM triggers the T.O V1/VR/V2 DISAGREE alert, when:
    - The flight crew presses the T.O CONFIG pb, or
    - The engines are set to takeoff power.
- The FMS checks that V1, VR, and V2 satisfy the regulatory requirements for the minimum speeds (VMCG, VMCA, VMU, and VS1G). If the entered V1, VR, and V2 do not satisfy the regulatory requirements for the minimum speeds (VMCG, VMCA, VMU, and VS1G):
  - The MCDU scratchpad displays the T.O SPEEDS TOO LOW message
  - The ECAM triggers the T.O SPEEDS TOO LOW alert, when:
    - The flight crew presses the T.O CONFIG pb, or
    - The engines are set to takeoff power.

Ident.: DSC-22_20-45-10-10-00022109.0002001 / 03 NOV 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

TAKEOFF SPEEDS CHECK

For the takeoff speeds (V1, VR, and V2) that the flight crew enters on the PERF TAKEOFF page of the MCDU:

- The FMS compares V1, VR, and V2.

  If the entered V1, VR, and V2 do not satisfy the condition V1≤VR≤V2:
  - The MCDU scratchpad displays the V1/VR/V2 DISAGREE message.
- The FMS checks that V1, VR, and V2 satisfy the regulatory requirements for the minimum speeds (VMCG, VMCA, VMU, and VS1G). If the entered V1, VR, and V2 do not satisfy the regulatory requirements for the minimum speeds (VMCG, VMCA, VMU, and VS1G):
  - The MCDU scratchpad displays the TO SPEED TOO LOW message.

ASSOCIATED ALERTS AND MESSAGES

Ident.: DSC-22_20-45-10-30-00022142.0003001 / 05 JUN 18
2 **Applicable to: MSN 10949-11597**

ASSOCIATED ALERTS

If the takeoff surveillance function of the FMS detects an abnormal situation, one or more of the following ECAM alerts are triggered:

- T.O SPEEDS NOT INSERTED
- T.O SPEEDS TOO LOW
- T.O V1/VR/V2 DISAGREE

Ident.: DSC-22_20-45-10-30-00022143.0002001 / 05 JUN 18
Applicable to: ALL

ASSOCIATED MESSAGES

On the MCDU, the FMS message area displays the following messages:

- ENTRY OUT OF RANGE
- TO SPEED TOO LOW
- V1/VR/V2 DISAGREE .

Intentionally left blank

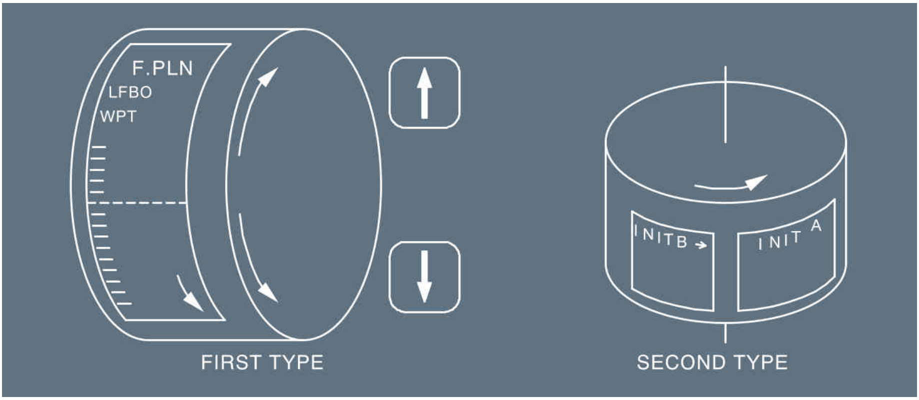
FMS2 Honeywell

GENERAL

Ident.: DSC-22_20-50-10-25-00000556.0001001 / 01 OCT 12

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The Flight Management and Guidance System (FMGS) displays information on various “pages”. When a page cannot display all of the assigned information, it cues the pilot to call up additional information. There are three types of pages, and each type has its particular way of cuing the pilot to call up additional information.



FIRST TYPE

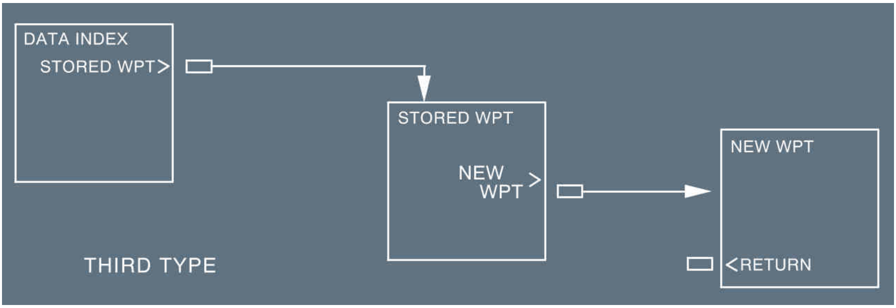
When this page cannot simultaneously display all the information on the screen (more information than the six pairs of lines can hold), the pilot can scroll the page up or down.
In this case, the screen displays a ↑ ↓ symbol in the bottom righthand corner (F-PLN pages, secondary F-PLN page, departure/arrival pages,...).

SECOND TYPE

When the information is on successive pages, the pilot presses the “NEXT PAGE” key to sequentially call up these pages.
In this case, an arrow is displayed in the top righthand corner of the screen (INIT pages).

THIRD TYPE

When different types of information are on successive pages, the pilot calls up these pages by pressing the key adjacent to the prompts >, < or *.

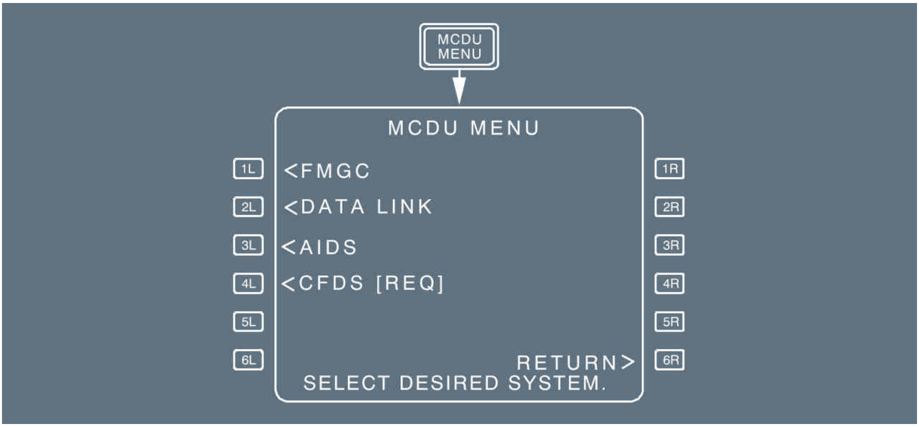

DATA INDEX
STORED WPT>
THIRD TYPE
STORED WPT
NEW WPT>
NEW WPT
<RETURN

MCDU MENU PAGE

Ident.: DSC-22_20-50-10-25-00000557.0001001 / 14 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

This page lists the various systems which the pilot can access via the MCDU.


MCDU MENU
MCDU MENU
1L
<FMGC
2L
<DATA LINK
3L
<AIDS
4L
<CFDS [REQ]
5L
6L
RETURN>
SELECT DESIRED SYSTEM.
1R
2R
3R
4R
5R
6R

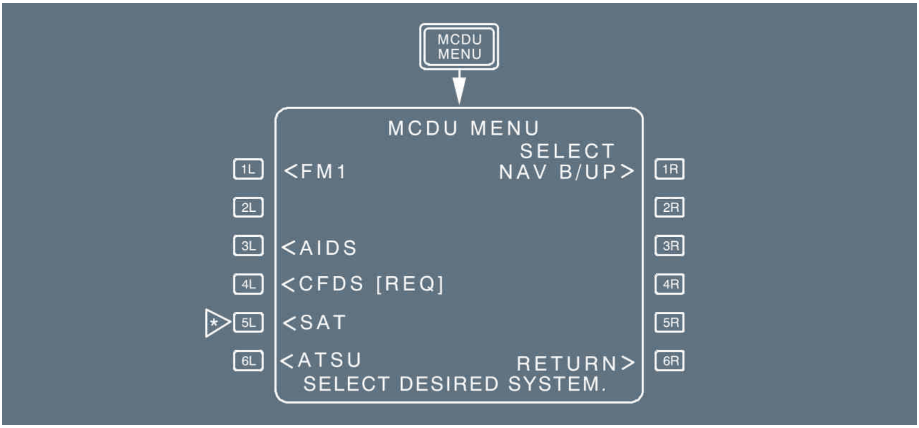
The pilot selects a system by pressing the key adjacent to the name of that system. The name of the selected system is displayed in green, all others in white.
If the MCDU cannot establish communication with the selected system, it displays “OUT”.
When a system calls for the pilot's attention, the MCDU displays “REQ” next to the system's name, and the “MCDU MENU” annunciator lights up.
When the pilot presses the key next to the name of the system requiring attention, the “MCDU MENU” annunciator light goes out.

MCDU MENU PAGE

Ident.: DSC-22_20-50-10-25-00000557.0010001 / 14 MAY 12

2 **Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page lists the various systems which the pilot can access via the MCDU.



The flight crew selects a system by pressing the key adjacent to the name of that system.
The name of the selected system is displayed in green, all others in white.
If the MCDU cannot establish communication with the selected system, it displays “OUT”.
When a system calls for the flight crew attention, the MCDU displays “REQ” next to the system’s name, and the “MCDU MENU” annunciator lights up.
When the flight crew presses the key next to the name of the system requiring attention, the “MCDU MENU” annunciator light goes out.

SELECT NAV B/UP	Pressing the [1R] key selects the NAV B/UP function and DESELECT NAV B/UP appears in the [1R] field. If the NAV B/UP is inoperative, the field is blank.
RETURN	This field is displayed when a function is active

When the MCDU communicated with a system other than the FMGC, the flight crew should use the MCDU MENU page to revert to the FMGC system.

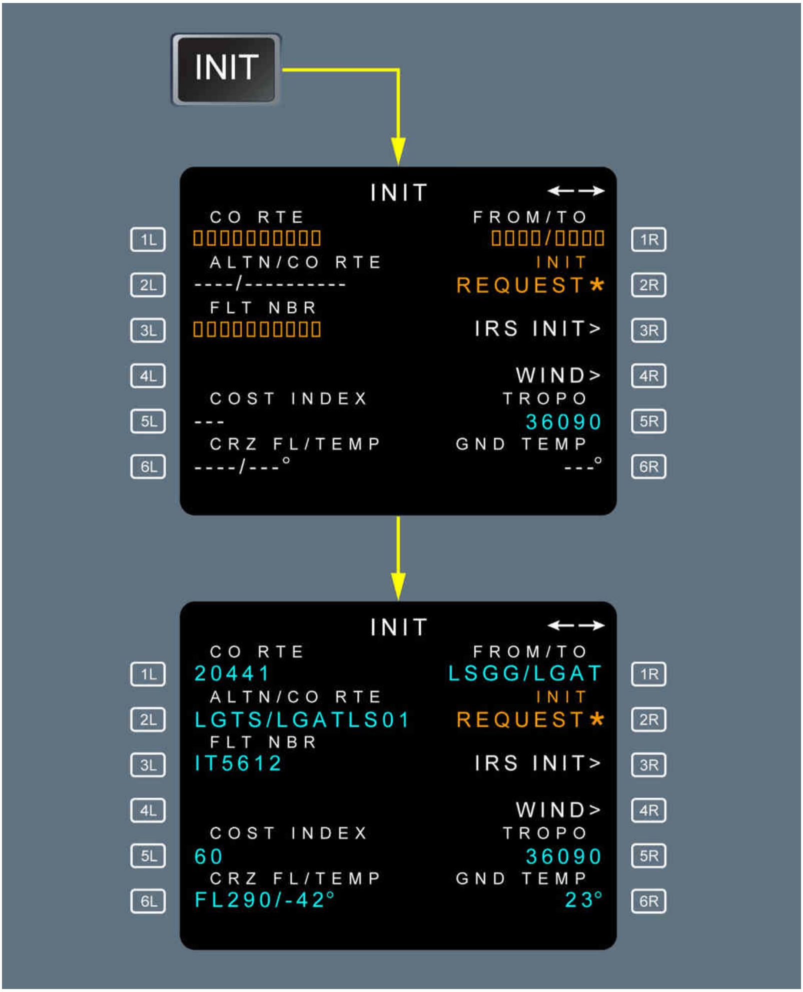
INIT A PAGE

Ident.: DSC-22_20-50-10-25-00000558.0011001 / 25 MAY 21

3 **Applicable to: MSN 10949-11597**

The flight crew uses the INIT A page to initialize the flight plan and align the inertial reference system.

- The flight crew presses the INIT key on the MCDU to access the INIT A page. The INIT A page can be accessed on ground or in flight.
- The flight crew may also display this page by:
  - Pressing the “NEXT PAGE” key or the [←] or [→] keys (depending on the MCDU type) on the MCDU console, while on the INIT FUEL PRED page, or
  - Pressing the key next to “RETURN” or “INSERT” on the route selection page, or
  - Pressing the key next to “INSERT” on the WIND page.
- When in the DONE phase, the flight crew presses the INIT key to switch to the next preflight phase.



```
             INIT              ←→
 CO RTE                  FROM/TO
▯▯▯▯▯▯▯▯▯▯             ▯▯▯▯/▯▯▯▯
 ALTN/CO RTE                INIT
----/----------         REQUEST*
 FLT NBR
▯▯▯▯▯▯▯▯▯▯             IRS INIT>

                           WIND>
 COST INDEX                TROPO
---                        36090
 CRZ FL/TEMP            GND TEMP
----/---°                   ---°
```

```
             INIT              ←→
 CO RTE                  FROM/TO
20441                  LSGG/LGAT
 ALTN/CO RTE                INIT
LGTS/LGATLS01           REQUEST*
 FLT NBR
IT5612                 IRS INIT>

                           WIND>
 COST INDEX                TROPO
60                         36090
 CRZ FL/TEMP            GND TEMP
FL290/-42°                   23°
```

[1L] CO RTE	If the flight crew enters a company route number, the screen displays all data associated with that route (8 or 10 characters, depending on the pin program). Inserting the CO RTE into the route selection page also enters the CO RTE number in this field.

[2L] ALTN/CO RTE	This field is dashed, until a primary destination is entered in the [1R] field. If a preferred alternate is associated with the primary destination, it is displayed in this field with the company route identification. The flight crew may manually enter an alternate and company route. If preferred alternate is not associated with the primary destination, NONE is displayed in this field. When the alternate route and the primary destination do not match, the MCDU scratchpad displays DEST/ALTN MISMATCH. If the primary destination is changed, this field is modified accordingly.
[3L] FLT NBR	The flight number automatically appears in this field, if it is stored with the company route. The flight crew may modify it, or enter a new number here.
[5L] COST INDEX	This is usually stored in the database along with the company route. The flight crew may modify it, or enter a new value here. The system defaults to the last entered value, if a value is not stored in the database.
[6L] CRZ FL/TEMP	The cruise flight level is usually stored in the database along with the company route. If not, it has to be entered manually. If no cruise flight level is entered, the system will not furnish predictions, while the aircraft is on the ground. The flight crew has to enter the temperature at cruise flight level in order to refine the predictions. Otherwise, these are computed for ISA conditions. If no sign is entered, the system uses a minus.
[1R] FROM/TO	This field allows the flight crew to enter a city pair (ICAO codes for city of origin and destination). This entry automatically deletes any previously entered company route and calls up the route selection page. If one airfield of the pair is not in the database, the display changes to the NEW RWY page.
[2R] INIT REQUEST	This prompt is displayed if the flight crew did not enter an active flight plan or entered a flight number or a company route that is not in the aircraft database. Selecting this prompt sends the ground a request for active flight plan initialization (downlink message). When the asterisk is not displayed, a downlink message cannot be sent. The uplink flight plan is automatically inserted in the active flight plan, prior to engine start, provided an active flight plan does not exist. After engine start, the uplink flight plan is sent to the secondary flight plan and manually inserted or rejected.
[3R] IRS INIT	The flight crew presses this key to access the IRS INIT page.

[4R] WIND	The flight crew presses this key in order to obtain access to the CLB WIND page, unless a temporary flight plan exists. In this case, the scratchpad displays TEMPORARY F-PLN EXISTS.
[5R] TROPO	The default tropopause altitude is 36 090 ft. The flight crew can use this field to modify it (60 000 ft maximum).
[6R] GND TEMP	The flight crew can use this field to insert the ground temperature (in Celsius) during the cockpit preparation. The FMS uses this value to compute the ISA deviation profile for the Climb segment. When no pilot entry exists, or if the pilot entry is cleared, the GND TEMP value reverts to the default ISA value at the selected Departure Airport altitude.

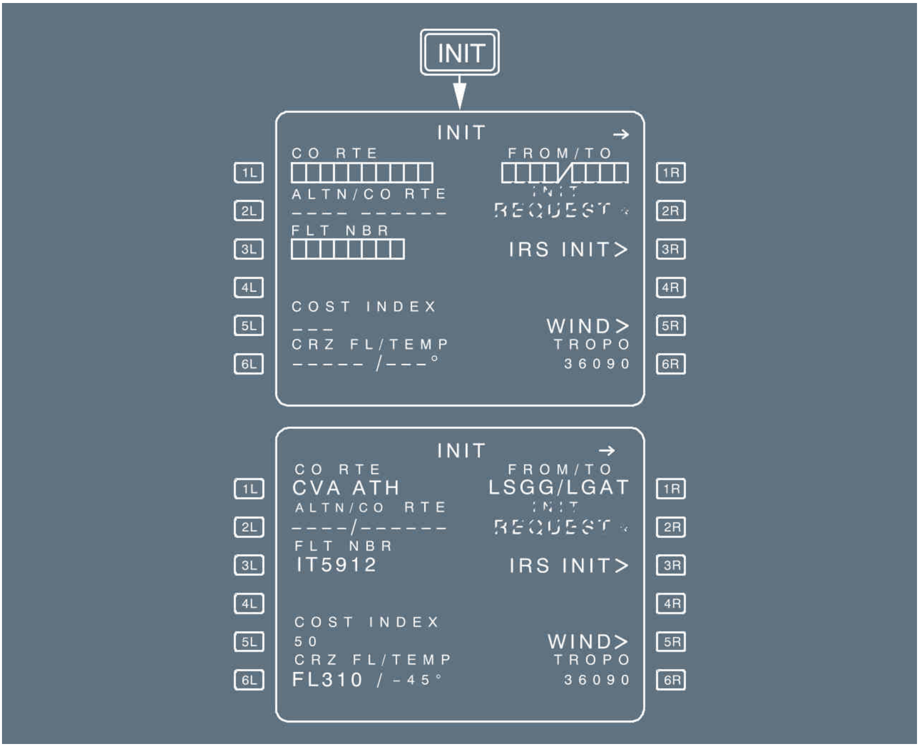
INIT A PAGE

Ident.: DSC-22_20-50-10-25-00000558.0009001 / 01 MAR 18

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The flight crew uses the INIT A page to initialize the flight plan and align the inertial reference system.

- The flight crew accesses to this page by pressing the INIT key on the MCDU. The INIT A page can be accessed on ground or in flight.
- The flight crew may also call up this page by:
  - Pressing the “NEXT PAGE” key on the MCDU console, while on the INIT B page, or
  - Pressing the key next to “RETURN” or “INSERT” on the route selection page, or
  - Pressing the key next to “INSERT” on the wind page.
- When in the done phase, the pilot may press the INIT key to switch to the next preflight phase.


INIT
INIT →
CO RTE
FROM/TO
ALTN/CO RTE
---- ------
INIT
REQUEST *
FLT NBR
IRS INIT>
COST INDEX

WIND>
CRZ FL/TEMP
----- /---°
TROPO
36090
INIT →
CO RTE
CVA ATH
FROM/TO
LSGG/LGAT
ALTN/CO RTE
----/------
INIT
REQUEST *
FLT NBR
IT5912
IRS INIT>
COST INDEX
50
WIND>
CRZ FL/TEMP
FL310 / -45°
TROPO
36090
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1L] CO RTE	If the flight crew enters a company route number, the screen displays all data associated with that route (8 or 10 characters, depending on the pin program). Inserting the CO RTE into the RTE selection page also enters the CO RTE number in this field.
[2L] ALTN/CO RTE (blue)	This field is dashed, until a primary destination is entered in the 1R field. If a preferred alternate is associated with the primary destination, it is displayed in this field with the company route identification. The crew may manually enter an alternate and company route. If preferred alternate is not associated with the primary destination, NONE is displayed in this field. When the alternate route and the primary destination do not match, the MCDU scratchpad displays “DEST/ALTN MISMATCH”. If the primary destination is changed, this field is modified accordingly.

[3L] FLIGHT NUMBER	The flight number automatically appears in this field, if it is stored with the company route. The flight crew may modify it, or enter a new number here.
[5L] COST INDEX	This is usually stored in the database along with the company route. The flight crew may modify it, or enter a new value here. It defaults to the last entered value, if a value is not stored in the database.
[6L] CRZ FL/TEMP (cruise flight level and temperature)	The cruise flight level is usually stored in the database along with the company route. If not, it has to be entered manually. If no cruise flight level is entered, the system will not furnish predictions, while the aircraft is on the ground. The flight crew has to enter the temperature at cruise flight level in order to refine the predictions. Otherwise, these are computed for ISA conditions. (If no sign is entered, the system uses a plus).
[1R] FROM/TO	This field allows the pilot to enter a city pair (ICAO codes for city of origin and destination). This entry automatically deletes any previously entered company route and calls up the route selection page. If one airfield of the pair is not in the database, the display changes to the NEW RWY page.
[2R] INIT REQUEST	This prompt is displayed if the pilot did not enter an active flight plan or entered a flight number or a company route that is not in the aircraft database. Selecting this prompt sends the ground a request for active flight plan initialization (downlink message). When the star is not displayed, a downlink message cannot be sent. The uplink flight plan is automatically inserted in the active flight plan, prior to engine start, provided an active flight plan does not exist. After engine start, the uplink flight plan is sent to the secondary flight plan and manually inserted or rejected.
[3R] IRS INIT	The flight crew presses this key to access the IRS INIT page.
[5R] WIND	The pilot presses this key in order to gain access to the climb wind page, unless a temporary flight plan exists. In this case, the scratchpad displays TEMPORARY F-PLN EXISTS.
[6R] TROPO	The default tropopause altitude is 36 090 ft. The pilot can use this field to modify it (60 000 ft maximum).

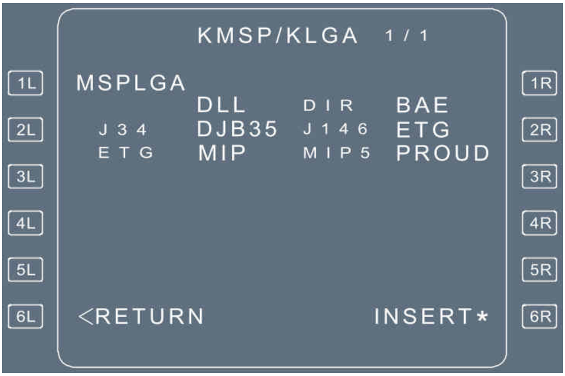
ROUTE SELECTION PAGE

Ident.: DSC-22_20-50-10-25-00000559.0001001 / 17 MAR 11

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page displays all the company routes, stored in the database, that are associated with the inserted city pair. They can be called up manually, or displayed automatically.

- Manually : The pilot presses the FROM/TO or ALTN key on the INIT A page when a city pair is displayed.
- Automatically : The system displays it, when the pilot enters a city pair, or defines an alternate on the INIT A page of the active or secondary flight plan.



```
            KMSP/KLGA    1 / 1
MSPLGA
             DLL      DIR     BAE
   J34       DJB35    J146    ETG
   ETG       MIP      MIP5    PROUD




<RETURN                   INSERT*
```

TITLE	Idents for the city pair inserted on the INIT A page. (The numbers in the upper righthand corner are the total number of company routes from this city pair stored in the database).
[1L]	This field shows the name of the company route. NONE appears, if there is no company route for this city pair.
Line 2 to Line 5	These fields display the various elements of the company route: Waypoints in large green font, and airways in small white font.
[6L] RETURN	The pilot presses this key to return to the INIT A page.
[6R] INSERT	The pilot presses this key to insert the displayed company route in the flight plan, and return to the INIT A page.

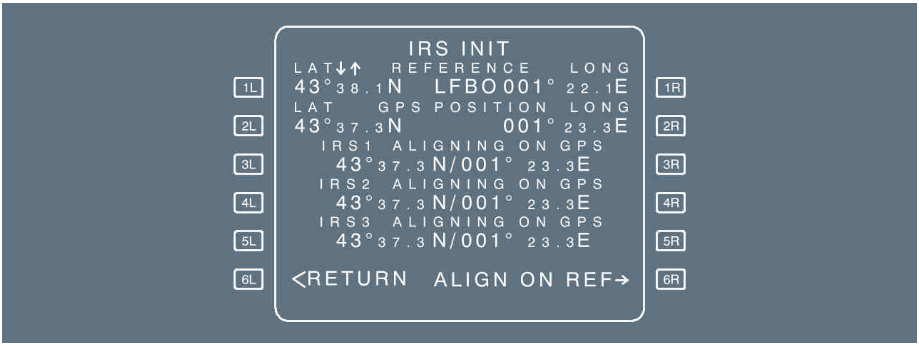
Note: *The pilot can slew the display to show the rest of the route, if one page does not show it all, or to display other company routes for this city pair.*

IRS INIT PAGE

Ident.: DSC-22_20-50-10-25-00013511.0051001 / 14 MAY 12

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The flight crew uses the IRS INIT page to align the inertial reference system. The crew accesses this page, by pressing the IRS INIT key on the INIT A page.



IRS INIT
LAT↓↑ REFERENCE LONG
43°38.1N LFBO 001°22.1E
LAT GPS POSITION LONG
43°37.3N 001°23.3E
IRS1 ALIGNING ON GPS
43°37.3N/001°23.3E
IRS2 ALIGNING ON GPS
43°37.3N/001°23.3E
IRS3 ALIGNING ON GPS
43°37.3N/001°23.3E
<RETURN ALIGN ON REF→

Line 1 LAT-REFERENCE-LONG	This line provides the latitude and longitude of the FM reference position. This reference is extracted from the navigation database. The flight crew can modify this reference. Only when the FM reference position matches the origin airport position, the airport identifier is displayed in green. Otherwise, there are dashes at the place of the airport identifier. Latitude and longitude of the FM reference position are displayed in blue. The flight crew can modify the latitude and longitude values using the scroll keys.
Line 2 LAT-GPS POSITION-LONG	This line displays the GPS position latitude and longitude.
Line 3 to 5	These lines display the IRS 1-2-3 alignment state, source and latitude/longitude. The alignment status can be ALIGNING ON XXX, or ALIGNED ON XXX or IN ATT. XXX is the alignment source and can be GPS or CDU or REF. It is displayed in white font. The latitude and longitude values are displayed in green.
[6L] RETURN	This prompt enables the flight crew to return to the INIT A page.

[6R]	If a reference is available, field displays ALIGN ON REF → in blue which is replaced by CONFIRM ALIGN* in amber when 6R prompt is pressed. Pressing again the 6R prompt enables the transmission of the FM reference position displayed in line 1.

WIND PAGES

Ident.: DSC-22_20-50-10-25-00000560.0010001 / 26 NOV 19

6 **Applicable to: MSN 10949-11597**

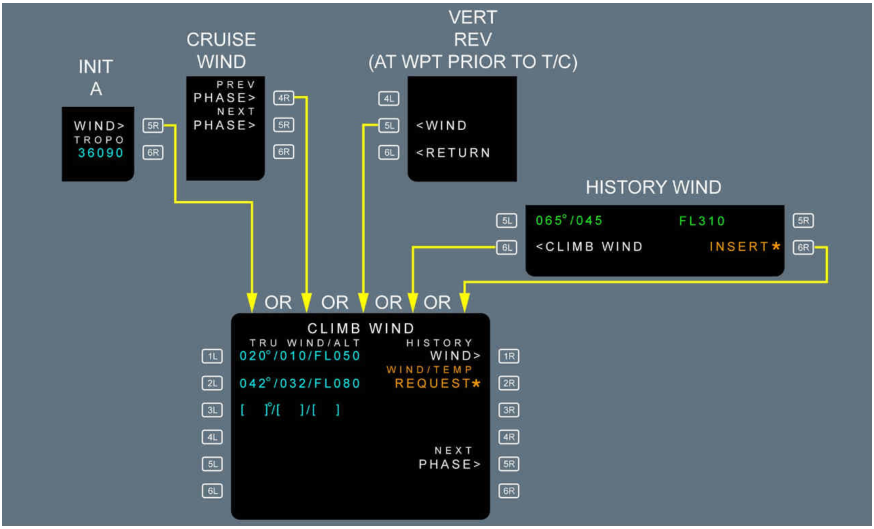
Winds in climb, cruise, descent and approach are necessary to provide the flight crew with reliable predictions and performance. Wind pages enable the flight crew to enter and/or review the winds propagated by the FMGS or sent by ACARS for the various flight phases.

Note: *On WIND pages, wind direction is always true-referenced.*

CLIMB WIND PAGE

This page enables the flight crew to enter and/or review predicted wind vectors (direction and velocity) at up to 5 different levels.

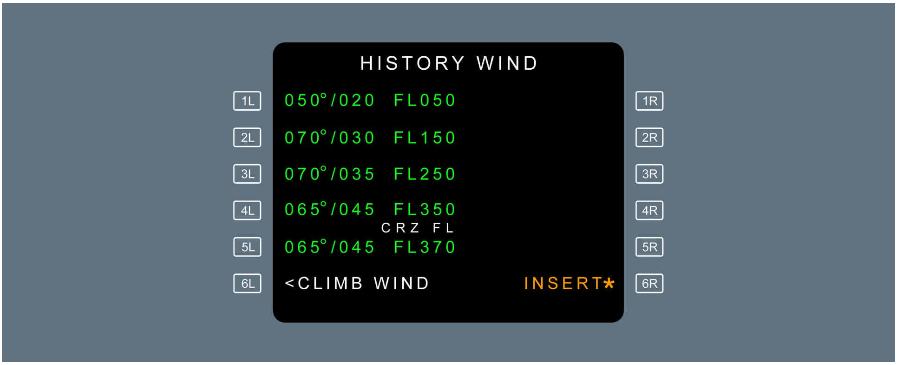
THE CLIMB WIND PAGE IS ACCESSED FROM:


INIT
A
WIND>
TROPO
36090
5R
6R
CRUISE
WIND
PREV
PHASE>
NEXT
PHASE>
4R
5R
6R
VERT
REV
(AT WPT PRIOR TO T/C)
4L
5L
6L
<WIND
<RETURN
HISTORY WIND
5L
6L
065°/045
FL310
<CLIMB WIND
INSERT*
5R
6R
OR
OR
OR
OR
CLIMB WIND
TRU WIND/ALT
020°/010/FL050
042°/032/FL080
[ ]°/[ ]/[ ]
HISTORY
WIND>
WIND/TEMP
REQUEST*
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	CLIMB WIND in large white font.

[1L] to [5L] TRU WIND/ALT	This field displays the winds, entered at various climb altitudes : In blue before climb phase activation, and in green after climb phase activation. This field may also display history winds or uplink winds. Large blue brackets are displayed before any wind entry. Flight crew-entered and uplinked winds are displayed in large font. History wind data is displayed in small font. Upon sequencing the top of climb, the climb winds are deleted. *Note:* *Climb winds are not deleted, when the origin airport is changed.*
[1R] HISTORY WIND	Displayed in preflight phase only. This key calls up the history wind page. This page is not modifiable (small green font), but can be inserted into the CLIMB WIND page by using the 6R key and modified accordingly.
[2R] WIND/TEMP REQUEST	Pressing this key sends a request for ACARS winds and temperature. (*Refer to DSC-22_20-70 Wind Data - Request for Wind Data*)
[5R] NEXT PHASE	Pressing this key calls up the CRUISE WIND page, or the DESCENT WIND page, if no cruise waypoint exists.

HISTORY WIND PAGE

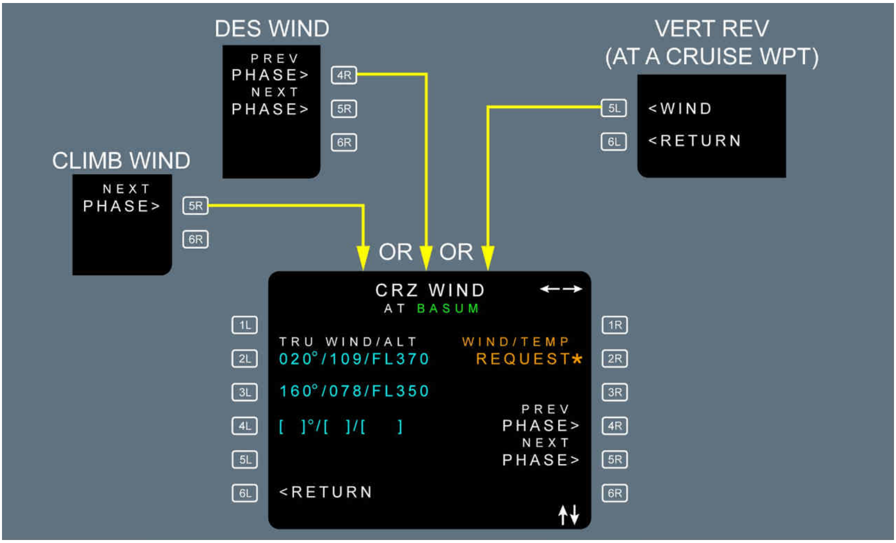


```
           HISTORY WIND
050°/020  FL050
070°/030  FL150
070°/035  FL250
065°/045  FL350
              CRZ FL
065°/045  FL370
<CLIMB WIND              INSERT*
```

[6L] CLIMB WIND	This key reverts the display to the CLIMB WIND page.
[6R] INSERT	This key inserts the history wind values into the CLIMB WIND page.

CRUISE WIND/TEMP PAGE

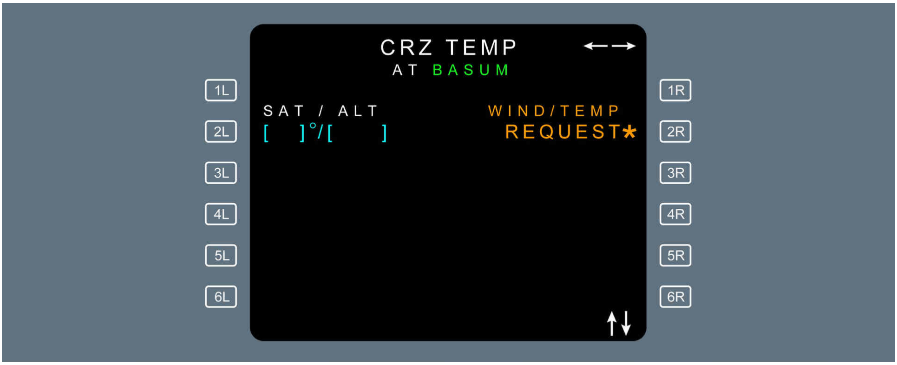
This page displays the wind direction and velocity for each cruise waypoint. The CRUISE WIND page enables the definition of a temperature at 4 different altitude levels, and is accessed as follows:


DES WIND
PREV
PHASE>
NEXT
PHASE>
4R
5R
6R
VERT REV
(AT A CRUISE WPT)
5L
6L
<WIND
<RETURN
CLIMB WIND
NEXT
PHASE>
5R
6R
OR
OR
CRZ WIND
AT BASUM
TRU WIND/ALT
020°/109/FL370
160°/078/FL350
[ ]°/[ ]/[ ]
<RETURN
WIND/TEMP
REQUEST*
PREV
PHASE>
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	CRZ WIND.
AT [location]	[location] is the fix at which the temperature data is defined
[2L] to [5L] TRU WIND/ALT	These fields display the entered wind at various altitudes in blue. The entered winds are propagated at the same altitude to the downpath cruise waypoints, if no other winds are entered. The propagated wind direction and velocity appears in small fonts. Both uplinked winds and flight crew-entered winds are displayed in large blue font. During cruise, the modification of wind data is possible.
[2R] WIND/TEMP REQUEST	Pressing this key sends a request for ACARS winds and temperature. (*Refer to DSC-22_20-70 Wind Data - Request for Wind Data*)
[4R] PREV PHASE	This prompt is displayed in Preflight, Takeoff, Climb and Done phases. Pressing this prompt calls up the CLIMB WIND page.
[5R] NEXT PHASE	Pressing this prompt calls up the DES WIND page.
← →	Allow the flight crew to use the NEXT PAGE MCDU key to go to the CRZ TEMP Page

↑ ↓	Allow the flight crew to go to the next waypoint CRZ WIND Page.

Any new entry performed on the CRZ WIND page is immediately inserted into the corresponding flight plan. Predictions are dashed on the F-PLN pages during the recomputation time. CRZ WIND page automatically reverts to F-PLN page, if a temporary flight plan is created or the secondary flight plan is activated.

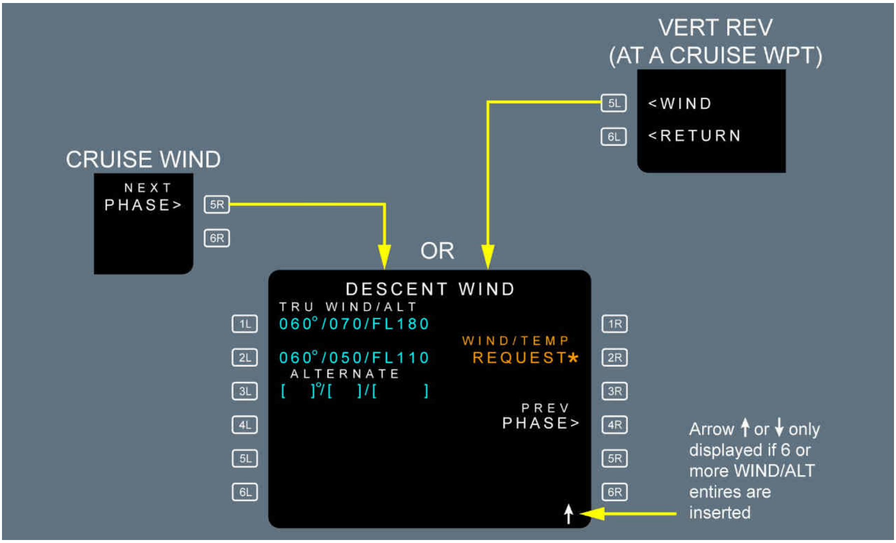


[2L] SAT/ALT	This field allows the flight crew to enter a temperature at a given flight level, or to display a propagated value. The flight crew must enter both temperature and altitude at the first entry. They can then independently modify the temperature, or the altitude.
[2R] WIND/TEMP REQUEST	Pressing this key sends a request for ACARS winds and temperature. (*Refer to DSC-22_20-70 Wind Data - Request for Wind Data*)

DESCENT WIND PAGE

This page enables the flight crew to define and display the winds used to compute the descent profile.

To display the DES WIND page, the flight crew selects the NEXT PHASE prompt on the CRUISE WIND page or the WIND prompt on the VERT REV page. The DESCENT WIND page enables the definition of a wind and a temperature at 5 different altitude levels.


VERT REV
(AT A CRUISE WPT)
5L <WIND
6L <RETURN
CRUISE WIND
NEXT
PHASE> 5R
6R
OR
DESCENT WIND
TRU WIND/ALT
1L 060°/070/FL180 1R
WIND/TEMP
2L 060°/050/FL110 REQUEST* 2R
ALTERNATE
3L [ ]°/[ ]/[ ] 3R
PREV
4L PHASE> 4R
5L 5R
6L 6R
Arrow ↑ or ↓ only displayed if 6 or more WIND/ALT entires are inserted

[1L] to [6L]	Up to 11 manual or uplinked temperatures can be inserted: - The first 6 are displayed on page 1 from [1L] to [6L] - The next 5 are displayed on page 2 from [1L] to [5L]. To access pages 1 and 2 press the ↑ or ↓ key on MCDU, when ↑ or ↓ appear at the bottom right of the MCDU screen. An entry of “GRND” in the “ALT” field is indicated as the wind at ground level. This wind is copied on the PERF APPR page (and corrected for the magnetic variation). A clear action on one key reverts the line to blue brackets.
[xL] ALTERNATE	This field only appears when an alternate is defined. This field appears on page 1 (from [2L] to [6L]) or page 2 (from [1L] to [6L]) based on the number of manually inserted or uplinked WIND/ALT values. This field always follow the last WIND/ALT values inserted, and automatically bumps down/up after each new WIND/ALT insertion/deletion. The flight crew-entered value or uplinked value is displayed in large blue font. The flight crew can always modify it.
[2R] WIND/TEMP REQUEST	Pressing this key sends a request for ACARS winds and temperature. (*Refer to DSC-22_20-70 Wind Data - Request for Wind Data*)

[4R] PREV PHASE	Pressing this key calls up the CRUISE WIND page. The field is erased after the top of descent has sequenced.
Blank or ↑ or ↓	If 6 or more WIND/ALT values are inserted, these keys enable the flight crew to go to the next/previous DESCENT WIND page.

Note: *If the destination airport is changed, descent winds and alternate wind are deleted.*

WIND PAGES

Ident.: DSC-22_20-50-10-25-00000560.0009001 / 01 MAR 18

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

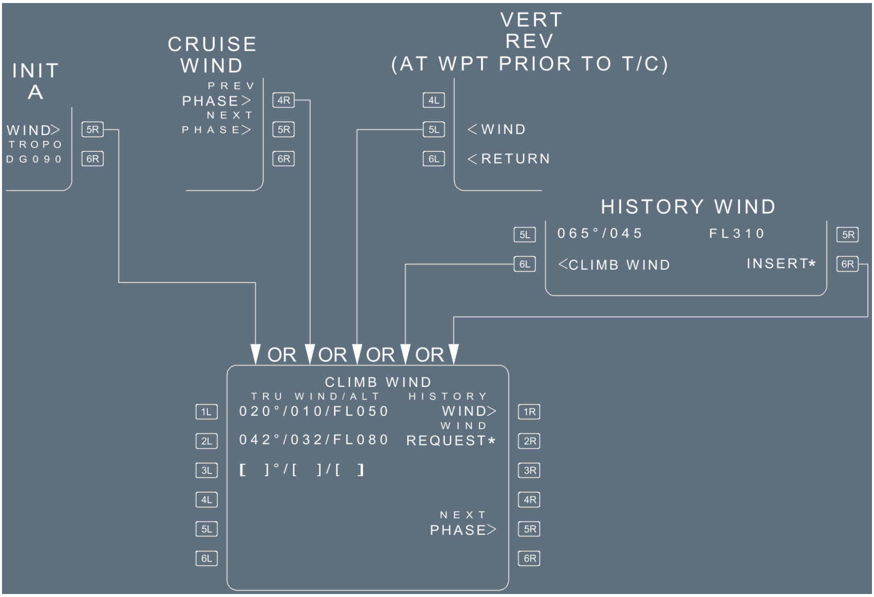
Winds in climb, cruise, descent and approach are necessary to provide the pilot with reliable predictions and performance. Wind pages enable the pilot to enter and/or review the winds propagated by the FMGS or sent by ACARS for the various flight phases.

Note: *On WIND pages, wind direction is always true-referenced.*

CLIMB WIND PAGE

This page enables the pilot to enter and/or review predicted wind vectors (direction and velocity) at up to 5 different levels.

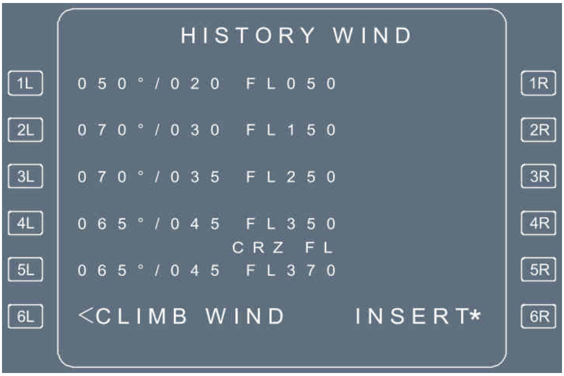
THE CLIMB WIND PAGE IS ACCESSED FROM:


INIT A
WIND>
TROPO
DG090
5R
6R
CRUISE WIND
PREV PHASE>
NEXT PHASE>
4R
5R
6R
VERT REV (AT WPT PRIOR TO T/C)
4L
5L
6L
<WIND
<RETURN
HISTORY WIND
5L
6L
065°/045
FL310
<CLIMB WIND
INSERT*
5R
6R
OR
OR
OR
OR
CLIMB WIND
TRU WIND/ALT
HISTORY WIND>
020°/010/FL050
WIND REQUEST*
042°/032/FL080
[ ]°/[ ]/[ ]
NEXT PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	CLIMB WIND in large white font.
[1L] to [5L] TRU WIND/ALT	This field displays the winds, entered at various climb altitudes : In blue before climb phase activation, and in green after climb phase activation. This field may also display history winds or uplink winds. Large blue brackets are displayed before any wind entry. Pilot-entered and uplinked winds are displayed in large font. History wind data is displayed in small font. Upon sequencing the top of climb, the climb winds are deleted. *Note:* *Climb winds are not deleted, when the origin airport is changed.*
[1R] HISTORY WIND	Displayed in preflight phase only. This key calls up the history wind page. This page is not modifiable (small green font), but can be inserted into the CLIMB WIND page by using the 6R key and modified accordingly.
[2R] WIND REQUEST	Pressing this key sends a request for ACARS winds.

[5R] NEXT PHASE	Pressing this key calls up the CRUISE WIND page, or the DESCENT WIND page, if no cruise waypoint exists.

HISTORY WIND PAGE

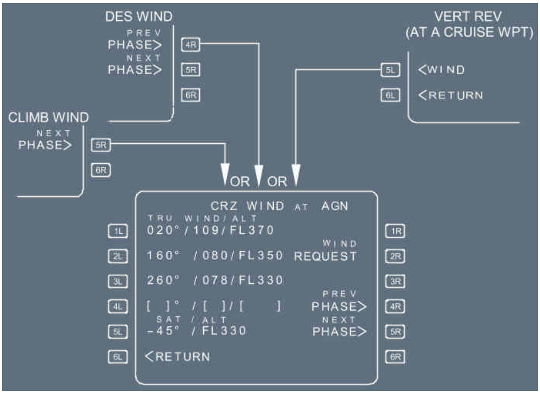


```
           HISTORY WIND
1L  050°/020  FL050                 1R
2L  070°/030  FL150                 2R
3L  070°/035  FL250                 3R
4L  065°/045  FL350                 4R
              CRZ FL
5L  065°/045  FL370                 5R
6L  <CLIMB WIND          INSERT*    6R
```

[6L] CLIMB WIND	This key reverts the display to the CLIMB WIND page.
[6R] INSERT	This key inserts the history wind values into the CLIMB WIND page.

CRZ WIND PAGE

This page displays the wind direction and velocity for each cruise waypoint.
The cruise wind page enables the definition of a temperature at a given altitude, and is accessed as follows:


DES WIND
PREV PHASE>
NEXT PHASE>
4R
5R
6R
VERT REV
(AT A CRUISE WPT)
5L <WIND
6L <RETURN
CLIMB WIND
NEXT PHASE>
5R
6R
OR
OR

```
          CRZ WIND AT  AGN
    TRU WIND/ALT
1L  020°/109/FL370                  1R
                          WIND
2L  160° /080/FL350    REQUEST      2R
3L  260° /078/FL330                 3R
                          PREV
4L  [  ]° /[  ]/[    ]   PHASE>     4R
     SAT / ALT            NEXT
5L  -45° / FL330         PHASE>     5R
6L  <RETURN                         6R
```

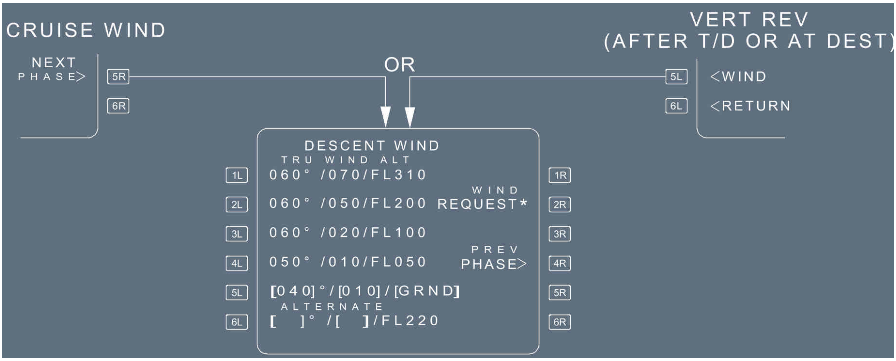
TITLE	CRZ WIND AT in large white font.

[1L] to [4L] TRU WIND/ALT	These fields display the entered wind at various altitudes in blue. The entered winds are propagated at the same altitude to the downpath cruise waypoints, if no other winds are entered. The propagated wind direction and velocity are displayed in small fonts. Both uplinked winds and pilot-entered winds are displayed in large blue font. Wind data is modifiable during cruise.
[5L] SAT/ALT	This field allows the pilot to enter a temperature at a given flight level, or to display a propagated value. The crew must enter both temperature and altitude at the first entry. They can then independently modify the temperature, or the altitude.
[2R] WIND REQUEST	Pressing this key sends a request for ACARS winds.
[4R] PREV PHASE	This prompt is displayed in Preflight, Takeoff, Climb and Done phases. Pressing this prompt calls up the CLIMB WIND page.
[5R] NEXT PHASE	Pressing this prompt calls up the DES WIND page.

Any new entry performed on the CRZ WIND page is immediately inserted into the corresponding flight plan. Predictions are dashed on the F-PLN pages during the recomputation time. CRZ WIND page automatically reverts to F-PLN page, if a temporary flight plan is created or the secondary flight plan is activated.

DESCENT WIND PAGE

This page enables the pilot to define and display the winds used for computing the descent profile. The pilot calls it up by selecting NEXT PHASE on the CRUISE WIND page, or the WIND prompt on the VERT REV page.


CRUISE WIND
NEXT PHASE>
5R
6R
OR
VERT REV
(AFTER T/D OR AT DEST)
5L
<WIND
6L
<RETURN
DESCENT WIND
TRU WIND ALT
1L
060° /070/FL310
1R
WIND
2L
060° /050/FL200
REQUEST*
2R
3L
060° /020/FL100
3R
PREV
4L
050° /010/FL050
PHASE>
4R
5L
[040]°/[010]/[GRND]
5R
ALTERNATE
6L
[ ]° /[ ]/FL220
6R

[1L] to [5L]	This displays inserted winds or uplinked winds, in large blue fonts, prior to activating the descent phase (modifiable values), and in green after descent phase activation (not modifiable values). An entry of “GRND” in the “ALT” field is seen as the wind at ground level. This wind is copied on the PERF APPR page (and corrected for the magnetic variation). A clear action on one key reverts the line to blue brackets.
[6L] ALTERNATE	This field is only displayed when an alternate is defined. The pilot-entered value or uplinked value is displayed in large blue font. It is always modifiable by the pilot.
[2R] WIND REQUEST*	Pressing this key sends a request for ACARS winds.
[4R] PREV PHASE	Pressing this key calls up the CRUISE WIND page. The field is erased after the top of descent has sequenced.

Note: *Descent winds and alternate wind are deleted, if the destination airport is changed.*

INIT FUEL PRED PAGE

Ident.: DSC-22_20-50-10-25-00000561.0010001 / 05 MAY 22

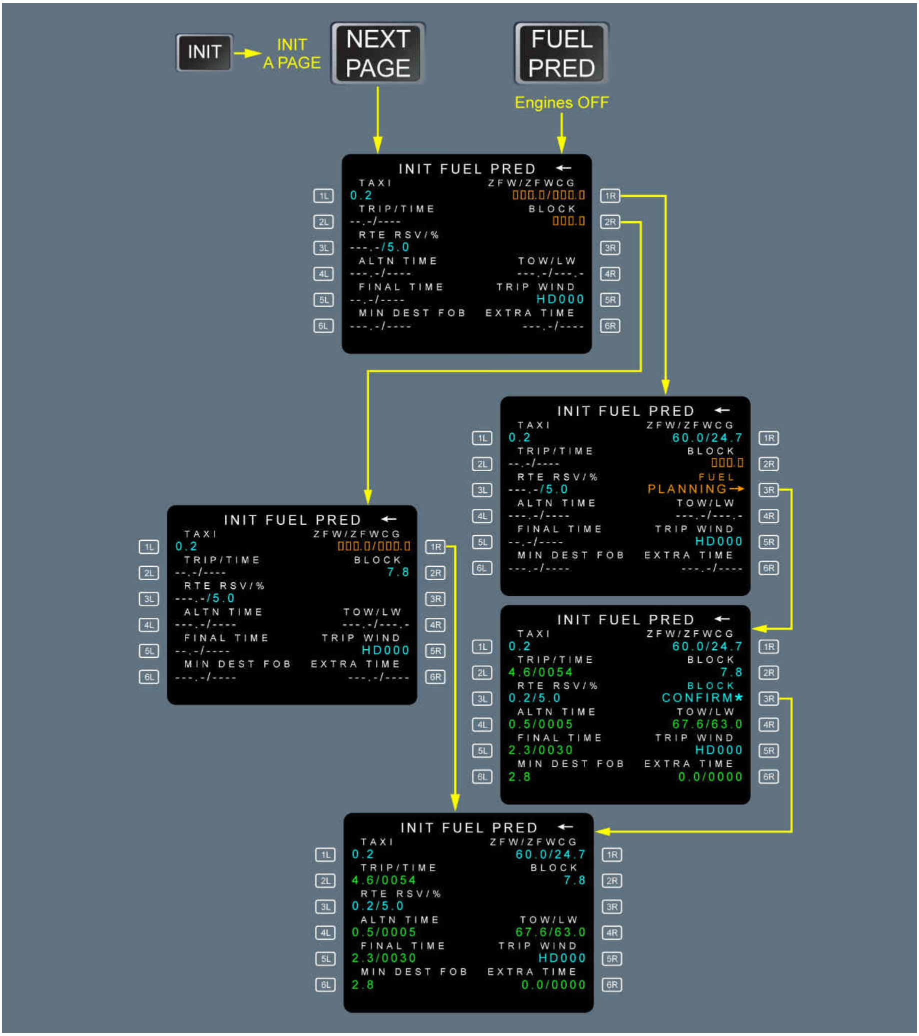
7 **Applicable to: MSN 10949-11597**

Note: *With FMS2 Release 2 the name of the INIT B page is changed to INIT FUEL PRED page. However, the Flight Operations documents include references of both names.*

The pilot uses this page to initialize the gross weight and center of gravity, before starting the engines.
As long as the engines are not yet started, the flight crew displays this page via one of the following:

- From the INIT A page when they press the NEXT PAGE key on the MCDU, or
- When they press the FUEL PRED key on the MCDU.

This page automatically reverts to the FUEL PRED page after the first engine is started.
The FMGC will stop using the pilot-entered block fuel and will compute its predictions based on the FOB indicated by the FQI computer (or the FAC as a back up) from that moment on.


INIT
INIT A PAGE
NEXT PAGE
FUEL PRED
Engines OFF
INIT FUEL PRED
TAXI
ZFW/ZFWCG
TRIP/TIME
BLOCK
RTE RSV/%
ALTN TIME
TOW/LW
FINAL TIME
TRIP WIND
MIN DEST FOB
EXTRA TIME
FUEL PLANNING→
BLOCK CONFIRM*
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R

[1L] TAXI	This is the taxi fuel, which defaults to a preset value, (usually 200 kg or 400 lb in the AMI file). The crew can change the value through this field.
[2L] TRIP/TIME	This field displays trip fuel and time when predictions become available. The pilot cannot modify this data.

[3L] RTE RSV/%	This field displays the contingency fuel for the route and the corresponding percentage of trip fuel. It may be equal to 0.0, if such is the policy of the operator. The flight crew can either enter a fuel quantity, or a percentage.
[4L] ALTN/TIME	Displays alternate trip fuel and time, assuming that the Cost Index = 0 and that the aircraft flies at the default cruise flight level. The flight crew can modify the alternate fuel as required. In this case, alternate time will be dashed.
[5L] FINAL/TIME	Displays the final reserve fuel and time calculated at the alternate airport (or destination airport, if selected in the “airline fuel policy” section of the AMI). Before any crew entry, the FINAL field is dashed and FINAL TIME field is defaulted to the value specified in the AMI file (typically 30 min). The flight crew may enter a final fuel or time, and the system will compute associated holding time/fuel available. The system assumes a holding pattern at 1 500 ft AGL, with the aircraft in CONF 1 at maximum endurance speed (racetrack pattern, altitude and selected airport can be modified through the “airline fuel policy” section of the AMI).
[6L] MIN DEST FOB	Displays the expected minimum fuel at destination. It is equal by default to the ALTN + FINAL fuel. This field can be modified directly by the flight crew, and is also impacted by the modification of ALTN and/or FINAL fuel. *Note:* *If pilot entry of MIN DEST FOB is lower than ALTN + FINAL fuel, the message CHECK MIN DEST FOB is triggered on the MCDU.*
[1R] ZFW/ZFWCG	Displays the Zero Fuel Weight (ZFW) and Zero Fuel Weight CG (ZFWCG). The flight crew must enter the ZFW/ZFWCG values (as appropriate) to obtain a speed profile and predictions. *Note:* *If the flight crew enters a ZFW value that exceeds the acceptable range (as defined in the OPC or in the performance database), the ENTRY OUT OF RANGE message appears and the value is rejected.*
[2R] BLOCK	The block fuel in this field is a mandatory entry that enables the system to predict the estimated fuel on board (EFOB). The FMGC may also compute the block, if the flight crew selects the FUEL PLANNING function.

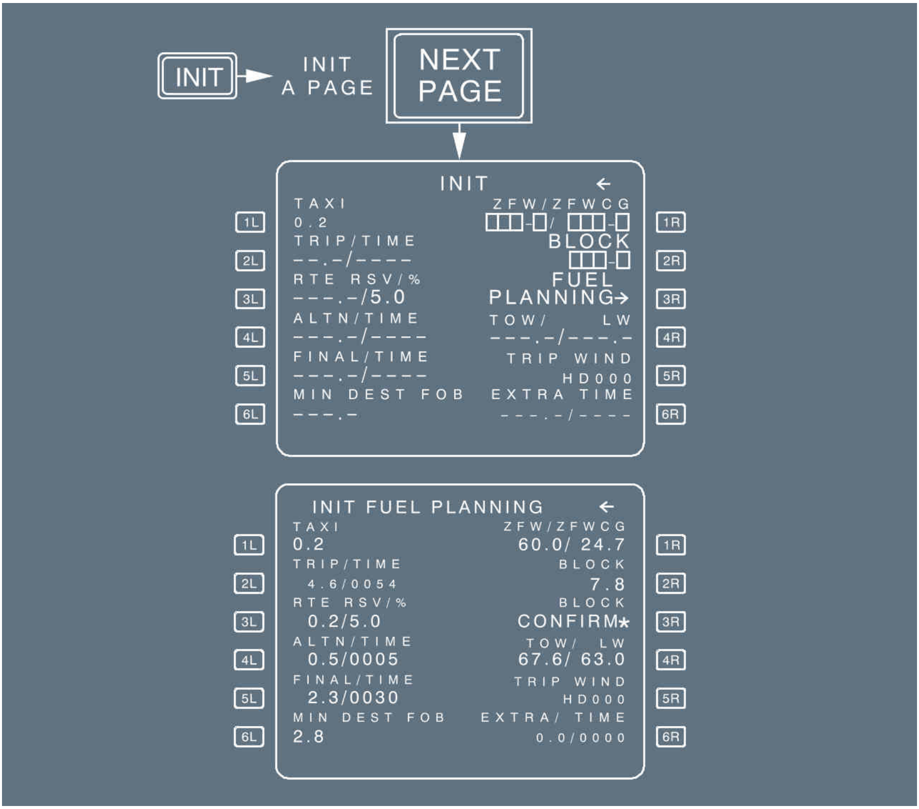
[3R] FUEL PLANNING	Initiates an FMGC block fuel computation using current hypothesis and extra = 0. When the pilot selects this function, FUEL PLANNING becomes green, and the BLOCK field is dashed during FMGC computation. The title of the page changes to INIT FUEL PLANNING, and BLOCK CONFIRM* replaces the FUEL PLANNING prompt, when the block fuel is computed by the FMGC. If the pilot modifies the parameters used to compute prediction before confirmation, the computation automatically restarts and FUEL PLANNING is displayed in green.
[4R] TOW/LW	Displays the computed Takeoff Weight (TOW) and Landing Weight (LW) at the primary destination. This cannot be modified.
[5R] TRIP WIND	This field allows the entry of a mean wind component for the trip from the origin to the destination. Upon entry of a CO RTE or FROM/TO pair, this field defaults to HD 000 in small font. An entry preceeded by –, H, HD is considered to be headwind, +, T, TL to be tailwind. The entered speed is displayed in large blue font. When the flight crew inserts a wind on the CLIMB, CRUISE or DESCENT WIND page, or on the PERF APP page, the system no longer considers the trip wind, and the corresponding field is dashed.
[6R] EXTRA/TIME	Displays the amount of extra fuel, and the resulting time available for holding over the primary destination. EXTRA FUEL = BLOCK – (TAXI + TRIP + RSV + MIN DEST FOB). The field displays its information in small font, and it cannot be modified by the flight crew.

INIT B PAGE

Ident.: DSC-22_20-50-10-25-00000561.0009001 / 01 MAR 18

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The pilot uses this page to initialize the gross weight and center of gravity, before starting the engines.
The pilot can call it up from the INIT A page during preflight phase prior to engine start, by pressing the NEXT PAGE key on the MCDU console, as long as engines have not been started.
This page automatically reverts to the FUEL PRED page after the first engine is started.
The FMGC will stop using the pilot-entered block fuel and will compute its predictions based on the FOB indicated by the FQI computer (or the FAC as a back up) from that moment on.


INIT
INIT A PAGE
NEXT PAGE
INIT ←
TAXI
0.2
ZFW/ZFWCG
TRIP/TIME
--.-/----
BLOCK
RTE RSV/%
---.-/5.0
FUEL PLANNING→
ALTN/TIME
---.-/----
TOW/ LW
---.-/---.-
FINAL/TIME
---.-/----
TRIP WIND
HD000
MIN DEST FOB
---.-
EXTRA TIME
---.-/----
INIT FUEL PLANNING ←
TAXI
0.2
ZFW/ZFWCG
60.0/ 24.7
TRIP/TIME
4.6/0054
BLOCK
7.8
RTE RSV/%
0.2/5.0
BLOCK
CONFIRM*
ALTN/TIME
0.5/0005
TOW/ LW
67.6/ 63.0
FINAL/TIME
2.3/0030
TRIP WIND
HD000
MIN DEST FOB
2.8
EXTRA/ TIME
0.0/0000
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1L] TAXI	This is the taxi fuel, which defaults to a preset value, (usually 200 kg or 400 lb in the AMI file). The crew can change the value through this field.
[2L] TRIP/TIME (green)	This field displays trip fuel and time when predictions become available. The pilot cannot modify this data.
[3L] RTE RSV/% (blue)	This field displays the contingency fuel for the route and the corresponding percentage of trip fuel. It may be equal to 0.0, if such is the policy of the operator. The flight crew can either enter a fuel quantity, or a percentage.
[4L] ALTN/TIME (blue/green)	Displays alternate trip fuel and time, assuming that the Cost Index = 0 and that the aircraft flies at the default cruise flight level. The flight crew can modify the alternate fuel as required. In this case, alternate time will be dashed.

[5L] FINAL/TIME (blue)	Displays the final reserve fuel and time calculated at the alternate airport (or destination airport, if selected in the "airline fuel policy" section of the AMI). Before any crew entry, the FINAL field is dashed and FINAL TIME field is defaulted to the value specified in the AMI file (typically 30 min). The flight crew may enter a final fuel or time, and the system will compute associated holding time/fuel available. The system assumes a holding pattern at 1 500 ft AGL, with the aircraft in CONF 1 at maximum endurance speed (racetrack pattern, altitude and selected airport can be modified through the "airline fuel policy" section of the AMI).
[6L] MIN DEST FOB (blue)	Displays the expected minimum fuel at destination. It is equal by default to the ALTN + FINAL fuel. This field can be modified directly by the flight crew, and is also impacted by the modification of ALTN and/or FINAL fuel. Note: *If pilot entry of MIN DEST FOB is lower than ALTN + FINAL fuel, the message "CHECK MIN DEST FOB" is triggered on the MCDU.*
[1R] ZFW/ZFWCG (blue)	Displays the Zero Fuel Weight (ZFW) and Zero Fuel Weight CG (ZFWCG). The flight crew must enter the ZFW/ZFWCG values (as appropriate) to obtain a speed profile and predictions. Note: *If the flight crew enters a ZFW value that exceeds the acceptable range (as defined in the OPC or in the performance database), the "ENTRY OUT OF RANGE" message appears and the value is rejected.*
[2R] BLOCK	The block fuel in this field is a mandatory entry. When the flight crew enters a block fuel, the page title changes to INIT FUEL PREDICTION.
[3R] FUEL PLANNING (amber)	Initiates an FMGC block fuel computation using current hypothesis and extra = 0. When the pilot selects this function, FUEL PLANNING becomes green, and the BLOCK field is dashed during FMGC computation. The title of the page changes to INIT FUEL PLANNING, and BLOCK CONFIRM* replaces the FUEL PLANNING prompt, when the block fuel is computed by the FMGC. If the pilot modifies the parameters used to compute prediction before confirmation, the computation automatically restarts and FUEL PLANNING is displayed in green.
[4R] TOW/LW (green)	Displays the computed Takeoff Weight (TOW) and Landing Weight (LW) at the primary destination. This cannot be modified.

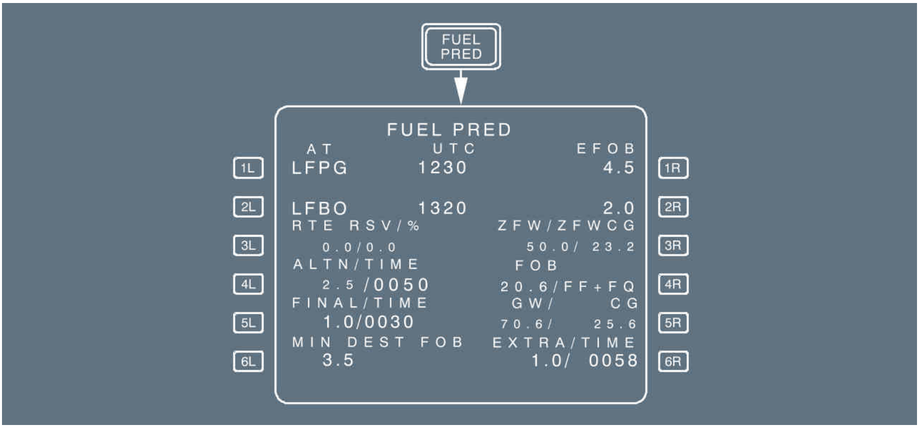
[5R] TRIP WIND (blue)	This field allows the entry of a mean wind component for the trip from the origin to the destination. Upon entry of a CO RTE or FROM/TO pair, this field defaults to HD 000 in small font. An entry preceeded by –, H, HD is considered to be headwind, +, T, TL to be tailwind. The entered speed is displayed in large blue font. When the flight crew inserts a wind on the CLIMB, CRUISE or DESCENT WIND page, or on the PERF APP page, the system no longer considers the trip wind, and the corresponding field is dashed.
[6R] EXTRA/TIME (green)	Displays the amount of extra fuel, and the resulting time available for holding over the primary destination. EXTRA FUEL = BLOCK – (TAXI + TRIP + RSV + MIN DEST FOB). The field displays its information in small font, and it cannot be modified by the flight crew.

FUEL PREDICTION PAGE

Ident.: DSC-22_20-50-10-25-00000562.0009001 / 01 MAR 18

8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The pilot presses the FUEL PRED key on the MCDU console to display fuel prediction information at destination and alternate, as well as fuel management data after the engines are started.



```
            FUEL PRED
  AT          UTC          EFOB
LFPG          1230          4.5

LFBO          1320          2.0
RTE RSV/%             ZFW/ZFWCG
   0.0/0.0              50.0/ 23.2
ALTN/TIME                FOB
   2.5 /0050          20.6/FF+FQ
FINAL/TIME              GW/     CG
   1.0/0030            70.6/   25.6
MIN DEST FOB          EXTRA/TIME
   3.5                   1.0/ 0058
```

[1L] - [1R] AT-UTC/TIME-EFOB (green)	Display time and fuel predictions to the primary destination. TIME is displayed before takeoff. UTC predictions are displayed after takeoff. If the flight crew has entered an Estimated Takeoff Time (ETT), the UTC is displayed. The EFOB at destination will turn to amber, if it becomes less than the MIN DEST FOB value.
[2L] - [2R] AT-UTC/TIME-EFOB (green)	These lines display time and fuel predictions to the alternate airport.
[3L] RTE RSV% (blue)	Before departure, this field displays the route reserve fuel and the corresponding percentage of trip fuel. It may be equal to 0.0, if such is the policy of the operator. The crew can either enter a fuel quantity or a percentage. After takeoff, it becomes green 0.0/0.0, and the corresponding fuel is added to the EXTRA fuel.
[4L] ALTN/TIME (blue/green)	Displays alternate trip fuel and time, assuming that the Cost Index = 0 and that the aircraft flies at the default cruise flight level. The flight crew can modify the alternate fuel as required. In this case, alternate time will be dashed.
[5L] FINAL/TIME (blue)	Displays the final reserve fuel and time calculated at the alternate airport (or destination airport, if selected in the “airline fuel policy” section of the AMI). The flight crew may enter a final fuel or time, and the system will compute associated holding time/fuel available. The system assumes a holding pattern at 1 500 ft AGL, with the aircraft in CONF 1 at maximum endurance speed (racetrack pattern, altitude and selected airport can be modified through the “airline fuel policy” section of the AMI).
[6L] MIN DEST FOB (blue)	Displays the expected Minimum Fuel at Destination. It is equal to the FINAL + ALTN fuel. The field can be modified directly by the flight crew, and is also impacted by the modification of the ALTN and/or the FINAL fuel.
[3R] ZFW/ZFWCG (blue)	Displays the Zero Fuel Weight (ZFW) and Zero Fuel Weight Center of Gravity (ZFWCG) values, as entered before engine start on the INIT B page. The flight crew can re-enter or modify these values after engine start on the FUEL PRED page. If at engine start, no ZFW or ZFWCG values have been entered, amber boxes are displayed in the corresponding field. The flight crew must enter the ZFW/ZFWCG values to obtain a speed profile and predictions.

[4R] FOB (blue)	Displays the Fuel On Board (FOB) calculated by the FMGS and the following fuel sensors: - Fuel flow and fuel quantity sensors (/FF+FQ) - Fuel flow sensors only (/FF). - Fuel quantity sensors only (/FQ). The flight crew can modify the FOB value in flight, or modify the sensors used by entering “/FF”, “/FQ” or “/FF+FQ”, as required.
[5R] GW/CG (green)	The FMS continuously updates the GrossWeight (GW) and Center of Gravity (CG) during the flight. The field displays dashes, as long as the system is not calculating the Fuel On Board, or the ZFW has not been entered by the flight crew. The field cannot be modified.
[6R] EXTRA/TIME (green)	Displays the amount of extra fuel, and the resulting time available for holding over the primary destination. EXTRA FUEL = FOB – (TAXI + TRIP + RSV + MIN DEST FOB). This field displays its information in small green font, and it cannot be modified by the flight crew.

Note: All fields are dashed before engines are started.

FLIGHT PLAN PAGES

Ident.: DSC-22_20-50-10-25-00000563.0009001 / 26 NOV 19

9 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

These pages display all waypoints of the active and alternate flight plans, along with associated predictions.

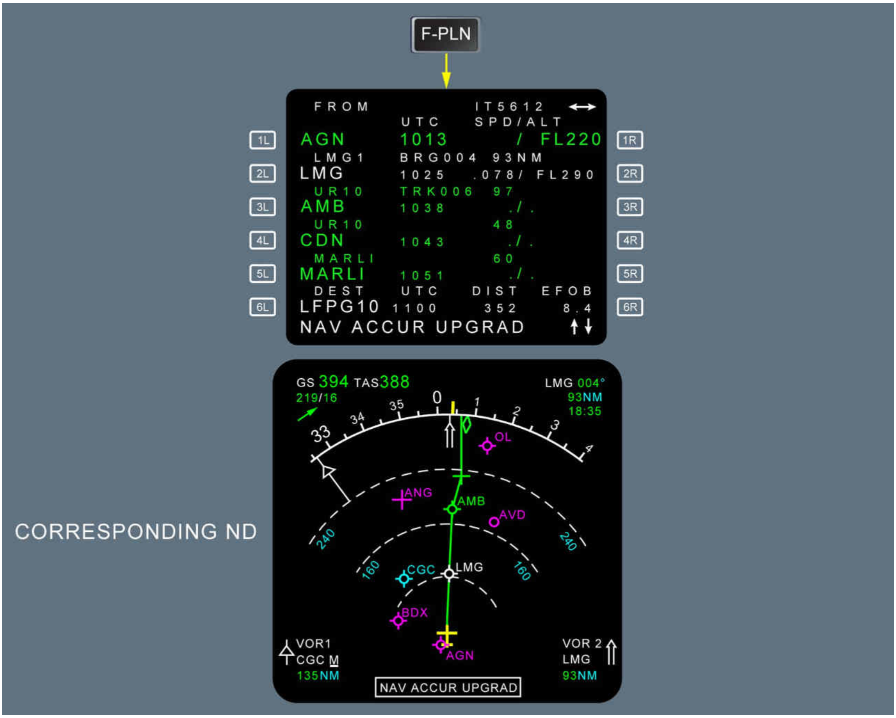
The flight crew can make all revisions to the lateral and vertical flight plans from these pages:

The flight crew presses the left key to revise the lateral flight plan, and the right key to revise the vertical flight plan.

The flight crew presses the F-PLN key on the MCDU console to access the Flight Plan A page of the active flight plan.

FLIGHT PLAN A PAGE

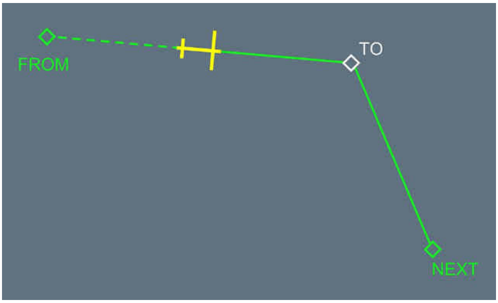
Flight Plan A Page displays time, speed, and altitude predictions for each active flight plan waypoint.


F-PLN
FROM
IT5612 ↔
UTC
SPD/ALT
1L AGN 1013 / FL220 1R
LMG1 BRG004 93NM
2L LMG 1025 .078/ FL290 2R
UR10 TRK006 97
3L AMB 1038 ./. 3R
UR10 48
4L CDN 1043 ./. 4R
MARLI 60
5L MARLI 1051 ./. 5R
DEST UTC DIST EFOB
6L LFPG10 1100 352 8.4 6R
NAV ACCUR UPGRAD ↑↓
CORRESPONDING ND
GS 394 TAS388
219/16
LMG 004°
93NM
18:35
33
34
35
0
1
2
3
4
OL
ANG
AMB
AVD
240
240
160
160
CGC
LMG
BDX
AGN
VOR1
CGC M
135NM
VOR 2
LMG
93NM
NAV ACCUR UPGRAD

TITLE	FLIGHT NUMBER (blank, if no flight number has been entered). This line may display: TMPY in yellow if a temporary flight plan exists; OFST in white, if a lateral offset is flown; or, OFST in yellow, if a lateral offset revision is pending.
Line 1 to Line 5 WPT, UTC, SPD, ALT	These lines display consecutive waypoints along with associated predictions of time, speed or Mach and altitude for each. TIME is displayed before takeoff, and UTC after takeoff. After the flight crew enters an Estimated Takeoff Time (ETT), UTC is displayed. The time and flight level display at the FROM waypoint (first line of the flight plan) are values that the system memorized at waypoint sequencing.

[1R] SPD/ALT	The field dedicated to SPEED or MACH is blank at the FROM waypoint, except at the departure airport (V1 associated with runway elevation, is displayed). *Note: When the HOLD marker is slewed, the HOLD SPD Label will overwrite the TIME/UTC title.*
Line 6, DEST UTC/TIME DIST, EFOB	DIST is the distance to destination along the displayed flight plan. EFOB is the estimated fuel on board at destination. The EFOB at destination will turn to amber, if it becomes less than the MIN DEST FOB value. The sixth line is permanent and is displayed in white font once predictions are available, except when a TMPY F-PLN is displayed or in some cases when an ALT CSTR is entered ("*CLB or DES*" prompt appears).

Note: The predicted altitude at a waypoint is related to the QNH below the transition altitude, and is given as a flight level above the transition altitude.



The generic flight plan page displays the FROM waypoint (last waypoint to be overflown) on the first line, and the TO waypoint (in white) on the second line. The FROM/TO flight plan leg is called the active leg.
The flight crew can use the scroll keys to review all flight plan legs down to the last point of the alternate flight plan. The AIRPORT key serves as a fast slew key. The flight crew can press it to call up the next airport (DEST, ALTN, ORIGIN) to be displayed on the flight plan page.
In order to return to the beginning of the flight plan page, the flight crew presses the F-PLN key on the MCDU console.
The display shows the name of the leg between two waypoints, and the distance between them on a line between the lines that identify them. During an approach, this in-between line also defines the angle of the final descent path. For example, "2-3 °" indicates that the leg is two nautical miles long, and the flight path angle is -3 °.

The display shows the bearing between FROM and TO waypoints as the bearing from the aircraft position to the TO waypoint. It shows track (TRK) between the waypoints shown in lines 2 and 3. This is the outbound track of the next leg.
If the database contains a published missed approach procedure, or if someone has inserted one manually, the display shows it in blue after the destination runway identification. It turns green when the go-around phase becomes active.
After the last waypoint of the missed approach, the display shows the alternate flight plan in NAV mode.
When NAV mode is engaged, the flight crew can only clear or modify the TO waypoint by using the DIR key on the MCDU console.

PREDICTIONS

The system calculates and displays predictions for all waypoints.
It uses the current wind to compute TO waypoint predictions, and uses predicted winds to compute all others.

CONSTRAINTS

The database may define an altitude or speed constraint for each waypoint of the climb, descent, and approach phases, or the flight crew may manually insert such constraints (except at origin, destination, FROM, and pseudo-waypoints) or a time constraint (RTA).
The constraints are displayed in magenta, as long as predictions are not completed.
Once predictions are available, constraints are replaced by speed, time and altitude predictions, preceded by stars. If the star is in magenta, the system predicts that the aircraft will match the constraint (altitude within 250 ft, speed not more than 10 kt above the constraints, RTA within the required accuracy). If the star is in amber, the system predicts that the aircraft will miss the constraint and the MCDU displays: SPD ERROR AT WPTXX for speed constraint, or RTA MISSED AT XXX for time constraint.

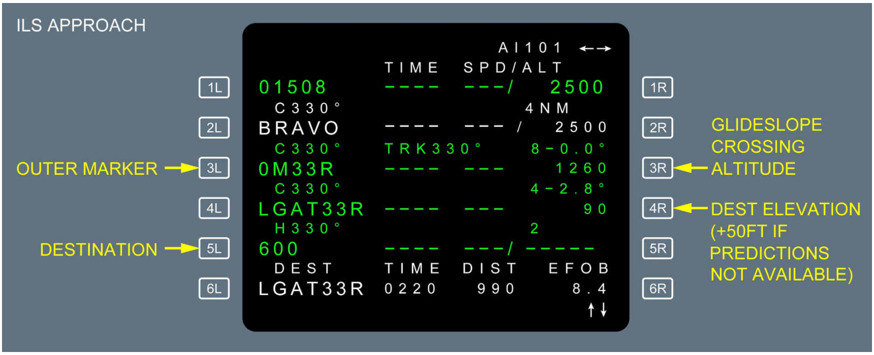
Note: *SPD and ALT CSTR may either be entered on the VERT REV page or directly on the F-PLN A page, whereas TIME CSTR may only be entered from the RTA page.*

PSEUDO-WAYPOINTS

Pseudo-waypoints are geographical positions corresponding to an event in the vertical flight plan: T/C (top of climb), T/D (top of descent), SPD/LIM (speed limit), DECEL (deceleration for approach), etc. The display shows them as waypoints in parentheses.

APPROACH DISPLAY

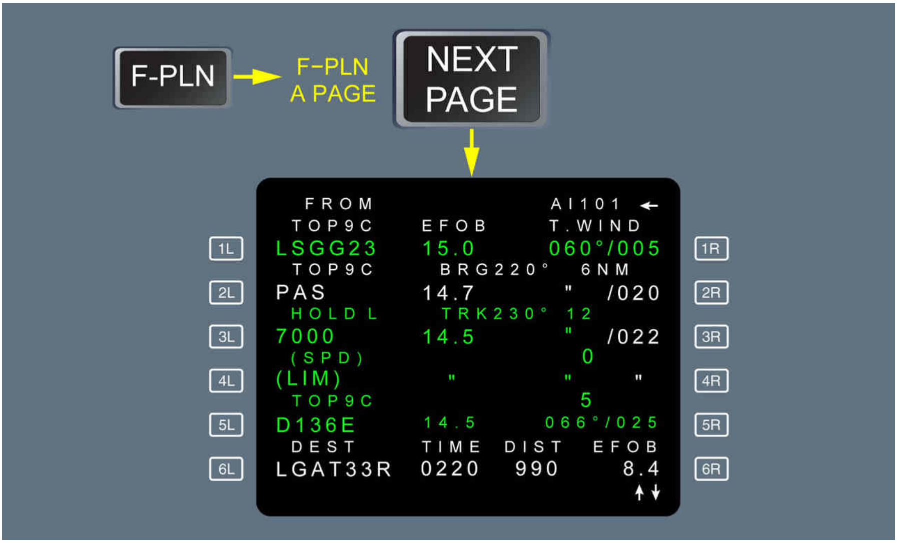
The flight crew cannot enter an altitude constraint at destination or Missed Approach Point (MAP).


ILS APPROACH
OUTER MARKER
DESTINATION
GLIDESLOPE CROSSING ALTITUDE
DEST ELEVATION (+50FT IF PREDICTIONS NOT AVAILABLE)
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
                        AI101 ←→
          TIME  SPD/ALT
01508     ----  ---/   2500
 C330°             4NM
BRAVO     ----  --- /  2500
 C330°    TRK330°    8-0.0°
0M33R     ----  ---    1260
 C330°               4-2.8°
LGAT33R   ----  ---      90
 H330°               2
600       ----  ---/ -----
 DEST     TIME  DIST   EFOB
LGAT33R   0220   990    8.4
                         ↑↓
```

FLIGHT PLAN B PAGE

This page displays fuel predictions and forecast winds at each waypoint.
The flight crew calls it up by pressing the NEXT PAGE key when the FLIGHT PLAN A page is displayed.


F-PLN
F-PLN A PAGE
NEXT PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
 FROM                 AI101 ←
 TOP9C      EFOB      T.WIND
LSGG23      15.0     060°/005
 TOP9C       BRG220°   6NM
PAS         14.7       "  /020
 HOLD L      TRK230°  12
7000        14.5       "  /022
 (SPD)                 0
(LIM)         "        "     "
 TOP9C                 5
D136E        14.5    066°/025
 DEST       TIME  DIST    EFOB
LGAT33R     0220   990     8.4
                           ↑↓
```

TITLE	FLIGHT NUMBER (blank if no flight number has been entered).

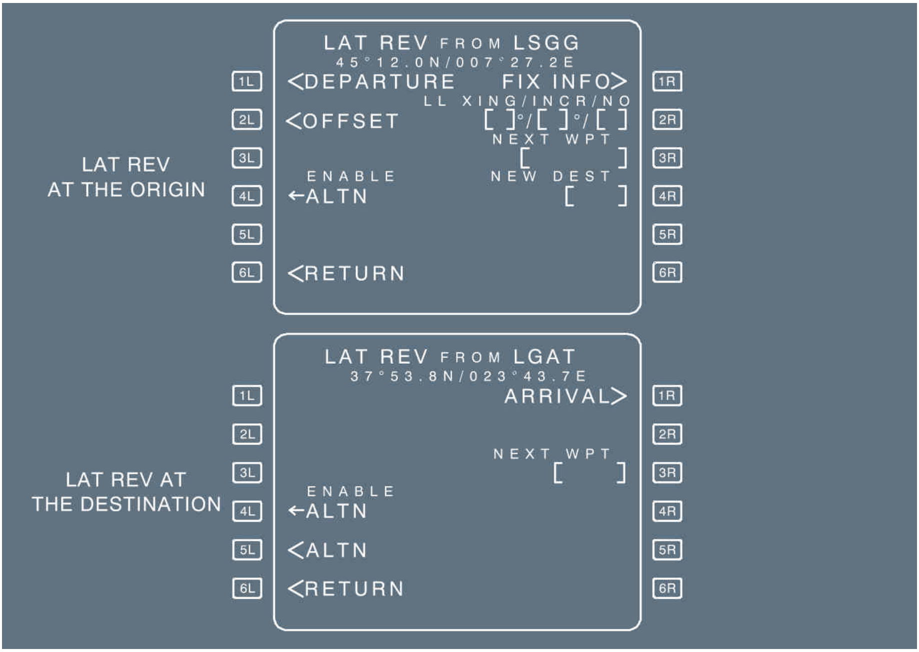
Line 1 to Line 5 WPT-EFOB-WIND	These lines display consecutive waypoints and associated fuel predictions, and the forecast wind profile. The direction of forecast winds is relative to true north. Forecast winds include winds entered by the flight crew (large font) and the propagated winds at intermediate waypoints (small font). If the flight crew uses a trip wind, it will be displayed for each waypoint. If no other wind entry is made after takeoff, the FROM waypoint will display the actually recorded wind, and the waypoints downpath will still display the trip wind.
Line 6 DEST-UTC/DIST-EFOB	Identical to F-PLN A page.

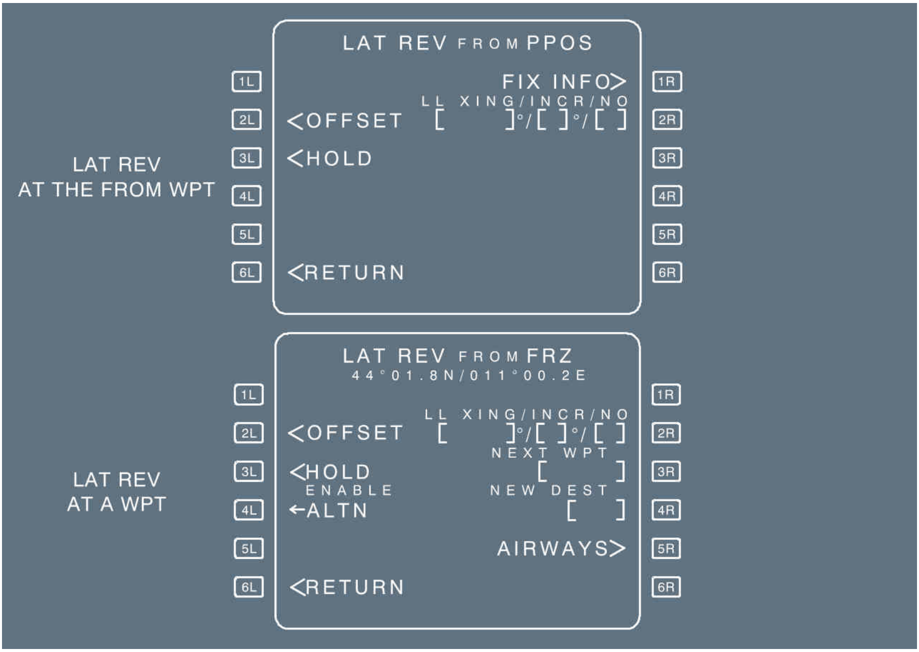
LATERAL REVISION PAGES

Ident.: DSC-22_20-50-10-25-00000564.0009001 / 26 OCT 22

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139

These pages give the flight crew a list of the lateral flight plan revisions, which can be used to change the flight plan beyond a selected waypoint.
The flight crew calls up these pages from the flight plan pages (A or B) by pressing the left key adjacent to the selected waypoint.
Different lateral flight plan revisions are available for different waypoints.


LAT REV
AT THE ORIGIN
LAT REV FROM LSGG
45°12.0N/007°27.2E
<DEPARTURE
FIX INFO>
LL XING/INCR/NO
<OFFSET
[ ]°/[ ]°/[ ]
NEXT WPT
[ ]
ENABLE
←ALTN
NEW DEST
[ ]
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
LAT REV AT
THE DESTINATION
LAT REV FROM LGAT
37°53.8N/023°43.7E
ARRIVAL>
NEXT WPT
[ ]
ENABLE
←ALTN
<ALTN
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

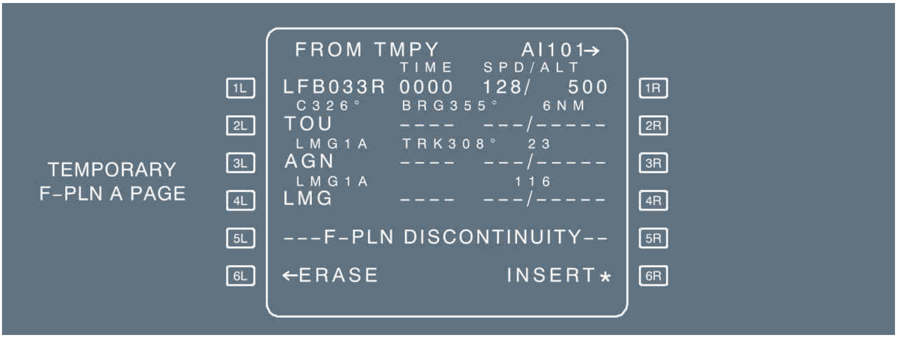

LAT REV FROM PPOS
FIX INFO>
LL XING/INCR/NO
<OFFSET
[ ]°/[ ]°/[ ]
<HOLD
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
LAT REV
AT THE FROM WPT
LAT REV FROM FRZ
44°01.8N/011°00.2E
LL XING/INCR/NO
<OFFSET
[ ]°/[ ]°/[ ]
NEXT WPT
<HOLD
[ ]
ENABLE
←ALTN
NEW DEST
[ ]
AIRWAYS>
<RETURN
LAT REV
AT A WPT

TITLE	The ident of the waypoint or airport selected for revision, along with its latitude and longitude. If the selected waypoint is the FROM waypoint, the title omits the aircraft latitude and longitude, and displays the “PPOS” (present position) instead.
[1L] DEPARTURE	This prompt gives the flight crew access to the departure pages, where the flight crew can select and insert runways, SIDs, and TRANSs.
[2L] OFFSET	This prompt gives the flight crew access to the OFFSET page.
[3L] HOLD	This prompt gives access to the hold pages.
[4L] ENABLE ALTN	This prompt allows the flight crew to switch to the alternate flight plan at the selected revision waypoint, and use it as a new active flight plan. The system never displays this prompt at the FROM waypoint.
[5L] ALTN	This prompt gives access to the alternate airport page. The system displays it only at the destination.
[6L] RETURN	This prompt returns the display to the flight plan page.
[1R] ARRIVAL	This prompt calls up the arrival pages, where RWY, APPR, STAR TRANS and VIA can be selected and inserted.

[1R] FIX INFO	FIX INFO is only displayed on the lateral revision page at the origin or FROM waypoint. It gives access to the FIX INFO page.
[2R] LLXING/INCR/NO	This prompt allows the flight crew to create the latitude/longitude crossing point. The increment (INCR) ranges from 1 to 20 °, and the number of crossing points from 1 to 99. This prompt is not displayed for waypoints belonging to the descent procedure.
[3R] NEXT WPT	The flight crew uses this prompt to enter the next waypoint. If this waypoint is a latitude/longitude, or is neither in the database nor in the flight crew-defined elements, the display reverts to the NEW WAYPOINT PAGE.
[4R] NEW DEST	The flight crew uses this prompt to enter a new destination.
[5R] AIRWAYS	The flight crew uses this prompt to access the AIRWAYS page.
[6R] INSERT	This prompt is displayed when the flight crew has created a temporary flight plan. It can be used to activate the temporary flight plan.

TEMPORARY REVISION

When the flight crew selects a lateral revision, the system creates a “Temporary F-PLN” and displays it in yellow on the MCDU, and as a dashed yellow line on the ND, enabling the flight crew to review the data before inserting it. As long as the temporary flight plan is not inserted, the previous the flight plan remains active and the system guides the aircraft along it.



```
 FROM TMPY          AI101→
          TIME    SPD/ALT
LFB033R  0000    128/    500
 C326°     BRG355°      6NM
TOU       ----    ---/-----
 LMG1A     TRK308°    23
AGN       ----    ---/-----
 LMG1A               116
LMG       ----    ---/-----

---F-PLN DISCONTINUITY--

←ERASE              INSERT*
```

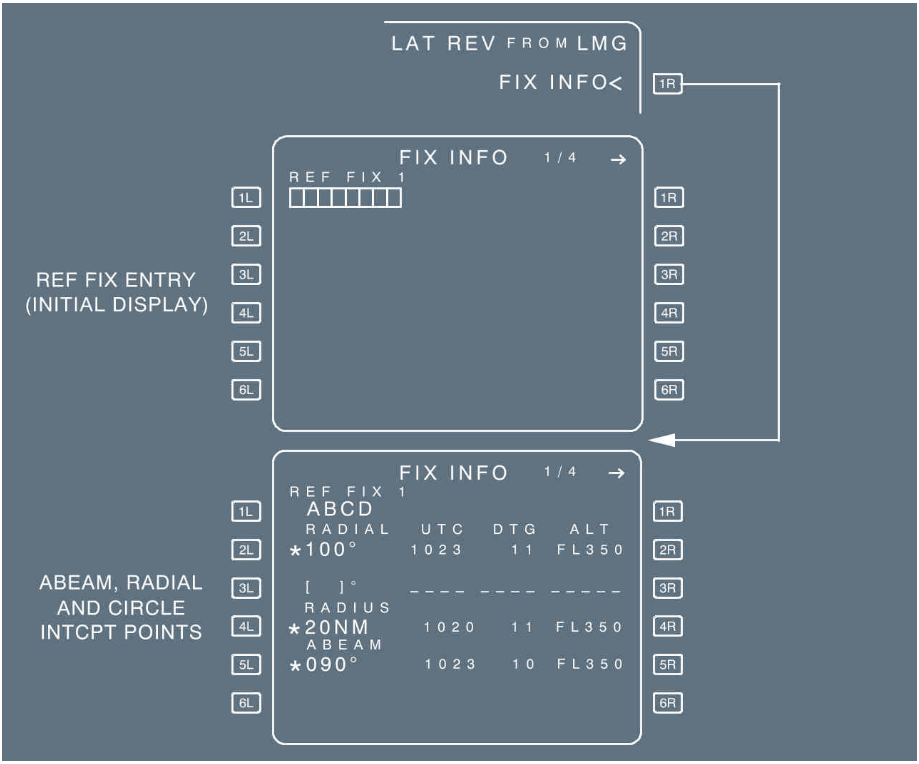
FIX INFO PAGE

Ident.: DSC-22_20-50-10-25-00000565.0009001 / 14 MAY 12

10 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page provides access to the RADIAL, CIRCLE, and ABEAM intercept functions.
The reference may be a given database fix or a pilot-defined element.

If the radial, circle or abeam intercepts the active flight plan, the intersection point can be converted to a waypoint and inserted into the flight plan.
The FIX INFO page may be accessed from the LAT REV page at the origin airport, or at FROM.


LAT REV FROM LMG
FIX INFO<
1R
REF FIX ENTRY (INITIAL DISPLAY)
FIX INFO 1/4 →
REF FIX 1
□□□□□□□□
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
ABEAM, RADIAL AND CIRCLE INTCPT POINTS
FIX INFO 1/4 →
REF FIX 1
ABCD
RADIAL UTC DTG ALT
*100° 1023 11 FL350
[ ]° ---- ---- -----
RADIUS
*20NM 1020 11 FL350
ABEAM
*090° 1023 10 FL350

[1L] REF FIX (blue)	Allows entries of the REF FIX. This reference may be any database element (navaid, waypoint, NDB, airport, runway) or a pilot-defined element. Prior to entry, amber boxes are displayed.

[2L] - [2R] RADIAL (blue) and [3L] - [3R] (blue)	Enables entry of a radial from the REF FIX. If the radial line intersects the active flight plan, the FMGS will compute the time, the along path DTG (Distance To Go), and the altitude at the intersection point (small green font). A large blue star is then displayed to insert the intersection waypoint into the flight plan. This waypoint is not part of the pilot-stored elements. Format of the created waypoint is: XXXNNN XXX = First 3 letters of REF FIX ident. NNN = Value of the radial
[4L] - [4R] RADIUS (blue)	This function enables the flight crew to enter a radius that defines a circle around the REF FIX. When the circle intercepts the current flight path, the FMGS will compute the time, the along path distance and the altitude at the first intersection point, from the current aircraft position (small green front). A large blue star is then displayed to insert the intersection waypoint into the flight plan. This waypoint is not part of the pilot stored element. The waypoint is automatically labelled: “DNNNXXX” NNN = Value of the radius XXX = First 3 letters of the REF FIX ident.
[5L] - [5R] ABEAM	This function enables the pilot to create waypoints on a flight plan (primary or secondary) that are abeam a reference fix. Once computed, the page displays the radial number in large green font. Time, distance and altitude predictions are displayed in small green font. Selecting the key adjacent to the star creates the waypoint and inserts it into the flight plan. The waypoint is identified by AB + the REF FIX ident e.g. AB TLS. Abeam waypoints are not stored in the pilot-stored waypoint database.

Note: *Four FIX INFO pages, providing the capability to define four different REF FIX elements, are available.*

OFFSET PAGE

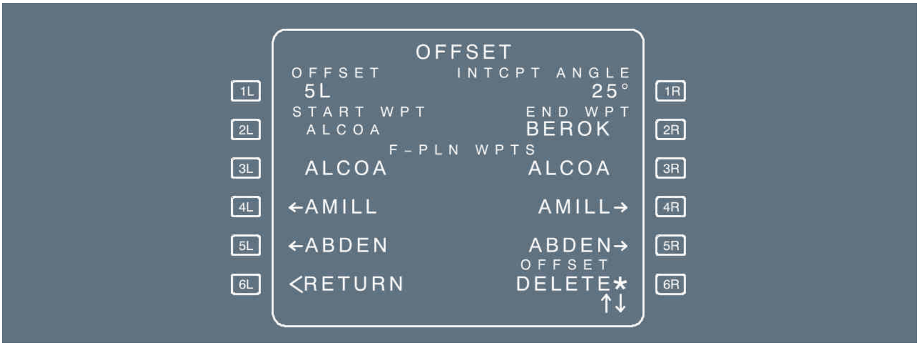
Ident.: DSC-22_20-50-10-25-00013512.0019001 / 17 MAY 21

11 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page allows the flight crew to insert a preplanned offset into the flight plan by entering:
- A start waypoint
- An end waypoint

- An offset distance to the left or to the right
- The intercept angle value.

The flight crew calls up this page from the LATERAL REVISION page, by pressing [2L] key.



OFFSET
OFFSET INTCPT ANGLE
5L 25°
START WPT END WPT
ALCOA BEROK
F-PLN WPTS
ALCOA ALCOA
←AMILL AMILL→
←ABDEN ABDEN→
OFFSET
<RETURN DELETE*
↑↓

TITLE	OFFSET in white large font. If a temporary flight plan exists, it is displayed in yellow large font.
[1L] OFFSET	This field displays the lateral offset distance, left or right, in the flight plan. The offset may be between 1 and 50 NM. Blue brackets are displayed until an offset is inserted. When the flight crew enters an offset, or modifies another element in the OFFSET page, the OFFSET field becomes yellow. One time the temporary flight plan is inserted, the field becomes blue. The flight crew can delete an inserted offset either by pressing the CLR key, by entering a zero for the amount of the offset, or by pressing OFFSET DELETE in 6L field.
[2L] START WPT	The START WPT ident for the offset is displayed in yellow if a temporary flight plan exists, in blue if already inserted, or in green when the field is not modifiable. The default START WPT shall be the waypoint where the lateral revision is performed, the first waypoint offsettable, or PPOS if the offset is currently flown. This waypoint can also be selected from the list of waypoints in the fields 3L to 5L, or can be manually entered by the flight crew.
[3L] to [5L]	Display the start waypoints available for selection. Two scrolling list are available. The active start waypoint is displayed in green in the list. Other waypoints are displayed in blue. The currently selected start waypoint does not have selection arrow associated.

[6L] RETURN ERASE	RETURN: The flight crew presses this key to return to the last displayed LAT REV page. ERASE: It is displayed when a temporary flight plan has been created, and it enables the flight crew to erase the temporary flight plan.
[1R] INTCPT ANGLE	This field displays the intercept angle. The angle may be between 10 ° and 50 °. The intercept angle in the AMI is the default value, and is shown in blue. When the flight crew enters an intercept angle, or modifies another element in the OFFSET page, the field becomes yellow. When the temporary flight plan is inserted, the field becomes blue.
[2R] END WPT	The END WPT ident for the offset is displayed in yellow if a temporary flight plan exists, or in blue if already inserted. The default END WPT shall be the waypoint terminating the last consecutive offsettable leg from default or currently selected START WPT. This waypoint can also be selected from the list of waypoints in the fields 3R to 5R, or can be manually entered by the flight crew.
[3R] to [5R]	Display the end waypoints available for selection. Two scrolling lists are available. The active end waypoint is displayed in green in the lists. Other waypoints are displayed in blue. The currently selected end waypoint does not have selection arrow associated.
[6R] INSERT OFFSET DELETE	INSERT: This field allows the flight crew to activate the temporary flight plan and reverts the display to the active flight plan. This field is displayed when the offset segment is completely defined on OFFSET page. OFFSET DELETE: This prompt enables the flight crew to create a temporary flight plan where the predefined offset is canceled. This field is displayed when an offset exists in the active flight plan.

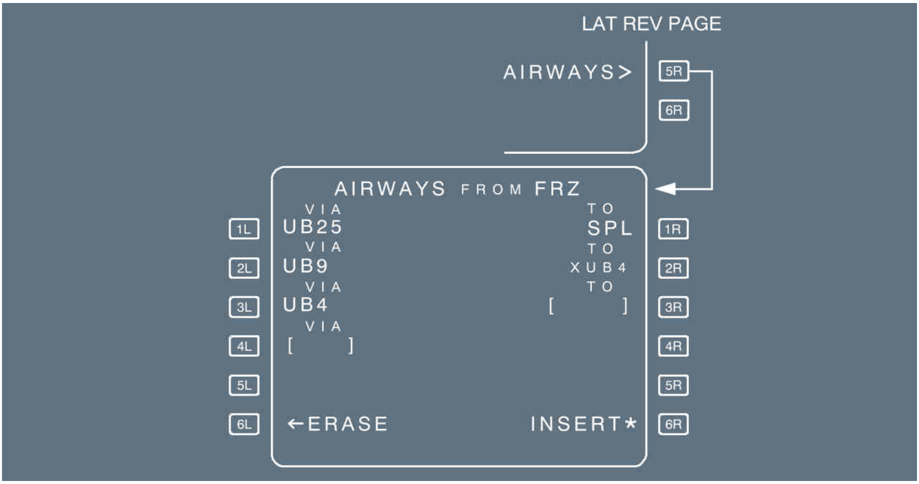
Note: *If the waypoint lists in lines 3 to 5 do not fit in one page, the flight crew can scroll in an open loop, two lines by two lines. To keep the initial order of the list, two markers appear:*
- *- START OF LIST - : This marker is displayed at the beginning of the list*
- *- END OF LIST - : This marker is displayed at the end of the list.*

AIRWAYS PAGE

Ident.: DSC-22_20-50-10-25-00000566.0009001 / 14 MAY 12

12 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page allows the pilot to select up to five airways for stringing into the flight plan, after the revise waypoint.
The pilot calls up this page by pressing the lateral revision page [5R] key.



TITLE	Revise point ident (large green font)
[1L] to [5L] VIA	This field displays the airways entered by the pilot.
[6L] ERASE or RETURN	The flight crew presses this key to return to the lateral revision page. This field displays ERASE when a temporary flight plan is created. It enables the temporary flight plan to be erased.
[1R] to [5R] TO	Displays the end points of the corresponding airways entered on the [1L] to [5L] entries. The ending point is displayed in large blue font, if manually-entered, in blue small font if FMGC-computed.
[6R] INSERT (amber)	Allows the entered VIA/TO segments to be inserted into the flight plan. The display reverts to the F-PLN page.

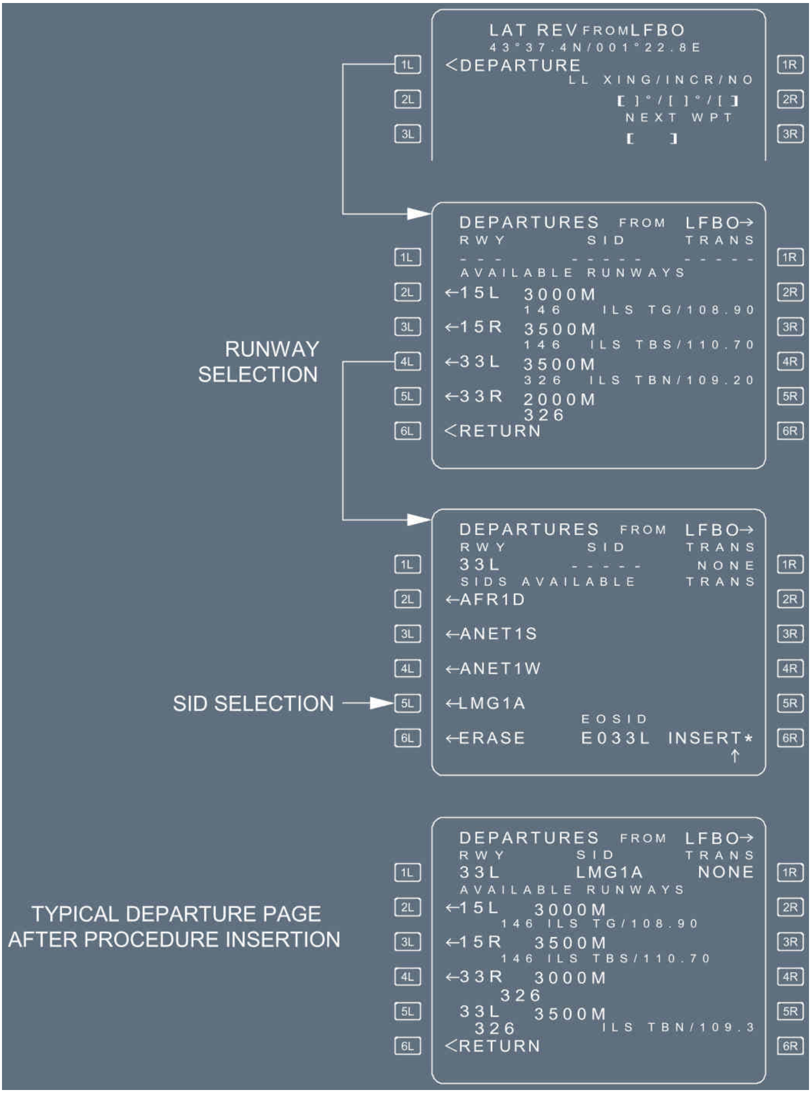
Note: 1. *If the entered airway contains at least one fixed radius transition waypoint as defined in the navigation database, and the TO waypoint is defined and, the fixed radius transition waypoint is in the flight plan, then, “FIXED TURN RADIUS AWY” is displayed between the VIA and TO fields.*
2. *If the condition for display “FIXED TURN RADIUS AWY” is satisfied for two consecutives airways lines, the second line displays (“) instead of the whole message.*

DEPARTURE PAGES

Ident.: DSC-22_20-50-10-25-00000567.0001001 / 17 MAR 11

13 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

These pages allow the pilot to review departure procedures (RWY, SID, TRANS) and enter them into the active flight plan.
When the display shows the lateral revision page for the origin, the pilot calls them up by pressing the 1L key.
Three pages are available: RWY, and SIDS and TRANS (if any).
The pilot sequentially calls up each page by selecting a data item (such as RWY), or by pressing the NEXT PAGE key on the MCDU console.


RUNWAY SELECTION
SID SELECTION
TYPICAL DEPARTURE PAGE AFTER PROCEDURE INSERTION
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
     LAT REV FROM LFBO
     43°37.4N/001°22.8E
<DEPARTURE
              LL XING/INCR/NO
                   [ ]°/[ ]°/[ ]
                     NEXT WPT
                     [    ]
```

```
 DEPARTURES  FROM  LFBO→
 RWY          SID        TRANS
 ---         -----       -----
 AVAILABLE RUNWAYS
←15L    3000M
        146      ILS TG/108.90
←15R    3500M
        146     ILS TBS/110.70
←33L    3500M
        326     ILS TBN/109.20
←33R    2000M
        326
<RETURN
```

```
 DEPARTURES  FROM  LFBO→
 RWY          SID        TRANS
 33L         -----        NONE
 SIDS AVAILABLE          TRANS
←AFR1D

←ANET1S

←ANET1W

←LMG1A
                EOSID
←ERASE          E033L  INSERT*
                            ↑
```

```
 DEPARTURES  FROM  LFBO→
 RWY          SID        TRANS
 33L         LMG1A        NONE
 AVAILABLE RUNWAYS
←15L    3000M
      146 ILS TG/108.90
←15R    3500M
      146 ILS TBS/110.70
←33R    3000M
      326
 33L    3500M
  326              ILS TBN/109.3
<RETURN
```

Line 1 RWY, SID TRANS	This line displays the RWY, SID, and TRANS in green after they have been inserted into the active flight plan, or in yellow if selected but not yet inserted. If nothing has been selected or inserted, the line displays dashes.

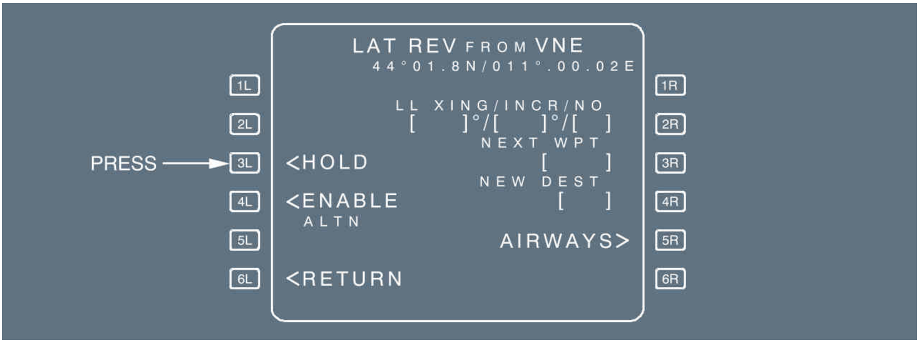
[2L] to [5L] RWY/SIDs	These fields display selectable and selected RWYs or SIDs (including EOSID and NO SID option). The pilot can slew each list. Selectable RWYs and SIDs are displayed in blue with an arrow. Once a RWY or SID is selected, the arrow disappears. A RWY or SID, already inserted in the flight plan, is displayed in green. The display shows the length, heading, and, if available, the ILS ident and frequency for each runway.
[6L] ERASE or RETURN	The pilot presses this key to erase a selected data item and revert to the previous selection. If the pilot erases the page, the display reverts to the active flight plan page. The display shows RETURN instead of ERASE, when the pilot has not created a temporary flight plan.
[2R] to [5R] TRANS	This field displays the selectable and selected enroute transitions in blue and green respectively. They are blank, if there are no transitions.
[6R] INSERT or BLANK	The pilot uses this key to insert a temporary procedure into the flight plan. The page reverts to the active flight plan page, when the insertion is completed. It is associated with RETURN (6L).
[6M] EOSID	Once a runway is inserted into the flight plan, this field displays any ENG OUT SID for that runway. If there is none, it displays NONE.

HOLD PAGES

Ident.: DSC-22_20-50-10-25-00000568.0001001 / 01 OCT 12

14 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

These pages allow the pilot to review and modify the holding pattern parameters at the selected revise waypoint.
The flight crew calls up these pages by pressing the HOLD key on the LAT REV page for the waypoint. The flight crew can insert database hold, holds computed by the FMS or holds that they manually define.



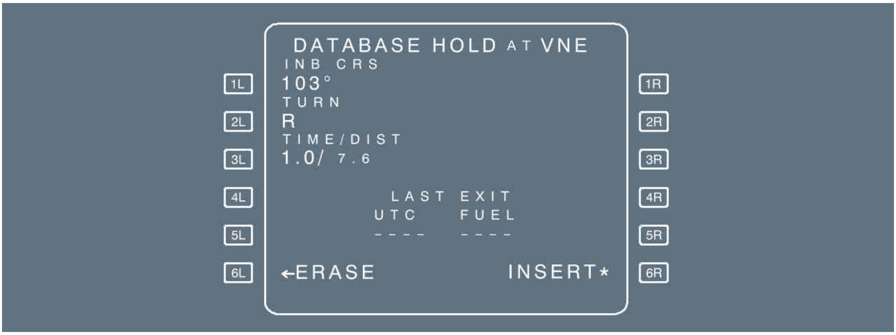
PRESS → 3L

```
        LAT REV FROM VNE
     44°01.8N/011°.00.02E
          LL XING/INCR/NO
       [    ]°/[    ]°/[  ]
                   NEXT WPT
<HOLD                 [    ]
                   NEW DEST
<ENABLE                 [  ]
 ALTN
                  AIRWAYS>
<RETURN
```

At first access, the HOLD page appears as follow:

DATABASE HOLD

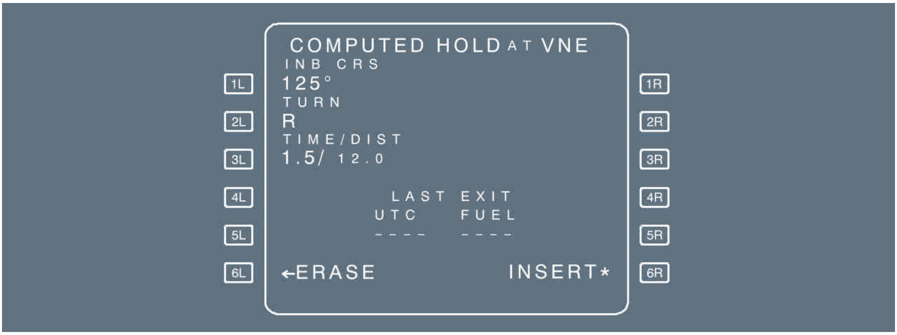
If a hold is defined in the navigation database for the revised waypoint, and can be inserted, the parameters in [1L], [2L] and [3L] appear in yellow.



```
  DATABASE HOLD AT VNE
INB CRS
103°
TURN
R
TIME/DIST
1.0/ 7.6

          LAST   EXIT
         UTC     FUEL
         ----    ----

←ERASE           INSERT*
```

COMPUTED HOLD

If a default hold is computed by the FMS and can be inserted, the parameters in [1L], [2L] and [3L] appear in yellow.



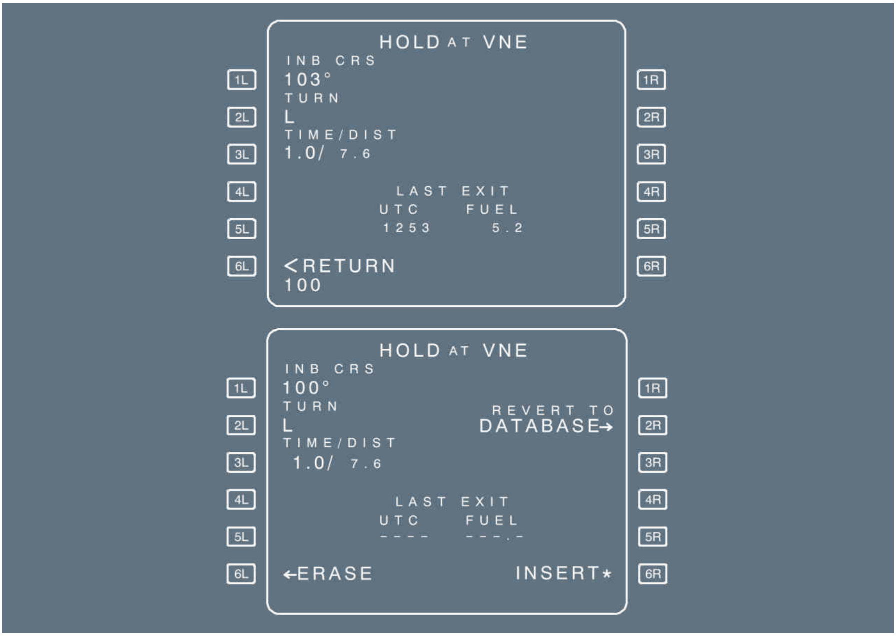
COMPUTED HOLD AT VNE
INB CRS
125°
TURN
R
TIME/DIST
1.5/ 12.0
LAST EXIT
UTC FUEL
---- ----
←ERASE INSERT*

A computed hold has the following default parameters:

[1L] INB CRS	Inbound track of the F-PLN leg leading to the revised waypoint
[2L] TURN	Direction right (R) to turn in the hold
[3L] TIME/DIST	TIME on outbound leg is 1.5 min above 14 000 ft, 1 min below 14 000 ft.
[2R]	This field shows “REVERT TO COMPUTED” when the flight crew has modified the holding pattern.

HOLD MODIFIED BY FLIGHT CREW

If the flight plan contains a holding pattern that was defined by the pilot from an existing database or computed hold, the parameters in [1L], [2L] and [3L] appear in blue.
If the pilot has modified holding pattern data from the database, the field next to [2R] displays “REVERT TO DATABASE” or “REVERT TO COMPUTED” to enable the pilot to revert to default parameters.

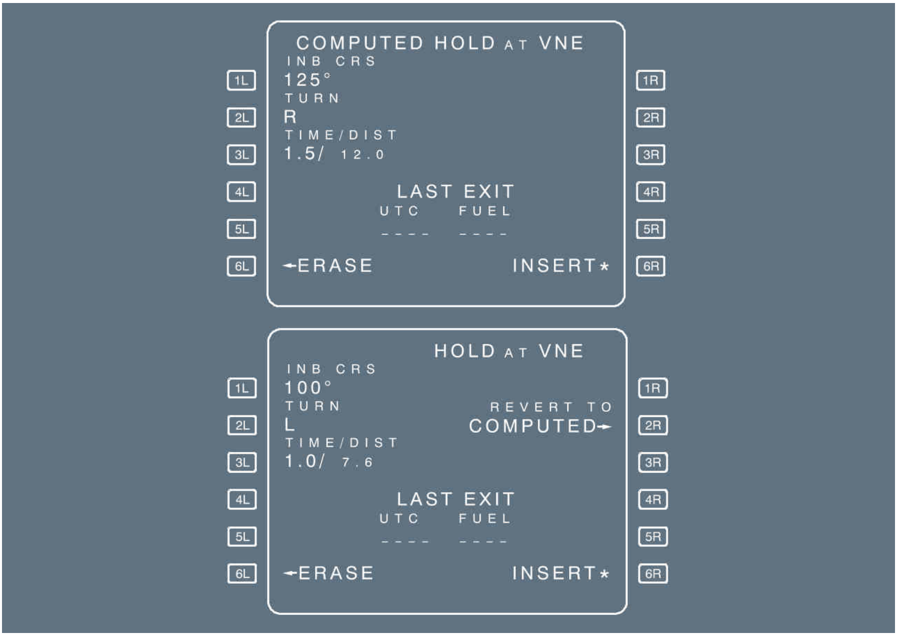


HOLD AT VNE
INB CRS
103°
TURN
L
TIME/DIST
1.0/ 7.6
LAST EXIT
UTC FUEL
1253 5.2
<RETURN
100

HOLD AT VNE
INB CRS
100°
TURN
L
REVERT TO
DATABASE→
TIME/DIST
1.0/ 7.6
LAST EXIT
UTC FUEL
---- ---.-
←ERASE
INSERT*

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

EXAMPLE The pilot modifies the inbound course.



COMPUTED HOLD AT VNE
INB CRS
125°
TURN
R
TIME/DIST
1.5/ 12.0
LAST EXIT
UTC FUEL
---- ----
←ERASE INSERT*

HOLD AT VNE
INB CRS
100°
TURN
L
REVERT TO
COMPUTED→
TIME/DIST
1.0/ 7.6
LAST EXIT
UTC FUEL
---- ----
←ERASE INSERT*

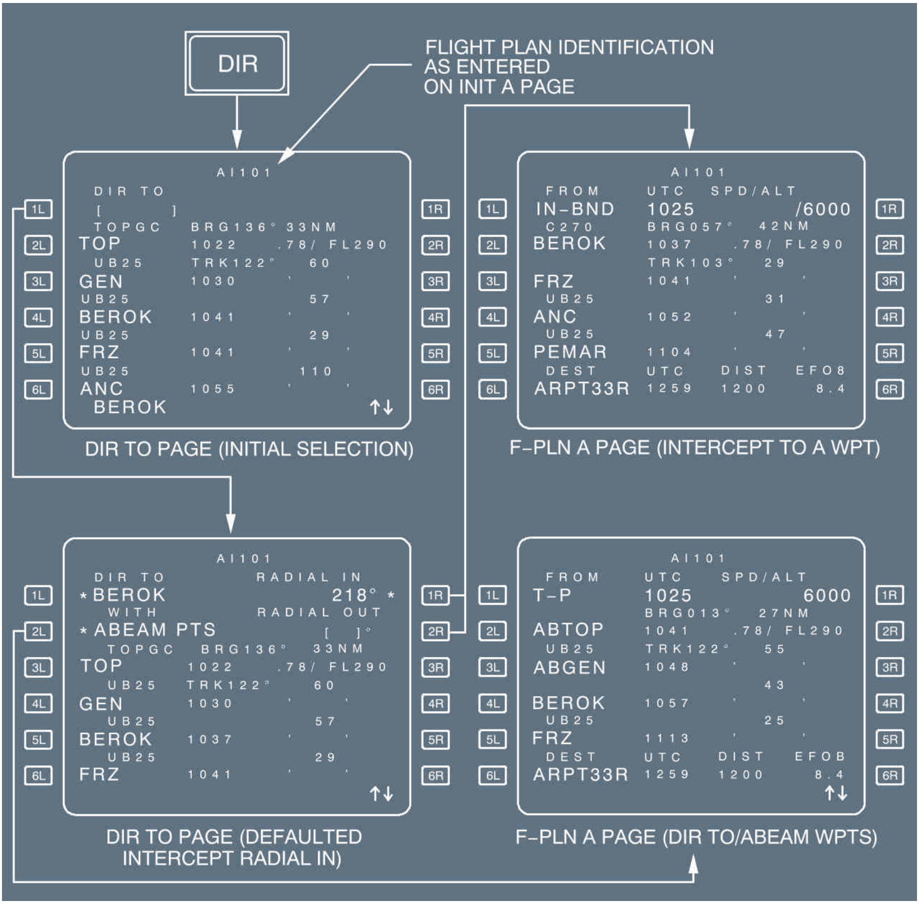
[1L] INB CRS	This field displays the inbound course of the holding pattern. The data may be manually or automatically modified.
[2L] TURN	This field shows the direction to turn in the hold (L or R). The data may be modified.
[3L] TIME/DIST	This field shows the time and distance for the outbound leg. The data may be modified, but time and distance cannot be entered simultaneously. Time and distance are dependent values that the system calculates from the predicted true airspeed, which in turn depends upon the holding speed (speed for maximum endurance, ICAO speed limit, or constraint speed, whichever is lower).
[6L] ERASE or RETURN	The pilot presses this key when the field shows “ERASE”, to erase the holding pattern. The pilot presses this key when the field shows “RETURN”, to return to the LAT REV page, if the hold is already inserted in the flight plan.
[2R] REVERT TO...	The pilot presses this key to delete manual modifications to the database hold (or computed hold), and to revert to the database (or computed) holding data.

[6R] INSERT	The pilot presses this key to insert the hold into the active flight plan.
LAST EXIT UTC FUEL	This field displays the time at which the aircraft must leave the holding pattern in order to meet fuel policy criteria (extra fuel = 0). The system also displays the estimated fuel on board at that time. Always displayed in thousand of kilograms or pounds.

DIRECT TO PAGE

Ident.: DSC-22_20-50-10-25-00000569.0001001 / 23 JUN 15

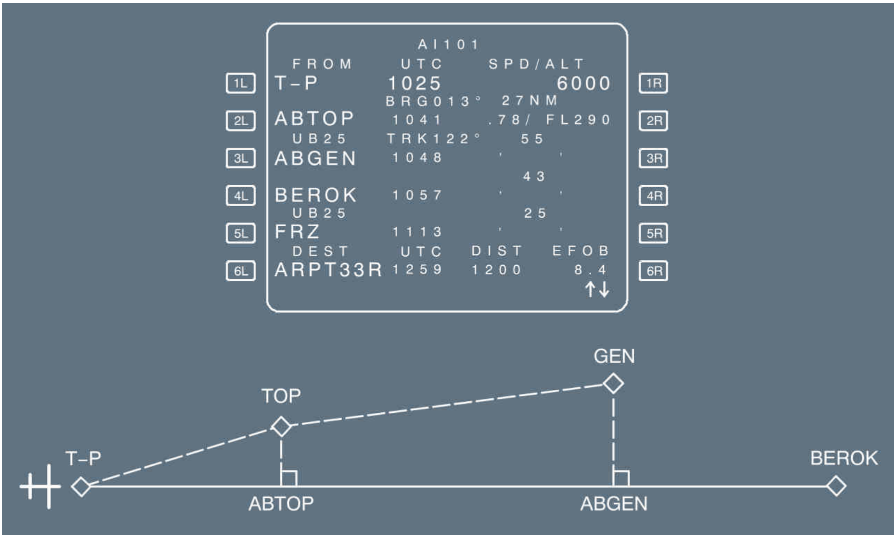
15 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**


DIR
FLIGHT PLAN IDENTIFICATION AS ENTERED ON INIT A PAGE
AI101
DIR TO
[ ]
TOPGC BRG136° 33NM
TOP 1022 .78/ FL290
UB25 TRK122° 60
GEN 1030
UB25 57
BEROK 1041
UB25 29
FRZ 1041
UB25 110
ANC 1055
BEROK ↑↓
DIR TO PAGE (INITIAL SELECTION)
AI101
FROM UTC SPD/ALT
IN-BND 1025 /6000
C270 BRG057° 42NM
BEROK 1037 .78/ FL290
TRK103° 29
FRZ 1041
UB25 31
ANC 1052
UB25 47
PEMAR 1104
DEST UTC DIST EFOB
ARPT33R 1259 1200 8.4
F-PLN A PAGE (INTERCEPT TO A WPT)
AI101
DIR TO RADIAL IN
*BEROK 218° *
WITH RADIAL OUT
*ABEAM PTS [ ]°
TOPGC BRG136° 33NM
TOP 1022 .78/ FL290
UB25 TRK122° 60
GEN 1030
UB25 57
BEROK 1037
UB25 29
FRZ 1041 ↑↓
DIR TO PAGE (DEFAULTED INTERCEPT RADIAL IN)
AI101
FROM UTC SPD/ALT
T-P 1025 6000
BRG013° 27NM
ABTOP 1041 .78/ FL290
UB25 TRK122° 55
ABGEN 1048
43
BEROK 1057
UB25 25
FRZ 1113
DEST UTC DIST EFOB
ARPT33R 1259 1200 8.4 ↑↓
F-PLN A PAGE (DIR TO/ABEAM WPTS)
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R

Pressing the “DIR” key under the MCDU screen brings up the DIR TO page. On this page, the [1L] key is the DIR TO key. The pilot presses it to modify the flight plan by creating a direct leg from the aircraft's present position to any selected waypoint. When in NAV mode, the pilot must use this key to modify the active leg or the TO waypoint. The pilot cannot call up this page when the aircraft's present position is not valid.

[1L] DIR TO	Pressing this key selects the DIRECT TO or INTERCEPT waypoint. The pilot can identify the waypoint to be inserted by using its identifier, its latitude and longitude, place/bearing/distance, or place-bearing/place-bearing. *Note: If the entered DIR TO is a latitude/longitude, the NEW WAYPOINT page is automatically called up.* If the pilot does not select the RADIAL IN (1R) or RADIAL OUT (2R) or ABEAM PTS (2L), the DIR TO function routes the aircraft from the present position to the waypoint inserted in the DIR TO field.
Line 3 to Line 6	These lines display the active flight plan with time/speed/distance predictions. The display may be slewed ↑ ↓. Pressing any key activates the DIRECT TO function from the present position to the waypoint adjacent to that key.
[2L] ABEAM PTS	The flight crew presses this key to activate the DIR TO/ABEAM function which projects the flight plan waypoints perpendiculary on the DIR TO leg:

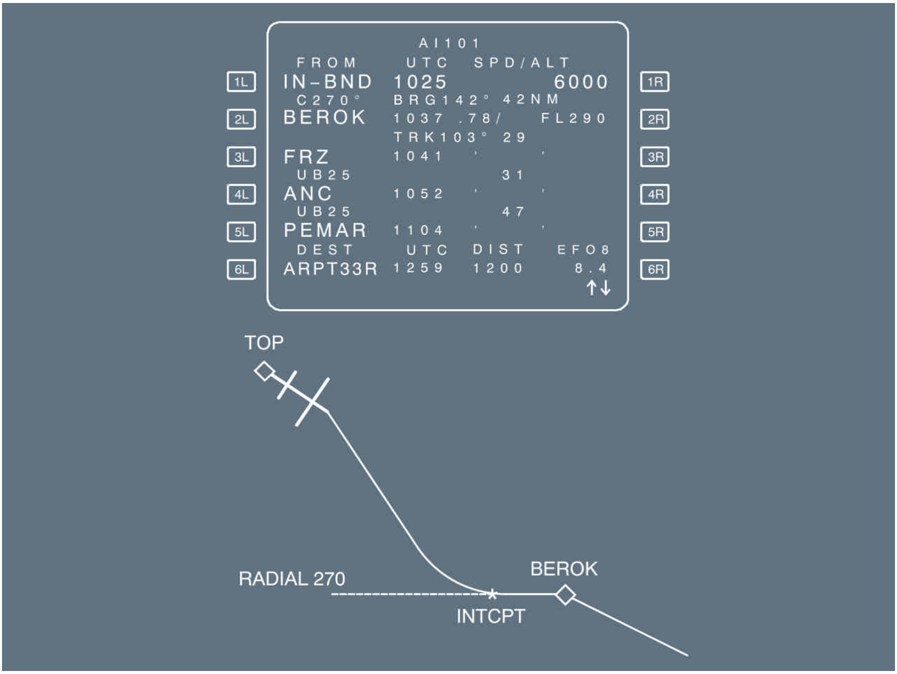
EXAMPLE: DIR TO BEROK - ABEAM.



```
        AI101
 FROM       UTC      SPD/ALT
T-P         1025        6000
            BRG013°  27NM
ABTOP       1041     .78/ FL290
 UB25       TRK122°    55
ABGEN       1048      '      '
                       43
BEROK       1057      '      '
 UB25                  25
FRZ         1113      '      '
 DEST       UTC     DIST    EFOB
ARPT33R     1259    1200     8.4
                              ↑↓
```

[1R] RADIAL IN and [2R] RADIAL OUT	The pilot fills in these fields to define a radial, associated to the waypoint defined in 1L. These keys respectively activate the DIR TO/INTERCEPT TO and DIR TO/INTERCEPT FROM functions. The pilot enters the radial in, or radial out, as : XXX, XXX being the radial. The aircraft intercepts from its current position and tracks the selected waypoint and radial to (or from) this waypoint.

<u>EXAMPLE: RADIAL INBND - DIR TO BEROK - RADIAL 270 ° INBOUND</u>



```
             AI101
  FROM     UTC   SPD/ALT
IN-BND    1025       6000
  C270°    BRG142° 42NM
BEROK     1037 .78/   FL290
           TRK103° 29
FRZ       1041  '      '
  UB25            31
ANC       1052  '      '
  UB25            47
PEMAR     1104  '      '
  DEST     UTC  DIST   EFO8
ARPT33R   1259  1200    8.4
                          ↑↓
```

If the DIR TO/INTCPT WPT entry is to a waypoint already in the flight plan, a default RADIAL IN is displayed in small font. However, no radial is displayed on the ND for this default radial. No default radial is provided for the RADIAL OUT field.

Selecting the INTCPT TO (RADIAL IN [1R]) function:
- Activates the intercept radial INTO the WPT.
- Sets the course = radial IN + 180 °.
- Reverts the display to the F-PLN A page.

Selecting the INTCPT FROM (RADIAL OUT [2R]) function:

- Activates the intercept radial FROM the WPT.
- Sets the course = radial OUT.
- Reverts the display to F-PLN A page.

For details, DSC_22_20_30 Flight Planning.

Note: *It is not recommended to use the DIR TO function when the aircraft is on the ground. The use of the DIR TO function when the aircraft is on the ground may result in the loss of all departure data, that includes both of the following:*

- *The takeoff speeds*
- *The derated level, or the flexible temperature.*

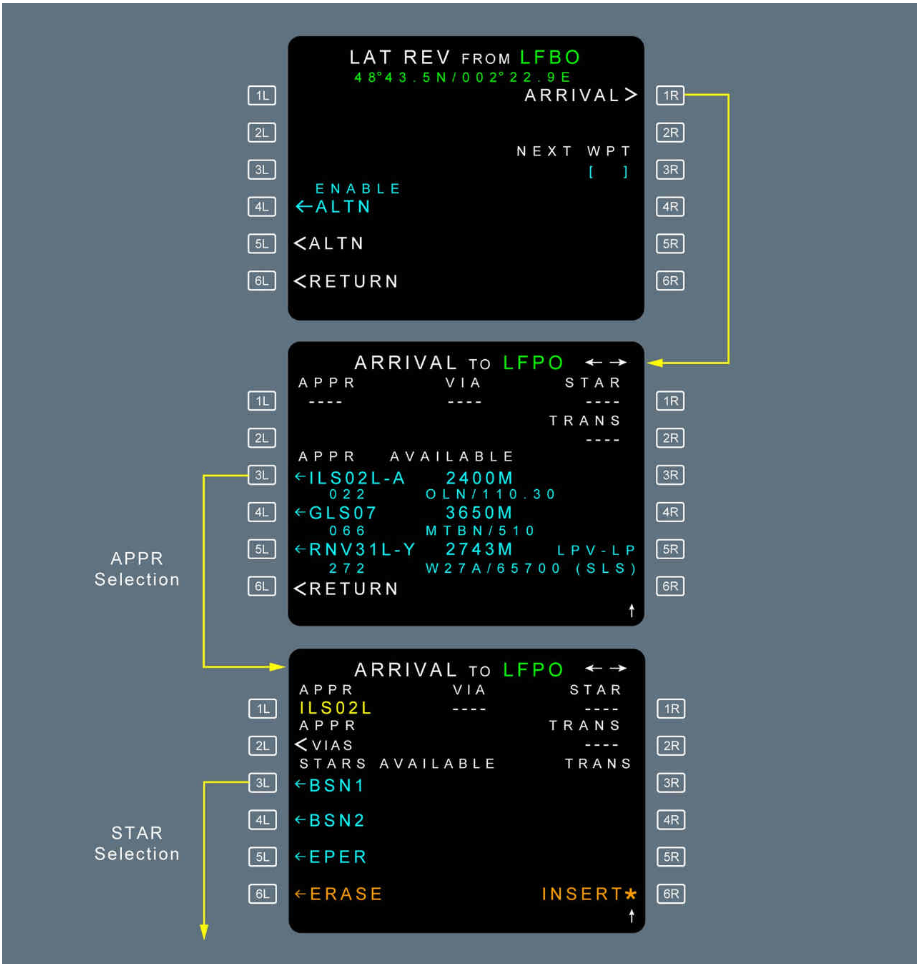
ARRIVAL PAGES

16 Ident.: DSC-22_20-50-10-25-00000570.0024001 / 04 NOV 22
Applicable to: MSN 10949-11597

These pages enable the flight crew to review arrival procedures (approaches, VIAs, STARs, TRANS) and enter them into the active flight plan.
The flight crew presses the [1R] key from the LAT REV page for the destination to access the ARRIVAL pages.
Three pages, APPR, STAR, and VIA, are available, along with a fourth, TRANS, if there are any transitions.
The flight crew either selects a data item (such as APPR), or presses the NEXT PAGE on the MCDU to access the next pages sequentially.

Line [1L] - [1R] [2R]	This line displays the APPR, VIA, STAR, and TRANS in green, if they are inserted in the flight plan, and in yellow, as a temporary flight plan, if they are selected but not yet inserted. It displays dashes or NONE, if nothing is selected or inserted.
[2L] APPR VIAS	The flight crew presses this key to access to transitions from the last point of the STAR to the first point of the approach.

[3L] to [5L]	These fields list selectable and selected APPRs, STARs, and VIAs. The flight crew can slew the pages, when necessary. The FMS displays the APPRs, STARs, and VIAs that are available for selection in blue with an arrow. The arrow disappears when the flight crew selects an APPR, STAR, or VIA. The flight crew inserts into the flight plan the APPR, STAR, or VIA and then the FMS displays the APPR, STAR, or VIA in green on the ARRIVAL page. The list of VIAs available on the APPROACH VIAS page is composed of: - The VIAs compatible with the selected STAR, displayed below the "APPR VIAS AVAILABLE" subtitle - The VIAs not compatible with the selected STAR, but compatible with the selected APPR, displayed below the "OTHER APPR VIAS" subtitle. If only one VIA is compatible with the selected STAR, then the VIA is automatically selected in VIA field on the ARRIVAL page. For each approach, the display shows runway length, heading, and the frequency and identifier of the ILS or the channel and identifier of the GLS ◁ when ILS or GLS ◁ is available. When SLS ◁ is available, for RNAV(GNSS) approach with LPV or LP minima, the LPV-LP tag is added next to the runway length (whether the approach is with LP or with LPV minima), and the SLS tag is added below the LPV-LP tag. SLS ident and channel are displayed on the left of SLS tag. In the case of multiple approaches for the same runway, the approach is identified with the runway plus the multiple indicator (i.e. ILS 33L-S).
[6L] ERASE or RETURN	The flight crew presses this key to erase selected data and to revert to the previous selection. The page reverts to the LAT REV page. The field displays RETURN, instead of ERASE, when the flight crew has not created a temporary flight plan.
[3R] TRANS to [5R]	These fields display selectable and selected enroute transitions (if any). They are blue when selected, and become green when inserted into the active flight plan.
[6R] INSERT	The flight crew presses this key to insert the temporary procedure into the active flight plan. The page reverts to the active flight plan page when this occurs.

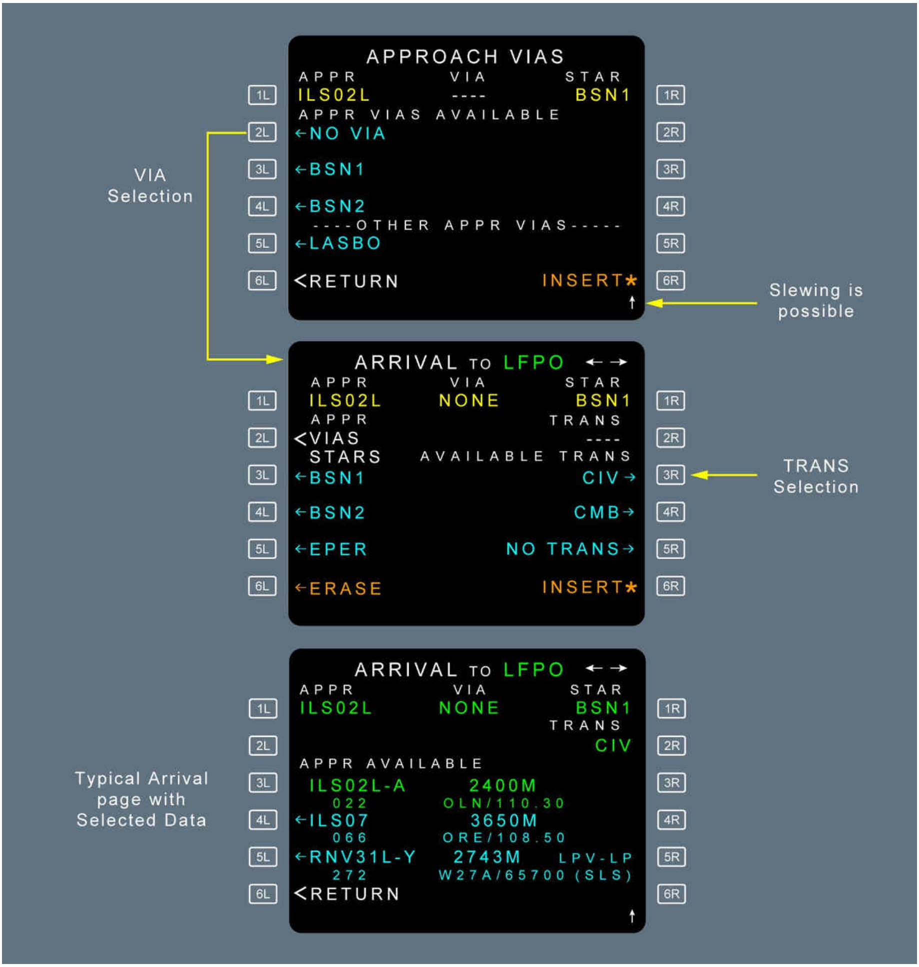


```
        LAT REV FROM LFBO
   48°43.5N/002°22.9E
                         ARRIVAL>


                      NEXT WPT
                         [    ]
 ENABLE
←ALTN

<ALTN

<RETURN
```

```
   ARRIVAL TO LFPO          ←→
APPR          VIA          STAR
----          ----         ----
                          TRANS
                           ----
APPR  AVAILABLE
←ILS02L-A   2400M
  022     OLN/110.30
←GLS07      3650M
  066     MTBN/510
←RNV31L-Y   2743M         LPV-LP
  272     W27A/65700 (SLS)
<RETURN
                              ↑
```

```
   ARRIVAL TO LFPO          ←→
APPR          VIA          STAR
ILS02L        ----         ----
APPR                      TRANS
<VIAS                      ----
STARS AVAILABLE           TRANS
←BSN1

←BSN2

←EPER

←ERASE                 INSERT*
                              ↑
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
APPR
Selection
STAR
Selection


APPROACH VIAS
APPR VIA STAR
ILS02L ---- BSN1
APPR VIAS AVAILABLE
←NO VIA
←BSN1
←BSN2
----OTHER APPR VIAS-----
←LASBO
<RETURN INSERT*
↑
VIA Selection
Slewing is possible
ARRIVAL TO LFPO ←→
APPR VIA STAR
ILS02L NONE BSN1
APPR TRANS
<VIAS ----
STARS AVAILABLE TRANS
←BSN1 CIV→
←BSN2 CMB→
←EPER NO TRANS→
←ERASE INSERT*
TRANS Selection
ARRIVAL TO LFPO ←→
APPR VIA STAR
ILS02L NONE BSN1
TRANS
CIV
APPR AVAILABLE
ILS02L-A 2400M
022 OLN/110.30
←ILS07 3650M
066 ORE/108.50
←RNV31L-Y 2743M LPV-LP
272 W27A/65700 (SLS)
<RETURN
↑
Typical Arrival page with Selected Data
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

ARRIVAL PAGES

17 Ident.: DSC-22_20-50-10-25-00000570.0017001 / 04 NOV 22

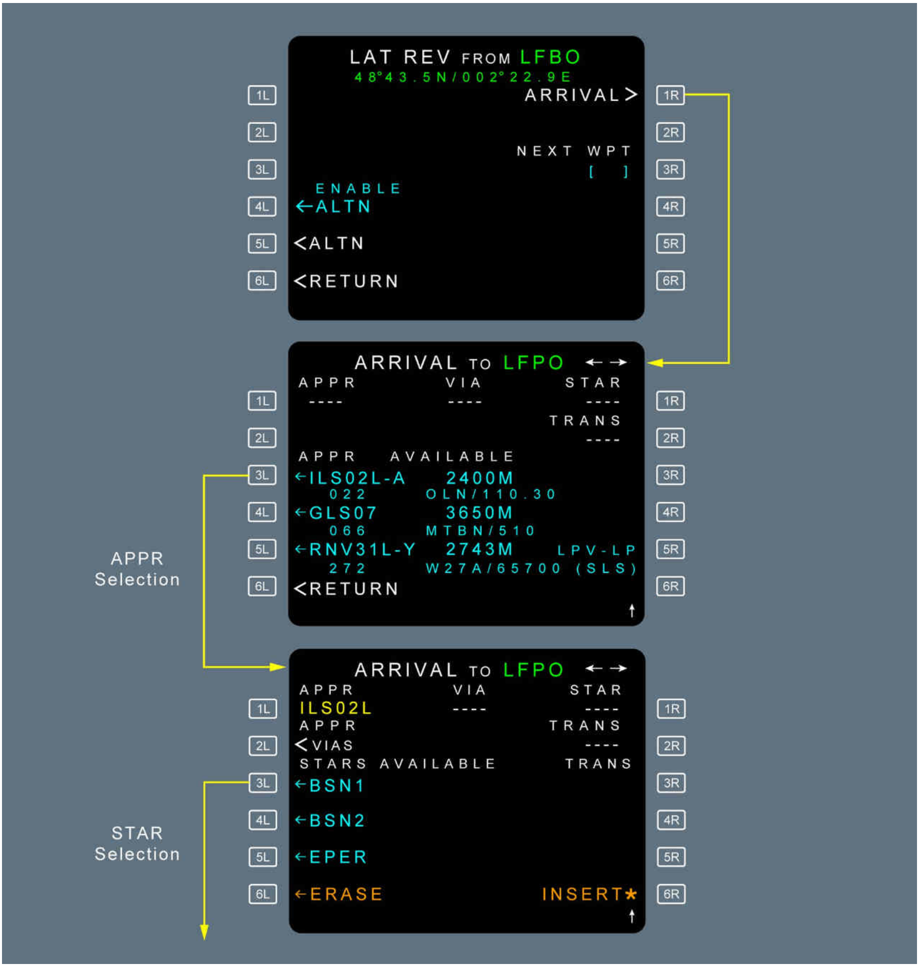
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

These pages enable the flight crew to review arrival procedures (approaches, VIAs, STARs, TRANS) and enter them into the active flight plan.

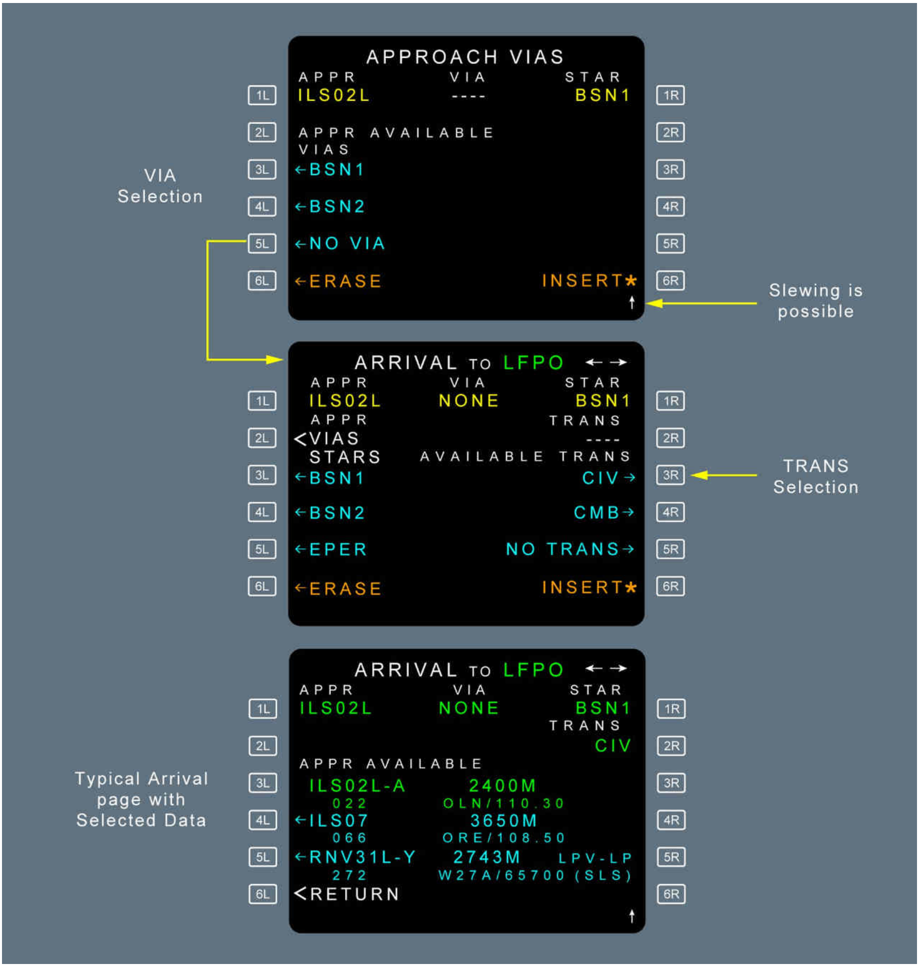
The flight crew presses the [1R] key from the LAT REV page for the destination to access the ARRIVAL pages.
Three pages, APPR, STAR, and VIA, are available, along with a fourth, TRANS, if there are any transitions.
The flight crew either selects a data item (such as APPR), or presses the NEXT PAGE on the MCDU to access the next pages sequentially.

Line [1L] - [1R] [2R]	This line displays the APPR, VIA, STAR, and TRANS in green, if they are inserted in the flight plan, and in yellow, as a temporary flight plan, if they are selected but not yet inserted. It displays dashes or NONE, if nothing is selected or inserted.
[2L] APPR VIAS	The flight crew presses this key to access transitions from the last point of the STAR to the first point of the approach.
[3L] to [5L]	These fields list selectable and selected APPRs, STARs, and VIAs. The flight crew can slew the pages, when necessary. The FMS displays the APPRs, STARs, and VIAs that are available for selection in blue with an arrow. The arrow disappears when the flight crew selects an APPR, STAR, or VIA. The flight crew inserts into the flight plan the APPR, STAR, or VIA and then the FMS displays the APPR, STAR, or VIA in green on the ARRIVAL page. The list of VIAs available on the APPROACH VIAS page is composed of VIAs compatible with the selected STAR. If only one VIA is compatible with the selected STAR, then the VIA is automatically selected in VIA field on the ARRIVAL page. For each approach, the display shows runway length, heading, and the frequency and identifier of the ILS or the channel and identifier of the GLS ◁ when ILS or GLS ◁ is available. When SLS ◁ is available, for RNAV(GNSS) approach with LPV or LP minima, the LPV-LP tag is added next to the runway length (whether the approach is with LP or with LPV minima), and the SLS tag is added below the LPV-LP tag. SLS ◁ ident and channel are displayed on the left of SLS tag. In the case of multiple approaches for the same runway, the approach is identified with the runway plus the multiple indicator (i.e. ILS 33L-S).
[6L] ERASE or RETURN	The flight crew presses this key to erase selected data and to revert to the previous selection. The page reverts to the LAT REV page. The field displays RETURN, instead of ERASE, when the flight crew has not created a temporary flight plan.

[3R] TRANS to [5R]	These fields display selectable and selected enroute transitions (if any). They are blue when selected, and become green when inserted into the active flight plan.
[6R] INSERT	The flight crew presses this key to insert the temporary procedure into the active flight plan. The page reverts to the active flight plan page when this occurs.


LAT REV FROM LFBO
48°43.5N/002°22.9E
ARRIVAL>
NEXT WPT
[ ]
ENABLE
←ALTN
<ALTN
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
ARRIVAL TO LFPO ←→
APPR VIA STAR
---- ---- ----
TRANS

APPR AVAILABLE
←ILS02L-A 2400M
022 OLN/110.30
←GLS07 3650M
066 MTBN/510
←RNV31L-Y 2743M LPV-LP
272 W27A/65700 (SLS)
<RETURN
↑
APPR
Selection
ARRIVAL TO LFPO ←→
APPR VIA STAR
ILS02L ---- ----
APPR TRANS
<VIAS ----
STARS AVAILABLE TRANS
←BSN1
←BSN2
←EPER
←ERASE INSERT*
↑
STAR
Selection


VIA
Selection
Slewing is
possible
TRANS
Selection
Typical Arrival
page with
Selected Data
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
       APPROACH VIAS
 APPR          VIA         STAR
 ILS02L        ----        BSN1

 APPR AVAILABLE
 VIAS
←BSN1

←BSN2

←NO VIA

←ERASE                  INSERT*
                              ↑
```

```
   ARRIVAL TO LFPO  ←→
 APPR         VIA         STAR
 ILS02L       NONE        BSN1
 APPR                    TRANS
<VIAS                     ----
 STARS      AVAILABLE TRANS
←BSN1                     CIV→

←BSN2                     CMB→

←EPER                NO TRANS→

←ERASE                 INSERT*
```

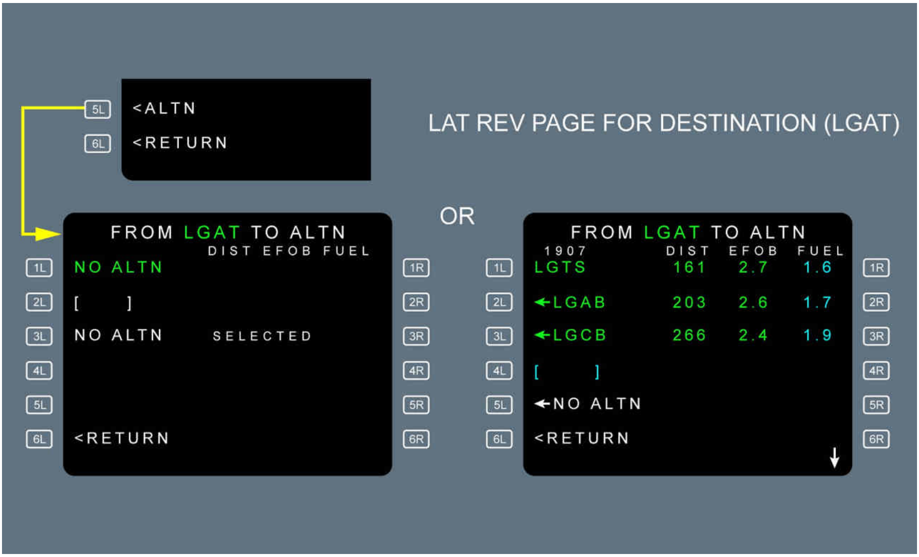
```
   ARRIVAL TO LFPO  ←→
 APPR         VIA         STAR
 ILS02L       NONE        BSN1
                         TRANS
                           CIV
 APPR AVAILABLE
 ILS02L-A     2400M
   022      OLN/110.30
←ILS07        3650M
   066      ORE/108.50
←RNV31L-Y    2743M      LPV-LP
   272     W27A/65700(SLS)
<RETURN
                             ↑
```

ALTERNATE PAGE

Ident.: DSC-22_20-50-10-25-00005710.0003001 / 30 AUG 18

18 **Applicable to: MSN 10949-11597**

This page enables the flight crew to check, in the NAV database, the alternate airports that are associated with the destination, and define additional alternates, if needed (Alternate airports are associated to the destination). The pilot displays this page with the ALTN prompt, from the lateral revision page for the destination.



```
<ALTN
<RETURN
```

```
   FROM LGAT TO ALTN
          DIST EFOB FUEL
NO ALTN
[      ]
NO ALTN      SELECTED



<RETURN
```

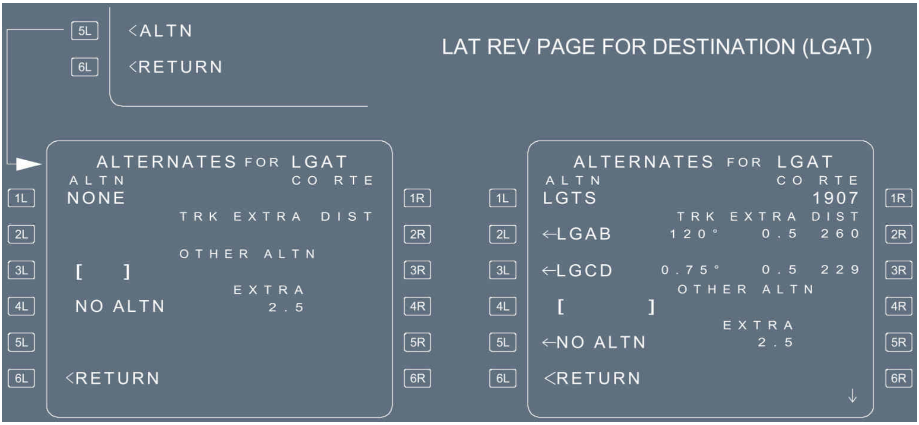
```
   FROM LGAT TO ALTN
 1907     DIST  EFOB  FUEL
LGTS       161   2.7   1.6
←LGAB      203   2.6   1.7
←LGCB      266   2.4   1.9
[      ]
←NO ALTN
<RETURN                  ↓
```

TITLE	The destination airport appears in a large green font.
[1L] ALTN	This field displays the selected alternate airport: In green, if it is active. In yellow, if it is temporary. “NO ALTN” appears, if the flight crew selects NO ALTN, or if the destination has no alternate airport.
Line 2 to line 5	These lines display the navigation database alternates (up to 6) and/or associated company routes and other alternate possibilities (up to 3, pilot entry). For each alternate identification, all the following apply: - DIST: Distance between destination and alternate, great circle distance, or company route distance if any - EFOB: Extra fuel weight that remains after landing at the alternate - FUEL: Fuel weight required to go from destination to alternate. The value is inserted, modified, or cleared by the flight crew. When the database defines a preferred alternate, it is displayed on Line 2 (if the flight crew has not scrolled).

ALTERNATE PAGE

Ident.: DSC-22_20-50-10-25-00000571.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

19 This page enables the flight crew to review, in the NAV database, the alternate airports that are paired with the destination, and define additional alternates, if needed. (Alternate airports are linked to the destination). The flight crew calls up this page with the ALTN prompt, from the lateral revision page for the destination.


5L <ALTN
6L <RETURN
LAT REV PAGE FOR DESTINATION (LGAT)
ALTERNATES FOR LGAT
ALTN CO RTE
1L NONE
TRK EXTRA DIST
OTHER ALTN
3L [ ]
EXTRA
4L NO ALTN 2.5
6L <RETURN
ALTERNATES FOR LGAT
ALTN CO RTE
1L LGTS 1907
TRK EXTRA DIST
2L ←LGAB 120° 0.5 260
3L ←LGCD 0.75° 0.5 229
OTHER ALTN
4L [ ]
EXTRA
5L ←NO ALTN 2.5
6L <RETURN
↓
1R 2R 3R 4R 5R 6R

TITLE	The destination airport is displayed large green font.
[1L] ALTN	This field displays the selected alternate: In green, if it is active; in yellow, if it is temporary. “NONE” is displayed, if NO ALTN option is selected, or if the destination has no alternate.
Line 2 to line 5	These lines display the identifications of alternates (up to 6), the extra fuel weight remaining after landing at the alternates, and the great-circle track and distances to them from the destination. If the database contains a company route between the destination and the alternate, the distance shown is an airway distance, not a great-circle distance. When the database defines a preferred alternate, it is displayed on Line 2 (if no scrolling has been performed).

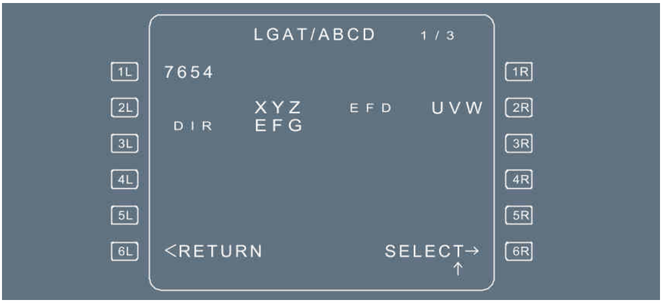
[4L] OTHER ALTN	The flight crew can enter an airport identifier in the brackets (Line 3). If that airport is not stored in the database , the NEW RUNWAY page appears for the flight crew to use in defining it. If it is stored in the database, the ROUTE SELECTION page appears, and the flight crew can use it to select the best route. The flight crew may enter a distance in the DIST field of the OTHER ALTN prompt, in order to get preliminary fuel predictions. However, once the flight crew has selected the alternate airfield as a temporary alternate and then inserted it, the ALTN distance reverts either to the airway distance, if the flight crew has selected a company route, or otherwise to the direct distance to the alternate. The flight crew can use OTHER ALTN to overwrite and replace the previous OTHER ALTN.
NO ALTN	The flight crew uses this key to select the NO ALTN option.
[6L] RETURN or ERASE	The flight crew presses this key to make the display revert to the LAT REV page. Pressing this key erases the temporary selection.
[1R] CO RTE	Pressing this key displays the active company route between the destination and the selected alternate.
[6R] INSERT	Pressing this key activates the temporary selection.

ROUTE SELECTION PAGE FOR ALTERNATE

Ident.: DSC-22_20-50-10-25-00000572.0001001 / 17 MAR 11

20 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page enables the pilot to review the company route between the destination and the alternate, and to select a different route, if that seems appropriate.
This page comes up automatically, when the flight crew enters an ident in the OTHER ALTN field.
See the “Route Selection” page *Refer to DSC-22_20-50-10-25 Route Selection Page*for a description of this page.



```
          LGAT/ABCD      1/3
7654
             XYZ     EFD    UVW
DIR          EFG




<RETURN                SELECT→
                             ↑
```

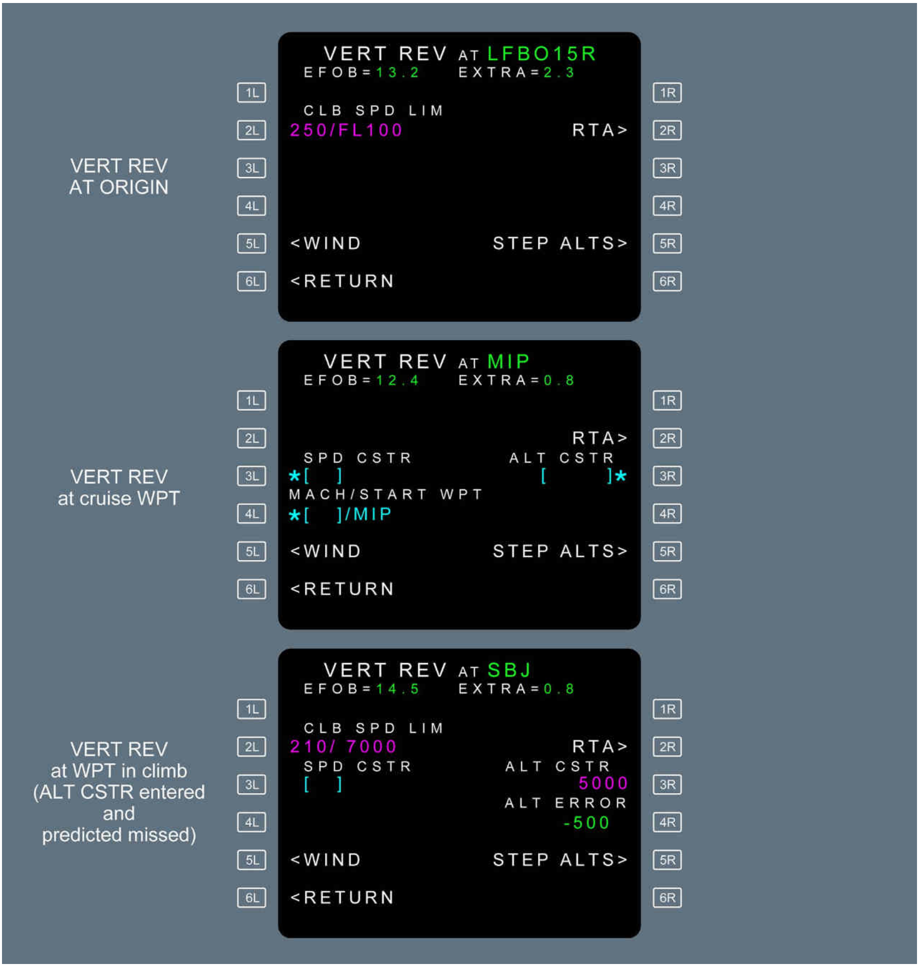
[6R] SELECT	Pressing this key reverts the display to the alternate page. (The distance between the destination and the alternate is then the airway distance).

VERTICAL REVISION PAGES

Ident.: DSC-22_20-50-10-25-00000573.0001001 / 04 DEC 18

21 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

These pages contain the menu of available vertical flight plan revisions that can be applied at a selected waypoint.
The pilot calls up these pages from the flight plan A or B pages by pressing the right hand key next to the selected revised waypoint.
The pilot may make several different vertical revisions (although some may not be available at all waypoints): Speed limit, speed constraint, altitude constraint, time constraint, wind page and STEP ALTS page.



VERT REV
AT ORIGIN

```
   VERT REV AT LFBO15R
  EFOB=13.2     EXTRA=2.3

  CLB SPD LIM
250/FL100                  RTA>




<WIND               STEP ALTS>

<RETURN
```

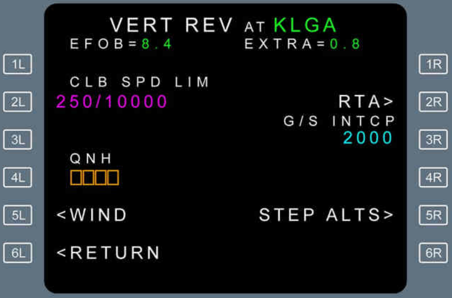
VERT REV
at cruise WPT

```
   VERT REV AT MIP
  EFOB=12.4     EXTRA=0.8

                           RTA>
  SPD CSTR            ALT CSTR
*[   ]                  [     ]*
MACH/START WPT
*[   ]/MIP
<WIND               STEP ALTS>

<RETURN
```

VERT REV
at WPT in climb
(ALT CSTR entered
and
predicted missed)

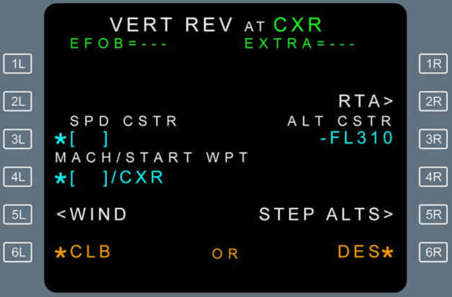
```
   VERT REV AT SBJ
  EFOB=14.5     EXTRA=0.8

  CLB SPD LIM
210/ 7000                  RTA>
  SPD CSTR            ALT CSTR
  [   ]                   5000
                     ALT ERROR
                          -500
<WIND               STEP ALTS>

<RETURN
```

VERT REV
AT DEST



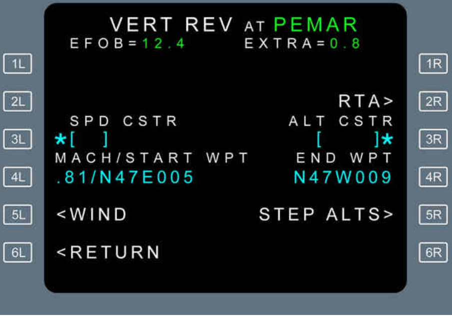
```
    VERT REV AT KLGA
 EFOB=8.4       EXTRA=0.8

 CLB SPD LIM
250/10000               RTA>
                   G/S INTCP
                        2000
 QNH
 □□□□
<WIND             STEP ALTS>

<RETURN
```

VERT REV at WPT
(predictions not
available)



```
    VERT REV AT CXR
 EFOB=---       EXTRA=---

                        RTA>
 SPD CSTR           ALT CSTR
*[   ]               -FL310
MACH/START WPT
*[   ]/CXR
<WIND             STEP ALTS>

*CLB         OR         DES*
```

VERT REV with
constant MACH
segment defined
between N47E005
and N47W009
(both waypoints are
in CRZ phase)



```
    VERT REV AT PEMAR
 EFOB=12.4      EXTRA=0.8

                        RTA>
 SPD CSTR           ALT CSTR
*[   ]              [     ]*
MACH/START WPT       END WPT
.81/N47E005          N47W009
<WIND             STEP ALTS>

<RETURN
```

TITLE	“VERT REV AT [location]” The second line shows remaining fuel and extra fuel at the waypoint being revised. From FMS2 release 2 the second line does not exist.
[1L] “TOO STEEP PATH BEYOND”	This message appears if the waypoint is part of a leg with a descent path that is too steep.

[2L] CLB/DES SPD LIM	This field displays the speed limit applicable to the climb or descent phase. It displays it in large font when data has been inserted manually, and in small font when data comes from the database.
[3L] SPD CSTR	This field displays any speed constraint assigned to the revised waypoint. It is in large font when inserted manually, and in small font when it comes from the database. It is not displayed at the origin airport, at a FROM waypoint, a speed limit pseudo waypoint, or the destination airport.
[4L] QNH	This field only functions when the revised waypoint is the primary destination. It allows the pilot to enter the atmospheric pressure at sea level. This field is identical to the QNH field of the PERF APPR page.
[4L] MACH/START WPT	This prompt allows the pilot to enter or modify the start point of a constant Mach segment, and its associated Mach. It is not displayed at primary destination and alternate flight plan waypoints. (*Refer to DSC-22_20-30-20-25 Constant Mach Segment - Entering a Constant Mach Segment*).
[5L] WIND	The pilot presses this key to access the wind pages. The first wind displayed page, corresponds to the selected waypoint (e.g. climb page), if the selected waypoint is a climb phase waypoint. A CLR action reverts it to brackets.
[6L] RETURN or CLB	The pilot presses this key to return to the last displayed flight plan page. When displayed, pressing this key assigns the constraint to CLB phase and inserts it into the vertical flight plan. The page reverts to the flight plan page.
[2R] RTA prompt	This prompt gives access to the RTA page. It is not displayed when the VERT REV page is accessed from the alternate F-PLN.
[3R] ALT CSTR	This field displays the altitude constraint assigned to this revised waypoint. It uses large font when the constraint is manually-entered, and small font when it is from the database. A CLR action reverts it to brackets. The constraint may be: - “At”, entered as XXXXX (Example: FL 180). - “At or above”, entered as + XXXXX or XXXXX + (Example: FL +310). - “At or below”, entered as – XXXXX or XXXXX – (Example: -5 000). - A “window” constraint. The altitude window consists of two altitudes between which the aircraft should fly. The crew cannot manually enter a “window” constraint.

G/S INTCP	This field displays the glide intercept altitude for an ILS approach on the vertical revision page at destination.
[4R] ALT ERROR	When the aircraft misses a predicted altitude constraint, this field displays the difference between the altitude constraint and the predicted altitude. If, for example, "-500" appears in this field in green, the aircraft will reach the waypoint at an altitude 500 ft below the constraint altitude. This only applies to waypoints in the climb and descent phases.
[4R] END WPT	This prompt allows the pilot to enter or modify the endpoint of a constant Mach segment. It is displayed when a pair Mach/start exists in 4L field. This prompt is not displayed on the destination VERT REV page. (*Refer to DSC-22_20-30-20-25 Constant Mach Segment - Entering a Constant Mach Segment*).
[5R] STEP ALTS	This legend appears for any waypoint, once a cruise altitude has been entered. It is not available in engine-out, descent, approach, and go-around phases. This gives the pilot access to the STEP ALTS page.
[6R] DES	When this field displays "DES", pressing this key assigns the constraints to the descent phase and inserts them into the vertical flight plan. The page reverts to the F-PLN page. (See note below).

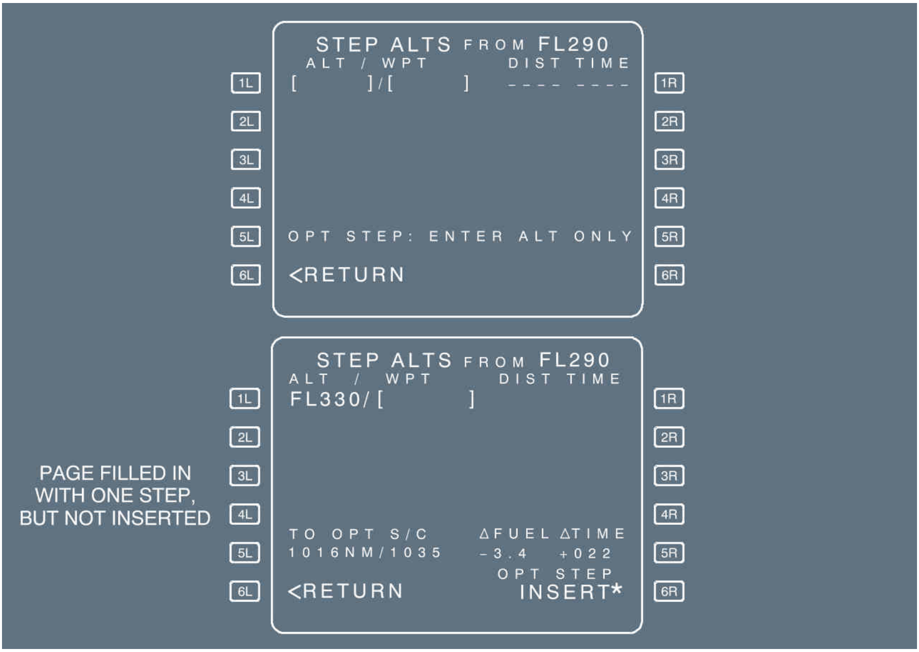
Note: *Altitude and speed constraints may apply to the climb, descent, or approach phase, but never to the cruise phase. Fields 6L/6R display "CLB/DES" when the revised waypoint is a cruise phase waypoint and the FMGS needs to know if the new constraint is to be applied in climb or descent phase. The FMGS will modify the cruise phase accordingly. These 2 prompts also display "CLB/DES" when the predictions are not computed. (Top of climb and top of descent not yet defined).*

STEP ALTS PAGE

Ident.: DSC-22_20-50-10-25-00000574.0009001 / 14 MAY 12

22 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page allows the pilot to insert up to four geographic step points and one optimal step point into the flight plan. This page also displays the fuel/time savings associated with the optional step.
The flight crew calls it up either from the vertical revision page.



```
    STEP ALTS FROM FL290
  ALT / WPT          DIST TIME
[       ]/[       ]   ---- ----





OPT STEP: ENTER ALT ONLY
<RETURN
```

```
    STEP ALTS FROM FL290
 ALT  /  WPT        DIST TIME
FL330/[        ]



TO OPT S/C          ΔFUEL ΔTIME
1016NM/1035          -3.4   +022
                       OPT STEP
<RETURN                 INSERT*
```

PAGE FILLED IN
WITH ONE STEP,
BUT NOT INSERTED

TITLE [1L] - [1R] [4L] - [4R]		STEP ALTS in white followed by the current cruise altitude in green.
ALT/WPT {blue}	:	The waypoint identifier, as well as the altitude to step, can be entered in this field. Both are displayed in large font. The waypoint may either be an active (or secondary) flight plan waypoint, or an inserted optimal point (OPT). When an entry is made, a temporary F-PLN is created.

DIST / TIME (UTC) (small green font)	Displays the distance to go, and time from the present aircraft position along the flight plan to the step point. *Note:* *The following messages may be displayed in the DIST/TIME field:* - *ABOVE MAX, if the step altitude exceeds the MAX altitude.* - *"IGNORED", if the step start or end point is less than 50 NM from the top of descent or if the step climb is located prior to the top of climb or after the top of descent.* - *"STEP AHEAD", when the aircraft is within 20 NM of the start step point.* - *"NO OPTIMAL" if a non inserted optimal step falls in a discontinuity due to a flight plan change, or when no new optimal exists after an UPDATE or when no optimal step point exists for the entered altitude.*

Note: *If no optimal step point exists for the altitude displayed in [1L], the "NO OPTIMAL" message is displayed in the FUEL/TIME field. This message is also displayed, if the optimal step falls into a discontinuity.*

[5L] OPT STEP: ENTER ONLY ALT (white) TO OPT S/C (green small front)	This field displays the distance and time to an uninserted optimal step point, if one exists. It is displayed to guide the flight crew for the entry format of an optional step. *Note:* *On any flight plan change, an inserted optimal step remains in the flight plan at a fixed distance to destination.*
[6L] RETURN	The flight crew presses this key to return to the previous page.
[5R] SAVINGS	This field displays the fuel and time savings prior to the insertion of the optimal step point. Fuel savings are displayed in thousand of kilograms (or pounds) (maxi 99.9). The value is preceded by: "–" in case of fuel saving, "+" in case of additional fuel cost. Time savings are displayed in hours and minutes. The value is preceded by "–" in case of time saving, "+" in case of additional time cost.

[6R] INSERT* (amber)	This field displays INSERT*, when an optimal step point exists but is not yet inserted. When INSERT is selected: - The optimal step point is inserted into the flight plan. - OPT is displayed in line 1L. - Optimal step distance and time are deleted in line 5L. - The UPDATE* blue prompt replaces the INSERT* prompt.
UPDATE*	This prompt enables the computation of another optimal step point. The UPDATE* prompt is then replaced by the INSERT* prompt.

RTA PAGE

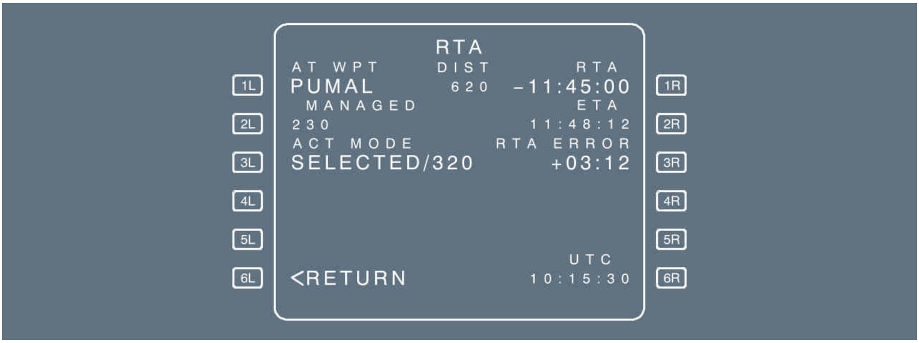
Ident.: DSC-22_20-50-10-25-00000575.0009001 / 14 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The Required Time of Arrival (RTA) page allows the entry and display of a waypoint identifier, with associated time constraints. The page also displays the entered or computed Estimated Takeoff Time (ETT), as well as the following data:

- Predicted ETA at the time-constrained waypoint;
- Performance adjusted SPD target;
- Time error;
- Distance to time constrained waypoint;
- Active speed mode;

The flight crew calls up this page with the RTA prompt from the vertical revision page.



```
               RTA
 AT WPT        DIST         RTA
PUMAL           620   -11:45:00
  MANAGED                   ETA
230                    11:48:12
 ACT MODE             RTA ERROR
SELECTED/320             +03:12



                            UTC
<RETURN                10:15:30
```

TITLE	RTA (large white font)

line 1	This line displays: - AT WPT, DIST and RTA when a time constraint can be defined. The identifier of the revised waypoint or the first following waypoint at which the time constraint can be defined, is displayed by default in large blue font - AT WPT, DIST and RTA when a time constraint has already been defined. The associated constrained waypoint identifier is displayed by default in large blue font - AT WPT and white dashes when no time constraint can be defined - AT WPT and blue brackets if a time constraint can only be introduced before the waypoint at which the VERT REV has been initiated. Only when the waypoint identifier has been defined (by the flight crew or by default), blue brackets and a blue start are displayed in [1R] field. The flight crew enters the time constraint as “HHMMSS”, preceded by: - for at or before; + for at or after; no sign for at.
[2L] MANAGED	This field displays the FMGS-computed ECON speed/Mach (*Refer to DSC-22_20-40-10 Optimization*)
[3L] ACT MODE	This field displays the active speed mode : MANAGED or SELECTED/NNN (NNN is the selected target speed). The pilot cannot modify it through this field.
[6L] RETURN	The pilot presses this key to revert the display to the VERT REV page.
[2R] ETA	When a required time at arrival has been defined, the 2R field displays the estimated time of arrival as “HHMMSS”.
[3R] RTA ERROR	This field is blank when the RTA is predicted as made. If the RTA is predicted as missed, “RTA ERROR” is displayed in small white font, and the time error between ETA and RTA is displayed in small amber font.
[6R] ETT	The Estimated Takeoff Time (ETT) field is available in the preflight phase. If no ETT is available, the 6R field displays blue brackets and a blue star. Once available, the ETT is displayed in magenta.
UTC	Universal time is displayed in green for takeoff, climb, cruise, descent and approach phases.

RTA PAGE

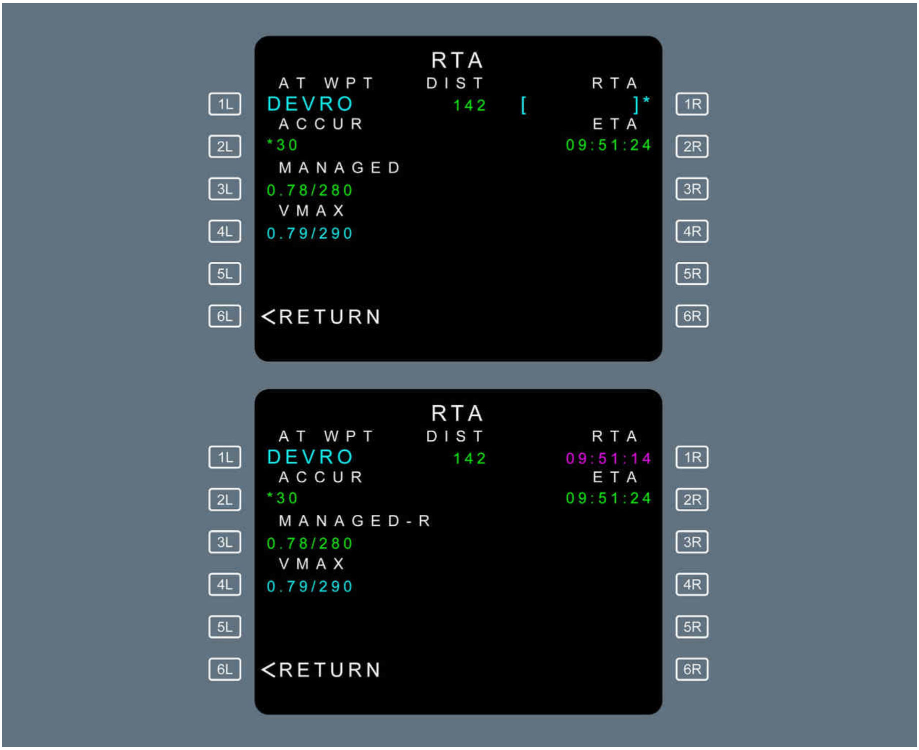
Ident.: DSC-22_20-50-10-25-00000575.0011001 / 26 NOV 19

23 **Applicable to: MSN 10949-11597**

The Required Time of Arrival (RTA) is a time constraint that must be respected at the revised waypoint.
On the RTA page, the flight crew can insert, modify or delete a RTA at a waypoint.

The RTA page allows the entry and display of a waypoint identifier, with associated time constraints and its accuracy. The page also allows the entry or display of the following data:
- Estimated Takeoff Time (ETT)
- Predicted ETA at the time-constrained waypoint
- Performance adjusted SPD target
- RTA error (in case of RTA missed)
- Distance to time constrained waypoint
- Maximum allowable RTA speed schedule (VMAX)

The flight crew calls up this page with the RTA prompt from the vertical revision page.



```
                RTA
 AT WPT        DIST                RTA
DEVRO           142     [            ]*
 ACCUR                             ETA
*30                           09:51:24
 MANAGED
0.78/280
 VMAX
0.79/290


<RETURN
```

```
                RTA
 AT WPT        DIST                RTA
DEVRO           142           09:51:14
 ACCUR                             ETA
*30                           09:51:24
 MANAGED-R
0.78/280
 VMAX
0.79/290


<RETURN
```

TITLE	RTA (large white font)

[1L] - [1R] AT WPT / DIST / RTA	This line displays: - AT WPT, and empty blue brackets facing the [1L] prompt, when no waypoint has been defined, or - AT WPT, DIST, and RTA when a waypoint has been defined. The waypoint identifier is displayed in blue font. If only the waypoint identifier has been defined, blue brackets and a blue star are displayed facing the [1R] prompt. The flight crew enters or loads the time constraint as "HHMMSS", preceded by: "-" for at or before "+" for at or after no sign for at. DIST is the distance to time constrained waypoint.
[2L] ACCUR	This field displays the RTA accuracy "30" in green font.
[3L] PREFLIGHT phase: ETT	This field displays the Estimated Takeoff Time (ETT). If no ETT is available, the [3L] field displays blue brackets and a blue star. Once available, the ETT is displayed in magenta.
[3L] Other flight phases: MANAGED	This field displays the managed speed. When RTA is active, MANAGED-R and managed speed for the RTA are displayed. In speed selected mode, this field is replaced by white dashes. In heading selected mode, this field is replaced by last RTA speed. When heading or speed is in SELECTED mode, RTA SPEED/MACH value is not used for guidance until activation of the MANAGED mode. When the constrained waypoint is sequenced, the ECON SPD/MACH is resumed unless the constrained waypoint is located in the descent segment (in this case, the RTA speed is kept). If the aircraft enters a holding pattern, the downpath time constraint is deleted.
[4L] VMAX	This field displays the maximum speed allowed for RTA guidance. This parameter is flight crew modifiable (MACH or CAS or both). If no specific VMAX is entered, the RTA speed will be restricted by the maximum speed envelope (MMO - 0.02 / VMO -10). _Note:_ *VMIN is not modifiable and corresponds to Green Dot or minimum maneuvering speed.*
[6L] RETURN	The flight crew presses this key to revert the display to the VERT REV page.
[2R] ETA	When a AT WPT has been defined, the [2R] field displays the estimated time of arrival as "HHMMSS".

[3R] RTA ERROR	This field is displayed in case the currently active RTA is predicted unachievable. The time error between ETA and RTA is displayed in small amber font. In addition, RTA MISSED AT XXX message is displayed in scratchpad.

DATA INDEX PAGES

Ident.: DSC-22_20-50-10-25-00000576.0001001 / 17 MAR 11

24 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

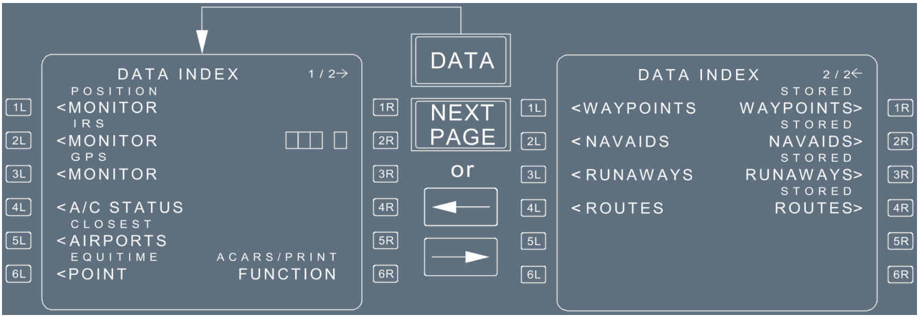
There are two INDEX pages:

The DATA INDEX 1/2 page gives access to various pages devoted to navigation.

The DATA INDEX 2/2 page lists the navigation data, entered in the FMGS.

The pilot enters those items labeled “stored” and can modify them. The pilot can call up the others, but cannot modify them.

The pilot calls up these pages by pressing the DATA key on the MCDU console:


DATA INDEX 1/2→
POSITION
<MONITOR
IRS
<MONITOR
GPS
<MONITOR
<A/C STATUS
CLOSEST
<AIRPORTS
EQUITIME
<POINT
ACARS/PRINT
FUNCTION
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DATA
NEXT PAGE
or
DATA INDEX 2/2←
<WAYPOINTS
STORED
WAYPOINTS>
<NAVAIDS
STORED
NAVAIDS>
<RUNAWAYS
STORED
RUNAWAYS>
<ROUTES
STORED
ROUTES>

DATA INDEX 1/2 PAGE

[1L] POSITION MONITOR - [2L] IRS MONITOR	When the flight crew presses these keys, the display shows all essential navigation data.
[3L] GPS MONITOR	This key calls up the GPS MONITOR page.
[4L] A/C STATUS	This key calls up the aircraft status page.
[5L] CLOSEST AIRPORTS.	This key calls up the closest airports page.
[6L] EQUITIME POINT	This key calls up the equitime point page.
[6R] ACARS/PRINT	This key calls up the PRINT function pages and the ACARS function pages.

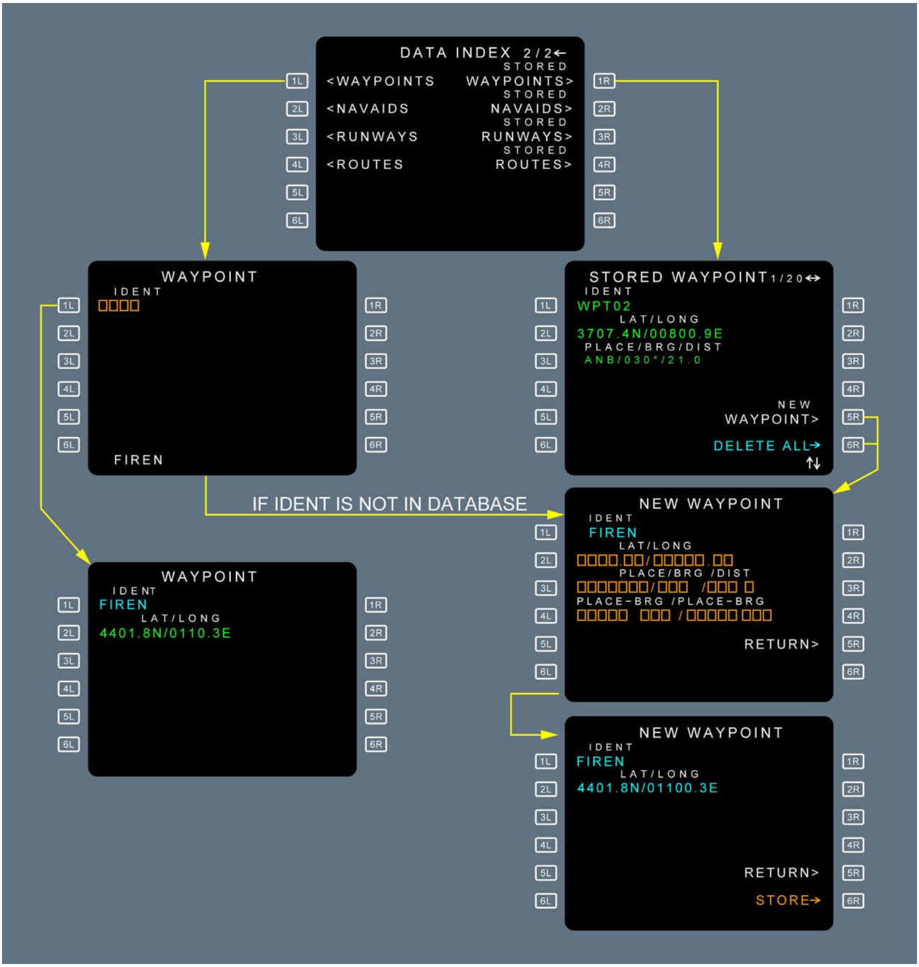
DATA INDEX 2/2 PAGE

[1L] WAYPOINTS [2L] NAVAIDS [3L] RUNWAYS [4L] ROUTES	These keys call up descriptions of waypoints, NAVAIDs, runways, and routes stored in the database, so that they can be reviewed.
[1R] STORED WAYPOINTS [2R] STORED NAVAIDS [3R] STORED RUNWAYS [4R] STORED ROUTES	These keys call up waypoints, NAVAIDs, runways, and routes that the pilot has stored, enabling the pilot to review and store them in, or delete them from, the database. The airline can choose to automatically have all pilot-stored data erased in the done phase.

WAYPOINT/STORED WAYPOINT/NEW WAYPOINT PAGES

Ident.: DSC-22_20-50-10-25-00000577.0001001 / 30 AUG 18

25 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**


DATA INDEX 2/2←
<WAYPOINTS
STORED WAYPOINTS>
<NAVAIDS
STORED NAVAIDS>
<RUNWAYS
STORED RUNWAYS>
<ROUTES
STORED ROUTES>
WAYPOINT
IDENT
□□□□
FIREN
STORED WAYPOINT 1/20↔
IDENT
WPT02
LAT/LONG
3707.4N/00800.9E
PLACE/BRG/DIST
ANB/030°/21.0
NEW WAYPOINT>
DELETE ALL→
↑↓
IF IDENT IS NOT IN DATABASE
NEW WAYPOINT
IDENT
FIREN
LAT/LONG
□□□□.□□/□□□□□.□□
PLACE/BRG /DIST
□□□□□□□/□□□ /□□□.□
PLACE-BRG /PLACE-BRG
□□□□□ □□□ /□□□□□ □□□
RETURN>
WAYPOINT
IDENT
FIREN
LAT/LONG
4401.8N/0110.3E
NEW WAYPOINT
IDENT
FIREN
LAT/LONG
4401.8N/01100.3E
RETURN>
STORE→

WAYPOINT PAGE

- The pilot can call up this page by pressing the 1L key on the DATA INDEX page. The display then shows waypoint information associated with the identifier the flight crew inserts it in the [1L] field.
- With this page it is possible to call any waypoint not stored in the stored waypoint list, if they belong to the active, temporary, or secondary flight plan.

STORED WAYPOINT PAGE

The pilot calls up this page by pressing the 1R key on the DATA INDEX page.
This page displays waypoints, defined and stored by the pilot. It lists each stored waypoint, along with a number that shows the relative order in which it was inserted in the database. This number is displayed in the upper righthand corner of the page. For example, “1/20” indicates that the waypoint was the first of 20 stored.

Note: *Latitude/Longitude crossing points and Abeam/Radial Intercept points are never included in the stored waypoint list.*

[1L] IDENT	To delete a waypoint, the pilot clears the 1L ident display.
[2L] LAT/LONG	Latitude and longitude of the waypoint are displayed in this field.
[3L]	This field either displays PLACE/BRG/DIST or PLACE-BRG/ PLACE-BRG or PLACE/DIST, depending on how the waypoint was defined.
[5R] NEW WAYPOINT	The pilot presses this key to call up the NEW WAYPOINT page.
[6R] DELETE ALL	The pilot presses this key and the label changes to amber CONFIRM DELETE ALL. Pressing this key a second time deletes all the waypoints, stored by the flight crew, except those currently used in the active or secondary flight plan. (“F-PLN ELEMENT RETAINED” appears on the MCDU).

NEW WAYPOINT PAGE

- The flight crew displays this page by pressing the 5R key on the STORED WAYPOINT page.
- The flight crew uses this page to define and store waypoints. The maximum number of waypoints that it is possible to enter depends on the FMS standard. It is possible for these to be 20 or 99, and appears in the upper right corner of the STORED WAYPOINT page. For example, "1/20" indicates that 20 is the maximum number of waypoints that it is possible to store. If an additional waypoint is entered, then the first one is deleted.

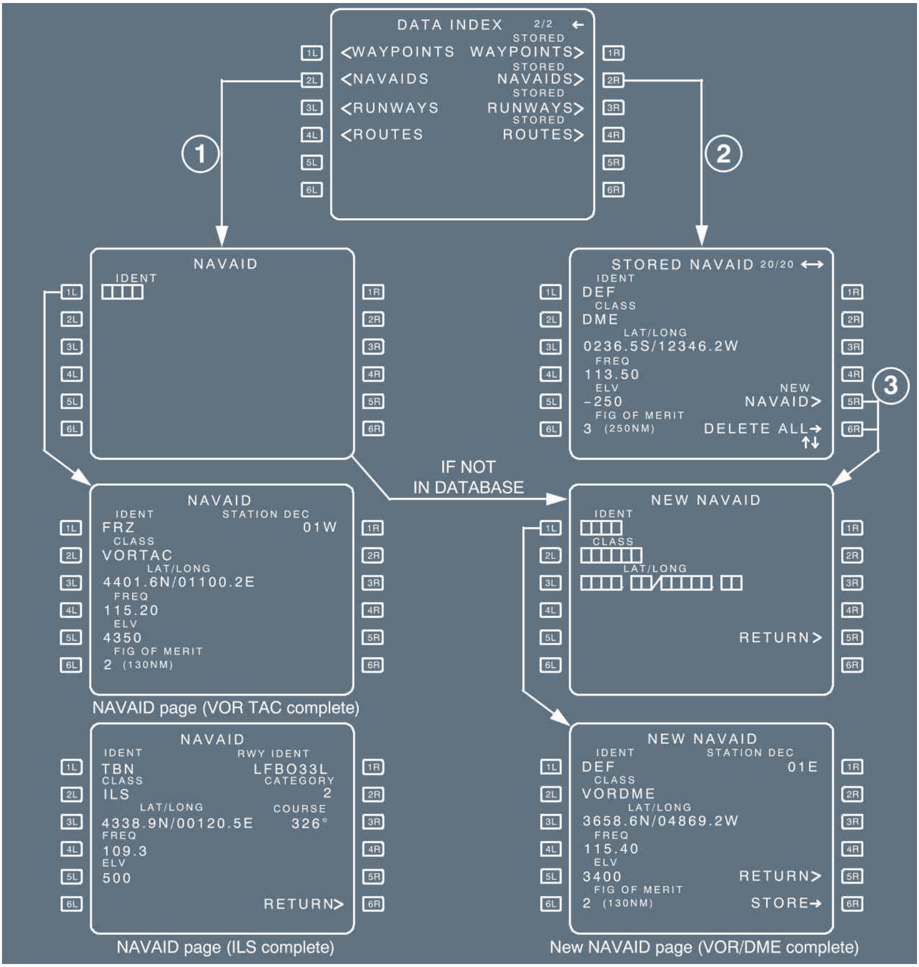
The flight crew defines a waypoint by entering its ident in the data field next to 1L, then by entering its position in the amber boxes.

The STORE prompt appears next to 6R when the boxes are filled in, and the pilot presses the key to store the waypoint in the database.
If the pilot enters the waypoint's position as place/bearing/distance, or place-bearing/place-bearing, the FMGC computes its latitude and longitude.

NAVAID/STORED NAVAID/NEW NAVAID PAGES

Ident.: DSC-22_20-50-10-25-00000578.0001001 / 01 OCT 12

26 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**


DATA INDEX 2/2 ←
<WAYPOINTS
STORED WAYPOINTS>
<NAVAIDS
STORED NAVAIDS>
<RUNWAYS
STORED RUNWAYS>
<ROUTES
STORED ROUTES>
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
①
②
③
NAVAID
IDENT
□□□□
STORED NAVAID 20/20 ↔
IDENT
DEF
CLASS
DME
LAT/LONG
0236.5S/12346.2W
FREQ
113.50
ELV
-250
NEW NAVAID>
FIG OF MERIT
3 (250NM)
DELETE ALL→
↑↓
IF NOT IN DATABASE
NAVAID
IDENT
FRZ
STATION DEC
01W
CLASS
VORTAC
LAT/LONG
4401.6N/01100.2E
FREQ
115.20
ELV
4350
FIG OF MERIT
2 (130NM)
NEW NAVAID
IDENT
□□□□
CLASS
□□□□□□
LAT/LONG
□□□□.□□/□□□□□.□ □□
RETURN>
NAVAID
IDENT
TBN
RWY IDENT
LFBO33L
CLASS
ILS
CATEGORY
2
LAT/LONG
4338.9N/00120.5E
COURSE
326°
FREQ
109.3
ELV
500
RETURN>
NEW NAVAID
IDENT
DEF
STATION DEC
01E
CLASS
VORDME
LAT/LONG
3658.6N/04869.2W
FREQ
115.40
ELV
3400
RETURN>
FIG OF MERIT
2 (130NM)
STORE→

NAVAID page (VOR TAC complete)

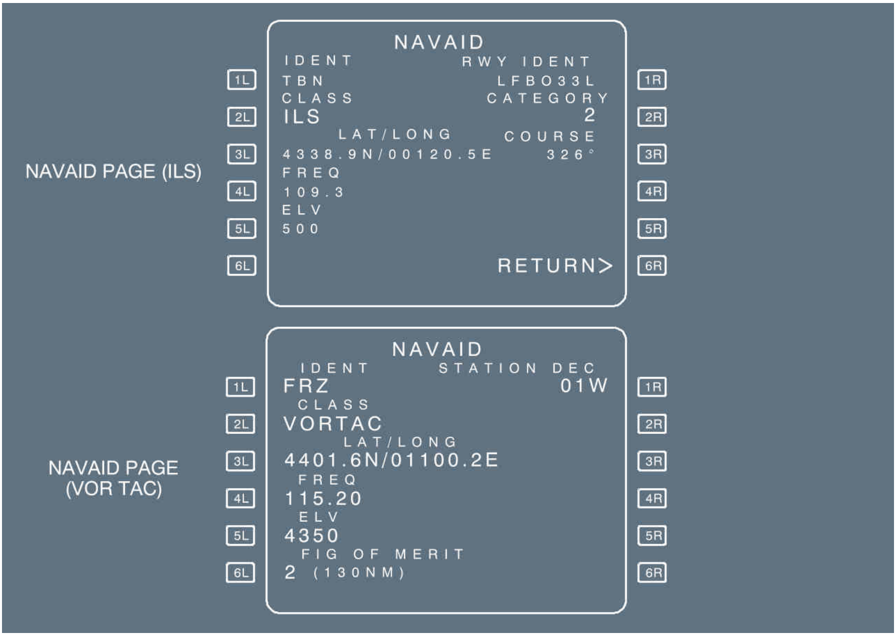
NAVAID page (ILS complete)

New NAVAID page (VOR/DME complete)

NAVAID PAGE

The pilot calls up this page by pressing the 2L key on the DATA INDEX page 2.

This page displays NAVAID information associated with the identifier the pilot inserts in the [1L] field.



NAVAID
IDENT RWY IDENT
TBN LFBO33L
CLASS CATEGORY
ILS 2
LAT/LONG COURSE
4338.9N/00120.5E 326°
FREQ
109.3
ELV
500
RETURN>

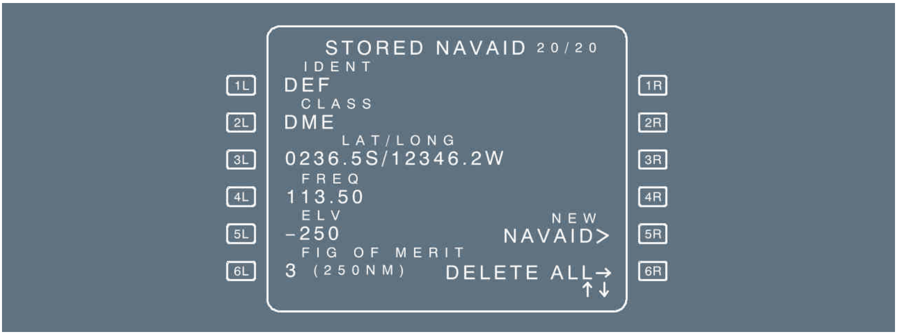
NAVAID
IDENT STATION DEC
FRZ 01W
CLASS
VORTAC
LAT/LONG
4401.6N/01100.2E
FREQ
115.20
ELV
4350
FIG OF MERIT
2 (130NM)

[2L] CLASS	This field identifies the NAVAID as VOR, DME, VOR DME, VORTAC, NDB, LOC, ILS, MLS, ILS/DME, MLS/DME, ILS/TAC or TACAN. It displays NON COLLOCATED, if the NAVAID is uncollocated.
[4L] FREQ or CHAN	CHAN is displayed, if the class of NAVAID is an MLS or an MLS DME.
[5L] ELV	This field gives the NAVAID elevation in feet above sea level. It is not displayed for VOR or NDB.
[6L] FIG OF MERIT	This field shows how far out the FMGS can autotune a VOR, VOR/DME, VORTAC, or DME for display or for computing position. 0 : up to 40 NM 1 : up to 70 NM 2 : up to 130 NM 3 : up to 250 NM

[1R] STATION DEC or RWY IDENT	This is the magnetic declination in the NAVAID area (used only for VOR, VOR/DME, and VORTAC). The field displays RWY IDENT, if the NAVAID is a LOC, ILS, MLS, ILS/DME, MLS/DME or ILS/TAC.
[2R] CATEGORY	This field shows the NAVAID's category, if it is an ILS, ILS/DME, MLS, MLS/DME or ILS/TAC. A LOC DME has a category = 0.
[3R] COURSE	This is the localizer course, if the NAVAID is an ILS or a LOC.
[6R] RETURN	This prompt is displayed, if the page has been accessed from the SELECTED NAVAID page. The pilot presses this key to return to the SELECTED NAVAID page.

STORED NAVAID PAGE

The pilot calls up this page by pressing the 2R key on the DATA INDEX page. This page is used to display or delete defined and stored NAVAIDs.



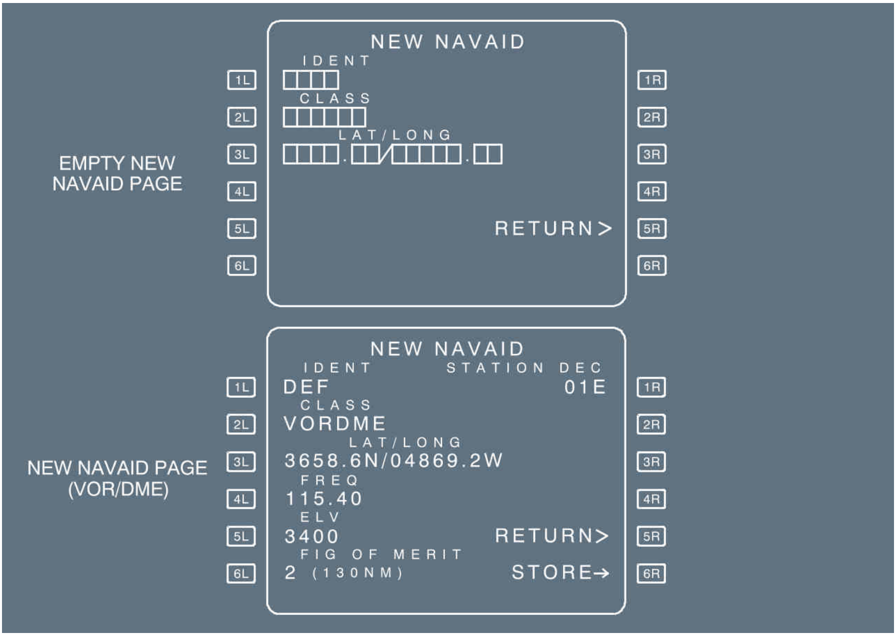
```
   STORED NAVAID 20/20
 IDENT
DEF
 CLASS
DME
    LAT/LONG
0236.5S/12346.2W
 FREQ
113.50
 ELV                  NEW
-250              NAVAID>
 FIG OF MERIT
3 (250NM)     DELETE ALL→
                       ↑↓
```

A number in the upper righthand corner of the screen shows the relative order in which the NAVAIDs were stored. (For example, 3/7 means the third out of the seven stored).
Slew keys give the pilot access to the different stored NAVAIDs.

[1L] IDENT	The pilot deletes a stored NAVAID by entering its ident in this field, then by pressing the CLR key at the bottom of the MCDU control panel.
[6R] DELETE ALL and CONFIRM DELETE ALL	The pilot presses this key to erase all the stored NAVAIDs, except those currently used in the active or secondary flight plan. (The MCDU displays “F-PLN ELEMENT RETAINED.”).

NEW NAVAID PAGE

The pilot calls up this page by pressing the 5R key on the STORED NAVAID page.



```
         NEW NAVAID
 IDENT
□□□□
 CLASS
□□□□□□
     LAT/LONG
□□□□.□□/□□□□□.□□

                      RETURN>
```

```
         NEW NAVAID
 IDENT          STATION DEC
DEF                     01E
 CLASS
VORDME
      LAT/LONG
3658.6N/04869.2W
 FREQ
115.40
 ELV
3400                 RETURN>
 FIG OF MERIT
2 (130NM)             STORE→
```

It can be used to define and store up to 20 NAVAIDs. Entering an additional waypoint deletes the first one. The NAVAID elements must be entered in two steps:

1. Enter the data in the lines of amber boxes.
2. Enter frequency, elevation, figure of merit, and station declination or ILS category and course, if applicable.

<u>Note:</u> *The pilot cannot create an ILS/DME or an uncollocated NAVAID.*
If the runway associated with the ILS has been entered through the new runway page, the course, IDENT, and runway IDENT are already displayed on the new NAVAID page when it comes up (copied from the new runway page). For details, see the new runway page info below.

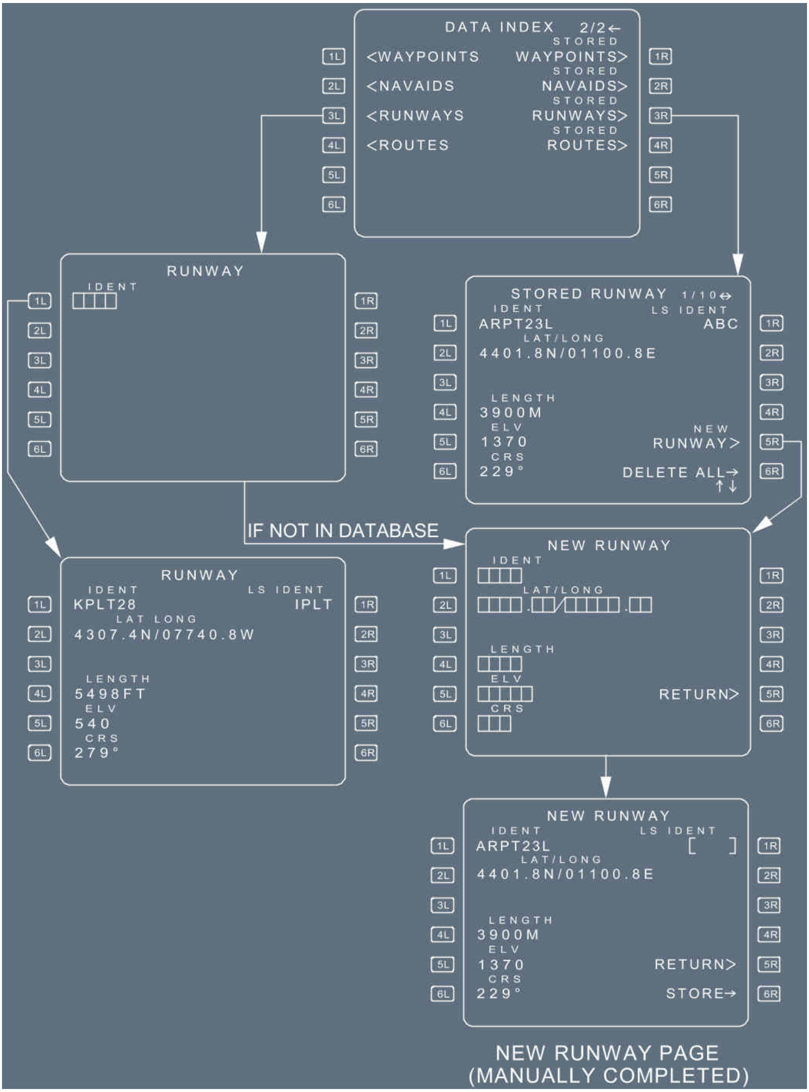
[1R] STATION DEC	The pilot must enter the magnetic declination, if the prompt is displayed. This prompt is displayed only for VOR, VORTAC or VOR/DME.
[3R] COURSE	If the NAVAID is an ILS, LOC, enter the course.
[6R] STORE	This prompt appears when all the amber boxes are filled in. The pilot presses the key to store the NAVAID.

A stored NAVAID is never used for position computation.

RUNWAYS/STORED RUNWAYS/NEW RUNWAY PAGES

Ident.: DSC-22_20-50-10-25-00000579.0004001 / 17 MAR 11

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


DATA INDEX 2/2←
<WAYPOINTS
STORED WAYPOINTS>
<NAVAIDS
STORED NAVAIDS>
<RUNWAYS
STORED RUNWAYS>
<ROUTES
STORED ROUTES>
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
RUNWAY
IDENT
STORED RUNWAY 1/10↔
IDENT ARPT23L
LS IDENT ABC
LAT/LONG 4401.8N/01100.8E
LENGTH 3900M
ELV 1370
CRS 229°
NEW RUNWAY>
DELETE ALL→
↑↓
IF NOT IN DATABASE
RUNWAY
IDENT KPLT28
LS IDENT IPLT
LAT LONG 4307.4N/07740.8W
LENGTH 5498FT
ELV 540
CRS 279°
NEW RUNWAY
IDENT
LAT/LONG
LENGTH
ELV
CRS
RETURN>
NEW RUNWAY
IDENT ARPT23L
LS IDENT [ ]
LAT/LONG 4401.8N/01100.8E
LENGTH 3900M
ELV 1370
CRS 229°
RETURN>
STORE→
NEW RUNWAY PAGE
(MANUALLY COMPLETED)

RUNWAY PAGE

This page displays the following information:

[1L] IDENT	The runway IDENT, which comprises the airport identification and the runway direction, uses six or seven digits (Example: CYYZ 24L and LFRJ 08).
[2L] LAT/LONG	The latitude and longitude of the runway threshold.
[4L] LENGTH	The runway length in meters (M) or feet (ft), in five digits (9 999 ft).
[5L] ELV	The elevation of the threshold in feet above sea level.
[6L] CRS	The runway course (degrees magnetic).
[1R] LS IDENT	The LOC or ILS identifier.

STORED RUNWAY PAGE

The pilot uses this page to display or delete the defined and stored runways. The stored runways are listed and numbered in the order in which they were inserted. The number is displayed in the upper righthand corner of the page. (For example, 2/4 means the runway is the second of the four stored runways).
The pilot can delete any stored runway from the database by displaying its IDENT in the 1L field, then by pressing the CLR key on the MCDU control panel.

[6R] DELETE ALL and CONFIRM DELETE ALL	The pilot presses this key to erase all the stored runways, except those used in the active or secondary flight plan. (The MCDU displays “F-PLN ELEMENT RETAINED”).
[1L] to [6L]	These fields are similar to the RUNWAY page fields.

NEW RUNWAY PAGE

The pilot can use this page to define and store up to 10 runways.

- **When the pilot enters an ILS/LOC IDENT in the [1R] field the new NAVAID page comes up. When the pilot has entered and stored the necessary data in the new NAVAID page, the new runway page reappears.**

The new runway page and the new NAVAID page (ILS/LOC) are not independent:

- **When the flight crew first defines the ILS/LOC (on the new NAVAID page) the new runway page, when called up, already displays the RWY course, RWY IDENT, and ILS IDENT (copied from the new NAVAID page).**
- **When the flight crew first defines the runway (on the new runway page) the new NAVAID page, when called up, already displays the ILS course, ILS IDENT, and runway IDENT.**

The pilot must enter the two runway directions on two different new runway pages (Example: LFRJ 08 and LFRJ 26) to allow the flight plan to select either one.

Note: *When 10 runways are stored, entering a new stored runway deletes the first one of the list (1/10).*

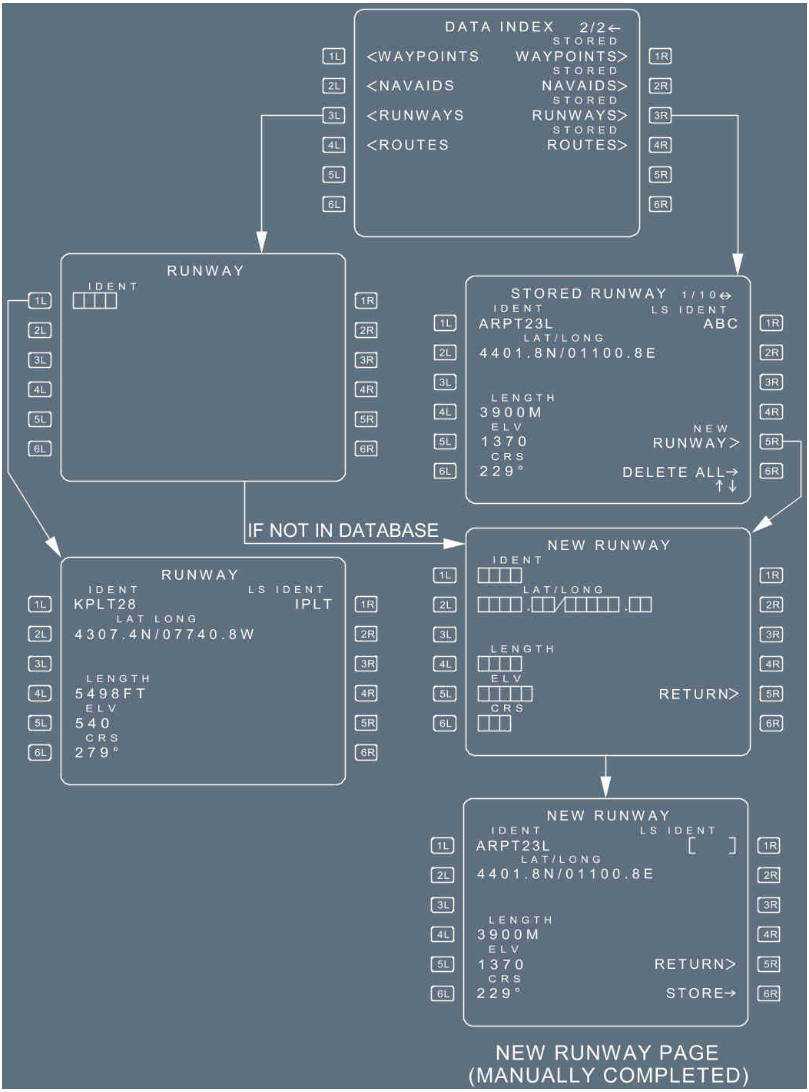
[1L] to [6L]	Enter information about the new runway.
[1R] LS IDENT	Enter the ILS/LOC IDENT. The NEW NAVAID page comes up.
[5R] RETURN	The pilot presses this key to return to the NEW NAVAID page.
[6R] STORE	This prompt only appears when all the amber boxes have been filled in.

Note: *The NEW RUNWAY may be used for departure or destination, but no SID or STAR can be associated or stored with this runway. Therefore, the pilot will use it as an “independent” airport.*
A new runway is identified by the 4–letter ICAO airport identifier, although all six or seven digits must be entered.

RUNWAYS/STORED RUNWAYS/NEW RUNWAY PAGES

Ident.: DSC-22_20-50-10-25-00000579.0001001 / 17 MAR 11

27 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**


DATA INDEX 2/2←
<WAYPOINTS
STORED WAYPOINTS>
<NAVAIDS
STORED NAVAIDS>
<RUNWAYS
STORED RUNWAYS>
<ROUTES
STORED ROUTES>
RUNWAY
IDENT
STORED RUNWAY 1/10↔
IDENT
ARPT23L
LS IDENT
ABC
LAT/LONG
4401.8N/01100.8E
LENGTH
3900M
ELV
1370
CRS
229°
NEW RUNWAY>
DELETE ALL→
↑↓
IF NOT IN DATABASE
RUNWAY
IDENT
KPLT28
LS IDENT
IPLT
LAT LONG
4307.4N/07740.8W
LENGTH
5498FT
ELV
540
CRS
279°
NEW RUNWAY
IDENT
LAT/LONG
LENGTH
ELV
CRS
RETURN>
NEW RUNWAY
IDENT
ARPT23L
LS IDENT
[ ]
LAT/LONG
4401.8N/01100.8E
LENGTH
3900M
ELV
1370
CRS
229°
RETURN>
STORE→
NEW RUNWAY PAGE
(MANUALLY COMPLETED)
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

RUNWAY PAGE

This page displays the following information:

[1L] IDENT	The runway IDENT, which comprises the airport identification and the runway direction, uses six or seven digits (Example: CYYZ 24L and LFRJ 08).
[2L] LAT/LONG	The latitude and longitude of the runway threshold.
[4L] LENGTH	The runway length in meters (M) or feet (ft), in five digits (9 999 ft).
[5L] ELV	The elevation of the threshold in feet above sea level.
[6L] CRS	The runway course (degrees magnetic).
[1R] LS IDENT	The LOC or ILS identifier.

STORED RUNWAY PAGE

The pilot uses this page to display or delete the defined and stored runways. The stored runways are listed and numbered in the order in which they were inserted. The number is displayed in the upper righthand corner of the page. (For example, 2/4 means the runway is the second of the four stored runways).
The pilot can delete any stored runway from the database by displaying its IDENT in the 1L field, then by pressing the CLR key on the MCDU control panel.

[6R] DELETE ALL and CONFIRM DELETE ALL	The pilot presses this key to erase all the stored runways, except those used in the active or secondary flight plan. (The MCDU displays “F-PLN ELEMENT RETAINED”).
[1L] to [6L]	These fields are similar to the RUNWAY page fields.

NEW RUNWAY PAGE

The pilot can use this page to define and store up to 10 runways.

- **When the pilot enters an ILS/LOC IDENT in the [1R] field the new NAVAID page comes up. When the pilot has entered and stored the necessary data in the new NAVAID page, the new runway page reappears.**

The new runway page and the new NAVAID page (ILS/LOC) are not independent:

- **When the flight crew first defines the ILS/LOC (on the new NAVAID page) the new runway page, when called up, already displays the RWY course, RWY IDENT, and ILS IDENT (copied from the new NAVAID page).**
- **When the flight crew first defines the runway (on the new runway page) the new NAVAID page, when called up, already displays the ILS course, ILS IDENT, and runway IDENT.**

The pilot must enter the two runway directions on two different new runway pages (Example: LFRJ 08 and LFRJ 26) to allow the flight plan to select either one.

Note: *When 10 runways are stored, entering a new stored runway deletes the first one of the list (1/10).*

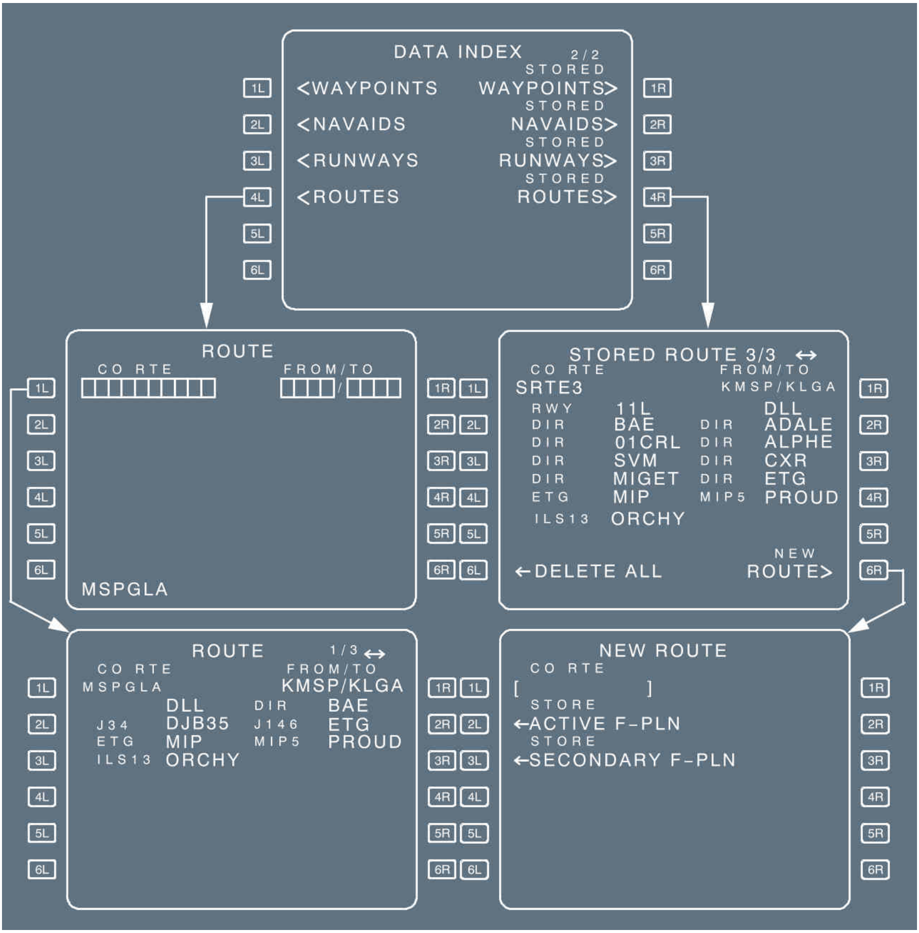
[1L] to [6L]	Enter information about the new runway.
[1R] LS IDENT	Enter the ILS/LOC IDENT. The NEW NAVAID page comes up.
[5R] RETURN	The pilot presses this key to return to the NEW NAVAID page.
[6R] STORE	This prompt only appears when all the amber boxes have been filled in.

Note: *The NEW RUNWAY may be used for departure or destination, but no SID or STAR can be associated or stored with this runway. Therefore, the pilot will use it as an “independent” airport.*
A new runway is identified by the 4–letter ICAO airport identifier, although all six or seven digits must be entered.

ROUTE/STORED ROUTE/NEW ROUTE PAGES

Ident.: DSC-22_20-50-10-25-00000580.0001001 / 01 OCT 12

28 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

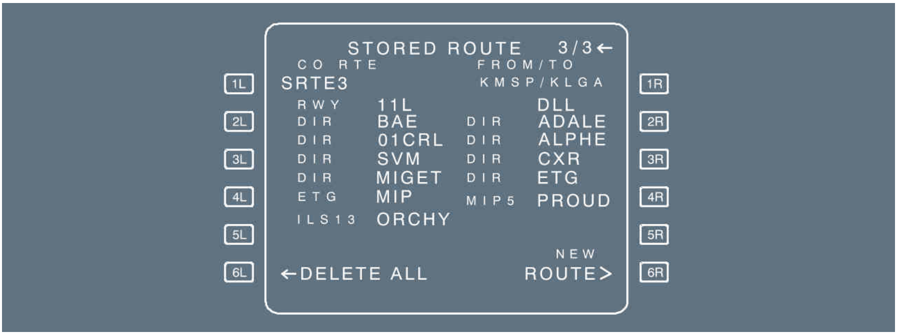

DATA INDEX 2/2
<WAYPOINTS
STORED WAYPOINTS>
<NAVAIDS
STORED NAVAIDS>
<RUNWAYS
STORED RUNWAYS>
<ROUTES
STORED ROUTES>
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
ROUTE
CO RTE
FROM/TO
MSPGLA
STORED ROUTE 3/3 ↔
CO RTE
FROM/TO
SRTE3
KMSP/KLGA
RWY 11L
DLL
DIR BAE
DIR ADALE
DIR 01CRL
DIR ALPHE
DIR SVM
DIR CXR
DIR MIGET
DIR ETG
ETG MIP
MIP5 PROUD
ILS13 ORCHY
←DELETE ALL
NEW ROUTE>
ROUTE 1/3 ↔
CO RTE
FROM/TO
MSPGLA
KMSP/KLGA
DLL
DIR BAE
J34 DJB35
J146 ETG
ETG MIP
MIP5 PROUD
ILS13 ORCHY
NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN

ROUTE PAGES

(Not-modifiable)

[1L] CO RTE	Any company route IDENT, entered in this field, causes all the elements of the route to be displayed.
Line 2 to Line 6	These lines display the various route elements, including waypoints and airways.
[1R] FROM/TO	This field is automatically filled in, when the pilot enters the IDENT for a company route. When the pilot manually enters a city pair, the MCDU displays “NOT IN DATA BASE” if the city pair is not in the navigation database. If the city pair is in the database, the CO RTE field displays the first route stored (small blue font). If more than one route is stored, the pilot can slew to see the different routes.

STORED ROUTE PAGE



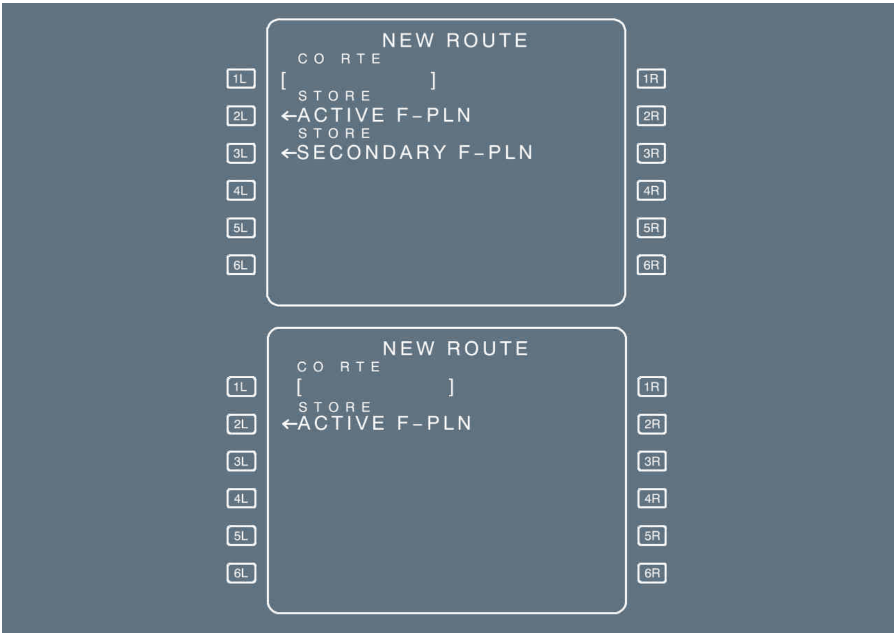
```
        STORED ROUTE    3/3←
 CO RTE               FROM/TO
SRTE3                KMSP/KLGA
 RWY     11L             DLL
 DIR     BAE      DIR    ADALE
 DIR     01CRL    DIR    ALPHE
 DIR     SVM      DIR    CXR
 DIR     MIGET    DIR    ETG
 ETG     MIP      MIP5   PROUD
 ILS13   ORCHY

                          NEW
←DELETE ALL            ROUTE>
```

This page displays up to 5 routes, stored by the pilot. The stored routes are listed and numbered in the order of insertion. The number is displayed in the upper right-hand corner of the page.

[1L] CO RTE	This field identifies the stored route. Clearing this field deletes the stored route.
Line 2 to Line 5	The fields in these lines are identical to the corresponding fields in the route page.
[6L] DELETE ALL	Pressing this key changes the label to amber CONFIRM DELETE ALL. Pressing this key a second time deletes all previously-stored routes.
[1R] FROM/TO	This identifies the city pair of the stored route.
[6R] NEW ROUTE	Pressing this key calls up the new route page.

NEW ROUTE PAGE

The pilot calls up this page by pressing the NEW ROUTE key on the stored route page. It can be used to store up to five new routes that have already been defined in the active or secondary flight plan.



NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN

NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN

[1L] CO RTE	This field enables the pilot to enter a new company route IDENT. If that IDENT has already been assigned, the entry is rejected.
[2L] STORE ACTIVE F-PLN (blue)	Pressing this key stores parameters of the active flight plan as new route. The display shows this prompt when the system contains a FROM/TO, but only during preflight.
[3L] STORE SECONDARY F-PLN (blue)	Pressing this key stores parameters of the secondary flight plan as new route. The display shows this prompt when the system contains a FROM/TO and the secondary flight plan has not yet been sequenced.

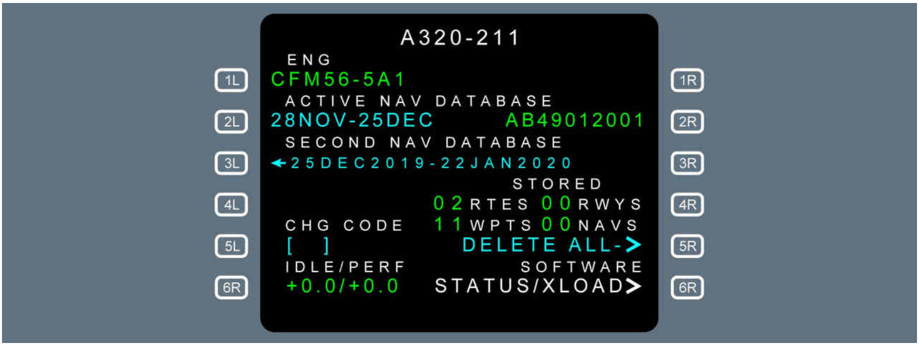
Note:
- *If it has not already been named, a stored route is automatically named when stored: SRTE 1 to SRTE 5.*
- *When 5 routes are already stored, the pilot cannot insert a new stored route. The "STORED ROUTE FULL" message is displayed, and the pilot must manually delete a route in order to store a new one.*
- *Several flight plan elements are not retained when the route is stored:*
  - *Pilot-entered holds*
  - *Offset*
  - *Pilot-entered constraints*
  - *Modifications to terminal procedures*
  - *Pseudo-waypoints*
  - *Step at optimum.*
  - *Pilot-entered constant Mach segment.*
    The MCDU then displays "REVISIONS NOT STORED".

AIRCRAFT STATUS PAGE

Ident.: DSC-22_20-50-10-25-00000581.0003001 / 25 MAY 21

29 **Applicable to: MSN 10949-11597**

The system automatically displays this page at power up, but the flight crew may also call it up by pressing the DATA key on the MCDU console.



```
            A320-211
 ENG
CFM56-5A1
 ACTIVE NAV DATABASE
28NOV-25DEC        AB49012001
 SECOND NAV DATABASE
←25DEC2019-22JAN2020
                       STORED
               02RTES 00RWYS
 CHG CODE      11WPTS 00NAVS
 [  ]            DELETE ALL->
 IDLE/PERF           SOFTWARE
 +0.0/+0.0      STATUS/XLOAD>
```

TITLE	AIRCRAFT TYPE
[1L] ENGINE TYPE	The system uses this to calculate predictions.

Note: *When the same performance database is used for various aircraft configurations, the aircraft or engine type displayed in the [1L] field may differ from the actual aircraft.*

[2L] ACTIVE DATABASE	The display shows the validity period and part number of the navigation database in large font.
[3L] SECOND DATABASE	The display shows the validity period of the second navigation database in small font. If the key is pressed, the CONFIRM and CANCEL prompts appear. The flight crew must press the key to confirm or cancel the switching to second navigation database.

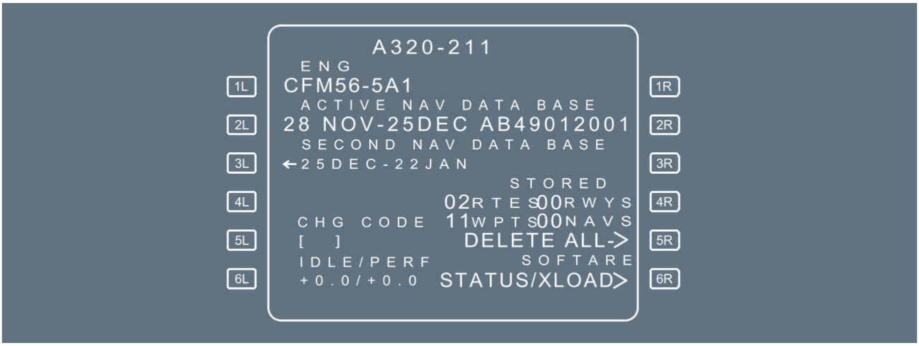
CAUTION	Cycling the database erases the primary and secondary flight plans, as well as stored data. The flight crew must never do this in flight.

[5L] CHG CODE	The maintenance crew can modify the IDLE/PERF factor displayed in [6L] field. This field is displayed in the PREFLIGHT and DONE phases. The label is displayed in small font. The brackets, or the entered value, is displayed in large font.
[6L] IDLE/PERF	It is only possible to modify these factors when the aircraft is on ground. If no value has been entered, the FMS displays default values coded in the AMI file. Default values are displayed in small font, although manually entered values are displayed in large font. When it is necessary to modify the IDLE or the PERF factor, *Refer to DSC-22_20-40-30 Procedure to Modify the PERF and IDLE Factors (on Ground only)*.
[4R] STORED	This field displays pilot-stored data in large font. The field is blank if no data is stored. The airline can choose to have this data automatically erased at the done phase.
[5R] DELETE ALL	Pressing this key changes the label to CONFIRM DELETE ALL. Pressing this key a second time deletes all pilot-stored data, except data that is part of the active and secondary flight plans.
[6R] STATUS/XLOAD	This prompt gives access to the P/N STATUS and P/N XLOAD pages.

AIRCRAFT STATUS PAGE

Ident.: DSC-22_20-50-10-25-00000581.0001001 / 28 APR 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The system automatically displays this page at power up, but the pilot may also call it up by pressing the DATA key on the MCDU console.



```
            A320-211
   ENG
CFM56-5A1
   ACTIVE NAV DATA BASE
28 NOV-25DEC AB49012001
   SECOND NAV DATA BASE
←25DEC-22JAN
                          STORED
                     02RTES 00RWYS
 CHG CODE            11WPTS 00NAVS
 [  ]                  DELETE ALL->
 IDLE/PERF                 SOFTARE
 +0.0/+0.0           STATUS/XLOAD>
```

TITLE	AIRCRAFT TYPE
[1L] ENGINE TYPE	The system uses this to calculate predictions.

Note: *When the same performance database is used for various aircraft configurations, the aircraft type displayed may differ from the actual aircraft.*

[2L] ACTIVE DATABASE	The validity period and part number are displayed in large font.
[3L] SECOND DATABASE	The validity period is displayed in small font. The pilot can press the 3L key to switch to the second database as the active database.

CAUTION	Cycling the database erases the primary and secondary flight plans, as well as the stored data. The flight crew must never do this in flight.

[5L] CHG CODE	This field allows the entry of a code to change the IDLE and/or PERF factor, displayed in 6L. It is displayed in the PREFLIGHT and DONE phases. The label is displayed in small white font. The brackets, or the entered value, is displayed in large blue font.

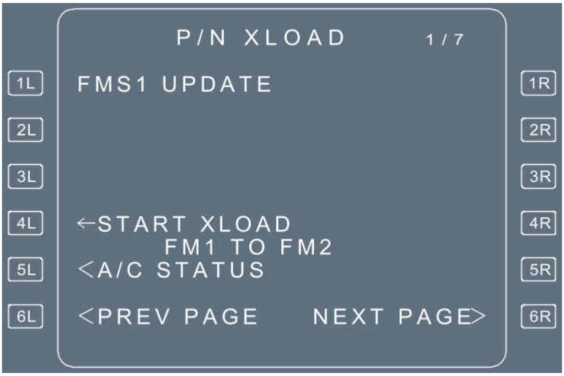
[6L] IDLE/PERF	It is only possible to modify these factors when the aircraft is on ground. If no value was entered, the FMS displays default values coded in the Airline Modifiable Information (AMI) file. Default values are displayed in small font, although manually entered values are displayed in large font. When it is necessary to modify the IDLE or the PERF factor: - ENTER the change code in the CHG CODE field [5L]. The default value for this code is "ARM" but it is possible to modify it on airline request (the applicable code is then coded in the Airline Modifiable Information (AMI) file). When a valid change code is entered, the IDLE and PERF factors are displayed in blue. - ENTER the new IDLE and/or PERF factor(s) in the scratchpad. - PRESS the [6L] key to insert the new IDLE and/or PERF factor(s). The new IDLE and/or PERF factor(s) is (are) displayed in large blue font.
[4R] STORED	This field displays pilot-stored data in a large green font. The field is blank, if no data is stored. (The airline can choose to have this data automatically erased at the done phase).
[5R] DELETE ALL	Pressing this key changes the label to amber CONFIRM DELETE ALL. Pressing this key a second time deletes all pilot-stored data, except data that is part of the active and secondary flight plans.
[6R] STATUS/XLOAD	This prompt gives access to the P/N STATUS and P/N XLOAD pages.

P/N XLOAD PAGE

Ident.: DSC-22_20-50-10-25-00000582.0001001 / 17 MAR 11

30 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page allows the crossloading of all databases or configuration files part numbers which are different between both sides. Crossloading from this page avoids reviewing each individual P/N STATUS page.



P/N XLOAD 1/7
FMS1 UPDATE
←START XLOAD
FM1 TO FM2
<A/C STATUS
<PREV PAGE NEXT PAGE>

TITLE	P/N XLOAD
[1L]	FMS 1 UPDATE: FMS 1 can be loaded on the right side MCDU. FMS 2 UPDATE: FMS 2 can be loaded on the left side MCDU
[4L]	START XLOAD: This blue prompt is displayed, only if the system detects a difference between both sides' part numbers. FMS 1/FMS 2 IDENTICAL: Displayed in green, when there is no difference between both sides' part numbers.
Line 5	FM 1 TO FM 2 or FM 2 TO FM 1: Indicates the crossloading direction. This line is not displayed when there is no difference between both side part numbers.
[5L]	A/C STATUS: This white prompt is displayed, when there is no crossloading in process. It gives access to the A/C STATUS page. MM: SS MIN REMAINING: Indicates the time remaining for crossload completion, when a crossload is in process.
[6L] PREV PAGE	The pilot presses this key to return to the A/C STATUS page.
[6R] NEXT PAGE	Pressing this key calls up the next P/N XLOAD page.

P/N STATUS PAGES

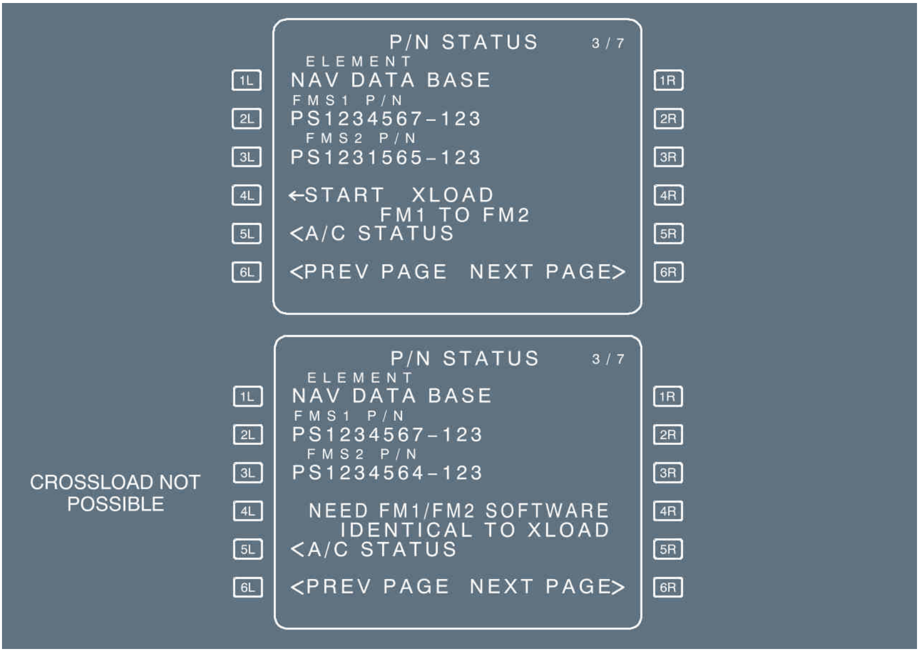
Ident.: DSC-22_20-50-10-25-00000583.0001001 / 01 OCT 12

31 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

These pages allow reviewing and crossloading the following databases and configuration files between both FMS:

- Page 2	FMS SOFTWARE part numbers
- Page 3	NAV DATA BASE part numbers

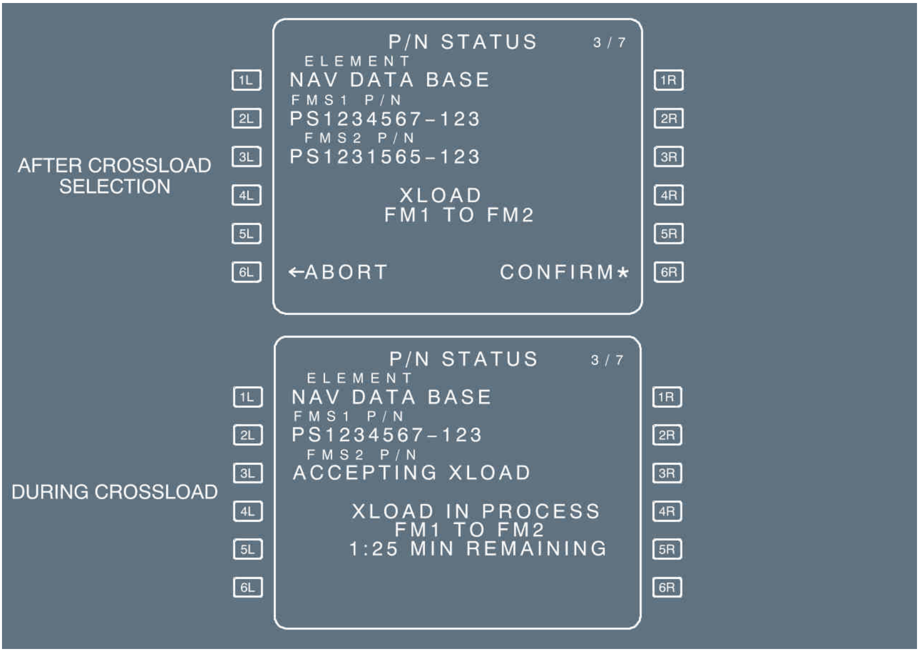
- Page 4	FM AIRLINE CONFIG part numbers
- Page 5	FM OPTIONS CONFIG part numbers
- Page 6	PERF DATA BASE part numbers
- Page 7	FLIGHT TEST DATA BASE



```
          P/N STATUS         3/7
  ELEMENT
 NAV DATA BASE
  FMS1  P/N
 PS1234567-123
   FMS2  P/N
 PS1231565-123

←START   XLOAD
         FM1 TO FM2
<A/C STATUS

<PREV PAGE   NEXT PAGE>
```

CROSSLOAD NOT POSSIBLE

```
          P/N STATUS         3/7
  ELEMENT
 NAV DATA BASE
  FMS1  P/N
 PS1234567-123
   FMS2  P/N
 PS1234564-123

  NEED FM1/FM2 SOFTWARE
     IDENTICAL TO XLOAD
<A/C STATUS

<PREV PAGE   NEXT PAGE>
```



AFTER CROSSLOAD SELECTION

```
P/N STATUS        3/7
 ELEMENT
NAV DATA BASE
 FMS1 P/N
PS1234567-123
 FMS2 P/N
PS1231565-123

       XLOAD
     FM1 TO FM2

←ABORT       CONFIRM*
```

DURING CROSSLOAD

```
P/N STATUS        3/7
 ELEMENT
NAV DATA BASE
 FMS1 P/N
PS1234567-123
 FMS2 P/N
ACCEPTING XLOAD

   XLOAD IN PROCESS
      FM1 TO FM2
  1:25 MIN REMAINING
```

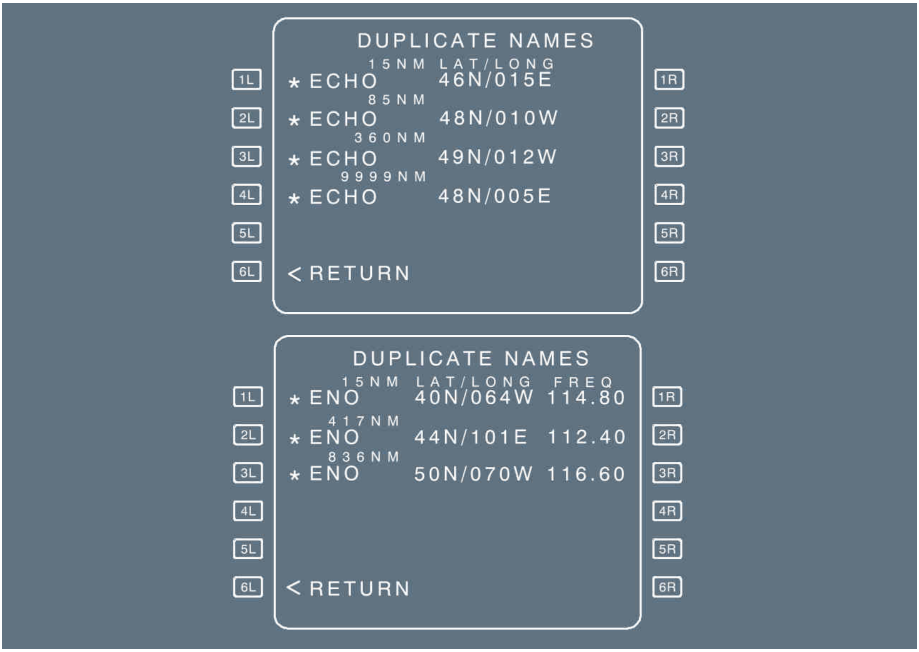
TITLE	P/N STATUS
Line 1 ELEMENT	Indicates the name of the database or configuration file that can be crossloaded: - FMS SOFTWARE on Page 2 - NAV DATA BASE on Page 3 - FM AIRLINE CONFIG on Page 4 - FM OPTIONS CONFIG on Page 5 - PERF DATA BASE on Page 6 - FLIGHT TEST DATABASE on Page 7.
Line 2 FMS1 P/N Line 3 FMS2 P/N	These fields display the part numbers of the database or configuration file (stated on line 1), that are installed on the FMS 1 and 2. Identical part numbers are displayed in green, different ones in amber. During crossload, the updated part number is replaced by the amber “ACCEPTING XLOAD” message.

Line 4	This line is empty when the active flight phase is not Preflight or Done. XLOAD FMx TO FMy or START XLOAD FMx TO FMy: This blue prompt is displayed when the database or configuration file (stated on line 1) can be crossloaded. XLOAD ARMED: Displayed in blue on the receiving FM when the crossload has been requested, but not yet confirmed. XLOAD IN PROCESS: Displayed in white when the crossload is ongoing. XLOAD NOT SUPPORTED: Crossloading is unavailable for this element. NO P/N TO XLOAD: The element is missing. NEED FG 1/FG 2 IDENTICAL TO XLOAD: The receiving side's FG software is incompatible with the FG software to be crossloaded. NEED FM 1/FM 2 SOFTWARE IDENTICAL TO XLOAD: The crossloaded element is incompatible with the receiving side's FM software.
[5L] A/C STATUS	This prompt is available, when no crossload is in process. This gives the pilot access to the aircraft status page. MM: SS MIN REMAINING: Displays the time remaining to complete the crossload, when a crossload is in process.
[6L] PREV PAGE ABORT	This key calls up the previous P/N STATUS page. This amber prompt is displayed when a crossload is in process. The pilot uses it to stop the crossload.
[6R] NEXT PAGE CONFIRM*	This key calls up the next P/N STATUS page. This amber prompt is displayed when a crossload has been armed. The pilot presses it to start the crossload.

DUPLICATE NAMES PAGE

Ident.: DSC-22_20-50-10-25-00000584.0003001 / 01 OCT 12
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

This page, which automatically appears, allows the pilot to select a specific waypoint, airport, or NAVAID when the database holds more than one under the same identifier.



```
         DUPLICATE NAMES
           15NM  LAT/LONG
* ECHO           46N/015E
           85NM
* ECHO           48N/010W
          360NM
* ECHO           49N/012W
         9999NM
* ECHO           48N/005E


< RETURN
```

```
         DUPLICATE NAMES
        15NM  LAT/LONG  FREQ
* ENO         40N/064W  114.80
       417NM
* ENO         44N/101E  112.40
       836NM
* ENO         50N/070W  116.60



< RETURN
```

The pilot presses the key adjacent to a waypoint, NAVAID, or airport to select it as the one to be entered. When the pilot has finished, the page automatically reverts to the previously displayed page.

DISTANCE

The direct distance to the aircraft is displayed in green above each name. If this distance is greater than 9 999 NM, 9 999 NM is displayed.

LAT/LONG COLUMN

This column lists the rounded off latitudes and longitudes of the different points, using the same identifier.

FREQ/CHAN COLUMN

This column lists the NAVAIDs frequencies, if any. It displays CHAN for a GLS.

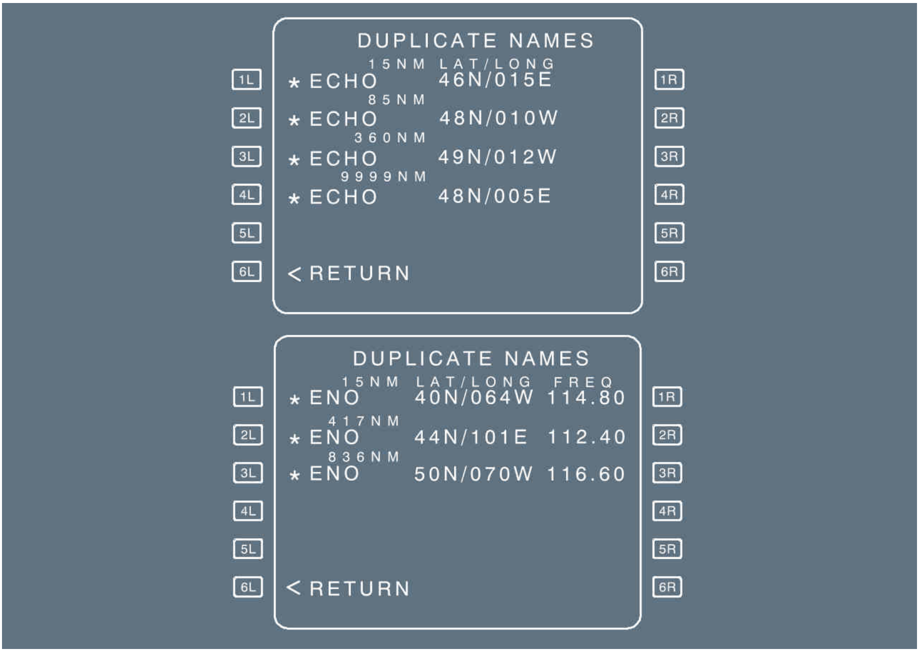
Note:
- *The DUPLICATE NAMES page is not displayed when 2 waypoints with the same IDENT belong to the same airway. The system selects the first waypoint found in the database.*
- *The waypoints or NAVAIDs are ranked by their distance from the aircraft position.*
- *When a waypoint is named using ICAO phonetic alpha characters, a minus sign and the ICAO code of the country where the waypoint is located, are displayed. e.g. Alpha in France becomes A-LF; Bravo in England becomes B-EG.*

DUPLICATE NAMES PAGE

Ident.: DSC-22_20-50-10-25-00000584.0001001 / 01 OCT 12

32 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

This page, which automatically appears, allows the pilot to select a specific waypoint, airport, or NAVAID when the database holds more than one under the same identifier.



```
        DUPLICATE NAMES
         15NM  LAT/LONG
* ECHO         46N/015E
         85NM
* ECHO         48N/010W
        360NM
* ECHO         49N/012W
       9999NM
* ECHO         48N/005E


<RETURN
```

```
        DUPLICATE NAMES
       15NM  LAT/LONG  FREQ
* ENO        40N/064W  114.80
      417NM
* ENO        44N/101E  112.40
      836NM
* ENO        50N/070W  116.60



<RETURN
```

The pilot presses the key adjacent to a waypoint, NAVAID, or airport to select it as the one to be entered. When the pilot has finished, the page automatically reverts to the previously displayed page.

DISTANCE

The direct distance to the aircraft is displayed in green above each name. If this distance is greater than 9 999 NM, 9 999 NM is displayed.

LAT/LONG COLUMN

This column lists the rounded off latitudes and longitudes of the different points, using the same identifier.

FREQ/CHAN COLUMN

This column lists the NAVAIDs frequencies, if any. It displays CHAN for a MLS.

Note:
- *The DUPLICATE NAMES page is not displayed when 2 waypoints with the same IDENT belong to the same airway. The system selects the first waypoint found in the database.*
- *The waypoints or NAVAIDs are ranked by their distance from the aircraft position.*
- *When a waypoint is named using ICAO phonetic alpha characters, a minus sign and the ICAO code of the country where the waypoint is located, are displayed. e.g. Alpha in France becomes A-LF; Bravo in England becomes B-EG.*

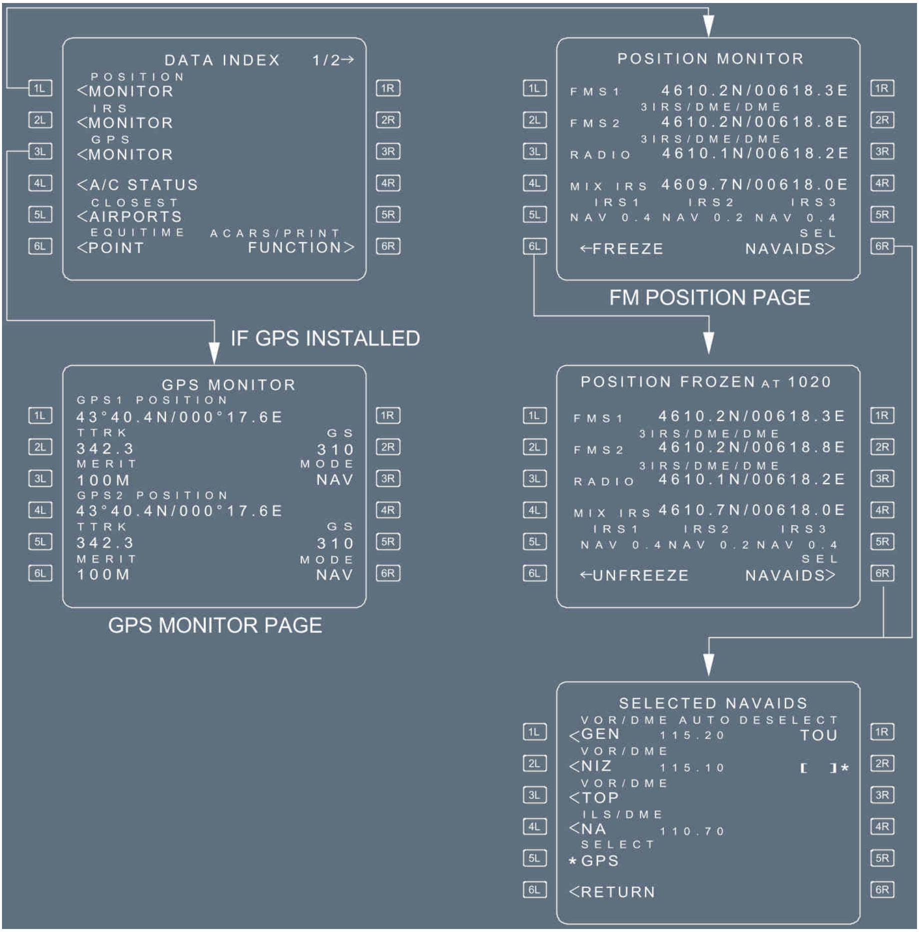
POSITION MONITOR PAGE

Ident.: DSC-22_20-50-10-25-00000585.0001001 / 17 MAR 11

33 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page displays all the different positions that the FMGC has computed with the various available methods of navigation. It also shows which method obtained each position. (The positions should be almost identical).

The pilot calls up this page by pressing the 1L key on the data index page.


DATA INDEX 1/2→
POSITION
<MONITOR
IRS
<MONITOR
GPS
<MONITOR
<A/C STATUS
CLOSEST
<AIRPORTS
EQUITIME
<POINT
ACARS/PRINT
FUNCTION>
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
POSITION MONITOR
FMS1 4610.2N/00618.3E
3IRS/DME/DME
FMS2 4610.2N/00618.8E
3IRS/DME/DME
RADIO 4610.1N/00618.2E
MIX IRS 4609.7N/00618.0E
IRS1 IRS2 IRS3
NAV 0.4 NAV 0.2 NAV 0.4
SEL
←FREEZE
NAVAIDS>
FM POSITION PAGE
IF GPS INSTALLED
GPS MONITOR
GPS1 POSITION
43°40.4N/000°17.6E
TTRK
342.3
GS
310
MERIT
100M
MODE
NAV
GPS2 POSITION
43°40.4N/000°17.6E
TTRK
342.3
GS
310
MERIT
100M
MODE
NAV
GPS MONITOR PAGE
POSITION FROZEN AT 1020
FMS1 4610.2N/00618.3E
3IRS/DME/DME
FMS2 4610.2N/00618.8E
3IRS/DME/DME
RADIO 4610.1N/00618.2E
MIX IRS 4610.7N/00618.0E
IRS1 IRS2 IRS3
NAV 0.4 NAV 0.2 NAV 0.4
SEL
←UNFREEZE
NAVAIDS>
SELECTED NAVAIDS
VOR/DME AUTO DESELECT
<GEN 115.20 TOU
VOR/DME
<NIZ 115.10 [ ]*
VOR/DME
<TOP
ILS/DME
<NA 110.70
SELECT
*GPS
<RETURN

POSITION MONITOR AND POSITION FROZEN PAGE

Ident.: DSC-22_20-50-10-25-00009133.0001001 / 29 MAR 12

34 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Line 1 FMGC 1	This line shows the latitude and longitude, as calculated by the FMGC 1, and the navigation method used by the FMGC for that calculation (Example: “3 IRS/DME/DME”).

Line 2 FMGC 2	This line shows the latitude and longitude, as calculated by the FMGC 2, and the navigation method used.
Line 3 RADIO or GPS or GPIRS	This line shows the latitude and longitude, calculated by the onside FMGC from selected radio NAVAIDs (Example: DME/DME, VOR/DME, or LOC) or from GPS or GPIRS.
Line 4 MIX IRS	This line shows the latitude and longitude of the weighted mean inertial reference system (IRS) calculated by the onside FMGC from the available IRSs.
Line 5 IRS 1,2,3	This line shows the deviation in nautical miles of each IRS position from the onside FMGC position. It also displays the IRS mode, which can be INVAL, ALIGN, NAV or ATT. *Note: INVAL is displayed when an ADIRS has failed, or the IRS position is not refreshed.*
[6L] FREEZE/UNFREEZE	The pilot presses this key to freeze (or unfreeze) all the data displayed on the page. When the data is frozen, the title of the page specifies the time at which it was frozen.
[6R] SEL NAVAIDS	The pilot presses this key to access the selected NAVAIDs page.

SELECTED NAVAIDS PAGE

Ident.: DSC-22_20-50-10-25-00000586.0014001 / 03 APR 13

35 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

MODIFIABLE ONLY FOR DESELECTION

Line 1	This field displays the NAVAID tuned for display purposes, and the tuning mode (AUTO, MAN, or RMP).
Line 2 and 3	These fields display the NAVAIDs, if any, tuned for the calculation of radio position by the FMGC.
[4L]	This field displays the tuned ILS, GLS ◁✻ , MLS ◁✻ , if any.
[5L] DESELECT/SELECT RADIONAV	The flight crew presses this key to manually select or deselect the NAVAIDs. If the flight crew selects (deselects) the NAVAIDs for position calculation, “RADIONAV SELECTED” (“RADIONAV DESELECTED”) is displayed in the label line in blue small font and “DESELECT” (“SELECT”) is displayed in white large font. By default NAVAIDs are selected. The deselection of the RADIONAV inhibits use of radio position (either DME/DME or VOR/DME) for position calculation.

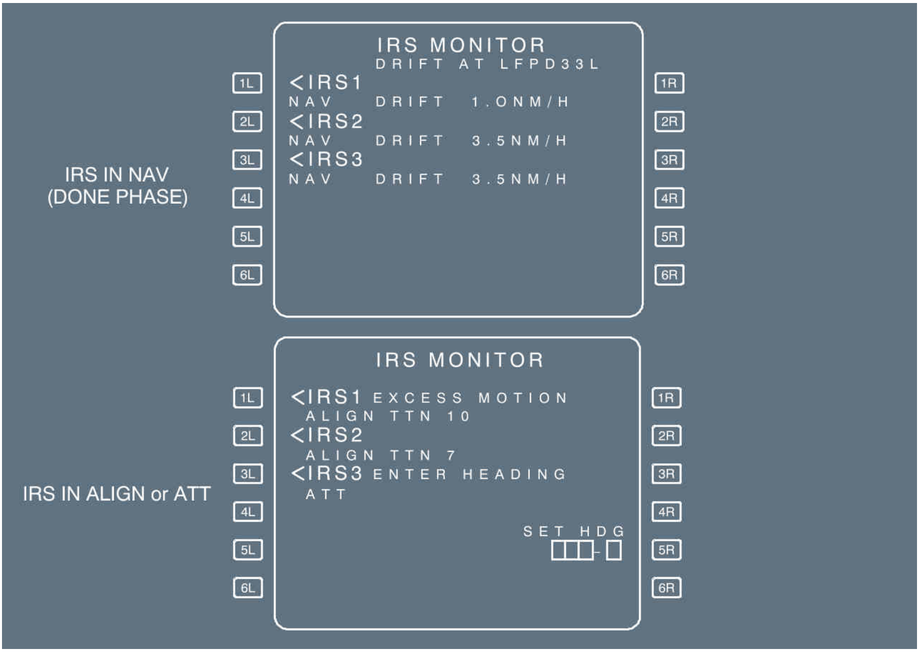
[6L] DESELECT/SELECT GPS	The crew presses this key to manually select or deselect the GPS for position computation. Upon transition to the DONE phase, the prompt returns to DESELECT status. If the pilot deselects the GPS, “GPS IS DESELECTED” is displayed when the aircraft is less than 80 NM from the top of descent, or in approach phase.
[1R] DESELECT to [4R]	The pilot deselects a NAVAID by entering its identifier in one of these six fields. Once deselected in this way, the NAVAID can no longer be tuned manually through the entry of its IDENT, nor can it be autotuned for display or determination of the position for the rest of the flight. The deselection is cleared: - Manually, by a CLR action into this field, or - Automatically upon transition to the done or preflight phase, or upon activation of the second database. The pilot may deselect as many as four stations.
[6R] RETURN	The pilot presses this key to return to the POSITION MONITOR page.

IRS MONITOR PAGE

Ident.: DSC-22_20-50-10-25-00000587.0010001 / 01 OCT 12

36 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page displays the IRS data. The crew calls up this page by pressing the IRS monitor prompt of the DATA INDEX page.

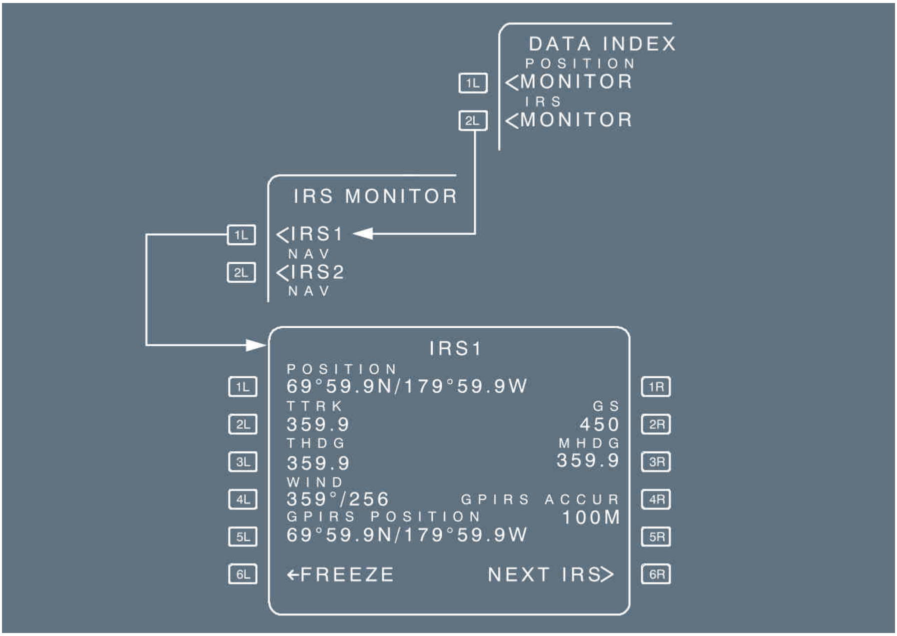

IRS IN NAV
(DONE PHASE)
IRS MONITOR
DRIFT AT LFPD33L
<IRS1
NAV DRIFT 1.0NM/H
<IRS2
NAV DRIFT 3.5NM/H
<IRS3
NAV DRIFT 3.5NM/H
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
IRS IN ALIGN or ATT
IRS MONITOR
<IRS1 EXCESS MOTION
ALIGN TTN 10
<IRS2
ALIGN TTN 7
<IRS3 ENTER HEADING
ATT
SET HDG
□□□.□

TITLE DRIFT AT XXXX (amber)	Displays “DRIFT AT” runway identifier, if at least one IRS average drift is displayed.
[1L] to [3L] IRS 1(2) (3) (white)	These prompts allow access to the associated IRS pages. Each label line displays the mode (NAV, ALIGN, ATT or INVAL), the average drift (upon transition to DONE phase), and the Time To NAV (if IRS in align) for each IRS.

[1R] to [3R]	Displays the status message of the associated IRS in small green font. List of available messages: IR FAULT CHECK C/B DELAYED MAINT CDU FAULT ENTER PPOS ENTER HEADING SELECT ATT REENTER PPOS EXCESS MOTION SYS BELOW -15 ° SWITCH ADR
[5R] SET HDG (white)	This field is displayed, if at least one IRS is in ATT mode. This function allows initialization of a heading for IRS in ATT mode: - If a heading has been entered in this field, or on the ADIRS panel, the value is displayed in blue. - If not, amber boxes are displayed.

IRS 1 (2)(3) PAGE

This page displays the IRS parameters and GPS/IRS hybrid parameters. The pilot calls up this page by pressing either the 1L key from the IRS MONITOR page, or the NEXT IRS prompt on another IRS page (closed loop).


DATA INDEX
1L
POSITION
<MONITOR
2L
IRS
<MONITOR
IRS MONITOR
1L
<IRS1
NAV
2L
<IRS2
NAV
IRS1
1L
POSITION
69°59.9N/179°59.9W
2L
TTRK
359.9
GS
450
3L
THDG
359.9
MHDG
359.9
4L
WIND
359°/256
GPIRS ACCUR
100M
5L
GPIRS POSITION
69°59.9N/179°59.9W
6L
←FREEZE
NEXT IRS>
1R
2R
3R
4R
5R
6R

TITLE	Displays the selected IRS in large white font. When data is frozen, IRS is replaced by “IRS FROZEN AT”, followed by the time at which the pilot has frozen the display.
[1L] POSITION	Displays the latitude/longitude given by the selected IRS.
[2L] TTRK	True track
[3L] THDG	True heading
[4L] WIND	True wind direction/velocity
[5L] GPIRS	GPS/IRS hybrid position of the IRS
[6L] FREEZE/UNFREEZE	Allows the crew to freeze or unfreeze all data displayed on all three IRS pages. When the data is frozen, the title of the page specifies the time at which it was frozen. It is automatically unfrozen when exiting the page.
[2R] GS	Ground speed
[3R] MHDG	Magnetic heading
[4R] GPIRS ACCUR	GPS/IRS Figure of Merit (meters or feet)

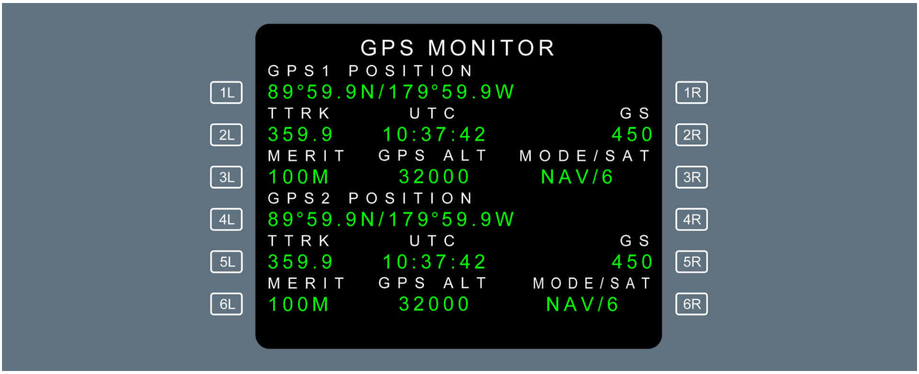
[6R] NEXT IRS	This prompt enables another IRS page (closed loop IRS 1 → 2 → 3 → 1) to be displayed.

GPS MONITOR PAGE ◁

Ident.: DSC-22_20-50-10-25-00000588.0001001 / 02 MAY 23

37 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

38 This page displays the GPS data. The flight crew can access this page via the GPS MONITOR ◁ prompt of the DATA INDEX page.



```
              GPS MONITOR
 GPS1 POSITION
 89°59.9N/179°59.9W
 TTRK       UTC          GS
 359.9    10:37:42      450
 MERIT    GPS ALT   MODE/SAT
 100M      32000     NAV/6
 GPS2 POSITION
 89°59.9N/179°59.9W
 TTRK       UTC          GS
 359.9    10:37:42      450
 MERIT    GPS ALT   MODE/SAT
 100M      32000     NAV/6
```

[1L] and [4L]	Display the GPS 1 and 2 positions.
[2L] - [2R] and [5L] - [5R] TTRK-UTC-GS	Display the GPS 1 and 2 true tracks. UTC fields indicate UTC time for each GPS sensor. GS fields indicate the GPS 1 and 2 ground speeds.

[3L] - [3R] and [6L] - [6R] MERIT-GPS ALT-MODE/SAT

Display the GPS 1 and 2 figures of merit (in meters or feet). GPS ALT is displayed for information purposes. It is not used by the FMGS. MODE/SAT fields indicate the GPS 1 and 2 modes followed by the number of satellites tracked.

The GPS can operate in the following modes:

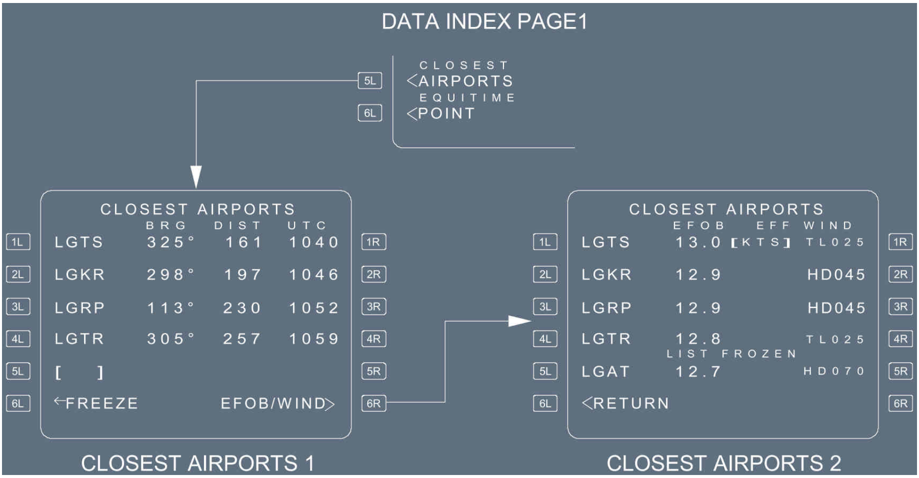
INIT	:	System initialization
ACQ	:	Satellite acquisition
NAV	:	Normal mode
TEST	:	System test
FAULT	:	Invalid system
ALTAID or AIDED	:	Degraded modes. The MMR uses aircraft inputs for computation purposes.
SBAS	:	Satellite Based Augmentation System is being used.

CLOSEST AIRPORTS PAGES

Ident.: DSC-22_20-50-10-25-00000589.0001001 / 17 MAR 11

39 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The system automatically selects the closest 4 airports from the current aircraft position, and displays them on these pages. A fifth one can be selected by the pilot.
Page 1 displays the bearing, distance, and time to go to each airport; page 2 displays the EFOB and allows the crew to enter an effective wind to be flown to each airport.
The flight crew accesses the CLOSEST AIRPORTS page 1 by pressing the 5L key from the DATA INDEX A page. They access the CLOSEST AIRPORTS page 2 by pressing the EFOB/WIND prompt (6R key) on page 1.


DATA INDEX PAGE1

```
5L   CLOSEST
    <AIRPORTS
6L   EQUITIME
    <POINT
```

```
           CLOSEST AIRPORTS
           BRG     DIST    UTC
1L  LGTS   325°    161    1040   1R
2L  LGKR   298°    197    1046   2R
3L  LGRP   113°    230    1052   3R
4L  LGTR   305°    257    1059   4R
5L  [    ]                       5R
6L  ←FREEZE          EFOB/WIND>  6R
```

CLOSEST AIRPORTS 1

```
           CLOSEST AIRPORTS
           EFOB         EFF  WIND
1L  LGTS   13.0 [KTS]   TL025   1R
2L  LGKR   12.9         HD045   2R
3L  LGRP   12.9         HD045   3R
4L  LGTR   12.8         TL025   4R
          LIST FROZEN
5L  LGAT   12.7         HD070   5R
6L  <RETURN                     6R
```

CLOSEST AIRPORTS 2

[1L] - [1R] to [4L] - [4R] The closest four airports are extracted from the database, and ranked by distance from the aircraft position.

BRG	Displays the current bearing from the aircraft's position to the airport.
DIST	Displays the current great-circle distance from the aircraft's position to the airport.
TIME or UTC	Displays the predicted time to the airport, computed using the current wind or a wind vector entered on page 2, and the speed according to the current mode (managed or selected). The time is only computed in cruise phase.

[5L] The crew may enter a fifth airport here, using the 4-letter code. The entry may be modified at any time, even when “LIST FROZEN” is displayed.

If the pilot enters an airport that is not in the database, then “NOT IN DATABASE” appears in the scratchpad.

[1L] - [1R] EFOB to [5L] - [5R] EFF WIND Displays the EFOB at each airport. EFOB is only computed in cruise phase.

Used to enter an anticipated headwind or tailwind along the bearing to the airport. If the entry is preceded by +, T, or TL, a tailwind is assumed.

If the entry is preceded by -, H, or HD, a headwind is assumed.

Before pilot entry, a default value may be displayed, based on the current wind.

The effective wind is used to compute the EFOB and time to the airport.

[6L] FREEZE/UNFREEZE	This prompt enables the pilot to freeze and unfreeze the list of four airports. The list is automatically frozen when accessing page 2. It will remain frozen upon returning to page 1. The “LIST FROZEN” message is always displayed on page 2.
RETURN	Returns to page 1.
[6R] EFOB/WIND	Gives access to page 2. Pressing this prompt automatically freezes the list of the four closest airports.

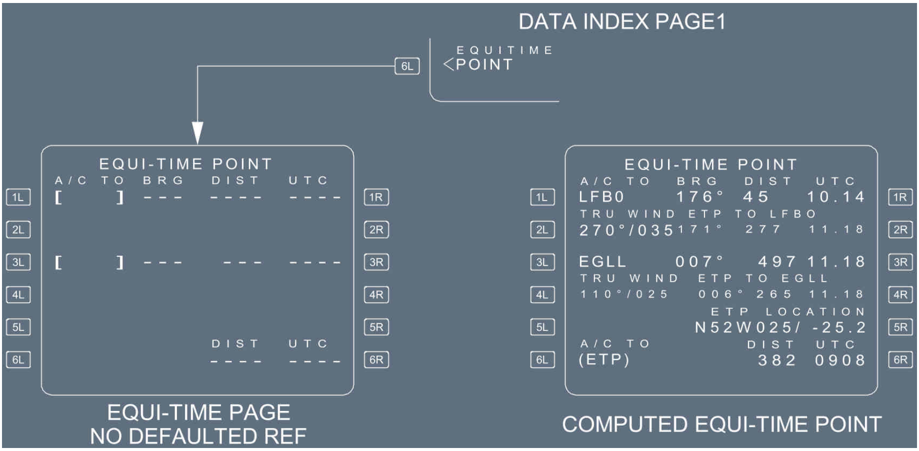
Note:
- *If the aircraft position becomes invalid, all fields are dashed, FREEZE/UNFREEZE and EFOB/WIND prompts are removed, LIST FROZEN is displayed, and the A/C POSITION INVALID message is displayed in the scratchpad. Page 2 cannot be accessed.*
- *Predictions (EFOB, TIME) displayed on the page assume:*
  - *ECON CRZ speed (managed) or current selected speed (selected)*
  - *CI (for managed speed only) and CRZ FL from primary F-PLN are kept*
  - *constant wind value*
  - *In case of engine out, the aircraft altitude is the minimum of (CRZ FL, EO MAX ALT)*
  - *Downpath steps are not considered*
  - *Descent fuel burn is a conservative value which only depends on the difference between current CRZ ALT and destination altitude.*

EQUI-TIME POINT PAGE

Ident.: DSC-22_20-50-10-25-00000590.0001001 / 18 DEC 12

40 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The pilot uses this page to require an equitime point computation between two different points (airport, NAVAID, runway, NDB or waypoint). This pseudo-waypoint (ETP) is displayed on the navigation display along the F-PLN. The EQUI-TIME POINT page is accessed by pressing the 6L key from the DATA INDEX page:



```
 EQUITIME
<POINT
```

```
       EQUI-TIME POINT
A/C TO    BRG   DIST    UTC
[      ]  ---   ----    ----


[      ]  ---    ---    ----



                DIST    UTC
                ----    ----
```

EQUI-TIME PAGE
NO DEFAULTED REF

```
      EQUI-TIME POINT
A/C TO     BRG   DIST   UTC
LFB0       176°  45     10.14
TRU WIND ETP TO LFBO
270°/035171°     277    11.18

EGLL       007°     497 11.18
TRU WIND  ETP TO EGLL
110°/025  006° 265      11.18
              ETP LOCATION
           N52W025/ -25.2
A/C TO           DIST   UTC
(ETP)            382    0908
```

COMPUTED EQUI-TIME POINT

[1L] A/C TO and (blue) [3L]	Displays reference waypoint 1. Displays reference waypoint 2.

Note: *Origin and destination airports are used by default for respective reference points 1 and 2, until a pilot entry is made.*

[1R] BRG/DIST/UTC and [3R] (green)	Displays the bearing, distance, time, from the aircraft's current position to the reference waypoint 1. Displays the bearing, distance, time, from the current position of the aircraft to the reference waypoint 2.

BRG :	Displays the current great-circle bearing from the position of the aircraft to the reference waypoint.
DIST :	Displays the current great-circle distance from the position of the aircraft to the reference waypoint.
UTC :	Displays the predicted time of arrival at the reference waypoint (computed using the current wind or a wind vector, entered by the crew). The time is only computed in cruise phase. In other phases, it is dashed.

[2L] and [4L] TRU WIND (blue)	The pilot may enter the wind (direction/velocity) at the reference waypoint and the CRZ FL: This wind is used to compute the time from the aircraft's position to the reference waypoint, and to locate the equitime point. If no entry is made, the wind/velocity field will read zero.

[2R] and [4R] EPT TO XXX (green)	This field displays the bearing distance and the time from the equitime point position (ETP) to the reference waypoint.
[5R] ETP LOCATION	This field displays the ident of the next waypoint following the equitime point. It provides the distance along the flight plan from the equitime point to the indicated waypoint.
[6L] - [6R] A/C TO (ETP) DIST/UTC (green)	This field displays the distance and time from the aircraft's current position to the equitime point along the flight plan. If at least one reference waypoint exists, but no equitime point exists, the field is blank and NO ETP is displayed in 6L.

Note: *The assumptions for the equitime point computation include the cost index, speed managed (with SPD LIM), and winds.*
In case of engine-out, the EO LRC speed is considered.

PRINT FUNCTION PAGES

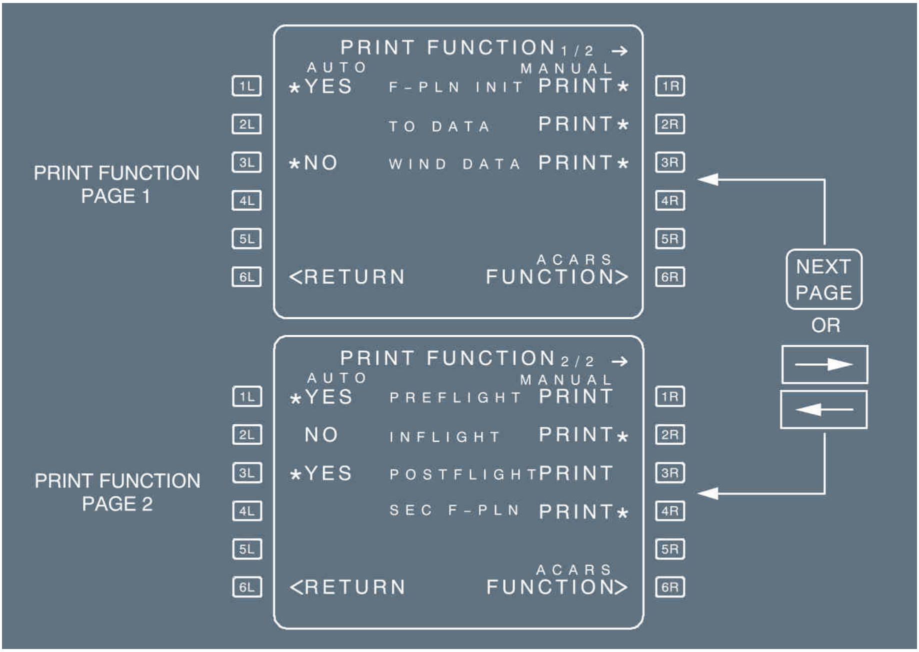
Ident.: DSC-22_20-50-10-25-00000591.0001001 / 01 OCT 12

41 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The PRINT FUNCTION pages enable the crew to print the data relative to the current flight.

This data comes from 2 different sources:
- ACARS uplink messages, and
- Active data from the current flight.

The pilot may access these pages from the “DATA INDEX” page1/2 by pressing the [6R] ACARS/PRINT FUNCTION key.



```
     PRINT FUNCTION1/2  →
  AUTO            MANUAL
*YES  F-PLN INIT  PRINT*

      TO DATA     PRINT*

*NO   WIND DATA   PRINT*



                   ACARS
<RETURN        FUNCTION>
```

```
     PRINT FUNCTION2/2  →
  AUTO            MANUAL
*YES  PREFLIGHT   PRINT

 NO   INFLIGHT    PRINT*

*YES  POSTFLIGHTPRINT

      SEC F-PLN   PRINT*


                   ACARS
<RETURN        FUNCTION>
```

PRINT FUNCTION PAGE 1/2

This page displays the status of the automatic printing capabilities, for the uplink messages (left column), and the status of the manual printing capabilities of the current active data (right column).

LEFT COLUMN

AUTO * YES (blue)	Line 1:	Uplink messages related to flight plan INIT data are automatically printed when received.
	Line 2:	Uplink messages related to takeoff data are automatically printed when received.
	Line 3:	Uplink messages related to wind data are automatically printed when received.
* NO (blue)	When "NO", preceded by a star, is displayed in front of a line, automatic printing is deselected. The pilot can reactivate it by pressing the left key of the line.	
NO (without a star)	Automatic printing is internally deactivated for the data of the line. The pilot cannot reactivate it manually.	
Blank	The ACARS function is not available for this line. Uplink messages can neither be received nor automatically printed.	

RIGHT COLUMN

MANUAL	Displays the status of the manual printing capability of the active data (and not of the ACARS uplink data).
PRINT * (amber)	Pressing the right keys prints the following active data: Line 1: Active flight plan INIT data Line 2: Active takeoff data Line 3: Active wind data

If the star is not displayed, printing is not possible.
When the key is pressed, the star is removed until the data is printed.

[6L] RETURN	Pressing this key reverts the display to the DATA INDEX page.
[6R] ACARS FUNCTION	Pressing this key reverts the display to the ACARS FUNCTION page.

PRINT FUNCTION PAGE 2/2

This page describes the printing capabilities of the reports displayed on lines 1 to 4.

LEFT COLUMN

AUTO (white) * YES (blue)	Line 1: The PREFLIGHT report is automatically printed at engine start. Line 2: The INFLIGHT report is automatically printed at takeoff. Line 3: The POSTFLIGHT report is automatically printed at engine shutdown.
* NO (blue)	The report, displayed on the line, is not printed automatically. The pilot can reactivate the function by pressing the left key of the line.
NO (without a star)	Automatic printing is internally deactivated for the report. The pilot cannot reactivate it.

RIGHT COLUMN

MANUAL PRINT *	Pressing a right key prints the report displayed on the line. If the star is not displayed, printing is not possible. When the key is pressed, the star is removed until the report is printed. For the PREFLIGHT, INFLIGHT and POSTFLIGHT reports, only one type of report is available for printing at any given time, depending on the current flight phase. For the SEC F-PLN report, the print selection start is only displayed if a secondary flight plan exists.

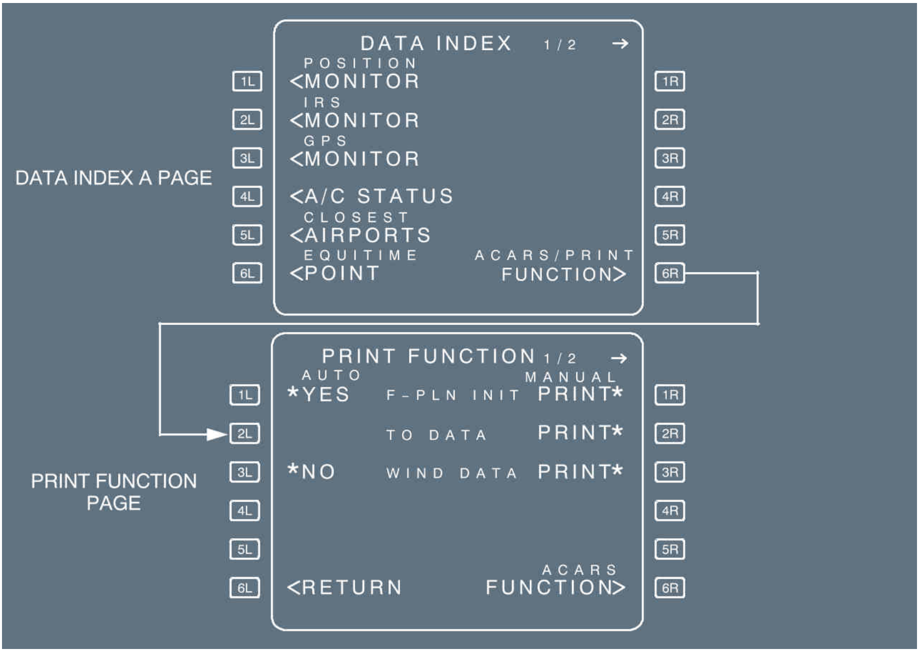
ACARS FUNCTION PAGE

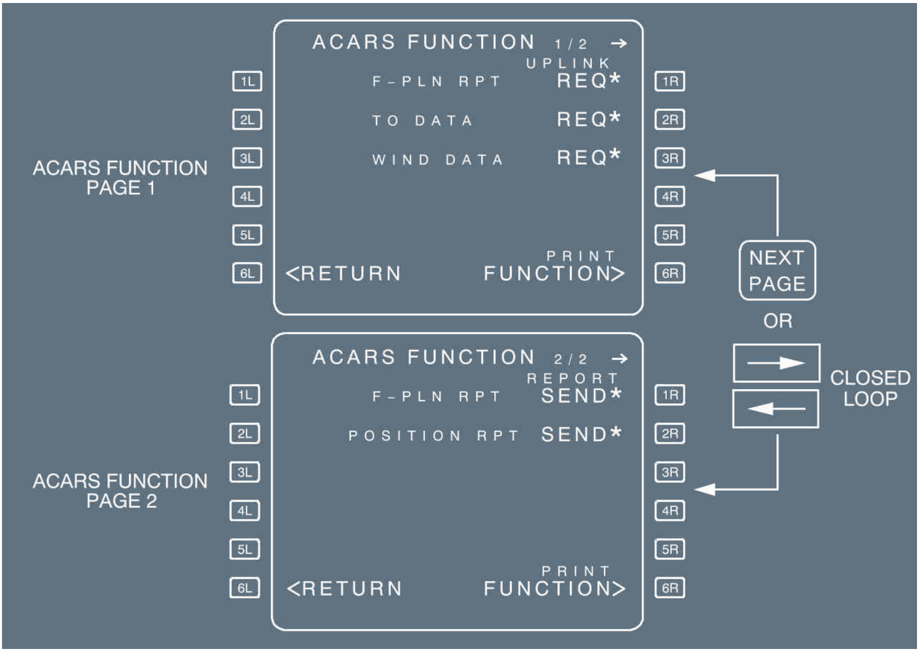
Ident.: DSC-22_20-50-10-25-00000592.0001001 / 01 OCT 12

42 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The ACARS FUNCTION pages display the functions enabling the crew to send manual requests or reports to the ground.

All functions, displayed on pages 1 and 2, may be inhibited through a pin program.
The ACARS/PRINT FUNCTION prompt is displayed on the DATA INDEX page 1/2. Pressing this key displays the PRINT FUNCTION page from which the ACARS FUNCTION page can be accessed.

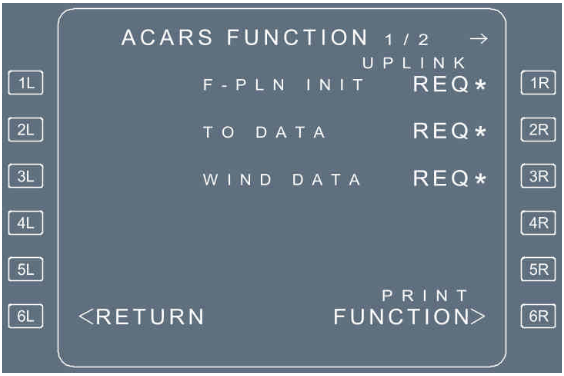

DATA INDEX A PAGE
DATA INDEX 1/2 →
POSITION
<MONITOR
IRS
<MONITOR
GPS
<MONITOR
<A/C STATUS
CLOSEST
<AIRPORTS
EQUITIME
<POINT
ACARS/PRINT
FUNCTION>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PRINT FUNCTION PAGE
PRINT FUNCTION 1/2 →
AUTO
*YES
MANUAL
F-PLN INIT
PRINT*
TO DATA
PRINT*
*NO
WIND DATA
PRINT*
ACARS
<RETURN
FUNCTION>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R


ACARS FUNCTION PAGE 1
ACARS FUNCTION 1/2 →
UPLINK
F-PLN RPT REQ*
TO DATA REQ*
WIND DATA REQ*
<RETURN
PRINT
FUNCTION>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
NEXT PAGE
OR
CLOSED LOOP
ACARS FUNCTION PAGE 2
ACARS FUNCTION 2/2 →
REPORT
F-PLN RPT SEND*
POSITION RPT SEND*
<RETURN
PRINT
FUNCTION>

ACARS FUNCTION PAGE 1

Ident.: DSC-22_20-50-10-25-00000593.0001001 / 01 MAR 18

43 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**


ACARS FUNCTION 1/2 →
UPLINK
F-PLN INIT REQ*
TO DATA REQ*
WIND DATA REQ*
<RETURN
PRINT
FUNCTION>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	ACARS FUNCTION 1/2 in white
Line 1 F-PLN INIT REQ*	Pressing this key sends a request for flight plan to the ground (downlink message) The INIT REQUEST prompt of the INIT A page provides the same function.
Line 2 TO DATA REQ*	Pressing this key sends a request for takeoff data. Displayed in the DONE and PREFLIGHT phases. The TO DATA REQUEST prompt of the UPLINK TO DATA REQ page provides the same function.
Line 3 WIND DATA REQ*	Pressing this key sends a request for wind data. The WIND REQUEST prompt of the CLIMB, CRUISE, and DESCENT WIND pages provides the same function.

Note: *If “REQ” is not followed by a star, the request cannot be sent (downlink message).*
When a function (line 1 or 2 or 3) is deactivated internally, the corresponding line is blank.

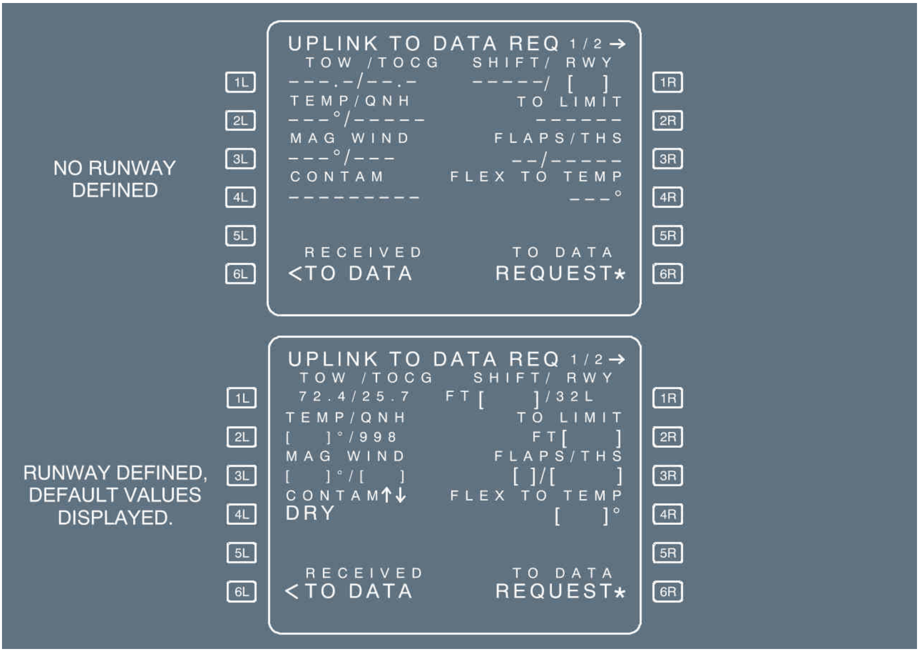
[6L] RETURN	The pilot presses this key to make the display revert to the DATA INDEX page.
[6R] PRINT FUNCTION	The pilot presses this key to access the PRINT FUNCTION page.

UPLINK TO DATA REQ PAGES

Ident.: DSC-22_20-50-10-25-00000594.0009001 / 14 MAY 12

44 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This page allows the flight crew to send a request for takeoff data for up to 2 runways. There is one page for each runway. The page is accessed from the PERF TAKEOFF page, or from the UPLINK XXX (MAX or DRT or FLX) TO DATA page, by pressing the UPLINK TO DATA prompt.

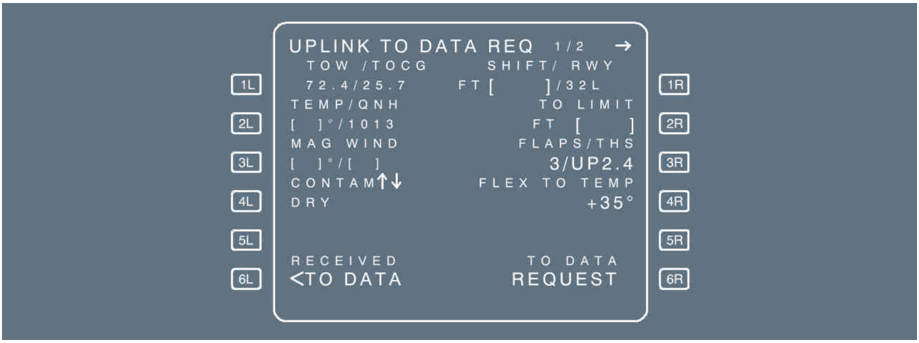


```
UPLINK TO DATA REQ 1/2→
 TOW /TOCG      SHIFT/ RWY
---.-/--.-     -----/ [  ]
TEMP/QNH          TO LIMIT
---°/-----         -------
MAG WIND         FLAPS/THS
---°/---          --/-----
CONTAM       FLEX TO TEMP
---------             ---°

 RECEIVED          TO DATA
<TO DATA          REQUEST*
```

```
UPLINK TO DATA REQ 1/2→
 TOW /TOCG      SHIFT/ RWY
 72.4/25.7   FT[     ]/32L
TEMP/QNH          TO LIMIT
[  ]°/998         FT[    ]
MAG WIND         FLAPS/THS
[  ]°/[  ]       [ ]/[   ]
CONTAM↑↓     FLEX TO TEMP
DRY                [   ]°

 RECEIVED          TO DATA
<TO DATA          REQUEST*
```

TITLE	White.
[1L] TOW/TOCG (green)	This field is dashed, until a runway is defined in the [1R] field. The TOW/TOCG is defaulted to the values of the INIT B and FUEL PRED pages. If not available, dashes are displayed. It cannot be modified by the pilot.
[2L] TEMP/QNH or QFE (green/blue)	This field is dashed, until a runway is defined in the [1R] field. It displays the temperature at origin and baro setting. TEMP = If the temperature is not defined, blue brackets are displayed, and the flight crew can modify this field according to the weather information. BARO = Defaulted to FCU selection and can be modified by the pilot.
[3L] MAG WIND (blue)	This field is dashed, until a runway is defined in the [1R] field. It displays the wind at the origin. If the wind is not defined, blue brackets are displayed. The pilot can modify this field.

[4L] CONTAM (blue)	This field is dashed, until a runway is defined in the [1R] field. The display is defaulted to DRY. The scroll keys allow the crew to modify the runway contamination. DRY, WET, 1/4 WATER, 1/2 WATER, 1/4 SLUSH, 1/2 SLUSH, COMP SNOW.
[6L] RECEIVED TO DATA	This field calls up the UPLINK MAX (or FLX or DRT) TO DATA page that displays the data received by AOC.



```
UPLINK TO DATA REQ  1/2  →
  TOW /TOCG        SHIFT/ RWY
  72.4/25.7      FT [    ]/32L
TEMP/QNH              TO LIMIT
[  ]°/1013          FT [     ]
MAG WIND             FLAPS/THS
[  ]°/[  ]             3/UP2.4
CONTAM↑↓          FLEX TO TEMP
DRY                       +35°


RECEIVED               TO DATA
<TO DATA               REQUEST
```

[1R] SHIFT/RWY (blue)	This field is dashed, until a runway is defined in the F-PLN. If a runway is defined in the F-PLN, it is automatically filled in as: SHIFT = Value from the PERF TO page, or blue brackets [ ], if no value is defined. RWY = F-PLN departure runway. The pilot can modify this field.
[2R] TO LIMIT (blue)	It is dashed, until a runway is defined in the [1R] field. It displays blue brackets [ ], when a runway is defined. The pilot may enter a length, considering runway obstacles.
[3R] FLAPS/THS (blue)	This field is dashed, until a runway is defined in the [1R] field; it is then defaulted to values from the PERF TO page. Blue brackets are displayed, if the PERF TO page does not have any defined values.
[4R] FLEX TO TEMP (blue)	This field is dashed, until a runway is defined in the [1R] field; it is then defaulted to values from the PERF TO page. Blue brackets are displayed, if the PERF TO page does not have any defined values. The pilot can modify this field and enter a FLEX TO temperature (FXX).
[6R] TO DATA REQUEST* (amber)	Pressing the key sends the takeoff data request message to the ground. The asterisk disappears when the request is sent. It reappears when the data is available.

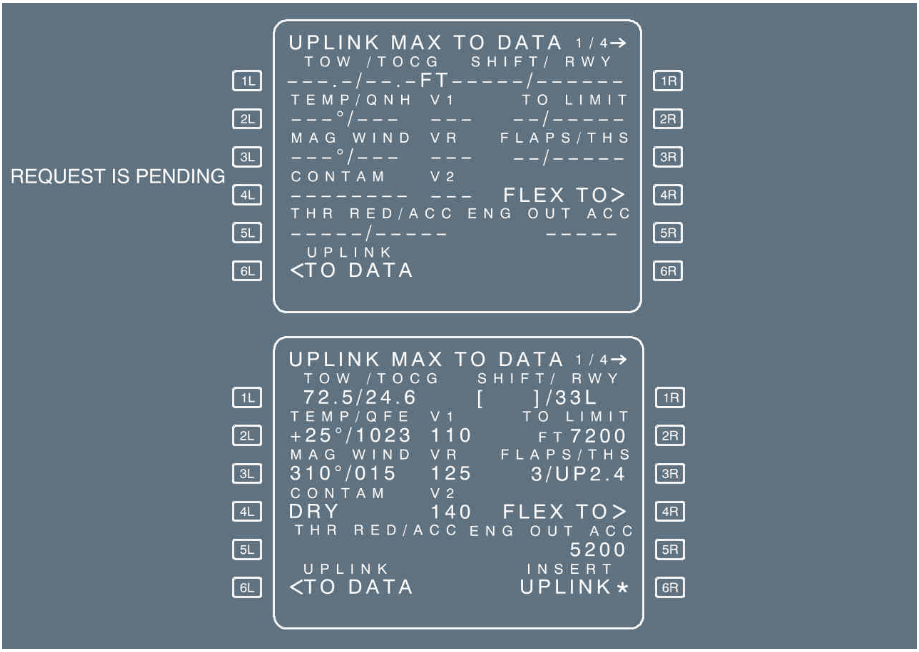
Page 2/2 is a page used for requesting a second runway data.

Note: *If the UPLINK TO DATA REQ Page 2 is accessed (Page 1 being filled), the fields of this page are filled with default values after entry of a runway in [1R]. QNH or QFE and wind are common with Page 1.*

UPLINK MAX TO DATA PAGES

Ident.: DSC-22_20-50-10-25-00000595.0010001 / 01 OCT 12

45 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**



REQUEST IS PENDING

```
UPLINK MAX TO DATA 1/4→
 TOW /TOCG      SHIFT/ RWY
---.-/--.-FT-----/------
TEMP/QNH   V1       TO LIMIT
---°/---   ---     --/-----
MAG WIND   VR      FLAPS/THS
---°/---   ---     --/-----
CONTAM     V2
--------   ---    FLEX TO>
THR RED/ACC ENG OUT ACC
-----/-----          -----
 UPLINK
<TO DATA
```

```
UPLINK MAX TO DATA 1/4→
 TOW /TOCG       SHIFT/ RWY
 72.5/24.6      [     ]/33L
TEMP/QFE   V1       TO LIMIT
+25°/1023  110      FT7200
MAG WIND   VR      FLAPS/THS
310°/015   125      3/UP2.4
CONTAM     V2
DRY        140    FLEX TO>
 THR RED/ACC ENG OUT ACC
                       5200
 UPLINK             INSERT
<TO DATA           UPLINK*
```

This page is accessed from the UPLINK TO DATA REQ page by pressing the RECEIVED TO DATA key.
There is a set of 2 pages (MAX TO DATA and FLEX TO DATA) for each of the 4 uplinked runway data. Uplinked data is displayed in green. (It cannot be modified by the flight crew).

[1L] TOW/TOCG	Uplinked reference Takeoff Gross Weight and Takeoff Center of Gravity.
[2L] TEMP/QNH (or QFE)	Uplinked assumed temperature and BARO setting.
[3L] MAG WIND	Uplinked takeoff runway wind.

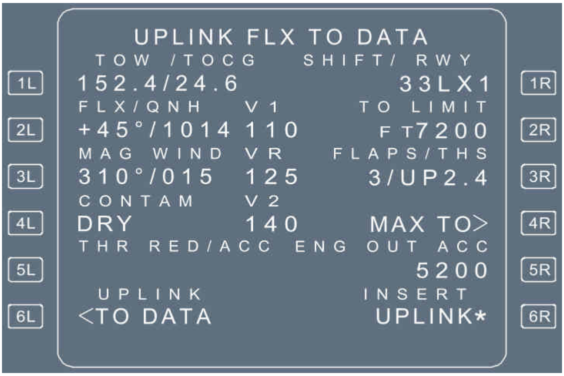
[4L] CONTAM	Uplinked takeoff runway contamination.
[5L] THR RED/ACC	Uplinked Thrust Reduction and Acceleration altitudes.
[6L] UPLINK TO DATA	Pressing the key calls up the UPLINK TO DATA REQ page.
V1, VR, V2	Uplinked takeoff speeds.
[1R] SHIFT/RWY	Uplinked TO runway IDENT, runway intersection and position shift.
[2R] TO LIMIT	Uplinked runway length remaining.
[3R] FLAPS/THS	Uplinked FLAPS/SLATS CONF and TRIM position.
[4R] FLEX TO	Pressing this key calls up the UPLINK FLEX TO DATA pages.
[5R] ENG OUT ACC	Uplinked engine-out acceleration altitude.
[6R] INSERT UPLINK*	Uplinked takeoff data is available for insertion. Selecting this prompt inserts the following data on the PERF TO page: - V1, VR, V2 - THR RED/ACC, ENG OUT ACC altitudes - FLAPS/THS - SHIFT - FLEX The display reverts to the PERF TO page, the asterisk disappears. This field is not displayed, if the runway does not match the active runway. If the runway matches the active runway but the uplinked TOW differs from the current TOW (the uplinked TOW is 3 t greater or 1 t lower than the TOW estimated by the FMS): - The asterisk disappears and the insertion is not possible - The TOW value is displayed in amber in [1L] field.

Note: *All previously-received data is replaced by the new uplinked data.*

UPLINK FLX TO DATA PAGES

Ident.: DSC-22_20-50-10-25-00000596.0001001 / 05 JUN 18

46 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**



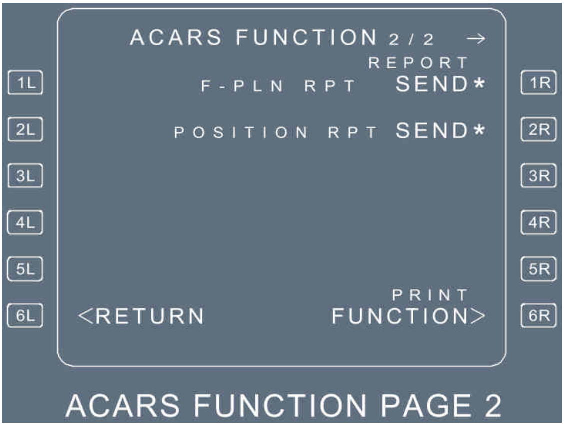
```
       UPLINK FLX TO DATA
   TOW /TOCG      SHIFT/ RWY
152.4/24.6             33LX1
FLX/QNH      V1     TO LIMIT
+45°/1014 110         FT7200
MAG WIND     VR   FLAPS/THS
310°/015     125     3/UP2.4
CONTAM       V2
DRY          140     MAX TO>
THR RED/ACC  ENG OUT ACC
                        5200
  UPLINK              INSERT
<TO DATA             UPLINK*
```

TITLE	UPLINK FLX TO DATA.
[2L]	FLX/QNH (or QFE) When the UPLINK FLEX TO DATA page is selected, it displays uplink assumed Flex Temperature and BARO setting (QNH or QFE).
[4R] MAX TO	Pressing this key calls up the MAX TO DATA page.

ACARS FUNCTION PAGE 2

Ident.: DSC-22_20-50-10-25-00000597.0001001 / 17 MAR 11

47 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**



Line 1 F-PLN RPT SEND	Pressing this key sends the flight plan report to the ground.
Line 2 POSITION RPT SEND	Pressing this key sends a Position Report to the ground.

Note:
- *No report can be sent, if “SEND” is not followed by a star*
- *When a function (line 1 or 2) is deactivated through the navigation database policy file, the corresponding line is blank.*

[6L] RETURN	The pilot presses this key to revert to the DATA INDEX page.
[6R] PRINT FUNCTION	The pilot presses this key to access the PRINT FUNCTION page.

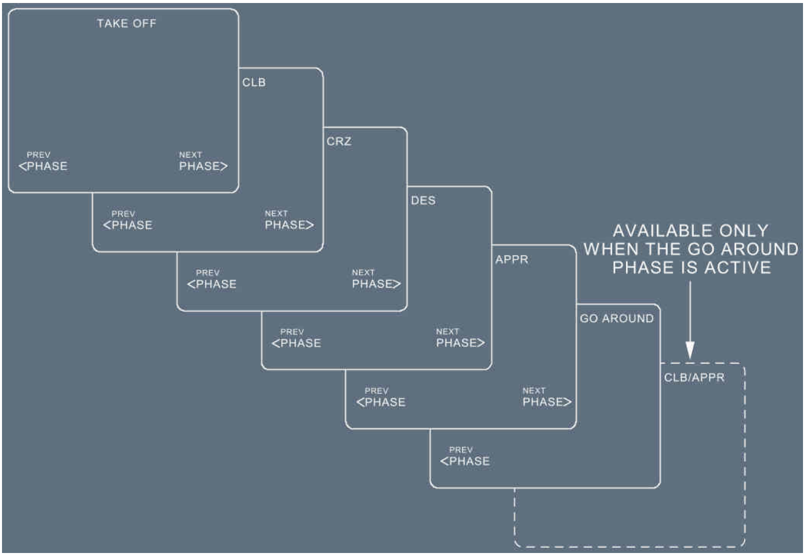
PERF PAGE

Ident.: DSC-22_20-50-10-25-00000598.0001001 / 17 MAR 11

48 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The flight plan is divided into the following phases:
PREFLIGHT, TAKEOFF, CLIMB, CRUISE, DESCENT, APPROACH, GO-AROUND, DONE.
Each phase, except for the preflight and done phases, has a performance (PERF) page. The PERF pages display performance data, speeds related to the various phases, and predictions.

Pressing the PERF key on the MCDU console calls up the performance page for the current active phase. Performance pages, relating to phases already flown, are not available.
In the preflight and done phases, pressing the PERF key brings up the takeoff performance page.
Pressing the PERF key in the done phase makes the phase transition to the preflight phase.

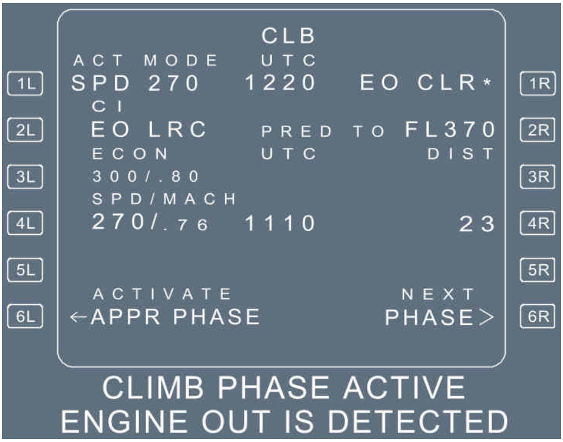

TAKE OFF
PREV <PHASE
NEXT PHASE>
CLB
PREV <PHASE
NEXT PHASE>
CRZ
PREV <PHASE
NEXT PHASE>
DES
PREV <PHASE
NEXT PHASE>
APPR
PREV <PHASE
NEXT PHASE>
GO AROUND
PREV <PHASE
CLB/APPR
AVAILABLE ONLY WHEN THE GO AROUND PHASE IS ACTIVE

The FMGS flight phases are not related to the FWC flight phases.

Line 6	Fields may display two different prompts, depending upon whether the phase is active or not.
[6L] PREV PHASE	To review the performance page for the previous phase. The prompt is unavailable on the takeoff performance page. It is also unavailable for phases already flown.
[6L] ACTIVATE APPR PHASE	To activate, then confirm, the APPR phase. Available only on the page corresponding to the active phase.
[6R] NEXT PHASE	To review the performance page for the next phase.

Note: ***Engine-out condition***

- *When the FMGS detects an engine-out condition, the system automatically calls up the performance page for the current flight phase (except when this occurs before the diversion point during takeoff or no EOSID exists in the flight plan) and displays "EO CLR*" in the [1R] field and EO LRC (engine-out long range cruise) in the [2L] field. On the CLB, CRZ and DES (when the descent phase is not active) PERF pages, the pilot can enter a cost index value and overwrite to "EO LRC". Clearing the cost index reverts to EO LRC.*
  If the pilot presses the [1R] key, the system reverts to the normal processing (with no engine failed) and suppresses the EO information. (Refer to DSC-22_20-30-10-15 General).
- *If the engine-out condition is detected before the diversion point at takeoff, a temporary flight plan is created.*



```
                 CLB
 ACT MODE        UTC
 SPD 270        1220     EO CLR*
   CI
   EO LRC        PRED TO FL370
   ECON          UTC        DIST
   300/.80
   SPD/MACH
   270/.76      1110          23


   ACTIVATE                NEXT
 ←APPR PHASE              PHASE>
```

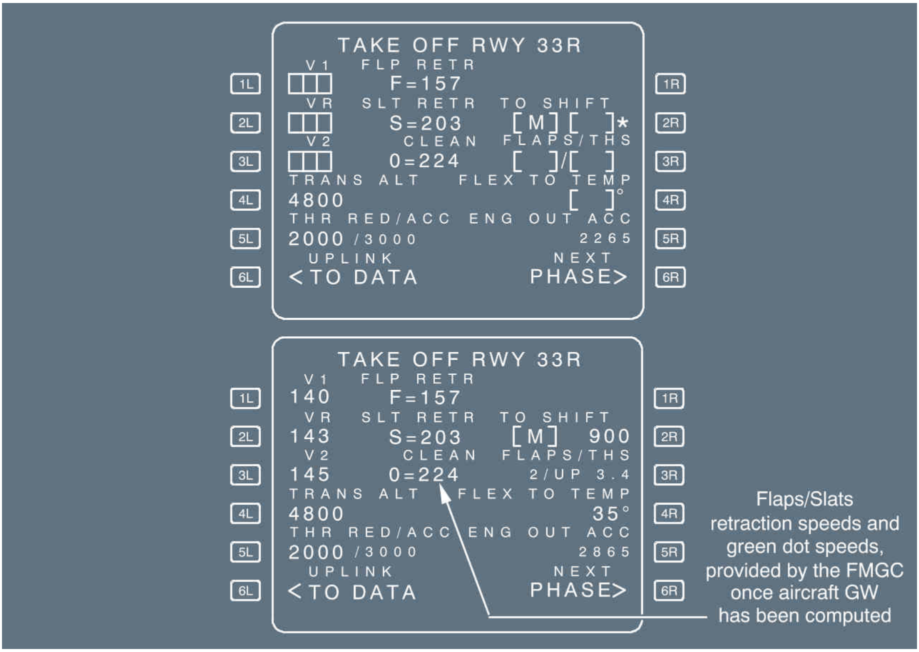
CLIMB PHASE ACTIVE
ENGINE OUT IS DETECTED

PERF TAKEOFF PAGE

Ident.: DSC-22_20-50-10-25-00000599.0010001 / 08 JUL 15

49 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

During the preflight phase, the pilot presses the PERF key to call up the takeoff performance page.



```
        TAKE OFF RWY 33R
 V1     FLP RETR
[ ][ ]   F=157
 VR     SLT RETR     TO SHIFT
[ ][ ]   S=203     [M][   ]*
 V2        CLEAN     FLAPS/THS
[ ][ ]   0=224     [  ]/[   ]
TRANS ALT       FLEX TO TEMP
4800                    [  ]°
THR RED/ACC    ENG OUT ACC
2000/3000               2265
  UPLINK               NEXT
<TO DATA             PHASE>
```

```
        TAKE OFF RWY 33R
 V1     FLP RETR
140      F=157
 VR     SLT RETR     TO SHIFT
143      S=203      [M]   900
 V2        CLEAN     FLAPS/THS
145      0=224       2/UP 3.4
TRANS ALT       FLEX TO TEMP
4800                     35°
THR RED/ACC    ENG OUT ACC
2000/3000               2865
  UPLINK               NEXT
<TO DATA             PHASE>
```

Flaps/Slats retraction speeds and green dot speeds, provided by the FMGC once aircraft GW has been computed

TITLE	TAKE OFF RWY is in large green font when the takeoff phase is active, and in large white font when it is inactive. The active flight plan selected runway is displayed in large green font.

<u>Note:</u> *If the takeoff shift, or the flaps/THS, or the runway is changed after V1, VR or V2 insertion, but the origin airport remains the same, the MCDU “CHECK TAKE OFF DATA” message appears. All takeoff parameters are retained except in case of runway change. In case of runway change, the parameters are invalidated, but still displayed adjacent to each field. The “CONFIRM TO DATA” prompt in [6R] allows reverting to the previous values.*

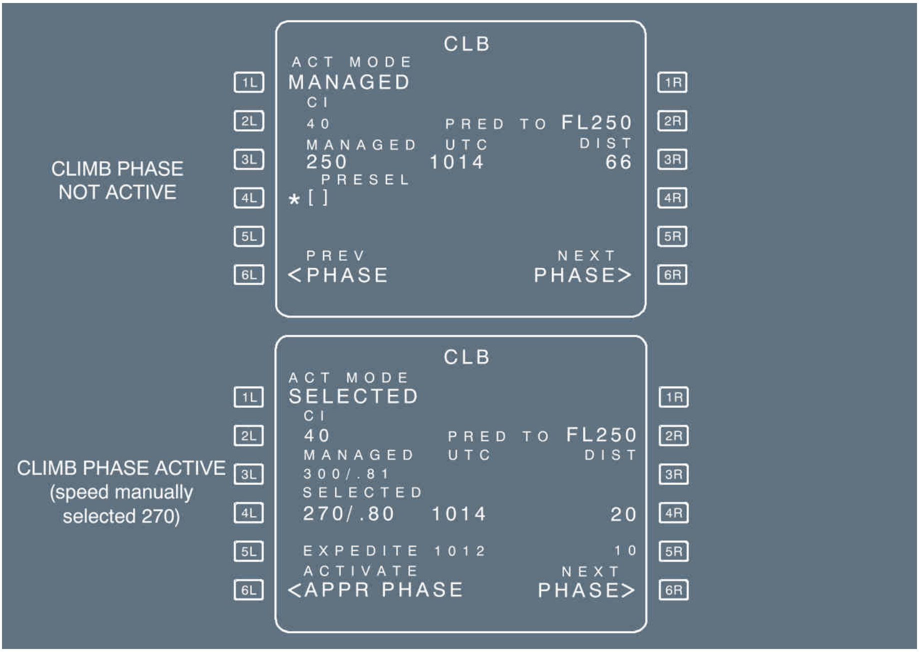
[1L] V1 [2L] VR [3L] V2	The boxes remain amber, as long as the pilot does not make entries in them. The pilot can modify any entry, as long as the takeoff phase is not active. *Note:* *1. If the flight crew does not enter V2, the SRS mode will be unavailable at takeoff.* *2. The MCDU “V1/VR/V2 DISAGREE” amber message appears if the inserted V1, VR, V2 speeds do not satisfy the condition: V1 ≤ VR ≤ V2.* *3. The MCDU “TO SPEED TOO LOW” amber message appears if the inserted V1, VR, V2 speeds do not satisfy the existing regulatory conditions regarding VMCG/VMCA and VS1G speeds.*
[4L] TRANS ALT (transion altitude)	This field displays the navigation database default altitude (if defined) once the origin airport is entered. The pilot can modify it.
[5L] THR RED (thrust reduction altitude)	This is the altitude at which the pilot should reduce the thrust from TOGA/FLX to MAX CLIMB (CL detent) with all engines operative (“CLB” or “LVR CLB” flashing on the FMA). - The thrust reduction altitude defaults to 1 500 ft above the runway elevation, or to the altitude set by the airline - The pilot can modify this altitude: The minimum is 400 ft above the runway elevation.
ACC (Acceleration altitude)	This is the altitude at which the climb phase is triggered. - The target speed jumps to the initial climb speed - The default value is 1 500 ft above runway elevation - The flight crew can modify the value. The minimum value is 400 ft above runway elevation, and it can be higher than, or equal to, or lower than THR RED. *Note:* *- A clearing action reverts both values to the defaulted ones* *- When the flight crew selects an altitude on the FCU that is below THR RED, it brings THR RED and ACC down to this altitude. (The 400 ft minimum still applies).*
[6L] UPLINK TO DATA	This key calls up the UPLINK TO DATA REQ page. It is only displayed in the preflight and done phases.
[1R] EO CLR	EO CLR is displayed when an engine-out is detected and when active flight phase is takeoff.

[2R] TO SHIFT	The takeoff shift is the distance in meters or feet between the beginning of the runway and the aircraft's takeoff position. When taking off from an intersection, the flight crew should insert this value to ensure a correct update of the FM position. The takeoff shift value must be positive, and cannot be greater than the runway length.
[3R] FLAPS/THS	This is a flight crew entry for the positions of the flaps and the trimmable horizontal stabilizer (THS) at takeoff. The flight crew can modify it until takeoff, by entering “UP X.X” or “X.X UP”, or “DN X.X” or “X.X DN” for the THS.
[4R] FLX TO TEMP	The flight crew inserts the FLX TO temperature for FLX takeoff setting purposes. The flight crew can only enter it during preflight. The system sends it to the FADEC and displays the entered data on the upper ECAM display. The TEMP value is always entered in degrees Celsius.
[5R] ENG OUT ACC	This field displays the engine-out acceleration altitude, as defined in the database, or is manually entered by the flight crew. This is for display only, as a reminder. It cannot be cleared. The above ACC altitude rules of [5L] apply to this field.
[6R] NEXT PAGE or CONFIRM TO DATA*	This key calls up the climb performance page, or allows the flight crew to revert to the previously-entered T.O. parameters, in case of runway change with the same origin airport.

PERF CLIMB PAGE

Ident.: DSC-22_20-50-10-25-00000600.0001001 / 14 MAY 12

50 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**



```
              CLB
ACT MODE
MANAGED
 CI
 40           PRED TO FL250
 MANAGED      UTC      DIST
250          1014        66
  PRESEL
*[ ]


 PREV                  NEXT
<PHASE               PHASE>
```

```
              CLB
ACT MODE
SELECTED
 CI
40            PRED TO FL250
 MANAGED      UTC      DIST
 300/.81
 SELECTED
 270/.80      1014       20

 EXPEDITE     1012       10
 ACTIVATE              NEXT
<APPR PHASE          PHASE>
```

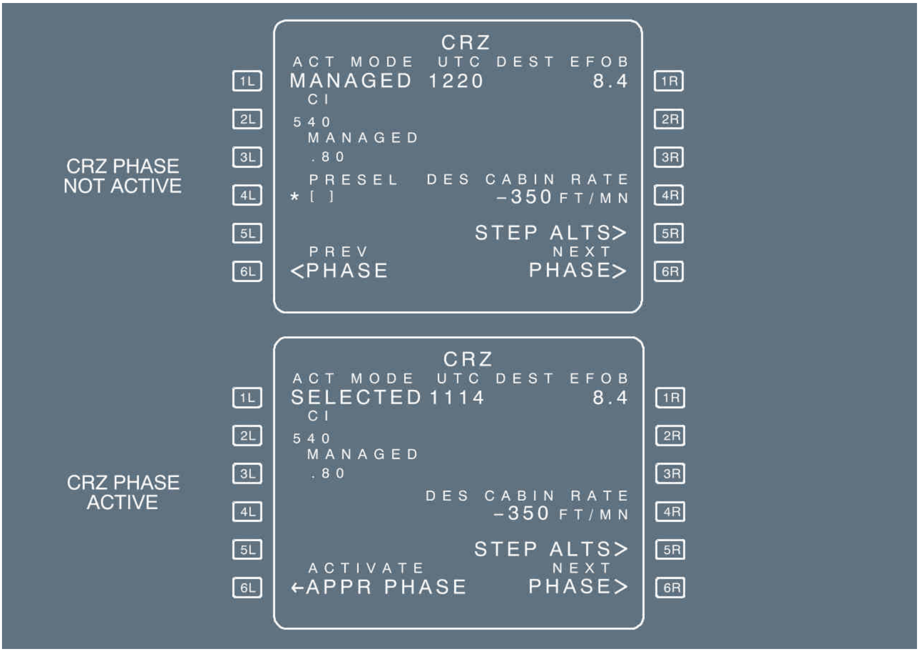
TITLE	CLB is displayed in large white fonts when the climb phase is inactive, and in large green fonts if it is active.
[1L] ACT MODE	This field displays the preselected or active speed mode: SELECTED or MANAGED. The pilot cannot modify it from this field.
[2L] CI (Cost Index)	This field displays the cost index, as initialized on the INIT A or defaulted from the database, or inserted in this field by the pilot. EO LRC automatically replaces the cost index value in case of engine-out.
[3L] MANAGED	This field displays the FMGS computed ECON speed/Mach (*Refer to DSC-22_20-40-10 Optimization*). Before CLIMB phase is active, if the preselected speed mode is SELECTED, a star is displayed next to the MANAGED speed. Pressing the 3L key in this case preselects MANAGED speed, and 4L reverts to brackets.

[4L] PRESEL or SELECTED	If the climb phase is not active: This field displays PRESEL as long as the climb phase is not active. The pilot can enter a preselected speed only. If the climb phase is active: The title of this field becomes SELECTED. This field displays the selected (or preselected) SPD or MACH target. The pilot cannot modify it directly in this field, but can adjust it with the SPD/MACH selection knob on the FCU. If the pilot pushes in the FCU SPD/MACH selection knob to revert to managed speed, the system selects (or reselects) ECON SPD/MACH and [4L] is blank.
[5L] Blank or EXPEDITE	This field is blank as long as the aircraft is in preflight. This field displays this legend when the takeoff or climb phase is active. The flight crew cannot engage EXPEDITE from this field. It indicates the time and distance required to reach the altitude displayed in the 2R field, in case of climb at green dot.
[6L] PREV PHASE	This field displays this legend if climb phase is not active. The pilot presses this key to call up the takeoff page.
[6L] ACTIVATE APPR PHASE	The field displays this legend if the climb phase is active. Pressing this key once displays “CONFIRM APPR PHASE*”. Pressing it again activates the approach phase.
[1R] EO CLR	The system displays the EO CLR prompt in case of engine out in climb.
[2R] PRED TO...	This field displays the target altitude for the predictions shown in 3R, 4R, or 5L. It defaults to FCU altitude, but the pilot can modify it to any altitude below CRZ FL.
[3R] [4R] [5R]	These fields show time and distance predictions for the target altitude selected in [2R], computed for the current vertical mode and speed mode (MANAGED, SELECTED). These fields are displayed only while the takeoff, or climb phase is active.
[6R] NEXT PHASE	The flight crew presses this key to call up the PERF CRZ page.

PERF CRUISE PAGE

Ident.: DSC-22_20-50-10-25-00000601.0009001 / 30 MAR 15

51 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

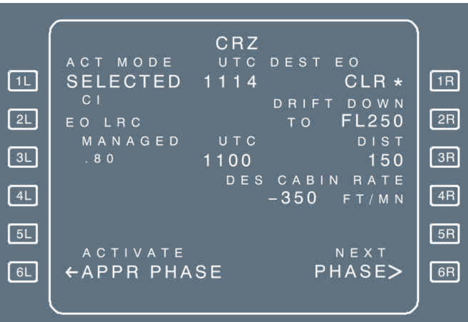

CRZ PHASE
NOT ACTIVE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
                  CRZ
ACT MODE     UTC DEST  EFOB
MANAGED  1220           8.4
 CI
540
 MANAGED
 .80
 PRESEL      DES CABIN RATE
* [ ]           -350 FT/MN
                STEP ALTS>
 PREV                 NEXT
<PHASE              PHASE>
```

CRZ PHASE
ACTIVE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

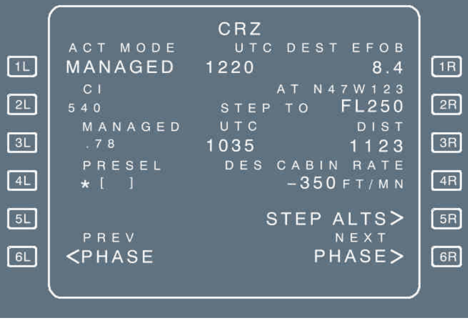
```
                  CRZ
ACT MODE     UTC DEST  EFOB
SELECTED 1114           8.4
 CI
540
 MANAGED
 .80
             DES CABIN RATE
                -350 FT/MN
                STEP ALTS>
 ACTIVATE             NEXT
←APPR PHASE         PHASE>
```

PERF CRZ PAGE IN EO CONDITION



```
                 CRZ
ACT MODE      UTC  DEST  EO
SELECTED     1114       CLR*
  CI                 DRIFT DOWN
EO LRC                TO  FL250
  MANAGED      UTC         DIST
  .80         1100          150
                DES CABIN RATE
                  -350   FT/MN

  ACTIVATE                NEXT
←APPR PHASE             PHASE>
```

PERF CRZ PAGE WITH PREPLANNED STEP



```
                 CRZ
ACT MODE       UTC  DEST  EFOB
MANAGED       1220         8.4
  CI                AT N47W123
540            STEP TO   FL250
  MANAGED      UTC        DIST
  .78         1035        1123
  PRESEL        DES CABIN RATE
  * [  ]          -350 FT/MN
                    STEP ALTS>
  PREV                    NEXT
<PHASE                  PHASE>
```

TITLE	CRZ in white large font, when cruise phase is not active, in green large font, when it is.
[1L] ACT MODE	This field shows the preselected or active speed mode: SELECTED or MANAGED. The pilot cannot modify it through this field.
[2L] CI	This field shows the cost index as initialized on the INIT A page or defaulted from the database, or as inserted in this field by the crew. EO LRC replaces automatically the cost index value in case of engine out.
[3L] MANAGED	This field displays the FMGS computed ECON speed/Mach (*Refer to DSC-22_20-40-10 Optimization*). Before CRUISE phase is active, if the preselected speed mode is SELECTED, a star is displayed next to the MANAGED speed. Pressing the 3L key in this case preselects MANAGED speed, and 4L reverts to brackets.

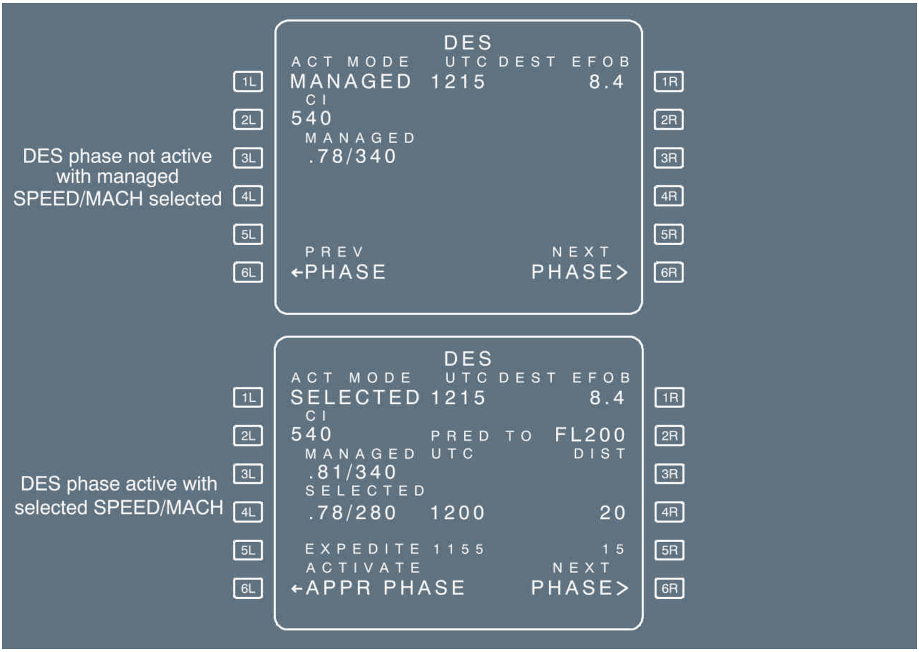
[4L] PRESEL	If cruise phase is not active: The pilot can enter a preselected speed or Mach number. If cruise phase is active: This field is blank. *Note: If the flight crew enters a value in the PRESEL field during the cruise altitude capture (ALT CRZ*), the FCU selected speed may revert to M 0.01.*
[6L] PREV PHASE or	The pilot can press this key to call up the climb page, if the cruise phase is not yet active.
[6L] ACTIVATE APPR PHASE	This field displays this legend if the cruise phase is active. The flight crew presses the key once to change the legend to “CONFIRM APPR PHASE*”. A second press activates the approach phase. *Note: If the pilot activates the approach phase inadvertently, it can reselect the cruise flight level into the progress page to reactivate the cruise phase.*
[1R] TIME/UTC DES EFOB	Before takeoff this field displays the flight time to destination and the predicted remaining fuel on board. If the crew enters an estimated takeoff time, the field displays automatically the predicted arrival time (UTC) at destination. After takeoff it displays the predicted arrival time at destination (UTC) and the remaining fuel on board (DEST EFOB) at destination, in green font. The DEST EFOB field will turn to amber, if the EFOB at destination becomes less than the MIN DEST FOB value displayed on the FUEL PRED page. EO CLR is displayed when an engine-out is detected.
[2R] STEP TO FL XX, DRIFT DOWN TO FL XX, or TO T/D	The field, in combination with 3R, displays the predictions for the step point and the step altitude, the drift down altitude, or the Top of Descent.
[3R] TIME/UTC and DIST	This field displays the time and distance to go to the various points identified in 2R.
[4R] DES CABIN RATE	This field displays MAX [computed DES cabin rate, maximum descent cabin rate]. The pilot may modify the value: the FM recomputes then the top of descent in order to match this value. If the FM cannot match the pilot entry, the FM computed value overwrites the pilot entry. A clear action reverts to the default value (-350 ft/min). DES CAB RATE being a negative value, 'minus” is not a necessary entry.
[5R] STEP ALTS	This key calls up the STEP ALTS page (vertical revision *Refer to DSC-22_20-50-10-25 VERTICAL REVISION Pages*).

[6R] NEXT PHASE	This key calls up the DES page.

PERF DESCENT PAGE

Ident.: DSC-22_20-50-10-25-00000602.0011001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324


DES phase not active
with managed
SPEED/MACH selected
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DES
ACT MODE
UTC DEST EFOB
MANAGED 1215 8.4
CI
540
MANAGED
.78/340
PREV
←PHASE
NEXT
PHASE>
DES phase active with
selected SPEED/MACH
DES
ACT MODE
UTC DEST EFOB
SELECTED 1215 8.4
CI
540
PRED TO FL200
MANAGED
UTC
DIST
.81/340
SELECTED
.78/280 1200 20
EXPEDITE 1155 15
ACTIVATE
←APPR PHASE
NEXT
PHASE>

TITLE	DES is in large white font if the descent phase is not active; it is in large green font, if it is.
[1L] ACT MODE	This field displays the preselected or active speed mode (MANAGED or SELECTED). The flight crew cannot modify it through this field.
[2L] CI	This field displays the cost index, as initialized on the INIT A page or defaulted from the database, or inserted in this field by the flight crew. The flight crew cannot modify it when the descent phase is active.

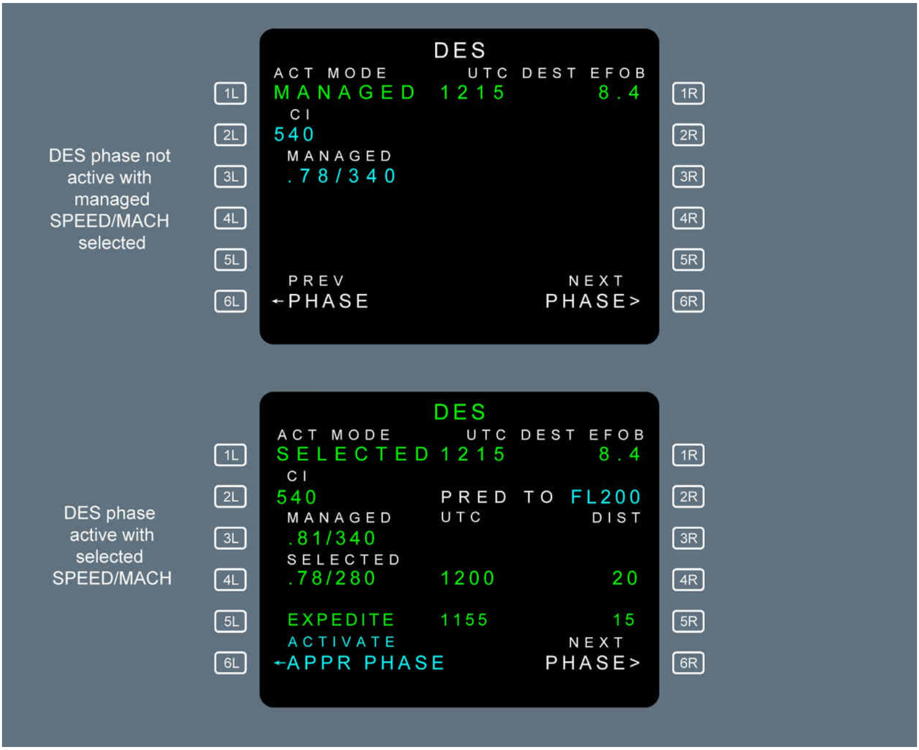
[3L] MANAGED	If the descent phase is not active: Before the flight crew makes any entry. This field displays MANAGED in white, with the associated ECON descent Mach or speed in blue. The crew may overwrite the ECON descent Mach or speed by entering a Mach number or a speed in this field. The system uses the pilot entry to compute the descent profile. The descent may be flown in managed using this new pilot entry. The entry is modifiable. It can be cleared to revert to ECON speed/Mach. If the descent phase is active: The flight crew cannot make an entry in this field. The field displays the ECON speed/Mach or the speed/Mach value previously entered by the pilot.
[4L] blank or SELECTED	If the descent phase is not active, or the descent phase is active but the active speed mode is MANAGED: This field is blank. If the descent phase is active and the active speed mode is SELECTED: The field displays the speed or Mach target manually selected by the pilot. “SELECTED” is displayed in the [1L] field. To modify the field value, the pilot will use the SPD/MACH selector knob of the FCU. [4L] field and FCU window will display the same value. Pushing in the FCU speed selector knob activates the managed SPD/MACH target displayed in the [3L] field.
[5L] Blank or EXPEDITE	If the descent phase is not active this field is blank. Displays this legend if the descent phase is active. It indicates the time and distance required to reach the altitude displayed in the 2R field at MMO/VMO speed. The pilot cannot select the EXPEDITE mode through this field.
[6L] PREV PHASE or ACTIVATE APPR PHASE	This key calls up the cruise phase page if the descent phase is not yet active. Displayed if the descent phase is active. First press causes “CONFIRM APPR PHASE” to be displayed. Second press activates the approach phase.

[1R] TIME/UTC DEST EFOB	Before takeoff, this field displays the flight time to destination and the predicted remaining fuel on board. If the crew enters an estimated takeoff time, the field displays automatically the predicted arrival time (UTC). After takeoff, it displays the predicted arrival time at destination (UTC) and the remaining fuel on board (DEST EFOB) at destination in green font. The DEST EFOB field will turn to amber, if the EFOB at destination becomes less than the MIN DEST FOB value displayed on the FUEL PRED page. EO CLR is displayed when an engine-out is detected.
[2R] PRED TO...	This field displays the target altitude for the predictions in [3R] [4R], or [5R]. The display defaults to the altitude selected on the FCU. The flight crew can modify it to any altitude lower than present altitude.
[3R] [4R] [5R]	These fields display time and distance predictions down to the target altitude selected in [2R], computed for the current vertical mode (DES or OP DES) and the indicated speed mode (MANAGED, SELECTED).
[6R] NEXT PHASE	The pilot presses this key to call up the PERF APPR page.

PERF DESCENT PAGE

Ident.: DSC-22_20-50-10-25-00000602.0029001 / 30 AUG 18

52 **Applicable to: MSN 10949-11597**



DES phase not active with managed SPEED/MACH selected

```
                DES
ACT MODE      UTC DEST EFOB
MANAGED      1215      8.4
 CI
540
 MANAGED
.78/340



 PREV                  NEXT
←PHASE               PHASE>
```

DES phase active with selected SPEED/MACH

```
                DES
ACT MODE      UTC DEST EFOB
SELECTED 1215          8.4
 CI
540           PRED TO FL200
 MANAGED      UTC      DIST
.81/340
 SELECTED
.78/280       1200       20

 EXPEDITE     1155       15
 ACTIVATE              NEXT
←APPR PHASE          PHASE>
```

TITLE	DES is in large white font if the descent phase is not active; it is in large green font, if it is.
[1L] ACT MODE	This field displays the preselected or active speed mode (MANAGED or SELECTED). The flight crew cannot modify it through this field.
[2L] CI	This field displays the cost index, as initialized on the INIT A page or defaulted from the database, or inserted in this field by the flight crew. The flight crew cannot modify it when the descent phase is active.

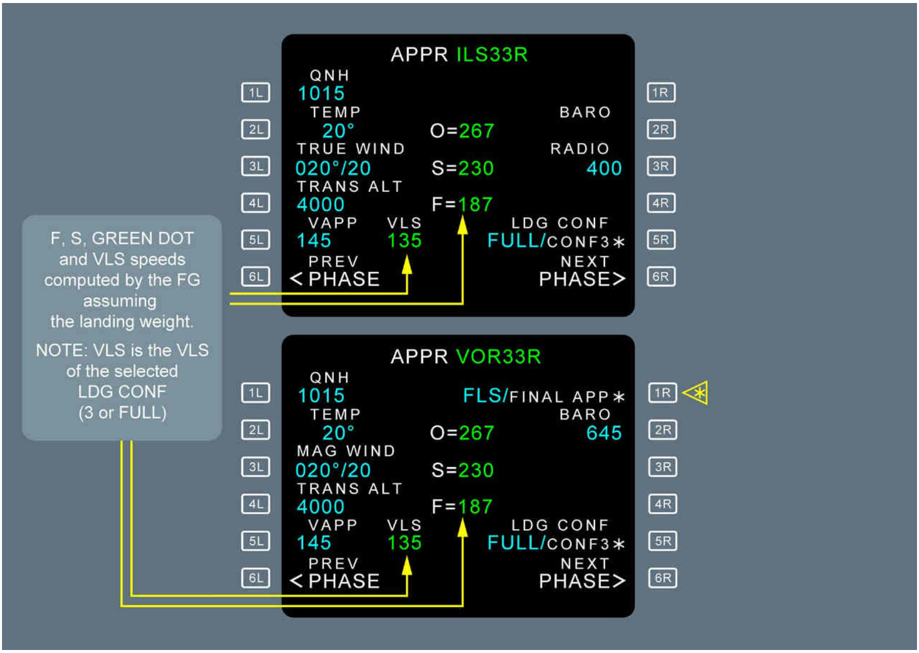
[3L] MANAGED	Before the flight crew makes any entry, this field displays MANAGED in white, with the associated ECON descent Mach or speed in blue. The flight crew may overwrite the ECON descent Mach or speed by entering a Mach number or a speed in this field. The system uses the flight crew entry to compute the descent profile. It is possible to fly the descent in the MANAGED mode, with the use of this new flight crew entry. The flight crew can modify this field either before or after the beginning of the descent, with the application of one of the following: - Enter only a new speed and keep the same managed Mach number (entry format: /XXX), or - Enter a new target speed and enable the FMS to compute a new managed Mach number with the highest possible cross-over altitude (entry format: XXX), or - Clear the entry to revert to ECON Mach/speed.
[4L] blank or SELECTED	If the descent phase is not active, or the descent phase is active but the active speed mode is MANAGED: This field is blank. If the descent phase is active and the active speed mode is SELECTED: The field displays the speed or Mach target manually selected by the pilot. “SELECTED” is displayed in the [1L] field. To modify the field value, the pilot will use the SPD/MACH selector knob of the FCU. [4L] field and FCU window will display the same value. Pushing in the FCU speed selector knob activates the managed SPD/MACH target displayed in the [3L] field.
[5L] Blank or EXPEDITE	If the descent phase is not active this field is blank. Displays this legend if the descent phase is active. It indicates the time and distance required to reach the altitude displayed in the 2R field at MMO/VMO speed. The pilot cannot select the EXPEDITE mode through this field.
[6L] PREV PHASE or ACTIVATE APPR PHASE	This key calls up the cruise phase page if the descent phase is not yet active. Displayed if the descent phase is active. First press causes “CONFIRM APPR PHASE” to be displayed. Second press activates the approach phase.

[1R] TIME/UTC DEST EFOB	Before takeoff, this field displays the flight time to destination and the predicted remaining fuel on board. If the crew enters an estimated takeoff time, the field displays automatically the predicted arrival time (UTC). After takeoff, it displays the predicted arrival time at destination (UTC) and the remaining fuel on board (DEST EFOB) at destination in green font. The DEST EFOB field will turn to amber, if the EFOB at destination becomes less than the MIN DEST FOB value displayed on the FUEL PRED page. EO CLR is displayed when an engine-out is detected.
[2R] PRED TO...	This field displays the target altitude for the predictions in [3R] [4R], or [5R]. The display defaults to the altitude selected on the FCU. The flight crew can modify it to any altitude lower than present altitude.
[3R] [4R] [5R]	These fields display time and distance predictions down to the target altitude selected in [2R], computed for the current vertical mode (DES or OP DES) and the indicated speed mode (MANAGED, SELECTED).
[6R] NEXT PHASE	The pilot presses this key to call up the PERF APPR page.

PERF APPR PAGE

Ident.: DSC-22_20-50-10-25-00016132.0015001 / 10 MAY 21

53 **Applicable to: MSN 10949-11597**



```
            APPR ILS33R
  QNH
 1015
  TEMP                        BARO
   20°          O=267
 TRUE WIND                   RADIO
 020°/20        S=230          400
 TRANS ALT
 4000           F=187
  VAPP    VLS             LDG CONF
 145      135            FULL/CONF3*
  PREV                        NEXT
<PHASE                      PHASE>
```

```
            APPR VOR33R
  QNH
 1015                 FLS/FINAL APP*
  TEMP                        BARO
   20°          O=267          645
 MAG WIND
 020°/20        S=230
 TRANS ALT
 4000           F=187
  VAPP    VLS             LDG CONF
 145      135            FULL/CONF3*
  PREV                        NEXT
<PHASE                      PHASE>
```

F, S, GREEN DOT and VLS speeds computed by the FG assuming the landing weight.

NOTE: VLS is the VLS of the selected LDG CONF (3 or FULL)

TITLE	The page title displays: - APPR, if the Approach phase is not active or APPR, if the Approach phase is active, and - The identification of the selected approach.

[1L] QNH	This field displays brackets, when the aircraft is more than 180 NM from the destination. Inside 180 NM, mandatory amber boxes appear. The flight crew must enter the QNH in hectopascals (hPa) or in inches of mercury (inHg). The value is either entered in hPa or inHg: - For hPa, enter three or four digits, within the allowable range for hPa, or - For inHg, enter the four digits of the desired value with or without a decimal point, within the allowable range for inHg. The system interprets: - 1003 as 1 003 hPa - 2900 as 29.00 inHg - 29.92 as 29.92 inHg. The flight crew can modify this entry at any time. *Note:* *An erroneous entry of an OAT or BARO minimum in QNH field (e.g. 22 °C or 2 200 ft) is accepted by the system. As a consequence, the CPC computes an erroneous cabin pressurization segment during descent, then may trigger a pressurization ECAM alert.*
[2L] TEMP	This field displays the temperature at destination. Until the flight crew enters the temperature, the field displays brackets. The flight crew can modify this figure. The system uses this temperature to refine its computation of the descent profile (ISA model).
[3L] MAG WIND or TRUE WIND	The flight crew enters the wind speed in knots at the destination in this field. The reference of the wind entry is magnetic or true, depending on the airport's reference. The system transmits any entry made in this field to the DESCENT WIND page (which displays wind direction as true, not magnetic, whatever the airport's reference is).
[4L] TRANS ALT	This field displays the transition altitude taken from the database (small font) or entered by the flight crew (large font). The flight crew can modify it at any time.

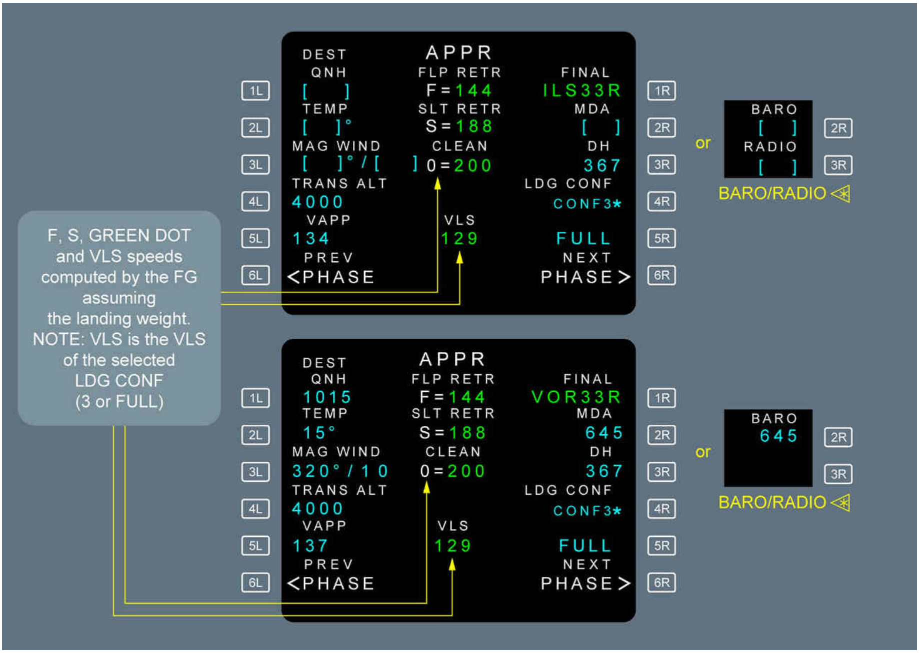
[5L] VAPP	The FMGC computes this approach speed, using the formula: VAPP = VLS + 1/3 of the headwind components (limited to VLS +5 kt as a minimum and VLS +15 kt as a maximum). The flight crew can modify VAPP. A clear action reverts VAPP to the computed value. *Note:* *VLS = 1.23 VS1G of the selected landing configuration (FULL or 3).*
[6L] PREV PAGE	This field displays this legend if the approach phase is not active. Pressing this key calls up the PERF DES page.
[1R] FLS/FINAL APP * ◁	This field is displayed only with the FLS/FINAL APP - Coexistence ◁ . This field enables the flight crew to select FLS or FINAL APP as a guidance mode for the non precision approach selected in the ARRIVAL page. The selected guidance mode is displayed in cyan large font. The other guidance mode is displayed in white small font. If the key is pressed, the CONFIRM FINAL APP or CONFIRM FLS prompt appears. The flight crew must press the key to confirm the choice. *Note:* *1. FLS is the default mode for non precision approach.* *2. In the case of an RNAV(RNP) approach, or if FLS guidance is not available for the selected approach FINAL APP will be automatically selected. In this case, FINAL APP will be displayed and the key is inhibited.*
[2R] BARO	This field displays: - The MDA with associated brackets, or - The MDH with associated brackets, if the aircraft is equipped with QFE ◁ option. The flight crew inserts the value, which can be modified at any time. If the flight crew makes an entry in [3R] field or changes the approach, it clears this figure. The BARO range is 0 to 5 000 ft above landing elevation.
[3R] RADIO	If the flight plan includes an ILS, GLS ◁ or MLS ◁ approach, this field displays RADIO and empty brackets. For a CAT II or CAT III approach, the flight crew inserts the decision height. The system will accept an entry of NO, NODH or NO DH. If the flight crew inserts a BARO value in [2R] field, this erases the decision height, and this field reverts to brackets. The RADIO range is 0 to 700 ft.

[4R] Blank or EO CLR	When the flight phase is Approach and an engine-out is active, the EO CLR prompt appears. The flight crew can deactivate the engine out mode by pressing the key.
[5R] LDG CONF FULL/CONF 3	The flight crew can use this key to select the landing configuration. CONF FULL is the default landing configuration. The selected configuration is displayed in first position. The configuration that is not selected is displayed in second position.
[6R] NEXT PHASE	Pressing this key calls up the PERF GO AROUND page.

PERF APPR PAGE

Ident.: DSC-22_20-50-10-25-00016132.0010001 / 10 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324


1L
2L
3L
4L
5L
6L
DEST
APPR
QNH
FLP RETR
FINAL
[ ]
F=144
ILS33R
TEMP
SLT RETR
MDA
[ ]°
S=188
[ ]
MAG WIND
CLEAN
DH
[ ]°/[ ]
O=200
367
TRANS ALT
LDG CONF
4000
CONF3*
VAPP
VLS
134
129
FULL
PREV
NEXT
<PHASE
PHASE>
1R
2R
3R
4R
5R
6R
or
BARO
[ ]
RADIO
[ ]
2R
3R
BARO/RADIO
F, S, GREEN DOT and VLS speeds computed by the FG assuming the landing weight.
NOTE: VLS is the VLS of the selected LDG CONF (3 or FULL)
DEST
APPR
QNH
FLP RETR
FINAL
1015
F=144
VOR33R
TEMP
SLT RETR
MDA
15°
S=188
645
MAG WIND
CLEAN
DH
320°/10
O=200
367
TRANS ALT
LDG CONF
4000
CONF3*
VAPP
VLS
137
129
FULL
PREV
NEXT
<PHASE
PHASE>
or
BARO
645
2R
3R
BARO/RADIO

TITLE	The page title displays APPR, if the Approach phase is not active or APPR, if it the Approach phase is active.

[1L] QNH	This field displays brackets, when the aircraft is more than 180 NM from the destination. Inside 180 NM, mandatory amber boxes appear. The flight crew must enter the QNH in hectopascals (hPa) or in inches of mercury (inHg). The value is either entered in hPa or inHg: - For hPa, enter three or four digits within the allowable range for hPa, or - For inHg, enter the two digits of the desired value or two digits followed by a decimal point and two additional digits, within the allowable range for inHg. The system interprets: - 1 003 as 1 003 hPa - 29 as 29.00 inHg - 29.92 as 29.92 inHg. The flight crew can modify this entry at any time. *Note:* *An erroneous entry of an OAT or BARO minimum in QNH field (e.g. 22 °C or 2 200 ft) is accepted by the system. As a consequence, the CPC computes an erroneous cabin pressurization segment during descent, then may trigger a pressurization ECAM alert.*
[2L] TEMP	This field displays the temperature at destination. Until the flight crew enters the temperature, the field displays brackets. The flight crew can modify this figure. The system uses this temperature to refine its computation of the descent profile (ISA model).
[3L] MAG WIND	The flight crew enters the magnetic wind in knots at the destination in this field. The system transmits any entry made in this field to the VERTICAL REVISION and FLIGHT PLAN B pages (which display wind direction as true, not magnetic).
[4L] TRANS ALT	This field displays the transition altitude taken from the database (small font) or entered by the flight crew (large font). The flight crew can modify it at any time.

[5L] VAPP	The FMGC computes this approach speed, using the formula: VAPP = VLS + 1/3 of the headwind components (limited to VLS +5 kt as a minimum and VLS +15 kt as a maximum). The flight crew can modify VAPP. A clear action reverts VAPP to the computed value. *Note:* *VLS = 1.23 VS1G of the selected landing configuration (FULL or 3).*
[6L] PREV PAGE	This field displays this legend if the approach phase is not active. Pressing this key calls up the PERF DES page.
[1R] FINAL	This field displays the approach specified in the flight plan. The flight crew cannot modify it through this field.

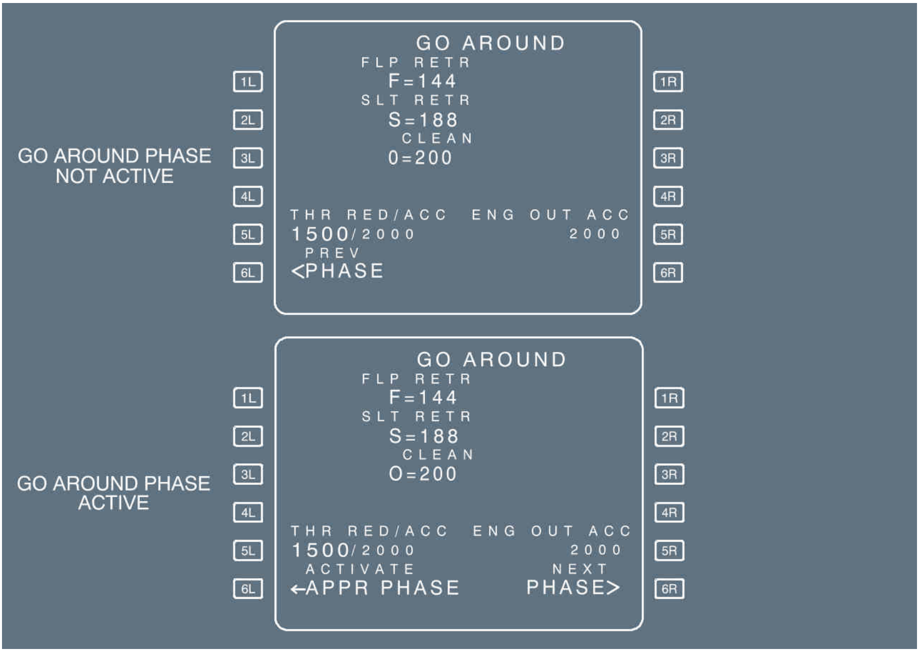
[2R] MDA/MDH or BARO ◁	This field displays:
	- The MDA with associated brackets, or
	- The MDH with associated brackets, if:
	  - The aircraft is equipped with QFE ◁ option, or
	  - The FCU setting is QFE, if the aircraft is equipped with the BARO ◁ option.
	The flight crew inserts the value, which can be modified at any time. If the flight crew makes an entry in [3R] field or changes the approach, it clears this figure.

[3R] DH or RADIO ◁	If the flight plan includes an ILS, GLS ◁ or MLS ◁ approach, this field displays DH or RADIO ◁ and empty brackets. For a CAT II or CAT III approach, the flight crew inserts the decision height. The system will accept an entry of NO, NODH or NO DH. If the flight crew inserts an MDA or an MDH (or a BARO ◁ value) in [2R] field, this erases the decision height, and this field reverts to brackets. The DH or RADIO ◁ range is 0 to 700 ft.
[4R] LDG CONF CONF 3	The flight crew can select CONF 3 by pressing this key. This moves the * down to the [5R] field, that displays FULL.
[5R] FULL	The flight crew can use this key to select CONF FULL when necessary. CONF FULL is the default landing configuration.
[6R] NEXT PHASE	Pressing this key calls up the PERF GO AROUND page.

PERF GO AROUND PAGE

Ident.: DSC-22_20-50-10-25-00000604.0002001 / 01 OCT 12

54 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**


GO AROUND PHASE NOT ACTIVE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
GO AROUND PHASE ACTIVE

GO AROUND
FLP RETR
F=144
SLT RETR
S=188
CLEAN
0=200
THR RED/ACC ENG OUT ACC
1500/2000 2000
PREV
<PHASE

GO AROUND
FLP RETR
F=144
SLT RETR
S=188
CLEAN
O=200
THR RED/ACC ENG OUT ACC
1500/2000 2000
ACTIVATE NEXT
←APPR PHASE PHASE>

TITLE	GO AROUND is in large white font, if the go-around phase is not active; it is in large green font, if it is.

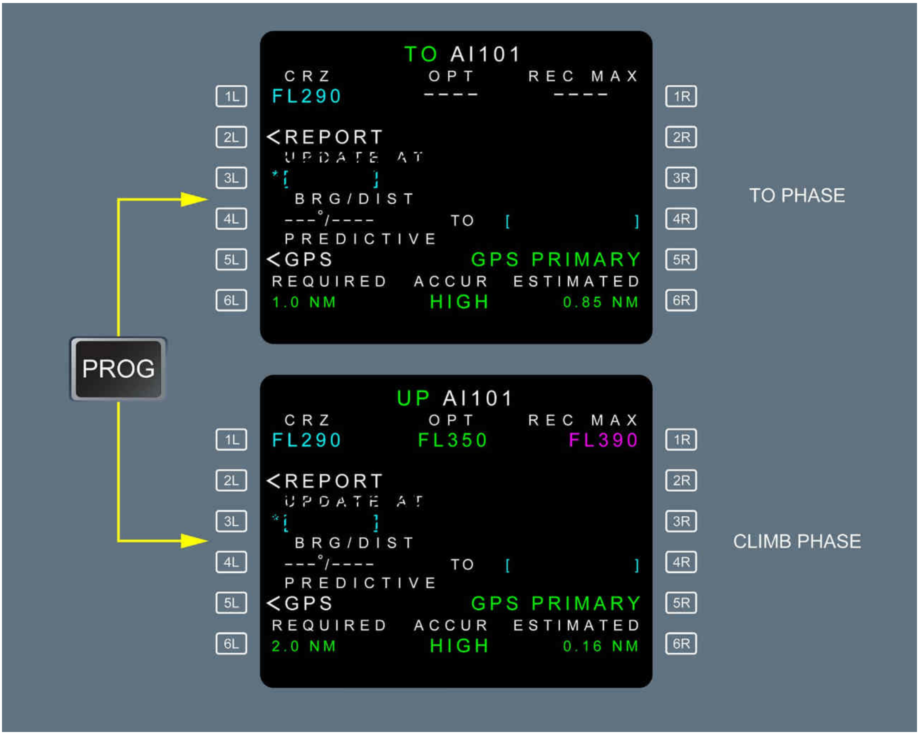
[5L] THR RED ACC	This field displays the thrust reduction altitude and the acceleration altitude. **Thrust reduction altitude:** - Altitude at which thrust must be reduced from takeoff/go-around thrust to maximum climb thrust - “CLB” or “LVR CLB” flashing on flight mode annunciator - Defaults to 1 500 ft above destination runway elevation, or to the altitude set by the airline - Can be modified by the crew (minimum 400 ft above destination runway elevation). **Acceleration altitude:** - Altitude at which target speed jumps to green-dot speed (see the note below) - Defaults to 1 500 ft above destination runway elevation, or to the altitude set by the airline. - Can be modified by the crew, but is always equal to (or higher than) the thrust reduction altitude.
[6L] PREV PHASE or	This field displays this legend if the go-around phase is not active. Pressing the key calls up the PERF APPR page.
ACTIVATE APPR PHASE	This field displays this legend if the go-around phase is active. Pressing it once makes “CONFIRM APPR” appear. A second press activates the approach phase.
[5R] ENG OUT ACC	This display has the same characteristics as the display beside the 5R key on the takeoff page. It is for display only, and the pilot can modify it.
[6R] NEXT PHASE	Pressing this key calls up the PERF APPR page.
[IR] Blank or EO CLR*	This field is normally blank. EO CLR* is displayed when GO AROUND is the active phase and an engine-out condition is detected.

Note: *When the go-around phase is active, if the pilot enables ALTN or if the pilot inserts a new destination in the active flight plan and a new cruise flight level on the progress page, the go-around phase shifts automatically into the climb phase. (The target speed jumps from green dot speed to initial climb speed).*

PROG PAGES

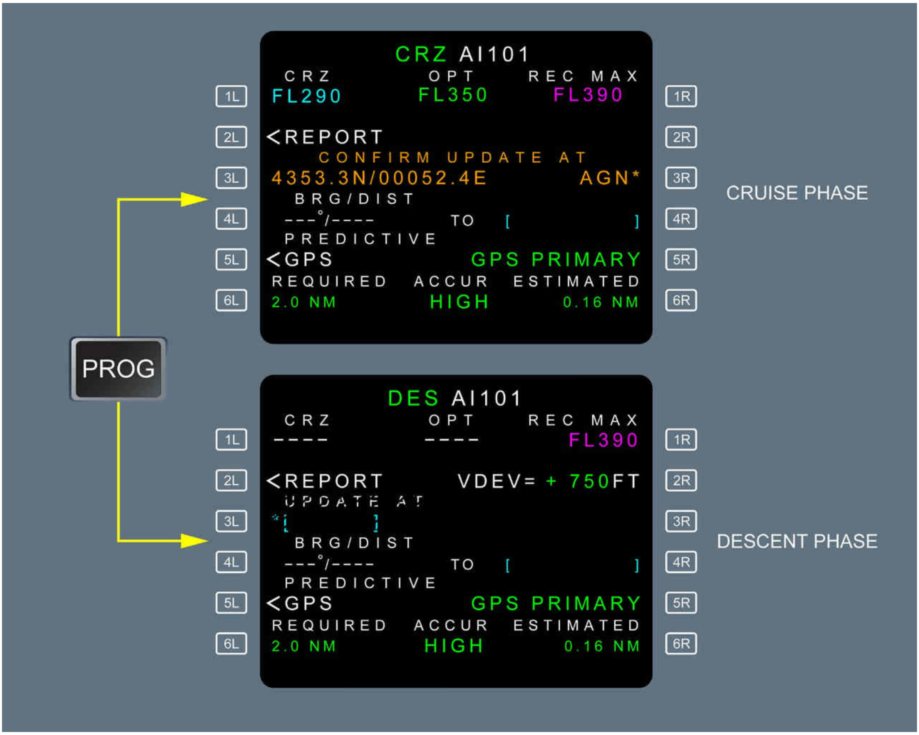
Ident.: DSC-22_20-50-10-25-00000605.0046001 / 10 MAY 22
Applicable to: MSN 01143-01376

The progress page is a multifunction page that enables the pilot to:
- Select a new cruise flight level
- Crosscheck the navigation accuracy of the Flight Management (FM) system and validate it
- Update the FM position
- Monitor the descent.



```
          TO AI101
 CRZ        OPT      REC MAX
FL290       ----       ----
<REPORT
 UPDATE AT
*[         ]
  BRG/DIST
 ---°/----      TO [         ]
 PREDICTIVE
<GPS           GPS PRIMARY
REQUIRED    ACCUR    ESTIMATED
1.0 NM      HIGH       0.85 NM
```

```
          UP AI101
 CRZ        OPT      REC MAX
FL290      FL350      FL390
<REPORT
 UPDATE AT
*[         ]
  BRG/DIST
 ---°/----      TO [         ]
 PREDICTIVE
<GPS           GPS PRIMARY
REQUIRED    ACCUR    ESTIMATED
2.0 NM      HIGH       0.16 NM
```

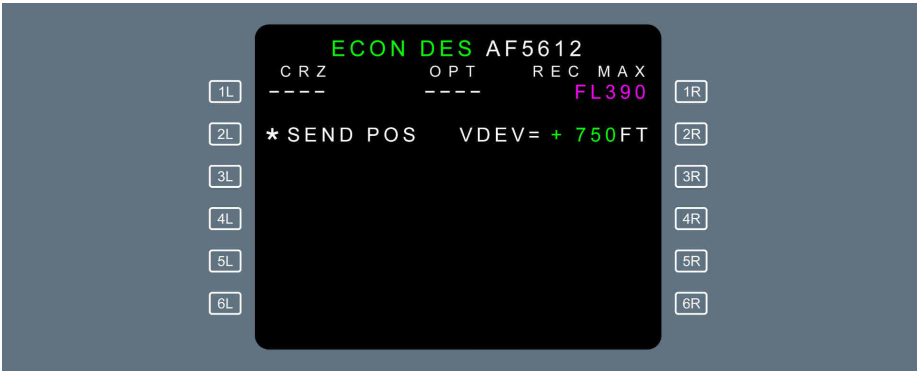


```
        CRZ AI101
  CRZ         OPT      REC MAX
FL290        FL350      FL390
<REPORT
  CONFIRM UPDATE AT
4353.3N/00052.4E          AGN*
  BRG/DIST
 ---°/----     TO  [          ]
 PREDICTIVE
<GPS               GPS PRIMARY
REQUIRED    ACCUR   ESTIMATED
2.0 NM      HIGH       0.16 NM
```

```
        DES AI101
  CRZ         OPT      REC MAX
----         ----       FL390
<REPORT          VDEV= + 750FT
 UPDATE AT
*[       ]
  BRG/DIST
 ---°/----     TO  [          ]
 PREDICTIVE
<GPS               GPS PRIMARY
REQUIRED    ACCUR   ESTIMATED
2.0 NM      HIGH       0.16 NM
```

TITLE	Different for each flight phase (see above). The vertical phase is in large green font. The flight number is in large white font. EO is large amber font, if the engine-out condition is detected.
Line 1 CRZ (blue)	This line displays the cruise flight level, inserted on the INIT A page or directly in this field in blue. If the flight crew uses the FCU to select an altitude that is higher than the one displayed in this field, the system changes the number displayed to agree. In this line, the flight crew cannot insert a flight level that is lower than the FCU-selected altitude. This field shows dashes when the descent or approach phase is active.
OPT	This field displays the optimum flight level (in green), that is computed based on the current gross weight, cost index, temperature and wind. This flight level requires a 5 min minimum cruise at a minimum cruise flight level of FL 100. It displays dashes if an engine-out is detected.

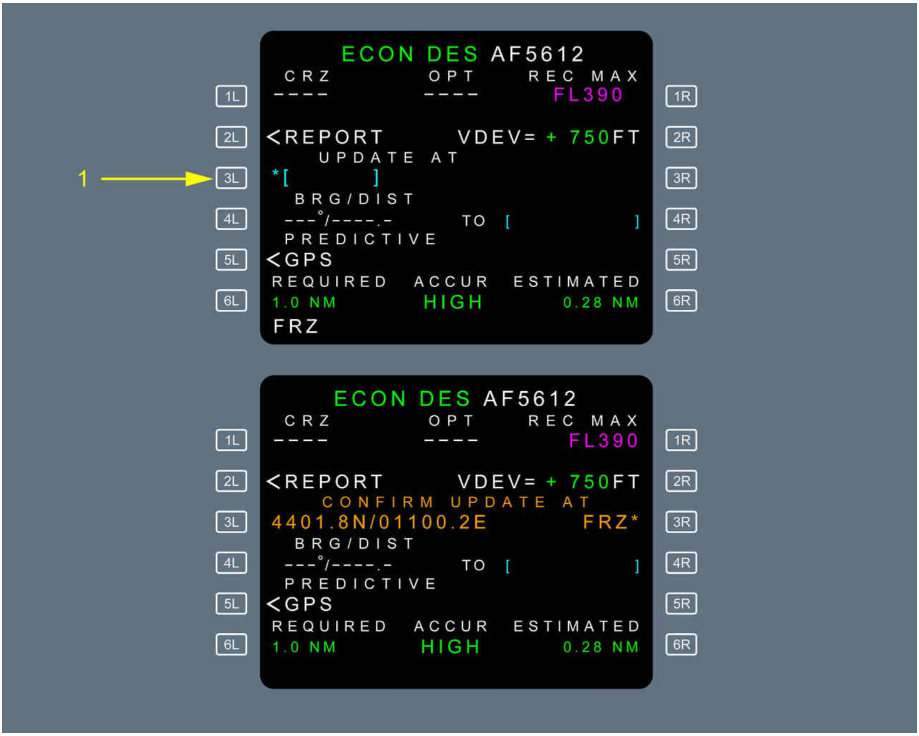
REC MAX	This field displays the recommended maximum altitude (in magenta), that is computed based on the current gross weight and temperature, and assuming that the anti-ice is off (if icing conditions are expected, use the performance application of the EFB). It provides the aircraft with a 0.3 g buffet margin, a minimum rate of climb at MAX CL thrust, and level flight at MAX CRZ thrust. This field is limited to FL 398. If one engine is out, this field displays the recommended maximum engine-out altitude, that is computed based on the long-range cruise speed and assuming that anti-ice is off. _Note:_ *The OPT or REC MAX field may display a value up to FL 398. However, the current aircraft's maximum certified altitude is 39 100 ft. Disregard the OPT or REC MAX value, if it exceeds FL 391.*
[2L] REPORT	This key calls up the REPORT PAGE.
[2R] VDEV	This field is displayed during the descent and approach phases, when NAV mode is engaged, or in HDG mode, provided that the crosstrack error (XTK) is less than 5 NM. It displays the vertical deviation between the aircraft's current altitude and the FMS-computed vertical profile.



```
      ECON DES AF5612
 CRZ          OPT       REC MAX
----          ----        FL390

*SEND POS       VDEV= + 750FT
```

Line 3 POSITION UPDATE AT ◁*	The flight crew can update the FMS position via this field by entering either the IDENT of a waypoint, a NAVAID, an airport, a latitude and longitude (LL), a place/bearing/distance, or a place-bearing/place-bearing (PBX). When the flight crew has entered this data, this field changes its format to: “CONFIRM UPDATE AT”, followed by the latitude/longitude and IDENT of the inserted position with an asterisk. The flight crew presses the right-hand key adjacent to the asterisk to confirm the update, when the aircraft overflies the inserted position.

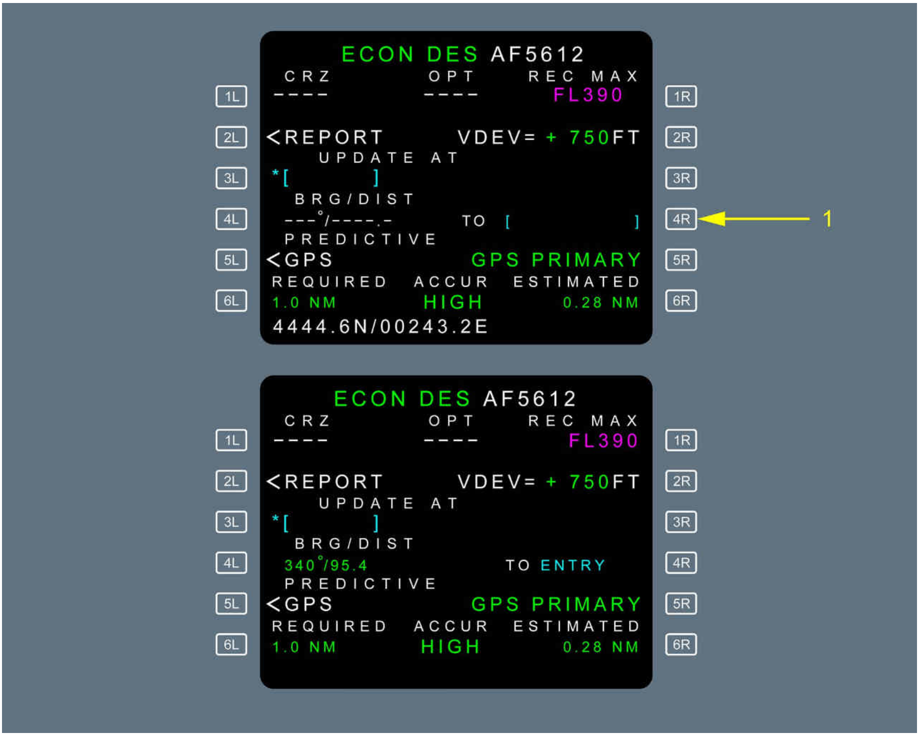
Note: *If no IDENT has been inserted, the field displays “ENTRY” instead of an IDENT.*



```
      ECON DES AF5612
 CRZ         OPT        REC MAX
----        ----         FL390
<REPORT          VDEV= + 750FT
     UPDATE AT
*[        ]
   BRG/DIST
 ---°/----.-       TO [          ]
 PREDICTIVE
<GPS
REQUIRED    ACCUR     ESTIMATED
1.0 NM       HIGH       0.28 NM
FRZ
```

```
      ECON DES AF5612
 CRZ         OPT        REC MAX
----        ----          FL390
<REPORT          VDEV= + 750FT
     CONFIRM UPDATE AT
4401.8N/01100.2E          FRZ*
   BRG/DIST
 ---°/----.-       TO [          ]
 PREDICTIVE
<GPS
REQUIRED    ACCUR     ESTIMATED
1.0 NM       HIGH       0.28 NM
```

Line 4 BRG/DIST	On this line, the pilot can enter an airport, a waypoint, a NAVAID, or a runway. The pilot may enter each as an IDENT, a latitude/longitude (LL), a place/bearing/distance (PBD), or a place-bearing/place-bearing (PBX). The field then shows the FMGC-computed bearing and distance to the site from the aircraft's present position. The last distance digit is in 1/10 of a NM. If it does not have an IDENT, the point is called “ENTRY”. Example: BRG/DIST 340 °/95.4 to ENTRY



```
ECON DES AF5612
 CRZ          OPT        REC MAX
----         ----          FL390
<REPORT             VDEV= + 750FT
    UPDATE AT
*[          ]
  BRG/DIST
 ---°/----.-          TO [          ]
 PREDICTIVE
<GPS                   GPS PRIMARY
REQUIRED       ACCUR      ESTIMATED
1.0 NM         HIGH          0.28 NM
4444.6N/00243.2E
```

```
ECON DES AF5612
 CRZ          OPT        REC MAX
----         ----          FL390
<REPORT             VDEV= + 750FT
    UPDATE AT
*[          ]
  BRG/DIST
 340°/95.4              TO ENTRY
 PREDICTIVE
<GPS                   GPS PRIMARY
REQUIRED       ACCUR      ESTIMATED
1.0 NM         HIGH          0.28 NM
```

[5L] PREDICTIVE GPS	This prompt gives access to the PREDICTIVE GPS page.

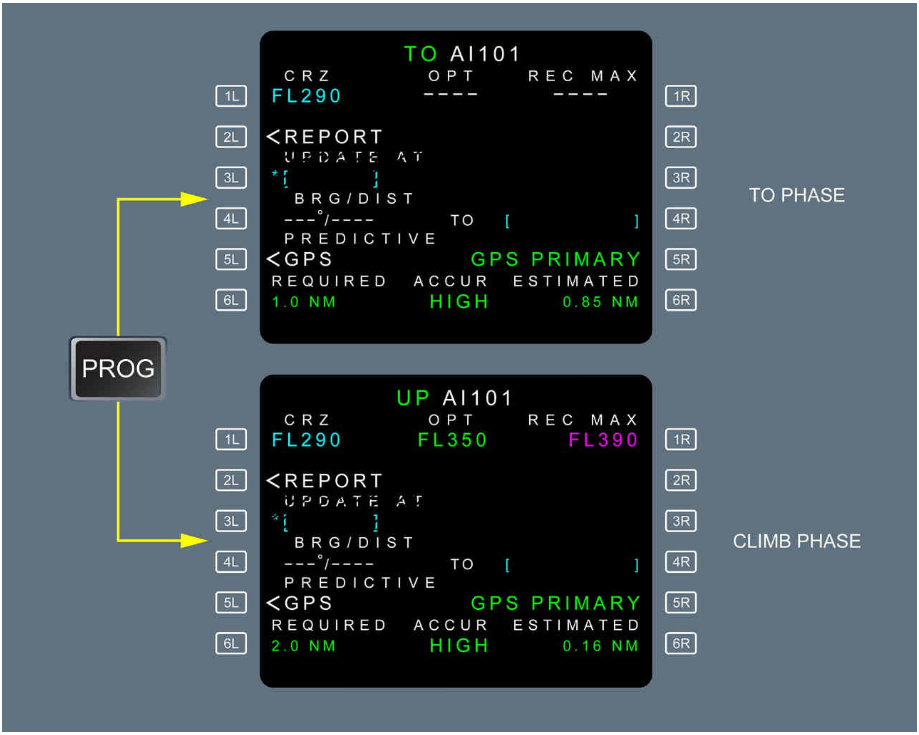
[5R] GPS PRIMARY	This prompt is displayed, when the FMS navigation mode is GPS PRIMARY. When GPS PRIMARY is not available, or navigation mode is not GPS/IRS, this field is blank. The scratchpad displays the relevant “GPS PRIMARY″ message when this prompt appears; and “GPS PRIMARY LOST”, when the field turns to blank.
[6L] REQUIRED	This field displays the default value for the required navigation accuracy level. The pilot can modify it. Provided no pilot entry has been made, the default value changes according to the actual flight area (En route, terminal, approach).
ACCUR HIGH/LOW	This field shows the flight management system's estimate of the navigational accuracy. “HIGH” indicates that the FMS estimates that the navigational accuracy matches the accuracy criteria of the area currently flown. “LOW” indicates that the criteria are not matched.
[6R] ESTIMATED	This field displays the current estimated navigation accuracy value (EPE) as computed by the FMS.

PROG PAGES

Ident.: DSC-22_20-50-10-25-00000605.0051001 / 10 MAY 22

55 **Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

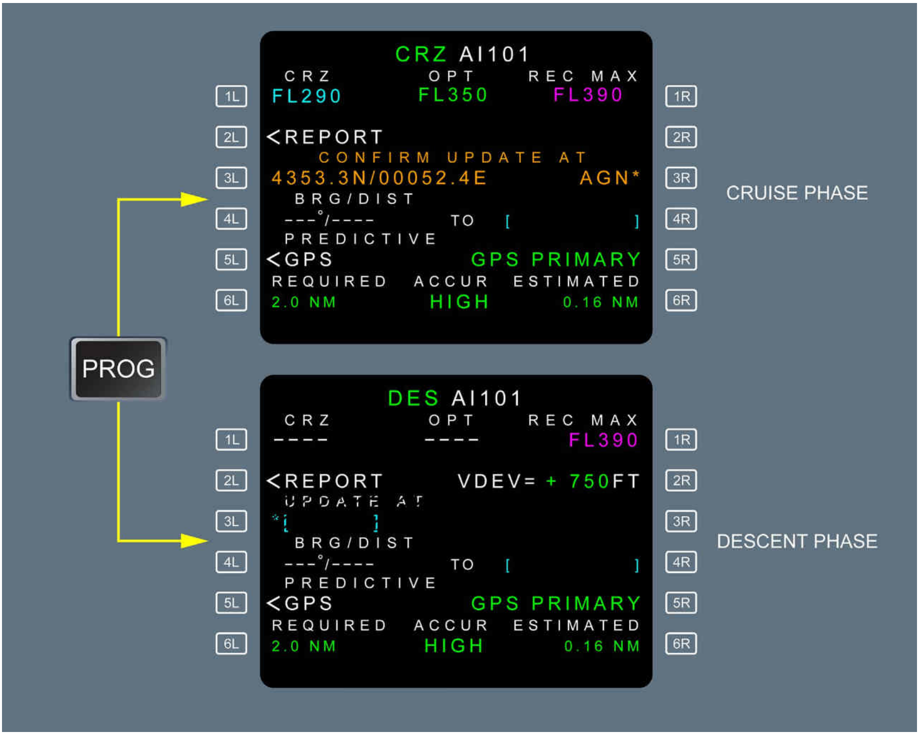
The progress page is a multifunction page that enables the pilot to:
- Select a new cruise flight level
- Crosscheck the navigation accuracy of the Flight Management (FM) system and validate it
- Update the FM position
- Monitor the descent.



```
         TO AI101
 CRZ          OPT        REC MAX
FL290         ----         ----
<REPORT
 UPDATE AT
*[        ]
  BRG/DIST
 ---°/----       TO  [           ]
 PREDICTIVE
<GPS               GPS PRIMARY
REQUIRED     ACCUR    ESTIMATED
1.0 NM       HIGH       0.85 NM
```

```
         UP AI101
 CRZ          OPT        REC MAX
FL290        FL350        FL390
<REPORT
 UPDATE AT
*[        ]
  BRG/DIST
 ---°/----       TO  [           ]
 PREDICTIVE
<GPS               GPS PRIMARY
REQUIRED     ACCUR    ESTIMATED
2.0 NM       HIGH       0.16 NM
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PROG
TO PHASE
CLIMB PHASE

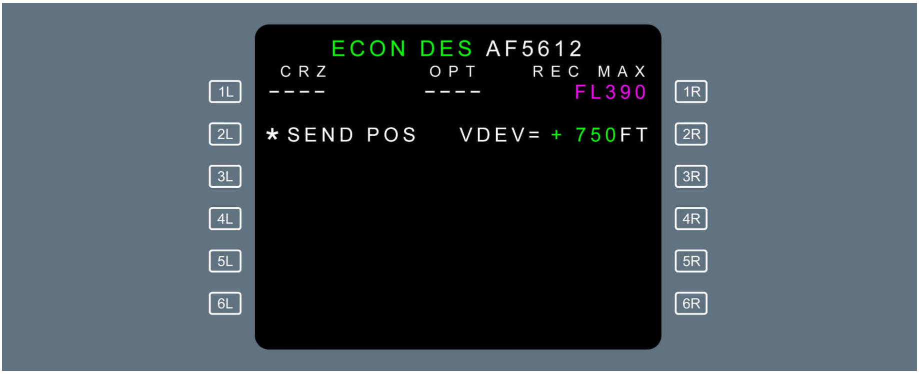


```
            CRZ AI101
  CRZ          OPT        REC MAX
 FL290        FL350        FL390
<REPORT
      CONFIRM UPDATE AT
 4353.3N/00052.4E            AGN*
   BRG/DIST
  ---°/----       TO   [          ]
  PREDICTIVE
<GPS                  GPS PRIMARY
 REQUIRED     ACCUR     ESTIMATED
 2.0 NM        HIGH       0.16 NM
```

```
            DES AI101
  CRZ          OPT        REC MAX
 ----         ----         FL390
<REPORT             VDEV= + 750FT
  UPDATE AT
 *[          ]
   BRG/DIST
  ---°/----       TO   [          ]
  PREDICTIVE
<GPS                  GPS PRIMARY
 REQUIRED     ACCUR     ESTIMATED
 2.0 NM        HIGH       0.16 NM
```

TITLE	Different for each flight phase (see above). The vertical phase is in large green font. The flight number is in large white font. EO is large amber font, if the engine-out condition is detected.
Line 1 CRZ (blue)	This line displays the cruise flight level, inserted on the INIT A page or directly in this field in blue. If the flight crew uses the FCU to select an altitude that is higher than the one displayed in this field, the system changes the number displayed to agree. In this line, the flight crew cannot insert a flight level that is lower than the FCU-selected altitude. This field shows dashes when the descent or approach phase is active.
OPT	This field displays the optimum flight level (in green), that is computed based on the current gross weight, cost index, temperature and wind. This flight level requires a 5 min minimum cruise at a minimum cruise flight level of FL 100. It displays dashes if an engine-out is detected.

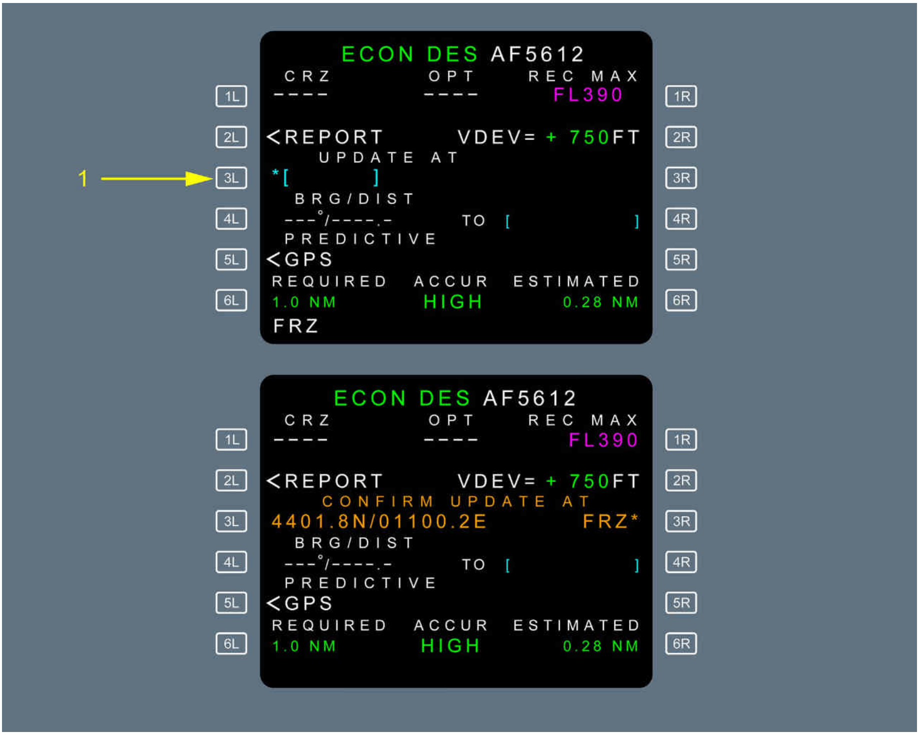
REC MAX	This field displays the recommended maximum altitude (in magenta), that is computed based on the current gross weight and temperature, and assuming that the anti-ice is off (if icing conditions are expected, use the performance application of the EFB). It provides the aircraft with a 0.3 g buffet margin, a minimum rate of climb at MAX CL thrust, and level flight at MAX CRZ thrust. This field is limited to FL 398. If one engine is out, this field displays the recommended maximum engine-out altitude, that is computed based on the long-range cruise speed and assuming that anti-ice is off.
[2L] REPORT	This key calls up the REPORT PAGE.
[2R] VDEV	This field is displayed during the descent and approach phases, when NAV mode is engaged, or in HDG mode, provided that the crosstrack error (XTK) is less than 5 NM. It displays the vertical deviation between the aircraft's current altitude and the FMS-computed vertical profile.



```
     ECON DES AF5612
 CRZ          OPT       REC MAX
----         ----         FL390

*SEND POS       VDEV= + 750FT
```

Line 3 POSITION UPDATE AT ◁	The flight crew can update the FMS position via this field by entering either the IDENT of a waypoint, a NAVAID, an airport, a latitude and longitude (LL), a place/bearing/distance, or a place-bearing/place-bearing (PBX). When the flight crew has entered this data, this field changes its format to: “CONFIRM UPDATE AT”, followed by the latitude/longitude and IDENT of the inserted position with an asterisk. The flight crew presses the right-hand key adjacent to the asterisk to confirm the update, when the aircraft overflies the inserted position.

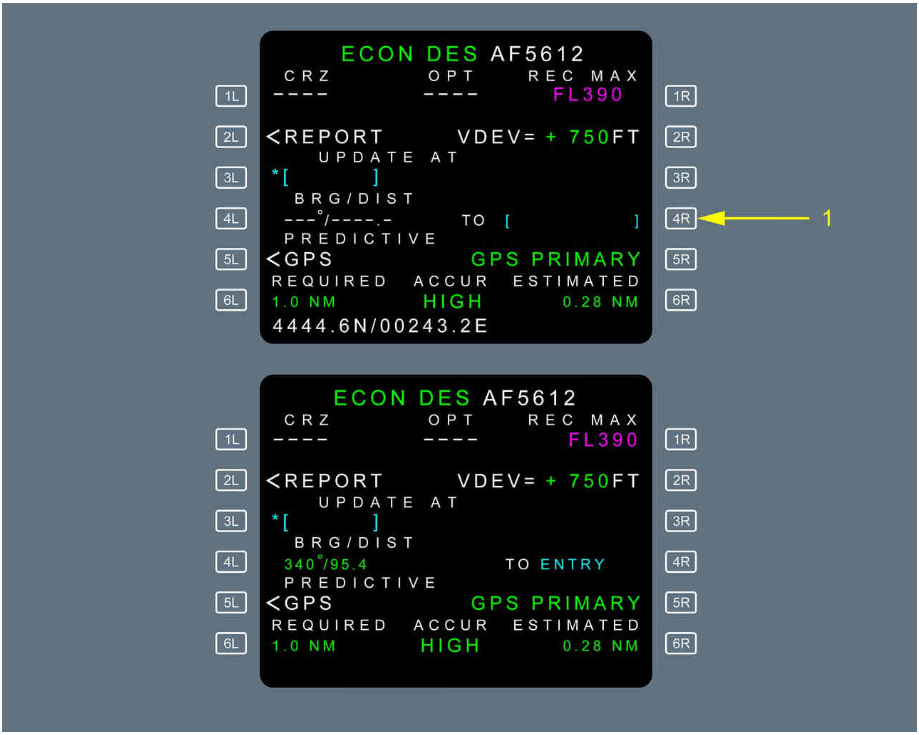
Note: *If no IDENT has been inserted, the field displays “ENTRY” instead of an IDENT.*



```
        ECON DES AF5612
 CRZ            OPT       REC MAX
----           ----        FL390
<REPORT           VDEV= + 750FT
      UPDATE AT
*[        ]
    BRG/DIST
---°/----.-         TO [           ]
 PREDICTIVE
<GPS
REQUIRED      ACCUR      ESTIMATED
1.0 NM         HIGH        0.28 NM
FRZ
```

```
        ECON DES AF5612
 CRZ            OPT       REC MAX
----           ----         FL390
<REPORT           VDEV= + 750FT
      CONFIRM UPDATE AT
4401.8N/01100.2E             FRZ*
    BRG/DIST
---°/----.-         TO [           ]
 PREDICTIVE
<GPS
REQUIRED      ACCUR      ESTIMATED
1.0 NM         HIGH        0.28 NM
```

Line 4 BRG/DIST	On this line, the pilot can enter an airport, a waypoint, a NAVAID, or a runway. The pilot may enter each as an IDENT, a latitude/longitude (LL), a place/bearing/distance (PBD), or a place-bearing/place-bearing (PBX). The field then shows the FMGC-computed bearing and distance to the site from the aircraft's present position. The last distance digit is in 1/10 of a NM. If it does not have an IDENT, the point is called “ENTRY”. <u>Example:</u> BRG/DIST 340 °/95.4 to ENTRY



```
      ECON DES AF5612
 CRZ           OPT      REC MAX
----           ----      FL390
<REPORT           VDEV= + 750FT
     UPDATE AT
*[         ]
   BRG/DIST
 ---°/----.-        TO [           ]
 PREDICTIVE
<GPS                GPS PRIMARY
REQUIRED    ACCUR    ESTIMATED
1.0 NM       HIGH       0.28 NM
4444.6N/00243.2E
```

```
     ECON DES AF5612
 CRZ           OPT      REC MAX
----           ----       FL390
<REPORT           VDEV= + 750FT
     UPDATE AT
*[         ]
   BRG/DIST
 340°/95.4              TO ENTRY
 PREDICTIVE
<GPS                GPS PRIMARY
REQUIRED    ACCUR    ESTIMATED
1.0 NM       HIGH       0.28 NM
```

[5L] PREDICTIVE GPS	This prompt gives access to the PREDICTIVE GPS page.
[5R] GPS PRIMARY	This prompt is displayed, when the FMS navigation mode is GPS PRIMARY. When GPS PRIMARY is not available, or navigation mode is not GPS/IRS, this field is blank. The scratchpad displays the relevant “GPS PRIMARY″ message when this prompt appears; and “GPS PRIMARY LOST”, when the field turns to blank.
[6L] REQUIRED	This field displays the default value for the required navigation accuracy level. The pilot can modify it. Provided no pilot entry has been made, the default value changes according to the actual flight area (En route, terminal, approach).
ACCUR HIGH/LOW	This field shows the flight management system's estimate of the navigational accuracy. “HIGH” indicates that the FMS estimates that the navigational accuracy matches the accuracy criteria of the area currently flown. “LOW” indicates that the criteria are not matched.

[6R] ESTIMATED	This field displays the current estimated navigation accuracy value (EPE) as computed by the FMS.

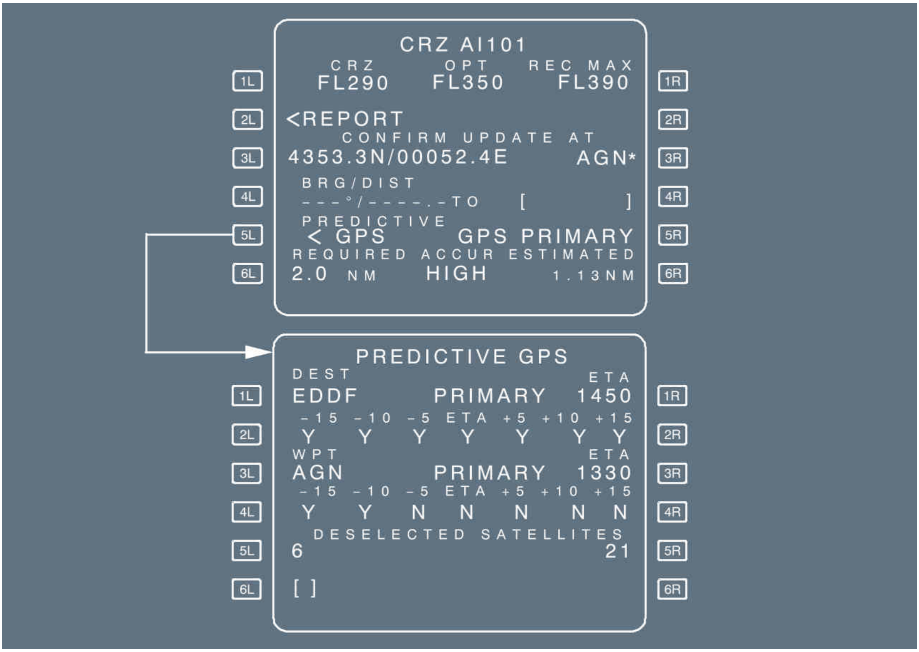
PREDICTIVE GPS PAGES

Ident.: DSC-22_20-50-10-25-00009139.0001001 / 31 AUG 17

56 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Note: 1. *This page is only operative with Honeywell ADIRS.*
2. *This page cannot be used as a substitute to determine pre-flight planning RAIM availability when required by operational regulations. Refer to PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed).*

The pilot accesses this page by pressing the PREDICTIVE GPS prompt of the PROG page.
This page displays information relative to theoretical predictive availability of GPS PRIMARY at destination, and at any waypoint selected by the crew.



```
              CRZ AI101
    CRZ           OPT          REC MAX
  FL290         FL350          FL390
<REPORT
         CONFIRM UPDATE AT
4353.3N/00052.4E              AGN*
  BRG/DIST
  ---°/----.-TO    [             ]
  PREDICTIVE
 < GPS              GPS PRIMARY
REQUIRED ACCUR ESTIMATED
2.0 NM       HIGH           1.13NM
```

```
            PREDICTIVE GPS
DEST                          ETA
EDDF            PRIMARY      1450
 -15  -10  -5  ETA  +5  +10  +15
 Y     Y    Y    Y    Y    Y    Y
WPT                           ETA
AGN             PRIMARY      1330
 -15  -10  -5  ETA  +5  +10  +15
 Y     Y    N    N    N    N    N
   DESELECTED SATELLITES
6                              21
[ ]
```

[1L] DEST	Destination, airport as currently selected in active flight plan. It is not modifiable. This field displays dashes, when no destination airport exists.

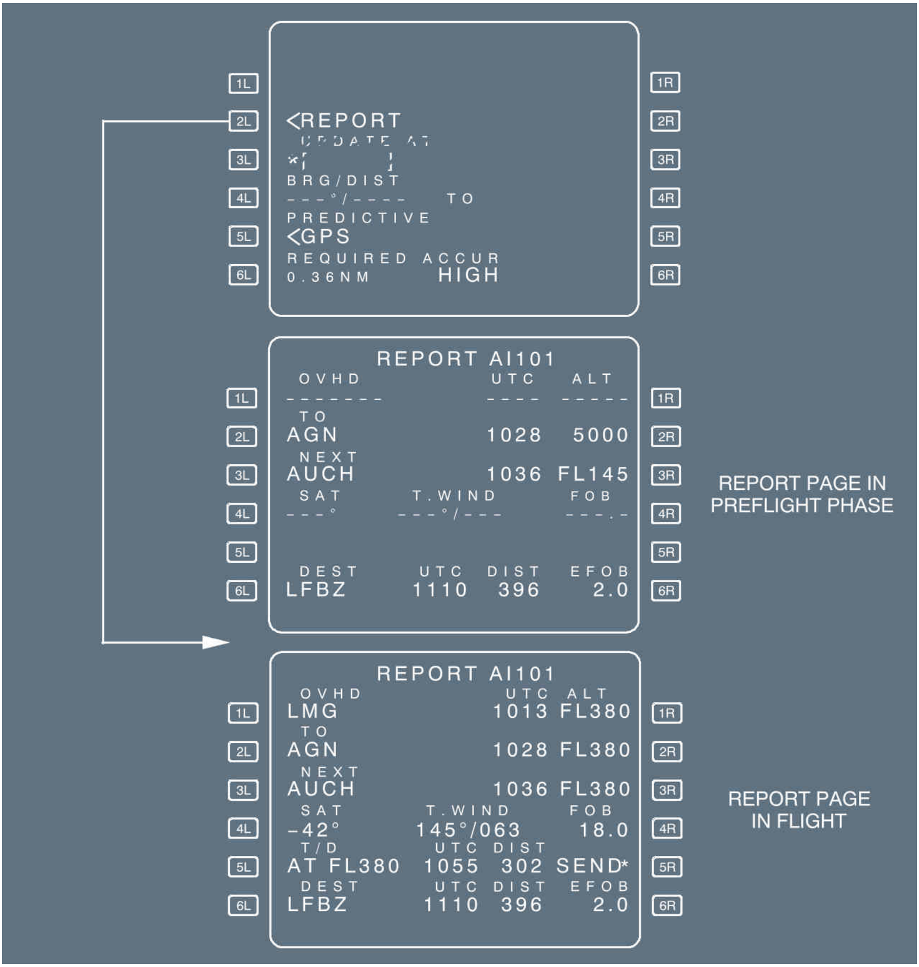
[1R] ETA	This field is defaulted to the Estimated Arrival Time, as computed by the FMS (small blue font). The pilot may enter a value in this field (large blue font). Amber boxes are displayed, when no prediction exists, or the crew entry has been cleared.
Line 2 PRIMARY Y/N	Predicted primary status at destination airport, at the following times: Estimated time of arrival ±5, 10, 15 min. Availability of GPS PRIMARY at the corresponding time is indicated by Y, when PRIMARY is predicted to be available; and, by N, when GPS PRIMARY is predicted not to be available. These fields are blanked when the destination [1L] field, or the time [1R] field is not defined.
[3L] WPT	The pilot may enter a reference waypoint in this field. Blue brackets are displayed, when no entry has been made.
[3R] ETA	When a reference waypoint has been entered in the [3L] field, amber boxes are displayed. The crew is requested to enter a reference time in this field.
Line 4 PRIMARY Y/N	Information equivalent to [2L] / [2R] is displayed for any pilot-selected waypoint. The corresponding time of arrival is also displayed.
Line 5 DESELECTED SATELLITES and Line 6 SATELLITES	Enables the pilot to deselect up to four satellites by inserting the corresponding satellite number ; the number is then displayed in large blue font. When deactivated, the satellites are not considered for predictive GPS availability at destination, or at the selected waypoint. The deselection is cancelled when the entry is cleared (blue brackets are displayed), or the field is overwritten by a different satellite number.

REPORT PAGE

Ident.: DSC-22_20-50-10-25-00000606.0009001 / 14 MAY 12

57 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The pilot calls this page by pressing the [2L] key on the PROG page:



```
<REPORT
 UPDATE AT
*[      ]
BRG/DIST
---°/----       TO
PREDICTIVE
<GPS
REQUIRED ACCUR
0.36NM          HIGH
```

```
        REPORT AI101
 OVHD            UTC   ALT
--------         ----  -----
 TO
AGN              1028   5000
 NEXT
AUCH             1036  FL145
 SAT       T.WIND       FOB
---°      ---°/---     ---.-

 DEST      UTC   DIST  EFOB
LFBZ       1110   396   2.0
```

REPORT PAGE IN PREFLIGHT PHASE

```
        REPORT AI101
 OVHD            UTC  ALT
LMG              1013 FL380
 TO
AGN              1028 FL380
 NEXT
AUCH             1036 FL380
 SAT       T.WIND       FOB
-42°      145°/063     18.0
 T/D         UTC  DIST
AT FL380    1055  302 SEND*
 DEST        UTC  DIST  EFOB
LFBZ        1110  396   2.0
```

REPORT PAGE IN FLIGHT

This page displays information related to the FROM, TO, NEXT and DEST waypoints, as well as the current wind, temperature, distance and time to the next cruise profile change.

TITLE (White)	Displays the flight number. This line displays EO in amber, in case an engine-out is detected.
[1L] OVHD (green)	Displays the last sequenced waypoint. This field never displays the pseudo-waypoints and the F-PLN markers (T-P, PPOS, IN-BND, OUT-BND).

[1R] UTC/TIME ALT (green)	This field displays the time and altitude recorded at the time of sequence.
[2L]-[2R] TO (green)	This field displays the active waypoint, predicted time of arrival and predicted altitude at this waypoint. *Note:* *Time and altitude values are identical to those values on the F-PLN pages.*
[3L]-[3R] NEXT (green)	Same information for the next waypoint.
[4L] [4R] SAT/T.WIND/FOB (green)	This field displays the static air temperature, the wind direction and velocity, and the FOB recorded at waypoint sequencing.
[5L] T/D/UTC/DIST (green)	This field displays the estimated time, and the distance to go to the next change of the cruise profile (T/D, S/C, S/D). These data are only displayed when the cruise phase is active.
[5R] SEND* (blue)	The crew uses this prompt to downlink a position report. This field may be blank, depending on airline policy.
Line 6 DEST/UTC/DIST/EFOB	This field displays the estimated time of arrival, the distance along the F-PLN, and the estimated fuel on board (DEST EFOB) at destination. The DEST EFOB field will turn to amber, if the EFOB at destination becomes less than the MIN DEST FOB value displayed on the FUEL PRED page.. This display is identical to the information on the F-PLN pages.

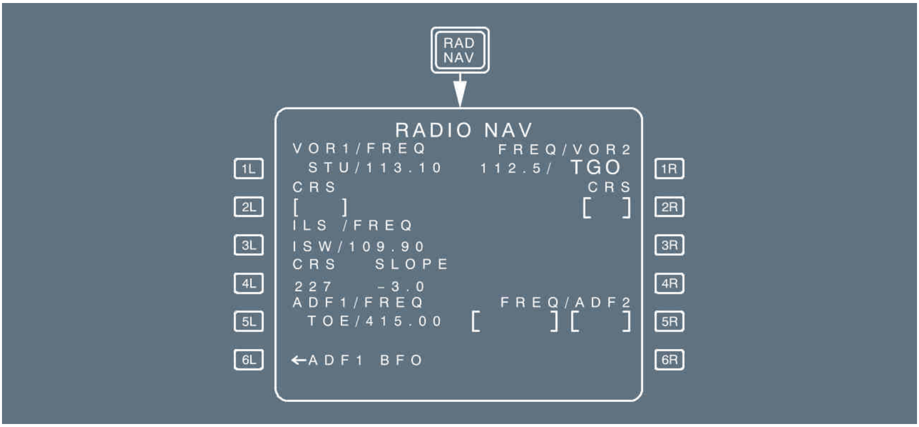
Note: *No data can be inserted or modified on the REPORT page.*

RADIO NAV PAGE

Ident.: DSC-22_20-50-10-25-00000607.0009001 / 06 APR 16

58 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

This page enables the pilot to select or verify the radio NAVAIDs, tuned for display purposes only. These NAVAIDs include: VOR, VOR/DME, TAC, VORTAC, ILS, and ADF.



```
           RADIO NAV
VOR1/FREQ             FREQ/VOR2
 STU/113.10      112.5/ TGO
CRS                         CRS
[    ]                    [   ]
ILS /FREQ
ISW/109.90
CRS    SLOPE
227     -3.0
ADF1/FREQ             FREQ/ADF2
 TOE/415.00  [      ][    ]

←ADF1  BFO
```

Line 1 VOR1/FREQ FREQ/VOR2	This line displays the identifiers and frequencies of VORs 1 and 2, whether they are automatically or manually tuned. To manually tune a VOR, the pilot inserts the IDENT or frequency. If the IDENT is not in the database, the new NAVAID page comes up. A “clear” action reverts the selection to the autotuned NAVAID.
Line 2 CRS	This line displays courses for the NAVAIDs in Line 1. The pilot can manually enter the courses through these fields.
[3L] LS/FREQ	This field displays the IDENT of an ILS and its frequency (for ILS). It is autotuned, if the ILS is associated to the departure runway, or if the flight plan contains an ILS approach. The flight crew may also enter an ILS manually. When the manually entered ILS differs from the ILS that the FMS would autotune, “RWY-LS MISMATCH” appears.

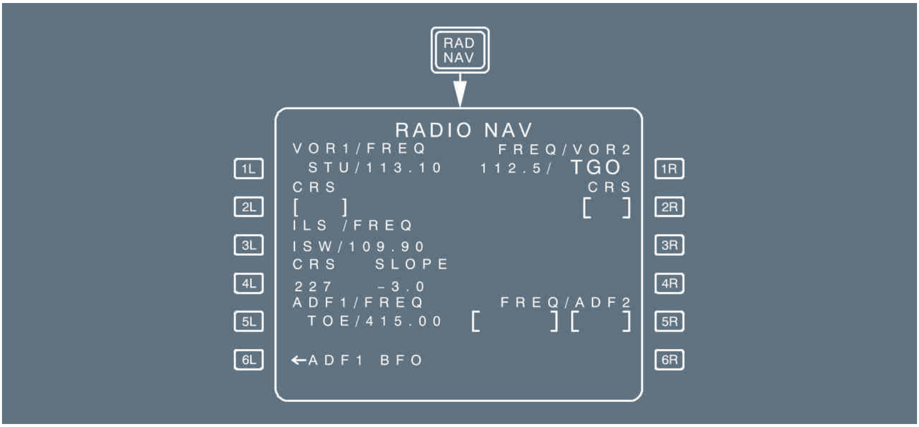
[4L] CRS SLOPE	CRS: This field displays the course associated with the LS displayed in Line 3. It comes up automatically if an LS is autotuned, or if an LS has been manually tuned via its IDENT. Otherwise, the course must be entered manually. The course may be backbeam (Bxxx) or frontbeam (Fxxx).. SLOPE: This field displays the slope associated with the LS displayed in Line 3. It comes up automatically if an LS is autotuned for approach, or if an LS has been manually tuned via its IDENT. *Note:* *1. The slope does not apply to LOC only, LDA, SDF or Backbeam approaches.* *2. If the flight crew intends to manually tune an ILS that is not in the navigation database or to manually tune an ILS by its frequency (ident not entered), and if they do not enter the course, the flight crew will not be able to arm approach modes.*
Line 5 ADF1/FREQ FREQ/ADF2	This line displays the identifiers and frequencies of ADFs 1 and 2. The pilot can use the IDENT or the frequency to manually tune the ADF.
Line 6 ADF1/BFO BFO/ADF2	When an ADF is selected, these fields display an ADF/BFO prompt. The flight crew presses the key once to erase the arrow and put the ADF in BFO mode. A clear action brings the arrow back and cancels BFO.

Note:
- *The autotune function only works for NAVAIDs stored in the database.*
- *When tuning manually, the operator should use the IDENT, rather than the frequency, unless the NAVAID is not in the database.*
- *Manually-tuned frequencies are displayed in large font.*

RADIO NAV PAGE

Ident.: DSC-22_20-50-10-25-00000607.0015001 / 06 APR 16
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

This page enables the pilot to select or verify the radio NAVAIDs, tuned for display purposes only. These NAVAIDs include: VOR, VOR/DME, TAC, VORTAC, ILS, and ADF.



```
RADIO NAV
VOR1/FREQ              FREQ/VOR2
 STU/113.10      112.5/ TGO
CRS                          CRS
[    ]                      [  ]
ILS /FREQ
ISW/109.90
CRS    SLOPE
227    -3.0
ADF1/FREQ              FREQ/ADF2
 TOE/415.00   [       ][    ]
←ADF1 BFO
```

Line 1 VOR1/FREQ FREQ/VOR2	This line displays the identifiers and frequencies of VORs 1 and 2, whether they are automatically or manually tuned. To manually tune a VOR, the pilot inserts the IDENT or frequency. If the IDENT is not in the database, the new NAVAID page comes up. A “clear” action reverts the selection to the autotuned NAVAID.
Line 2 CRS	This line displays courses for theNAVAIDs in Line 1. The pilot can manually enter the courses through these fields.
[3L] LS/FREQ	This field displays the IDENT of an ILS/GLS and its frequency (for ILS) or channel (for GLS). It is autotuned, if the ILS//GLS is associated to the departure runway, or if the flight plan contains an ILS/GLS approach. The flight crew may also enter an ILS/GLS manually. When the manually entered ILS/GLS differs from the ILS/GLS that the FMS would autotune, “RWY-LS MISMATCH” appears.

[4L] CRS SLOPE	CRS: This field displays the course associated with the LS displayed in Line 3. It comes up automatically if an LS is autotuned, or if an LS has been manually tuned via its IDENT. Otherwise, the course must be entered manually. The course may be backbeam (Bxxx) or frontbeam (Fxxx).. SLOPE: This field displays the slope associated with the LS displayed in Line 3. It comes up automatically if an LS is autotuned for approach, or if an LS has been manually tuned via its IDENT. *Note:* *1. The slope does not apply to LOC only, LDA, SDF or Backbeam approaches.* *2. If the flight crew intends to manually tune an ILS that is not in the navigation database or to manually tune an ILS by its frequency (ident not entered), and if they do not enter the course, the flight crew will no be able to arm approach modes.*
Line 5 ADF1/FREQ FREQ/ADF2	This line displays the identifiers and frequencies of ADFs 1 and 2. The pilot can use the IDENT or the frequency to manually tune the ADF.
Line 6 ADF1/BFO BFO/ADF2	When an ADF is selected, these fields display an ADF/BFO prompt. The flight crew presses the key once to erase the arrow and put the ADF in BFO mode. A clear action brings the arrow back and cancels BFO.

Note:
- *The autotune function only works for NAVAIDs stored in the database.*
- *When tuning manually, the operator should use the IDENT, rather than the frequency, unless the NAVAID is not in the database.*
- *Manually-tuned frequencies are displayed in large font.*

SECONDARY PAGES

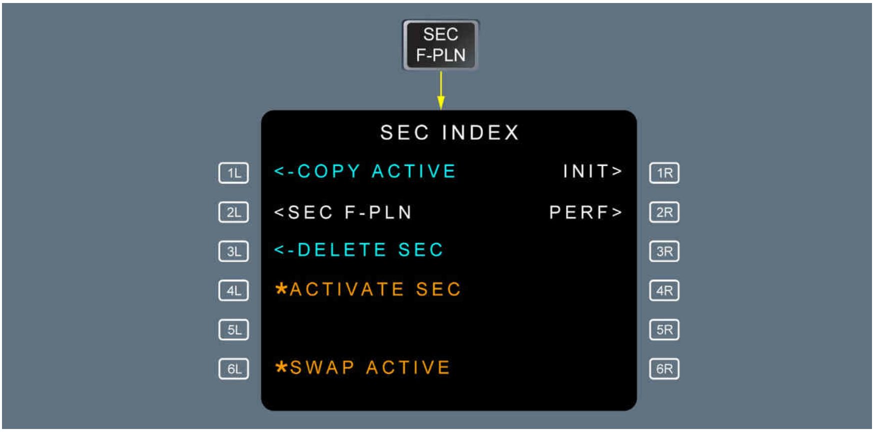
Ident.: DSC-22_20-50-10-25-00000608.0010001 / 30 AUG 18

59 **Applicable to: MSN 10949-11597**

The SEC F-PLN key on the MCDU console allows the flight crew to call up the secondary index page and the secondary flight plan page. The secondary flight plan is generally for a diversion, for predictable runway changes for takeoff or landing, or for training.
There are two types of secondary index pages. The type selected depends on the presence of a secondary flight plan.

SECONDARY INDEX PAGE

A SECONDARY FLIGHT PLAN IS ALREADY DEFINED



```
SEC INDEX
<-COPY ACTIVE         INIT>
<SEC F-PLN            PERF>
<-DELETE SEC
*ACTIVATE SEC

*SWAP ACTIVE
```

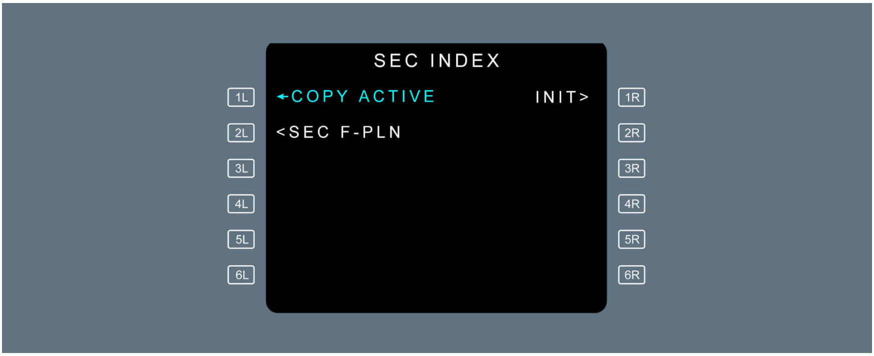
[1L] COPY ACTIVE	The flight crew presses this key to copy the active flight plan into the secondary flight plan and delete the previous secondary plan.
[2L] SEC F-PLN	The flight crew presses this key to call up the secondary flight plan pages.
[3L] DELETE SEC	The flight crew presses this key to delete the current secondary flight plan.
[4L] ACTIVATE SEC	The flight crew presses this key to activate the secondary flight plan as the active flight plan.

Note: *"ACTIVATE SEC" routinely appears if the HDG/TRK mode is active. If the NAV mode is active, "ACTIVATE SEC" appears only if the active and secondary flight plans have a common active leg.*

[6L] SWAP ACTIVE	The flight crew presses this key to swap the active flight plan and the secondary flight plan. Therefore, all the following apply: - The active flight plan becomes the secondary flight plan - The secondary flight plan becomes the active flight plan. When the NAV mode is engaged, the function is only available if the current leg of the active flight plan is identical to its associated leg in the secondary flight plan.
[1R] INIT	The flight crew presses this key to call up the SEC INIT A page.

[2R] PERF	The flight crew presses this key to call up the performance pages for the secondary flight plan.

A SECONDARY FLIGHT PLAN IS NOT DEFINED



SEC INDEX
←COPY ACTIVE INIT>
<SEC F-PLN

[1L] COPY ACTIVE	The pilot presses this key to copy the primary active flight plan into the secondary flight plan.
[2L] SEC F-PLN	The pilot presses this key to call up the secondary flight plan pages.
[1R] INIT	The pilot presses this key to call up the secondary INIT page. It is similar to the active INIT page, but blue brackets replace all the amber boxes.

SECONDARY FLIGHT PLAN PAGES

The secondary flight plan pages A and B are identical to those of the active flight plan, but are automatically sequenced, only when the secondary is copied from the primary and their active legs are identical.
The active and secondary flight plans pages differ from each other as follows:

SECONDARY LATERAL REVISION PAGES:

- ERASE and INSERT are not displayed.
- FIX INFO is not available.
- A lateral revision of the secondary flight plan does not create a temporary flight plan: All revisions are directly applied to the secondary flight plan.

SECONDARY VERTICAL REVISION PAGES:

A vertical revision on the secondary flight plan does not create a temporary flight plan.

SECONDARY INIT A AND B PAGES:

- They use blue brackets, instead of amber boxes.
- They have no align prompt.
- They do not provide for slewing or entering data in the 4L-4R fields (airport reference).

SECONDARY STEP ALTITUDE PAGES:

These pages operate as the primary STEP ALT page, except that optimal step, savings are not available.

SECONDARY WIND PAGES:

They have no history wind page.

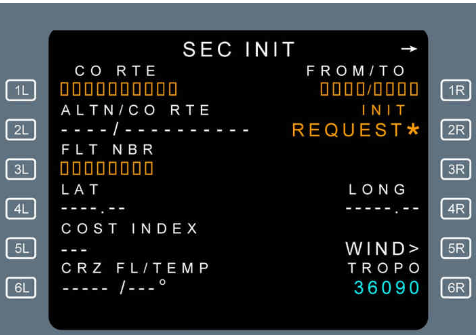
SECONDARY PERFORMANCE PAGES:

- All boxes are replaced by blue brackets.
- They have no engine-out mode, no engine-out long range cruise cost index.
- They have no expedite predictions.
- They have no ACTIVATE/CONFIRM APPROACH PHASE prompt.
- They have no PRED TO ALTN predictions on the PERF CLB and PERF DES pages.
- They have no engine-out drift down, no top of descent, no cabin descent rate information on the PERF CRZ page.

The secondary flight plan has no FUEL PRED page.

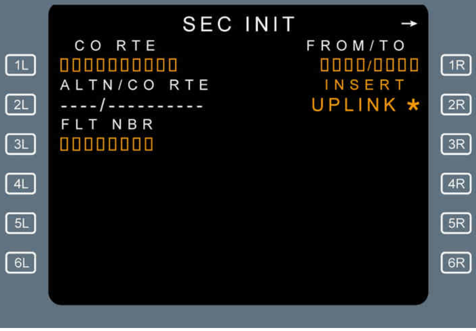
SECONDARY INIT A PAGE IS ALSO USED TO REQUEST OR DISPLAY AN UPLINK INIT MESSAGE RECEIVED AFTER ENGINE START.

This uplink INIT message can be cleared or inserted as SECONDARY INIT data.



```
             SEC INIT               →
  CO RTE                    FROM/TO
□□□□□□□□□□              □□□□/□□□□
ALTN/CO RTE                    INIT
----/----------          REQUEST*
FLT NBR
□□□□□□□□
LAT                          LONG
----.--                    -----.--
COST INDEX
---                          WIND>
CRZ FL/TEMP                  TROPO
----- /---°                  36090
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R



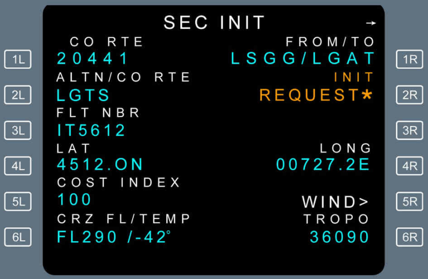
```
             SEC INIT               →
  CO RTE                    FROM/TO
□□□□□□□□□□              □□□□/□□□□
ALTN/CO RTE                  INSERT
----/----------           UPLINK *
FLT NBR
□□□□□□□□
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[2R] INIT REQUEST* Enable to request INIT data from the ground or,

[2R] INSERT UPLINK* A downlink message has been received following a request. The message can be cleared or entered in the SEC INIT page.

SECONDARY INIT
A PAGE AFTER
UPLINK MESSAGE
INSERTION.



```
            SEC INIT              →
  CO RTE                   FROM/TO
20441                    LSGG/LGAT
ALTN/CO RTE                   INIT
LGTS                      REQUEST*
FLT NBR
IT5612
LAT                           LONG
4512.0N                   00727.2E
COST INDEX
100                          WIND>
CRZ FL/TEMP                  TROPO
FL290 /-42°                  36090
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

SECONDARY PAGES

Ident.: DSC-22_20-50-10-25-00000608.0009001 / 13 FEB 13

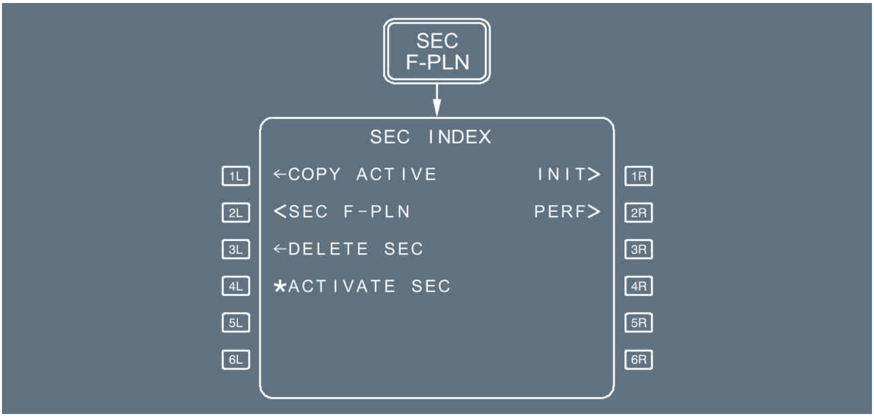
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The SEC F-PLN key on the MCDU console allows the flight crew to call up the secondary index page and the secondary flight plan page. The secondary flight plan is generally for a diversion, for predictable runway changes for takeoff or landing, or for training.

There are two types of secondary index pages. The type selected depends on the presence of a secondary flight plan.

SECONDARY INDEX PAGE

A SECONDARY FLIGHT PLAN IS ALREADY DEFINED

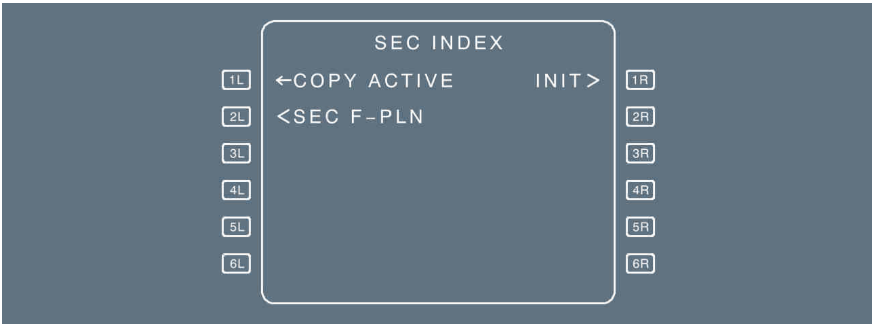


[1L] COPY ACTIVE (blue)	The flight crew presses this key to copy the active flight plan into the secondary flight plan and delete the previous secondary plan.
[2L] SEC F-PLN (white)	The flight crew presses this key to call up the secondary flight plan pages.
[3L] DELETE SEC (blue)	The flight crew presses this key to delete the current secondary flight plan.
[4L] ACTIVATE SEC (amber)	The flight crew presses this key to activate the secondary flight plan as the active flight plan.

Note: *"ACTIVATE SEC" routinely appears if the HDG/TRK mode is active. If the NAV mode is active, "ACTIVATE SEC" appears only if the active and secondary flight plans have a common active leg.*

[1R] INIT (white)	The flight crew presses this key to call up the SEC INIT A page.
[2R] PERF (white)	The flight crew presses this key to call up the performance pages for the secondary flight plan.

A SECONDARY FLIGHT PLAN IS NOT DEFINED



[1L] COPY ACTIVE (blue)	The pilot presses this key to copy the primary active flight plan into the secondary flight plan.
[2L] SEC F-PLN (white)	The pilot presses this key to call up the secondary flight plan pages.
[1R] INIT (white)	The pilot presses this key to call up the secondary INIT page. It is similar to the active INIT page, but blue brackets replace all the amber boxes.

SECONDARY FLIGHT PLAN PAGES

The secondary flight plan pages A and B are identical to those of the active flight plan, but are automatically sequenced, only when the secondary is copied from the primary and their active legs are identical.
The active and secondary flight plans pages differ from each other as follows:

SECONDARY LATERAL REVISION PAGES:

- ERASE and INSERT are not displayed.
- FIX INFO is not available.
- A lateral revision of the secondary flight plan does not create a temporary flight plan: All revisions are directly applied to the secondary flight plan.

SECONDARY VERTICAL REVISION PAGES:

A vertical revision on the secondary flight plan does not create a temporary flight plan.

SECONDARY INIT A AND B PAGES:

- They use blue brackets, instead of amber boxes.
- They have no align prompt.
- They do not provide for slewing or entering data in the 4L-4R fields (airport reference).

SECONDARY STEP ALTITUDE PAGES:

These pages operate as the primary STEP ALTS page, except that optimal step, savings are not available.

SECONDARY WIND PAGES:

They have no history wind page.

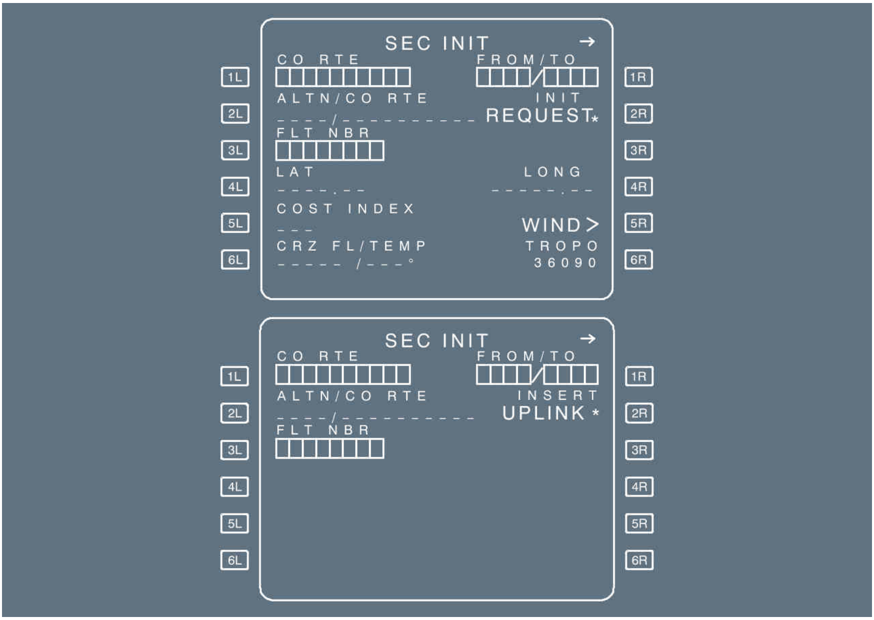
SECONDARY PERFORMANCE PAGES:

- All boxes are replaced by blue brackets.
- They have no engine-out mode, no engine-out long range cruise cost index.
- They have no expedite predictions.
- They have no ACTIVATE/CONFIRM APPROACH PHASE prompt.
- They have no PRED TO ALTN predictions on the PERF CLB and PERF DES pages.
- They have no engine-out drift down, no top of descent, no cabin descent rate information on the PERF CRZ page.

The secondary flight plan has no FUEL PRED page.

SECONDARY INIT A PAGE IS ALSO USED TO REQUEST OR DISPLAY AN UPLINK INIT MESSAGE RECEIVED AFTER ENGINE START.

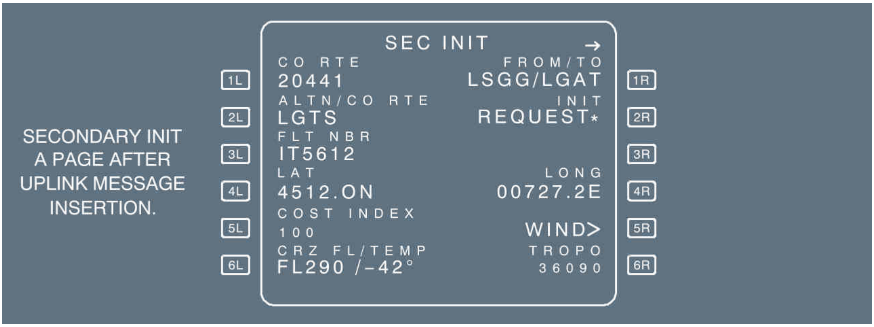
This uplink INIT message can be cleared or inserted as SECONDARY INIT data.



```
           SEC INIT             →
 CO RTE                FROM/TO
 ☐☐☐☐☐☐☐☐☐☐           ☐☐☐☐/☐☐☐☐
 ALTN/CO RTE                INIT
 ----/----------       REQUEST*
 FLT NBR
 ☐☐☐☐☐☐☐☐
 LAT                       LONG
 ----.--               -----.--
 COST INDEX
 ---                      WIND>
 CRZ FL/TEMP              TROPO
 ----- /---°              36090
```

```
           SEC INIT             →
 CO RTE                FROM/TO
 ☐☐☐☐☐☐☐☐☐☐           ☐☐☐☐/☐☐☐☐
 ALTN/CO RTE              INSERT
 ----/----------       UPLINK *
 FLT NBR
 ☐☐☐☐☐☐☐☐
```

[2R] INIT REQUEST*	Enable to request init data from the ground or,
[2R] INSERT UPLINK*	A downlink message has been received following a request. The message can be cleared or entered in the SEC INIT page.



SECONDARY INIT A PAGE AFTER UPLINK MESSAGE INSERTION.

```
           SEC INIT             →
 CO RTE                FROM/TO
 20441                LSGG/LGAT
 ALTN/CO RTE                INIT
 LGTS                  REQUEST*
 FLT NBR
 IT5612
 LAT                       LONG
 4512.0N               00727.2E
 COST INDEX
 100                      WIND>
 CRZ FL/TEMP              TROPO
 FL290 /-42°              36090
```

BACK UP NAV PAGES

Ident.: DSC-22_20-50-10-25-00013508.0019001 / 29 JAN 13

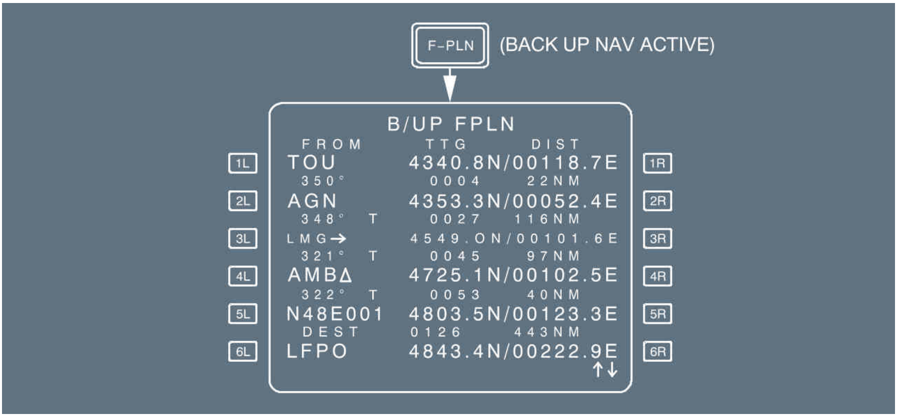
60 **Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The MCDU features a back up navigation function which provides simplified point-to-point GPIRS and IRS based navigation in case of a dual FM failure.
The backup Navigation mode allows limited lateral flight planning within the MCDU, that can be used to drive the Navigation Display and provides relative path position information and auto-sequencing of the Backup Navigation flight plan. The Backup Navigation flight plan reflects, as much as possible, the active primary FM flight plan upon its initial activation.
During FM normal operation, the F-PLN is continuously downloaded in the MCDU memory: the BACK UP NAV function links the MCDU of the failed FM to its onside IRS. All navigation data related to the MCDU F-PLN are displayed on the associated ND.
BACK UP NAV function is activated on the MCDU MENU page by pressing the NAV B/UP prompt.
The MCDU back-up F-PLN may accept a maximum of 165 legs, including information such as waypoint position/identification, leg type, discontinuity, overfly and turn direction information (radial, pattern, heading leg... cannot be part of the MCDU F-PLN). No secondary or temporary F-PLN exists.

BACK UP NAV pages display the data related to the BACK UP NAV function. There are six pages available while BACK UP NAV is active:
- B/UP F-PLN
- B/UP F-PLN for DIRECT TO
- B/UP PROG
- B/UP IRS for onside IRS (1+2)
- B/UP IRS 3
- B/UP GPS (if the GPS is installed)

B/UP F-PLN PAGE

The B/UP F-PLN page displays the MCDU F-PLN data. The pilot calls up this page by pressing the F-PLN key while B/UP NAV is active.



```
           B/UP FPLN
 FROM        TTG        DIST
TOU      4340.8N/00118.7E
 350°        0004       22NM
AGN      4353.3N/00052.4E
 348°  T     0027      116NM
LMG→     4549.0N/00101.6E
 321°  T     0045       97NM
AMBΔ     4725.1N/00102.5E
 322°  T     0053       40NM
N48E001  4803.5N/00123.3E
 DEST      0126      443NM
LFPO     4843.4N/00222.9E
                          ↑↓
```

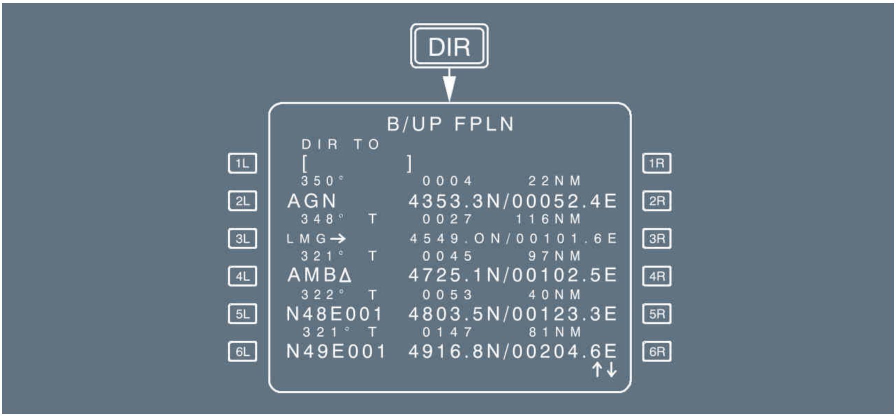
TITLE line 1 to line 5	B/UP F-PLN is displayed in a white large font Display consecutive waypoints with their associated latitude/longitude. If a waypoint is to be overflown, an overfly symbol (△) is displayed after the identifier. If a turn is specified into the next leg, a large font arrow is displayed after the identifier. Label lines contain the bearing, time to go and distance to the next waypoint displayed in small font.

white	bearing
green	time to go and distance
BRG	Between FROM and TO waypoints: True or Mag depending on the TRUE pb-sw ◁ position. T is displayed when the bearing is true referenced. Between other waypoints: out bound true track of the great circle joining the 2 related waypoints, independant of TRUE pb-sw ◁ .
TTG	HHMM limited to 9 959. Time between the 2 related waypoints.
DIST	NM limited to 9 999.

line 6 DEST	DEST airport identifier and associated latitude/longitude. DIST to destination is computed as the direct distance from the aircraft to the active waypoint plus the along flight plan distances. time to go to destination is computed as distance to destination divided by ground speed. TTG and DEST are dashed if aircraft position is unavailable.

B/UP F-PLN (DIR TO)PAGE

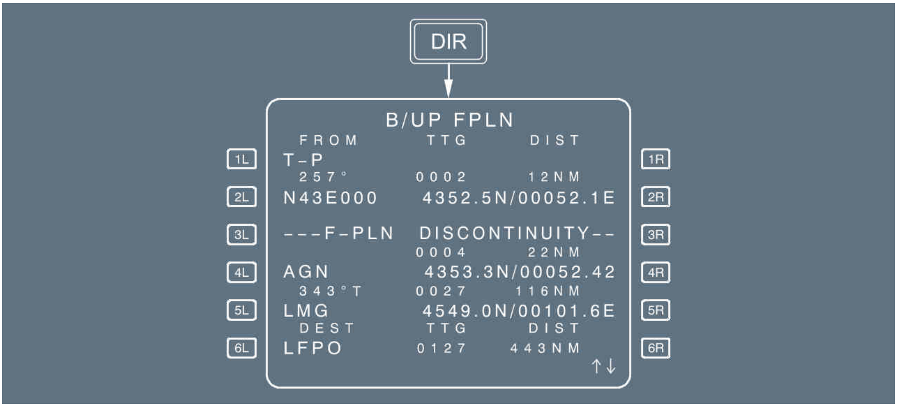
The pilot calls up this page using the DIR key on MCDU while BACK UP NAV is active and aircraft position is valid.



```
          B/UP FPLN
 DIR TO
 [            ]
 350°          0004      22NM
AGN           4353.3N/00052.4E
 348°  T       0027     116NM
LMG→          4549.0N/00101.6E
 321°  T       0045      97NM
AMBΔ          4725.1N/00102.5E
 322°  T       0053      40NM
N48E001       4803.5N/00123.3E
 321°  T       0147      81NM
N49E001       4916.8N/00204.6E
                            ↑↓
```

TITLE [1L] DIR TO	B/UP F-PLN is displayed in a white large font Allows DIRECT TO selection to the desired waypoint. This waypoint can be selected from the F-PLN or manually entered through the scratchpad (IDENT/LAT/LONG or LAT/LONG)
line 2 to line 6	Display consecutive waypoints of the F-PLN. Same as the B/UP F-PLN page. The TO WAYPOINT is displayed in [2L]. Vertical slewing function is available.

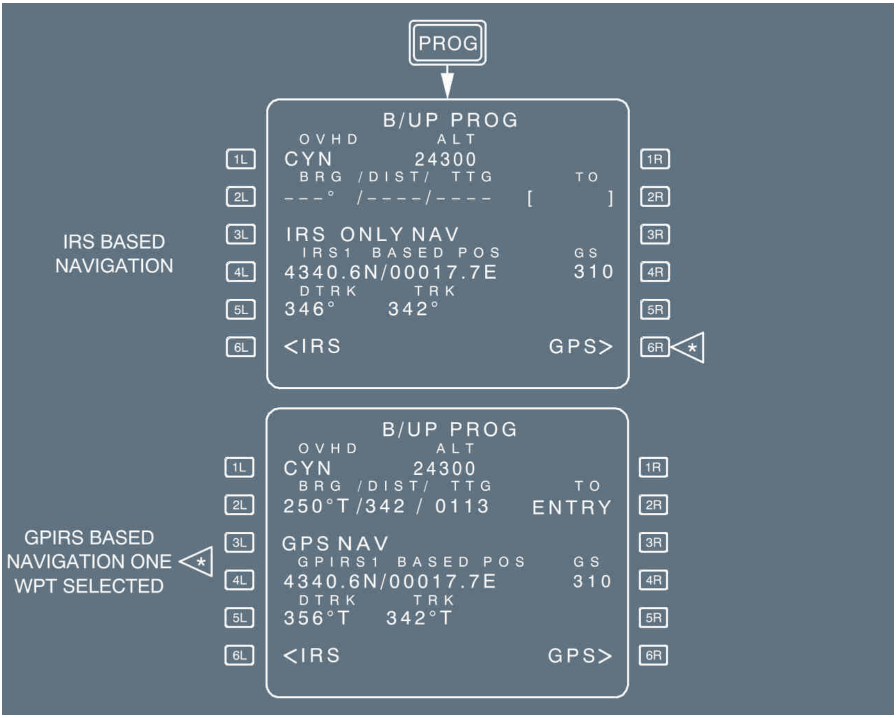
After a DIR TO selection, the B/UP F-PLN page is modified as following:



```
            B/UP FPLN
  FROM         TTG        DIST
T-P
  257°        0002        12NM
N43E000      4352.5N/00052.1E

---F-PLN     DISCONTINUITY--
              0004        22NM
AGN          4353.3N/00052.42
  343°T       0027       116NM
LMG          4549.0N/00101.6E
  DEST         TTG        DIST
LFPO          0127       443NM
                            ↑↓
```

B/UP PROG PAGE

It displays flight parameters relative to the F-PLN or a selected waypoint.
The flight crew calls up this page by pressing the PROG key on MCDU when BACK UP NAV is active.


PROG
IRS BASED
NAVIGATION
GPIRS BASED
NAVIGATION ONE
WPT SELECTED
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
          B/UP PROG
  OVHD            ALT
CYN              24300
  BRG  /DIST/   TTG            TO
---°  /----/----          [      ]

IRS ONLY NAV
  IRS1  BASED POS            GS
4340.6N/00017.7E            310
  DTRK        TRK
346°       342°

<IRS                        GPS>
```

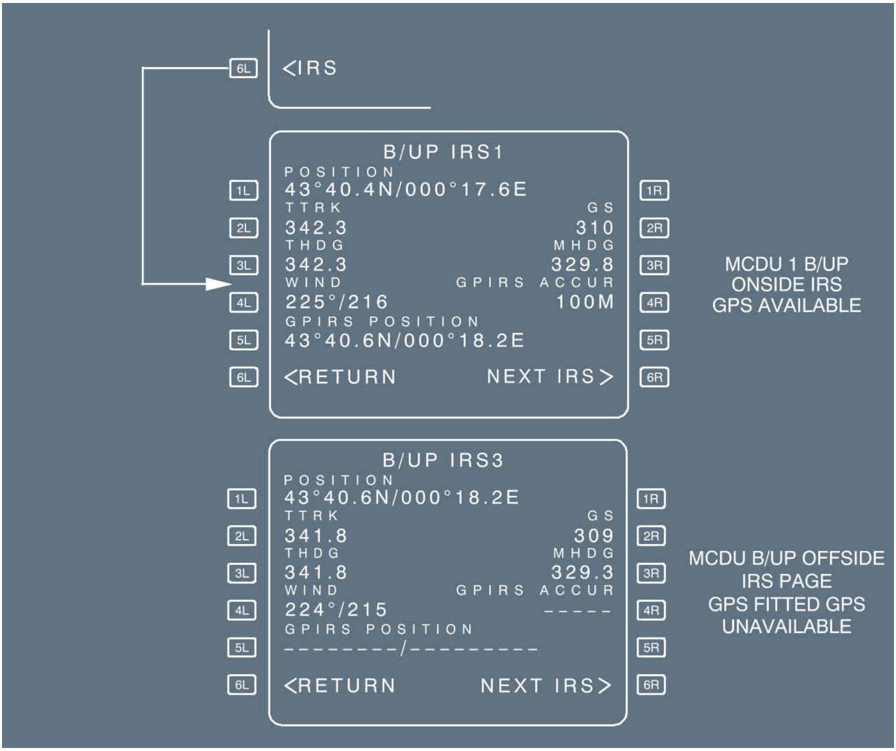
```
          B/UP PROG
  OVHD            ALT
CYN              24300
  BRG  /DIST/   TTG            TO
250°T /342 / 0113          ENTRY

GPS NAV
  GPIRS1  BASED POS          GS
4340.6N/00017.7E            310
  DTRK        TRK
356°T      342°T

<IRS                        GPS>
```

TITLE line 1 OVHD/ALT	B/UP PROG is displayed in a white large font. Displays the identifier of the last sequenced waypoint and the altitude at the time of the sequence.

line 2 BRG/DIST/TTG/TO	Allows the flight crew to enter an existing MCDU F-PLN waypoint identifier or LAT/LONG or IDENT/LAT/LONG. MCDU then computes bearing, distance and time to go to that waypoint from the present position. The pilot may modify or clear this entry (2R field). BRG True or magnetic outbound track of the great circle joining aircraft present position to the entered waypoint: dependent on the TRUE pb-sw ◁ position. DIST limited to 9 999. TTG HHMM limited to 9 959. time to go to the entered position computed assuming current ground speed. These fields are displayed in a green small font. They are dashed if present position is unavailable.
[3L]	Means of navigation used by the Back-Up Navigation. If GPS is fitted and is the navigation source, “GPS NAV” is displayed, otherwise “IRS ONLY NAV” is displayed. If the GPS is not installed, this field is blank.
[4L] IRS 1 (2 or 3) BASED POS GPIRS 1 (2 or 3) (green)	Current aircraft position provided by the selected IRS GPIRS IRS 1 (or 3 if IRS 1 failed) on MCDU 1 IRS 2 (or 3 if IRS 2 failed) on MCDU 2 GPIRS 1 (or GPIRS 3) or MCDU 1 ◁ GPIRS 2 (or GPIRS 3) or MCDU 2 ◁
[4R] GS (green)	Current ground speed from the selected IRS or GPS ◁ .
[5L] DTRK/TRK (green)	Desired track of the MCDU F-PLN active leg and current aircraft track from the selected IRS/GPS (True or Mag). These tracks are true or magnetic depending on TRUE pb-sw ◁ position.
[6L] IRS 1 (2)	Gives access to onside B/UP IRS (1 or 2) page
[6R] GPS	Gives access to B/UP GPS page. This prompt only appears when the GPS is installed.

B/UP IRS 1 OR 2 OR 3 PAGE

Display IRS 1, 2, 3 navigation data.
The pilot calls up this page from B/UP PROG page, by pressing the corresponding prompt.



```
<IRS
```

```
        B/UP IRS1
POSITION
43°40.4N/000°17.6E
TTRK                     GS
342.3                   310
THDG                   MHDG
342.3                 329.8
WIND           GPIRS ACCUR
225°/216               100M
GPIRS POSITION
43°40.6N/000°18.2E
<RETURN           NEXT IRS>
```

MCDU 1 B/UP ONSIDE IRS GPS AVAILABLE

```
        B/UP IRS3
POSITION
43°40.6N/000°18.2E
TTRK                     GS
341.8                   309
THDG                   MHDG
341.8                 329.3
WIND           GPIRS ACCUR
224°/215              -----
GPIRS POSITION
--------/---------
<RETURN           NEXT IRS>
```

MCDU B/UP OFFSIDE IRS PAGE GPS FITTED GPS UNAVAILABLE

TITLE	B/UP IRS 1, 2, 3 displayed in a white large font.
[1L] POSITION	Current aircraft position from selected IRS
[2L] T TRK	True track
[2R] GS	Ground speed
[3L] T HDG	True heading
[3R] M HDG	Magnetic heading Dashed when in polar area.
[4L] WIND	Wind direction and velocity Wind direction is always true referenced.
[4R] GPIRS ACCUR	GPS accuracy in meters as in the IRS page.
[5R] GPIRS POSITION	If GPS is installed, the GPS IRS position is provided as in the IRS page.
[6L] RETURN	Gives access to B/UP PROG page

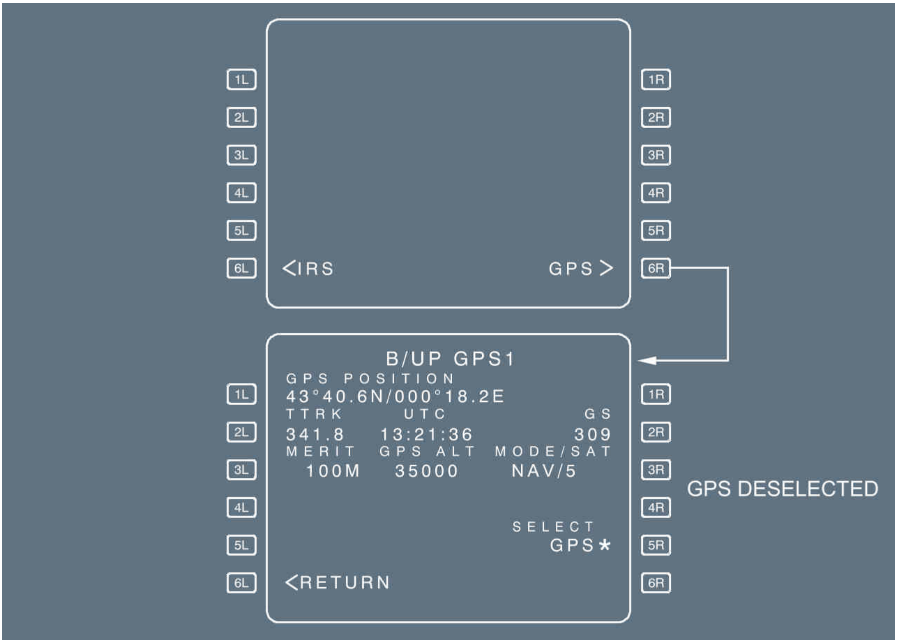
[6R] NEXT IRS	Gives access to the next IRS page. (Closed loop 1 → 2 → 3 → 1)

This page is not modifiable by the crew.

Note: *The fields [4R] and [5L] are blanked when the GPS is not installed.*

B/UP GPS

Display GPS navigation data.
The flight crew calls up this page from B/UP PROG page, by pressing the corresponding prompt.



```
<IRS                          GPS>
```

```
           B/UP GPS1
GPS POSITION
43°40.6N/000°18.2E
TTRK       UTC                GS
341.8    13:21:36            309
MERIT    GPS ALT        MODE/SAT
  100M    35000          NAV/5

                          SELECT
                           GPS*
<RETURN
```

TITLE	B/UP GPS 1, 2 displayed in a white large font.
[1L]	GPS POSITION
Line 2:	TTRK GPIRS position (latitude/longitude) UTC: Time GS: Ground Speed
Line 3:	MERIT: GPS figure of merit GPS ALT: GPS altitude MODE/SAT: Navigation mode and number of tracked satellites. These values are displayed as in the FM GPS page.

[5R]	DESELECT/SELECT GPS: The flight crew may select and deselect the GPS for navigation Backup function. The default configuration is GPS selected.

TEMP PAGES

Applicable to: MSN 10949-11597

Ident.: DSC-22_20-50-10-25-A-00022370.0001001 / 30 AUG 18

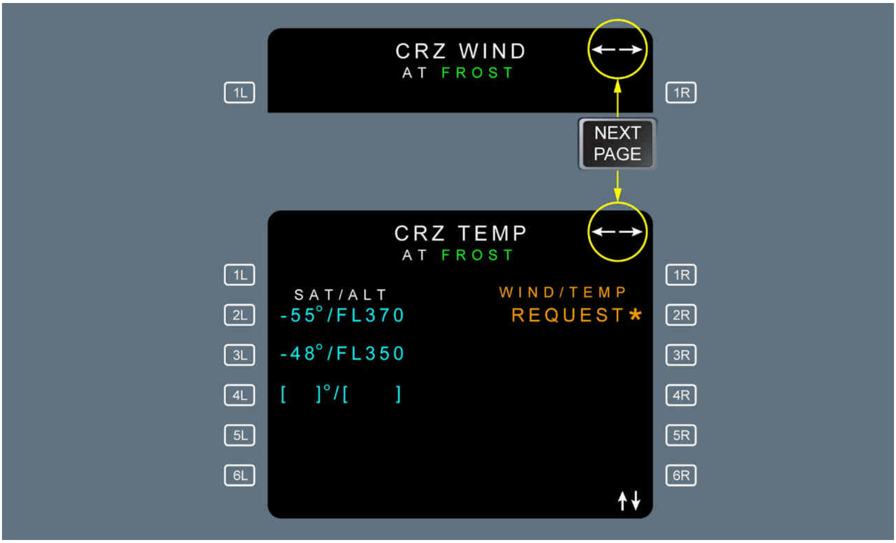
61 ### GENERAL

A temperature profile in cruise and descent is necessary to provide the flight crew with reliable predictions and performance. Temperature pages enable the flight crew to enter and/or check the temperatures propagated by the FMGS or sent by ACARS for the various flight phases. There are two temperature pages:

- CRZ TEMP Page, accessible via CRZ WIND Page and by pressing NEXT PAGE on MCDU, and
- DES TEMP Page, accessible via DES WIND Page and by pressing NEXT PAGE on MCDU. This page is only accessible with 4D ◁✳ or Enhanced RTA ◁✳ options

Ident.: DSC-22_20-50-10-25-A-00022371.0001001 / 30 AUG 18

62 ### CRZ TEMP PAGE


CRZ WIND
AT FROST

CRZ TEMP
AT FROST
SAT/ALT
-55°/FL370
-48°/FL350
[ ]°/[ ]
WIND/TEMP
REQUEST*

TITLE	CRZ TEMP
AT [location]	[location] is the fix at which the temperature data is defined
[2L] to [5L] SAT/ALT	This displays up to 4 manual inserted, uplinked, or propagated temperatures: - Manual pilot entries or uplinked appear in large blue font, and - Propagated values appear in small blue font. To clear a manual or uplinked entry, the flight crew presses the CLR MCDU key. The pilot cannot clear a propagated entry. Attempting to clear a propagated SAT/ALT display NOT ALLOWED message. The pilot can override a propagated value. In this case, the value becomes a manual entry and it is possible to clear. The altitude is entered in feet MSL or flight levels, but is always displayed in flight level format. The SAT/ALT list is sorted by descending altitude order, starting from 2L. After each modification, the list is automatically sorted again.
[2R] WIND/TEMP REQUEST	Enable the flight crew to send a request for ACARS winds and temperatures.
← →	Enable the flight crew to use the NEXT PAGE MCDU key to revert to the CRZ WIND Page.
↑ ↓	Enable the flight crew to go to the next waypoint CRZ TEMP Page.

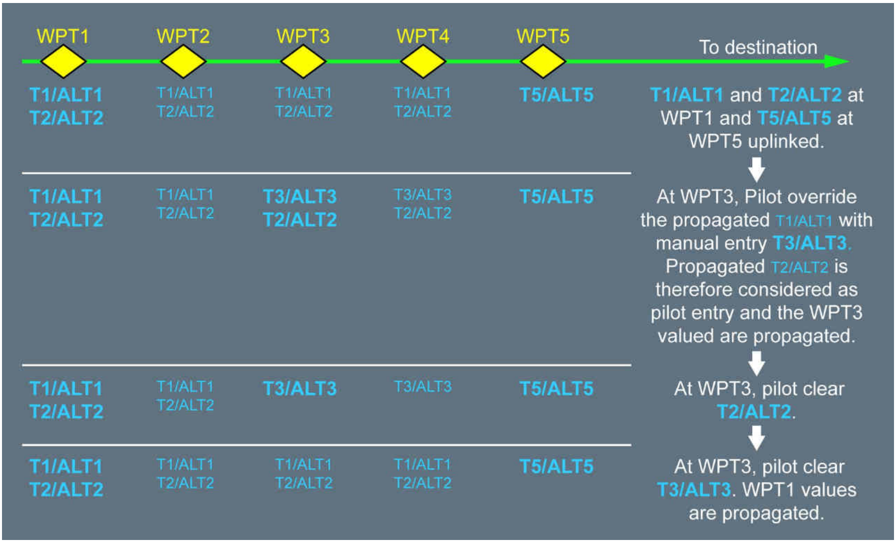
CRZ TEMP SAT/ALT ENTRIES AND MODIFICATION

Altitude entries for temperature are independent of a waypoint to the other. The entered altitudes are also independent of the wind altitudes.

A flight crew entry of SAT/ALT is propagated constantly down path (not up path) to the next waypoint (excluded) on which at least one SAT/ALT pilot entry is defined, or up to and that includes the last cruise waypoint.

When propagated SAT/ALT exist at a waypoint, if a manual entry of SAT/ALT at this waypoint is performed, all the remaining propagated SAT/ALT at this waypoint are considered as flight crew entries. The entry can be performed either on a line where propagated temperature exists or on a line where brackets are displayed. If the entry is performed on a line where a propagated temperature is defined, the manual entry overwrites this temperature. In addition, any propagated temperature defined on any other line is considered as a flight crew entry.

This mechanism provides the flight crew with a simple way to modify the ISA DEV at a waypoint, as illustrated below:


WPT1
WPT2
WPT3
WPT4
WPT5
To destination
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T5/ALT5
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T3/ALT3 T2/ALT2
T3/ALT3 T2/ALT2
T5/ALT5
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T3/ALT3
T3/ALT3
T5/ALT5
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T1/ALT1 T2/ALT2
T5/ALT5

T1/ALT1 and T2/ALT2 at WPT1 and T5/ALT5 at WPT5 uplinked.

At WPT3, Pilot override the propagated T1/ALT1 with manual entry T3/ALT3. Propagated T2/ALT2 is therefore considered as pilot entry and the WPT3 valued are propagated.

At WPT3, pilot clear T2/ALT2.

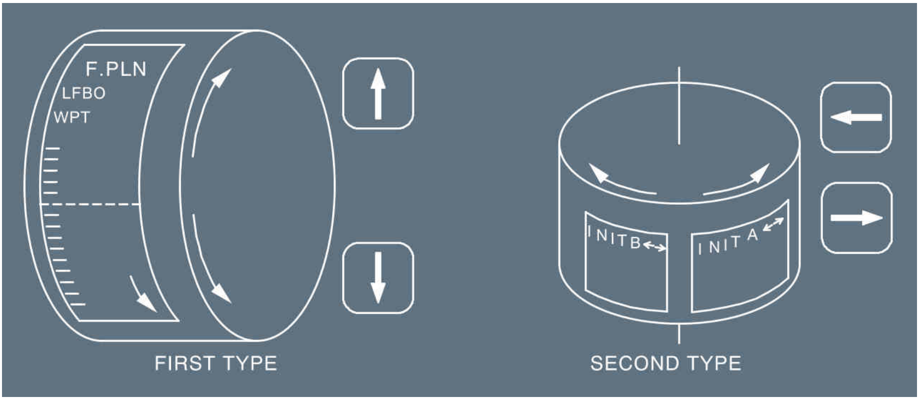
At WPT3, pilot clear T3/ALT3. WPT1 values are propagated.

FMS2 Thales

GENERAL

Ident.: DSC-22_20-50-10-28-00000813.0001001 / 14 MAY 12
Applicable to: MSN 04827-04860

The Flight Management and Guidance System (FMGS) displays information on several “pages”. When a page cannot display all of the assigned information, it cues the pilot to call up additional information. There are three types of pages, and each type has its particular way of cuing the pilot to call up additional information.



FIRST TYPE

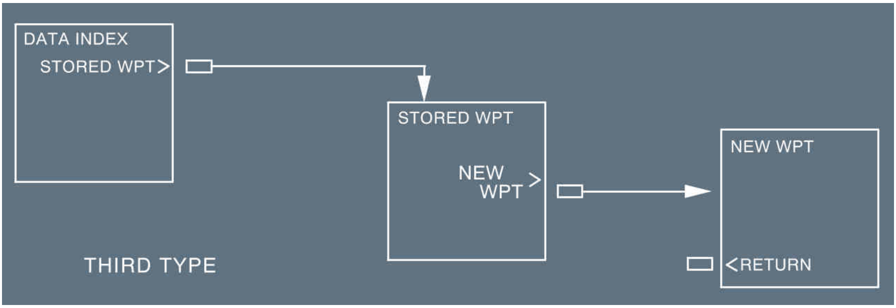
When this page cannot simultaneously display all the information on the screen (more information than the six pairs of lines can hold), the pilot can scroll up or down the page.
In this case, the screen displays a ↑ ↓ symbol in the bottom right-hand corner (F-PLN pages, secondary F-PLN page, departure/arrival pages,...).

SECOND TYPE

When the information is on successive pages, the pilot presses the “→” or "←" keys to sequentially call up these pages.
In this case, an arrow is displayed in the top right-hand corner of the screen (INIT pages).

THIRD TYPE

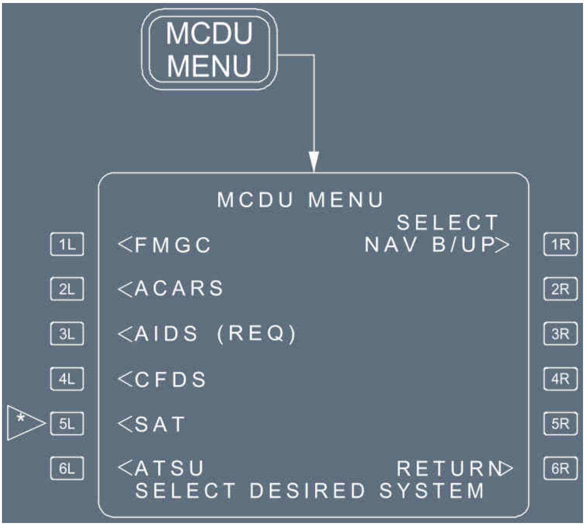
When different types of information are on successive pages, the pilot calls up these pages by pressing the key adjacent to the prompts : >, < or *.


DATA INDEX
STORED WPT>
STORED WPT
NEW WPT>
NEW WPT
<RETURN
THIRD TYPE

MCDU MENU PAGE

Ident.: DSC-22_20-50-10-28-00000814.0012001 / 16 MAR 11
Applicable to: MSN 04827-04860

This page lists the various systems which are accessible via the MCDU. The system automatically displays this page at power up.


MCDU MENU
MCDU MENU
SELECT NAV B/UP>
<FMGC
<ACARS
<AIDS (REQ)
<CFDS
<SAT
<ATSU
RETURN>
SELECT DESIRED SYSTEM
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
*

The flight crew selects a system by pressing the key adjacent to the name of that system.

The screen shows the name of the selected system in:
- Green, if communication is established.
- Blue, associated with the (SEL) indicator, until communication is established. The scratchpad displays “WAIT FOR SYSTEM RESPONSE”.
- White, associated with the (TIME OUT) indicator, if the MCDU cannot establish communication with the selected system.

When a system calls for the flight crew’s attention, the MCDU displays “REQ” next to the system’s name, and the “MCDU MENU” annunciator lights up.
When the flight crew presses the key next to the name of the system that requires attention, the “MCDU MENU” annunciator light goes off.
When the MCDU is communicating with a system other than the FMGC, the pilot should use the MCDU MENU page to revert to the FMGC system.

SELECT NAV B/UP	Pressing the [1R] key selects the NAV B/UP function and DESELECT NAV B/UP appears in the [1R] field. If the NAV B/UP is inoperative, the field is blank.
RETURN	This field is displayed when a function is active.

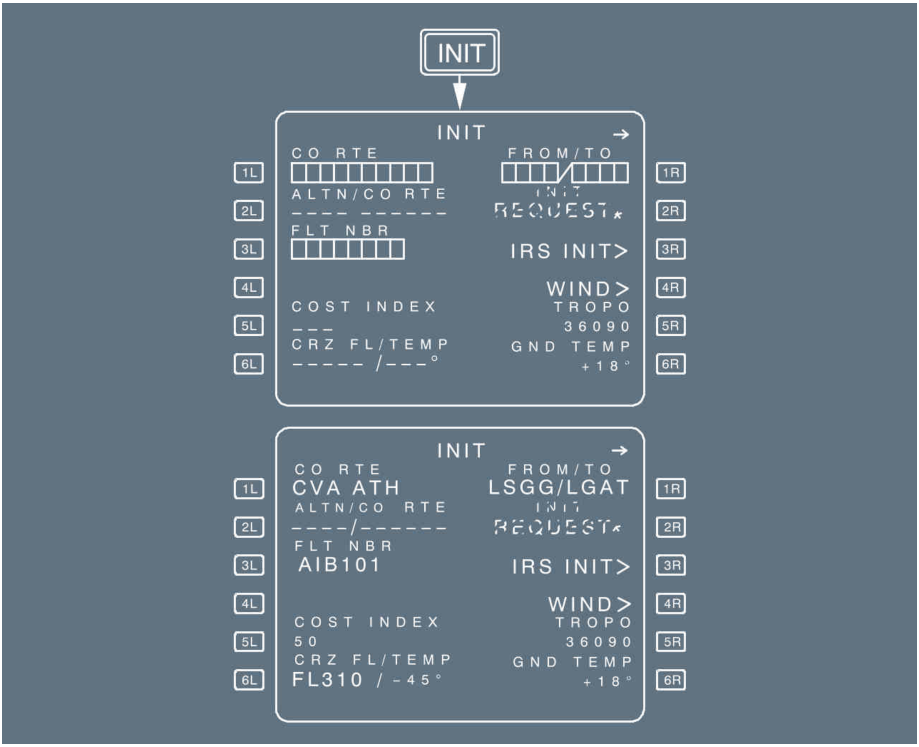
If the MCDU attempts to communicate with a system, “SEL” is displayed next to the system name.

INIT A PAGE

Ident.: DSC-22_20-50-10-28-00000815.0021001 / 17 MAY 21
Applicable to: MSN 04827-04860

The flight crew uses the INIT A page in pre-flight phase, to initialize the flight plan and align the inertial reference system.
The flight crew accesses this page by pressing the INIT key on the MCDU.
The INIT A page can be accessed on ground or in flight.
When in the done phase, the pilot can press the INIT key to begin the next preflight phase.

Note: *The flight crew may also call up this page by pressing:*
- *The “→” or “←” keys on the MCDU, when on the INIT B page, or*
- *The key next to “RETURN” or “INSERT” on the ROUTE SELECTION page.*



INIT →
CO RTE
☐☐☐☐☐☐☐☐☐☐
FROM/TO
☐☐☐☐/☐☐☐☐
ALTN/CO RTE
---- ------
INIT
REQUEST*
FLT NBR
☐☐☐☐☐☐☐☐
IRS INIT>
WIND>
COST INDEX

TROPO
36090
CRZ FL/TEMP
----- /---°
GND TEMP
+18°

INIT →
CO RTE
CVA ATH
FROM/TO
LSGG/LGAT
ALTN/CO RTE
----/------
INIT
REQUEST*
FLT NBR
AIB101
IRS INIT>
WIND>
COST INDEX
50
TROPO
36090
CRZ FL/TEMP
FL310 / -45°
GND TEMP
+18°

[1L] CO RTE (blue)	If the flight crew enters a company route number, the screen displays all data associated with that route (8 or 10 characters, depending on the pin program). Inserting the CO RTE into the RTE selection page also enters the CO RTE number in this field.

[2L] ALTN/CO RTE (blue)	This field is dashed, until a primary destination is entered in the 1R field. If a preferred alternate is associated with the primary destination in the Navigation Database, it is displayed in this field with the company route identification. The crew may manually enter an alternate and company route. If the preferred alternate is not associated with the primary destination, “NONE” is displayed in this field. When the alternate route and the primary destination do not match, the MCDU scratchpad displays “DEST/ALTN MISMATCH”. If the primary destination is changed, this field is modified accordingly.
[3L] FLT NBR (blue)	The flight number automatically appears in this field, if it is stored with the company route. The flight crew may modify it, or enter a new number here.
[5L] COST INDEX (blue)	This is usually stored in the database, along with the company route. The flight crew may modify it, or enter a new value here. It defaults to the last entered value, if a value is not stored in the database.
[6L] CRZ FL/TEMP (cruise flight level and temperature)	The cruise flight level is usually stored in the database, along with the company route. If not, it has to be entered manually. If no cruise flight level is entered, the system will not furnish predictions, while the aircraft is on ground. The flight crew has to enter the temperature at cruise flight level in order to refine the predictions. Otherwise, these are computed for ISA conditions. (If no sign is entered, the system uses a plus).
[1R] FROM/TO (blue)	The flight crew can enter a city pair in this field (ICAO codes for city of origin and destination). This entry automatically deletes any previously-entered company route, and calls up the route selection page (if a company route exists). If one airfield of the pair is not in the database, the display changes to the NEW RWY page.

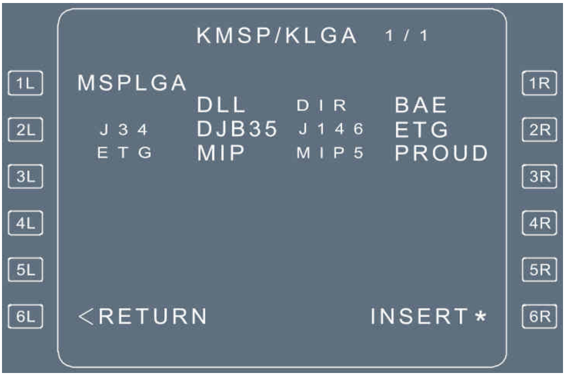
[2R] INIT REQUEST ◁	This prompt is displayed, if the pilot did not enter an active flight plan, or entered a flight number or a company route that is not in the aircraft database. Selecting this prompt sends the ground a request for active flight plan initialization (downlink message). When the asterisk is not displayed, a downlink message cannot be sent. The uplink flight plan is automatically inserted in the active flight plan, before engine start, provided that an active flight plan does not exist. After engine start, the uplink flight plan is sent to the secondary flight plan, and manually-inserted or rejected (Refer to DSC/Auto Flight - Flight management/AOC Functions ◁).
[3R] IRS INIT	The flight crew presses this key to access the IRS INIT page.
[4R] WIND	The crew presses this key to access the pages, unless a temporary flight plan exists. In this case, the scratchpad displays “TEMPORARY F-PLN EXISTS”.
[5R] TROPO (blue)	The default tropopause altitude is36 090 ft. The pilot can use this field to modify the tropopause altitude (99 990 ft maximum).
[6R] GND TEMP (blue)	When a CO RTE or a FROM/TO is defined, the ground temperature value corresponds to the standard ISA temperature at the origin airport elevation. The flight crew can modify this value as required on the pre-flight phase.

ROUTE SELECTION PAGE

Ident.: DSC-22_20-50-10-28-00000818.0001001 / 16 MAR 11
Applicable to: MSN 04827-04860

This page displays all the company routes, stored in the database, that are associated with the inserted city pair. They can either be called up manually, or displayed automatically.

- Manually: The pilot presses the FROM/TO or ALTN key on the INIT A page when a city pair is displayed.
- Automatically: The system displays it, when the pilot enters a city pair or defines an alternate on the INIT A page of the active or secondary flight plan.



```
          KMSP/KLGA     1/1
MSPLGA
             DLL      DIR     BAE
   J34       DJB35    J146    ETG
   ETG       MIP      MIP5    PROUD



<RETURN                  INSERT*
```

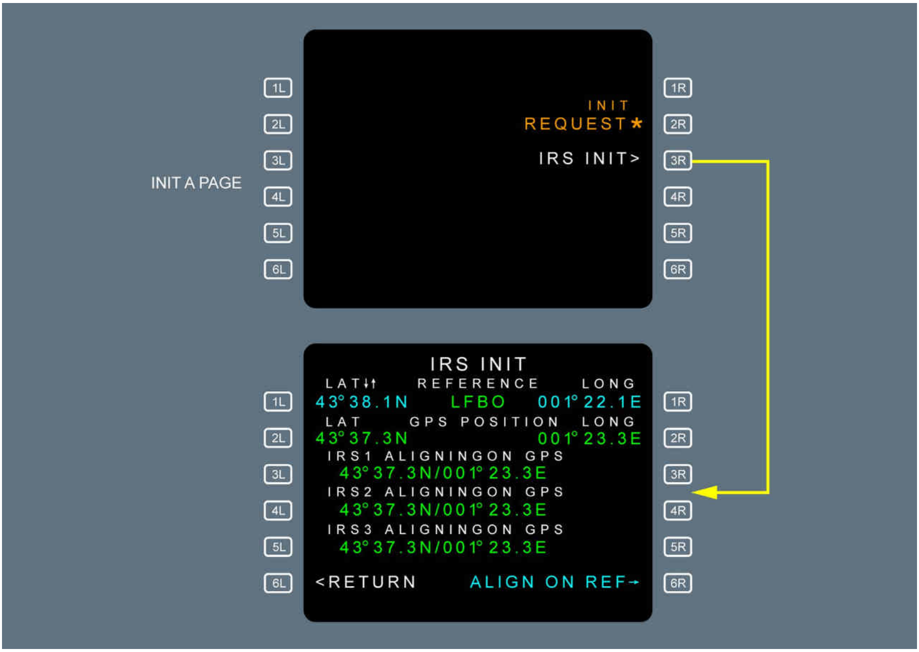
TITLE	Idents for the city pair inserted on the INIT A page. (The numbers in the upper right-hand corner are the total number of company routes from this city pair stored in the database).
[1L]	This field shows the name of the company route. "NONE" appears, if there is no company route for this city pair.
Line 2 to Line 5	These fields display the various elements of the company route : Waypoints appear in large green font, and airways in small white font.
[6L] RETURN	The pilot presses this key to return to the INIT A page.
[6R] INSERT or SELECT	This prompt displays an amber INSERT (blue for the secondary flight plan), if the pilot accessed the page from the INIT A (or secondary INIT A) page. It displays SELECT (blue) if the crew accessed the page from the alternate page. The pilot presses this key to insert the displayed company route in the respective flight plan and to return the display to the accessing page.

Note: *The pilot can scroll to display the rest of the route (if one page does not show it all), or other company routes for this city pair.*

IRS INIT PAGE

Ident.: DSC-22_20-50-10-28-00009556.0052001 / 30 AUG 18
Applicable to: MSN 04827-04860

The flight crew uses the IRS INIT page to align the inertial reference system. The crew accesses this page, by pressing the IRS INIT key on the INIT A page.



```
                 INIT
            REQUEST*
            IRS INIT>
```

```
          IRS INIT
 LAT⇅    REFERENCE     LONG
43°38.1N    LFBO   001°22.1E
 LAT    GPS POSITION   LONG
43°37.3N           001°23.3E
 IRS1 ALIGNINGON GPS
  43°37.3N/001°23.3E
 IRS2 ALIGNINGON GPS
  43°37.3N/001°23.3E
 IRS3 ALIGNINGON GPS
  43°37.3N/001°23.3E
<RETURN       ALIGN ON REF→
```

Line 1 LAT-REFERENCE-LONG	This line provides the latitude and longitude of the FM reference position. This reference is extracted from the navigation database. The flight crew can modify this reference. Only when the FM reference position matches the origin airport position, the airport identifier is displayed in green. Otherwise, there are dashes at the place of the airport identifier. Latitude and longitude of the FM reference position are displayed in blue. The flight crew can modify the latitude and longitude values using the scroll keys.
Line 2 LAT-GPS POSITION-LONG	These lines display the IRS 1-2-3 alignment state, source and latitude/longitude.
Line 3 to 5	The alignment status can be ALIGNING ON XXX, or ALIGNED ON XXX or IN ATT. XXX is the alignment source and can be GPS or CDU or REF. It is displayed in white font. The latitude and longitude values are displayed in green.
[6L] RETURN	This prompt enables the crew to return to the INIT A page.

[6R]	If a reference is available, this field displays ALIGN ON REF → in blue which is replaced by CONFIRM ALIGN * in amber when 6R prompt is pressed. Pressing again the 6R prompt enables the transmission of the FM reference position displayed in line 1.

WIND PAGES

Ident.: DSC-22_20-50-10-28-00009557.0021001 / 14 MAY 12
Applicable to: MSN 04827-04860

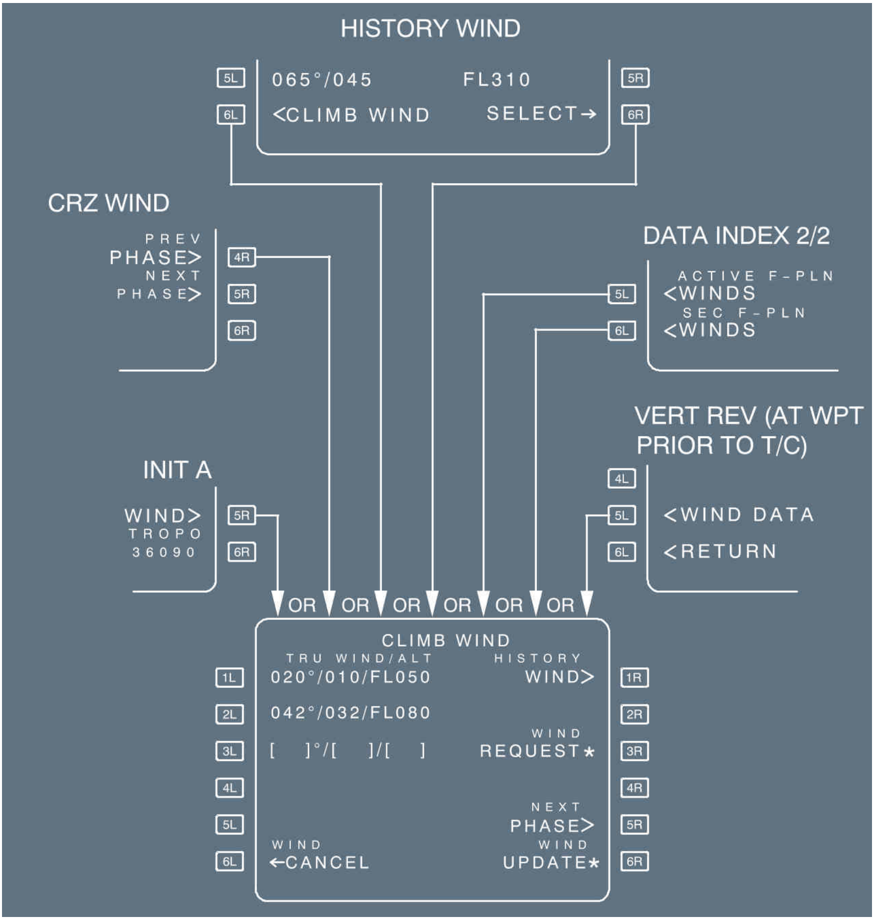
Winds in climb, cruise, descent, and approach are necessary to provide the pilot with reliable predictions and performance. Wind pages enable the pilot to enter and/or review the winds propagated by the FMGS or sent by ACARS for the various flight phases.

Note: *1. On the WIND pages, wind direction is always true-referenced.*
2. On the WIND pages, pending wind data exist as soon as a wind entry or a modification is performed on any of the WIND pages and until WIND UPDATE or WIND CANCEL is selected.

CLIMB WIND PAGE

This page enables the pilot to enter and/or review predicted wind vectors (direction and velocity) at up to 5 different levels.

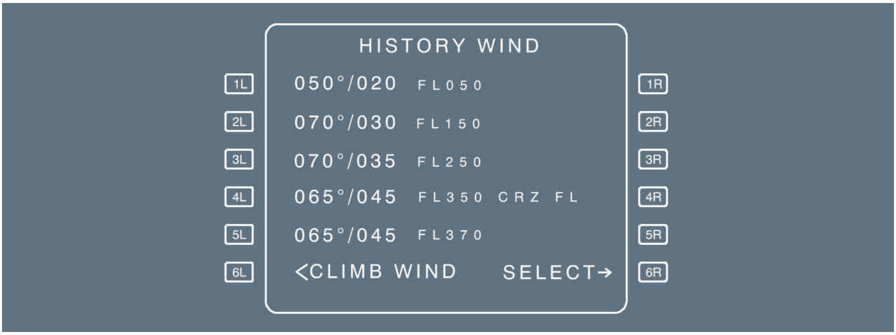
THE CLIMB WIND PAGE IS ACCESSED FROM:


HISTORY WIND
5L
065°/045
FL310
5R
6L
<CLIMB WIND
SELECT→
6R
CRZ WIND
PREV
PHASE>
4R
NEXT
PHASE>
5R
6R
DATA INDEX 2/2
5L
ACTIVE F-PLN
<WINDS
6L
SEC F-PLN
<WINDS
VERT REV (AT WPT PRIOR TO T/C)
4L
5L
<WIND DATA
6L
<RETURN
INIT A
WIND>
5R
TROPO
36090
6R
OR
OR
OR
OR
OR
OR
CLIMB WIND
TRU WIND/ALT
HISTORY
1L
020°/010/FL050
WIND>
1R
2L
042°/032/FL080
2R
WIND
3L
[ ]°/[ ]/[ ]
REQUEST*
3R
4L
4R
NEXT
PHASE>
5L
5R
WIND
WIND
6L
←CANCEL
UPDATE*
6R

TITLE	"CLIMB WIND" is displayed in large white font. “DRAFT” is displayed next to “CLIMB WIND”, in yellow large font, when pending wind data exist for the active flight plan.

[1L] to [5L] TRU WIND/ALT	This field displays the winds, entered at various climb altitudes: before climb phase, in yellow when pending wind data exist, and blue otherwise. In green, after climb phase activation. This field may also display history winds. Large blue brackets are displayed before any wind entry. Flight crew-entered winds are displayed in large blue font. History wind data is displayed in small green font. Upon sequencing the top of climb, the climb winds are deleted.
[6L] RETURN or WIND CANCEL	The RETURN prompt is displayed in large white font, when no wind entry is performed. Selecting this prompt reverts to the access page. The WIND CANCEL prompt appears in amber, as soon as a wind entry is performed. It is used to cancel a wind data update. *Note:* *Climb winds are not deleted, when the origin airport is changed.*
[1R] HISTORY WIND	This key calls up the history wind page and is only displayed in the preflight phase. It cannot be modified (white font), but can be inserted into the CLIMB WIND page by using the 6R key and modified accordingly.
[3R] WIND REQUEST	Pressing this key sends a request for AOC winds. (Refer to DSC-22_20 Auto Flight - Flight Management / 70 AOC Functions / B Wind Data / Wind Data - Request for Wind Data).
[5R] NEXT PHASE	Pressing this key calls up the CRZ WIND page, or the DESCENT WIND page, if no cruise waypoint exists. It is displayed in white font.
[6R] WIND UPDATE	This prompt is displayed in amber, as soon as a wind entry or a modification is performed. When it is pressed winds are inserted.

HISTORY WIND PAGE



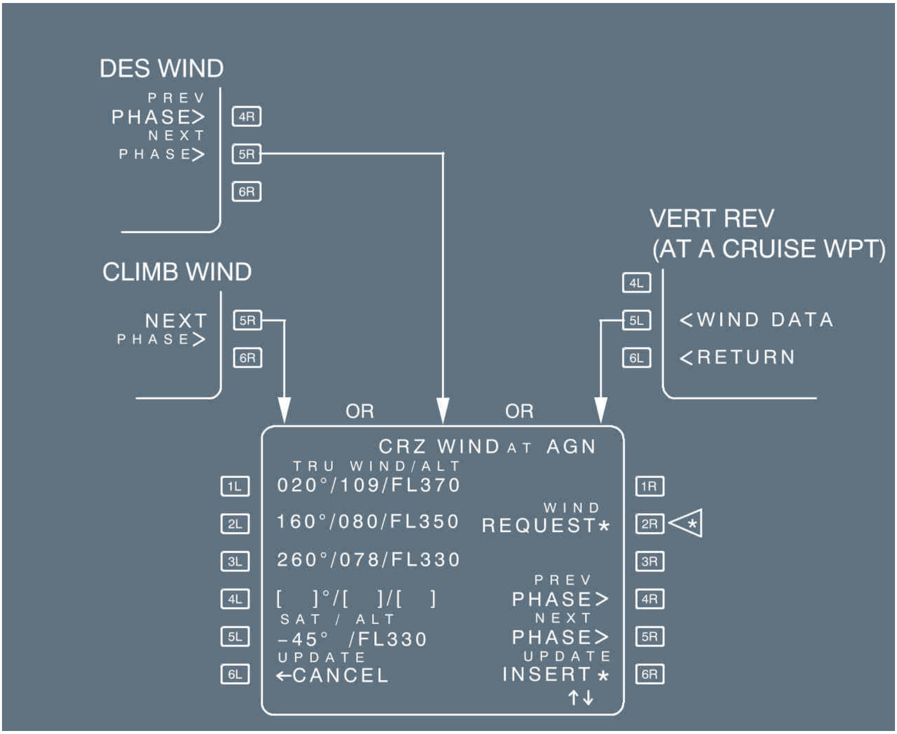
```
HISTORY WIND
050°/020  FL050
070°/030  FL150
070°/035  FL250
065°/045  FL350 CRZ FL
065°/045  FL370
<CLIMB WIND        SELECT→
```

[1L] to [5L]	The history winds are given for the default altitudes of FL 050, FL 150, FL 250 and the CRZ FL of the previous flight. They are displayed in yellow when pending data exist, in blue otherwise.
[6L] CLIMB WIND	This key reverts the display to the CLIMB WIND page. It is displayed in white font.
[6R] SELECT	This key inserts the history wind values into the CLIMB WIND page. This prompt is displayed in amber, if no wind has been inserted yet.

CRZ WIND PAGE

The CRUISE WIND page allows the entry and display of predicted wind data (direction and velocity) for each cruise waypoint.
Until weight data is entered and predictions are computed, cruise winds may be entered at any waypoint that is not part of a SID, STAR or approach.
The CRZ WIND page also enables the definition of a temperature at a given altitude to refine the predicted temperature profile. It is accessed from the CLIMB or DESCENT WIND page, or by pressing the WIND DATA prompt on the VERT REV page of a cruise waypoint. The flight crew can scroll from a cruise waypoint to the next one by using the MCDU scroll keys. Once the last cruise waypoint is reached, the “up arrow”slew key allows access to the first cruise waypoint.
The flight crew can enter wind data for each cruise waypoint at up to four different altitudes.

Note: *This set of four altitudes is defined for the whole cruise phase. Entering a new altitude at a cruise waypoint will remove the previous altitude from the computations.*

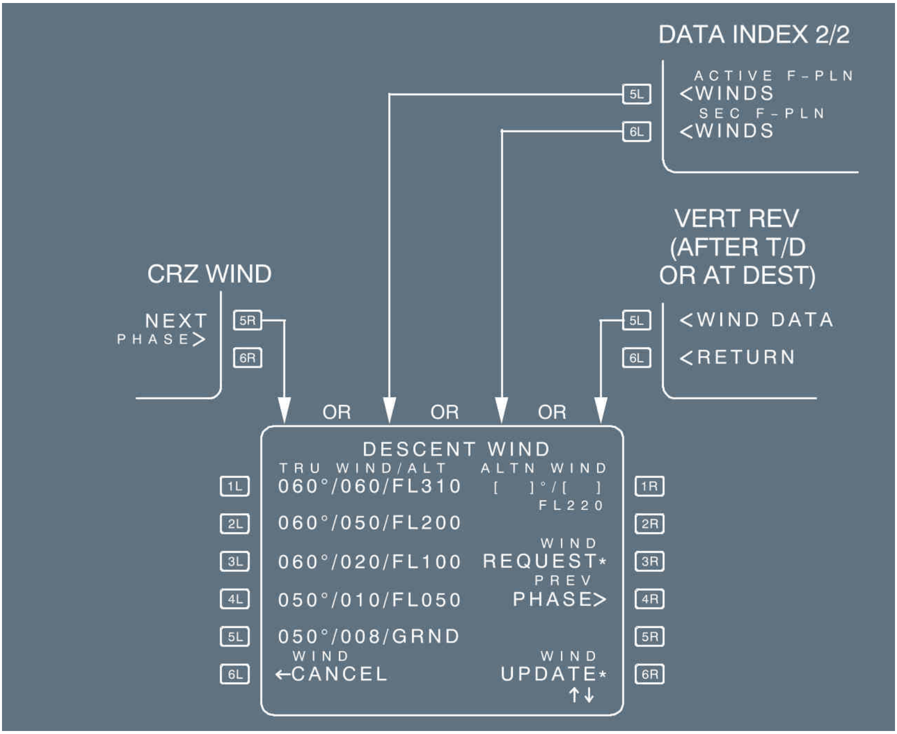

DES WIND
PREV PHASE>
NEXT PHASE>
4R
5R
6R
CLIMB WIND
NEXT PHASE>
5R
6R
VERT REV
(AT A CRUISE WPT)
4L
5L
6L
<WIND DATA
<RETURN
OR
OR
CRZ WIND AT AGN
TRU WIND/ALT
020°/109/FL370
160°/080/FL350
260°/078/FL330
[ ]°/[ ]/[ ]
SAT / ALT
-45° /FL330
UPDATE
←CANCEL
WIND
REQUEST*
PREV
PHASE>
NEXT
PHASE>
UPDATE
INSERT*
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	”CRZ WIND AT” is displayed in white font. “DRAFT” is displayed next to “CRZ WIND AT”, in yellow large font, when pending wind data exist for the active flight plan. The cruize waypoint at which the wind data is defined is displayed in green large font.
[1L] to [4L] TRU WIND/ALT	These fields display the entered winds at various altitudes. The entered winds are propagated at the same altitude to the downpath cruise waypoints, if no other winds are entered. The propagated wind direction and velocity are displayed in small font. Both the uplinked winds and the pilot-entered winds are displayed in large font. Wind data can be modified during cruise. Wind data is displayed in yellow when pending winds exist and in blue when inserted.

[5L] SAT/ALT	This field enables the crew to enter a temperature at a given flight level, or it displays a propagated value. The flight crew must enter both temperature and altitude at the first entry. They can then modify the temperature or the altitude independently. SAT and Altitude are displayed in yellow when pending winds exist and in blue otherwise.
[6L] RETURN or WIND CANCEL	The “< RETURN” prompt is displayed when no modification has been performed on any WIND page. Selecting this prompt reverts to the page from which WIND pages have been accessed when modifications have been performed on any WIND page, the “WIND CANCEL“ prompt is displayed. Selecting this prompt cancels all modifications to the WIND pages.
[2R] WIND REQUEST	Pressing this key sends a request for ACARS winds. (Refer to DSC-22_20 Auto Flight - Flight Management / 70 AOC Functions / B Wind Data / Wind Data - Request for Wind Data).
[4R] PREV PHASE	This prompt is displayed in white in Preflight, Takeoff, Climb, Done and Go-Around phases. Pressing this prompt calls up the CLIMB WIND page.
[5R] NEXT PHASE	This prompt is displayed in white. Pressing this prompt calls up the DES WIND page.
[6R] WIND UPDATE*	This prompt is displayed when entries or modifications have been performed on any WIND page. Selecting this prompt inserts all the modifications performed on the WIND pages. Predictions are dashed on the F-PLN pages during the recomputation time. CRZ WIND page automatically reverts to F-PLN page, if the secondary flight plan is activated.

DESCENT WIND PAGE

This page enables the pilot to define and display the winds used for computing the descent profile at up to 5 descent altitudes.
The pilot calls it up by selecting NEXT PHASE on the CRUISE WIND page, or the WIND prompt on the VERT REV page.


DATA INDEX 2/2
5L
6L
ACTIVE F-PLN
<WINDS
SEC F-PLN
<WINDS
VERT REV
(AFTER T/D
OR AT DEST)
5L
6L
<WIND DATA
<RETURN
CRZ WIND
NEXT
PHASE>
5R
6R
OR
OR
OR
DESCENT WIND
TRU WIND/ALT
ALTN WIND
060°/060/FL310
[ ]°/[ ]
FL220
060°/050/FL200
060°/020/FL100
WIND
REQUEST*
PREV
PHASE>
050°/010/FL050
050°/008/GRND
WIND
←CANCEL
WIND
UPDATE*
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	”DESCENT WIND” is displayed in large white font. “DRAFT” is displayed next to “DESCENT WIND” in yellow large font when pending wind data exist for the active flight plan.
[1L] to [5L] TRU WIND/ALT	These lines display inserted winds or uplinked winds: in yellow when pending data exist, and in blue otherwise, prior to activating the descent phase (modifiable values). In green after descent phase activation (not modifiable values). An entry of “GRND” in the “ALT” field is seen as the wind at ground level. This wind is copied on to the PERF APPR page (and corrected for the magnetic variation), and used for the computation of the predictions. A clear action on one key reverts the line to blue brackets.

[6L] RETURN or WIND CANCEL	The RETURN prompt is displayed in white large font, when no wind entry is performed. Selecting this prompt reverts to the access page. The WIND CANCEL prompt appears in amber, as soon as a wind entry is performed. It is used to cancel a wind data update.

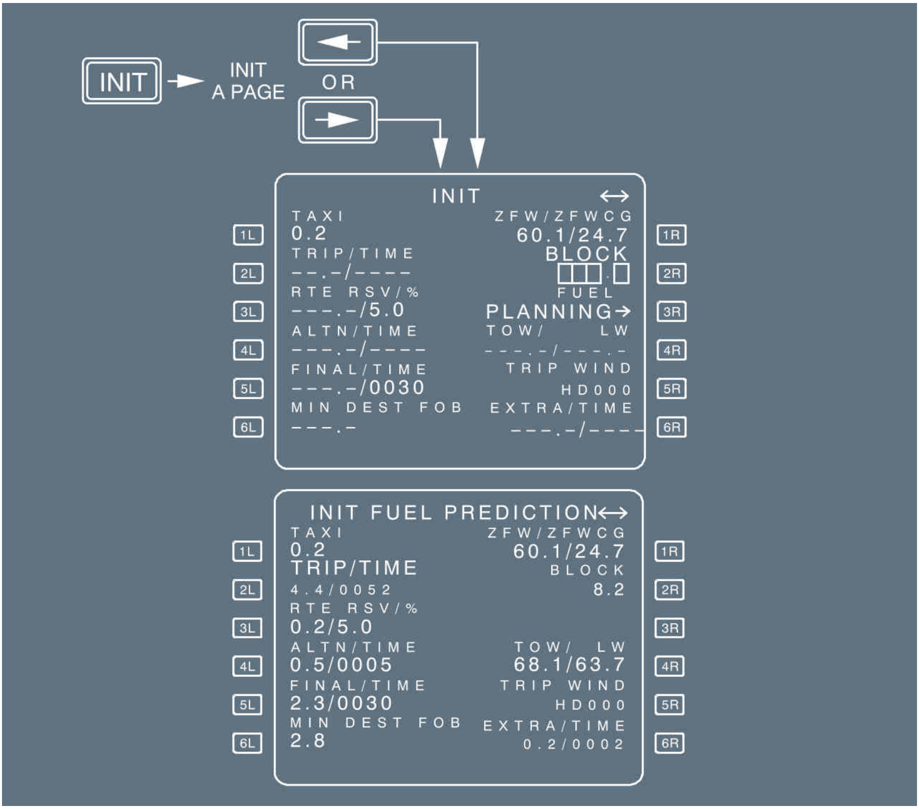
Note: Descent and alternate winds are deleted, if the destination airport is changed.

[1R] ALTN WIND	This field is only displayed when an alternate is defined. The flight crew-entered or uplinked value is displayed in large yellow font when pending data exist, and in blue otherwise. It can always be modified by the pilot.
[2R] FLXXX	This field displays an uplinked alternate cruise altitude in the label line. If no uplink is done, this field displays the FMS alternate cruise flight level in small green font.
[3R] WIND REQUEST	Pressing this key sends a request for ACARS winds (Refer to DSC-22_20 Auto Flight - Flight Management / 70 AOC Functions / B Wind Data / Wind Data - Request for Wind Data).
[4R] PREV PHASE	Pressing this key calls up the CRZ WIND page. The prompt is erased after the top of descent is sequenced. It is displayed in large white font.
[6R] WIND UPDATE	This prompt is displayed in amber, as soon as a wind entry or a modification is performed. Pressing the up (down) scroll key will display the data at the next (previous) downpath (up path) descent waypoint.

INIT B PAGE

Ident.: DSC-22_20-50-10-28-00000824.0021001 / 14 MAY 12
Applicable to: MSN 04827-04860

This page is used to initialize the gross weight and center of gravity values, before starting the engines.
The crew can call it up from the INIT A page, by pressing the “→” or “←” key on the MCDU, as long as the engines have not been started.
This page automatically reverts to the FUEL PRED page after the first engine is started.
The FMGC will stop using the pilot-entered block fuel and will compute its predictions based on the FOB indicated by the FQI computer (or the FAC as backup) from that moment on.


INIT
INIT
A PAGE
OR
INIT ↔
TAXI
0.2
ZFW/ZFWCG
60.1/24.7
TRIP/TIME
--.-/----
BLOCK
□□□.□
RTE RSV/%
---.-/5.0
FUEL
PLANNING→
ALTN/TIME
---.-/----
TOW/ LW
---.-/---.-
FINAL/TIME
---.-/0030
TRIP WIND
HD000
MIN DEST FOB
---.-
EXTRA/TIME
---.-/----
INIT FUEL PREDICTION↔
TAXI
0.2
ZFW/ZFWCG
60.1/24.7
TRIP/TIME
4.4/0052
BLOCK
8.2
RTE RSV/%
0.2/5.0
ALTN/TIME
0.5/0005
TOW/ LW
68.1/63.7
FINAL/TIME
2.3/0030
TRIP WIND
HD000
MIN DEST FOB
2.8
EXTRA/TIME
0.2/0002
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1L] TAXI (blue)	This is the taxi fuel, that defaults to a preset value, (usually 200 kg or 400 lb in the AMI file). The crew can change the value through this field.
[2L] TRIP/TIME (green)	This field displays the trip fuel and time when predictions are available. The crew cannot modify these values.
[3L] RTE RSV/% (blue)	This field displays the contingency fuel for the route and the corresponding percentage of trip fuel. It may be equal to 0.0, if such is the policy of the operator. The crew can either enter a fuel quantity, a percentage.

[4L] ALTN/TIME (blue/green)	Displays alternate trip fuel and time, assuming that the Cost Index = 0 and that the aircraft flies at the default cruise flight level. (*Refer to DSC-22_20-30-10-18 Alternate Function - Review and Selection of Alternate Airport*). The flight crew can modify the alternate fuel as required. In this case, alternate time will be dashed.
[5L] FINAL/TIME (blue)	Displays the final reserve fuel and time calculated at the alternate airport (or destination airport, if selected in the “airline fuel policy” section of the AMI). Before any crew entry, the FINAL field is dashed and FINAL TIME field is defaulted to the value specified in the AMI file (typically 30 min). The flight crew may enter a final fuel or time, and the system will compute associated holding time/fuel available. The system assumes a holding pattern at 1 500 ft AGL with the aircraft in CONF 1 at maximum endurance speed (racetrack pattern, altitude and selected airport can be modified through the “airline fuel policy” section of the AMI).
[6L] MIN DEST FOB (blue)	Displays the expected minimum fuel at destination. It is equal to the ALTN + FINAL fuel. This field can be modified by the flight crew, and is also impacted by the modification of ALTN and/or FINAL fuel. *Note:* *If flight crew entry of MIN DEST FOB is lower than ALTN + FINAL fuel, the message “CHECK MIN DEST FOB” is triggered on the MCDU.*
[1R] ZFWCG/ZFW (blue)	Displays the Zero Fuel Weight (ZFW) and Zero Fuel Weight CG (ZFWCG). The flight crew must enter the ZFW/ZFWCG values (as appropriate) to obtain a speed profile and predictions. *Note:* *If the flight crew enters a ZFW value that exceeds the acceptable range as defined in the performance data base, the “ENTRY OUT OF RANGE” message appears and the value is rejected.*
[2R] BLOCK	The block fuel in this field is a mandatory entry. When the flight crew enters a block fuel, the page title changes to INIT FUEL PREDICTION.

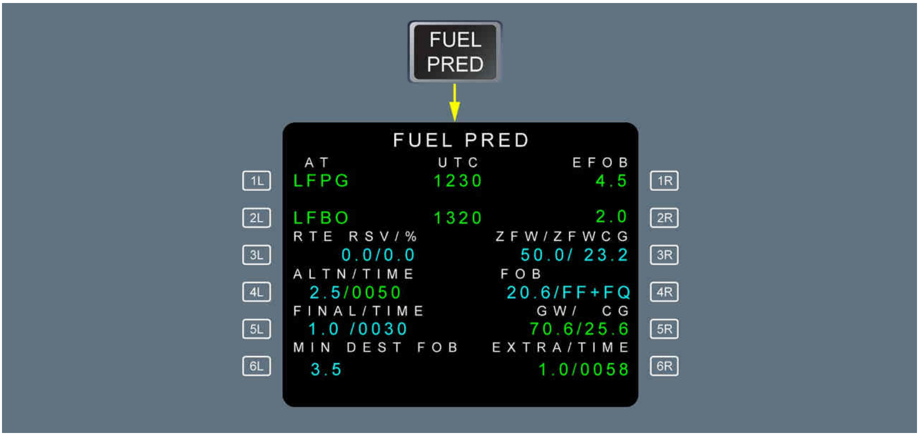
[3R] FUEL PLANNING (amber)	Initiates an FMGC block fuel computation using current hypothesis and extra = 0. When the pilot selects this function, FUEL PLANNING becomes green, and the BLOCK field is dashed during FMGC computation. The title of the page changes to INIT FUEL PLANNING, and BLOCK CONFIRM* replaces the FUEL PLANNING prompt, when the block fuel is computed by the FMGC. If the pilot modifies the parameters used to compute prediction before confirmation, the computation automatically restarts and FUEL PLANNING is displayed in green.
[4R] TOW/LW (green)	Displays the computed Takeoff Weight (TOW) and Landing Weight (LW) at the primary destination. This cannot be modified.
[5R] TRIP WIND (blue)	This field allows the entry of a mean wind component for the trip from the origin to the destination. Upon entry of a CO RTE or FROM/TO pair, this field defaults to HD 000 in small font. An entry preceeded by –, H, HD is considered to be headwind, +, T, TL to be tailwind. The entered speed is displayed in large blue font. When the flight crew inserts a wind on the CLIMB, CRUISE or DESCENT WIND page or on the PERF APP page, the system no longer considers the trip wind, and the corresponding field is dashed.
[6R] EXTRA/TIME (green)	Displays the amount of extra fuel, and the resulting time available for holding over the primary destination. EXTRA FUEL = BLOCK – (TAXI + TRIP + RSV + MIN DEST FOB). The field displays its information in small font, and it cannot be modified by the flight crew.

FUEL PREDICTION PAGE

Ident.: DSC-22_20-50-10-28-00000825.0022001 / 10 MAY 21
Applicable to: MSN 04827-04860

The FUEL PRED page displays fuel prediction information at destination and alternate, as well as fuel management data after the engines are started. The flight crew accesses the FUEL PRED page, by pressing the FUEL PRED key on the MCDU.

Note: *The flight crew can also call up this page by pressing the "→" key on the MCDU when on the INIT A page.*



```
          FUEL PRED
 AT          UTC        EFOB
LFPG         1230        4.5

LFBO         1320        2.0
RTE RSV/%            ZFW/ZFWCG
   0.0/0.0           50.0/ 23.2
ALTN/TIME               FOB
 2.5/0050           20.6/FF+FQ
FINAL/TIME            GW/   CG
 1.0 /0030           70.6/25.6
MIN DEST FOB       EXTRA/TIME
 3.5                  1.0/0058
```

[1L] - [1R] AT-UTC-TIME/EFOB	Display time and fuel predictions to the primary destination. TIME is displayed before takeoff. UTC predictions are displayed after takeoff. If the flight crew has entered ETT, the UTC is displayed. The EFOB at destination will turn to amber, if it becomes less than the MIN DEST FOB value.
[2L] - [2R] AT-UTC/TIME-EFOB	Display time and fuel predictions to the alternate airport (*Refer to DSC-22_20-30-10-18 Alternate Function - General*).
[3L] RTE RSV/%	Before departure, this field displays the route reserve fuel and the corresponding percentage of trip fuel. It may be equal to 0.0, if such is the policy of the operator. The flight crew can enter either a fuel quantity or a percentage. After takeoff, it is dashed, and the corresponding fuel is added to the EXTRA fuel.
[4L] ALTN/TIME	Displays alternate trip fuel and time, assuming that the cost index is equal to 0 and that the aircraft flies at the default cruise flight level. *Refer to DSC-22_20-30-10-18 Alternate Function - Review and Selection of Alternate Airport*. The flight crew can modify the alternate fuel as required. In this case, alternate time will be dashed.

[5L] FINAL/TIME	Displays the final reserve fuel and time calculated at the alternate airport (or destination airport, if selected in the “airline fuel policy” section of the AMI). The flight crew may enter a final fuel or time, and the system will compute associated holding time/fuel available. The system assumes a holding pattern at 1 500 ft AGL, with the aircraft in CONF1 at maximum endurance speed (racetrack pattern, altitude and selected airport can be modified through the “airline fuel policy” section of the AMI).
[6L] MIN DEST FOB	Displays the expected minimum fuel at destination. It is equal to the FINAL + ALTN fuel. The field can be modified directly by the flight crew, and is also impacted by the modification of the ALTN and/or the FINAL fuel.
[3R] ZFW/ZFWCG	Displays the ZFW and ZFWCG values, as entered before engine start on the INIT B page. The flight crew can re-enter or modify these values after engine start on the FUEL PRED page. If at engine start, no ZFW or ZFWCG values have been entered, amber boxes are displayed in the corresponding field. The flight crew must enter the ZFW/ZFWCG values to obtain a speed profile and predictions.
[4R] FOB	Displays the FOB calculated by the FMGS and/or the following fuel sensors: - Fuel flow and fuel quantity sensors (/FF+FQ) - Fuel flow sensors only (/FF) - Fuel quantity sensors only (/FQ). The flight crew can modify the FOB value in flight, or modify the sensors used by entering “/FF”, “/FQ” or “/FF+FQ”, as required.
[5R] GW/CG	The FMS continuously updates the GW and CG during the flight. The field displays dashes, as long as the system is not calculating the FOB, or ZFW has not been entered by the flight crew. If after engine start ZFW and FOB are defined but GW/CG cannot be computed (ZFWCG missing), 25 % is used as a default value; INITIALIZE WEIGHTS message is triggered on MCDU scratchpad and the flight crew must enter ZFWCG in [3R]. The field cannot be modified.
[6R] EXTRA/TIME	Displays the amount of extra fuel, and the resulting time available for holding over the primary destination. EXTRA FUEL = FOB - (TAXI + TRIP + RSV + MIN DEST FOB). This field cannot be modified.

Note: All fields are dashed before engines are started.

FLIGHT PLAN PAGES

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-50-10-28-A-00000826.0001001 / 16 MAR 11

These pages display all active and alternate flight plan, waypoints alongwith the associated predictions.

The flight crew can make all revisions to the lateral and vertical flight plans from these pages:

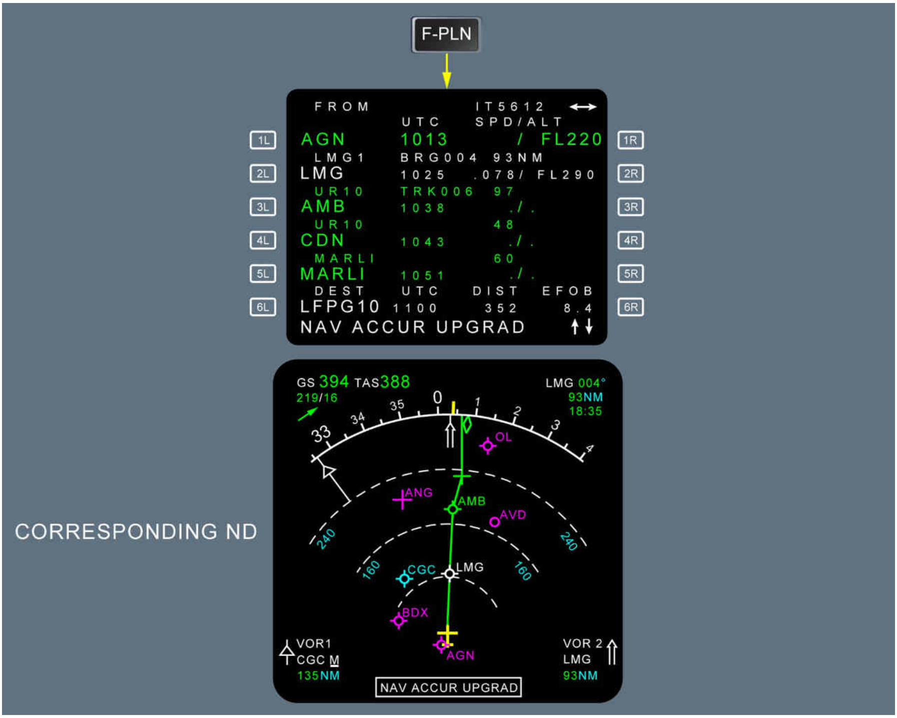
The flight crew presses the left key to revise the lateral flight plan, and the right key to revise the vertical flight plan.

The flight crew presses the F-PLN key on the MCDU console to access page A of the active flight plan.

Ident.: DSC-22_20-50-10-28-A-00000827.0009001 / 06 AUG 19

FLIGHT PLAN A PAGE

Flight Plan A Page displays time, speed, and altitude predictions for each active flight plan waypoint.



```
 FROM                  IT5612  ↔
             UTC       SPD/ALT
AGN          1013         / FL220
 LMG1        BRG004   93NM
LMG          1025     .078/ FL290
 UR10        TRK006   97
AMB          1038         ./.
 UR10                 48
CDN          1043         ./.
 MARLI                60
MARLI        1051         ./.
 DEST        UTC      DIST    EFOB
LFPG10      1100      352      8.4
NAV ACCUR UPGRAD                ↑↓
```

F-PLN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CORRESPONDING ND
GS 394 TAS388
219/16
LMG 004°
93NM
18:35
33
34
35
0
1
2
3
4
OL
ANG
AMB
AVD
240
240
160
160
CGC
LMG
BDX
AGN
VOR1
CGC M
135NM
VOR 2
LMG
93NM
NAV ACCUR UPGRAD

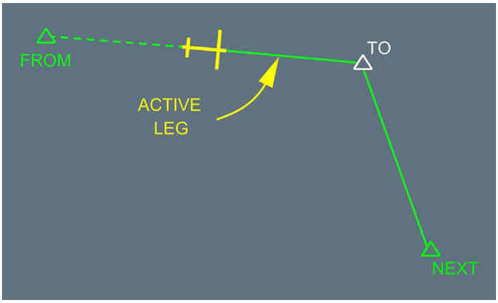
TITLE	FLIGHT NUMBER (blank, if no flight number has been entered). This line may display OFST in white, if a lateral offset is flown.
Line 1 to Line 5 WPT, UTC, SPD, ALT	These lines display consecutive waypoints, alongwith associated predictions of time, speed or Mach and altitude for each. TIME is displayed before takeoff, and UTC after takeoff. After the flight crew enters an Estimated Takeoff Time (ETT), UTC is displayed. The time and flight level display at the FROM waypoint (first line of the flight plan) are values that the system memorized at waypoint sequencing.
[1R] SPD/ALT	The field dedicated to SPEED or MACH is blank at the FROM waypoint, except at the departure airport (V1 associated with runway elevation, is displayed).

Note: *When the HOLD marker is slewed, the HOLD SPD label will overwrite the TIME/UTC title. In addition, the IMM EXIT or RESUME HOLD prompt will replace the SPD/ALT field.*

Note: *The predicted altitude at a waypoint is related to the QNH below the transition altitude, and is given as a flight level above the transition altitude.*

Line 6, DEST UTC/TIME DIST, EFOB	DIST is the distance to destination along the displayed flight plan. EFOB is the estimated fuel on board at destination. The EFOB at destination will turn to amber, if it becomes less than the MIN DEST FOB value. The sixth line is permanent and is displayed in white font, once predictions are available, except when a TMPY F-PLN is displayed, or in some cases when an ALT CSTR is entered ("← CLB or DES →" prompt appears).

The generic flight plan page displays the FROM waypoint (last waypoint to be overflown) on the first line, and the TO waypoint (in white) on the second line. The FROM/TO flight plan leg is called the active leg.



The flight crew can use the scroll keys to review all flight plan legs down to the last point of the alternate flight plan. The AIRPORT key serves as a fast scroll key. The flight crew can press it to call up the next airport (DEST, ALTN, ORIGIN) to be displayed on the flight plan page.

In order to return to the beginning of the flight plan page, the flight crew presses the F-PLN key on the MCDU console.

The display shows the name of the leg between two waypoints, and the distance between them on a line between the lines that identify them. During an approach, this in-between line also defines the angle of the final descent path. For example, "2-3 °" indicates that the leg is two nautical miles long, and the flight path angle is -3 °.

The display shows the bearing between FROM and TO waypoints as the bearing from the aircraft position to the TO waypoint. It shows track (TRK) between the waypoints shown in lines 2 and 3. This is the outbound track of the next leg.

If the database contains a published missed approach procedure, or if someone has inserted one manually, the display shows it in blue after the destination runway identification. It turns green when the go-around phase becomes active.
After the last waypoint of the missed approach, the display shows the alternate flight plan.
When NAV mode is engaged, the flight crew can only clear or modify the TO waypoint by using the DIR key on the MCDU console.

PREDICTIONS

The FMS calculates and displays predictions at all F-PLN waypoints.
It uses the current wind and the predicted winds to compute the predictions.

CONSTRAINTS

The database may define an altitude or speed constraint for each waypoint of the climb, descent, and approach phases, or the flight crew may manually insert such constraints (except at origin, destination, FROM, and pseudo-waypoints) or a time constraint (RTA).
The constraints are displayed in magenta, as long as predictions are not completed.
Once predictions are available, constraints are replaced by speed, time and altitude predictions, preceded by stars. If the star is in magenta, the system predicts that the aircraft will match the constraint (altitude within 250 ft, speed not more than 10 kt above the constraints, RTA within the required accuracy). If the star is in amber, the system predicts that the aircraft will miss the constraint and the MCDU displays: SPD ERROR AT WPTXX for speed constraint, or RTA MISSED AT XXX for time constraint.

Note: *SPD and ALT CSTR may either be entered on the VERT REV page or directly on the F-PLN A page, whereas TIME CSTR may only be entered from the RTA page.*

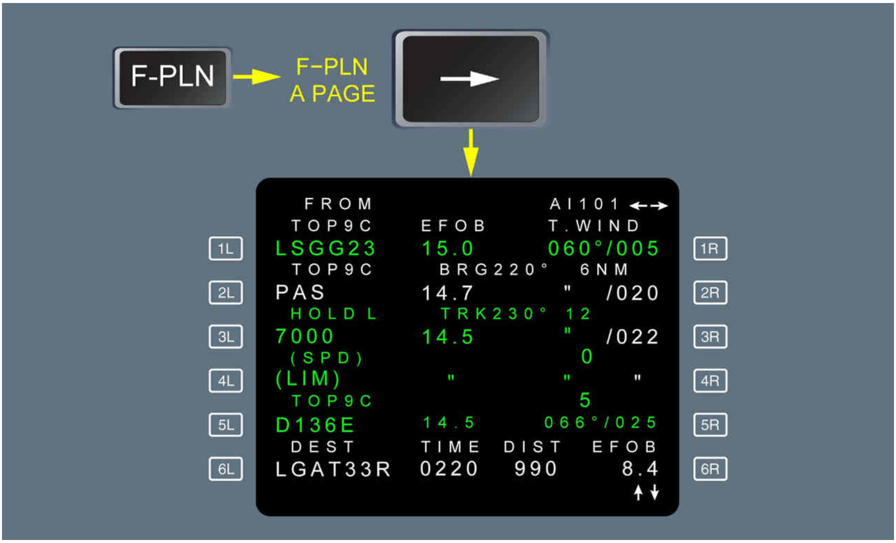
PSEUDO-WAYPOINTS

Pseudo-waypoints are geographical positions corresponding to an event in the flight plan : T/C (Top of Climb), T/D (Top of Descent), SPD/LIM (Speed Limit), S/C (Step Climb point), S/D (Step Descent point), DECEL (Deceleration for Approach), Time Markers etc.
Pseudo-waypoints are displayed as waypoints in parentheses.

Ident.: DSC-22_20-50-10-28-A-00000828.0001001 / 28 MAY 20

FLIGHT PLAN B PAGE

This page displays fuel predictions and forecast winds at each waypoint.
The flight crew calls it up by pressing the ″→” or “←” keys when the FLIGHT PLAN A page is displayed.



```
  FROM                   AI101 ←→
 TOP9C      EFOB        T.WIND
LSGG23      15.0        060°/005
 TOP9C       BRG220°     6NM
PAS         14.7          "   /020
  HOLD L     TRK230°     12
7000        14.5          "   /022
  (SPD)                   0
(LIM)         "           "     "
  TOP9C                   5
D136E        14.5       066°/025
 DEST       TIME  DIST     EFOB
LGAT33R     0220   990      8.4
                            ↑↓
```

TITLE	FLIGHT NUMBER (blank, if no flight number has been entered).
Line 1 to Line 5 WPT-EFOB-WIND	These lines display consecutive waypoints and associated fuel predictions, and the predicted wind profile. The direction of forecast winds is relative to true north. Forecast winds include winds entered by the flight crew (large font) and the propagated winds at intermediate waypoints (small font). EFOB and WIND at the FROM waypoint are displayed in large font. At other waypoints, it is displayed in small font, and in the same color as the associated waypoint. No wind entry is allowed on this page. The flight crew will use the CLIMB, CRUISE, or DESCENT WIND pages, accessed from the INIT A page or the DATA INDEX B page.
Line 6 DEST-UTC/DIST-EFOB	Identical to the F-PLN A page.

LATERAL REVISION PAGES

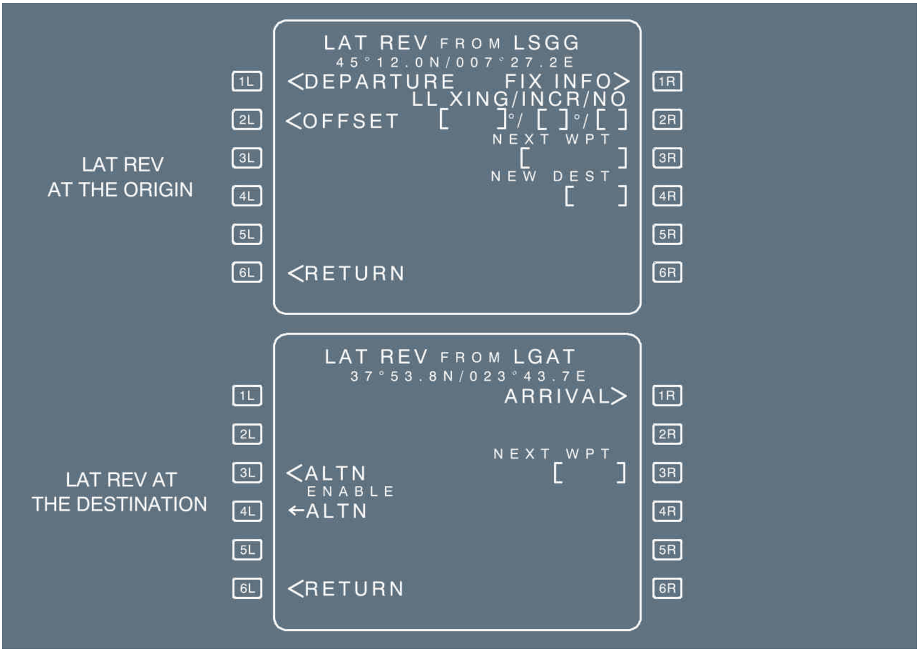
Applicable to: MSN 04827-04860

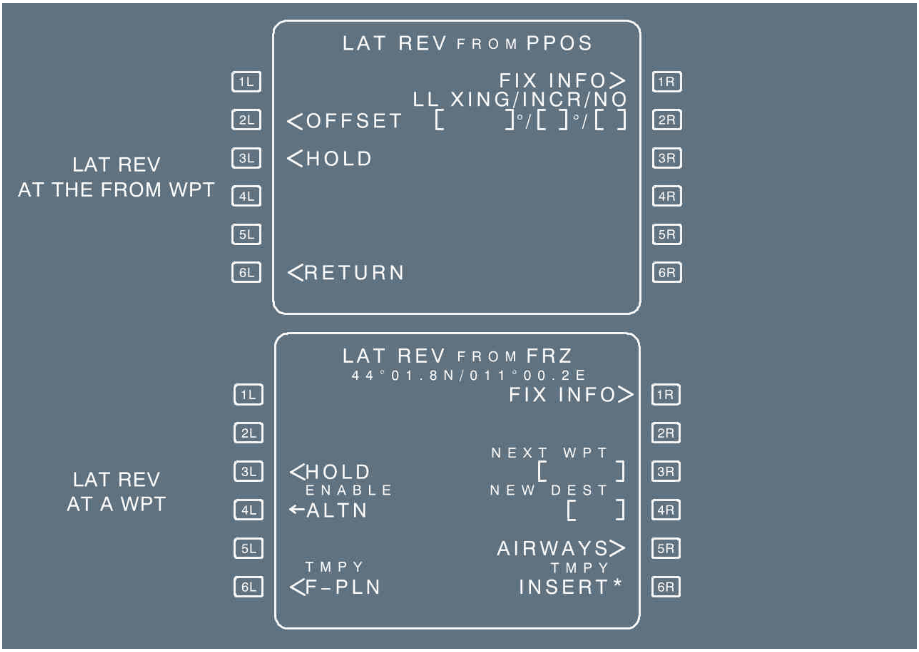
Ident.: DSC-22_20-50-10-28-B-00000829.0021001 / 14 MAY 12

These pages provide a list of the lateral flight plan revisions, that can be used to change the flight plan beyond a selected waypoint.

The crew calls up these pages from the flight plan pages (A or B), by pressing the left key next to the selected waypoint.

Different lateral flight plan revisions are available for different waypoints.


LAT REV
AT THE ORIGIN
LAT REV FROM LSGG
45°12.0N/007°27.2E
<DEPARTURE
FIX INFO>
LL XING/INCR/NO
<OFFSET
[ ]°/ [ ]°/ [ ]
NEXT WPT
[ ]
NEW DEST
[ ]
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
LAT REV AT
THE DESTINATION
LAT REV FROM LGAT
37°53.8N/023°43.7E
ARRIVAL>
NEXT WPT
<ALTN
[ ]
ENABLE
←ALTN
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R


LAT REV AT THE FROM WPT
LAT REV FROM PPOS
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
FIX INFO>
LL XING/INCR/NO
<OFFSET [ ]°/[ ]°/[ ]
<HOLD
<RETURN
LAT REV AT A WPT
LAT REV FROM FRZ
44°01.8N/011°00.2E
FIX INFO>
NEXT WPT
<HOLD [ ]
ENABLE
NEW DEST
←ALTN [ ]
AIRWAYS>
TMPY
TMPY
<F-PLN
INSERT*

TITLE	The ident of the waypoint or airport selected for revision, alongwith its latitude and longitude. If the selected waypoint is the FROM waypoint, the title omits the aircraft latitude and longitude, and instead displays the "PPOS" (present position) instead.
[1L] DEPARTURE	This prompt gives access to the DEPARTURE pages, where the crew can select and insert runways, SIDs, and TRANSs.
[2L] OFFSET [ ]	This prompt allows the pilot to enter a left or right lateral offset in the flight plan. The offset can be between 1 and 50 NM. When the pilot enters an offset, the OFFSET field becomes yellow, and the 6L and 6R fields display "ERASE" and "INSERT". The pilot can delete an inserted offset by pressing the CLR pb, by entering a zero for the amount of the offset, or by selecting a DIR TO.
[3L] HOLD or [3L] ALTN	HOLD prompt gives access to the hold pages. ALTN prompt is only available if the revised point is the destination airport. It enables the pilot to access the alternate airport page.

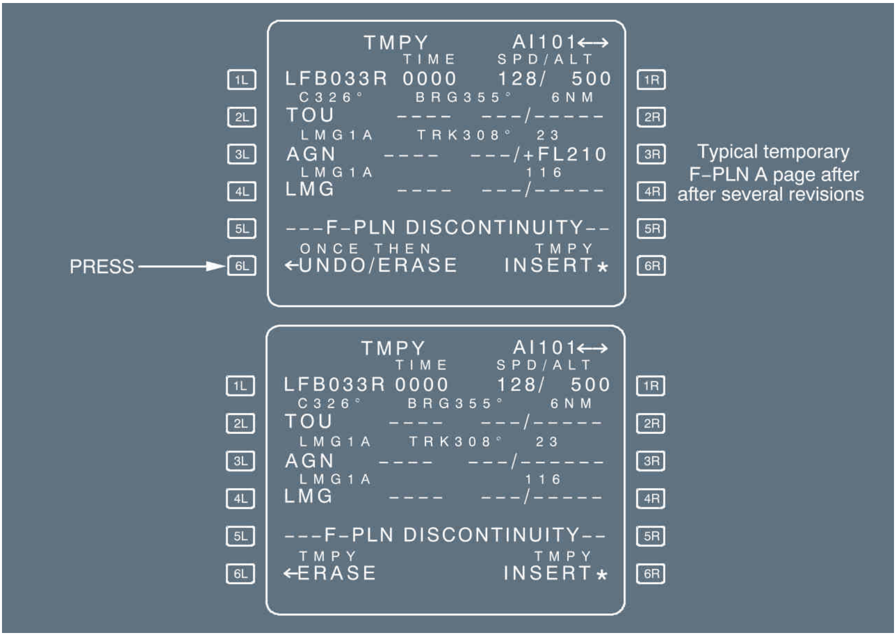
[4L] ENABLE ALTN	The crew presses this key to create a temporary flight plan using the alternate flight plan that is defined, but not inserted. This prompt is not displayed at the ORIGIN and FROM waypoints.
[6L] TMPY F-PLN (yellow) or RETURN (white)	Pressing this key gives access to the temporary flight plan (when created). (No temporary flight plan exists). This prompt gives access to the last displayed page.
[1R] ARRIVAL or FIX INFO	ARRIVAL prompt calls up the arrival pages, where APPR, STAR, TRANS and VIA can be selected. FIX INFO prompt gives access to the FIX INFO pages. This prompt is only displayed on the lateral revision at the origin (before take off) or FROM (after take off), and at waypoints of the primary flight plan (except destination).
[2R] LL XING/INCR/NO (blue)	This field allows the crew to create latitude/longitude crossing points. The increment (INCR) ranges from 1 to 20 °, and the number of crossing points (from 1 to 99). This field is in yellow when a temporary flight plan exists and is not displayed for waypoints belonging to the descent procedure.
[3R] NEXT WPT (blue)	The crew presses this key to enter the content of the scratchpad as next waypoint. This prompt is not displayed at the FROM (or PPOS) waypoint. This field is in yellow when a temporary flight plan exists.
[4R] NEW DEST (blue)	The system displays this prompt for the flight crew to enter a new destination. It is not displayed at the FROM (or PPOS) waypoint, at waypoints beyond the destination, or at destination. When the missed approach becomes active, the prompt is available at any point of the missed approach. This field is in yellow when a temporary flight plan exists.
[5R] AIRWAYS	The crew presses this key to insert an airway starting at the revised waypoint and another waypoint. This prompt is not displayed at the FROM waypoint, origin or destination, and on manually-created waypoints.
[6R] TMPY INSERT*	Activates the temporary flight plan.

Ident.: DSC-22_20-50-10-28-B-00000830.0002001 / 14 MAY 12

TEMPORARY REVISION

When the pilot selects a lateral or vertical revision, the system creates a “Temporary F-PLN” and displays it in yellow on the MCDU (except Missed approach and Alternate parts that are dispalyed in blue) and as a dashed yellow line on the ND to enable the pilot to review the data before inserting. As long as the temporary flight plan is not inserted, the previous flight plan remains active and the system guides the aircraft along. The pilot can perform multiple revisions in the same temporary flight plan.

The temporary flight plan does not display destination information on 6L, but displays fields to erase or insert the temporary revision:
- UNDO/THEN ERASE: Cancels the last revision in the temporary flight plan.
- TMPY INSERT: Activates the entire temporary flight plan with all the revisions included.
- TMPY ERASE: Deletes the entire temporary flight plan.


TMPY
AI101↔
TIME
SPD/ALT
LFB033R 0000 128/ 500
C326°
BRG355°
6NM
TOU ---- ---/-----
LMG1A
TRK308°
23
AGN ---- ---/+FL210
LMG1A
116
LMG ---- ---/-----
---F-PLN DISCONTINUITY--
ONCE THEN
TMPY
←UNDO/ERASE
INSERT*
PRESS
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
TMPY
AI101↔
TIME
SPD/ALT
LFB033R 0000 128/ 500
C326°
BRG355°
6NM
TOU ---- ---/-----
LMG1A
TRK308°
23
AGN ---- ---/------
LMG1A
116
LMG ---- ---/-----
---F-PLN DISCONTINUITY--
TMPY
TMPY
←ERASE
INSERT*

Typical temporary F-PLN A page after after several revisions

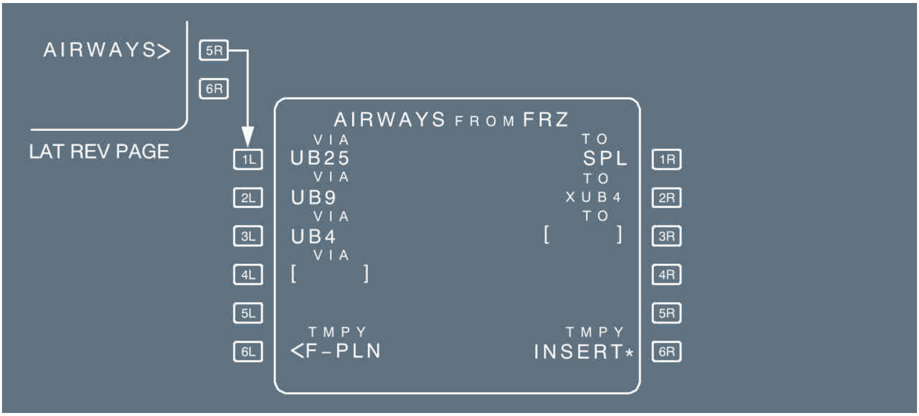
Note: *The destination information is still available by scrolling up to the end of the flight plan or by using the AIRPORT key.*

AIRWAYS PAGE

Ident.: DSC-22_20-50-10-28-00000831.0021001 / 14 MAY 12
Applicable to: MSN 04827-04860

The flight crew can use the AIRWAYS page to select up to five airways, and string them into the flight plan, after the revised waypoint.

The crew calls up this page, by pressing the AIRWAYS key (5R) on the LAT REV page.



TITLE	“AIRWAYS from XXX”, XXX: Revised waypoint ident (large green font).
[1L] to [5L] VIA	Displays the airways entered by the crew.
[6L] TMPY F-PLN or RETURN	The flight crew presses this key to return to the lateral revision page. This field displays “TMPY F-PLN” when a temporary flight plan is created. It enables the temporary flight plan to be consulted.
[1R] to [5R] TO	Displays the end point of the corresponding airways entered on the [1L] to [5L] entries. The ending point is displayed in large blue font, if manually-entered, in small blue font, if computed by the FMGC.
[6R] TMPY INSERT*	Activates the temporary flight plan.

Note: 1. *If the entered airway contains at least one fixed radius transition waypoint as defined in the navigation database, and the TO waypoint is defined, and the fixed radius transition waypoint is in the flight plan, then, “FIXED TURN RADIUS AWY” is displayed between the VIA and TO fields.*
2. *If the condition for display “FIXED TURN RADIUS AWY” is satisfied for two consecutives airways lines, the second line displays (“) instead of the whole message.*

DEPARTURE PAGES

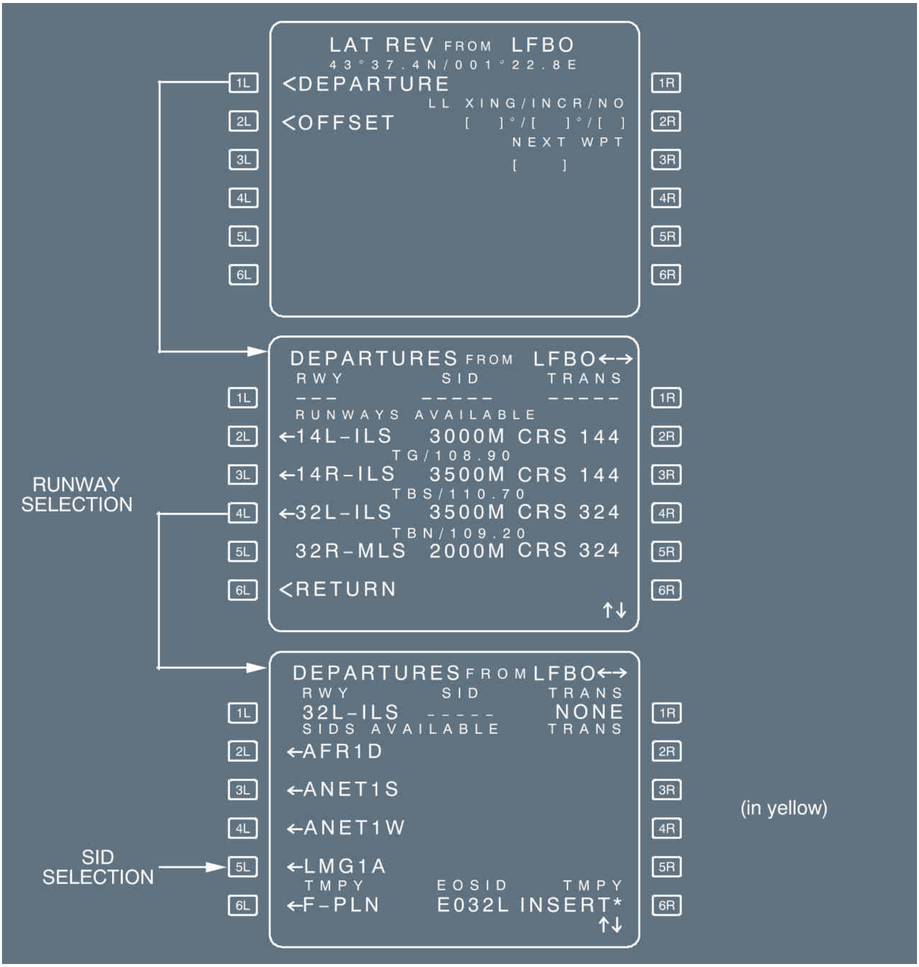
Ident.: DSC-22_20-50-10-28-00000832.0004001 / 01 OCT 12
Applicable to: MSN 04827-04860

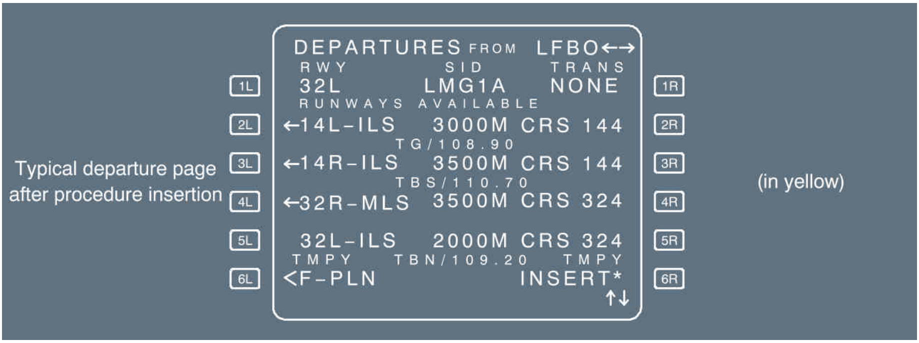
The flight crew can use the DEPARTURE pages to review departure procedures (RWY, SID, TRANS), and enter them into the temporary flight plan.

When the display shows the lateral revision page for the origin, the flight crew calls it up by pressing the 1L key.

The RWY, and, SIDS/enroute TRANS (if any) pages are available.

The flight crew sequentially calls up the SIDs and TRANS (if any) pages by selecting a runway on the RWY page. The flight crew can also scroll between the RWY, SIDs and TRANS (if any) pages by pressing the "←" or "→" key on the MCDU console.


LAT REV FROM LFBO
43°37.4N/001°22.8E
<DEPARTURE
LL XING/INCR/NO
<OFFSET
[ ]°/[ ]°/[ ]
NEXT WPT
[ ]
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DEPARTURES FROM LFBO←→
RWY SID TRANS
--- ----- -----
RUNWAYS AVAILABLE
←14L-ILS 3000M CRS 144
TG/108.90
←14R-ILS 3500M CRS 144
TBS/110.70
←32L-ILS 3500M CRS 324
TBN/109.20
32R-MLS 2000M CRS 324
<RETURN
↑↓
RUNWAY SELECTION
DEPARTURES FROM LFBO←→
RWY SID TRANS
32L-ILS ----- NONE
SIDS AVAILABLE TRANS
←AFR1D
←ANET1S
←ANET1W
←LMG1A
TMPY EOSID TMPY
←F-PLN E032L INSERT*
↑↓
SID SELECTION
(in yellow)



```
 DEPARTURES FROM  LFBO←→
 RWY        SID     TRANS
 32L       LMG1A    NONE
 RUNWAYS AVAILABLE
←14L-ILS   3000M CRS 144
           TG/108.90
←14R-ILS   3500M CRS 144
           TBS/110.70
←32R-MLS   3500M CRS 324

 32L-ILS   2000M CRS 324
 TMPY      TBN/109.20  TMPY
<F-PLN             INSERT*
                        ↑↓
```

Typical departure page after procedure insertion

(in yellow)

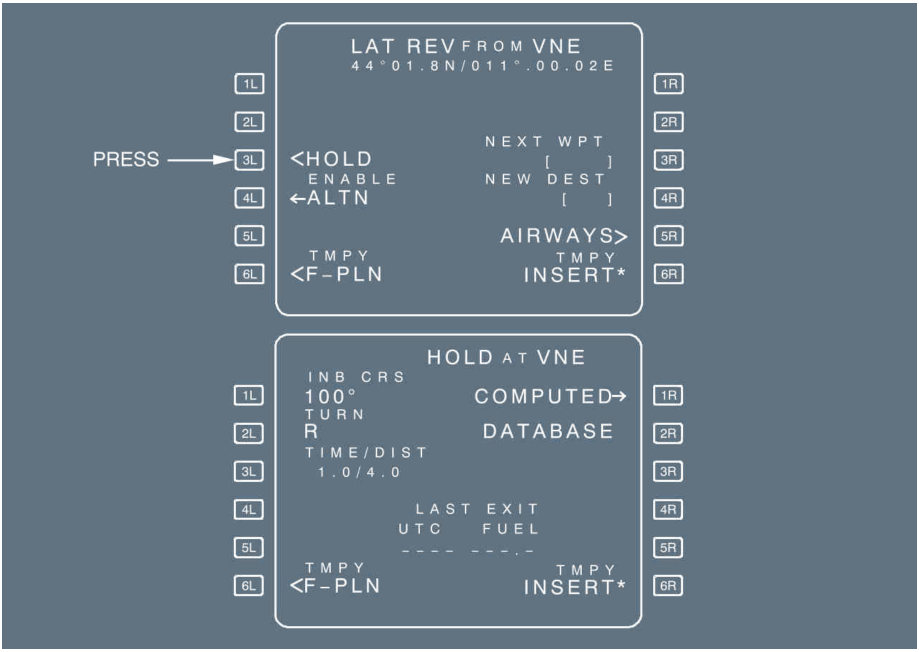
Line 1 RWY, SID TRANS	This line displays the RWY, SID, and TRANS in green after they have been inserted into the active flight plan, or in yellow if a temporary is created or updated. If nothing has been selected or inserted, the line displays dashes. “NONE” is displayed in the SID or TRANS field, if no SID or TRANS exists, or NO SID or NO TRANS was selected by the crew.
[2L] to [5L] RWY/SIDs	These fields display selectable and selected RWYs or SIDs. The pilot can scroll each list. Selectable RWYs and SIDs are displayed in blue with an arrow. Once a RWY or SID is selected, the arrow disappears. A RWY or SID, already inserted in the flight plan, is displayed in green. When a runway is selected, a temporary is created or modified, and the DEPARTURE page 2 for SID selection is automatically displayed. The display shows the length, course and, if available, the MLS ident and frequency for each runway.
[6L] TMPY F-PLN or RETURN	The pilot presses this key to return to the temporary flight plan page, if a temporary exists. The display shows RETURN, instead TMPY F-PLN, when the pilot has not created a temporary flight plan. Pressing this key reverts to the LAT REV page.
[2R] to [5R] TRANS	This field displays the selectable and selected enroute transitions in blue and green respectively. They are blank, if there are no transitions. When a TRANS is selected, a temporary is created or updated (if one already exists).
[6M] EOSID	Once a runway is inserted into the flight plan, this field displays any ENG OUT SID for that runway. If a temporary is created or updated, the EOSID is displayed in yellow. Otherwise, it is displayed in green. If there is none, it displays “NONE”.

[6R] TMPY INSERT*	Activates the temporary flight plan.

HOLD PAGES

Ident.: DSC-22_20-50-10-28-00000833.0021001 / 14 MAY 12
Applicable to: MSN 04827-04860

These pages allow the pilot to review and modify the holding pattern parameters at the selected revise waypoint
The pilot calls up these pages by pressing the HOLD key on the LAT REV page for the waypoint.
The flight crew can insert database holds, hold computed by the FMS, or manually defined holds.


LAT REV FROM VNE
44°01.8N/011°.00.02E
NEXT WPT
[ ]
PRESS
<HOLD
ENABLE
←ALTN
NEW DEST
[ ]
AIRWAYS>
TMPY
<F-PLN
TMPY
INSERT*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
HOLD AT VNE
INB CRS
100°
COMPUTED→
TURN
R
DATABASE
TIME/DIST
1.0/4.0
LAST EXIT
UTC FUEL
---- ---.-
TMPY
<F-PLN
TMPY
INSERT*

The page title is displayed in white, if no temporary flight plan exists, or in yellow if a temporary flight plan is in progress. Hold parameters are displayed in blue if no Temporary exists, or in yellow if a temporary flight plan is in progress.

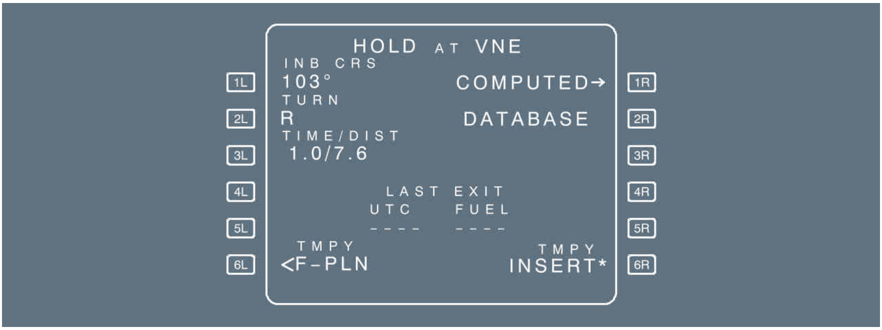
At first access, the HOLD page is displayed as follows:

- If a database hold is available at that waypoint, [1L], [2L] and [3L] display in yellow the parameters of the FMS database hold.
  In [2R], DATABASE is displayed in yellow. If any hold parameter is modified, DATABASE is displayed in white with a white arrow.
  In [1R], COMPUTED is displayed in white with a white arrow.
- If no database hold is available at that waypoint, [1L], [2L] and [3L] display in yellow the parameters of the FMS computed hold
  In [1R], COMPUTED is displayed in yellow. If any hold parameter is modified, COMPUTED is displayed in white with a white arrow.

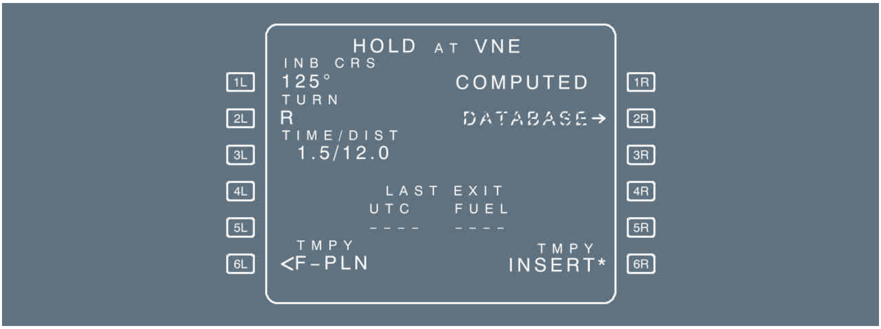
When the HOLD has been inserted, [1L], [2L] and [3L] display in blue the parameters of the already-existing hold.

- If the already-existing hold is a computed hold, COMPUTED is displayed in blue in [1R].
- If the already-existing hold is a database hold, DATABASE is displayed in blue in [2R].
- If the already-existing hold is neither a computed hold nor a database hold, both COMPUTED and DATABASE are displayed in white with a white arrow.

- **Database Hold**
  If a hold is defined in the navigation database for the revised waypoint and can be inserted then the corresponding TMPY F-PLN is automatically created by the FMS and DATABASE is displayed in yellow.



- **Computed Hold**
  If a default hold is computed by the FMS and can be inserted then the corresponding TMPY F-PLN is automatically created by the FMS and COMPUTED is displayed in yellow.



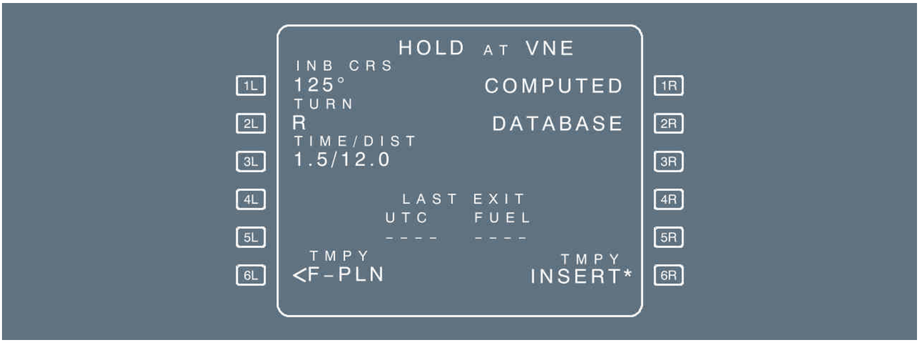
```
           HOLD AT VNE
     INB CRS
1L   125°            COMPUTED     1R
     TURN
2L   R              DATABASE→     2R
     TIME/DIST
3L    1.5/12.0                    3R

4L           LAST   EXIT          4R
             UTC    FUEL
5L           ----   ----          5R
      TMPY                 TMPY
6L   <F-PLN              INSERT*  6R
```

A computer hold has the following default parameters:

INB CRS = INBD TRK of the F-PLN leg leading to the revised waypoint.

TURN = Turn direction right.

TIME on outbound leg is 1.5 min above 14 000 ft, 1 min below 14 000 ft.



```
           HOLD AT VNE
     INB CRS
1L   125°            COMPUTED     1R
     TURN
2L   R               DATABASE     2R
     TIME/DIST
3L   1.5/12.0                     3R

4L           LAST   EXIT          4R
             UTC    FUEL
5L           ----   ----          5R
      TMPY                 TMPY
6L   <F-PLN              INSERT*  6R
```

[1L] INB CRS	This field displays the inbound course of the holding pattern. The data may be manually or automatically modified (via COMPUTED or DATABASE prompts).
[2L] TURN	This field shows the direction to turn in the hold (L or R). The data may be modified.

[3L] TIME/DIST	This field shows the time and distance for the outbound leg. The data may be modified, but time and distance cannot be entered simultaneously. Time and distance are dependent values that the system calculates from the predicted ground speed at the revised point, which in turn depends upon the holding speed (speed for maximum endurance, ICAO speed limit, or constraint speed, whichever is lower).
[6L] TMPY F-PLN or RETURN	This prompt gives access to the temporary flight plan page if one is in progress. If not, “RETURN” is displayed and allows a return to the LAT REV page.
[1R] COMPUTED (→)	Pressing this key reverts parameters to the system-computed parameters (1L, 2L, 3L).
[2R] DATABASE (→)	Pressing this key reverts the displayed parameters to the parameters memorized in the database for this waypoint.
LAST EXIT UTC FUEL	This field displays the time at which the aircraft must leave the holding pattern in order to meet fuel policy criteria (extra fuel = 0). The system also displays the estimated fuel on board at that time in thousands of kg or lb.

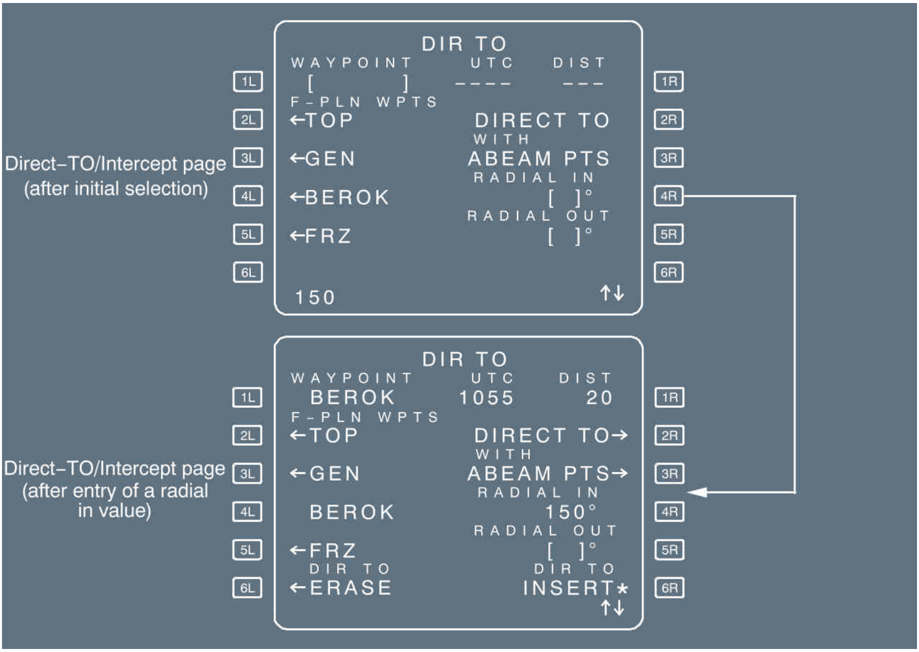
The 1R and 2R fields, as well as the hold parameters (1L, 2L, 3L), are blue when no temporary flight plan exists, and yellow when a temporary flight plan is in progress.

[6R] TMPY INSERT*	Activates the temporary flight plan.

DIRECT TO PAGE

Ident.: DSC-22_20-50-10-28-00000834.0004001 / 01 OCT 12
Applicable to: MSN 04827-04860

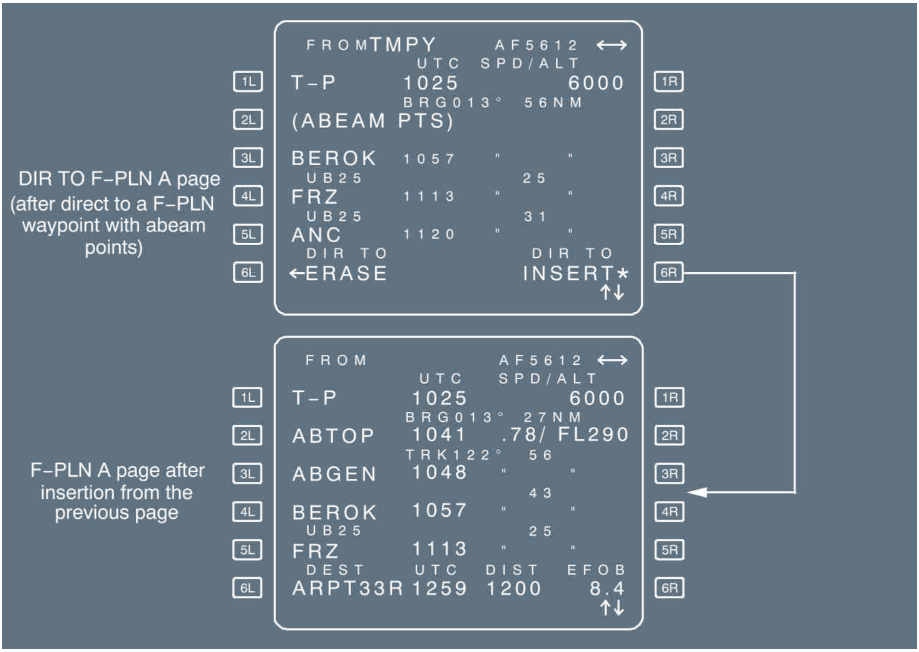
Pressing the “DIR” key from the MCDU screen calls up the DIR TO page. The pilot presses it to modify the flight plan, by creating a direct leg from the aircraft’s present position to any selected waypoint. The pilot cannot call up this page when the aircraft's present position is invalid. The “A/C POSITION INVALID” message is then displayed.
These are four DIRECT TO/INTERCEPT functions: DIRECT TO, ABEAM PTS, RADIAL IN, RADIAL OUT.
Using the DIRECT TO function results in the creation of a DIR TO temporary flight plan. This DIR TO temporary flight plan only reflects the insertion of the direct leg in the active flight plan. Moreover, a DIR TO temporary flight plan and a multi-revision flight plan cannot exist at the same time.


DIR TO
WAYPOINT
UTC
DIST
[ ]

F-PLN WPTS
←TOP
DIRECT TO
WITH
←GEN
ABEAM PTS
RADIAL IN
←BEROK
[ ]°
RADIAL OUT
←FRZ
[ ]°
150
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DIR TO
WAYPOINT
UTC
DIST
BEROK
1055
20
F-PLN WPTS
←TOP
DIRECT TO→
WITH
←GEN
ABEAM PTS→
RADIAL IN
BEROK
150°
RADIAL OUT
←FRZ
[ ]°
DIR TO
DIR TO
←ERASE
INSERT*
↑↓

Direct–TO/Intercept page (after initial selection)

Direct–TO/Intercept page (after entry of a radial in value)


1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
FROMTMPY AF5612 ⟷
UTC SPD/ALT
T-P 1025 6000
BRG013° 56NM
(ABEAM PTS)
BEROK 1057 " "
UB25 25
FRZ 1113 " "
UB25 31
ANC 1120 " "
DIR TO DIR TO
←ERASE INSERT*
↑↓
FROM AF5612 ⟷
UTC SPD/ALT
T-P 1025 6000
BRG013° 27NM
ABTOP 1041 .78/ FL290
TRK122° 56
ABGEN 1048 " "
43
BEROK 1057 " "
UB25 25
FRZ 1113 " "
DEST UTC DIST EFOB
ARPT33R 1259 1200 8.4
↑↓

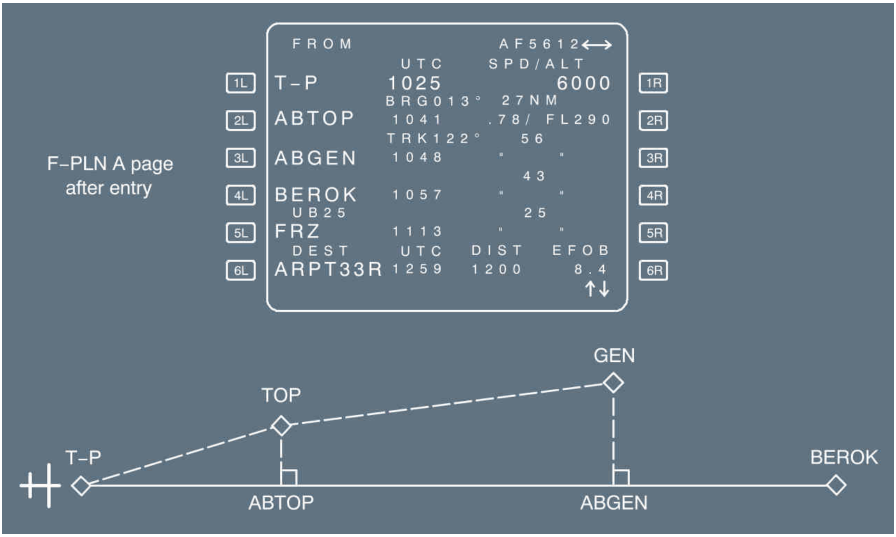
DIR TO F-PLN A page (after direct to a F-PLN waypoint with abeam points)

F-PLN A page after insertion from the previous page

[1L] WAYPOINT	This field gives access to the 'Direct TO' fix waypoint to be selected from a list of waypoints. The 'Direct TO' waypoint may be entered by using its identifier, place/bearing/distance, place-bearing/ place-bearing or latitude/longitude.
[2L] to [5L] F-PLN WPTS	This list provides the waypoints of the active flight plan, except waypoints from the missed approach, pseudo-waypoints F-PLN markers, non fixed waypoints. The display may be scrolled ↑ ↓
[6L] DIR TO ERASE	Pressing this key deletes the DIR TO temporary F-PLN.
[1R] UTC/DIST	As soon as the DIR TO temporary F-PLN is created, the time and distance to the 'Direct TO' fix waypoint is displayed in yellow.
[2R] DIRECT TO	Selecting this key activates the DIRECT TO function in the DIR TO temporary F-PLN.
[3R] ABEAM PTS	Selecting this key activates the ABEAM PTS function in the DIR TO temporary F-PLN.

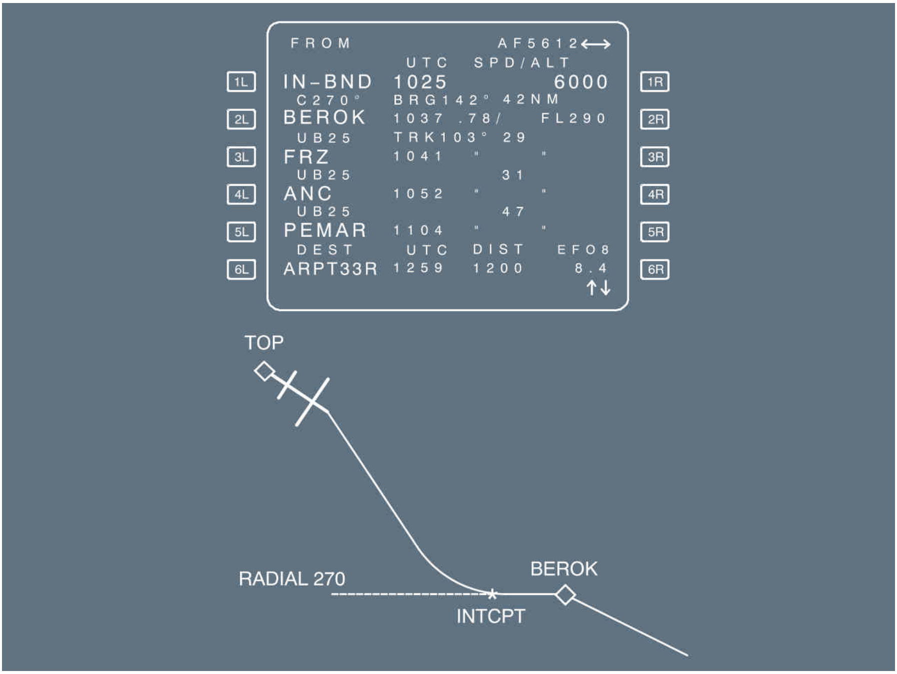
[4R] RADIAL IN and [5R] RADIAL OUT	The pilot fills in these fields to define a radial associated to the waypoint. Selecting a radial in (out) will activate the intercept radial into (from) the specified waypoint in the DIR TO temporary F-PLN. The pilot enters the radial in, or radial out, as XXX, XXX being the radial. An M or T may also be entered, referring to a MAG or a True value. A default radial in is proposed by the FMS if the DIR TO waypoint is part of the F-PLN.
[6R] DIR TO INSERT	Pressing this key enables the DIR TO temporary F-PLN to be inserted. After insertion, the F-PLN A page is displayed.

EXAMPLE 1: DIR TO BEROK - ABEAM



```
 FROM                    AF5612↔
               UTC      SPD/ALT
T-P           1025         6000
              BRG013°    27NM
ABTOP         1041     .78/ FL290
              TRK122°    56
ABGEN         1048       "    "
                         43
BEROK         1057       "    "
 UB25                    25
FRZ           1113       "
 DEST          UTC     DIST   EFOB
ARPT33R       1259     1200    8.4
                                ↑↓
```

EXAMPLE 2: RADIAL INBND - DIR TO BEROK - RADIAL 270° INBOUND



```
 FROM                        AF5612↔
              UTC    SPD/ALT
IN-BND       1025           6000
  C270°      BRG142° 42NM
BEROK        1037 .78/     FL290
  UB25       TRK103° 29
FRZ          1041  "         "
  UB25                31
ANC          1052  "         "
  UB25                47
PEMAR        1104  "         "
  DEST        UTC    DIST    EFOB
ARPT33R      1259    1200     8.4
                               ↑↓
```

If the DIR TO/INTCPT WPT entry is to a waypoint already in the flight plan, a default RADIAL IN is displayed in small font. However, no radial is displayed on the ND for this default radial. No default radial is provided for the RADIAL OUT field.

Selecting the INTCPT TO (RADIAL IN [1R]) function:
- Activates the intercept radial IN TO the WPT in the temporary F-PLN.
- Sets the course = radial IN + 180 °.

Selecting the INTCPT FROM (RADIAL OUT [2R]) function:
- Activates the intercept radial OUT from the WPT.
- Sets the course = radial OUT.

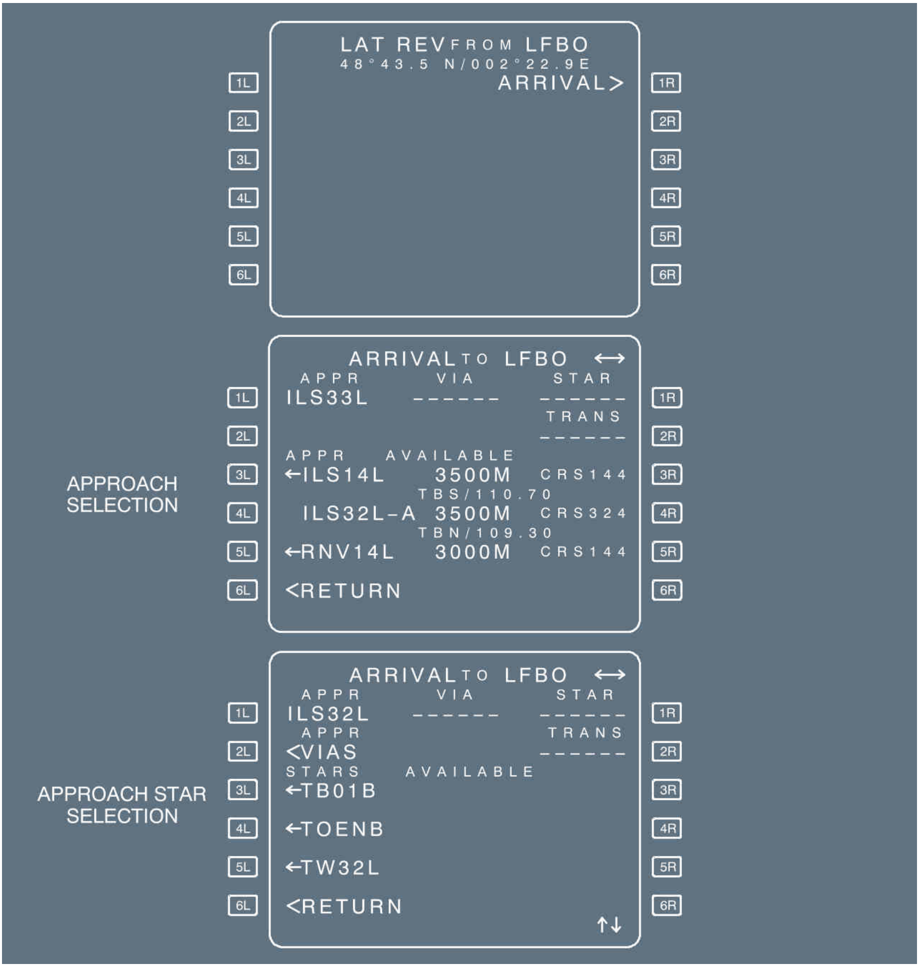
For details: *Refer to DSC-22_20-30-10-18 DIR Key (DIRECT-TO-FUNCTION) - General*.

ARRIVAL PAGES

Ident.: DSC-22_20-50-10-28-00000835.0025001 / 17 MAY 21
Applicable to: MSN 04827-04860

These pages enable the pilot to select a runway with its associated final, and to review arrival procedures (approaches, VIAs, STARs, TRANS) and enter them into the active flight plan.
The pilot calls them up from the LAT REV page for the destination.
Three lists APPR, STAR, and TRANS are available, along with a fourth, APPROACH VIAS if there are any transitions.
The pilot sequentially calls up each page, either by selecting a data item (such as APPR) or by pressing the "→" or "←" keys on the MCDU console.
When an approach is selected, it is inserted in a temporary fight plan and the ARRIVAL page 2 or APPROACH VIA page is automatically displayed.

Line [1L]-[1R] [2R]	This line displays the APPR, VIA, STAR, and TRANS in green, if they have been inserted in the flight plan, and in yellow, as a temporary flight plan, if they have been selected but not yet inserted. It displays dashes or "NONE", if nothing has been selected or inserted.
[2L] APPR VIAS	The pilot presses this key to call up transitions from the last point of the STAR to the first point of the approach.
[3L] to [5L]	These fields list selectable and selected APPRs, STARs, and VIAs. The flight crew can scroll the pages, when necessary. Selectable APPRs, STARs, and VIAs are displayed in blue with an arrow. Once the pilot has selected an APPR, STAR, or VIA, a temporary F-PLN is created. After the APPR, STAR, or VIA is inserted into the flight plan, it is displayed in green. For each approach, the display shows runway length, heading, and the frequency and identifier of the ILS when ILS is available. In case there are multiple approaches for the same runway, the ILS is identified with the runway plus the multiple indicator (i.e. ILS33L-S)
[6L] TMPY F-PLN or RETURN	TMPY F-PLN is displayed to access the temporary F-PLN page corresponding to the last revision. The field displays “RETURN”, instead of TMPY F-PLN, when the flight crew has not created a temporary flight plan.
[3R] to [5R]	These fields either display: - The identifier and the frequency of the NAVAID specified for the approach, or - The enroute transitions compatible with the selected STAR. The active selected TRANS is in green, the remaining TRANS are in blue.



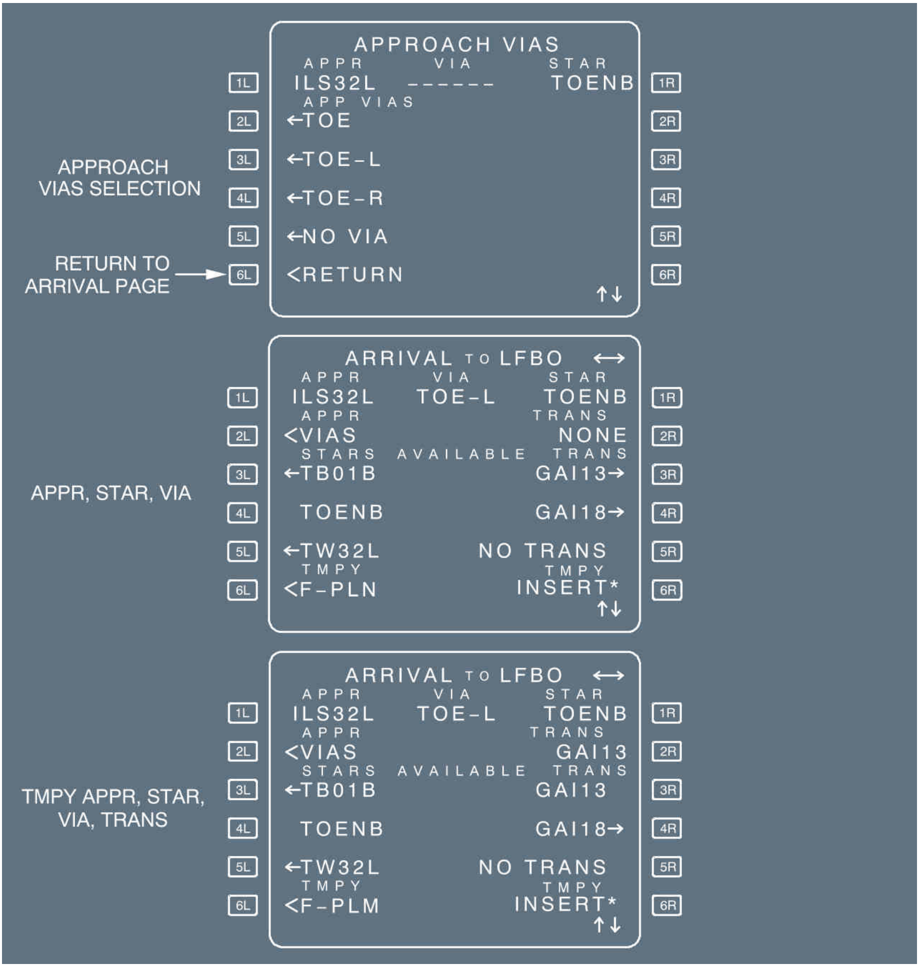
```
      LAT REV FROM LFBO
      48°43.5 N/002°22.9E
                  ARRIVAL>
```

APPROACH SELECTION

```
      ARRIVAL TO  LFBO   ↔
  APPR      VIA       STAR
ILS33L     ------    ------
                      TRANS
                     ------
APPR    AVAILABLE
←ILS14L     3500M    CRS144
          TBS/110.70
 ILS32L-A   3500M    CRS324
          TBN/109.30
←RNV14L     3000M    CRS144
<RETURN
```

APPROACH STAR SELECTION

```
      ARRIVAL TO  LFBO   ↔
  APPR      VIA       STAR
ILS32L     ------    ------
  APPR                TRANS
<VIAS                ------
STARS     AVAILABLE
←TB01B

←TOENB

←TW32L

<RETURN
                         ↑↓
```

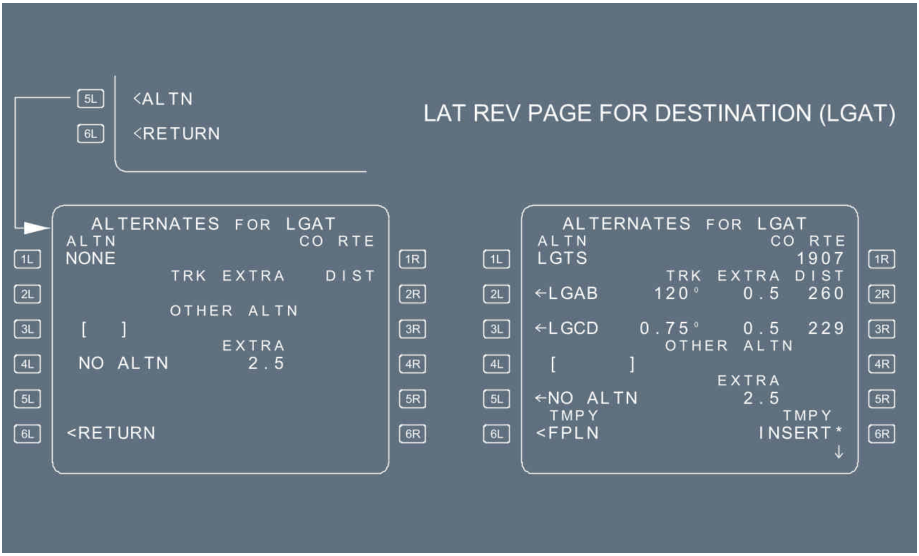

APPROACH VIAS
APPR VIA STAR
ILS32L ------ TOENB
APP VIAS
←TOE
←TOE-L
←TOE-R
←NO VIA
<RETURN
↑↓
APPROACH VIAS SELECTION
RETURN TO ARRIVAL PAGE
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
ARRIVAL TO LFBO ↔
APPR VIA STAR
ILS32L TOE-L TOENB
APPR TRANS
<VIAS NONE
STARS AVAILABLE TRANS
←TB01B GAI13→
TOENB GAI18→
←TW32L NO TRANS
TMPY TMPY
<F-PLN INSERT*
↑↓
APPR, STAR, VIA
ARRIVAL TO LFBO ↔
APPR VIA STAR
ILS32L TOE-L TOENB
APPR TRANS
<VIAS GAI13
STARS AVAILABLE TRANS
←TB01B GAI13
TOENB GAI18→
←TW32L NO TRANS
TMPY TMPY
<F-PLM INSERT*
↑↓
TMPY APPR, STAR, VIA, TRANS

ALTERNATE PAGE

Ident.: DSC-22_20-50-10-28-00000836.0002001 / 03 NOV 21

Applicable to: MSN 04827-04860

This page enables the flight crew to review, in the NAV database, the alternate airports that are paired with the destination, and define additional alternates, if needed. The flight crew calls up this page with the ALTN prompt, from the lateral revision page for the destination.


5L
6L
<ALTN
<RETURN
LAT REV PAGE FOR DESTINATION (LGAT)
ALTERNATES FOR LGAT
ALTN
CO RTE
NONE
TRK EXTRA DIST
OTHER ALTN
[ ]
EXTRA
NO ALTN 2.5
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
ALTERNATES FOR LGAT
ALTN
CO RTE
LGTS 1907
TRK EXTRA DIST
←LGAB 120° 0.5 260
←LGCD 0.75° 0.5 229
OTHER ALTN
[ ]
EXTRA
←NO ALTN 2.5
TMPY
TMPY
<FPLN
INSERT*
↓

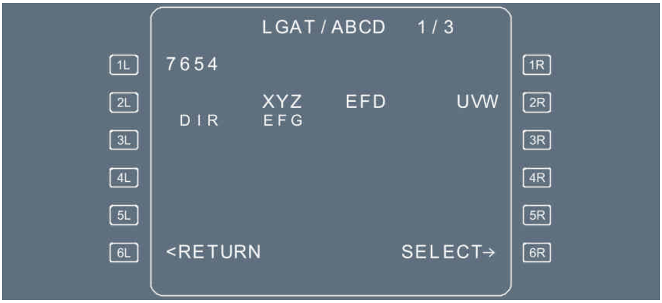
TITLE	The destination airport is displayed in large green font.
[1L] ALTN	This field displays the selected alternate: In green, if it is active; in yellow, if it is temporary. “NONE” is displayed, if NO ALTN option is selected, or if the destination has no alternate.
Line 2 to line 5	These lines display the identifications of alternates (up to 6), the extra fuel weight remaining after landing at the alternates, and the great-circle track and distances to them from the destination. If the database contains a company route between the destination and the alternate, the distance shown is an airway distance, not a great-circle distance. When the database defines a preferred alternate, it is displayed on Line 2 (if no scrolling has been performed).

[4L] OTHER ALTN	The flight crew can enter an airport identifier in the brackets (Line 3). If that airport is not stored in the database, the NEW RUNWAY page appears for the flight crew to use in defining it. If it is stored in the database, the ROUTE SELECTION page appears, and the flight crew can use it to select the best route. The flight crew may enter a distance in the DIST field of the OTHER ALTN prompt, in order to get preliminary fuel predictions. However, once the flight crew has selected the alternate airfield as a temporary alternate and then inserted it, the ALTN distance either reverts to the airway distance, if the flight crew has selected a company route, or to the direct distance to the alternate. The flight crew can use OTHER ALTN to overwrite and replace the previous OTHER ALTN.
NO ALTN	The flight crew uses this key to select the NO ALTN option.
[6L] RETURN or THPY F-PLN	The flight crew presses this key to revert the display to the LAT REV page. Pressing this key gives access to the TMPY F-PLN page corresponding to the last revised item.
[1R] CO RTE	Pressing this key displays the active company route between the destination and the selected alternate.
[6R] TMPY INSERT*	Activates the temporary flight plan.

ROUTE SELECTION PAGE FOR ALTERNATE

Ident.: DSC-22_20-50-10-28-00000837.0002001 / 05 JUN 18
Applicable to: MSN 04827-04860

This page enables the pilot to review the company route between the destination and the alternate, and to select a different route, if that seems appropriate.
This page comes up automatically, when the flight crew enters an ident in the OTHER ALTN field and if a route is stored in the Navigation database for this ALTN.



```
         LGAT/ABCD    1/3
7654
           XYZ    EFD        UVW
  DIR      EFG



<RETURN               SELECT→
```

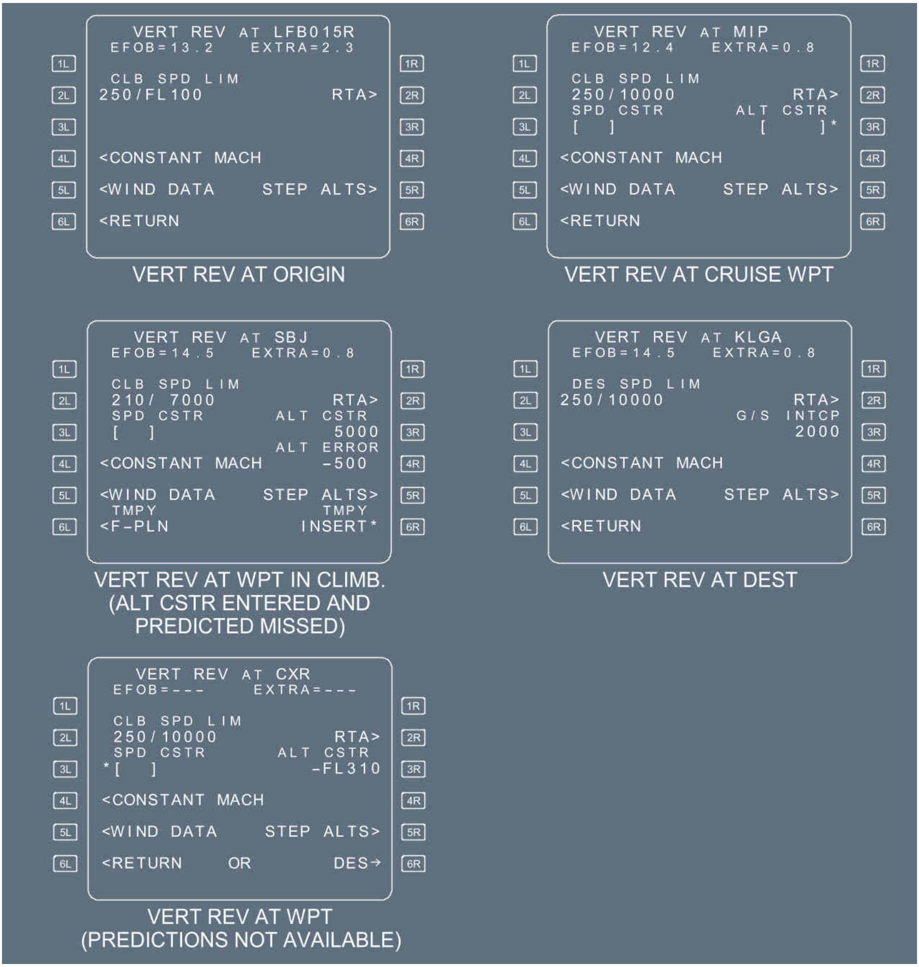
[6R] SELECT	Pressing this key reverts the display to the alternate page. (The distance between the destination and the alternate is then the airway distance).

VERTICAL REVISION PAGES

Ident.: DSC-22_20-50-10-28-00000838.0004001 / 16 MAR 11

Applicable to: MSN 04827-04860

These pages contain the menu of available vertical flight plan revisions that can be applied at a selected waypoint.
The crew calls up these pages from the flight plan A or B pages by pressing the right-hand key next to the selected revised waypoint.
The crew may make several different vertical revisions although some may not be available at all waypoints.


VERT REV AT LFB015R
EFOB=13.2 EXTRA=2.3
CLB SPD LIM
250/FL100 RTA>
<CONSTANT MACH
<WIND DATA STEP ALTS>
<RETURN
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
VERT REV AT MIP
EFOB=12.4 EXTRA=0.8
CLB SPD LIM
250/10000 RTA>
SPD CSTR ALT CSTR
[ ] [ ]*
<CONSTANT MACH
<WIND DATA STEP ALTS>
<RETURN
VERT REV AT SBJ
EFOB=14.5 EXTRA=0.8
CLB SPD LIM
210/ 7000 RTA>
SPD CSTR ALT CSTR
[ ] 5000
ALT ERROR
<CONSTANT MACH -500
<WIND DATA STEP ALTS>
TMPY TMPY
<F-PLN INSERT*
VERT REV AT KLGA
EFOB=14.5 EXTRA=0.8
DES SPD LIM
250/10000 RTA>
G/S INTCP
2000
<CONSTANT MACH
<WIND DATA STEP ALTS>
<RETURN
VERT REV AT CXR
EFOB=--- EXTRA=---
CLB SPD LIM
250/10000 RTA>
SPD CSTR ALT CSTR
*[ ] -FL310
<CONSTANT MACH
<WIND DATA STEP ALTS>
<RETURN OR DES→

VERT REV AT ORIGIN

VERT REV AT CRUISE WPT

VERT REV AT WPT IN CLIMB. (ALT CSTR ENTERED AND PREDICTED MISSED)

VERT REV AT DEST

VERT REV AT WPT (PREDICTIONS NOT AVAILABLE)

TITLE (white)	"VERT REV AT [location]" The second line shows the remaining fuel and the extra fuel at the waypoint being revised.
[1L] "TOO STEEP PATH BEYOND" (amber)	Is displayed, if the waypoint is part of a leg with a descent path too steep.

[2L] CLB/DES SPD LIM (magenta)	Displays the speed limit applicable to the climb or descent phase. It is in large font when entered manually, and in small font when it comes from the database.
[3L] SPD CSTR (magenta)	This field displays any speed constraint assigned to the revised waypoint. It is in large font when entered manually, and in small font when it comes from the database. It is in yellow when a temporary flight plan exits.
[4L] CONSTANT MACH	This prompt provides access to the CONSTANT MACH page.
[5L] WIND DATA (white)	This prompt is only displayed for climb, cruise and descent waypoints, respectively giving access to the CLIMB, CRUISE and DESCENT WIND pages for wind data at the revised point.
[6L] RETURN or TMPY F-PLN or ← CLB	The pilot presses this key to return to the last displayed flight plan page. When a temporary flight plan exists, the TMPY F-PLN prompt appears and provides access to this page. When "← CLB" displayed, pressing this key assigns the constraint to CLB phase and inserts it into the vertical flight plan.
[2R] RTA	This prompt provides access to the Required Time Arrival (RTA) page. It is not displayed when the VERT REV page is accessed from the alternate F-PLN.
[3R] ALT CSTR (magenta)	This field displays the altitude constraint assigned to this revised waypoint. It is in large font when the constraint is manually-entered, and in small font when it comes from the database. A CLR action reverts it to brackets. The constraint may be: • "At", entered as XXXXX (Example: FL 180). • "At or above", entered as + XXXXX or XXXXX + (Example: FL +310). • "At or below", entered as – XXXXX or XXXXX – (Example: -5 000). • A "window" constraint. The altitude window consists of two altitudes within which the aircraft should fly. The crew cannot manually enter a "window" constraint. It is in yellow when a temporary flight plan exists.
G/S INTCP (green)	This field displays the glide intercept altitude for an ILS approach on the vertical revision page at destination. It cannot be modified by the pilot.

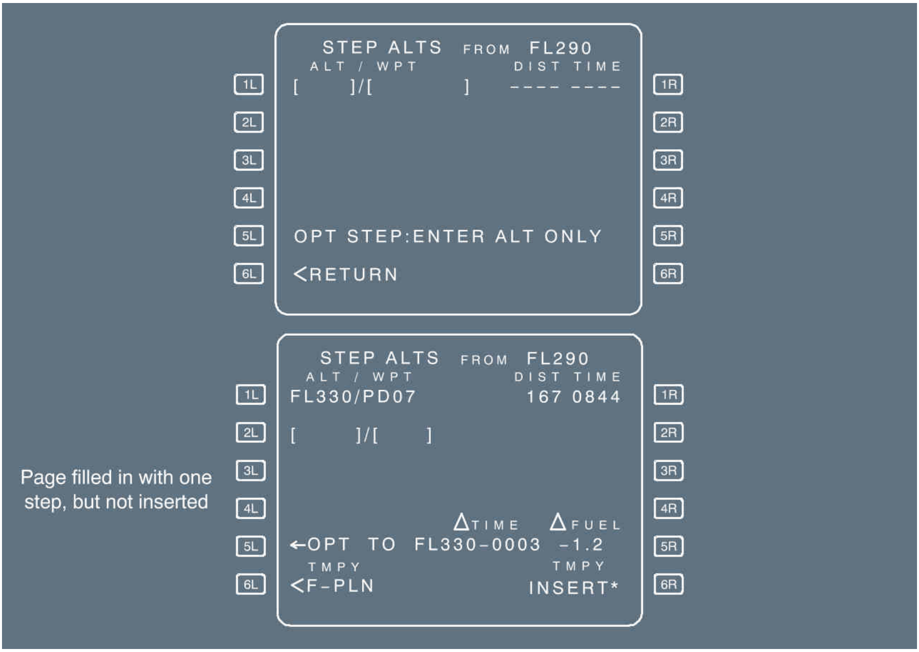
[4R] ALT ERROR (green)	When the aircraft misses a predicted altitude constraint, this field displays the difference between the altitude constraint and the predicted altitude. If, for example, “-500” appears in this field in green, the aircraft will reach the waypoint at an altitude 500 ft below the constraint altitude. This only applies to waypoints in the climb and descent phases.
[5R] STEP ALTS (white)	This legend appears for any waypoint, once a cruise altitude has been entered. It is not available in engine-out, descent, approach, and go-around phases. This gives the pilot access to the STEP ALTS page.
[6R] DES →	When this field displays “DES”, pressing this key assigns the constraints to the descent phase and inserts them into the vertical flight plan. (See note below).
TMPY INSERT *	Activates the temporary flight plan.

Note: *Altitude and speed constraints may apply to the climb, descent, or approach phase, but never to the cruise phase. The 6L/6R fields display “CLB/DES” when the revised waypoint is a cruise phase waypoint, and the FMGS needs to know if the new constraint is to be applied in climb or descent phase. The FMGS will modify the cruise phase accordingly. These 2 prompts also display “CLB/DES” when the predictions are not computed. (Top of climb and top of descent not yet defined).*

STEP ALTS PAGE

Ident.: DSC-22_20-50-10-28-00000839.0004001 / 14 MAY 12
Applicable to: MSN 04827-04860

This page enables the pilot to insert up to four geographic step points and one optimal step point into the flight plan. This page also displays the fuel/time savings associated with the optional step.
The crew calls it up from the vertical revision page.



STEP ALTS FROM FL290
ALT / WPT DIST TIME
[ ]/[ ] ---- ----
OPT STEP:ENTER ALT ONLY
<RETURN

STEP ALTS FROM FL290
ALT / WPT DIST TIME
FL330/PD07 167 0844
[ ]/[ ]
ΔTIME ΔFUEL
←OPT TO FL330-0003 -1.2
TMPY TMPY
<F-PLN INSERT*

Page filled in with one step, but not inserted

TITLE	STEP ALTS followed by the current cruise altitude.
[1L] – [1R] [4L] – [4R] ALT/WPT (blue)	The waypoint identifier, as well as the altitude to step, can be entered in this field. Both are displayed in large font. When an entry is made, a temporary F-PLN is created.

DIST/TIME (UTC) (small green font)	Displays the distance to go, and time from the present aircraft position, along the flight plan to the step point. *Note: The following messages may be displayed in the DIST/TIME field:* *- “ABOVE MAX”, if the step altitude exceeds the Max altitude.* *- “IGNORED”, if the end step point is less than 50 NM from the top of descent or if the step climb is located prior to the top of climb or after the top of descent.* *- “STEP AHEAD”, when the aircraft is within 20 NM of the start step point.* *- “NO OPTIMAL STEP” if the FMS is not able to compute an optimal step for the corresponding altitude.* *- "NO OPTIMAL” if an inserted optimal step is not optimal any longer.*
[5L] OPT STEP: ENTER ONLY ALT (white)	Is displayed to guide the crew for the entry format of an optimal step.
(OPT) FROZEN: RTA EXISTS	Is displayed, if a time constraint exists in the flight plan.
(OPT) TO FLXXX	This prompt allows the selection of the optimal step.
NO OPTIMAL STEP	Is displayed when the system cannot determine the optimal point for the corresponding altitude.
[6L] RETURN or TMPY F-PLN	The flight crew presses this key to return to the previous page. Appears when a temporary flight plan exists. It provides access to the temporary flight plan page.
[5R] ΔTIME/ΔFUEL (green)	Time and fuel savings represent the gain from selecting the optimal step: The difference in flight time and fuel consumption between the F-PLN without the optimal step selected and the F-PLN with the optimal step selected. It is displayed, when an optimal step has been computed. As soon as the optimum step is selected, the time/fuel savings information is no longer displayed.
[6R] TMPY INSERT *	Activates the temporary flight plan.

DATA INDEX PAGES

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-50-10-28-C-00000841.0002001 / 01 OCT 12

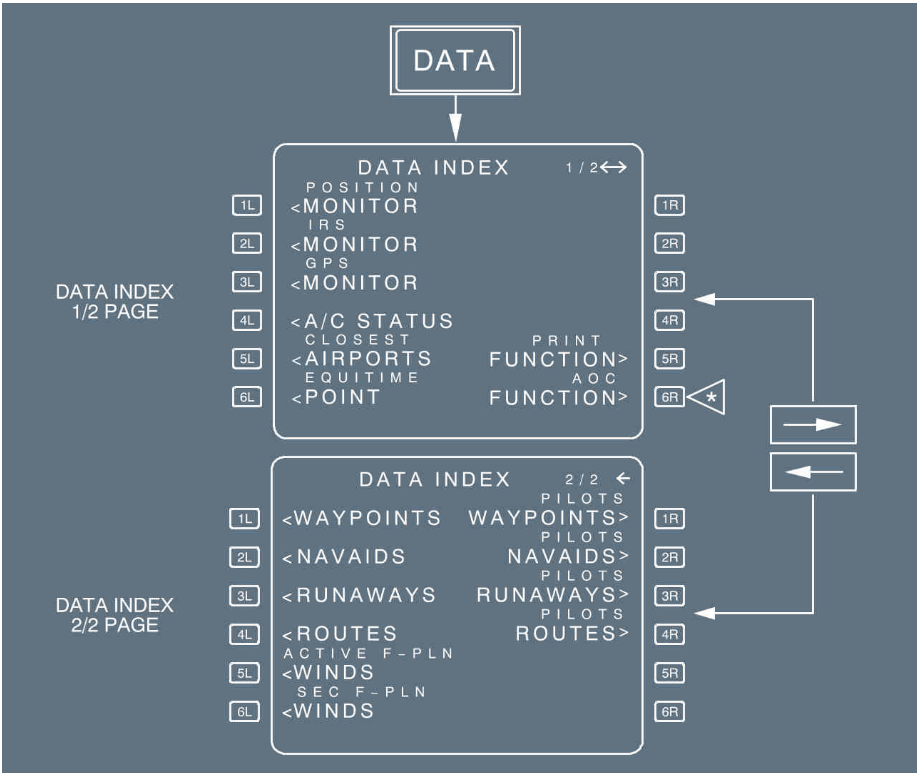
There are two INDEX pages:

The DATA INDEX 1/2 page gives access to various pages assigned to navigation.

The DATA INDEX 2/2 page lists the navigation data, entered in the FMGS.

The crew enters those items labeled “PILOTS” and can modify them. The crew can call up the others, but cannot modify them.

The crew calls up these pages by pressing the DATA key on the MCDU console:


DATA
DATA INDEX 1/2 PAGE
DATA INDEX 1/2↔
POSITION
<MONITOR
IRS
<MONITOR
GPS
<MONITOR
<A/C STATUS
CLOSEST
<AIRPORTS
PRINT
FUNCTION>
EQUITIME
<POINT
AOC
FUNCTION>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
*
DATA INDEX 2/2 PAGE
DATA INDEX 2/2 ←
<WAYPOINTS
PILOTS
WAYPOINTS>
<NAVAIDS
PILOTS
NAVAIDS>
<RUNAWAYS
PILOTS
RUNAWAYS>
<ROUTES
PILOTS
ROUTES>
ACTIVE F-PLN
<WINDS
SEC F-PLN
<WINDS

Ident.: DSC-22_20-50-10-28-C-00000842.0002001 / 16 MAR 11

DATA INDEX 1/2 PAGE

[1L] POSITION MONITOR - [2L] IRS MONITOR	When the flight crew presses these keys, the display shows all essential navigation data.
[3L] GPS MONITOR	This key calls up the GPS MONITOR page.
[4L] A/C STATUS	This key calls up the aircraft status page.
[5L] CLOSEST AIRPORTS.	This key calls up the closest airports page.
[6L] EQUI-TIME POINT	This key calls up the equi-time point page.
[5R] PRINT ◁*	This key calls up the printer function pages.
[6R] AOC ◁*	This key calls up the ACARS function pages.

Ident.: DSC-22_20-50-10-28-C-00000843.0001001 / 23 JUN 15

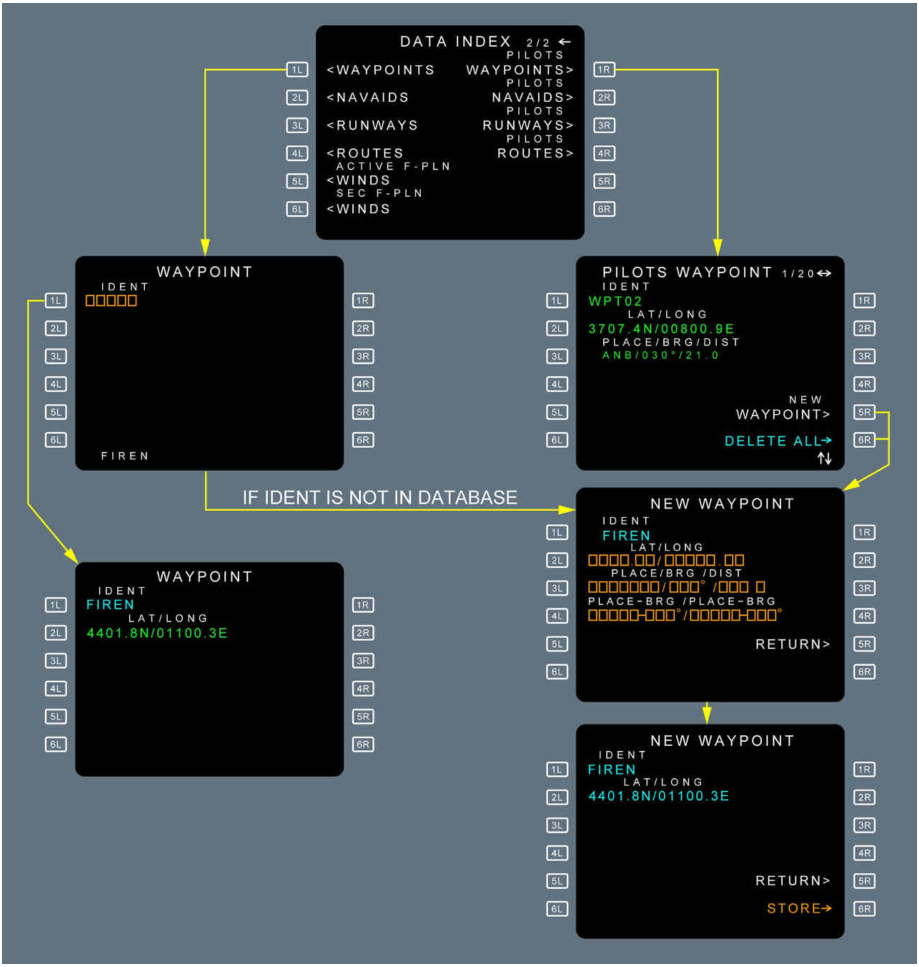
DATA INDEX 2/2 PAGE

[1L] WAYPOINTS [2L] NAVAIDs [3L] RUNWAYS [4L] ROUTES	These keys call up descriptions of waypoints, NAVAIDs, runways, and routes stored in the database, so that they can be reviewed.
[5L] ACTIVE F-PLN WINDS	This key calls up the appropriate active F-PLN wind page (CLIMB, CRUISE, or DESCENT).
[6L] SEC F-PLN WINDS	This key calls up the appropriate secondary F-PLN page (CLIMB, CRUISE, or DESCENT).
[1R] PILOTS WAYPOINTS [2R] PILOTS NAVAIDS [3R] PILOTS RUNWAYS [4R] PILOTS ROUTES	These keys call up waypoints, NAVAIDs, runways, and routes that the pilot has stored, enabling the pilot to review and store them in, or delete them from, the database. The airline can choose to automatically have all pilot-stored data erased in the done phase.

WAYPOINT/PILOTS WAYPOINT/NEW WAYPOINT PAGES

Ident.: DSC-22_20-50-10-28-00000844.0002001 / 04 SEP 18

Applicable to: MSN 04827-04860


DATA INDEX 2/2 ←
<WAYPOINTS
PILOTS WAYPOINTS>
<NAVAIDS
PILOTS NAVAIDS>
<RUNWAYS
PILOTS RUNWAYS>
<ROUTES
PILOTS ROUTES>
ACTIVE F-PLN <WINDS
SEC F-PLN <WINDS
WAYPOINT
IDENT
□□□□□
FIREN
PILOTS WAYPOINT 1/20↔
IDENT
WPT02
LAT/LONG
3707.4N/00800.9E
PLACE/BRG/DIST
ANB/030°/21.0
NEW WAYPOINT>
DELETE ALL→
↑↓
IF IDENT IS NOT IN DATABASE
WAYPOINT
IDENT
FIREN
LAT/LONG
4401.8N/01100.3E
NEW WAYPOINT
IDENT
FIREN
LAT/LONG
□□□□.□□/□□□□□.□□
PLACE/BRG /DIST
□□□□□□□/□□□° /□□□.□
PLACE-BRG /PLACE-BRG
□□□□□-□□□°/□□□□□-□□□°
RETURN>
NEW WAYPOINT
IDENT
FIREN
LAT/LONG
4401.8N/01100.3E
RETURN>
STORE→
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R

WAYPOINT PAGE

- The pilot calls up this page by pressing the 1L key on the DATA INDEX page. It displays waypoint information associated with the identifier, which the flight crew inserts in the [1L] field.
- From this page, it is possible to call up any waypoint from the navigation database, or any waypoint not stored in the stored waypoint list, if they belong to the active, temporary, or secondary flight plan.

PILOTS' WAYPOINT PAGE

The pilot calls up this page by pressing the 1R key on the DATA INDEX page. It displays waypoints, defined and stored by the pilot. It lists each stored waypoint, along with a number that shows the relative order in which it was inserted in the database. This number is displayed in the upper right-hand corner of the page. For example, “1/20” indicates that the waypoint was the first of 20 stored.

[1L] IDENT	To delete a waypoint, the pilot clears the 1L IDENT display.
[2L] LAT/LONG	The waypoint latitude and longitude are displayed in this field.
[3L]	This field displays PLACE/BRG/DIST, or PLACE-BRG/ PLACE-BRG, or PLACE/DIST, depending on how the waypoint was defined.
[5R] NEW WAYPOINT	The pilot presses this key to call up the NEW WAYPOINT page.
[6R] DELETE ALL	The pilot presses this key and the label changes to an amber "CONFIRM DELETE ALL". Pressing this key a second time deletes all the waypoints stored by the flight crew, except those currently used in the active or secondary flight plan. (“PILOT ELEMENT RETAINED” appears on the MCDU).

NEW WAYPOINT PAGE

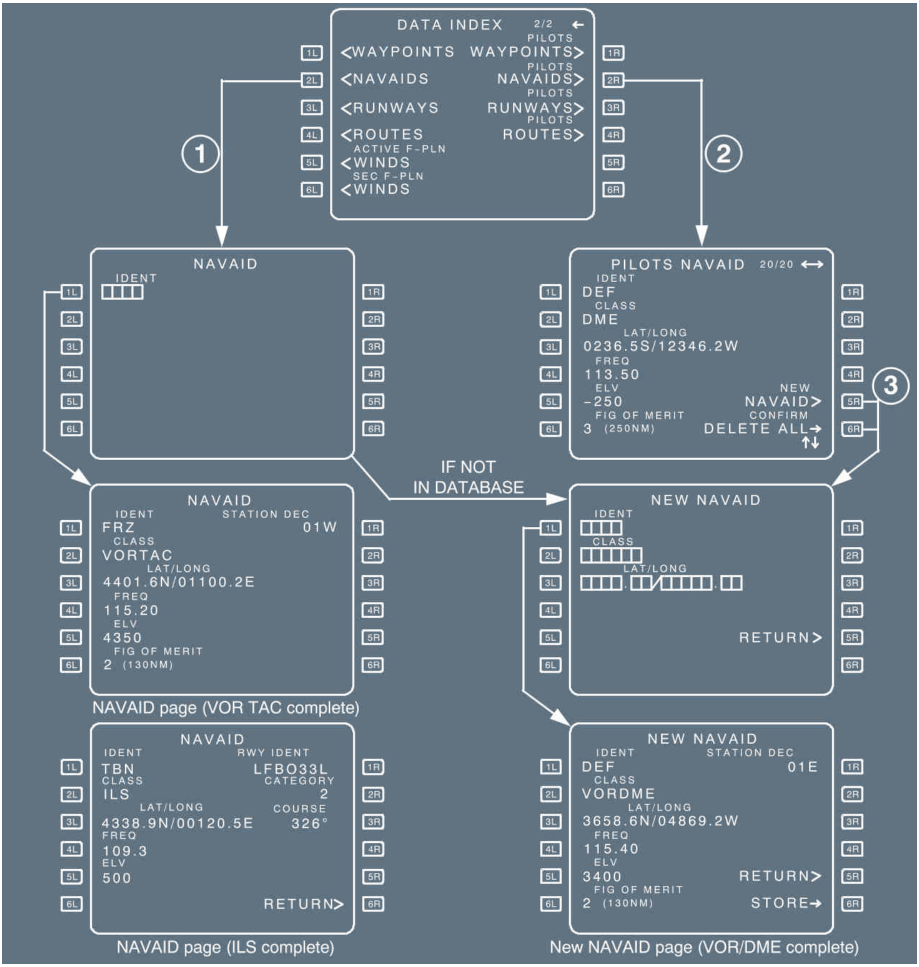
- The pilot displays this page by pressing the 5R key on the PILOTS' WAYPOINT page.
- The flight crew uses this page to define and store waypoints. The maximum number of waypoints that it is possible to enter depends on the FMS standard. The maximum number can be 20 or 99. This number appears in the upper right corner of the STORED WAYPOINT page. For example, "1/20" indicates that it is possible to store up to 20 waypoints. If an additional waypoint is entered, then the first one is deleted.

The flight crew defines a waypoint by entering its IDENT in the data field next to 1L, then by entering its position in the amber boxes.
The STORE prompt appears next to 6R when the boxes are filled in, and the pilot presses the key to store the waypoint in the database.

If the pilot enters the waypoint's position as place/bearing/distance, or place-bearing/place-bearing, the FMGC computes its latitude and longitude.

NAVAID/PILOTS' NAVAID/NEW NAVAID PAGES

Ident.: DSC-22_20-50-10-28-00000845.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860


DATA INDEX 2/2 ←
<WAYPOINTS
PILOTS WAYPOINTS>
<NAVAIDS
PILOTS NAVAIDS>
<RUNWAYS
PILOTS RUNWAYS>
<ROUTES
PILOTS ROUTES>
ACTIVE F-PLN <WINDS
SEC F-PLN <WINDS
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
1
2
3
NAVAID
IDENT
PILOTS NAVAID 20/20 ↔
IDENT DEF
CLASS DME
LAT/LONG 0236.5S/12346.2W
FREQ 113.50
ELV -250
NEW NAVAID>
FIG OF MERIT 3 (250NM)
CONFIRM DELETE ALL→
↑↓
IF NOT IN DATABASE
NAVAID
IDENT FRZ
STATION DEC 01W
CLASS VORTAC
LAT/LONG 4401.6N/01100.2E
FREQ 115.20
ELV 4350
FIG OF MERIT 2 (130NM)
NEW NAVAID
IDENT
CLASS
LAT/LONG
RETURN>
NAVAID
IDENT TBN
RWY IDENT LFBO33L
CLASS ILS
CATEGORY 2
LAT/LONG 4338.9N/00120.5E
COURSE 326°
FREQ 109.3
ELV 500
RETURN>
NEW NAVAID
IDENT DEF
STATION DEC 01E
CLASS VORDME
LAT/LONG 3658.6N/04869.2W
FREQ 115.40
ELV 3400
RETURN>
FIG OF MERIT 2 (130NM)
STORE→

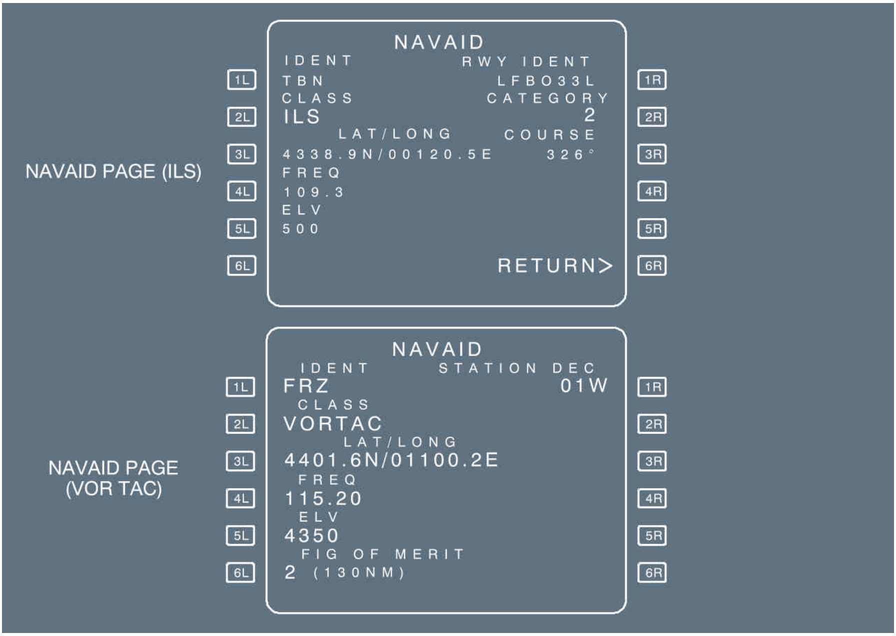
NAVAID page (VOR TAC complete)

NAVAID page (ILS complete)

New NAVAID page (VOR/DME complete)

NAVAID PAGE

The pilot calls up this page by pressing the 2L key on the DATA INDEX page 2.
This page displays NAVAID information associated with the identifier the pilot inserts in the [1L] field.



```
              NAVAID
IDENT                 RWY IDENT
TBN                   LFBO33L
CLASS                 CATEGORY
ILS                          2
     LAT/LONG          COURSE
4338.9N/00120.5E          326°
FREQ
109.3
ELV
500
                       RETURN>
```

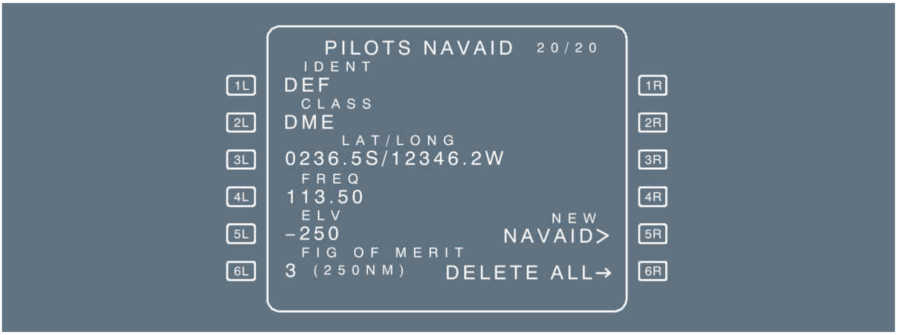
```
              NAVAID
  IDENT          STATION DEC
FRZ                      01W
  CLASS
VORTAC
     LAT/LONG
4401.6N/01100.2E
  FREQ
115.20
  ELV
4350
  FIG OF MERIT
2 (130NM)
```

[2L] CLASS	This field identifies the NAVAID as VOR, DME, VOR DME, VORTAC, NDB, LOC, ILS, MLS, ILS/DME, MLS/DME, ILS/TAC or TACAN. It displays NON COLLOCATED, if the NAVAID is uncollocated.
[3L] LAT/LONG	If a uncollocated VOR DME or VORTAC is displayed, the LAT/LONG is the VOR latitude and longitude. The LAT/LONG displayed for an ILS, ILS DME, ILS TAC is the LAT/LONG of the localizer.
[4L] FREQ or CHAN	CHAN is displayed, if the class of NAVAID is an MLS or an MLS DME.
[5L] ELV	This field gives the NAVAID elevation in feet above sea level. It is not displayed for VOR or NDB.

[6L] FIG OF MERIT	This field shows how far out the FMGS can autotune a VOR, VOR/DME, VORTAC, or DME for display or for computing position. 0 : Up to 40 NM 1 : Up to 70 NM 2 : Up to 130 NM 3 : Up to 250 NM
[1R] STATION DEC or RWY IDENT	This is the magnetic declination in the NAVAID area (used only for VOR, VOR/DME, and VORTAC). The field displays RWY IDENT, if the NAVAID is a LOC, ILS, MLS, ILS/DME, MLS/DME or ILS/TAC.
[2R] CATEGORY	This field shows the NAVAID's category, if it is an ILS, ILS/DME, MLS, MLS/DME or ILS/TAC. A LOC DME has a category = 0.
[3R] COURSE	This is the localizer course, if the NAVAID is an ILS or a LOC, ILS TAC, ILS, MLS or MLS/DME.
[6R] RETURN	This prompt is displayed, if the page is accessed from the SELECTED NAVAID page. The pilot presses this key to return to the SELECTED NAVAID page.

PILOTS' NAVAID PAGE

The pilot calls up this page by pressing the 2R key on the DATA INDEX page. This page is used to display or delete defined and stored navaids.



PILOTS NAVAID 20/20
IDENT
DEF
CLASS
DME
LAT/LONG
0236.5S/12346.2W
FREQ
113.50
ELV
-250
NEW
NAVAID>
FIG OF MERIT
3 (250NM)
DELETE ALL→

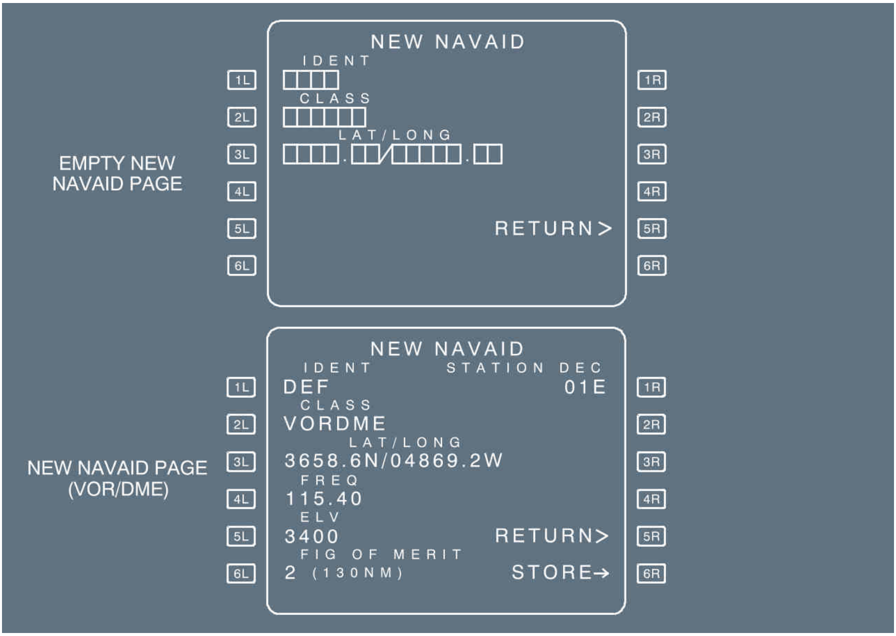
A number in the upper right-hand corner of the screen shows the relative order in which the NAVAIDs were stored. (For example, 3/7 means the third of seven stored).
Scroll keys are used to access the different stored NAVAIDs.

[1L] IDENT	The pilot deletes a stored NAVAID by entering its IDENT in this field, then by pressing the CLR key at the bottom of the MCDU control panel.
[2L] - [6L]	Same as the NAVAID page, but data is displayed in green.

[1R] - [4R]	Same as the NAVAID page, but data is displayed in green.
[5R] NEW NAVAID	This key calls up the NEW NAVAID page to define and store a NAVAID.
[6R] DELETE ALL and CONFIRM DELETE ALL	The pilot presses this key to erase all the stored NAVAIDs, except those currently used in the active or secondary flight plan. (The MCDU displays “PILOT ELEMENT RETAINED.”).

NEW NAVAID PAGE

The pilot calls up this page by pressing the 5R key on the STORED NAVAID page.



NEW NAVAID
IDENT
□□□□
CLASS
□□□□□□
LAT/LONG
□□□□.□□/□□□□□.□□
RETURN>

NEW NAVAID
IDENT STATION DEC
DEF 01E
CLASS
VORDME
LAT/LONG
3658.6N/04869.2W
FREQ
115.40
ELV
3400 RETURN>
FIG OF MERIT
2 (130NM) STORE→

It can be used to define and store up to 20 NAVAIDs. Entering an additional waypoint deletes the first one. The NAVAID elements must be entered in two steps:

1. Enter the data in the amber-boxed lines.
2. Enter frequency, elevation, figure of merit, and station declination or ILS category and course, if applicable.

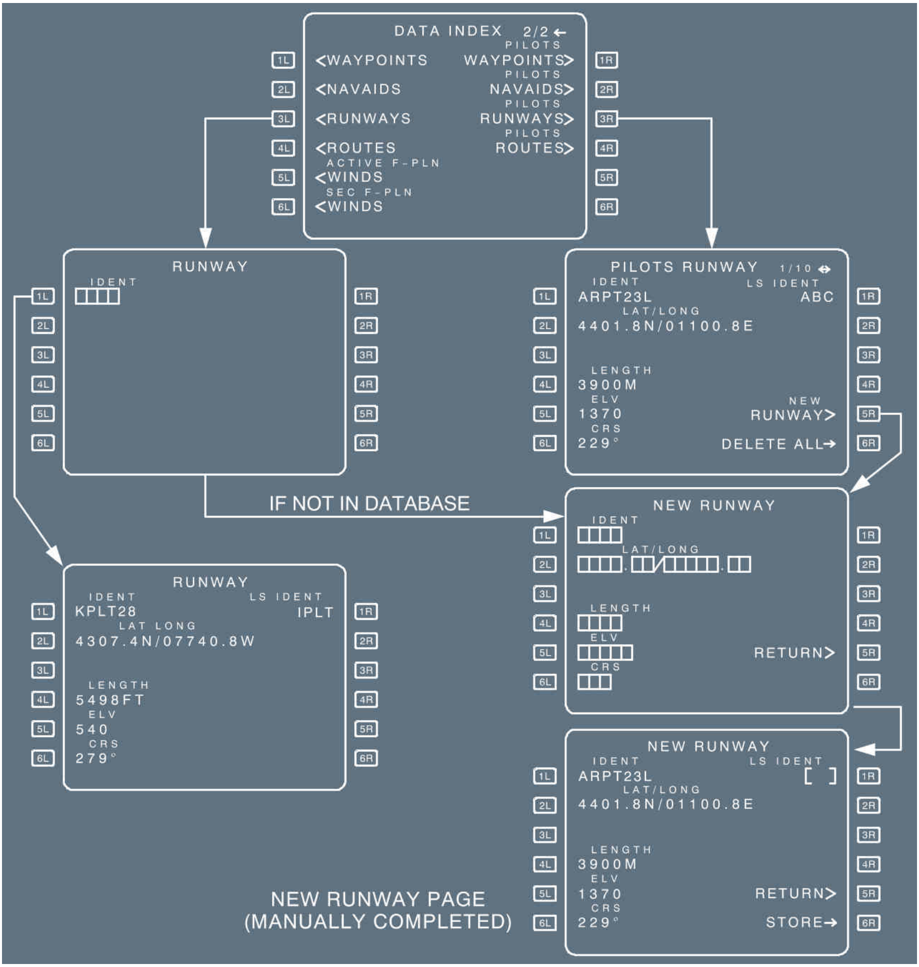
Note: *The pilot cannot create an ILS/DME, MLS/DME, or ILS/TAC or an uncollocated NAVAID. If the runway associated with the ILS or MLS has been entered via the new runway page, the course, IDENT, and runway IDENT are already displayed on the new NAVAID page when it comes up (copied from the new runway page). For details: Refer to DSC-22_20-50-10-28 RUNWAYS/PILOTS' RUNWAYS/NEW RUNWAY Pages.*

[1R] STATION DEC	The pilot must enter the magnetic declination, if the prompt is displayed. This prompt is only displayed for VOR, VORTAC, or VOR/DME.
[3R] COURSE	If the NAVAID is an ILS, MLS, LOC, enter the course.
[6R] STORE	This prompt appears when all the amber boxes have been filled in. The pilot presses this key to store the NAVAID.

A stored NAVAID is never used for position computation.

RUNWAYS/PILOTS' RUNWAYS/NEW RUNWAY PAGES

Ident.: DSC-22_20-50-10-28-00000846.0002001 / 14 MAY 12
Applicable to: MSN 04827-04860


DATA INDEX 2/2 ←
<WAYPOINTS
PILOTS WAYPOINTS>
<NAVAIDS
PILOTS NAVAIDS>
<RUNWAYS
PILOTS RUNWAYS>
<ROUTES
PILOTS ROUTES>
ACTIVE F-PLN <WINDS
SEC F-PLN <WINDS
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
RUNWAY
IDENT
□□□□
PILOTS RUNWAY 1/10 ↔
IDENT ARPT23L
LS IDENT ABC
LAT/LONG 4401.8N/01100.8E
LENGTH 3900M
ELV 1370
CRS 229°
NEW RUNWAY>
DELETE ALL→
IF NOT IN DATABASE
NEW RUNWAY
IDENT □□□□
LAT/LONG □□□□.□□/□□□□□.□□
LENGTH □□□□
ELV □□□□□
CRS □□□
RETURN>
RUNWAY
IDENT KPLT28
LS IDENT IPLT
LAT LONG 4307.4N/07740.8W
LENGTH 5498FT
ELV 540
CRS 279°
NEW RUNWAY
IDENT ARPT23L
LS IDENT [ ]
LAT/LONG 4401.8N/01100.8E
LENGTH 3900M
ELV 1370
CRS 229°
RETURN>
STORE→
NEW RUNWAY PAGE
(MANUALLY COMPLETED)

RUNWAY PAGE

This page displays the following information :

[1L] IDENT	The runway ident, which comprises the airport identification and the runway direction, uses six or seven digits (Example : CYYZ 24L and LFRJ 08).
[2L] LAT/LONG	The latitude and longitude of the runway threshold.
[4L] LENGTH	The runway length in meters (M) or feet (ft), in four digits (26 300 ft or 8 000 m).
[5L] ELV	The elevation of the threshold in feet above sea level.
[6L] CRS	The runway course (degrees magnetic).
[1R] LS IDENT	The LOC, ILS or MLS identifier.

PILOTS' RUNWAY PAGE

The pilot uses this page to display or delete the defined and stored runways. The stored runways are listed and numbered in the order in which they were inserted. The number is displayed in the upper right-hand corner of the page. (For example, 2/4 means the runway is the second of four stored runways).
The pilot can delete any stored runway from the database by displaying its ident in the 1L field, then by pressing the CLR key on the MCDU control panel.

[6R] DELETE ALL and CONFIRM DELETE ALL	The pilot presses this key to erase all the stored runways, except those used in the active or secondary flight plan. (The MCDU displays “PILOT ELEMENT RETAINED”).
[1L] to [6L]	These fields are similar to the RUNWAY page fields.

NEW RUNWAY PAGE

The pilot can use this page to define and store up to 10 runways.
When the pilot enters an ILS/LOC ident in the [1R] field, the new navaid page comes up. When the pilot has entered and stored the necessary data in the new navaid page, the new runway page reappears.

The new runway page and the new navaid page (ILS/LOC) are not independent :
- When the flight crew first defines the ILS/LOC (on the new navaid page), the new runway page, when called up, already displays the RWY course, RWY ident, and ILS ident (copied from the new navaid page).
- When the flight crew first defines the runway (on the new runway page), the new navaid page, when called up, already displays the ILS course, ILS ident, and runway ident.

The pilot must enter the two runway directions on two different new runway pages (Example: LFRJ 08 and LFRJ 26) to allow the flight plan to select either one.

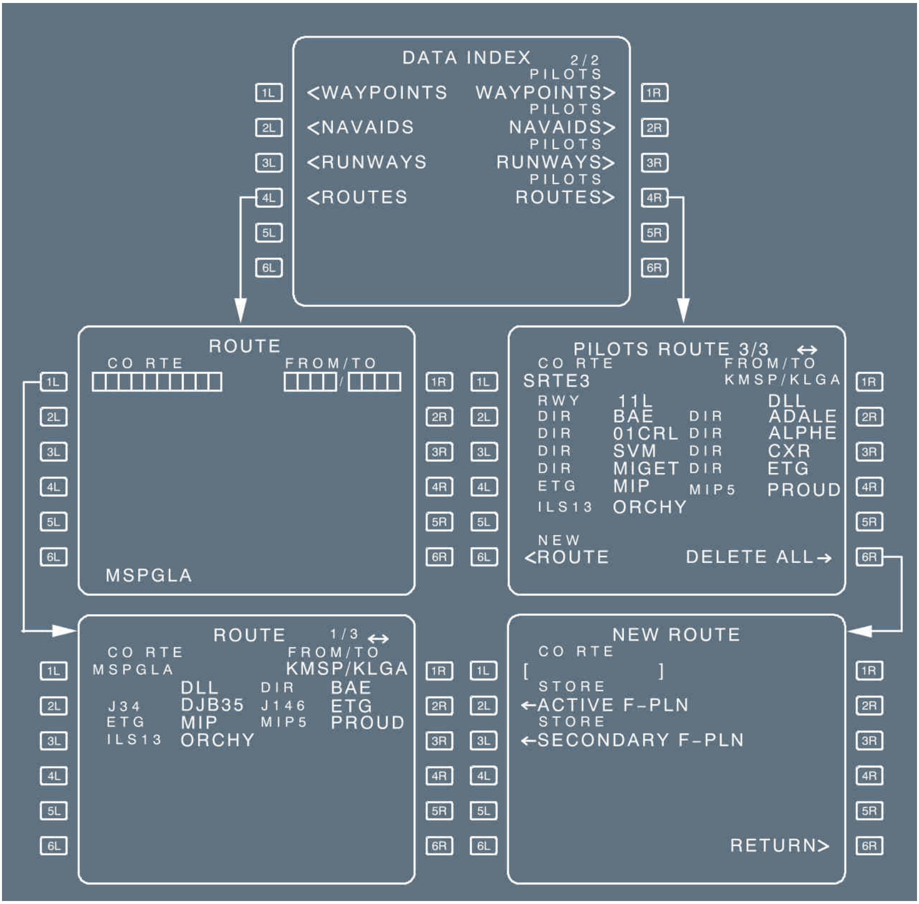
Note: *When 10 runways are stored, entering a new stored runway deletes the first one of the list (1/10).*

[1L] to [6L]	These keys are used to enter information about the new runway.
[1R] LS IDENT	This key is used to enter the ILS/MLS/LOC ident. The NEW NAVAID page comes up.
[5R] RETURN	The pilot presses this key to return to the NEW NAVAID page.
[6R] STORE	This prompt only appears when all the amber boxes have been filled in.

Note: *The NEW RUNWAY may be used for departure or destination, but no SID or STAR can be associated or stored with this runway. Therefore, the pilot will use it as an “independent” airport.*
A new runway is identified by the 4–letter ICAO airport identifier, although all six or seven digits must be entered.

ROUTE/PILOTS' ROUTE/NEW ROUTE PAGES

Ident.: DSC-22_20-50-10-28-00000847.0001001 / 01 OCT 12
Applicable to: MSN 04827-04860


DATA INDEX 2/2
PILOTS
<WAYPOINTS WAYPOINTS>
PILOTS
<NAVAIDS NAVAIDS>
PILOTS
<RUNWAYS RUNWAYS>
PILOTS
<ROUTES ROUTES>
ROUTE
CO RTE
FROM/TO
MSPGLA
PILOTS ROUTE 3/3 ↔
CO RTE FROM/TO
SRTE3 KMSP/KLGA
RWY 11L DLL
DIR BAE DIR ADALE
DIR 01CRL DIR ALPHE
DIR SVM DIR CXR
DIR MIGET DIR ETG
ETG MIP MIP5 PROUD
ILS13 ORCHY
NEW
<ROUTE DELETE ALL→
ROUTE 1/3 ↔
CO RTE FROM/TO
MSPGLA KMSP/KLGA
DLL DIR BAE
J34 DJB35 J146 ETG
ETG MIP MIP5 PROUD
ILS13 ORCHY
NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN
RETURN>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

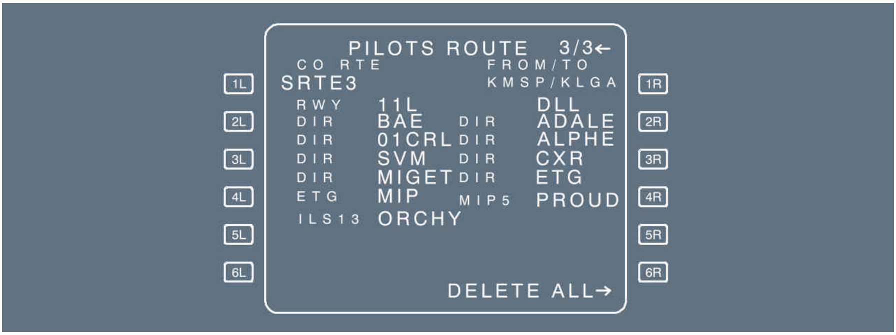
ROUTE PAGES

(Not-modifiable)

[1L] CO RTE	Any company route ident, entered in this field, causes all the elements of the route to be displayed.

Line 2 to Line 6	These lines display the various route elements, including waypoints and airways.
[1R] FROM/TO	This field is automatically filled in, when the pilot enters the ident for a company route. When the pilot manually enters a city pair, the MCDU displays “NOT IN DATA BASE”, if the city pair is not in the navigation database. If the city pair is in the database, the CO RTE field displays the first route stored in small blue font. If more than one route is stored, the pilot can scroll to see the different routes.

PILOTS' ROUTE PAGE



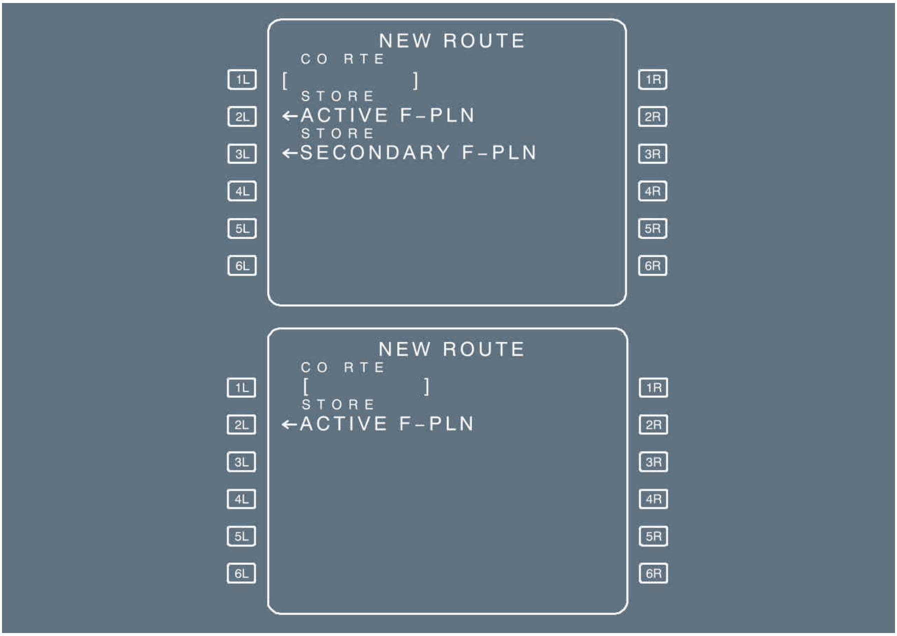
```
        PILOTS ROUTE   3/3←
  CO RTE            FROM/TO
SRTE3               KMSP/KLGA
  RWY     11L             DLL
  DIR     BAE      DIR    ADALE
  DIR     01CRL    DIR    ALPHE
  DIR     SVM      DIR    CXR
  DIR     MIGET    DIR    ETG
  ETG     MIP      MIP5   PROUD
  ILS13   ORCHY



                 DELETE ALL→
```

This page displays up to 5 routes, stored by the pilot. The Pilots' routes are listed and numbered in the order of insertion. The number is displayed in the upper right-hand corner of the page.

[1L] CO RTE	This field identifies the stored route. Clearing this field deletes the stored route.
Line 2 to Line 5	The fields in these lines are identical to the corresponding fields on the route page.
[6L] NEW ROUTE	Pressing this key calls up the new route page.
[1R] FROM/TO	This identifies the city pair of the stored route.
[6R] DELETE ALL	Pressing this key changes the label "CONFIRM DELETE ALL" which appears in amber. Pressing this key a second time deletes all previously-stored routes.

NEW ROUTE PAGE

The pilot calls up this page by pressing the NEW ROUTE key on the PILOT'S ROUTE page. It can be used to store up to five new routes that have already been defined in the active or secondary flight plan.


NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

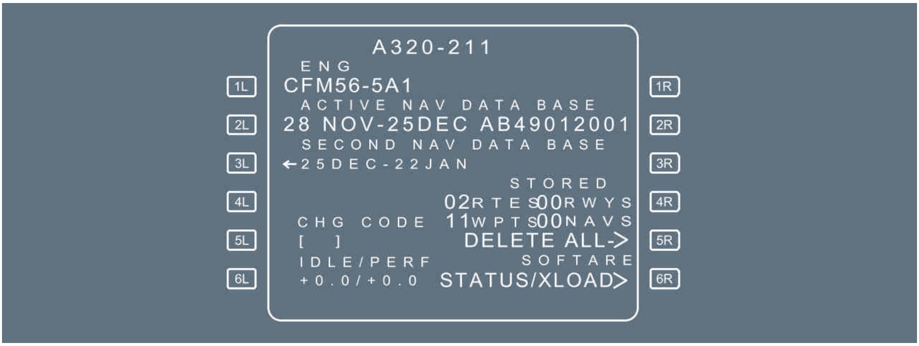
[1L] CO RTE	This field allows the pilot to enter a new company route ident. If that ident has already been assigned, the entry is rejected. The message NON UNIQUE ROUTE is then displayed.
[2L] STORE ACTIVE F-PLN (cyan)	Pressing this key stores parameters of the active flight plan as a new route. This prompt appears when the system contains a FROM/TO, but only during preflight.
[3L] STORE SECONDARY F-PLN (cyan)	Pressing this key stores parameters of the secondary flight plan as a new route. This prompt appears when the system contains a FROM/TO, and the secondary flight plan has not yet been sequenced.

Note:
- *If it has not already been named, a stored route is automatically named (SRTE 1 to SRTE 5) when stored.*
- *When 5 routes are already stored, the pilot cannot insert a new stored route. The “PILOTS' ROUTE FULL” message is displayed, and the pilot must manually delete a route, in order to be able to store a new one.*
- *The following flight plan elements are not retained when the route is stored :*
  - *Pilot-entered holds and constraints*
  - *Offset*
  - *Modifications to terminal procedures*
  - *Pseudo waypoints*
  - *Step at optimum*
  - *The MCDU then displays “REVISIONS NOT STORED”.*

AIRCRAFT STATUS PAGE

Ident.: DSC-22_20-50-10-28-00000848.0001001 / 24 SEP 14
Applicable to: MSN 04827-04860

The pilot call this page up by pressing the DATA key on the MCDU console.



```
           A320-211
  ENG
 CFM56-5A1
  ACTIVE NAV DATA BASE
 28 NOV-25DEC AB49012001
  SECOND NAV DATA BASE
 ←25DEC-22JAN
                       STORED
               02RTES00RWYS
 CHG CODE      11WPTS00NAVS
 [   ]          DELETE ALL->
 IDLE/PERF           SOFTARE
 +0.0/+0.0     STATUS/XLOAD>
```

TITLE	AIRCRAFT TYPE
[1L] ENGINE TYPE	The system uses this engine model to calculate predictions.

Note: *When the same performance database is used for different aircraft configurations, the aircraft or engine type displayed in the [1L] field may differ from the actual aircraft.*

[2L] ACTIVE DATABASE	The validity period and part number are displayed in large font.
[3L] SECOND DATABASE	The validity period and part number are displayed in small font. The pilot can press the 3L key to switch to the second database as the active database.

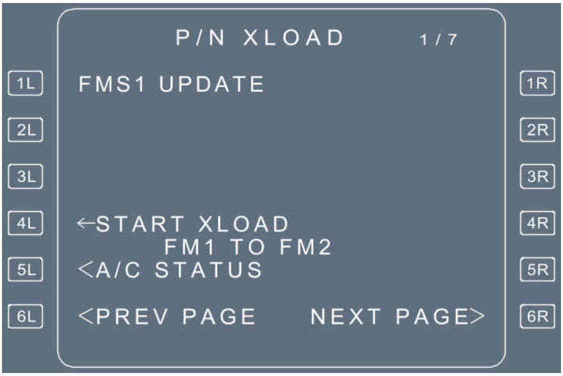
CAUTION	Cycling the database erases the primary and secondary flight plans, as well as the stored data. The flight crew must never do this in flight.

[5L] CHG CODE	This field allows entry of a code which permits modification of the IDLE and/or PERF factor displayed in 6L. It is displayed in the PREFLIGHT and DONE phases. The label is displayed in small white fonts; the brackets, or the entered value, are displayed in large blue fonts.
[6L] IDLE/PERF	It is only possible to modify these factors when the aircraft is on ground. If no value was entered, the FMS displays default values coded in the Airline Modifiable Information (AMI) file. Default values are displayed in small font, although manually entered values are displayed in large font. When it is necessary to modify the IDLE or the PERF factor: - ENTER the change code in the CHG CODE field [5L]. The default value for this code is “ARM” but it is possible to modify it on airline request (the applicable code is then coded in the Airline Modifiable Information (AMI) file). When a valid change code is entered, the IDLE and PERF factors are displayed in blue. - ENTER the new IDLE and/or PERF factor(s) in the scratchpad. - PRESS the [6L] key to insert the new IDLE and/or PERF factor(s). The new IDLE and/or PERF factor(s) is (are) displayed in large blue font.
[4R] STORED	This field displays pilot-stored data in a large green font. The field is blank, if no data is stored. (The airline can choose to have this data automatically erased at the done phase).
[5R] DELETE ALL	Pressing this key changes the label to "CONFIRM DELETE ALL" in amber. Pressing this key a second time deletes all pilot-stored data, except data that is part of the active and secondary flight plans.
[6R] STATUS/XLOAD	This prompt gives access to the P/N STATUS and P/N XLOAD pages.

P/N XLOAD PAGE

Ident.: DSC-22_20-50-10-28-00000849.0001001 / 10 DEC 09
Applicable to: MSN 04827-04860

This page allows the crossloading of all databases or configuration files' part numbers which are different between both sides. Crossloading from this page avoids reviewing each individual P/N STATUS page.



TITLE	P/N XLOAD
[1L]	FMS1 UPDATE : FMS1 can be loaded on the right side MCDU. FMS2 UPDATE : FMS2 can be loaded on the left side MCDU
[4L]	START XLOAD : This blue prompt is displayed, only if the system detects a difference between both sides' part numbers. FMS1/FMS2 IDENTICAL : Displayed in green, when there is no difference between both sides' part numbers.
Line 5	FM1 TO FM2 or FM2 TO FM1 : Indicates the crossloading direction.
[5L]	A/C STATUS : This white prompt is displayed, when there is no crossloading in progress. It gives access to the A/C STATUS page. MM : SS MIN REMAINING : Indicates the time remaining for crossload completion, when a crossload is in progress.
[6L] PREV PAGE	The pilot presses this key to return to the A/C STATUS page.
[6R] NEXT PAGE	Pressing this key calls up the next P/N XLOAD page.

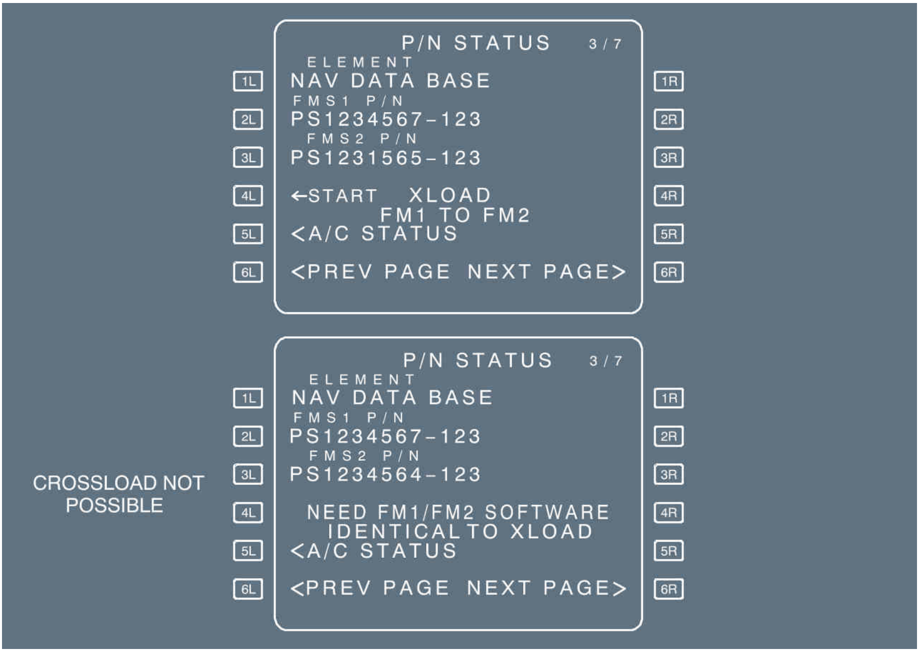
P/N STATUS PAGES

Ident.: DSC-22_20-50-10-28-00000850.0001001 / 01 OCT 12
Applicable to: MSN 04827-04860

These pages enable the following databases and configuration files to be reviewed and crossloaded between both FMS :

- Page 2	FMS SOFTWARE part numbers
- Page 3	NAV DATA BASE part numbers
- Page 4	FM AIRLINE CONFIG part numbers
- Page 5	FM OPTIONS CONFIG part numbers

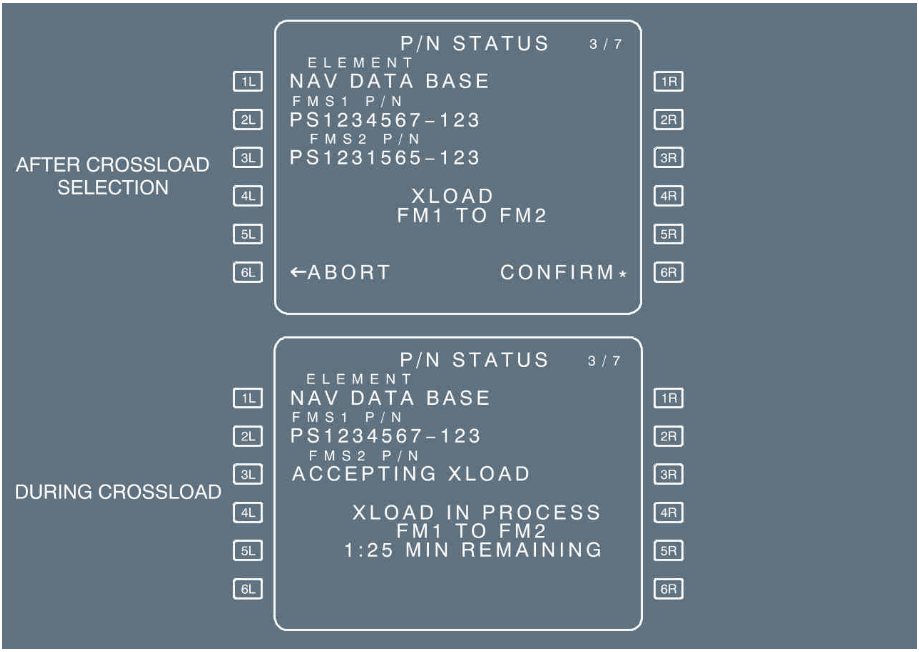
- Page 6	PERF DATA BASE part numbers
- Page 7	MAG VAR DATABASE part numbers



```
          P/N STATUS     3/7
   ELEMENT
NAV DATA BASE
 FMS1  P/N
PS1234567-123
   FMS2  P/N
PS1231565-123

←START   XLOAD
        FM1 TO FM2
<A/C STATUS

<PREV PAGE  NEXT PAGE>
```

```
          P/N STATUS     3/7
   ELEMENT
NAV DATA BASE
 FMS1  P/N
PS1234567-123
   FMS2  P/N
PS1234564-123

  NEED FM1/FM2 SOFTWARE
    IDENTICAL TO XLOAD
<A/C STATUS

<PREV PAGE  NEXT PAGE>
```

CROSSLOAD NOT POSSIBLE



AFTER CROSSLOAD SELECTION

```
          P/N STATUS      3/7
   ELEMENT
NAV DATA BASE
 FMS1  P/N
PS1234567-123
   FMS2  P/N
PS1231565-123

            XLOAD
         FM1 TO FM2

←ABORT            CONFIRM*
```

DURING CROSSLOAD

```
          P/N STATUS      3/7
   ELEMENT
NAV DATA BASE
 FMS1  P/N
PS1234567-123
   FMS2  P/N
ACCEPTING XLOAD

     XLOAD IN PROCESS
         FM1 TO FM2
    1:25 MIN REMAINING
```

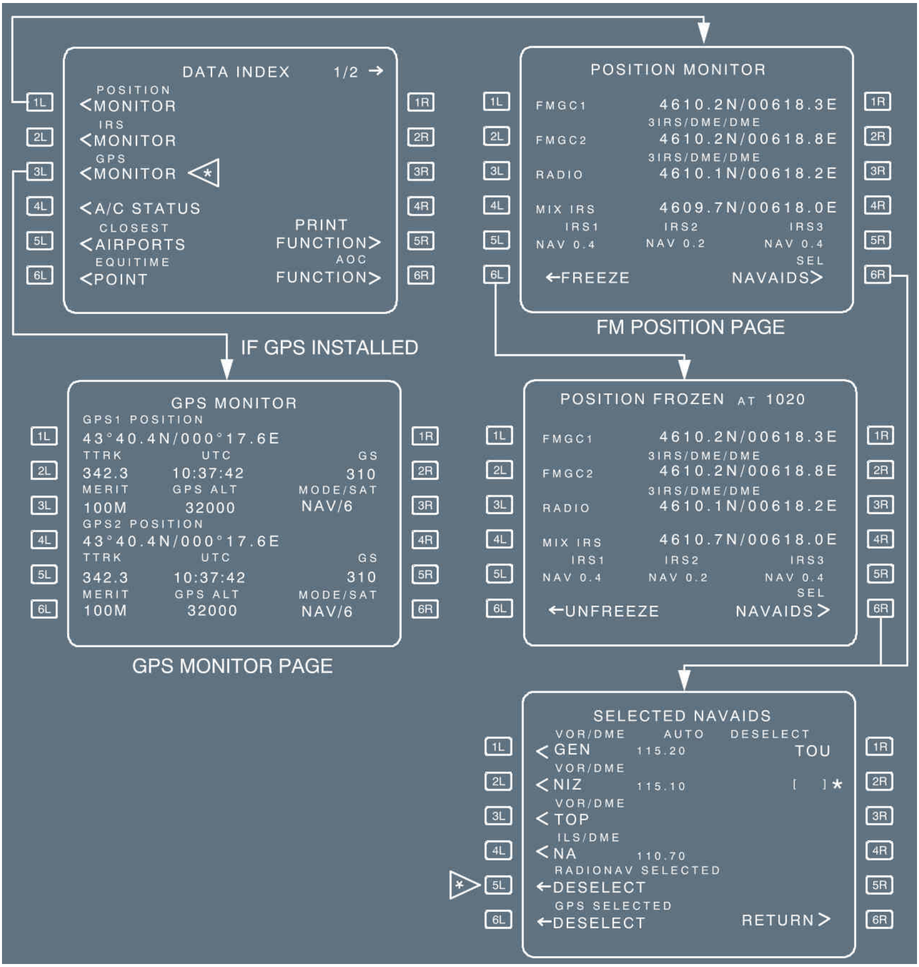
TITLE	P/N STATUS
Line 1 ELEMENT	Indicates the name of the database or configuration file that can be crossloaded : - FMS SOFTWARE on Page 2 - NAV DATA BASE on Page 3 - FM AIRLINE CONFIG on Page 4 - FM OPTIONS CONFIG on Page 5 - PERF DATA BASE on Page 6 - MAG VAR DATABASE on Page 7.
Line 2 FMS1 P/N Line 3 FMS2 P/N	These fields display the part numbers of the database or configuration file (stated on line 1), that are installed on the FMS 1 and 2. Identical part numbers are displayed in green, different ones in amber. During crossload, the updated part number is replaced by the “ACCEPTING XLOAD” amber message.

Line 4	This line is empty when the active flight phase is not Preflight or Done. XLOAD FMx TO FMy or START XLOAD FMx TO FMy : This blue prompt is displayed when the database or configuration file (stated on line 1) can be crossloaded. XLOAD ARMED : Displayed in blue on the receiving FM when the crossload has been requested, but not yet confirmed. XLOAD IN PROCESS : Displayed in white, when the crossload is ongoing. A/C ENG NOT SUPPORTED : Related to the Performance Database only. It is displayed when the FMS performance database model is incompatible with the aircraft/engine's pin program. XLOAD NOT SUPPORTED : Crossloading is unavailable for this element. NO P/N TO XLOAD : The element is missing. NEED FG1/FG2 IDENTICAL TO XLOAD : The receiving side's FG software is incompatible with the FG software to be crossloaded. NEED FM1/FM2 SOFTWARE IDENTICAL TO XLOAD : The crossloaded element is incompatible with the receiving side's FM software.
[5L] A/C STATUS	This prompt is available, when no crossload is in process. This gives the pilot access to the aircraft status page. MM : SS MIN REMAINING : Displays the time remaining to complete the crossload, when a crossload is in process.
[6L] PREV PAGE ABORT	This key calls up the previous P/N STATUS page. This amber prompt is displayed when a crossload is in progress. The pilot uses it to stop the crossload.
[6R] NEXT PAGE CONFIRM*	This key calls up the next P/N STATUS page. This amber prompt is displayed when a crossload has been armed. The pilot presses it to start the crossload.

POSITION MONITOR PAGE

Ident.: DSC-22_20-50-10-28-00000853.0008001 / 14 MAY 12
Applicable to: MSN 04827-04860

This page displays all the different positions that the FMGC has computed with the various available navigation methods. It also shows which method obtained each position. (The positions should be almost identical).
The pilot calls up this page by pressing the 1L key on the data index page.



```
        DATA INDEX        1/2 →
   POSITION
<MONITOR
   IRS
<MONITOR
   GPS
<MONITOR ◁*

<A/C STATUS
   CLOSEST               PRINT
<AIRPORTS            FUNCTION>
   EQUITIME                AOC
<POINT               FUNCTION>
```

```
          POSITION MONITOR
FMGC1          4610.2N/00618.3E
                 3IRS/DME/DME
FMGC2          4610.2N/00618.8E
                 3IRS/DME/DME
RADIO          4610.1N/00618.2E

MIX IRS        4609.7N/00618.0E
    IRS1         IRS2        IRS3
NAV 0.4        NAV 0.2    NAV 0.4
                              SEL
←FREEZE                  NAVAIDS>
```

FM POSITION PAGE

IF GPS INSTALLED

```
          GPS MONITOR
GPS1 POSITION
43°40.4N/000°17.6E
TTRK        UTC           GS
342.3    10:37:42        310
MERIT      GPS ALT    MODE/SAT
100M       32000       NAV/6
GPS2 POSITION
43°40.4N/000°17.6E
TTRK        UTC           GS
342.3    10:37:42        310
MERIT      GPS ALT    MODE/SAT
100M       32000       NAV/6
```

GPS MONITOR PAGE

```
      POSITION FROZEN AT 1020
FMGC1          4610.2N/00618.3E
                 3IRS/DME/DME
FMGC2          4610.2N/00618.8E
                 3IRS/DME/DME
RADIO          4610.1N/00618.2E

MIX IRS        4610.7N/00618.0E
    IRS1         IRS2        IRS3
NAV 0.4        NAV 0.2    NAV 0.4
                              SEL
←UNFREEZE                NAVAIDS>
```

```
          SELECTED NAVAIDS
   VOR/DME      AUTO     DESELECT
<GEN         115.20           TOU
   VOR/DME
<NIZ         115.10         [   ]*
   VOR/DME
<TOP
   ILS/DME
<NA          110.70
   RADIONAV SELECTED
←DESELECT
   GPS SELECTED
←DESELECT                 RETURN>
```

POSITION MONITOR AND POSITION FROZEN PAGE

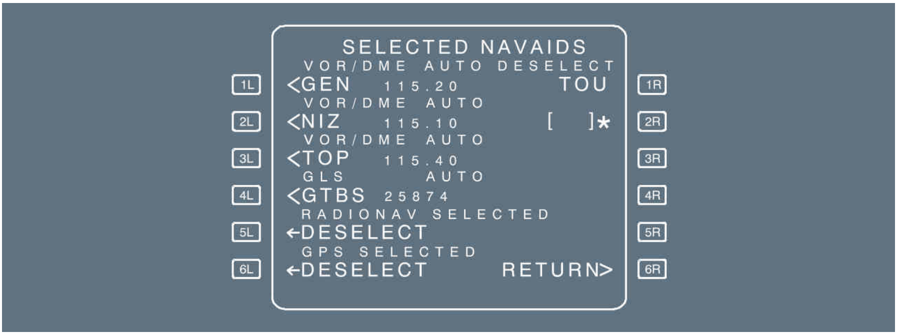
Line 1 FMGC 1	This line displays the latitude and longitude in green, as calculated by the FMGC 1, and the navigation method used by the FMGC for that calculation in white (Example: “3 IRS/DME/DME”).

Line 2 FMGC 2	This line displays the latitude and longitude in green, as calculated by the FMGC 2, and the navigation method used, in white.
Line 3 RADIO or GPS or GPIRS or RADIO DESELECTED	This line displays the latitude and longitude in green, calculated by the onside FMGC from selected radio NAVAIDs (Example: DME/DME, VOR/DME, or LOC) or from GPS or GPIRS. The selected radio NAVAIDs are displayed in white.
Line 4 MIX IRS	This line shows the latitude and longitude of the weighted mean inertial reference system (IRS) calculated by the onside FMGC from the available IRSs.
Line 5 IRS 1,2,3	This line shows the deviation in nautical miles of each IRS position from the onside FMGC position. It also displays the IRS mode, which can be INVAL, ALIGN, NAV or ATT. *Note:* *INVAL is displayed when an ADIRS has failed, or the IRS position is not refreshed.*
[6L] FREEZE/UNFREEZE (blue)	The pilot presses this key to freeze (or unfreeze) all the data displayed on the page. When the data is frozen, the title of the page specifies the time at which it was frozen.
[6R] SEL NAVAIDS	The pilot presses this key to access the selected navaids page.

SELECTED NAVAIDS PAGE

Ident.: DSC-22_20-50-10-28-00000854.0003001 / 14 MAY 12
Applicable to: MSN 04827-04860

MODIFIABLE FOR DESELECTION/SELECTION


```
      SELECTED NAVAIDS
 VOR/DME  AUTO DESELECT
<GEN     115.20          TOU
 VOR/DME  AUTO
<NIZ     115.10        [   ]*
 VOR/DME  AUTO
<TOP     115.40
 GLS      AUTO
<GTBS    25874
 RADIONAV SELECTED
←DESELECT
 GPS SELECTED
←DESELECT             RETURN>
```

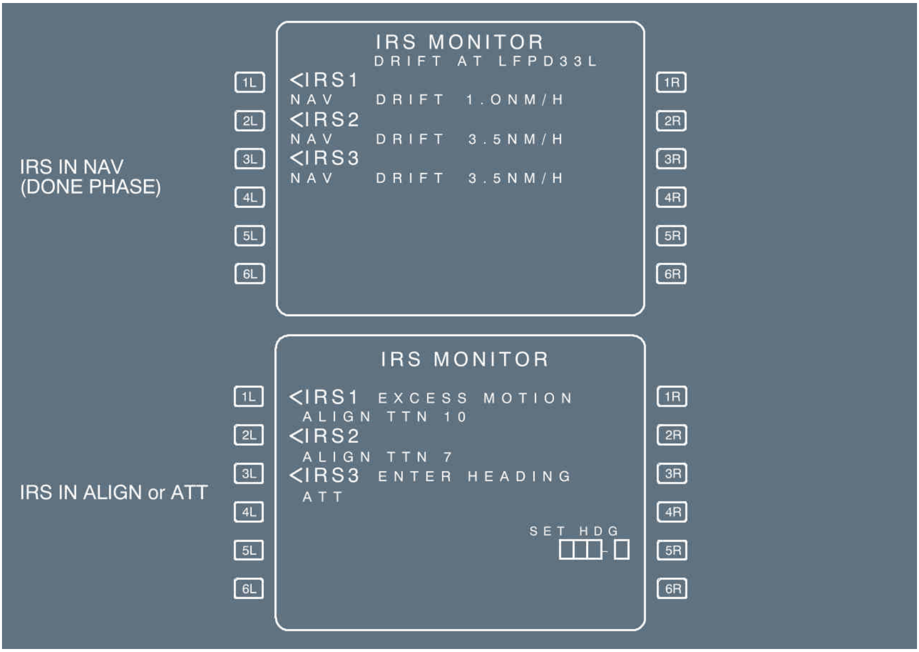
[1L]	This field displays the ident of the NAVAID tuned for display purposes, in blue, and the frequency of the NAVAID in green.
[2L] to [3L]	These fields display the ident of the NAVAIDs tuned for the calculation of the radio position by the FMGC, in blue, and the frequency of the NAVAIDs in green.
[4L]	This field displays the ident of the landing system (XLS) in blue, and the frequency (or the channel) of the landing system in green. *Note:* *For fields [1L] to [4L] the class of the tuned NAVAID or the landing systems, and the tuning mode (AUTO, MAN, or RMP) are displayed in white in the label field.*
[5L]	The flight crew presses this key to manually select or deselect the NAVAIDs. If the flight crew selects (deselects) the NAVAIDs for position calculation, “RADIONAV SELECTED” (“RADIONAV DESELECTED”) is displayed in the label line in blue small font and “DESELECT” (“SELECT”) is displayed in white large font. By default NAVAIDS are selected. The deselection of the RADIONAV inhibits use of radio position (either DME/DME or VOR/DME) for position calculation.
[6L]	The flight crew presses this key to manually select or deselect the GPS. If the flight crew selects (deselects) the GPS, “GPS SELECTED” (“GPS DESELECTED”) is displayed in the label line in blue small font and “DESELECT” (“SELECT”) is displayed in white large font. By default GPS is selected. If the flight crew deselects the GPS, “GPS IS DESELECTED” MCDU message is displayed when the aircraft is less than 80 NM from the top of descent, or in approach phase.

[1R] to [5R]	The flight crew deselects a NAVAID by entering the NAVAID identifier in one of these four fields. Once deselected, the flight crew can manually tune the NAVAID by entering the ident of the NAVAID for display purposes. The deselection can be cleared: - Manually, by a CLR action in this field, or - Automatically upon transition to the done or preflight phase, or upon activation of the second database. The flight crew may deselects as many as four stations. If the flight crew attempts to deselect a NAVAID that has been previously deselected, the “XXXX IS DESELECTED” MCDU message is displayed.
[6R] RETURN	The flight crew presses this key to return to the POSITION MONITOR page.

IRS MONITOR PAGE

Ident.: DSC-22_20-50-10-28-00000856.0003001 / 23 JUN 15
Applicable to: MSN 04827-04860

This page displays the IRS data. The crew calls up this page by pressing the IRS monitor prompt of the DATA INDEX 1/2 page.



```
        IRS MONITOR
      DRIFT AT LFPD33L
<IRS1
NAV     DRIFT  1.0NM/H
<IRS2
NAV     DRIFT  3.5NM/H
<IRS3
NAV     DRIFT  3.5NM/H
```

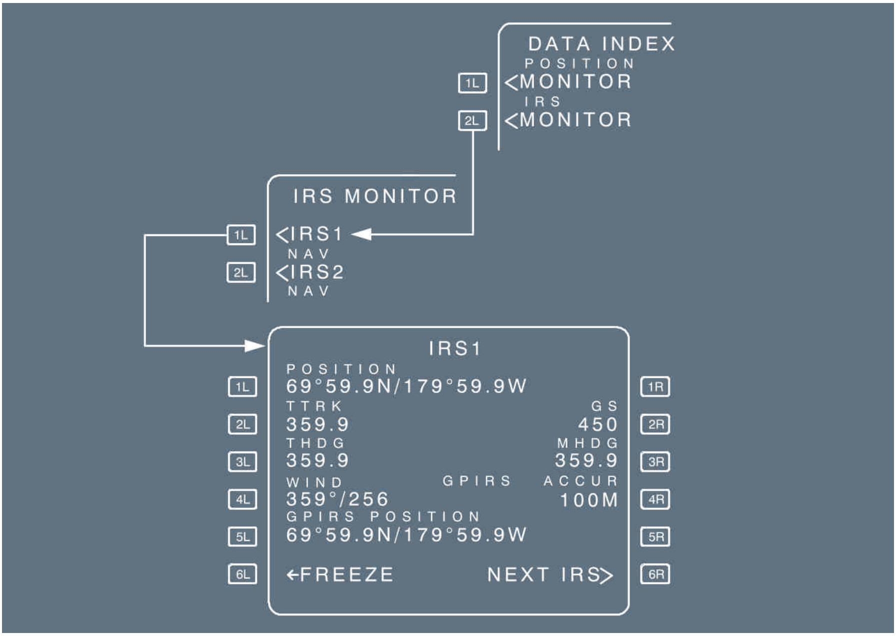
```
        IRS MONITOR

<IRS1   EXCESS MOTION
  ALIGN TTN 10
<IRS2
  ALIGN TTN 7
<IRS3   ENTER HEADING
  ATT

                 SET HDG
                  □□□.□
```

TITLE DRIFT AT XXXX (amber)	Displays “DRIFT AT” runway identifier, if at least one IRS average drift is displayed.
[1L] to [3L] IRS 1(2) (3) (white)	These prompts access the associated IRS pages. Each label line displays the mode (NAV, ALIGN, ATT or INVAL), the average drift (upon transition to DONE phase), and the Time To NAV in minutes (if IRS in align) for each IRS.

[1R] to [3R]	Displays the status message of the associated IRS in small green font. List of available messages: IR FAULT DELAYED MAINT ENTER PPOS SELECT ATT EXCESS MOTION SWITCH ADR CHECK C/B CDU FAULT ENTER HEADING REENTER PPOS SYS BELOW -15 °
[5R] SET HDG (white)	This field is displayed, if at least one IRS is in ATT mode. This function allows initialization of a heading for IRS in ATT mode: - If a heading has been entered in this field, or on the ADIRS panel, the value is displayed in blue. - If not, amber boxes are displayed.

IRS 1 (2) (3) PAGE

This page displays the IRS parameters and GPS/IRS hybrid parameters.
The pilot calls up this page by pressing either the 1L key from the IRS MONITOR page, or the NEXT IRS prompt on another IRS page (closed loop).


DATA INDEX
POSITION
1L <MONITOR
IRS
2L <MONITOR
IRS MONITOR
1L <IRS1
NAV
2L <IRS2
NAV
IRS1
POSITION
69°59.9N/179°59.9W
TTRK
359.9
GS
450
THDG
359.9
MHDG
359.9
WIND
359°/256
GPIRS
ACCUR
100M
GPIRS POSITION
69°59.9N/179°59.9W
←FREEZE
NEXT IRS>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

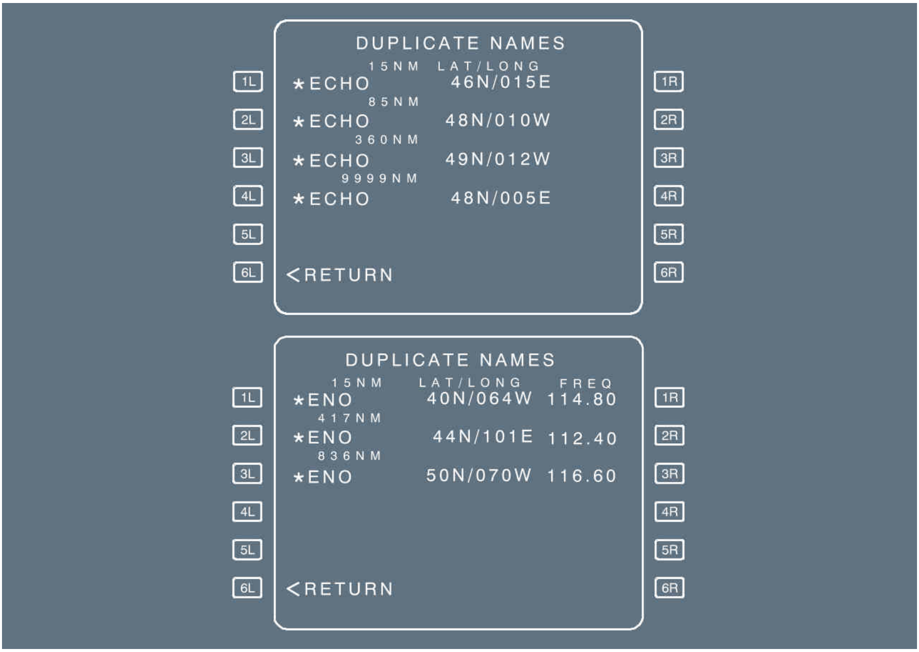
TITLE	Displays the selected IRS in large white font. When data is frozen, IRS is replaced by “IRS FROZEN AT”, followed by the time at which the pilot has frozen the display.
[1L] POSITION	Displays the latitude/longitude given by the selected IRS.
[2L] TTRK	True track
[3L] THDG	True heading
[4L] WIND	True wind direction/velocity
[5L] GPIRS	GPS/IRS hybrid position of the IRS
[6L] FREEZE/UNFREEZE	Allows the crew to freeze or unfreeze all data displayed on all three IRS pages. When the data is frozen, the title of the page specifies the time at which it was frozen. It is automatically unfrozen when exiting the page.
[2R] GS	Ground speed
[3R] MHDG	Magnetic heading
[4R] GPIRS ACCUR	GPS/IRS Figure of Merit (meters or feet)

[6R] NEXT IRS	This prompt enables another IRS page (closed loop IRS 1 → 2 → 3 → 1) to be displayed.

DUPLICATE NAMES PAGE

Ident.: DSC-22_20-50-10-28-00000852.0001001 / 23 JUN 15
Applicable to: MSN 04827-04860

This page automatically appears and enables the pilot to select a specific waypoint, airport, or NAVAID, when the database has more than one with the same identifier.



```
      DUPLICATE NAMES
       15NM  LAT/LONG
*ECHO         46N/015E
       85NM
*ECHO         48N/010W
      360NM
*ECHO         49N/012W
     9999NM
*ECHO         48N/005E



<RETURN
```

```
     DUPLICATE NAMES
    15NM   LAT/LONG   FREQ
*ENO       40N/064W 114.80
   417NM
*ENO       44N/101E 112.40
   836NM
*ENO       50N/070W 116.60



<RETURN
```

The pilot presses the key adjacent to a waypoint, NAVAID, or airport, to select it as the one to be entered. When the pilot has finished, the page automatically reverts to the previously displayed page.

DISTANCE

The direct distance to the aircraft is displayed in green above each name. If this distance is greater than 9 999 NM, then +9 999 NM is displayed.

LAT/LONG COLUMN

This column lists the rounded off latitudes and longitudes of the different points, using the same identifier.

FREQ/CHAN COLUMN

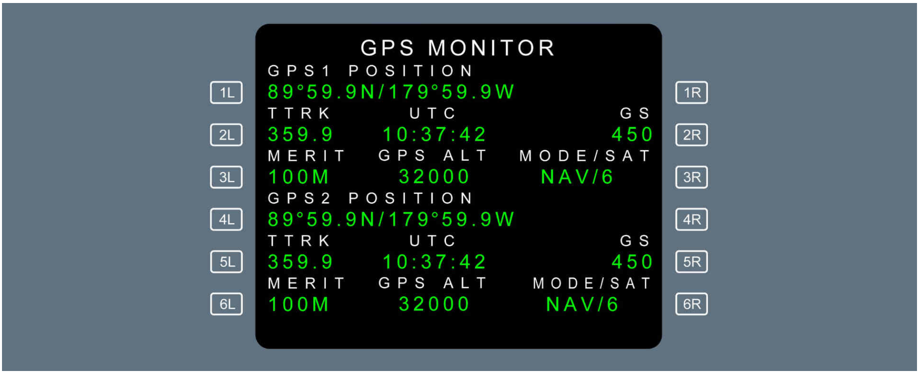
This column lists the NAVAIDs frequencies, if any. It displays CHAN for an MLS.

Note:
- *The DUPLICATE NAMES page is not displayed, when 2 waypoints with the same ident belong to the same airway. The system selects the first waypoint found in the database.*
- *The waypoints or NAVAIDs are ranked according to their distance from the aircraft's position.*
- *When a waypoint is named using ICAO phonetic alpha characters, a minus sign and the ICAO code of the country where the waypoint is located, are displayed. e.g. Alpha in France becomes A-LF ; Bravo in England becomes B-EG.*

GPS MONITOR PAGE ◁

Ident.: DSC-22_20-50-10-28-00000858.0001001 / 26 JAN 22
Applicable to: MSN 04827-04860

This page displays the GPS data. The flight crew calls up this page by pressing the GPS MONITOR ◁ prompt of the DATA INDEX page.



```
        GPS MONITOR
GPS1 POSITION
89°59.9N/179°59.9W
TTRK       UTC           GS
359.9    10:37:42       450
MERIT    GPS ALT   MODE/SAT
100M      32000      NAV/6
GPS2 POSITION
89°59.9N/179°59.9W
TTRK       UTC           GS
359.9    10:37:42       450
MERIT    GPS ALT   MODE/SAT
100M      32000      NAV/6
```

[1L] and [4L]	Display the GPS 1 and 2 positions.
[2L] - [2R] and [5L] - [5R] TTRK-UTC-GS	Display the GPS 1 and 2 true tracks. UTC fields indicate UTC time for each GPS sensor. GS fields indicate the GPS 1 and 2 ground speed.

[3L] - [3R] and [6L] - [6R] MERIT-GPS ALT-MODE/SAT	Display the GPS 1 and 2 figures of merit (in meters or feet). GPS ALT is displayed for information purposes. It is not used by the FMGS. MODE/SAT fields indicate the GPS 1 and 2 modes followed by the number of satellites tracked. The GPS can operate in the following modes: INIT : System initialization ACQ : Satellite acquisition NAV : Normal mode TEST : System test FAULT : Invalid system ALTAID or AIDED : Degraded modes. The MMR uses aircraft inputs for computation purposes.

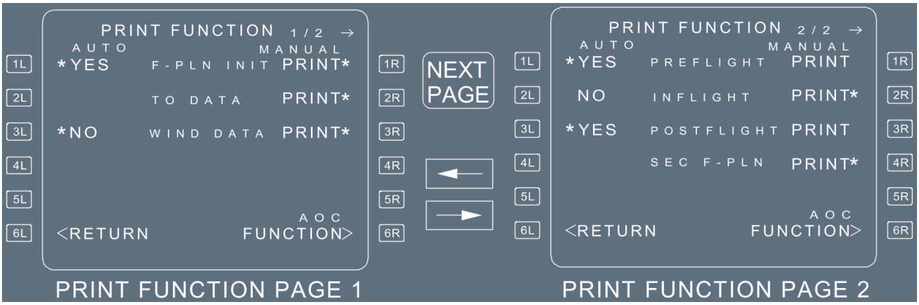
PRINT FUNCTION PAGES

Ident.: DSC-22_20-50-10-28-00009558.0001001 / 16 MAR 11
Applicable to: MSN 04827-04860

The PRINT FUNCTION pages enable the crew to print the data relative to the current flight.

This data comes from 2 different sources:
- ACARS uplink messages, and
- Active data from the current flight.

The pilot may access these pages from the “DATA INDEX” page1/2, by pressing the [6R] ACARS/PRINT FUNCTION key.



PRINT FUNCTION 1/2 →
AUTO MANUAL
YES F-PLN INIT PRINT
TO DATA PRINT*
NO WIND DATA PRINT
AOC
<RETURN FUNCTION>

PRINT FUNCTION PAGE 1

PRINT FUNCTION 2/2 →
AUTO MANUAL
*YES PREFLIGHT PRINT
NO INFLIGHT PRINT*
*YES POSTFLIGHT PRINT
SEC F-PLN PRINT*
AOC
<RETURN FUNCTION>

PRINT FUNCTION PAGE 2

PRINT FUNCTION PAGE 1/2

This page displays the status of the automatic printing capabilities, for the uplink messages (left column), and the status of the manual printing capabilities of the current active data (right column).

LEFT COLUMN

AUTO

* YES (blue)	Line 1 : Uplink messages related to flight plan INIT data are automatically printed when received. Line 2 : Uplink messages related to takeoff data are automatically printed when received. Line 3 : Uplink messages related to wind data are automatically printed when received.
NO (without an asterisk)	Automatic printing is internally deactivated for the data of the line. The pilot cannot reactivate it manually.
Blank	The ACARS function is not available for this line. Uplink messages can neither be received nor automatically printed.

RIGHT COLUMN

MANUAL	Displays the status of the manual printing capability of the active data (and not of the ACARS uplink data).
PRINT * (amber)	Pressing the right keys prints the following active data: Line 1 : Active flight plan INIT data Line 2 : Active takeoff data Line 3 : Active wind data

Printing is only possible, if the asterisk appears.
When the key is pressed, the asterisk disappears until the data is printed.

[6L] RETURN	Pressing this key reverts the display to the DATA INDEX page.
[6R] ACARS FUNCTION	Pressing this key reverts the display to the ACARS FUNCTION page.

PRINT FUNCTION PAGE 2/2

This page describes the printing capabilities of the reports displayed on lines 1 to 4.

LEFT COLUMN

AUTO (white)

* YES (blue)	Line 1 : The PREFLIGHT report is automatically printed at engine start. Line 2 : The INFLIGHT report is automatically printed at takeoff. Line 3 : The POSTFLIGHT report is automatically printed at engine shutdown.

NO (without an asterisk)	Automatic printing is internally deactivated for the report. The pilot cannot reactivate it.

RIGHT COLUMN

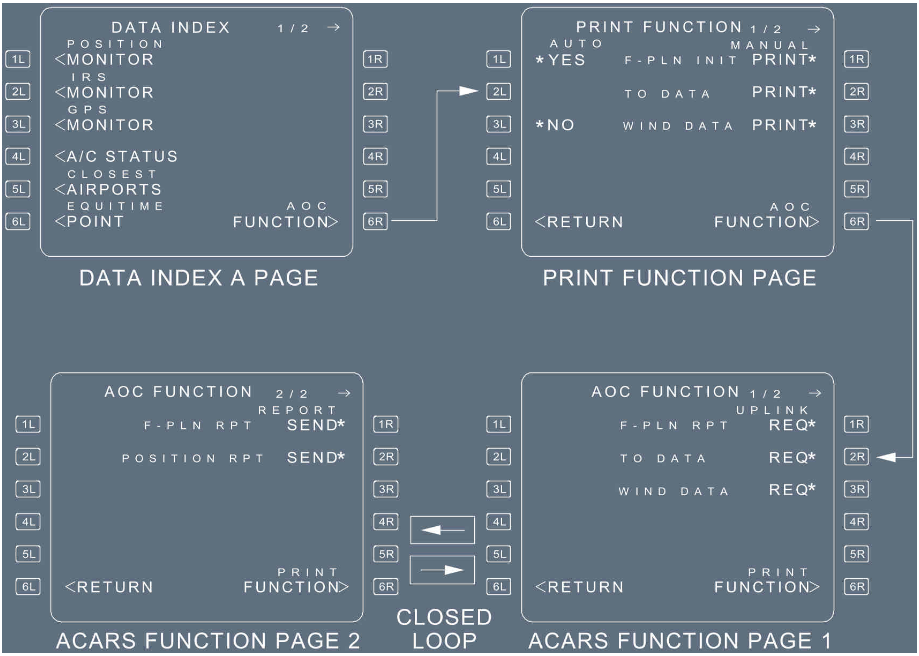
MANUAL	Pressing a right key prints the report displayed on the line.
PRINT *	It is not possible to print, if the asterisk does not appear. When the key is pressed, the asterisk disappears until the report is printed. Regarding the PREFLIGHT, INFLIGHT, and POSTFLIGHT reports: Only one can be printed at a time, depending on the applicable flight phase. For the SEC F-PLN report, the print selection start is only displayed if a secondary flight plan exists.

AOC FUNCTION PAGE (IF INSTALLED)

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-50-10-28-D-00000896.0001001 / 16 MAR 11

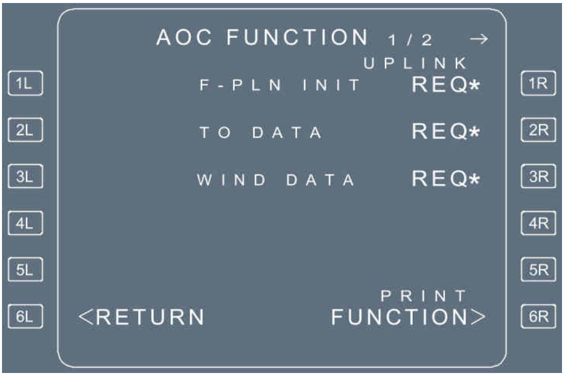
The AOC FUNCTION pages display those functions which enable crews to send manual requests or reports to the ground.
All functions, displayed on pages 1 and 2, may be inhibited via a pin program.
The AOC/PRINT FUNCTION prompt is displayed on the DATA INDEX page 1/2. Pressing this key displays the PRINT FUNCTION page, from which the AOC FUNCTION page can be accessed.


DATA INDEX 1/2 →
POSITION
<MONITOR
IRS
<MONITOR
GPS
<MONITOR
<A/C STATUS
CLOSEST
<AIRPORTS
EQUITIME
<POINT
AOC
FUNCTION>
DATA INDEX A PAGE
PRINT FUNCTION 1/2 →
AUTO
MANUAL
*YES
F-PLN INIT
PRINT*
TO DATA
PRINT*
*NO
WIND DATA
PRINT*
<RETURN
AOC
FUNCTION>
PRINT FUNCTION PAGE
AOC FUNCTION 2/2 →
REPORT
F-PLN RPT
SEND*
POSITION RPT
SEND*
<RETURN
PRINT
FUNCTION>
ACARS FUNCTION PAGE 2
CLOSED
LOOP
AOC FUNCTION 1/2 →
UPLINK
F-PLN RPT
REQ*
TO DATA
REQ*
WIND DATA
REQ*
<RETURN
PRINT
FUNCTION>
ACARS FUNCTION PAGE 1
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

The AOC function page 2 is accessed using the "→" or "←" keys from page 1 and vice versa.

Ident.: DSC-22_20-50-10-28-D-00000897.0001001 / 28 MAR 11

AOC FUNCTION PAGE 1 (IF INSTALLED)


AOC FUNCTION 1/2 →
UPLINK
F-PLN INIT
REQ*
TO DATA
REQ*
WIND DATA
REQ*
<RETURN
PRINT
FUNCTION>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	AOC FUNCTION 1/2 is in white.

Line 1 F-PLN INIT REQ*	Pressing this key sends a flight plan request to the ground (downlink message). The INIT REQUEST prompt of the INIT A page provides the same function.
Line 2 TO DATA REQ*	Pressing this key sends a request for takeoff data. Displayed in the DONE and PREFLIGHT phases. The TO DATA REQUEST prompt of the UPLINK TO DATA REQ page provides the same function.
Line 3 WIND DATA REQ*	Pressing this key sends a request for wind data. The WIND REQUEST prompt of the CLIMB, CRUISE, and DESCENT WIND pages provides the same function.

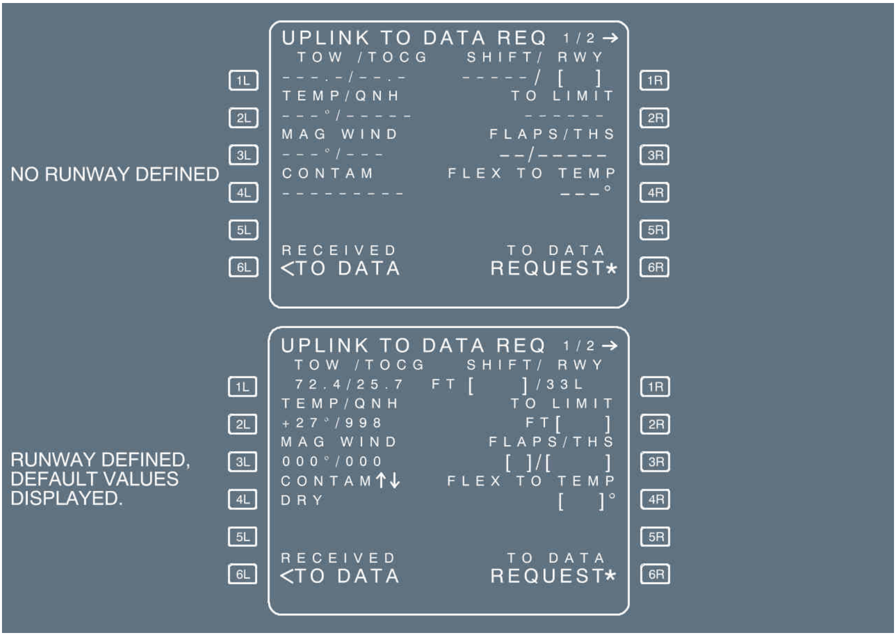
Note: *If "REQ" is not followed by an asterisk, the request cannot be sent (downlink message). When a function (line 1 or 2 or 3) is deactivated internally, the corresponding line is blank.*

[6L] RETURN	The pilot presses this key to revert the display revert to the DATA INDEX page.
[6R] PRINT FUNCTION ◁✳	The pilot presses this key to access the PRINT FUNCTION page. (DSC-22_20 Auto Flight - Flight Management/50 Controls and Indicators/10 MCDU - Page Description/28 FMS2 thales/Print Function Pages).

Ident.: DSC-22_20-50-10-28-D-00000898.0001001 / 14 MAY 12

UPLINK TO DATA REQ PAGES (IF INSTALLED)

This page allows the pilot to send a request for takeoff data for up to 2 runways. There is one page for each runway. The page is accessed from the PERF TAKEOFF page, or from the UPLINK XXX (MAX or DRT or FLX) TO DATA page, by pressing the UPLINK TO DATA prompt.


NO RUNWAY DEFINED

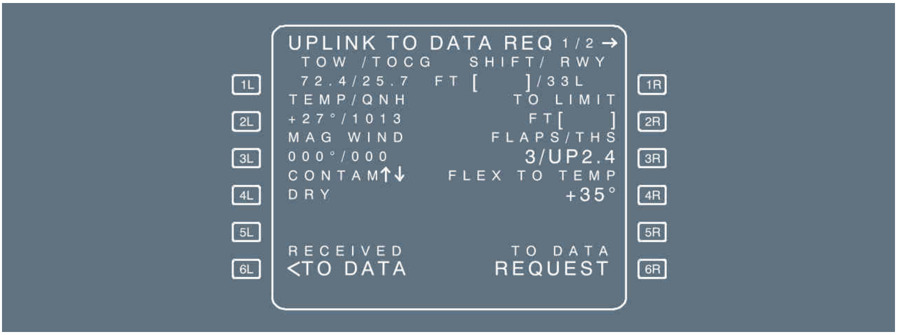
```
UPLINK TO DATA REQ     1/2 →
 TOW /TOCG      SHIFT/ RWY
---.-/--.-      -----/ [   ]
TEMP/QNH            TO LIMIT
---°/-----           ------
MAG WIND           FLAPS/THS
---°/---            --/-----
CONTAM          FLEX TO TEMP
---------               ---°

RECEIVED             TO DATA
<TO DATA            REQUEST*
```

RUNWAY DEFINED, DEFAULT VALUES DISPLAYED.

```
UPLINK TO DATA REQ     1/2 →
 TOW /TOCG      SHIFT/ RWY
 72.4/25.7     FT [    ]/33L
TEMP/QNH            TO LIMIT
+27°/998            FT[    ]
MAG WIND           FLAPS/THS
000°/000           [ ]/[    ]
CONTAM↑↓        FLEX TO TEMP
DRY                   [   ]°

RECEIVED             TO DATA
<TO DATA            REQUEST*
```

TITLE	White.
[1L] TOW/TOCG (green)	This field is dashed, until a runway is defined in the [1R] field. The TOW/TOCG is defaulted to the values of the INIT B and FUEL PRED pages. If not available, dashes are displayed. It cannot be modified by the pilot.
[2L] TEMP/QNH or QFE (green/blue)	This field is dashed, until a runway is defined in the [1R] field; TEMP = Defaulted to SAT, and cannot be modified by the crew. BARO = Defaulted to FCU selection and can be modified by the pilot.
[3L] MAG WIND (blue)	This field is dashed, until a runway is defined in the [1R] field. It displays the wind at the origin. The pilot can modify this field.
[4L] CONTAM (blue)	This field is dashed, until a runway is defined in the [1R] field. The display is defaulted to DRY. The scroll keys are used to modify the runway contamination: DRY, WET, 1/4 WATER, 1/2 WATER, 1/4 SLUSH, 1/2 SLUSH, COMP SNOW.

[6L] RECEIVED TO DATA	This field calls up the UPLINK MAX (or FLX) TO DATA page that displays the data received by ACARS.



```
UPLINK TO DATA REQ 1/2 →
 TOW /TOCG      SHIFT/ RWY
 72.4/25.7   FT [    ]/33L
TEMP/QNH          TO LIMIT
+27°/1013         FT[     ]
MAG WIND        FLAPS/THS
000°/000           3/UP2.4
CONTAM↑↓      FLEX TO TEMP
DRY                   +35°

RECEIVED           TO DATA
<TO DATA           REQUEST
```

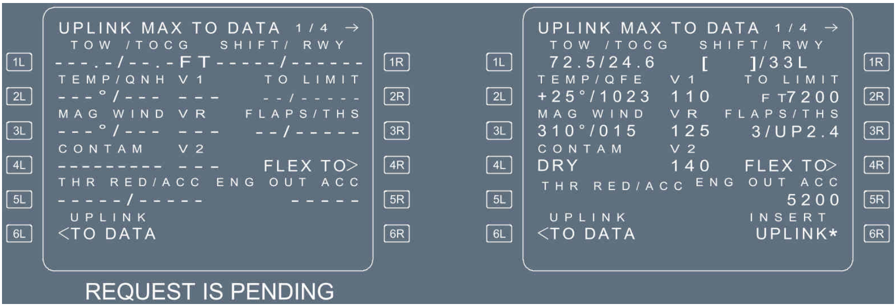
[1R] SHIFT/RWY (blue)	This field is dashed, until a runway is defined in the F-PLN. If a runway is defined in the F-PLN, it is automatically filled in as: SHIFT = Value from the PERF TO page, or blue brackets [ ], if no value is defined. RWY = F-PLN departure runway. The pilot can modify this field.
[2R] TO LIMIT (blue)	It is dashed, until a runway is defined in the [1R] field. It displays blue brackets [ ], when a runway is defined. The pilot may enter a length, considering runway obstacles.
[3R] FLAPS/THS (blue)	This field is dashed, until a runway is defined in the [1R] field; it is then defaulted to values from the PERF TO page. Blue brackets are displayed, if the PERF TO page does not have any defined values.
[4R] FLEX TO TEMP (blue)	This field is dashed, until a runway is defined in the [1R] field; it is then defaulted to values from the PERF TO page. Blue brackets are displayed, if the PERF TO page does not have any defined values. The pilot can modify this field and enter a FLEX TO temperature (FXX).
[6R] TO DATA REQUEST* (amber)	Pressing this key sends the takeoff data request message to the ground. The asterisk disappears when the request is sent. It reappears when the data is available.

Page 2/2 is used for requesting a second runway data.

Note: *If the UPLINK TO DATA REQ Page 2 is accessed (Page 1 being filled), the fields on this page are filled in with default values after entering of a runway in the [1R] field. QNH or QFE, and wind are common with Page 1.*

Ident.: DSC-22_20-50-10-28-D-00000900.0021001 / 18 MAR 11

UPLINK MAX TO DATA PAGES (IF INSTALLED)



```
UPLINK MAX TO DATA 1/4 →
 TOW /TOCG   SHIFT/ RWY
---.-/--.-FT-----/------
TEMP/QNH V1     TO LIMIT
---°/--- ---    --/-----
MAG WIND VR   FLAPS/THS
---°/--- ---   --/-----
CONTAM   V2
-------- ---    FLEX TO>
THR RED/ACC ENG OUT ACC
-----/-----        -----
 UPLINK
<TO DATA

REQUEST IS PENDING
```

```
UPLINK MAX TO DATA 1/4 →
 TOW /TOCG   SHIFT/ RWY
 72.5/24.6   [     ]/33L
TEMP/QFE  V1    TO LIMIT
+25°/1023 110   FT7200
MAG WIND  VR  FLAPS/THS
310°/015  125   3/UP2.4
CONTAM    V2
DRY       140   FLEX TO>
THR RED/ACC ENG OUT ACC
                   5200
 UPLINK          INSERT
<TO DATA        UPLINK*
```

This page is accessed from the UPLINK TO DATA REQ page by pressing the RECEIVED TO DATA key.
There is a set of 2 pages (MAX TO DATA and FLEX TO DATA) for each of the 4 uplinked runway data. Uplinked data is displayed in green. (It cannot be modified by the pilot).

[1L] TOW/TOCG	Uplinked reference Takeoff Gross Weight and Takeoff Center of Gravity.
[2L] TEMP/QNH (or QFE)	Uplinked assumed temperature and baro setting.
[3L] MAG WIND	Uplinked takeoff runway wind.
[4L] CONTAM	Uplinked takeoff runway contamination.
[5L] THR RED/ACC	Uplinked Thrust Reduction and Acceleration altitudes.
[6L] UPLINK TO DATA	Pressing the key calls up the UPLINK TO DATA REQ page
V1 , VR, V2	Uplinked takeoff speeds.
[1R] SHIFT/RWY	Uplinked TO runway ident, runway intersection, and position shift.
[2R] TO LIMIT	Uplinked runway length remaining.
[3R] FLAPS/THS	Uplinked FLAPS/SLATS CONF and TRIM position.
[4R] FLEX TO	Pressing this key calls up the UPLINK FLEX TO DATA pages.
[5R] ENG OUT ACC	Uplinked engine-out acceleration altitude.

[6R] INSERT UPLINK *

Uplinked Takeoff data is available for insertion.

Selecting this prompt inserts the following data in the PERF TO page:
- V1, VR, V2
- THR RED/ACC, ENG OUT ACC altitudes
- FLAPS/THS
- SHIFT
- FLEX

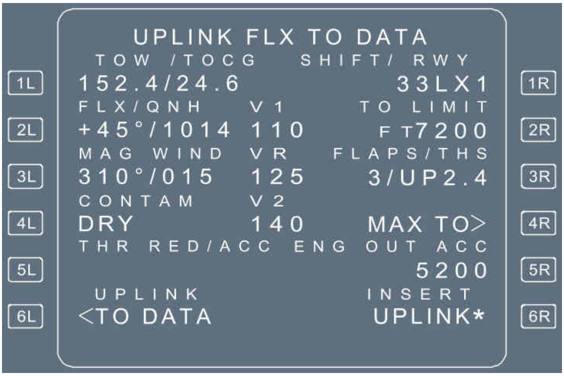
The display reverts to the PERF TO page, the asterisk disappears.

This field is not displayed, if the runway does not match the active runway. If the runway matches the active runway but the uplinked TOW differs from the current TOW:
- The asterisk disappears and the insertion is not possible (the uplink TOW is 3 t greater or 1 t lower than the TOW estimated by the FMS).
- The TOW value is displayed in amber in [1L] field.

Note: All previously received data is replaced by the new uplinked data.

Ident.: DSC-22_20-50-10-28-D-00000901.0001001 / 16 MAR 11

UPLINK FLX TO DATA PAGES (IF INSTALLED)



```
        UPLINK FLX TO DATA
  TOW /TOCG        SHIFT/ RWY
152.4/24.6            33LX1
FLX/QNH     V1     TO LIMIT
+45°/1014  110       F T7200
MAG WIND    VR    FLAPS/THS
310°/015   125       3/UP2.4
CONTAM      V2
DRY        140       MAX TO>
THR RED/ACC ENG OUT ACC
                        5200
  UPLINK              INSERT
<TO DATA             UPLINK*
```

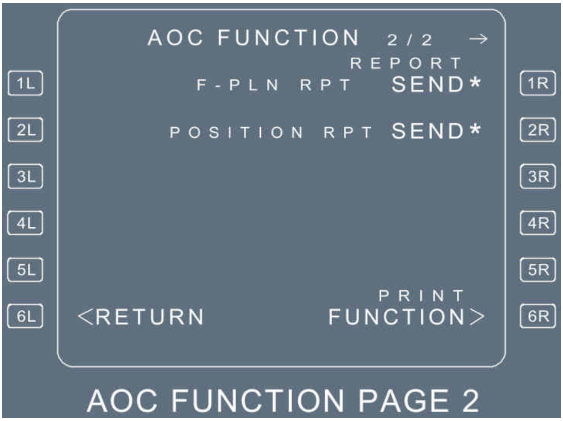
TITLE

UPLINK FLX TO DATA in white.

[2L]	FLX/QNH (or QFE) When the UPLINK FLEX TO DATA page is selected, it displays uplink assumed Flex Temperature and baro setting (QNH or QFE).
[4R] MAX TO	Pressing this key calls up the MAX TO DATA page. For all other fields, refer to MAX TO DATA page.

Ident.: DSC-22_20-50-10-28-D-00000902.0001001 / 16 MAR 11

AOC FUNCTION PAGE 2 (IF INSTALLED)



Line 1 F-PLN RPT SEND	Pressing this key sends the flight plan report to the ground.
Line 2 POSITION RPT SEND	Pressing this key sends a Position Report to the ground.

Note:
- *No report can be sent, if “SEND” is not followed by an asterisk.*
- *When a function (line 1 or 2) is deactivated via the navigation database policy file, the corresponding line is blank.*

[6L] RETURN	The pilot presses this key to revert to the DATA INDEX page.
[6R] PRINT FUNCTION	The pilot presses this key to access the PRINT FUNCTION page.

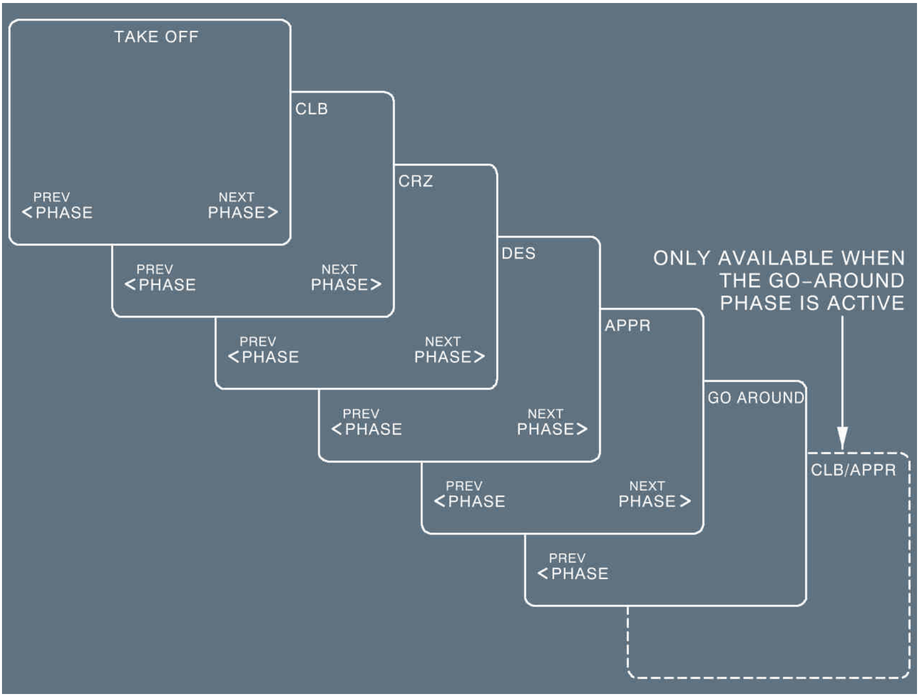
PERF PAGE

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-50-10-28-E-00000903.0001001 / 01 OCT 12

The flight plan is divided into the following phases :
PREFLIGHT, TAKEOFF, CLIMB, CRUISE, DESCENT, APPROACH, GO-AROUND, DONE.

Each phase, except for the preflight and done phases, has a performance (PERF) page. The PERF pages display performance data, speeds related to the various phases, and predictions.
Pressing the PERF key on the MCDU console calls up the performance page for the current active phase. Performance pages, relating to phases already flown, are unavailable.
In the preflight and done phases, pressing the PERF key brings up the takeoff performance page.
Pressing the PERF key in the done phase makes the phase transition to the preflight phase.

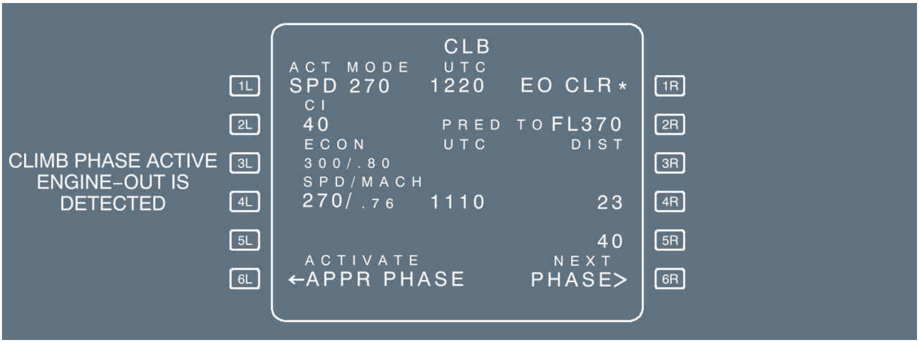

TAKE OFF
PREV <PHASE
NEXT PHASE>
CLB
PREV <PHASE
NEXT PHASE>
CRZ
PREV <PHASE
NEXT PHASE>
DES
PREV <PHASE
NEXT PHASE>
APPR
PREV <PHASE
NEXT PHASE>
GO AROUND
PREV <PHASE
ONLY AVAILABLE WHEN THE GO-AROUND PHASE IS ACTIVE
CLB/APPR

The FMGS flight phases are unrelated to the FWC flight phases.

Line 6	Fields may display two different prompts, depending upon whether the phase is active or not.
[6L] PREV PHASE	To review the performance page for the previous phase. The prompt is unavailable on the takeoff performance page. It is also unavailable for phases already flown.
[6L] ACTIVATE APPR PHASE	To activate, then confirm, the APPR phase. It is only available on the page corresponding to the active phase.
[6R] NEXT PHASE	To review the performance page for the next phase.

Note: ***"EO CLR*" prompt***

- *When the FMGS detects an engine-out condition, the system automatically calls up the performance page for the current flight phase (except when this occurs before the diversion point during takeoff, or no EOSID exists in the flight plan), and displays "EO CLR*" in the [1R] field.*
  If the pilot presses the [1R] key, the system reverts to the normal processing (with no engine failed) and suppresses the EO information.
- *If the engine-out condition is detected before the diversion point at takeoff, a temporary flight plan is created.*

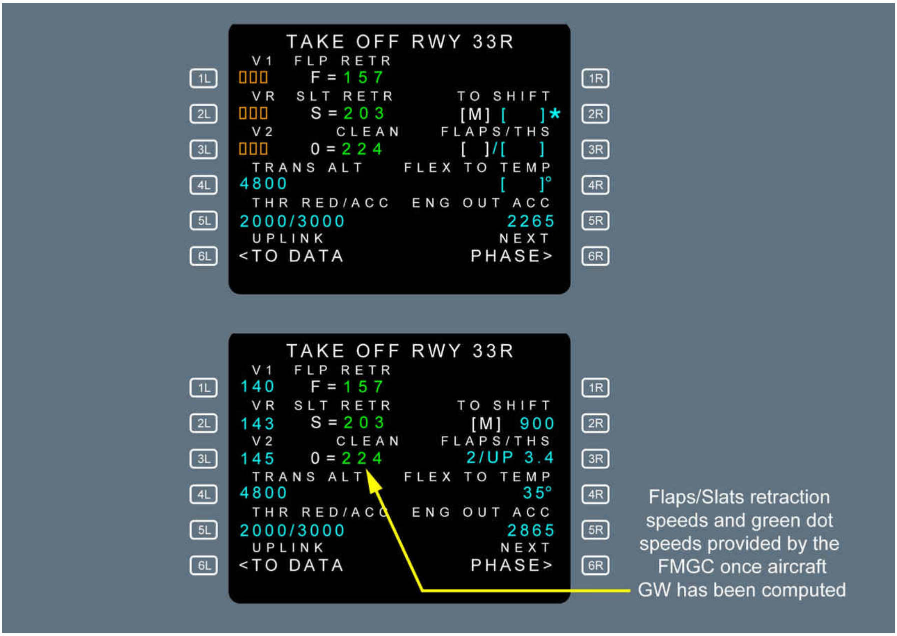

CLIMB PHASE ACTIVE ENGINE-OUT IS DETECTED

```
                     CLB
ACT MODE      UTC
SPD 270       1220       EO CLR*
 CI
 40           PRED  TO FL370
 ECON         UTC          DIST
 300/.80
 SPD/MACH
 270/.76      1110           23

                             40
 ACTIVATE                 NEXT
←APPR PHASE              PHASE>
```

Ident.: DSC-22_20-50-10-28-E-00000904.0004001 / 30 AUG 18

PERF TAKEOFF PAGE

During the preflight phase, the pilot presses the PERF key to call up the takeoff performance page.



```
     TAKE OFF RWY 33R
 V1   FLP RETR
□□□    F=157
 VR   SLT RETR          TO SHIFT
□□□    S=203          [M] [    ]*
 V2      CLEAN        FLAPS/THS
□□□    O=224          [  ]/[   ]
 TRANS ALT       FLEX TO TEMP
4800                      [   ]°
 THR RED/ACC     ENG OUT ACC
2000/3000                 2265
 UPLINK                   NEXT
<TO DATA                PHASE>
```

```
     TAKE OFF RWY 33R
 V1   FLP RETR
140    F=157
 VR   SLT RETR          TO SHIFT
143    S=203            [M]  900
 V2      CLEAN        FLAPS/THS
145    O=224           2/UP 3.4
 TRANS ALT       FLEX TO TEMP
4800                       35°
 THR RED/ACC     ENG OUT ACC
2000/3000                 2865
 UPLINK                   NEXT
<TO DATA                PHASE>
```

Flaps/Slats retraction speeds and green dot speeds provided by the FMGC once aircraft GW has been computed

TITLE	TAKE OFF RWY is in large green font when the takeoff phase is active, and in large white font when it is inactive. The active flight plan selected runway is displayed in large green font.

<u>Note:</u> *If the takeoff shift, or the flaps/THS, or the runway is changed after V1, V2 or VR insertion, but the origin airport remains the same, the MCDU "CHECK TAKEOFF DATA" message appears, but all takeoff parameters are retained (except in case of runway change.They are invalidated, but still displayed adjacent to each field. The "CONFIRM TO DATA" prompt in [6R] allows reverting to the previous values).*

[1L] V1 [2L] VR [3L] V2	The boxes remain amber, as long as the pilot does not make entries in them. The pilot can modify any entry, as long as the takeoff phase is inactive. *Note:* *1. If the pilot does not enter V2, the SRS mode will be unavailable at takeoff.* *2. The MCDU “V1/VR/V2 DISAGREE” amber message appears if the inserted V1, VR, V2 do not satisfy the condition: V1 ≤ VR ≤ V2* *3. The MCDU "TO SPEED TOO LOW" amber message is displayed if the Take-Off Speeds entered by the flight crew are not above the minimum control speeds.*
[4L] TRANS ALT (transition altitude)	This field displays the navigation database default altitude (if defined), once the origin airport is entered. The pilot can modify it.
[5L] THR RED (thrust reduction altitude)	This is the altitude at which the pilot should reduce the thrust from TOGA/FLX to MAX CLIMB (CL detent) with all engines operative (“CLB” or “LVR CLB” flashing on the FMA). - The thrust reduction altitude defaults to 1 500 ft above the runway elevation, or to the altitude set by the airline. - The pilot can modify this altitude: The minimum is 400 ft above the runway elevation.

ACC (Acceleration altitude)	This is the altitude at which the climb phase is triggered. - The target speed jumps to the initial climb speed. - The default value is 1 500 ft above runway elevation. - The flight crew can modify the value. The minimum value is 400 ft above runway elevation, and it can be higher than, or equal to, or lower than THR RED. *Note:* - *A clearing action reverts both values to the defaulted ones.* - *When the crew selects an altitude on the FCU that is below THR RED, it brings THR RED and ACC down to this altitude. (The 400 ft minimum still applies).*
[6L] UPLINK TO DATA	This key calls up the UPLINK TO DATA REQ page. It is only displayed in the preflight and done phases.
[1R] EO CLR	EO CLR is displayed when an engine-out is detected and when active flight phase is takeoff.
[2R] TO SHIFT	The takeoff shift is the distance in meters or feet between the beginning of the runway and the aircraft's takeoff position. When taking off from an intersection, the flight crew should insert this value to ensure a correct update of the FM position. The takeoff shift value must be positive, and cannot be greater than the runway length.
[3R] FLAPS/THS	This is a flight crew entry for the positions of the flaps and the trimmable horizontal stabilizer (THS) at takeoff. The flight crew can modify it until takeoff, by entering “UP X.X” or “X.X UP”, or “DN X.X” or “X.X DN” for the THS.
[4R] FLX TO TEMP or DRT TO (if installed) or FLX TO	The pilot inserts the FLX TO temperature for FLX takeoff setting purposes, or a derate ◁ level. The pilot can only enter it during preflight. The system sends it to the FADEC and displays the entered data on the upper ECAM display. The TEMP value is always entered in degrees Celsius.

[5R] ENG OUT ACC	This field displays the engine-out acceleration altitude, as defined in the database, or is manually entered by the flight crew. This is for display only, as a reminder. It cannot be cleared. The above ACC altitude rules of [5L] apply to this field.
[6R] NEXT PAGE or CONFIRM TO DATA*	This key calls up the climb performance page, or allows the pilot to revert to the previously-entered T.O. parameters, in case of runway change with the same origin airport.

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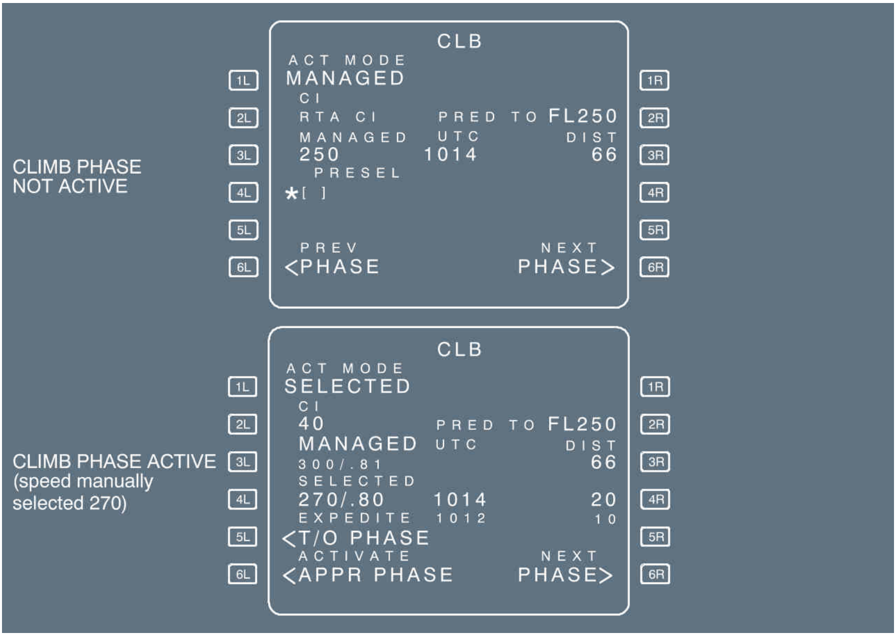
PERF CLIMB PAGE



CLIMB PHASE NOT ACTIVE

```
                CLB
ACT MODE
MANAGED
 CI
 RTA CI        PRED TO FL250
 MANAGED       UTC       DIST
 250          1014         66
   PRESEL
*[  ]

 PREV                    NEXT
<PHASE                 PHASE>
```

CLIMB PHASE ACTIVE (speed manually selected 270)

```
                CLB
ACT MODE
SELECTED
 CI
 40            PRED TO FL250
 MANAGED       UTC       DIST
 300/.81                   66
 SELECTED
 270/.80       1014        20
 EXPEDITE      1012        10
<T/O PHASE
 ACTIVATE                NEXT
<APPR PHASE            PHASE>
```

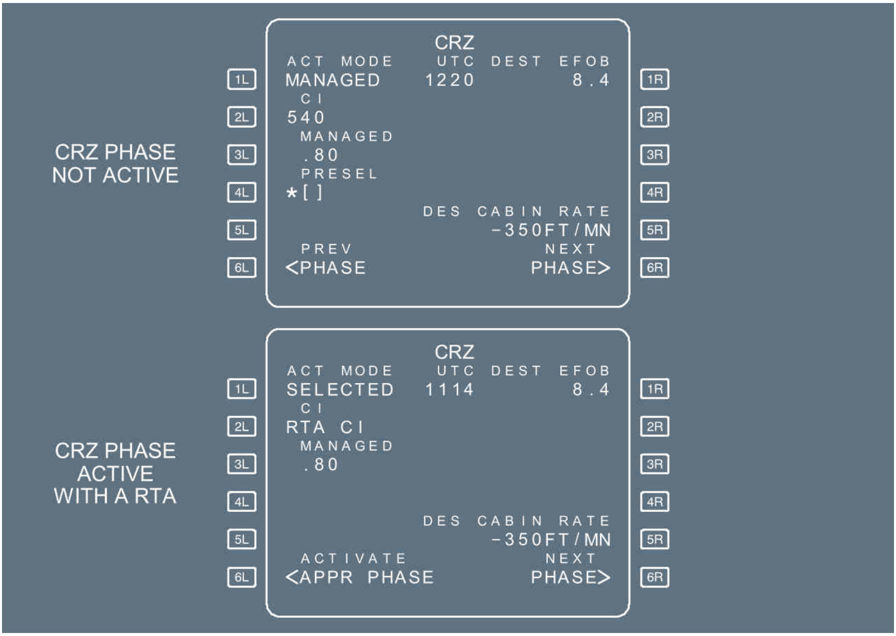
TITLE	CLB is displayed in large green font when climb phase is active, and in large white font when it is inactive.
[1L] ACT MODE	This field displays the preselected or active speed mode: SELECTED or MANAGED. The pilot cannot modify it from this field.

[2L] CI (Cost Index)	This field displays the cost index, as initialized on the INIT A or defaulted from the database, or inserted in this field by the pilot. RTA CI automatically replaces the cost index value, if a time constraint exists in the F-PLN. Note: *In case of an engine-out, EO LRC (engine-out long range cruise) replaces the CI field.* *You can enter a cost index and overwrite EO LRC. In this case, clearing the cost index reverts to EO LRC.*
[3L] MANAGED	This field displays the FMGS computed ECON speed/Mach *Refer to DSC-22_20-40-10 Optimization*. Before the CLIMB phase is active, if the preselected speed mode is SELECTED, an asterisk appears next to the MANAGED speed. In this case, pressing the 3L key preselects MANAGED speed, and 4L reverts to brackets.
[4L] PRESEL or SELECTED	**If the climb phase is active:** - The title of this field becomes "SELECTED". - This field displays the selected (or preselected) SPD or MACH target. - The flight crew cannot modify this field directly, but can adjust it with the FCU's SPD/MACH selection knob. - If the flight crew pushes in the FCU's SPD/MACH selection knob to revert to managed speed, the system selects (or reselects) ECON SPD/MACH, and [4L] is blank. **If the climb phase is inactive:** - This field displays PRESEL, as long as the climb phase is inactive. - The flight crew can only enter a preselected speed.
[5L]	EXPEDITE is displayed in green small font in the [5L] label line when the takeoff or climb phase is active. The flight crew cannot engage EXPEDITE from this field. It indicates the time and distance required to reach the altitude displayed in the 2R field, in case of climb at green dot. If the climb phase is active, T/O PHASE is displayed. This field enables the flight crew to access the PERF TAKE OFF page.
[6L] PREV PHASE	This field displays this legend, if the climb phase is inactive. The flight crew presses this key to call up the takeoff page.

[6L] ACTIVATE APPR PHASE	The field displays this legend, if the climb phase is active. Pressing this key once displays “CONFIRM APPR PHASE*”. Pressing it again activates the approach phase.
[1R] EO CLR	In case of engine-out detection, the [1R] field displays the EO CLR prompt.
[2R] PRED TO...	This field displays the target altitude for the predictions shown in the 3R, 4R, or 5L field. It defaults to the FCU altitude, but the pilot can modify it to any altitude below MAX ALT.
[3R] [4R]	These fields show time and distance predictions for the target altitude selected in [2R], computed for the current vertical mode and speed mode (MANAGED, SELECTED). These fields are only displayed while the takeoff, or climb phase is active.
[6R] NEXT PHASE	The flight crew presses this key to call up the PERF CRZ page.

Ident.: DSC-22_20-50-10-28-E-00000906.0004001 / 03 NOV 21

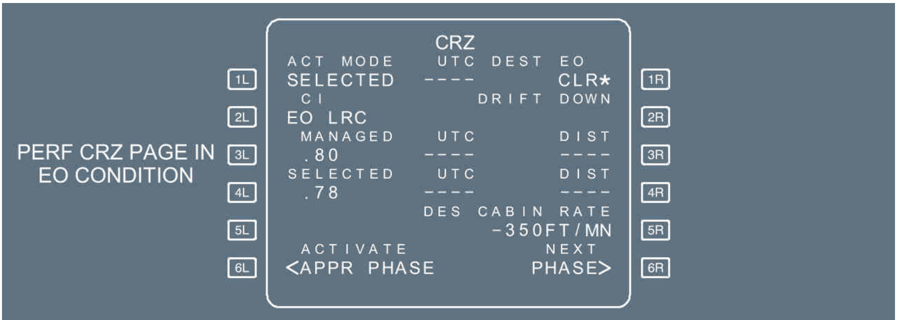
PERF CRUISE



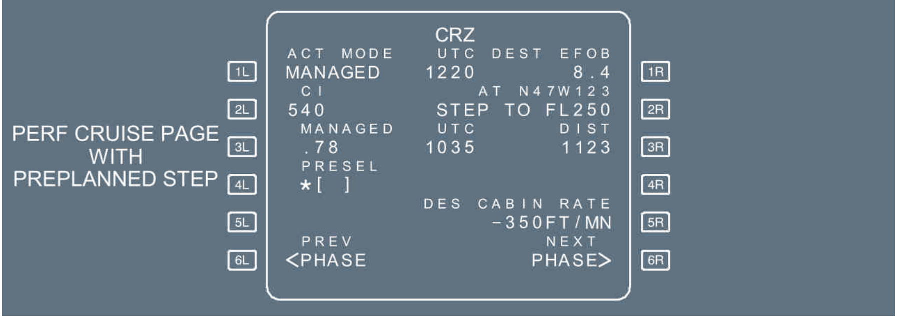
```
                 CRZ
 ACT MODE      UTC  DEST  EFOB
MANAGED        1220        8.4
  CI
540
  MANAGED
 .80
  PRESEL
*[ ]
               DES CABIN RATE
                   -350FT/MN
  PREV                 NEXT
<PHASE                PHASE>
```

```
                 CRZ
 ACT MODE      UTC  DEST  EFOB
SELECTED       1114        8.4
  CI
RTA CI
  MANAGED
 .80


               DES CABIN RATE
                   -350FT/MN
  ACTIVATE             NEXT
<APPR PHASE           PHASE>
```


PERF CRZ PAGE IN EO CONDITION

```
                  CRZ
ACT MODE      UTC  DEST  EO
SELECTED     ----        CLR*
 CI               DRIFT DOWN
EO LRC
 MANAGED      UTC        DIST
 .80         ----        ----
SELECTED      UTC        DIST
 .78         ----        ----
             DES CABIN RATE
                  -350FT/MN
 ACTIVATE               NEXT
<APPR PHASE           PHASE>
```


PERF CRUISE PAGE WITH PREPLANNED STEP

```
                  CRZ
ACT MODE      UTC  DEST  EFOB
MANAGED      1220         8.4
 CI               AT N47W123
540          STEP TO FL250
 MANAGED      UTC        DIST
 .78         1035        1123
 PRESEL
 *[  ]
             DES CABIN RATE
                  -350FT/MN
 PREV                   NEXT
<PHASE                PHASE>
```

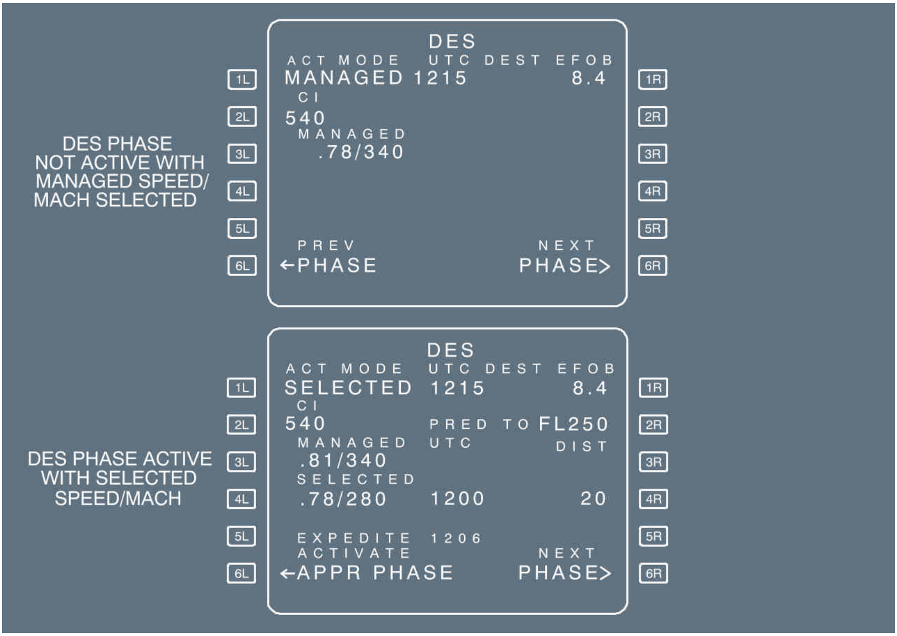
TITLE	CRZ is in large green font, when the cruise phase is active, and in large white font, when it is inactive.
[1L] ACT MODE	This field shows the preselected or active speed mode : SELECTED or MANAGED. The flight crew cannot modify it from this field.
[2L] CI	This field shows the cost index, as initialized on the INIT A page or defaulted from the database, or as inserted in this field by the flight crew. RTA CI automatically replaces the cost index value, if a RTA exists in the F-PLN. EO LRC automatically replaces the cost index value in case of an engine-out.

[3L] MANAGED	This field displays the FMGS-computed ECON speed/Mach *Refer to DSC-22_20-40-10 Optimization*. Before the CRUISE phase is active, if the preselected speed mode is SELECTED, an asterisk appears next to the MANAGED speed. In this case, pressing the 3L key preselects MANAGED speed, and 4L reverts to brackets.
[4L] PRESEL	If the cruise phase is active: This field is blank. If the cruise phase is inactive: The flight crew can enter a preselected speed or Mach number. Note: *If the flight crew enters a value in the PRESEL field during the cruise altitude capture (ALT CRZ*), the FCU selected speed may revert to M 0.01.*
[6L] PREV PHASE or	The flight crew can press this key to call up the climb page, if the cruise phase is not yet active.
[6L] ACTIVATE APPR PHASE	This field displays this legend, if the cruise phase is active. The flight crew presses this key once to change the legend to “CONFIRM APPR PHASE*”. A second press activates the approach phase. Note: *If the flight crew inadvertently activates the approach phase, the flight crew can reselect the cruise flight level from the progress page, in order to reactivate the cruise phase.*
[1R] TIME/UTC DEST EFOB	Before takeoff, this field displays the flight time to destination and the predicted remaining fuel on board. If the flight crew enters an estimated takeoff time, the field automatically displays the predicted arrival time (UTC) at destination. After takeoff, it displays the predicted arrival time at destination (UTC) and the remaining fuel on board (DEST EFOB) at destination, in green font. The DEST EFOB field will turn to amber, if the EFOB at destination becomes less than the MIN DEST FOB values displayed on the FUEL PRED page. EO CLR is displayed when an engine-out is detected.
[2R] STEP TO FL XX, TO T/D, or DRIFT DOWN	This field, in combination with 3R and 4R, displays the predictions for the step point and step altitude, the Top of Descent, or the drift down altitude.
[3R] and [4R] TIME/UTC and DIST	These fields display the time and distance to go to the various points identified in the 2R field.

[5R] DES CABIN RATE	This field displays MAX [computed DES cabin rate, maximum descent cabin rate]. The flight crew may modify the value : The FM then recomputes the top of descent, in order to match this value. If the FM cannot match the flight crew's entry, the FM-computed value overwrites the flight crew's entry. A clear action reverts to the default value (-350 ft/min). DES CAB RATE being a negative value, "minus" is not a necessary entry.
[6R] NEXT PHASE	This key calls up the DES page.

Ident.: DSC-22_20-50-10-28-E-00000907.0025001 / 01 OCT 12

PERF DESCENT PAGE



DES PHASE NOT ACTIVE WITH MANAGED SPEED/ MACH SELECTED

```
                 DES
ACT MODE    UTC  DEST  EFOB
MANAGED 1215           8.4
   CI
540
  MANAGED
   .78/340



  PREV                 NEXT
←PHASE                PHASE>
```

DES PHASE ACTIVE WITH SELECTED SPEED/MACH

```
                 DES
ACT MODE    UTC  DEST  EFOB
SELECTED    1215       8.4
   CI
540         PRED  TO FL250
  MANAGED   UTC        DIST
 .81/340
  SELECTED
 .78/280    1200        20

  EXPEDITE  1206
  ACTIVATE             NEXT
←APPR PHASE           PHASE>
```

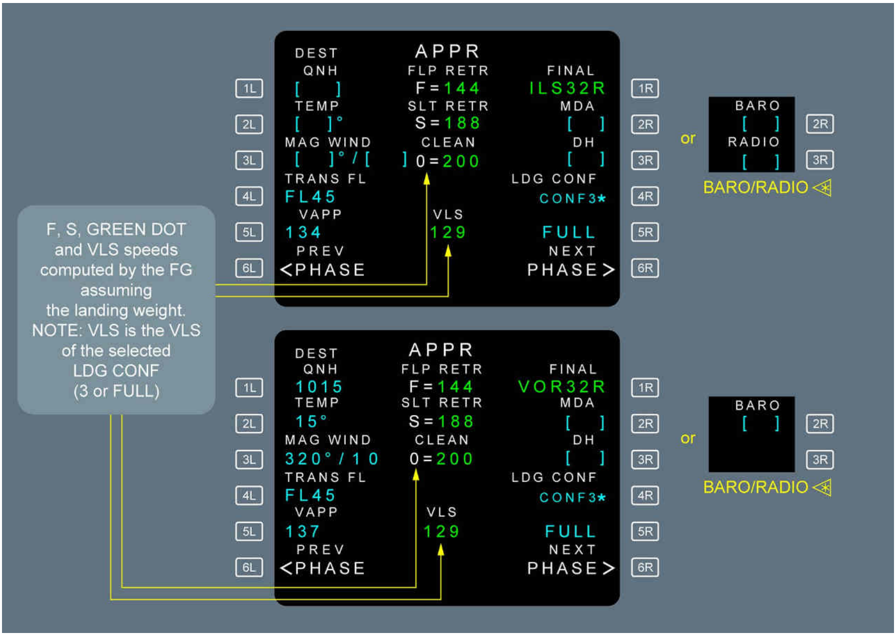
TITLE	DES is in large green font if the descent phase is active, and in large white font if it is inactive.
[1L] ACT MODE	This field displays the preselected or active speed mode (MANAGED or SELECTED). The flight crew cannot modify it from this field.

[2L] CI	This field displays the cost index, as initialized on the INIT A page or defaulted from the database, or inserted in this field by the flight crew. RTA CI automatically replaces the cost index value, if a time constraint exists in the F-PLN. The flight crew cannot modify in descent/approach phase below the descent speed limit altitude, or FL 100, whichever is higher.
[3L] MANAGED	Before the flight crew makes any entry, this field displays "MANAGED" in white, with the associated ECON descent Mach or speed, in blue. The crew may overwrite the ECON descent Mach or speed, by entering a Mach number or a speed in this field. The system uses the pilot's entry to compute the descent profile. The descent may be flown in managed, using this new pilot entry. The entry is modifiable. It can be cleared to revert to ECON speed/Mach.
[4L] blank or SELECTED	**If the descent phase is inactive, or the descent phase is active but the active speed mode is MANAGED:** - This field is blank. **If the descent phase is active, and the active speed mode is SELECTED:** - The field displays the speed or Mach target manually selected by the pilot. “SELECTED” is displayed in the [1L] field. - To modify the field value, the pilot uses the FCU's SPD/MACH selector knob. The [4L] field and FCU window will display the same value. - Pushing in the FCU speed selector knob activates the managed SPD/MACH target displayed in the [3L] field.
[5L] Blank or EXPEDITE	If the descent phase is inactive, this field is blank. Displays this legend, if the descent phase is active. It indicates the time and distance required to reach the altitude displayed in the 2R field at MMO/VMO speed. The pilot cannot select the EXPEDITE mode from this field.
[6L] PREV PHASE or ACTIVATE APPR PHASE	This key calls up the cruise phase page, if the descent phase is not yet active. Displayed, if the descent phase is active. Pressing this key once makes “CONFIRM APPR PHASE” appear. A second press activates the approach phase.

[1R] TIME/UTC DEST EFOB	Before takeoff, this field displays the flight time to destination and the predicted remaining fuel on board. If the crew enters an estimated takeoff time, the field automatically displays the predicted arrival time (UTC). After takeoff, it displays the predicted arrival time at destination (UTC) and the remaining fuel on board (DEST EFOB) at destination, in green font. The DEST EFOB field will turn to amber, if the EFOB at destination becomes less than the MIN DEST FOB value displayed on the FUEL PRED page. EO CLR is displayed when an engine-out is detected.
[2R] PRED TO...	This field displays the target altitude for the predictions in [3R], [4R], or [5L]. The display defaults to the FCU-selected altitude. The flight crew can modify it to any altitude lower than the present altitude.
[3R] [4R]	These fields display time and distance predictions down to the target altitude selected in [2R], computed for the current vertical mode (DES or OP DES) and the indicated speed mode (MANAGED or SELECTED).
[6R] NEXT PHASE	The pilot presses this key to call up the PERF APPR page.

Ident.: DSC-22_20-50-10-28-E-00016135.0012001 / 10 MAY 21

PERF APPR PAGE


DEST
APPR
QNH
FLP RETR
FINAL
[ ]
F=144
ILS32R
TEMP
SLT RETR
MDA
[ ]°
S=188
[ ]
MAG WIND
CLEAN
DH
[ ]°/[ ]
O=200
[ ]
TRANS FL
LDG CONF
FL45
CONF3*
VAPP
VLS
134
129
FULL
PREV
NEXT
<PHASE
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
or
BARO
[ ]
RADIO
[ ]
BARO/RADIO
DEST
APPR
QNH
FLP RETR
FINAL
1015
F=144
VOR32R
TEMP
SLT RETR
MDA
15°
S=188
[ ]
MAG WIND
CLEAN
DH
320°/10
O=200
[ ]
TRANS FL
LDG CONF
FL45
CONF3*
VAPP
VLS
137
129
FULL
PREV
NEXT
<PHASE
PHASE>
or
BARO
[ ]
BARO/RADIO

F, S, GREEN DOT and VLS speeds computed by the FG assuming the landing weight. NOTE: VLS is the VLS of the selected LDG CONF (3 or FULL)

TITLE	The page title displays APPR, if the Approach phase is not active or APPR, if it the Approach phase is active.

[1L] QNH

This field displays brackets, when the aircraft is more than 180 NM from the destination. Inside 180 NM, mandatory amber boxes appears.

The flight crew must enter the QNH in hectopascals (hPa) or in inches of mercury (inHg). The value is either entered in hPa or inHg:
- For hPa, enter three or four digits within the allowable range for hPa, or
- For inHg, enter the four digits of the desired value with or without a decimal point, within the allowable range for inHg.

The system interprets:
- 1 003 as 1 003 hPa
- 2900 as 29.00 inHg
- 29.92 as 29.92 inHg.

The flight crew can modify this entry at any time.

Note: *An erroneous entry of an OAT or BARO minimum in QNH field (e.g. 22 °C or 2 200 ft) is accepted by the system. As a consequence, the CPC computes an erroneous cabin pressurization segment during descent, then may trigger a pressurization ECAM alert.*

The FMS uses the QNH:

- To compute the descent profile
- To compute the FLS beam on aircraft equipped with the FLS ◁ option.

[2L] TEMP

This field displays the temperature at destination. Until the flight crew enters the temperature, the field displays brackets. The flight crew can modify this figure.
The system uses this temperature to:

- Refine its computation of the descent profile (ISA model)
- Compute the FLS beam on aircraft equipped with the FLS ◁ option.

[3L] MAG WIND or TRUE WIND

In this field, the flight crew enters the magnetic wind at the destination in knots. The system transmits any entry made in this field to the VERTICAL REVISION and FLIGHT PLAN B pages (which display wind direction as true, not magnetic).

[4L] TRANS FL	This field displays the transition flight level, computed by the FMS based on the transition altitude (extracted from the database) and the QNH value entered in the [1L] field. It is rounded to the upper multiple of 5. By default, it is displayed in small font. The flight crew can modify it (it is then displayed in large font).
[5L] VAPP	The FMGC computes this approach speed, using the formula: VAPP = VLS + 1/3 of the headwind components (limited to VLS +5 kt as a minimum and VLS +15 kt as a maximum). The flight crew can modify VAPP. A clear action reverts VAPP to the computed value. *Note:* *VLS = 1.23 VS1G of the selected landing configuration (FULL or 3).*
[6L] PREV PAGE	This field displays this legend, if the approach phase is not active. Pressing this key calls up the PERF DES page.
[1R] FINAL	This field displays the approach specified in the flight plan. The flight crew cannot modify it from this field.

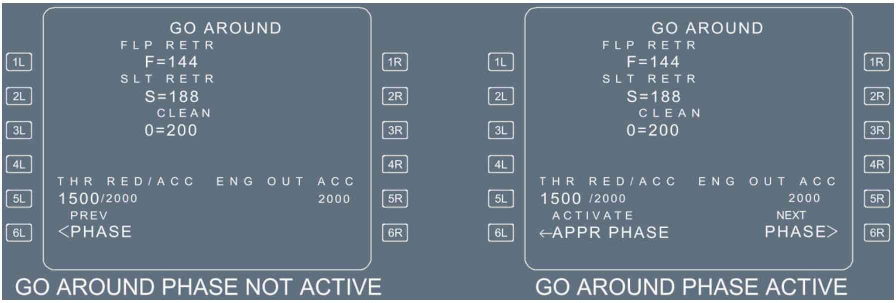
[2R] MDA/MDH or BARO ◁	This field displays:
	- The MDA with associated brackets, or
	- The MDH with associated brackets, if:
	  - The aircraft is equipped with QFE ◁ option, or
	  - The FCU setting is QFE, if the aircraft is equipped with the BARO ◁ option.
	The flight crew inserts the value, which can be modified at any time. If the flight crew makes an entry in the [3R] field, or changes the approach, it clears this figure.

[3R] DH or RADIO ◁	If the flight plan includes an ILS, GLS ◁ or MLS ◁ approach, this field displays DH or RADIO ◁ and empty brackets. For a CAT II or CAT III approach, the flight crew inserts the decision height. The decision height is a radio altimeter height. The system will accept an entry of NO. If the flight crew inserts an MDA or an MDH (or a BARO ◁ value) in [2R] field, this erases the decision height, and the field reverts to brackets. The RADIO ◁ range is from 0 to 700 ft.
[4R] LDG CONF CONF 3	The flight crew can select CONF 3 by pressing this key. This moves the * down to the [5R] field, that displays FULL.

[5R] FULL	The flight crew can use this key to select CONF FULL when necessary. CONF FULL is the default landing configuration.
[6R] NEXT PHASE	Pressing this key calls up the PERF GO AROUND page.

Ident.: DSC-22_20-50-10-28-E-00000909.0002001 / 16 MAR 11

PERF GO AROUND


GO AROUND
FLP RETR
F=144
SLT RETR
S=188
CLEAN
O=200
THR RED/ACC ENG OUT ACC
1500/2000 2000
PREV
<PHASE

GO AROUND PHASE NOT ACTIVE

GO AROUND
FLP RETR
F=144
SLT RETR
S=188
CLEAN
O=200
THR RED/ACC ENG OUT ACC
1500 /2000 2000
ACTIVATE NEXT
←APPR PHASE PHASE>

GO AROUND PHASE ACTIVE

TITLE	GO AROUND is in large white font, if the go-around phase is not active; it is in large green font if it is.
[5L] THR RED ACC	This field displays the thrust reduction altitude and the acceleration altitude. **Thrust reduction altitude:** - Altitude at which thrust must be reduced from takeoff/go-around thrust to maximum climb thrust. - “CLB” or “LVR CLB” flashing on the flight mode annunciator. - Defaults to 1 500 ft above destination runway elevation, or to the altitude set by the airline. - Can be modified by the crew (minimum 400 ft above destination runway elevation). **Acceleration altitude:** - Altitude at which target speed increase to Green Dot speed (See the note below). - Defaults to 1 500 ft above the destination runway elevation, or to the altitude set by the airline. - Can be modified by the crew, but is always equal to or higher than the thrust reduction altitude.
[6L] PREV PHASE or	This field displays this legend, if the go-around phase is inactive. Pressing the key calls up the PERF APPR page.

ACTIVATE APPR PHASE	This field displays this legend, if the go-around phase is active. Pressing it once makes “CONFIRM APPR” appear. A second press activates the approach phase.
[5R] ENG OUT ACC	This display has the same characteristics as the display beside the 5R key on the takeoff page. It is for display only, and the pilot can modify it.
[6R] NEXT PHASE	Pressing this key calls up the PERF APPR page.
[1R] Blank or EO CLR*	This field is normally blank. EO CLR* is displayed when the GO AROUND phase is active, and an engine-out condition is detected.

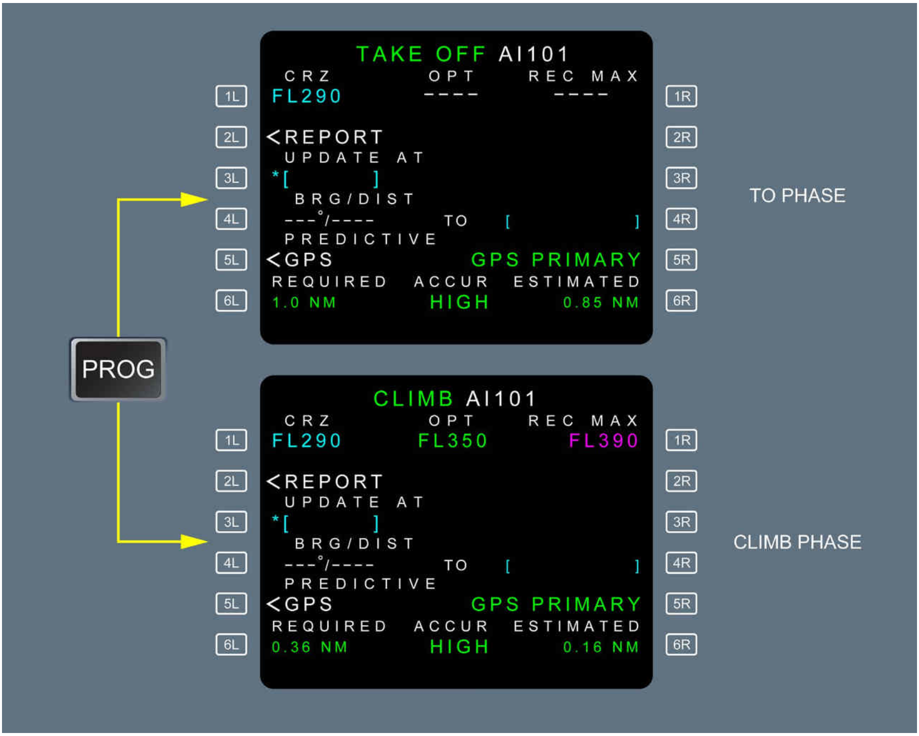
Note: When the go-around phase is active, if the pilot enables ALTN or if the pilot inserts a new destination in the active flight plan, the go-around phase automatically shifts into the climb phase. (The target speed jumps from green dot speed to initial climb speed).

PROG PAGES

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-50-10-28-F-00000910.0030001 / 17 NOV 20

The progress page is a multifunction page that enables the pilot to:
- Select a new cruise flight level;
- Crosscheck the navigation accuracy of the Flight Management (FM) system and validate it;
- Update the FM position;
- Monitor the descent.

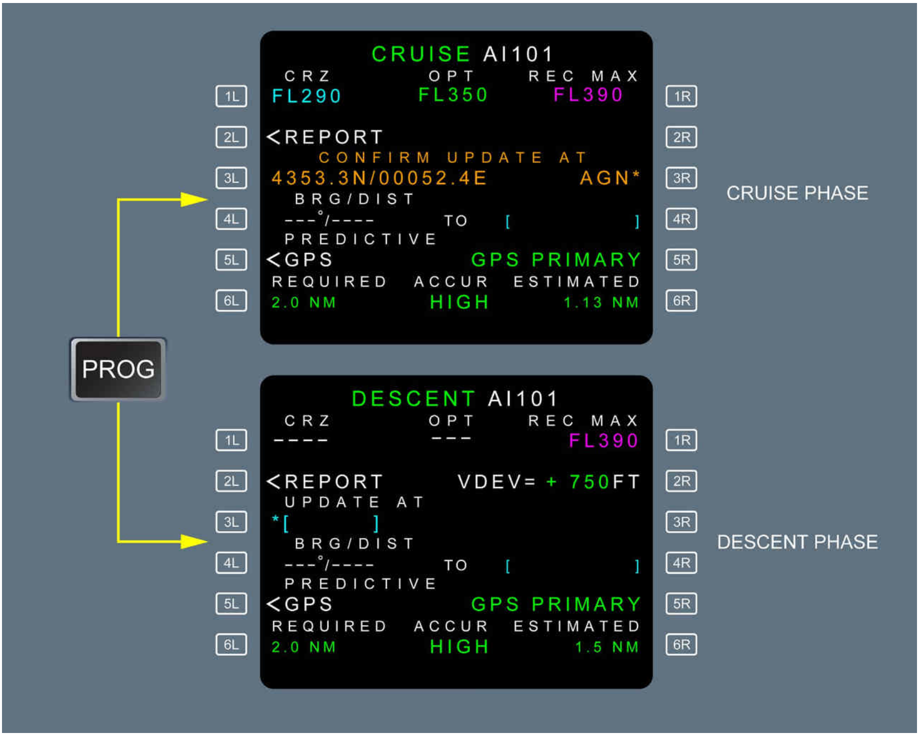


TO PHASE

```
      TAKE OFF AI101
 CRZ         OPT      REC MAX
FL290        ----      ----
<REPORT
 UPDATE AT
*[       ]
  BRG/DIST
 ---°/----      TO  [         ]
 PREDICTIVE
<GPS            GPS PRIMARY
REQUIRED    ACCUR   ESTIMATED
1.0 NM       HIGH     0.85 NM
```

CLIMB PHASE

```
        CLIMB AI101
 CRZ         OPT      REC MAX
FL290       FL350      FL390
<REPORT
 UPDATE AT
*[       ]
  BRG/DIST
 ---°/----      TO  [         ]
 PREDICTIVE
<GPS            GPS PRIMARY
REQUIRED    ACCUR   ESTIMATED
0.36 NM      HIGH     0.16 NM
```

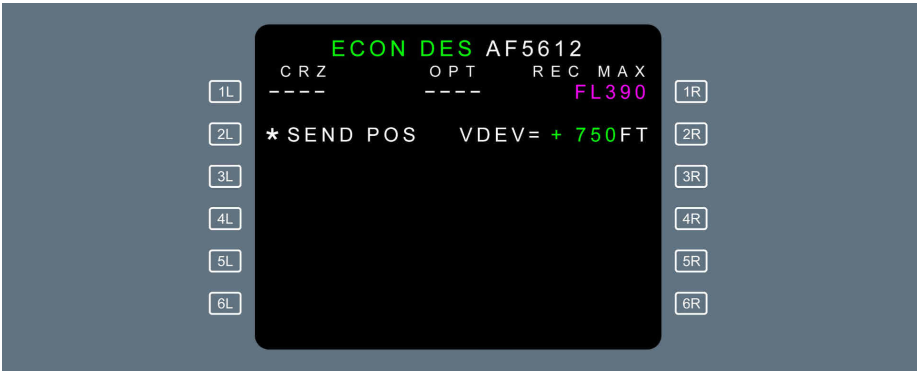

CRUISE AI101
CRZ
FL290
OPT
FL350
REC MAX
FL390
<REPORT
CONFIRM UPDATE AT
4353.3N/00052.4E
AGN*
BRG/DIST
---°/----
TO
[ ]
PREDICTIVE
<GPS
GPS PRIMARY
REQUIRED
2.0 NM
ACCUR
HIGH
ESTIMATED
1.13 NM
CRUISE PHASE
PROG
DESCENT AI101
CRZ

OPT

REC MAX
FL390
<REPORT
VDEV= + 750FT
UPDATE AT
*[ ]
BRG/DIST
---°/----
TO
[ ]
PREDICTIVE
<GPS
GPS PRIMARY
REQUIRED
2.0 NM
ACCUR
HIGH
ESTIMATED
1.5 NM
DESCENT PHASE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	Different for each flight phase (see above). The vertical phase is in large green font. The flight number is in large white font. EO is large amber font, if the engine-out condition is detected.
Line 1 CRZ (blue)	This line displays the cruise flight level, inserted on the INIT A page or directly in this field in blue. If the FCU is used to select an altitude that is higher than the one displayed, the system changes the displayed number to match the one selected by the FCU. In this line, the flight crew cannot insert a flight level that is lower than the FCU-selected altitude. This field shows dashes when the descent or approach phase is active.

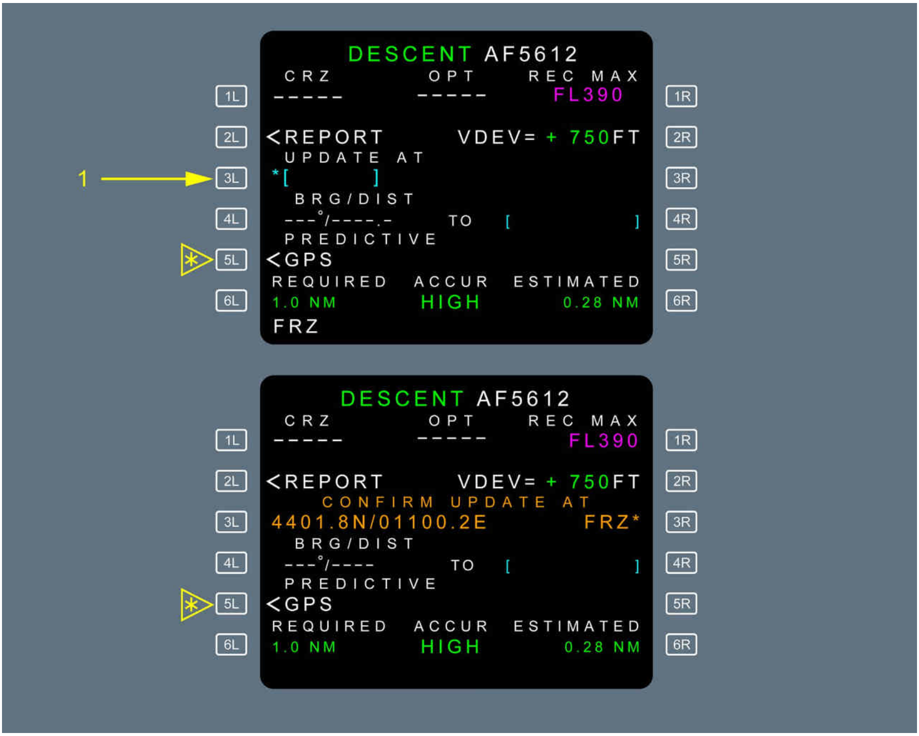
OPT	This field displays the optimum flight level (in green), that is computed based on the current gross weight, cost index, temperature, wind This flight level requires a 5 min minimum cruise time at a minimum cruise flight level of FL 100. It displays dashes if an engine-out is detected:
REC MAX	This field displays the recommended maximum altitude (in magenta), that is computed based on the current gross weight and temperature, and assuming that the anti-ice is off (if icing conditions are expected, use the performance application of the EFB). It provides the aircraft with a 0.3 g buffet margin, a minimum rate of climb at MAX CL thrust, and level flight at MAX CRZ thrust. This field is limited to FL 398. If one engine is out, this field displays the recommended maximum engine-out altitude, that is computed based on the long-range cruise speed and assuming that anti-ice is off.
[2L] REPORT	This key calls up the REPORT PAGE.
[2R] VDEV	This field is displayed during the descent and approach phases, when NAV mode is engaged without crosstrack error limitation, or in HDG mode, provided that the crosstrack error (XTK) is less than 4 NM. In the particular case of a DIR TO RADIAL INBND, this field is displayed while the DIR TO RADIAL INBND is flown without crosstrack error (XTK) limitation. It displays the vertical deviation between the aircraft's current altitude and the FMGC-computed vertical profile.



```
        ECON DES AF5612
 CRZ          OPT      REC MAX
----         ----        FL390
*SEND POS       VDEV= + 750FT
```

Line 3 UPDATE AT	The flight crew can update the FMGC position via this field by entering either the IDENT of a waypoint, a NAVAID, an airport, a latitude and longitude, or a place/bearing/distance, or a place-bearing/place-bearing. When the flight crew has entered this data, this field changes its format to: “CONFIRM UPDATE AT”, followed by the latitude/longitude and IDENT of the inserted position with an asterisk. The flight crew presses the right-hand key adjacent to the asterisk to confirm the update, when the aircraft overflies the inserted position.

Note: *If no IDENT has been inserted, the field displays “ENTRY”, instead of an IDENT.*



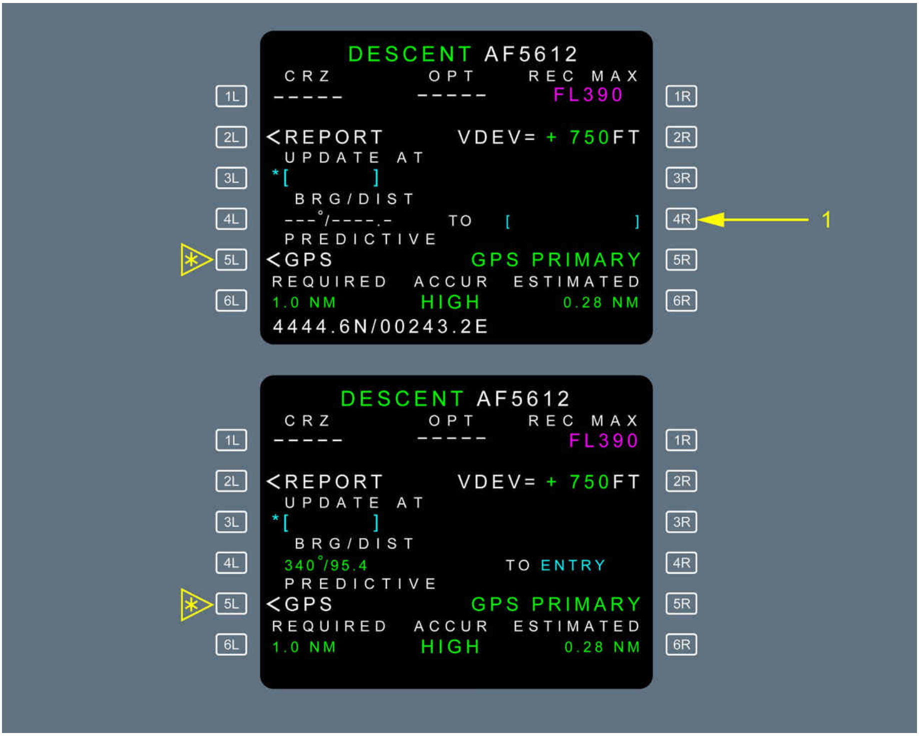
```
     DESCENT AF5612
 CRZ        OPT      REC MAX
-----      -----      FL390
<REPORT         VDEV= + 750FT
 UPDATE AT
*[        ]
  BRG/DIST
---°/----.-     TO  [          ]
 PREDICTIVE
<GPS
REQUIRED    ACCUR    ESTIMATED
1.0 NM       HIGH      0.28 NM
FRZ
```

```
     DESCENT AF5612
 CRZ        OPT      REC MAX
-----      -----       FL390
<REPORT         VDEV= + 750FT
   CONFIRM UPDATE AT
4401.8N/01100.2E         FRZ*
  BRG/DIST
---°/----       TO  [          ]
 PREDICTIVE
<GPS
REQUIRED    ACCUR    ESTIMATED
1.0 NM       HIGH      0.28 NM
```

Line 4 BRG/DIST

On this line, the pilot can enter an airport, a waypoint, a NAVAID, or a runway. The pilot may enter each as an IDENT, a latitude/longitude (LL), a place/bearing/distance (PBD), or a place-bearing/place-bearing (PBX). The field then shows the FMGC-computed bearing and distance from this site to the aircraft's present position. The last distance digit is in 1/10 of a NM. If it does not have an IDENT, the point is called "ENTRY".

Example: BRG/DIST
340 °/95.4 to ENTRY


DESCENT AF5612
CRZ
OPT
REC MAX

FL390
<REPORT
VDEV= + 750FT
UPDATE AT
*[ ]
BRG/DIST
---°/----.-
TO [ ]
PREDICTIVE
<GPS
GPS PRIMARY
REQUIRED
ACCUR
ESTIMATED
1.0 NM
HIGH
0.28 NM
4444.6N/00243.2E
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
DESCENT AF5612
CRZ
OPT
REC MAX

FL390
<REPORT
VDEV= + 750FT
UPDATE AT
*[ ]
BRG/DIST
340°/95.4
TO ENTRY
PREDICTIVE
<GPS
GPS PRIMARY
REQUIRED
ACCUR
ESTIMATED
1.0 NM
HIGH
0.28 NM

[5L] PREDICTIVE GPS ⊲

This prompt gives access to the PREDICTIVE GPS page.

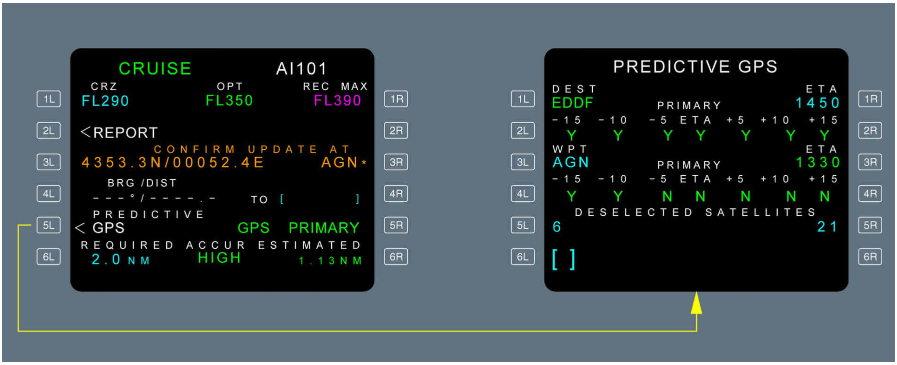
[5R] GPS PRIMARY ◁	This prompt is displayed when the FMS navigation mode is GPS PRIMARY. This field is blank, when GPS PRIMARY is unavailable, or the navigation mode is not GPS/IRS. When the GPS PRIMARY function is not embedded, this field displays: - The “REQD DIST TO LAND = ” - The “DIR DIST TO DEST = “ The scratchpad displays the relevant “GPS PRIMARY″ message when this prompt appears, and “GPS PRIMARY LOST” when the field goes blank.
[6L] REQUIRED	This field displays the default value for the required navigation accuracy level. The pilot can modify it. Provided no pilot entry has been made, the default value changes according to the actual flight area (enroute, terminal, approach; *Refer to DSC-22_20-40-10 General*).
ACCUR HIGH/LOW	This field shows the flight management system's estimate of navigational accuracy. “HIGH” indicates that the FMS estimates that the navigational accuracy matches the accuracy criteria of the currently flown area. “LOW” indicates the criteria is not matched.
[6R] ESTIMATED	This field displays the current estimated navigation accuracy value (EPE), as computed by the FMS.

Ident.: DSC-22_20-50-10-28-F-00000911.0001001 / 04 DEC 18

PREDICTIVE GPS PAGE (IF INSTALLED)

Note: 1. *This page is only displayed with Honeywell ADIRS.*
2. *This page cannot be used as a substitute to determine pre-flight planning RAIM availability when required by operational regulations. Refer to PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed).*

The pilot accesses this page by pressing the PREDICTIVE GPS prompt of the PROG page. This page displays information relative to predictive availability of GPS PRIMARY at destination and at any waypoint selected by the crew.


1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CRUISE AI101
CRZ
FL290
OPT
FL350
REC MAX
FL390
<REPORT
CONFIRM UPDATE AT
4353.3N/00052.4E
AGN*
BRG /DIST
---°/-----.-
TO [ ]
PREDICTIVE
< GPS
GPS PRIMARY
REQUIRED
2.0NM
ACCUR
HIGH
ESTIMATED
1.13NM
PREDICTIVE GPS
DEST
EDDF
PRIMARY
ETA
1450
-15 -10 -5 ETA +5 +10 +15
Y Y Y Y Y Y Y
WPT
AGN
PRIMARY
ETA
1330
-15 -10 -5 ETA +5 +10 +15
Y Y N N N N N
DESELECTED SATELLITES
6
21
[ ]

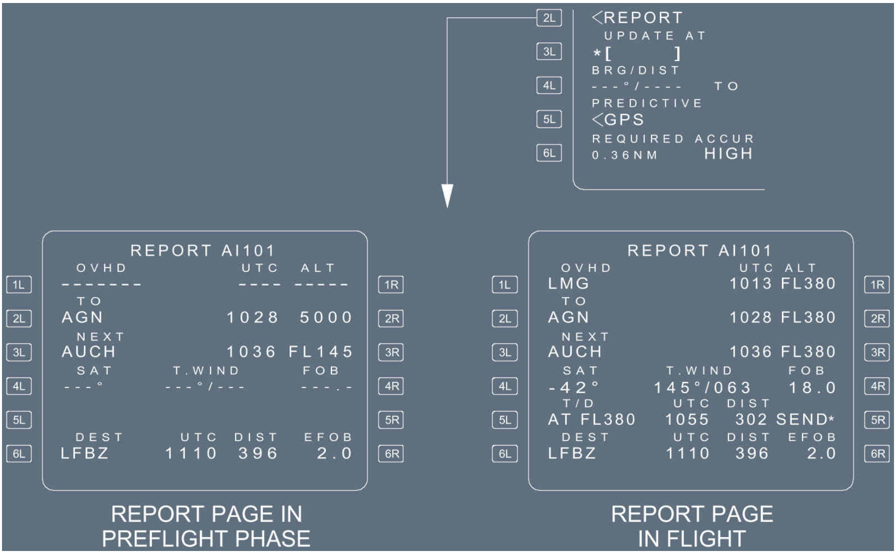
[1L] DEST	This field displays the destination airport, as currently selected in the active flight plan. It cannot be modified. Dashes appear in this field, when no destination airport exists.
[1R] ETA	This field is defaulted to the estimated arrival time, as computed by the FMS (small blue font). The pilot may enter a value in this field (large blue font). Amber boxes are displayed when no prediction exists, or when the crew entry has been cleared.
Line 2 PRIMARY Y/N	This line shows the predicted primary status at the destination airport for the following times: - Estimated time of arrival ± 5, 10, 15 min. - Availability of GPS PRIMARY at the corresponding times, is indicated by Y, if PRIMARY is predicted to be available and by N if GPS PRIMARY is predicted to be unavailable. - These fields are blank, when the destination [1L], or time [1R] field is not defined.
[3L] WPT	The pilot may enter a reference waypoint in this field. Blue brackets appear, when no entry has been made.
[3R] ETA	When a reference waypoint has been entered in the [3L] field, amber boxes appear. The crew is prompted to enter a reference time in this field.
Line 4 PRIMARY Y/N	Information equivalent to [2L]/[2R] is displayed for any pilot-selected waypoint. The corresponding arrival time is also displayed.

Line 5 DESELECTED SATELLITES and Line 6 SATELLITES	This line enables the pilot to deselect up to four satellites by inserting the corresponding satellite number. This number then appears in large blue font. When deactivated, the satellites are not considered for predictive GPS availability at the destination or at a selected waypoint. The deselection is cancelled when the entry is cleared (blue brackets appears), or when the field is overwritten by a different satellite number.

Ident.: DSC-22_20-50-10-28-F-00000912.0001001 / 16 MAR 11

REPORT PAGE

The pilot calls this page by pressing the [2L] key on the PROG page :



```
<REPORT
 UPDATE AT
*[        ]
BRG/DIST
---°/----    TO
PREDICTIVE
<GPS
REQUIRED ACCUR
0.36NM       HIGH
```

```
      REPORT AI101
 OVHD                UTC   ALT
-------              ----  -----
 TO
AGN                  1028  5000
 NEXT
AUCH                 1036 FL145
 SAT       T.WIND          FOB
---°       ---°/---        ---.-

 DEST       UTC  DIST     EFOB
LFBZ       1110  396       2.0
```

REPORT PAGE IN PREFLIGHT PHASE

```
      REPORT AI101
 OVHD               UTC ALT
LMG                1013 FL380
 TO
AGN                1028 FL380
 NEXT
AUCH               1036 FL380
 SAT       T.WIND          FOB
-42°      145°/063         18.0
 T/D        UTC   DIST
AT FL380   1055   302 SEND*
 DEST       UTC   DIST    EFOB
LFBZ       1110   396      2.0
```

REPORT PAGE IN FLIGHT

This page displays information related to the FROM, TO, NEXT, and DEST waypoints, as well as the current wind, temperature, distance and time to the next cruise profile change.

TITLE (White)	This field indicates the flight number. If an engine-out is detected, this line shows "EO" in amber.
[1L] OVHD (green)	Displays the last sequenced waypoint. This field never displays the pseudo-waypoints and the F-PLN markers (T-P, PPOS, IN-BND, OUT-BND).
[1R] UTC/TIME ALT (green)	Displays the time and altitude recorded at the time of sequence.

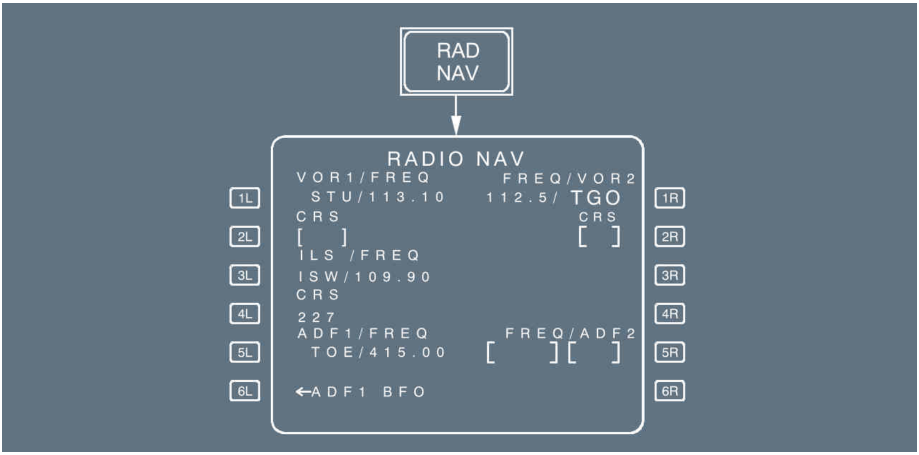
[2L]-[2R] TO (green)	Displays the active waypoint, predicted time of arrival, and predicted altitude at this waypoint. Note: *Time and altitude values are identical to those values on the F-PLN pages.*
[3L]-[3R] NEXT (green)	Same information for the next waypoint.
[4L] [4R] SAT/T.WIND/FOB (green)	This field displays the static air temperature, the wind direction and velocity, and the FOB recorded at waypoint sequencing.
[5L] T/D/UTC/DIST (green)	This field displays the estimated time, and the distance to go to the next change of the cruise profile (T/D, S/C, S/D). This data is only displayed if the cruise phase is active.
[5R] SEND* (blue)	The crew uses this prompt to downlink a position report. This field may be blank, depending on airline policy.
Line 6 DEST/UTC/DIST/EFOB	This field displays the estimated time of arrival, the distance along the F-PLN, and the estimated fuel on board at destination. This display is identical to the information on the F-PLN pages.

Note: *No data can be inserted or modified on the REPORT page.*

RADIO NAV PAGE

Ident.: DSC-22_20-50-10-28-00000913.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860

This page enables the pilot to select or verify the radio NAVAIDs, tuned for display purposes only.
These NAVAIDs include: VOR, VOR/DME, TAC, VORTAC, ILS, and ADF.
If either RMP is set on NAV, this page is blank on both MCDUs.



Line 1 VOR1/FREQ FREQ/VOR2	This line displays the identifiers and frequencies of VORs 1 and 2, whether they are automatically or manually tuned. To manually tune a VOR, the pilot inserts the IDENT or frequency. If the IDENT is not in the database, the new NAVAID page comes up. A “clear” action reverts the selection to the autotuned NAVAID.
Line 2 CRS	This line displays courses for the NAVAIDs in Line 1. The pilot can manually enter the courses from these fields.
[3L] ILS/FREQ	This field displays the IDENT and frequency of an ILS. It is autotuned, if the ILS is associated with the departure runway, or if the flight plan shows an ILS approach selected for the destination. The ILS may also be entered manually. When the manually-entered ILS differs from the ILS that would be autotuned, "RWY-ILS MISMATCH" appears.
[4L] CRS	This field displays the course associated with the ILS in Line 3. It comes up automatically if an ILS is autotuned, or if an ILS has been manually tuned via its IDENT. Otherwise, the course must be entered manually. The course may be backbeam (Bxxx) or frontbeam (Fxxx).
[4R] SLOPE CRS ◁	In this field, the pilot enters the slope and course of the MLS. The course may be backbeam (Bxxx) or frontbeam (Fxxx).
Line 5 ADF1/FREQ FREQ/ADF2	This line displays the identifiers and frequencies of ADFs 1 and 2. The pilot can use the IDENT or the frequency to manually tune the ADF.

Line 6 ADF1/BFO BFO/ADF2	When an ADF is selected, these fields display an ADF/BFO prompt. The flight crew presses this key once to erase the arrow and revert ADF to BFO mode. A clear action recalls the arrow, and cancels BFO.

Note:
- *The autotune function only works for NAVAIDs stored in the database.*
- *When tuning manually, the Operator should use the IDENT, rather than the frequency, unless the NAVAID is not in the database.*
- *Manually-tuned frequencies are displayed in large font.*

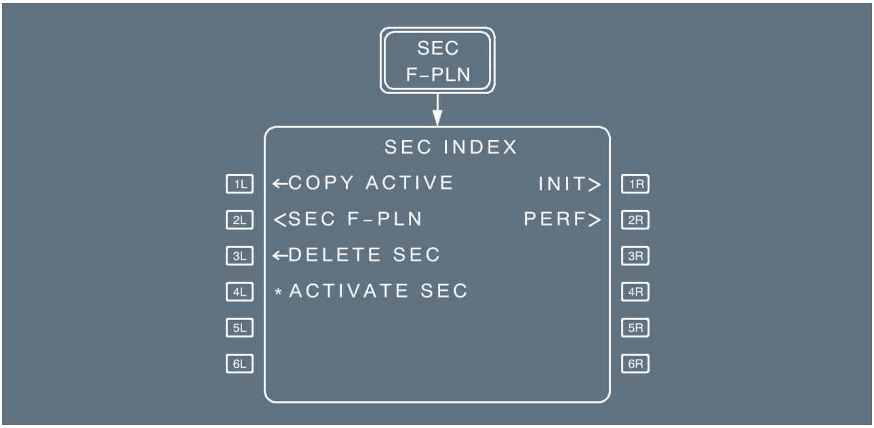
SECONDARY PAGES

Ident.: DSC-22_20-50-10-28-00000914.0021001 / 14 MAY 12
Applicable to: MSN 04827-04860

The SEC F-PLN key on the MCDU console allows the flight crew to call up the secondary index page and the secondary flight plan page. The secondary flight plan is generally used to prepare a diversion an alternate routing, for predictable runway changes at takeoff or landing, or for a next flight.
There are two types of secondary index page, depending on whether a secondary flight plan has already been defined.

SECONDARY INDEX PAGE

A SECONDARY FLIGHT PLAN IS ALREADY DEFINED



[1L] COPY ACTIVE (blue)	The pilot presses this key to copy the active flight plan into the secondary flight plan, and to erase the previous secondary plan.

Note: *When created with a copy active, the FROM/TO pair of the secondary flight plan is not modifiable on SEC INIT A page. The SEC F-PLN is to be deleted before any FROM/TO modification.*

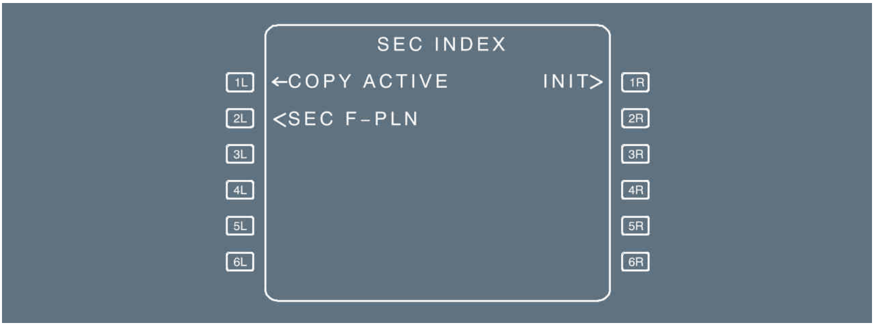
[2L] SEC F-PLN (white)	The pilot presses this key to call up the secondary flight plan pages.
[3L] DELETE SEC (blue)	The pilot presses this key to delete the current secondary flight plan.
[4L] ACTIVATE SEC (amber)	The pilot presses this key to activate the secondary flight plan as the active flight plan. With such an action, activation is immediate and no temporary flight plan is created.

Note: *When flying in NAV mode, it is not possible to activate the SEC F-PLN, if the first leg of the SEC F-PLN is not compatible with the current active leg: If the crew presses the “ACTIVATE SEC” prompt, the SEC F-PLN activation is rejected and the “SELECT HDG/TRK FIRST” message is displayed in the scratchpad.*

- *The SEC F-PLN activation is rejected*
- *The “SELECT HDG/TRK FIRST” message is displayed in the scratchpad.*

[1R] INIT (white)	This prompt is always displayed. It gives access to the SEC INIT A and B pages.
[2R] PERF (white)	The flight crew presses this key to call up the performance pages of the secondary flight plan. In flight, when the active flight plan has been copied, this prompt only appears if the first lateral leg of the secondary flight plan is identical to the active leg of the primary flight plan. During preflight, this prompt is always displayed.

A SECONDARY FLIGHT PLAN IS NOT DEFINED



[1L] COPY ACTIVE (blue)	The pilot presses this key to copy the primary active flight plan into the secondary flight plan.
[2L] SEC F-PLN (white)	The pilot presses this key to call up the secondary flight plan pages.
[1R] INIT (white)	This prompt allows access to the SEC INIT A and B pages. It is similar to the active INIT page, but blue brackets replace all the amber boxes.

SECONDARY FLIGHT PLAN PAGES

The secondary flight plan pages A and B are identical to those of the active flight plan. They are automatically sequenced, only when the secondary flight plan is copied from the primary one and their active legs are identical.

No temporary flight plan is created in a secondary flight plan: the lateral and vertical revisions are directly inserted into the secondary flight plan.

Moreover, the active and secondary flight plan pages differ from one another as follows:

SECONDARY LATERAL REVISION PAGES

- OFFSET and FIX INFO are not available.

SECONDARY INIT A AND B PAGES

- Blue brackets are displayed by default.

SECONDARY STEP ALTITUDE PAGES

These pages operate as the active STEP ALTS page.

SECONDARY WIND PAGES

Do not have a history wind page.

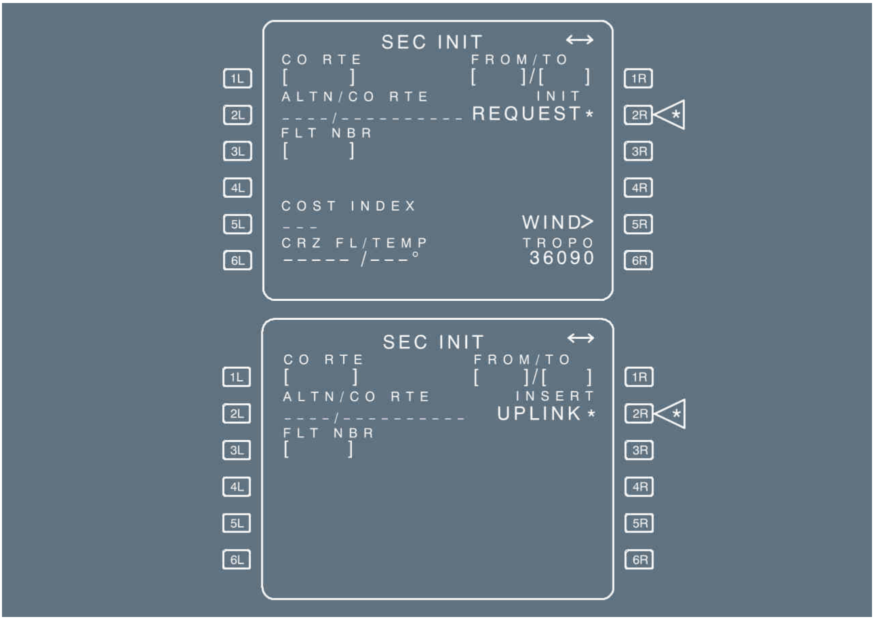
SECONDARY PERFORMANCE PAGES

- All boxes are replaced by blue brackets.
- Have neither an engine-out mode, nor an engine-out long-range cruise cost index.
- Have no expedite predictions.
- Have no ACTIVATE/CONFIRM APPROACH PHASE prompt.
- Have no PRED TO ALTN predictions on the PERF CLB and PERF DES pages.
- Have no top of descent, no cabin descent rate information on the PERF CRZ page.

The secondary flight plan does not have a FUEL PRED page.

THE SECONDARY INIT A PAGE IS ALSO USED TO REQUEST OR DISPLAY AN UPLINK INIT MESSAGE RECEIVED AFTER ENGINE START.

This uplink INIT message can be cleared or inserted as SEC INIT data.

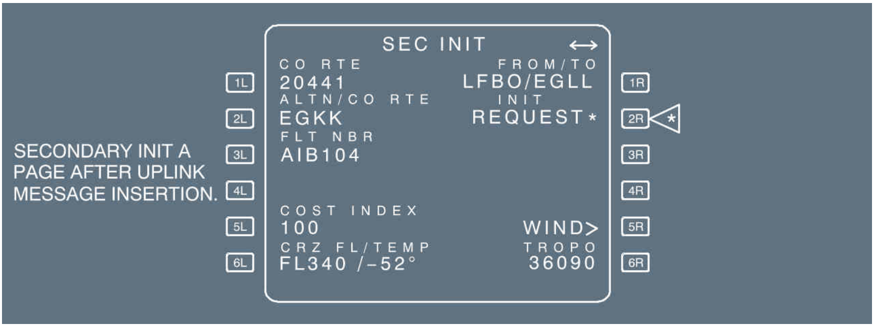


```
           SEC INIT            ↔
CO RTE                  FROM/TO
[     ]                 [    ]/[    ]
ALTN/CO RTE                INIT
----/----------        REQUEST*
FLT NBR
[      ]

COST INDEX
---                       WIND>
CRZ FL/TEMP               TROPO
----- /---°               36090
```

```
           SEC INIT            ↔
CO RTE                  FROM/TO
[     ]                 [    ]/[    ]
ALTN/CO RTE              INSERT
----/----------         UPLINK*
FLT NBR
[      ]
```

[2R] INIT REQUEST*	This field enables INIT data to be requested from the ground.
[2R] INSERT UPLINK*	An uplink message has been received following a request. The message can be cleared or entered on the SEC INIT page.



SECONDARY INIT A PAGE AFTER UPLINK MESSAGE INSERTION.

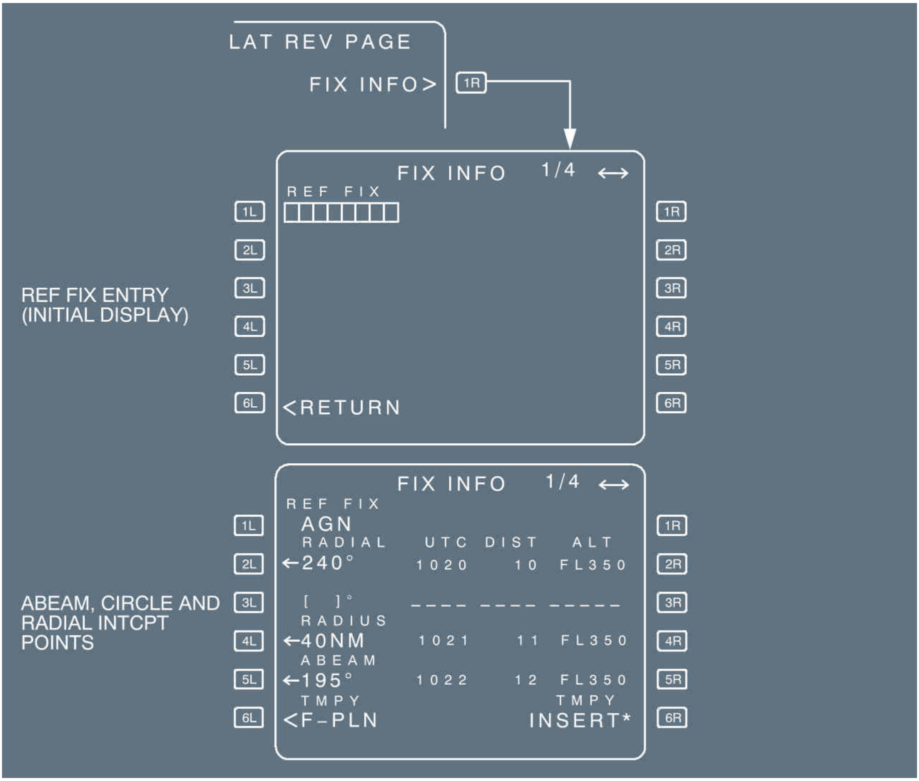
```
           SEC INIT            ↔
CO RTE                  FROM/TO
20441                 LFBO/EGLL
ALTN/CO RTE                INIT
EGKK                   REQUEST*
FLT NBR
AIB104

COST INDEX
100                       WIND>
CRZ FL/TEMP               TROPO
FL340 /-52°               36090
```

RADIAL FIX INFO PAGES

Ident.: DSC-22_20-50-10-28-00009559.0021001 / 14 MAY 12
Applicable to: MSN 04827-04860

The FIX INFO pages provides access to the RADIAL, CIRCLE and ABEAM intercept functions.
The reference may be a given database fix or a pilot-defined element.
If the radial, circle or abeam intercepts the active or temporary flight plan, the intersection point can be converted to a waypoint and inserted into the flight plan.
The FIX INFO pages may be accessed from the LAT REV page, after performing a lateral revision at the origin airport, or at FROM or at any F-PLN waypoint of the primary flight plan (except Destination).


LAT REV PAGE
FIX INFO>
1R
REF FIX ENTRY (INITIAL DISPLAY)
FIX INFO 1/4 ↔
REF FIX
□□□□□□□
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
ABEAM, CIRCLE AND RADIAL INTCPT POINTS
FIX INFO 1/4 ↔
REF FIX
AGN
RADIAL
UTC
DIST
ALT
←240°
1020
10
FL350
[ ]°
---- ---- -----
RADIUS
←40NM
1021
11
FL350
ABEAM
←195°
1022
12
FL350
TMPY
<F-PLN
TMPY
INSERT*

[1L] REF FIX (blue)	Enables entry of the REF FIX. This reference may be any database element (NAVAID, waypoint, NDB, airport, runway) or a pilot-defined element. Before entry, amber boxes are displayed.

[2L] – [2R] RADIAL (blue) and [3L] – [3R] (blue)	Enables entry of a radial from the REF FIX. If the radial line intersects the active flight plan, the FMGS will compute the time, the along path DIST (Distance To Go), and the altitude at the intersection point (small green font). A large blue selection arrow is then displayed to insert the intersection waypoint into the temporary flight plan. This waypoint is not part of the pilot-stored elements. It is automatically labelled: "XXXNNN" XXX = First 3 letters of the REF FIX ident. NNN = Value of the radial
[4L] - [4R] RADIUS (blue)	This function enables the flight crew to enter a radius that defines a circle around the REF FIX. When the circle intercepts the current flight path, the FMGS will compute the time, the along path distance and the altitude at the first intersection point, from the current aircraft position (small green front). A large blue selection arrow is then displayed to insert the intersection waypoint into the temporary flight plan. This waypoint is not part of the pilot stored element. The waypoint is automatically labelled: "DNNNXXX" NNN = Value of the radius XXX = First 3 letters of the REF FIX ident.
[5L] - [5R] ABEAM	This function enables the pilot to create a waypoint in the flight plan (primary or secondary) that is abeam the reference fix (REF FIX). Once computed, the page displays the radial number in large green font. The FMGS computes the time, the along path distance, and altitude at the abeam point (small green font). A large blue selection arrow is then displayed to insert the waypoint into the temporary flight plan. The waypoint is labelled: "AB" + the REF FIX ident, for example, with "TOU" VOR, "ABTOU".
[6L] TMPY F-PLN or RETURN	This field displays "TMPY F-PLN" in yellow font, if a temporary flight plan exists. It enables to return to the temporary flight plan page. Otherwise, the RETURN prompt is displayed and enables to return to the LAT REV page.
[6R] TMPY INSERT*	Activates the temporary flight plan.

Note: Four FIX INFO pages, providing the capability to define four different REF FIX elements, are available.

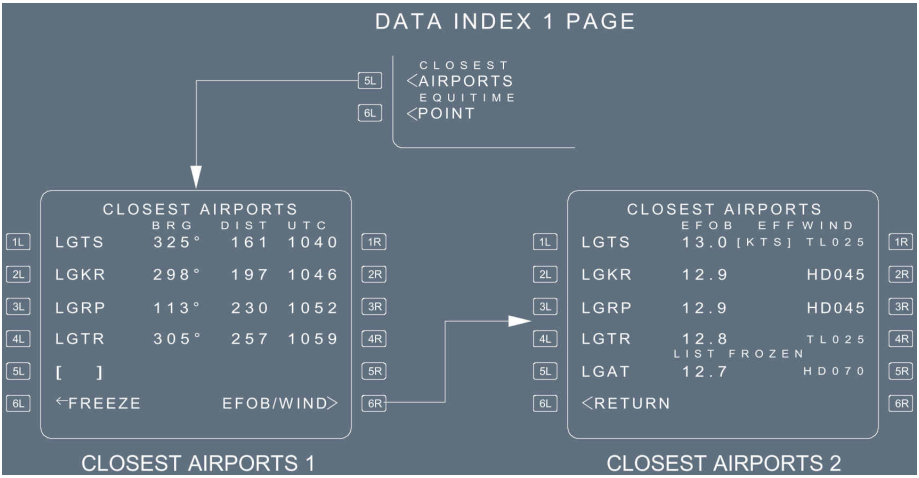
CLOSEST AIRPORTS PAGES

Ident.: DSC-22_20-50-10-28-00009560.0001001 / 16 MAR 11
Applicable to: MSN 04827-04860

The FMS automatically selects the four closest airports from the current aircraft position, and displays them on the CLOSEST AIRPORT pages, ranked by distance. The flight crew can select an additional, fifth airport on this page.

- CLOSEST AIRPORTS page 1 displays the bearing, distance, and time to go to each airport
- CLOSEST AIRPORTS page 2 displays the Estimated Fuel On Board (EFOB) and enables the crew to check or modify the effective wind estimated to the corresponding airport.

The flight crew accesses the CLOSEST AIRPORTS page 1 by pressing the [5L] key on the DATA INDEX 1 page. They access the CLOSEST AIRPORTS page 2 by pressing the EFOB/WIND prompt (6R key) on page 1.



DATA INDEX 1 PAGE

```
5L    CLOSEST
     <AIRPORTS
      EQUITIME
6L   <POINT
```

```
          CLOSEST AIRPORTS
              BRG    DIST   UTC
1L  LGTS      325°   161   1040   1R
2L  LGKR      298°   197   1046   2R
3L  LGRP      113°   230   1052   3R
4L  LGTR      305°   257   1059   4R
5L  [    ]                        5R
6L  ←FREEZE            EFOB/WIND> 6R
```

CLOSEST AIRPORTS 1

```
          CLOSEST AIRPORTS
              EFOB     EFFWIND
1L  LGTS      13.0 [KTS]  TL025   1R
2L  LGKR      12.9        HD045   2R
3L  LGRP      12.9        HD045   3R
4L  LGTR      12.8        TL025   4R
             LIST FROZEN
5L  LGAT      12.7        HD070   5R
6L  <RETURN                       6R
```

CLOSEST AIRPORTS 2

CLOSEST AIRPORTS 1 PAGE

[1L] - [1R] BRG/DIST/UTC (green) to [4L] - [4R]	The closest four airports are extracted from the database, and ranked by distance from the aircraft position.

BRG	Displays the current bearing from the aircraft's position to the airport.
DIST	Displays the current great-circle distance from the aircraft's position to the airport.
UTC	Displays the predicted time of arrival at the airport, computed using the current wind or a wind vector entered on page 2, and the speed in accordance with the current mode (managed or selected). The time is only computed in cruise phase.

[5L]	The crew may enter a fifth airport in this field, using the 4–letter ICAO code. The field may be modified at any time, even when “LIST FROZEN” is displayed.

If the crew enters an airport that is not in the database, a “NOT IN DATABASE” message appears in the scratchpad.

[6L] FREEZE/UNFREEZE (cyan)	This prompt enables the pilot to freeze and unfreeze the list of four airports. The list is automatically frozen when accessing page 2. It will remain frozen until returning to page 1. The “LIST FROZEN” message is always displayed on page 2.
[6R] EFOB/WIND	Gives access to page 2. Pressing this prompt automatically freezes the list of the four closest airports.

CLOSEST AIRPORTS 2 PAGE:

[1L] - [1R] EFOB (green) to [5L] - [5R] EFF WIND (cyan)	Displays the EFOB at each airport. The EFOB is only computed in cruise phase. Used to enter an estimated effective wind (headwind or tailwind) along the route to the airport. If the entry is preceded by “+”, “T”, or “TL”, a tailwind is assumed. If the entry is preceded by “–”, “H”, or “HD”, a headwind is assumed. This field displays in small font a default value, based on the current wind experienced by the aircraft. The crew can modify this value, it is then displayed in large font. The effective wind is used to compute the EFOB and time to reach the airport.

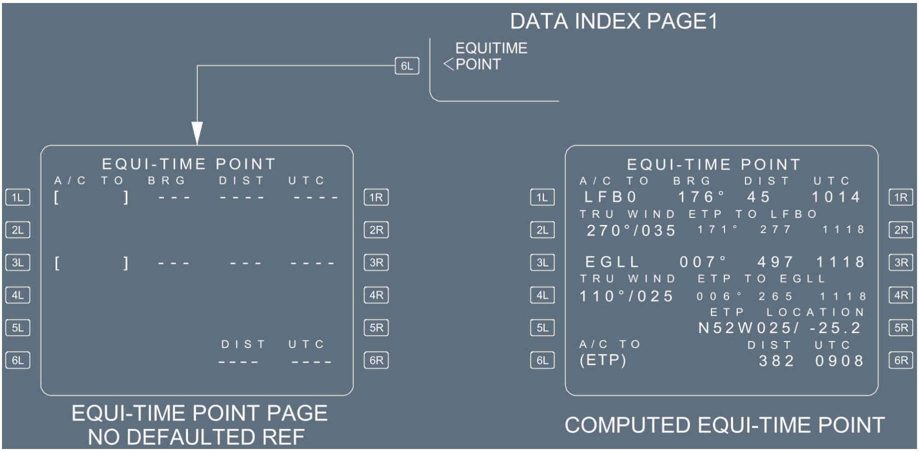
[6L] RETURN	Returns to page 1.

Note:
- *If the aircraft position becomes invalid, all BRG, DIST, UTC fields are dashed. The CLOSEST AIRPORTS page still displays the last available list of 4 closest airports and the last crew-defined airport (if any). FREEZE/UNFREEZE and EFOB/WIND prompts are removed, LIST FROZEN is displayed, and the A/C POSITION INVALID message is displayed in the scratchpad. Page 2 cannot be accessed.*
- *Predictions (EFOB, TIME) displayed on the CLOSEST AIRPORTS page assume:*
  - *ECON CRZ speed (managed) or current selected speed (selected) is kept;*
  - *CI (for managed speed only) and CRZ FL from the active F-PLN are kept*
  - *A constant wind value;*
  - *In case of engine out, the aircraft altitude is the minimum of (CRZ FL, EO MAX ALT);*
  - *Downpath steps are not considered;*
  - *Descent fuel burn is a conservative value which only depends on the difference between current CRZ ALT and the destination airport altitude.*

EQUI - TIME POINT PAGE

Ident.: DSC-22_20-50-10-28-00009561.0004001 / 18 MAR 11
Applicable to: MSN 04827-04860

The flight crew uses this page to request an equi-time point computation between two different points (airport, NAVAID, runway, NDB or waypoint). This pseudo-waypoint (ETP) is displayed on the navigation display along the F-PLN. The EQUI-TIME POINT page is accessed by pressing the 6L key on the DATA INDEX 1 page:


DATA INDEX PAGE1
EQUITIME
<POINT
6L
EQUI-TIME POINT
A/C TO BRG DIST UTC
[ ] --- ---- ----
[ ] --- --- ----
DIST UTC
---- ----
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
EQUI-TIME POINT PAGE
NO DEFAULTED REF
EQUI-TIME POINT
A/C TO BRG DIST UTC
LFBO 176° 45 1014
TRU WIND ETP TO LFBO
270°/035 171° 277 1118
EGLL 007° 497 1118
TRU WIND ETP TO EGLL
110°/025 006° 265 1118
ETP LOCATION
N52W025/ -25.2
A/C TO
DIST UTC
(ETP) 382 0908
COMPUTED EQUI-TIME POINT

[1L] A/C TO and [3L] (blue)	Displays reference waypoint 1. Displays reference waypoint 2.

Note: Origin and destination airports are used by default for respective reference points 1 and 2, until a pilot entry is made.

[1R] BRG/DIST/UTC and [3R] (green)	Displays the bearing, distance, time, from the aircraft's current position to the reference waypoint 1. Displays the bearing, distance, time, from the current position of the aircraft to the reference waypoint 2. BRG : Displays the current great-circle bearing from the position of the aircraft to the reference waypoint. DIST : Displays the current great-circle distance from the position of the aircraft to the reference waypoint. UTC : Displays the predicted time of arrival at the reference waypoint (computed using the current wind or a wind vector, entered by the crew). The time is only computed in cruise phase. In other phases, it is dashed.
[2L] and [4L] TRU WIND (blue)	The crew may enter the wind (direction/velocity) at the reference waypoint and CRZ FL: This wind value is used to calculate the time from the position of the aircraft to the reference waypoint, and to locate the equitime point. If no entry is made, the wind/velocity is assumed to be equal to zero.
[2R] and [4R] ETP TO XXXX (green)	Displays the bearing distance and the time from the Equi-Time Point (ETP) position to the reference waypoint.
[5R] ETP LOCATION	Displays the ident of the F-PLN waypoint following the equitime point. It provides the distance along the flight plan from the ETP to the indicated waypoint.
[6L] - [6R] A/C TO (ETP) DIST/UTC (green)	This field displays the distance from the current position of the aircraft to the ETP along the flight plan, and the estimated time of arrival at the ETP. If at least one reference waypoint exists, but no ETP exists, the field is blank and NO ETP is displayed in 6L.

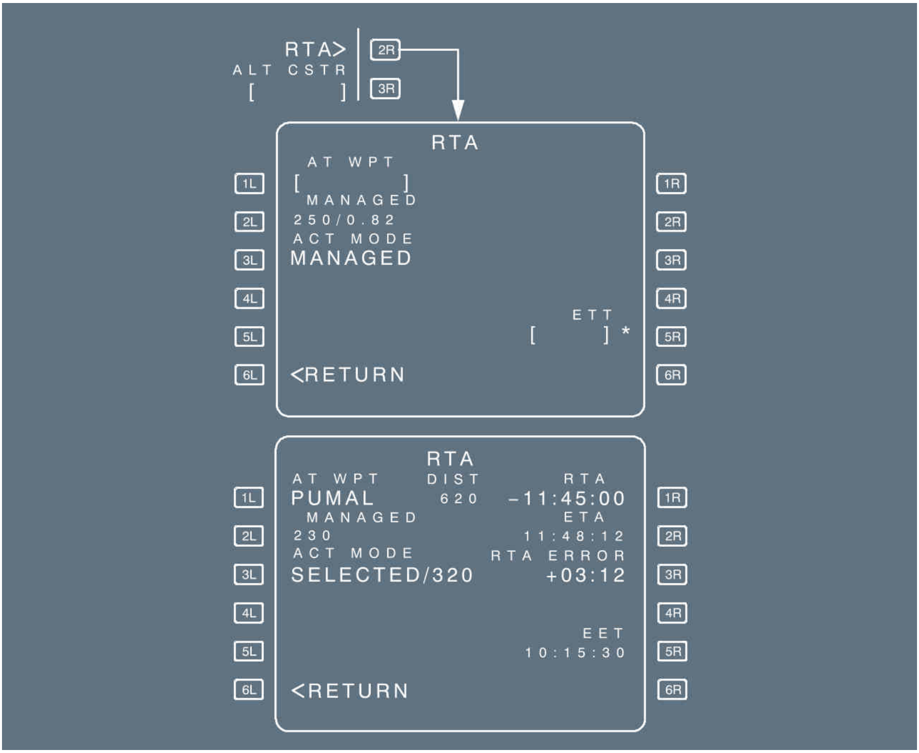
Note: The ETP computation is based on the cost index, managed speed (with SPD LIM).
In case of engine-out, the EO LRC speed is assumed.
If the ETP fix is an airport, the ETP computation takes into account the descent towards this airport.

RTA PAGE

Ident.: DSC-22_20-50-10-28-00009562.0021001 / 14 MAY 12
Applicable to: MSN 04827-04860

The RTA (Required Time of Arrival) page enables to enter a time constraint on a given waypoint.
When an RTA has been defined at a waypoint, the RTA page provides the following information:
- Predicted ETA at the time-constrained waypoint
- Performance adjusted SPD target
- Time error
- Distance to time constrained waypoint
- Active speed mode.

The RTA page also allows to enter an Estimated Takeoff Time (ETT), or may display an FMS-computed ETT.
The flight crew calls up this page with the RTA prompt from the VERT REV page.



RTA>
ALT CSTR
[ ]

RTA
AT WPT
[ ]
MANAGED
250/0.82
ACT MODE
MANAGED
ETT
[ ] *
<RETURN

RTA
AT WPT | DIST | RTA
PUMAL | 620 | -11:45:00
MANAGED | | ETA
230 | | 11:48:12
ACT MODE | | RTA ERROR
SELECTED/320 | | +03:12
EET
10:15:30
<RETURN

[1L] – [1R] AT WPT/DIST/RTA	This line displays AT WPT and empty blue brackets, when no waypoint has been specified, or AT WPT, DIST and RTA when a waypoint has been defined. The waypoint identifier is displayed in large blue font. If only the waypoint identifier has been defined and no RTA value, blue brackets and a blue star are displayed facing the 1R prompt. The flight crew enters the time constraint as “HHMMSS”, preceeded by: A “–“ sign for “at or before” A “+” sign for “at or after” no sign for “at”. DIST is displayed in yellow if a temporary flight plan exists.
[2L] MANAGED (yellow/green)	This field displays the FMGS-computed ECON speed/Mach (*Refer to DSC-22_20-40-10 General*) used to respect the RTA. Speed and/or Mach are displayed in yellow if a temporary flight plan exists. Otherwise they are displayed in green.
[3L] ACT MODE (green)	Displays the active speed mode: MANAGED or SELECTED/NNN (NNN is the selected target speed). The crew cannot modify the active speed mode via this field.
[6L] TMPY F-PLN (yellow) or RETURN (white)	The crew presses this key to revert the display to the VERT REV page. The TMPY F-PLN prompt accesses the temporary F-PLN page.
[2R] ETA (yellow/green)	When a required time at arrival has been defined, the 2R field displays the estimated time of arrival as “HHMMSS”. ETA is displayed in yellow if a temporary flight plan exists. Otherwise it is displayed in green.
[3R] RTA ERROR	This field is blank when the RTA is predicted as made. The RTA is predicted as missed, if the aircraft is expected to reach the point at RTA +30 s or later. In this case, “RTA ERROR” is displayed in small white font, and the calculated time error between the ETA and the RTA is displayed in small amber font.
[5R] ETT	The Estimated Takeoff Time (ETT) field is available in preflight phase. If no ETT has been entered, the 5R field displays blue brackets and a blue star. When an ETT has been entered, it is displayed in magenta. This field may also display an FMS-computed ETT, when an RTA has been defined. Entry of ETT does not lead to the creation of a temporary flight plan.
UTC	Universal time is displayed in green for takeoff, climb, cruise, descent and approach phases.

[6R] TMPY INSERT *	Activates the temporary flight plan.

CONSTANT MACH PAGE

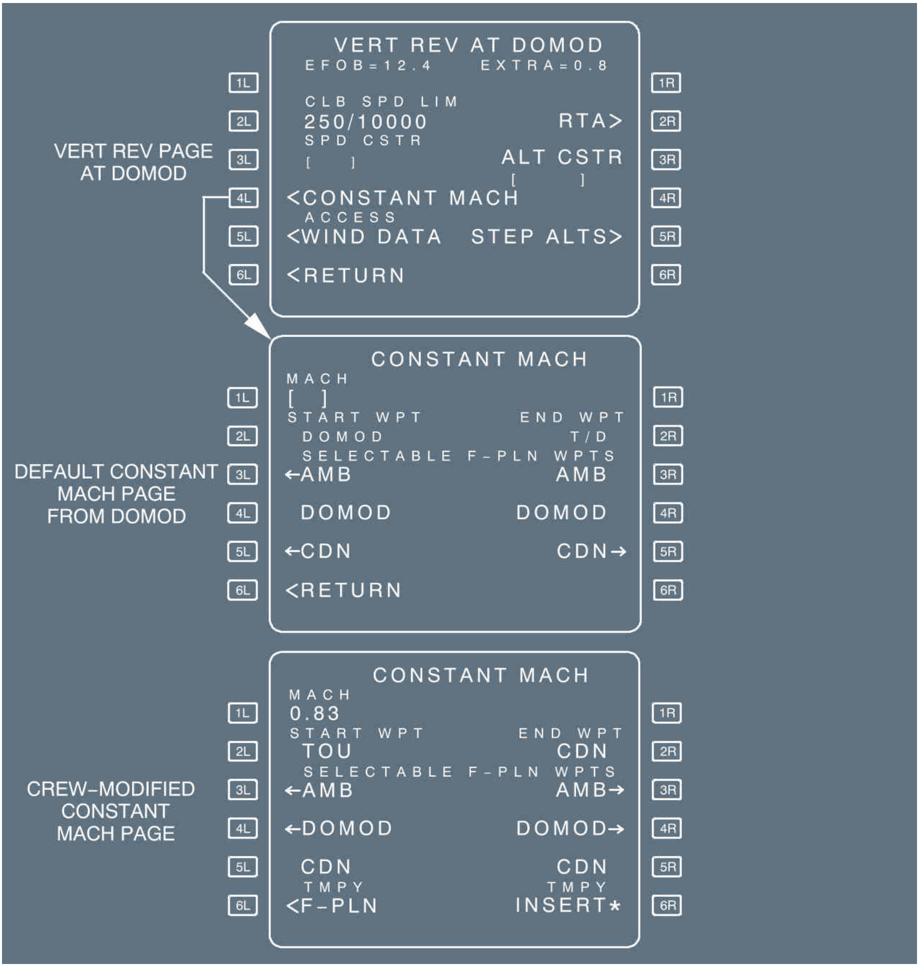
Ident.: DSC-22_20-50-10-28-00009563.0004001 / 01 OCT 12
Applicable to: MSN 04827-04860

The CONSTANT MACH page allows the crew to specify a constant Mach value to be kept during a given part of the cruise phase. The crew can specify on this page:
- The desired constant Mach value
- The Start and End waypoint of the constant Mach segment.

The constant Mach segment is flown in MANAGED speed mode. The FMS takes the crew-entered constant Mach into account to calculate the cruise predictions.

Note: A constant Mach may also be defined in the SEC F-PLN.

The CONSTANT MACH page is accessed by pressing the CONSTANT MACH prompt [4L] on the VERT REV page from any waypoint, including the FROM waypoint.
If the page is accessed from a VERT REV at the FROM, the proposed default start waypoint will be PPOS.
The CONSTANT MACH page is accessible in pre-flight, takeoff, climb and cruise phases. A constant Mach may only be defined cruise segment.


VERT REV PAGE AT DOMOD
VERT REV AT DOMOD
EFOB=12.4 EXTRA=0.8
CLB SPD LIM
250/10000
RTA>
SPD CSTR
[ ]
ALT CSTR
[ ]
<CONSTANT MACH
ACCESS
<WIND DATA
STEP ALTS>
<RETURN
DEFAULT CONSTANT MACH PAGE FROM DOMOD
CONSTANT MACH
MACH
[ ]
START WPT
END WPT
DOMOD
T/D
SELECTABLE F-PLN WPTS
←AMB
AMB
DOMOD
DOMOD
←CDN
CDN→
<RETURN
CREW-MODIFIED CONSTANT MACH PAGE
CONSTANT MACH
MACH
0.83
START WPT
END WPT
TOU
CDN
SELECTABLE F-PLN WPTS
←AMB
AMB→
←DOMOD
DOMOD→
CDN
CDN
TMPY
TMPY
<F-PLN
INSERT*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1L] MACH (blue)	Enables the entry of the desired Mach value waypoint is displayed in large blue font.

[2L] START WPT (blue)	Enables the Start waypoint of the constant Mach segment to be specified. The default Start waypoint is the waypoint at which the vertical revision has been performed, if it belongs to the cruise phase. Otherwise, the field is blank. The default Start waypoint (if any) is displayed in small blue font. The crew may select a different Start waypoint in the list of selectable F-PLN waypoints. A crew-selected Start waypoint is displayed in large blue font.
SELECTABLE F-PLN WPTS (blue) [3L] – [3R] [4L] – [4R] [5L] – [5R]	This is the list of the F-PLN waypoints that can be selected as Start or End waypoint of the constant Mach segment. The FMS automatically displays the list of all downpath waypoints belonging to the cruise phase (before the T/D). The crew selects the Start waypoint in the list on the left side, and the End waypoint on the right side.
[6L] <RETURN (white) or <TMPY F-PLN (yellow)	If a temporary F-PLN exists, the prompt <TMPY F-PLN is displayed. This enables the crew to return to the TMPY F-PLN page. If no TMPY F-PLN exists, the <RETURN prompt is displayed. It enables a return to the VERT REV page.
[2R] END WPT (blue)	This field enables the End waypoint of the constant Mach segment to be specified. By default, the End waypoint is the Top of Descent (T/D). The default End waypoint is in small blue font. The crew may select a different End waypoint in the list of selectable F-PLN waypoints. A crew-selected End waypoint is displayed in large blue font.
[6R] TMPY INSERT*	Activates the temporary flight plan.

BACK UP NAV PAGES

Applicable to: MSN 04827-04860

Ident.: DSC-22_20-50-10-28-G-00013272.0006001 / 16 MAR 11

The MCDU features a back up navigation function which provides simplified point-to-point GPIRS and IRS based navigation in case of a dual FM failure.

The backup Navigation mode allows limited lateral flight planning within the MCDU, that can be used to drive the Navigation Display and provides relative path position information and auto-sequencing of the Backup Navigation flight plan. The Backup Navigation flight plan reflects, as much as possible, the active primary FM flight plan upon its initial activation.

During FM normal operation, the F-PLN is continuously downloaded in the MCDU memory: the BACK UP NAV function links the MCDU of the failed FM to its onside IRS. All navigation data related to the MCDU F-PLN are displayed on the associated ND.

BACK UP NAV function is activated on the MCDU MENU page by pressing the NAV B/UP prompt.

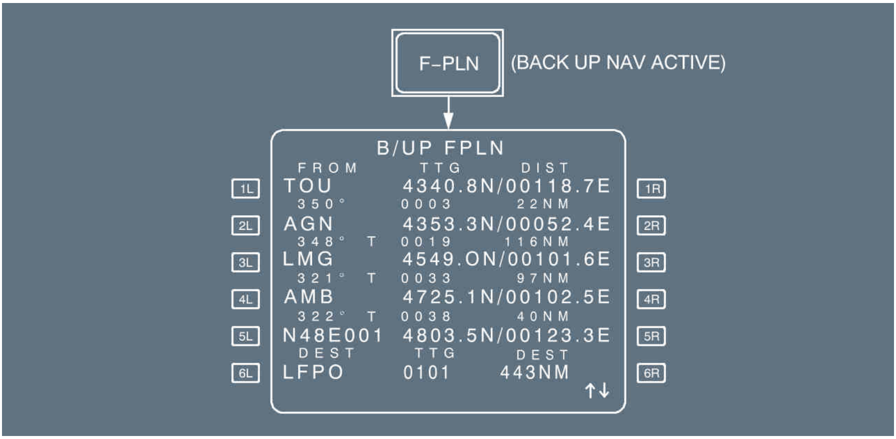
The MCDU back-up F-PLN may accept a maximum of 150 legs, including information such as waypoint position/identification, leg type, discontinuity, overfly and turn direction information (radial, pattern, heading leg... cannot be part of the MCDU F-PLN). No secondary or temporary F-PLN exists.

BACK UP NAV pages display the data related to the BACK UP NAV function. These are six pages available while BACK UP NAV is active:
- B/UP F-PLN
- B/UP F-PLN for DIRECT TO
- B/UP PROG
- B/UP IRS for onside IRS (1+2)
- B/UP IRS 3
- B/UP GPS (if the GPS is installed)

Ident.: DSC-22_20-50-10-28-G-00013273.0006001 / 23 JUL 12

B/UP F-PLN PAGE

The B/UP F-PLN page displays the MCDU F-PLN data. The pilot calls up this page by pressing the F-PLN MCDU key while B/UP NAV is active.



```
          B/UP FPLN
  FROM        TTG        DIST
 TOU         4340.8N/00118.7E
  350°        0003       22NM
 AGN         4353.3N/00052.4E
  348°   T    0019      116NM
 LMG         4549.0N/00101.6E
  321°   T    0033       97NM
 AMB         4725.1N/00102.5E
  322°   T    0038       40NM
 N48E001     4803.5N/00123.3E
  DEST        TTG        DEST
 LFPO        0101       443NM
                           ↑↓
```

TITLE	B/UP F-PLN is displayed in a white large font

line 1 to line 5 Display consecutive waypoints with their associated latitude/longitude. If a waypoint is to be overflown, an overfly symbol (Δ) is displayed after the identifier.
If a turn is specified into the next leg, a large font arrow is displayed after the identifier.

Label lines contain the bearing, time to go and distance to the next waypoint displayed in small font.

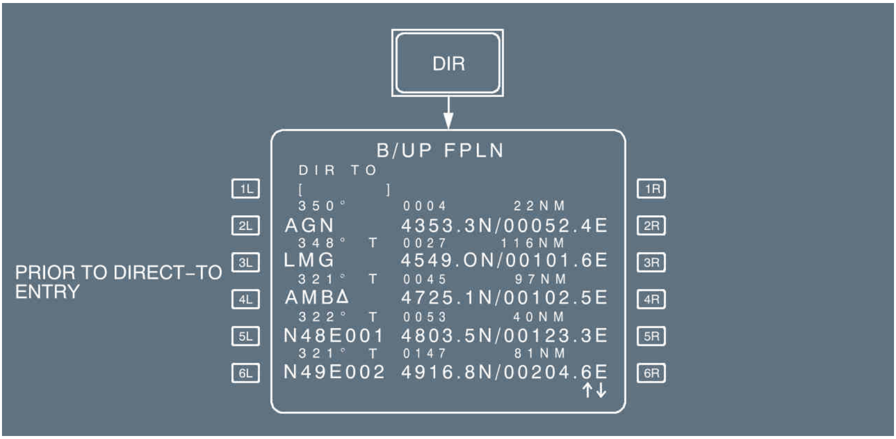
White	bearing
green	time to go and distance
BRG	Between FROM and TO waypoints: True or Mag depending on the TRUE pb-sw ◁ position. T is displayed when the bearing is true referenced. Between other waypoints: out bound true track of the great circle joining the 2 related waypoints, independant of TRUE pb-sw ◁ .
TTG	HHMM limited to 9 959. Time between the 2 related waypoints.
DIST	NM limited to 9 999.

line 6 DEST/TTG DIST DEST airport identifier and Time To Go (TTG) to that waypoint. DIST to destination is computed as the direct distance from the aircraft to the active waypoint plus the along flight plan distances. Time to go to destination is computed as distance to destination divided by ground speed.
TTG and DEST are dashed if aircraft position is unavailable.

Ident.: DSC-22_20-50-10-28-G-00013275.0006001 / 14 MAY 12

B/UP F-PLN (DIR TO) PAGE

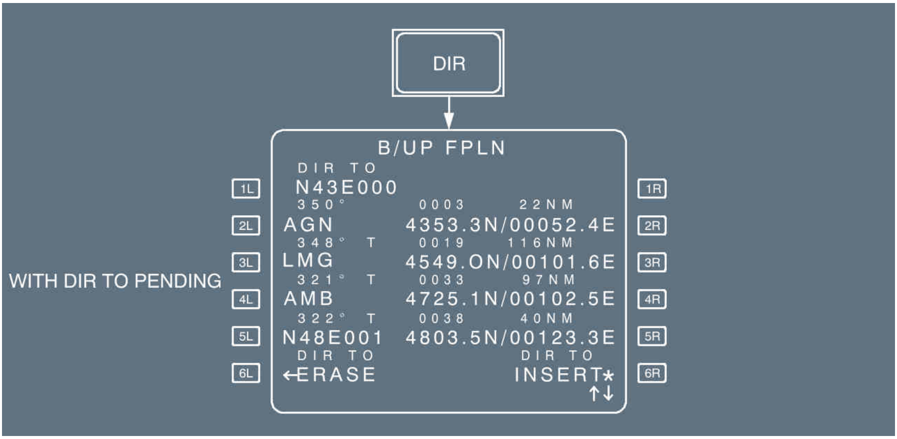
The pilot calls up this page using the DIR key on MCDU while BACK UP NAV is active and aircraft position is valid.



```
            B/UP FPLN
 DIR TO
[          ]
 350°          0004          22NM
AGN           4353.3N/00052.4E
 348°   T      0027         116NM
LMG           4549.0N/00101.6E
 321°   T      0045          97NM
AMBΔ          4725.1N/00102.5E
 322°   T      0053          40NM
N48E001       4803.5N/00123.3E
 321°   T      0147          81NM
N49E002       4916.8N/00204.6E
                               ↑↓
```

TITLE	B/UP F-PLN is displayed in a white large font.
[1L] DIR TO	Allows DIRECT TO selection to the desired waypoint. This waypoint can be selected from the F-PLN or manually entered through the scratchpad (IDENT/LAT/LONG or LAT/LONG)
line 2 to line 6	Display consecutive waypoints of the F-PLN. Same as the B/UP F-PLN page. The TO WAYPOINT is displayed in [2L]. Vertical slewing function is available

When a DIR TO is pending, the page displays the prompts “DIR TO INSERT” and “DIR TO ERASE” in line 6.



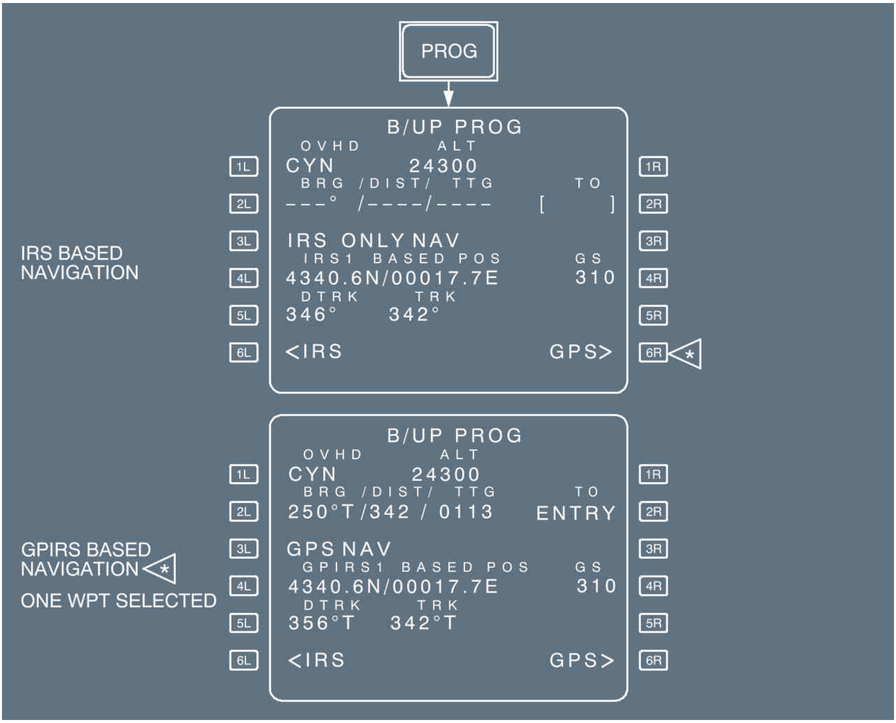
WITH DIR TO PENDING

```
            B/UP FPLN
 DIR TO
 N43E000
 350°          0003      22NM
 AGN          4353.3N/00052.4E
 348°   T      0019     116NM
 LMG          4549.0N/00101.6E
 321°   T      0033      97NM
 AMB          4725.1N/00102.5E
 322°   T      0038      40NM
 N48E001      4803.5N/00123.3E
 DIR TO                 DIR TO
←ERASE                 INSERT*
                            ↑↓
```

Ident.: DSC-22_20-50-10-28-G-00013276.0006001 / 21 MAR 16

B/UP PROG PAGE

It displays flight parameters relative to the F-PLN or a selected waypoint.
The flight crew calls up this page by pressing the PROG key on MCDU when BACK UP NAV is active.


PROG
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
IRS BASED
NAVIGATION
GPIRS BASED
NAVIGATION
ONE WPT SELECTED

```
           B/UP PROG
 OVHD            ALT
CYN            24300
 BRG /DIST/ TTG               TO
---°  /----/----          [      ]
IRS ONLY NAV
  IRS1  BASED POS            GS
4340.6N/00017.7E             310
 DTRK         TRK
346°       342°
<IRS                        GPS>
```

```
           B/UP PROG
 OVHD            ALT
CYN            24300
 BRG /DIST/ TTG               TO
250°T /342 / 0113         ENTRY
GPS NAV
 GPIRS1  BASED POS           GS
4340.6N/00017.7E             310
 DTRK         TRK
356°T      342°T
<IRS                        GPS>
```

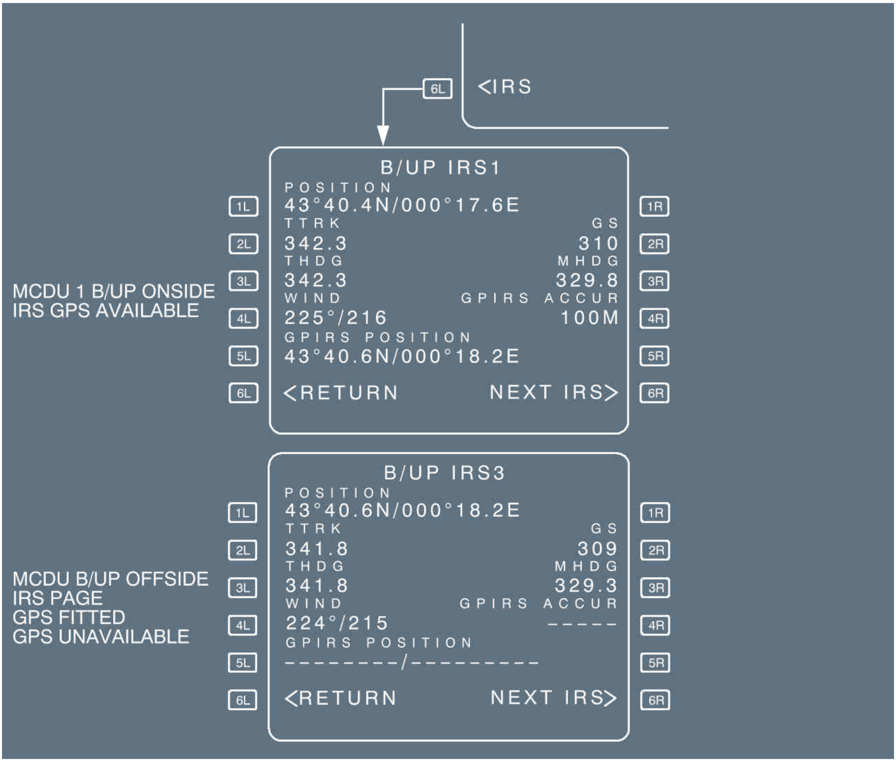
TITLE	B/UP PROG is displayed in a white large font.
line 1 OVHD/ALT	Displays the identifier of the last sequenced waypoint and the altitude at the time of the sequence.

line 2 BRG/DIST/TTG/TO	Allows the flight crew to enter an existing MCDU F-PLN waypoint identifier or LAT/LONG or IDENT/LAT/LONG. MCDU then computes bearing, distance and time to go to that waypoint from the present position. BRG : True or magnetic outbound track of the great circle joining aircraft present position to the entered waypoint: dependent on the TRUE pb-sw ◁ position. DIST : limited to 9 999. TTG : HHMM limited to 9 959. time to go to the entered position computed assuming current ground speed. These fields are displayed in a green small font. They are dashed if present position is unavailable.
[3L]	Means of navigation used by the Back-Up Navigation. If GPS is fitted and is the navigation source, “GPS NAV” is displayed, otherwise “IRS ONLY NAV” is displayed. If the GPS is not installed, this field is blank.
[4L] IRS 1 (2 or 3) BASED POS GPIRS 1 (2 or 3) (green)	Current aircraft position provided by the selected IRS GPIRS IRS 1 (or 3 if IRS 1 failed) on MCDU 1 IRS 2 (or 3 if IRS 2 failed) on MCDU 2 GPIRS 1 (or GPIRS 3) or MCDU 1 ◁ GPIRS 2 (or GPIRS 3) or MCDU 2 ◁
[4R] GS (green)	Current ground speed from the selected IRS or GPS ◁
[5L] DTRK/TRK (green)	Desired track of the MCDU F-PLN active leg and current aircraft track from the selected IRS/GPS (True or Mag). These tracks are true or magnetic depending on TRUE pb-sw ◁ position.
[6L] IRS 1 (2)	Gives access to onside B/UP IRS (1 or 2) page
[6R] GPS	Gives access to B/UP GPS page. This prompt only appears when the GPS is installed.

Ident.: DSC-22_20-50-10-28-G-00013278.0006001 / 14 MAY 12

B/UP IRS 1 OR 2 OR 3 PAGE

Display IRS 1, 2, 3 navigation data.
The pilot calls up this page from B/UP PROG page, by pressing the corresponding prompt.



MCDU 1 B/UP ONSIDE
IRS GPS AVAILABLE

```
          B/UP IRS1
POSITION
43°40.4N/000°17.6E
TTRK                        GS
342.3                      310
THDG                      MHDG
342.3                    329.8
WIND               GPIRS ACCUR
225°/216                  100M
GPIRS POSITION
43°40.6N/000°18.2E
<RETURN              NEXT IRS>
```

MCDU B/UP OFFSIDE
IRS PAGE
GPS FITTED
GPS UNAVAILABLE

```
          B/UP IRS3
POSITION
43°40.6N/000°18.2E
TTRK                        GS
341.8                      309
THDG                      MHDG
341.8                    329.3
WIND               GPIRS ACCUR
224°/215                 -----
GPIRS POSITION
--------/---------
<RETURN              NEXT IRS>
```

TITLE	B/UP IRS 1, 2, 3 displayed in a white large font.
[1L] POSITION	Current aircraft position from selected IRS
[2L] T TRK	True track
[2R] GS	Ground speed
[3L] T HDG	True heading
[3R] M HDG	Magnetic heading Dashed when in polar area.
[4L] WIND	Wind direction and velocity Wind direction is always true referenced.
[4R] GPIRS ACCUR	GPS accuracy in meters as in the IRS page.
[5R] GPIRS POSITION	If GPS is installed, the GPS IRS position is provided as in the IRS page.

[6L] RETURN	Gives access to B/UP PROG page
[6R] NEXT IRS	Gives access to the next IRS page. (Closed loop 1 → 2 → 3 → 1)

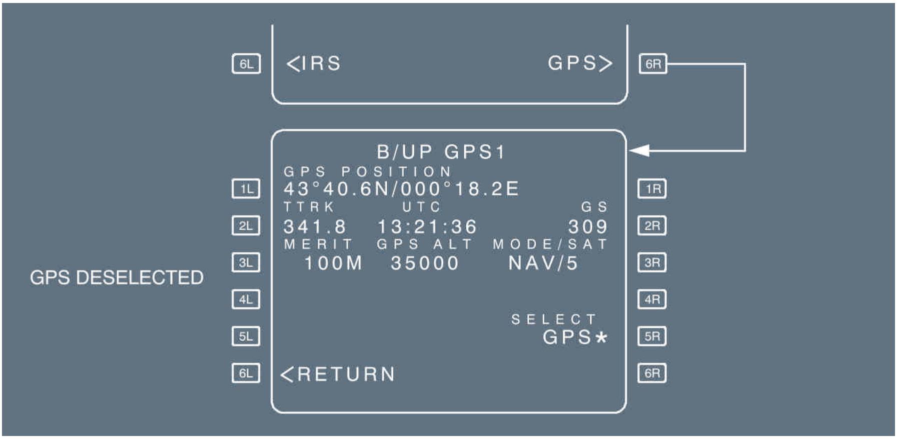
This page is not modifiable by the crew.

Note: *The fields [4R] and [5L] are blanked when the GPS is not installed.*

Ident.: DSC-22_20-50-10-28-G-00013279.0006001 / 14 MAY 12

B/UP GPS

Display GPS navigation data.
The flight crew calls up this page from B/UP PROG page, by pressing the corresponding prompt.


6L
<IRS
GPS>
6R
B/UP GPS1
GPS POSITION
43°40.6N/000°18.2E
TTRK
UTC
GS
341.8
13:21:36
309
MERIT
GPS ALT
MODE/SAT
100M
35000
NAV/5
SELECT
GPS*
<RETURN
GPS DESELECTED
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

TITLE	B/UP GPS 1, 2 displayed in a white large font.
[1L]	GPS POSITION
Line 2 :	TTRK GPIRS position (latitude/longitude) UTC: Time GS: Ground Speed
Line 3 :	MERIT : GPS figure of merit GPS ALT: GPS altitude MODE/SAT: Navigation mode and number of tracked satellites. These values are displayed as in the FM GPS page.
[5R]	DESELECT/SELECT GPS: The flight crew may select and deselect the GPS for navigation Backup function. The default configuration is GPS selected.

Intentionally left blank

FMS2 Honeywell

MCDU MESSAGE LIST

1 Ident.: DSC-22_20-50-20-35-00000918.0040001 / 12 MAY 22
Applicable to: MSN 11531

Messages displayed on the MCDU are of two types and displayed in two colors.

Type I : A direct result of a flight crew action;
Type II : Information about a situation, or a call for flight crew action;
Type II messages are stored in a first-in/first-out message queue (5 messages max)
They are suppressed, if correct data is entered or when they no longer apply
The flight crew can clear all messages by pressing the CLEAR key on the MCDU console.
Amber : Important
White : Less important

MESSAGE	TYPE	CONDITIONS
A/C POSITION INVALID	II	The aircraft position has become invalid. If the message has been cleared and the flight crew attempts to call up the HOLD at PPOS or DIR TO page while the aircraft position is still invalid, then the message is displayed again.
ACT RTE UPLINK (ACARS msg)	II	A flight plan is stored in the active flight plan.
ALIGN IRS	II	Appears when the IRS are ready for alignment, but the INIT A page is not displayed on either side of the flight deck. The ALIGN IRS message requires that one of the flight crew call up the IRS INIT page, to align the IRS.
ALT CSTR ABOVE CRZ FL	II	This appears when a flight plan altitude constraint has been ignored because the flight crew has inserted a cruise flight level or step-down altitude that is strictly below the flight plan constraint.
AREA RNP IS XX-XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the default RNP value associated to the current flight area and when there is no RNP value defined in the navigation database for the active leg or route.
AWY/WPT MISMATCH	I	The pilot entered VIA on the AIRWAYS page does not contain the revised point. If you enter a second airway IDENT, it must contain the first airway ending point.
BLOCK IGNORES RTA	II	A time constraint existing at initiation of flight planning, or an entry of a time constraint made after initiation of flight planning, are ignored by the fuel planning function.
CABIN RATE EXCEEDED	II	This message appears when the aircraft gets within 200 NM of the destination and the computed rate of descent makes it impossible for the cabin to be repressurized at the maximum rate.

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MESSAGE	TYPE	CONDITIONS
CHECK ALTN WIND (ACARS msg)	II	The uplinked alternate cruise flight level differs from the defaulted alternate cruise flight level.
CHECK APPR SELECTION *EFIS PFD (FMA)	II	Displayed when a NON-ILS or non GLS approach is part of the F-PLN and an ILS/GLS is manually tuned on RAD NAV page. This message reminds the flight crew that available guidance modes for the approach are APP NAV/FINAL. Displayed when in cruise at less than 100 NM from the top of descent or in descent or approach phase.
CHECK CO RTE (ACARS msg)	II	The uplinked company route identifier differs from the one specified in the request.
CHECK DATA BASE CYCLE	II	The current date does not match the effective date of the active database, and someone attempts to enter a FROM/TO or CO RTE.
CHECK IRS 1(2)(3)/FM POSITION	II	Each IRS position is compared to the FM position. The difference is greater than a threshold function of time.
CHECK IRS/AIRPORT POS	I	The distance between ADIRS alignment position and the NAV Database Airport Reference Point is at least 5 NM
CHECK DEST DATA (ACARS msg)	II	The aircraft is at 180 NM from destination and the destination QNH, TEMP or WIND displayed on the PERF APPR page received by ACARS uplink has to be checked. If a modification of these parameters is performed creating a conflict with previous data, the message is triggered again.
CHECK FLT NBR (ACARS msg)	II	The uplinked flight number differs from the flight number specified in the request.
CHECK MIN DEST FOB	II	This message appears when the flight crew has manually entered the MIN DEST FOB value, and MIN DEST FOB is lower than ALTN + FINAL.
CHECK NORTH REF * EFIS ND	II	The MAG/TRUE sw does not correspond to the airport MAG/TRUE bearing reference (as stored in the FMGS navigation database), either at the departure airport (during preflight), or at the destination airport (when entering the ARRIVAL area).
CHECK QFE	II	This appears at the transition from QNH to QFE reference, when the QFE altitude differs by more than 100 ft from the predicted altitude, with the QNH set on the MCDU by means of the airport elevation in the NAV database.
CHECK TAKEOFF DATA	II	Following a flight crew entry or modification of one of the take-off parameters, there may be an inconsistency between the take-off runway or the TO shift and V1, VR, V2, FLEX TO temperature or derated level. The flight crew activated the secondary F-PLN in PREFLIGHT or DONE phase.

Continued on the following page

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MESSAGE	TYPE	CONDITIONS
CHECK WEIGHT	II	- The gross weights (GW) computed by the flight management computer (FMC) and the flight augmentation computer (FAC) disagree by more than 7 t (7.7 US tons) (in flight only), or - An active secondary or swap active is performed and the ZFWCG or ZFW of the active F-PLN differs from the ZFWCG or ZFW in SEC F-PLN (before engine start), or - An active secondary or swap active is performed and the ZFW of the active F-PLN differs from the ZFW in SEC F-PLN by more than 5 t (after engine start).
CLK IS TAKEOFF TIME	II	This appears when the flight crew has entered an Estimated Takeoff Time (ETT), and the actual time is equal to ETT.
CLOCK/GPS TIME DIFF XX	II	Aircraft clock time and GPS time differ by more than XX minutes.
CROSSLOAD ABORTED	II	Message displayed on the transmitting MCDU, indicating an error in the transmission process.
CROSSLOAD COMPLETE	II	The database crossload from one FMGC to the other was successfully completed.
CRZ FL ABOVE MAX FL	II	This appears when the flight crew enters a cruise altitude that is above the computed maximum altitude.
CSTR DEL UP TO WPT 01	II	This appears when constraints get deleted because the aircraft transitions to a go-around flight phase, before the FMGS sequences the flight plan destination.
DELETING OFFSET	II	This appears when the system is deleting an offset automatically, which it does under certain specific conditions, such as: - Change of active leg due to lateral revision. - Termination of next leg at destination runway and the current distance to go is less than or equal to the distance required to reach the path, or the next leg is not a CF, FM or TF leg.
DEST/ALTN MISMATCH	I	The pilot attempts to enter an alternate CO RTE (which starts at an origin that is not the primary flight plan destination).
DEST EFOB BELOW MIN	II	The EFOB at destination calculated by the FMS is less than the MIN DEST FOB value specified on the FUEL PRED page, for more than 2 min. The message is triggered in flight, except during Takeoff and Climb phases.
DIR TO IN PROCESS	I	The flight crew calls up the vertical or lateral revision page on one MCDU while the direct to page is displayed on the other MCDU.
ENTER DEST DATA	II	The flight crew has not entered wind, QNH, or temperature for the destination, and the aircraft is 180 NM out.
ENTRY OUT OF RANGE	I	The flight crew attempts to enter data that is out of the range specified for the selected field.

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MESSAGE	TYPE	CONDITIONS
FLS SEL: UPDATE MINIMA	I	SLS ◁* has been deselected in RADIO NAV page through the dedicated prompt. The guidance mode has switched to FLS. LP or LPV minima can no longer be used. The flight crew should modify the approach minimum to LNAV/VNAV or LNAV, if available, or choose another adequate approach.
FLT NBR UPLINK (ACARS msg)	II	A flight number has been added to the uplink flight plan without previous request.
F-PLN ELEMENT RETAINED	I	The flight crew attempts to delete stored NAVAIDs, waypoints or runways that are contained in any flight plan or that are being tuned.
F-PLN FULL	II	There is not enough memory in the flight plan allotment for the computer to accept more flight plan data.
FMS 1/FMS 2 A/C STS DIFF	II	This message always precedes a transition to independent mode, and appears at power-up if the system detects a difference in one of the following: - NAV database serial number - Performance database - FM operational program - Aircraft and airline program pins
FMS 1/FMS 2 GW DIFF	II	Onside and offside aircraft weight differ by 2 t or more.
FMS 1/FMS 2 PGM PIN DIFF	II	Onside and offside program pins are different.
FMS 1/FMS 2 POS DIFF	II	Onside and offside positions differ by 0.5 NM or more (5 NM when GPS is not installed).
FMS 1/FMS 2 SPD TGT DIFF	II	Onside and offside target speeds displayed on the PFD differ by 5 kt or more.
FMS SETTING SPD/RTA	II	Displayed when the system recomputes its managed speed target to satisfy the RTA constraints.
FORMAT ERROR	I	A data entry does not meet the specified entry format for a given field.
GPS PRIMARY LOST (also displayed on ND)	II	Displayed when GPS PRIMARY mode is lost.
GPS PRIMARY	II	Displayed when the FMS is transitioning to GPS PRIMARY
GPS IS DESELECTED	II	This message appears when GPS has been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
INDEPENDENT OPERATION	II	The FMGCs operate independently of each other.
INITIALIZE WEIGHT/CG	II	The zero-fuel weight or block fuel (FOB) is undefined after engine start.
INVALID FLT NBR UPLINK (ACARS msg)	II	The uplink message contains a valid flight plan but no flight number.

Continued on the following page

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MESSAGE	TYPE	CONDITIONS
INVALID PERF UPLINK (ACARS msg)	II	Performance uplink message has been rejected.
INVALID RTE UPLINK (ACARS msg)	II	An error was detected into the uplink message and it is rejected.
INVALID TAKEOFF UPLINK (ACARS msg)	II	The current uplink takeoff data message is rejected.
INVALID WIND/TEMP UPLK (ACARS msg)	II	The current uplink wind message is rejected.
LARGE NDB NOT ALLOWED	II	The size of the Navigation Database loaded is not supported by the FMS.
LAT DISCONT AHEAD	II	The next leg is a discontinuity and the aircraft is 30 s from flying the leg.
LIST OF 10 IN USE	I	The flight crew has tried to enter more than ten stored runways into the database, and all of the first ten are included in a flight plan or a pilot-stored route.
LIST OF 20 IN USE	I	The flight crew has tried to create a NAVAID when 20 are already in use (in a flight plan or pilot-stored routes).
LIST OF 99 IN USE	I	The flight crew has tried to store a pilot-defined waypoint when 99 are already in use (in a flight plan or pilot-stored routes).
MACH SEGMENT DELETED	II	A constant Mach segment of the active flight plan has been automatically deleted. This occurs when the secondary flight plan or the alternate is activated, or engine out is detected or when the flight phase changes from CRZ to another one.
MCDU OVERHEATED	II	This message is displayed for 15 s in case of MCDU overheating.
MORE DRAG (EFIS PFD)	II	DES mode is engaged, idle is selected and the aircraft must decelerate in order to recover the path, or to respect an altitude constraint, a speed limit or a speed constraint.
NAV ACCUR DOWNGRAD (also displayed on ND)	II	NAV accuracy has been downgraded from HIGH to LOW. (See FMGS principles for an explanation).
NAV ACCUR UPGRAD (*EFIS ND)	II	NAV accuracy has been upgraded from LOW to HIGH.
NEW ACC ALT-HHHH	II	The acceleration altitude has been changed.
NEW CRZ ALT-HHHHH	II	The cruise altitude has been changed.
NEW THR RED ALT-HHHH	II	The thrust reduction altitude has been changed.
NO ANSWER TO REQUEST (ACARS msg)	I	A crew request, was previously sent to the ground and no answer has been received for 4 min.
NO FLS FOR THIS APPR	II	The FMS does not compute any FLS beam for the selected approach. FLS function is not available.
NO INTERSECTION FOUND	I	The system could not find any common waypoint nor intersection point through the airway.
NO SLS FOR THIS APPR	II	An error has been detected on the SLS Final Approach Segment data block.

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MESSAGE	TYPE	CONDITIONS
NO SLS MAN TUNING	I	The flight crew tries to tune SLS manually.
NO SLS: SBAS DESELECTED	II	SBAS is deselected on the SELECTED NAVAID page while SLS is selected in RADIO NAV page.
NON UNIQUE ROUTE IDENT	I	The flight crew has tried to enter on the new route page a company route IDENT that is identical to an existing company route IDENT (pilot-defined or in the database).
NOT ALLOWED	I	Data entry is not allowed in the selected field, or a selection action is not allowed.
NOT ALLOWED IN NAV	I	An attempt to modify the TO waypoint is made while in NAV mode.
NO NAV INTERCEPT	II	It is triggered, when NAV mode is armed and, no INTERCEPT waypoint exists before the TO waypoint.
NOT IN DATA BASE	I	The pilot is trying to enter or call up a company route IDENT, a FROM/TO pair, a place defined by place-bearing-distance (PBD) or place-bearing/place-bearing (PBX) or an airport NAVAID, waypoint runway, or NAVAID frequency/channel (including pilot-defined elements) that is not in the current database.
NOT XMITTED TO ACARS (ACARS msg)	II	A pilot request or a crew report was sent but the communication was not established or not acknowledged.
ONLY SPD ENTRY ALLOWED	I	The pilot is trying to enter a Mach number for a preselected speed value on the CLIMB page.
OPP FMGC IN PROCESS	II	The offside FMGC is unhealthy, and the FM system mode is SINGLE. The message indicates that the MCDU on which the message is displayed is being driven by the FMGC on the other side.
PAGE UPDATE IN PROCESS	I	The pilot presses a key on the flight plan page while predictions are being updated.
PERF DATA UPLINK (ACARS msg)	II	Performance data are received from ground.
PLACE/D IN TRANSITION	I	If a place/distance waypoint is defined within a pre-planned “fixed turn radius” transition, the entry is rejected and the “PLACE/D IN TRANSITION” scratchpad message is displayed.
PLEASE WAIT	I	Resynchronization between both FMGCs is in progress.
PROCEDURE RNP IS XX.XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the RNP value defined in the navigation database for the active leg or route.
PRINTER NOT AVAILABLE (ACARS msg)	II	A printer communication error has been detected while printing a report. The printing is terminated.
RADIONAV IS DESELECTED	II	Radio navaids have been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
REF/GPS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the GPS position.

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MESSAGE	TYPE	CONDITIONS
REF/LAST IRS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the last stored IRS position.
REVISIONS NOT STORED	II	This message, displayed when a pilot-defined route or company route (active or secondary flight plan) is stored, indicates that the following elements are not retained: - Pilot-entered holds - Offsets - Modifications to terminal area procedures - Pilot-entered constraints - Pseudo waypoints - Step at optimum.
RTA DELETED	II	A time constraint is automatically deleted: - In case of engine-out - When entering the holding pattern - In case of go-around - At phase transition from descent or approach to climb or cruise - When a time constraint is inserted in the same flight plan at a different waypoint - When the alternate flight plan is activated - When a DIR TO/ABEAM is performed, only if the time constrained waypoint is projected as an ABEAM waypoint - The time constrained waypoint is cleared or sequenced (regardless of active lateral mode) - Valid clock data is lost - The time constraint belongs to the active flight plan and the secondary flight plan is activated - The time constraint belongs to the secondary flight plan and COPY ACTIVE is performed.
RTA EXISTS	I	Displayed if the pilot tries to clear an estimated takeoff time defined by the system.
RTA MISSED AT WPT 01	II	While a time constraint is defined in the active flight plan and this time constraint is predicted as "missed" by the FMS.
RTE DATALINK IN PROG (ACARS msg)	I	A flight plan modification is performed after a F-PLN INIT request has been sent. This message is displayed until the uplink is entirely received.

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MESSAGE	TYPE	CONDITIONS
RWY/LS MISMATCH	II	- During climb, cruise, (ILS or GLS) descent approach, or go-around, the LS frequency entered on the RAD NAV page does not match the LS associated with the destination runway. - During preflight or takeoff, the LS frequency entered on the RAD NAV page does not match the LS associated with the takeoff runway.
SEC RTE UPLINK (ACARS msg)	II	A flight plan is stored in the secondary flight plan.
SELECT DESIRED SYSTEM	I	The MCDU displays its MENU page.
SELECT TRUE (also displayed on the ND)	II	The MAG/TRUE sw is set to MAG, while the IRS send true HDG/TRK.
SENSOR IS INVALID	I	- The pilot has selected FF or FQ, or FF + FQ, or FQ + FF on the FUEL PRED page and the sole sensor or both of the selected sensors are invalid, or - The flight crew has entered fuel on board only, and the FF sensor is invalid.
SET GREEN DOT SPEED (SET GREEN DOT displayed on PFD)	II	This message appears when the following conditions are all met: - Engine-out condition - Aircraft in selected speed mode - FCU-selected speed equal to or greater than green-dot speed +10 kt, and ALT* or ALT not active, or FCU-selected speed equal to or less than green-dot speed -10 kt.
SET HOLD SPEED (also displayed on PFD)	II	This instruction appears when the aircraft is in selected speed, the pilot has inserted a hold in the flight plan, the aircraft is 30 s or less from the point where it must start decelerating towards hold speed, and the selected speed differs from the hold speed by more than 5 kt.
SET MANAGED SPEED or CHECK SPEED MODE (Also displayed on PFD)	II	The target speed is selected for the current phase, but there is no preselected speed for the next flight phase. When this is so, one of these messages is displayed at transitions from climb to cruise, and from climb or cruise to descent. The message is always displayed at the transition to descent from climb or cruise if selected speed is active. It is not displayed if managed speed is active.
SPECIF NDB UNAVAIL	II	The NDB to be autotuned (specified for a NDB approach) is not available.

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MESSAGE	TYPE	CONDITIONS
SPECIF VOR-D UNAVAIL (also displayed on ND)	II	- The VOR, VOR-DME, or VORTAC to be autotuned (specified for an RNAV or VOR approach) has previously been deselected by the flight crew, or - The bearing, the frequency, or the IDENT of the VOR (or VORDME or VORTAC) to be autotuned is invalid.
SPD ERROR AT WPT 01	II	In lateral managed flight, the system predicts that the aircraft will miss a speed constraint by more than 10 kt. When the prediction changes to bring the miss within 5 kt, the message is cleared.
SPD LIM EXCEEDED	II	The aircraft is more that 150 ft below the speed limit altitude and more than 10 kt over green dot or the speed limit (which ever is smaller).
STEP ABOVE MAX FL	II	The pilot has entered a step altitude that is above the predicted maximum altitude.
STEP AHEAD	II	Indicates that the aircraft is within 20 NM of the active step point.
STEP DELETED	II	A step has been automatically deleted.
STORED ROUTES FULL	I	The system already contains five pilot-defined routes. (Only five are allowed.)
T/D REACHED (Also displayed on PFD)	II	One of these messages appears when the aircraft has reached the T/D in managed speed and it has not yet begun the descent.
TAKEOFF DATA UPLINK (ACARS msg)	II	A takeoff data message is received.
TEMPORARY F-PLN EXISTS	I	The flight crew has selected any key (except ERASE or INSERT) or attempted a flight planning operation on the secondary flight plan while the system is displaying a temporary flight plan.
TIME MARKER LIST FULL	I	The system already contains four time markers. (Only four are allowed).
TIME TO EXIT	II	The aircraft must leave holding immediately to satisfy fuel reserve requirements. (Extra fuel is zero).
T.O SPEEDS TOO LOW	II	This message appears if the inserted V1, VR, V2 speeds do not satisfy the existing regulatory conditions regarding VMCG/VMCA and VS1G speeds.
TOO STEEP PATH AHEAD	II	The system displays this message in cruise phase if the aircraft is within 150 NM of its destination or in descent or approach phase and in NAV mode and the descent profile contains a segment that is too steep.
TUNE BBB FFF.FF	II	The system cannot autotune the VOR for approach or position because of a manual VOR selection.
TURN AREA EXCEEDANCE	II	This message is displayed 1.5 min before entry of the PI leg, when in NAV mode, if the PI lateral path exceed the protection envelope defined in the Navigation database.

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MESSAGE	TYPE	CONDITIONS
UNKNOWN PROGRAM PIN	II	The system has been unable to initialize because of an incompatible or undefined aircraft pin program combination (A/C type, engine type, VMO/MMO parity) in the FMGC software.
UPLINK INSERT IN PROG (ACARS msg)	II	Displayed when an uplink message is currently inserted in the FMGS.
USING COST INDEX-NNN	I	This message is displayed when the system contains a flight plan, and the flight crew tries to enter a zero fuel weight or a gross weight into it before defining a Cost Index (CI). (In this case, the FMS defaults to the Cost Index from the last flight). It is also displayed when the flight crew inserts the ALTN F-PLN (in this case, the FMS defaults the cost index to 0).
V1/VR/V2 DISAGREE	II	This message is displayed when the entered V1, VR and V2 speeds do not satisfy the condition V1 ≤ VR ≤ V2.
WAIT FOR SYSTEM RESPONSE	I	During the time between a subsystem selection and the display of the subsystem page, the MCDU MENU page remains displayed with this message.
WIND UPLINK PENDING (ACARS msg)	II	A temporary flight plan exists or a DIR TO page is displayed and a wind uplink is received and stored.
WIND/TEMP DATA UPLK (ACARS msg)	II	Uplink wind message has been received.
WIND/TEMP UPLK EXISTS (ACARS msg)	I	A flight plan modification (active or secondary) is attempted when uplink winds are not inserted yet.
XXXX IS DESELECTED	I	The flight crew attempts to enter a deselected NAVAID, via the SELECTED NAVAID page, that has already been deselected.

MCDU MESSAGE LIST

Ident.: DSC-22_20-50-20-35-00000918.0037001 / 28 NOV 19

2 **Applicable to: MSN 10949-11522, 11572-11597**

Messages displayed on the MCDU are of two types and displayed in two colors.

Type I : A direct result of a pilot action;
Type II : Information about a situation, or a call for pilot action;
Type II messages are stored in a first-in/first-out message queue (5 messages max)
They are suppressed, if correct data is entered or when they no longer apply
The flight crew can clear all messages by pressing the CLEAR key on the MCDU console.
Amber : Important
White : Less important

MESSAGE	TYPE	CONDITIONS
A/C POSITION INVALID	II	The aircraft position has become invalid. If the message has been cleared and the flight crew attempts to call up the HOLD at PPOS or DIR TO page while the aircraft position is still invalid, then the message is displayed again.
ACT RTE UPLINK (ACARS msg)	II	A flight plan is stored in the active flight plan.
ALIGN IRS	II	Appears when the IRS are ready for alignment, but the INIT A page is not displayed on either side of the flight deck. The ALIGN IRS message requires that one of the flight crew call up the IRS INIT page, to align the IRS.
ALT CSTR ABOVE CRZ FL	II	This appears when a flight plan altitude constraint has been ignored because the flight crew has inserted a cruise flight level or step-down altitude that is strictly below the flight plan constraint.
AREA RNP IS XX-XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the default RNP value associated to the current flight area and when there is no RNP value defined in the navigation database for the active leg or route.
AWY/WPT MISMATCH	I	The pilot entered VIA on the AIRWAYS page does not contain the revised point. If you enter a second airway IDENT, it must contain the first airway ending point.
BLOCK IGNORES RTA	II	A time constraint existing at initiation of flight planning, or an entry of a time constraint made after initiation of flight planning, are ignored by the fuel planning function.
CABIN RATE EXCEEDED	II	This message appears when the aircraft gets within 200 NM of the destination and the computed rate of descent makes it impossible for the cabin to be repressurized at the maximum rate.
CHECK ALTN WIND (ACARS msg)	II	The uplinked alternate cruise flight level differs from the defaulted alternate cruise flight level.
CHECK APPR SELECTION *EFIS PFD (FMA)	II	Displayed when a NON-ILS or non GLS approach is part of the F-PLN and an ILS/GLS is manually tuned on RAD NAV page. This message reminds the flight crew that available guidance modes for the approach are APP NAV/FINAL. Displayed when in cruise at less than 100 NM from the top of descent or in descent or approach phase.
CHECK CO RTE (ACARS msg)	II	The uplinked company route identifier differs from the one specified in the request.
CHECK DATA BASE CYCLE	II	The current date does not match the effective date of the active database, and someone attempts to enter a FROM/TO or CO RTE.
CHECK IRS 1(2)(3)/FM POSITION	II	Each IRS position is compared to the FM position. The difference is greater than a threshold function of time.
CHECK IRS/AIRPORT POS	I	The distance between ADIRS alignment position and the NAV Database Airport Reference Point is at least 5 NM

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MESSAGE	TYPE	CONDITIONS
CHECK DEST DATA (ACARS msg)	II	The aircraft is at 180 NM from destination and the destination QNH, TEMP or WIND displayed on the PERF APPR page received by ACARS uplink has to be checked. If a modification of these parameters is performed creating a conflict with previous data, the message is triggered again.
CHECK FLT NBR (ACARS msg)	II	The uplinked flight number differs from the flight number specified in the request.
CHECK MIN DEST FOB	II	This message appears when the flight crew has manually entered the MIN DEST FOB value, and MIN DEST FOB is lower than ALTN + FINAL.
CHECK NORTH REF * EFIS ND	II	The MAG/TRUE sw does not correspond to the airport MAG/TRUE bearing reference (as stored in the FMGS navigation database), either at the departure airport (during preflight), or at the destination airport (when entering the ARRIVAL area).
CHECK QFE	II	This appears at the transition from QNH to QFE reference, when the QFE altitude differs by more than 100 ft from the predicted altitude, with the QNH set on the MCDU by means of the airport elevation in the NAV database.
CHECK TAKEOFF DATA	II	Following a flight crew entry or modification of one of the take-off parameters, there may be an inconsistency between the take-off runway or the TO shift and V1, VR, V2, FLEX TO temperature or derated level. The flight crew activated the secondary F-PLN in PREFLIGHT or DONE phase.
CHECK WEIGHT	II	- The gross weights (GW) computed by the flight management computer (FMC) and the flight augmentation computer (FAC) disagree by more than 7 t (7.7 US tons) (in flight only), or - An active secondary or swap active is performed and the ZFWCG or ZFW of the active F-PLN differs from the ZFWCG or ZFW in SEC F-PLN (before engine start), or - An active secondary or swap active is performed and the ZFW of the active F-PLN differs from the ZFW in SEC F-PLN by more than 5 t (after engine start).
CLK IS TAKEOFF TIME	II	This appears when the flight crew has entered an Estimated Takeoff Time (ETT), and the actual time is equal to ETT.
CLOCK/GPS TIME DIFF XX	II	Aircraft clock time and GPS time differ by more than XX minutes.
CROSSLOAD ABORTED	II	Message displayed on the transmitting MCDU, indicating an error in the transmission process.
CROSSLOAD COMPLETE	II	The database crossload from one FMGC to the other was successfully completed.
CRZ FL ABOVE MAX FL	II	This appears when the flight crew enters a cruise altitude that is above the computed maximum altitude.

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MESSAGE	TYPE	CONDITIONS
CSTR DEL UP TO WPT 01	II	This appears when constraints get deleted because the aircraft transitions to a go-around flight phase, before the FMGS sequences the flight plan destination.
DELETING OFFSET	II	This appears when the system is deleting an offset automatically, which it does under certain specific conditions, such as: - Change of active leg due to lateral revision. - Termination of next leg at destination runway and the current distance to go is less than or equal to the distance required to reach the path, or the next leg is not a CF, FM or TF leg.
DEST/ALTN MISMATCH	I	The pilot attempts to enter an alternate CO RTE (which starts at an origin that is not the primary flight plan destination).
DEST EFOB BELOW MIN	II	The EFOB at destination calculated by the FMS is less than the MIN DEST FOB value specified on the FUEL PRED page, for more than 2 min. The message is triggered in flight, except during Takeoff and Climb phases.
DIR TO IN PROCESS	I	The flight crew calls up the vertical or lateral revision page on one MCDU while the direct to page is displayed on the other MCDU.
ENTER DEST DATA	II	The flight crew has not entered wind, QNH, or temperature for the destination, and the aircraft is 180 NM out.
ENTRY OUT OF RANGE	I	The flight crew attempts to enter data that is out of the range specified for the selected field.
FLT NBR UPLINK (ACARS msg)	II	A flight number has been added to the uplink flight plan without previous request.
F-PLN ELEMENT RETAINED	I	The flight crew attempts to delete stored NAVAIDs, waypoints or runways that are contained in any flight plan or that are being tuned.
F-PLN FULL	II	There is not enough memory in the flight plan allotment for the computer to accept more flight plan data.
FMS 1/FMS 2 A/C STS DIFF	II	This message always precedes a transition to independent mode, and appears at power-up if the system detects a difference in one of the following: - NAV database serial number - Performance database - FM operational program - Aircraft and airline program pins
FMS 1/FMS 2 GW DIFF	II	Onside and offside aircraft weight differ by 2 t or more.
FMS 1/FMS 2 PGM PIN DIFF	II	Onside and offside program pins are different.
FMS 1/FMS 2 POS DIFF	II	Onside and offside positions differ by 0.5 NM or more (5 NM when GPS is not installed).
FMS 1/FMS 2 SPD TGT DIFF	II	Onside and offside target speeds displayed on the PFD differ by 5 kt or more.

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MESSAGE	TYPE	CONDITIONS
FMS SETTING SPD/RTA	II	Displayed when the system recomputes its managed speed target to satisfy the RTA constraints.
FORMAT ERROR	I	A data entry does not meet the specified entry format for a given field.
GPS PRIMARY LOST (also displayed on ND)	II	Displayed when GPS PRIMARY mode is lost.
GPS PRIMARY	II	Displayed when the FMS is transitioning to GPS PRIMARY
GPS IS DESELECTED	II	This message appears when GPS has been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
INDEPENDENT OPERATION	II	The FMGCs operate independently of each other.
INITIALIZE WEIGHT/CG	II	The zero-fuel weight or block fuel (FOB) is undefined after engine start.
INVALID FLT NBR UPLINK (ACARS msg)	II	The uplink message contains a valid flight plan but no flight number.
INVALID PERF UPLINK (ACARS msg)	II	Performance uplink message has been rejected.
INVALID RTE UPLINK (ACARS msg)	II	An error was detected into the uplink message and it is rejected.
INVALID TAKEOFF UPLINK (ACARS msg)	II	The current uplink takeoff data message is rejected.
INVALID WIND/TEMP UPLK (ACARS msg)	II	The current uplink wind message is rejected.
LARGE NDB NOT ALLOWED	II	The size of the Navigation Database loaded is not supported by the FMS.
LAT DISCONT AHEAD	II	The next leg is a discontinuity and the aircraft is 30 s from flying the leg.
LIST OF 10 IN USE	I	The flight crew has tried to enter more than ten stored runways into the database, and all of the first ten are included in a flight plan or a pilot-stored route.
LIST OF 20 IN USE	I	The flight crew has tried to create a NAVAID when 20 are already in use (in a flight plan or pilot-stored routes).
LIST OF 99 IN USE	I	The flight crew has tried to store a pilot-defined waypoint when 99 are already in use (in a flight plan or pilot-stored routes).
MACH SEGMENT DELETED	II	A constant Mach segment of the active flight plan has been automatically deleted. This occurs when the secondary flight plan or the alternate is activated, or engine out is detected or when the flight phase changes from CRZ to another one.
MCDU OVERHEATED	II	This message is displayed for 15 s in case of MCDU overheating.
MORE DRAG (EFIS PFD)	II	DES mode is engaged, idle is selected and the aircraft must decelerate in order to recover the path, or to respect an altitude constraint, a speed limit or a speed constraint.

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MESSAGE	TYPE	CONDITIONS
NAV ACCUR DOWNGRAD (also displayed on ND)	II	NAV accuracy has been downgraded from HIGH to LOW. (See FMGS principles for an explanation).
NAV ACCUR UPGRAD (*EFIS ND)	II	NAV accuracy has been upgraded from LOW to HIGH.
NEW ACC ALT-HHHH	II	The acceleration altitude has been changed.
NEW CRZ ALT-HHHHH	II	The cruise altitude has been changed.
NEW THR RED ALT-HHHH	II	The thrust reduction altitude has been changed.
NO ANSWER TO REQUEST (ACARS msg)	I	A crew request, was previously sent to the ground and no answer has been received for 4 min.
NO INTERSECTION FOUND	I	The system could not find any common waypoint nor intersection point through the airway.
NON UNIQUE ROUTE IDENT	I	The flight crew has tried to enter on the new route page a company route IDENT that is identical to an existing company route IDENT (pilot-defined or in the database).
NOT ALLOWED	I	Data entry is not allowed in the selected field, or a selection action is not allowed.
NOT ALLOWED IN NAV	I	An attempt to modify the TO waypoint is made while in NAV mode.
NO NAV INTERCEPT	II	It is triggered, when NAV mode is armed and, no INTERCEPT waypoint exists before the TO waypoint.
NOT IN DATA BASE	I	The pilot is trying to enter or call up a company route IDENT, a FROM/TO pair, a place defined by place-bearing-distance (PBD) or place-bearing/place-bearing (PBX) or an airport NAVAID, waypoint runway, or NAVAID frequency/channel (including pilot-defined elements) that is not in the current database.
NOT XMITTED TO ACARS (ACARS msg)	II	A pilot request or a crew report was sent but the communication was not established or not acknowledged.
ONLY SPD ENTRY ALLOWED	I	The pilot is trying to enter a Mach number for a preselected speed value on the CLIMB page.
OPP FMGC IN PROCESS	II	The offside FMGC is unhealthy, and the FM system mode is SINGLE. The message indicates that the MCDU on which the message is displayed is being driven by the FMGC on the other side.
PAGE UPDATE IN PROCESS	I	The pilot presses a key on the flight plan page while predictions are being updated.
PERF DATA UPLINK (ACARS msg)	II	Performance data are received from ground.
PLACE/D IN TRANSITION	I	If a place/distance waypoint is defined within a pre-planned “fixed turn radius” transition, the entry is rejected and the “PLACE/D IN TRANSITION” scratchpad message is displayed.
PLEASE WAIT	I	Resynchronization between both FMGCs is in progress.

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MESSAGE	TYPE	CONDITIONS
PROCEDURE RNP IS XX.XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the RNP value defined in the navigation database for the active leg or route.
PRINTER NOT AVAILABLE (ACARS msg)	II	A printer communication error has been detected while printing a report. The printing is terminated.
RADIONAV IS DESELECTED	II	Radio navaids have been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
REF/GPS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the GPS position.
REF/LAST IRS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the last stored IRS position.
REVISIONS NOT STORED	II	This message, displayed when a pilot-defined route or company route (active or secondary flight plan) is stored, indicates that the following elements are not retained: - Pilot-entered holds - Offsets - Modifications to terminal area procedures - Pilot-entered constraints - Pseudo waypoints - Step at optimum.
RTA DELETED	II	A time constraint is automatically deleted: - In case of engine-out - When entering the holding pattern - In case of go-around - At phase transition from descent or approach to climb or cruise - When a time constraint is inserted in the same flight plan at a different waypoint - When the alternate flight plan is activated - When a DIR TO/ABEAM is performed, only if the time constrained waypoint is projected as an ABEAM waypoint - The time constrained waypoint is cleared or sequenced (regardless of active lateral mode) - Valid clock data is lost - The time constraint belongs to the active flight plan and the secondary flight plan is activated - The time constraint belongs to the secondary flight plan and COPY ACTIVE is performed.
RTA EXISTS	I	Displayed if the pilot tries to clear an estimated takeoff time defined by the system.

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MESSAGE	TYPE	CONDITIONS
RTA MISSED AT WPT 01	II	While a time constraint is defined in the active flight plan and this time constraint is predicted as "missed" by the FMS.
RTE DATALINK IN PROG (ACARS msg)	I	A flight plan modification is performed after a F-PLN INIT request has been sent. This message is displayed until the uplink is entirely received.
RWY/LS MISMATCH	II	- During climb, cruise, (ILS or GLS) descent approach, or go-around, the LS frequency entered on the RAD NAV page does not match the LS associated with the destination runway. - During preflight or takeoff, the LS frequency entered on the RAD NAV page does not match the LS associated with the takeoff runway.
SEC RTE UPLINK (ACARS msg)	II	A flight plan is stored in the secondary flight plan.
SELECT DESIRED SYSTEM	I	The MCDU displays its MENU page.
SELECT TRUE (also displayed on the ND)	II	The MAG/TRUE sw is set to MAG, while the IRS send true HDG/TRK.
SENSOR IS INVALID	I	- The pilot has selected FF or FQ, or FF + FQ, or FQ + FF on the FUEL PRED page and the sole sensor or both of the selected sensors are invalid, or - The flight crew has entered fuel on board only, and the FF sensor is invalid.
SET GREEN DOT SPEED (SET GREEN DOT displayed on PFD)	II	This message appears when the following conditions are all met: - Engine-out condition - Aircraft in selected speed mode - FCU-selected speed equal to or greater than green-dot speed +10 kt, and ALT* or ALT not active, or FCU-selected speed equal to or less than green-dot speed -10 kt.
SET HOLD SPEED (also displayed on PFD)	II	This instruction appears when the aircraft is in selected speed, the pilot has inserted a hold in the flight plan, the aircraft is 30 s or less from the point where it must start decelerating towards hold speed, and the selected speed differs from the hold speed by more than 5 kt.
SET MANAGED SPEED or CHECK SPEED MODE (Also displayed on PFD)	II	The target speed is selected for the current phase, but there is no preselected speed for the next flight phase. When this is so, one of these messages is displayed at transitions from climb to cruise, and from climb or cruise to descent. The message is always displayed at the transition to descent from climb or cruise if selected speed is active. It is not displayed if managed speed is active.

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MESSAGE	TYPE	CONDITIONS
SPECIF NDB UNAVAIL	II	The NDB to be autotuned (specified for a NDB approach) is not available.
SPECIF VOR-D UNAVAIL (also displayed on ND)	II	- The VOR, VOR-DME, or VORTAC to be autotuned (specified for an RNAV or VOR approach) has previously been deselected by the flight crew, or - The bearing, the frequency, or the IDENT of the VOR (or VORDME or VORTAC) to be autotuned is invalid.
SPD ERROR AT WPT 01	II	In lateral managed flight, the system predicts that the aircraft will miss a speed constraint by more than 10 kt. When the prediction changes to bring the miss within 5 kt, the message is cleared.
SPD LIM EXCEEDED	II	The aircraft is more that 150 ft below the speed limit altitude and more than 10 kt over green dot or the speed limit (which ever is smaller).
STEP ABOVE MAX FL	II	The pilot has entered a step altitude that is above the predicted maximum altitude.
STEP AHEAD	II	Indicates that the aircraft is within 20 NM of the active step point.
STEP DELETED	II	A step has been automatically deleted.
STORED ROUTES FULL	I	The system already contains five pilot-defined routes. (Only five are allowed.)
T/D REACHED (Also displayed on PFD)	II	One of these messages appears when the aircraft has reached the T/D in managed speed and it has not yet begun the descent.
TAKEOFF DATA UPLINK (ACARS msg)	II	A takeoff data message is received.
TEMPORARY F-PLN EXISTS	I	The flight crew has selected any key (except ERASE or INSERT) or attempted a flight planning operation on the secondary flight plan while the system is displaying a temporary flight plan.
TIME MARKER LIST FULL	I	The system already contains four time markers. (Only four are allowed).
TIME TO EXIT	II	The aircraft must leave holding immediately to satisfy fuel reserve requirements. (Extra fuel is zero).
T.O SPEEDS TOO LOW	II	This message appears if the inserted V1, VR, V2 speeds do not satisfy the existing regulatory conditions regarding VMCG/VMCA and VS1G speeds.
TOO STEEP PATH AHEAD	II	The system displays this message in cruise phase if the aircraft is within 150 NM of its destination or in descent or approach phase and in NAV mode and the descent profile contains a segment that is too steep.
TUNE BBB FFF.FF	II	The system cannot autotune the VOR for approach or position because of a manual VOR selection.

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MESSAGE	TYPE	CONDITIONS
TURN AREA EXCEEDANCE	II	This message is displayed 1.5 min before entry of the PI leg, when in NAV mode, if the PI lateral path exceed the protection envelope defined in the Navigation database.
UNKNOWN PROGRAM PIN	II	The system has been unable to initialize because of an incompatible or undefined aircraft pin program combination (A/C type, engine type, VMO/MMO parity) in the FMGC software.
UPLINK INSERT IN PROG (ACARS msg)	II	Displayed when an uplink message is currently inserted in the FMGS.
USING COST INDEX-NNN	I	This message is displayed when the system contains a flight plan, and the flight crew tries to enter a zero fuel weight or a gross weight into it before defining a Cost Index (CI). (In this case, the FMS defaults to the Cost Index from the last flight). It is also displayed when the flight crew inserts the ALTN F-PLN (in this case, the FMS defaults the cost index to 0).
V1/VR/V2 DISAGREE	II	This message is displayed when the entered V1, VR and V2 speeds do not satisfy the condition V1 ≤ VR ≤ V2.
WAIT FOR SYSTEM RESPONSE	I	During the time between a subsystem selection and the display of the subsystem page, the MCDU MENU page remains displayed with this message.
WIND UPLINK PENDING (ACARS msg)	II	A temporary flight plan exists or a DIR TO page is displayed and a wind uplink is received and stored.
WIND/TEMP DATA UPLK (ACARS msg)	II	Uplink wind message has been received.
WIND/TEMP UPLK EXISTS (ACARS msg)	I	A flight plan modification (active or secondary) is attempted when uplink winds are not inserted yet.
XXXX IS DESELECTED	I	The flight crew attempts to enter a deselected NAVAID, via the SELECTED NAVAID page, that has already been deselected.

MCDU MESSAGE LIST

Ident.: DSC-22_20-50-20-35-00000918.0034001 / 28 NOV 19
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Messages displayed on the MCDU are of two types and displayed in two colors.

Type I : A direct result of a pilot action;
Type II : Information about a situation, or a call for pilot action;
Type II messages are stored in a first-in/first-out message queue (5 messages max)
They are suppressed, if correct data is entered or when they no longer apply
The flight crew can clear all messages by pressing the CLEAR key on the MCDU console.
Amber : Important
White : Less important

MESSAGE	TYPE	CONDITIONS
A/C POSITION INVALID	II	The aircraft position has become invalid. If the message has been cleared and the flight crew attempts to call up the HOLD at PPOS or DIR TO page while the aircraft position is still invalid, then the message is displayed again.
ACT RTE UPLINK (ACARS msg)	II	A flight plan is stored in the active flight plan.
ALIGN IRS	II	Appears when the IRS are ready for alignment, but the INIT A page is not displayed on either side of the flight deck. The ALIGN IRS message requires that one of the flight crew call up the IRS INIT page, to align the IRS.
AREA RNP IS XX-XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the default RNP value associated to the current flight area and when there is no RNP value defined in the navigation database for the active leg or route.
AWY/WPT MISMATCH	I	The pilot entered VIA on the AIRWAYS page does not contain the revised point. If you enter a second airway IDENT, it must contain the first airway ending point.
BLOCK IGNORES RTA	II	A time constraint existing at initiation of flight planning, or an entry of a time constraint made after initiation of flight planning, are ignored by the fuel planning function.
CABIN RATE EXCEEDED	II	This message appears when the aircraft gets within 200 NM of the destination and the computed rate of descent makes it impossible for the cabin to be repressurized at the maximum rate.
CHECK ALTN WIND (ACARS msg)	II	The uplinked alternate cruise flight level differs from the defaulted alternate cruise flight level.
CHECK APPR SELECTION *EFIS PFD (FMA)	II	Displayed when a NON-ILS or non GLS approach is part of the F-PLN and an ILS/GLS is manually tuned on RAD NAV page. This message reminds the flight crew that available guidance modes for the approach are APP NAV/FINAL. Displayed when in cruise at less than 100 NM from the top of descent or in descent or approach phase.
CHECK CO RTE (ACARS msg)	II	The uplinked company route identifier differs from the one specified in the request.
CHECK DATA BASE CYCLE	II	The current date does not match the effective date of the active database, and someone attempts to enter a FROM/TO or CO RTE.
CHECK IRS 1(2)(3)/FM POSITION	II	Each IRS position is compared to the FM position. The difference is greater than a threshold function of time.
CHECK IRS/AIRPORT POS	I	The distance between ADIRS alignment position and the NAV Database Airport Reference Point is at least 5 NM

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MESSAGE	TYPE	CONDITIONS
CHECK DEST DATA (ACARS msg)	II	The aircraft is at 180 NM from destination and the destination QNH, TEMP or WIND displayed on the PERF APPR page received by ACARS uplink has to be checked. If a modification of these parameters is performed creating a conflict with previous data, the message is triggered again.
CHECK FLT NBR (ACARS msg)	II	The uplinked flight number differs from the flight number specified in the request.
CHECK MIN DEST FOB	II	This message appears when the flight crew has manually entered the MIN DEST FOB value, and MIN DEST FOB is lower than ALTN + FINAL.
CHECK NORTH REF * EFIS ND	II	The MAG/TRUE sw does not correspond to the airport MAG/TRUE bearing reference (as stored in the FMGS navigation database), either at the departure airport (during preflight), or at the destination airport (when entering the ARRIVAL area).
CHECK QFE	II	This appears at the transition from QNH to QFE reference, when the QFE altitude differs by more than 100 ft from the predicted altitude, with the QNH set on the MCDU by means of the airport elevation in the NAV database.
CHECK TAKEOFF DATA	II	Following a flight crew entry or modification of one of the take-off parameters, there may be an inconsistency between the take-off runway or the TO shift and V1, VR, V2, FLEX TO temperature or derated level. The flight crew activated the secondary F-PLN in PREFLIGHT or DONE phase.
CHECK WEIGHT	II	The gross weights (GW) computed by the flight management computer (FMC) and the flight augmentation computer (FAC) disagree by more than 7 t (7.7 US tons).
CLK IS TAKEOFF TIME	II	This appears when the flight crew has entered an Estimated Takeoff Time (ETT), and the actual time is equal to ETT.
CLOCK/GPS TIME DIFF XX	II	Aircraft clock time and GPS time differ by more than XX minutes.
CROSSLOAD ABORTED	II	Message displayed on the transmitting MCDU, indicating an error in the transmission process.
CROSSLOAD COMPLETE	II	The database crossload from one FMGC to the other was successfully completed.
CRZ FL ABOVE MAX FL	II	This appears when the flight crew enters a cruise altitude that is above the computed maximum altitude.
CSTR DEL ABOVE CRZ FL	II	This appears when a flight plan altitude constraint has been deleted because the flight crew has inserted a cruise flight level, or step-down altitude that is at or below the flight plan constraint.
CSTR DEL UP TO WPT 01	II	This appears when constraints get deleted because the aircraft transitions to a go-around flight phase, before the FMGS sequences the flight plan destination.

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MESSAGE	TYPE	CONDITIONS
DECELERATE or T/D REACHED (Also displayed on PFD)	II	One of these messages appears when the aircraft has reached the T/D in managed speed and it has not yet begun the descent.
DELETING OFFSET	II	This appears when the system is deleting an offset automatically, which it does under certain specific conditions, such as: - Change of active leg due to lateral revision. - Termination of next leg at destination runway and the current distance to go is less than or equal to the distance required to reach the path, or the next leg is not a CF, FM or TF leg.
DEST/ALTN MISMATCH	I	The pilot attempts to enter an alternate CO RTE (which starts at an origin that is not the primary flight plan destination).
DEST EFOB BELOW MIN	II	The EFOB at destination calculated by the FMS is less than the MIN DEST FOB value specified on the FUEL PRED page, for more than 2 min. The message is triggered in flight, except during Takeoff and Climb phases.
DIR TO IN PROCESS	I	The flight crew calls up the vertical or lateral revision page on one MCDU while the direct to page is displayed on the other MCDU.
ENTER DEST DATA	II	The flight crew has not entered wind, QNH, or temperature for the destination, and the aircraft is 180 NM out.
ENTRY OUT OF RANGE	I	The flight crew attempts to enter data that is out of the range specified for the selected field.
FLT NBR UPLINK (ACARS msg)	II	A flight number has been added to the uplink flight plan without previous request.
F-PLN ELEMENT RETAINED	I	The flight crew attempts to delete stored NAVAIDs, waypoints or runways that are contained in any flight plan or that are being tuned.
F-PLN FULL	II	There is not enough memory in the flight plan allotment for the computer to accept more flight plan data.
FMS 1/FMS 2 A/C STS DIFF	II	This message always precedes a transition to independent mode, and appears at power-up if the system detects a difference in one of the following: - NAV database serial number - Performance database - FM operational program - Aircraft and airline program pins
FMS 1/FMS 2 GW DIFF	II	Onside and offside aircraft weight differ by 2 t or more.
FMS 1/FMS 2 PGM PIN DIFF	II	Onside and offside program pins are different.
FMS 1/FMS 2 POS DIFF	II	Onside and offside positions differ by 0.5 NM or more (5 NM when GPS is not installed).
FMS 1/FMS 2 SPD TGT DIFF	II	Onside and offside target speeds displayed on the PFD differ by 5 kt or more.

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MESSAGE	TYPE	CONDITIONS
FORMAT ERROR	I	A data entry does not meet the specified entry format for a given field.
GPS PRIMARY LOST (also displayed on ND)	II	Displayed when GPS PRIMARY mode is lost.
GPS PRIMARY	II	Displayed when the FMS is transitioning to GPS PRIMARY
GPS IS DESELECTED	II	This message appears when GPS has been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
INDEPENDENT OPERATION	II	The FMGCs operate independently of each other.
INITIALIZE WEIGHT/CG	II	The zero-fuel weight or block fuel (FOB) is undefined after engine start.
INVALID FLT NBR UPLINK (ACARS msg)	II	The uplink message contains a valid flight plan but no flight number.
INVALID PERF UPLINK (ACARS msg)	II	Performance uplink message has been rejected.
INVALID RTE UPLINK (ACARS msg)	II	An error was detected into the uplink message and it is rejected.
INVALID TAKEOFF UPLINK (ACARS msg)	II	The current uplink takeoff data message is rejected.
INVALID WIND UPLINK (ACARS msg)	II	The current uplink wind message is rejected.
LAT DISCONT AHEAD	II	The next leg is a discontinuity and the aircraft is 30 s from flying the leg.
LIST OF 10 IN USE	I	The flight crew has tried to enter more than ten stored runways into the database, and all of the first ten are included in a flight plan or a pilot-stored route.
LIST OF 20 IN USE	I	The flight crew has tried to create a PBD, LAT/LONG, or PBX, or store a pilot-defined waypoint or NAVAID when 20 are already in use (in a flight plan or pilot-stored routes).
MACH SEGMENT DELETED	II	A constant Mach segment of the active flight plan has been automatically deleted. This occurs when the secondary flight plan or the alternate is activated, or engine out is detected or when the flight phase changes from CRZ to another one.
MCDU OVERHEATED	II	This message is displayed for 15 s in case of MCDU overheating.
MORE DRAG (EFIS PFD)	II	DES mode is engaged, idle is selected and the aircraft must decelerate in order to recover the path, or to respect an altitude constraint, a speed limit or a speed constraint.
NAV ACCUR DOWNGRAD (also displayed on ND)	II	NAV accuracy has been downgraded from HIGH to LOW. (See FMGS principles for an explanation).
NAV ACCUR UPGRAD (*EFIS ND)	II	NAV accuracy has been upgraded from LOW to HIGH.
NEW ACC ALT-HHHH	II	The acceleration altitude has been changed.

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MESSAGE	TYPE	CONDITIONS
NEW CRZ ALT-HHHHH	II	The cruise altitude has been changed.
NEW THR RED ALT-HHHH	II	The thrust reduction altitude has been changed.
NO ANSWER TO REQUEST (ACARS msg)	I	A crew request, was previously sent to the ground and no answer has been received for 4 min.
NO INTERSECTION FOUND	I	The system could not find any common waypoint nor intersection point through the airway.
NON UNIQUE ROUTE IDENT	I	The flight crew has tried to enter on the new route page a company route IDENT that is identical to an existing company route IDENT (pilot-defined or in the database).
NOT ALLOWED	I	Data entry is not allowed in the selected field, or a selection action is not allowed.
NOT ALLOWED IN NAV	I	An attempt to modify the TO waypoint is made while in NAV mode.
NO NAV INTERCEPT	II	It is triggered, when NAV mode is armed and, no INTERCEPT waypoint exists before the TO waypoint.
NOT IN DATA BASE	I	The pilot is trying to enter or call up a company route IDENT, a FROM/TO pair, a place defined by place-bearing-distance (PBD) or place-bearing/place-bearing (PBX) or an airport NAVAID, waypoint runway, or NAVAID frequency/channel (including pilot-defined elements) that is not in the current database.
NOT XMITTED TO ACARS (ACARS msg)	II	A pilot request or a crew report was sent but the communication was not established or not acknowledged.
ONLY SPD ENTRY ALLOWED	I	The pilot is trying to enter a Mach number for a preselected speed value on the CLIMB page.
OPP FMGC IN PROCESS	II	The offside FMGC is unhealthy, and the FM system mode is SINGLE. The message indicates that the MCDU on which the message is displayed is being driven by the FMGC on the other side.
PAGE UPDATE IN PROCESS	I	The pilot presses a key on the flight plan page while predictions are being updated.
PERF DATA UPLINK (ACARS msg)	II	Performance data are received from ground.
PLACE/D IN TRANSITION	I	If a place/distance waypoint is defined within a pre-planned “fixed turn radius” transition, the entry is rejected and the “PLACE/D IN TRANSITION” scratchpad message is displayed.
PLEASE WAIT	I	Resynchronization between both FMGCs is in progress.
PROCEDURE RNP IS XX.XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the RNP value defined in the navigation database for the active leg or route.
PRINTER NOT AVAILABLE (ACARS msg)	II	A printer communication error has been detected while printing a report. The printing is terminated.

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MESSAGE	TYPE	CONDITIONS
RADIONAV IS DESELECTED	II	Radio navaids have been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
REF/GPS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the GPS position.
REF/LAST IRS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the last stored IRS position.
REVISIONS NOT STORED	II	This message, displayed when a pilot-defined route or company route (active or secondary flight plan) is stored, indicates that the following elements are not retained: - Pilot-entered holds - Offsets - Modifications to terminal area procedures - Pilot-entered constraints - Pseudo waypoints - Step at optimum.
RTA DELETED	II	A time constraint is automatically deleted: - In case of engine-out - When entering the holding pattern - In case of go-around - At phase transition from descent or approach to climb or cruise - When a time constraint is inserted in the same flight plan at a different waypoint - When the alternate flight plan is activated - When a DIR TO/ABEAM is performed, only if the time constrained waypoint is projected as an ABEAM waypoint - The time constrained waypoint is cleared or sequenced (regardless of active lateral mode) - Valid clock data is lost - The time constraint belongs to the active flight plan and the secondary flight plan is activated - The time constraint belongs to the secondary flight plan and COPY ACTIVE is performed.
RTA EXISTS	I	Displayed if the pilot tries to clear an estimated takeoff time defined by the system.
RTE DATALINK IN PROG (ACARS msg)	I	A flight plan modification is performed after a F-PLN INIT request has been sent. This message is displayed until the uplink is entirely received.

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MESSAGE	TYPE	CONDITIONS
RWY/LS MISMATCH	II	- During climb, cruise, (ILS or GLS) descent approach, or go-around, the LS frequency entered on the RAD NAV page does not match the LS associated with the destination runway. - During preflight or takeoff, the LS frequency entered on the RAD NAV page does not match the LS associated with the takeoff runway.
SEC RTE UPLINK (ACARS msg)	II	A flight plan is stored in the secondary flight plan.
SELECT DESIRED SYSTEM	I	The MCDU displays its MENU page.
SELECT TRUE (also displayed on the ND)	II	The MAG/TRUE sw is set to MAG, while the IRS send true HDG/TRK.
SENSOR IS INVALID	I	- The pilot has selected FF or FQ, or FF + FQ, or FQ + FF on the FUEL PRED page and the sole sensor or both of the selected sensors are invalid, or - The flight crew has entered fuel on board only, and the FF sensor is invalid.
SET GREEN DOT SPEED (SET GREEN DOT displayed on PFD)	II	This message appears when the following conditions are all met: - Engine-out condition - Aircraft in selected speed mode - FCU-selected speed equal to or greater than green-dot speed +10 kt, and ALT* or ALT not active, or FCU-selected speed equal to or less than green-dot speed -10 kt.
SET HOLD SPEED (also displayed on PFD)	II	This instruction appears when the aircraft is in selected speed, the pilot has inserted a hold in the flight plan, the aircraft is 30 s or less from the point where it must start decelerating towards hold speed, and the selected speed differs from the hold speed by more than 5 kt.
SET MANAGED SPEED or CHECK SPEED MODE (Also displayed on PFD)	II	The target speed is selected for the current phase, but there is no preselected speed for the next flight phase. When this is so, one of these messages is displayed at transitions from climb to cruise, and from climb or cruise to descent. The message is always displayed at the transition to descent from climb or cruise if selected speed is active. It is not displayed if managed speed is active.
SETTING SPD/RTA	II	Displayed when the system recomputes its managed speed target to satisfy the RTA constraints.
SPECIF NDB UNAVAIL	II	The NDB to be autotuned (specified for a NDB approach) is not available.

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MESSAGE	TYPE	CONDITIONS
SPECIF VOR-D UNAVAIL (also displayed on ND)	II	- The VOR, VOR-DME, or VORTAC to be autotuned (specified for an RNAV or VOR approach) has previously been deselected by the flight crew, or - The bearing, the frequency, or the IDENT of the VOR (or VORDME or VORTAC) to be autotuned is invalid.
SPD ERROR AT WPT 01	II	In lateral managed flight, the system predicts that the aircraft will miss a speed constraint by more than 10 kt. When the prediction changes to bring the miss within 5 kt, the message is cleared.
SPD LIM EXCEEDED	II	The aircraft is more that 150 ft below the speed limit altitude and more than 10 kt over green dot or the speed limit (which ever is smaller).
STEP ABOVE MAX FL	II	The pilot has entered a step altitude that is above the predicted maximum altitude.
STEP AHEAD	II	Indicates that the aircraft is within 20 NM of the active step point.
STEP DELETED	II	A step has been automatically deleted.
STORED ROUTES FULL	I	The system already contains five pilot-defined routes. (Only five are allowed.)
TAKEOFF DATA UPLINK (ACARS msg)	II	A takeoff data message is received.
TEMPORARY F-PLN EXISTS	I	The flight crew has selected any key (except ERASE or INSERT) or attempted a flight planning operation on the secondary flight plan while the system is displaying a temporary flight plan.
TIME ERROR AT WPT 01	II	While the aircraft is in lateral managed flight the FMGC predicts that it will miss a time constraint.
TIME MARKER LIST FULL	I	The system already contains four time markers. (Only four are allowed).
TIME TO EXIT	II	The aircraft must leave holding immediately to satisfy fuel reserve requirements. (Extra fuel is zero).
TO SPEED TOO LOW	II	This message appears if the inserted V1, VR, V2 speeds do not satisfy the existing regulatory conditions regarding VMCG/VMCA and VS1G speeds.
TOO STEEP PATH AHEAD	II	The system displays this message in cruise phase if the aircraft is within 150 NM of its destination or in descent or approach phase and in NAV mode and the descent profile contains a segment that is too steep.
TUNE BBB FFF.FF	II	The system cannot autotune the VOR for approach or position because of a manual VOR selection.
TURN AREA EXCEEDANCE	II	This message is displayed 1.5 min before entry of the PI leg, when in NAV mode, if the PI lateral path exceed the protection envelope defined in the Navigation database.

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MESSAGE	TYPE	CONDITIONS
UNKNOWN PROGRAM PIN	II	The system has been unable to initialize because of an incompatible or undefined aircraft pin program combination (A/C type, engine type, VMO/MMO parity) in the FMGC software.
UPLINK INSERT IN PROG (ACARS msg)	II	Displayed when an uplink message is currently inserted in the FMGS.
USING COST INDEX-NNN	I	This message is displayed when the system contains a flight plan, and the flight crew tries to enter a zero fuel weight or a gross weight into it before defining a Cost Index (CI). (In this case, the FMS defaults to the Cost Index from the last flight). It is also displayed when the flight crew inserts the ALTN F-PLN (in this case, the FMS defaults the cost index to 0).
V1/VR/V2 DISAGREE	II	This message is displayed when the entered V1, VR and V2 speeds do not satisfy the condition V1 ≤ VR ≤ V2.
WAIT FOR SYSTEM RESPONSE	I	During the time between a subsystem selection and the display of the subsystem page, the MCDU MENU page remains displayed with this message.
WIND DATA UPLINK (ACARS msg)	II	Uplink wind message has been received.
WIND UPLINK EXISTS (ACARS msg)	I	A flight plan modification (active or secondary) is attempted when uplink winds are not inserted yet.
WIND UPLINK PENDING (ACARS msg)	II	A temporary flight plan exists or a DIR TO page is displayed and a wind uplink is received and stored.
XXXX IS DESELECTED	I	The flight crew attempts to enter a deselected NAVAID, via the SELECTED NAVAID page, that has already been deselected.

MCDU MESSAGE LIST

Ident.: DSC-22_20-50-20-35-00000918.0020001 / 28 NOV 19
Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324

Messages displayed on the MCDU are of two types and displayed in two colors.

Type I : A direct result of a pilot action;
Type II : Information about a situation, or a call for pilot action;

Type II messages are stored in a first-in/first-out message queue (5 messages max)
They are suppressed, if correct data is entered or when they no longer apply
The flight crew can clear all messages by pressing the CLEAR key on the MCDU console.

Amber : Important
White : Less important

MESSAGE	TYPE	CONDITIONS
A/C POSITION INVALID	II	The aircraft position has become invalid. If the message has been cleared and the flight crew attempts to call up the HOLD at PPOS or DIR TO page while the aircraft position is still invalid, then the message is displayed again.
ACT RTE UPLINK (ACARS msg)	II	A flight plan is stored in the active flight plan.
ALIGN IRS	II	Appears when the IRS are ready for alignment, but the INIT A page is not displayed on either side of the flight deck. The ALIGN IRS message requires that one of the flight crew call up the IRS INIT page, to align the IRS.
AREA RNP IS XX-XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the default RNP value associated to the current flight area and when there is no RNP value defined in the navigation database for the active leg or route.
AWY/WPT MISMATCH	I	The pilot entered VIA on the AIRWAYS page does not contain the revised point. If you enter a second airway IDENT, it must contain the first airway ending point.
BLOCK IGNORES RTA	II	A time constraint existing at initiation of flight planning, or an entry of a time constraint made after initiation of flight planning, are ignored by the fuel planning function.
CABIN RATE EXCEEDED	II	This message appears when the aircraft gets within 200 NM of the destination and the computed rate of descent makes it impossible for the cabin to be repressurized at the maximum rate.
CHECK ALTN WIND (ACARS msg)	II	The uplinked alternate cruise flight level differs from the defaulted alternate cruise flight level.
CHECK APPR SELECTION *EFIS PFD (FMA)	II	Displayed when a NON ILS approach is part of the F-PLN and an ILS is manually tuned on RAD NAV page. This message reminds the flight crew that available guidance modes for the approach are APP NAV/FINAL. Displayed when in cruise at less than 100 NM from the top of descent or in descent or approach phase.
CHECK CO RTE (ACARS msg)	II	The uplinked company route identifier differs from the one specified in the request.
CHECK DATA BASE CYCLE	II	The current date does not match the effective date of the active database, and someone attempts to enter a FROM/TO or CO RTE.
CHECK IRS 1(2)(3)/FM POSITION	II	Each IRS position is compared to the FM position. The difference is greater than a threshold function of time.
CHECK IRS/AIRPORT POS	I	The distance between ADIRS alignment position and the NAV Database Airport Reference Point is at least 5 NM

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MESSAGE	TYPE	CONDITIONS
CHECK DEST DATA (ACARS msg)	II	The aircraft is at 180 NM from destination and the destination QNH, TEMP or WIND displayed on the PERF APPR page received by ACARS uplink has to be checked. If a modification of these parameters is performed creating a conflict with previous data, the message is triggered again.
CHECK FLT NBR (ACARS msg)	II	The uplinked flight number differs from the flight number specified in the request.
CHECK MIN DEST FOB	II	This message appears when the flight crew has manually entered the MIN DEST FOB value, and MIN DEST FOB is lower than ALTN + FINAL.
CHECK NORTH REF * EFIS ND	II	The MAG/TRUE sw does not correspond to the airport MAG/TRUE bearing reference (as stored in the FMGS navigation database), either at the departure airport (during preflight), or at the destination airport (when entering the ARRIVAL area).
CHECK QFE	II	This appears at the transition from QNH to QFE reference, when the QFE altitude differs by more than 100 ft from the predicted altitude, with the QNH set on the MCDU by means of the airport elevation in the NAV database.
CHECK TAKEOFF DATA	II	Following a flight crew entry or modification of one of the take-off parameters, there may be an inconsistency between the take-off runway or the TO shift and V1, VR, V2, FLEX TO temperature or derated level. The flight crew activated the secondary F-PLN in PREFLIGHT or DONE phase.
CHECK WEIGHT	II	The gross weights (GW) computed by the flight management computer (FMC) and the flight augmentation computer (FAC) disagree by more than 7 t (7.7 US tons).
CLK IS TAKEOFF TIME	II	This appears when the flight crew has entered an Estimated Takeoff Time (ETT), and the actual time is equal to ETT.
CLOCK/GPS TIME DIFF XX	II	Aircraft clock time and GPS time differ by more than XX minutes.
CROSSLOAD ABORTED	II	Message displayed on the transmitting MCDU, indicating an error in the transmission process.
CROSSLOAD COMPLETE	II	The database crossload from one FMGC to the other was successfully completed.
CRZ FL ABOVE MAX FL	II	This appears when the flight crew enters a cruise altitude that is above the computed maximum altitude.
CSTR DEL ABOVE CRZ FL	II	This appears when a flight plan altitude constraint has been deleted because the flight crew has inserted a cruise flight level, or step-down altitude that is at or below the flight plan constraint.
CSTR DEL UP TO WPT 01	II	This appears when constraints get deleted because the aircraft transitions to a go-around flight phase, before the FMGS sequences the flight plan destination.

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MESSAGE	TYPE	CONDITIONS
DECELERATE or T/D REACHED (Also displayed on PFD)	II	One of these messages appears when the aircraft has reached the T/D in managed speed and it has not yet begun the descent.
DELETING OFFSET	II	This appears when the system is deleting an offset automatically, which it does under certain specific conditions, such as: - Change of active leg due to lateral revision. - Termination of next leg at destination runway and the current distance to go is less than or equal to the distance required to reach the path, or the next leg is not a CF, FM or TF leg.
DEST/ALTN MISMATCH	I	The pilot attempts to enter an alternate CO RTE (which starts at an origin that is not the primary flight plan destination).
DEST EFOB BELOW MIN	II	The EFOB at destination calculated by the FMS is less than the MIN DEST FOB value specified on the FUEL PRED page, for more than 2 min. The message is triggered in flight, except during Takeoff and Climb phases.
DIR TO IN PROCESS	I	The flight crew calls up the vertical or lateral revision page on one MCDU while the direct to page is displayed on the other MCDU.
ENTER DEST DATA	II	The flight crew has not entered wind, QNH, or temperature for the destination, and the aircraft is 180 NM out.
ENTRY OUT OF RANGE	I	The flight crew attempts to enter data that is out of the range specified for the selected field.
FLT NBR UPLINK (ACARS msg)	II	A flight number has been added to the uplink flight plan without previous request.
F-PLN ELEMENT RETAINED	I	The flight crew attempts to delete stored NAVAIDs, waypoints or runways that are contained in any flight plan or that are being tuned.
F-PLN FULL	II	There is not enough memory in the flight plan allotment for the computer to accept more flight plan data.
FMS 1/FMS 2 A/C STS DIFF	II	This message always precedes a transition to independent mode, and appears at power-up if the system detects a difference in one of the following: - NAV database serial number - Performance database - FM operational program - Aircraft and airline program pins
FMS 1/FMS 2 GW DIFF	II	Onside and offside aircraft weight differ by 2 t or more.
FMS 1/FMS 2 PGM PIN DIFF	II	Onside and offside program pins are different.
FMS 1/FMS 2 POS DIFF	II	Onside and offside positions differ by 0.5 NM or more (5 NM when GPS is not installed).
FMS 1/FMS 2 SPD TGT DIFF	II	Onside and offside target speeds displayed on the PFD differ by 5 kt or more.

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MESSAGE	TYPE	CONDITIONS
FORMAT ERROR	I	A data entry does not meet the specified entry format for a given field.
GPS PRIMARY LOST (also displayed on ND)	II	Displayed when GPS PRIMARY mode is lost.
GPS PRIMARY	II	Displayed when the FMS is transitioning to GPS PRIMARY
GPS IS DESELECTED	II	This message appears when GPS has been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
INDEPENDENT OPERATION	II	The FMGCs operate independently of each other.
INITIALIZE WEIGHT/CG	II	The zero-fuel weight or block fuel (FOB) is undefined after engine start.
INVALID FLT NBR UPLINK (ACARS msg)	II	The uplink message contains a valid flight plan but no flight number.
INVALID PERF UPLINK (ACARS msg)	II	Performance uplink message has been rejected.
INVALID RTE UPLINK (ACARS msg)	II	An error was detected into the uplink message and it is rejected.
INVALID TAKEOFF UPLINK (ACARS msg)	II	The current uplink takeoff data message is rejected.
INVALID WIND UPLINK (ACARS msg)	II	The current uplink wind message is rejected.
LAT DISCONT AHEAD	II	The next leg is a discontinuity and the aircraft is 30 s from flying the leg.
LIST OF 10 IN USE	I	The flight crew has tried to enter more than ten stored runways into the database, and all of the first ten are included in a flight plan or a pilot-stored route.
LIST OF 20 IN USE	I	The flight crew has tried to create a PBD, LAT/LONG, or PBX, or store a pilot-defined waypoint or NAVAID when 20 are already in use (in a flight plan or pilot-stored routes).
MACH SEGMENT DELETED	II	A constant Mach segment of the active flight plan has been automatically deleted. This occurs when the secondary flight plan or the alternate is activated, or engine out is detected or when the flight phase changes from CRZ to another one.
MCDU OVERHEATED	II	This message is displayed for 15 s in case of MCDU overheating.
MORE DRAG (EFIS PFD)	II	DES mode is engaged, idle is selected and the aircraft must decelerate in order to recover the path, or to respect an altitude constraint, a speed limit or a speed constraint.
NAV ACCUR DOWNGRAD (also displayed on ND)	II	NAV accuracy has been downgraded from HIGH to LOW. (See FMGS principles for an explanation).
NAV ACCUR UPGRAD (*EFIS ND)	II	NAV accuracy has been upgraded from LOW to HIGH.
NEW ACC ALT-HHHH	II	The acceleration altitude has been changed.

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MESSAGE	TYPE	CONDITIONS
NEW CRZ ALT-HHHHH	II	The cruise altitude has been changed.
NEW THR RED ALT-HHHH	II	The thrust reduction altitude has been changed.
NO ANSWER TO REQUEST (ACARS msg)	I	A crew request, was previously sent to the ground and no answer has been received for 4 min.
NO INTERSECTION FOUND	I	The system could not find any common waypoint nor intersection point through the airway.
NON UNIQUE ROUTE IDENT	I	The flight crew has tried to enter on the new route page a company route IDENT that is identical to an existing company route IDENT (pilot-defined or in the database).
NOT ALLOWED	I	Data entry is not allowed in the selected field, or a selection action is not allowed.
NOT ALLOWED IN NAV	I	An attempt to modify the TO waypoint is made while in NAV mode.
NO NAV INTERCEPT	II	It is triggered, when NAV mode is armed and, no INTERCEPT waypoint exists before the TO waypoint.
NOT IN DATA BASE	I	The pilot is trying to enter or call up a company route IDENT, a FROM/TO pair, a place defined by place-bearing-distance (PBD) or place-bearing/place-bearing (PBX) or an airport NAVAID, waypoint runway, or NAVAID frequency (including pilot-defined elements) that is not in the current database.
NOT XMITTED TO ACARS (ACARS msg)	II	A pilot request or a crew report was sent but the communication was not established or not acknowledged.
ONLY SPD ENTRY ALLOWED	I	The pilot is trying to enter a Mach number for a preselected speed value on the CLIMB page.
OPP FMGC IN PROCESS	II	The offside FMGC is unhealthy, and the FM system mode is SINGLE. The message indicates that the MCDU on which the message is displayed is being driven by the FMGC on the other side.
PAGE UPDATE IN PROCESS	I	The pilot presses a key on the flight plan page while predictions are being updated.
PERF DATA UPLINK (ACARS msg)	II	Performance data are received from ground.
PLACE/D IN TRANSITION	I	If a place/distance waypoint is defined within a pre-planned “fixed turn radius” transition, the entry is rejected and the “PLACE/D IN TRANSITION” scratchpad message is displayed.
PLEASE WAIT	I	Resynchronization between both FMGCs is in progress.
PROCEDURE RNP IS XX.XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the RNP value defined in the navigation database for the active leg or route.
PRINTER NOT AVAILABLE (ACARS msg)	II	A printer communication error has been detected while printing a report. The printing is terminated.

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MESSAGE	TYPE	CONDITIONS
RADIONAV IS DESELECTED	II	Radio navaids have been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
REF/GPS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the GPS position.
REF/LAST IRS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the last stored IRS position.
REVISIONS NOT STORED	II	This message, displayed when a pilot-defined route or company route (active or secondary flight plan) is stored, indicates that the following elements are not retained: - Pilot-entered holds - Offsets - Modifications to terminal area procedures - Pilot-entered constraints - Pseudo waypoints - Step at optimum.
RTA DELETED	II	A time constraint is automatically deleted: - In case of engine-out - When entering the holding pattern - In case of go-around - At phase transition from descent or approach to climb or cruise - When a time constraint is inserted in the same flight plan at a different waypoint - When the alternate flight plan is activated - When a DIR TO/ABEAM is performed, only if the time constrained waypoint is projected as an ABEAM waypoint - The time constrained waypoint is cleared or sequenced (regardless of active lateral mode) - Valid clock data is lost - The time constraint belongs to the active flight plan and the secondary flight plan is activated - The time constraint belongs to the secondary flight plan and COPY ACTIVE is performed.
RTA EXISTS	I	Displayed if the pilot tries to clear an estimated takeoff time defined by the system.
RTE DATALINK IN PROG (ACARS msg)	I	A flight plan modification is performed after a F-PLN INIT request has been sent. This message is displayed until the uplink is entirely received.

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MESSAGE	TYPE	CONDITIONS
RWY/LS MISMATCH	II	- During climb, cruise, (ILS or MLS) descent approach, or go-around, the LS frequency entered on the RAD NAV page does not match the LS associated with the destination runway. - During preflight or takeoff, the LS frequency entered on the RAD NAV page does not match the LS associated with the takeoff runway.
SEC RTE UPLINK (ACARS msg)	II	A flight plan is stored in the secondary flight plan.
SELECT DESIRED SYSTEM	I	The MCDU displays its MENU page.
SELECT TRUE (also displayed on the ND)	II	The MAG/TRUE sw is set to MAG, while the IRS send true HDG/TRK.
SENSOR IS INVALID	I	- The pilot has selected FF or FQ, or FF + FQ, or FQ + FF on the FUEL PRED page and the sole sensor or both of the selected sensors are invalid, or - The flight crew has entered fuel on board only, and the FF sensor is invalid.
SET GREEN DOT SPEED (SET GREEN DOT displayed on PFD)	II	This message appears when the following conditions are all met: - Engine-out condition - Aircraft in selected speed mode - FCU-selected speed equal to or greater than green-dot speed +10 kt, and ALT* or ALT not active, or FCU-selected speed equal to or less than green-dot speed -10 kt.
SET HOLD SPEED (also displayed on PFD)	II	This instruction appears when the aircraft is in selected speed, the pilot has inserted a hold in the flight plan, the aircraft is 30 s or less from the point where it must start decelerating towards hold speed, and the selected speed differs from the hold speed by more than 5 kt.
SET MANAGED SPEED or CHECK SPEED MODE (Also displayed on PFD)	II	The target speed is selected for the current phase, but there is no preselected speed for the next flight phase. When this is so, one of these messages is displayed at transitions from climb to cruise, and from climb or cruise to descent. The message is always displayed at the transition to descent from climb or cruise if selected speed is active. It is not displayed if managed speed is active.
SETTING SPD/RTA	II	Displayed when the system recomputes its managed speed target to satisfy the RTA constraints.
SPECIF NDB UNAVAIL	II	The NDB to be autotuned (specified for a NDB approach) is not available.

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MESSAGE	TYPE	CONDITIONS
SPECIF VOR-D UNAVAIL (also displayed on ND)	II	- The VOR, VOR-DME, or VORTAC to be autotuned (specified for an RNAV or VOR approach) has previously been deselected by the flight crew, or - The bearing, the frequency, or the IDENT of the VOR (or VORDME or VORTAC) to be autotuned is invalid.
SPD ERROR AT WPT 01	II	In lateral managed flight, the system predicts that the aircraft will miss a speed constraint by more than 10 kt. When the prediction changes to bring the miss within 5 kt, the message is cleared.
SPD LIM EXCEEDED	II	The aircraft is more that 150 ft below the speed limit altitude and more than 10 kt over green dot or the speed limit (which ever is smaller).
STEP ABOVE MAX FL	II	The pilot has entered a step altitude that is above the predicted maximum altitude.
STEP AHEAD	II	Indicates that the aircraft is within 20 NM of the active step point.
STEP DELETED	II	A step has been automatically deleted.
STORED ROUTES FULL	I	The system already contains five pilot-defined routes. (Only five are allowed.)
TAKEOFF DATA UPLINK (ACARS msg)	II	A takeoff data message is received.
TEMPORARY F-PLN EXISTS	I	The flight crew has selected any key (except ERASE or INSERT) or attempted a flight planning operation on the secondary flight plan while the system is displaying a temporary flight plan.
TIME ERROR AT WPT 01	II	While the aircraft is in lateral managed flight the FMGC predicts that it will miss a time constraint.
TIME MARKER LIST FULL	I	The system already contains four time markers. (Only four are allowed).
TIME TO EXIT	II	The aircraft must leave holding immediately to satisfy fuel reserve requirements. (Extra fuel is zero).
TO SPEED TOO LOW	II	This message appears if the inserted V1, VR, V2 speeds do not satisfy the existing regulatory conditions regarding VMCG/VMCA and VS1G speeds.
TOO STEEP PATH AHEAD	II	The system displays this message in cruise phase if the aircraft is within 150 NM of its destination or in descent or approach phase and in NAV mode and the descent profile contains a segment that is too steep.
TUNE BBB FFF.FF	II	The system cannot autotune the VOR for approach or position because of a manual VOR selection.
TURN AREA EXCEEDANCE	II	This message is displayed 1.5 min before entry of the PI leg, when in NAV mode, if the PI lateral path exceed the protection envelope defined in the Navigation database.

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MESSAGE	TYPE	CONDITIONS
UNKNOWN PROGRAM PIN	II	The system has been unable to initialize because of an incompatible or undefined aircraft pin program combination (A/C type, engine type, VMO/MMO parity) in the FMGC software.
UPLINK INSERT IN PROG (ACARS msg)	II	Displayed when an uplink message is currently inserted in the FMGS.
USING COST INDEX-NNN	I	This message is displayed when the system contains a flight plan, and the flight crew tries to enter a zero fuel weight or a gross weight into it before defining a Cost Index (CI). (In this case, the FMS defaults to the Cost Index from the last flight). It is also displayed when the flight crew inserts the ALTN F-PLN (in this case, the FMS defaults the cost index to 0).
V1/VR/V2 DISAGREE	II	This message is displayed when the entered V1, VR and V2 speeds do not satisfy the condition V1 ≤ VR ≤ V2.
WAIT FOR SYSTEM RESPONSE	I	During the time between a subsystem selection and the display of the subsystem page, the MCDU MENU page remains displayed with this message.
WIND DATA UPLINK (ACARS msg)	II	Uplink wind message has been received.
WIND UPLINK EXISTS (ACARS msg)	I	A flight plan modification (active or secondary) is attempted when uplink winds are not inserted yet.
WIND UPLINK PENDING (ACARS msg)	II	A temporary flight plan exists or a DIR TO page is displayed and a wind uplink is received and stored.
XXXX IS DESELECTED	I	The flight crew attempts to enter a deselected NAVAID, via the SELECTED NAVAID page, that has already been deselected.

MCDU MESSAGE LIST

Ident.: DSC-22_20-50-20-35-00000918.0009001 / 28 NOV 19
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Messages displayed on the MCDU are of two types and displayed in two colors.

Type I : A direct result of a pilot action;

Type II : Information about a situation, or a call for pilot action;

Type II messages are stored in a first-in/first-out message queue (5 messages max)

They are suppressed, if correct data is entered or when they no longer apply

The flight crew can clear all messages by pressing the CLEAR key on the MCDU console.

Amber : Important

White : Less important

MESSAGE	TYPE	CONDITIONS
A/C POSITION INVALID	II	The aircraft position has become invalid. If the message has been cleared and the flight crew attempts to call up the HOLD at PPOS or DIR TO page while the aircraft position is still invalid, then the message is displayed again.
ACT RTE UPLINK (ACARS msg)	II	A flight plan is stored in the active flight plan.
ALIGN IRS	II	Appears when the IRS are ready for alignment, but the INIT A page is not displayed on either side of the flight deck. The ALIGN IRS message requires that one of the flight crew call up the IRS INIT page, to align the IRS.
AREA RNP IS XX-XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the default RNP value associated to the current flight area and when there is no RNP value defined in the navigation database for the active leg or route.
AWY/WPT MISMATCH	I	The pilot entered VIA on the AIRWAYS page does not contain the revised point. If you enter a second airway IDENT, it must contain the first airway ending point.
BLOCK IGNORES RTA	II	A time constraint existing at initiation of flight planning, or an entry of a time constraint made after initiation of flight planning, are ignored by the fuel planning function.
CABIN RATE EXCEEDED	II	This message appears when the aircraft gets within 200 NM of the destination and the computed rate of descent makes it impossible for the cabin to be repressurized at the maximum rate.
CHECK ALTN WIND (ACARS msg)	II	The uplinked alternate cruise flight level differs from the defaulted alternate cruise flight level.
CHECK APPR SELECTION (On PFD: CHECK APP GUIDANCE or CHECK APP SEL (if CPIP3 ◁*)	II	Displayed when a NON ILS approach is part of the F-PLN and an ILS is manually tuned on RAD NAV page. This message reminds the flight crew that available guidance modes for the approach are APP NAV/FINAL. Displayed when in cruise at less than 100 NM from the top of descent or in descent or approach phase.
CHECK CO RTE (ACARS msg)	II	The uplinked company route identifier differs from the one specified in the request.
CHECK DATA BASE CYCLE	II	The current date does not match the effective date of the active database, and someone attempts to enter a FROM/TO or CO RTE.
CHECK IRS 1(2)(3)/FM POSITION	II	Each IRS position is compared to the FM position. The difference is greater than a threshold function of time.
CHECK IRS/AIRPORT POS	I	The distance between ADIRS alignment position and the NAV Database Airport Reference Point is at least 5 NM

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MESSAGE	TYPE	CONDITIONS
CHECK DEST DATA (ACARS msg)	II	The aircraft is at 180 NM from destination and the destination QNH, TEMP or WIND displayed on the PERF APPR page received by ACARS uplink has to be checked. If a modification of these parameters is performed creating a conflict with previous data, the message is triggered again.
CHECK FLT NBR (ACARS msg)	II	The uplinked flight number differs from the flight number specified in the request.
CHECK MIN DEST FOB	II	This message appears when the flight crew has manually entered the MIN DEST FOB value, and MIN DEST FOB is lower than ALTN + FINAL.
CHECK NORTH REF * EFIS ND	II	The MAG/TRUE sw does not correspond to the airport MAG/TRUE bearing reference (as stored in the FMGS navigation database), either at the departure airport (during preflight), or at the destination airport (when entering the ARRIVAL area).
CHECK QFE	II	This appears at the transition from QNH to QFE reference, when the QFE altitude differs by more than 100 ft from the predicted altitude, with the QNH set on the MCDU by means of the airport elevation in the NAV database.
CHECK TAKEOFF DATA	II	Following a flight crew entry or modification of one of the take-off parameters, there may be an inconsistency between the take-off runway or the TO shift and V1, VR, V2, FLEX TO temperature or derated level. The flight crew activated the secondary F-PLN in PREFLIGHT or DONE phase.
CHECK WEIGHT	II	The gross weights (GW) computed by the flight management computer (FMC) and the flight augmentation computer (FAC) disagree by more than 7 t (7.7 US tons).
CLK IS TAKEOFF TIME	II	This appears when the flight crew has entered an Estimated Takeoff Time (ETT), and the actual time is equal to ETT.
CLOCK/GPS TIME DIFF XX	II	Aircraft clock time and GPS time differ by more than XX minutes.
CROSSLOAD ABORTED	II	Message displayed on the transmitting MCDU, indicating an error in the transmission process.
CROSSLOAD COMPLETE	II	The database crossload from one FMGC to the other was successfully completed.
CRZ FL ABOVE MAX FL	II	This appears when the flight crew enters a cruise altitude that is above the computed maximum altitude.
CSTR DEL ABOVE CRZ FL	II	This appears when a flight plan altitude constraint has been deleted because the flight crew has inserted a cruise flight level, or step-down altitude that is at or below the flight plan constraint.
CSTR DEL UP TO WPT 01	II	This appears when constraints get deleted because the aircraft transitions to a go-around flight phase, before the FMGS sequences the flight plan destination.

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MESSAGE	TYPE	CONDITIONS
DECELERATE or T/D REACHED (Also displayed on PFD)	II	One of these messages appears when the aircraft has reached the T/D in managed speed and it has not yet begun the descent.
DELETING OFFSET	II	This appears when the system is deleting an offset automatically, which it does under certain specific conditions, such as: - Change of active leg due to lateral revision. - Termination of next leg at destination runway and the current distance to go is less than or equal to the distance required to reach the path, or the next leg is not a CF, FM or TF leg.
DEST/ALTN MISMATCH	I	The pilot attempts to enter an alternate CO RTE (which starts at an origin that is not the primary flight plan destination).
DEST EFOB BELOW MIN	II	The EFOB at destination calculated by the FMS is less than the MIN DEST FOB value specified on the FUEL PRED page, for more than 2 min. The message is triggered in flight, except during Takeoff and Climb phases.
DIR TO IN PROCESS	I	The flight crew calls up the vertical or lateral revision page on one MCDU while the direct to page is displayed on the other MCDU.
ENTER DEST DATA	II	The flight crew has not entered wind, QNH, or temperature for the destination, and the aircraft is 180 NM out.
ENTRY OUT OF RANGE	I	The flight crew attempts to enter data that is out of the range specified for the selected field.
FLT NBR UPLINK (ACARS msg)	II	A flight number has been added to the uplink flight plan without previous request.
F-PLN ELEMENT RETAINED	I	The flight crew attempts to delete stored NAVAIDs, waypoints or runways that are contained in any flight plan or that are being tuned.
F-PLN FULL	II	There is not enough memory in the flight plan allotment for the computer to accept more flight plan data.
FMS 1/FMS 2 A/C STS DIFF	II	This message always precedes a transition to independent mode, and appears at power-up if the system detects a difference in one of the following: - NAV database serial number - Performance database - FM operational program - Aircraft and airline program pins
FMS 1/FMS 2 GW DIFF	II	Onside and offside aircraft weight differ by 2 t or more.
FMS 1/FMS 2 PGM PIN DIFF	II	Onside and offside program pins are different.
FMS 1/FMS 2 POS DIFF	II	Onside and offside positions differ by 0.5 NM or more (5 NM when GPS is not installed).
FMS 1/FMS 2 SPD TGT DIFF	II	Onside and offside target speeds displayed on the PFD differ by 5 kt or more.

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MESSAGE	TYPE	CONDITIONS
FORMAT ERROR	I	A data entry does not meet the specified entry format for a given field.
GPS PRIMARY LOST (also displayed on ND)	II	Displayed when GPS PRIMARY mode is lost.
GPS PRIMARY	II	Displayed when the FMS is transitioning to GPS PRIMARY
GPS IS DESELECTED	II	This message appears when GPS has been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
INDEPENDENT OPERATION	II	The FMGCs operate independently of each other.
INITIALIZE WEIGHT/CG	II	The zero-fuel weight or block fuel (FOB) is undefined after engine start.
INVALID FLT NBR UPLINK (ACARS msg)	II	The uplink message contains a valid flight plan but no flight number.
INVALID PERF UPLINK (ACARS msg)	II	Performance uplink message has been rejected.
INVALID RTE UPLINK (ACARS msg)	II	An error was detected into the uplink message and it is rejected.
INVALID TAKEOFF UPLINK (ACARS msg)	II	The current uplink takeoff data message is rejected.
INVALID WIND UPLINK (ACARS msg)	II	The current uplink wind message is rejected.
LAT DISCONT AHEAD	II	The next leg is a discontinuity and the aircraft is 30 s from flying the leg.
LIST OF 10 IN USE	I	The flight crew has tried to enter more than ten stored runways into the database, and all of the first ten are included in a flight plan or a pilot-stored route.
LIST OF 20 IN USE	I	The flight crew has tried to create a PBD, LAT/LONG, or PBX, or store a pilot-defined waypoint or NAVAID when 20 are already in use (in a flight plan or pilot-stored routes).
MACH SEGMENT DELETED	II	A constant Mach segment of the active flight plan has been automatically deleted. This occurs when the secondary flight plan or the alternate is activated, or engine out is detected or when the flight phase changes from CRZ to another one.
MCDU OVERHEATED	II	This message is displayed for 15 s in case of MCDU overheating.
MORE DRAG (EFIS PFD)	II	DES mode is engaged, idle is selected and the aircraft must decelerate in order to recover the path, or to respect an altitude constraint, a speed limit or a speed constraint.
NAV ACCUR DOWNGRAD (also displayed on ND)	II	NAV accuracy has been downgraded from HIGH to LOW. (See FMGS principles for an explanation).
NAV ACCUR UPGRAD (*EFIS ND)	II	NAV accuracy has been upgraded from LOW to HIGH.
NEW ACC ALT-HHHH	II	The acceleration altitude has been changed.

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MESSAGE	TYPE	CONDITIONS
NEW CRZ ALT-HHHHH	II	The cruise altitude has been changed.
NEW THR RED ALT-HHHH	II	The thrust reduction altitude has been changed.
NO ANSWER TO REQUEST (ACARS msg)	I	A crew request, was previously sent to the ground and no answer has been received for 4 min.
NO INTERSECTION FOUND	I	The system could not find any common waypoint nor intersection point through the airway.
NON UNIQUE ROUTE IDENT	I	The flight crew has tried to enter on the new route page a company route IDENT that is identical to an existing company route IDENT (pilot-defined or in the database).
NOT ALLOWED	I	Data entry is not allowed in the selected field, or a selection action is not allowed.
NOT ALLOWED IN NAV	I	An attempt to modify the TO waypoint is made while in NAV mode.
NO NAV INTERCEPT	II	It is triggered, when NAV mode is armed and, no INTERCEPT waypoint exists before the TO waypoint.
NOT IN DATA BASE	I	The pilot is trying to enter or call up a company route IDENT, a FROM/TO pair, a place defined by place-bearing-distance (PBD) or place-bearing/place-bearing (PBX) or an airport NAVAID, waypoint runway, or NAVAID frequency (including pilot-defined elements) that is not in the current database.
NOT XMITTED TO ACARS (ACARS msg)	II	A pilot request or a crew report was sent but the communication was not established or not acknowledged.
ONLY SPD ENTRY ALLOWED	I	The pilot is trying to enter a Mach number for a preselected speed value on the CLIMB page.
OPP FMGC IN PROCESS	II	The offside FMGC is unhealthy, and the FM system mode is SINGLE. The message indicates that the MCDU on which the message is displayed is being driven by the FMGC on the other side.
PAGE UPDATE IN PROCESS	I	The pilot presses a key on the flight plan page while predictions are being updated.
PERF DATA UPLINK (ACARS msg)	II	Performance data are received from ground.
PLACE/D IN TRANSITION	I	If a place/distance waypoint is defined within a pre-planned “fixed turn radius” transition, the entry is rejected and the “PLACE/D IN TRANSITION” scratchpad message is displayed.
PLEASE WAIT	I	Resynchronization between both FMGCs is in progress.
PROCEDURE RNP IS XX.XX	II	Displayed when the RNP value, manually-entered on the PROG page, is larger than the RNP value defined in the navigation database for the active leg or route.
PRINTER NOT AVAILABLE (ACARS msg)	II	A printer communication error has been detected while printing a report. The printing is terminated.

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MESSAGE	TYPE	CONDITIONS
RADIONAV IS DESELECTED	II	Radio navaids have been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
REF/GPS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the GPS position.
REF/LAST IRS POS DIFF	I	This message is displayed when there is a discrepancy between the reference position entered by the pilot and the last stored IRS position.
REVISIONS NOT STORED	II	This message, displayed when a pilot-defined route or company route (active or secondary flight plan) is stored, indicates that the following elements are not retained: - Pilot-entered holds - Offsets - Modifications to terminal area procedures - Pilot-entered constraints - Pseudo waypoints - Step at optimum.
RTA DELETED	II	A time constraint is automatically deleted: - In case of engine-out - When entering the holding pattern - In case of go-around - At phase transition from descent or approach to climb or cruise - When a time constraint is inserted in the same flight plan at a different waypoint - When the alternate flight plan is activated - When a DIR TO/ABEAM is performed, only if the time constrained waypoint is projected as an ABEAM waypoint - The time constrained waypoint is cleared or sequenced (regardless of active lateral mode) - Valid clock data is lost - The time constraint belongs to the active flight plan and the secondary flight plan is activated - The time constraint belongs to the secondary flight plan and COPY ACTIVE is performed.
RTA EXISTS	I	Displayed if the pilot tries to clear an estimated takeoff time defined by the system.
RTE DATALINK IN PROG (ACARS msg)	I	A flight plan modification is performed after a F-PLN INIT request has been sent. This message is displayed until the uplink is entirely received.

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MESSAGE	TYPE	CONDITIONS
RWY/LS MISMATCH	II	- During climb, cruise, (ILS or MLS) descent approach, or go-around, the LS frequency entered on the RAD NAV page does not match the LS associated with the destination runway. - During preflight or takeoff, the LS frequency entered on the RAD NAV page does not match the LS associated with the takeoff runway.
SEC RTE UPLINK (ACARS msg)	II	A flight plan is stored in the secondary flight plan.
SELECT DESIRED SYSTEM	I	The MCDU displays its MENU page.
SELECT TRUE (also displayed on the ND)	II	The MAG/TRUE sw is set to MAG, while the IRS send true HDG/TRK.
SENSOR IS INVALID	I	- The pilot has selected FF or FQ, or FF + FQ, or FQ + FF on the FUEL PRED page and the sole sensor or both of the selected sensors are invalid, or - The flight crew has entered fuel on board only, and the FF sensor is invalid.
SET GREEN DOT SPEED (SET GREEN DOT displayed on PFD)	II	This message appears when the following conditions are all met: - Engine-out condition - Aircraft in selected speed mode - FCU-selected speed equal to or greater than green-dot speed +10 kt, and ALT* or ALT not active, or FCU-selected speed equal to or less than green-dot speed -10 kt.
SET HOLD SPEED (also displayed on PFD)	II	This instruction appears when the aircraft is in selected speed, the pilot has inserted a hold in the flight plan, the aircraft is 30 s or less from the point where it must start decelerating towards hold speed, and the selected speed differs from the hold speed by more than 5 kt.
SET MANAGED SPEED or CHECK SPEED MODE (Also displayed on PFD)	II	The target speed is selected for the current phase, but there is no preselected speed for the next flight phase. When this is so, one of these messages is displayed at transitions from climb to cruise, and from climb or cruise to descent. The message is always displayed at the transition to descent from climb or cruise if selected speed is active. It is not displayed if managed speed is active.
SETTING SPD/RTA	II	Displayed when the system recomputes its managed speed target to satisfy the RTA constraints.
SPECIF NDB UNAVAIL	II	The NDB to be autotuned (specified for a NDB approach) is not available.

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MESSAGE	TYPE	CONDITIONS
SPECIF VOR-D UNAVAIL (also displayed on ND)	II	- The VOR, VOR-DME, or VORTAC to be autotuned (specified for an RNAV or VOR approach) has previously been deselected by the flight crew, or - The bearing, the frequency, or the IDENT of the VOR (or VORDME or VORTAC) to be autotuned is invalid.
SPD ERROR AT WPT 01	II	In lateral managed flight, the system predicts that the aircraft will miss a speed constraint by more than 10 kt. When the prediction changes to bring the miss within 5 kt, the message is cleared.
SPD LIM EXCEEDED	II	The aircraft is more that 150 ft below the speed limit altitude and more than 10 kt over green dot or the speed limit (which ever is smaller).
STEP ABOVE MAX FL	II	The pilot has entered a step altitude that is above the predicted maximum altitude.
STEP AHEAD	II	Indicates that the aircraft is within 20 NM of the active step point.
STEP DELETED	II	A step has been automatically deleted.
STORED ROUTES FULL	I	The system already contains five pilot-defined routes. (Only five are allowed.)
TAKEOFF DATA UPLINK (ACARS msg)	II	A takeoff data message is received.
TEMPORARY F-PLN EXISTS	I	The flight crew has selected any key (except ERASE or INSERT) or attempted a flight planning operation on the secondary flight plan while the system is displaying a temporary flight plan.
TIME ERROR AT WPT 01	II	While the aircraft is in lateral managed flight the FMGC predicts that it will miss a time constraint.
TIME MARKER LIST FULL	I	The system already contains four time markers. (Only four are allowed).
TIME TO EXIT	II	The aircraft must leave holding immediately to satisfy fuel reserve requirements. (Extra fuel is zero).
TO SPEED TOO LOW	II	This message appears if the inserted V1, VR, V2 speeds do not satisfy the existing regulatory conditions regarding VMCG/VMCA and VS1G speeds.
TOO STEEP PATH AHEAD	II	The system displays this message in cruise phase if the aircraft is within 150 NM of its destination or in descent or approach phase and in NAV mode and the descent profile contains a segment that is too steep.
TUNE BBB FFF.FF	II	The system cannot autotune the VOR for approach or position because of a manual VOR selection.
TURN AREA EXCEEDANCE	II	This message is displayed 1.5 min before entry of the PI leg, when in NAV mode, if the PI lateral path exceed the protection envelope defined in the Navigation database.

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MESSAGE	TYPE	CONDITIONS
UNKNOWN PROGRAM PIN	II	The system has been unable to initialize because of an incompatible or undefined aircraft pin program combination (A/C type, engine type, VMO/MMO parity) in the FMGC software.
UPLINK INSERT IN PROG (ACARS msg)	II	Displayed when an uplink message is currently inserted in the FMGS.
USING COST INDEX-NNN	I	This message is displayed when the system contains a flight plan, and the flight crew tries to enter a zero fuel weight or a gross weight into it before defining a Cost Index (CI). (In this case, the FMS defaults to the Cost Index from the last flight). It is also displayed when the flight crew inserts the ALTN F-PLN (in this case, the FMS defaults the cost index to 0).
V1/VR/V2 DISAGREE	II	This message is displayed when the entered V1, VR and V2 speeds do not satisfy the condition V1 ≤ VR ≤ V2.
WAIT FOR SYSTEM RESPONSE	I	During the time between a subsystem selection and the display of the subsystem page, the MCDU MENU page remains displayed with this message.
WIND DATA UPLINK (ACARS msg)	II	Uplink wind message has been received.
WIND UPLINK EXISTS (ACARS msg)	I	A flight plan modification (active or secondary) is attempted when uplink winds are not inserted yet.
WIND UPLINK PENDING (ACARS msg)	II	A temporary flight plan exists or a DIR TO page is displayed and a wind uplink is received and stored.
XXXX IS DESELECTED	I	The flight crew attempts to enter a deselected NAVAID, via the SELECTED NAVAID page, that has already been deselected.

FMS2 Thales

MCDU MESSAGE LIST

Ident.: DSC-22_20-50-20-38-00000919.0070001 / 28 NOV 19
Applicable to: MSN 04827-04860

The MCDU displays two types in two colors:

Type I : Direct result of a pilot action;
Type II : Information about a situation, or a call for pilot action;

Type II messages are stored in a first-in/first-out message queue (5 messages MAX).
They are suppressed, if correct data is entered or when they no longer apply.
The flight crew can clear all messages by pressing the MCDU's CLEAR key.

Amber : Important
White : Less important

MESSAGE	TYPE/COLOR	CONDITIONS
ABEAM POINTS LIST FULL	II	It is displayed when the number of abeam points exceeds 50, which is the maximum number allowed.
A/C POSITION INVALID	II	The position of the aircraft has become invalid. If the message has been cleared and the flight crew attempts to call up the HOLD at PPOS or DIR TO page while the position of the aircraft is still invalid, the message will reappear.
ALIGN IRS	II	Appears when the IRS are ready for alignment, but the IRS INIT page is not displayed on either MCDU. The ALIGN IRS message requires that one flight crew member call up the IRS INIT page, to align the IRS.
ALTN F-PLN DELETED	II	The Alternate F-PLN has been automatically deleted. This occurs when the F-PLN memory is full, and the system attempts to free up some space.
AOC XXXF-PLN UPLINK (ACARS MSG)	II	A flight plan is stored in the active or secondary flight plan. XXX is 'ACT' or 'SEC'.
AREA RNP IS XX-XX	II	It is displayed when: The RNP value, manually-entered on the PROG page, is larger than the default RNP value associated to the current flight area; and, when there is no RNP value defined in the navigation database for the active leg or route.
AWY/WPT MISMATCH	I	The pilot-entered VIA on the AIRWAYS page does not contain the revised point. If a second airway IDENT is entered, it must contain the first airway ending point.
BLOCK IGNORES RTA	II	A time constraint existing at initiation of flight planning, or an entry of a time constraint made after initiation of flight planning, are ignored by the fuel planning function.

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MESSAGE	TYPE/COLOR	CONDITIONS
CABIN RATE EXCEEDED	II	The aircraft is within 200 NM of its destination, and the computed rate of descent makes it impossible for the cabin to be repressurized at the maximum rate.
CHECK ALTN WIND (ACARS MSG)	II	The uplinked alternate cruise flight level differs from the defaulted alternate cruise flight level.
CHECK APPR SELECTION (On PFD: CHECK APP GUIDANCE or CHECK APP SEL (if CPIP3 ◁✱)	II	A non ILS/GLS approach is part of the F-PLN and an ILS/GLS is manually-tuned on the RAD NAV page. It reminds the flight crew that APP NAV/FINAL are the available guidance modes for the approach. Displayed when in cruise at less than 100 NM from the top of descent, or in descent, or approach phase.
CHECK CO RTE (AOC MSG)	II	The uplinked company route identifier differs from the one specified in the request.
CHECK DATA BASE CYCLE	II	The current date does not match the effective date of the active database, and someone attempts to enter a FROM/TO or CO RTE.
CHECK DEST DATA (AOC MSG)	II	The aircraft is 180 NM from its destination and the destination QNH, TEMP or WIND displayed on the PERF APPR page, received by ACARS uplink, has to be checked. If a modification of these parameters is performed, creating a conflict with previous data, the message retriggers.
CHECK FLT NBR (AOC MSG)	II	The uplinked flight number differs from the flight number specified in the request.
CHECK IRS/AIRPORT POS	II	The distance between ADIRS alignment position and the NAV Database Airport Reference Point is at least 5 NM.
CHECK IRS 1(2)(3)/FM POSITION	II	Each IRS position is compared to the FM position. The difference is greater than a threshold function of time.
CHECK NORTH REF * EFIS ND	II	The MAG/TRUE switch does not correspond to the airport MAG/TRUE bearing reference (as stored in the FMGS navigation database), either at the departure airport (during preflight), or at the destination airport (when entering the ARRIVAL area).
CHECK MIN DEST FOB	II	This message appears when the flight crew has manually entered the MIN DEST FOB value, and MIN DEST FOB is lower than ALTN + FINAL.
CHECK ONSIDE P/N	II	Appears when the FM displays the P/N STATUS page due to an onside incompatibility problem.
CHECK QFE	II	The transition from the QNH to the QFE reference, when the QFE altitude differs by more than 100 ft from the predicted altitude, with the QNH set on the MCDU by means of the airport elevation in the NAV database.

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MESSAGE	TYPE/COLOR	CONDITIONS
CHECK TAKEOFF DATA	II	After the flight crew enters or modifies one of the take-off parameters, there may be an inconsistency between the take-off runway, the TO shift or the flaps/THS and V1, V2, VR, FLEX TO temperature or derated level. The flight crew activated the secondary F-PLN in PREFLIGHT or DONE phase.
CHECK WEIGHT	II	The gross weights (GW) computed by the flight management computer (FMC) and the flight augmentation computer (FAC) disagree by more than 7 t (7.7 U.S tons).
CLK IS TAKEOFF TIME	II	The flight crew has entered an estimated takeoff time (ETT) and the actual time is equal to ETT.
CLOCK/GPS TIME DIFF XX	II	The aircraft clock time and GPS time differ by more than XX minutes.
CONSTANT MACH DELETED	II	A constant Mach segment of the active flight plan has been automatically deleted. This occurs when the secondary flight plan or the alternate is activated, an engine-out is detected, or when the flight phase changes from CRZ to another one.
CROSSLOAD ABORTED	II	The message displayed on the transmitting MCDU indicates an error in the transmitting process.
CROSSLOAD COMPLETE	II	The database crossloading from one FMGC to another was successfully completed.
CRZ FL ABOVE MAX FL	II	The flight crew enters a cruise altitude that is above the computed maximum altitude.
CSTR DEL ABOVE CRZ FL	II	A flight plan altitude constraint has been deleted because the flight crew has inserted a cruise flight level or step-down altitude that is at, or below, the flight plan constraint.
CSTR DEL UP TO WPT01	II	Constraints get deleted because the aircraft transitions to a go-around flight phase before the FMGS sequences the flight plan destination.
DECELERATE or T/D REACHED (Also displayed on PFD)	II	The aircraft is still in the cruise phase and managed speed, after it reaches the top of descent, and it has not started the descent.
DEFAULT STATE ASSUMED	II	This appears when all initialization data has been cleared after a very-long-term (VLT) power interruption. The flight crew should see this only when powering up a new MCDU.
XXXX IS DESELECTED	I	The pilot entered a NAVAID, via the RAD NAV or PROG page, that has previously been deselected.
DEST/ALTN MISMATCH	I	The pilot attempts to enter an alternate CO RTE (which starts at an origin that is not the primary flight plan destination).

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MESSAGE	TYPE/COLOR	CONDITIONS
DEST EFOB BELOW MIN	II	The EFOB at destination calculated by the FMS is less than the MIN DEST FOB value specified on the FUEL PRED page, for more than 2 min. The message is triggered in flight, except during Takeoff and Climb phases.
DIR TO IN PROCESS	I	The flight crew calls up the vertical or lateral revision page on one MCDU, while the DIR TO page is displayed on the other MCDU.
ENTER DEST DATA	II	The flight crew has not entered wind, QNH, or temperature for the destination, and the aircraft is 180 NM out.
ENTRY OUT OF RANGE	I	The flight crew attempts to enter data that is outside the range specified for the selected field.
FLT NBR UPLINK (ACARS MSG)	II	A flight number has been added to the uplink flight plan without previous request.
FM DATALINK UNAVAIL (ACARS MSG)	II	No communication is possible between the ATSU and both FMS.
FM PREDICTIONS LOST	II	Due to resets, the predictions of the active F-PLN are unavailable.
FMS1/FMS2 A/C STS DIFF	II	Always precedes a transition to independent mode and appears at power-up, if the system detects a difference in one of the following: - NAV database serial number - Performance database - FM operational program - Aircraft and airline pin programs.
FMS1/FMS2 GW DIFF	II	Onside and offside aircraft weights differ by 2 t or more.
FMS1/FMS2 PGM PIN DIFF	II	Onside and offside pin programs are different.
FMS1/FMS2 POS DIFF	II	Onside and offside positions differ by 5 NM (0.5 NM, if GPS installed) or more.
FMS1/FMS2 SPD TGT DIFF	II	Onside and offside target speeds differ by 5 kt or more.
FORMAT ERROR	I	A data entry does not meet the specified entry format for a given field.
F-PLN DATALINK IN PROG (AOC MSG)	I	A flight plan modification is performed after a F-PLN INIT request has been sent. This message is displayed until the uplink is entirely received.
F-PLN FULL	II	As there is insufficient memory in the flight plan, the computer does not accept anymore flight plan data.
GPS PRIMARY ◁ LOST (also displayed on ND)	II	GPS PRIMARY mode is lost.
GPS PRIMARY ◁	II	The FMS is transitioning to GPS PRIMARY.
GPS ◁ IS DESELECTED	II	GPS has been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.

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MESSAGE	TYPE/COLOR	CONDITIONS
INDEPENDENT OPERATION	II	The FMGCs operate independently of each other.
INITIALIZE WEIGHTS	II	The zero-fuel weight or block fuel (FOB) is undefined after engine start.
INIT DATA UPLINK (AOC MSG)	II	Initialization data has been received from the ground.
INSERT/ERASE TMPY FIRST	I	When performing a DIRECT TO/INTERCEPT revision, if a temporary F-PLN already exists due to a revision other than the DIRECT TO/INTERCEPT revision, no F-PLN waypoint can be inserted from the DIR TO page.
INVALID FLT NBR UPLINK (AOC MSG)	II	The uplink message contains a valid flight plan but no flight number.
INVALID INIT UPLINK (AOC MSG)	II	The initialization uplink message has been rejected.
INVALID ROUTE UPLINK (AOC MSG)	II	As an error is detected in the uplink message, it is rejected.
INVALID TAKEOFF UPLINK (AOC MSG)	II	The current uplink takeoff data message is rejected.
INVALID WIND UPLINK (AOC MSG)	II	The current uplink wind message is rejected.
IRS ONLY NAVIGATION	II	The aircraft is neither in an approach or in a terminal area, and: - The aircraft has been in IRS mode for more than 10 min, or - The aircraft is in IRS mode and is starting the descent phase.
LAT DISCONT AHEAD	II	The next leg is a discontinuity, and the aircraft is 30 s away from flying the leg.
LIST OF 10 IN USE	I	The flight crew has tried to enter more than ten stored runways in the database, and all of the first ten are included in a flight plan, or a pilot-stored route.
LIST OF 20 IN USE	I	The flight crew has tried to create a PBD, LAT/LONG, or PB-PB, or store a pilot-defined waypoint or NAVAID when 20 are already in use (in a flight plan or pilot-stored routes).
MANUAL HOLD DELETED	II	A manually-entered hold has been deleted, due to a change of the arrival procedure.
MCDU OVERHEATED	II	This message is displayed for 15 s in case of MCDU overheating.
MORE DRAG (EFIS PFD)	II	DES mode is engaged, idle is selected and the aircraft must decelerate to recover the path, or to respect an altitude constraint, a speed limit or a speed constraint.
NAV ACCUR DOWNGRAD (also displayed on ND)	II	NAV accuracy downgrades from HIGH to LOW. (See FMGS principles for an explanation).

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MESSAGE	TYPE/COLOR	CONDITIONS
NAV ACCUR UPGRAD (*EFIS ND)	II	NAV accuracy upgrades from LOW to HIGH.
NEW ACC ALT-HHHH	II	The acceleration altitude has changed.
NEW CRZ ALT-HHHHH	II	The cruise altitude has changed.
NEW THR RED ALT-HHHH	II	The thrust reduction altitude has changed.
NO ANSWER TO REQUEST (ACARS MSG)	II	A crew request was previously sent to the ground, and no answer has been received for 4 min.
NO INTERSECTION FOUND	I	The system could not find any common waypoint or intersection point through the airway.
NO NAV INTERCEPT	II	It is triggered, when NAV mode is armed and, no INTERCEPT waypoint exists before the TO waypoint.
NO VERT PATH INTERCEPT	II	The message is displayed when FINAL mode is armed and the aircraft is flying level more than 250 ft above the FMS vertical profile.
NON UNIQUE ROUTE IDENT	I	The flight crew has tried to enter a company route IDENT on the new route page that is identical to an existing company route IDENT (pilot-defined, or in the database).
NOT ALLOWED	I	Data entry is not allowed in the selected field. A selection action is also not allowed.
NOT IN DATA BASE	I	The pilot is trying to enter or call up a company route IDENT, a FROM/TO pair, a place defined by place-bearing-distance (PBD) or place-bearing/ place-bearing (PB/PB) or an airport NAVAID, waypoint runway, or NAVAID frequency (including pilot-defined elements) that is not in the current database.
NOT XMITTED TO ACARS (AOC MSG)	II	A pilot request or crew report was sent, but communication was neither established nor acknowledged.
OFST DELETED IN TMPY	II	The system automatically deletes an offset from the temporary flight plan, if: - The first leg of the temporary F-PLN is no longer a TF, CF or FM - Termination of next leg at destination runway and the current distance to go to the ending offset waypoint is less than the distance required to reach the temporary offset path and return to the temporary parent path.
ONLY SPD ENTRY ALLOWED	I	The pilot is trying to enter a Mach number for a preselected speed value on the CLIMB page.
OPP FMGC IN PROCESS	II	The offside FMGC is unhealthy, and the FM system mode is SINGLE. The message indicates that the MCDU, on which the message is displayed, is being driven by the FMGC on the other side.

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MESSAGE	TYPE/COLOR	CONDITIONS
PAGE UPDATE IN PROCESS	I	The flight crew presses a key on the flight plan page while predictions are being updated.
PILOT ELEMENT RETAINED	I	A pilot element is either a waypoint, or a NAVAID, or a route, or a runway that has been stored by the pilot. This message appears when deleting one of these elements is not allowed.
PILOTS ROUTES FULL	I	The system already contains five pilot-defined routes. (only five routes are allowed)
PLACE/WPT MISMATCH	I	When using the Along Track Offset function, the entered PLACE is not identical to the revise point.
PLEASE WAIT	I	Resynchronization between both FMGCs is in progress.
PRINT ABORTED	II	This message informs the crew that the print task has been aborted due to an FMS reset.
PRINTER NOT AVAILABLE (ACARS MSG)	II	A printer communication error was detected while printing a report. The printing was terminated.
PROCEDURE RNP IS XX.XX	II	The RNP value, manually-entered on the PROG page, is larger than the RNP value defined in the navigation database for the active leg or route.
RADIONAV IS DESELECTED	II	Radio NAVAIDs have been manually deselected and the aircraft is 80 NM before the top of descent or in approach phase.
REF/GPS POS DIFF ◁	II	This message is displayed when there is a discrepancy between the reference position entered by the flight crew and the GPS position.
REF/LAST IRS POS DIFF	II	This message is displayed when there is a discrepancy between the reference position entered by the flight crew and the last stored IRS position.
REVISION IN PROCESS	I	One MCDU displays an AIRWAY page and another revision is attempted from the other MCDU.
REVISIONS NOT STORED	II	This message, displayed when a pilot-defined route or company route (active or secondary flight plan) is stored, indicates that the following elements are not retained: - Pilot-entered holds - Offsets - Modifications to terminal area procedures - Pilot-entered constraints - Pseudo waypoints

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MESSAGE	TYPE/COLOR	CONDITIONS
RTA DELETED	II	A time constraint is automatically deleted: - In case of engine-out - When entering the holding pattern - In case of go-around - At phase transition from descent or approach to climb or cruise - When a time constraint is inserted in the same flight plan at a different waypoint - When the alternate flight plan is activated - When a DIR TO/ABEAM is performed, only if the time constrained waypoint is projected as an ABEAM waypoint - The time constrained waypoint is cleared or sequenced (regardless of active lateral mode) - Valid clock data is lost - The time constraint belongs to the active flight plan and the secondary flight plan is activated - The time constraint belongs to the secondary flight plan and COPY ACTIVE is performed
RTA EXISTS	I	Displayed if the pilot tries to clear an estimated takeoff time defined by the system.
RWY/LS MISMATCH	II	- During climb, cruise, descent, approach (ILS/GLS), or go-around, the LS frequency/channel entered on the RAD NAV page does not match the LS associated with the destination runway - During preflight or takeoff, the LS frequency/channel entered on the RAD NAV page does not match the LS associated with the takeoff runway.
SELECT DESIRED SYSTEM	I	The MCDU displays its MENU page.
SELECT HDG/TRK FIRST	I	- When in NAV mode, the temporary flight plan is inserted whilst the first leg of the temporary F-PLN does not match with the active leg. The same applies when in the SEC F-PLN. Then the temporary flight plan insertion is rejected, and the message is triggered.
SELECT TRUE (also displayed on the ND)	II	The MAG/TRUE switch is set to MAG, while the IRS send true HDG/TRK.

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MESSAGE	TYPE/COLOR	CONDITIONS
SENSOR IS INVALID	I	- The pilot has selected FF or FQ, or FF + FQ, or FQ + FF on the FUEL PRED page and the sole sensor or both of the selected sensors are invalid, or - The flight crew has entered fuel on board only, and the FF sensor is invalid.
SET GREEN DOT SPEED (SET GREEN DOT displayed on PFD)	II	This message appears when all of the following conditions are met: - Engine-out condition - Aircraft in selected speed mode - FCU-selected speed equal to, or greater than, green-dot speed +10 kt, and ALT* or ALT not active, or FCU-selected speed equal to or less than green-dot speed -10 kt.
SET HOLD SPEED (also displayed on PFD)	II	The aircraft is in selected speed, the pilot has inserted a hold in the flight plan, the aircraft is 30 s or less from the point where it must start decelerating towards hold speed, and the selected speed differs from the hold speed by more than 5 kt.
SET MANAGED SPEED or CHECK SPEED MODE (Also displayed on PFD)	II	The target speed is selected for the current phase, but there is no preselected speed for the next flight phase. When this is so, this message is displayed at transitions from climb to cruise, and from climb or cruise to descent. It is always displayed at the transition to descent from climb or cruise, if selected speed is active. It is not displayed, if managed speed is active.
SETTING SPD/RTA	II	Displayed when the system recomputes its managed speed target to satisfy the RTA constraints.
SPD ERROR AT WPT01	II	In lateral managed flight, the system predicts that the aircraft will miss a speed constraint by more than 10 kt. When the prediction changes, and brings the miss within 5 kt, the message is cleared.
SPD LIM EXCEEDED	II	The aircraft is more that 150 ft below the speed limit altitude, and more than 10 kt over the speed limit.
SPECIF NDB UNAVAIL	II	The NDB to be autotuned (specified for a NDB approach) is unavailable.
SPECIF VOR-D UNAVAIL (also displayed on ND)	II	- The VOR, VOR-DME, or VORTAC to be autotuned (specified for an RNAV or VOR approach) has previously been deselected by the flight crew, or - The bearing, the frequency, or the IDENT of the VOR (or VOR DME or VORTAC) to be autotuned is invalid.
STEP ABOVE MAX FL	II	The pilot has entered a step altitude that is above the predicted maximum altitude.

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MESSAGE	TYPE/COLOR	CONDITIONS
STEP AHEAD	II	Indicates that the aircraft is within 20 NM of the active step point.
STEP DELETED	II	A step has been deleted for any reason, including sequencing.
SYSTEM NOT AVAILABLE	I	Displayed when an ATC communication via the ATSU has failed.
TAKEOFF DATA UPLINK (ACARS MSG)	II	A takeoff data message is received.
TO SPEED TOO LOW	II	The flight crew has entered on PERF Takeoff page one or several TO speeds (V1, VR or V2) too low compared with the minimum speeds (VMCG, VMCA or VS1G).
TMPY F-PLN EXISTS	I	The flight crew has selected any key (except ERASE or INSERT), or attempted a flight planning operation on the secondary flight plan while the system is displaying a temporary flight plan.
TIME ERROR AT WPT01	II	While the aircraft is in lateral managed flight, the FMGC predicts that it will miss a time constraint (*Refer to DSC-22_20-30-20-28 Time Constraint/RTA - General*).
TIME MARKER LIST FULL	I	The system already contains four time markers. (Only four are allowed).
TIME TO EXIT	II	The aircraft must leave holding immediately to satisfy fuel reserve requirements. (Extra fuel is zero).
TOO STEEP PATH AHEAD	II	This message is displayed in cruise, if the aircraft is within 150 NM of its destination or in descent or approach phase and in NAV mode and the descent profile contains a segment that is too steep.
TUNE BBB FFF.FF	II	The system cannot autotune the VOR for approach or position, because of a manual VOR selection.
TURN AREA EXCEEDANCE	II	This message is displayed 1.5 min before entry of the PI leg, when in NAV mode, if the PI lateral path exceeds the protection envelope defined in the navigation database.
UNKNOWN PROGRAM PIN	II	The system is unable to initialize, due to an incompatible or undefined aircraft pin program combination (A/C type, engine type, VMO/MMO parity) in the FMGC software.
UPLINK INSERT IN PROG (AOC MSG)	II	An uplink message is currently inserted in the FMGS.
USING COST INDEX NNN	I	This message is displayed when the system contains a flight plan, and the flight crew tries to enter a zero fuel weight or a gross weight into it before defining a Cost Index (CI). (In this case, the FMS defaults to the Cost Index from the last flight). It is also displayed when the flight crew inserts the ALTN F-PLN (in this case, the FMS defaults the cost index to 0).

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MESSAGE	TYPE/COLOR	CONDITIONS
V1/VR/V2 DISAGREE	II	This message is displayed when the entered V1, VR and V2 speeds do not satisfy the condition V1 ≤ VR ≤ V2
WAIT FOR SYSTEM RESPONSE	II	During the time between a subsystem selection and the display of the subsystem page, the MCDU MENU page remains displayed with this message.
WIND DATA UPLINK (AOC MSG)	II	Uplink wind message has been received.
WIND UPLINK EXISTS (AOC MSG)	I	A flight plan modification (active or secondary) is attempted when uplink winds are not yet inserted.
WIND UPLINK PENDING (AOC MSG)	II	A temporary flight plan exists, or a DIR TO page is displayed, and a wind uplink is received and stored.

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MCDU DATA FORMAT LIST

Ident.: DSC-22_20-50-30-00000920.0085001 / 25 MAY 21

Applicable to: MSN 10949-11597

The following chart lists all the data the flight crew may enter on the MCDU.
It also shows the acceptable format for the various data items, the acceptable range, the units of entry, and the MCDU pages on which the data can be entered.

The following codes are used to indicate various data formats:

A : Letters
N : Numbers
X : Letters and numbers

DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
ACCEL ALT	See ALT		ft (MSL)	PERF TAKEOFF (ACT/SEC (2)) GO AROUND (ACT/SEC (2))
ALT	NNNN or NNNNN (leading zeros must be included)	MAX ALT = 39 000 Entry is rounded to the nearest 10 ft.	ft (MSL)	PERF CLB PERF DES CRZ TEMP DES TEMP ◁
ALT CSTR	See ALT	See ALT	ft (MSL)	VERT REV F-PLN A SEC F-PLN A
AIRWAYS (VIA)	XXXX	If not in data base, NOT IN DATA BASE is displayed.	N/A	LAT REV AIRWAYS ◁
ARPT	AAAA 1 character minimum. 4 maximum.	If AAAA is not in the database airport file, the NEW RUNWAY page is displayed.		INIT A (ACT/SEC (2)) LAT REV ALTN F-PLN A-B (ACT/SEC (2)) WAYPOINT DIR TO
BARO	See ALT	LDG elevation to LDG elevation + 5000.	ft (MSL)	PERF APPR (ACT/SEC (2))
BLOCK FUEL	NN.N leading zeros may be omitted.	0-80/0-175.2	Thousands of Kg or thousands of lb	INIT B (ACT/SEC (2))
CABIN RATE	- NNN (- may be omitted)	100 - 999	ft/min	DES FORECAST or CRUISE PERF PAGE ◁
CG	NN.N	8.0 - 45.0	% MAC	INIT B (ACT/SEC (2)) FUEL PRED
CHANNEL ◁	NNN	500 - 699		NEW NAVAID RAD NAV

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
CLASS (NAVAID)	AAAAAA (refer to RANGE for exact inputs allowed)	VOR DME VORDME VORTAC LOC, ILS NDB ILSDME MLS ◁ TACAN ◁	N/A	NEW NAVAID
CO RTE	XXXXXXX 7 or 10 characters (pin program)	If not in the NAVdatabase, a message will be displayed.	N/A	INIT A ROUTE SELECTION NEW ROUTE ALTERNATE
COST INDEX	NNN may be entered as 1-3 digits; leading zeros lay be omitted.	0 to 999	Kg/Min or 100 lb/Hr	INIT A (ACT/SEC (2)) PERF CLB (ACT/SEC (2)) PERF CRZ (ACT/SEC (2)) PERF DES (ALT/SEC (2))
CRS	See INB CRS	See INB CRS	degrees	RADIO NAV NEW NAVAID NEW RUNWAY
CRZ FL	Must be entered as FLIGHT LEVEL	Maximum FL (See FLIGHT LEVEL)	Hundred of ft	INIT A (ACT/SEC (2)) PROG
CRZ TEMP	See TEMP		See TEMP	INIT A (ACT/SEC (2)) FUEL PREDICTION
CRZ WIND	See WIND DIR/MAG	See WIND DIR/MAG	See WIND DIR/MAG	INIT A (ACT/SEC (2)) FUEL PREDICTION
DIST	NN.N leading and trailing 0's may be omitted.	0 - 99.9 or 0 - 999 (or 9999 ◁)	NM NM	HOLD ALTN
DRT TO ◁	“D”NN	Eight possible values		PERF TAKEOFF
EFF WIND ◁	± NNN ”+” may be entered as “T” or “TL”. "-” may be entered as “H” or “HD”. Leading zeros may be omitted. If no sign is input, “+” is taken.	0 - 500	kts	CLOSEST AIRPORT EQUI-TIME INIT A SEC INT A

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
ELV	± NNNN if no sign, + assumed. Leading 0's may be omitted.	Entry displayed to nearest 10 ft -400 to 20 470 ft (RWY) (or - 1000 to 20 470 ft ◁) -2 000 to 20 470 (NAVAID)	ft (MSL)	NEW RUNWAY NEW NAVAID
ETT/RTA ◁	HH:MM:SS	00:00:00 to 23:59:59	Hour HH Min MM Sec SS	RTA
FF/FQ Sensors	One or both may be entered, Both - /FF + FQ or - /FQ + FF Fuel flow - /FF Fuel Quantity - /FQ		N/A	FUEL PREDICTION
FIG OF MERIT	N	0 - 3	N/A	NEW NAVAID
FINAL/TIME	Only one may be entered at a time. NN.N or (NNN.N ◁) for FINAL NNNN for TIME	FINAL 0 - 10.0 (or 0 - 100 ◁) or 0 - 22.0 0 - 90 TIME	Thousand of kg or Thousand of lb minutes	FUEL PRED INIT B
FLAPS		0, 1, 2, or 3		PERF TAKEOFF
FLEX TO TEMP	1. If Derated TO option not implemented: same as TEMP 2. If Derated TO option is implemented: F NN		NN in degrees centigrade	PERF TAKEOFF

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
FLIGHT LEVEL	FLNNN or NNN Leading zeros on NNN may be omitted.	MAX FL = 390 (or MAX FL = 410)	Hundreds of ft (MSL)	F-PLN A-B, PROG VERT REV INIT A (ACT, SEC (2)) PERF CLB PERF DES STEP PRED STEP ALTS CRZ TEMP DES TEMP ◁✻
FLIGHT NUMBER	XXXXXXXX The 8 alphanumeric are not mandatory.	N/A	N/A	INIT A F-PLN A-B
FOB	NN.N (leading zeros may be omitted)	See BLOCK	Thousands of kg or Thousands of lb	FUEL PREDICTION
FREQ	NNN.NN ILS/VOR NNN.N NDB	108.00 - 117.95 190.0 - 1 750.0	MHz KHz	PROG. NEW NAVAID RADIO NAV
FROM/TO	AAAA /AAAA	AAAA must be in data base or message will be displayed	N/A	INIT A (ACT/SEC (2))
GW	NN.N Leading and trailing zeros may be omitted.	35 - 99.9 or 77.2 - 218	Thousands of kg or Thousands of lb	FUEL PREDICTION
IDLE FACTOR ◁✻	± N.N Leading and trailing zeros may be omitted.	-9.9. +9.9	%	A/C STATUS
INB CRS	NNN Leading zeros may be omitted. An entry of 360 is displayed as 0.	000 - 359	Degrees	HOLD
LAT	DDMM.MB or BDDMM.M DD - degrees, MM.M - minutes, B - direction. Leading zeros may be omitted but the direction (B) is necessary. Latitude is displayed as DDMM.MB.	B: N or S 0 ≤ DD ≤ 90 0 ≤ MM.M ≤ 59.9	Degree minutes tenths of minutes	INIT A (ACT/SEC (2))

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
LAT/LONG	LAT/LONG See LAT and See LONG except both must be entered with "/" in between.	See LAT and See LONG	See LAT and See LONG	F-PLN A-B (ACT/SEC (2)) PROG NEW WAYPOINT NEW NAVAID DIR TO LAT REV NEW RUNWAY
LENGTH	NNNN Leading zeros may be omitted	1 000 - 8 000 m 3 282 - 9 999 ft	Meters or feet	NEW RUNWAY
LONG	DDDMM.MB or BDDDMM.M DDD - degrees MM.M - minutes B - direction. Leading zeros may be omitted but the direction (B) is necessary.	B: E or W 0 ≤ DDD ≤ 180 0 ≤ MM.M ≤ 59	Degree minutes tenths of minutes	INIT A
MACH	.NN The decimal point is necessary. Trailing zeros are not necessary.	MAX = 0.82 MIN = 0.15	Mach Number	F-PLN A (ACT/SEC (2)) PERF CLB PERF CRZ PERF DES
MACH/SPD	MACH and SPD must be entered with "/" between (See MACH and See SPD formats).	See MACH and See SPD	See MACH and See SPD	PERF DES (ACT/SEC (2))
NAVAID	XXXX	Any alphanumeric	N/A	PROG NEW NAVAID NAVAID F-PLN A-B (ACT/SEC (2)) LAT REV DIR TO RADIO NAV SELECTED NAVAIDS
OFST	NNB or BNN NN offset distance B direction	B: L or R 1 < NN < 50	NM	LAT REV

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
PERF FACTOR	NN.N leading or trailing zeros may be omitted (± N.N)	-10.0 to +10.0 (or -9.9 - +9.9 ◁)	N/A	A/C STATUS
PLACE/BRG/DIST	PLACE can be any data base ARPT, NAVAID or WAYPOINT - BRG must be a 3 digit entry without decimal digit. An entry of BRG = 360 is displayed as 0.	PLACE - If not in data base, a message "NOT IN DATA BASE" is displayed BRG - 000 - 360	N/A degrees	LAT REV (ACT/SEC (2)) NEW WAYPOINT PROG DIR TO F-PLNA-B (ACT/SEC (2)) STEP ALTS
	DIST is NNN.N where leading zeros may be omitted; all 3 parameters must be entered with "/" between.	DIST - 0 - 999.9	NM	
PLACE-BRG/ PLACE-BRG	See PLACE/BRG/DIST A couple PLACE-BRG is entered with a dash in the middle. 2 couples have to be entered with "/" between	See PLACE/BRG/DIST	See PLACE/BRG/DIST	See PLACE/BRG/DIST
PLACE/DIST	PLACE: See PLACE/ BRG/DIST DIST: See PLACE/ BRG/DIST	PLACE: See PLACE/ BRG/DIST DIST: 0 - 999.9	N/A NM	F-PLN A and B SEC F-PLN A and B LAT REV NEW WAYPOINT DIR TO STEP ALTS
QNH	NNNN (leading zero may be omitted).	950 - 1 050 (or 745 - 1050 ◁)	Hecto-Pascals (hPa)	PERF APPR (ACT/SEC (2))
	NN.NN (four digits are mandatory).	28.06 - 31.01 (or 22.00 - 31.00 ◁)	In.Hg	
RADIAL ◁	NNN(T) 3 digits entry	000 - 360	Degrees	FIX INFO 1 to 4
RADIAL IN ◁	NNN(T) 3 digits entry	000 - 360	Degrees	DIR TO
RADIAL OUT ◁	NNN(T) 3 digits entry	000 - 360	Degrees	DIR TO FIX INFO 1 to 4

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
RADIO	NNN	0–700 No is accepted if an ILS / GLS ◁ ; APPR is selected.	ft	PERF APPR (ACT/SEC ⁽²⁾)
RADIUS ◁	DNNN 3 digits entry D is the identifiant of the circle radius	000 - 256	NM	FIX INFO 1 to 4
REF FIX ◁	See WAYPOINT			FIX INFO 1 to 4
RTE RSV	may be entered as fuel or percentage of trip fuel	Fuel 0 - 10.0 0 - 21.7 % : 0 - 15.0	thousands of kg thousands of lb	INIT B (ACT/SEC ⁽²⁾) FUEL PRED
RWY	AAAANND Where AAAA is See ARPT. NN is runway number (2 digits) must be entered D is L or R to be included only when there is more than one runway with the same number at ARPT.			RUNWAY NEW RUNWAY F-PLN A-B
SAT/ALT ◁	±NN/ALT Where NN is TEMP. For TEMP, if no sign, assume "-". Leading zeros may be omitted.	See TEMP and See ALT	N/A	CRUISE WIND
SET HDG ◁	NNN/N (leading and trailing zeros may be omitted) will always be displayed as NNN/N	000.0 - 360.0	Degrees	IRS MONITOR
SLOPE ◁	NN.N	00.0 -90.0	Degrees	NEW NAVAID
SPD	NNN (leading zero may be omitted)	MAX = 350 kt MIN = 90 kt	kt (CAS)	SEC F-PLN A PERF CLB PERF CRZ (ACT, SEC ⁽²⁾) PERF DES
SPD CSTR	See SPD	See SPD	kt (CAS)	F-PLN A (ACT/SEC ⁽²⁾) VERT REV (ACT/SEC ⁽²⁾)

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
SPD LIM	SSS/NNNNN SSS is a speed NNNNN is an ALT or FLIGHT LEVEL (See ALT and See FLIGHT LEVEL).	SSS: See SPD	kt/ft (MSL)	VERT REV (ACT/SEC (2))
SPD/MACH	See MACH/SPD	See MACH and See SPD	See MACH and See SPD	PERF DES (ACT/SEC (2))
STATION DEC	NND Where NN is the declination and D is the direction. Leading zeros may be omitted. D is not required for an entry of zero declination.	NN: 01 - 99 D: E or W	Degrees	NEW NAVAID
STEP ALT ◁	SNNN or NNNS (where NNN is in Flight Level) or SNNNNN or NNNNNS (where NNNNN is in ALT) Leading zeros may be omitted	See FLIGHT LEVEL or See ALT	See FLIGHT LEVEL or See ALT	F-PLN A
TAXI	N.N Leading or trailing zeros may be omitted	0 - 9.9	Thousands of kg	INIT B (ACT/SEC (2))
TEMP	± NN If no sign, + assumed	± 99	Degrees celsius	INIT A (ACT/SEC (2)) FUEL PRED PERF APPR CRZ TEMP DES TEMP ◁
THR RED ALT	See ALT	400 ft AGL mini	ft (MSL)	PERF TAKEOFF
THS	AAN.N or N.NAA where AA is UP or DN	MAX UP 9.9 MAX DN 5.0 MIN UP and DN is 0.0 increment 0.1	degrees	PERF TAKEOFF
TRANS ALT	See ALT			PERF GO AROUND
TIME	N.N	0 - 9.9	Minutes	HOLD

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
TIME MARK. ◁	HHMM	HH: 0 - 23 MM: 0 - 59	Hours Minutes	F-PLN A and B
T.O SHIFT	NNNN	1-Length of origin runway	m or ft	PERF TAKEOFF
TRIP WIND	See EFF WIND		kts	INIT A SEC INIT A
TROPO	An entry of NNNN or NNNNN is considered as an altitude. An entry of NNN or NN is considered as a FLIGHT LEVEL.(3)	See ALT (or 60 000 ◁)	ft	INIT A FUEL PREDICTION SEC FUEL PREDICTION
UTC CSTR	HH MM Where HH are hours and MM are minutes. Leading zeros may be omitted 1 or 2 digit entry is interpretated as minutes.	HH: 0 - 23 MM: 0 - 59	Hours and minutes	VERT REV
V1	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
V2	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
VR	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
WIND	See WIND DIR/ VELOCITY	See WIND DIR/ VELOCITY	See WIND DIR/ VELOCITY	F-PLN B (ACT/SEC (2)) FUEL PREDICTION

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
WAYPOINT	XXXXX - may be from . 1-5 (1-7 ◁✳) characters for waypoint. Acceptable as waypoint IDENT: ARPT NAVAID WAYPOINT LAT/LONG, PLACE BRG/ PLACE BRG and PLACE/BRG/ DIST PLACE/DIST ◁✳ may be entered to define a waypoint.			WAYPOINT NEW WAYPOINT F-PLN A and B (ACT/SEC (2)) LAT REV PROG DIR TO FIX INFO ◁✳ 1 AND 2 EQUI-TIME POINT ◁✳ STEP ALTS PREDICTIVE GPS ◁✳
WIND DIR/WIND MAG	NNN/NNN Both must be entered ; leading zeros may be omitted. An entry of WIND DIR = 360 is displayed as 0.	WIND DIRECTION 0 - 360	Degrees	INIT A PERF APPR (ACT/SEC (2)) STEP PRED
		WIND MAG 0 - 200 (or 0 - 500 ◁✳)	Kt	WIND F-PLN B VERT REV
WIND DIRECTION/ MAG/ALT	NNN/NNN/FL NNN or NNN/NNN/NN NNN	Direction and Velocity as above Minimum ALT 1 000	FL in hundred of ft, ALT in ft	DES FORECAST WIND PAGES ◁✳
ZFW	NN.N OR NNN.N Leading and trailing zeros may be omitted	MIN ZFW (1)– MZFW (1)	Thousands of kg or thousands of lb	INIT B (ACT/SEC (2))

(1) *As defined in the Performance Data Base.*

(2) *ACT/SEC = Active or Secondary*

(3) *If TROPO value is inserted in FL format, it is automatically converted to ALT format. The converted value is used for display and predictions computation.*

MCDU DATA FORMAT LIST

Ident.: DSC-22_20-50-30-00000920.0082001 / 21 MAR 16
Applicable to: MSN 04827-04860

The following chart lists all the data the pilot may enter on the MCDU.

It also shows the acceptable format for the various data items, the acceptable range, the units of entry, and the MCDU pages on which the data can be entered.

The following codes are used to indicate various data formats:

A : letters
N : numbers
X : letters and numbers

DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
ACCEL ALT	See ALT		ft (MSL)	TAKEOFF (ACT/SEC(2)) GO AROUND (ACT/SEC (2))
ALT	NNNN or NNNNN (leading zeros must be included)	Max ALT = 39 000 Entry is rounded to the nearest 10 ft	ft (MSL)	PERF CLB PERF DES
ALT CSTR	See ALT	See ALT	ft (MSL)	VERT REV F-PLN A SEC F-PLN A
AIRWAYS (VIA)	XXXX	If not in data base "NOT IN DATA BASE" is displayed	N/A	LAT REV AIRWAYS ◁
ARPT	AAAA 1 character minimum. 4 maximum.	If AAAA is not in the database airport file, the New Runway page is displayed		INIT A (ACT/SEC (2)) LAT REV ALTN F-PLN A-B (ACT/SEC (2)) WAYPOINT DIR TO
BARO	Same as ALT	Ldg elevation to ldg elevation + 5000	ft (MSL)	PERF APPR (ACT/SEC)
BLOCK FUEL	NN.N leading zeros may be omitted.	0-80/0-175.2	Thousands of Kg or thousands of Lb	INIT B (ACT/SEC (2))
CABIN RATE	- NNN (- may be omitted)	100 - 999	ft/min	DES FORECAST or CRUISE PERF. PAGE ◁
CG	NN.N	8.0 - 45.0	% MAC	INIT B. (ACT/SEC (2)) FUEL PRED
CHANNEL ◁	NNN	500 - 699		NEW NAVAID RAD NAV

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
CLASS (NAVAID)	AAAAAA (refer to RANGE for exact inputs allowed)	VOR DME VORDME VORTAC LOC, ILS NDB ILSDME MLS ◁ TACAN ◁	N/A	NEW NAVAID
CO RTE	XXXXXXX 7 or 10 characters (pin program)	If not in the NAVdatabase, a message will be displayed	N/A	INIT A ROUTE SELECTION NEW ROUTE ALTERNATE
COST INDEX	NNN may be entered as 1-3 digits; leading zeros lay be omitted	0 to 999	Kg/Min or 100 lb/Hr	INIT A (ACT/SEC$^{(2)}$) PERF CLB (ACT/SEC$^{(2)}$) PERF CRZ (ACT/SEC $^{(2)}$) PERF DES (ALT/SEC $^{(2)}$)
CRS	See INB CRS	See INB CRS	degrees	RADIO NAV NEW NAVAID NEW RUNWAY
CRZ FL	Must be entered as FLIGHT LEVEL	Maximum FL (See FLIGHT LEVEL)	Hundred of ft	INIT A (ACT/SEC $^{(2)}$) PROG
CRZ TEMP	See TEMP	±99	Degrees celsius	INIT A (ACT/SEC$^{(2)}$) FUEL PREDICTION
CRZ WIND	See WIND DIR/MAG	See WIND DIR/MAG	See WIND DIR/MAG	INIT A (ACT/SEC $^{(2)}$) FUEL PREDICTION
DIST	NN.N leading and trailing 0's may be omitted.	0 - 99.9 or 0 - 999 (or 9999 ◁)	NM NM	HOLD ALTN
DRT TO ◁	"D"NN	Eight possible values		PERF TAKEOFF
EFF WIND ◁	±NNN "+" may be entered as "T" or "TL" "-" may be entered as "H" or "HD" Leading zeros may be omitted If no sign is input, "+" is taken	0 - 500	kts	CLOSEST AIRPORT EQUI-TIME INIT A SEC INT A

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
ELV	±NNNN if no sign, + assumed Leading 0's may be omitted	Entry displayed to nearest 10 ft -400 to 20 470 ft (RWY) (or - 1000 to 20 470 ft ◁) -2 000 to 20 470 (NAVAID)	ft (MSL)	NEW RUNWAY NEW NAVAID
ETT/RTA ◁	HH:MM:SS	00:00:00 to 23:59:59	Hour HH Min MM Sec SS	RTA
FF/FQ Sensors	One or both may be entered, Both - /FF + FQ or - / FQ + FF Fuel flow - /FF Fuel Quantity - / FQ		N/A	FUEL PREDICTION
FIG OF MERIT	N	0 - 3	N/A	NEW NAVAID
FINAL/TIME	Only one may be entered at a time. NN.N or (NNN.N ◁) for FINAL NNNN for TIME	FINAL 0 - 10.0 (or 0 - 100 ◁) or 0 - 22.0 0 - 90 TIME	Thousand of kg or Thousand of lb minutes	FUEL PRED INIT B
FLAPS		0, 1, 2, or 3		TAKEOFF
FLEX TO TEMP	1. If Derated TO option not implemented: same as TEMP 2. If Derated TO option is implemented: F NN		NN in degrees centigrade	TAKEOFF
FLIGHT LEVEL	FLNNN or NNN Leading zeros on NNN may be omitted	Max FL = 390 (or Max FL = 410 ◁)	Hundreds of ft (MSL)	F-PLN A-B, PROG VERT REV INIT A (ACT, SEC(2)) PERF CLB PERF DES STEP PRED STEP ALTS ◁

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
FLIGHT NUMBER	XXXXXXXX The 8 alphanumeric are not mandatory	N/A	N/A	INIT A F-PLN A-B
FOB	NN.N (leading zeros may be omitted)	See BLOCK	Thousands of kg or Thousands of Lb	FUEL PREDICTION
FREQ	NNN.NN ILS/VOR NNN.N NDB	108.00 - 117.95 190.0 - 1 750.0	MHz KHz	PROG. NEW NAVAID RADIO NAV
FROM/TO	AAAA /AAAA	AAAA must be in data base or message will be displayed	N/A	INIT A (ACT/SEC (2))
GW	NN.N Leading and trailing zeros may be omitted	35 - 99.9 or 77.2 - 218	Thousands of kg or Thousands of Lb	FUEL PREDICTION
GND TEMP	±NN (if no sign, assume +)		See TEMP	INIT A, SEC INIT A
IDLE FACTOR ◁	± N.N Leading and trailing zeros may be omitted	-9.9. +9.9	%	A/C STATUS
INB CRS	NNN Leading zeros may be omitted. An entry of 360 is displayed as 0.	000 - 359	Degrees	HOLD
LAT	DDMM.MB DD - degrees, MM.M - minutes, B - direction. Leading zeros may be omitted but the direction (B) is necessary.	B: N or S 0 ≤ DD ≤ 90 0 ≤ MM.M ≤ 59.9	Degree minutes tenths of minutes	INIT A IRS INIT
LAT/LONG	LAT/LONG See LAT and See LONGexcept both must be entered with "/" in between	See LAT and See LONG	See LAT and See LONG	F-PLN A-B (ACT/SEC (2)) PROG NEW WAYPOINT NEW NAVAID DIR TO LAT REV NEW RUNWAY IRS INIT
LENGTH	NNNN Leading zeros may be omitted	1 000 - 8 000 m 3 282 - 9 999 ft	Meters or feet	NEW RUNWAY

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
LONG	DDDMM.MB or DDD - degrees MM.M - minutes B - direction. Leading zeros may be omitted but the direction (B) is necessary	B: E or W 0 ≤ DDD ≤ 180 0 ≤ MM.M ≤ 59	Degree minutes tenths of minutes	INIT A IRS INIT
MACH	.NN or 0.NN Trailing zeros are not necessary NN: Entry of two figures is necessary	MAX = .82 MIN = .15	Mach Number	F-PLN A (ACT/SEC (2)) PERF CLB PERF CRZ PERF DES
MACH/SPD	MACH and SPD must be entered with "/" between (See MACH and See SPD formats)	See MACH and See SPD	See MACH and See SPD	PERF DES (ACT/SEC (2))
MIN DEST FOB	NNN.N (leading zeros may be omitted)	0 - 80	Thousand of kg or lb (OPC option)	INIT B FUEL PRED (ATC/SEC)
NAVAID	XXXX	Any alphanumeric	N/A	PROG NEW NAVAID NAVAID F-PLN A-B (ACT/SEC (2)) LAT REV DIR TO RADIO NAV SELECTED NAVAIDS
OFST	NNB or BNN NN offset distance B direction	B: L or R 1 < NN < 50	NM	LAT REV
PERF FACTOR	NN.N leading or trailing zeros may be omitted (± N.N)	-10.0 to +10.0 (or -9.9 - +9.9 ◁*)	N/A	A/C STATUS

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
PLACE/BRG/DIST	PLACE can be any data base ARPT, NAVAID or WAYPOINT - BRG must be a 3 digit entry without decimal digit. An entry of BRG = 360 is displayed as 0.	PLACE - If not in data base, a message "NOT IN DATA BASE" is displayed BRG - 000 - 360	N/A degrees	LAT REV(ACT/SEC (2)) NEW WAYPOINT PROG DIR TO F-PLNA-B (ACT/SEC (2)) STEP ALTS
	DIST is NNN.N where leading zeros may be omitted ; all 3 parameters must be entered with "/" between	DIST - 0 - 999.9	NM	
PLACE-BRG/ PLACE-BRG	See PLACE/BRG/DIST A couple PLACE-BRG is entered with a dash in the middle. 2 couples have to be entered with "/" between	See PLACE/BRG/DIST	See PLACE/BRG/ DIST	See PLACE/BRG/DIST
PLACE/DIST	PLACE: See PLACE/ BRG/DIST DIST: See PLACE/ BRG/DIST	PLACE: See PLACE/ BRG/DIST DIST: 0 - 999.9	N/A NM	F-PLN A and B SEC F-PLN A and B LAT REV NEW WAYPOINT DIR TO STEP ALTS
QNH	NNNN (leading zero may be omitted).	745 - 1 050 (or 745 - 1050)	Hecto-Pascals (hPa)	PERF APPR (ACT/SEC (2))
	NN.NN or NNNN (four digits are mandatory).	28.06 - 31.01 (or 22.00 - 32.48)	In.Hg	
RADIAL	NNN(T) 3 digits entry	000 - 360	Degrees	FIX INFO 1 to 4
RADIAL IN	NNN(T) 3 digits entry	000 - 360	Degrees	DIR TO
RADIAL OUT	NNN(T) 3 digits entry	000 - 360	Degrees	DIR TO FIX INFO 1 to 4
RADIO	NNN	0–700 No is accepted if an ILS / GLS ; APPR is selected	ft	PERF APPR (ACT/SEC)

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
RADIUS ◁	DNNN 3 digits entry D is the identifiant of the circle radius	000 - 256	NM	FIX INFO 1 to 4
REF FIX ◁	See WAYPOINT			FIX INFO 1 to 4
RTE RSV	may be entered as fuel or percentage of trip fuel	Fuel 0 - 10.0 0 - 21.7 % : 0 - 15.0	thousands of kg thousands of lb	INIT B (ACT/SEC (2)) FUEL PRED
RWY	AAAANND Where AAAA is same as ARPT (See ARPT). NN is runway number (2 digits) must be entered D is L or R to be included only when there is more than one runway with the same number at ARPT.			RUNWAY NEW RUNWAY F-PLN A-B
SAT/ALT ◁	TEMP/ALT	See TEMP and See ALT	N/A	CRZ WIND
SET HDG ◁	NNN/N (leading and trailing zeros may be omitted) will always be displayed as NNN/N	000.0 - 360.0	Degrees	IRS MONITOR
SLOPE ◁	NN.N	00.0 -90.0	Degrees	NEW NAVAID
SPD	NNN (must be 3 numerics)	MAX = 350 kt MIN = 90 kt	kt (CAS)	SEC F-PLN A PERF CLB PERF CRZ (ACT, SEC(2)) PERF DES
SPD CSTR	See SPD	See SPD	kt (CAS)	F-PLN A (ACT/SEC (2)) VERT REV (ACT/SEC (2))
SPD LIM	SSS/NNNNN SSS is a speed NNNNN is an ALT or FLIGHT LEVEL (See ALT and See FLIGHT LEVEL)	SSS: See SPD	kt/ft (MSL)	VERT REV (ACT/SEC3 (2))
SPD/MACH	See MACH/SPD	See MACH and See SPD	See MACH and See SPD	PERF DES (ACT/SEC (2))

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
STATION DEC	NND Where NN is the declination and D is the direction. Leading zeros may be omitted. D is not required for an entry of zero declination.	NN: 01 - 99 D : E or W	Degrees	NEW NAVAID
STEP ALT ◁	SNNN or NNNS (where NNN is in Flight Level) or SNNNNN or NNNNNS (where NNNNN is in ALT) Leading zeros may be omitted	See FLIGHT LEVEL or See ALT	See FLIGHT LEVEL or See ALT	F-PLN A
TAXI	N.N Leading or trailing zeros may be omitted	0 - 9.9	Thousands of kg	INIT B (ACT/SEC (2))
TEMP	± NN If no sign, + assumed	±99	Degrees celsius	PERFTAKEOFF PERF APPR UPLINK TODATA REQ
THR RED ALT	See ALT	400 ft AGL mini	ft (MSL)	PERF TAKE OFF
THS	AAN.N or N.NAA where AA is UP or DN	max UP 7.0 max DN 5.0 increment .1	degrees	PERF TAKEOFF
TRANS ALT	See ALT			PERF TAKE OFF PERF GO AROUND
TRANS FL	See FLIGHT LEVEL			PERF APPR
TIME	N.N	0 - 9.9	Minutes	HOLD
TIME MARK. ◁	HHMM	HH: 0 - 23 MM : 0 - 59	Hours Minutes	F-PLN A and B
T.O SHIFT	NNNN	1-Length of origin runway	m or ft	PERF TAKEOFF
TRIP WIND	See EFF WIND		kts	INIT A SET INIT A
TROPO	See ALT	See ALT (or 60 000 ◁)	ft	INIT A FUEL PREDICTION SEC FUEL PREDICTION

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
UTC CSTR	HH MM Where HH are hours and MM are minutes. Leading zeros may be omitted 1 or 2 digit entry is interpretated as minutes	HH: 0 - 23 MM : 0 - 59	Hours and minutes	VERT REV
V1	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
V2	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
VR	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
WIND	See WIND DIR/ VELOCITY	See WIND DIR/ VELOCITY	See WIND DIR/ VELOCITY	F-PLN B (ACT/SEC (2)) FUEL PREDICTION
WAYPOINT	XXXXX - may be from . 1-5 (1-7 ◁) characters for waypoint. Acceptable as waypoint IDENT : ARPT NAVAID WAYPOINT LAT/LONG, PLACE BRG/ PLACE BRG and PLACE/BRG/ DIST PLACE / DIST ◁ may be entered to define a waypoint			WAYPOINT NEW WAYPOINT F-PLN A and B (ACT/SEC(2)) LAT REV PROG DIR TO FIX INFO ◁ 1 AND 2 EQUI-TIME POINT ◁ STEP ALTS ◁ PREDICTIVE GPS ◁
WIND DIR/WIND MAG	NNN/NNN Both must be entered ; leading zeros may be omitted. An entry of WIND DIR = 360 is displayed as 0.	WIND DIRECTION 0 - 360	Degrees	INIT A PERF APPR (ACT/SEC (2)) STEP PRED
		WIND MAG 0 - 200	Kt	WIND F-PLN B VERT REV

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
WIND DIRECTION/ MAG/ALT	NNN/NNN/FL NNN or NNN/NNN/NN NNN	Direction and Velocity as above Minimum ALT 1 000	FL in hundred of ft, ALT in ft	DES FORECAST WIND PAGES ◁
ZFW	NN.N OR NNN.N Leading and trailing zeros may be omitted	Min ZFW (1)– Max ZFW (1)	Thousands of kg or thousands of Lb	INIT B (ACT/SEC (2))

(1) *As defined in the Performance Data Base.*

(2) *ACT/SEC = Active or Secondary*

MCDU DATA FORMAT LIST

Ident.: DSC-22_20-50-30-00000920.0051001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The following chart lists all the data the pilot may enter on the MCDU.
It also shows the acceptable format for the various data items, the acceptable range, the units of entry, and the MCDU pages on which the data can be entered.

The following codes are used to indicate various data formats:

A : letters
N : numbers
X : letters and numbers

DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
ACCEL ALT	See ALT		ft (MSL)	TAKEOFF (ACT/SEC (2)) GO AROUND (ACT/SEC (2))
ALT	NNNN or NNNNN (leading zeros must be included)	Max ALT = 39 000 Entry is rounded to the nearest 10 ft	ft (MSL)	PERF CLB PERF DES
ALT CSTR	See ALT	See ALT	ft (MSL)	VERT REV F-PLN A SEC F-PLN A
AIRWAYS (VIA)	XXXX	If not in data base "NOT IN DATA BASE" is displayed	N/A	LAT REV AIRWAYS ◁

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
ARPT	AAAA 1 character minimum. 4 maximum.	If AAAA is not in the database airport file, the New Runway page is displayed		INIT A (ACT/SEC (2)) LAT REV ALTN F-PLN A-B (ACT/SEC (2)) WAYPOINT DIR TO
BARO	Same as ALT	Ldg elevation to ldg elevation + 5000	ft (MSL)	PERF APPR (ACT/SEC(2))
BLOCK FUEL	NN.N leading zeros may be omitted.	0-80/0-175.2	Thousands of Kg or thousands of Lb	INIT B (ACT/SEC (2))
CABIN RATE	- NNN (- may be omitted)	100 - 999	ft/min	DES FORECAST or CRUISE PERF PAGE ◁
CG	NN.N	8.0 - 45.0	% MAC	INIT B. (ACT/SEC (2)) FUEL PRED
CHANNEL ◁	NNN	500 - 699		NEW NAVAID RAD NAV
CLASS (NAVAID)	AAAAAA (refer to RANGE for exact inputs allowed)	VOR DME VORDME VORTAC LOC, ILS NDB ILSDME MLS ◁ TACAN ◁	N/A	NEW NAVAID
CO RTE	XXXXXXX 7 or 10 characters (pin program)	If not in the NAVdatabase, a message will be displayed	N/A	INIT A ROUTE SELECTION NEW ROUTE ALTERNATE
COST INDEX	NNN may be entered as 1-3 digits; leading zeros lay be omitted	0 to 999	Kg/Min or 100 lb/Hr	INIT A (ACT/SEC (2)) PERF CLB (ACT/SEC (2)) PERF CRZ (ACT/SEC (2)) PERF DES (ALT/SEC (2))
CRS	See INB CRS	See INB CRS	degrees	RADIO NAV NEW NAVAID NEW RUNWAY
CRZ FL	Must be entered as FLIGHT LEVEL	Maximum FL (See FLIGHT LEVEL)	Hundred of ft	INIT A (ACT/SEC (2)) PROG
CRZ TEMP	See TEMP		See TEMP	INIT A (ACT/SEC (2)) FUEL PREDICTION

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
CRZ WIND	See WIND DIR/MAG	See WIND DIR/MAG	See WIND DIR/MAG	INIT A (ACT/SEC (2)) FUEL PREDICTION
DIST	NN.N leading and trailing 0's may be omitted.	0 - 99.9 or 0 - 999 (or 9999 ◁)	NM NM	HOLD ALTN
DRT TO ◁	"D"NN	Eight possible values		PERF TAKEOFF
EFF WIND ◁	± NNN "+" may be entered as "T" or "TL" "-" may be entered as "H" or "HD" Leading zeros may be omitted If no sign is input, "+" is taken	0 - 500	kts	CLOSEST AIRPORT EQUI-TIME INIT A SEC INT A
ELV	± NNNN if no sign, + assumed Leading 0's may be omitted	Entry displayed to nearest 10 ft	ft (MSL)	
		-400 to 20 470 ft (RWY) (or - 1000 to 20 470 ft ◁)		NEW RUNWAY
		-2 000 to 20 470 (NAVAID)		NEW NAVAID
ETT/RTA ◁	HH:MM:SS	00:00:00 to 23:59:59	Hour HH Min MM Sec SS	RTA
FF/FQ Sensors	One or both may be entered, Both - /FF + FQ or - / FQ + FF Fuel flow - /FF Fuel Quantity - / FQ		N/A	FUEL PREDICTION
FIG OF MERIT	N	0 - 3	N/A	NEW NAVAID
FINAL/TIME	Only one may be entered at a time. NN.N or (NNN.N ◁) for FINAL NNNN for TIME	FINAL 0 - 10.0 (or 0 - 100 ◁) or 0 - 22.0 0 - 90 TIME	Thousand of kg or Thousand of lb minutes	FUEL PRED INIT B
FLAPS		0, 1, 2, or 3		TAKEOFF

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
FLEX TO TEMP	1. If Derated TO option not implemented: same as TEMP 2. If Derated TO option is implemented: F NN		NN in degrees centigrade	TAKEOFF
FLIGHT LEVEL	FLNNN or NNN Leading zeros on NNN may be omitted	Max FL = 390 (or Max FL = 410 ◁)	Hundreds of ft (MSL)	F-PLN A-B, PROG VERT REV INIT A (ACT, SEC (2)) PERF CLB PERF DES STEP PRED STEP ALTS ◁
FLIGHT NUMBER	XXXXXXXX The 8 alphanumeric are not mandatory	N/A	N/A	INIT A F-PLN A-B
FOB	NN.N (leading zeros may be omitted)	See BLOCK	Thousands of kg or Thousands of Lb	FUEL PREDICTION
FREQ	NNN.NN ILS/VOR NNN.N NDB	108.00 - 117.95 190.0 - 1 750.0	MHz KHz	PROG. NEW NAVAID RADIO NAV
FROM/TO	AAAA /AAAA	AAAA must be in data base or message will be displayed	N/A	INIT A (ACT/SEC (2))
GW	NN.N Leading and trailing zeros may be omitted	35 - 99.9 or 77.2 - 218	Thousands of kg or Thousands of Lb	FUEL PREDICTION
IDLE FACTOR ◁	± N.N Leading and trailing zeros may be omitted	-9.9. +9.9	%	A/C STATUS
INB CRS	NNN Leading zeros may be omitted. An entry of 360 is displayed as 0.	000 - 359	Degrees	HOLD

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
LAT	DDMM.MB or BDDMM.M DD - degrees, MM.M - minutes, B - direction. Leading zeros may be omitted but the direction (B) is necessary. Latitude is displayed as DDMM.MB	B: N or S 0 ≤ DD ≤ 90 0 ≤ MM.M ≤ 59.9	Degree minutes tenths of minutes	INIT A (ACT/SEC (2))
LAT/LONG	LAT/LONG See LAT and See LONG except both must be entered with "/" in between	See LAT and See LONG	See LAT and See LONG	F-PLN A-B (ACT/SEC (2)) PROG NEW WAYPOINT NEW NAVAID DIR TO LAT REV NEW RUNWAY
LENGTH	NNNN Leading zeros may be omitted	1 000 - 8 000 m 3 282 - 9 999 ft	Meters or feet	NEW RUNWAY
LONG	DDDMM.MB or BDDDMM.M DDD - degrees MM.M - minutes B - direction. Leading zeros may be omitted but the direction (B) is necessary	B: E or W 0 ≤ DDD ≤ 180 0 ≤ MM.M ≤ 59	Degree minutes tenths of minutes	INIT A
MACH	.NN The decimal point is necessary. Trailing zeros are not necessary	MAX = 0.82 MIN = 0.15	Mach Number	F-PLN A (ACT/SEC (2)) PERF CLB PERF CRZ PERF DES
MACH/SPD	MACH and SPD must be entered with "/" between (See MACH and See SPD formats)	See MACH and See SPD	See MACH and See SPD	PERF DES (ACT/SEC (2))

Continued on the following page

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
NAVAID	XXXX	Any alphanumeric	N/A	PROG NEW NAVAID NAVAID F-PLN A-B (ACT/SEC (2)) LAT REV DIR TO RADIO NAV SELECTED NAVAIDS
OFST	NNB or BNN NN offset distance B direction	B: L or R 1 < NN < 50	NM	LAT REV
PERF FACTOR	NN.N leading or trailing zeros may be omitted (± N.N)	-10.0 to +10.0 (or -9.9 - +9.9 ◁✻)	N/A	A/C STATUS
PLACE/BRG/DIST	PLACE can be any data base ARPT, NAVAID or WAYPOINT - BRG must be a 3 digit entry without decimal digit. An entry of BRG = 360 is displayed as 0.	PLACE - If not in data base, a message "NOT IN DATA BASE" is displayed BRG - 000 - 360	N/A degrees	LAT REV (ACT/SEC (2)) NEW WAYPOINT PROG DIR TO F-PLNA-B (ACT/SEC (2)) STEP ALTS ◁✻
	DIST is NNN.N where leading zeros may be omitted ; all 3 parameters must be entered with "/" between	DIST - 0 - 999.9	NM	
PLACE-BRG/ PLACE-BRG	See PLACE/BRG/ DIST A couple PLACE-BRG is entered with a dash in the middle. 2 couples have to be entered with "/" between	See PLACE/BRG/DIST	See PLACE/BRG/DIST	See PLACE/BRG/DIST

Continued on the following page

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
PLACE/DIST ❄	PLACE: See PLACE/ BRG/DIST DIST: See PLACE/ BRG/DIST	PLACE: See PLACE/ BRG/DIST DIST: 0 - 999.9	N/A NM	F-PLN A and B SEC F-PLN A and B LAT REV NEW WAYPOINT DIR TO STEP ALTS
QNH	NNNN (leading zero may be omitted).	950 - 1 050 (or 745 - 1050 ❄)	Hecto-Pascals (hPa)	PERF APPR (ACT/SEC [(2)])
	NN.NN (leading and trailing zeros may be omitted).	28.06 - 31.01 (or 22.00 - 31.00 ❄)	In.Hg	
RADIAL ❄	NNN(T) 3 digits entry	000 - 360	Degrees	FIX INFO 1 to 4
RADIAL IN ❄	NNN(T) 3 digits entry	000 - 360	Degrees	DIR TO
RADIAL OUT ❄	NNN(T) 3 digits entry	000 - 360	Degrees	DIR TO FIX INFO 1 to 4
RADIO	NNN	0–700 No is accepted if an ILS / GLS ❄ ; APPR is selected	ft	PERF APPR (ACT/SEC [(2)])
RADIUS ❄	DNNN 3 digits entry D is the identifiant of the circle radius	000 - 256	NM	FIX INFO 1 to 4
REF FIX ❄	See waypoint			FIX INFO 1 to 4
RTE RSV	may be entered as fuel or percentage of trip fuel	Fuel 0 - 10.0 0 - 21.7 % : 0 - 15.0	thousands of kg thousands of lb	INIT B (ACT/SEC [(2)]) FUEL PRED
RWY	AAAANND Where AAAA is See ARPT. NN is runway number (2 digits) must be entered D is L or R to be included only when there is more than one runway with the same number at ARPT.			RUNWAY NEW RUNWAY F-PLN A-B
SAT/ALT ❄	TEMP/ALT	See TEMP and See ALT	N/A	CRUISE WIND

Continued on the following page

Continued from the previous page

DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
SET HDG ◁✳	NNN/N (leading and trailing zeros may be omitted) will always be displayed as NNN/N	000.0 - 360.0	Degrees	IRS MONITOR
SLOPE ◁✳	NN.N	00.0 -90.0	Degrees	NEW NAVAID
SPD	NNN (leading zero may be omitted)	MAX = 350 kt MIN = 90 kt	kt (CAS)	SEC F-PLN A PERF CLB PERF CRZ (ACT, SEC (2)) PERF DES
SPD CSTR	See SPD	See SPD	kt (CAS)	F-PLN A (ACT/SEC (2)) VERT REV (ACT/SEC (2))
SPD LIM	SSS/NNNNN SSS is a speed NNNNN is an ALT or FLIGHT LEVEL (See ALT and See FLIGHT LEVEL)	SSS: See SPD	kt/ft (MSL)	VERT REV (ACT/SEC (2))
SPD/MACH	See MACH/SPD	See MACH and See SPD	See MACH and See SPD	PERF DES (ACT/SEC (2))
STATION DEC	NND Where NN is the declination and D is the direction. Leading zeros may be omitted. D is not required for an entry of zero declination.	NN: 01 - 99 D: E or W	Degrees	NEW NAVAID
STEP ALT ◁✳	SNNN or NNNS (where NNN is in Flight Level) or SNNNNN or NNNNNS (where NNNNN is in ALT) Leading zeros may be omitted	See FLIGHT LEVEL or See ALT	See FLIGHT LEVEL or See ALT	F-PLN A
TAXI	N.N Leading or trailing zeros may be omitted	0 - 9.9	Thousands of kg	INIT B (ACT/SEC (2))

Continued on the following page

Continued from the previous page

DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
TEMP	± NN If no sign, + assumed	± 99	Degrees celsius	INIT A (ACT/SEC (2)) FUEL PRED PERF APPR
THR RED ALT	See ALT	400 ft AGL mini	ft (MSL)	PERF TAKE OFF
THS	AAN.N or N.NAA where AA is UP or DN	max UP 7.0 max DN 5.0 increment 0.1	degrees	PERF TAKEOFF
TRANS ALT	See ALT			PERF GO AROUND
TIME	N.N	0 - 9.9	Minutes	HOLD
TIME MARK. ◁	HHMM	HH: 0 - 23 MM: 0 - 59	Hours Minutes	F-PLN A and B
T.O SHIFT	NNNN	1-Length of origin runway	m or ft	PERF TAKEOFF
TRIP WIND	See EFF WIND		kts	INIT A SET INIT A
TROPO	See ALT	See ALT (or 60 000 ◁)	ft	INIT A FUEL PREDICTION SEC FUEL PREDICTION
UTC CSTR	HH MM Where HH are hours and MM are minutes. Leading zeros may be omitted 1 or 2 digit entry is interpreted as minutes	HH: 0 - 23 MM: 0 - 59	Hours and minutes	VERT REV
V1	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
V2	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
VR	See SPD		kt (CAS)	PERF TAKEOFF (ACT/SEC (2))
WIND	See WIND DIR/ VELOCITY	See WIND DIR/ VELOCITY	See WIND DIR/ VELOCITY	F-PLN B (ACT/SEC (2)) FUEL PREDICTION

Continued on the following page

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DATA NAME	FORMAT	RANGE (X is input)	UNITS	DISPLAY PAGE
WAYPOINT	XXXXX - may be from . 1-5 (1-7 ◁✳) characters for waypoint. Acceptable as waypoint IDENT: ARPT NAVAID WAYPOINT LAT/LONG, PLACE BRG/ PLACE BRG and PLACE/BRG/ DIST PLACE/DIST ◁✳ may be entered to define a waypoint			WAYPOINT NEW WAYPOINT F-PLN A and B (ACT/SEC (2)) LAT REV PROG DIR TO FIX INFO ◁✳ 1 AND 2 EQUI-TIME POINT ◁✳ STEP ALTS ◁✳ PREDICTIVE GPS ◁✳
WIND DIR/WIND MAG	NNN/NNN Both must be entered ; leading zeros may be omitted. An entry of WIND DIR = 360 is displayed as 0.	WIND DIRECTION 0 - 360	Degrees	INIT A PERF APPR (ACT/SEC (2)) STEP PRED
		WIND MAG 0 - 200 (or 0 - 500 ◁✳)	Kt	WIND F-PLN B VERT REV
WIND DIRECTION/ MAG/ALT	NNN/NNN/FL NNN or NNN/NNN/NN NNN	Direction and Velocity as above Minimum ALT 1 000	FL in hundred of ft, ALT in ft	DES FORECAST WIND PAGES ◁✳
ZFW	NN.N OR NNN.N Leading and trailing zeros may be omitted	MIN ZFW See – Max ZFW See	Thousands of kg or thousands of Lb	INIT B (ACT/SEC (2))

(1) *As defined in the Performance Data Base.*

(2) *ACT/SEC = Active or Secondary*

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GENERAL

Ident.: DSC-22_20-60-10-00000921.0001001 / 10 DEC 09
Applicable to: ALL

The baro reference selector of the EIS (Electronic Instrument System) allows the pilot to use the standard barometric reference (STD), sea level atmospheric pressure (QNH), or atmospheric pressure at airfield elevation (QFE option) for the barometer setting.
The selected value is displayed in the baro reference display window of the EFIS control panel and on the Primary Flight Display (PFD) below the altitude scale.
The barometer setting is used as a reference for the altimeter of the PFD and for the PFD target altitude. In flight, it affects the predicted altitudes on the MCDU and the descent path computation.

MCDU ALTITUDE PREDICTIONS

Ident.: DSC-22_20-60-10-A-00000922.0001001 / 10 DEC 09
Applicable to: ALL

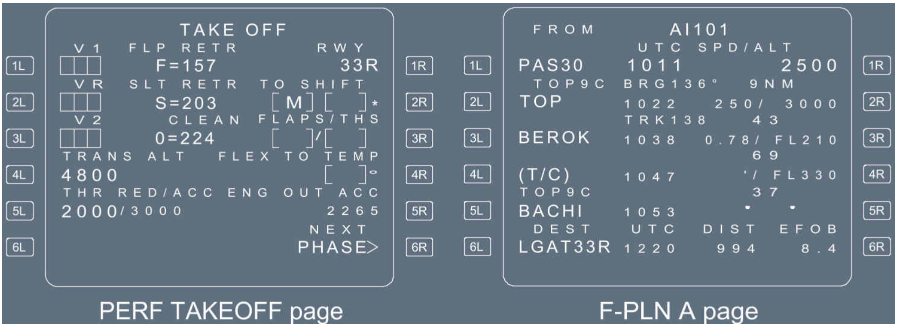
GENERAL

The FMGS predicts at each waypoint of the flight plan an altitude that is a function of all data in the lateral and vertical flight plans.

Ident.: DSC-22_20-60-10-A-00000927.0001001 / 10 DEC 09
Applicable to: ALL

ON THE GROUND

The altitude predicted at each waypoint is displayed as altitude in feet above mean sea level (AMSL) when it is below the transition altitude and as flight level when it is above the transition altitude. The altitude constraints are also displayed, and they follow the same rule (feet or flight level).
The predicted altitude is equal to the airport elevation plus the height you must attain in order to reach the waypoint in the applicable mode (climb or descent).



```
              TAKE OFF
   V1    FLP RETR              RWY
□□□        F=157               33R
   VR    SLT RETR    TO SHIFT
□□□        S=203       [M][    ]*
   V2         CLEAN  FLAPS/THS
□□□        O=224       [   ]/[   ]
TRANS ALT      FLEX TO TEMP
4800                    [   ]°
THR RED/ACC  ENG OUT ACC
2000/3000                     2265
                             NEXT
                           PHASE>
```

PERF TAKEOFF page

```
   FROM          AI101
               UTC  SPD/ALT
PAS30         1011         2500
  TOP9C     BRG136°     9NM
TOP           1022    250/  3000
            TRK138      43
BEROK         1038   0.78/ FL210
                        69
(T/C)         1047       '/ FL330
TOP9C                   37
BACHI         1053       "     "
  DEST        UTC     DIST   EFOB
LGAT33R       1220     994     8.4
```

F-PLN A page

Ident.: DSC-22_20-60-10-A-00000924.0001001 / 16 FEB 11

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

IN FLIGHT

The predicted altitude is equal to the aircraft altitude (as a function of the barometer setting), plus or minus the height you must attain to reach the waypoint in the applicable mode (climb or descent).

- In climb:
  Altitude predictions and constraints are displayed as altitude in feet above mean sea level (AMSL) at, or below, the transition altitude, and as the flight level above it.
  For example : If the transition altitude is 5 000 ft and you insert an altitude constraint as 8 000 ft, the MCDU F-PLN A page displays it as FL 80
- In descent:
  If “STD” is selected on the EIS control panel, altitude predictions and constraints above the transition level are displayed as flight levels, and those below the transition level are displayed as altitude AMSL.
  If sea level standard pressure (QNH), or field elevation pressure (QFE option), is selected on the EIS control panel, altitude predictions and constraints are displayed as altitudes AMSL, regardless of the transition altitude.
  For example: If the transition level is FL 50 and you insert an altitude constraint of 8 000 ft into the MCDU, the MCDU F-PLNS A page will display it as FL 80, if “STD” is selected, and as 8 000 ft, if “QNH” (or “QFE” option) F-PLN A page is selected.

Ident.: DSC-22_20-60-10-A-00000924.0002001 / 16 FEB 11
Applicable to: MSN 04827-04860

IN FLIGHT

The predicted altitude is equal to the aircraft altitude (as a function of the barometer setting), plus or minus the height you must attain to reach the waypoint in the applicable mode (climb or descent).

- In climb:
  Altitude predictions and constraints are displayed as altitude in feet above mean sea level (AMSL) at, or below, the transition altitude, and as the flight level above it.
  For example : If the transition altitude is 5 000 ft and you insert an altitude constraint as 8 000 ft, the MCDU F-PLN A page displays it as FL 80
- In descent:
  If “STD” is selected on the EIS control panel, altitude predictions and constraints above the transition level are displayed as flight levels, and those below the transition level are displayed as altitude AMSL.
  If sea level standard pressure (QNH), or field elevation pressure (QFE option), is selected on the EIS control panel, altitude predictions and constraints are displayed as altitudes AMSL, regardless of the transition altitude.
  For example: If the transition level is FL 50 and you insert an altitude constraint of 8 000 ft into the MCDU, the MCDU F-PLN A page will display it as FL 80, if “STD” is selected. If “QNH” (or “QFE” option) is selected, the MCDU F-PLN A page will display the barometric corrected altitude constraint.

TARGET ALTITUDE ON PFD

Ident.: DSC-22_20-60-10-00000925.0001001 / 01 OCT 12
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The PFD target altitude may either be:

- The altitude selected on the FCU, or
- A flight management altitude constraint, if the climb mode or descent mode is engaged and the system predicts a level-off at a constraint that comes before reaching the FCU altitude.

The PFD target altitude depends on the barometer setting:

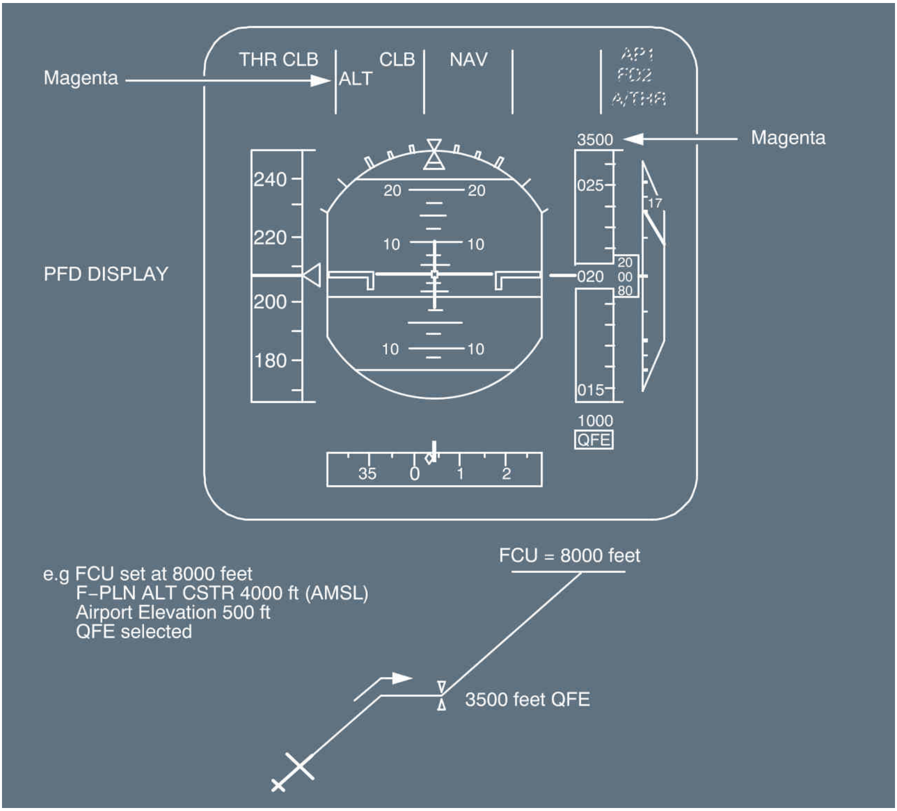
- If “STD” is selected, the target is a flight level
- If “QNH” or “QFE” is selected, the target is an altitude or height.

The aircraft will level off accordingly.

Note:
- *If the pilot changes the barometer setting during ALT* or ALT CST*, the aircraft may overshoot the target altitude, because the current value has been changed. However, the ALT* and ALT CST* modes allow the aircraft to regain the FCU altitude. As a general rule, avoid changing the barometer setting when in ALT* or ALT CST**
- *In aircraft equipped to use field elevation pressure (QFE option), switching from STD to QFE (or vice versa) in ALT CST* green changes the target value and may revert the vertical mode into V/S mode.*

NOTE FOR AIRCRAFT WITH QFE (FIELD ELEVATION PRESSURE) PIN PROGRAM

If you select “QFE” on the EFIS control panel:
- The MCDU predictions follow the basic rules (altitudes are AMSL below the transition level, flight levels above it)
- The altitude constraints on the MCDU follow the basic rules
- The target altitude on the PFD is QFE related:
  - If the target altitude has been selected by the FCU, the aircraft will level off there.
  - If the target altitude is an altitude constraint, the PFD automatically shows that constraint as corrected by the airport elevation.


Magenta
THR CLB
ALT
CLB
NAV
AP1
FD2
A/THR
3500
Magenta
PFD DISPLAY
240
220
200
180
20
20
10
10
10
10
025
17
20
00
80
020
015
1000
QFE
35
0
1
2
e.g FCU set at 8000 feet
F–PLN ALT CSTR 4000 ft (AMSL)
Airport Elevation 500 ft
QFE selected
FCU = 8000 feet
3500 feet QFE

TARGET ALTITUDE ON PFD

Ident.: DSC-22_20-60-10-00000925.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860

The PFD target altitude may either be:
- The altitude selected on the FCU, or
- A flight management altitude constraint, if the climb mode or descent mode is engaged and the system predicts a level-off at a constraint that comes before reaching the FCU altitude.

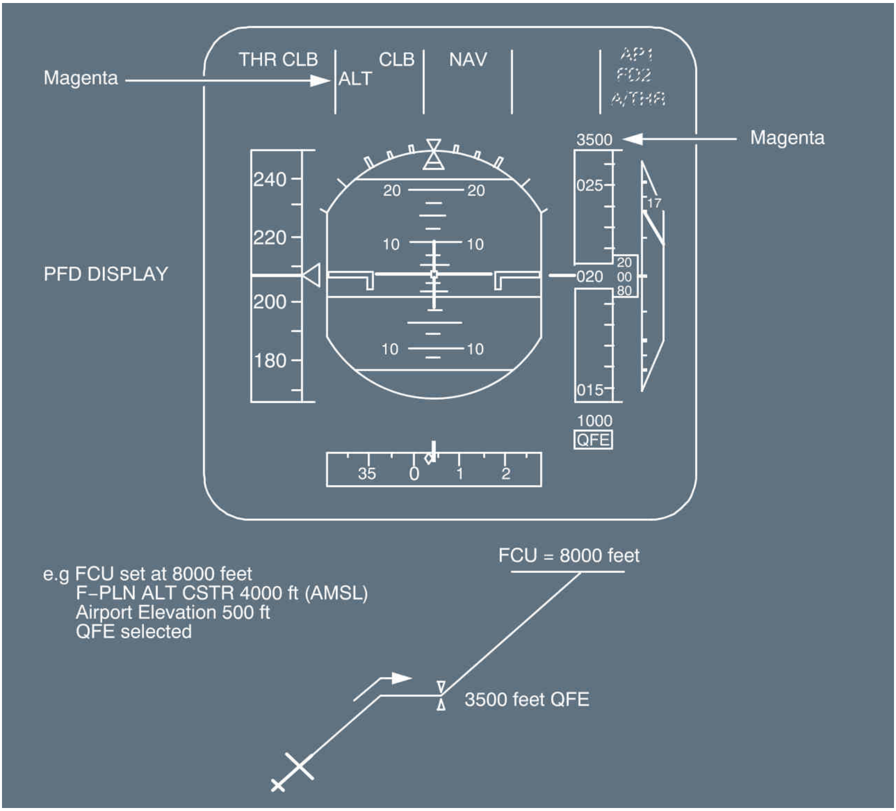
The PFD target altitude depends on the barometer setting:
- If “STD” is selected, the target is a flight level
- If “QNH” or “QFE” is selected, the target is an altitude or height.

The aircraft will level off accordingly.

NOTE FOR AIRCRAFT WITH QFE (FIELD ELEVATION PRESSURE) PIN PROGRAM

If you select “QFE” on the EFIS control panel:

- The MCDU predictions follow the basic rules (altitudes are AMSL below the transition level, flight levels above it)
- The altitude constraints on the MCDU follow the basic rules
- The target altitude on the PFD is QFE related:
  - If the target altitude has been selected by the FCU, the aircraft will level off there.
  - If the target altitude is an altitude constraint, the PFD automatically shows that constraint as corrected by the airport elevation.


Magenta
THR CLB
ALT
CLB
NAV
AP1
FD2
A/THR
3500
Magenta
PFD DISPLAY
240
220
200
180
20
20
10
10
10
10
025
020
015
20
00
80
17
1000
QFE
35
0
1
2
e.g FCU set at 8000 feet
F–PLN ALT CSTR 4000 ft (AMSL)
Airport Elevation 500 ft
QFE selected
FCU = 8000 feet
3500 feet QFE

PROCEDURES

Ident.: DSC-22_20-60-10-00000928.0001001 / 17 MAY 21
Applicable to: ALL

a. The altitude constraints in departure and arrival procedures should be defined in the navigation database or by the pilot on the MCDU:
   - in terms of altitude AMSL below the transition altitude
   - in terms of flight level above the transition altitude

   If a departure procedure defines an altitude constraint as an AMSL altitude above the transition altitude, you must convert it to STD, because the system and guidance will treat it as a flight level whenever you select the standard barometer setting.

b. In climb you should switch from QNH (or QFE) to STD on both EFIS control panels simultaneously when you reach the transition altitude.
   All MCDU altitude predictions and altitude constraints and all PFD altitude targets will be displayed as flight levels.

c. In descent, when ATC clears you to an altitude below the transition altitude, you can select QNH (or QFE) on both EFIS control panels simultaneously.
   All MCDU altitude predictions and constraints and PFD targets are now altitude AMSL.

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CLEARING THE SCRATCHPAD OF DATA OR MESSAGES

Ident.: DSC-22_20-60-20-00000929.0001001 / 16 FEB 11
Applicable to: ALL

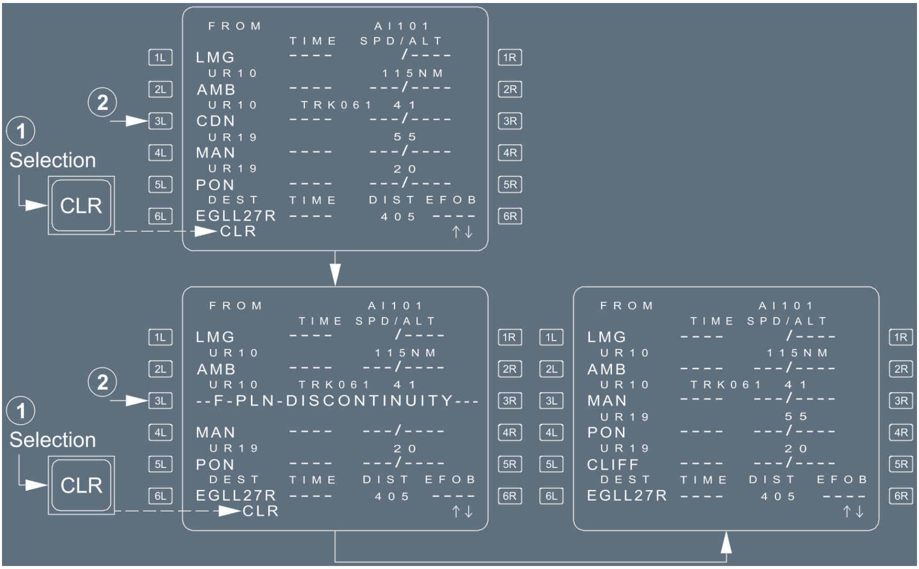
Press the “CLR” key with a single brief touch to erase the last alphanumeric character inserted in the scratchpad.
Press the key for more than three seconds to erase all the data inserted in the scratchpad. If the scratchpad is empty, it displays “CLR”.

CLEARING DATA FIELDS

Ident.: DSC-22_20-60-20-00000930.0001001 / 16 FEB 11
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Clear a data field by pressing the “CLR” key, the scratchpad displays CLR, then select the prompt for the field you want to clear (3L for example).

- You cannot clear all data fields:
  - If the field contains data that has a default value or a value computed by the FMGC, the data reverts to this value.
  - Any attempt to clear the defaulted value has no effect.
- Clearing a constraint on the F-PLN page deletes both the speed constraint and the altitude constraint associated with the waypoint
- If you clear a data field that is a waypoint in the flight plan (primary or secondary), you delete this waypoint from the flight plan and create a discontinuity. The discontinuity can also be cleared in a similar way.

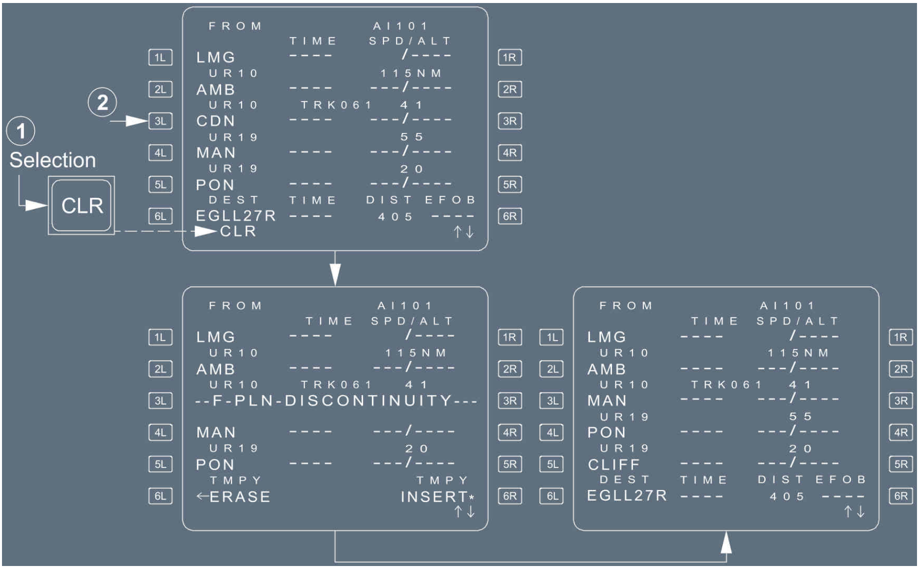

1
Selection
CLR
2
FROM AI101
TIME SPD/ALT
LMG ---- /----
UR10 115NM
AMB ---- ---/----
UR10 TRK061 41
CDN ---- ---/----
UR19 55
MAN ---- ---/----
UR19 20
PON ---- ---/----
DEST TIME DIST EFOB
EGLL27R ---- 405 ----
CLR
--F-PLN-DISCONTINUITY---
CLIFF ---- ---/----
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R

CLEARING DATA FIELDS

Ident.: DSC-22_20-60-20-00000930.0002001 / 16 FEB 11
Applicable to: MSN 04827-04860

Clear a data field by pressing the “CLR” key, the scratchpad displays CLR, then select the prompt for the field you want to clear (3L for example). This results in the creation of a temporary F-PLN. The function has no effect on the active F-PLN until the temporary is inserted.

- You cannot clear all data fields:
  - If the field contains data that has a default value or a value computed by the FMGC, the data reverts to this value.
  - Any attempt to clear the defaulted value has no effect.
- Clearing a constraint on the F-PLN page deletes both the speed constraint and the altitude constraint associated with the waypoint.
- If you clear a data field that is a waypoint in the flight plan (primary or secondary), you delete this waypoint from the flight plan and create a discontinuity. The discontinuity can also be cleared in a similar way.


FROM AI101
TIME SPD/ALT
LMG ---- /----
UR10 115NM
AMB ---- ---/----
UR10 TRK061 41
CDN ---- ---/----
UR19 55
MAN ---- ---/----
UR19 20
PON ---- ---/----
DEST TIME DIST EFOB
EGLL27R ---- 405 ----
CLR ↑↓
1
Selection
CLR
2
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
FROM AI101
TIME SPD/ALT
LMG ---- /----
UR10 115NM
AMB ---- ---/----
UR10 TRK061 41
--F-PLN-DISCONTINUITY---
MAN ---- ---/----
UR19 20
PON ---- ---/----
TMPY TMPY
←ERASE INSERT*
↑↓
FROM AI101
TIME SPD/ALT
LMG ---- /----
UR10 115NM
AMB ---- ---/----
UR10 TRK061 41
MAN ---- ---/----
UR19 55
PON ---- ---/----
UR19 20
CLIFF ---- ---/----
DEST TIME DIST EFOB
EGLL27R ---- 405 ----
↑↓

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GENERAL

Ident.: DSC-22_20-60-30-00000932.0002001 / 16 FEB 11
Applicable to: ALL

Various features are provided to the crew in order to execute a diversion:
- The EQUITIME POINT
- The CLOSEST AIRPORTS pages
- The SECONDARY F-PLN
- The ENABLE ALTN function
- The NEW DEST revision

DIVERSION TO PREPLANNED ALTERNATE AIRPORT

Ident.: DSC-22_20-60-30-00000933.0003001 / 16 FEB 11
Applicable to: MSN 04827-04860

This would probably occur at the end of the cruise phase, during descent or go-around. The pilot can use this method for diverting if the primary flight plan includes an alternate flight plan from destination to a suitable alternate airport.

When decided to divert to the alternate airport from a given waypoint, simply execute an “ENABLE ALTN” (enable alternate) revision:

SELECT “LAT REV” at a given waypoint
PRESS the “ENABLE ALTN” key
CHECK the temporary flight plan (TMPY F-PLN) and INSERT.
USE the DIR TO function to go to the required waypoint.

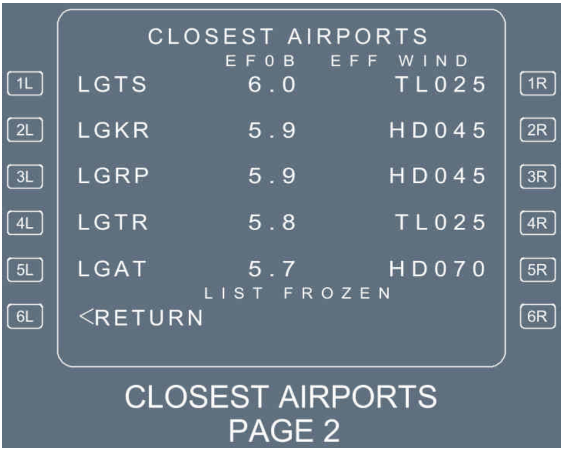
Note: *In most cases, the LAT REV shall be selected at the TO waypoint. This will facilitate the subsequent selection of the DIR TO waypoint.*

EN ROUTE DIVERSION WITH SEVERAL AIRPORTS AVAILABLE

Ident.: DSC-22_20-60-30-00009508.0002001 / 16 FEB 11

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

SELECT the CLOSEST AIRPORTS page.



```
       CLOSEST AIRPORTS
               EFOB    EFF WIND
LGTS           6.0        TL025
LGKR           5.9        HD045
LGRP           5.9        HD045
LGTR           5.8        TL025
LGAT           5.7        HD070
             LIST FROZEN
<RETURN
```

CLOSEST AIRPORTS
PAGE 2

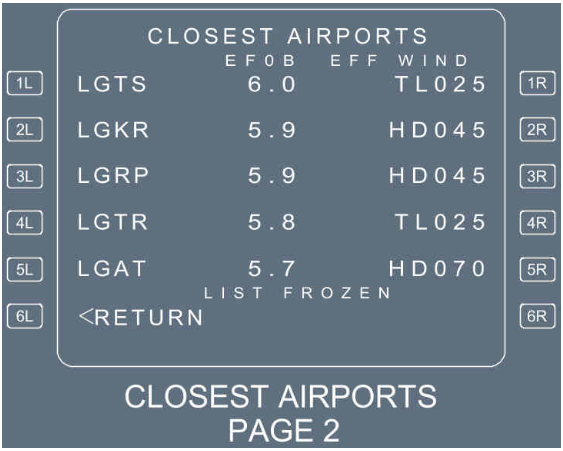
SELECT the EFOB/WIND prompt.
INSERT the effective wind at selected airport.
CHECK the predictions and CHOOSE the adequate diversion airport.
PREPARE the diversion flight plan on the SEC F-PLN.

Note: *Fuel/time predictions on the CLOSEST AIRPORTS page assume managed speed profile.*

EN ROUTE DIVERSION WITH SEVERAL AIRPORTS AVAILABLE

Ident.: DSC-22_20-60-30-00009508.0004001 / 16 FEB 11
Applicable to: MSN 04827-04860

SELECT the CLOSEST AIRPORTS page.



```
        CLOSEST AIRPORTS
             EFOB    EFF WIND
 LGTS         6.0       TL025
 LGKR         5.9       HD045
 LGRP         5.9       HD045
 LGTR         5.8       TL025
 LGAT         5.7       HD070
         LIST FROZEN
<RETURN
```

CLOSEST AIRPORTS
PAGE 2

SELECT the EFOB/WIND prompt, to access the CLOSEST AIRPORTS Page 2.
CHECK/INSERT the effective wind at the selected airports.
CHECK the predictions and CHOOSE the adequate diversion airport.
PREPARE the diversion flight plan on the SEC F-PLN.

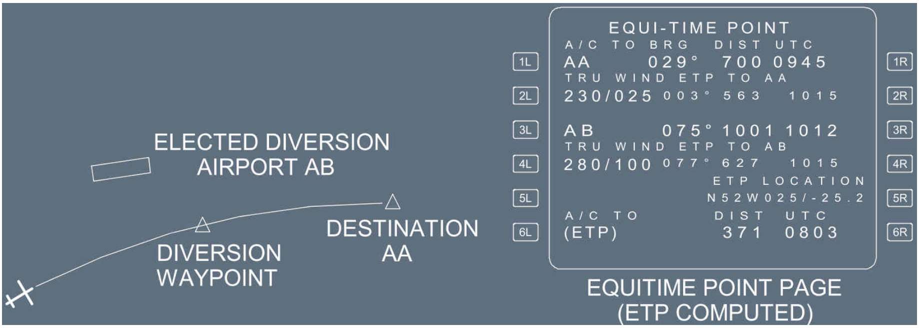
Note: *Fuel/time predictions on the CLOSEST AIRPORTS page assume managed speed is used.*

EN ROUTE DIVERSION OVER OCEANIC OR DESERTIC AREA

Ident.: DSC-22_20-60-30-00009528.0001001 / 16 FEB 11
Applicable to: ALL

The diversion airports are usually determined before departure or using the CLOSEST AIRPORTS data.

SELECT the EQUI-TIME POINT page.



```
      EQUI-TIME POINT
A/C  TO  BRG    DIST  UTC
AA       029°   700  0945
TRU  WIND  ETP  TO  AA
230/025  003°  563    1015

AB        075°  1001  1012
TRU  WIND  ETP  TO  AB
280/100  077°  627    1015
               ETP LOCATION
              N52W025/-25.2
A/C  TO          DIST   UTC
(ETP)             371   0803
```

ENTER the airport idents in 1L and 3L fields.
ENTER the associated winds in 2L and 4L fields.
CHECK the ETP position and time.
ENTER a predicted time at ETP as time marker.
PREPARE a diversion flight plan on the secondary flight plan.

DIVERSION PREPARATION ON THE SECONDARY FLIGHT PLAN

Ident.: DSC-22_20-60-30-00009530.0002001 / 16 FEB 11

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The following procedure shall be applied for all diversion cases, once the diversion airport has been selected, as well as the “most probable diversion point of the F-PLN”:

PRESS the SEC F-PLN key
PRESS the COPY ACTIVE prompt
SELECT a lateral revision at diversion waypoint
ENTER the ident of the diversion airport in the NEW DEST field.

Then finalize the flight plan between the diversion point and the diversion airport. When the diversion airport is no longer applicable or ETP is sequenced, repeat the same procedure for the next diversion airport.

MISCELLANEOUS

Ident.: DSC-22_20-60-30-00009531.0002001 / 16 FEB 11

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

In some cases, the diversion airport may be simply chosen using the airports displayed on ND when AIRPORT is selected on the EIS control panel.

During oceanic or desertic area flights, the flight crew may use the PROG page, as follows:

ENTER the ident of the diversion airport in the 4R field of MCDU 1
ENTER the next diversion airport in the 4R field of MCDU 2

Then, the FMS continuously calculated the BRG/DIST to the selected diversion airports.

UPDATE the PROG pages when sequencing the ETP.

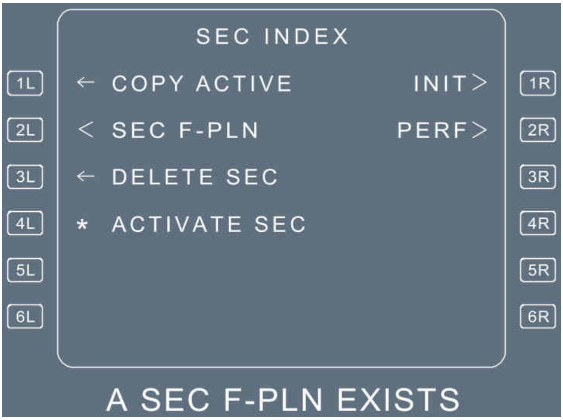
EXECUTION OF THE DIVERSION

Ident.: DSC-22_20-60-30-00009532.0001001 / 16 FEB 11

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

When the crew decides to divert:

PRESS the SEC F-PLN key.
SELECT the ACTIVATE SEC prompt.
SELECT DIR TO required point.



A SEC F-PLN EXISTS

DIVERSION TO THE ALTERNATE AIRPORT

Ident.: DSC-22_20-60-30-00009537.0001001 / 16 FEB 11

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The primary F-PLN includes an alternate flight plan from destination to the preferred alternate airport.
All fuel prediction and management (EXTRA fuel) take the alternate flight plan into consideration.
If the crew decides to divert at the end of the cruise, or beyond the last ETP, or in the descent or go-around phases, this will most probably be to the alternate airport.

When the crew decides to divert:

SELECT a lateral revision at suitable waypoint
SELECT ENABLE ALTN prompt
CHECK the temporary flight plan and INSERT
SELECT DIR TO required waypoint

Note:
- *In most cases, the LAT REV shall be selected at the TO WPT. This will facilitate the subsequent selection of the DIR TO waypoint.*
- *The ALTN flight plan shall be finalized, whenever the landing runway is known by the crew (before approach briefing).*
  In most cases, this will ensure that the most probable flight plan is displayed on the MCDU once ENABLE ALTN is selected.

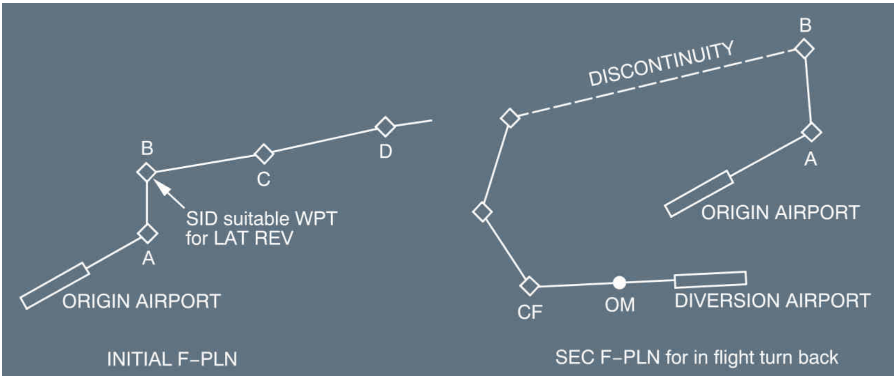
USING THE SECONDARY FLIGHT PLAN FUNCTION

Ident.: DSC-22_20-60-30-00000935.0002001 / 19 DEC 12
Applicable to: MSN 04827-04860

Use the SEC F-PLN function if a secondary flight plan for diversion has been prepared:

WHILE THE AIRCRAFT IS ON THE GROUND,

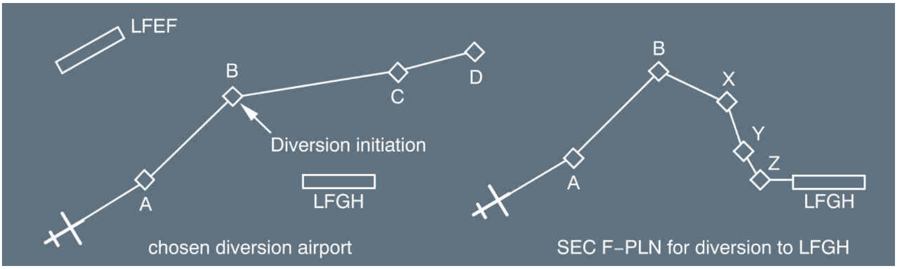
you have prepared the lateral path you would expect to use in case of an early in flight turn back (major failure after takeoff or during initial climbout), or the lateral path you would expect to use to land at a nearby diversion airport (weather at origin airport requires a takeoff alternate).


B
C
D
SID suitable WPT for LAT REV
A
ORIGIN AIRPORT
INITIAL F–PLN
DISCONTINUITY
B
A
ORIGIN AIRPORT
CF
OM
DIVERSION AIRPORT
SEC F–PLN for in flight turn back

SELECT the “SEC F-PLN” key on the MCDU.
DEPRESS the “COPY ACTIVE” key.
SELECT “LAT REV” at a waypoint with a suitable SID.
ENTER the ident of the diversion airport as the new destination.
ENTER the expected approach and route.
DEPRESS the PERF prompt on SEC INDEX page.
SELECT the PERF APP page of the secondary F-PLN.
ENTER the QNH and wind.
SELECT the landing configuration.

TO PREPARE A DIVERSION, IN CRUISE PHASE

The flight crew should consider the adequate diversion airports as the aircraft proceeds along the route of the active flight plan. For this purpose, the CLOSEST AIRPORTS page, EQUI-TIME POINT function, or EFIS “Airports” feature on the ND may be used.
Once selected, the flight crew should enter the diversion airport as the destination of the secondary flight plan, and adjust the routing as required.



SELECT the “SEC F-PLN” function key on MCDU.
PRESS the “COPY ACTIVE” prompt.
USE the CLOSEST AIRPORTS page, the EQUI-TIME POINT function, or the “AIRPORT” display on the ND.

Choose an adequate diversion airport and diversion initial waypoint.

SELECT “LAT REV” at the chosen waypoint.
ENTER the new destination (NEW DEST field).
MODIFY/COMPLETE the lateral flight plan.

To initiate the prepared diversion:
The flight crew may initiate the diversion prepared in the SEC F-PLN, as follows:

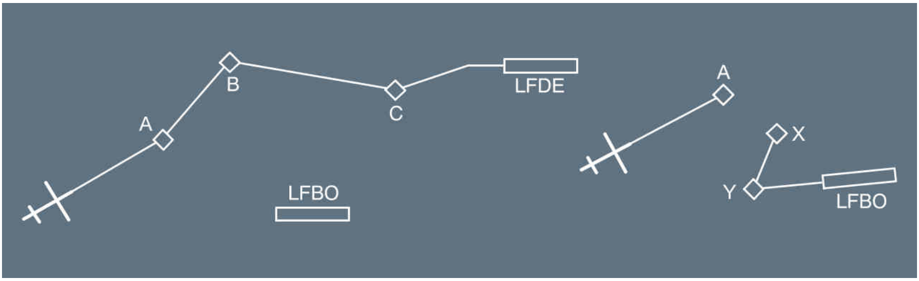
SELECT the “SEC F-PLN” key on the MCDU.
PRESS the “ACTIVE SEC” prompt [4L].

PERFORM a DIR TO to the desired waypoint in the new active flight plan.

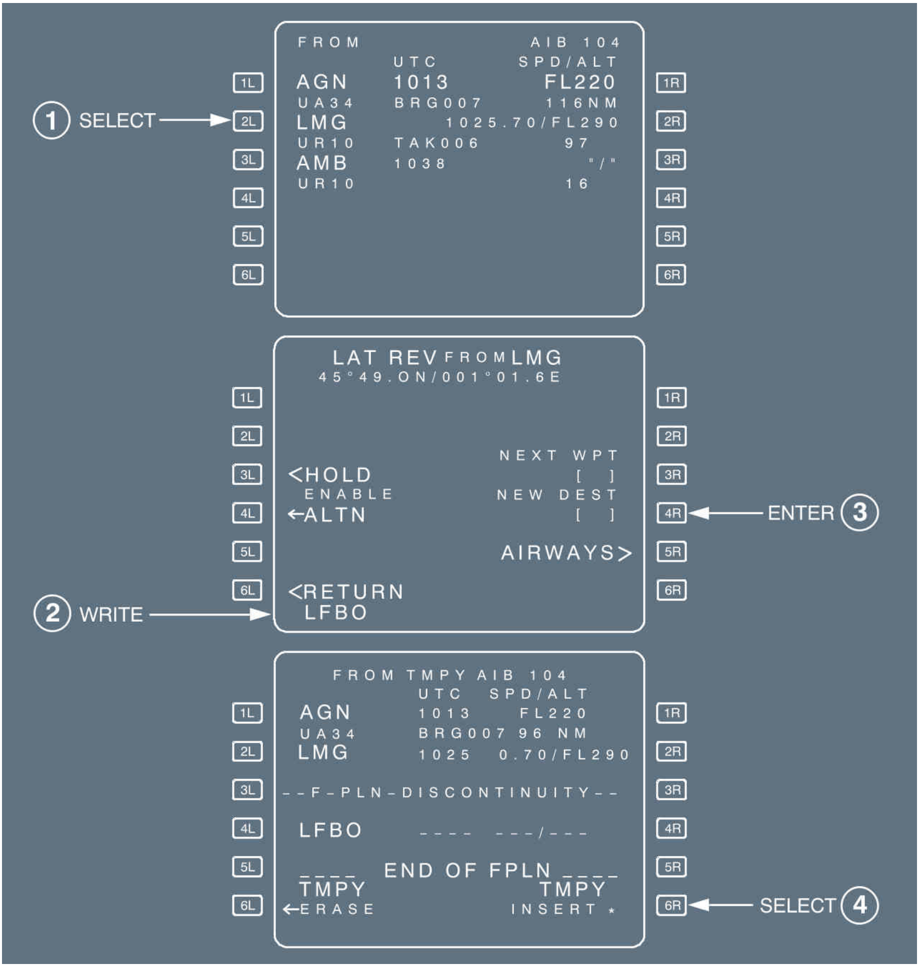
USING NEW DESTINATION FUNCTION

Ident.: DSC-22_20-60-30-00000936.0004001 / 01 OCT 12
Applicable to: MSN 04827-04860

If the crew has not prepared a diversion in the SEC F-PLN, the “NEW DEST” function allows to make the required change on the active flight plan.
Because the crew will probably have to initiate the diversion quickly, the revision waypoint will probably be the “TO” waypoint.
The crew will have to adjust the resulting active flight plan in order to have the correct routing to destination and have the applicable performance data entered.



SELECT “LAT REV” at the “TO” waypoint.
ENTER the ident for the new destination in the NEW DEST field (4R).
In the TMPY F-PLN, COMPLETE the lateral flight plan to the diversion airport.
CHECK the TMPY F-PLN, and INSERT.
ENTER/CHECK performance data as applicable.
When the diversion is initiated, USE a “DIR TO” to the appropriate waypoint.



```
FROM                     AIB 104
            UTC          SPD/ALT
AGN         1013           FL220
UA34        BRG007         116NM
LMG               1025.70/FL290
UR10        TAK006            97
AMB         1038             "/"
UR10                          16
```

```
     LAT REV FROM LMG
   45°49.0N/001°01.6E


                     NEXT WPT
<HOLD                   [   ]
  ENABLE             NEW DEST
←ALTN                   [   ]
                     AIRWAYS>

<RETURN
 LFBO
```

```
    FROM TMPY AIB 104
             UTC   SPD/ALT
 AGN         1013    FL220
 UA34        BRG007 96 NM
 LMG         1025   0.70/FL290
--F-PLN-DISCONTINUITY--
 LFBO        ----   ---/---

 ____  END OF FPLN ____
 TMPY                  TMPY
←ERASE              INSERT*
```

Note: *The temporary flight plan is displayed if the new destination airport is either in the Navigation Database, or in the pilot-defined runway file. Otherwise, the NEW RUNWAY page will appear so that the pilot can store a new runway.*

Intentionally left blank

GENERAL

Ident.: DSC-22_20-60-40-00000937.0001001 / 16 FEB 11
Applicable to: ALL

When the FMGS detects an engine-out condition, the following occurs:

FLIGHT MANAGEMENT PART

Ident.: DSC-22_20-60-40-00000938.0030001 / 16 MAR 11
Applicable to: MSN 04827-04860

- The managed target speeds is immediately set to a value that depends upon the flight phase
- The following pilot entries are deleted: preselected speeds, steps, time constraints
- No predictions are available for the ALTN flight plan, and the associated fields are dashed
- Predictions on the secondary flight plan are lost, if it is a copy of the active flight plan
- The PROG page shows the engine-out maximum recommended (EO MAX REC) altitude
- The system automatically calls up the current performance page, which has the EO CLR (engine-out clear) prompt displayed in the 1R field (except during takeoff, before the diversion point is reached).
  If the crew presses the EO CLR, the 2 engine predictions and performance will be restored. Reverting back to one engine-out performance is not possible, unless the system detects a new EO condition. Therefore, the pilot should not press the EO CLR key, if an actual engine-out is detected

FLIGHT MANAGEMENT PART

Ident.: DSC-22_20-60-40-00000938.0026001 / 16 MAR 11
1 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03284, 03313-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04953-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-06876, 06949-09324, 10949-11597**

- The managed target speeds is immediately set to a value that depends upon the flight phase
- All preselected speeds entered in the MCDU are deleted
- Step climb (or step descent), if entered, is deleted
- The time constraint is deleted
- The PROG page shows the engine-out maximum recommended (EO MAX REC) altitude
- The system automatically calls up the current performance page, which has the EO CLR (engine-out clear) prompt displayed in the 1R field (except during takeoff, before the diversion point is reached).
  If the crew presses the EO CLR, the 2 engine predictions and performance will be restored. Reverting back to one engine-out performance is not possible, unless the system detects a new EO condition. Therefore, the pilot should not press the EO CLR key, if an actual engine-out is detected

FLIGHT MANAGEMENT PART

Ident.: DSC-22_20-60-40-00000938.0002001 / 16 FEB 11

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03294, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 06895

- The managed target speeds is immediately set to a value that depends upon the flight phase
- All preselected speeds entered in the MCDU are deleted
- Step climb (or step descent), if entered, is deleted
- The time constraint is deleted
- The PROG page shows the engine-out maximum recommended (EO MAX REC) altitude
- The system automatically calls up the current performance page, which has the EO CLR (engine-out clear) prompt displayed in the 1R field (except during takeoff, before the diversion point is reached).
  If the crew presses the EO CLR, the 2 engine predictions and performance will be restored. Reverting back to one engine-out performance is not possible, unless the system detects a new EO condition. Therefore, the pilot should not press the EO CLR key, if an actual engine-out is detected
- It is not permitted to use the autopilot to perform non precision approaches in engine-out in the following modes: FINAL APP, NAV V/S, NAV/FPA. Only FD use is authorized.

FLIGHT GUIDANCE PART

Ident.: DSC-22_20-60-40-00000939.0002001 / 04 JUL 17
Applicable to: ALL

- All selected modes remain available (the “HDG/TRK”, “V/S”, and “OPEN” modes, for example)
- In the speed reference system (SRS) mode, the takeoff speed target is V2, or the current speed if it is higher but no more than V2 +15. The magenta triangle indicates V2 in all cases. The GO Around speed target is VAPP, or the current speed if higher, limited to VLS +15 kt
- The system limits autopilot (AP) and flight director (FD) bank angles during takeoff and approach phases as follows:
  - 15 ° when the aircraft speed is below the maneuvering speeds (F, S, or Green Dot speed) -10 kt , and then
  - In selected lateral guidance:
    - Linear increase to 25 ° up to maneuvering speeds (F, S, or Green Dot speed) -3 kt
    - 25 ° above maneuvering speeds (F, S, or Green Dot speed) -3 kt .
  - In managed lateral guidance:
    - Linear increase to 30 ° up to maneuvering speeds (F, S, or Green Dot speed) -3 kt
    - 30 ° above maneuvering speeds (F, S, or Green Dot speed) -3 kt .

Note: *The engine-out bank angle limits apply, when the FG part of the FMGS has detected an engine-out. It cannot be cleared by the crew through the MCDU EO CLEAR prompt.*

AUTOTHRUST

Ident.: DSC-22_20-60-40-00000940.0001001 / 16 FEB 11
Applicable to: ALL

The system extends the active range of the active engine from idle to maximum continuous thrust (MCT instead of CL thrust).
The Flight Mode Annunciator requests maximum continuous thrust on the live engine at a time that depends on when the engine-out occurs.

ENGINE-OUT CONDITIONS

Ident.: DSC-22_20-60-40-00000941.0001001 / 16 FEB 11
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The FMGS considers the aircraft to be in an engine-out condition, when one of the following conditions is present and the aircraft has commenced takeoff or is in flight:

- One engine master switch off, or
- N2 below idle, or

- One thrust lever angle is below 5 ° with the other above 22 °, or
- The FADEC shows an engine fault.

ENGINE-OUT CONDITIONS

Ident.: DSC-22_20-60-40-00000941.0002001 / 02 MAY 23
Applicable to: MSN 04827-04860

3

The FMGS considers the aircraft to be in an engine-out condition, during takeoff or in flight phase when one of the following conditions is applicable:

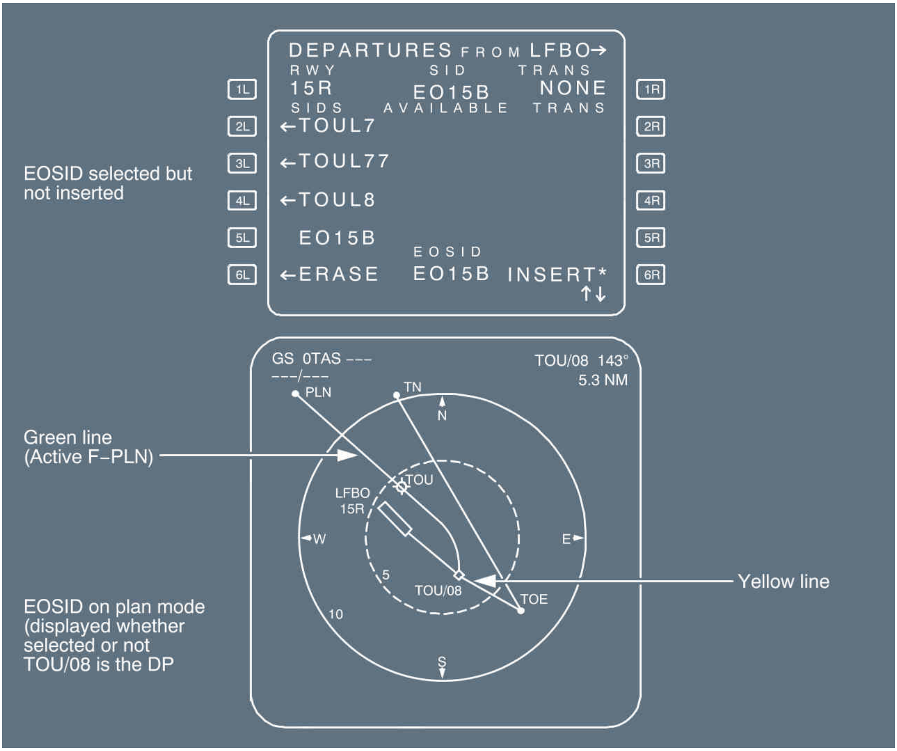
- One engine master lever is off for CFM engines, one engine is shut down for IAE or PW engines, or
- N2 below idle, or
- One thrust lever angle is below 5 ° with the other above 22 °, or
- The FADEC shows an engine fault.

ENGINE-OUT SID

Ident.: DSC-22_20-60-40-A-00000942.0001001 / 14 MAY 12
4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

GENERAL

An engine-out standard instrument departure (EOSID), when defined in the database, is always for a specific runway. It is indicated on the bottom line of the SID page for that runway, and you can select it manually.
The pilot can review the SID either by selecting the PLAN mode on the navigation display (solid yellow line), or by selecting it on the SID page. In the latter case, the navigation display shows the SID as a temporary flight plan.
The last point, if any, that is common to both the SID and engine-out SID is called the diversion point (DP).


DEPARTURES FROM LFBO→
RWY SID TRANS
15R EO15B NONE
SIDS AVAILABLE TRANS
←TOUL7
←TOUL77
←TOUL8
EO15B
EOSID
←ERASE EO15B INSERT*
↑↓
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
EOSID selected but not inserted
GS 0TAS ---
---/---
PLN
TN
N
TOU/08 143°
5.3 NM
Green line (Active F–PLN)
TOU
LFBO 15R
W
E
5
TOU/08
TOE
10
S
Yellow line
EOSID on plan mode (displayed whether selected or not TOU/08 is the DP

Ident.: DSC-22_20-60-40-A-00000942.0002001 / 18 NOV 13

Applicable to: MSN 04827-04860

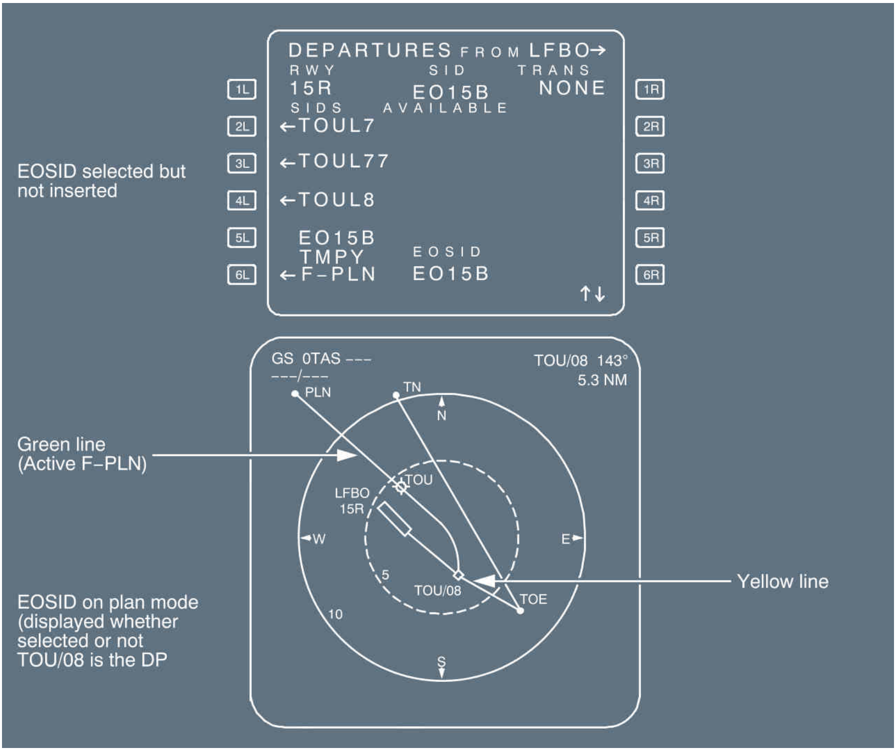
GENERAL

An engine-out standard instrument departure (EOSID), when defined in the database, is always for a specific runway. It is indicated on the bottom line of the SID page for that runway, and you can select it manually.

The pilot can review the SID either by selecting the PLAN mode on the navigation display (solid yellow line), or by selecting it on the SID page. In the latter case, the navigation display shows the SID as a temporary flight plan.

The last point, if any, that is common to both the SID and engine-out SID is called the diversion point (DP).

Note: *When several EOSID exist for a specific runway, the FMS only considers the first EOSID in alphabetical order in case of engine-out, whatever the EOSID previously selected.*


DEPARTURES FROM LFBO→
RWY SID TRANS
15R EO15B NONE
SIDS AVAILABLE
←TOUL7
←TOUL77
←TOUL8
EO15B
TMPY
EOSID
←F-PLN
EO15B
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
EOSID selected but not inserted
GS 0TAS ---
---/---
TOU/08 143°
5.3 NM
PLN
TN
N
Green line (Active F-PLN)
LFBO
15R
TOU
W
E
5
TOU/08
TOE
10
S
Yellow line
EOSID on plan mode (displayed whether selected or not TOU/08 is the DP

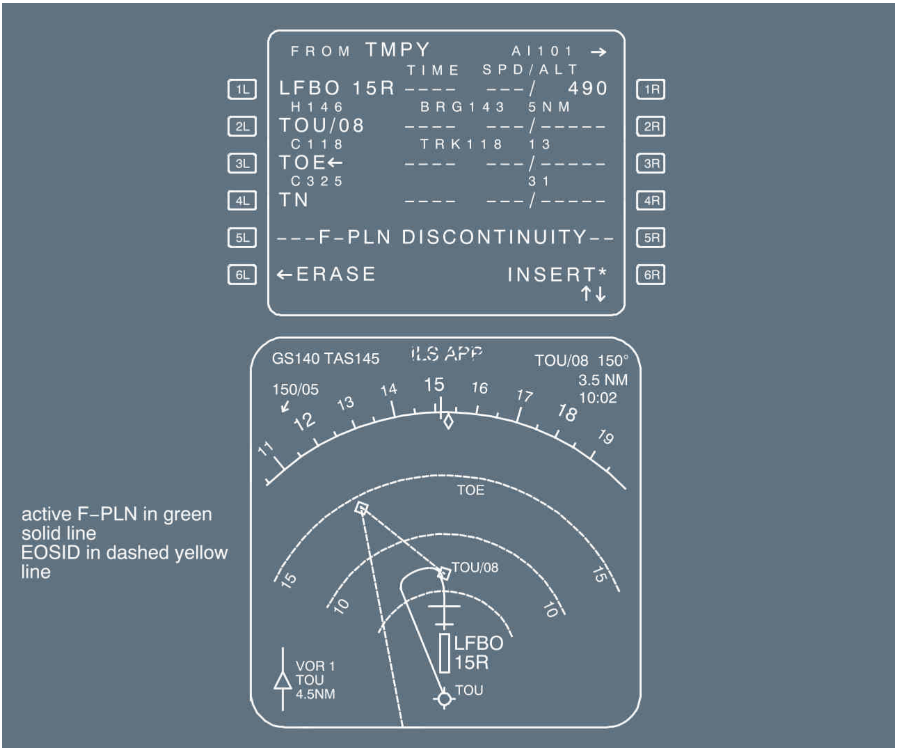
Ident.: DSC-22_20-60-40-A-00000943.0001001 / 14 MAY 12

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

WHEN AN ENGINE-OUT CONDITION OCCURS BEFORE THE DIVERSION POINT

The MCDU automatically shows the engine-out SID as a temporary flight plan on the F-PLN page and on the ND. The EOSID can be inserted or erased.

Note: *The EOSID Diversion Point is the waypoint at which the EOSID diverges from the active SID.*
If there is no common leg between the SID and the EOSID in the navigation database, the diversion point is by default the runway threshold. Therefore the SID and EOSID common leg(s) before the flight paths separation must be the same type and nature.



```
FROM TMPY              AI101 →
             TIME   SPD/ALT
LFBO 15R     ----   ---/  490
 H146         BRG143  5NM
TOU/08       ----   ---/-----
 C118         TRK118  13
TOE←         ----   ---/-----
 C325                 31
TN           ----   ---/-----
---F-PLN DISCONTINUITY--
←ERASE               INSERT*
                        ↑↓
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
GS140 TAS145
ILS APP
TOU/08 150°
3.5 NM
10:02
150/05
11
12
13
14
15
16
17
18
19
TOE
TOU/08
15
10
10
15
LFBO
15R
TOU
VOR 1
TOU
4.5NM

active F-PLN in green solid line
EOSID in dashed yellow line

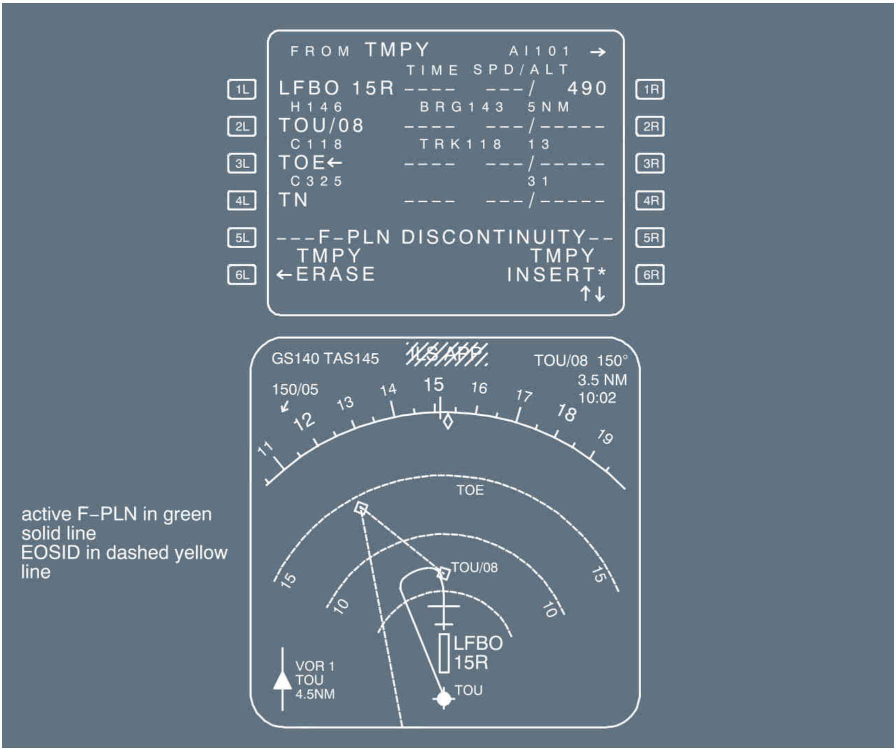
Ident.: DSC-22_20-60-40-A-00000943.0002001 / 14 MAY 12

Applicable to: MSN 04827-04860

WHEN AN ENGINE-OUT CONDITION OCCURS BEFORE THE DIVERSION POINT

The MCDU automatically shows the engine-out SID as a temporary flight plan on the F-PLN page and on the ND. The EOSID can be inserted or erased.

Note: *The EOSID Diversion Point is the waypoint at which the EOSID diverges from the active SID.*
If there is no common leg between the SID and the EOSID in the navigation database, the diversion point is by default the runway threshold. Therefore the SID and EOSID common leg(s) before the flight paths separation must be the same type and nature.



```
 FROM TMPY            AI101 →
              TIME  SPD/ALT
LFBO 15R ----  ---/   490
 H146          BRG143  5NM
TOU/08   ----  ---/-----
 C118          TRK118  13
TOE←     ----  ---/-----
 C325                  31
TN       ----  ---/-----
---F-PLN DISCONTINUITY--
  TMPY              TMPY
←ERASE          INSERT*
                      ↑↓
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
GS140 TAS145
~~ILS APP~~
TOU/08 150°
3.5 NM
10:02
150/05
11
12
13
14
15
16
17
18
19
TOE
TOU/08
15
10
10
15
LFBO
15R
TOU
VOR 1
TOU
4.5NM

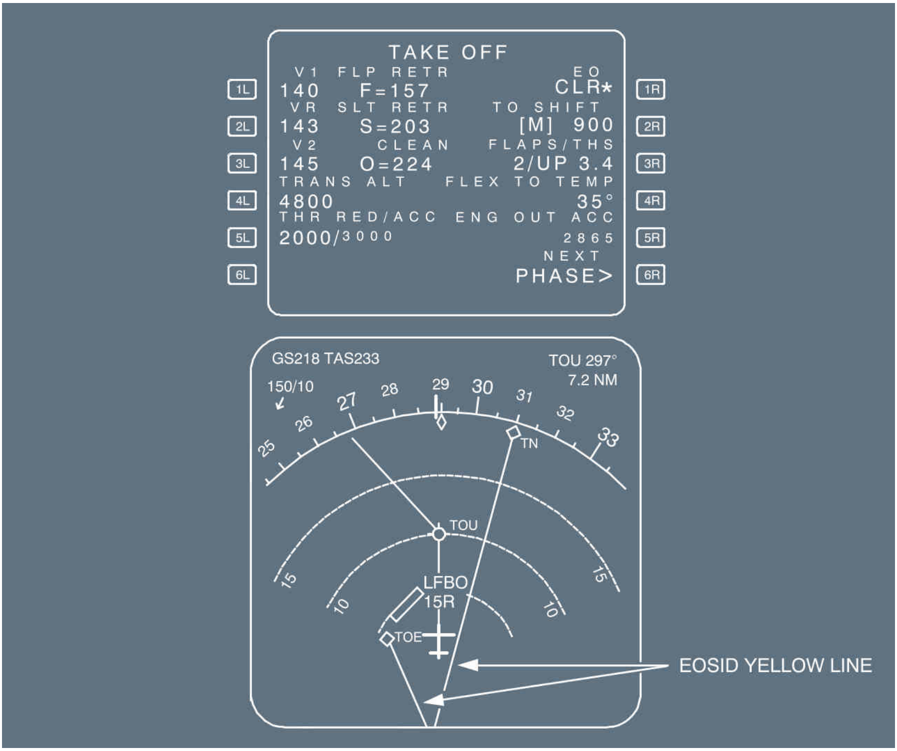
active F–PLN in green solid line
EOSID in dashed yellow line

Ident.: DSC-22_20-60-40-A-00000944.0001001 / 14 MAY 12
Applicable to: ALL

WHEN AN ENGINE-OUT CONDITION OCCURS AFTER THE DIVERSION POINT

REMAIN on the SID path

Note: *The navigation display shows the engine-out SID as a yellow line for your information. Directing the aircraft to the EOSID should not be performed unless it allows obstacle clearance and the flight crew considers it is the best strategy for a particular case.*



```
                TAKE OFF
 V1   FLP RETR              EO
140    F=157              CLR*
 VR   SLT RETR      TO SHIFT
143    S=203          [M]  900
 V2       CLEAN    FLAPS/THS
145    O=224          2/UP 3.4
TRANS ALT        FLEX TO TEMP
4800                       35°
THR RED/ACC      ENG OUT ACC
2000/3000                 2865
                         NEXT
                        PHASE>
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
GS218 TAS233
TOU 297°
7.2 NM
150/10
25
26
27
28
29
30
31
32
33
TN
TOU
15
10
LFBO
15R
TOE
10
15
EOSID YELLOW LINE

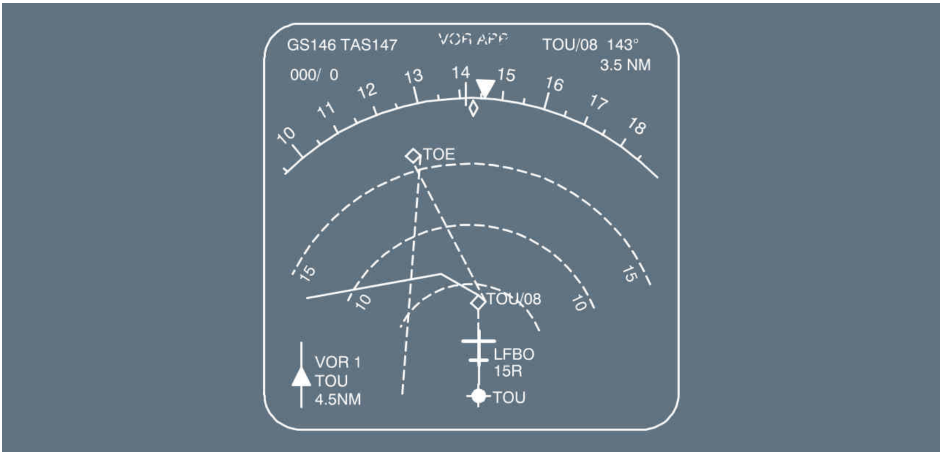
Ident.: DSC-22_20-60-40-A-00000945.0002001 / 14 MAY 12

Applicable to: ALL

BELOW THRUST-REDUCTION (THR RED) ALTITUDE

- The managed target speed changes to V2
- The PROG page displays the engine-out maximum recommended altitude

- The PERF TO page comes up on the display automatically with the “EO CLR” prompt in the 1R field
- The MCDU and the navigation display show the engine-out SID as a temporary flight plan, or the navigation display shows it for information only, depending upon the diversion point location.



PROCEDURE

- **When the aircraft reaches the engine-out acceleration altitude**

  PUSH in the V/S knob to level off.

  CLEAN up your configuration as the speed increases toward target speed.

  When the aircraft is clean and has reached Green Dot speed, “LVR MCT” flashes on the FMA,

  PULL out the altitude selector knob to resume the climb.

  The OP CLB. mode engages.

  MOVE the thrust lever for the live engine to “MCT” detent.

Ident.: DSC-22_20-60-40-A-00000946.0006001 / 16 FEB 11
Applicable to: ALL

ABOVE THRUST REDUCTION (THR RED) ALTITUDE

- The managed target speed changes to V2
- “LVR MCT” flashes amber on the flight mode annunciator
- The PROG page displays the engine-out maximum recommended altitude
- The PERF TO page displays the “EO CLR*” prompt in the 1R field
- The navigation display shows the EO SID.

PROCEDURE

MOVE the thrust lever of the active engine to the MCT detent.

- **When the aircraft reaches the engine-out acceleration altitude:**
  PUSH the V/S knob, in order to level off.
  CLEAN UP configuration as the speed increases.
- **When the aircraft reaches Green Dot speed:**
  PULL the ALT knob to resume the climb.

  Note: *If necessary, move the thrust lever of the active engine to the TOGA detent. The Flight Mode Annunciator will display "LVR MCT", flashing in white, when the aircraft reaches Green Dot speed.*

ENGINE-OUT IN CLB PHASE (ABOVE ACCELERATION ALTITUDE)

Ident.: DSC-22_20-60-40-B-00000947.0003001 / 16 FEB 11
Applicable to: ALL

ENGINE-OUT OCCURS WHILE AIRCRAFT IS ACTUALLY CLIMBING

- The managed target speed changes to Green Dot speed
- "LVR MCT" flashes white on the Flight Mode Annunciator
- The climb mode reverts to open climb (OP CLB) and the aircraft slowly decelerates down to Green Dot speed
- The MCDU shows the PERF CLB page with an "EO CLR*" (clear engine-out) prompt
- The PROG page shows the engine-out maximum recommended altitude (EO MAX REC ALT).

PROCEDURE

MOVE the thrust lever of the active engine to the MCT detent.
SET the altitude on the Flight Control Unit to an altitude below the engine-out maximum recovery altitude, as cleared by ATC.
INITIATE a diversion, when cleared to do so.

Ident.: DSC-22_20-60-40-B-00000948.0001001 / 16 FEB 11
6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENGINE-OUT OCCURS WHILE THE AIRCRAFT IS FLYING IN ALT MODE AT AN ALTITUDE SET ON THE FLIGHT CONTROL UNIT

- The target speed is set to engine-out cruise speed (EO CRZ SPD), computed at the altitude set on the Flight Control Unit, but limited by the limit speed (SPD LIM), if there is one.

Other consequences and procedures are similar to previous engine out climb.

ENGINE-OUT IN CRUISE PHASE

Ident.: DSC-22_20-60-40-00000949.0001001 / 17 NOV 20

7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

- The system sets the managed target speed to the higher of engine-out cruise Mach number or speed, or current speed.
- “LVR MCT” (or MCT) flashes on the Flight Mode Annunciator.
- The PERF CRZ page appears with the “EO CLR*” (clear engine-out) prompt.
- The PROG page displays the engine-out maximum recommended altitude (EO MAX REC ALT).

PROCEDURE

Perform engine out abnormal procedure.
Refer to EFB-IFT-30 One Engine Inoperative Strategies.
Initiate a diversion if necessary.

Note: *The engine-out descent strategy requires disconnection of the autothrust, and descent in OPEN DES mode.*
Disconnecting the autothrust prevents an automatic setting of THR IDLE; therefore, the autopilot will fly the target speed in OP DES mode, with a thrust manually selected by the crew.
When reaching the FCU-selected altitude, or whenever normal descent is resumed to a lower altitude, reengage the autothrust.

ENGINE-OUT IN CRUISE PHASE

Ident.: DSC-22_20-60-40-00000949.0002001 / 17 NOV 20

Applicable to: MSN 04827-04860

- The system sets the managed target speed to the higher of engine-out cruise Mach number or speed, or current speed.
- “LVR MCT” (or MCT) flashes on the Flight Mode Annunciator.
- The PERF CRZ page appears with the “EO CLR*” (clear engine-out) prompt.
- The PROG page displays the engine-out maximum recommended altitude (EO MAX REC ALT).

PROCEDURE

Perform engine out abnormal procedure.
Refer to EFB-IFT-30 One Engine Inoperative Strategies.
Initiate a diversion if necessary.

Note: *The engine-out descent strategy requires disconnection of the autothrust, and descent in OPEN DES mode.*
Disconnecting the autothrust prevents an automatic setting of THR IDLE; therefore, the autopilot will fly the target speed in OP DES mode, with a thrust manually selected by the crew.
When reaching the FCU-selected altitude, or whenever normal descent is resumed to a lower altitude, reengage the autothrust.

CHECK the MIN DEST FOB value on the FUEL PRED page.

If necessary, update the ALTN fuel value, according to the chosen flight strategy.

ENGINE-OUT IN DESCENT PHASE

Ident.: DSC-22_20-60-40-00000951.0001001 / 16 FEB 11
8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

- The managed target speed remains unchanged (ECON DES Mach number or speed, with any speed limitations).
- “LVR MCT” (or MCT) flashes on the Flight Mode Annunciator.
- The PERF DES page appears, showing the “EO CLR*” prompt.
- The PROG page displays the engine-out maximum recommended altitude (EO MAX REC ALT).
- The descent mode (if engaged) reverts to V/S, if the aircraft is above the EO REC MAX. If not, the descent mode is maintained.

PROCEDURE

MOVE the thrust lever for the live engine to the MCT detent.
If necessary, SELECT a suitable flight mode for descent.
DISCONNECT the autothrust and ADJUST thrust if necessary.

ENGINE-OUT IN DESCENT PHASE

Ident.: DSC-22_20-60-40-00000951.0004001 / 16 FEB 11
Applicable to: MSN 04827-04860

- The managed target speed remains unchanged (ECON DES Mach number or speed, with any speed limitations).
- “LVR MCT” (or MCT) flashes on the Flight Mode Annunciator.
- The PERF DES page appears, showing the “EO CLR*” prompt.
- The PROG page displays the engine-out maximum recommended altitude (EO MAX REC ALT).

PROCEDURE

MOVE the thrust lever for the live engine to the MCT detent.
If necessary, SELECT a suitable flight mode for descent.
DISCONNECT the autothrust and ADJUST thrust if necessary.

ENGINE-OUT IN APPROACH PHASE

Ident.: DSC-22_20-60-40-00000952.0001001 / 04 JUL 17
Applicable to: ALL

- The aircraft maintains approach speed (VAPP).
- “LVR MCT”(or MCT) flashes on the Flight Mode Annunciator.
- The PERF APPR page appears, showing the “EO CLR*” prompt.
- The progress page displays the engine-out maximum recommended altitude (EO MAX REC ALT).

PROCEDURE

MOVE the thrust lever for the live engine to the MCT detent.

CAUTION	Below maneuvering speed (F, S, Green Dot) – 10 kt, the autopilot or flight director (AP/FD) cannot order a bank angle greater than 15 °. Above maneuvering speed – 10 kt, this limit linearly increases until it reaches: - In selected lateral guidance: 25 ° at maneuvering speed – 3 kt. The limit is then 25 ° for all speeds above maneuvering speed – 3 kt. - In managed lateral guidance: 30 ° at maneuvering speed – 3 kt. The limit is then 30 ° for all speeds above maneuvering speed – 3 kt.

ENGINE-OUT IN GO-AROUND PHASE

Ident.: DSC-22_20-60-40-00000953.0002001 / 16 FEB 11
Applicable to: ALL

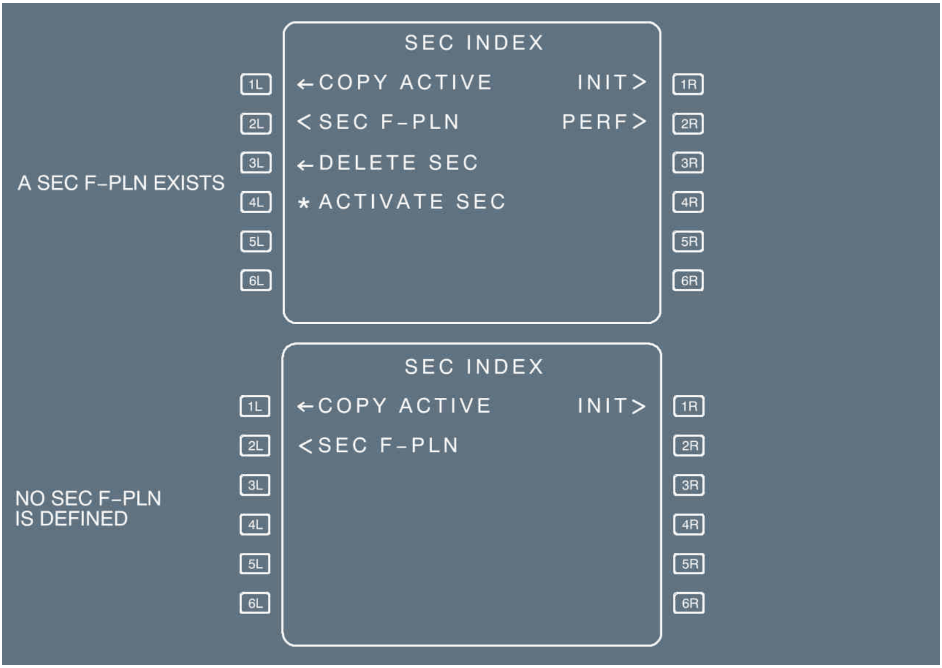
The results and procedures for takeoff phase apply, except that the displays do not show the engine-out SID.

SECONDARY FLIGHT PLAN

Ident.: DSC-22_20-60-50-00000954.0004001 / 14 MAY 12
Applicable to: MSN 04827-04860

The secondary flight plan (SEC F-PLN) is an alternative flight plan which can be activated when required.
It may include all the vertical elements except history wind data.

The flight crew can:
- Create a secondary flight plan independently from the active flight plan (a secondary flight plan can be created while a temporary flight plan exists).
- Copy it from the active flight plan.
- Delete it completely.
- Activate it, when the “ACTIVATE SEC” prompt is displayed: The secondary flight plan becomes the active flight plan.


A SEC F-PLN EXISTS
SEC INDEX
←COPY ACTIVE
INIT>
<SEC F-PLN
PERF>
←DELETE SEC
*ACTIVATE SEC
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
NO SEC F-PLN IS DEFINED
SEC INDEX
←COPY ACTIVE
INIT>
<SEC F-PLN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

- The screen displays the “ACTIVATE SEC” prompt in flight if:
  - HDG (or TRK) mode is engaged, or
  - NAV mode is engaged, and the active leg of the primary and secondary flight plans is the same.
- The screen displays the “INIT” prompt in all cases.
  The FMS sequences the secondary flight plan the same way as the active flight plan, when it is a copy of the active flight plan.

The navigation display shows the secondary flight plan in white. In PLAN mode, the crew can use the slew keys to review the secondary flight plan (as for the primary flight plan).

PREDICTIONS

The FMGS computes predictions using the same performance methods and performance factor it uses for the active flight plan. However, it predicts pseudo waypoints only for the MCDU not for the Navigation Display (ND).
The FMGS does not provide any prediction in the secondary flight plan for the DESCENT, APPROACH and GO AROUND phases.

- **When the flight crew initializes the secondary flight plan with the SEC INIT function:**
  The FMGS computes the secondary flight plan predictions as if the aircraft were on ground before engine start. The FMGS computes these predictions one time and does not update them to indicate the progress of the flight (aircraft position, fuel consumption, etc.).
- **When the flight crew initializes the secondary flight plan with the COPY ACTIVE function:**
  - The FMGS computes the secondary flight plan predictions as for the active flight plan. However:
    - The FMGS stops the update of the predictions if the first leg of the active flight plan is no longer the same as the active leg (i.e. if both flight plans diverge). The flight phase is the same as the flight phase at the time of the divergence.

      Note: *This does not apply to the preflight phase, when the FMGS computes the predictions if the departure airports are the same, even if the takeoff runways are different.*
    - The FMGS stops the update and the display of the predictions when the aircraft reaches the Top of Descent of the primary flight plan, or the Top of Descent of the secondary flight plan, whichever the aircraft reaches first.
  - In the SEC F-PLN, the computed distance between the "TO" waypoint, and the following waypoints may be erroneous when:
    - ■ The SEC F-PLN is created using the COPY ACTIVE function
    - ■ Lateral modifications are performed in either the active, or the SEC F-PLN
    - ■ The "TO" waypoint and/or the following waypoints differ between the ACTIVE, and the SEC F-PLN.

    Note: *1. As a result, in the SEC F-PLN, fuel and time predictions are also erroneous because they are computed using the erroneous distance.*
    2. If the SEC F-PLN is activated, the resulting ACTIVE F-PLN is not affected: distances and fuel/time computations in the active F-PLN are correct.

- **The flight crew may use the secondary flight plan in the following cases:**
  - At takeoff when an alternate takeoff runway is probable
  - On ground to initialize the FMGS again if the flight that the flight crew initially prepared is replaced by another flight (*Refer to PRO-NOR-SRP-01-05 Introduction*)
  - In flight to prepare a diversion
  - In flight when an alternate landing runway is probable
  - To prepare the next flight.

SECONDARY FLIGHT PLAN

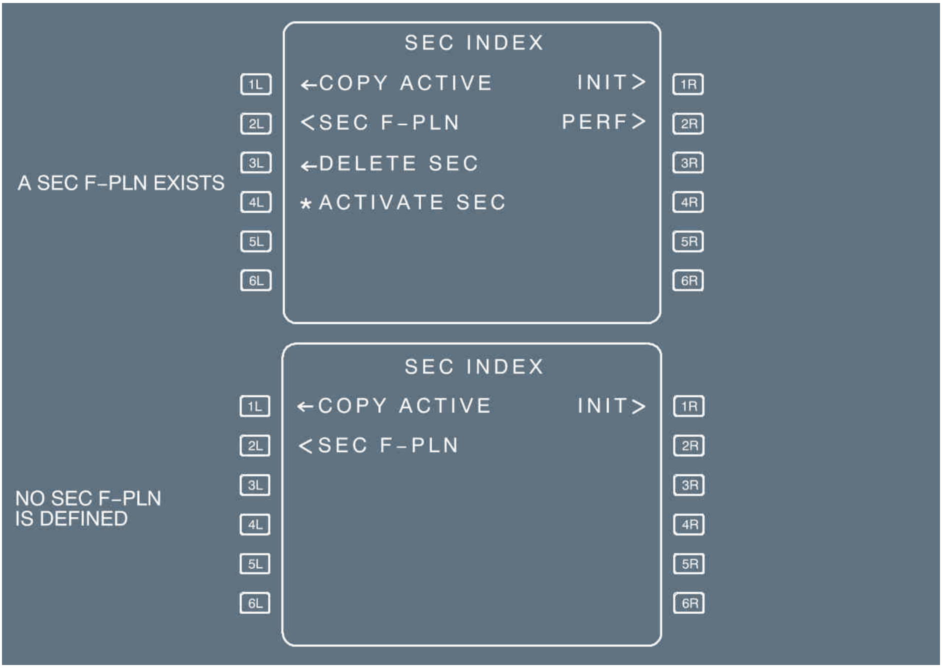
Ident.: DSC-22_20-60-50-00000954.0011001 / 14 MAY 12

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The secondary flight plan (SEC F-PLN) is an alternative flight plan which can be activated when required.
It may include all the vertical elements except history wind data.

The flight crew can:
- Create a secondary flight independently from the active flight plan (a secondary flight plan can be created while a temporary flight plan exists).
- Copy it from the active flight plan.
- Delete it completely.

- Activate it, when the “ACTIVATE SEC” prompt is displayed: The secondary flight plan becomes the active flight plan.


A SEC F–PLN EXISTS
SEC INDEX
←COPY ACTIVE
INIT>
<SEC F–PLN
PERF>
←DELETE SEC
*ACTIVATE SEC
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
NO SEC F–PLN
IS DEFINED
SEC INDEX
←COPY ACTIVE
INIT>
<SEC F–PLN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

- The screen displays the “ACTIVATE SEC” prompt in flight if:
  - HDG (or TRK) mode is engaged, or
  - NAV mode is engaged, and the active leg of the primary and secondary flight plans is the same.

  The FMS sequences the secondary flight plan the same way as the active flight plan, when it is a copy of the active flight plan.

The navigation display shows the secondary flight plan in white. In PLAN mode, the crew can use the slew keys to review the secondary flight plan (as for the primary flight plan).

PREDICTIONS

The FMGS computes predictions using the same performance methods and performance factor it uses for the active flight plan. However, it predicts pseudo waypoints only for the MCDU not for the Navigation Display (ND).

- **When the flight crew initializes the secondary flight plan with the SEC INIT function:**
  The FMGS computes the secondary flight plan predictions as if the aircraft were on ground before engine start. The FMGS computes these predictions one time and does not update them to indicate the progress of the flight (aircraft position, fuel consumption, etc.).
- **When the flight crew initializes the secondary flight plan with the COPY ACTIVE function:**

  The FMGS computes the secondary flight plan predictions as for the active flight plan. However:
  - The FMGS stops the update of the predictions if the first leg of the active flight plan is no longer the same as the active leg (i.e. if both flight plans diverge). The flight phase is the same as the flight phase at the time of the divergence.

    Note: *This does not apply to the preflight phase, when the FMGS computes the predictions if the departure airports are the same, even if the takeoff runways are different.*

- **The flight crew may use the secondary flight plan in the following cases:**
  - At takeoff when an alternate takeoff runway is probable
  - On ground to initialize the FMGS again if the flight that the flight crew initially prepared is replaced by another flight (*Refer to PRO-NOR-SRP-01-05 Introduction*)
  - In flight to prepare a diversion
  - In flight when an alternate landing runway is probable
  - To prepare the next flight.

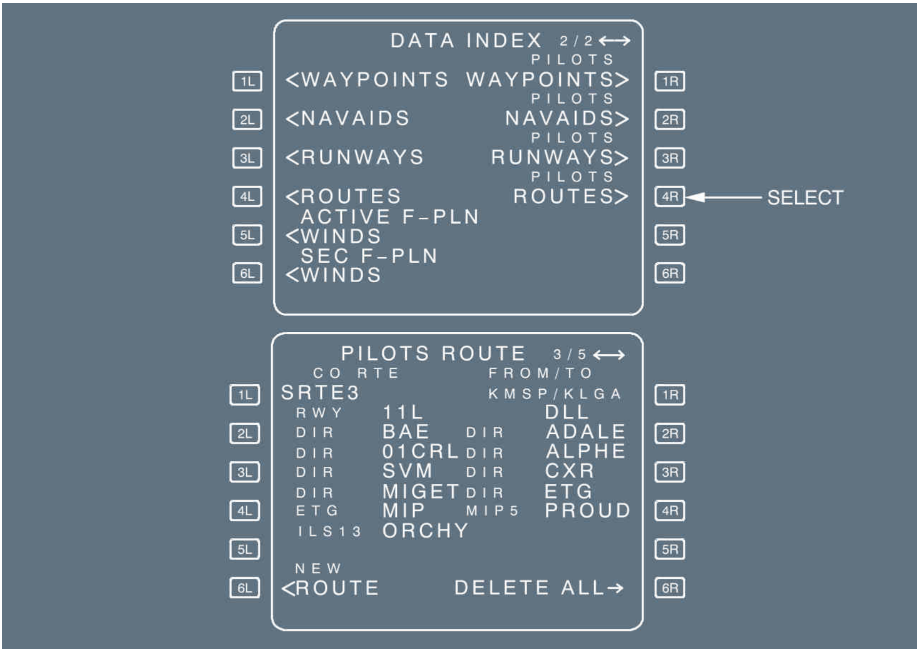
PILOTS ROUTE FUNCTION

Ident.: DSC-22_20-60-60-00000955.0003001 / 01 OCT 12
Applicable to: MSN 04827-04860

The pilot's route function allows the pilot to store or review as many as five different routes defined in an active or secondary flight plan.

This also allows the pilot to store a company route that is not yet in the database, but is expected to be flown several times (a charter route, for example).

Access the PILOTS ROUTES page from the DATA INDEX page.

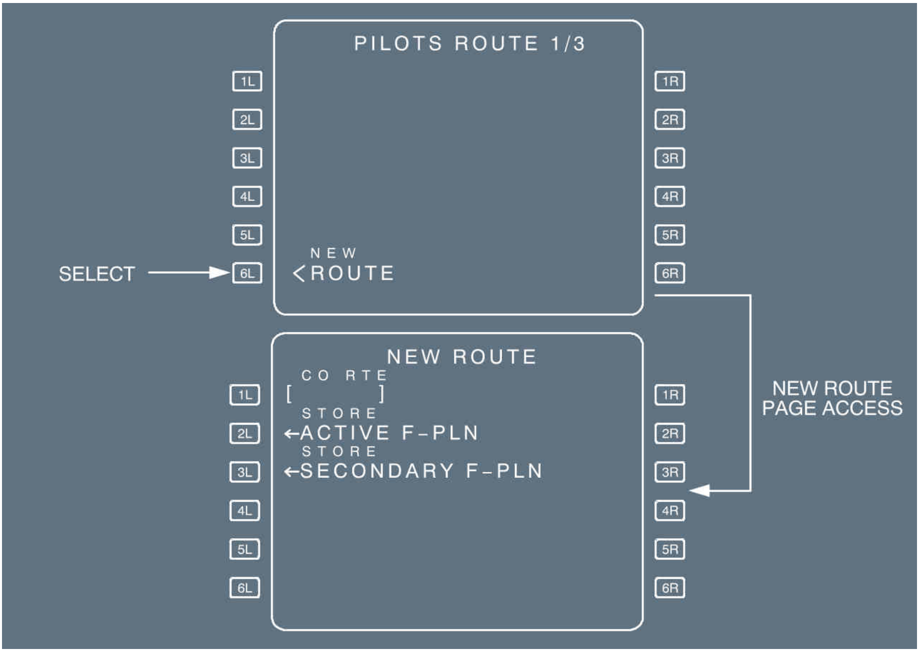


```
          DATA INDEX   2/2←→
                      PILOTS
<WAYPOINTS  WAYPOINTS>
                      PILOTS
<NAVAIDS       NAVAIDS>
                      PILOTS
<RUNWAYS       RUNWAYS>
                      PILOTS
<ROUTES          ROUTES>
 ACTIVE F-PLN
<WINDS
 SEC F-PLN
<WINDS
```

```
      PILOTS ROUTE    3/5←→
  CO RTE          FROM/TO
SRTE3             KMSP/KLGA
 RWY    11L        DLL
 DIR    BAE    DIR ADALE
 DIR    01CRL  DIR ALPHE
 DIR    SVM    DIR CXR
 DIR    MIGET  DIR ETG
 ETG    MIP   MIP5 PROUD
 ILS13  ORCHY

 NEW
<ROUTE         DELETE ALL→
```

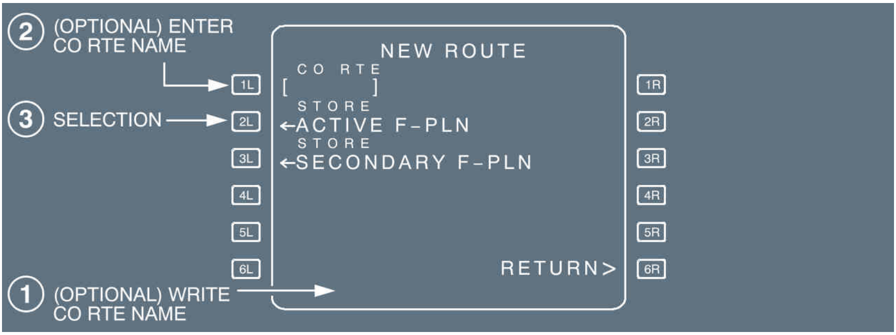
A stored route can be reviewed by using the slew key.

In order to store a new route, first define the route through the active flight plan (on the ground only) or the secondary flight plan (on the ground or in flight) then proceed as described below.


PILOTS ROUTE 1/3
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
SELECT
NEW
<ROUTE
NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN
NEW ROUTE
PAGE ACCESS

HOW TO STORE THE ACTIVE FLIGHT PLAN (DURING PREFLIGHT ONLY)

SELECT the DATA key on MCDU
PRESS the “PILOTS ROUTES” key
PRESS the “NEW ROUTE” key
ENTER the name of the company route (optional).
PRESS the “STORE ACTIVE F-PLN” key


② (OPTIONAL) ENTER
CO RTE NAME
③ SELECTION
① (OPTIONAL) WRITE
CO RTE NAME
NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN
RETURN>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

HOW TO STORE THE SECONDARY FLIGHT PLAN

SELECT the DATA key on MCDU
PRESS the “PILOTS ROUTES” key
PRESS the “NEW ROUTE” key
ENTER the company route name (optional)
PRESS the “STORE SECONDARY F-PLN” key

Note: *1. In either case, you may only store a company route if the active or secondary flight plan is complete from origin to destination.*
2. If you do not enter a name, the FMGS automatically names the stored route as “SRTE 1 (or 2, ...)” when it is stored.
3. The system does not retain several elements of the flight plans, when they are stored:
- *Pilot-entered holds*
- *Offsets*
- *Pilot-entered constraints*
- *Modifications to a terminal procedure*
- *Pseudo waypoints*

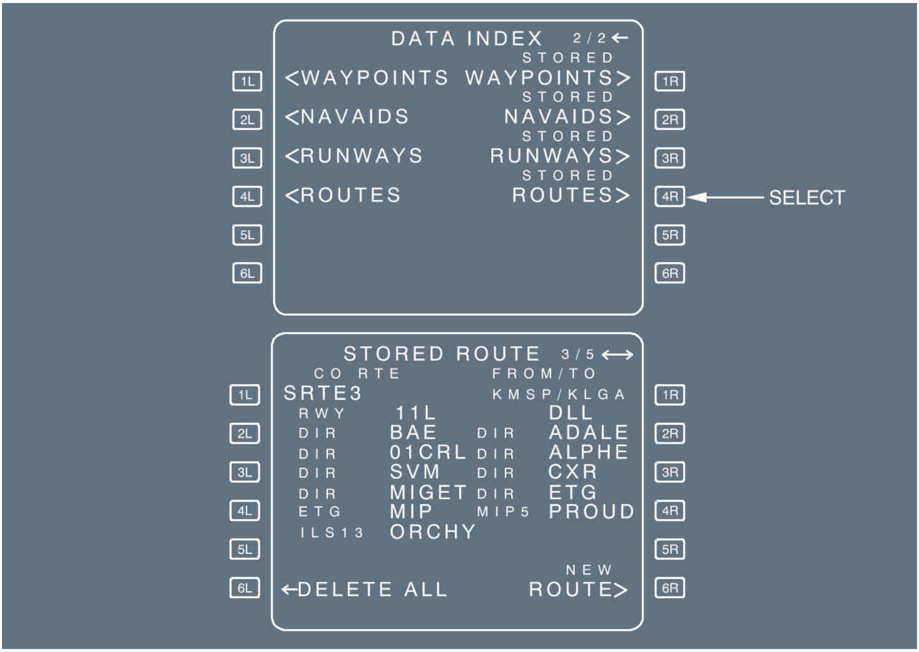
When this happens, it displays “REVISIONS NOT STORED”.
4. If five routes are already stored the system will reject a new entry and display “PILOTS ROUTES FULL” on the MCDU. Delete one stored route by clearing the CO RTE name before inserting a new one.

STORED ROUTE FUNCTION

Ident.: DSC-22_20-60-60-00000955.0002001 / 01 OCT 12

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

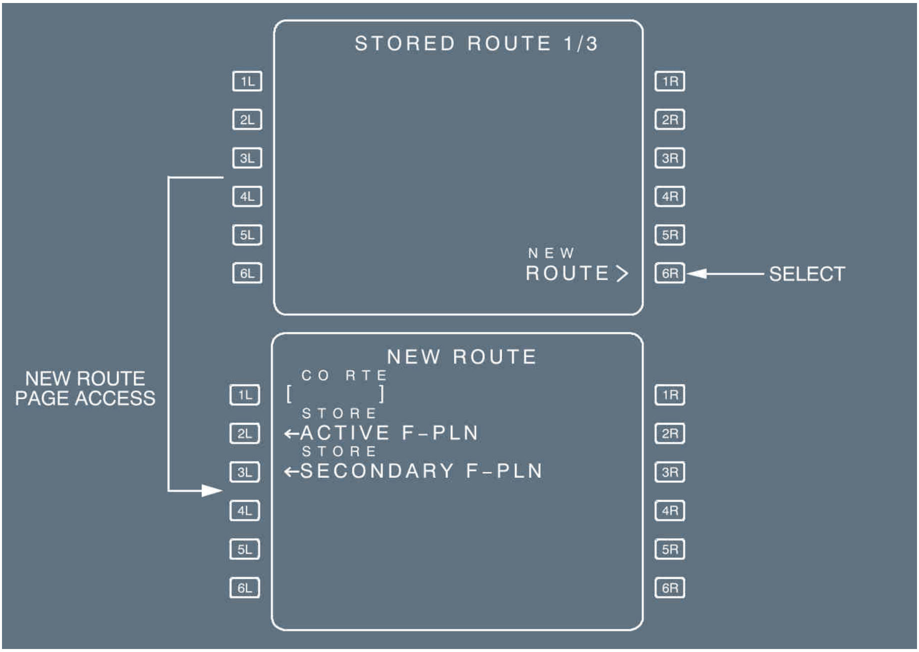
The stored route function allows the pilot to store or review as many as five different routes defined in an active or secondary flight plan.
This also allows the pilot to store a company route that is not yet in the database, but is expected to be flown several times (a charter route, for example).
Access the STORED ROUTES page from the DATA INDEX page.



```
          DATA INDEX       2/2←
                          STORED
<WAYPOINTS        WAYPOINTS>
                          STORED
<NAVAIDS            NAVAIDS>
                          STORED
<RUNWAYS            RUNWAYS>
                          STORED
<ROUTES              ROUTES>
```

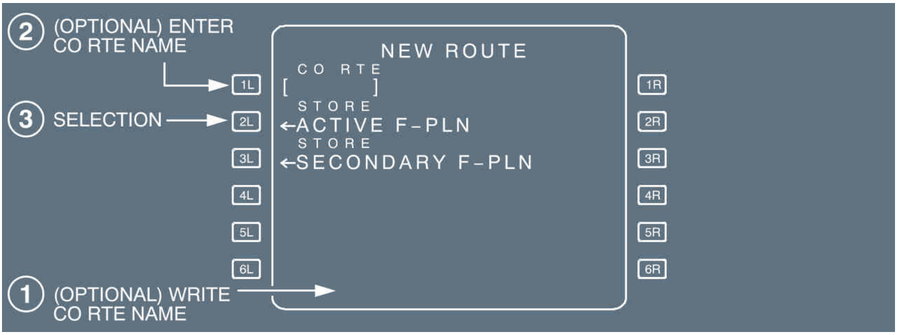
```
       STORED ROUTE      3/5↔
   CO RTE             FROM/TO
SRTE3               KMSP/KLGA
  RWY      11L              DLL
  DIR      BAE      DIR     ADALE
  DIR      01CRL    DIR     ALPHE
  DIR      SVM      DIR     CXR
  DIR      MIGET    DIR     ETG
  ETG      MIP      MIP5    PROUD
  ILS13    ORCHY

                              NEW
←DELETE ALL               ROUTE>
```

A stored route can be reviewed by using the slew key.
In order to store a new route, first define the route through the active flight plan (on the ground only) or the secondary flight plan (on the ground or in flight) then proceed as described below.


STORED ROUTE 1/3
NEW
ROUTE>
SELECT
NEW ROUTE PAGE ACCESS
NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

HOW TO STORE THE ACTIVE FLIGHT PLAN (DURING PREFLIGHT ONLY)

SELECT the DATA key on MCDU
PRESS the “STORED ROUTES” key
PRESS the “NEW ROUTE” key
ENTER the name of the company route (optional).
PRESS the “STORE ACTIVE F-PLN” key


② (OPTIONAL) ENTER CO RTE NAME
③ SELECTION
① (OPTIONAL) WRITE CO RTE NAME
NEW ROUTE
CO RTE
[ ]
STORE
←ACTIVE F-PLN
STORE
←SECONDARY F-PLN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

HOW TO STORE THE SECONDARY FLIGHT PLAN

SELECT the DATA key on MCDU
PRESS the “STORED ROUTES” key
PRESS the “NEW ROUTE” key
ENTER the company route name (optional)
PRESS the “STORE SECONDARY F-PLN” key

Note: 1. *In either case, you may only store a company route if the active or secondary flight plan is complete from origin to destination.*
2. *If you do not enter a name, the FMGS automatically names the stored route as “SRTE 1 (or 2 ...)” when it is stored.*
3. *The system does not retain several elements of the flight plans, when they are stored:*
   - *Pilot-entered holds*
   - *Offsets*
   - *Pilot-entered constraints*
   - *Modifications to a terminal procedure*
   - *Pseudo waypoints*

   When this happens, it displays “REVISIONS NOT STORED”.
4. *If five routes are already stored the system will reject a new entry and display “STORED ROUTES FULL” on the MCDU. Delete one stored route by clearing the CO RTE name before inserting a new one.*

GENERAL

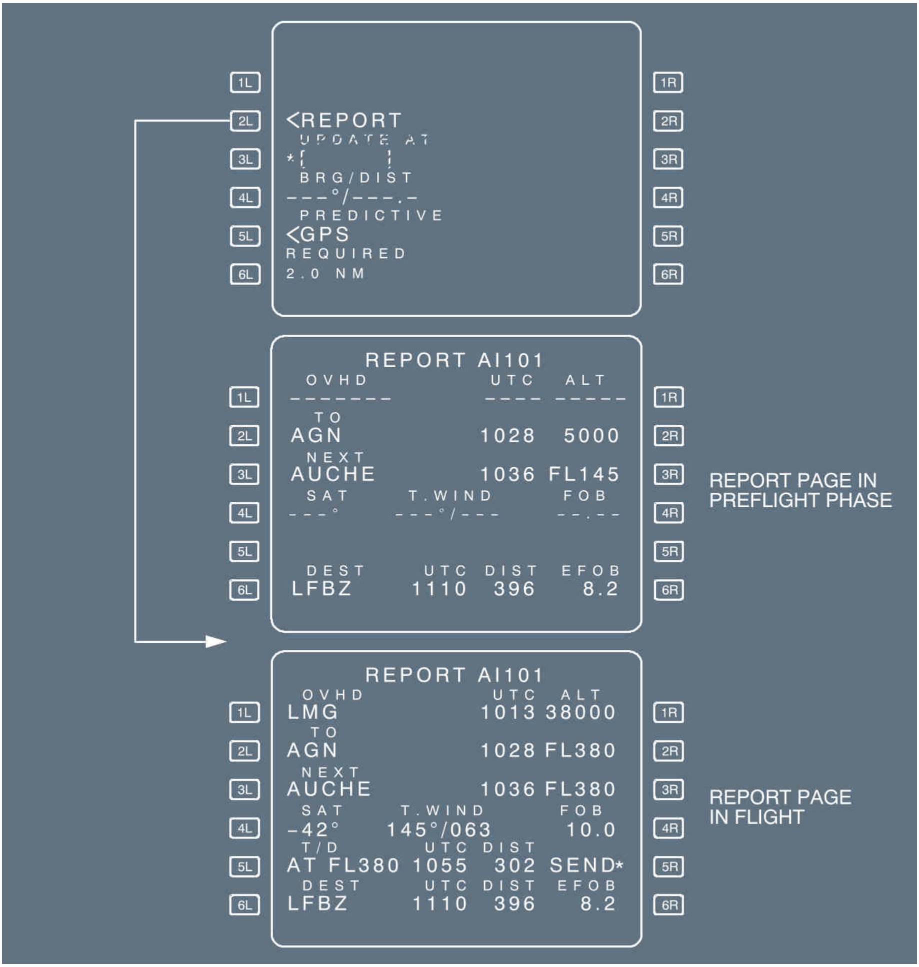
Ident.: DSC-22_20-60-70-00006017.0001001 / 16 FEB 11
Applicable to: ALL

The REPORT page allows the crew to achieve the position reporting.

REPORT PAGE ACCESS

Ident.: DSC-22_20-60-70-00009524.0008001 / 29 SEP 15
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The report page is accessed from the PROG PAGE.



```
<REPORT
 UPDATE AT
*[        ]
 BRG/DIST
---°/---.-
 PREDICTIVE
<GPS
REQUIRED
2.0 NM
```

```
      REPORT AI101
 OVHD              UTC   ALT
-------           ----  -----
  TO
AGN               1028   5000
 NEXT
AUCHE             1036  FL145
 SAT      T.WIND          FOB
---°      ---°/---       --.--


 DEST       UTC  DIST    EFOB
LFBZ       1110   396     8.2
```

REPORT PAGE IN
PREFLIGHT PHASE

```
      REPORT AI101
 OVHD              UTC   ALT
LMG               1013 38000
  TO
AGN               1028 FL380
 NEXT
AUCHE             1036 FL380
 SAT      T.WIND          FOB
-42°     145°/063        10.0
 T/D        UTC  DIST
AT FL380   1055   302  SEND*
 DEST       UTC  DIST    EFOB
LFBZ       1110   396     8.2
```

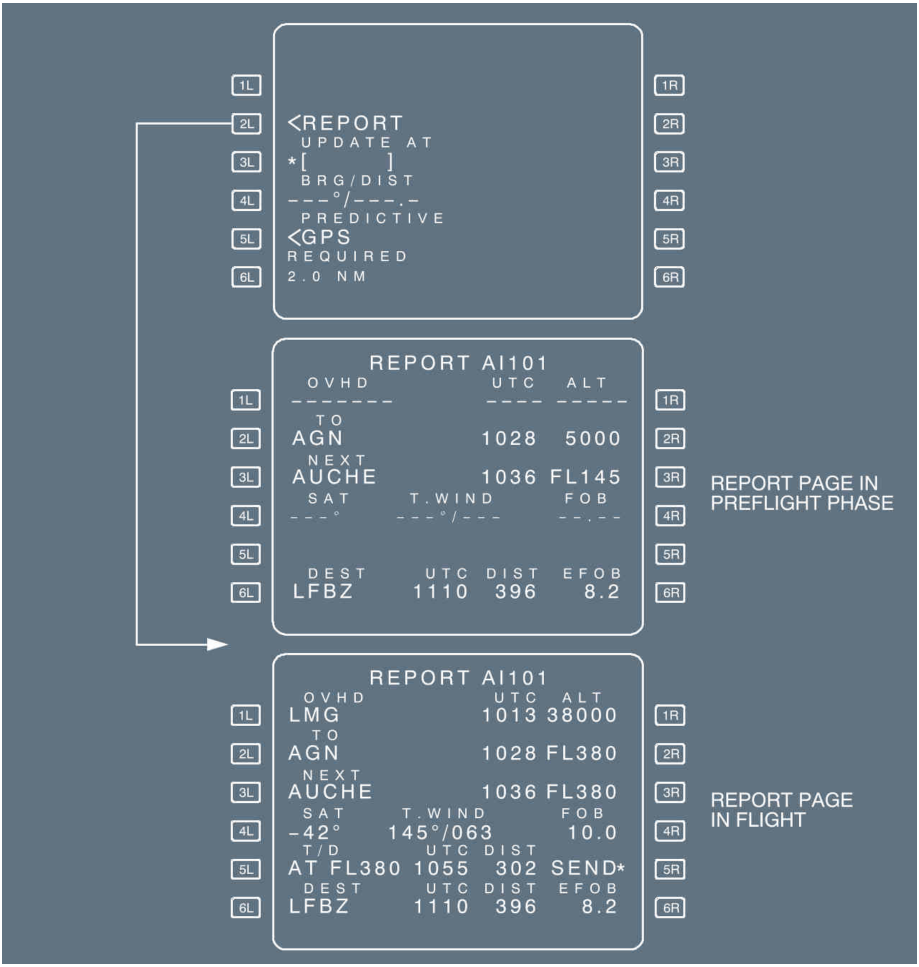
REPORT PAGE
IN FLIGHT

<u>Note:</u> *In case a DIR TO with ABEAM WPTs is achieved, or in case a FIX INFO with ABEAM or RADIAL/CIRCLE intersection is inserted in the F-PLN, the TO WPT (provided on the REPORT page) will be the ABEAM WPT or the RADIAL/CIRCLE intersect waypoint, if any, as on the F-PLN page.*

REPORT PAGE ACCES

Ident.: DSC-22_20-60-70-00009524.0010001 / 14 MAY 12
Applicable to: MSN 04827-04860

The report page is accessed from the PROG PAGE.


1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
<REPORT
UPDATE AT
*[ ]
BRG/DIST
---°/---.-
PREDICTIVE
<GPS
REQUIRED
2.0 NM
REPORT AI101
OVHD UTC ALT
-------- ---- -----
TO
AGN 1028 5000
NEXT
AUCHE 1036 FL145
SAT T.WIND FOB
---° ---°/--- --.--
DEST UTC DIST EFOB
LFBZ 1110 396 8.2
REPORT PAGE IN PREFLIGHT PHASE
REPORT AI101
OVHD UTC ALT
LMG 1013 38000
TO
AGN 1028 FL380
NEXT
AUCHE 1036 FL380
SAT T.WIND FOB
-42° 145°/063 10.0
T/D UTC DIST
AT FL380 1055 302 SEND*
DEST UTC DIST EFOB
LFBZ 1110 396 8.2
REPORT PAGE IN FLIGHT

Note: *In case a DIR TO with ABEAM WPTs is achieved, the TO WPT (provided on the REPORT page) will be the ABEAM WPT if any, as on the F-PLN page.*
Or in case a FIX INFO with ABEAM or RADIAL/CIRCLE intersection is inserted in the F-PLN, the TO WPT (provided on the REPORT page) will be the ABEAM WPT or the RADIAL/CIRCLE intersect waypoint, if any, as on the F-PLN page.

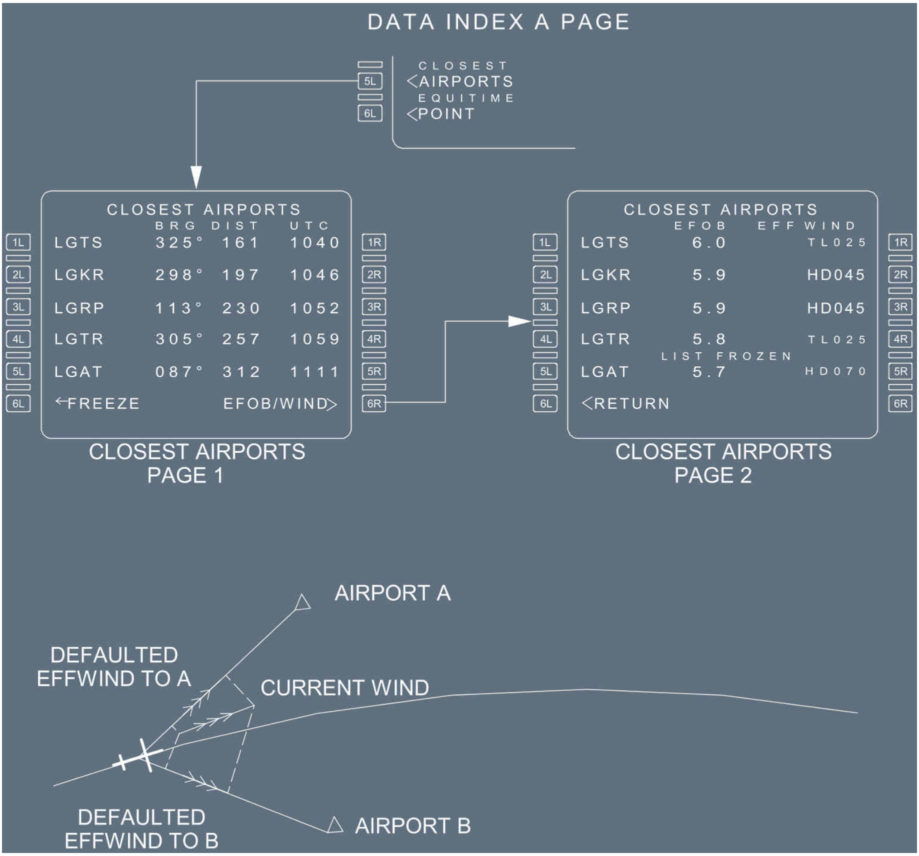
CLOSEST AIRPORTS

Ident.: DSC-22_20-60-80-00006018.0001001 / 07 APR 11

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The CLOSEST AIRPORTS page displays the four closest airports, from the position of the aircraft, found in the navigation database (*Refer to DSC-22_20-50-10-25 Closest Airports Pages*for the page description), and the 5th airport, as selected by the crew.

For each airport, the FM computes:
- The BRG/DIST/ESTIMATED UTC from the position of the aircraft to the corresponding airport.
- The EFOB at the airport, assuming an EFFECTIVE WIND (defaulted or entered by the pilot).


DATA INDEX A PAGE
5L
6L
CLOSEST
<AIRPORTS
EQUITIME
<POINT
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CLOSEST AIRPORTS
PAGE 1
CLOSEST AIRPORTS
PAGE 2
AIRPORT A
DEFAULTED
EFFWIND TO A
CURRENT WIND
DEFAULTED
EFFWIND TO B
AIRPORT B

CLOSEST AIRPORTS

	BRG	DIST	UTC
LGTS	325°	161	1040
LGKR	298°	197	1046
LGRP	113°	230	1052
LGTR	305°	257	1059
LGAT	087°	312	1111
←FREEZE		EFOB/WIND>	

CLOSEST AIRPORTS

	EFOB	EFF WIND
LGTS	6.0	TL025
LGKR	5.9	HD045
LGRP	5.9	HD045
LGTR	5.8	TL025
	LIST FROZEN	
LGAT	5.7	HD070
<RETURN		

Note: *When the CLOSEST AIRPORTS page 2 is selected, the list of airports is automatically frozen, as indicated on the page.*

The FUEL/TIME predictions to the closest airports use simplified assumptions:
- Managed speed profile in cruise, with the effective wind from the CLOSEST AIRPORTS page 2. In case of EO, Engine Out condition is considered.
- Continuous descent from CRZ FL down to the airport elevation.

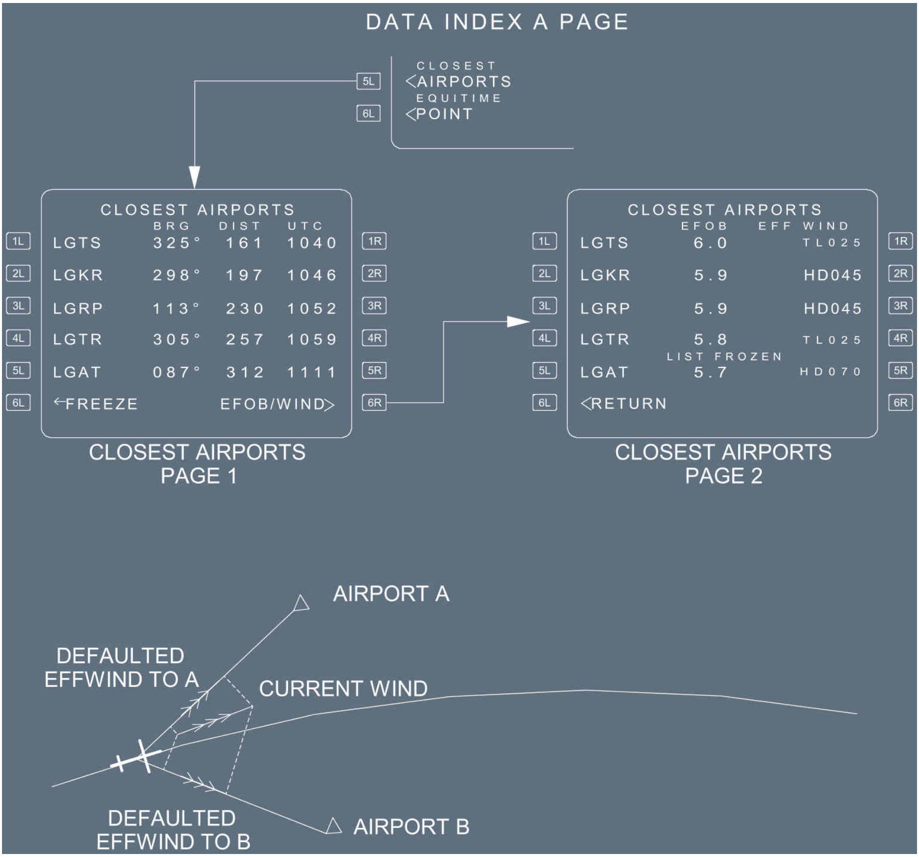
Note: *In case SELECTED SPD is used, the CLOSEST AIRPORTS page still provides good use to choose the applicable closest airport for diversion purposes. However, when SELECTED SPD is significantly different from MANAGED SPD, the predictions in terms of time and fuel must be disregarded since they are misleading.*
The predictions may then be checked on the SEC F-PLN.

CLOSEST AIRPORTS

Ident.: DSC-22_20-60-80-00006018.0002001 / 23 MAR 11
Applicable to: MSN 04827-04860

The CLOSEST AIRPORTS page displays the four closest airports, from the position of the aircraft, found in the navigation database (*Refer to DSC-22_20-50-10-28 CLOSEST AIRPORTS Pages*for the page description), and the 5th airport, as selected by the crew.

For each airport, the FM computes:
- The BRG/DIST/ESTIMATED UTC from the position of the aircraft to the corresponding airport.
- The EFOB at the airport, assuming an EFFECTIVE WIND (defaulted or entered by the pilot).


DATA INDEX A PAGE
5L
CLOSEST
<AIRPORTS
6L
EQUITIME
<POINT
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CLOSEST AIRPORTS
PAGE 1
CLOSEST AIRPORTS
PAGE 2
AIRPORT A
DEFAULTED
EFFWIND TO A
CURRENT WIND
DEFAULTED
EFFWIND TO B
AIRPORT B

CLOSEST AIRPORTS

	BRG	DIST	UTC
LGTS	325°	161	1040
LGKR	298°	197	1046
LGRP	113°	230	1052
LGTR	305°	257	1059
LGAT	087°	312	1111
←FREEZE		EFOB/WIND>	

CLOSEST AIRPORTS

	EFOB	EFF WIND
LGTS	6.0	TL025
LGKR	5.9	HD045
LGRP	5.9	HD045
LGTR	5.8	TL025
	LIST FROZEN	
LGAT	5.7	HD070
<RETURN		

Note: *When the CLOSEST AIRPORTS page 2 is selected, the list of airports is automatically frozen, as indicated on the page.*

The FUEL/TIME predictions to the closest airports use simplified assumptions:
- Managed speed profile in cruise, with the effective wind from the CLOSEST AIRPORTS page 2. In case of EO, Engine Out condition is considered.
- Continuous descent from CRZ FL down to the airport elevation.

Note: *In case SELECTED SPD is used, the CLOSEST AIRPORTS page still provides good use to choose the applicable closest airport for diversion purposes. However, when SELECTED SPD is significantly different from MANAGED SPD, the predictions in terms of time and fuel must be disregarded since they are misleading.*
The predictions may then be checked on the SEC F-PLN.

GENERAL

Ident.: DSC-22_20-60-90-00006019.0001001 / 16 FEB 11
Applicable to: ALL

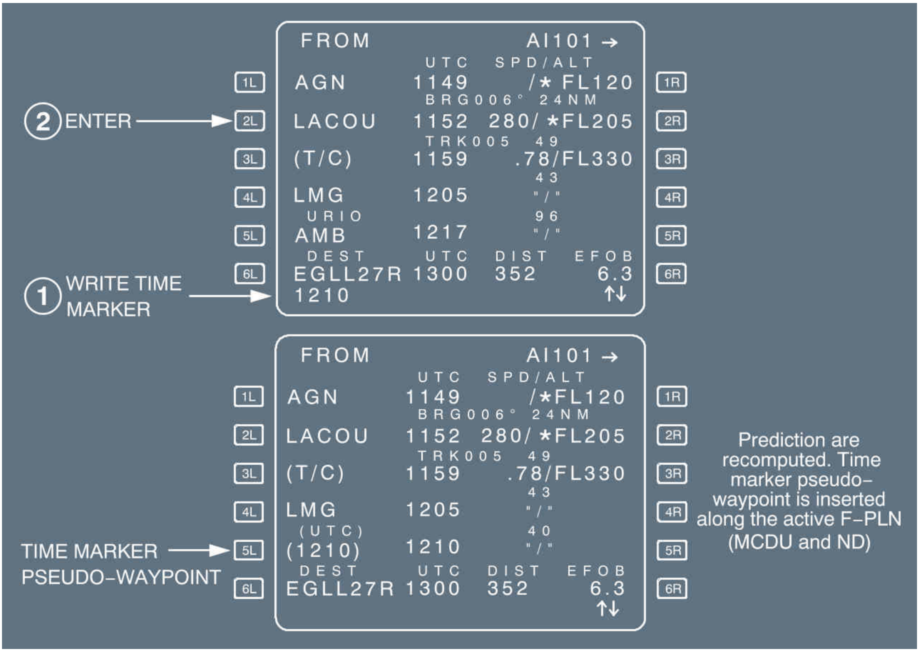
The crew can enter a time marker in the F-PLN A or B page. Once entered, the FMGS displays a pseudo waypoint along the flight plan on the MCDU and on the Navigation Display. This pseudo waypoint shows the predicted location of the aircraft at the entered time.

HOW TO INSERT A TIME MARKER

Ident.: DSC-22_20-60-90-00009522.0001001 / 01 OCT 12
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

WRITE the time marker in the scratchpad. The entry format is HHMM.
SELECT any left key of the F-PLN A or B page, to insert the time marker in the active flight plan.

The time marker is inserted in the flight plan according to time criteria, irrespective of the key chosen for entry.


1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
② ENTER
① WRITE TIME MARKER
TIME MARKER PSEUDO-WAYPOINT
Prediction are recomputed. Time marker pseudo-waypoint is inserted along the active F-PLN (MCDU and ND)

```
 FROM              AI101 →
          UTC   SPD/ALT
 AGN      1149    /* FL120
          BRG006°  24NM
 LACOU    1152  280/ *FL205
          TRK005   49
 (T/C)    1159    .78/FL330
                   43
 LMG      1205     "/"
  URIO             96
 AMB      1217     "/"
  DEST    UTC   DIST   EFOB
 EGLL27R  1300  352     6.3
 1210                   ↑↓
```

```
 FROM              AI101 →
          UTC   SPD/ALT
 AGN      1149    /*FL120
          BRG006°  24NM
 LACOU    1152  280/ *FL205
          TRK005   49
 (T/C)    1159    .78/FL330
                   43
 LMG      1205     "/"
  (UTC)            40
 (1210)   1210     "/"
  DEST    UTC   DIST   EFOB
 EGLL27R  1300  352     6.3
                        ↑↓
```

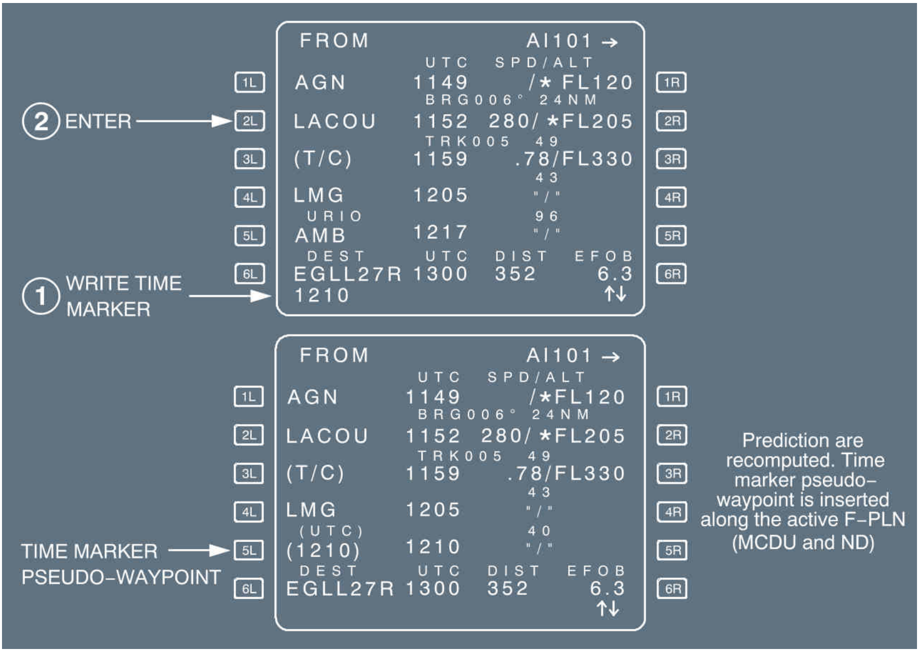
Up to four time markers may exist at a time. An attempt to enter a fifth time marker will cause the "TIME MARKER LIST FULL" message to appear on the scratchpad.
The FMGS updates the time marker position with the predictions.
When the current clock time equals or exceeds the time marker entry, the FMGS sequences the time marker (even in preflight).

HOW TO INSERT A TIME MARKER

Ident.: DSC-22_20-60-90-00009522.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860

WRITE the time marker in the scratchpad. The entry format is HHMM.
SELECT any left key of the F-PLN A or B page, to insert the time marker in the active flight plan.

The time marker is inserted in the flight plan according to time criteria, irrespective of the key chosen for entry.



```
 FROM               AI101 →
             UTC   SPD/ALT
AGN          1149      /* FL120
              BRG006°  24NM
LACOU        1152   280/ *FL205
              TRK005    49
(T/C)        1159     .78/FL330
                        43
LMG          1205        "/"
  URIO                   96
AMB          1217        "/"
  DEST       UTC   DIST    EFOB
EGLL27R      1300  352      6.3
1210                         ↑↓
```

② ENTER

① WRITE TIME MARKER

```
 FROM               AI101 →
             UTC   SPD/ALT
AGN          1149      /*FL120
              BRG006°  24NM
LACOU        1152   280/ *FL205
              TRK005    49
(T/C)        1159     .78/FL330
                        43
LMG          1205        "/"
 (UTC)                  40
(1210)       1210        "/"
  DEST       UTC   DIST    EFOB
EGLL27R      1300  352      6.3
                             ↑↓
```

TIME MARKER PSEUDO–WAYPOINT

Prediction are recomputed. Time marker pseudo–waypoint is inserted along the active F–PLN (MCDU and ND)

Up to four time markers may exist in the F-PLN at a time. An attempt to enter a fifth time marker will cause the "TIME MARKER LIST FULL" message to appear on the scratchpad.
The FMGS updates the time marker position with the predictions.

When the current clock time equals or exceeds the time marker entry, the FMGS sequences the time marker (even in preflight).

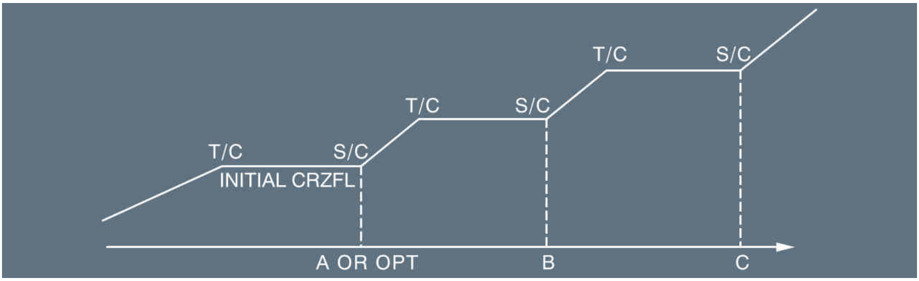
Intentionally left blank

STEP CLIMB/STEP DESCENT

Ident.: DSC-22_20-60-100-00006020.0012001 / 12 APR 17

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The STEP ALTS function enables to define the successive cruise Flight Levels. The optimum position to initiate a climb, from the initial (or current) cruise Flight Level to the next one, can also be determined.



PRINCIPLE

GEOGRAPHIC STEPS

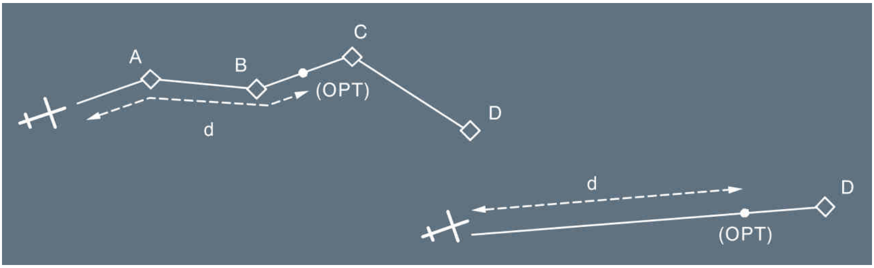
Up to four geographic steps may be defined on the STEP ALTS page. These steps are initiated at the geographical position, along the F-PLN.

Rules

- The minimum step size is 1 000 ft.
- A Step Climb (S/C) cannot follow a Step Descent (S/D).
- A STEP is automatically cleared, if:
  - The S/C (S/D) is sequenced without any level change done by the crew.
  - The crew achieves a LAT REV, which deletes the associated waypoint from the F-PLN
  - By EO condition.
- A STEP is manually cleared:
  - On the STEP ALTS page, by CLEARING the corresponding field.
  - On the F-PLN page, by CLEARING the (S/C) or (S/D) pseudo-waypoints.
- A STEP entry is IGNORED, if the remaining CRZ distance is less than about 50 NM.
- Once the steps are inserted in the F-PLN, they are displayed:
  - On the MCDU, as (S/C), (S/D), (T/C), (T/D) pseudo waypoints.
  - On the ND, by associated ↗, ↘, ↗, ↘ white symbols.

OPTIMUM STEP

When geographic steps are inserted, or an altitude is entered, the FM proposes an OPTIMUM STEP start of climb position for the first step climb altitude ahead. Predicted FUEL and TIME savings are displayed when calculated to be greater than 100 kg or 1 min respectively. If no savings are found, no optimum step is proposed.
The OPT STEP is not automatically inserted. The crew must insert it, if appropriate. Once inserted, the OPT STEP point (OPT) becomes a fixed geographical point.
If some F-PLN parameters are subsequently changed (e.g. winds, new waypoints), an update of the optimum position relative to the previous one may be proposed. If savings exist, this new optimum may be inserted to replace the previous optimum step point.
Once an OPT STEP is inserted in the F-PLN, and the crew achieves a lateral F-PLN revision, the FM keeps the (OPT) along the new F-PLN, at the same distance from the aircraft's position, as previously determined.



Rules

- The OPT STEP is only computed by the FM, if data required for the prediction computation are inserted : F-PLN, CRZ FL, CI, GW, CG at least.
- The search of the OPT STEP begins 20 NM beyond (T/C) before Cruise, or ahead of the aircraft's position.
- The search of the OPT STEP ends 20 NM before the next STEP POINT, or 300 NM before the (T/D).
- Only one OPT STEP is computed at a time.

Guidance

When reaching the step point, the steps must be initiated by the crew by selecting the new CRZ FL, and pressing the FCU ALT selector knob. If sequenced without any crew action, the step is automatically deleted.

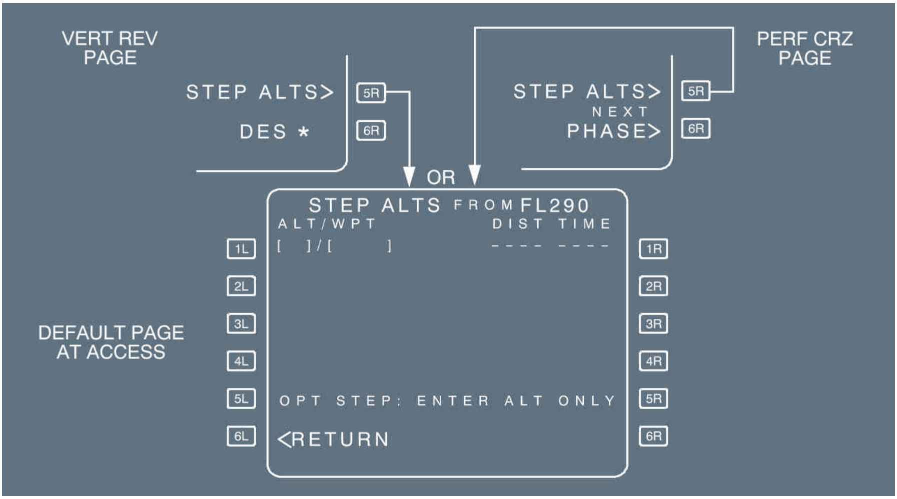
If the crew initiates the step:

- The CRZ FL is automatically reassigned to its new value.
- The guidance is THR CLB/CLB for a step climb.
  THR IDLE/DES with V/S = -1 000 ft/min for a step descent.

STEP ENTRY

The STEP ALTS page is either accessed from the :

- The VERT REV page, or
- PERF CRZ page.


VERT REV PAGE
STEP ALTS>
DES *
5R
6R
PERF CRZ PAGE
STEP ALTS>
NEXT PHASE>
5R
6R
OR
STEP ALTS FROM FL290
ALT/WPT
DIST TIME
[ ]/[ ]
---- ----
OPT STEP: ENTER ALT ONLY
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DEFAULT PAGE AT ACCESS

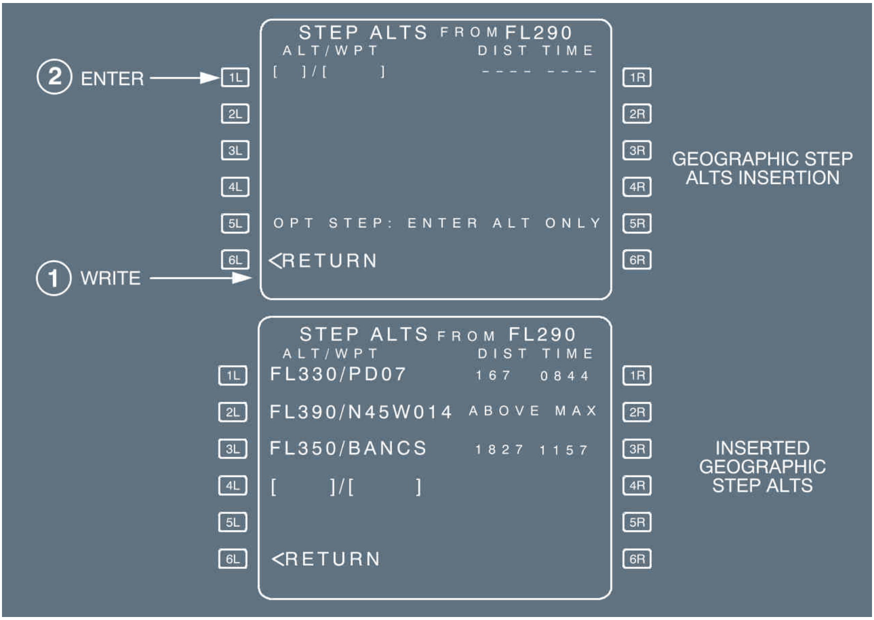
FOR GEOGRAPHIC STEP:

PRESS the F-PLN or PERF key.
SELECT vertical revision at a cruise waypoint.
SELECT the STEP ALTS prompt.

WRITE the ALT/WPT in the scratchpad, and ENTER it in [1L] to [4L].

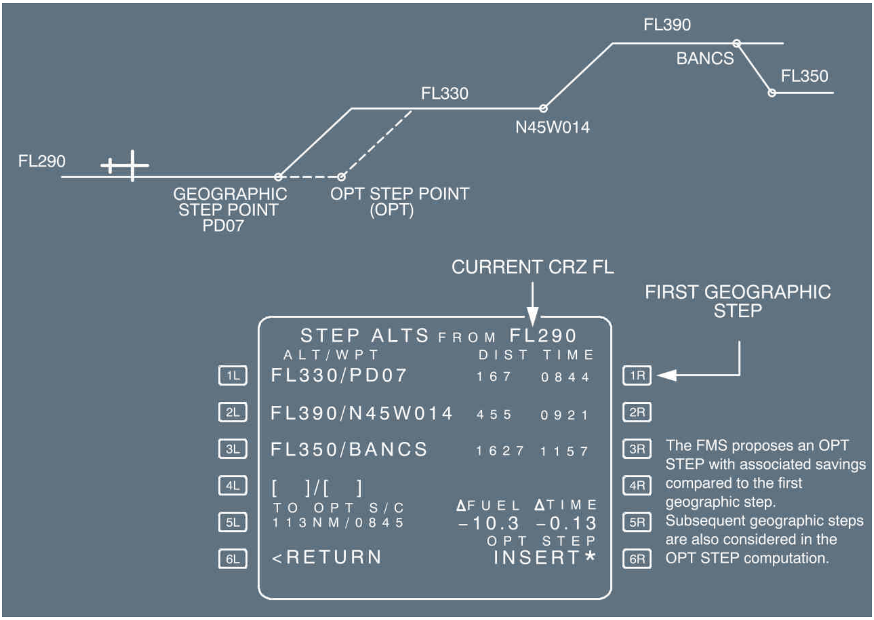
Note:
- *The position may be a waypoint ident, PBD, PD.*
- *The pilot may enter FL 350/LMG/–20. The FM will compute the geographic step 20 NM before LMG to FL 350.*
- *To modify an inserted STEP:*
  - *To modify the CRZ FL only, enter it in the left key, as "FLXXX".*
  - *To modify the position only, enter it in the left key, as "/XXX".*
  - *To modify both, modify the position first, and then the CRZ FL (it is not possible to modify both in a single entry).*

CHECK the PREDICTIONS.


STEP ALTS FROM FL290
ALT/WPT
DIST TIME
[ ]/[ ]
---- ----
② ENTER
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
OPT STEP: ENTER ALT ONLY
<RETURN
① WRITE
GEOGRAPHIC STEP ALTS INSERTION
STEP ALTS FROM FL290
ALT/WPT
DIST TIME
FL330/PD07 167 0844
FL390/N45W014 ABOVE MAX
FL350/BANCS 1827 1157
[ ]/[ ]
<RETURN
INSERTED GEOGRAPHIC STEP ALTS

FOR OPTIMAL STEP

Once all geographical steps are inserted, and the predictions are available, the STEP ALTS page displays the FUEL/TIME savings for the first step climb. If no significant savings are predicted, the NO OPTIMAL message is displayed.

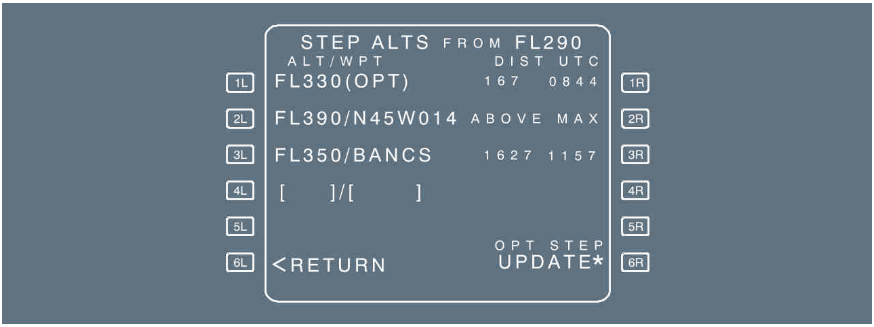

FL390
BANCS
FL350
FL330
N45W014
FL290
GEOGRAPHIC STEP POINT PD07
OPT STEP POINT (OPT)
CURRENT CRZ FL
FIRST GEOGRAPHIC STEP
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
      STEP ALTS FROM FL290
   ALT/WPT                DIST  TIME
FL330/PD07                 167  0844

FL390/N45W014              455  0921

FL350/BANCS               1627  1157

[   ]/[   ]
 TO OPT S/C           ΔFUEL  ΔTIME
 113NM/0845           -10.3  -0.13
                         OPT STEP
<RETURN                   INSERT*
```

The FMS proposes an OPT STEP with associated savings compared to the first geographic step. Subsequent geographic steps are also considered in the OPT STEP computation.

To INSERT the proposed OPT STEP displayed in [5L]:

SELECT the INSERT* prompt in [6R].

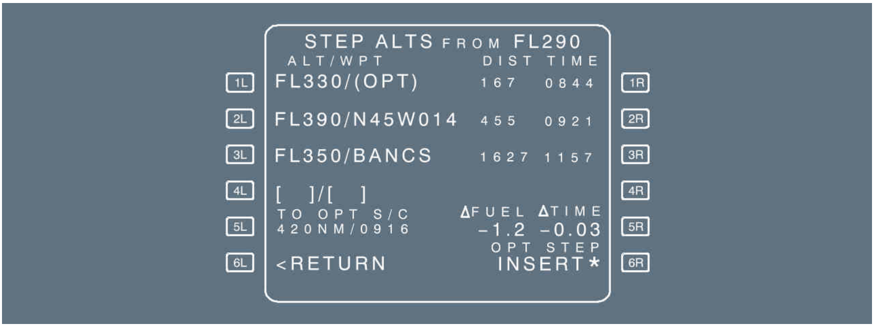

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
      STEP ALTS FROM FL290
   ALT/WPT                DIST  UTC
FL330(OPT)                 167  0844

FL390/N45W014         ABOVE  MAX

FL350/BANCS               1627  1157

[     ]/[       ]


                         OPT STEP
<RETURN                   UPDATE*
```

The computed (OPT) step replaces the initially inserted step position, and is then considered at a fixed geographic position. Savings are no longer displayed, and the UPDATE* prompt replaces the INSERT* prompt. This prompt allows the crew to update the (OPT) step position, considering possible F-PLN or inserted wind changes.

If pressed, a new OPT point is proposed, with the associated SAVINGS and INSERT prompt, or NO OPTIMAL.

UPDATE prompt has been pressed, the new OPT STEP point gives additional savings:



```
       STEP ALTS FROM FL290
  ALT/WPT              DIST  TIME
FL330/(OPT)             167  0844
FL390/N45W014           455  0921
FL350/BANCS            1627  1157
[   ]/[   ]
 TO OPT S/C           ΔFUEL ΔTIME
 420NM/0916            -1.2 -0.03
                         OPT STEP
<RETURN                   INSERT*
```

THERE ARE ONLY 2 CRZ FLS IN THE F-PLN:

The pilot may obtain the OPT position of the STEP point, as follows:

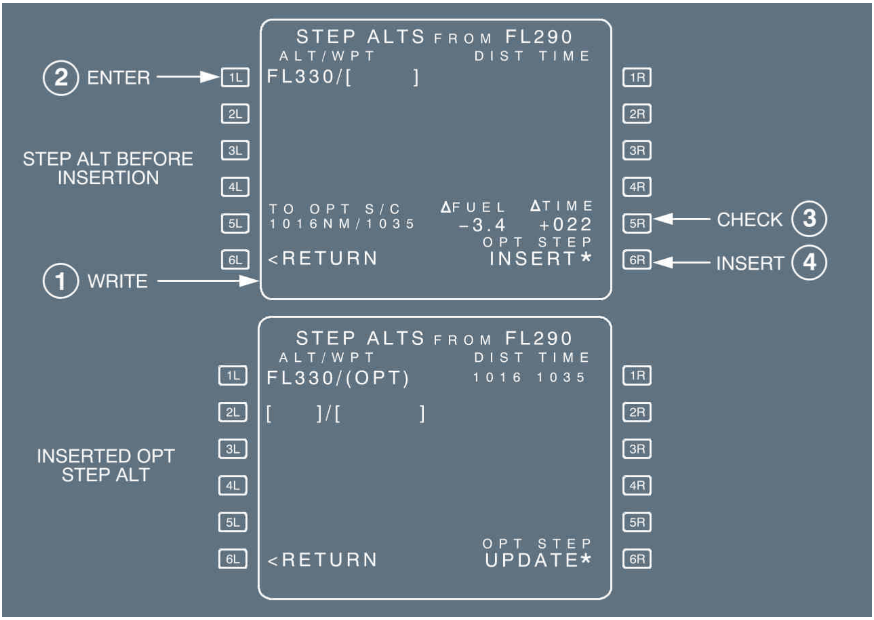
INSERT the initial cruise FL on the INIT A page.
ENSURE that the ZFW, ZFWCG and BLOCK fuel are inserted on the INIT B page.
WRITE the new CRZ FL in the STEP ALTS page, in the [1L] field.

Distance and time to optimum point and fuel/time saving are displayed.

CHECK the fuel and time savings and prediction on the [5R] field.

Savings are computed by comparing the entered step altitude, and the origin altitude of the step.

INSERT, if suitable.


STEP ALTS FROM FL290
ALT/WPT
DIST TIME
② ENTER
FL330/[ ]
STEP ALT BEFORE INSERTION
TO OPT S/C
1016NM/1035
ΔFUEL ΔTIME
-3.4 +022
OPT STEP
<RETURN
INSERT*
CHECK ③
INSERT ④
① WRITE
STEP ALTS FROM FL290
ALT/WPT
DIST TIME
FL330/(OPT)
1016 1035
[ ]/[ ]
INSERTED OPT STEP ALT
OPT STEP
<RETURN
UPDATE*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

Note: *No OPT STEP is available in the SEC F-PLN.*

MESSAGES

Messages may be displayed in the DIST/TIME field:
- "ABOVE MAX", if the inserted step altitude exceeds the REC MAX ALT.
  The "STEP ABOVE MAX FL" scratchpad message is associated to the "ABOVE MAX" message.
- "IGNORED"

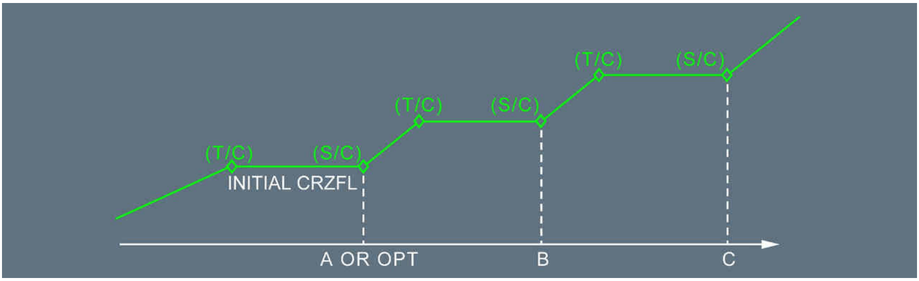
  This message is displayed in the following cases:
  - Step climb is located prior to the top of climb, or after the top of descent.
  - Step end is at less than 50 NM from the top of descent. An optimum step point, < 200 NM from top of descent, cannot be inserted

- “STEP AHEAD”, when the distance to the step point is less than 20 NM . A “STEP AHEAD” scratchpad message is also displayed.
  The following message may be displayed in the scratchpad:
- “NOT ALLOWED”, if:
  - Four steps already exist in the F-PLN, and an additionnal entry is attempted.
  - Any attempt to enter a step at the FROM waypoint, or at a pseudo waypoint is done.
  - Two consecutive steps are entered at the same waypoint (e.g. step climb after step descent).

STEP CLIMB/STEP DESCENT

Ident.: DSC-22_20-60-100-00006020.0011001 / 28 MAY 20
Applicable to: MSN 04827-04860

The STEP ALTS function enables to define the successive cruise Flight Levels. The optimum position to initiate a climb, from the initial (or current) cruise Flight Level to the next one, can also be determined.



PRINCIPLE

GEOGRAPHIC STEPS

Up to four geographic steps may be defined on the STEP ALTS page. These steps are initiated at the geographical position, along the F-PLN.

Rules

- The minimum step size is 500 ft
- A Step Climb (S/C) cannot follow a Step Descent (S/D).
- A STEP is automatically cleared, if:
  - The S/C (S/D) is sequenced without any level change done by the crew
  - The crew achieves a LAT REV, which deletes the associated waypoint from the F-PLN
  - By EO condition.

- A STEP is manually cleared:
  - On the STEP ALTS page, by CLEARING the corresponding field
  - On the F-PLN page, by CLEARING the (S/C) or (S/D) pseudo-waypoints
- A STEP entry is IGNORED, if the remaining CRZ distance is less than about 50 NM.
- Once the steps are inserted in the F-PLN, they are displayed:
  - On the MCDU, as (S/C), (S/D), (T/C), (T/D) pseudo waypoints
  - On the ND, by associated ↗, ↘, ↗, ↘ white symbols.

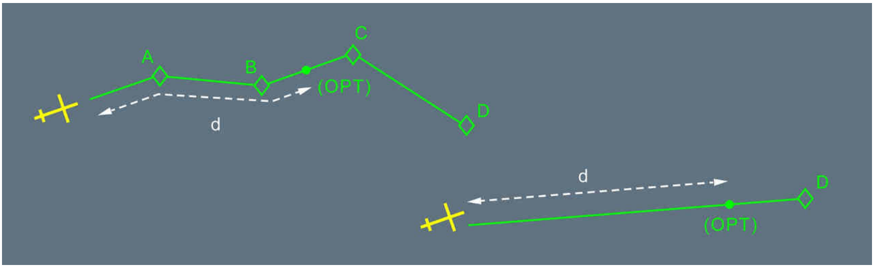
OPTIMUM STEP

When geographic steps are inserted, or an altitude is entered, the FM proposes an OPTIMUM STEP start of climb position for the first step climb altitude ahead. Predicted FUEL and TIME savings are displayed when calculated to be greater than 100 kg or 1 min respectively. If no savings are found, no optimum step is proposed.

The OPT STEP is not automatically inserted. The crew must insert it, if appropriate. Once inserted, the OPT STEP point (OPT) becomes a fixed geographical point.

If some F-PLN parameters are subsequently changed (e.g. winds, new waypoints), an update of the optimum position relative to the previous one may be proposed. If savings exist, this new optimum may be inserted to replace the previous optimum step point.

Once an OPT STEP is inserted in the F-PLN, and the crew achieves a lateral F-PLN revision, the FM keeps the (OPT) along the new F-PLN, at the same distance from the aircraft's position, as previously determined.



Rules

- The OPT STEP is only computed by the FM, if data required for the prediction computation are inserted : F-PLN, CRZ FL, CI, GW, CG at least
- The search of the OPT STEP begins 20 NM beyond (T/C) before Cruise, or ahead of the aircraft's position
- The search of the OPT STEP ends 20 NM before the next STEP POINT, or 300 NM before the (T/D)
- Only one OPT STEP is computed at a time.

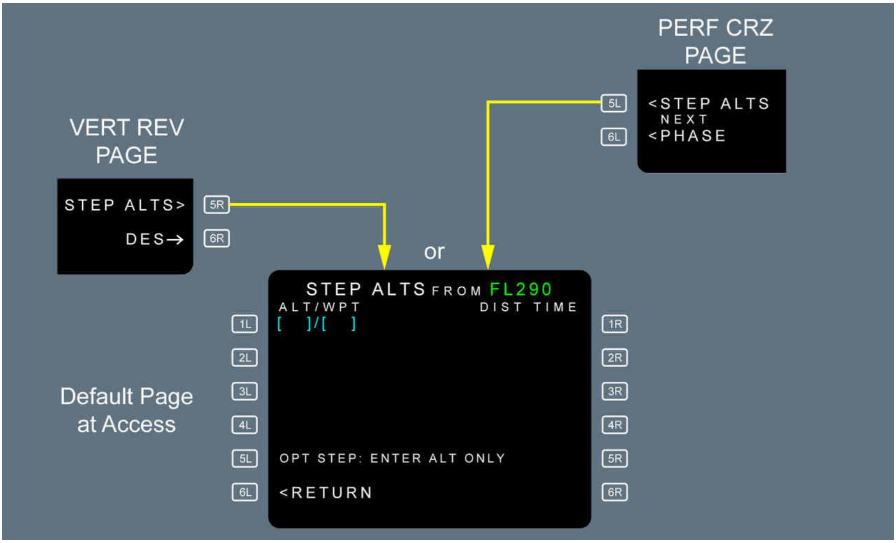
Guidance

When reaching the step point, the steps must be initiated by the crew by selecting the new CRZ FL, and pressing the FCU ALT selector knob. If sequenced without any crew action, the step is automatically deleted.

If the crew initiates the step:
- The CRZ FL is automatically reassigned to its new value
- The guidance is THR CLB/CLB for a step climb or THR IDLE/DES with V/S = -1 000 ft/min for a step descent.

STEP ENTRY

The STEP ALTS page is either accessed from the :
- The VERT REV page, or
- PERF CRZ page.


PERF CRZ PAGE
5L
6L
<STEP ALTS
NEXT
<PHASE
VERT REV PAGE
STEP ALTS>
DES→
5R
6R
or
STEP ALTS FROM FL290
ALT/WPT
DIST TIME
[ ]/[ ]
OPT STEP: ENTER ALT ONLY
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
Default Page at Access

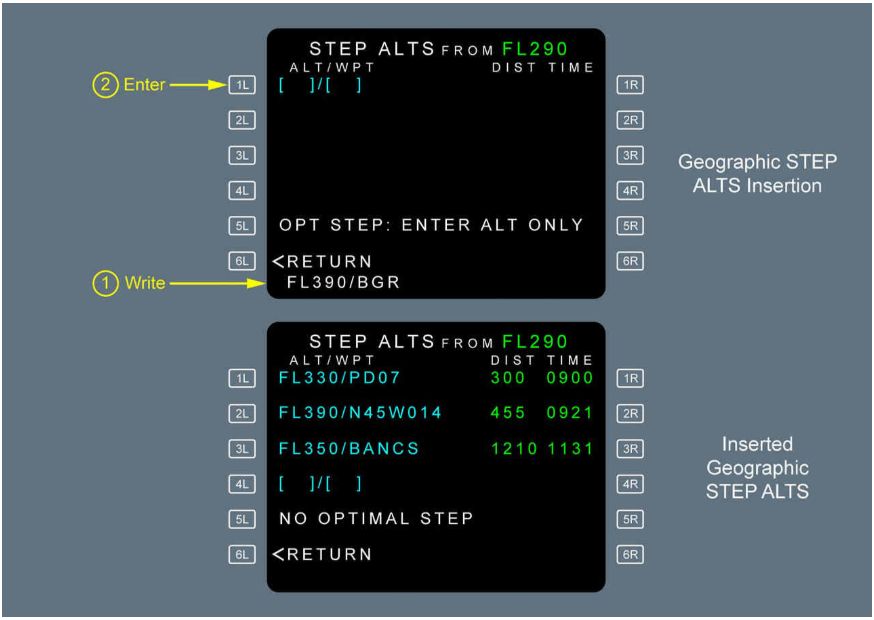
FOR GEOGRAPHIC STEP:

PRESS the PERF key, or PRESS the F-PLN key and SELECT VERT REV at a cruise waypoint. SELECT the STEP ALTS prompt.

1. WRITE the ALT/WPT in the scratchpad
2. ENTER it in [1L] to [4L].

Note:
- *The position may be a waypoint ident, PBD, PD*
- *The crew may enter LMG/–20/350. The FMS will compute the geographic step to FL 350 20 NM before LMG*
- *To modify an inserted STEP:*
  - *To modify the CRZ FL only, enter it in the left key, as “FLXXX”*
  - *To modify the position only, enter it in the left key, as “/XXX”*
  - *To modify both, modify the position first, and then the CRZ FL (it is not possible to modify both in a single entry).*

CHECK the PREDICTIONS.



```
STEP ALTS FROM FL290
 ALT/WPT              DIST  TIME
[   ]/[   ]



OPT STEP: ENTER ALT ONLY
<RETURN
 FL390/BGR
```

Geographic STEP ALTS Insertion

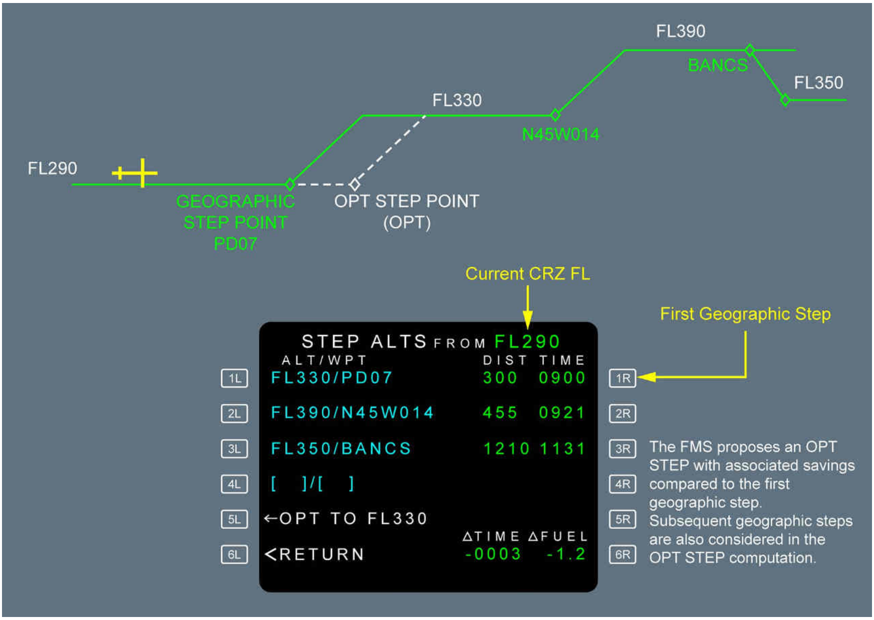
```
STEP ALTS FROM FL290
 ALT/WPT              DIST  TIME
FL330/PD07            300   0900
FL390/N45W014         455   0921
FL350/BANCS          1210   1131
[   ]/[   ]
NO OPTIMAL STEP
<RETURN
```

Inserted Geographic STEP ALTS

FOR OPTIMAL STEP

Once the geographic steps are inserted, and the predictions are available, the FMGS computes an optimal location for the first step, and the STEP ALTS page displays the associated FUEL/TIME savings.

Note: *If the FMGS cannot determine an optimal step for the selected altitude, “NO OPTIMAL STEP” is displayed in the [5L] field.*

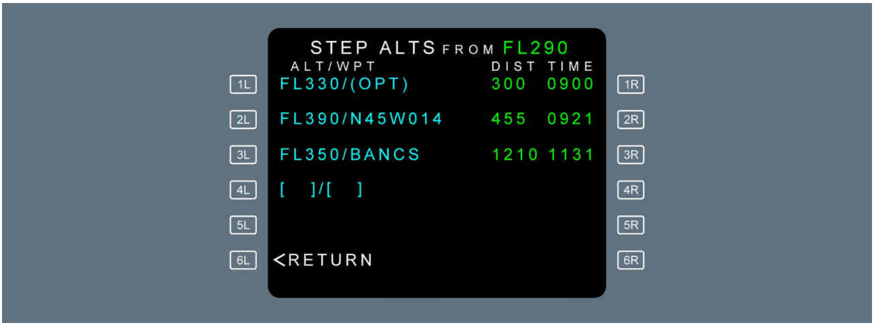

FL390
BANCS
FL350
FL330
N45W014
FL290
GEOGRAPHIC STEP POINT PD07
OPT STEP POINT (OPT)
Current CRZ FL
First Geographic Step
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
     STEP ALTS FROM FL290
   ALT/WPT              DIST TIME
FL330/PD07               300  0900

FL390/N45W014            455  0921

FL350/BANCS             1210 1131

[   ]/[   ]

←OPT TO FL330
                       ΔTIME ΔFUEL
<RETURN                -0003  -1.2
```

The FMS proposes an OPT STEP with associated savings compared to the first geographic step.
Subsequent geographic steps are also considered in the OPT STEP computation.

To INSERT the proposed OPT STEP:

SELECT the [5L] prompt.


1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
     STEP ALTS FROM FL290
   ALT/WPT              DIST TIME
FL330/(OPT)              300  0900

FL390/N45W014            455  0921

FL350/BANCS             1210 1131

[   ]/[   ]



<RETURN
```

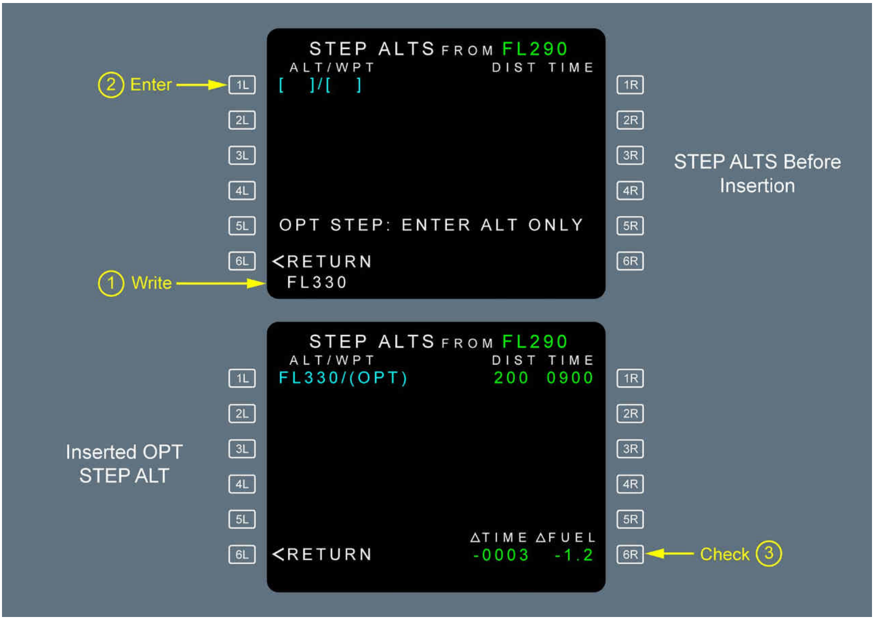
The computed (OPT) step replaces the initially inserted step position. Once inserted, the time and fuel savings associated to the optimal step are no longer displayed. The optimum step position is regularly updated until the aircraft is within 20 NM of the optimum step point.

Note: *If the circumstances lead to a situation where the entered optimal step is no longer optimal, "NO OPTIMAL" is displayed in the [1R] field.*

TO DETERMINE THE OPTIMAL STEP LOCATION WHEN THERE ARE ONLY 2 CRZ FLS IN THE F-PLN:

The crew may obtain the optimal position for the STEP as follows:

1. INSERT the initial CRZ FL on the INIT A page.
   ENSURE that the ZFW, ZFWCG and BLOCK fuel are inserted on the INIT B page.
2. ENTER the new CRZ FL in the STEP ALTS page in the [1L] field.
   If an optimal step can be determined, the FMGS automatically computes the optimal position of the step, with associated fuel/time savings.
3. CHECK the fuel and time savings and prediction on the [6R] field.
   Savings are computed by comparing the entered step altitude, and the origin altitude of the step.



```
STEP ALTS FROM FL290
 ALT/WPT            DIST TIME
[   ]/[   ]



OPT STEP: ENTER ALT ONLY
<RETURN
 FL330
```

```
STEP ALTS FROM FL290
 ALT/WPT            DIST TIME
FL330/(OPT)         200  0900




                ΔTIME ΔFUEL
<RETURN         -0003  -1.2
```

MESSAGES

Messages may be displayed in the DIST/TIME field:

- “ABOVE MAX”, if the inserted step altitude exceeds the REC MAX ALT.
  The “STEP ABOVE MAX FL” scratchpad message is associated to the “ABOVE MAX” message.
- “IGNORED” displayed in the following cases:
  - Step climb is located prior to the top of climb, or after the top of descent.
  - Step end is at less than 50 NM from the top of descent. An optimum step point, < 200 NM from top of descent, cannot be inserted.
- “STEP AHEAD”, when the distance to the step point is less than 20 NM. A “STEP AHEAD” scratchpad message is also displayed.
- A “NOT ALLOWED” message is displayed in the scratchpad, if:
  - Four steps already exist in the F-PLN, and an additional step is entered.
  - A step is entered at the FROM waypoint, or at a pseudo-waypoint.
  - Two consecutive steps are entered at the same waypoint (e.g. step climb after step descent).

GENERAL

Ident.: DSC-22_20-60-110-00006021.0001001 / 01 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

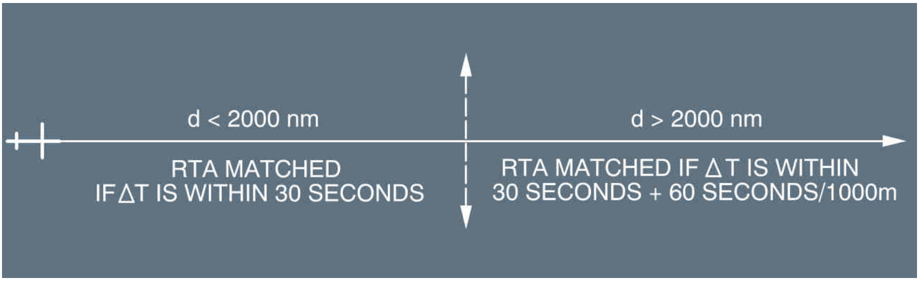
A time constraint (RTA) may be assigned at any waypoint of the F-PLN, downpath of the origin and the FROM waypoint. It can be an ”AT”, “AT OR BEFORE”, or “AT OR AFTER” constraint.
The FMS computes a new managed speed profile from the aircraft position to the constrained waypoint, in order to match the 30 s difference (ΔT) between the time predicted at the constrained waypoint and the RTA. This modified managed speed profile can be checked using the speed prediction, displayed for each waypoint of the F-PLN page.
The RTA function uses a speed range between Green Dot speed and VMO - 10 (or MMO - 0.02).
When the constrained waypoint is sequenced, the ECON SPD/MACH is resumed unless the constrained waypoint is located in a descent segment.

Note: *The FM does not compute a new managed speed profile when a RTA is entered in the descent profile while the aircraft is in cruise within 40 NM from the top of descent.*

The time constraint is inserted on the RTA page. A time constraint may be inserted at any waypoint of the primary or secondary flight plan.
If an engine-out condition is detected, the time constraint is automatically deleted and RTA DELETED message on scratchpad.
If the aircraft enters a holding pattern, the downpath time constraint is deleted.
Once inserted in the F-PLN, the RTA is displayed in magenta on the F-PLN page, as long as no predictions are available.

Once the predictions are available, the time constraint is replaced by the new predicted time at the associated waypoint, and highlighted by a star: (*)
- The (*) is magenta, if the time constraint is matched with the 30 s criteria.
- The (*) is amber, if the time constraint is missed.

Time constraint matching criteria:

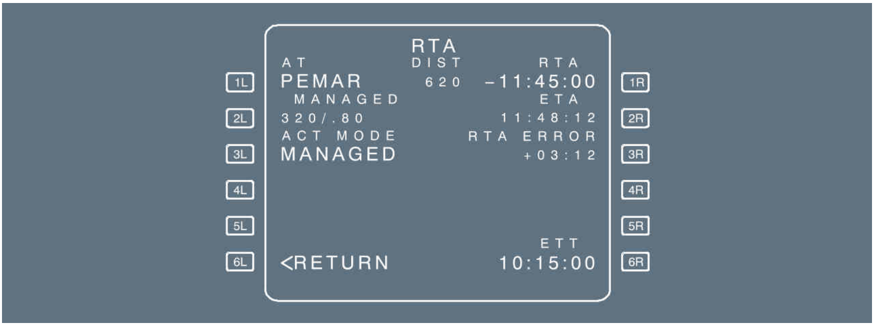

d < 2000 nm
d > 2000 nm
RTA MATCHED
IF ΔT IS WITHIN 30 SECONDS
RTA MATCHED IF ΔT IS WITHIN
30 SECONDS + 60 SECONDS/1000m

Note: *ΔT is the time difference between the time predicted at the constrained waypoint and the RTA.*

TIME CSTR ENTRY

PRESS the F-PLN key.
SELECT vertical revision at the revised waypoint.
SELECT the RTA key.
ENTER a waypoint at which a time constraint is to be defined.
WRITE the time constraint (+/–HHMMSS) into the scratchpad and ENTER

The display automatically reverts to the F-PLN A page.



```
                      RTA
      AT              DIST           RTA
1L    PEMAR           620      -11:45:00    1R
        MANAGED                      ETA
2L    320/.80                   11:48:12    2R
      ACT MODE               RTA ERROR
3L    MANAGED                     +03:12    3R
4L                                          4R
5L                                          5R
                                     ETT
6L    <RETURN                   10:15:00    6R
```

Note: - *The TIME CSTR can be directly cleared on the F-PLN A page, using the CLR key.*
- *The time constraint is automatically deleted in the following cases:*
  - *Engine out, or*
  - *When entering a holding pattern, or*
  - *In case of Go-Around, or*
  - *A time constraint is entered at another waypoint, while another time constraint already exists.*

A scratchpad “RTA DELETED” message is displayed.

GENERAL

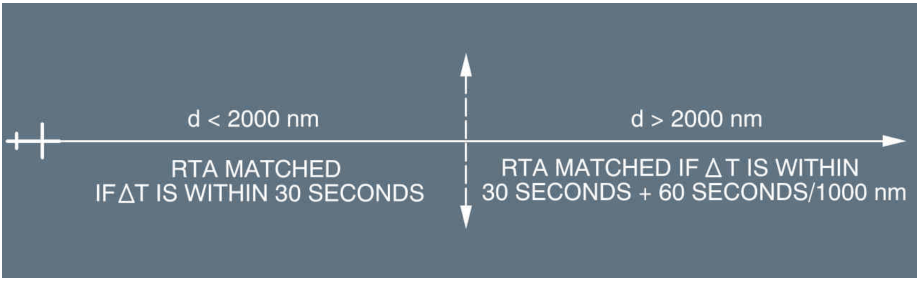
Ident.: DSC-22_20-60-110-00006021.0011001 / 01 OCT 12
Applicable to: MSN 04827-04860

A time constraint (RTA) may be assigned at any waypoint of the F-PLN, downpath of the origin and the FROM waypoint. It can be an ”AT”, “AT OR BEFORE”, or “AT OR AFTER” constraint.
The FMS computes a new managed speed profile from the aircraft position to the constrained waypoint, in order to match the 30 s difference (ΔT) between the time predicted at the constrained

waypoint and the RTA. This modified managed speed profile can be checked using the speed prediction, displayed for each waypoint of the F-PLN page.
The RTA function uses a speed range between Green Dot speed and VMO - 10 (or MMO - 0.02).
When the constrained waypoint is sequenced, the ECON SPD/MACH is resumed unless the constrained waypoint is located in a descent segment.
The time constraint is inserted on the RTA page. A time constraint may be inserted at any waypoint of the active or secondary flight plan.
If an engine-out condition is detected, the time constraint is automatically deleted and RTA DELETED message on scratchpad.
If the aircraft enters a holding pattern, the downpath time constraint is deleted.
Once inserted in the F-PLN, the RTA is displayed in magenta on the F-PLN page, as long as no predictions are available. On the PERF page, the Cost Index value is replaced by “RTA CI”.

Once the predictions are available, the time constraint is replaced by the new predicted time at the associated waypoint, and highlighted by a star: (*)
- The (*) is magenta, if the time constraint is matched with the 30 s criteria.
- The (*) is amber, if the time constraint is missed.

Time constraint matching criteria:


d < 2000 nm
d > 2000 nm
RTA MATCHED
IF ΔT IS WITHIN 30 SECONDS
RTA MATCHED IF ΔT IS WITHIN
30 SECONDS + 60 SECONDS/1000 nm

Note: *ΔT is the time difference between the time predicted at the constrained waypoint and the RTA. It is used to define the “missed” or “made” status.*

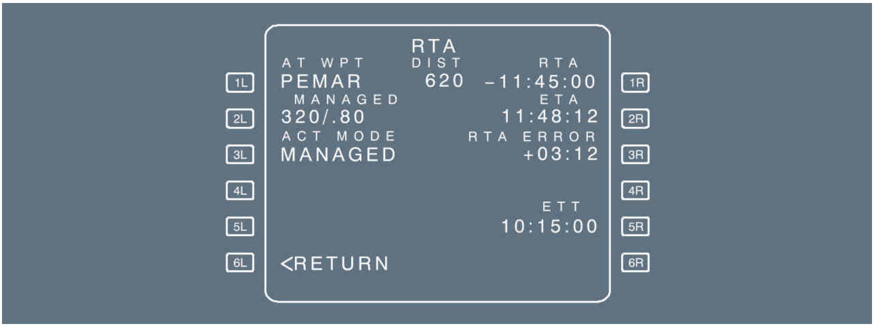
ENTRY OF A REQUIRED TIME OF ARRIVAL

PRESS the F-PLN key.
SELECT VERT REV at any waypoint.
SELECT the RTA prompt [2R].
ENTER the waypoint at which a time constraint is to be defined in the [1L] field

When accessing the RTA page, the [1L] field is defaulted to the waypoint at which the vertical revision has been performed.

WRITE the RTA in the scratchpad and ENTER in the [1R] field.

The format to be used is:
- *"HHMMSS" for "AT HHMMSS" (ex : "124500")*
- *"+HHMMSS" for "AT OR AFTER HHMMSS" (ex : "+124500")*
- *"-HHMMSS" for "AT OR BEFORE HHMMSS" (ex : "-124500")*



```
                    RTA
AT WPT             DIST          RTA
PEMAR               620    -11:45:00
  MANAGED                        ETA
320/.80                     11:48:12
ACT MODE                   RTA ERROR
MANAGED                       +03:12

                                 ETT
                            10:15:00
<RETURN
```

<u>*Note:*</u> - *The RTA can be directly cleared on the F-PLN A page, using the CLR key.*

The time constraint is automatically deleted in the following cases:
- *Engine out, or*
- *When entering a holding pattern, or*
- *In case of Go-Around, or*
- *A time constraint is entered at another waypoint, while another time constraint already exists.*
- *The waypoint where the RTA was entered is deleted.*

In case a time constraint is deleted, the "RTA DELETED" scratchpad message is displayed.

ESTIMATED TAKEOFF TIME (ETT)

Ident.: DSC-22_20-60-110-00009523.0001001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The Estimated Takeoff Time (ETT) may be entered by the pilot during the preflight phase at the origin airport. This time is used as the initialization time for predictions.
The entry is accepted in the preflight phase, if the ETT is greater than the clock time.

PROCEDURE

PRESS the F-PLN key
SELECT a vertical revision at origin

SELECT the RTA page
WRITE the ETT into the scratchpad, and ENTER in the ETT field.

The display automatically reverts to the F-PLN A page.

Note:
- *If the current time exceeds the ETT entry, the CLK IS TAKE OFF TIME message is displayed ; the ETT is replaced by the clock time.*
- *At takeoff, the takeoff time is automatically updated using the actual clock time.*
- *An ETT entry is automatically deleted, if the origin airport is modified, or if the clock is inoperative.*
- *If a time constraint is entered at a waypoint in the F-PLN, the takeoff time required to match the constraint is automatically computed by the FM. This result is displayed in magenta as ETT at the origin.*

USE OF TIME/ETT CONSTRAINT

During preflight :
- If an ETT has been entered, time predictions are based on the entered value (or clock time, if greater).
- If both an ETT and a time constraint have been entered, time predictions are based on the entered ETT value (or clock time, if greater). The managed speed profile is computed to match the time constraint, as closely as possible, using a pseudo cost index value. (Not displayed).
- If only a time constraint has been entered:
  - Optimum speeds are computed to determine the ETT, so as to satisfy the time constraint.
  - If necessary, flight time (based on optimum speeds) plus clock time (current) is greater than the time constraint ; optimum speeds are modified to match the time constraint as closely as possible.

After Takeoff : The predictions are based on the current time.
Speeds are adjusted to satisfy the time constraint.

ESTIMATED TAKEOFF TIME (ETT)

Ident.: DSC-22_20-60-110-00009523.0011001 / 23 JUN 15
Applicable to: MSN 04827-04860

The Estimated Takeoff Time (ETT) may be entered by the pilot during the preflight phase at the origin airport. This time is used as the initialization time for predictions.
The entry is accepted in the preflight phase, if the ETT is greater than the clock time.
No temporary flight plan is created upon insertion or modification of an ETT

PROCEDURE

PRESS the F-PLN key

SELECT VERT REV at departure
SELECT the RTA prompt [2R]
ENTER the ETT in the [5R] field of RTA page

Note:
- *If the current time exceeds the ETT entry, the CLK IS TAKE OFF TIME message is displayed ; the ETT is replaced by the clock time.*
- *At takeoff, the takeoff time is automatically updated using the actual clock time.*
- *An ETT entry is automatically deleted, if the origin airport is modified, or if the clock is inoperative.*
- *If a time constraint is entered at a waypoint in the F-PLN, the takeoff time required to match the constraint is automatically computed by the FM. This result is displayed in magenta as ETT at the origin.*

USE OF TIME/ETT CONSTRAINT

During preflight :
- If an ETT has been entered, time predictions are based on the entered value (or clock time, if greater).
- If both an ETT and a time constraint have been entered, time predictions are based on the entered ETT value (or clock time, if greater). The managed speed profile is computed to match the time constraint, as closely as possible, using a pseudo cost index value. (Not displayed).
- If only a time constraint has been entered:
  - Optimum speeds are computed to determine the ETT, so as to satisfy the time constraint.
  - If necessary, flight time (based on optimum speeds) plus clock time (current) is greater than the time constraint ; optimum speeds are modified to match the time constraint as closely as possible.

After Takeoff : The predictions are based on the current time.
Speeds are adjusted to satisfy the time constraint.

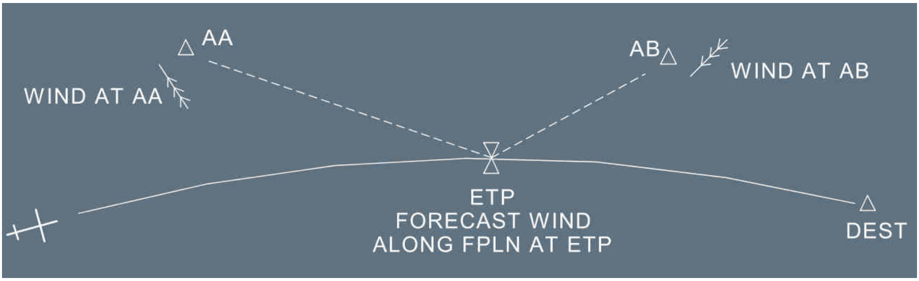
EQUITIME POINT

Ident.: DSC-22_20-60-120-00006015.0001001 / 16 MAR 11

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The equitime point page displays the ETP, computed along the F-PLN route between two referenced positions (airports, waypoints or navaids), defined by the pilot (*Refer to DSC-22_20-50-10-25 Equi - Time Point Page*for the page description).
When first accessing the page, the FMS proposes origin and destination airfields, as defaulted positions.
The pilot may overwrite these two positions and insert the wind in their vicinity at the applicable CRZ FL.
The FMS then computes the resulting ETP, using the managed or selected speed, and blending the forecasted winds along the F-PLN route with the inserted winds.

The FMS provides:
- TIME and DIST from the aircraft position (or origin on ground) to the ETP
- The BRG/DIST from the ETP to the defined positions
- TIME overhead each position, assuming the aircraft flies from the present position to the defined position via the ETP
- (ETP) pseudo waypoint is displayed on the ND along the F-PLN
- ETP location in relation to the subsequent waypoint.



EQUITIME POINT

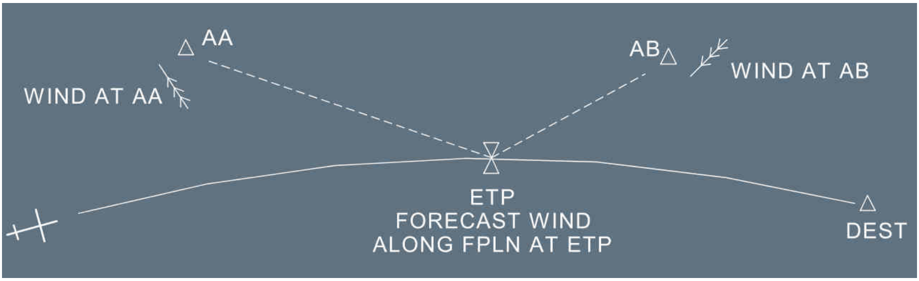
Ident.: DSC-22_20-60-120-00006015.0002001 / 18 MAR 11

Applicable to: MSN 04827-04860

The EQUI-TIME POINT page displays the ETP, computed along the F-PLN route between two referenced positions (airports, waypoints or navaids), defined by the crew (*Refer to DSC-22_20-50-10-28 EQUI - TIME POINT Page*for the page description).
When first accessing the page, the FMS proposes origin and destination airfields, as defaulted positions.

The pilot may overwrite these two positions and insert the wind in their vicinity at the applicable CRZ FL.
The FMS then computes the resulting ETP, using the managed or selected speed, and blending the forecasted winds along the F-PLN route with the inserted winds.

The FMS provides:
- TIME and DIST from the aircraft position (or origin on ground) to the ETP
- The BRG/DIST from the ETP to the defined positions
- TIME overhead each position, assuming the aircraft flies from the present position to the defined position via the ETP
- (ETP) pseudo waypoint is displayed on the ND along the F-PLN
- ETP location in relation to the subsequent waypoint.



EQUITIME POINT ENTRY

Ident.: DSC-22_20-60-120-00009536.0001001 / 01 OCT 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

PRESS the DATA key.
SELECT the EQUI-TIME POINT prompt.

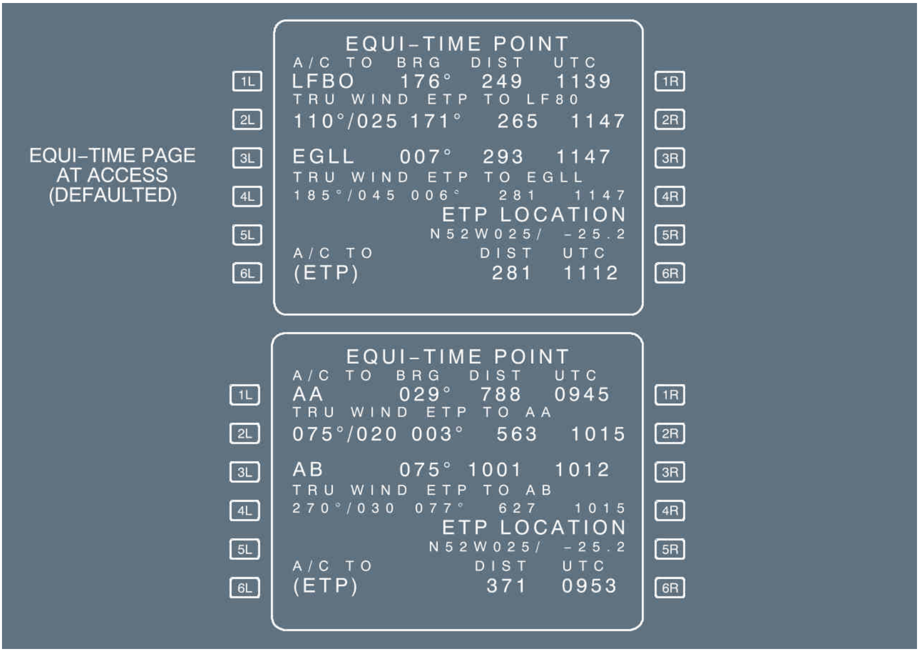
The EQUI-TIME POINT page is displayed. The origin and destination airports are used by default.

ENTER the REF POINT 1 in the [1L] field.
ENTER the associated wind in the [2L] field.

The wind to be inserted is the wind in the vicinity of the reference point at the CRZ FL.

ENTER the REF POINT 2 in the [3L] field.
ENTER the associated wind in the [4L] field.

The system displays the ETP location with regards to the next waypoint of the active flight plan following the ETP in the [5R] field, and the A/C TO (ETP) predictions in the [6R] field.



EQUI–TIME PAGE AT ACCESS (DEFAULTED)

```
        EQUI-TIME POINT
 A/C TO     BRG    DIST   UTC
 LFBO       176°   249    1139
 TRU WIND   ETP    TO LF80
 110°/025 171°     265    1147

 EGLL       007°   293    1147
 TRU WIND   ETP    TO EGLL
 185°/045 006°     281    1147
                  ETP LOCATION
              N52W025/   -25.2
 A/C TO            DIST   UTC
 (ETP)             281    1112
```

```
        EQUI-TIME POINT
 A/C TO     BRG    DIST   UTC
 AA         029°   788    0945
 TRU WIND   ETP    TO AA
 075°/020 003°     563    1015

 AB         075°  1001    1012
 TRU WIND   ETP    TO AB
 270°/030 077°     627    1015
                  ETP LOCATION
              N52W025/   -25.2
 A/C TO            DIST   UTC
 (ETP)             371    0953
```

Note:
- *The ETP pseudo-waypoint is not displayed on the MCDU F-PLN page. In order to easily locate it, or when closing the applicable ETP, the TIME MARKER may be used; this allows the crew to visualize it in advance on the F-PLN page or, to prepare the next applicable ETP on the Equi-time Point page*
- *The ETP is computed using speed according to the current mode (managed or selected).*

EQUITIME POINT ENTRY

Ident.: DSC-22_20-60-120-00009536.0002001 / 01 OCT 12
Applicable to: MSN 04827-04860

PRESS the DATA key.
SELECT the EQUI-TIME POINT prompt.

The EQUI-TIME POINT page is displayed. The origin and destination airports are used by default.

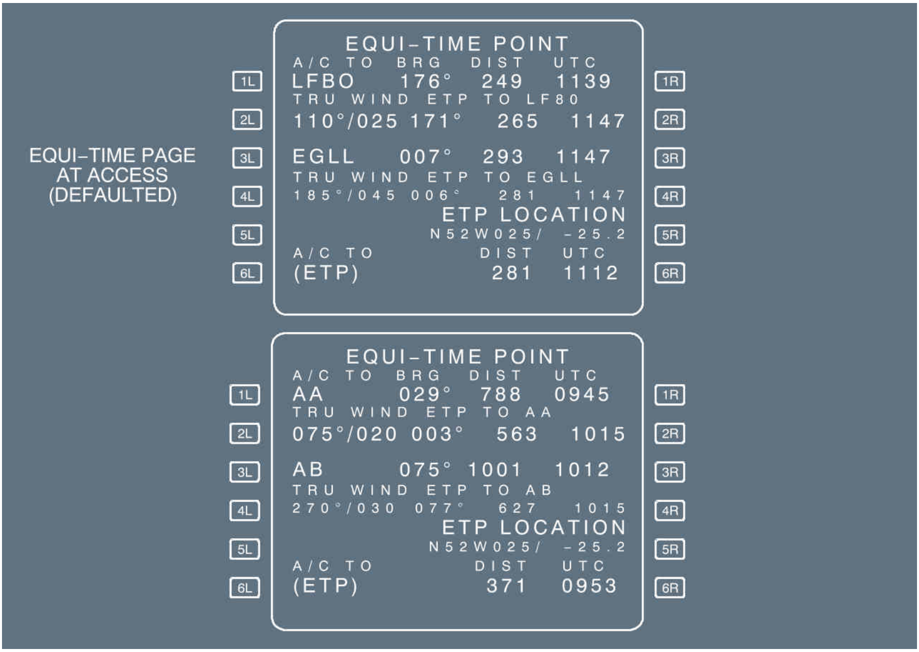
ENTER the REF POINT 1 in the [1L] field.
ENTER the associated wind in the [2L] field.

The wind to be inserted is the wind in the vicinity of the reference point at the CRZ FL.

ENTER the REF POINT 2 in the [3L] field.

ENTER the associated wind in the [4L] field.

The FMS computes the ETP location (ETP coordinates, and distance between the ETP and the following waypoint on the F-PLN) and displays it in the [5R] field. The FMS also computes predictions related to the ETP (the distance to go, and the predicted time at the ETP) and displays them in the [6R] field.



EQUI–TIME PAGE
AT ACCESS
(DEFAULTED)

```
        EQUI-TIME POINT
A/C TO     BRG    DIST    UTC
LFBO       176°   249    1139
TRU WIND   ETP  TO LF80
110°/025 171°     265    1147

EGLL       007°   293    1147
TRU WIND   ETP  TO EGLL
185°/045   006°   281    1147
                ETP LOCATION
             N52W025/   -25.2
A/C TO              DIST   UTC
(ETP)                281   1112
```

```
        EQUI-TIME POINT
A/C TO     BRG    DIST    UTC
AA         029°   788    0945
TRU WIND   ETP  TO AA
075°/020 003°     563    1015

AB         075°  1001    1012
TRU WIND   ETP  TO AB
270°/030   077°   627    1015
                ETP LOCATION
             N52W025/   -25.2
A/C TO              DIST   UTC
(ETP)                371   0953
```

Note:
- *The ETP pseudo-waypoint is not displayed on the MCDU F-PLN page. In order to easily locate it, or when closing the applicable ETP, the TIME MARKER may be used; this allows the crew to visualize it in advance on the F-PLN page or, to prepare the next applicable ETP on the Equi-time Point page*
- *The ETP is computed using speed according to the current mode (managed or selected).*

GENERAL

Ident.: DSC-22_20-60-130-00012906.0011001 / 24 FEB 14

Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

The MCDU NAV B/UP allows to link a MCDU to its associated IRS in order to allow the flight crew to monitor the navigation and to be provided with some basic flight planning functions in case of FM 1 + 2 failure.

CAUTION	The MCDU NAV B/UP is to be used only in case of FM 1 + 2 failure. It can be selected temporarily in case of FM1 or 2 only failure, in order to ensure that the function is available on the failed side. When in MCDU NAV B/UP on both sides, one FG at least must be available to engage AP and A/THR.

The MCDU NAV B/UP function provides:
- Aircraft position using onside IRS or IRS 3
- Aircraft position using GPIRS ◁ position
- F-PLN as memorized in the MCDU
- F-PLN display on ND
- F-PLN automatic sequencing
- Limited lateral revisions
- Mag (True) bearing depending on the pilot selection, from aircraft position to the TO WPT and associated distance
- True track between waypoints
- Time estimates computed with current GS from onside IRS
- Total time and distance to destination

The following features are not provided:
- No DATA BASE available:
  - No autotuning, NAVAIDS must be selected on RMP
  - No radio position
  - No EFIS CTL PANEL options
  - No LDG ELEV (must be manually selected on overhead panel).
- No performance data:
  - No CLB/DES/APP NAV/FINAL modes
  - No SPEED MANAGED
  - No automatic SPD/MACH change over.
- Most of predictions are lost:
  - No EFOB
  - No XTRA
  - No ETA at DEST.
- No multiple lateral F-PLN

- No AP/FD managed modes
- No crosstalk between MCDUs: F-PLN revisions have to be achieved on both MCDUs.

BACK UP NAV SELECTION

Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_20-60-130-A-00012907.0011001 / 16 FEB 11

2

FM F-PLN DOWNLOAD IN MCDU

While BACK UP NAV is not active, the FM downloads permanently a condensed form of the F-PLN in the MCDU.

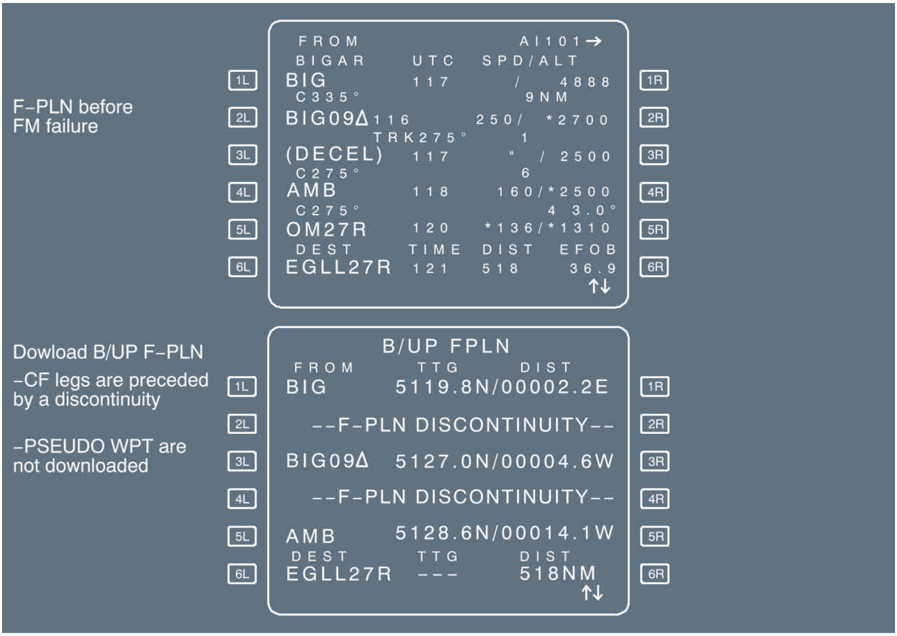
Downloaded information include:
- Waypoint position
- Waypoint identifier
- Leg type
- Discontinuity
- Overfly
- Turn direction.

Heading legs, course to fix legs, ..., computed INTCPT positions, pseudo waypoints, ..., cannot be downloaded.
They are replaced by discontinuities.
Maximum of 150 waypoints are downloaded.

Ident.: DSC-22_20-60-130-A-00012908.0011001 / 14 MAY 12

3

EXAMPLE OF DOWNLOADED F-PLN



F–PLN before FM failure

```
 FROM                        AI101→
 BIGAR       UTC     SPD/ALT
BIG          117       /   4888
 C335°                  9NM
BIG09Δ116            250/  *2700
          TRK275°         1
(DECEL)      117        "  /  2500
 C275°                  6
AMB          118      160/*2500
 C275°                   4  3.0°
OM27R        120     *136/*1310
 DEST        TIME    DIST    EFOB
EGLL27R      121     518     36.9
                              ↑↓
```

Dowload B/UP F–PLN

–CF legs are preceded by a discontinuity

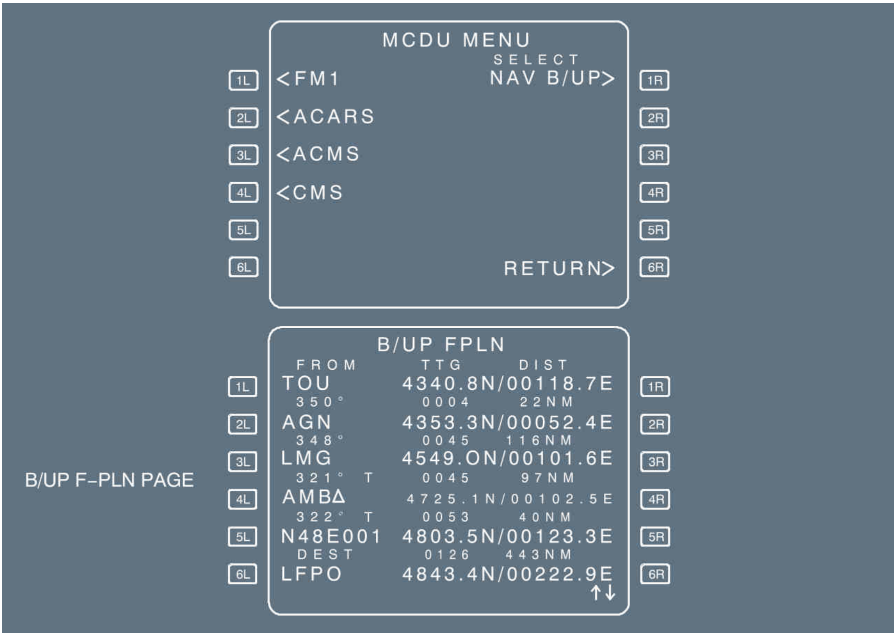
–PSEUDO WPT are not downloaded

```
             B/UP FPLN
 FROM         TTG        DIST
BIG         5119.8N/00002.2E
    --F-PLN DISCONTINUITY--
BIG09Δ      5127.0N/00004.6W
    --F-PLN DISCONTINUITY--
AMB         5128.6N/00014.1W
 DEST         TTG        DIST
EGLL27R       ---        518NM
                          ↑↓
```

In that procedure, all the legs are coded as CF (Course to Fix) legs. This explains all the discontinuities resulting in the B/UP F-PLN.
These discontinuities may be cleared.
When the second FM fails

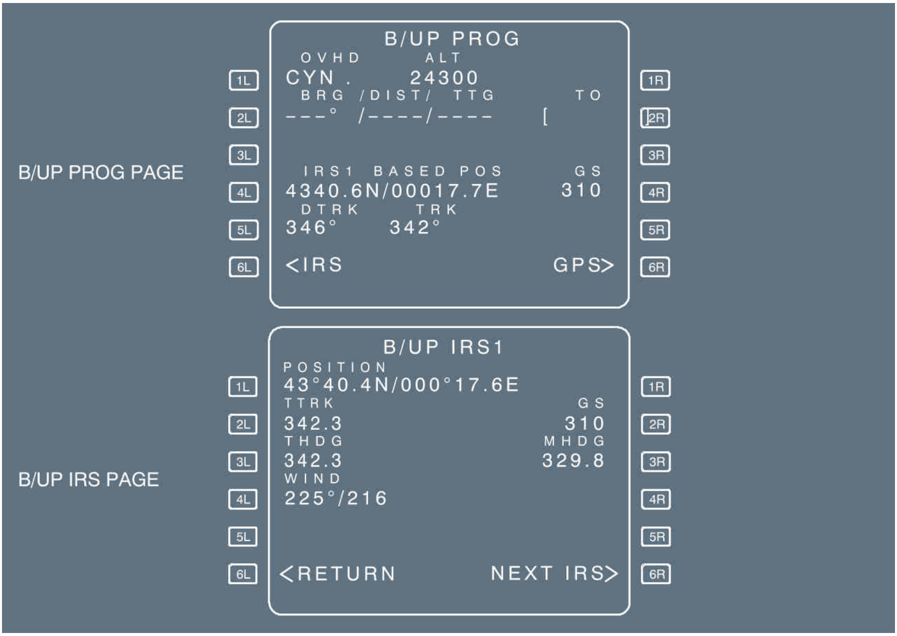
REENGAGE and SELECT the required AP and A/THR modes (if disconnected).
SELECT the NAV B/UP prompt on both MCDU.
SELECT NAV on both RMP

Tune the required navaids



```
         MCDU MENU
                      SELECT
<FM1                NAV B/UP>
<ACARS
<ACMS
<CMS


                      RETURN>
```

```
          B/UP FPLN
  FROM        TTG      DIST
TOU       4340.8N/00118.7E
  350°        0004     22NM
AGN       4353.3N/00052.4E
  348°        0045    116NM
LMG       4549.0N/00101.6E
  321°  T     0045     97NM
AMBΔ      4725.1N/00102.5E
  322°  T     0053     40NM
N48E001   4803.5N/00123.3E
  DEST        0126    443NM
LFPO      4843.4N/00222.9E
                         ↑↓
```



```
          B/UP PROG
 OVHD           ALT
CYN .         24300
 BRG  /DIST/  TTG          TO
---°  /----/----      [


  IRS1  BASED POS          GS
4340.6N/00017.7E         310
 DTRK        TRK
346°       342°

<IRS                     GPS>
```

```
          B/UP IRS1
POSITION
43°40.4N/000°17.6E
TTRK                       GS
342.3                     310
THDG                     MHDG
342.3                   329.8
WIND
225°/216


<RETURN              NEXT IRS>
```

- Only MCDU MENU
  - F-PLN key
  - PROG key
  - DIR key
- B/UP F-PLN page
  - B/UP PROG page
  - B/UP IRS 1, 2, 3 pages are available when BACK UP NAV is selected.
- B/U GPS (if GPS ◁ is installed).

BACK UP NAV OPERATION

Ident.: DSC-22_20-60-130-B-00012909.0011001 / 16 FEB 11

4 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

AP AND A/THR

One FG at least must be available to allow the engagement of AP/FD and A/THR. All FM managed modes are lost as well as managed speed.

As a consequence:
- LAT F-PLN is flown in HDG/TRK modes
- VERT F-PLN is flown in OPEN/V/S/FPA modes
- SPD TARGET is manually SELECTED on the FCU
- SPD/MACH crossover is manually SELECTED on the FCU.

It is recommended to use the TRK/FPA modes:

SELECT the required TRK on FCU at waypoint sequencing (as no AP/FD coupling exists in NAV B/UP). F-PLN sequencing is automatic.
MONITOR the track of the next leg prior reaching the TO waypoint (track between TO and next waypoints is true track).
ADJUST the track to follow the F-PLN with X-TRK = 0
USE OP DES or FPA to descend as suitable.

FPA allows easy altitudes predictions:
DNM = Δ(FL)/FPA°

Ident.: DSC-22_20-60-130-B-00012910.0011001 / 16 FEB 11

5 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

NAVIGATION MONITORING

The navigation accuracy check must be achieved periodically using the same principle as with FM navigation:

COMPARE computed data with raw data
SELECT ON RMP the applicable navaid
PRESS the [PROG] key

B/UP PROG page is displayed

WRITE in the scratchpad then ENTER the navaid LAT/LONG
SELECT associated navaid needle on the EFIS control panel.
COMPARE computed BRG/DIST with RAW DATA on ND

- *If the crosscheck is POSITIVE the ND may be used in ROSE NAV/MAP modes with raw data*
- *If the crosscheck is NEGATIVE the ND must be used in ROSE VOR/ROSE ILS modes.*

Note: *B/UP IRS ◁ and B/UP GPS ◁ pages may also be used to check the position.*

Ident.: DSC-22_20-60-130-B-00012911.0011001 / 16 FEB 11

6 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

FLIGHT PLANNING

The following revisions may be achieved:
- WPT insertion/deletion
- OVERFLY insertion/deletion

- DIR TO a waypoint
- CLR waypoints/discontinuities.

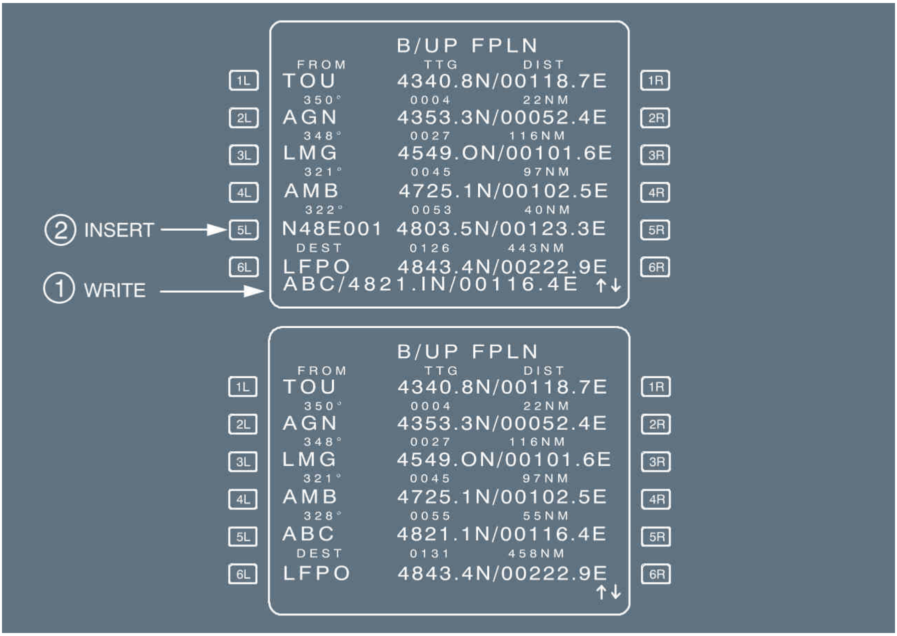
Waypoint identifiers are either published waypoint identifiers if present in the MCDU active F-PLN, or coded LAT/LONG identifiers resulting from flight crew entries.
All flight planning functions are directly applied on active F-PLN without LAT REV page.

Ident.: DSC-22_20-60-130-B-00012912.0011001 / 23 JUN 15

7 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

WAYPOINT INSERTION

Waypoint insertion into the F-PLN is performed via the B/UP F-PLN page by selecting the line key adjacent to the desired point of insertion, whenever a pre-existing waypoint identifier or valid IDENT/LAT/LONG or LAT/LONG entry is displayed in the scratchpad.
Any waypoint entry which causes the number of legs in the route to exceed the maximum allowed results in the "F-PLN FULL" message.



```
        B/UP FPLN
FROM       TTG       DIST
TOU     4340.8N/00118.7E
 350°      0004      22NM
AGN     4353.3N/00052.4E
 348°      0027     116NM
LMG     4549.0N/00101.6E
 321°      0045      97NM
AMB     4725.1N/00102.5E
 322°      0053      40NM
N48E001 4803.5N/00123.3E
DEST       0126     443NM
LFPO    4843.4N/00222.9E
ABC/4821.1N/00116.4E   ↑↓
```

```
        B/UP FPLN
FROM       TTG       DIST
TOU     4340.8N/00118.7E
 350°      0004      22NM
AGN     4353.3N/00052.4E
 348°      0027     116NM
LMG     4549.0N/00101.6E
 321°      0045      97NM
AMB     4725.1N/00102.5E
 328°      0055      55NM
ABC     4821.1N/00116.4E
DEST       0131     458NM
LFPO    4843.4N/00222.9E
                       ↑↓
```

Note:
- *If the inserted waypoint is entered only with LAT/LONG, its identifier would be : N48E001*
- *If the flight crew writes a waypoint IDENT/LAT/LONG with an IDENT already used in the F-PLN, a message "NOT ALLOWED" is displayed.*

Ident.: DSC-22_20-60-130-B-00012913.0011001 / 16 FEB 11

8 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

WAYPOINT DELETION

Waypoint and discontinuity may be deleted from the B/UP F-PLN page by using the CLR key.

Ident.: DSC-22_20-60-130-B-00012914.0011001 / 16 FEB 11

9 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

OVERFLY INSERTION/DELETION

Same as for the FM F-PLN.

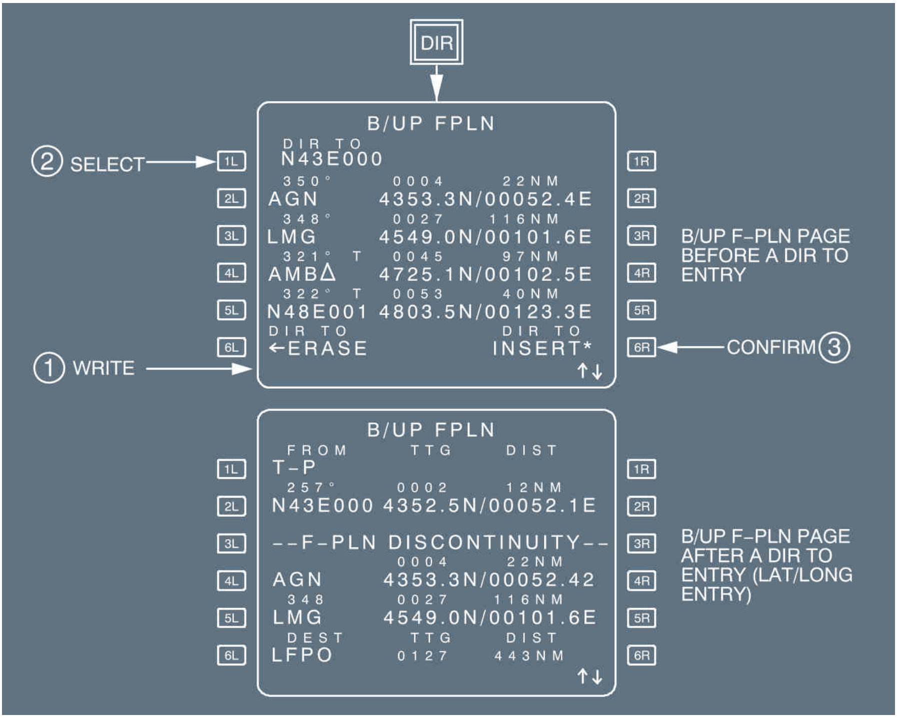
Ident.: DSC-22_20-60-130-B-00012915.0006001 / 23 JUN 15

Applicable to: MSN 04827-04860

DIRECT TO A WAYPOINT

The DIR TO function operates as for the normal F-PLN, except that RADIAL INTERCEPT and ABEAM functions are not available.

PRESS the DIR key, then SELECT the downpath waypoint
WRITE LAT/LONG (or IDENT/LAT/LONG) on the scratchpad then INSERT in [1L].
Confirm the DIR TO [6R].
SELECT the correct track on the FCU in order for the aircraft to turn toward the new TO waypoint.


DIR
② SELECT
① WRITE
CONFIRM③
B/UP F-PLN PAGE BEFORE A DIR TO ENTRY
B/UP F-PLN PAGE AFTER A DIR TO ENTRY (LAT/LONG ENTRY)
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
           B/UP FPLN
 DIR TO
N43E000
 350°        0004      22NM
AGN         4353.3N/00052.4E
 348°        0027     116NM
LMG         4549.0N/00101.6E
 321°  T     0045      97NM
AMBΔ        4725.1N/00102.5E
 322°  T     0053      40NM
N48E001 4803.5N/00123.3E
DIR TO                 DIR TO
←ERASE               INSERT*
                          ↑↓
```

```
           B/UP FPLN
 FROM        TTG        DIST
T-P
 257°        0002       12NM
N43E000 4352.5N/00052.1E

--F-PLN DISCONTINUITY--
             0004       22NM
AGN         4353.3N/00052.42
 348         0027      116NM
LMG         4549.0N/00101.6E
 DEST        TTG        DIST
LFPO         0127      443NM
                          ↑↓
```

In this example, the entered DIR TO waypoint is a LAT/LONG waypoint.
Due to the fact that this new waypoint is not identical to any waypoint in the F-PLN, a direct leg to that waypoint is created and followed by a discontinuity.
When the DIR TO function is completed, the B/UP F-PLN page is displayed with the DIR TO waypoint as the TO waypoint and the T-P waypoint as the FROM waypoint.
If a DIR TO function is achieved for a waypoint that belongs to the B/UP F-PLN, no F-PLN discontinuity is created.

Note: - *In case of a DIR TO waypoint associated with an OVERFLY condition, the OVERFLY is kept.*

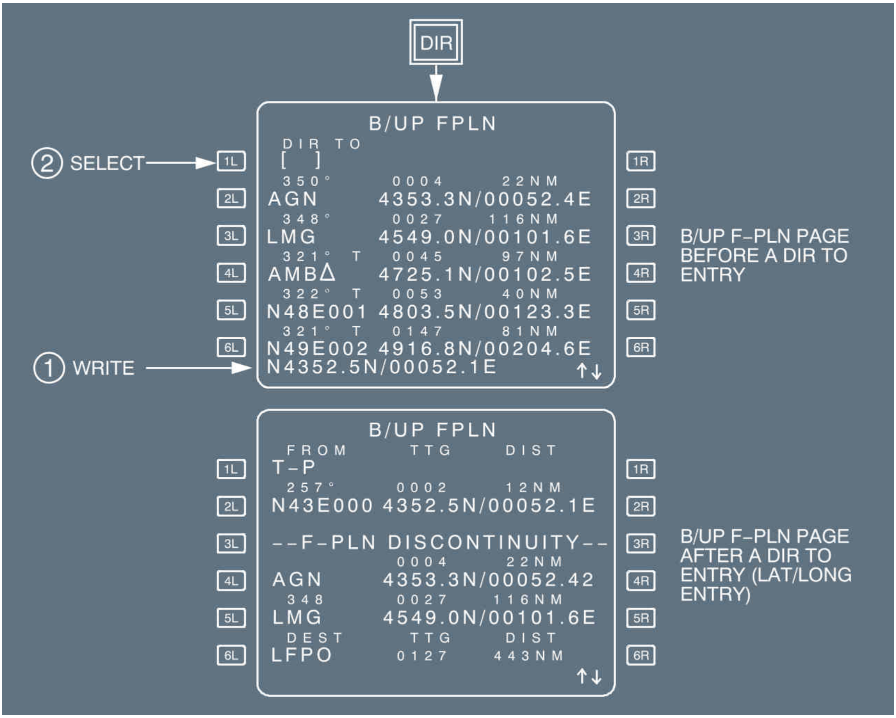
Ident.: DSC-22_20-60-130-B-00012915.0011001 / 23 JUN 15

10 **Applicable to: MSN 03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

DIRECT TO A WAYPOINT

The DIR TO function operates as for the normal F-PLN, except that RADIAL INTERCEPT and ABEAM functions are not available.

PRESS the DIR key.
WRITE LAT/LONG (or IDENT/LAT/LONG) on the scratchpad then INSERT in [1L].
SELECT the correct track on the FCU in order for the aircraft to turn toward the new TO waypoint.



```
          B/UP FPLN
 DIR TO
 [   ]
 350°         0004        22NM
AGN         4353.3N/00052.4E
 348°         0027       116NM
LMG         4549.0N/00101.6E
 321°   T     0045        97NM
AMBΔ        4725.1N/00102.5E
 322°   T     0053        40NM
N48E001 4803.5N/00123.3E
 321°   T     0147        81NM
N49E002 4916.8N/00204.6E
N4352.5N/00052.1E           ↑↓
```

B/UP F-PLN PAGE BEFORE A DIR TO ENTRY

```
          B/UP FPLN
  FROM          TTG         DIST
 T-P
  257°          0002        12NM
 N43E000 4352.5N/00052.1E
 --F-PLN DISCONTINUITY--
                0004        22NM
 AGN         4353.3N/00052.42
  348           0027       116NM
 LMG         4549.0N/00101.6E
  DEST          TTG         DIST
 LFPO           0127       443NM
                                ↑↓
```

B/UP F-PLN PAGE AFTER A DIR TO ENTRY (LAT/LONG ENTRY)

In this example, the entered DIR TO waypoint is a LAT/LONG waypoint.
Due to the fact that this new waypoint is not identical to any waypoint in the F-PLN, a direct leg to that waypoint is created and followed by a discontinuity.
When the DIR TO function is completed, the B/UP F-PLN page is displayed with the DIR TO waypoint as the TO waypoint and the T-P waypoint as the FROM waypoint.
If a DIR TO function is achieved for a waypoint that belongs to the B/UP F-PLN, no F-PLN discontinuity is created.

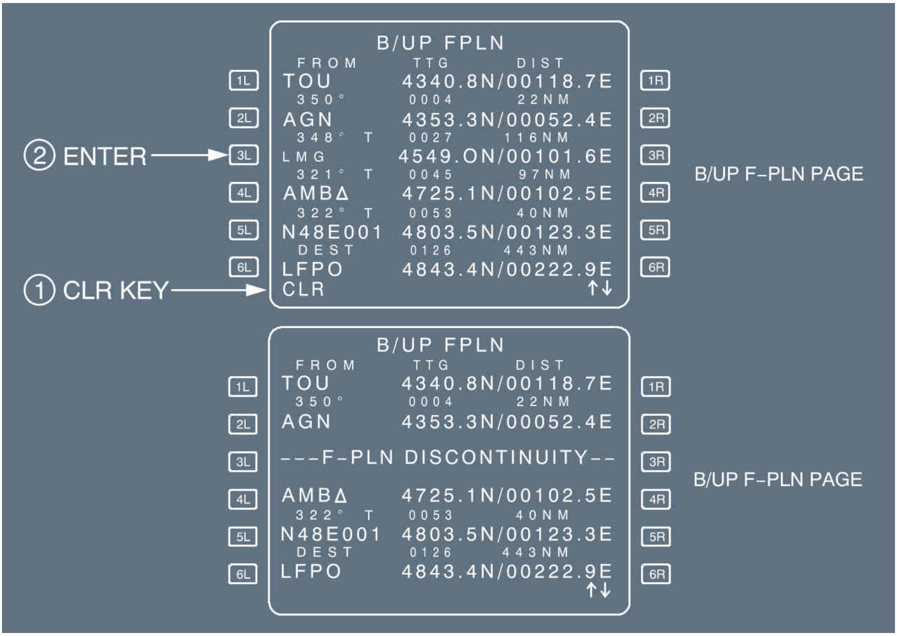
Note: - *In case of a DIR TO waypoint associated with an OVERFLY condition, the OVERFLY is kept.*

Ident.: DSC-22_20-60-130-B-00012916.0011001 / 14 MAY 12

11 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

CLR WAYPOINT/DISCONTINUITY

CLR as for normal operation.



```
           B/UP FPLN
 FROM        TTG        DIST
TOU        4340.8N/00118.7E
 350°        0004       22NM
AGN        4353.3N/00052.4E
 348°  T     0027      116NM
LMG        4549.0N/00101.6E
 321°  T     0045       97NM
AMBΔ       4725.1N/00102.5E
 322°  T     0053       40NM
N48E001    4803.5N/00123.3E
 DEST        0126      443NM
LFPO       4843.4N/00222.9E
CLR                        ↑↓
```

```
           B/UP FPLN
 FROM        TTG        DIST
TOU        4340.8N/00118.7E
 350°        0004       22NM
AGN        4353.3N/00052.4E

---F-PLN DISCONTINUITY--

AMBΔ       4725.1N/00102.5E
 322°  T     0053       40NM
N48E001    4803.5N/00123.3E
 DEST        0126      443NM
LFPO       4843.4N/00222.9E
                           ↑↓
```

Ident.: DSC-22_20-60-130-B-00012917.0011001 / 23 DEC 14

12 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

APPROACHES

- ND display selection rule
  As per normal operation, it depends upon the result of NAV ACCY CROSS CHECK.
  Furthermore it depends also whether the F-PLN is complete, including the approach.

F-PLN	NAV ACCY CHECK	ND	
		PF	PM

Continued on the following page

Continued from the previous page

Complete with appropriate approach	Positive	ARC or ROSE NAV Ref navaid Raw data	
	Negative	ROSE VOR/ILS	ARC or ROSE NAV or ROSE VOR/ILS Ref Navaid Raw Data
Incomplete	Positive or Negative	ROSE VOR/ILS	

Ident.: DSC-22_20-60-130-B-00012918.0011001 / 16 FEB 11

13 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

END OF DESCENT

ADJUST manually the landing elevation on the overhead panel.
SET the MDA on the standby altimeter.

Ident.: DSC-22_20-60-130-B-00012919.0011001 / 23 JUN 15

14 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

NON ILS APPROACHES

SELECT on RMP the approach reference navaids.

The autopilot and flight director available modes are TRK-FPA and HDG/VS
The autothrust available speed target is selected speed.

Ident.: DSC-22_20-60-130-B-00012920.0011001 / 16 FEB 11

15 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ILS APPROACHES

Only CAT 1 approaches may be flown since the DH indication is not available.

CHECK the ILS frequency and course on the RMP.
PUSH the LS pb on the EIS control panel.

The autopilot and flight director available modes are APP (LOC – G/S – LAND)
The autothrottle available speed target is selected speed

CHECK VAPP in the QRH.

GENERAL

Ident.: DSC-22_20-60-140-00006025.0001001 / 16 FEB 11
Applicable to: MSN 02887

When a flight is scheduled to cross high latitude areas (usually beyond 60° N or S,) various precautions must be taken regarding ADIRSs, FMGSs, and EIS.

These precautions are mostly dictated by :
- The change from the MAG to TRUE heading (track) reference required by the airway reference changes at high latitudes, or the unavailability of magnetic variation at high latitudes.
- Some particularities linked to the pole overfly.

DESCRIPTION

Ident.: DSC-22_20-60-140-00009534.0001001 / 01 OCT 12
Applicable to: MSN 02887

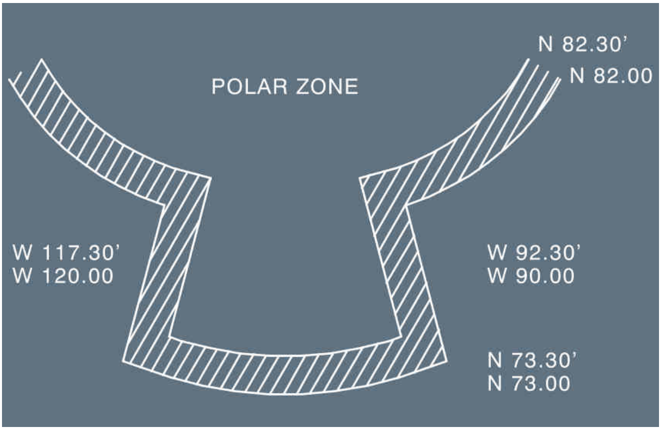
ADIRS

ALIGNMENT :

The IRS may be aligned up to latitude 73N without any particular procedures.
Between 73N and 82N (north or south), the required alignment time is greater and a specific procedure has to be performed.
Beyond 82 ° North or South, no ADIRS alignment is possible.

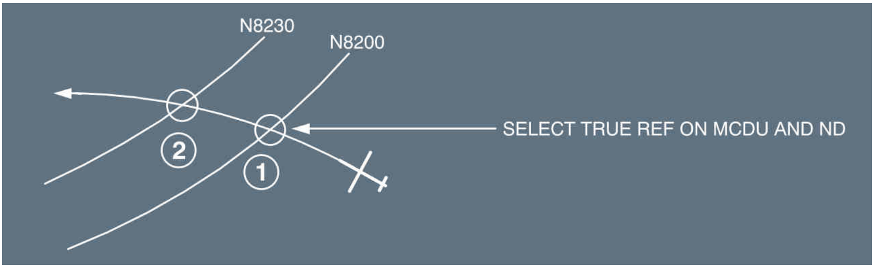
MAG-TRUE REFERENCE SELECTION :

The ADIRS are able to provide TRUE heading (track), regardless of the aircraft latitude.
The ADIRS are able to provide MAG heading (track) between latitudes 82°30 N and 60°30 S, except in the vicinity of the magnetic pole, as shown below :


POLAR ZONE
N 82.30'
N 82.00
W 117.30'
W 120.00
W 92.30'
W 90.00
N 73.30'
N 73.00

Note: 1. *The latitude values given in this diagram are average values. In reality, the polar area involves different hysteresis, combined with the track angle penetration of the aircraft in the zone.*
2. *All airfields where STARs and approaches are MAG referenced — such as Svalbard — will be flown with magnetic reference selected.*
3. *Although located outside the polar zone, Thule is “TRUE” oriented.*

The MAG/TRUE selection is achieved manually by pressing the NORTH REF pushbutton, or automatically if the aircraft enters the polar zone with MAG still selected. In this case the following messages and cautions are displayed.


N8230
N8200
SELECT TRUE REF ON MCDU AND ND
②
①

When in 1, the “SELECT TRUE REF” amber message is displayed on the ND and MCDU scratchpad.

When in 2, and MAG reference is still selected, following events will occur :
- The IRSs automatically revert from MAG to TRUE
- A TRUE indication appears on the ND and PFD heading scales. The GRID track information appears on ND.
- The autopilot might disconnect, an amber caution NAV HDG DISCREPANCY (associated with a CHECK HDG message on the PFD and on the ND) might be triggered (the IRS do not reach the polar zone simultaneously).

Note: *The messages and cautions are triggered as soon as the first IRS reaches the polar zone ; when the other two IRSs enter the polar zone, the messages are no longer displayed.*

FMGS

- Flight Guidance part
  - When the pilot manually changes the heading reference from MAG to TRUE or vice versa.
    - ■ if NAV mode is engaged, there is no discontinuity in the lateral guidance
    - ■ if HDG (TRK) modes are engaged, the HDG (TRK) target is automatically modified using current position variation; thus there is no discontinuity in the lateral guidance
  - When TRUE reference is selected, only CAT I ILS approaches may be flown
  - if an automatic MAG/TRUE switching occurs when entering the Polar zone, the autopilot might disengage due to the fact that most probably, the automatic switching will not occur simultaneously for the 3 IRSs. The AP OFF warning is displayed on the ECAM.
- Flight Management part
  - When the aircraft reaches 78 N (60 S), the aircraft position is computed using XYZ earth centered Cartesian coordinates.
    This allows the FM to continuously provide, a MIX IRS position regardless of latitude, the FM position being linked to the MIX IRS position.
  - During preflight phase, if TRUE reference is selected (takeoff with TRUE reference is rare), the pilot is reminded of this selection by :
    - ■ CHECK NORTH REF amber message on ND and MCDU scratchpad if the origin airport reference does not match the one selected by the pilot.
    - ■ TRUE label above PFD/ND heading scales flashes for 10 s at slats extension.
    - ■ TRUE NORTH REF memo message flashes for 10 s at engine start or at slat extension.
  - Before approach, the pilot is reminded of the correct TRUE/MAG selection by :
    - ■ CHECK NORTH REF amber message on ND and MCDU scratchpad if the destination airport reference in database does not match the one selected by the pilot and the aircraft reaches the arrival area (approximately 25 NM from destination airport).
    - ■ If true is selected, TRUE label pulses on PFD/ND during 10 s at slats extension, as well as the TRUE NORTH REF message on ECAM (as a reminder).
  - The tracks and bearings, provided on the MCDU F-PLN, PROG... pages are computed TRUE or MAG referenced, according to the TRUE/MAG cockpit selection
    - ■ if selection is TRUE, the bearing and track figures are displayed followed by a T.
  - if the pilot wishes to create a PBD, PB/PB waypoint or define a radial (DIR TO INTCPT), the rule for bearing or radial entry is as follows :
    - ■ if the bearing is inserted without specifying its reference, the reference is the one corresponding to the cockpit selection

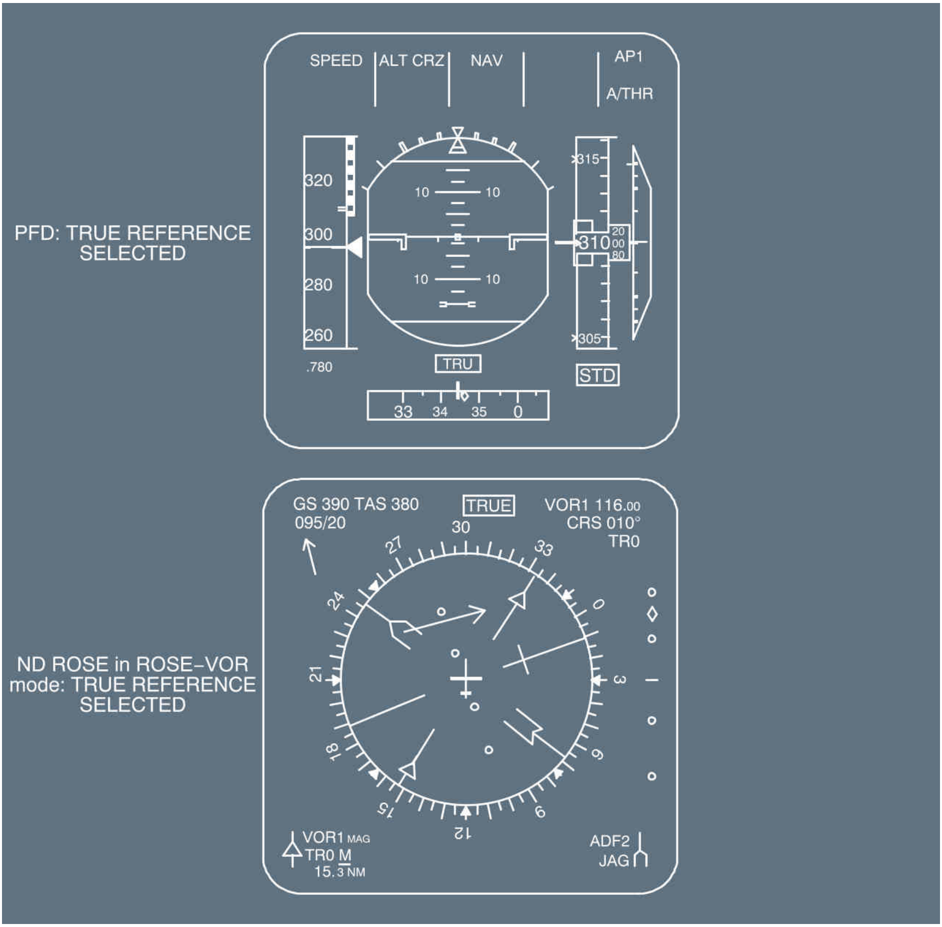
- if the bearing is inserted with its specified reference (M for magnetic, T for true), the bearing is so defined : e.g. TOU/350 T/15.

EIS PFD/ND

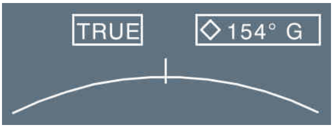
TRUE/MAG REFERENCE INDICATION

The TRUE/MAG reference selection is indicated by a specific label displayed above the heading scales of both EFIS DUs:

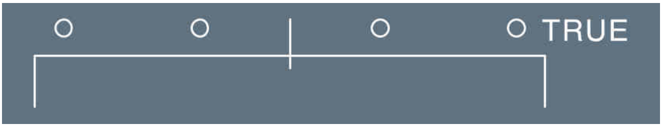
- If MAG is selected (which is the most common situation) no label is provided ; the bearing to the TO waypoint on the ND is displayed with the digits only
- If TRUE is selected (manually or automatically), a TRUE label is provided above PFD/ND heading scales.


PFD: TRUE REFERENCE SELECTED
SPEED
ALT CRZ
NAV
AP1
A/THR
320
300
280
260
.780
10
10
10
10
315
310
20
00
80
305
TRU
STD
33
34
35
0
ND ROSE in ROSE–VOR mode: TRUE REFERENCE SELECTED
GS 390 TAS 380
095/20
TRUE
VOR1 116.00
CRS 010°
TR0
30
27
33
24
0
21
3
18
6
15
9
12
VOR1 MAG
TR0 M
15.3 NM
ADF2
JAG

- The GRID TRACK appears on the ND in all modes except in PLAN mode if no approach title is displayed.

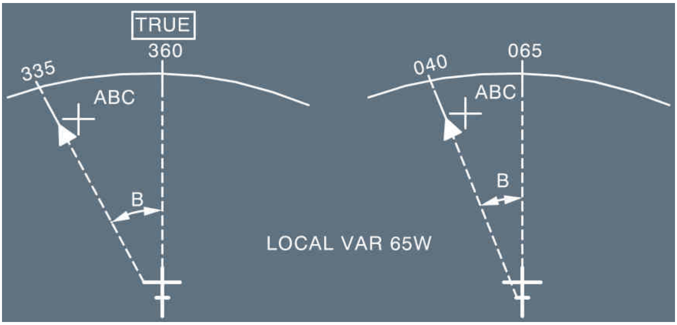


Note: *If the ILS scale is displayed on PFD, the TRUE message is shifted on the right side.*



ADF AND VOR BEARING DISPLAY

- The ADF needle represents the relative bearing between the aircraft and the NDB.
  The ADF relative bearing information (B) is thus independant of the TRUE/MAG selection, and the needle is always pointing to the same direction whatever is the selection.
  Furthermore (provided FM position is accurate) when the EFIS ND is in ARC or ROSE NAV modes, the ADF needle will point towards the NDB symbol as provided by the FMS.



Note: the same reading is available on the DDRMI.

- The VOR bearing is measured by the VOR, at the VOR location :
  - it is a TRUE bearing if the VOR station is TRUE referenced
  - it is a MAG bearing if the VOR station is MAG referenced.

  When the ND display mode is ARC or ROSENAV, the FM computed data (aircraft position, F-PLN legs, NAVAID position symbol...) are provided along with VOR needles, if selected.

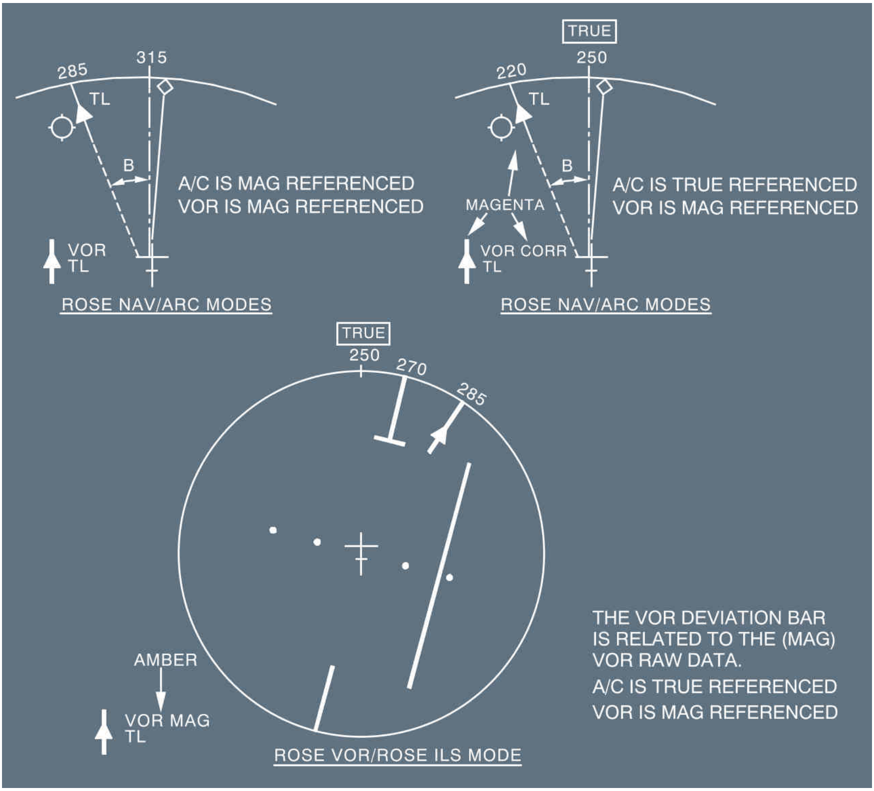
  → It is important in these display modes, that there is a consistency between the FM data and the VOR raw data.
  Hence, if the cockpit NORTH REF selection does not match the VOR station reference, there may be a discrepancy between the VOR raw data and the FM data, unless a correction is applied to the VOR data.

PRINCIPLE

When the ND is in ARC/ROSE NAV mode, if there is a mismatch between the NORTH REF selection and the VOR station reference, the VOR needle is equal to the VOR raw bearing corrected by the local variation at the aircraft present position.
In that case, the needle is displayed in magenta colour, the label CORR (corrected) is displayed in magenta in the lower corner of the ND.
In all other ND display modes (ROSE VOR, ROSE ILS), the VOR raw data (with no correction) is displayed. MAG or TRUE (amber) is displayed next to the VOR identifier when its reference does not match the cockpit selection.

EXAMPLE:

Local variation 65W – TL is a magnetic referenced VOR.


285
315
TL
B
A/C IS MAG REFERENCED
VOR IS MAG REFERENCED
VOR
TL
ROSE NAV/ARC MODES
TRUE
250
220
TL
B
MAGENTA
A/C IS TRUE REFERENCED
VOR IS MAG REFERENCED
VOR CORR
TL
ROSE NAV/ARC MODES
TRUE
250
270
285
AMBER
VOR MAG
TL
THE VOR DEVIATION BAR
IS RELATED TO THE (MAG)
VOR RAW DATA.
A/C IS TRUE REFERENCED
VOR IS MAG REFERENCED
ROSE VOR/ROSE ILS MODE

VOR tran smitter Reference	ND display MODE	Cockpit Reference Selection		DDRMI
		TRUE	MAG	
TRUE	ARC/ROSE NAV	VOR Raw data	VOR is corrected	VOR RAW DATA
	ROSE VOR/ILS	VOR RAW DATA		
MAG	ARC/ROSE NAV	VOR is corrected	VOR Raw data	
	ROSE VOR/ILS	VOR RAW DATA		

Note: *ND in ROSE VOR/ROSE ILS modes and DDRMI VOR bearing indications are always identical.*

DDRMI

The heading provided by the DDRMI is directly linked to the NORTH REF cockpit selection.

The VOR bearing indications are raw data, as provided by the station.

PROCEDURES

Ident.: DSC-22_20-60-140-00009535.0001001 / 23 DEC 14
Applicable to: MSN 02887

IRS ALIGNMENT

- **When a high latitude flight or polar flight is planned, it is most probably a long range type of a flight.**

  DELAY the completion of IRS aligment as long as possible.

  Prior to pressing the ALIGN IRS prompt, SLEW the origin airport reference coordinates to the gate coordinates, if published.

- **When the origin airport is located between latitude 73° N and 82° (North or South), IRS alignment should last at least 15 min. Consequently :**

  SET IRS selectors to NAV

  START the STOP WATCH

  ADJUST the origin airport coordinates to the gate coordinates, if published.

  PRESS the ALIGN IRS prompt, after the 15 NM countdown or later.

  Note: *Beyond 82° North or South, no ADIRS alignment is possible.*

FLIGHT

- **Takeoff :**

  If the “CHECK NORTH REF” amber message comes up on the ND and MCDU, verify that the NORTH REF selection matches the origin airport reference.

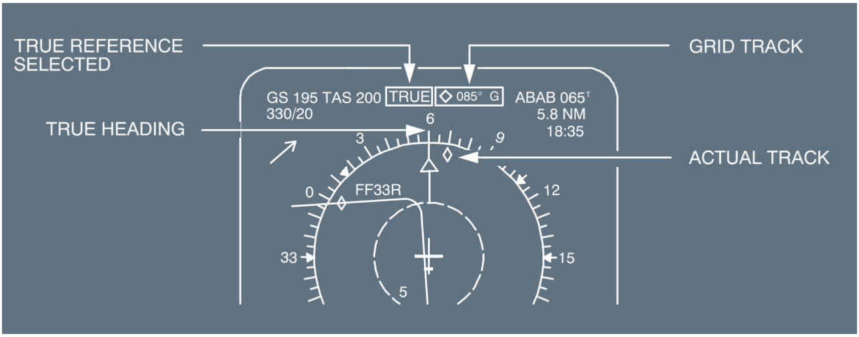
  Note: *The “CHECK NORTH REF” amber message and the associated alerts are dependant of a correct coding of the airport North reference (TRUE/MAG) in the navigation database. The runway orientation displayed on ND is also affected if the airport North reference is not correctly coded.*

- **Cruise :**

  When reaching an area where the heading reference should be changed (oceanic area, airway or polar track defined in TRUE reference, ...) ;

  SELECT TRUE by pressing the NORTH REF pushbutton.

  When reaching 65 N with TRUE reference selected, the GRID TRACK is provided on the ND’s upper right box. The ND compass still displays true track and heading.
  GRID TRK along with XTK are the cues to be used to monitor the proprer lateral guidance.


TRUE REFERENCE SELECTED
GRID TRACK
GS 195 TAS 200
TRUE
085° G
ABAB 065T
330/20
5.8 NM
18:35
TRUE HEADING
6
3
9
ACTUAL TRACK
0
FF33R
12
33
15
5

If the “SELECT TRUE” message appears on the ND/MCDU, this indicates that the aircraft has reached the Polar zone with MAG reference still selected in the cockpit.
Press the NORTH REF pushbutton to select TRUE.

Note: *If this is not achieved, an automatic switching will subsequently occur. The AP will most probably disengage with associated warnings.*
In such a case :
Press the NORTH REF pushbutton to select “TRUE”.
Re-engage the AP.

- Use of VOR/DME

  En route, the VOR/DME are basically used for either FM NAV ACCY crosscheck, or for reporting a given radial to the ATC.

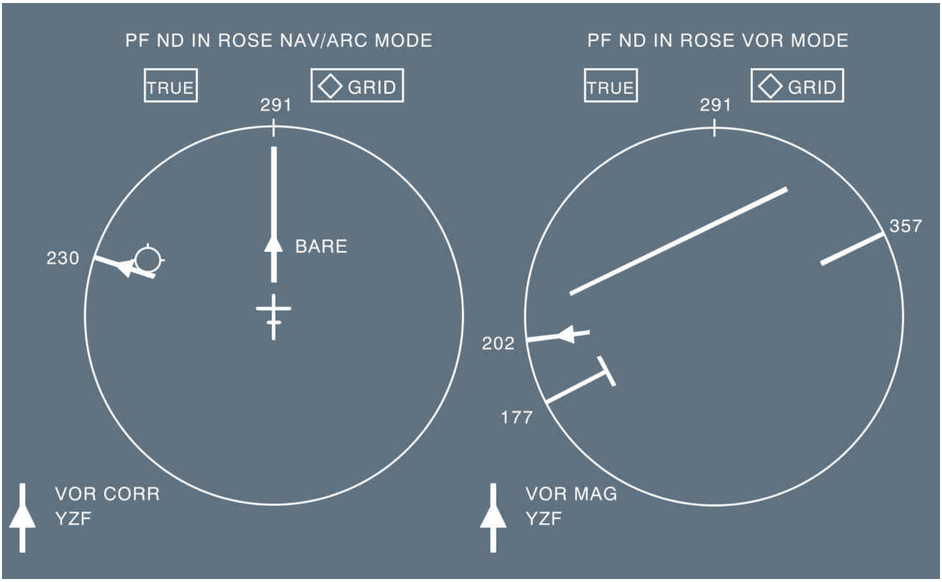
  The FM NAV ACCY crosscheck is achieved, as usual, by comparing the bearing/distance that is displayed on the ND, with the bearing/distance that is displayed on the PROG page.

  In case the VOR used is defined in another reference (e.g. MAG) than the one selected in the cockpit (e.g. TRUE), the bearing that is provided on ND is in magenta and is corrected. The VOR-corrected bearing should be within 5 ° of the FM-computed bearing (taking into account the meridian convergence and the difference in magnetic variation).

  → In case of doubt, set the NORTH REF to the VOR reference, and check the bearings.

CAUTION	The correction of VOR indications in ROSENAV or ARC ND modes depend on a correct navigation database coding. If the North reference (TRUE/MAG) that is coded for the VOR orientation is not correct, the VOR indication correction will be unduly applied. If VOR needles are in magenta (CORR), check both the aircraft NORTH REF selection and the VOR station orientation on the navigation charts.

  If the aircraft has to report on a given VOR radial, which is defined in a different reference (e.g. MAG) from the cockpit reference (e.g. TRUE), check the RADIAL crossing on the PM ND set to ROSE VOR mode, or use DDRMI. (Ex: The aircraft flies NCA 24) : (NCA 24 is the TRUE referenced route). ATC requests the aircraft to report on RADIAL 357 from YZF (MAG-referenced).


PF ND IN ROSE NAV/ARC MODE
TRUE
GRID
291
230
BARE
VOR CORR
YZF
PF ND IN ROSE VOR MODE
TRUE
GRID
291
357
202
177
VOR MAG
YZF

- Use of ADF
  The Polar Zone NDBs are quite powerful, and the bearing can be received at long distances.
- Use these NDBs to check the reasonableness of the FM navigation by comparing the ADF bearing, that is displayed on the ND, with the FM-computed bearing, that is displayed on the PROG page.

- Flying the pole
  - In most case, the autopilot will be in NAV mode.
    When approaching the pole, a CHECK HDG message appears, with the associated ECAM Procedure.
    - ■ Disregard the ECAM Procedure.
      The message is due to the fact that the IRSs do not reach the pole simultaneously ; thus the headings do not turn simultaneously from 360 to 180 °.
  - In case HDG mode is used (e.g FM1 + 2 failed and Back Up Nav as installed is used)
    - ■ The autopilot onside that the best IRS is to be engaged.
      The offside HDG bug (▿) should be disregarded when close to the pole since, the IRS headings may differ.

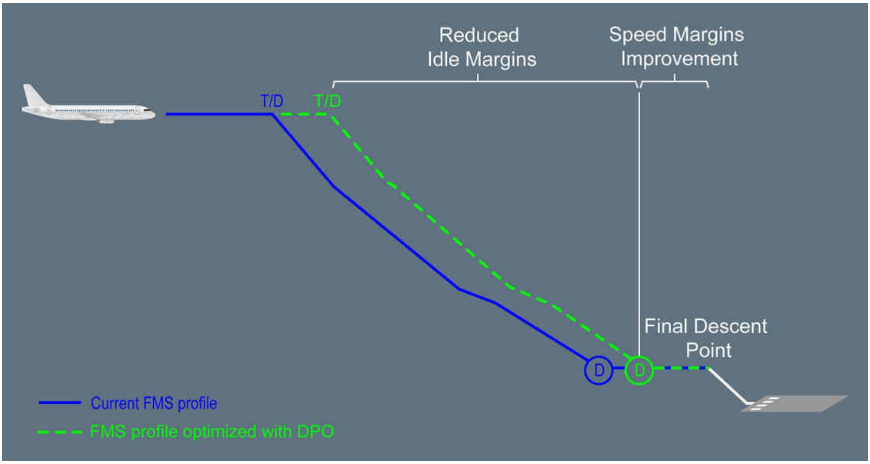
- Approach
  - If CHECK NORTH REF amber message comes up on ND and MCDU, verify that the NORTH pushbutton is selected to the destination airport reference.

    Note: *The "CHECK NORTH REF" amber message and the associated alerts are dependant of a correct coding of the airport North reference (TRUE/MAG) in the navigation database. The runway orientation displayed on ND is also affected if the airport North reference is not correctly coded.*
  - If TRUE is selected for approach, only CAT I ILS approaches may be flown.

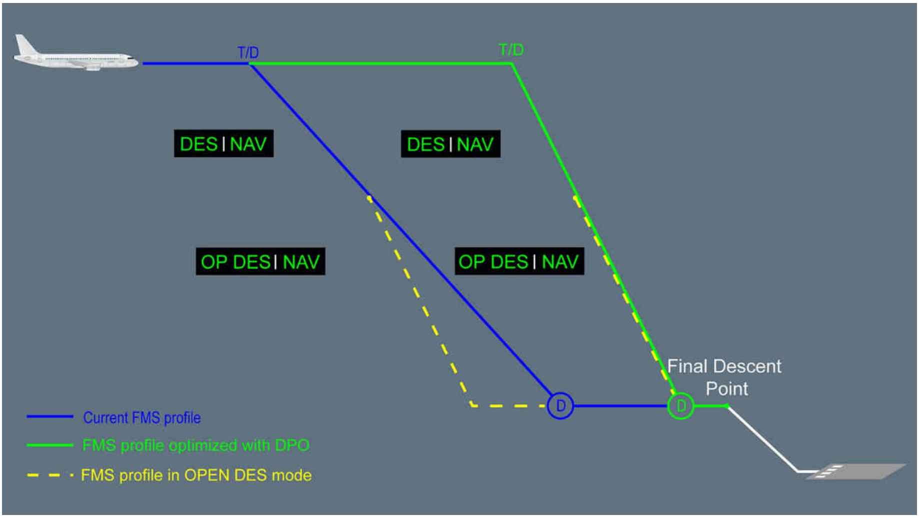
DESCENT PROFILE OPTIMIZATION ◁

Ident.: DSC-22_20-60-150-00019723.0001001 / 07 JUN 16
Applicable to: ALL

During the idle segment in descent, margins are added to the idle thrust to have more flexibility to maintain the aircraft on the computed descent profile in case of external perturbations such as important wind change.
The Descent Profile Optimization (DPO ◁) optimizes the computed vertical profile. It decreases the idle thrust margins in descent and the speed margins in approach to reduce fuel burn in descent phase.
With DPO ◁ , the computed vertical profile is steeper. The T/D is reached later. Before the final approach, the deceleration level-off is shorter.


Reduced
Idle Margins
Speed Margins
Improvement
T/D
T/D
Final Descent
Point
D
D
Current FMS profile
FMS profile optimized with DPO

With DPO ◁ , along the idle segment, without altitude constraint, the descent profile computed by the FMS is the same as the one flown in OPEN DES mode. Therefore, reverting in OPEN DES mode during the descent does not change the descent rate.


T/D
T/D
DES | NAV
DES | NAV
OP DES | NAV
OP DES | NAV
Final Descent Point
D
D
Current FMS profile
FMS profile optimized with DPO
FMS profile in OPEN DES mode

With DPO ◁✱ , the FMGS has less flexibility to maintain the aircraft on the computed vertical profile in case of difference between wind entry and effective wind. Therefore, the accurate winds have to be entered in the FMGS before descent.

During descent, the VDEV should be closely monitored. If the aircraft goes above the flight descent profile, the flight crew may have to extend speed brakes to go back on the computed descent profile.

If ENG ANTI ICE or ENG ANTI ICE + WING ANTI ICE are used during descent (inducing an increased idle thrust), the flight crew may have to extend speed brakes to stay on the computed descent profile.

GENERAL

Ident.: DSC-22_20-65-00013372.0001001 / 15 FEB 11
Applicable to: MSN 02887

When a flight is scheduled to cross high latitude areas (usually beyond 60 ° N or S,) various precautions must be taken regarding ADIRSs, FMGSs, and EIS.

These precautions are mostly dictated by:
- The change from the MAG to TRUE heading (track) reference required by the airway reference changes at high latitudes, or the unavailability of magnetic variation at high latitudes.
- Some particularities linked to the pole overfly.

DESCRIPTION

Applicable to: MSN 02887

Ident.: DSC-22_20-65-A-00013373.0001001 / 27 MAY 13

ADIRS

MAG-TRUE REFERENCE SELECTION

The ADIRS are able to provide TRUE heading (track), regardless of the aircraft latitude.
The ADIRS are able to provide MAG heading (track) up to N 82 ° or S 60 °.
The MAG/TRUE selection is achieved manually by pressing the NORTH REF pb.

Note: *1. All airfields where STARs and APPRs are MAG referenced - such as Svalbard - will be flown with magnetic reference selected.*
2. Although located outside the above polar zone, Thule is "TRUE" oriented.

Ident.: DSC-22_20-65-A-00013374.0001001 / 02 MAY 23

1 FMGS

- Flight Guidance part
  - When the flight crew manually changes the heading reference from MAG to TRUE or vice versa:
    - If NAV mode is engaged, there is no discontinuity in the lateral guidance
    - If HDG (TRK) modes are engaged, the HDG (TRK) target is automatically modified using current position variation; thus there is no discontinuity in the lateral guidance
  - When TRUE reference is selected, only CAT I ILS approaches may be flown

- Flight Management part
  - When the aircraft reaches 78 N (60 S), the aircraft position is computed using XYZ earth centered Cartesian coordinates:
    This allows the FM to continuously provide, regardless of latitude, a MIX IRS position, the FM position being linked to the MIX IRS one.
  - During preflight phase, if TRUE reference is selected (takeoff with TRUE reference is rare),the pilot is reminded of this selection by:
    - CHECK NORTH REF message on ND and MCDU scratchpad if the origin airport reference does not match the one selected by the flight crew.
    - TRUE label above PFD/ND heading scales flashes for 10 s at slats extension.
  - Before approach, the flight crew is reminded of the correct TRUE/MAG selection by:
    - CHECK NORTH REF message on ND and MCDU scratchpad if the destination airport reference in database does not match the one selected by the flight crew and the aircraft reaches the arrival area (approximately 25 NM from destination airport).
    - If true is selected, TRUE label pulses on PFD/ND during 10 s at slats extension.

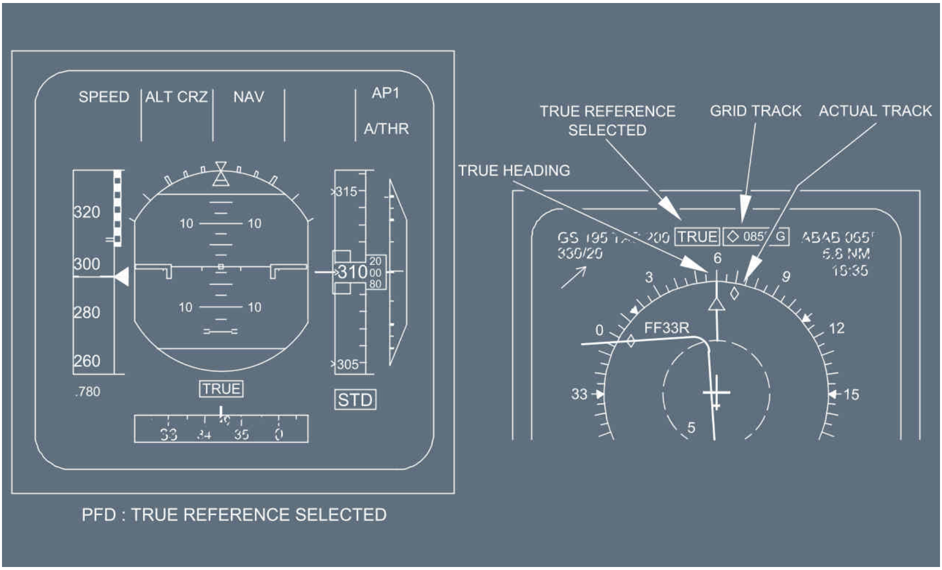
    Note: *If the flight crew selects TRUE reference whereas the selected approach is defined in MAG reference in the FM navigation data base, the NAV mode will disengage at the entry into the approach procedure.*
  - The tracks and bearings, provided on the MCDU F-PLN, PROG... pages are computed TRUE or MAG referenced, according to the TRUE/MAG cockpit selection
    - If selection is TRUE, the bearing and track figures are displayed followed by a T.
  - If the flight crew wishes to create a PBD, PBX waypoint or define a radial (DIR TO INTCPT), the rule for bearing or radial entry is as follows:
    - If the bearing is inserted without specifying its reference, the reference is the one corresponding to the cockpit selection
    - If the bearing is inserted with its specified reference (M for magnetic, T for true), the bearing is so defined: e.g. TOU/350T/15.

EIS PFD/ND

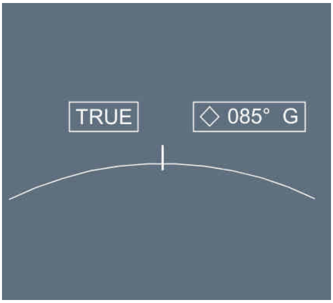
TRUE/MAG REFERENCE INDICATION

The TRUE/MAG reference selection is indicated by a specific label displayed above the heading scales of both EFIS DUs:

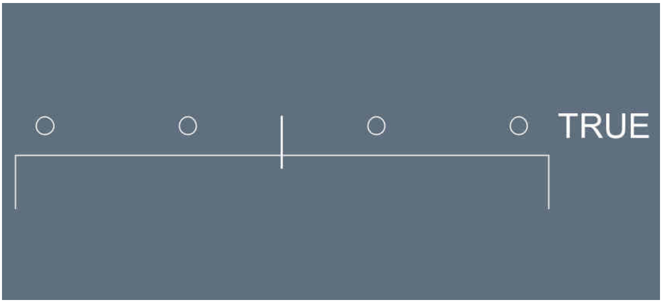
- If MAG is selected (which is the most common situation) no label is provided; the bearing to the TO waypoint on the ND is displayed with the digits only
- If TRUE is selected, a TRUE label is provided above PFD/ND heading scales.


SPEED
ALT CRZ
NAV
AP1
A/THR
320
300
280
260
.780
10
10
10
10
TRUE
33
34
35
0
315
310
20
00
80
305
STD
PFD : TRUE REFERENCE SELECTED
TRUE REFERENCE SELECTED
GRID TRACK
ACTUAL TRACK
TRUE HEADING
GS 195 TAS 200
330/20
TRUE
085°
G
ABAB 065°
6.8 NM
15:35
6
3
9
0
12
FF33R
33
15
5

- The GRID TRACK appears on the ND in all modes except in PLAN mode if no approach title is displayed.



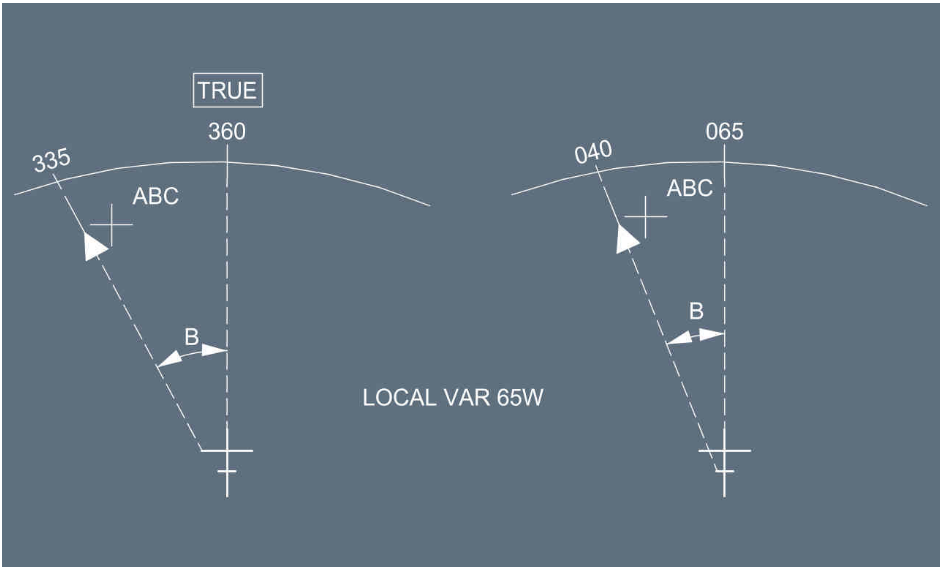
Note: If the ILS scale is displayed on PFD, the TRUE message is shifted on the right side.



Ident.: DSC-22_20-65-A-00013377.0001001 / 15 FEB 11

ADF AND VOR BEARING DISPLAY

- The ADF needle represents the relative bearing between the aircraft and the NDB.
  The ADF relative bearing information (B) is thus independant of the TRUE/MAG selection, and the needle is always pointing to the same direction whatever is the selection.
  Furthermore (provided FM position is accurate) when the EFIS ND is in ARC or ROSE NAV modes, the ADF needle will point towards the NDB symbol as provided by the FMS.



Note: The same reading is available on the DDRMI.

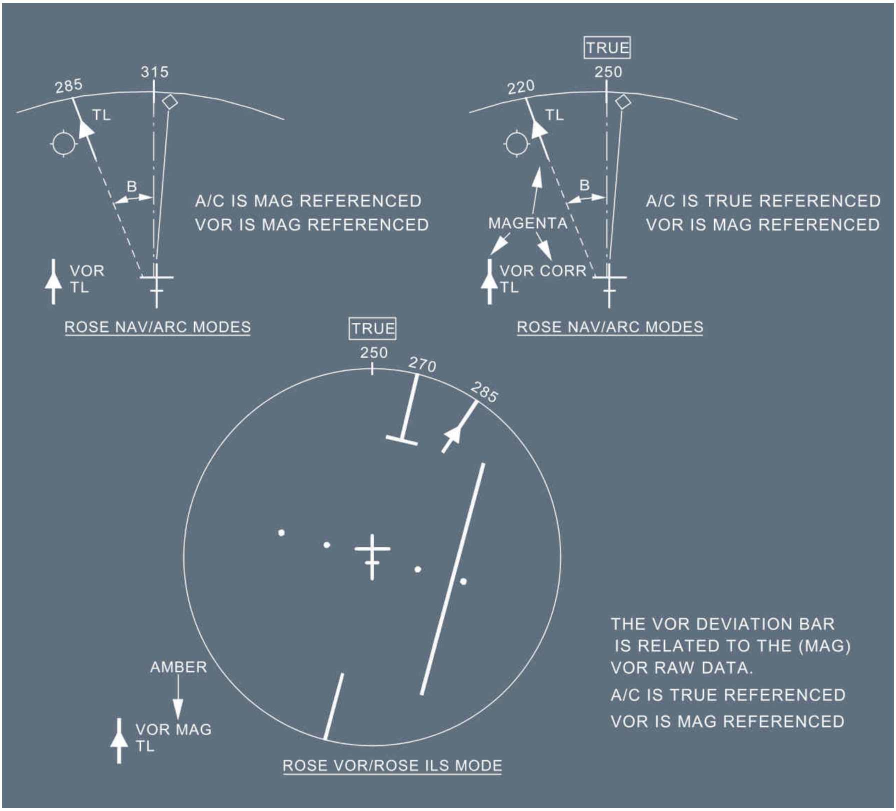
- The VOR bearing is measured by the VOR, at the VOR location:
  - It is a TRUE bearing if the VOR station is TRUE referenced
  - It is a MAG bearing if the VOR station is MAG referenced.

  When the ND display mode is ARC or ROSENAV, the FM computed data (aircraft position, F-PLN legs, NAVAID position symbol...) are provided along with VOR needles, if selected.
  → It is important in these display modes, that there is a consistency between the FM data and the VOR raw data.
  Hence, if the cockpit NORTH REF selection does not match the VOR station reference, there may be a discrepancy between the VOR raw data and the FM data, unless a correction is applied to the VOR data.

Principle

When the ND is in ARC/ROSE NAV mode, if there is a mismatch between the NORTH REF selection and the VOR station reference, the VOR needle is equal to the VOR raw bearing corrected by the local variation at the aircraft present position.
In that case, the needle is displayed in magenta colour, the label CORR (corrected) is displayed in magenta in the lower corner of the ND.
In all other ND display modes (ROSE VOR, ROSE ILS), the VOR raw data (with no correction) is displayed. MAG or TRUE (amber) is displayed next to the VOR identifier when its reference does not match the cockpit selection.

EXAMPLE	Local variation 65 W – TL is a magnetic referenced VOR.


285
315
TL
B
A/C IS MAG REFERENCED
VOR IS MAG REFERENCED
VOR
TL
ROSE NAV/ARC MODES
TRUE
250
220
TL
B
MAGENTA
A/C IS TRUE REFERENCED
VOR IS MAG REFERENCED
VOR CORR
TL
ROSE NAV/ARC MODES
TRUE
250
270
285
AMBER
VOR MAG
TL
ROSE VOR/ROSE ILS MODE
THE VOR DEVIATION BAR
IS RELATED TO THE (MAG)
VOR RAW DATA.
A/C IS TRUE REFERENCED
VOR IS MAG REFERENCED

VOR transmitter Reference	ND display MODE	Cockpit Reference Selection		DDRMI
		TRUE	MAG	
TRUE	ARC/ROSE NAV	VOR Raw data	VOR is corrected	VOR RAW DATA
	ROSE VOR/ILS	VOR RAW DATA		
MAG	ARC/ROSE NAV	VOR is corrected	VOR Raw data	
	ROSE VOR/ILS	VOR RAW DA		

Note: ND in ROSE VOR/ROSE ILS modes and DDRMI VOR bearing indications are always identical.

Ident.: DSC-22_20-65-A-00013378.0001001 / 15 FEB 11

DDRMI

The heading provided by the DDRMI is directly linked to the NORTH REF cockpit selection.
The VOR bearing indications are raw data, as provided by the station.

PROCEDURES - FLIGHT

Ident.: DSC-22_20-65-00013430.0001001 / 23 DEC 14
Applicable to: MSN 02887

FLIGHT

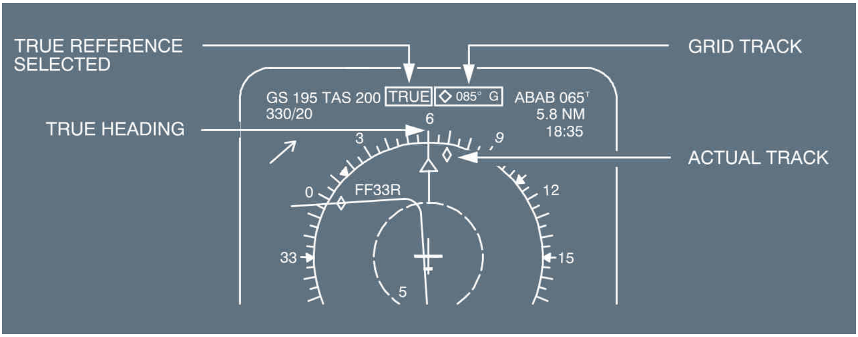
- **Takeoff:**
  - **If the “CHECK NORTH REF” amber message comes up on the ND and MCDU:** Verify that the NORTH REF selection matches the origin airport reference.

  Note: The “CHECK NORTH REF” amber message and the associated alerts are dependant of a correct coding of the airport North reference (TRUE/MAG) in the navigation database. The runway orientation displayed on ND is also affected if the airport North reference is not correctly coded.

- **Cruise:**
  When reaching an area where the heading reference should be changed (oceanic area, airway or polar track defined in TRUE reference ...).

  SELECT TRUE by pressing the NORTH REF pb.

  When reaching 65 N with TRUE reference selected, the GRID TRACK is provided on the ND’s upper right box. The ND compass still displays true track and heading. GRID TRK along with XTK are the cues to be used to monitor the proprer lateral guidance



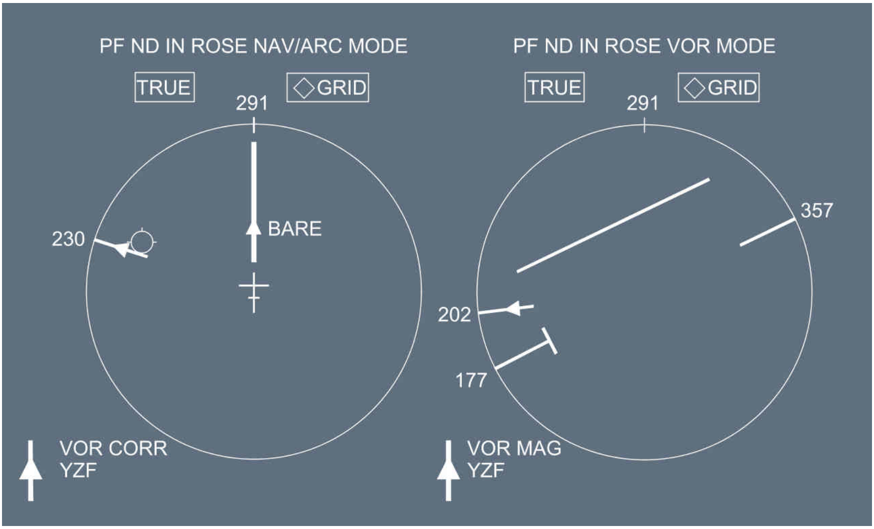
If the “SELECT TRUE” message appears on the ND/MCDU, this indicates that the aircraft has reached the Polar zone with MAG reference still selected in the cockpit. Press the NORTH REF pb to select TRUE.

USE OF VOR/DME

En route, the VOR/DME are basically used for either FM NAV ACCY crosscheck, or for reporting a given radial to the ATC.
The FM NAV ACCY crosscheck is achieved, as usual, by comparing the bearing/distance that is displayed on the ND, with the bearing/distance that is displayed on the PROG page.
In case the VOR used is defined in another reference (e.g. MAG) than the one selected in the cockpit (e.g. TRUE), the bearing that is provided on ND is in magenta and is corrected. The VOR-corrected bearing should be within 5 ° of the FM-computed bearing (taking into account the meridian convergence and the difference in magnetic variation).
→ In case of doubt, set the NORTH REF to the VOR reference, and check the bearings.

CAUTION	The correction of VOR indications in ROSENAV or ARC ND modes depend on a correct navigation database coding. If the North reference (TRUE/MAG) that is coded for the VOR orientation is not correct, the VOR indication correction will be unduly applied. If VOR needles are in magenta (CORR), check both the aircraft NORTH REF selection and the VOR station orientation on the navigation charts.

If the aircraft has to report on a given VOR radial, which is defined in a different reference (e.g. MAG) from the cockpit reference (e.g. TRUE), check the RADIAL crossing on the PM ND set to ROSE VOR mode, or use DDRMI. (Ex: The aircraft flies NCA 24) : (NCA 24 is the TRUE referenced route). ATC requests the aircraft to report on RADIAL 357 from YZF (MAG-referenced).


PF ND IN ROSE NAV/ARC MODE
TRUE
◇GRID
291
230
BARE
VOR CORR
YZF
PF ND IN ROSE VOR MODE
TRUE
◇GRID
291
357
202
177
VOR MAG
YZF

USE OF ADF

The Polar Zone NDBs are quite powerful, and the bearing can be received at long distances.

Use these NDBs to check the reasonableness of the FM navigation by comparing the ADF bearing, that is displayed on the ND, with the FM-computed bearing, that is displayed on the PROG page.

FLYING THE POLE

- In most case, the autopilot will be in NAV mode.

  When approaching the pole, a CHECK HDG message appears, with the associated ECAM Procedure.
  - Disregard the ECAM Procedure.
    The message is due to the fact that the IRSs do not reach the pole simultaneously; thus the headings do not turn simultaneously from 360 to180 °.
- If the flight crew uses the HDG mode
  - The autopilot onside that the best IRS is to be engaged.
    The offside HDG bug (q) should be disregarded when close to the pole since, the headings may differ.

APPROACH

- If CHECK NORTH REF amber message comes up on ND and MCDU, verify that the NORTH pushbutton is selected to the destination airport reference.

  Note: *The “CHECK NORTH REF” amber message and the associated alerts are dependant of a correct coding of the airport North reference (TRUE/MAG) in the navigation database. The runway orientation displayed on ND is also affected if the airport North reference is not correctly coded.*

- If TRUE is selected for approach, only CAT I ILS approaches may be flown.

FLIGHT PLAN INITIALIZATION THROUGH ACARS

Ident.: DSC-22_20-70-00000956.0007001 / 17 MAY 21

1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

REQUEST FOR ACTIVE FLIGHT PLAN INITIALIZATION BEFORE ENGINE START

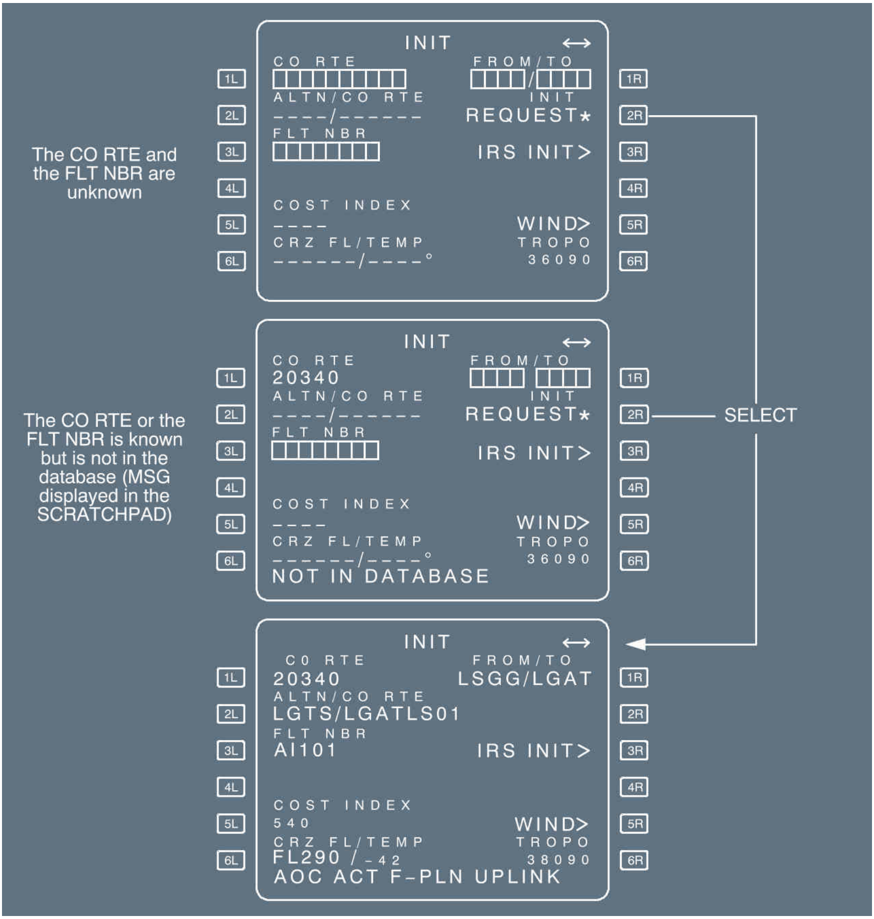
Before engine start, the crew may request a route for the active flight plan. When the route is received, “AOC ACT F-PLN UPLINK” message is displayed on the MCDU indicating that the flight plan has been received and automatically inserted.
After engine start, it is not possible to initialize directly the active flight plan since the received flight plan is automatically routed into the secondary, and the MDCU displays “AOC SEC F-PLN UPLINK”.

PROCEDURE

PRESS the INIT REQUEST * prompt.

The star (*) disappears, all data fields are dashed except:
- *CO RTE, FLT NBR if previously displayed and*
- *Default values.*

The star is not displayed when the FMGS cannot communicate with the ACARS. No request can be sent.
When an active flight plan exists, INIT REQUEST prompt is removed from the active INIT page and no request can be sent for the active flight plan. If a flight plan is entered manually after the request, the uplink message is routed to the secondary.



The CO RTE and the FLT NBR are unknown

```
               INIT               ↔
CO RTE                  FROM/TO
▯▯▯▯▯▯▯▯▯▯             ▯▯▯▯/▯▯▯▯
ALTN/CO RTE                 INIT
----/------            REQUEST*
FLT NBR
▯▯▯▯▯▯▯▯               IRS INIT>

COST INDEX
----                      WIND>
CRZ FL/TEMP               TROPO
------/----°              36090
```

The CO RTE or the FLT NBR is known but is not in the database (MSG displayed in the SCRATCHPAD)

```
               INIT               ↔
CO RTE                  FROM/TO
20340                  ▯▯▯▯ ▯▯▯▯
ALTN/CO RTE                 INIT
----/------            REQUEST*
FLT NBR
▯▯▯▯▯▯▯▯               IRS INIT>

COST INDEX
----                      WIND>
CRZ FL/TEMP               TROPO
------/----°              36090
NOT IN DATABASE
```

```
               INIT               ↔
 C0 RTE                  FROM/TO
20340                  LSGG/LGAT
ALTN/CO RTE
LGTS/LGATLS01
FLT NBR
AI101                  IRS INIT>

COST INDEX
540                       WIND>
CRZ FL/TEMP               TROPO
FL290 /-42                38090
AOC ACT F-PLN UPLINK
```

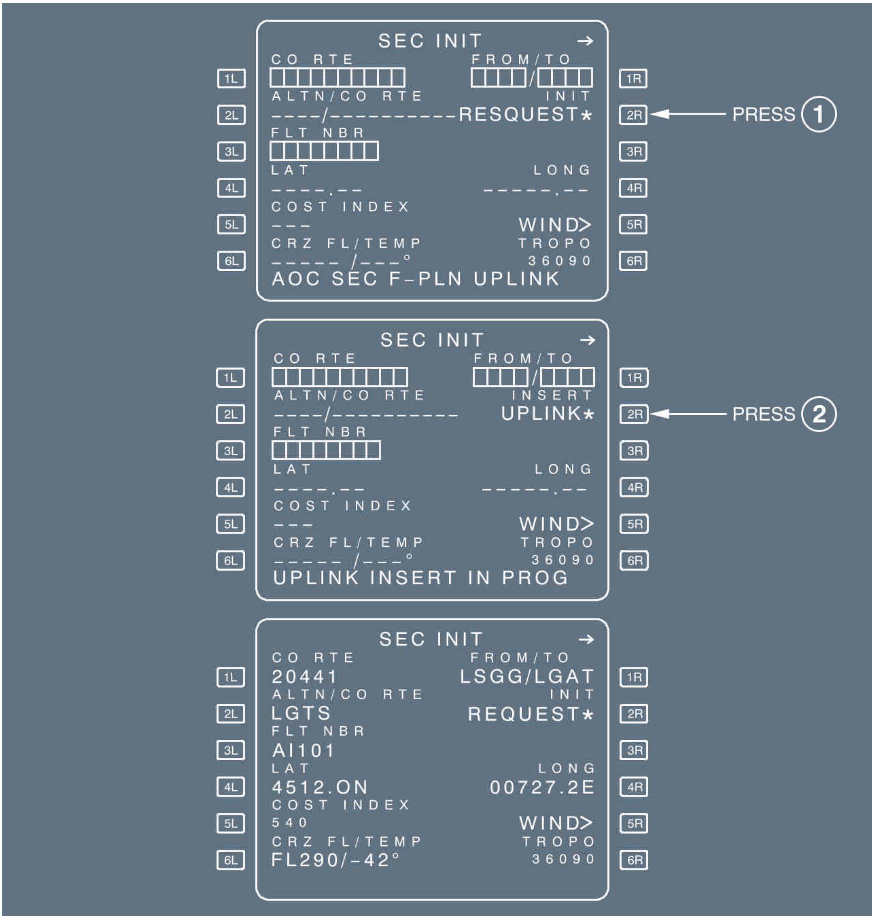
REQUEST FOR SECONDARY FLIGHT PLAN

A request for a secondary flight plan can be initiated anytime. Any flight plan received after engine start is automatically routed into the secondary flight plan.
When the flight plan is received, a message “AOC SEC F-PLN UPLINK” is displayed on the MCDU scratchpad.
Before engine start, and if the SEC F-PLN is empty, any uplinked flight plan is automatically inserted into the secondary flight plan, and no flight crew action is required.

After engine start, or if the SEC F-PLN is not empty, the flight crew must manually insert the uplinked flight plan via INSERT UPLINK prompt.

PROCEDURE TO INSERT OR REJECT A SECONDARY FLIGHT PLAN

When the uplink message is received, the INIT REQUEST prompt of the INIT A page is replaced by INSERT UPLINK (2R field). Pressing the 2R key will insert the flight plan into the secondary. Clearing the prompt will reject it.
If a temporary flight plan or a DIR TO is in progress, the uplink insertion is not accepted until the temporary flight plan or the DIR TO is completed.



```
        SEC INIT                 →
 CO RTE                 FROM/TO
 □□□□□□□□□□            □□□□/□□□□
 ALTN/CO RTE                 INIT
 ----/----------RESQUEST*
 FLT NBR
 □□□□□□□□
 LAT                         LONG
 ----.--                -----.--
 COST INDEX
 ---                        WIND>
 CRZ FL/TEMP                TROPO
 ----- /---°                36090
 AOC SEC F-PLN UPLINK
```

```
        SEC INIT                 →
 CO RTE                 FROM/TO
 □□□□□□□□□□            □□□□/□□□□
 ALTN/CO RTE               INSERT
 ----/----------          UPLINK*
 FLT NBR
 □□□□□□□□
 LAT                         LONG
 ----.--                -----.--
 COST INDEX
 ---                        WIND>
 CRZ FL/TEMP                TROPO
 ----- /---°                36090
 UPLINK INSERT IN PROG
```

```
        SEC INIT                 →
 CO RTE                 FROM/TO
 20441                  LSGG/LGAT
 ALTN/CO RTE                 INIT
 LGTS                    REQUEST*
 FLT NBR
 AI101
 LAT                         LONG
 4512.0N                 00727.2E
 COST INDEX
 540                        WIND>
 CRZ FL/TEMP                TROPO
 FL290/-42°                 36090
```

FLIGHT PLAN INITIALIZATION THROUGH ACARS (IF INSTALLED)

Ident.: DSC-22_20-70-00000956.0014001 / 01 OCT 12
Applicable to: MSN 04827-04860

REQUEST FOR ACTIVE FLIGHT PLAN INITIALIZATION BEFORE ENGINE START

Before engine start, the crew may request a route for the active flight plan. When the route is received, “AOC ACT F-PLN UPLINK” message is displayed on the MCDU indicating that the flight plan has been received and automatically inserted.

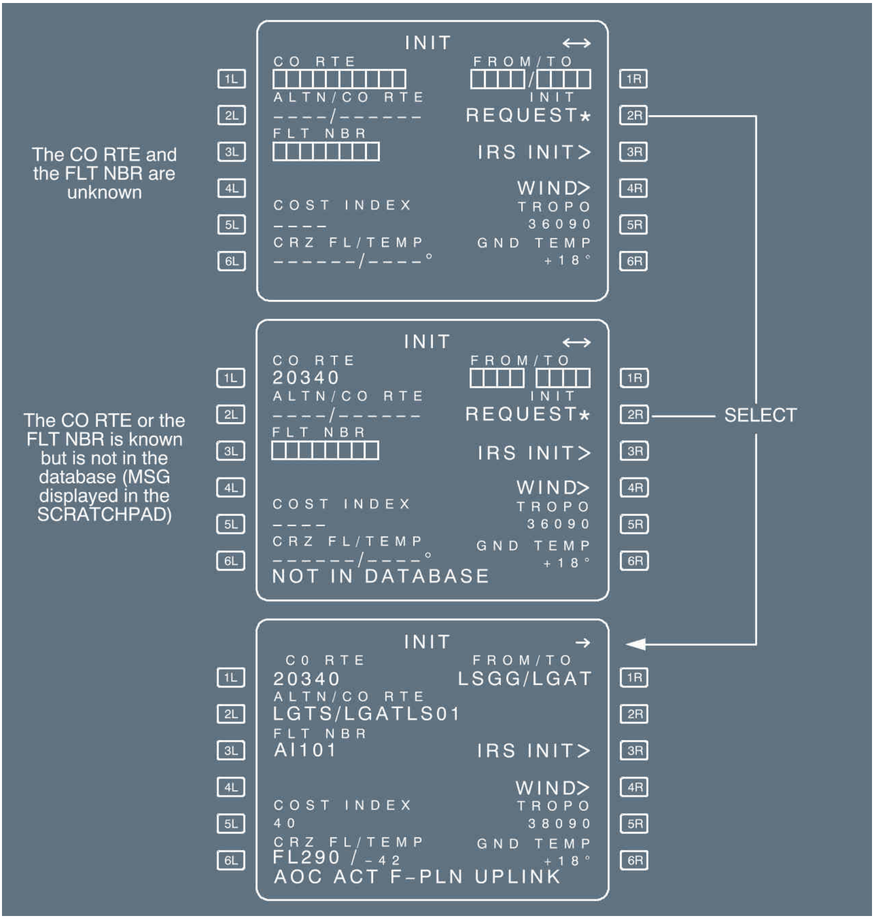
After engine start, it is not possible to initialize directly the active flight plan since the received flight plan is automatically routed into the secondary, and the MDCU displays “AOC SEC F-PLN UPLINK”.

PROCEDURE

PRESS the INIT REQUEST * prompt.

The star (*) disappears, all data fields are dashed except:
- *CO RTE, FLT NBR if previously displayed and*
- *Ddefault values.*

The star is not displayed when the FMGS cannot communicate with the ACARS. No request can be sent.
When an active flight plan exists, INIT REQUEST prompt is removed from the active INIT page and no request can be sent for the active flight plan. If a flight plan is entered manually after the request, the uplink message is routed to the secondary.


The CO RTE and the FLT NBR are unknown
The CO RTE or the FLT NBR is known but is not in the database (MSG displayed in the SCRATCHPAD)
SELECT
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
                INIT              ↔
CO RTE                    FROM/TO
□□□□□□□□□□            □□□□/□□□□
ALTN/CO RTE                  INIT
----/------             REQUEST*
FLT NBR
□□□□□□□□               IRS INIT>
                           WIND>
COST INDEX                 TROPO
----                       36090
CRZ FL/TEMP             GND TEMP
------/----°                +18°
```

```
                INIT              ↔
CO RTE                    FROM/TO
20340                  □□□□ □□□□
ALTN/CO RTE                  INIT
----/------             REQUEST*
FLT NBR
□□□□□□□□               IRS INIT>
                           WIND>
COST INDEX                 TROPO
----                       36090
CRZ FL/TEMP             GND TEMP
------/----°                +18°
NOT IN DATABASE
```

```
                INIT              →
C0 RTE                    FROM/TO
20340                   LSGG/LGAT
ALTN/CO RTE
LGTS/LGATLS01
FLT NBR
AI101                  IRS INIT>
                           WIND>
COST INDEX                 TROPO
40                         38090
CRZ FL/TEMP             GND TEMP
FL290 / -42                 +18°
AOC ACT F-PLN UPLINK
```

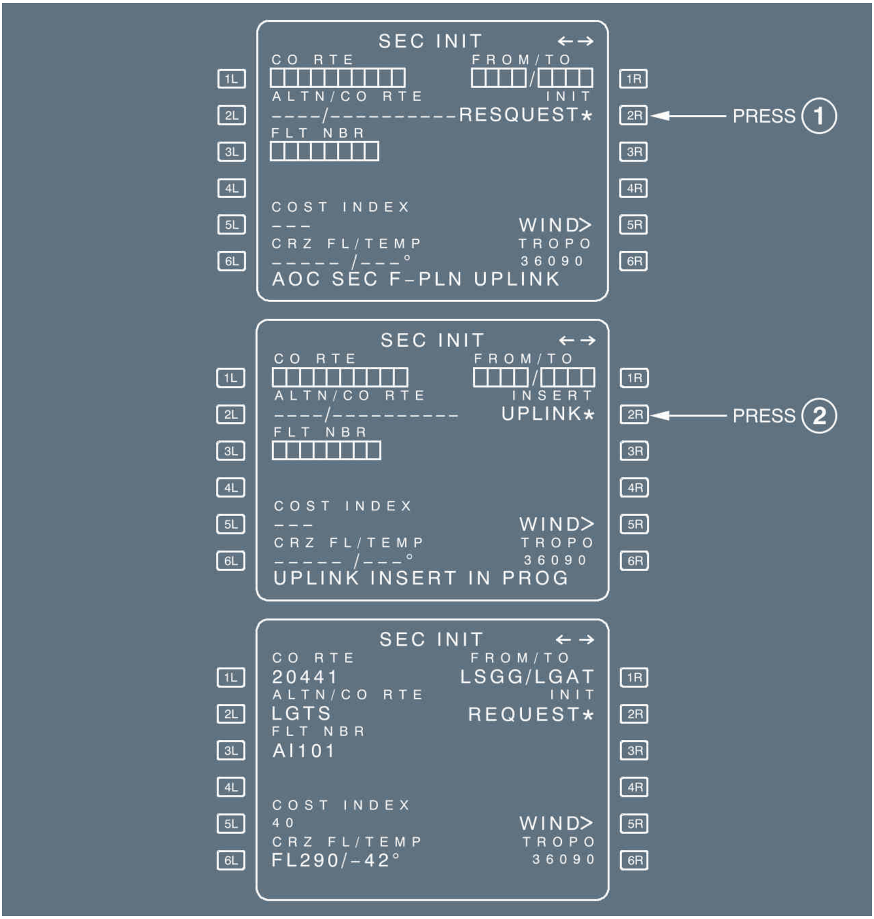
REQUEST FOR SECONDARY FLIGHT PLAN

A request for a secondary flight plan can be initiated anytime. Any flight plan received after engine start is automatically routed into the secondary flight plan.
When the flight plan is received, a message “AOC SEC F-PLN UPLINK” is displayed on the MCDU scratchpad.
Before engine start, and if the SEC F-PLN is empty, any uplinked flight plan is automatically inserted into the secondary flight plan, and no flight crew action is required.

After engine start, or if the SEC F-PLN is not empty, the flight crew must manually insert the uplinked flight plan via INSERT UPLINK prompt.

PROCEDURE TO INSERT OR REJECT A SECONDARY FLIGHT PLAN

When the uplink message is received, the INIT REQUEST prompt of the INIT A page is replaced by INSERT UPLINK (2R field). Pressing the 2R key will insert the flight plan into the secondary. Clearing the prompt will reject it.
If a temporary flight plan or a DIR TO is in progress, the uplink insertion is not accepted until the temporary flight plan or the DIR TO is completed.



```
          SEC INIT                ←→
 CO RTE                  FROM/TO
 □□□□□□□□□□              □□□□/□□□□
 ALTN/CO RTE                  INIT
 ----/----------------RESQUEST*
 FLT NBR
 □□□□□□□□


 COST INDEX
 ---                         WIND>
 CRZ FL/TEMP                 TROPO
 ----- /---°                 36090
 AOC SEC F-PLN UPLINK
```

```
          SEC INIT                ←→
 CO RTE                  FROM/TO
 □□□□□□□□□□              □□□□/□□□□
 ALTN/CO RTE                INSERT
 ----/----------           UPLINK*
 FLT NBR
 □□□□□□□□


 COST INDEX
 ---                         WIND>
 CRZ FL/TEMP                 TROPO
 ------ /---°                36090
 UPLINK INSERT IN PROG
```

```
          SEC INIT                ←→
 CO RTE                  FROM/TO
 20441                   LSGG/LGAT
 ALTN/CO RTE                  INIT
 LGTS                     REQUEST*
 FLT NBR
 AI101


 COST INDEX
 40                          WIND>
 CRZ FL/TEMP                 TROPO
 FL290/-42°                  36090
```

TAKEOFF DATA

Ident.: DSC-22_20-70-A-00000957.0001001 / 15 FEB 11

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

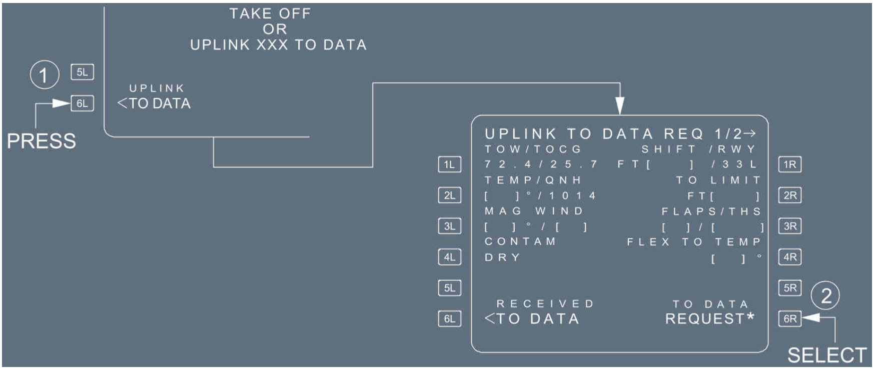
GENERAL

The takeoff data may be requested in preflight or done phase for the active flight plan only. It is always associated with the active flight plan message.

REQUEST FOR TAKEOFF DATA

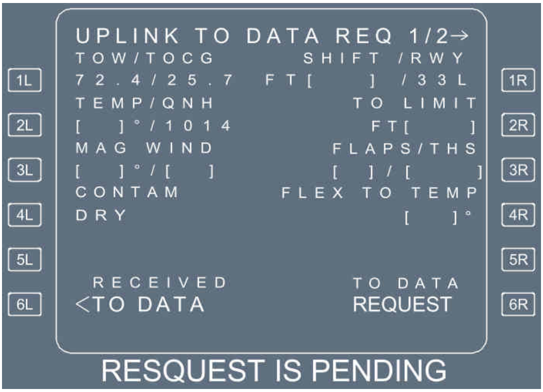
In order to obtain takeoff data from the ground station:

SELECT UPLINK TO DATA [6L] key.
SEND the request by pressing the “TO DATA REQUEST” [6R] key.


TAKE OFF
OR
UPLINK XXX TO DATA
①
5L
6L
UPLINK
<TO DATA
PRESS
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
②
SELECT

```
UPLINK TO DATA REQ 1/2→
TOW/TOCG          SHIFT /RWY
72.4/25.7    FT[    ] /33L
TEMP/QNH            TO LIMIT
[   ]°/1014       FT[      ]
MAG WIND          FLAPS/THS
[  ]°/[   ]       [  ]/[   ]
CONTAM          FLEX TO TEMP
DRY                  [   ]°

 RECEIVED           TO DATA
<TO DATA           REQUEST*
```

When TO DATA REQUEST is sent, data of the TO DATA REQ page are locked in and the star displayed in the 6R field is removed.


1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

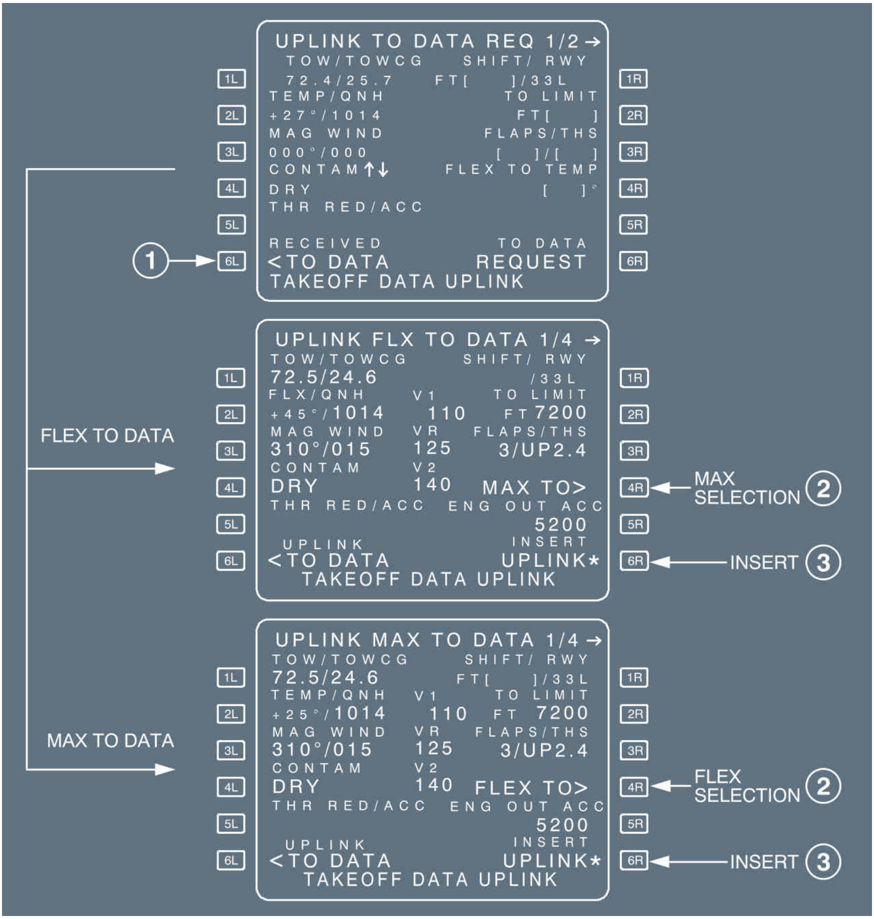
```
UPLINK TO DATA REQ 1/2→
TOW/TOCG          SHIFT /RWY
72.4/25.7    FT[    ] /33L
TEMP/QNH            TO LIMIT
[   ]°/1014       FT[      ]
MAG WIND          FLAPS/THS
[  ]°/[   ]       [  ]/[   ]
CONTAM          FLEX TO TEMP
DRY                  [   ]°

 RECEIVED           TO DATA
<TO DATA            REQUEST
```

RESQUEST IS PENDING

Ident.: DSC-22_20-70-A-00000959.0005001 / 23 JUN 15
Applicable to: MSN 04827-04860

PROCEDURE TO INSERT UPLINK TAKEOFF DATA

PRESS the 6L key "RECEIVED TO DATA" when the message TAKEOFF DATA UPLINK is displayed.



```
 UPLINK TO DATA REQ 1/2→
  TOW/TOWCG        SHIFT/ RWY
  72.4/25.7       FT[    ]/33L
TEMP/QNH               TO LIMIT
+27°/1014               FT[    ]
MAG WIND              FLAPS/THS
000°/000              [  ]/[  ]
CONTAM↑↓           FLEX TO TEMP
DRY                       [  ]°
THR RED/ACC

RECEIVED                TO DATA
<TO DATA                REQUEST
TAKEOFF DATA UPLINK
```

```
 UPLINK FLX TO DATA 1/4 →
TOW/TOWCG            SHIFT/ RWY
72.5/24.6                  /33L
FLX/QNH        V1      TO LIMIT
+45°/1014      110       FT7200
MAG WIND       VR     FLAPS/THS
310°/015       125      3/UP2.4
CONTAM         V2
DRY            140      MAX TO>
THR RED/ACC         ENG OUT ACC
                           5200
  UPLINK                 INSERT
<TO DATA                UPLINK*
    TAKEOFF DATA UPLINK
```

```
 UPLINK MAX TO DATA 1/4 →
TOW/TOWCG            SHIFT/ RWY
72.5/24.6         FT[    ]/33L
TEMP/QNH       V1      TO LIMIT
+25°/1014      110     FT  7200
MAG WIND       VR     FLAPS/THS
310°/015       125      3/UP2.4
CONTAM         V2
DRY            140     FLEX TO>
THR RED/ACC         ENG OUT ACC
                           5200
  UPLINK                 INSERT
<TO DATA                UPLINK*
    TAKEOFF DATA UPLINK
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
①
FLEX TO DATA
MAX TO DATA
MAX SELECTION ②
FLEX SELECTION ②
INSERT ③
INSERT ③

This displays the uplink data on 2 different pages: UPLINK MAX TO DATA
UPLINK FLX TO DATA

SELECT the data corresponding to the thrust to be used (MAX or FLEX) by pressing [4R].

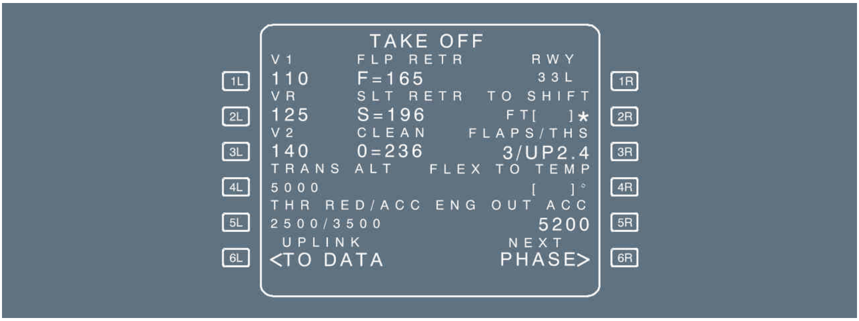
SELECT the active runway data by slewing the pages (1/4... 4/4).
PRESS the [6R] key “INSERT UPLINK”.

UPLINK MAX TO DATA and UPLINK FLX TO DATA pages are not modifiable.

Note: *The “INSERT UPLINK” prompt is not displayed:*
- *If the uplinked runway is different from the active runway*
- *If the uplinked TOW differs from the FMS-estimated TOW by more than 1 t*
- *If the uplinked TOCG differs from the FMS-estimated TOCG by more than 0.5 %*
- *If the uplink is incomplete.*

- **When the takeoff data have been inserted**

, the PERF TO page is amended of the new data.



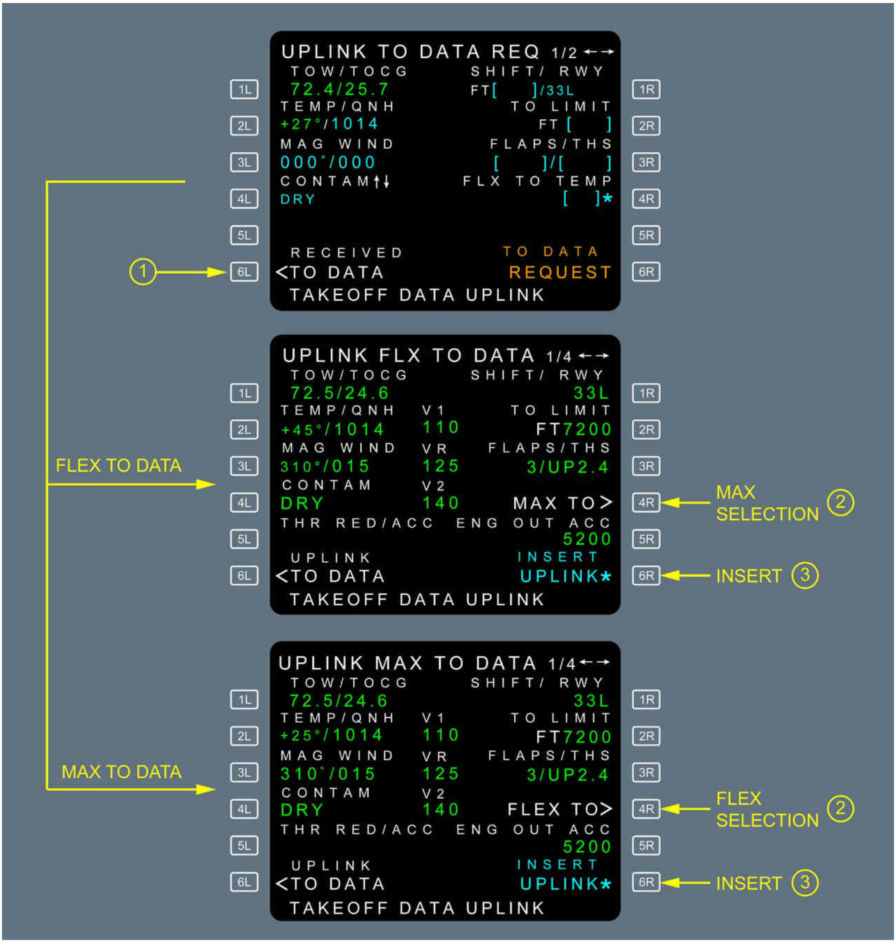
```
          TAKE OFF
V1       FLP RETR         RWY
110      F=165            33L
VR       SLT RETR    TO SHIFT
125      S=196         FT[   ]*
V2       CLEAN      FLAPS/THS
140      0=236       3/UP2.4
TRANS ALT        FLEX TO TEMP
5000                   [   ]°
THR RED/ACC     ENG OUT ACC
2500/3500               5200
 UPLINK                NEXT
<TO DATA              PHASE>
```

Ident.: DSC-22_20-70-A-00000959.0001001 / 10 MAY 21

3 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

PROCEDURE TO INSERT UPLINK TAKEOFF DATA

PRESS the [6L] key RECEIVED TO DATA when the message TAKEOFF DATA UPLINK is displayed.



```
UPLINK TO DATA REQ 1/2 ←→
 TOW/TOCG          SHIFT/ RWY
 72.4/25.7         FT[    ]/33L
TEMP/QNH              TO LIMIT
+27°/1014               FT [    ]
MAG WIND            FLAPS/THS
000°/000             [    ]/[    ]
CONTAM↑↓          FLX TO TEMP
DRY                      [   ]*

 RECEIVED              TO DATA
<TO DATA               REQUEST
 TAKEOFF DATA UPLINK
```

```
UPLINK FLX TO DATA 1/4 ←→
 TOW/TOCG          SHIFT/ RWY
 72.5/24.6                 33L
TEMP/QNH       V1     TO LIMIT
+45°/1014      110      FT7200
MAG WIND       VR    FLAPS/THS
310°/015       125    3/UP2.4
CONTAM         V2
DRY            140     MAX TO>
THR RED/ACC     ENG OUT ACC
                          5200
 UPLINK                 INSERT
<TO DATA               UPLINK*
 TAKEOFF DATA UPLINK
```

```
UPLINK MAX TO DATA 1/4 ←→
 TOW/TOCG          SHIFT/ RWY
 72.5/24.6                 33L
TEMP/QNH       V1     TO LIMIT
+25°/1014      110      FT7200
MAG WIND       VR    FLAPS/THS
310°/015       125    3/UP2.4
CONTAM         V2
DRY            140   FLEX TO>
THR RED/ACC     ENG OUT ACC
                          5200
 UPLINK                 INSERT
<TO DATA               UPLINK*
 TAKEOFF DATA UPLINK
```

①
FLEX TO DATA
MAX TO DATA
MAX SELECTION ②
INSERT ③
FLEX SELECTION ②
INSERT ③
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

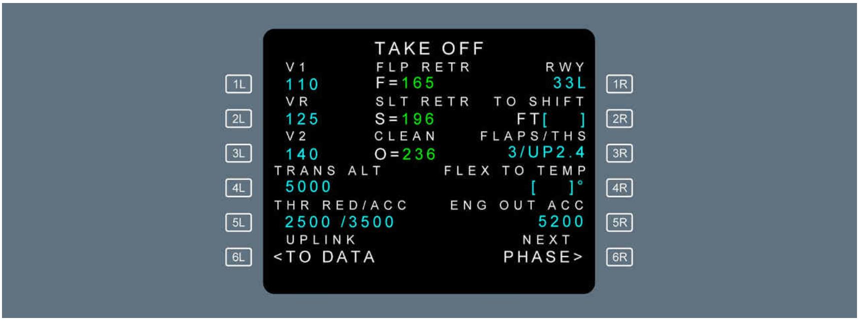
Note: *This displays the uplink data on two different pages:*
- *UPLINK MAX TO DATA*
- *UPLINK FLX TO DATA.*

SELECT the data corresponding to the thrust to be used (MAX or FLEX) by pressing [4R] key.
SELECT the active runway data by scrolling the pages (1/4... 4/4).
PRESS the [6R] key INSERT UPLINK.

Note: *UPLINK MAX TO DATA and UPLINK FLX TO DATA pages are not modifiable.*

- **If the takeoff data displayed on this page are not relevant to the active runway entered in the flight plan,** the INSERT UPLINK prompt is not displayed.

- **When the takeoff data are inserted,** the PERF TO page is updated with the new data.



```
               TAKE OFF
  V1        FLP RETR          RWY
 110        F=165             33L
  VR        SLT RETR     TO SHIFT
 125        S=196          FT[   ]
  V2        CLEAN       FLAPS/THS
 140        O=236         3/UP2.4
TRANS ALT            FLEX TO TEMP
 5000                     [    ]°
THR RED/ACC           ENG OUT ACC
 2500 /3500                  5200
  UPLINK                     NEXT
<TO DATA                   PHASE>
```

WIND DATA

Ident.: DSC-22_20-70-B-00000961.0001001 / 01 OCT 12

4 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

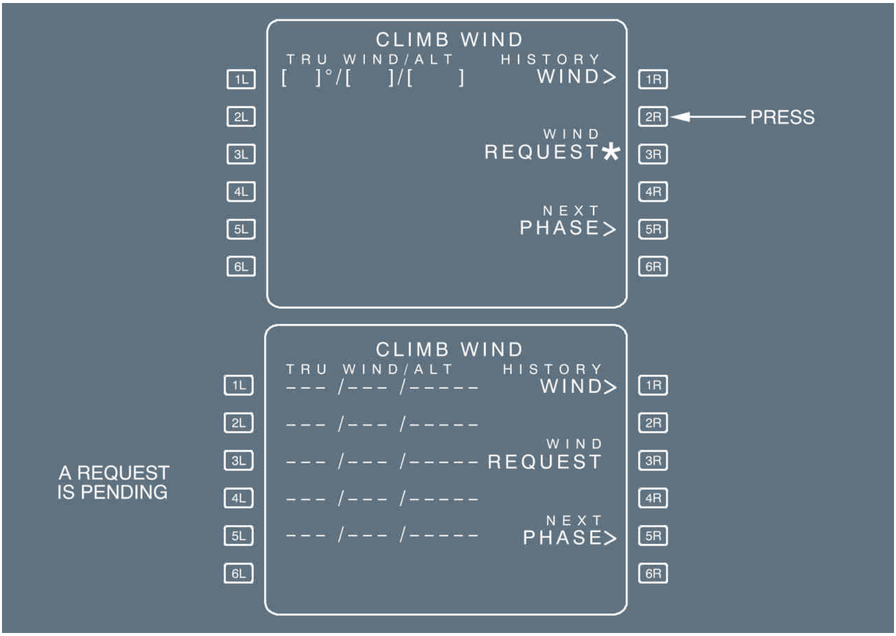
REQUEST FOR WIND DATA

To send a wind request, press the “WIND REQUEST” selection key of any wind pages. This request is automatically sent to the ground for one or more flight phases and for the selected flight plan (primary or secondary). The content of the wind request message is not dependent on the selected wind page (CLIMB, CRUISE or DESCENT) but on the flight phase in progress.

- For active flight plan or secondary flight plan that is a “COPY ACTIVE”, a wind request sent by the crew:
  - during preflight or takeoff phase, initiates a demand for climb, cruise, descent and alternate winds.
  - during climb and cruise phase, initiates a demand for cruise, descent and alternate winds.
  - during descent/approach and go around, no wind request is possible.
- For secondary flight plan that is not a “COPY ACTIVE” there is no restriction linked to flight phase.

Before engine start, and if data has not been entered in any WIND page for the flight plan, the uplinked wind data is automatically inserted into the flight plan, and no flight crew action is required.

If the uplinked wind message is received after engine start, or if data has been entered in any WIND page of the flight plan, the flight crew must manually insert the uplinked wind data via the INSERT UPLINK prompt.


CLIMB WIND
TRU WIND/ALT
HISTORY
[ ]°/[ ]/[ ]
WIND>
WIND
REQUEST*
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PRESS
CLIMB WIND
TRU WIND/ALT
HISTORY
--- /--- /-----
WIND>
--- /--- /-----
WIND
--- /--- /-----
REQUEST
--- /--- /-----
NEXT
--- /--- /-----
PHASE>
A REQUEST
IS PENDING

When the amber star following the “WIND REQUEST” is not displayed, the FM is not able to communicate with the ACARS and the pilot cannot send any request.

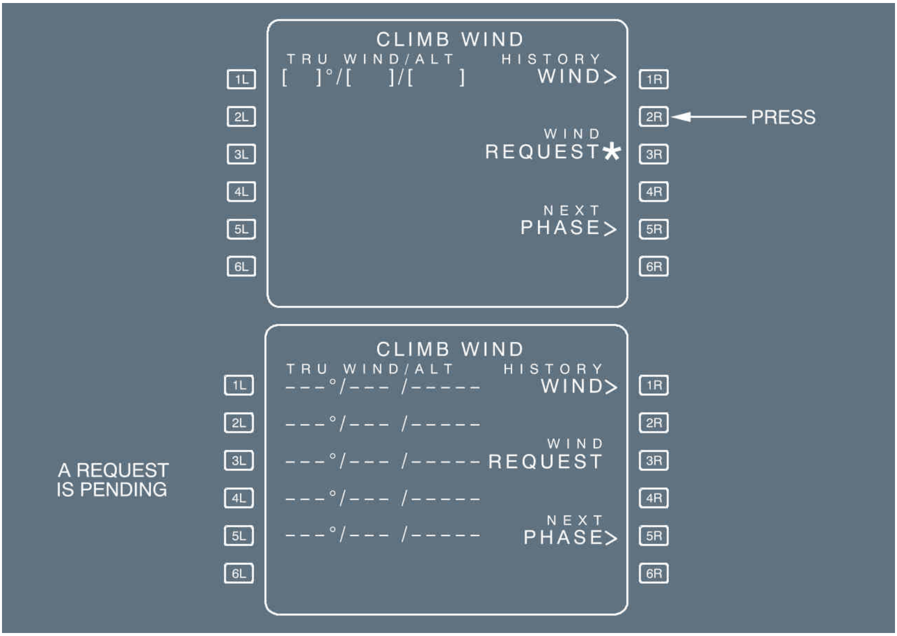
Ident.: DSC-22_20-70-B-00000961.0006001 / 01 OCT 12
Applicable to: MSN 04827-04860

REQUEST FOR WIND DATA

To send a wind request, press the “WIND REQUEST” selection key of any wind pages. This request is automatically sent to the ground for one or more flight phases and for the selected flight plan (primary or secondary). The content of the wind request message is not dependent on the selected wind page (CLIMB, CRUISE or DESCENT) but on the flight phase in progress.

- For active flight plan or secondary flight plan that is a “COPY ACTIVE”, a wind request sent by the crew:
  - during preflight or takeoff phase, initiates a demand for climb, cruise, descent and alternate winds.
  - during climb and cruise phase, initiates a demand for cruise, descent and alternate winds.
  - during descent/approach and go around, no wind request is possible.
- For secondary flight plan that is not a “COPY ACTIVE” there is no restriction linked to flight phase.

If the uplinked wind message is received after engine start, or if data has been entered in any WIND page of the flight plan, the flight crew must manually insert the uplinked wind data via the INSERT UPLINK prompt.


CLIMB WIND
TRU WIND/ALT
[ ]°/[ ]/[ ]
HISTORY
WIND>
WIND
REQUEST*
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PRESS
CLIMB WIND
TRU WIND/ALT
---°/--- /-----
---°/--- /-----
---°/--- /-----
---°/--- /-----
---°/--- /-----
HISTORY
WIND>
WIND
REQUEST
NEXT
PHASE>
A REQUEST
IS PENDING

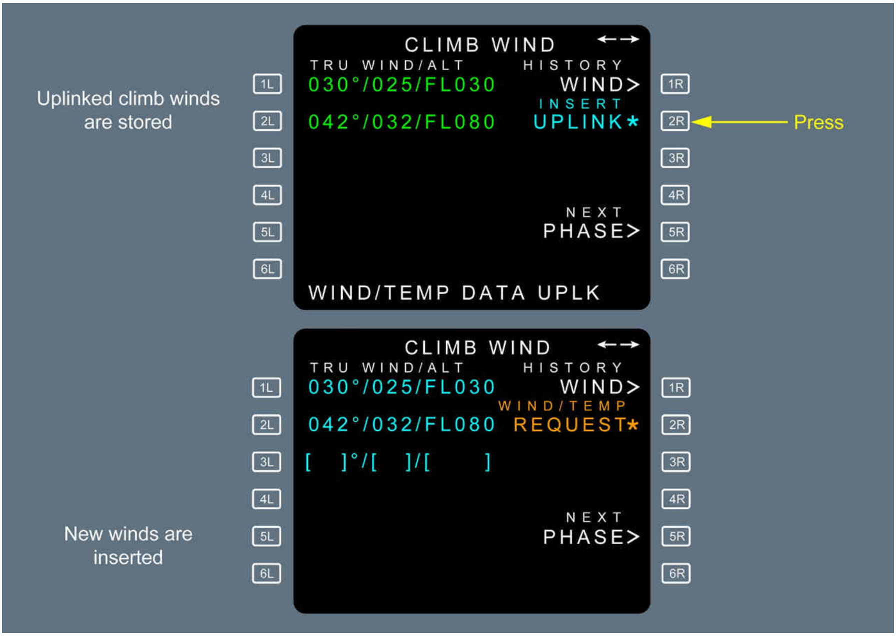
When the amber star following the “WIND REQUEST” is not displayed, the FM is not able to communicate with the ACARS and the pilot cannot send any request.

Ident.: DSC-22_20-70-B-00000962.0054001 / 26 NOV 19

5 **Applicable to: MSN 10949-11597**

PROCEDURE TO INSERT WIND DATA

When the uplink message is received, the [2R] field is modified, the WIND/TEMP REQUEST is replaced by the INSERT UPLINK. This prompt, when pressed, enables the flight crew to insert the uplink wind data, phase by phase.
To access, review, insert or delete the uplink wind data of other phases, the flight crew uses "NEXT PHASE" or "PREV PHASE" key.
If the flight crew is not satisfied with the uplink winds, the flight crew will delete the winds, phase by phase clearing the "INSERT UPLINK" prompt. This will delete all the uplinked winds of the selected flight phase.



Uplinked climb winds are stored

```
          CLIMB WIND        ←→
TRU WIND/ALT          HISTORY
030°/025/FL030          WIND>
                       INSERT
042°/032/FL080        UPLINK*



                          NEXT
                        PHASE>

WIND/TEMP DATA UPLK
```

Press

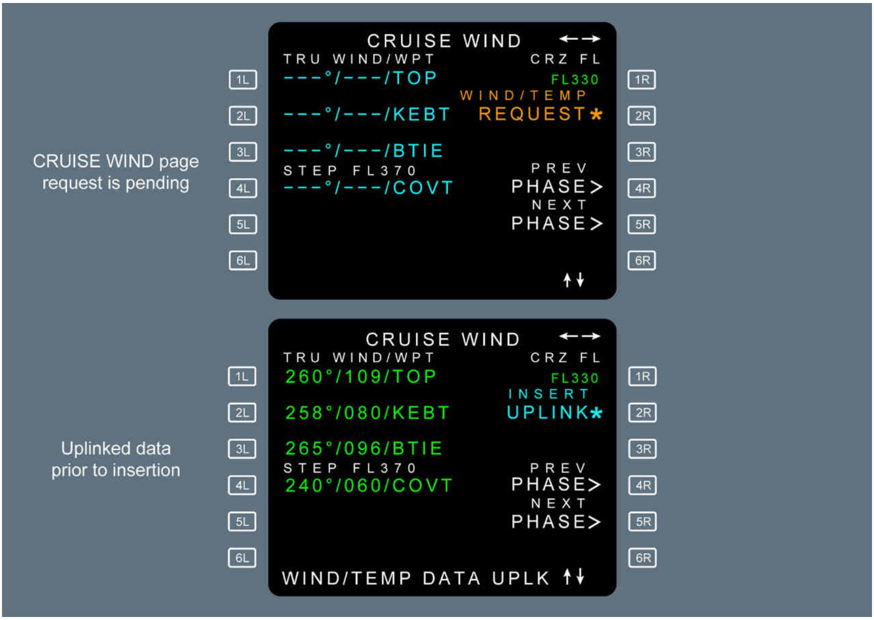
```
          CLIMB WIND        ←→
TRU WIND/ALT          HISTORY
030°/025/FL030          WIND>
                    WIND/TEMP
042°/032/FL080       REQUEST*
[   ]°/[   ]/[     ]


                          NEXT
                        PHASE>
```

New winds are inserted

CLIMB WIND PAGE

When a request is pending, the history WIND page cannot be accessed.
When the climb phase is active, the flight crew cannot request neither modify the climb winds of the active flight plan or secondary flight plan if it is a "COPY ACTIVE".

CRUISE WIND PAGE



CRUISE WIND page request is pending

```
           CRUISE WIND       ←→
TRU WIND/WPT                CRZ FL
---°/---/TOP                 FL330
                      WIND/TEMP
---°/---/KEBT          REQUEST*

---°/---/BTIE
STEP FL370                   PREV
---°/---/COVT              PHASE>
                             NEXT
                           PHASE>

                               ↑↓
```

Uplinked data prior to insertion

```
           CRUISE WIND       ←→
TRU WIND/WPT                CRZ FL
260°/109/TOP                 FL330
                           INSERT
258°/080/KEBT             UPLINK*

265°/096/BTIE
STEP FL370                   PREV
240°/060/COVT              PHASE>
                             NEXT
                           PHASE>

WIND/TEMP DATA UPLK            ↑↓
```

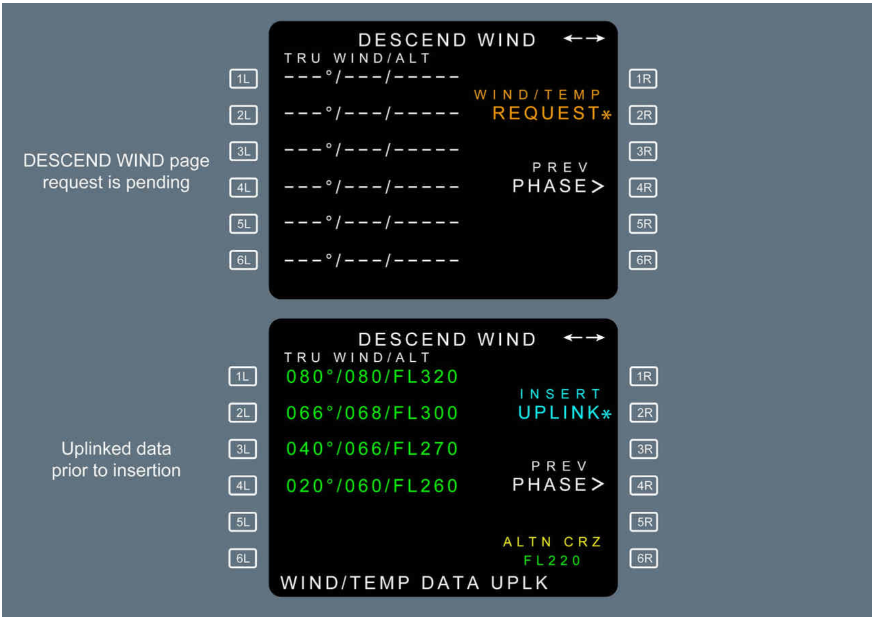
A wind request sent during cruise phase will apply for downpath waypoints of the cruise, descent, approach and alternate phases.

- If the uplink message contains more data and waypoints than the flight plan, the winds at extra waypoints are not considered and automatically discarded. This is transparent to the flight crew
- Clearing the INSERT UPLINK* prompt deletes all uplink wind data of the cruise phase. Cruise page reverts to the previous data.

Note: *During cruise, whenever uplink wind data is received and not inserted or cancelled on the CRUISE WIND page, access to the DIR TO function is not possible. The "WIND UPLINK EXISTS" message is displayed on the MCDU scratchpad. Insert or cancel the uplinked wind message first and then access the DIR TO function.*

DESCEND WIND PAGE

The procedures to insert, review or delete descent winds during preflight, climb or cruise phase are described in the above wind general procedure.



DESCEND WIND page request is pending

DESCEND WIND ←→
TRU WIND/ALT
---°/---/-----
---°/---/----- WIND/TEMP REQUEST*
---°/---/-----
---°/---/----- PREV PHASE>
---°/---/-----
---°/---/-----

Uplinked data prior to insertion

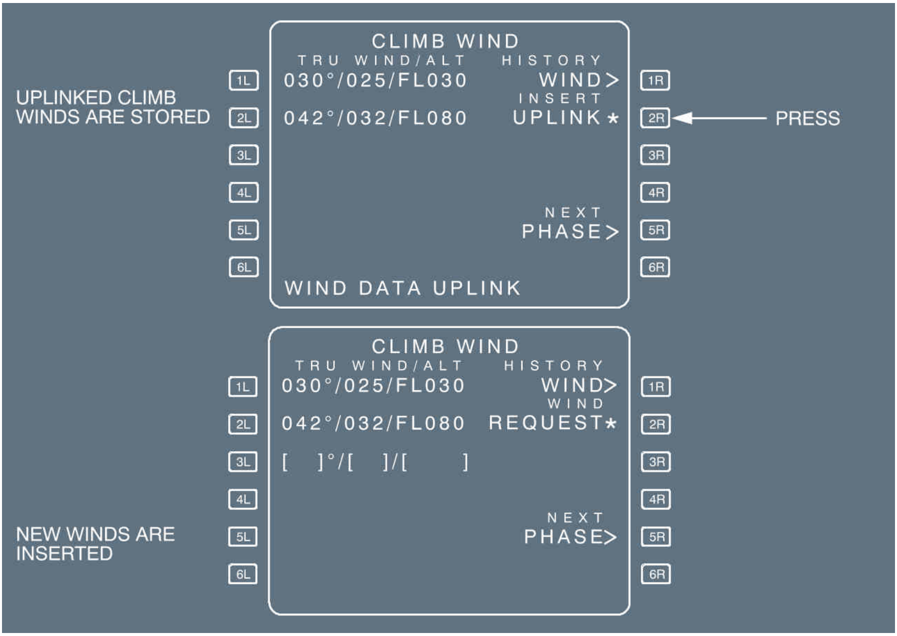
DESCEND WIND ←→
TRU WIND/ALT
080°/080/FL320
066°/068/FL300 INSERT UPLINK*
040°/066/FL270
020°/060/FL260 PREV PHASE>
ALTN CRZ FL220
WIND/TEMP DATA UPLK

If the alternate wind is not available, dashes are displayed in the field.
In descent, approach or go around phases, the flight crew cannot request or modify the descent winds of the active flight plan or secondary flight plan if it is a “COPY ACTIVE”.

Ident.: DSC-22_20-70-B-00000962.0020001 / 14 MAY 12
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

PROCEDURE TO INSERT WIND DATA

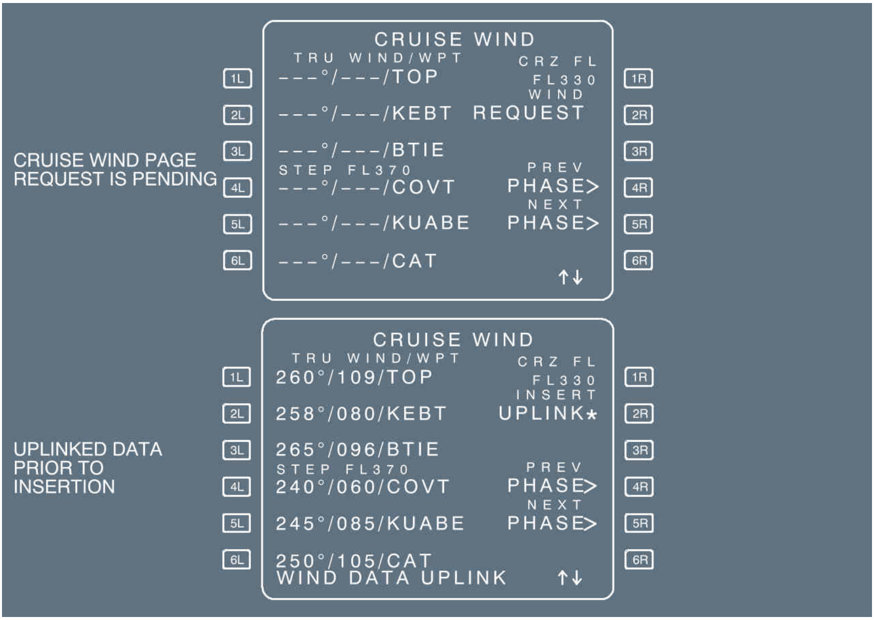
When the uplink message is received, the 2R field is modified, the amber “WIND REQUEST” is replaced by the blue “INSERT UPLINK*”. This prompt, when pressed, enables the flight crew to insert the uplink wind data, phase by phase.
To access, review, insert or delete the uplink wind data of other phases, the crew uses “NEXT PHASE” or “PREV PHASE” key.
If the crew is not satisfied with the uplink winds, the flight crew will delete the winds, phase by phase clearing the “INSERT UPLINK” prompt. This will delete all the uplinked winds of the selected flight phase.


UPLINKED CLIMB WINDS ARE STORED
CLIMB WIND
TRU WIND/ALT
HISTORY
030°/025/FL030
WIND>
INSERT
042°/032/FL080
UPLINK*
NEXT
PHASE>
WIND DATA UPLINK
PRESS
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
CLIMB WIND
TRU WIND/ALT
HISTORY
030°/025/FL030
WIND>
WIND
042°/032/FL080
REQUEST*
[ ]°/[ ]/[ ]
NEXT
PHASE>
NEW WINDS ARE INSERTED

CLIMB WIND PAGE

When a request is pending, the history WIND page cannot be accessed.
When the climb phase is active, the crew cannot request neither modify the climb winds of the active flight plan or secondary flight plan if it is a copy active.

CRUISE WIND PAGE


CRUISE WIND PAGE REQUEST IS PENDING

```
       CRUISE WIND
 TRU WIND/WPT            CRZ FL
---°/---/TOP              FL330
                           WIND
---°/---/KEBT  REQUEST

---°/---/BTIE
STEP FL370                 PREV
---°/---/COVT          PHASE>
                           NEXT
---°/---/KUABE         PHASE>

---°/---/CAT
                            ↑↓
```

UPLINKED DATA PRIOR TO INSERTION

```
       CRUISE WIND
 TRU WIND/WPT            CRZ FL
260°/109/TOP              FL330
                         INSERT
258°/080/KEBT       UPLINK*

265°/096/BTIE
STEP FL370                 PREV
240°/060/COVT          PHASE>
                           NEXT
245°/085/KUABE         PHASE>

250°/105/CAT
WIND DATA UPLINK            ↑↓
```

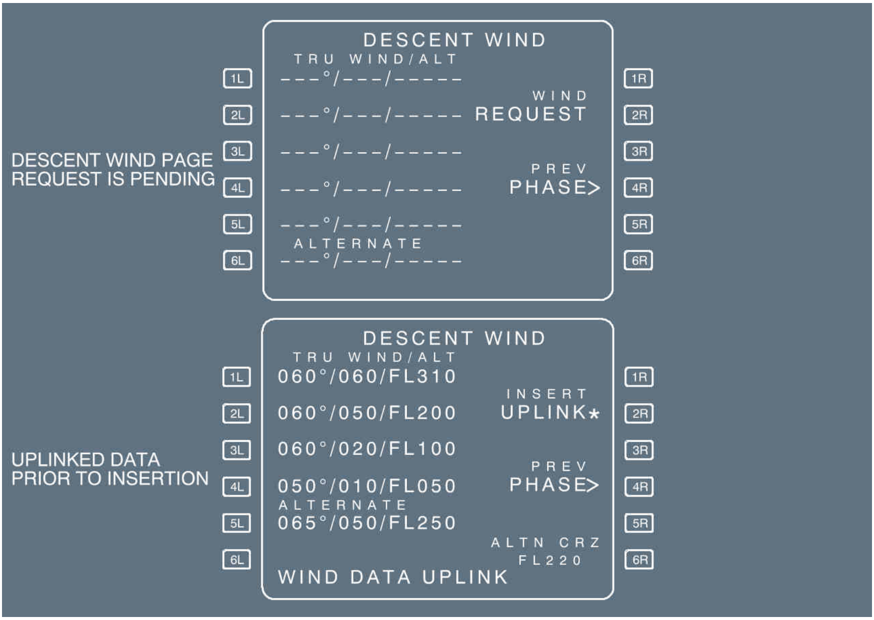
A wind request sent during cruise phase will apply for downpath waypoints of the cruise, descent, approach and alternate phases.

- If the uplink message contains more data and waypoints than the flight plan, the winds at extra waypoints are not considered and automatically discarded. This is transparent to the pilot
- Clearing the INSERT UPLINK* prompt deletes all uplink wind data of the cruise phase. Cruise page reverts to the previous data.

Note: *During cruise, whenever uplink wind data is received and not inserted or cancelled on the CRUISE WIND page, access to the DIR TO function is not possible. The “WIND UPLINK EXISTS” message is displayed on the MCDU scratchpad. Insert or cancel the uplinked wind message first and then access the DIR TO function.*

DESCENT WIND PAGE

The procedures to insert, review or delete descent winds during preflight, climb or cruise phase are described in the above wind general procedure.



DESCENT WIND PAGE
REQUEST IS PENDING

```
      DESCENT WIND
 TRU WIND/ALT
---°/---/-----
                     WIND
---°/---/----- REQUEST
---°/---/-----
                     PREV
---°/---/-----      PHASE>
---°/---/-----
 ALTERNATE
---°/---/-----
```

UPLINKED DATA
PRIOR TO INSERTION

```
      DESCENT WIND
 TRU WIND/ALT
060°/060/FL310
                   INSERT
060°/050/FL200    UPLINK*
060°/020/FL100
                     PREV
050°/010/FL050      PHASE>
ALTERNATE
065°/050/FL250
                 ALTN CRZ
                    FL220
WIND DATA UPLINK
```

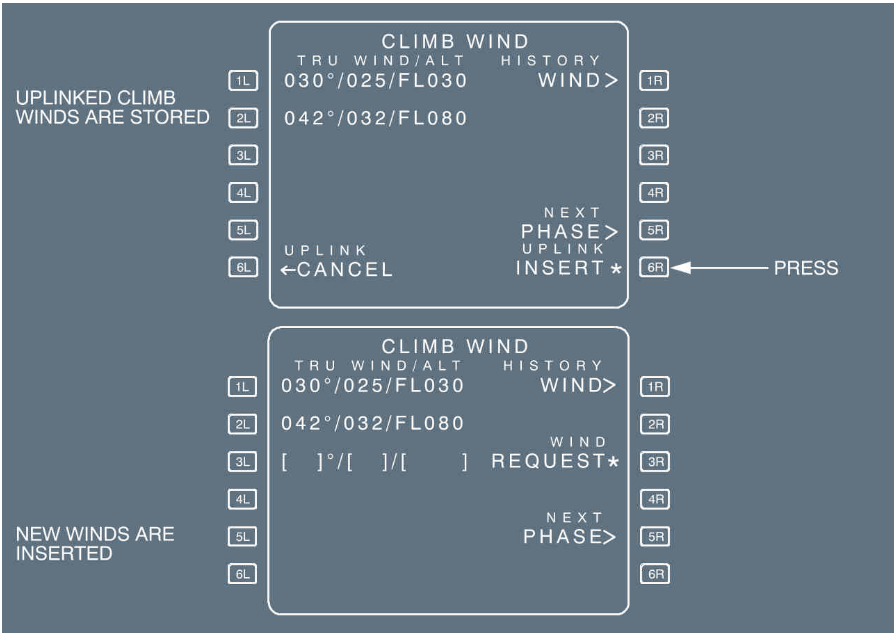
If the alternate wind is not available, dashes are displayed in the field.
In descent, approach or go around phases, the pilot cannot request or modify the descent winds of the active flight plan or secondary flight plan if it is a “COPY ACTIVE”.

Ident.: DSC-22_20-70-B-00000962.0022001 / 02 MAY 23
Applicable to: MSN 04827-04860

6

PROCEDURE TO INSERT WIND DATA

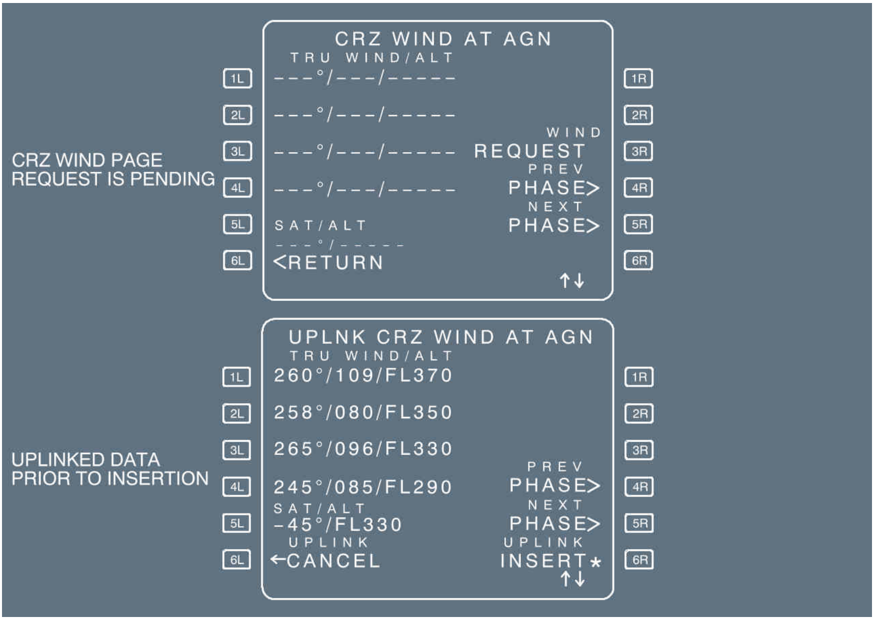
When the uplink message is received, “WIND REQUEST” disappears from the 3R field and “UPLINK” is displayed in large yellow font next to the title.
To access, review, insert or delete the uplink wind data of other phases, the flight crew uses “NEXT PHASE” or “PREV PHASE” key.
If the flight crew is not satisfied with the uplink winds, the flight crew can delete them using the "UPLINK CANCEL" prompt (6L field). This will delete all unplinked winds


CLIMB WIND
TRU WIND/ALT
HISTORY
030°/025/FL030
WIND>
UPLINKED CLIMB WINDS ARE STORED
042°/032/FL080
NEXT
PHASE>
UPLINK
←CANCEL
UPLINK
INSERT*
PRESS
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CLIMB WIND
TRU WIND/ALT
HISTORY
030°/025/FL030
WIND>
042°/032/FL080
WIND
[ ]°/[ ]/[ ]
REQUEST*
NEXT
PHASE>
NEW WINDS ARE INSERTED

CLIMB WIND PAGE

When a request is pending, the history WIND page cannot be accessed.
When the climb phase is active, the flight crew cannot request neither modify the climb winds of the active flight plan or secondary flight plan if it is a copy active.

CRUISE WIND PAGE



CRZ WIND PAGE REQUEST IS PENDING

```
      CRZ WIND AT AGN
  TRU WIND/ALT
---°/---/-----
---°/---/-----
                       WIND
---°/---/-----      REQUEST
                        PREV
---°/---/-----        PHASE>
                        NEXT
SAT/ALT               PHASE>
---°/-----
<RETURN
                          ↑↓
```

UPLINKED DATA PRIOR TO INSERTION

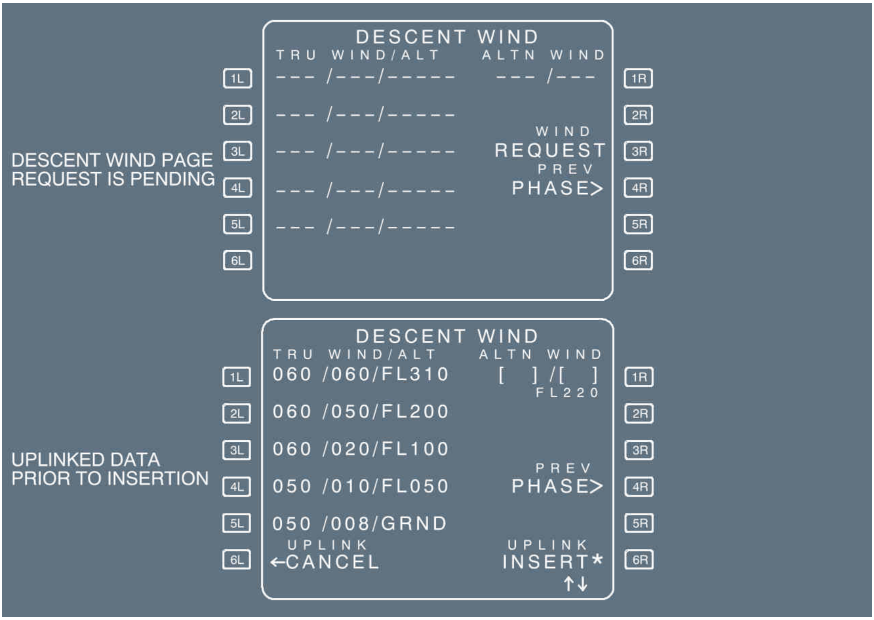
```
    UPLNK CRZ WIND AT AGN
  TRU WIND/ALT
260°/109/FL370
258°/080/FL350
265°/096/FL330
                        PREV
245°/085/FL290        PHASE>
SAT/ALT                 NEXT
-45°/FL330            PHASE>
  UPLINK              UPLINK
←CANCEL              INSERT*
                          ↑↓
```

A wind request sent during cruise phase will apply for downpath waypoints of the cruise, descent, approach and alternate phases.

- If the uplink message contains more data and waypoints than the flight plan, the winds at extra waypoints are not considered and automatically discarded. This is transparent to the flight crew
- Clearing the INSERT UPLINK* prompt deletes all uplink wind data of the cruise phase. Cruise page reverts to the previous data.

DESCENT WIND PAGE

The procedures to insert, review or delete descent winds during preflight, climb or cruise phase are described in the above wind general procedure.



DESCENT WIND PAGE REQUEST IS PENDING

```
         DESCENT WIND
TRU WIND/ALT       ALTN WIND
--- /---/-----     --- /---
--- /---/-----
                       WIND
--- /---/-----      REQUEST
                       PREV
--- /---/-----       PHASE>
--- /---/-----
```

UPLINKED DATA PRIOR TO INSERTION

```
         DESCENT WIND
TRU WIND/ALT       ALTN WIND
060 /060/FL310     [  ] /[  ]
                       FL220
060 /050/FL200
060 /020/FL100
                       PREV
050 /010/FL050       PHASE>
050 /008/GRND
  UPLINK              UPLINK
←CANCEL              INSERT*
                          ↑↓
```

If the alternate wind is not available, dashes are displayed in the field.
In descent, approach or go around phases, the flight crew cannot request or modify the descent winds of the active flight plan or secondary flight plan if it is a “COPY ACTIVE”.

PRINT FUNCTION

Ident.: DSC-22_20-80-00000964.0011001 / 18 MAR 11
Applicable to: MSN 04827-04860

The PRINT function allows various reports to be printed either automatically (when linked to ACARS ◁ or ATSU ◁) or manually.

The manual PRINT function allows printing of FM-generated flight reports and additional data:

F-PLN	INITialization data
T.O.	Data
WIND	Data
PREFLIGHT	REPORT
IN FLIGHT	REPORT
POSTFLIGHT	REPORT

A detailed description of the PRINT FUNCTION pages is provided in *Refer to DSC-22_20-50-10-28 PRINT FUNCTION Pages*.
The print function is available if ACARS ◁ or ATSU ◁ are available or not.
The various flight reports contain most of the prediction information required by the flight crew to monitor the progress of the flight. The resulting documents can therefore be used as realistic master documents, based on the latest data provided by the flight crew to the computer, in terms of ATC clearances and weather information.

PRINT FUNCTION

Ident.: DSC-22_20-80-00000964.0009001 / 18 MAR 11
1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The PRINT function allows various reports to be printed either automatically (when linked to ACARS ◁ or ATSU ◁) or manually.

The manual PRINT function allows printing of FM-generated flight reports and additional data:

F-PLN	INITialization data
T.O.	Data
WIND	Data
PREFLIGHT	REPORT
IN FLIGHT	REPORT
POSTFLIGHT	REPORT

A detailed description of the PRINT FUNCTION pages is provided in *Refer to DSC-22_20-50-10-25 Print Function Pages*.
The print function is available if ACARS ◁ or ATSU ◁ are available or not.

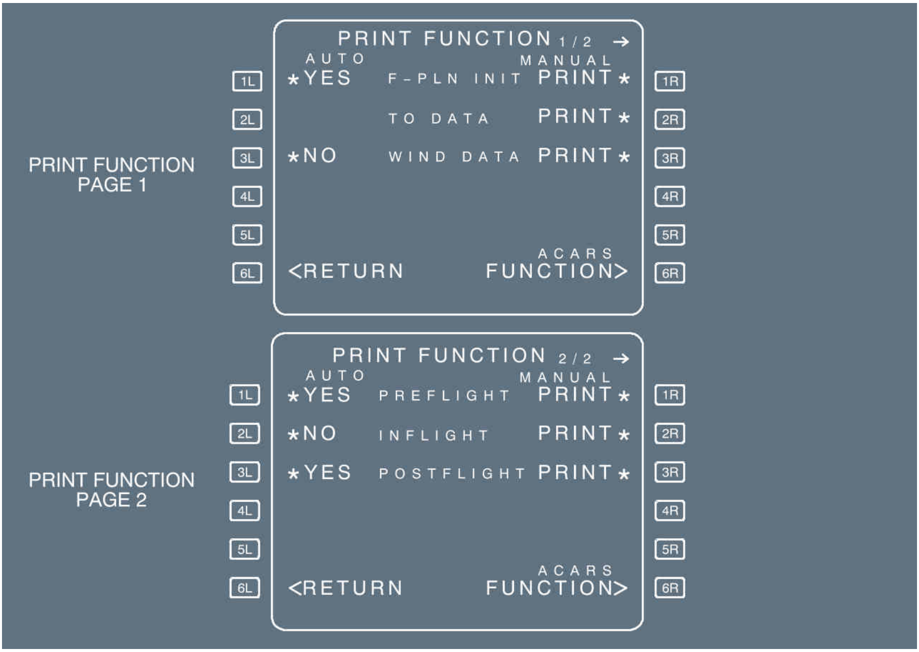
The various flight reports contain most of the prediction information required by the flight crew to monitor the progress of the flight. The resulting documents can therefore be used as realistic master documents, based on the latest data provided by the flight crew to the computer, in terms of ATC clearances and weather information.

PRINT FUNCTION ACCESS

Ident.: DSC-22_20-80-00000965.0004001 / 01 OCT 12

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The PRINT FUNCTION page is accessed:
- From the DATA INDEX A PAGE, or
- From the AOC FUNCTION page (if ACARS ◁).



```
   PRINT FUNCTION 1/2 →
 AUTO              MANUAL
*YES  F-PLN INIT   PRINT*
      TO DATA      PRINT*
*NO   WIND DATA    PRINT*



                    ACARS
<RETURN         FUNCTION>
```

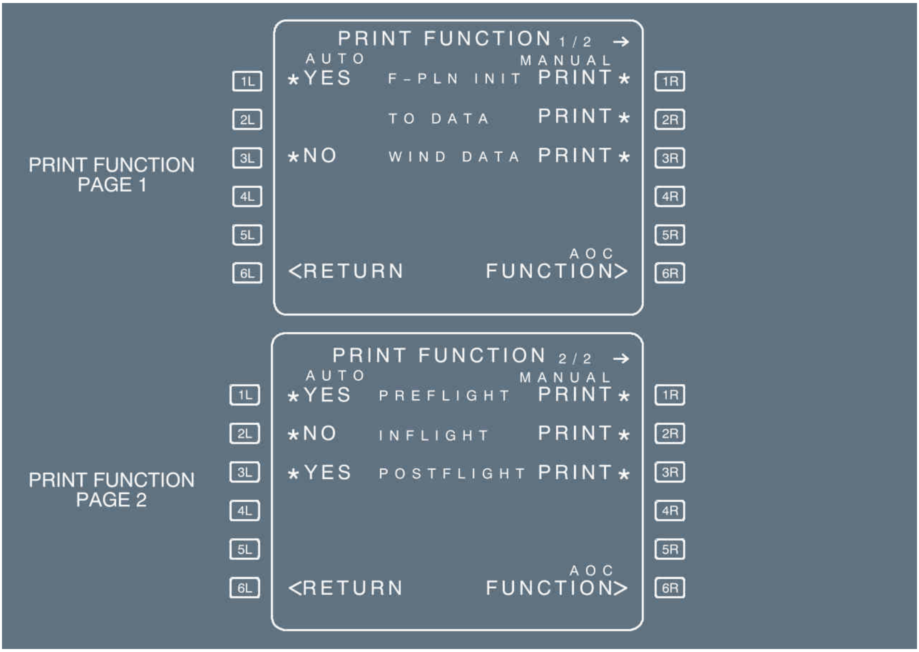
```
   PRINT FUNCTION 2/2 →
 AUTO              MANUAL
*YES  PREFLIGHT    PRINT*
*NO   INFLIGHT     PRINT*
*YES  POSTFLIGHT   PRINT*



                    ACARS
<RETURN         FUNCTION>
```

Note: *For an automatic printing, “time” is the time of the reception of the message. For a manual printing, “time” is the time of the print request.*

PRINT FUNCTION ACCESS

Ident.: DSC-22_20-80-00000965.0018001 / 01 OCT 12
Applicable to: MSN 04827-04860

The PRINT FUNCTION page is accessed:
- From the DATA INDEX A PAGE, or
- From the AOC FUNCTION page (if ACARS ◁).



PRINT FUNCTION PAGE 1

```
        PRINT FUNCTION 1/2   →
    AUTO                  MANUAL
1L *YES   F-PLN INIT     PRINT*  1R
2L        TO DATA        PRINT*  2R
3L *NO    WIND DATA      PRINT*  3R
4L                               4R
5L                               5R
                            AOC
6L <RETURN             FUNCTION> 6R
```

PRINT FUNCTION PAGE 2

```
        PRINT FUNCTION 2/2   →
    AUTO                  MANUAL
1L *YES   PREFLIGHT      PRINT*  1R
2L *NO    INFLIGHT       PRINT*  2R
3L *YES   POSTFLIGHT     PRINT*  3R
4L                               4R
5L                               5R
                            AOC
6L <RETURN             FUNCTION> 6R
```

Note: *For an automatic printing, "time" is the time of the reception of the message. For a manual printing, "time" is the time of the print request.*

ON GROUND BEFORE ENGINE START

Ident.: DSC-22_20-80-00000966.0001001 / 23 JUN 15
3 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

When the overall F-PLN data (lateral, vertical including winds, steps, constraints) and the ZFW and ZFWCG values have been inserted:

SELECT the FUEL PLANNING prompt [3R],

- **If the computed BLOCK fuel does not correspond to the actual block fuel required for the flight:**

  ENTER the actual block required for the flight in the [2R] field,

  PRINT the PREFLIGHT report.

  The flight crew may then use the PREFLIGHT report to monitor the progress of the flight.

  Note: *Before printing the PREFLIGHT report, the flight crew must check that the F-PLNis complete (all F-PLN discontinuities must be cleared) and that all the F-PLN elements (including winds, steps, constraints, alternate airport) have been inserted, in order to obtain an accurate PREFLIGHT report.*

ON GROUND BEFORE ENGINE START

Ident.: DSC-22_20-80-00000966.0008001 / 18 MAR 11
Applicable to: MSN 04827-04860

When the overall F-PLN data (lateral, vertical including winds, steps, constraints) and the ZFW and ZFWCG values have been inserted:

SELECT the FUEL PLANNING prompt [3R],

- **If the computed BLOCK fuel does not correspond to the actual block fuel required for the flight :**

  ENTER the actual block required for the flight in the [2R] field,

PRINT the PREFLIGHT report.

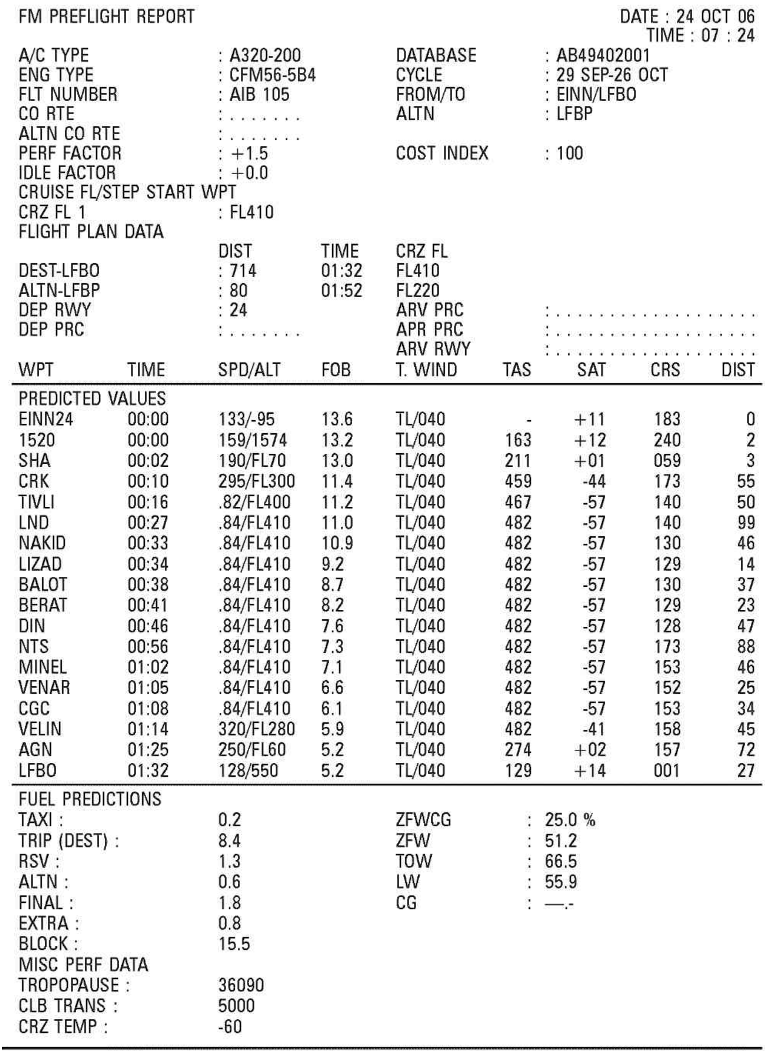
The flight crew may then use the PREFLIGHT report to monitor the progress of the flight.

Note:
1. *Before printing the PREFLIGHT report, the flight crew must check that the F-PLN is complete (all F-PLN discontinuities must be cleared) and that all the F-PLN elements (including winds, steps, constraints, alternate airport) have been inserted, in order to obtain an accurate PREFLIGHT report.*
2. *The following anomalies are known on Thales/Smiths FMS PREFLIGHT reports:*
   - *Head trip wind values are always printed as 000 ° and Tail trip wind values as 180 °.*
   - *The name of PLANA waypoint may erroneously be replaced with “SAURA”.*

EXAMPLE (FM PREFLIGHT REPORT)

Ident.: DSC-22_20-80-00000967.0001001 / 18 MAR 11

4 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**



```
FM PREFLIGHT REPORT                                                   DATE : 24 OCT 06
                                                                         TIME : 07 : 24
A/C TYPE              : A320-200           DATABASE        : AB49402001
ENG TYPE              : CFM56-5B4          CYCLE           : 29 SEP-26 OCT
FLT NUMBER            : AIB 105            FROM/TO         : EINN/LFBO
CO RTE                : . . . . . . . .    ALTN            : LFBP
ALTN CO RTE           : . . . . . . . .
PERF FACTOR           : +1.5               COST INDEX      : 100
IDLE FACTOR           : +0.0
CRUISE FL/STEP START WPT
CRZ FL 1              : FL410
FLIGHT PLAN DATA
                        DIST       TIME    CRZ FL
DEST-LFBO             : 714        01:32   FL410
ALTN-LFBP             : 80         01:52   FL220
DEP RWY               : 24                 ARV PRC         : . . . . . . . . . . . . . . . . . . .
DEP PRC               : . . . . . . . .    APR PRC         : . . . . . . . . . . . . . . . . . . .
                                           ARV RWY         : . . . . . . . . . . . . . . . . . . .
WPT          TIME       SPD/ALT     FOB    T. WIND     TAS      SAT      CRS      DIST
-----------------------------------------------------------------------------------------
PREDICTED VALUES
EINN24       00:00      133/-95     13.6   TL/040        -      +11      183         0
1520         00:00      159/1574    13.2   TL/040      163      +12      240         2
SHA          00:02      190/FL70    13.0   TL/040      211      +01      059         3
CRK          00:10      295/FL300   11.4   TL/040      459      -44      173        55
TIVLI        00:16      .82/FL400   11.2   TL/040      467      -57      140        50
LND          00:27      .84/FL410   11.0   TL/040      482      -57      140        99
NAKID        00:33      .84/FL410   10.9   TL/040      482      -57      130        46
LIZAD        00:34      .84/FL410   9.2    TL/040      482      -57      129        14
BALOT        00:38      .84/FL410   8.7    TL/040      482      -57      130        37
BERAT        00:41      .84/FL410   8.2    TL/040      482      -57      129        23
DIN          00:46      .84/FL410   7.6    TL/040      482      -57      128        47
NTS          00:56      .84/FL410   7.3    TL/040      482      -57      173        88
MINEL        01:02      .84/FL410   7.1    TL/040      482      -57      153        46
VENAR        01:05      .84/FL410   6.6    TL/040      482      -57      152        25
CGC          01:08      .84/FL410   6.1    TL/040      482      -57      153        34
VELIN        01:14      320/FL280   5.9    TL/040      482      -41      158        45
AGN          01:25      250/FL60    5.2    TL/040      274      +02      157        72
LFBO         01:32      128/550     5.2    TL/040      129      +14      001        27
-----------------------------------------------------------------------------------------
FUEL PREDICTIONS
TAXI :                  0.2                ZFWCG        :  25.0 %
TRIP (DEST) :           8.4                ZFW          :  51.2
RSV :                   1.3                TOW          :  66.5
ALTN :                  0.6                LW           :  55.9
FINAL :                 1.8                CG           :  —.-
EXTRA :                 0.8
BLOCK :                 15.5
MISC PERF DATA
TROPOPAUSE :            36090
CLB TRANS :             5000
CRZ TEMP :              -60
```

IN FLIGHT

Ident.: DSC-22_20-80-00000968.0012001 / 18 MAR 11
Applicable to: MSN 04827-04860

Once the aircraft has reached the CRZ FL once, all the latest ATC clearances have been inserted in the FM, when all the WINDS/STEPS have been properly updated:

ACCESS the PRINT FUNCTION page
PRINT the INFLIGHT REPORT

The inflight report provides the list of all the overflown F-PLN waypoints (HISTORY VALUES) with their associated data (Time, ALT, Fuel, ...), and the predictions to all the downpath waypoints (PREDICTED VALUES).
This new document replaces the PREFLIGHT report, since it carries all the latest expected F-PLN changes. It is the new applicable master document used to monitor the progress of the flight.
The inflight report will be printed after each important F-PLN modification.

Note: *The following anomalies are known on Thales/Smiths FMS IN FLIGHT reports:*
- *Winds not yet inserted with the UPDATE INSERT prompt are erroneously printed on the INFLIGHT print as if they had been inserted.*
- *The distance on the last sequenced waypoint is erroneous.*
- *Head trip wind values are always printed as 000 ° and Tail trip wind values as 180 °.*
- *The TO waypoint of a DIR TO with ABEAM is not printed.*
- *The name of PLANA waypoint may erroneously be replaced with “SAURA”.*

IN FLIGHT

Ident.: DSC-22_20-80-00000968.0007001 / 18 MAR 11
5 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

Once the aircraft has reached the CRZ FL once, all the latest ATC clearances have been inserted in the FM, when all the WINDS/STEPS have been properly updated:

ACCESS the PRINT FUNCTION page
PRINT the INFLIGHT REPORT

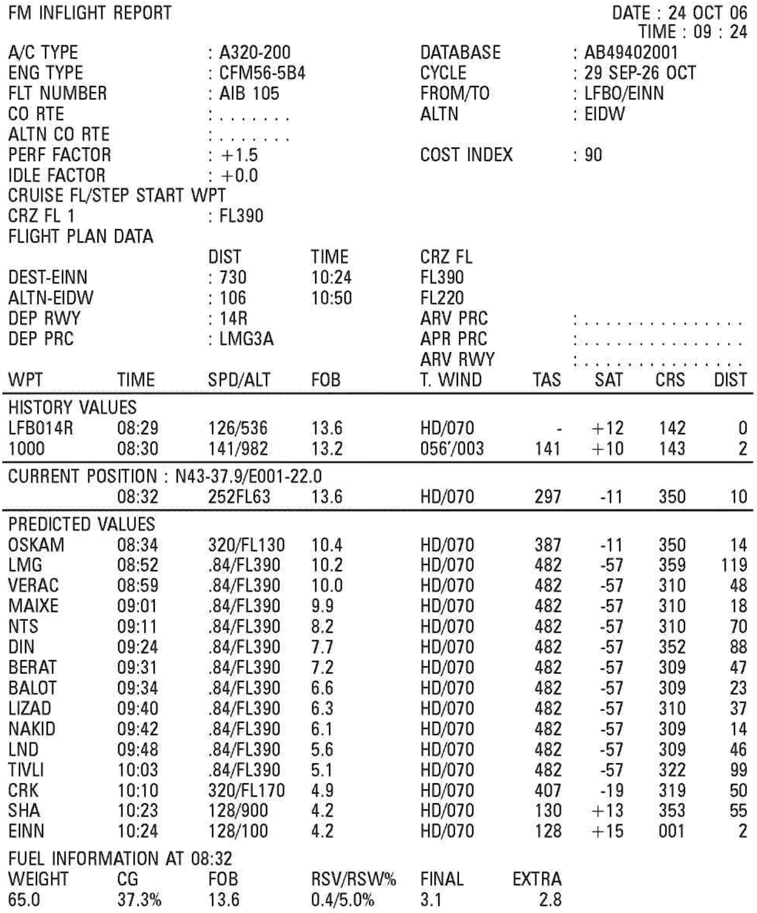
The inflight report provides the list of all the overflown F-PLN waypoints (HISTORY VALUES) with their associated data (Time, ALT, Fuel, ...), and the predictions to all the downpath waypoints (PREDICTED VALUES).
This new document replaces the PREFLIGHT report, since it carries all the latest expected F-PLN changes. It is the new applicable master document used to monitor the progress of the flight.
The inflight report will be printed after each important F-PLN modification.

Note: *If the selected Fuel Unit option is pounds, the HISTORY FOB values may be incorrectly printed in tons on the INFLIGHT REPORT. The CURRENT and PREDICTED FOB values, however, are correctly printed in pounds.*

EXAMPLE (FM INFLIGHT REPORT)

Ident.: DSC-22_20-80-00000969.0001001 / 18 MAR 11

6 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**



```
FM INFLIGHT REPORT                                            DATE : 24 OCT 06
                                                                TIME : 09 : 24
A/C TYPE               : A320-200              DATABASE     : AB49402001
ENG TYPE               : CFM56-5B4             CYCLE        : 29 SEP-26 OCT
FLT NUMBER             : AIB 105               FROM/TO      : LFBO/EINN
CO RTE                 : . . . . . . . .       ALTN         : EIDW
ALTN CO RTE            : . . . . . . . .
PERF FACTOR            : +1.5                  COST INDEX   : 90
IDLE FACTOR            : +0.0
CRUISE FL/STEP START WPT
CRZ FL 1               : FL390
FLIGHT PLAN DATA
                         DIST      TIME        CRZ FL
DEST-EINN              : 730       10:24       FL390
ALTN-EIDW              : 106       10:50       FL220
DEP RWY                : 14R                   ARV PRC      : . . . . . . . . . . . . . . .
DEP PRC                : LMG3A                 APR PRC      : . . . . . . . . . . . . . . .
                                               ARV RWY      : . . . . . . . . . . . . . . .
WPT        TIME        SPD/ALT     FOB         T. WIND        TAS     SAT     CRS    DIST
------------------------------------------------------------------------------------------
HISTORY VALUES
LFB014R    08:29       126/536     13.6        HD/070           -     +12     142       0
1000       08:30       141/982     13.2        056'/003       141     +10     143       2
------------------------------------------------------------------------------------------
CURRENT POSITION : N43-37.9/E001-22.0
           08:32       252FL63     13.6        HD/070         297     -11     350      10
------------------------------------------------------------------------------------------
PREDICTED VALUES
OSKAM      08:34       320/FL130   10.4        HD/070         387     -11     350      14
LMG        08:52       .84/FL390   10.2        HD/070         482     -57     359     119
VERAC      08:59       .84/FL390   10.0        HD/070         482     -57     310      48
MAIXE      09:01       .84/FL390   9.9         HD/070         482     -57     310      18
NTS        09:11       .84/FL390   8.2         HD/070         482     -57     310      70
DIN        09:24       .84/FL390   7.7         HD/070         482     -57     352      88
BERAT      09:31       .84/FL390   7.2         HD/070         482     -57     309      47
BALOT      09:34       .84/FL390   6.6         HD/070         482     -57     309      23
LIZAD      09:40       .84/FL390   6.3         HD/070         482     -57     310      37
NAKID      09:42       .84/FL390   6.1         HD/070         482     -57     309      14
LND        09:48       .84/FL390   5.6         HD/070         482     -57     309      46
TIVLI      10:03       .84/FL390   5.1         HD/070         482     -57     322      99
CRK        10:10       320/FL170   4.9         HD/070         407     -19     319      50
SHA        10:23       128/900     4.2         HD/070         130     +13     353      55
EINN       10:24       128/100     4.2         HD/070         128     +15     001       2
FUEL INFORMATION AT 08:32
WEIGHT     CG          FOB         RSV/RSW%    FINAL       EXTRA
65.0       37.3%       13.6        0.4/5.0%    3.1           2.8
```

Note: *In case of a major failure such as an engine out, a new print will be done when time permits.*

REACHING THE GATE AFTER LANDING

Ident.: DSC-22_20-80-00000970.0012001 / 18 MAR 11
Applicable to: MSN 04827-04860

The POSTFLIGHT REPORT gives a complete list of all the overflown waypoints during the flight (HISTORY VALUES).

Furthermore it provides:
- FUEL/TIME summary
- IRS Drift and G/S

Once at the gate, after engine shutdown:
- ACCESS the PRINT FUNCTION page
- PRINT the POSTFLIGHT REPORT

Note: *The following anomalies are known on Thales/Smiths FMS POST FLIGHT reports:*
- *The IRS Drift value on the POST FLIGHT REPORT may be erroneous.*
- *Some ABEAM waypoints may not be printed on the POST FLIGHT REPORT.*
- *Head trip wind values are always printed as 000 ° and Tail trip wind values as 180 °.*
- *The name of PLANA waypoint may erroneously be replaced with “SAURA”.*

REACHING THE GATE AFTER LANDING

Ident.: DSC-22_20-80-00000970.0007001 / 18 MAR 11
7 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The POSTFLIGHT REPORT gives a complete list of all the overflown waypoints during the flight (HISTORY VALUES).

Furthermore it provides:
- FUEL/TIME summary
- IRS Drift and G/S

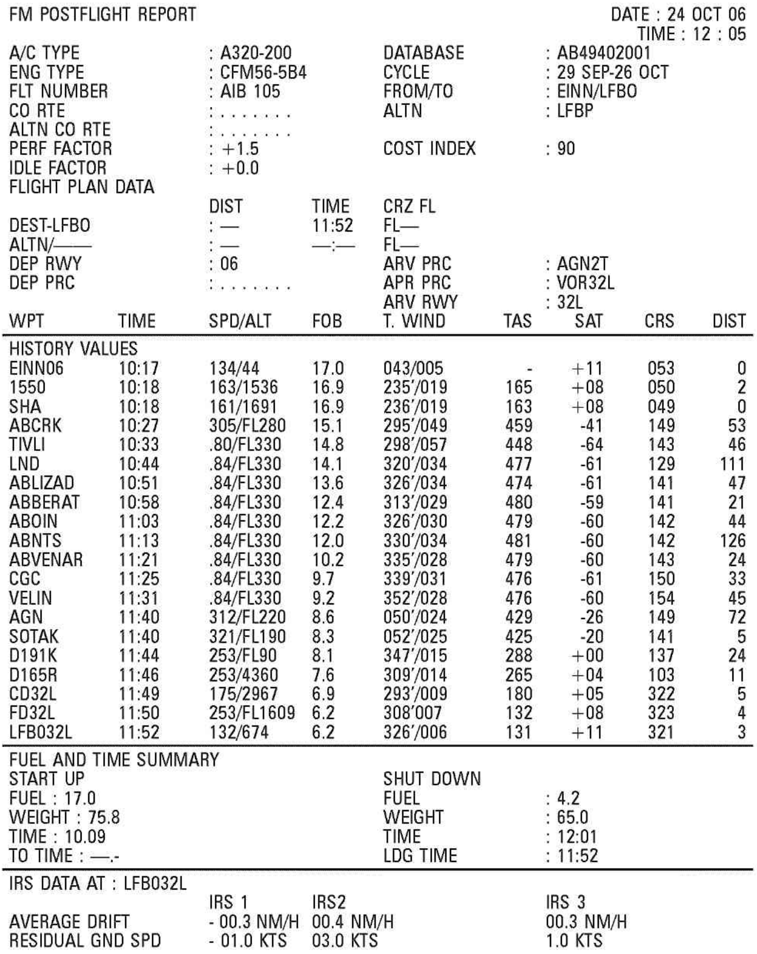
When at the gate, after engine shutdown:
- ACCESS the PRINT FUNCTION page
- PRINT the POSTFLIGHT REPORT

Note: *If the selected Fuel Unit option is pounds, the HISTORY FOB values may be incorrectly printed in tons on the POSTFLIGHT REPORT.*

EXAMPLE (FM POSTFLIGHT REPORT)

Ident.: DSC-22_20-80-00000971.0001001 / 18 MAR 11

8 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**



```
FM POSTFLIGHT REPORT                                                    DATE : 24 OCT 06
                                                                        TIME : 12 : 05
A/C TYPE             : A320-200         DATABASE         : AB49402001
ENG TYPE             : CFM56-5B4        CYCLE            : 29 SEP-26 OCT
FLT NUMBER           : AIB 105          FROM/TO          : EINN/LFBO
CO RTE               : . . . . . . .    ALTN             : LFBP
ALTN CO RTE          : . . . . . . .
PERF FACTOR          : +1.5             COST INDEX       : 90
IDLE FACTOR          : +0.0
FLIGHT PLAN DATA
                       DIST      TIME   CRZ FL
DEST-LFBO            : —         11:52  FL—
ALTN/——              : —         —:—    FL—
DEP RWY              : 06               ARV PRC          : AGN2T
DEP PRC              : . . . . . . .    APR PRC          : VOR32L
                                        ARV RWY          : 32L
WPT        TIME      SPD/ALT     FOB    T. WIND       TAS      SAT      CRS      DIST
HISTORY VALUES
EINN06     10:17     134/44      17.0   043/005         -      +11      053         0
1550       10:18     163/1536    16.9   235'/019      165      +08      050         2
SHA        10:18     161/1691    16.9   236'/019      163      +08      049         0
ABCRK      10:27     305/FL280   15.1   295'/049      459      -41      149        53
TIVLI      10:33     .80/FL330   14.8   298'/057      448      -64      143        46
LND        10:44     .84/FL330   14.1   320'/034      477      -61      129       111
ABLIZAD    10:51     .84/FL330   13.6   326'/034      474      -61      141        47
ABBERAT    10:58     .84/FL330   12.4   313'/029      480      -59      141        21
ABOIN      11:03     .84/FL330   12.2   326'/030      479      -60      142        44
ABNTS      11:13     .84/FL330   12.0   330'/034      481      -60      142       126
ABVENAR    11:21     .84/FL330   10.2   335'/028      479      -60      143        24
CGC        11:25     .84/FL330   9.7    339'/031      476      -61      150        33
VELIN      11:31     .84/FL330   9.2    352'/028      476      -60      154        45
AGN        11:40     312/FL220   8.6    050'/024      429      -26      149        72
SOTAK      11:40     321/FL190   8.3    052'/025      425      -20      141         5
D191K      11:44     253/FL90    8.1    347'/015      288      +00      137        24
D165R      11:46     253/4360    7.6    309'/014      265      +04      103        11
CD32L      11:49     175/2967    6.9    293'/009      180      +05      322         5
FD32L      11:50     253/FL1609  6.2    308'007       132      +08      323         4
LFB032L    11:52     132/674     6.2    326'/006      131      +11      321         3
FUEL AND TIME SUMMARY
START UP                                SHUT DOWN
FUEL : 17.0                             FUEL             : 4.2
WEIGHT : 75.8                           WEIGHT           : 65.0
TIME : 10.09                            TIME             : 12:01
TO TIME : —.-                           LDG TIME         : 11:52
IRS DATA AT : LFB032L
                       IRS 1        IRS2                 IRS 3
AVERAGE DRIFT        - 00.3 NM/H  00.4 NM/H              00.3 NM/H
RESIDUAL GND SPD     - 01.0 KTS   03.0 KTS               1.0 KTS
```

HOW TO CHANGE T.O DATA OR DEPARTURE RUNWAY AFTER REJECTED TAKEOFF

Ident.: DSC-22_20-85-00023074.0001001 / 04 NOV 20
Applicable to: ALL

GENERAL

This chapter provides an operational recommendation to the flight crew, on how to modify the FMS T.O DATA or departure runway after a rejected takeoff.

DESCRIPTION

In case of rejected takeoff (with an aircraft speed above 90 kt or with sufficient thrust), the FMS remains in TAKEOFF phase and the flight crew cannot modify the FMS departure T.O DATA or departure runway in the active flight plan.

OPERATIONAL RECOMMENDATION

In that case, if the flight crew has to change the FMS T.O DATA in the active flight plan, the flight crew should proceed as follows:

- Delete the SEC F-PLN
- Initialize the SEC F-PLN with the new T.O DATA and/or new departure runway
- Activate the SEC F-PLN.

INSERTION OF APPROACH MINIMA

1 Ident.: DSC-22_20-85-A-00015220.0027001 / 04 SEP 18
Applicable to: MSN 11531

QNH USE FOR AIRCRAFT NOT EQUIPPED WITH QFE OPTION

This table explains how the flight crew must insert the approach minimum on the MCDU PERF APPR page.

		Guidance Modes			
		LOC G/S CAT II & CAT III approaches	LOC G/S CAT I approaches	F-LOC F-G/S FINAL APP	NAV FPA LOC FPA LOC B/C FPA ◁ LOC F-G/S LOC B/C F-G/S ◁ TRK FPA
MCDU PERF APPR page	BARO field	---	DA	DA or MDA	MDA
	RADIO field	DH or RA	---		
FMA display		“RADIO XXX”	“BARO XXXX”		

Ident.: DSC-22_20-85-A-00015220.0001001 / 21 MAR 17

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**

QNH USE FOR AIRCRAFT NOT EQUIPPED WITH QFE OPTION

This table explains how the flight crew must insert the approach minimum on the MCDU PERF APPR page.

		Guidance Modes			
		LOC G/S CAT II & CAT III approaches	LOC G/S CAT I approaches	FINAL APP	NAV FPA LOC FPA LOC B/C FPA ◁ TRK FPA
MCDU PERF APPR page	MDA field	---	DA	DA or MDA	MDA
	DH field	DH or RA	---		
FMA display		“DH XXX”	“MDA XXXX”		

Ident.: DSC-22_20-85-A-00015220.0011001 / 21 MAR 17

3 **Applicable to: MSN 01459, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

QNH USE FOR AIRCRAFT NOT EQUIPPED WITH QFE OPTION

This table explains how the flight crew must insert the approach minimum on the MCDU PERF APPR page.

		Guidance Modes			
		LOC G/S CAT II & CAT III approaches	LOC G/S CAT I approaches	FINAL APP	NAV FPA LOC FPA LOC B/C FPA ◁ TRK FPA
MCDU PERF APPR page	BARO field	---	DA	DA or MDA	MDA
	RADIO field	DH or RA	---		
FMA display		“RADIO XXX”	“BARO XXXX”		

4 Ident.: DSC-22_20-85-A-00015221.0035001 / 04 SEP 18

Applicable to: MSN 11531

QNH USE FOR AIRCRAFT EQUIPPED WITH QFE OPTION

This table explains how the flight crew must insert the approach minimum on the MCDU PERF APPR page.

		Guidance Modes			
		LOC G/S CAT II & CAT III approaches	LOC G/S CAT I approaches	F-LOC F-G/S FINAL APP	NAV FPA LOC FPA LOC B/C FPA LOC F-G/S LOC B/C F-G/S TRK FPA
MCDU PERF APPR page	BARO field	---	DA	DA or MDA	MDA
	RADIO field	DH or RA	---		
FMA display		"RADIO XXX"	"BARO XXXX"		

Ident.: DSC-22_20-85-A-00015222.0001001 / 21 MAR 17
Applicable to: ALL

QFE USE FOR AIRCRAFT NOT EQUIPPED WITH QFE OPTION

The crew should not use QFE on aircraft with a "QNH only" pin programming (incorrect profile computation of the managed vertical modes CLB, DES and FINAL APPR, possible false GPWS warnings in mountainous areas).

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AUTOMATIC FMGC RESET AND RESYNCHRONIZATION

Ident.: DSC-22_20-90-10-A-00012661.0001001 / 04 NOV 20
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

FM RESET

When the FM software cannot work properly or receives instructions to perform impossible operations, it automatically resets itself. A resynchronization with the other FM always follows. When the reset is a minor one, the system will recover by itself. One single reset lasts 2 to 3 s maximum followed by 25 s of resynchronization.

When the reset is a major one:
- Resets recur at short intervals (several in 2 or 3 min)
- The memories are cleared, leading to the loss of F-PLN, GW, CI, CRZ FL, MCDU-entered speeds and NAVAIDs and to database switching.

CAUTION	If three dual FM resets occur in 2 min, pilot-entered data is lost. If a dual reset is identified, it is recommended that the flight crew does not perform again the last MCDU actions for 1 min (in order to avoid a potential second dual reset, leading to the loss of pilot-entered data).

Ident.: DSC-22_20-90-10-A-00012661.0003001 / 04 NOV 20
Applicable to: MSN 04827-04860

FM RESET

When the FM software cannot work properly or receives instructions to perform impossible operations, it automatically resets itself. A resynchronization with the other FM always follows. When the reset is a minor one, the system will recover by itself. One single reset lasts 2 to 3 s maximum followed by a resynchronization.

When the reset is a major one:
- Resets recur at short intervals (several in 1 min)
- The memories are cleared, leading to the loss of F-PLN, GW, CI, CRZ FL, MCDU-entered speeds and NAVAIDs.

CAUTION	If four dual FM resets occur in 3 min, pilot-entered data is lost. If a dual reset is identified, it is recommended that the flight crew does not perform again the last MCDU actions for 1 min (in order to avoid a potential second dual reset, leading to the loss of pilot-entered data).

Ident.: DSC-22_20-90-10-A-00012662.0001001 / 10 JAN 11

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

FM RESYNCHRONIZATION

An FM resynchronization automatically occurs after an FM reset but it may occur independently each time self comparisons between FM1 and FM2 reveal discrepancies.
One single resynchronization lasts approximately 25 s.
If 5 several resynchronizations occur within 5 min, independent mode commences.

Ident.: DSC-22_20-90-10-A-00012662.0002001 / 19 AUG 10

Applicable to: MSN 04827-04860

FM RESYNCHRONIZATION

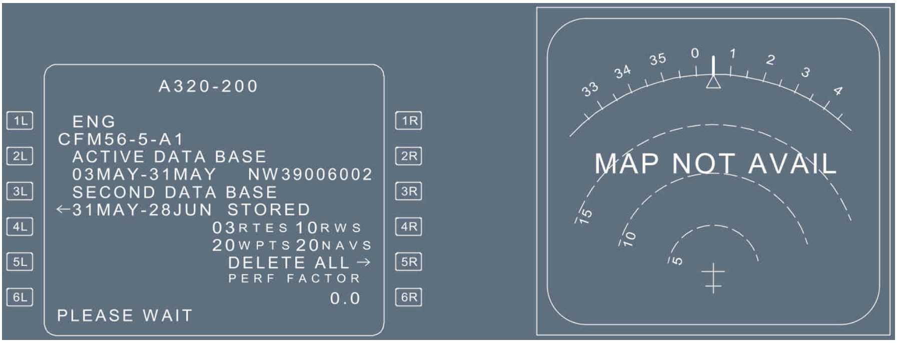
An FM resynchronization automatically occurs after an FM reset. But, it may occur independently each time self-comparisons between the FM1 and FM2 reveal discrepancies.
If three successive resynchronizations fail, independent mode commences.

Ident.: DSC-22_20-90-10-A-00012663.0001001 / 29 SEP 15

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

FMGC STATUS DURING A RESET/RESYNCHRONIZATION

While a RESET/RESYNCH occurs:
- The ND shows “MAP NOT AVAIL”
- The MCDU reverts to the A/C STATUS page, with “PLEASE WAIT” displayed in the scratchpad
- Autotuning of Navaids (VOR, DME, ADF) are lost on the failed side
- AP and managed modes may be transiently lost (reversion to HDG/V/S or TRK/FPA)
- If the pilot presses a key while the scratchpad is showing “PLEASE WAIT”, there is no change at MCDU level. This is normal, and the crew should not respond by pulling the MCDU circuit breaker.



```
A320-200
 ENG
CFM56-5-A1
 ACTIVE DATA BASE
 03MAY-31MAY    NW39006002
 SECOND DATA BASE
←31MAY-28JUN  STORED
              03RTES 10RWS
              20WPTS 20NAVS
              DELETE ALL →
               PERF FACTOR
                       0.0
PLEASE WAIT
```

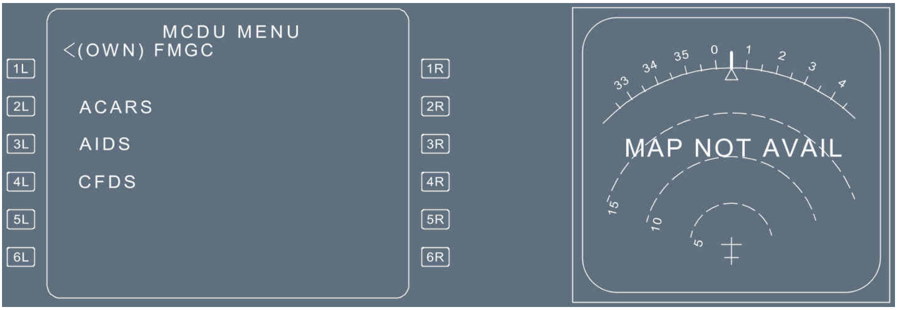
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
33
34
35
0
1
2
3
4
MAP NOT AVAIL
15
10
5

Ident.: DSC-22_20-90-10-A-00012663.0002001 / 10 JAN 11
Applicable to: MSN 04827-04860

FMGC STATUS DURING A RESET/RESYNCHRONIZATION

While a RESET/RESYNCH occurs:

- The ND shows “MAP NOT AVAIL”
- The MCDU may revert to the MCDU MENU page
- Autotuning of Navaids (VOR, DME, ADF) are lost on the failed side
- AP/FD /A/THR modes may be transiently lost
- A reversion to basic modes (HDG/V/S or TRK/FPA) occurs if the FM1 (FM2) resets while AP1 (AP2) is engaged.



MCDU MENU
<(OWN) FMGC
ACARS
AIDS
CFDS
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
33
34
35
0
1
2
3
4
MAP NOT AVAIL
15
10
5

Ident.: DSC-22_20-90-10-A-00012664.0001001 / 10 JAN 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

SINGLE RESET OR DUAL RESET WITH AUTORECOVERY

If the RESET/RESYNCH succeeds, all functions are recovered.

Note: *When an FMGC is recovered, its FD if previously engaged, is also recovered and its status is displayed on the FMA.*

PROCEDURE

RESELECT the convenient MCDU page.
REENGAGE managed modes and the AP.

WAIT 1 min after the "PLEASE-WAIT" message has disappeared, before engaging the AP/FD of the failed FMGC.

If "MAP NOT AVAIL" remains displayed, along with "SET OFFSIDE RNG/MODE" on one ND, temporarily SELECT a different mode on the corresponding EIS control panel.

Ident.: DSC-22_20-90-10-A-00012664.0002001 / 10 JAN 11
4 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

SINGLE RESET OR DUAL RESET WITH AUTORECOVERY

If the RESET/RESYNCH succeeds, all functions are recovered.

Note: *When an FMGC is recovered, its FD if previously engaged, is also recovered and its status is displayed on the FMA.*

PROCEDURE

RESELECT the convenient MCDU page.
REENGAGE managed modes and the AP.

WAIT 1 min after the "PLEASE-WAIT" message has disappeared, before engaging the AP/FD of the failed FMGC.

If both "MAP NOT AVAIL" and "SET OFFSIDE RNG/MODE" remain displayed on one ND, or if "OFFSIDE FM CONTROL" remains displayed, temporarily SELECT a different mode or range on the corresponding EIS control panel.

Ident.: DSC-22_20-90-10-A-00012664.0019001 / 10 JAN 11
Applicable to: MSN 04827-04860

SINGLE RESET OR DUAL RESET WITH AUTORECOVERY

If the RESET/RESYNCH succeeds, all functions are recovered.

Note: *When an FMGC is recovered, its FD if previously engaged, is also recovered and its status is displayed on the FMA.*

PROCEDURE

RESELECT the convenient MCDU page.
REENGAGE managed modes, and the AP and A/THR, if necessary.

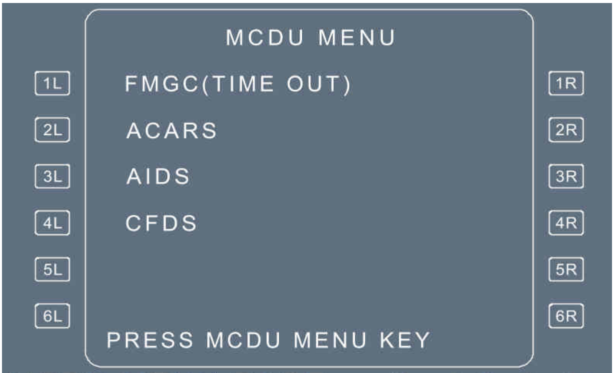
If both “MAP NOT AVAIL” and “SET OFFSIDE RNG/MODE” remain displayed on one ND, or if “OFFSIDE FM CONTROL” remains displayed, temporarily SELECT a different mode or range on the corresponding EIS control panel.

Ident.: DSC-22_20-90-10-A-00012665.0001001 / 10 JAN 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

SINGLE LATCH

If five successive resets occur, the failing FMGC will latch, and single mode operation will start.

While failed, the following occurs:
- The failed ND side displays “MAP NOT AVAIL” and “SELECT OFFSIDE RNG/MODE” (if the NDs are not both in the same mode or range)
- The MCDU reverts to the MENU PAGE and shows an “FMGC TIME OUT” prompt
- If the AP and FD were previously engaged on the failed side, the AP and FD disengage and the right-hand column of the FMA shows that the operating FD is offside. The ECAM displays the “AP OFF” warning, and the master warning light and audio remind the pilot of the AP disengagement
- All functions are restored on the operative side.



MCDU MENU PAGE on the failed side

PROCEDURE

Select the same range and mode on both NDs to give the failed ND side something to display. Select any function key on the affected FMGC MCDU. (The page will display “OPP FMGC IN PROGRESS”).

Both MCDUs are now driven by the other FMGC, and only one AP/FD is available. The system works in SINGLE Mode.

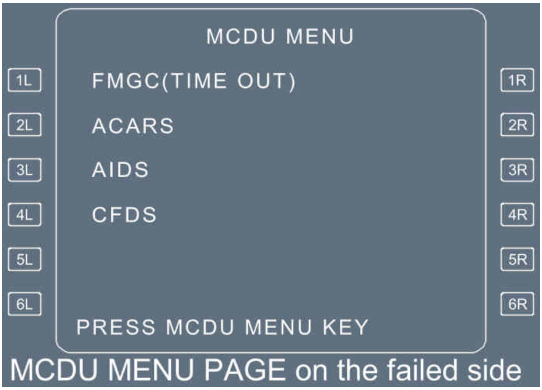
Perform a manual reset of the failed FMGC, when convenient.

Ident.: DSC-22_20-90-10-A-00012665.0002001 / 16 NOV 11
5 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

SINGLE LATCH

If five successive resets occur, the failing FMGC will latch, and single mode operation will start.

While failed, the following occurs:
- On the ND usually associated with the failed FMGC:
  If the NDs are not both in the same mode or range, the associated ND displays “MAP NOT AVAIL” and “SET OFFSIDE RNG/MODE”. If the NDs are in the same mode and range, the associated ND displays the “OFFSIDE FM CONTROL” amber message
- The MCDU reverts to the MENU PAGE and shows an “FMGC TIME OUT” prompt
- If the AP and FD were previously engaged on the failed side, the AP and FD disengage and the right-hand column of the FMA shows that the operating FD is offside. The ECAM displays the “AP OFF” warning, and the master warning light and audio remind the pilot of the AP disengagement.
- All functions are restored on the operative side.



MCDU MENU PAGE on the failed side

PROCEDURE

Select the same range and mode on both NDs to give the failed ND side something to display. Select any function key on the affected FMGC MCDU. (The page will display “OPP FMGC IN PROGRESS”).

Both MCDUs are now driven by the other FMGC, and only one AP/FD is available. The system works in SINGLE Mode.

Perform a manual reset of the failed FMGC, when convenient.

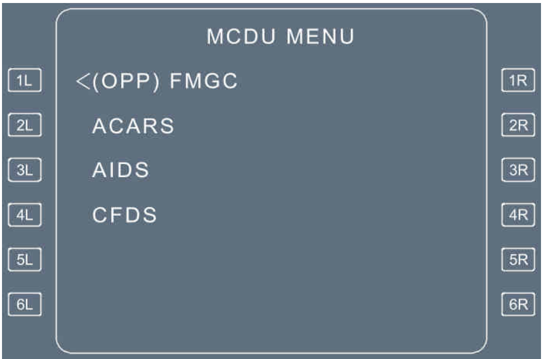
Ident.: DSC-22_20-90-10-A-00012665.0033001 / 10 JAN 11
Applicable to: MSN 04827-04860

SINGLE LATCH

If five successive resets occur in 4 min, the failing FMGC will latch, and single mode operation will start.

While failed, the following occurs:

- On the ND usually associated with the failed FMGC:
  If the NDs are not both in the same mode or range, the associated ND displays “MAP NOT AVAIL” and “SET OFFSIDE RNG/MODE”. If the NDs are in the same mode and range, the associated ND displays the “OFFSIDE FM CONTROL” amber message
- The MCDU reverts to the MENU PAGE and shows an “(OPP) FMGC” prompt
- If the AP and FD were previously engaged on the failed side, the AP and FD disengage and the right-hand column of the FMA shows that the operating FD is offside. The ECAM displays the “AP OFF” warning, and the master warning light and audio remind the pilot of the AP disengagement
- All functions are restored on the operative side.



MCDU MENU PAGE on the failed side

PROCEDURE

Select the same range and mode on both NDs to give the failed ND side something to display. Select any function key on the affected FMGC MCDU. (The page will display “OPP FMGC IN PROCESS”).

Both MCDUs are now driven by the other FMGC, and only one AP/FD is available. The system works in SINGLE Mode.

Perform a manual reset of the failed FMGC, when convenient.

Ident.: DSC-22_20-90-10-A-00014936.0001001 / 21 MAR 17
Applicable to: MSN 04827-04860

SINGLE LATCH WITH AP AND FD STILL AVAILABLE IN MANAGED MODES ON BOTH SIDES

In some cases, one FMS may fail and latch (no auto-recovery), but the FMS may continue to send valid but frozen guidance targets to the FG. These frozen guidance targets correspond to the last valid targets sent by the FMS before the failure.
In that case, the FG does not see the FMS failure.
Both AP and FD may remain available. If the AP is engaged on the affected side, the failed FMGC continues to guide the aircraft in managed mode (speed, vertical and lateral) with the frozen targets.
When the FMGC fails, the cockpit effects are as follows:

PFD

- There is no change on the FMA:
  - No mode reversion, no automatic AP disconnection, and no automatic A/THR disconnection
  - "1FD2" may remain displayed on both FMA
- The FD orders are erroneous on the side of the failed FMGC, since based on the frozen guidance targets
- The FD orders are still available and correct on the opposite side.

ND

The flight crew may encounter one of the following two situations:

- Situation 1: The ND associated to the failed FMGC displays "MAP NOT AVAIL" in red, and "GPS PRIMARY LOST" in amber
- Situation 2: The ND associated to the failed FMGC displays either:
  - The map coming from the opposite FMS and "OFFSIDE FM CONTROL" in amber, if both NDs are in the same range and mode, or
  - "MAP NOT AVAIL" in red and "SET OFFSIDE RNG/MODE" in amber, if both NDs are not in the same range and mode.

MCDU

- The MCDU of the failed FMGC is frozen
- The other MCDU displays "INDEPENDENT OPERATION" in amber.

ECAM

- The FWS may trigger the ECAM alert "CAB PR LDG ELEV FAULT".

PROCEDURE

DISREGARD the information coming from the failed side

DO NOT USE the AP on the affected side

- **If the AP is engaged on the affected side:**

  FLY the aircraft back on the intended path

  ENGAGE the AP on the operative side, according to the Recommended Practice for Autopilot Engagement (*Refer to FCTM/AS-FG-10-1 Recommended Practice for Autopilot (AP) Engagement*)

- **If time permits:**

  PERFORM a long reset of the failed FMGC

- **If the failure affects FMGC1, and if the FMGC1 is still failed and latched before the approach:**

  DO NOT USE AP1 for the approach

  - **Before disconnecting AP2:**

    REVERT to selected speed

    DISCONNECT A/THR

    Note: *It prevents the A/THR from switching to the frozen speed target of the failed FMGC1 when the flight crew disconnects the AP2 for landing.*

Ident.: DSC-22_20-90-10-A-00012666.0001001 / 03 NOV 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

DUAL RESET WITH LOSS OF DATA AND AUTORECOVERY

Three successive dual resets without result erases all flight crew-entered data (F-PLN, GW, CRZ FL, CI, etc.).

When FMGS recovery is obtained:
- Database cycle may have switched
- The FM position bias is lost. The FM position returns to the MIX IRS position.
- Autotuning the VOR/DME is restored, based on the aircraft’s IRS position
- FMGS tuning of the ILS and ADF is not possible
- Lateral and vertical managed mode cannot reengage
- The CAB PR LDG ELEV FAULT alert is triggered
- A map display may be lost on one ND.

PROCEDURE

When the system recovers:
If the FMGC remains in Takeoff phase, CHANGE the vertical mode in order to recover the next flight phase.

SELECT the initial database.

SELECT DIR TO the required downpath waypoint.
SELECT LAT REV at the downpath waypoint, and redefine the DESTINATION.
SELECT the FUEL PRED page, and enter GW.
SELECT the PROG page, and enter CRZ FL.
SELECT the PERF page, and enter CI.
CHECK or reengage (as appropriate) the relevant speed/Mach target and vertical mode.

L2 *Redefine the flight plan for the remainder of the flight.*

L1 If MAP NOT AVAIL remains displayed, along with SET OFFSIDE RNG/MODE on one ND, temporarily SELECT a different mode on the corresponding EFIS control panel.
PERFORM a NAV accuracy check, when possible.

L2 *The flight crew should consider a manual FM position update, if MIX IRS and actual positions differ by more than 20 NM.*

Ident.: DSC-22_20-90-10-A-00012666.0012001 / 03 NOV 22

6 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

DUAL RESET WITH LOSS OF DATA AND AUTORECOVERY

Three successive dual resets without result erases all flight crew-entered data (F-PLN, GW, CRZ FL, CI, etc.).

When FMGS recovery is obtained:
- Database cycle may have switched
- The FM position bias is lost. The FM position returns to the MIX IRS position.
- Autotuning the VOR/DME is restored, based on the aircraft's IRS position
- FMGS autotuning of the ILS/SLS ◁ and ADF is not possible
- SLS ◁ is not available
- Lateral and vertical managed mode cannot reengage
- The CAB PR LDG ELEV FAULT alert is triggered
- A map display may be lost on one ND.

PROCEDURE

When the system recovers:
If the FMGC remains in Takeoff phase, CHANGE the vertical mode in order to recover the next flight phase..

SELECT the initial database.
SELECT DIR TO the required downpath waypoint.
SELECT LAT REV at the downpath waypoint, and redefine the DESTINATION.
SELECT the FUEL PRED page, and enter GW.
SELECT the PROG page, and enter CRZ FL.
SELECT the PERF page, and enter CI.

CHECK or reengage (as appropriate) the relevant speed/Mach target and vertical mode.

L2 *Redefine the flight plan for the remainder of the flight.*

L1 If both MAP NOT AVAIL and SET OFFSIDE RNG/MODE remain displayed on one ND, or if OFFSIDE FM CONTROL remains displayed, temporarily SELECT a different mode or range on the corresponding EFIS control panel.
PERFORM a NAV accuracy check, when possible.

L2 *The flight crew should consider a manual FM position update, if MIX IRS and actual positions differ by more than 20 NM.*

Ident.: DSC-22_20-90-10-A-00012666.0083001 / 03 NOV 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

DUAL RESET WITH LOSS OF DATA AND AUTORECOVERY

Three successive dual resets without result erases all flight crew-entered data (F-PLN, GW, CRZ FL, CI, etc.).

When FMGS recovery is obtained:
- Database cycle may have switched
- The FM position bias is lost. The FM position returns to the MIX IRS position.
- Autotuning the VOR/DME is restored, based on the aircraft’s IRS position
- FMGS autotuning of the ILS/GLS/SLS and ADF is not possible
- Lateral and vertical managed mode cannot reengage
- The CAB PR LDG ELEV FAULT alert is triggered
- A map display may be lost on one ND.

PROCEDURE

When the system recovers:
If the FMGC remains in Takeoff phase, CHANGE the vertical mode in order to recover the next flight phase.

SELECT the initial database.
SELECT DIR TO the required downpath waypoint.
SELECT LAT REV at the downpath waypoint, and redefine the DESTINATION.
SELECT the FUEL PRED page, and enter GW.
SELECT the PROG page, and enter CRZ FL.
SELECT the PERF page, and enter CI.
CHECK or reengage (as appropriate) the relevant speed/Mach target and vertical mode.

L2 *Redefine the flight plan for the remainder of the flight.*

L1 If both MAP NOT AVAIL and SET OFFSIDE RNG/MODE remain displayed on one ND, or if OFFSIDE FM CONTROL remains displayed, temporarily SELECT a different mode or range on the corresponding EFIS control panel.

PERFORM a NAV accuracy check, when possible.

L2 *If the FMGC remains in Takeoff phase, CHANGE the vertical mode in order to recover the next flight phase.*

Ident.: DSC-22_20-90-10-A-00012666.0059001 / 03 NOV 22
Applicable to: MSN 04827-04860

DUAL RESET WITH LOSS OF DATA AND AUTORECOVERY

Four successive dual resets in 3 min erases all flight crew-entered data (F-PLN, GW, CRZ FL, CI, etc.).

When FMGS recovery is obtained:
- The FM position bias is lost. The FM position returns to the MIX IRS position.
- Autotuning the VOR/DME is restored, based on the aircraft's IRS position
- FMGS tuning of the ILS and ADF is not possible
- Lateral and vertical managed mode cannot reengage
- The CAB PR LDG ELEV FAULT alert is triggered
- A map display may be lost on one ND.

PROCEDURE

When the system recovers:
If the FMGC remains in Takeoff phase, CHANGE the vertical mode in order to recover the next flight phase.

SELECT DIR TO the required downpath waypoint.
SELECT LAT REV at the downpath waypoint and redefine the DESTINATION.
SELECT the FUEL PRED page, and ENTER the ZFW and ZFWCG values.
SELECT the PROG page, and enter CRZ FL.
SELECT the PERF page, and enter CI.
CHECK or reengage (as appropriate) the relevant speed/Mach target and vertical mode.

L2 *Redefine the flight plan for the remainder of the flight.*

L1 If both MAP NOT AVAIL and SET OFFSIDE RNG/MODE remain displayed on one ND, or if OFFSIDE FM CONTROL remains displayed, temporarily SELECT a different mode or range on the corresponding EFIS control panel.
PERFORM a NAV accuracy check, when possible.

L2 *The flight crew should consider a manual FM position update, if MIX IRS and actual positions differ by more than 20 NM.*

Ident.: DSC-22_20-90-10-A-00012667.0001001 / 10 JAN 11
Applicable to: MSN 04827-04860

FMS DEGRADED MODE

In some remote cases (several automatic resets in a row on one or both FMS), the affected FMS(s) may enter a “degraded mode”, with no predictions.
The intent of this degraded mode is to keep maximum use of the FMS and related functions.

The characteristics of this FMS degraded mode are the following:
- The predictions are lost on the affected FMS(s). All predictions are replaced by dashes on MCDU pages
- The vertical profile and managed speed computations are lost on the affected FM(s) (in Approach phase, VAPP is correctly computed and managed speed is available)
- Managed vertical guidance and managed speed (if previously used) are lost and revert to selected mode
- Lateral path computation and guidance remain available
- The MCDU displays the “FM PREDICTIONS LOST” message.

Note: *1. If predictions are lost on one FMS only, all managed modes are available when using the other side AP.*
2. The Approach phase must be activated manually.

PROCEDURE

● **If the message “FM PREDICTIONS LOST” is displayed:**

- If vertical managed guidance and/or prediction are not deemed necessary, keep using the FMS as needed for Lateral navigation only. Use selected modes for vertical and speed guidance.

  Note: *If only one FMS has entered the degraded mode, consider using the other AP.*

- If vertical managed guidance and/or predictions are required, RE-ENTER a Cost Index (CI) value on INIT A or PERF page (predictions for the active flight plan are then recomputed).

  Note: *In approach phase, a direct CI entry is not allowed : it is then not possible to recover predictions. However, entry of the current altitude in the CRZ FL field will force the CRZ phase and thus, allow to reenter the CI. The approach phase may then be re-activated again.*

Ident.: DSC-22_20-90-10-A-00012668.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

DUAL LATCH

- Both FMGCs are inoperative. FM and FG capability are lost
- Both NDs display "MAP NOT AVAILABLE". NAVAID tuning is not performed
- AP/FD, A/THR are lost
- FMGC (TIME OUT) subsystem page is displayed on both MCDUs
- The following messages are displayed on the ECAM:
  "CAB PR LDG ELEV FAULT"
  "AUTO FLT AP OFF", if AP was engaged
  "AUTO FLT A/THR OFF", if A/THR was engaged.

PROCEDURE

FLY raw data.
TUNE necessary NAVAIDs using the RMPs.
PERFORM a manual reset of both FMGCs.

Note: *A recovery will result in the loss of all pilot-entered data.*

Note for all FMGC automatic resets

- A single or double FM auto-reset does not affect an ILS approach below 700 ft AGL. ILS frequency is locked and AP/FDs remain engaged
- Above 700 ft , the loss of ILS tuning due to a dual reset will cause a loss of LOC and G/S, and the disengagement of APs and FDs
- During a non ILS approach, if the master FMGC fails, AP/FD and managed modes are lost and FDs engage in basic modes.

Ident.: DSC-22_20-90-10-A-00012668.0013001 / 17 MAR 17
7 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

DUAL LATCH

- Both FMGCs are inoperative. FM and FG capability are lost
- Both NDs display "MAP NOT AVAILABLE". NAVAID tuning is not performed
- AP/FD, A/THR are lost
- FMGC (TIME OUT) subsystem page is displayed on both MCDUs
- The following messages are displayed on the ECAM:
  "CAB PR LDG ELEV FAULT"
  "AUTO FLT AP OFF", if AP was engaged
  "AUTO FLT A/THR OFF", if A/THR was engaged.

PROCEDURE

FLY raw data.

TUNE necessary NAVAIDs using the RMPs.
PERFORM a manual reset of both FMGCs.

- **If successful, refer to dual reset with loss of data and auto recovery:**

  Note: A recovery will result in the loss of all pilot-entered data.

- **If unsuccessful:**

  FLY raw data.

  Select the NAV B/UP prompt on both MCDU DATA pages.

  (Refer to DSC-22_20-60-130 General HOW TO USE, concerning navigation backup operation).

  SET the landing elevation of the destination on the overhead panel.

Note for all FMGC automatic resets

- A single or double FM auto-reset does not affect an ILS approach below 700 ft AGL. ILS frequency is locked and AP/FDs remain engaged
- Above 700 ft , the loss of ILS tuning due to a dual reset will cause a loss of LOC and G/S, and the disengagement of APs and FDs
- During a non ILS approach, if the master FMGC fails, AP/FD and managed modes are lost and FDs engage in basic modes.

MANUAL FMGC RESET

Ident.: DSC-22_20-90-10-B-00012669.0001001 / 10 JAN 11
8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

On rare occasions, the FMGC may require manual resetting.
If this occurs in flight, reset one FMGC at a time.

Ident.: DSC-22_20-90-10-B-00012669.0002001 / 01 APR 14
Applicable to: MSN 04827-04860

On rare occasions, the FMGC may require manual resetting.
If this occurs in flight, reset one FMGC at a time.

The flight crew can perform two types of FMGC reset:
- A short FMGC reset of 10 s
  The FMS re-initializes data processing. However the data entered by the flight crew are memorized (F-PLN, INIT and PERF data)
- A long FMGC reset of 15 min
  All the memory is cleared and the FMS re-initializes all data and processing.

Ident.: DSC-22_20-90-10-B-00020857.0001001 / 17 MAR 17
Applicable to: ALL

Refer to System Reset Table - AUTO FLT
for the manual reset procedure of the FMGC.

Ident.: DSC-22_20-90-10-B-00012671.0001001 / 17 MAR 17
Applicable to: ALL

MANUAL RESET OF BOTH FMGC

When the aircraft is on ground with the engines stopped, the flight crew may attempt a double and simultaneous CB reset when a single CB reset has failed.

"CHECK WEIGHT" MESSAGE

Ident.: DSC-22_20-90-20-00012677.0001001 / 04 JUN 19
Applicable to: ALL

DESCRIPTION

The “CHECK WEIGHT” message appears on the MCDU when the Gross Weight (GW) computed by the FMGC and the GW computed by the FAC disagree by more than 7 t (15 432 lb).

PROCEDURE

When this message appears:

FMS FOB .... CHECK

CALL UP the MCDU FUEL PRED page and compare the FOB to the FOB from the Computerized F-PLN. Correct it if necessary.

FMS ZFW value.. CHECK

CALL UP the MCDU FUEL PRED page and compare the ZFW to the ZFW on the loadsheet.

- **If the FMS ZFW on the MCDU is not correct**

  FMS ZFW .... CORRECT/RE-INSERT

  The entry of a correct ZFW will clear the MCDU message.

- **If the FMS ZFW on the MCDU is correct**

  VLS, F, S, GREEN DOT (PFD).. DISREGARD

  If the FMS GW is correct, the characteristic speeds computed by the FAC (displayed on PFD) may not be correct.

  QRH OPERATING SPEEDS.. USE

  Refer to QRH/OPS Operating Speeds

Intentionally left blank

ERRONEOUS PREDICTIONS

Ident.: DSC-22_20-90-30-00012672.0001001 / 28 MAY 20
Applicable to: ALL

DESCRIPTION

The FMGS may display temporary erroneous predictions that can affect such data as ECON speed/Mach, optimum flight level, fuel or time predictions.

OPERATIONAL RECOMMENDATION

The flight crew should not perform a reset of the FMS.

FOR MISSING PREDICTIONS OR OBVIOUS ERRONEOUS PREDICTIONS

To recover the FMS predictions:

1. On the WIND page, the flight crew should verify for each flight level:
   - The temperature value for each cruise waypoint
   - The wind data for each cruise waypoint.

   If some temperature or wind data are erroneous or missing the flight crew should:
   - Update data
   - Check if correct predictions are recovered.
2. In the legs of the Flight Plan, the flight crew should verify:
   - If there is one Flight Plan leg with erroneous predicted distance, or erroneous predicted time or erroneous predicted fuel consumption, and
   - If one Flight Plan leg with erroneous predictions exists, then the flight crew should:
     - Insert an intermediate waypoint
     - Check if correct predictions are recovered.

3. In the arrival procedure of the Flight Plan, the flight crew should verify:
   - If there are two successive waypoints separated by a distance of 3 NM or less, and
   - If one of these two waypoints contains an AT OR BELOW altitude constraint the flight crew should:
     - Insert the same altitude constraint to the lowest waypoint
     - Check if correct predictions are recovered.

FOR SUSPECTED ERRONEOUS PREDICTIONS OR TO FORCE A F-PLN RE-COMPUTATION

If the flight crew suspects that the FMS predictions are erroneous (slow computations, slightly erroneous values, etc.) and if the previous actions remain not successful, in order to recover the FMS predictions, the flight crew should:

- Copy of the ACTIVE F-PLN into a SEC F-PLN
- Remove the STAR procedure of the ACTIVE F-PLN

  Note: *The STAR usually contains a lot of constraints which may disturb FMS predictions computations.*

- Insert again the STAR in the ACTIVE F-PLN, later during the flight.

SPURIOUS ENGINE OUT INDICATION

Ident.: DSC-22_20-90-30-00012673.0001001 / 17 MAR 17
Applicable to: ALL

PROCEDURE

If a spurious engine-out is detected:

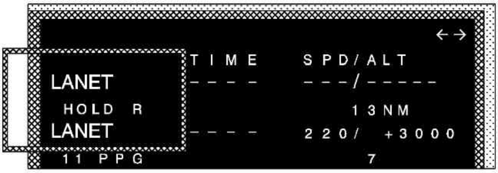
PRESS the EO CLR prompt of the MCDU PERF page
RE-ENGAGE previous vertical mode
RE-ENTER preselected speeds (if any). No other consequences are to be expected.

INCORRECT MANAGEMENT OF SPD CSTR FOR ARRIVAL PROCEDURE HOLDS

Ident.: DSC-22_20-100-20-00013647.0001001 / 16 MAR 11

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

A procedure Holding Pattern (HOLD) is part of a navigation database procedure. The flight crew cannot manually insert it in the flight plan.
The aircraft flies the HOLD one time, and exits it automatically at the HOLD fix.



```
                                    ←→
         TIME    SPD/ALT
LANET    ----    ---/-----
 HOLD R           13NM
LANET    ----    220/ +3000
  11 PPG            7
```

Procedure HOLD on the F-PLN MCDU page

The FMS computes procedure HOLDs based on the predicted speed of the aircraft at the pattern entry. For an arrival procedure HOLD, the FMS-predicted speed takes into account:

- The ICAO-fixed speed limit for the hold,
- Any speed constraint coded at the hold entry fix.

Some operators reported the following misbehaviour : if charts indicate a speed constraint for a procedure HOLD, the FMS erroneously applies this speed constraint only at the exit fix, instead of the entry fix. As a consequence, the FMS-predicted HOLD speed does not take the speed constraint into account.
As a result, the FMS may compute the HOLD based on a speed that is higher than required. In such a case, the HOLD will have a size larger than expected.

Note: *If the flight crew reverts to selected speed to reduce the speed at the HOLD entry, the FMS will not re-compute the size of the HOLD.*

OPERATIONAL RECOMMENDATION

During descent preparation :

- Use the charts to CHECK if the arrival procedure includes a HOLD that has a speed constraint.
- If the arrival procedure includes a HOLD that has a speed constraint : ENTER MANUALLY the speed constraint at the hold entry fix.

MISALIGNMENT OF FMS F-PLN LEGS FOR ILS APPROACHES

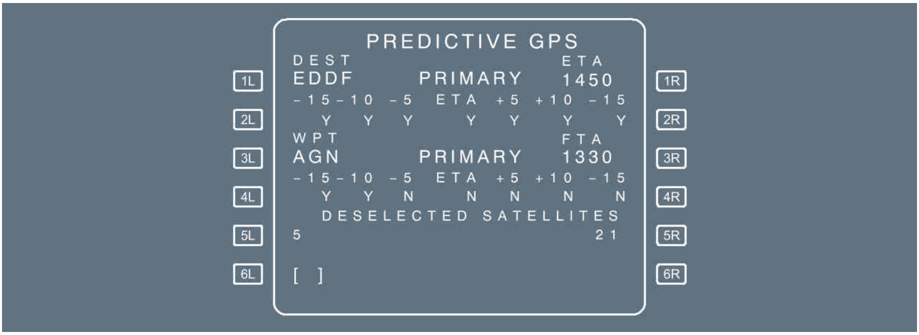
Ident.: DSC-22_20-100-20-00013650.0001001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

For the F-PLN legs belonging to an ILS approach, the FMS incorrectly uses its own Magnetic Variation table instead of the Magnetic Variation of the ILS associated to the approach (coded in the Navigation Data Base). This misbehaviour occurs when the Navaid used for the ILS approach is a DME.
In some cases, it may happen that magnetic variation of the airport differs by a few degrees from the ILS navaid. Thus, the FMS F-PLN does not match with the actual beam of the ILS beam.
When the ILS approach is coded with successive legs, these legs may also appear as not matching with intermediate approach waypoint.
For all approaches affected by this behaviour, the FMS will display an incorrect trajectory on ND for the LS approach. The guidance would also be wrong if the approach legs are flown in NAV instead of LOC mode.

INCORRECT MANAGEMENT OF ETA ENTRY ON PREDICTIVE GPS PAGE

Ident.: DSC-22_20-100-20-00013652.0001001 / 22 MAY 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

During pre-flight, when a destination airport exists but the FMS does not compute predictions, amber boxes are displayed in the MCDU field ETA of the predicitve GPS page. When the flight crew manually enters an ETA, the value should be displayed in large cyan font.
With the current H2 standard, the FMS does not take into account the manual entry of an ETA (field 1R) for the destination (DEST, field 1L).
The FMS validates the manual entry only when an ETA is already computed by the FMS, when predictions are available (necessary conditions to have some predictions are : entry of a GW, CRZ FL, CI and F-PLN).
This anomaly does not impact the ETA of the WPT field (3L and 3R). An ETA can be entered in the field 3L even if no predictions are computed.



```
           PREDICTIVE GPS
DEST                            ETA
EDDF          PRIMARY           1450
-15-10  -5    ETA   +5   +10   -15
   Y     Y     Y     Y     Y     Y     Y
WPT                             FTA
AGN           PRIMARY           1330
-15-10  -5    ETA   +5   +10   -15
   Y     Y     N     N     N     N     N
   DESELECTED SATELLITES
5                                 21

[  ]
```

FLIGHT NUMBER ERASED UPON AOC FLIGHT PLAN UPLINK

Ident.: DSC-22_20-100-20-00013653.0001001 / 16 MAR 11

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

When a Flight Plan (F-PLN) uplink is performed, if the uplinked F-PLN is inserted as the active F-PLN but does not contain a Flight Number, the previously entered Flight Number is erased. In such a case, the flight crew needs to re-enter the correct Flight Number on the INIT A page.

LOSS OF FMS POSITION FURTHER TO IRS LOSS

Ident.: DSC-22_20-100-20-00013654.0001001 / 23 JUN 15

1 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

The loss or the failure of an Inertial Reference System (IRS) could result in the loss of the FMS position with the following cockpit effects :

- MAP NOT AVAIL GPS, PRIMARY LOST displayed on ND
- The DIR TO page is unavailable on both MCDU
- During approach, transient ATHR thrust variations at autopilot disconnection (Only applicable in case of IR 1 FAULT).

Technical explanation :

The FMS needs valid data from the IRS in order to compute a position.

The FMS checks the IRS data with a specific parameter coming from the Flight Guidance (FG) part of the FMGC. When an IRS is lost or off (dispatched inoperative), the onside FG erroneously indicates to the FMS that the IRS DATA is still valid.

As a result, the FMS position is lost on the same side than the IRS inoperative (IRS1 for FMS1 and IRS for FMS2). The manual switching on IRS 3 (ATT HDG on CAPT 3 or F/O 3) does not enable to recover the data.

PROCEDURE:

In case of an IR x FAULT ECAM warning in flight with the above mentioned cockpit effects, apply the following procedure :
De-activate (do not perform a reset) the FMS on the same side than the IRS inoperative :

- For IR 1 FAULT : pull FMGC 1 CB B2 (VU 49)
- For IR 2 FAULT : pull FMGC 2 CB M17 (VU 121)

ERRONEOUS FUEL PREDICTION IN THE CASE OF DESCENT WITH TWO ALTITUDE CONSTRAINTS

Ident.: DSC-22_20-100-20-00013655.0001001 / 16 MAR 11

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

DESCRIPTION:

If the flight plan has two altitude constraints for the descent, the flight crew may notice erroneous FMS fuel predictions.

EXPLANATION

If the flight plan has two altitude constraints for the descent, the FMS may define a geometric segment between both altitude constraints. If there is a deceleration required within the geometric segment, the FMS may consider that the geometric segment is too steep to fly without speedbrakes. In this case, the FMS tags the entire geometric segment as a speedbrake segment : The FMS assumes that during the entire segment half of the speedbrakes are extended, even for the parts where no deceleration is planned. As a consequence, the FMS will predict an increased thrust for the entire geometric segment. This may lead to erroneous fuel predictions. (a long geometric segment (e.g. above 100 NM) may lead to an error of 1.5 t for the fuel prediction at destination).

Note: *When flying the geometric segment, the predictions become better as the aircraft approaches the end of the geometric segment, and turn back to normal when the aircraft has sequenced the second altitude constraint.*

PROCEDURE:

If the flight crew suspects this behavior in preflight, or during the flight, they can delete and enter again one altitude constraint in descent and compare the fuel predictions of the flight plan with and without the geometric segment. This allows the flight crew to evaluate the impact of the geometric segment on the fuel predictions.
It is not recommended to permanently delete altitude constraints that are stored in the navigation database.

UNEXPECTED SWITCH OF SPEED TARGET WHEN RTA IS USED

Ident.: DSC-22_20-100-20-00013659.0001001 / 16 NOV 11

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

An anomaly could be experienced when the RTA (Requested Time of Arrival) function is used.
The MCDU and the PFD could suddenly display an erroneous speed target at the transition altitude when a RTA is entered and if the flight crew performs an action (Vapp entry or altitude constraint modification) that causes a F-PLN profile recomputation.
This scenario could also occur if the flight crew has inserted a RTA and then deleted this RTA (the FMS may erroneously retain the RTA target).
Some cases could happen while the aircraft is in descent (DES mode) in managed speed. This speed target change is significant at high altitude if the RTA speed target is lower than the speed target used before the beginning of the descent.

PROCEDURE

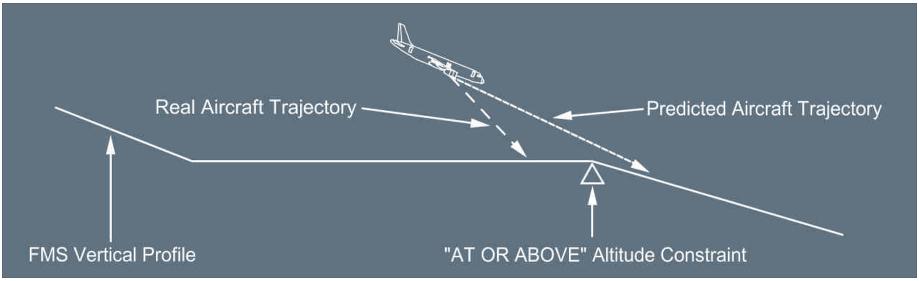
If an erroneous speed target is displayed at high altitude, the flight crew can manually select a speed to continue the descent.

UNDUE AP DISCONNECTION OR REVERSION TO V/S DURING CLIMB AND DESCENT

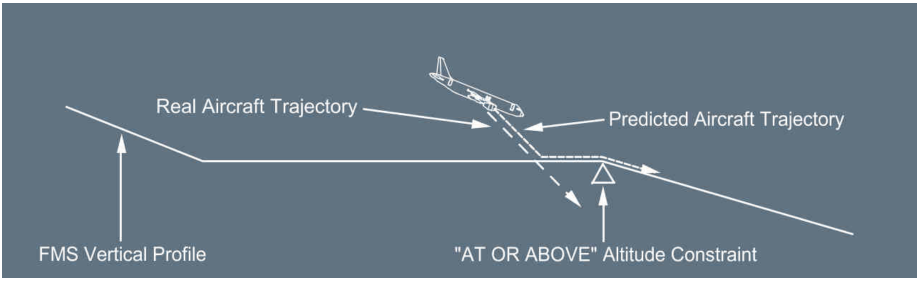
Ident.: DSC-22_20-100-20-00014436.0017001 / 23 JUN 15

3 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

An AP disconnection or a reversion to the V/S mode may occur when the aircraft reaches an altitude constraint in the CLB or DES mode. The following are two situations in which this behavior may occur.
Situation 1: The aircraft is above the vertical profile.
When the aircraft is not on the vertical profile, the FMS makes assumptions in order to compute the FMS predictions. For example, if the aircraft flies in selected speed, the FMS considers an immediate return to managed speed.
These assumptions can result in FMS predictions that are not consistent with the real trajectory of the aircraft. Therefore, the FMS may not anticipate the need to level off, when the FCU selected altitude is above the altitude constraint in climb or below the altitude constraint in descent.


Real Aircraft Trajectory
Predicted Aircraft Trajectory
FMS Vertical Profile
"AT OR ABOVE" Altitude Constraint

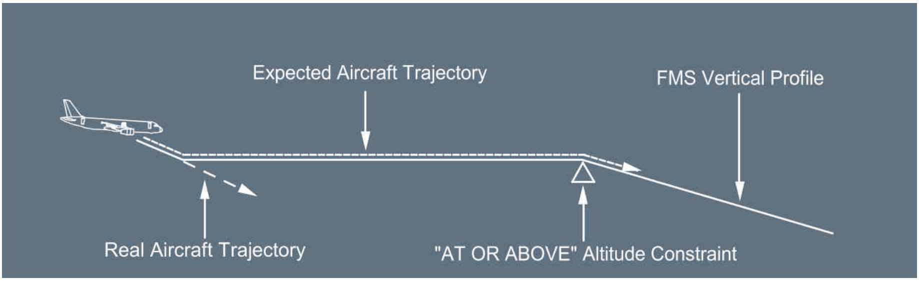
However, the FMS requests the ALT CST* mode, when the aircraft reaches the altitude constraint, in order to level off and comply with the altitude constraint.
Due to problem of communication between the FMS and the FG, the FMGC may unduly revert to the V/S mode. The FWC triggers a triple-click aural warning ◁ , and the aircraft goes beyond the altitude constraint.


Real Aircraft Trajectory
Predicted Aircraft Trajectory
FMS Vertical Profile
"AT OR ABOVE" Altitude Constraint

Situation 2: The aircraft levels off at an altitude constraint in descent.
When the aircraft reaches an altitude constraint with the DES mode engaged and the FCU selected altitude below the altitude constraint, the FG engages the ALT CST* mode. The FG also arms the DES mode, in order to resume the descent beyond the waypoint with the altitude constraint.

In very rare cases, the FMS does not see that the FG arms the DES mode:
- If the FINAL APP mode is armed, the FMGC may unduly:
  - Disconnect the AP, or
  - Disconnect the AP and revert to the V/S mode, or
  - Revert to the V/S mode.
- If the FINAL APP mode is not armed, the FMGC may unduly revert to the V/S mode.

In both of the above-mentioned cases, the FWC triggers a triple-click aural warning ◁ , and the aircraft goes beyond the altitude constraint.
If the AP disconnects, the FWC triggers a cavalry-charge aural warning.


Expected Aircraft Trajectory
FMS Vertical Profile
Real Aircraft Trajectory
"AT OR ABOVE" Altitude Constraint

OPERATIONAL RECOMMENDATIONS

Understand your FMA at all times.

- **If the AP disconnects, or if the FMGC reverts to the V/S mode:**

  Adjust the vertical speed or level off in order to comply with the altitude constraint.

VOR/DME AND VOR/TACAN NOT AUTOMATICALLY TUNED

Ident.: DSC-22_20-100-20-00014440.0001001 / 04 MAY 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

In case there is no NAVAID in the flight plan, nor any recommended NAVAID coded in the inserted procedure, the FMS may not automatically tune the expected Terminal or Low Altitude VOR/DME or VOR/TACAN.
The FMS may not automatically tune the expected NAVAID, if the aircraft is above 12 000 ft for a Terminal VOR/DME or VOR/TACAN, and above 18 000 ft for a Low Altitude NAVAID.
As a consequence, the ND and the MCDU RAD NAV page may not display the NAVAID information.

OPERATIONAL RECOMMENDATIONS

If the flight crew encounters the misbehavior during the flight, the flight crew can manually tune the expected VOR/DME or VOR/TACAN to recover the display on the ND.
As a manual tuning overrides any automatic tuning, the flight crew must clear the manual tuning, when the NAVAID is no longer required, in order to revert to the automatic NAVAID tuning.

OPTIMUM TARGET SPEEDS NOT UPDATED FOLLOWING THE AUTOMATIC DELETION OF A STEP CLIMB

Ident.: DSC-22_20-100-20-00014756.0001001 / 04 NOV 20

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

DESCRIPTION

During the FMS climb phase, if the flight crew selects an altitude on the FCU that is above the CRZ FL displayed on the PROG page, the altitude selected on the FCU becomes the new CRZ FL.
If this new CRZ FL is at or above the altitude of a Step Climb of the flight plan, the FMS automatically deletes the Step Climb. The FMS displays the STEP DELETED message.
As the optimum target speeds (ECON CLIMB speed/Mach and ECON CRUISE speed/Mach) depend on the CRZ FL, the FMS should immediately update the ECON CLIMB speed/Mach and the ECON CRUISE speed/Mach.
Due to a FMS misbehavior, the FMS may not correctly manage the automatic deletion of the Step Climb when the CRZ FL is automatically set to the altitude selected on the FCU. The FMS may not update the ECON CLIMB speed/Mach and the ECON CRUISE speed/Mach accordingly.
If the ECON CRUISE speed/Mach was not correctly updated, the FMS updates the ECON CRUISE speed/Mach when the aircraft reaches the new CRZ FL. However, the FMS updates the ECON CRUISE speed/Mach with a rate of 0.01 Mach/min, in order to avoid sudden increase of the target speed. Therefore, the aircraft may take several minutes to reach the new ECON CRUISE speed/Mach.

OPERATIONAL RECOMMENDATIONS

- **If the flight crew suspects this misbehavior during the flight and the FMS is in CLIMB phase:**

  CHANGE the CI or the CRZ FL on the PROG page, the optimum target speed is updated when the aircraft reaches the CRZ FL.

- **If the flight crew suspects this misbehavior during the flight and the FMS is in CRUISE phase:**

  The optimum target speed is updated with a rate of 0.01 Mach/min when the aircraft reaches the FCU altitude.

ERRONEOUS LATERAL GUIDANCE IN NAV MODE WITH LOC MODE ARMED DURING APPROACH

Ident.: DSC-22_20-100-20-00015035.0001001 / 26 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

During approach, the FMS may guide the aircraft along a specific track instead of along the F-PLN with NAV mode green on the FMA, because of the LOC Convergence function (*Refer to DSC-22_30-40-80-10 LOC* Engagement Conditions - LOC Convergence Function*).
The logics of the LOC Convergence function is as follows:

- **If NAV mode is engaged, and LOC mode is armed,**
  and
  The aircraft is within 20 NM of the destination runway,
  and
  The difference between the aircraft track and the QFU is less than 20 °.

  The aircraft is guided with a converging track of 20 ° from the LOC axis.

  The NAV mode remains engaged. However the aircraft no longer follows the F-PLN, but converges towards the LOC axis.

- **If the difference between the aircraft track and the QFU becomes more than 20 ° when the LOC Convergence function is active:**

  The FMS deactivates the LOC Convergence function, and the aircraft follows back the F-PLN.

  It may lead to slight oscillations, since the FMS may successively activate and deactivate the LOC Convergence function.

OPERATIONAL RECOMMENDATIONS

- **If the flight crew considers that the LOC Convergence function may affect the guidance along the F-PLN trajectory in NAV mode:**

  On the intercept trajectory for the LOC axis, the flight crew should push the APPR pb (or the LOC pb-sw) when appropriate.

- **If the flight crew detects that the aircraft does not follow the intended trajectory:**

  The flight crew should revert to HDG/TRK mode, and intercept the LOC axis with the HDG/TRK mode engaged and the LOC mode armed.

UNDUE REDUCTION OF THE SPEED TARGET IN CASE OF DIR TO/ABEAM WHILE FLYING A CONSTANT MACH SEGMENT

Ident.: DSC-22_20-100-20-00015532.0003001 / 18 MAR 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The FMS may erroneously command a Mach target of 0, when the following conditions are met:
- The aircraft is flying a Constant Mach Segment (CMS), and
- The TO waypoint is the end of the CMS, and
- The aircraft is close to the TO waypoint, i.e. about 1 NM, and
- The flight crew performs a DIR TO/ABEAM to a waypoint that is not part of the CMS.

In that case, the FMS does not create the abeam of the TO waypoint (end of the CMS), since it is too close from the aircraft.
In addition, the FMS erroneously keeps the CMS until the abeam of the next waypoint, and defines 0 as Mach target on the CMS. The FMS correctly computes the speed target once the abeam of the next waypoint is sequenced.

OPERATIONAL RECOMMENDATIONS

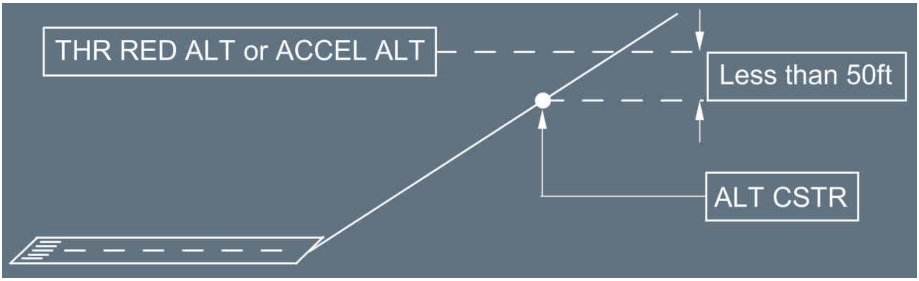
The flight crew should manually clear the CMS on the MCDU VERT REV page.

LOSS OF FUEL AND TIME PREDICTIONS DURING TAKEOFF DATA INSERTION

Ident.: DSC-22_20-100-20-00015602.0001001 / 05 AUG 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

The flight crew may lose fuel and time prediction when the altitude of the first constraint is less than 50 ft below either the THR RED ALT or the ACC ALT, the update of fuel and time computation predictions may last a long time. The flight crew may think that the predictions are lost (the DEST EFOB and TRIP FUEL are also dashed on the FUEL PRED page).

The flight crew may encounter the situation described above, if one of the following occurs:
- The first altitude constraint of the SID is less than 50 ft below either the THR RED ALT or the ACC ALT.
- The flight crew inserts a THR RED ALT or an ACC ALT less than 50 ft above the first altitude constraint of the F-PLN.
- The flight crew modifies the F-PLN to insert an AT or an AT OR BELOW altitude constraint less than 50 ft below the THR RED ALT or the ACC ALT.



OPERATIONAL RECOMMENDATION:

The flight crew can recover the fuel and time predictions if the flight crew sets the THR RED ALT or ACC ALT value on the PERF TAKEOFF page to the same value as the first altitude constraint of the F-PLN.

ERRONEOUS TRAJECTORY DURING PROCEDURES WITH A TURN DIRECTION ON A LEG WITH AN ALTITUDE TERMINATION

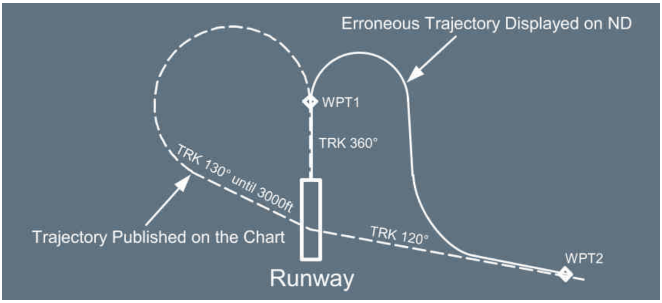
Ident.: DSC-22_20-100-20-00015748.0001001 / 09 SEP 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

In some very specific operational conditions that depend on the coding in the Navigation Database of the procedure, and on various performance conditions (aircraft weight, flaps, thrust setting, temperature, wind...), the FMS may compute an erroneous trajectory on some Standard Instrument Departures (SID), and on some Missed Approach procedures.

The SIDs and the Missed Approach procedures that may be affected are coded in the Navigation Database with a leg that has a turn direction and an altitude termination. The leg can be one of the following:
- A Course-to-an-Altitude (CA) leg that defines a course to follow to an altitude
- A Fix-to-an-Altitude (FA) leg that defines a track to follow from a waypoint to an altitude
- A Heading-to-an-Altitude (VA) leg that defines a heading to follow to an altitude
- A Holding-to-an-Altitude (HA) leg that defines a holding pattern to an altitude

The turn direction (left or right) that is coded on a leg indicates that the aircraft has to execute a turn in the specified direction to intercept the leg.
In some very specific operational conditions (aircraft weight, wind...), the FMS may predict that the aircraft will reach the altitude that terminates the leg, before the initiation of the leg. In that case, the FMS ignores the leg, and the associated turn direction.
The FMS computes a new trajectory to directly join the next leg. The trajectory may not be consistent with the published trajectory.

Example:
- Leg 1: a Course-to-Fix (CF) leg that defines a track (360 °) to a waypoint (WPT1)
- Leg 2: a Course-to-an-Altitude (CA) leg that defines a track (130 °) to intercept an altitude (3 000 ft). The leg is coded in the Navigation Database with a turn direction (left). The end of the leg depends on the aircraft performance. The turn direction is indicated by an arrow on the line of leg 1 on the MCDU
- Leg 3: a CF leg that defines a track (120 °) to a waypoint (WPT2)


Erroneous Trajectory Displayed on ND
WPT1
TRK 360°
TRK 130° until 3000ft
Trajectory Published on the Chart
TRK 120°
WPT2
Runway

Depending on the aircraft performance, the FMS may predict that the aircraft will reach 3 000 ft before WPT1. In that case, the FMS ignores the leg 2 (CA leg) because the aircraft is already above the altitude that ends leg 2, before the beginning of leg 2. The FMS also ignores the turn direction that is coded on the leg.

As a result, the FMS computes again the trajectory from the end of leg 1, directly to leg 3. As shown on the above illustration, this trajectory includes a right turn, instead of a left turn, because it induces the shortest course change to intercept leg 3 (CF leg).

If the NAV mode is engaged, the aircraft follows this erroneous trajectory.

OPERATIONAL RECOMMENDATIONS

The flight crew should pay particular attention to the check of the flight plan during the Cockpit Preparation, and during the Descent Preparation.

CAUTION	Even if the flight plan is correct during the Cockpit Preparation or during the Descent Preparation, the FMS may compute and display an erroneous trajectory when the FMS updates its predictions after takeoff or after go-around initiation.

If the flight crew detects that the lateral flight plan does not agree with the published trajectory, the flight crew should revert to the HDG/TRK mode, and monitor NAVAID raw data as appropriate.

The flight crew should reengage the NAV mode when the lateral flight plan is consistent with the published trajectory.

ERRONEOUS TRAJECTORY WHILE IN HDG (TRK) MODE DURING PROCEDURES WITH A TURN DIRECTION ON A LEG WITH AN ALTITUDE TERMINATION

Ident.: DSC-22_20-100-20-00023728.0001001 / 26 NOV 19
4 **Applicable to: MSN 10949-11597**

DESCRIPTION

In some very specific operational conditions that depend on the coding in the Navigation Database of the procedure, and on various performance conditions (aircraft weight, flaps, thrust setting, temperature, wind ...), the FMS may compute an erroneous trajectory.

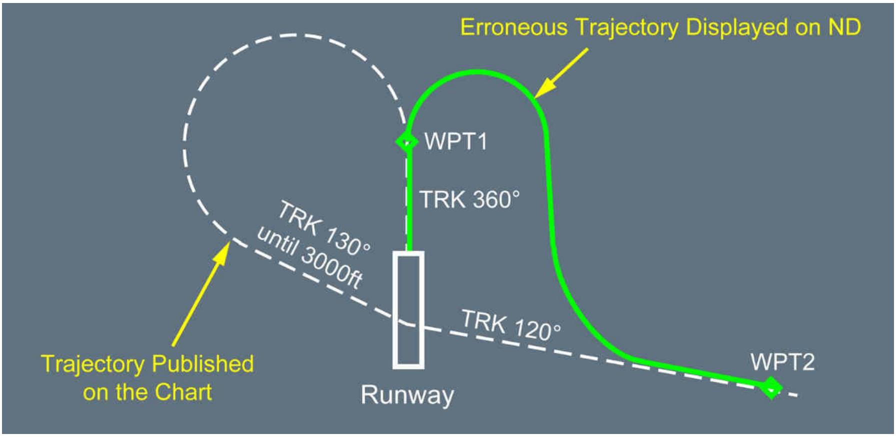
The SIDs and the Missed Approach procedures that may be affected are coded in the Navigation Database with a leg that has a turn direction and an altitude termination. The leg can be one of the following:
- A Course-to-an-Altitude (CA) leg that defines a course to follow to an altitude
- A Fix-to-an-Altitude (FA) leg that defines a track to follow from a waypoint to an altitude
- A Heading-to-an-Altitude (VA) leg that defines a heading to follow to an altitude
- A Holding-to-an-Altitude (HA) leg that defines a holding pattern to an altitude.

The turn direction (left or right) that is coded on a leg indicates that the aircraft has to execute a turn in the specified direction to intercept the leg.
In some very specific operational conditions, the FMS may predict that the aircraft will reach the altitude that terminates the leg, before the initiation of the leg. In that case, the FMS ignores the leg and the associated turn direction.
The FMS computes a new trajectory to directly join the next leg. The trajectory may not be consistent with the published trajectory.
The abnormal behavior depends on the AP/FD lateral modes engaged.

After takeoff, the NAV mode engages. At any time before the end of the altitude termination leg:
- If the NAV mode stays engaged, the FMS will compute a trajectory consistent with the published trajectory
- If the HDG/TRK mode is engaged, the FMS may compute an erroneous trajectory and display it on the ND. If the flight crew engages the NAV mode, the aircraft will follow the erroneous trajectory.

Example:
- Leg 1: A Course-to-Fix (CF) leg that defines a track (360 °) to a waypoint (WPT1)
- Leg 2: A Course-to-an-Altitude (CA) leg that defines a track (130 °) to intercept an altitude (3 000 ft). The leg is coded in the Navigation Database with a turn direction (left). The end of the leg depends on the aircraft performance. The turn direction is indicated by an arrow on the line of leg 1 on the F-PLN page of the MCDU.
- Leg 3: A CF leg that defines a track (120 °) to a waypoint (WPT2).

Erroneous trajectory on ND


Erroneous Trajectory Displayed on ND
WPT1
TRK 360°
TRK 130° until 3000ft
TRK 120°
WPT2
Trajectory Published on the Chart
Runway

Depending on the aircraft performance, the FMS may predict that the aircraft will reach 3 000 ft before WPT1. In that case, if the HDG/TRK mode is engaged, the FMS ignores the leg 2 (CA leg) because the aircraft is already above the altitude that ends leg 2, before the beginning of leg 2. The FMS also ignores the turn direction that is coded on the leg.
As a result, the FMS computes again the trajectory from the end of leg 1, directly to leg 3. As shown on the above illustration, this trajectory includes a right turn, instead of a left turn, because it induces the shortest course change to intercept leg 3 (CF leg). This erroneous trajectory will be displayed on the ND.
If flight crew reengages the NAV mode before the end of the altitude termination leg, the aircraft follows this erroneous trajectory.

OPERATIONAL RECOMMENDATIONS

The flight crew should pay particular attention to the check of the flight plan during the Cockpit Preparation, and during the Descent Preparation.

CAUTION	Even if the flight plan is correct during the Cockpit Preparation or during the Descent Preparation, the FMS may compute and display an erroneous trajectory when the FMS updates its predictions after takeoff or after go-around initiation.

When in HDG/TRK mode after takeoff or go around initiation, if the flight crew detects that the lateral flight plan does not agree with the published trajectory, the flight crew should keep the HDG/TRK mode engaged, and monitor NAVAID raw data as appropriate.
The flight crew should only reengage the NAV mode when the lateral flight plan is consistent with the published trajectory.

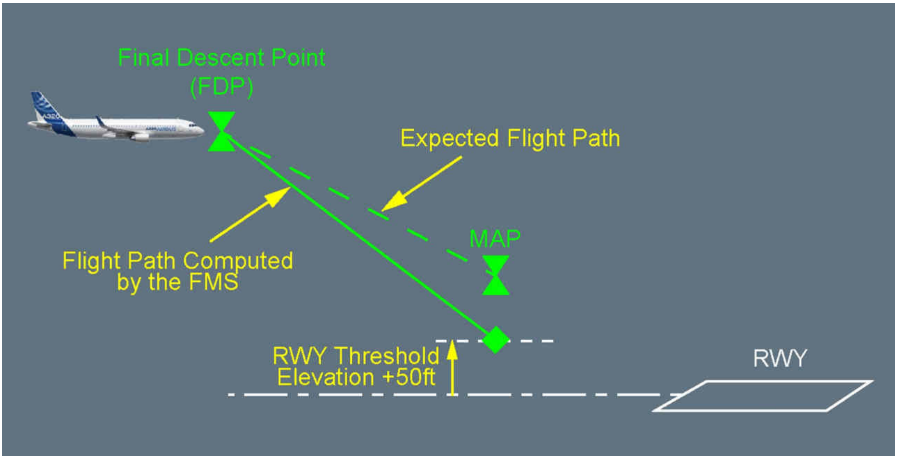
ERRONEOUS VERTICAL PROFILE DURING LOC B/C APPROACHES WITH A MAP LOCATED BEFORE THE RUNWAY THRESHOLD

Ident.: DSC-22_20-100-20-00019782.0001001 / 25 JUL 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

DESCRIPTION

When the flight crew selects a LOC Back Course (LOC B/C) approach in the arrival page of the MCDU, if the Missed Approach Point (MAP) is located before the runway threshold, the FMS builds the final approach vertical flight path assuming that there is an altitude constraint at the MAP, equal to the runway (RWY) threshold elevation plus 50 ft, disregarding the actual coded MAP altitude.
As a result, the FMS computes an erroneous vertical flight path for the final approach, an erroneous crossing altitude at the MAP, and displays an erroneous vertical deviation indication (V/DEV symbol on the PFD and V/DEV value on MCDU PROG page), when flying the approach.



Therefore, the flight crew must fly the LOC B/C approaches in selected vertical guidance mode (FPA or V/S mode), and they must disregard the V/DEV displayed on the PFD and MCDU PROG page.

PROCEDURE

For LOC B/C approaches, check the position of the MAP on the approach chart:

- **If the MAP is located at the runway threshold:**
  V/DEV symbol can be used to assist the flight crew in flying the vertical flight path in selected mode. Crosscheck the final descent with the published chart using altitude versus distance, as per Standard Operating Procedures (SOPs).
- **If the MAP is located before the runway threshold:**
  DISREGARD the V/DEV symbol, and crosscheck the final descent using the altitude versus the distance to the MAP.

ERRONEOUS VERTICAL GUIDANCE IN APPROACH SUBSEQUENT TO A DIR TO PERFORMED WHEN NEAR THE TOP OF DESCENT

Ident.: DSC-22_20-100-20-00022771.0001001 / 05 MAR 19
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

DESCRIPTION

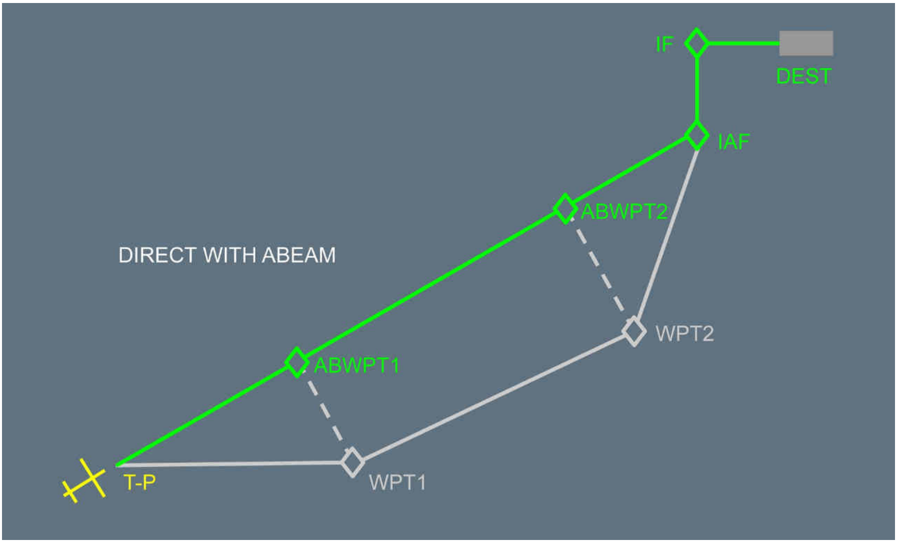
When the flight crew inserts a DIR TO waypoint, the FMS computes the horizontal path to the destination. When near the top of descent, if the flight crew inserts a DIR TO waypoint that is at, or after the IAF, the FMS computation may be erroneous for all of the following:

- The distance of the legs after the DIR TO waypoint.
- The vertical deviation on the legs after the DIR TO waypoint.
- The vertical guidance in DES and FINAL APP modes.

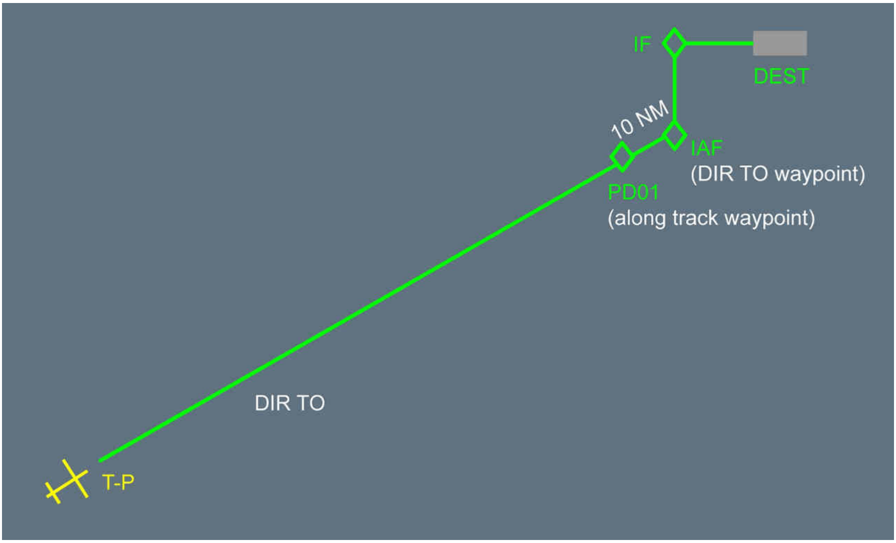
In order to compute the turn radius of the horizontal path, the FMS uses the current TAS at the time of the DIR TO insertion.This is the cause to the erroneous calculation. Instead, the FMS should use the TAS that is predicted at the DIR TO waypoint.

PROCEDURE

When near the top of descent, to insert a DIR TO waypoint that is at or after the IAF, the flight crew should use the DIRECT WITH ABEAM (ABEAM PTS) function. The flight crew must then check that at least one abeam waypoint is computed ahead of the position of the aircraft.
For more information on the DIRECT WITH ABEAM function, *Refer to DSC-22_20-30-10-15 DIR Key (Direct-to-Function) - Procedure for DIR TO/ABEAM*.


IF
DEST
IAF
ABWPT2
DIRECT WITH ABEAM
WPT2
ABWPT1
T-P
WPT1

If there is no abeam waypoint computed, the flight crew must insert a Place Distance waypoint 10 NM before the DIR TO waypoint. (*Refer to DSC-22_20-30-10-15 Inserting a Waypoint - Along Track Waypoint Insertion*)



NO ENGAGEMENT OF THE PRESEL SPD TARGET IN CLIMB

Ident.: DSC-22_20-100-20-00023539.0002001 / 26 NOV 19

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

DESCRIPTION

This misbehavior is experienced if the flight crew entered a PRESEL SPD TARGET in the FMS PERF CLIMB page and when the following occurs simultaneously:
- FMS transition from TAKEOFF to CLIMB phase, and
- A F-PLN leg is sequenced by the FMS.

EXPLANATION

The FMS transition from TAKEOFF to CLIMB phase occurs in the following cases:
- The aircraft reaches the ACCEL ALT entered in the FMS PERF TAKEOFF page, or
- The SRS mode disengages and another vertical mode such as ALT* engages.

At the activation of the CLIMB phase, when a PRESEL SPD TARGET is set in the FMS PERF CLIMB page and A/THR is active, the FMS orders to synchronize the FCU SPD target to the preselected value and go to selected SPD mode automatically.
When a F-PLN leg is sequenced at the same time than the activation of the CLIMB phase, the FMS gives the priority to the leg sequencing process. Then, the PRESEL SPD TARGET is not taken into account. In such condition the PRESEL SPD TARGET entered in the FMS PERF

CLIMB page is disregarded and the aircraft accelerates to reach the MANAGED SPD TARGET displayed on the FMS PERF CLIMB page.

OPERATIONAL RECOMMENDATION

If the PRESEL SPD TARGET is not taken into account after the FMS transition from TAKEOFF to CLIMB phase, the flight crew should revert to selected speed mode and select the SPD TARGET on the FCU.

ERRONEOUS CF LEG COMPUTATION FOLLOWING FMS NEW RUNWAY WITH LS IDENT CREATION

Ident.: DSC-22_20-100-20-00023647.0001001 / 26 NOV 19

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

DESCRIPTION

The flight crew may experience this abnormal behavior if a runway and its associated LS IDENT is created via the FMS NEW RUNWAY page.

If the flight crew creates a runway and its associated LS (LS IDENT of the FMS NEW RUNWAY page), the FMS considers this NAVAID as the recommended NAVAID for the newly created runway.
This created NAVAID does not have an associated magnetic variation in the FMS. Thus, the FMS may apply an erroneous magnetic variation and may compute an erroneous course for the CF leg.

OPERATIONAL RECOMMENDATION

In the case of runway creation, the flight crew should not insert an LS IDENT on the FMS NEW RUNWAY page.

If the flight crew plans to perform an ILS approach on the newly created runway, the ILS should be tuned via either of the following:
- The FMS RADIO NAV page, or
- The RMP.

UNEXPECTED ILS AUTO-TUNING

Ident.: DSC-22_20-100-20-00024029.0001001 / 28 MAY 20

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

DESCRIPTION

The FMS may erroneously automatically tune an ILS frequency in the following two cases:
- After selection of an ILS approach, the flight crew changes the approach and selects a RWY-only or Visual approach that is not associated with an ILS frequency, or
- The flight crew selects a RWY-only approach that is associated to an ILS frequency.

OPERATIONAL RECOMMENDATION

If the flight crew identifies an unexpected tuning of an ILS frequency by the FMS, the flight crew should do one of the following:
- Insert the ILS frequency 108.00 in the FMS RAD NAV page, or
- Insert the ILS frequency 108.00 in the RMP.

Note: 108.00 is the default value of ILS frequency that is not associated with an ILS approach.

ERRONEOUS MANAGED APPROACH SPEED AFTER DESCENT WIND UPLINK

Ident.: DSC-22_20-100-20-00024052.0003001 / 28 MAY 20

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

DESCRIPTION

This misbehaviour is encountered in the following conditions:
- The flight crew inserts the uplink of an AOC DESCENT WIND that contains wind at destination (GRND wind appears on the DESCENT WIND page)
- The flight crew does not manually reinsert the wind at destination on the PERF APPR page.

In the case of the uplink of an AOC DESCENT WIND that contains wind at destination (GRND wind appears on the DESCENT WIND page), all of the following apply:
- The FMS correctly receives and uses the wind at destination
- The wind at destination correctly appears on the PERF APPR page
- The FMS erroneously transmits the wind at destination to the Flight Guidance Computer for GSmini computation.

As a result, the managed approach speed that appears on PFD and which is used for guidance by the Flight Guidance Computer may be erroneously increased, depending on the current headwind that the flight crew encounters.

OPERATIONAL RECOMMENDATION

Starting from the DESCENT PREPARATION phase of the Standard Operating Procedures, the flight crew should manually reenter the wind at destination on the PERF APPR page, each time an uplink of an AOC DESCENT WIND that contains wind at destination (GRND wind appears on DESCENT WIND page) is performed. And this recommendation applies whatever the value of the wind at destination, which appears on the PERF APPR page, subsequent to the uplink. This applies even if the value to reenter on the PERF APPR page is exactly the same value.

LOSS OF FMS PREDICTIONS IN LOW DENSITY OF AIRPORTS

7 Ident.: DSC-22_20-100-20-00026317.0001001 / 03 NOV 22
Applicable to: MSN 10949-11597

DESCRIPTION

The FMS may encounter temporary and repetitive loss of predictions in the flight plan of the MCDU during flight, if the FMS finds only 4 airports in the Navigation Database within 1 200 NM from the aircraft position.
The occurrence rate increases when the flight crew enters a 5th airport on [5L] key of the CLOSEST AIRPORTS page.

Note: *During the occurrence, the UTC fields of the 4th and 5th (when entered) airports are dashed in the CLOSEST AIRPORTS page.*

The loss of the time prediction for more than 5 minutes can trigger a FWD fuel transfer from the TRIM tank.

OPERATIONAL RECOMMENDATION

The flight crew should clear the 5th airport in the CLOSEST AIRPORTS page to recover the full FMS predictions.
To avoid new occurrences in flight, the operator should request the FMS supplier to modify the Navigation Database to increase the number of available airports, on the flight routes affected by the loss of predictions. A minimum of 5 airports must be available within 1 200 NM of all expected flight plans.

Intentionally left blank

MCDU FROZEN AFTER THE FLIGHT CREW ACCESSES THE "DIR TO", "HOLD" OR "OFFSET" FUNCTION

Ident.: DSC-22_20-100-30-00012686.0001001 / 21 MAR 17
Applicable to: MSN 04827-04860

When the flight crew attempts to access the “DIR TO” function (via the DIR), the “HOLD” function (via the HOLD prompt on the LAT REV MCDU page) or the "OFFSET" function (via the OFFSET prompt on the LAT REV MCDU page), the corresponding MCDU may remain frozen.
In such a case, the MCDU simultaneously displays an “A/C POSITION INVALID” scratchpad message, in white (note that in other cases of display, the “A/C POSITION INVALID” message is amber).

PROCEDURE

If the MCDU is frozen after the flight crew accesses the “DIR TO”, “HOLD” or "OFFSET" function:

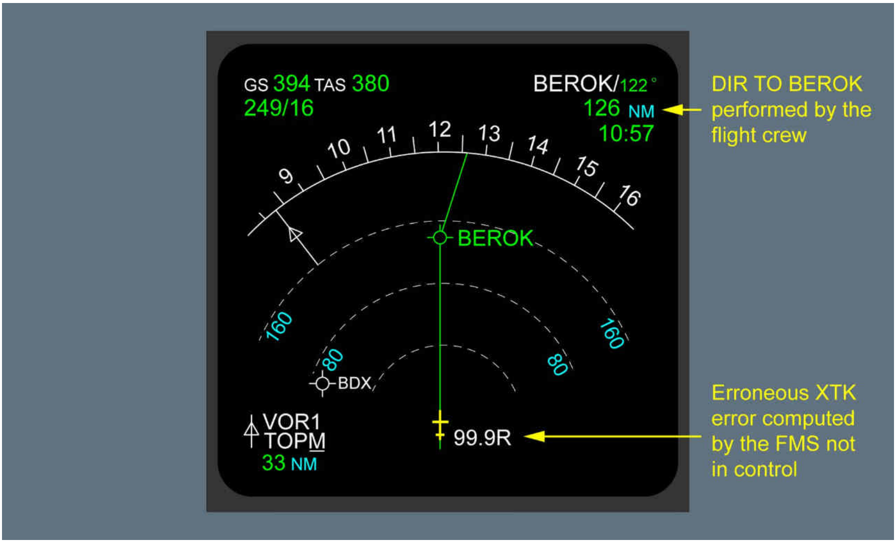
APPLY the manual reset procedure provided (*Refer to procedure*) to successively reset both FMGCs.

ERRONEOUS CROSS TRACK ERROR/FD DISPLAY ORDERS AFTER A DIR TO ON ALIGNED WAYPOINT

Ident.: DSC-22_20-100-30-00013636.0002001 / 26 NOV 19
Applicable to: MSN 04827-04860

DESCRIPTION

Erroneous cross track errors (XTK) and FD orders fluctuations have been reported when a DIR TO is performed to a waypoint ahead, with no heading change.
In these conditions, some time after the DIR TO, the FMS not in control (“slave FMS”) may compute an erroneous XTK using as the reference the next leg after the DIR TO waypoint (the corresponding FD order being based on this erroneous cross track).
However, the XTK and FD of the FMS in control remain correct.
If later, the flight crew switches the autopilot to the affected FMS side, the aircraft guidance will become erroneous.



DIR TO BEROK performed by the flight crew

Erroneous XTK error computed by the FMS not in control

OPERATIONAL RECOMMENDATION:

The flight crew should perform a new DIR TO to recover a correct XTK/FD behaviour.

ERRONEOUS FUEL PREDICTIONS IN THE CASE OF DESCENT WITH TWO ALTITUDE CONSTRAINTS

Ident.: DSC-22_20-100-30-00013638.0001001 / 16 MAR 11
Applicable to: MSN 04827-04860

DESCRIPTION:

If the flight plan has two altitude constraints for the descent, the flight crew may notice erroneous FMS fuel predictions.

EXPLANATION:

If the flight plan has two altitude constraints for the descent, the FMS may define a geometric segment between both altitude constraints. If there is a deceleration required within the geometric segment, the FMS may consider that the geometric segment is too steep to fly without speedbrakes. In this case, the FMS tags the entire geometric segment as a speedbrake segment : The FMS assumes that during the entire segment half of the speedbrakes are extended, even for the parts where no deceleration is planned. As a consequence, the FMS will predict an increased thrust for the entire geometric segment. This may lead to erroneous fuel predictions. (a long geometric segment (e.g. above 100 NM) may lead to an error of 1.5 t for the fuel prediction at destination).

Note: *When flying the geometric segment, the predictions become better as the aircraft approaches the end of the geometric segment, and turn back to normal when the aircraft has sequenced the second altitude constraint.*

PROCEDURE:

If the flight crew suspects this behavior in preflight, or during the flight, they can delete and enter again one altitude constraint in descent and compare the fuel predictions of the flight plan with and without the geometric segment. This allows the flight crew to evaluate the impact of the geometric segment on the fuel predictions. It is not recommended to permanently delete altitude constraints that are stored in the navigation database.

ERRONEOUS LATERAL GUIDANCE IN NAV MODE WITH LOC MODE ARMED DURING APPROACH

Ident.: DSC-22_20-100-30-00015036.0001001 / 05 JUN 18
Applicable to: MSN 04827-04860

During approach, the FMS may guide the aircraft along a specific track instead of along the F-PLN with NAV mode green on the FMA, because of the LOC Convergence function.
The logics of the LOC Convergence function is as follows:

- **If NAV mode is engaged, and LOC mode is armed,**
  and
  The aircraft is within 20 NM of the destination runway,
  and
  The difference between the aircraft track and the QFU is less than 20 °.

  The aircraft is guided with a converging track of 20 ° from the LOC axis.

  The NAV mode remains engaged. However the aircraft no longer follows the F-PLN, but converges towards the LOC axis.

OPERATIONAL RECOMMENDATIONS

- **If the flight crew considers that the LOC Convergence function may affect the guidance along the F-PLN trajectory in NAV mode:**

  On the intercept trajectory for the LOC axis, the flight crew should push the APPR pb (or the LOC pb-sw) when appropriate.

- **If the flight crew detects that the aircraft does not follow the intended trajectory:**

  The flight crew should revert to HDG/TRK mode, and intercept the LOC axis with the HDG/TRK mode engaged and the LOC mode armed.

ERRONEOUS TRAJECTORY COMPUTATION WHILE IN HDG/TRK MODE DURING PROCEDURES WITH A TURN DIRECTION ON A LEG WITH AN ALTITUDE TERMINATION

Ident.: DSC-22_20-100-30-00019778.0001001 / 08 JUL 16
Applicable to: MSN 04827-04860

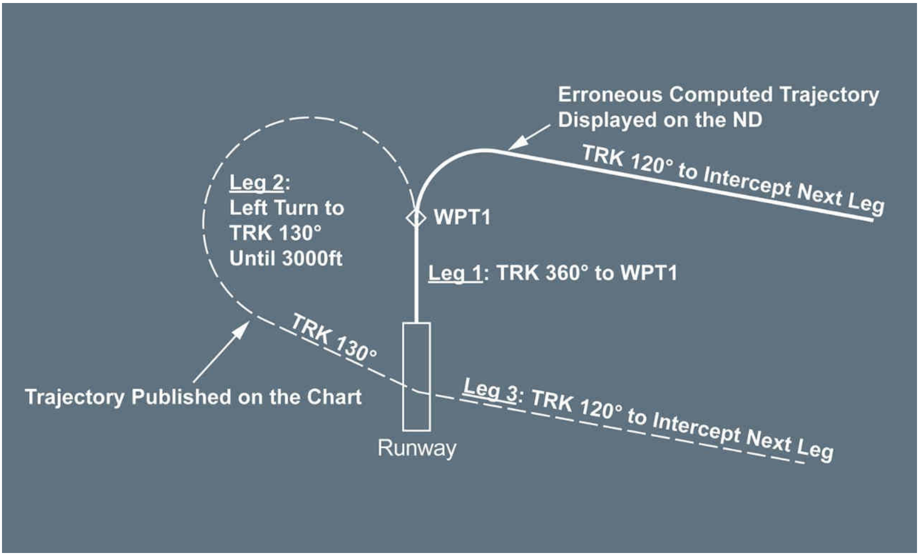
In some specific conditions that depend on the coding in the Navigation Database of the procedure, and on climb performance of the aircraft, the FMS may compute an erroneous trajectory on some Standard Instrument Departures (SID), and on some Missed Approach procedures, when the aircraft is in HDG/TRK mode.

The SIDs and the Missed Approach procedures that may be affected are coded in the Navigation Database with a leg that has both a turn direction and an altitude termination. The leg can be one of the following:
- A Course-to-an-Altitude (CA) leg that defines a course to follow to an altitude
- A Fix-to-an-Altitude (FA) leg that defines a track to follow from a waypoint to an altitude
- A Heading-to-an-Altitude (VA) leg that defines a heading to follow to an altitude

The turn direction (left or right) that is coded on a leg indicates that the aircraft has to execute a turn in the specified direction to intercept the leg.
In some specific operational conditions (light aircraft weight, strong headwind...), the FMS may predict that the aircraft will reach the altitude that terminates the leg, before the initiation of the leg. In that case, if the aircraft is in HDG/TRK selected mode, the FMS ignores the leg and the associated turn direction, and computes a new trajectory to join the next leg.
The trajectory may therefore not be consistent with the published trajectory.

Note: *The erroneous computation may happen only if the aircraft is in HDG/TRK mode. The erroneous computation does not happen as long as the aircraft stays in NAV mode.*

Example:
- Leg 1: a Course-to-Fix (CF) leg that defines a track (360 °) to a waypoint (WPT1)
- Leg 2: a Course-to-an-Altitude (CA) leg that defines a track (130 °) to intercept an altitude (3 000 ft). The leg is coded in the Navigation Database with a turn direction (left). The end of the leg depends on the aircraft performance. The turn direction is indicated by an arrow on the line of leg 1 on the MCDU
- Leg 3: a Course-to-Intercept (CI) leg that defines a track of 120 ° to follow until the interception of the next leg.


Erroneous Computed Trajectory Displayed on the ND
TRK 120° to Intercept Next Leg
Leg 2: Left Turn to TRK 130° Until 3000ft
WPT1
Leg 1: TRK 360° to WPT1
TRK 130°
Trajectory Published on the Chart
Leg 3: TRK 120° to Intercept Next Leg
Runway

Depending on the aircraft performance and the external conditions, the FMS may predict that the aircraft will reach 3 000 ft before WPT1. In that case, if the HDG/TRK mode is engaged, the FMS ignores the leg 2 (CA leg) because the aircraft is already above the altitude that ends leg 2, before the beginning of leg 2. The FMS also ignores the turn direction that is coded on the leg.
As a result, the FMS re-computes the trajectory from the end of leg 1, directly to leg 3. As shown on the above illustration, this trajectory includes a right turn, instead of a left turn, because it induces the shortest course change to intercept leg 3 (CI leg).
If the NAV mode is re-engaged after the new computation, the aircraft follows an erroneous trajectory.

OPERATIONAL RECOMMENDATIONS

The flight crew should pay particular attention to the check of the flight plan during the Cockpit Preparation, and during the Descent Preparation.

CAUTION	Even if the flight plan is correct during the Cockpit Preparation or during the Descent Preparation, the FMS may compute and display an erroneous trajectory when the FMS updates its predictions after takeoff or after go-around initiation.

When in HDG/TRK mode after takeoff or go around initiation, if the flight crew detects that the lateral flight plan does not agree with the published trajectory, the flight crew should stay in HDG/TRK selected mode, and monitor NAVAID raw data as appropriate.

The flight crew should only reengage the NAV mode when the lateral flight plan is consistent with the published trajectory.

UNCOMMANDED CLIMB NEAR THE TOP OF DESCENT (T/D)

Ident.: DSC-22_20-100-30-00021871.0001001 / 28 MAY 20
Applicable to: MSN 04827-04860

DESCRIPTION

When the inserted tropopause altitude is equal to the final FMS cruise flight level, the FMS can erroneously compute a very steep segment in the FMS vertical profile. A guidance anomaly can then order a pitch up to capture this steep segment while in DES mode.

In this case, an unexpected climb may occur when the following conditions are satisfied:

- Tropopause altitude is equal to final FMS cruise flight level (tropopause altitude can be manually entered on MCDU/INIT A page or received via an AOC uplink)
- DES mode is engaged before the T/D.

If this unexpected climb occurs, the aircraft pitches up and A/THR commands a thrust increase but speed may decrease.

OPERATIONAL RECOMMENDATION

■ **How to avoid unexpected climb at top of descent:**

The tropopause altitude entered or uplinked on MCDU/INIT A page must be different from the final FMS cruise flight level by at least 10 ft. The altitude of the final FMS cruise flight level is the flight plan altitude at the T/D. As the flight level may be selected on MCDU or FCU with an accuracy of 100 ft, tropopause altitude must be set to a value that is not a multiple of 100 ft.

For example, if the tropopause altitude is 37 000 ft, then the value 37 010 ft or 36 990 ft must be entered or uplinked on MCDU/INIT A page.

■ **How to manage an unexpected climb near the T/D:**

If the aircraft unexpectedly climbs near the T/D, the flight crew must disengage the DES mode or disconnect the AP/FD. DES mode can then be re-engaged once the T/D is sequenced and the aircraft is back on the FMS descent profile.

ERRONEOUS ALTITUDE CONSTRAINT AFTER SID OR STAR SELECTION CHANGE

Ident.: DSC-22_20-100-30-00022414.0001001 / 24 AUG 18
Applicable to: MSN 04827-04860

DESCRIPTION

When the flight crew changes the SID or the STAR procedure, the FMS may keep a constraint of the previous procedure after the change.
The condition of occurrence is that both SID(STAR) procedures have the same last(first) waypoint but with different associated altitude constraints.
At the first SID(STAR) selection, the waypoint is linked to the en-route flight plan and the FMS considers this waypoint as the first(last) en-route waypoint.
When the SID(STAR) is changed, the FMS may keep the constraint of the first(last) en-route waypoint rather than the constraint of the new selected SID(STAR).

Note: *The issue may also appear if the altitude constraint was inserted manually in the previous SID(STAR).*

PROCEDURE

As per SOP, the flight crew must compare the inserted SID(STAR), including constraints, with the charts and make corrections if necessary.

WAYPOINT NOT SEQUENCED AFTER DIR TO RADIAL IN

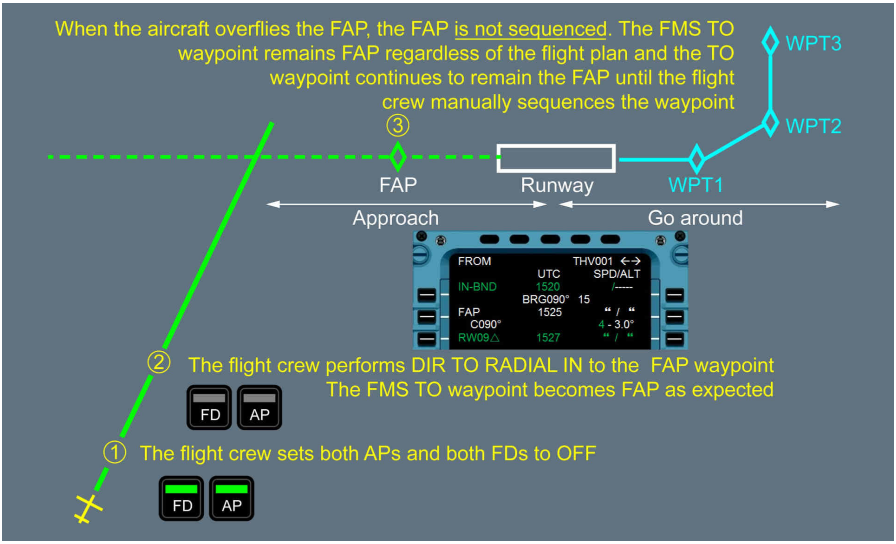
Ident.: DSC-22_20-100-30-00022530.0001001 / 18 SEP 18
Applicable to: MSN 04827-04860

DESCRIPTION

If the flight crew performs a DIR TO RADIAL IN with both APs and both FDs set to OFF, the FMS correctly computes the "DIR TO RADIAL IN waypoint" as the TO waypoint. The correct computation is confirmed by correct display on Navigation Display (ND) and Multipurpose Control and Display Unit (MCDU). However, the FMS will not sequence the newly-created TO waypoint when the aircraft overflies it. The FMS keeps it as the TO waypoint until the flight crew performs a manual sequencing.

Note: *If the flight crew performs the DIR TO RADIAL IN before they set both APs and both FDs to OFF, the FMS will correctly sequence the waypoint.*

The illustration below provides a typical example of the abnormal behavior:


When the aircraft overflies the FAP, the FAP is not sequenced. The FMS TO waypoint remains FAP regardless of the flight plan and the TO waypoint continues to remain the FAP until the flight crew manually sequences the waypoint

② The flight crew performs DIR TO RADIAL IN to the FAP waypoint The FMS TO waypoint becomes FAP as expected

① The flight crew sets both APs and both FDs to OFF

UNUSABLE MIN DEST FOB VALUE IN THE SECONDARY FLIGHT PLAN

Ident.: DSC-22_20-100-30-00022951.0001001 / 26 NOV 19
Applicable to: MSN 04827-04860

In some specific conditions the flight crew may observe that the EXTRA fuel value displayed on the FMS FUEL PRED page may not be equal to the difference between the "Predicted DEST EFOB value" and the "MIN DEST FOB value". This misbehavior may occur in either of the following cases:

- **If an ATC uplink is performed**

DESCRIPTION

This misbehavior may occur in the following case:
- The MIN DEST FOB value of the active F-PLN is not the computed value by the FMS, and
- A SEC F-PLN is created from an ATC uplink.

In this situation the MIN DEST FOB may not be copied in the SEC F-PLN.

RECOMMENDATION

Subsequent to the uplink of a new SEC F-PLN, the flight crew can detect this misbehavior if the MIN DEST FOB value is not copied in the SEC F-PLN. The EXTRA fuel value displayed on the FMS FUEL PRED page may no longer be equal to the difference between the "Predicted DEST EFOB value" and the "MIN DEST FOB value".

In this case, the flight crew should enter a MIN DEST FOB value in the SEC F-PLN.

● If an AOC uplink is performed

DESCRIPTION

This misbehavior may occur when all of the following conditions are satisfied:

- A SEC F-PLN is created by COPY ACTIVE or from an ATC uplink before the AOC uplink is loaded, and
- The MIN DEST FOB value of this SEC F-PLN is not the computed value by the FMS, and
- An AOC message is loaded:
  - Either in flight, or
  - On ground.

When an AOC flight plan uplink is loaded in the SEC F-PLN, the previous MIN DEST FOB value of the SEC F-PLN may not be clearable and fuel prediction computations are not consistent. The EXTRA fuel value displayed on the FMS FUEL PRED page may no longer be equal to the difference between the “Predicted DEST EFOB value” and the “MIN DEST FOB value”.

EXPLANATION

In the SEC Flight Plan:

When the AOC message is loaded with a new flight plan, the displayed MIN DEST FOB value of the SEC flight plan is not correct because the value applicable to the previous flight plan remains displayed.

In addition, this MIN DEST FOB value cannot be cleared.

The MIN DEST FOB value used by the FMS to perform the fuel computations (in particular for EXTRA fuel computation) is the default FMS computed value. Therefore, there is a difference between the displayed MIN DEST FOB value and the other fuel data (i.e. EXTRA differs from FOB at destination minus MIN DEST FOB).

In the Active Flight Plan:

If the uploaded SEC flight plan is activated, this abnormal behavior is transferred to the active flight plan. The MIN DEST FOB value cannot be cleared and the value that is displayed on the INIT B page or the FUEL PRED page is not correct and not consistent with the other fuel data that are correctly computed and displayed.

RECOMMENDATION

Subsequent to the uplink of a new SEC flight plan, the flight crew can detect this misbehavior if the EXTRA fuel value is no longer equal to the “Predicted DEST EFOB value minus MIN DEST FOB value”.

The flight crew cannot clear the MIN DEST FOB value. In order to continue, the flight crew should enter a MIN DEST FOB value again in the SEC flight plan to recover nominal fuel computations. To do this, the flight crew can perform one of the following:
- To obtain the FMS computed value, enter any value other than “CLR” then clear it, or
- Directly enter the desired MIN DEST FOB value.

Then, the flight crew can activate the SEC flight plan.

UNEXPECTED DECELERATE DISPLAYED ON MCDU (AND "T/D REACHED" ON PFD) DURING CLIMB

Ident.: DSC-22_20-100-30-00023137.0001001 / 04 JUN 19
Applicable to: MSN 04827-04860

DESCRIPTION

In some cases, both of the following spurious messages are simultaneously displayed:
- DECELERATE on the MCDU scratchpad
- T/D REACHED on the PFD.

The messages are displayed:
- During climb, or
- At acceleration altitude.

This misbehavior has no impact on the guidance of the aircraft.

OCCURRENCE CONDITIONS

This misbehavior occurs when, during cockpit preparation, all the following conditions apply:
- The FMS is fully initialized with predictions and FMS position is available, and
- A dual FMS reset (more than 5 s and less than 10 min) is performed and IRS are switched OFF, and
- FMS restarts while IRS are still OFF.

RECOMMENDATION

ON GROUND:

After FMS restart, enter any data in order to initiate a new profile computation (V2 speed, Cost Index, CRZ FL, ZFW, etc). This new profile computation restores normal FMS behavior.

IN FLIGHT:

During CLIMB or at acceleration altitude, disregard both of the following spurious messages: DECELERATE and T/D REACHED. Perform a DIR TO to the next waypoint, in order to force a new computation of the vertical path and restore normal FMS behavior.

MISSING OR INCORRECT INSERT UPLINK PROMPT ON UPLINK T.O DATA PAGE

Ident.: DSC-22_20-100-30-00023494.0001001 / 26 NOV 19
Applicable to: MSN 04827-04860

DESCRIPTION

This misbehavior may occur when all of the following conditions are satisfied:
- The flight crew sends a T.O DATA REQUEST on MCDU UPLINK TO DATA page
- The AOC uplink provides the T.O DATA for multiple runways. The T.O DATA are inserted for the DEPARTURE RWY in the active FMS F-PLN
- A SEC F-PLN is created by pressing COPY ACTIVE on the SEC INDEX page
- The DEPARTURE RWY is modified in the SEC F-PLN and SEC F-PLN is activated.

In such situation either of the following may occur:
- The INSERT UPLINK* prompt is displayed on all UPLINK TO DATA pages, or
- The INSERT UPLINK* prompt is only displayed on the UPLINK TO DATA page for previous DEPARTURE RWY.

OPERATIONAL RECOMMENDATION

Subsequent to an AOC T.O DATA REQUEST, the flight crew must crosscheck the T.O DATA to be inserted. The flight crew must check that the T.O DATA is consistent with the T.O RWY before they select the prompt INSERT UPLINK*.
If the prompt INSERT UPLINK* is not displayed on the UPLINK T.O DATA page of the selected T.O RWY (received by AOC), the flight crew must initiate a new T.O DATA REQUEST.

FMS RESET UPON CROSSING THE 180TH MERIDIAN

Ident.: DSC-22_20-100-30-00023697.0001001 / 26 NOV 19
Applicable to: MSN 04827-04860

DESCRIPTION

A single or a dual FMS reset with automatic recovery may occur when the aircraft crosses the 180th meridian (longitude 180 °).

- A reversion to basic modes (HDG/V/S or TRK/FPA) occurs if the FM1 (FM2) resets while AP1 (AP2) is engaged.

While the reset occurs:

- The ND of the resetting side displays “MAP NOT AVAIL”
- The FMS of the resetting side reverts to the MCDU MENU page
- The Autotuning of Navaids (VOR, DME, ADF ◁) is lost on the resetting side

OPERATIONAL RECOMMENDATION

In order to anticipate a possible FMS reset, the flight crew should monitor the crossing of the 180th meridian, using for example the FIX INFO page of the FMS.

DUAL FMS RESET WITH LOSS OF DATA UPON DIR TO/ABEAM INSERTION WITH 3 STEP ALTS

Ident.: DSC-22_20-100-30-00023710.0001001 / 26 NOV 19
Applicable to: MSN 04827-04860

DESCRIPTION

A dual FMS reset with automatic recovery may occur at DIR TO/ABEAM insertion when all the following conditions are met:
- The TO waypoint of the DIR TO/ABEAM does not belong to the flight plan
- There are at least 3 STEP ALTS defined in the flight plan
- The direct leg contains at least one waypoint with a STEP ALT.

The insertion is unsuccessful. After the reset, the DIR TO TMPY F-PLN remains displayed on FMS and ND.
If the DIR TO/ABEAM insertion is attempted 4 times within 3 min, all the FMS data are lost (*Refer to DSC-22_20-90-10 Automatic FMGC Reset and Resynchronization - Dual Reset with Loss of Data and Autorecovery*).

OPERATIONAL RECOMMENDATION

When there are 3 step altitudes in the STEP ALTS page of the FMS, do not use the DIR TO/ABEAM to a waypoint located outside of the flight plan. Instead, use the DIR TO or the DIR TO/INCPT.

AIRCRAFT SYSTEMS

AUTO FLIGHT - FLIGHT GUIDANCE

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DSC-22_30-10 General

General....A

DSC-22_30-20 Flight Director

DSC-22_30-20-10 General

General....A

DSC-22_30-20-20 FD Engagement

Manual Engagement....A
Automatic Engagement....B
Engagement Annunciation....C

DSC-22_30-20-30 FD Symbology - Display

FD Symbology - Display....A

DSC-22_30-20-40 FD Symbology - Non Display

FD Symbology - Non Display....A

DSC-22_30-20-50 FD Disengagement

General....A
Manual Disengagement....B
Automatic Disengagement....C
Disengagement Annunciation....D

DSC-22_30-20-60 FD Warnings

FD Bars Flashing....A
FD Flag....B

DSC-22_30-30 Autopilot

DSC-22_30-30-10 General

General....A

DSC-22_30-30-20 AP Engagement

Introduction....A
Engagement Conditions....B
Engagement Annunciation....C

DSC-22_30-30-30 AP Disengagement

Manual Disengagement....A
Automatic Disengagement....B
Disengagement Annunciations and Warnings....C

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DSC-22_30-40 AP/FD Modes

DSC-22_30-40-10 General

Introduction....................A
AP/FD Lateral Modes....................B
AP/FD Vertical Modes....................C
AP/FD Common Modes....................D
AP/FD Mode Status and Display....................E

DSC-22_30-40-20 Takeoff

DSC-22_30-40-20-10 General

General....................A

DSC-22_30-40-20-20 SRS TO Mode

General....................A
Engagement Conditions....................B
Disengagement Conditions....................C

DSC-22_30-40-20-30 RWY Mode

General....................A
Engagement Conditions....................B
Disengagement Conditions....................C

DSC-22_30-40-20-40 RWY TRK Mode

General....................A
Engagement Conditions....................B
Disengagement Conditions....................C

DSC-22_30-40-30 Lateral Guidance from Takeoff to Descent

DSC-22_30-40-30-10 HDG/TRK Mode

General....................A
Engagement Conditions....................B
HDG-V/S / TRK-FPA Selection....................C
HDG/TRK Preset....................D
Disengagement Conditions....................E
Synchronize the HDG/TRK Window of the FCU....................F

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DSC-22_30-40-30-20 NAV Mode

General....A
Arming Conditions....B
Disarming Conditions....C
Engagement Conditions....D
Disengagement Conditions....E
Interactions with Vertical Modes....F

DSC-22_30-40-40 Climb

DSC-22_30-40-40-10 OP CLB Mode

General....A
Arming Conditions....B
Disarming Conditions....C
Engagement Conditions....D
OP CLB Association with Altitude Modes....E
Disengagement Conditions....F

DSC-22_30-40-40-20 CLB Mode

General....A
Arming Conditions....B
Disarming Conditions....C
Engagement Conditions....D
CLB Association with Altitude Modes....E
Disengagement Conditions....F

DSC-22_30-40-40-30 EXP CLB Mode

General....A
Engagement Conditions....B
Disengagement Conditions....C

1 DSC-22_30-40-50 Altitude

DSC-22_30-40-50-10 ALT

General....A
ALT Arming Conditions....B
ALT Disarming Conditions....C
ALT* Engagement Conditions....D
ALT* Disengagement Conditions....E
ALT Engagement Conditions....F
ALT Disengagement Conditions....G

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DSC-22_30-40-50-20 ALT CST

General....A
ALT CST Arming Conditions....B
ALT CST Disarming Conditions....C
ALT CST* Engagement Conditions....D
ALT CST* Disengagement Conditions....E
ALT CST Engagement Conditions....F
ALT CST Disengagement Conditions....G

DSC-22_30-40-50-30 ALT CRZ

General....A
ALT CRZ Arming conditions....B
ALT CRZ Disarming Conditions....C
ALT CRZ* Engagement Conditions....D
ALT CRZ* Disengagement Conditions....E
ALT CRZ Engagement Conditions....F
ALT CRZ Disengagement Conditions....G

DSC-22_30-40-60 Descent

DSC-22_30-40-60-10 General

General....A

DSC-22_30-40-60-20 OP DES Mode

General....A
Engagement Conditions....B
Disengagement Conditions....C

DSC-22_30-40-60-30 DES Mode

General....A
Arming Conditions....B
Disarming Conditions....C
Engagement Conditions....D
Disengagement Conditions....E

DSC-22_30-40-60-40 EXP DES Mode

General....A
Engagement Conditions....B
Disengagement Conditions....C

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DSC-22_30-40-70 V/S / FPA Mode

General....A
Engagement Conditions....B
Disengagement Conditions....C

DSC-22_30-40-80 Approach Modes and Landing Modes

DSC-22_30-40-80-00 General

General....A
ILS/GLS (If Installed)/SLS (If Installed) Guidance Mode....B
FLS Guidance Mode....C
FINAL APP Guidance Mode....D

DSC-22_30-40-80-10 LOC Mode

General....A
LOC Arming Conditions....B
LOC Disarming Conditions....C
LOC* Engagement Conditions....D
LOC* Disengagement Conditions....E
LOC Engagement Conditions....F
LOC Disengagement Conditions....G

DSC-22_30-40-80-20 G/S Mode

General....A
G/S Arming Conditions....B
G/S Disarming Conditions....C
G/S* Engagement Conditions....D
G/S* Disengagement Conditions....E
G/S Engagement Conditions....F
G/S Disengagement Conditions....G

DSC-22_30-40-80-30 LAND Mode

General....A
Engagement Conditions....B
Disengagement Conditions....C

DSC-22_30-40-80-40 FLARE Mode

General....A
Engagement Conditions....B
Disengagement Conditions....C

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DSC-22_30-40-80-50 ROLL OUT Mode

General......A
Engagement Conditions......B
Disengagement Conditions......C

DSC-22_30-40-80-60 F-LOC Mode

General......A
F-LOC Arming Conditions...... B
F-LOC Disarming Conditions...... C
F-LOC* Engagement Conditions......D
F-LOC* Disengagement Conditions...... E
F-LOC Engagement Conditions......F
F-LOC Disengagement Conditions...... G

DSC-22_30-40-80-70 F-G/S Mode

General......A
F-G/S Arming Conditions......B
F-G/S Disarming Conditions......C
F-G/S* Engagement Conditions...... D
F-G/S* Disengagement Conditions......E
F-G/S Engagement Conditions......F
F-G/S Disengagement Conditions......G

DSC-22_30-40-80-90 FINAL APP Mode

General......A
APP NAV and FINAL Arming Conditions......B
APP NAV and FINAL Disarming Conditions......C
APP NAV Engagement Conditions...... D
APP NAV Disengagement Conditions......E
FINAL APP Engagement Conditions......F
FINAL APP Disengagement Conditions...... G

DSC-22_30-40-90 Go-Around

DSC-22_30-40-90-10 General

General......A

DSC-22_30-40-90-20 SRS GA Mode

General......A
Engagement Conditions......B
Disengagement Conditions......C

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DSC-22_30-40-90-30 GA TRK Mode

General....A
Engagement Conditions....B
Disengagement Conditions....C

DSC-22_30-40-100 AP/FD TCAS Mode

General....A
AP/FD TCAS Mode Availability....B
Arming Conditions....C
Disarming Conditions....D
Engagement Conditions....E
Disengagement Conditions....F
Normal Operations - When a TA is triggered....G
Normal Operations - When a RA is triggered....H
Normal Operations - When Clear of Conflict....I

DSC-22_30-40-110 AP/FD Mode Reversions

AP/FD Mode Reversions....A

DSC-22_30-40-120 Scenario Examples

DSC-22_30-40-120-20 Takeoff

Takeoff with NAV....A
Takeoff with HDG/TRK Preset....B

DSC-22_30-40-120-30 Climb with OP CLB Mode

At the Acceleration Altitude....A
The Flight Crew Pulls the ALT Knob....B
NAV Disengages....C

DSC-22_30-40-120-40 Climb with CLB Mode

At the Acceleration Altitude....A
Climbing toward an Altitude Constraint....B

DSC-22_30-40-120-50 Altitude with ALT

CLB and ALT - Example 1....A
CLB and ALT - Example 2....B
OP CLB and ALT....C
ALT in Descent with TCAS TA....D

DSC-22_30-40-120-60 Altitude with ALT CST

CLB and ALT CST....A

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DSC-22_30-40-120-70 Altitude with ALT CRZ

CLB and ALT CRZ........A
OP CLB and ALT CRZ........B
ALT CRZ with TCAS TA........C

DSC-22_30-40-120-80 Approach and Landing

ILS Approach and Autoland........A
VOR Approach Flown with FLS Function........B
LOC only Approach Flown with FLS Function........C
VOR Approach Flown with FINAL APP Guidance Mode........D

DSC-22_30-50 Autothrust

DSC-22_30-50-10 General

General........A

DSC-22_30-50-20 Thrust Levers

Thrust Levers........A

DSC-22_30-50-30 A/THR Arming and Activation

Preliminary Conditions required for A/THR Arming and Activation........A
A/THR Arming........B
A/THR Activation........C

DSC-22_30-50-40 A/THR Disconnection

A/THR Disconnection........A
A/THR Annunciation and Warnings........B

DSC-22_30-50-50 A/THR Modes

General........A
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Speed/Mach Mode........C
RETARD mode........D
A/THR Mode Reversions........E
ALPHA FLOOR........F

DSC-22_30-50-60 Scenario Examples

From Takeoff to Thrust Reduction Altitude........A
From Soft Go-around to Thrust Reduction Altitude........B

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DSC-22_30-60 Speed/MACH Control

DSC-22_30-60-10 General

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DSC-22_30-60-20 Managed Speed/Mach

General.....A
Engagement Conditions.....B
Managed Speed/Mach Target.....C
2 Ground Speed Mini Function.....D
Disengagement Conditions.....E

DSC-22_30-60-30 Selected Speed/Mach

General.....A
Engagement Conditions.....B
Disengagement Conditions.....C

DSC-22_30-60-40 Speed/MACH FCU Window Synchronization

Speed/MACH FCU Window Synchronization.....A

DSC-22_30-70 Approach and Landing Capability

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Fail Concept.....B
Display.....C

DSC-22_30-80 Controls and Indicators

DSC-22_30-80-10 Autoland Light

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DSC-22_30-80-20 FMA

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- FD 2 .....B
1 FD - C
1 FD 2 .....D
A.FLOOR .....E
ALT (armed).....F
ALT (engaged).....G
ALT* .....H
ALT CRZ (armed).....I
ALT CRZ (engaged).....J
ALT CRZ* .....K
ALT CST (armed).....L

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ALT CST (engaged) M
ALT CST* N
AP1 O
AP1+2 P
AP2 Q
APP NAV (armed) R
APP NAV (engaged) S
APPR1 (SLS ◁) T
A/THR (activated) U
A/THR (armed) V
AUTO LAND (GLS ◁) W
BARO XXXXX X
BRK LO (armed) Y
BRK LO (activated) Z
BRK MAX (activated) AA
BRK MAX (armed) on Line 2 AB
BRK MAX (armed) on Line 3 AC
BRK MED (armed) AD
BRK MED (activated) AE
CAT1 AF
CAT2 AG
CAT3 DUAL AH
CAT3 SINGLE AI
CHECK APP SEL AJ
CHECK APPR SELECTION AK
CHECK SPEED MODE AL
CLB (armed) AM
CLB (engaged) AN
DECELERATE AO
DES (armed) AP
DES (engaged) AQ
DISCONNECT AP FOR LDG AR
EXP CLB AS
EXP DES AT
F-APP AU
F-APP + RAW AV
F-G/S (armed) AW
F-G/S (engaged) AX
F-G/S* AY
FINAL (armed) AZ

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FINAL APP .... BA
FINAL APP SELECTED .... BB
FLARE .... BC
F-LOC (armed) .... BD
F-LOC (engaged) .... BE
F-LOC* .... BF
FOR GA: SET TOGA .... BG
FPA .... BH
GA TRK .... BI
G/S (armed) .... BJ
G/S (engaged) .... BK
G/S* .... BL
HDG .... BM
LAND .... BN
LOC (armed) .... BO
LOC (engaged) .... BP
LOC* .... BQ
LVR ASYM .... BR
LVR CLB .... BS
LVR MCT .... BT
LVR TOGA .... BU
MACH .... BV
MACH (with a flashing amber box) .... BW
MACH SEL:.XX .... BX
MAN FLX XX .... BY
MAN GA SOFT .... BZ
MAN MCT .... CA
MAN PITCH TRIM ONLY .... CB
MAN THR CC
MAN TOGA .... CD
MORE DRAG .... CE
NAV (armed) .... CF
NAV (engaged) .... CG
NO DH .... CH
OP CLB (armed) CI
OP CLB (engaged) .... CJ
OP DES .... CK
RADIO XXX CL
RAW ONLY .... CM
ROLL OUT .... CN

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RWY ....CO
RWY TRK .... CP
SET GREEN DOT SPEED .... CQ
SET HOLD SPEED .... CR
SET MANAGED SPEED .... CS
SPEED .... CT
SPEED with a flashing amber box.... CU
SPEED SEL:XXX CV
SRS .... CW
TCAS (armed).... CX
TCAS (engaged).... CY
TCAS RA INHIBITED .... CZ
T/D REACHED .... DA
THR CLB .... DB
THR IDLE .... DC
THR LK .... DD
THR LVR .... DE
THR MCT .... DF
TOGA LK .... DG
TRK .... DH
TRK FPA DESELECTED .... DI
USE MAN PITCH TRIM .... DJ
V/S .... DK

DSC-22_30-110 Temporary Abnormal Behaviors

Misbehaviour of the Enhanced LOC Capture Function.... A
Unexpected G/S mode armed.... B
Left Turn Not Expected while in HDG or TRK Mode.... C
Spurious CAT 2 INOP.... D

Localization Title	Toc Index	ID	Reason
DSC-22_30-PLP-TOC Altitude		1	Documentation update: The "ALT" table of content entry renamed in "Altitude"
DSC-22_30-PLP-TOC Ground Speed Mini Function		2	Documentation update: Deletion of the "00025750.0001001 Managed Speed Target Computation" documentary unit.
DSC-22_30-40-20-20 General - Pitch	A	1	Documentation update: Addition of "General - Pitch" documentary unit
DSC-22_30-40-80-00 Guidance Selection	C	2	Documentation update: Addition of "Guidance Selection" documentary unit
DSC-22_30-40-80-00 FLS Function Availability	C	3	Documentation update: Addition of "FLS Function Availability" documentary unit
DSC-22_30-40-80-00 Approaches flown with Lateral and Vertical FLS Guidance	C	4	Documentation update: Addition of "Approaches flown with Lateral and Vertical FLS Guidance" documentary unit
DSC-22_30-40-80-00 Approaches flown with Vertical FLS Guidance	C	5	Documentation update: Addition of "Approaches flown with Vertical FLS Guidance" documentary unit
DSC-22_30-40-80-60 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-22_30-40-80-60 F-LOC Arming Conditions	B	2	Documentation update: Addition of "F-LOC Arming Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC Disarming Conditions	C	3	Documentation update: Addition of "F-LOC Disarming Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC* Engagement Conditions	D	4	Documentation update: Addition of "F-LOC* Engagement Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC* Disengagement Conditions	E	5	Documentation update: Addition of "F-LOC* Disengagement Conditions" documentary unit
DSC-22_30-40-80-60 Reversions	E	6	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-60 Reversions - Triple Click	E	7	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-60 F-LOC Engagement Conditions	F	8	Documentation update: Addition of "F-LOC Engagement Conditions" documentary unit
DSC-22_30-40-80-60 F-LOC Disengagement Conditions	G	9	Documentation update: Addition of "F-LOC Disengagement Conditions" documentary unit
DSC-22_30-40-80-60 Reversions	G	10	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-60 Reversions - Triple Click	G	11	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-70 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-22_30-40-80-70 F-G/S Arming Conditions	B	2	Documentation update: Addition of "F-G/S Arming Conditions" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-22_30-40-80-70 F-G/S Disarming Conditions	C	3	Documentation update: Addition of "F-G/S Disarming Conditions" documentary unit
DSC-22_30-40-80-70 F-G/S* Engagement Conditions	D	4	Documentation update: Addition of "F-G/S* Engagement Conditions" documentary unit
DSC-22_30-40-80-70 F-G/S* Disengagement Conditions	E	5	Documentation update: Addition of "F-G/S* Disengagement Conditions" documentary unit
DSC-22_30-40-80-70 Reversions	E	6	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-70 Reversions - Triple Click	E	7	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-70 F-G/S Engagement Conditions	F	8	Documentation update: Addition of "F-G/S Engagement Conditions" documentary unit
DSC-22_30-40-80-70 F-G/S Disengagement Conditions	G	9	Documentation update: Addition of "F-G/S Disengagement Conditions" documentary unit
DSC-22_30-40-80-70 Reversions	G	10	Documentation update: Addition of "Reversions" documentary unit
DSC-22_30-40-80-70 Reversions - Triple Click	G	11	Documentation update: Addition of "Reversions - Triple Click" documentary unit
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	3	Documentation update: Addition of "FINAL APP Engagement Conditions" documentary unit
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	5	Documentation update: Addition of "FINAL APP Engagement Conditions" documentary unit
DSC-22_30-40-90-20 General	A	2	Documentation update: Addition of "General" documentary unit
DSC-22_30-40-120-80 VOR Approach Flown with FLS Function	B	1	Documentation update: Addition of "VOR Approach Flown with FLS Function" documentary unit
DSC-22_30-40-120-80 LOC only Approach Flown with FLS Function	C	2	Documentation update: Addition of "LOC only Approach Flown with FLS Function" documentary unit
DSC-22_30-70 List of Approach and Landing Capabilities - FLS	A	1	Documentation update: Addition of "List of Approach and Landing Capabilities - FLS" documentary unit
DSC-22_30-80-20 F-APP	AU	17	Documentation update: Addition of "F-APP" documentary unit
DSC-22_30-80-20 F-APP + RAW	AV	18	Documentation update: Addition of "F-APP + RAW" documentary unit
DSC-22_30-80-20 F-G/S (armed)	AW	19	Documentation update: Addition of "F-G/S (armed)" documentary unit
DSC-22_30-80-20 F-G/S (engaged)	AX	20	Documentation update: Addition of "F-G/S (engaged)" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-22_30-80-20 F-G/S*	AY	21	Documentation update: Addition of "F-G/S*" documentary unit
DSC-22_30-80-20 F-LOC (armed)	BD	23	Documentation update: Addition of "F-LOC (armed)" documentary unit
DSC-22_30-80-20 F-LOC (engaged)	BE	24	Documentation update: Addition of "F-LOC (engaged)" documentary unit
DSC-22_30-80-20 F-LOC*	BF	25	Documentation update: Addition of "F-LOC*" documentary unit
DSC-22_30-80-20 RAW ONLY	CM	34	Documentation update: Addition of "RAW ONLY" documentary unit
DSC-22_30-40-20-20 General - Pitch	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-40-30-10 Engagement Conditions 7	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097,

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DSC-22_30-40-30-10 HDG/TRK Preset (at Go Around) NAV mode in GA	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-30-20 Arming Conditions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-30-20 Disarming Conditions	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-30-20 Engagement Conditions	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Engagement Conditions	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Disengagement Conditions	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Reversions	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-40-30 Reversions - Triple Click	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-50-10 General - TCAP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-50-20 General - TCAP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-50-30 General - TCAP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 Engagement Conditions	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 Disengagement Conditions	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-60-40 Reversions	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_30-40-80-00 Approach Selection - Manual Tuning on FMS	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-10 LOC Disarming Conditions	C	1	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-10 LOC Disarming Conditions	C	2	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-20 G/S Disarming Conditions	C	1	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-20 G/S Disarming Conditions	C	2	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-90 APP NAV and FINAL Disarming Conditions	C	1	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-90 APP NAV and FINAL Disarming Conditions	C	2	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-40-80-90 FINAL APP Engagement Conditions	F	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032,

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DSC-22_30-40-80-90 Reversions	G	7	Effectivity update: The information now also applies to MSN 11531. The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-40-80-90 Reversions	G	8	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11572, 11597.
DSC-22_30-40-90-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-90-20 General	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

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DSC-22_30-40-90-30 Engagement Conditions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 AP/FD TCAS Mode Availability	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Arming Conditions	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Disarming Conditions	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Engagement Conditions	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Disengagement Conditions	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a TA is triggered	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on AP and FD	H	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on AP/FD Lateral Mode	H	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on AP/FD Vertical Mode	H	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - AP/FD Vertical Mode Engaged At Occurence of the RA	H	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - AP/FD Vertical Mode Armed at Occurrence of the RA	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on A/THR and Speed/Mach Control	H	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on ALPHA FLOOR	H	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-100 Normal Operations - When Clear of Conflict	I	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-110 Speed Protection due to Excessive V/S Target (AP/FD TCAS mode engaged)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-120-50 ALT in Descent with TCAS TA	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-40-120-70 ALT CRZ with TCAS TA	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-30 Arming Conditions	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-30 A/THR Engagement In Overspeed	C	2	Effectivity update: The information now also applies to MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
DSC-22_30-50-40 A/THR Disconnection	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-40 A/THR Disconnection	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-50 A/THR Soft Mode	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-50 ALPHA FLOOR	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-50-60 From Soft Go-around to Thrust Reduction Altitude	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-60-20 Managed Speed Target Computation	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-60-20 Managed Speed Target Computation	D	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032,

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DSC-22_30-70 List of Approach and Landing Capabilities - FLS - Disconnect AP for Landing	A	2	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 08495, 08596, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-10 Autoland Warning Light	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-10 Autoland Warning Light	A	2	Effectivity update: The information now also applies to MSN 03002, 03284, 03313, 03565, 03630, 03662, 04544, 04734.
DSC-22_30-80-10 Autoland Warning Light	A	3	Effectivity update: The information now also applies to MSN 02014.
DSC-22_30-80-10 Autoland Warning Light	A	4	Effectivity update: The information no longer applies to MSN 02014, 03002, 03284, 03313, 03565, 03630, 03662, 04544, 04734.
DSC-22_30-80-20 FMA Display	A	1	Effectivity update: The information no longer applies to MSN 07081, 07098.
DSC-22_30-80-20 FMA Display	A	2	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK LO (armed)	Y	3	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK LO (activated)	Z	4	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK MAX (activated)	AA	5	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DSC-22_30-80-20 BRK MAX (armed) on Line 2	AB	6	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK MAX (armed) on Line 3	AC	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 04827, 04860, 06634, 06871.
DSC-22_30-80-20 BRK MED (armed)	AD	8	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 BRK MED (activated)	AE	9	Effectivity update: The information now also applies to MSN 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 CHECK APP SEL	AJ	10	Effectivity update: The information no longer applies to MSN 02321.
DSC-22_30-80-20 CHECK APPR SELECTION	AK	11	Effectivity update: The information now also applies to MSN 02321, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 CHECK SPEED MODE	AL	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 DISCONNECT AP FOR LDG	AR	13	Effectivity update: The information now also applies to MSN 02321. The information no longer applies to MSN 05947, 05987, 07081, 07098, 08495, 08596.
DSC-22_30-80-20 DISCONNECT AP FOR LDG	AR	14	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 08495, 08596, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 EXP CLB	AS	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 EXP DES	AT	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 FINAL APP SELECTED	BB	22	Effectivity update: The information now also applies to MSN 11531. The information no longer applies to all MSN.
DSC-22_30-80-20 FOR GA: SET TOGA	BG	26	Effectivity update: The information now also applies to MSN 03002, 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 LVR CLB	BS	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 LVR MCT	BT	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 LVR TOGA	BU	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-22_30-80-20 LVR TOGA	BU	30	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098.
DSC-22_30-80-20 LVR TOGA	BU	31	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-22_30-80-20 MACH (with a flashing amber box)	BW	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 MAN GA SOFT	BZ	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 SPEED with a flashing amber box	CU	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TCAS (armed)	CX	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TCAS (engaged)	CY	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TCAS RA INHIBITED	CZ	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 T/D REACHED	DA	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-80-20 TRK FPA DESELECTED	DI	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_30-110 Left Turn Not Expected while in HDG or TRK Mode	C	1	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
DSC-22_30-110 Spurious CAT 2 INOP	D	2	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734. The information no longer applies to MSN 06798, 06949, 07005, 07081, 07098.

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GENERAL

Ident.: DSC-22_30-10-00025187.0001001 / 18 MAY 22
Applicable to: ALL

The Flight Guidance (FG) provides the following functions:
- The Flight Director (FD)
- The Autopilot (AP)
- The Autothrust (A/THR).

The FG operates by using the following modes:
- AP/FD lateral modes to control the lateral trajectory
- AP/FD vertical modes to control the vertical trajectory, or the speed or Mach
- A/THR modes to control the speed or Mach, or the thrust.

Speed or Mach cannot be simultaneously controlled by the AP/FD and the A/THR.

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GENERAL

Ident.: DSC-22_30-20-10-00025400.0001001 / 18 MAY 22
Applicable to: ALL

The FD displays guidance orders on the PFD:
- If no AP is engaged, the flight crew can manually fly the aircraft by following FD orders, or
- If at least one AP is engaged, the flight crew can use the FD to monitor the FG.

There are two FDs referred to as FD1 and FD2. In normal operation:
- PFD1 displays FD1 guidance orders, computed by FMGC1
- PFD2 displays FD2 guidance orders, computed by FMGC2.

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MANUAL ENGAGEMENT

Ident.: DSC-22_30-20-20-00025401.0001001 / 18 MAY 22
Applicable to: ALL

The flight crew manually engages the onside FD by pressing the onside FD pb.

Note: *If the flight crew did not previously engage any AP or FD, then HDG or TRK, and V/S or FPA engage. The FD symbol flashes for 10 s.*

AUTOMATIC ENGAGEMENT

Applicable to: ALL

Ident.: DSC-22_30-20-20-A-00025402.0001001 / 18 MAY 22

ON GROUND

FD1 and FD2 automatically engage at aircraft power-up.

IN FLIGHT

FD1 and FD2 automatically engage in flight, if:
- The flight crew engages the SRS GA mode, or
- The AP/FD TCAS mode engages upon a RA.

Ident.: DSC-22_30-20-20-A-00025403.0001001 / 18 MAY 22

Note: *On SRS engagement, if the flight crew previously selected the FPV/FPD display, the FD symbol reverts to vertical and horizontal bars.*

ENGAGEMENT ANNUNCIATION

Ident.: DSC-22_30-20-20-00025404.0001001 / 18 MAY 22
Applicable to: ALL

If FD1 and/or FD2 engages, all the following events occur:
- The associated FD pb on the FCU comes on
- The xFDy message appears in the "AP, FD, A/THR Engagement Status" column of both FMAs.

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FD SYMBOLOGY - DISPLAY

Ident.: DSC-22_30-20-30-00025405.0001001 / 18 MAY 22
Applicable to: ALL

The pitch, roll, and yaw bars respectively indicate the pitch, roll, and yaw FD guidance orders.

Note: *Independently from FD display, the FPV can be displayed on the PFDs. The FPV does not indicate guidance orders.*
For definition and display conditions of the FPV, Refer to DSC-31-40 Flight Path Vector

When the FDs are engaged, the PFDs can display the pitch, roll, and yaw symbologies.
Refer to DSC-31-40 Guidance

DISPLAY CONDITIONS OF THE GUIDANCE SYMBOLOGY, WHEN THE FDS ARE ENGAGED:

FOR LATERAL GUIDANCE

The PFD displays the roll bar when a lateral mode is engaged.

The PFD displays a yaw bar that replaces the roll bar in green below 30 ft radio height if a localizer signal is available during:
- Takeoff in RWY mode, or
- Landing in FLARE and ROLL OUT modes.

FOR VERTICAL GUIDANCE

The PFD displays the pitch bar after liftoff, when a vertical mode is engaged.

IN FLIGHT, IN TRK-FPA MODE

The FPD replaces both FD bars.
The FPD symbol shows the flight crew how to intercept and fly the vertical and lateral flight trajectory.
For more information about the FPD, *Refer to DSC-31-40 Guidance*

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FD SYMBOLOGY - NON DISPLAY

Ident.: DSC-22_30-20-40-00025406.0001001 / 18 MAY 22
Applicable to: ALL

If the FDs are not engaged, the PFDs do not display the FD symbology.

The FD bars disappear, when one of the following occurs:
- The aircraft bank angle exceeds 45 °, or
- The aircraft pitch exceeds 25 ° up or 13 ° down.

The pitch bar disappears in ROLL OUT.

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GENERAL

Ident.: DSC-22_30-20-50-00025359.0001001 / 18 MAY 22
Applicable to: ALL

If all FDs disengage while no AP is engaged, all the following occur:
- The lateral and vertical modes disengage, and
- If engaged, the A/THR reverts to (or remains in) SPEED or MACH mode.

If all FDs disengage while at least one AP is engaged, all the following occur:
- The lateral and vertical modes remain engaged, and
- If engaged, the A/THR remains engaged in the current mode.

MANUAL DISENGAGEMENT

Ident.: DSC-22_30-20-50-00025360.0001001 / 18 MAY 22
Applicable to: ALL

The flight crew can manually press the onside FD pb to disengage the onside FD.

AUTOMATIC DISENGAGEMENT

Applicable to: ALL

Ident.: DSC-22_30-20-50-A-00025361.0001001 / 18 MAY 22

The FD disengages if, in ROLL OUT, the difference between the aircraft track and the runway track is more than 20 °.

DUE TO FAILURES

The FD disengages if one of the following occurs:
- The FD becomes inoperative, or
- The FCU is not available, or
- All the engines fail.

Ident.: DSC-22_30-20-50-A-00025362.0001001 / 18 MAY 22

DUE TO SPEED PROTECTION

The FD disengages if no AP is engaged and the aircraft speed is either:
- below VLS in DES or OP DES, or
- above VMAX in CLB or OP CLB.

Note: *After the FD disengages, the A/THR reverts to SPEED or MACH mode and adjusts the thrust to recover the target speed or keep the speed within the range from VLS to VMAX, if the target speed is out of this range.*

DISENGAGEMENT ANNUNCIATION

Ident.: DSC-22_30-20-50-00025363.0001001 / 18 MAY 22
Applicable to: ALL

If the flight crew disengages one FD, all the following occur:
- The corresponding FD pb goes off,
- The FD symbol no longer appears on the associated PFD,
- 1FD- appears on the FMA if FD2 is disengaged or -FD2 if FD1 is disengaged.

If one FD fails, all the following occur:
- All FD pb remain on,
- Both PFDs display the guidance orders from the remaining FD,
- 1FD1 appears on the FMA if FD2 fails, or 2FD2 if FD1 fails.

FD BARS FLASHING

Ident.: DSC-22_30-20-60-00025365.0001001 / 18 MAY 22
Applicable to: ALL

PITCH BAR

The pitch bar (or FPV) flashes for 10 s and remains steady, if one of the following occurs:
- An automatic reversion to V/S (or FPA) mode occurs, or
- All APs and FDs are previously disengaged and the flight crew engages the FD.

The pitch bar (or FPV) flashes, if, during approach, the MMR is not able to compute the vertical deviation above 100 ft RA.

ROLL BAR

The roll bar (or FPV) flashes for 10 s and remains steady, if one of the following occurs:
- An automatic reversion to HDG (or TRK) mode occurs, or
- All APs and FDs are previously disengaged and the flight crew engages the FD.

The roll bar (or FPV) flashes if, during approach, the MMR is not able to compute the lateral deviation above 15 ft RA.

FD FLAG

Ident.: DSC-22_30-20-60-00025366.0001001 / 18 MAY 22
Applicable to: ALL

If the guidance orders are not available while the FD is engaged, a FD flag appears on the PFD and the FD bars disappear.

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GENERAL

Ident.: DSC-22_30-30-10-00025195.0001001 / 18 MAY 22
Applicable to: ALL

The AP:
- Stabilizes the aircraft around its center of gravity
- Controls the lateral trajectory
- Controls the vertical trajectory, or speed/Mach
- Coordinates with the A/THR
- Performs the automatic landing, or the go-around.

The AP generates:
- Pitch, roll, and yaw orders
- The nosewheel angle.

There are two APs: AP1 and AP2.
AP1 uses system data displayed on PFD1, and AP2 uses system data displayed on PFD2.

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INTRODUCTION

Ident.: DSC-22_30-30-20-00025196.0001001 / 18 MAY 22
Applicable to: ALL

When an AP engages, the sidesticks are locked in the neutral position, and the force to move the rudder pedals increases. However, the flight crew can always disengage the APs and the locking devices.
The APs engage with the same guidance mode previously used by the FD.
If the FDs were not previously engaged, the AP engages in HDG or TRK, and V/S or FPA.
L2 The APs are available in normal and alternate law, only.

ENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-30-20-A-00025197.0001001 / 18 MAY 22

ENGAGEMENT OF ONE AP

One AP engages when the flight crew presses the AP1 pb or the AP2 pb on the FCU, and the aircraft is in flight for more than 5 s.
In BACK-UP NAV, the AP engages in selected modes if the FG part is available.
The AP engages only if the aircraft pitch, bank angle, and speed are within an acceptable range.

Ident.: DSC-22_30-30-20-A-00025198.0001001 / 18 MAY 22

ENGAGEMENT OF BOTH APS

When one AP is engaged, the flight crew can press the second AP pb to engage the second AP.

However, the second AP can engage only when one of the following conditions is applicable:
- LOC is armed, or LOC* or LOC is engaged, and
- G/S is armed, or G/S* or G/S is engaged
- Go-around is engaged.

When both APs are engaged, AP1 is active, and AP2 is on standby, regardless of the order of AP engagement.

ENGAGEMENT ANNUNCIATION

Ident.: DSC-22_30-30-20-00025199.0001001 / 18 MAY 22
Applicable to: ALL

When AP1(2) engages, all the following events occur:

- The associated AP1(2) pb on the FCU comes on
- Both FMAs display:
  - AP1 (AP2)
  - AP1+2, if both APs are engaged.

MANUAL DISENGAGEMENT

Applicable to: ALL

Ident.: DSC-22_30-30-30-A-00025200.0001001 / 18 MAY 22

The APs disengages if one of the following occurs:

- The flight crew presses the takeover pb on the sidestick, or
- The flight crew presses the AP1(2) pb on the FCU, or
- The flight crew moves the pitch trim wheel beyond a certain threshold, or
- The flight crew moves a sidestick above a specific threshold, or

Ident.: DSC-22_30-30-30-A-00025201.0001001 / 18 MAY 22

- The flight crew moves the rudder pedals above a specific threshold, or

Ident.: DSC-22_30-30-30-A-00025202.0001001 / 18 MAY 22

- On ground, the flight crew sets all the thrust levers above the MCT detent.

Airbus recommends to press the sidestick pb two times to disengage both APs.
L2 One time to disengage the APs, the second time to clear the associated AP OFF alert.
L1 The other ways of disengagement are to be avoided. In particular, the disengagement of the APs with the sidestick, or the rudder pedal deflection is very uncomfortable for passengers.

AUTOMATIC DISENGAGEMENT

Applicable to: ALL

Ident.: DSC-22_30-30-30-B-00025203.0001001 / 18 MAY 22

The APs automatically disengage, if one of the following occurs:

- One of the engagement conditions is lost, or

Ident.: DSC-22_30-30-30-B-00025204.0001001 / 18 MAY 22

- During an approach with FINAL APP mode engaged, the aircraft reaches:
  - The MAP, or
  - The MDA/MDH -50 ft (if entered), or 400 ft AGL (if no MDA/MDH is entered).

Ident.: DSC-22_30-30-30-B-00025205.0001001 / 18 MAY 22

In addition, in normal law with all protections available, the APs will disengage when:

- High speed protection activates, or
- Angle-of-attack protection activates, or
- Pitch attitude exceeds 25 ° up, or 13 ° down, or bank angle exceeds 45 °.

When the AP is OFF, the associated FCU pb goes off, and AP1 (AP2) disappears from the FMA.

DISENGAGEMENT ANNUNCIATIONS AND WARNINGS

Ident.: DSC-22_30-30-30-00025206.0001001 / 18 MAY 22
Applicable to: ALL

When AP1(2) disengages, all the following events occur:
- The associated AP1(2) pb on the FCU goes off
- On both FMAs, the AP1(AP2) message disappears.

DISCONNECTION VIA THE takeover pb

The normal way to disconnect the AP is to press the takeover pb two times.

When the flight crew presses the takeover pb for the first time, the following warnings are triggered, and will continue, until the flight crew presses the takeover pb a second time:
- The AP OFF memo appears on the PFDs and on the WD
- A cavalry charge audio indicator sounds, at low volume
- The MASTER WARN light comes on.

When the flight crew presses the takeover pb the second time or the MASTER WARN light, all the above warnings are cleared.

If the flight crew does not quickly press the takeover pb a second time, the following additional warnings will trigger:
- The cavalry charge audio indicators sounds, at high volume
- The AUTO FLT AP OFF alert is displayed on the WD.

When the flight crew presses the MASTER WARN light, or the takeover pb a second time, the cavalry charge audio indicator stops and the memos disappear, but the AUTO FLT AP OFF remains displayed.

OTHER WAYS OF DISCONNECTION

If the AP disengages, without any flight crew action on the takeover pb, the following warnings will trigger:
- The AP OFF memo appears on the PFDs
- A cavalry charge audio indicator sounds, at high volume
- The AUTO FLT AP OFF alert is displayed on the WD.

When the flight crew presses the MASTER WARN light, or the takeover pb (one time), the cavalry charge stops and the memo disappears, but the alert remains displayed.

INTRODUCTION

Ident.: DSC-22_30-40-10-00025207.0001001 / 18 MAY 22
Applicable to: ALL

The AP/FD modes are either lateral, vertical, or common.

Two types of AP/FD modes are available in order to guide the aircraft:
- Managed modes: when the aircraft is using managed targets, the FMGS guides the aircraft along lateral and vertical flight paths and speed profiles computed by the FM from data in the MCDU. FM manages the guidance targets.
- Selected modes: when the flight crew is using selected targets, the FMGS guides the aircraft along lateral and vertical flight paths and speed profiles to meet targets that the flight crew has selected manually on the FCU. The flight crew selects the guidance targets.

AP/FD LATERAL MODES

Applicable to: ALL

MODE	TYPE	GUIDANCE	REMARK
Ident.: DSC-22_30-40-10-A-00025212.0001001 / 18 MAY 22			
RWY	MANAGED	Runway mode Mode used at takeoff to guide the aircraft along the runway center line using LOC.	Triggered by the thrust levers at FLX or TOGA position.
RWY TRK	MANAGED	Runway Track mode Mode used to guide the aircraft along the track the aircraft was following at the mode engagement.	
HDG,TRK	SELECTED	Heading mode, Track mode Mode used to guide the aircraft on a heading or a track selected by the flight crew. The target value is displayed in the FCU window.	*Note:* *HDG,TRK are called "basic modes" because it is a back up mode for certain situations :* - *F-PLN discontinuity entry* - *AP engagement with no FD* - *Loss of F-PLN* - *MCDU BACK UP NAV* ◁ .
NAV	MANAGED	Navigation mode Mode used to guide the aircraft along the lateral F-PLN. Available above 30 ft after takeoff.	Automatically armed at takeoff unless HDG,TRK is preset. In that case RWY TRK engages after takeoff.
LOC* **LOC**	MANAGED	Localizer capture mode Localizer track mode Mode used to guide the aircraft on the lateral approach path (LOC approach path).	Selected by pressing APPR pb on the FCU.
F-LOC* ◁ **F-LOC** ◁	MANAGED	Flight Management Landing System Localizer capture mode Flight Management Landing System Localizer track mode Mode used to guide the aircraft on the lateral approach path (F-PLN approach path).	Selected by pressing APPR pb on the FCU.
LOC B/C* ◁ **LOC B/C** ◁	MANAGED	Localizer Back Course capture mode Localizer Back Course track mode Mode used to guide the aircraft on the back beam of a localizer.	Selected by LAT REV at destination. Activated by pressing the LOC pb on the FCU.
GA TRK	MANAGED	Go-Around track mode Mode used to guide the aircraft along the track the aircraft was following at the mode engagement.	Triggered by the thrust levers at TOGA with Slats/Flaps in at least CONF 1.

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MODE	TYPE	GUIDANCE	REMARK
Ident.: DSC-22_30-40-10-A-00025215.0001001 / 18 MAY 22			
APP NAV	MANAGED	Approach Nav mode Mode used to guide the aircraft on the lateral approach path.	Selected by pressing APPR pb on the FCU; the mode that engages depends upon the selected approach in the F-PLN.

AP/FD VERTICAL MODES

Applicable to: ALL

Ident.: DSC-22_30-40-10-B-00025217.0001001 / 18 MAY 22

MODE	TYPE	GUIDANCE	REMARK
SRS	MANAGED	Speed Reference System mode Mode used at takeoff, or go-around to maintain SRS speed (V2, V2+10, VAPP...).	Triggered by the thrust levers at FLX or TOGA position. Automatically disengages at ACCEL ALT, or when another VERT mode is engaged.
OP CLB	SELECTED	Open Climb mode mode Mode used to climb directly to the FCU selected altitude. These modes disregard all ALT CST. The A/THR is in THRUST mode (CLB/IDLE)	The speed target may either be selected or managed. ALT mode is systematically armed. Altitude target is blue on the PFD.
CLB	MANAGED	Climb mode Mode used to climb towards FCU selected altitude along VERT F-PLN taking into account ALT CST. Available, only if NAV mode engaged. The A/THR is in THRUST mode (CLB).	The speed target may either be selected or managed. If managed, SPD CST, SPD LIM, and HOLD SPD are taken into account. ALT mode is always armed, and the FMA displays: - ALT CST if the next level off is predicted at an ALT CST, or - ALT if the next level off is predicted at the FCU selected altitude.
EXP CLB ◁✳	SELECTED	This mode is used to increase the vertical speed by selecting Green Dot speed in climb.	Used to expedite a climb towards a specific flight level.
ALT* **ALT**	SELECTED	Altitude acquire mode Altitude hold mode Mode used to maintain a level flight at the FCU selected altitude.	
ALT CST* **ALT CST**	MANAGED	Altitude Constraint capture mode Altitude Constraint hold mode Mode automatically engaged when reaching an ALT CST before the FCU selected altitude.	CLB/DES mode are systematically armed.
ALT CRZ* **ALT CRZ**	SELECTED	Altitude capture of the cruise flight level Altitude hold of the cruise flight level Mode used to maintain the cruise level flight.	Soft ALT mode engages when FCU selected altitude = CRZ FL. Soft ALT mode is part of the managed guidance.

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MODE	TYPE	GUIDANCE	REMARK
OP DES	SELECTED	Open Descent mode Mode used to descend directly to the FCU selected altitude. These modes disregard all ALT CST. The A/THR is in THRUST mode (CLB/IDLE)	The speed target may either be selected or managed. ALT mode is systematically armed. Altitude target is blue on the PFD.
DES	MANAGED	Descent mode Mode used to descend towards FCU selected altitude along the computed descent path, taking into account ALT CST. Available, only if NAV mode engaged. The A/THR may be in THRUST, or SPD mode.	The speed target may either be selected or managed. If managed, SPD CST, SPD LIM, and HOLD SPD are taken into account. ALT mode is always armed, and the FMA displays: - ALT CSTif the next level off is predicted at an ALT CST, or - ALT if the next level off is predicted at the FCU selected altitude.
EXP DES ◁ ,	SELECTED	This mode is used to increase the vertical speed by selecting 0.80/340 kt in descent.	Used to expedite a descent towards a specific flight level.
V/S, FPA	SELECTED	Vertical Speed mode, Flight Path Angle mode Mode used to guide the aircraft by a vertical speed, or a selected flight path angle.	Altitude target is blue on PFD. V/S-FPA is a basic mode.
G/S* **G/S**	MANAGED	Glide Slope capture mode Glide Slope track mode Mode used to guide the aircraft along the final approach path (ILS/GLS ◁ /SLS ◁ (RNAV(GNSS) approach with LPV minima guidance mode)	Selected by pressing APPR pb on the FCU.
F-G/S* ◁ **F-G/S** ◁	MANAGED	Flight Landing System Glide Slope capture mode Flight Landing System Glide Slope track mode Mode used to guide the aircraft along the final approach path (FLS ◁ approach)	Selected by pressing APPR pb on the FCU.

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Ident.: DSC-22_30-40-10-B-00025224.0001001 / 18 MAY 22

MODE	TYPE	GUIDANCE	REMARK
FINAL	MANAGED	Final mode Mode used to guide the aircraft along the final approach path (non precision approach)	Selected by pressing the FCU's APPR pb. The mode engaged depends upon the selected approach in the F-PLN. Linked to APPR common mode (APPR pb).

Ident.: DSC-22_30-40-10-B-00025225.0001001 / 18 MAY 22

AP/FD TCAS ◁✱	MANAGED	Mode used to guide the A/C in the case of TCAS RA	Automatically engaged when a RA is triggered.

AP/FD COMMON MODES

Applicable to: ALL

MODE	TYPE	GUIDANCE	REMARK
Ident.: DSC-22_30-40-10-C-00025227.0001001 / 18 MAY 22			
LAND	MANAGED	Land mode Common mode engaged below 400 ft RA during an automatic ILS/GLS /SLS (RNAV(GNSS) approach with LPV minima guidance mode) approach.	Engaged only if LOC mode and G/S mode are already engaged.
FLARE	MANAGED	Flare mode Common mode which provides alignment to the runway centerline on the yaw axis, and flare on the pitch axis.	Engaged below 60 ft RA, based on the current vertical speed.
ROLL OUT	MANAGED	Roll Out mode Mode used to guide the aircraft on the runway following an automatic landing.	FD roll out symbol is displayed on PFD at touch down.
Ident.: DSC-22_30-40-10-C-00025237.0001001 / 18 MAY 22			
FINAL APP	MANAGED	Final Approach mode Common mode including APP NAV and FINAL modes during non-precision approach.	Engaged only if APP- NAV mode and FINAL mode are already armed.

AP/FD MODE STATUS AND DISPLAY

Ident.: DSC-22_30-40-10-00025226.0001001 / 18 MAY 22
Applicable to: ALL

AP/FD MODE STATUS

An AP/FD lateral or vertical mode can be armed, engaged, or disengaged.
An AP/FD common mode can either be engaged or disengaged.
When all APs and FDs disengage, all AP/FD modes disengage.

AP/FD MODE DISPLAY

The FMA displays the AP/FD modes (*Refer to DSC-22_30-80-20 FMA Display*).

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General

GENERAL

Ident.: DSC-22_30-40-20-10-00025902.0001001 / 18 MAY 22
Applicable to: ALL

At takeoff, SRS vertical mode, and RWY lateral mode simultaneously engage. They disengage at different moment.
In some cases, when airborne, RWY mode can change to another lateral takeoff mode such as RWY TRK mode.

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SRS TO Mode

GENERAL

Ident.: DSC-22_30-40-20-20-A-00025335.0001001 / 18 MAY 22
Applicable to: ALL

The SRS mode is a managed vertical mode, used during takeoff and during go-around.
This chapter only describes the SRS mode during takeoff, also referred to as the SRS TO mode. The FMA announces the SRS TO mode with the SRS indication.
The SRS TO controls the speed via the elevators, in order to steer the aircraft along a vertical path.

The guidance law also includes:
- A flight path angle protection, that ensures a minimum vertical speed of 120 ft/min

1 Ident.: DSC-22_30-40-20-20-A-00025341.0002001 / 18 MAY 22
Applicable to: MSN 11531

- A pitch angle protection to reduce the aircraft nose-up (15 ° of maximum pitch attitude or 22.5 ° maximum in case of windshear).

Ident.: DSC-22_30-40-20-20-A-00025341.0001001 / 18 MAY 22
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

- A pitch angle protection to reduce the aircraft nose-up (18 ° of maximum pitch attitude or 22.5 ° maximum in case of windshear).

Ident.: DSC-22_30-40-20-20-A-00025342.0001001 / 18 MAY 22
Applicable to: ALL

- A speed protection limiting the target speed to V2+15 kt.

Ident.: DSC-22_30-40-20-20-A-00025344.0001001 / 18 MAY 22
Applicable to: ALL

When the aircraft is on ground, V2 is the speed target.
When the aircraft is airborne, V2+10 kt becomes the speed target.
If one engine fails, the speed target is the current aircraft speed at the engine failure detection.
However, the speed target is limited by V2 and V2+15 kt.
For more information on the speed target, *Refer to DSC-22_20-60-40 Flight Guidance Part*.
For more information on the speed target, *Refer to DSC-22_30-60-20 General*.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-20-20-00025337.0001001 / 18 MAY 22
Applicable to: ALL

SRS TO engages, when all of the following conditions are applicable:

- The aircraft is on ground
- The slats or the flaps are extended
- V2 is inserted in the PERF TAKEOFF page

L2 If V2 has not been inserted, V/S mode engages 5 s after lift-off on the current V/S value.

L1
- The flight crew sets at least one thrust lever:
  - To the TOGA detent, or
  - To the FLX-MCT detent, when a FLX TO temperature or a Derated Takeoff is entered in the PERF TAKEOFF page.

Note: *When V2 is inserted, or SRS TO is engaged, the speed automatically becomes managed. For more information about engagement conditions of managed speed, Refer to DSC-22_30-60-20 Engagement Conditions.*

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-20-20-B-00025338.0001001 / 18 MAY 22

SRS TO mode disengages, when one of the following occurs:

- Automatically, at the GA ACCEL ALT, or if ALT* or ALT CST* mode engages (above 400 ft RA), or
- Another vertical mode engages.

Note: *In Engine Out conditions, the SRS mode does not automatically disengage at EO ACCEL ALT.*

Ident.: DSC-22_30-40-20-20-B-00025339.0001001 / 18 MAY 22

REVERSIONS

SRS TO reverts to OP CLB, when the FCU selected altitude is above the aircraft altitude, and the flight crew pulls the SPD/MACH knob.

Ident.: DSC-22_30-40-20-20-B-00025340.0001001 / 18 MAY 22

When the reversion occurs:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

RWY Mode

GENERAL

Ident.: DSC-22_30-40-20-30-00025240.0001001 / 18 MAY 22
Applicable to: ALL

The RWY mode is a managed lateral mode.
When the LOC signal is available, the RWY mode gives lateral guidance orders during takeoff, and initial climb.

L2 The RWY guidance law aims to maintain the aircraft on the runway centerline during the takeoff run.
When the aircraft is airborne, the RWY guidance law aims to maintain the sideslip indicator centered.
To follow the guidance, the FD displays the conventional guidance bar.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-20-30-00025241.0001001 / 18 MAY 22
Applicable to: ALL

RWY engages, if all of the following conditions are applicable:

- L2 V2 is inserted in the PERF TAKEOFF page, and
- The aircraft is on ground, and
- The slats are extended, and
- The LOC is valid, and
- The LOC deviation is below 1/2 dot, and
- The aircraft heading is within 20 ° of the ILS (GLS ◁✳) (SLS ◁✳) course, and
- An ILS (GLS ◁✳)(SLS ◁✳) is set, associated to the takeoff runway, and the difference between the LS course and the runway heading, as inserted in the flight plan is less than 2 °, and
- No lateral mode is already engaged, and
- L1 The flight crew sets a thrust lever to:
  - The TOGA detent, if TOGA is selected on the PERF TAKEOFF page, or
  - The FLX-MCT detent, if a FLX TO temperature or a Derated Takeoff ◁✳ level is entered on the PERF TAKEOFF page.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-20-30-00025242.0001001 / 18 MAY 22
Applicable to: ALL

RWY disengages, when one of the following occurs:

- The LOC is lost below 30 ft RA
- NAV is armed, and the aircraft reaches 30 ft RA: NAV engages
- L2 NAV is not armed, and the aircraft reaches 50 ft RA: RWY TRK engages

L1 - Another lateral mode engages

L2 - The aircraft heading deviates from more than 20 ° from the ILS (GLS ◁)(SLS ◁) course.

RWY TRK Mode

GENERAL

Ident.: DSC-22_30-40-20-40-00025243.0001001 / 18 MAY 22
Applicable to: ALL

RWY TRK mode is a managed lateral mode.
The RWY TRK mode guides the aircraft along a constant track target. The track target is the aircraft track at RWY TRK engagement.

L2 To follow the guidance, the FD displays the conventional guidance bar.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-20-40-00025244.0001001 / 18 MAY 22
Applicable to: ALL

The RWY TRK automatically engages at 30 ft RA, if all of the following conditions are applicable:
- The FMS flight phase is takeoff, and
- NAV is not engaged.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-20-40-00025245.0001001 / 18 MAY 22
Applicable to: ALL

RWY TRK disengages, when one of the following occurs:
- The flight crew pulls the HDG/TRK knob: HDG/TRK engages
- NAV is armed, and the aircraft reaches the capture zone of the active leg: NAV engages
- The flight crew inserts a DIRECT TO waypoint: NAV engages.

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HDG/TRK Mode

GENERAL

Ident.: DSC-22_30-40-30-10-00025898.0001001 / 18 MAY 22
Applicable to: ALL

HDG and TRK are selected lateral modes. They are the basic modes of lateral guidance.
HDG/TRK guides the aircraft laterally along the heading/track target, that appears in the HDG/TRK window on the FCU. For more information on the HDG/TRK window, *Refer to DSC-22_10-40-20 Lateral Control Area*.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-30-10-A-00025881.0001001 / 18 MAY 22
Applicable to: ALL

HDG or TRK engages when one of the following conditions occurs:

Ident.: DSC-22_30-40-30-10-A-00025882.0001001 / 18 MAY 22
Applicable to: ALL

- The flight crew pulls the HDG/TRK knob on the FCU in flight, or

L2 This is applicable if:
- The aircraft is in flight, for at least 5 s after liftoff, or
- Not in LAND, FLARE, or ROLL OUT, or
- Not in GA TRK below 100 ft RA.

Ident.: DSC-22_30-40-30-10-A-00025883.0001001 / 18 MAY 22
Applicable to: ALL

- NAV is engaged and the flight crew inserts a DIRECT TO RADIAL IN or DIRECT TO RADIAL OUT, or

Ident.: DSC-22_30-40-30-10-A-00025884.0001001 / 18 MAY 22
Applicable to: ALL

- FINAL mode (armed or engaged) is lost when the aircraft is in APP NAV mode, or

Ident.: DSC-22_30-40-30-10-A-00025885.0001001 / 18 MAY 22
Applicable to: ALL

- All AP and FDs were previously off, and the flight crew engages the AP or the FDs

Note: *1. The AP or FDs engage in basic modes: HDG or TRK, and V/S or FPA.*
2. If the FD engages, the FD bars flash for 10 s.

Ident.: DSC-22_30-40-30-10-A-00025886.0001001 / 18 MAY 22
Applicable to: ALL

- LOC mode is armed when FINAL APP was previously engaged, or

Ident.: DSC-22_30-40-30-10-A-00025887.0001001 / 18 MAY 22
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

- The flight crew presses the APPR pb (above 400 ft) or the LOC pb to off, when the approach is armed, or

Ident.: DSC-22_30-40-30-10-A-00025888.0001001 / 18 MAY 22
Applicable to: ALL

- LOC*, LOC, LOC B/C* ◁ , LOC B/C ◁ , F-LOC* ◁ or F-LOC ◁ is engaged in a LOC only approach, and the flight crew presses the LOC pb to off.

Ident.: DSC-22_30-40-30-10-A-00025889.0001001 / 18 MAY 22
Applicable to: ALL

REVERSIONS TO HDG/TRK

The HDG/TRK also engages when one of the following reversion occurs:

- NAV disengages:
  - The aircraft reaches a flight plan discontinuity
  - The NAV mode fails.
- The approach is modified in the flight plan, when LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , or LOC B/C ◁ is engaged
- LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , or LOC B/C ◁ is lost after a failure occurs in approach.
  All AP(s) disengage. The FDs reverts to HDG or TRK and V/S or FPA.

Note: *If a managed vertical mode was previously engaged, a selected vertical mode engages:*
- *If CLB was engaged, OP CLB engages*
- *If ALT CST*, ALT CRZ*, or DES was engaged, V/S/FPA engages*
- *If ALT CST was engaged, ALT engages.*

Ident.: DSC-22_30-40-30-10-A-00025890.0001001 / 18 MAY 22
Applicable to: ALL

When the reversion occurs:

- The triple click sounds
- The new guidance mode is boxed for 10s
- The FD bars flash for 10s.

HDG-V/S / TRK-FPA SELECTION

Ident.: DSC-22_30-40-30-10-00025891.0001001 / 18 MAY 22
Applicable to: ALL

The flight crew can press the HDG-V/S / TRK-FPA pb on the FCU to change from one selection to another.
At the aircraft power-up, the HDG-V/S / TRK-FPA selection is set to HDG-V/S by default.

When HDG-V/S is selected:
- HDG appears on the HDG/TRK window of the FCU
- V/S appears on the V/S / FPA window of the FCU
- HDG and/or V/S mode(s) can be engaged
- TRK and FPA modes cannot be engaged.

When TRK-FPA is selected:
- TRK appears on the HDG/TRK window of the FCU
- FPA appears on the V/S / FPA window of the FCU
- HDG and V/S mode(s) cannot be engaged
- TRK and/or FPA modes can be engaged
- Both PFDs display the FPV in green.

HDG/TRK PRESET

Ident.: DSC-22_30-40-30-10-B-00025892.0001001 / 18 MAY 22
Applicable to: ALL

GENERAL

The system has a HDG/TRK preset function for takeoff and go-around.
If the flight crew decides not to fly the flight plan after takeoff or go-around, the flight crew can turn the HDG/TRK knob on the FCU to preset a heading or a track. The set value remains displayed in the FCU HDG/TRK window until the flight crew pulls the knob.

AT TAKEOFF

If the flight crew presets the HDG/TRK before takeoff and up to 30 ft RA, NAV disarms. The preset value remains displayed in the HDG/TRK window (even when RWY TRK engages at 50 ft RA).
When the flight crew pulls the HDG/TRK knob (at least 5 s after liftoff), HDG or TRK mode engages.
The aircraft follows the preset target.

Ident.: DSC-22_30-40-30-10-B-00025893.0002001 / 18 MAY 22
Applicable to: ALL

AT GO-AROUND

If the flight crew presets the HDG/TRK when LOC*, LOC, LOC B/C, LOC B/C*, F-LOC* ◁* , F-LOC ◁* , LAND, FLARE, ROLL OUT or GA TRK mode is engaged, the preset value remains displayed in the HDG/TRK window, as long as one of theses modes is engaged.
After go-around engagement, HDG/TRK will engage, when the flight crew pulls the HDG/TRK knob.
When the HDG or TRK engages, the heading/track target is the HDG/TRK preset.

Ident.: DSC-22_30-40-30-10-B-00025894.0001001 / 18 MAY 22
2 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

When overflying the MAP, HDG/TRK will synchronize with the current aircraft heading / track. The HDG/TRK preset function is no longer available.

Ident.: DSC-22_30-40-30-10-B-00025895.0001001 / 18 MAY 22
Applicable to: ALL

CANCELLATION

The flight crew can cancel a HDG/TRK preset with one of the following action:
- The HDG/TRK knob is pushed, or
- A DIR TO is selected in the FMS, or
- The AP and FDs are disengaged.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-30-10-00025896.0001001 / 18 MAY 22
Applicable to: ALL

The engagement of any other lateral mode disengages HDG or TRK.

SYNCHRONIZE THE HDG/TRK WINDOW OF THE FCU

Ident.: DSC-22_30-40-30-10-00025897.0001001 / 18 MAY 22
Applicable to: ALL

The lateral window of the FCU displays heading or a track value when:
- The HDG/TRK mode is engaged. The displayed value is the current HDG/TRK or the manually selected value of the target
- The flight crew turns the HDG/TRK knob. The value in the window first synchronizes with the current HDG/TRK, then displays the manual selection. It remains displayed for 10 s or 45 sdepending upon FCU standard, then vanishes if the flight crew does not pull the knob (except in HDG preset)

- A HDG/TRK is preset
- AP/FD is lost. The value becomes that of the aircraft current heading or track.

Note: *If HDG is switched to TRK (or vice versa), the value displayed in the window switches from heading to track (or vice versa).*

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NAV Mode

GENERAL

Ident.: DSC-22_30-40-30-20-00025463.0001001 / 18 MAY 22
Applicable to: ALL

The NAV mode is a managed lateral mode, that guides the aircraft laterally along the FMS flight plan. It is designed to have a zero crosstrack error. NAV usually arms before engaging.

ARMING CONDITIONS

Ident.: DSC-22_30-40-30-20-00025464.0002001 / 18 MAY 22
1 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

For NAV arming, the lateral flight plan must be available.

NAV arms, when one of the following occurs:
- The aircraft is on ground, and the flight crew does not preset a HDG/TRK for takeoff, or
- The flight crew pushes the HDG/TRK knob on the FCU, or
- The flight crew activates a DIRECT TO RADIAL IN or DIRECT TO RADIAL OUT when in HDG/TRK mode, or
- The flight crew presses the APPR pb and the conditions to arm the FINAL APP mode are applicable, or
- The flight crew initiates a go-around.

L2 This is not applicable if HDG/ TRK is preset.

L1 However, NAV cannot arm, if one of the following modes is engaged: LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁ , LAND, FLARE, ROLL OUT.

ARMING CONDITIONS

Ident.: DSC-22_30-40-30-20-00025464.0001001 / 18 MAY 22
Applicable to: MSN 01376

For NAV arming, the lateral flight plan must be available.

NAV arms, when one of the following occurs:
- The aircraft is on ground, and the flight crew does not preset a HDG/TRK for takeoff, or
- The flight crew pushes the HDG/TRK knob on the FCU, or
- The flight crew activates a DIRECT TO RADIAL IN or DIRECT TO RADIAL OUT when in HDG or TRK mode, or
- The flight crew presses the APPR pb and the conditions to arm the FINAL APP mode are applicable.

However, NAV cannot arm, if one of the following modes is engaged: LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁ , LAND, FLARE, ROLL OUT.

DISARMING CONDITIONS

Ident.: DSC-22_30-40-30-20-00025465.0001001 / 18 MAY 22
Applicable to: MSN 01376

NAV mode disarms, when one of the following occurs:
- The flight crew presets a HDG/TRK for takeoff, or go-around, or
- NAV mode engages, or
- The flight crew pulls out the HDG/TRK knob, or
- The flight crew arms or engages an approach mode, except if the APP NAV can be armed, or
- The flight crew engages a go-around, or
- LAND mode engages.

DISARMING CONDITIONS

Ident.: DSC-22_30-40-30-20-00025465.0003001 / 18 MAY 22
2 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

NAV mode disarms, when one of the following occurs:
- The flight crew presets a HDG/TRK for takeoff, or go-around, or
- NAV mode engages, or
- The flight crew pulls out the HDG/TRK knob, or
- The flight crew arms or engages an approach mode, except if the APP NAV can be armed, or
- LAND mode engages.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-30-20-00025466.0001001 / 18 MAY 22
Applicable to: MSN 01376

For NAV engagement, the lateral flight plan must be available.

NAV engages, if one of the following occurs:
- NAV is armed, and the aircraft reaches 30 ft RA after takeoff, or
- NAV is armed, and the aircraft reaches the capture zone of the flight plan active leg, or
- The flight crew activates a DIR TO on the MCDU, or

L2 This is not applicable, if LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁ , LAND, FLARE, ROLL OUT is engaged below 700 ft RA.

L1 - The flight crew selects the HDG/TRK when the aircraft is close to (within ~1 NM of) the active flight plan leg.

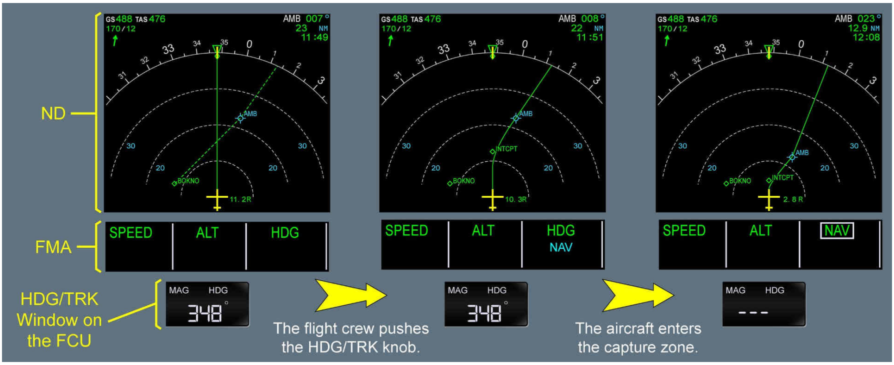
When NAV is engaged, the HDG/TRK window on the FCU displays dashes.

CAPTURE ZONE OF THE FLIGHT PLAN ACTIVE LEG

When NAV is armed, it automatically engages, if:

- The aircraft track line intercepts the flight plan between the FROM and the TO waypoints, and
- The intercept waypoint (INTCPT) is displayed on the ND, and
- The aircraft reaches the capture zone of the flight plan active leg.

The following is an example:


ND
FMA
HDG/TRK Window on the FCU
GS488 TAS476
170/12
AMB 007°
23 NM
11:49
BOKNO
AMB
11. 2R
SPEED
ALT
HDG
MAG HDG
348
The flight crew pushes the HDG/TRK knob.
AMB 008°
22 NM
11:51
INTCPT
10. 3R
HDG
NAV
The aircraft enters the capture zone.
AMB 023°
12.9 NM
12:08
2. 8 R
NAV

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-30-20-00025466.0002001 / 18 MAY 22

3 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

For NAV engagement, the lateral flight plan must be available.

NAV engages, if one of the following occurs:

- NAV is armed, and the aircraft reaches 30 ft RA after takeoff, or
- NAV is armed, and the aircraft reaches the capture zone of the flight plan active leg, or
- The flight crew activates a DIR TO on the MCDU, or

L2 This is not applicable, if LOC*, LOC, F-LOC* ◁✳ , F-LOC ◁✳ , LOC B/C* ◁✳ , LOC B/C ◁✳ , LAND, FLARE, ROLL OUT is engaged below 700 ft RA.

L1
- The flight crew selects the HDG/TRK when the aircraft is close to (within ~1 NM of) the active flight plan leg, or
- The flight crew initiates a go-around above 100 ft RA, and the aircraft reaches the capture zone of the flight plan active leg.

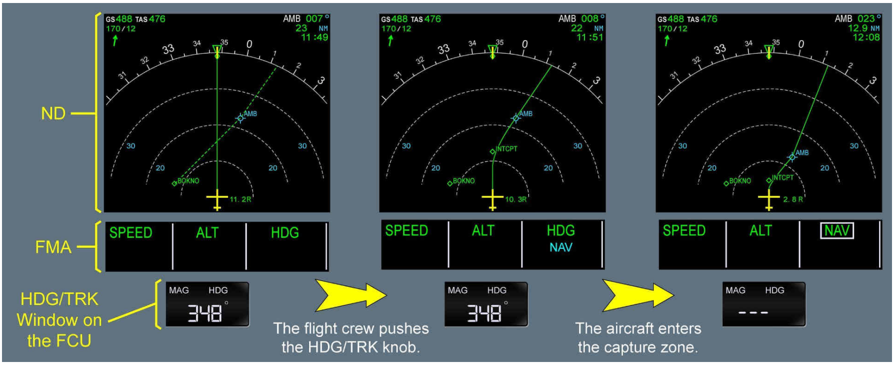
L2 This is not applicable if a HDG/TRK was preset.

L1 When NAV is engaged, the HDG/TRK window on the FCU displays dashes.

CAPTURE ZONE OF THE FLIGHT PLAN ACTIVE LEG

When NAV is armed, it automatically engages, if:
- The aircraft track line intercepts the flight plan between the FROM and the TO waypoints, and
- The intercept waypoint (INTCPT) is displayed on the ND, and
- The aircraft reaches the capture zone of the flight plan active leg.

The following is an example:


ND
FMA
HDG/TRK Window on the FCU
GS488 TAS476
170/12
AMB 007°
23 NM
11:49
AMB
BOKNO
11. 2R
SPEED
ALT
HDG
MAG HDG
348
The flight crew pushes the HDG/TRK knob.
AMB 008°
22 NM
11:51
INTCPT
10. 3R
HDG
NAV
The aircraft enters the capture zone.
AMB 023°
12.9 NM
12:08
2. 8R
NAV

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-30-20-A-00025467.0001001 / 18 MAY 22

NAV disengages, when HDG, TRK, LOC *, F-LOC * ◁ , LOC B/C * ◁ , or GA TRK engages.

REVERSIONS

NAV disengages, and reverts to the HDG/TRK mode when:
- The aircraft reaches a flight plan discontinuity
- The flight plan becomes invalid.

Note: *When the lateral mode reverts to HDG/TRK, the vertical mode also reverts to a vertical selected mode.*

For more information about the reversion to HDG/TRK, *Refer to DSC-22_30-40-30-10 Engagement Conditions 1*.

Ident.: DSC-22_30-40-30-20-A-00025468.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10s
- The FD bars flash for 10s.

INTERACTIONS WITH VERTICAL MODES

Ident.: DSC-22_30-40-30-20-00025469.0001001 / 18 MAY 22
Applicable to: ALL

When NAV is engaged with the managed vertical modes CLB or DES or FINAL APP, the guidance takes into account the altitude and speed constraints, linked to waypoints on the lateral flight plan. When NAV disengages, the managed vertical modes are not available and the altitude constraints are disregarded.

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OP CLB Mode

GENERAL

Ident.: DSC-22_30-40-40-10-00025470.0001001 / 18 MAY 22
Applicable to: ALL

OP CLB mode is a selected vertical mode.
OP CLB guides the aircraft vertically to the FCU selected altitude. All altitude constraints are disregarded.

When OP CLB is engaged:
- OP CLB controls the speed/Mach target (selected or managed)
- If the A/THR is active, the A/THR will control the thrust.

OP CLB usually arms before it engages.

ARMING CONDITIONS

Ident.: DSC-22_30-40-40-10-00025471.0001001 / 18 MAY 22
Applicable to: ALL

OP CLB arms, when all of the following conditions are applicable:
- The aircraft is on ground, or SRS is engaged (TO or GA), and
- NAV is neither armed nor engaged, or the vertical flight plan is not available, and
- The ACCEL altitude is available and below the FCU selected altitude.

DISARMING CONDITIONS

Ident.: DSC-22_30-40-40-10-00025472.0001001 / 18 MAY 22
Applicable to: ALL

OP CLB disarms, when one of the following occurs:
- V/S/FPA or OP CLB engages, or
- The ACCEL altitude becomes equal to, or above the FCU selected altitude, or
- CLB arms.

ENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-40-10-A-00025473.0001001 / 18 MAY 22

L2 The OP CLB mode can only engage, when all of the following are applicable:
- LAND or FLARE is not engaged, and
- If SRS GA is engaged, the aircraft is above 100 ft RA, and
- The aircraft is airborne for at least 5 s.

L1 OP CLB mode engages, when one of the following are applicable:
- The FCU selected altitude is above the aircraft altitude, and the flight crew pulls the ALT knob, or
- SRS TO or SRS GA is engaged with OP CLB armed, and the aircraft reaches the ACCEL altitude.

Ident.: DSC-22_30-40-40-10-A-00025475.0001001 / 18 MAY 22

REVERSIONS TO OP CLB

OP CLB also engages, when one of the following reversions occurs:
- CLB and NAV are engaged, and NAV disengages, or
- L2 CLB is engaged, and the vertical flight plan becomes invalid, or
- CLB is engaged, and the FMS flight phase changes to the descent or approach phase, or
- EXP CLB ◁ is engaged and the flight crew pulls the SPD/MACH knob, or
- L1 SRS TO, or SRS GA is engaged, the FCU selected altitude is above the aircraft altitude, and the flight crew pulls the SPD/MACH knob.

Ident.: DSC-22_30-40-40-10-A-00025476.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

OP CLB ASSOCIATION WITH ALTITUDE MODES

Ident.: DSC-22_30-40-40-10-00025474.0001001 / 18 MAY 22

Applicable to: ALL

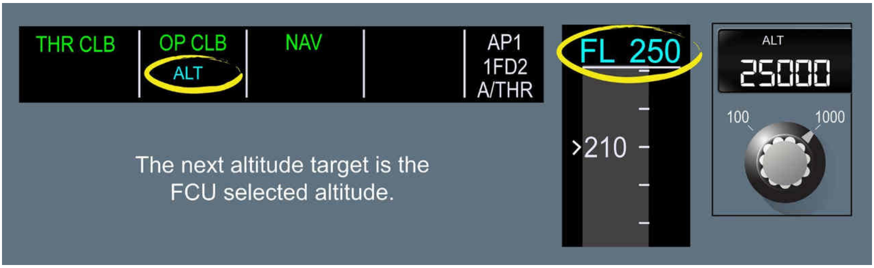
OP CLB ASSOCIATION WITH ALTITUDE MODES

OP CLB is always associated to an altitude mode.
When OP CLB is engaged:

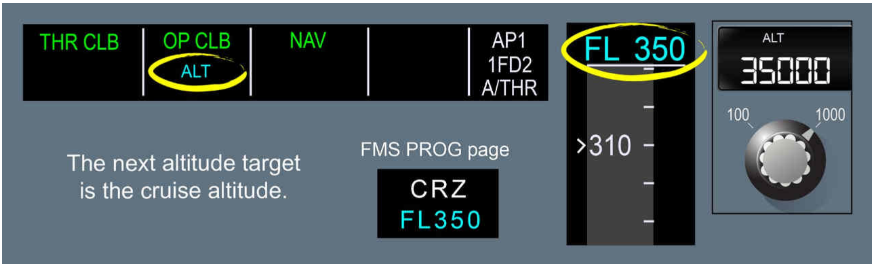
Conditions	The FMA displays the following message on Line 2 of the "AP/FD Vertical Modes" column:
The next altitude target is the FCU selected altitude. In addition, the FCU selected altitude is not set to the cruise altitude.	ALT is armed
The next altitude target is the cruise altitude. In this case, the FCU selected altitude is equal to the cruise altitude. *Note:* *The cruise altitude is defined on the PERF CRUISE page.*	ALT CRZ is armed

The following are examples:

OP CLB and ALT armed


THR CLB
OP CLB
ALT
NAV
AP1
1FD2
A/THR
FL 250
>210
ALT
25000
100
1000
The next altitude target is the FCU selected altitude.

OP CLB and ALT CRZ armed


THR CLB
OP CLB
ALT
NAV
AP1
1FD2
A/THR
The next altitude target is the cruise altitude.
FMS PROG page
CRZ
FL350
FL 350
>310
ALT
35000
100
1000

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-40-10-B-00025477.0001001 / 18 MAY 22

OP CLB disengages, when another vertical mode engages.

L2 OP CLB disengages, when one of the following occurs:

- ALT is armed, and the aircraft reaches the capture zone of the FCU selected altitude: ALT * engages
- ALT CRZ is armed, and the aircraft reaches the capture zone of the cruise altitude: ALT CRZ* engages.
- The flight crew pushes the ALT knob, when:
  - NAV is engaged
  - The vertical flight plan is available
  - The FMS flight phase is neither the descent, nor the approach phase.

  CLB engages
- The flight crew pulls or pushes the V/S/FPA knob to engage V/S/FPA
- The flight crew pushes the EXPED pb ◁ to engage EXP CLB ◁ .

Ident.: DSC-22_30-40-40-10-B-00025478.0001001 / 18 MAY 22

REVERSIONS

OP CLB reverts to V/S/FPA, when the flight crew sets the FCU selected altitude below the aircraft altitude.

Ident.: DSC-22_30-40-40-10-B-00025479.0001001 / 18 MAY 22

When the reversion occurs:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

CLB Mode

GENERAL

Ident.: DSC-22_30-40-40-20-00025582.0001001 / 18 MAY 22
Applicable to: ALL

CLB mode is a managed vertical mode.
CLB guides the aircraft vertically along the FMS flight plan, to the FCU selected altitude or to the next altitude constraint, whichever comes first. Therefore, altitude constraints, associated with applicable waypoints, are taken into account.
CLB can only be engaged, when NAV is engaged.

When CLB is engaged:
- AP/FDs controls the speed/Mach target (selected or managed) through the elevators

  Note: The FG system does not adjust the speed/Mach target to match the altitude constraints.

- If the A/THR is active, the A/THR will control the thrust.

CLB usually arms before it engages.

ARMING CONDITIONS

Ident.: DSC-22_30-40-40-20-00025583.0001001 / 18 MAY 22
Applicable to: ALL

CLB arms, when all of the following conditions are applicable:
- The aircraft is on ground, or SRS TO or SRS GA is engaged, and
- NAV is armed or engaged, or the vertical flight plan is available, and
- L2 The altitude set on the FCU is above the current altitude, and
- L1 The ACCEL altitude is available, and is below:
  - the FCU selected altitude, and
  - the next altitude constraint.

L2 CLB also arms, when CLB was previously engaged, and ALT CST* engages. This scenario is possible, when the selected altitude set on the FCU is above the altitude constraint.
L1 The flight crew can display and modify the ACCEL altitude on the PERF TAKEOFF and PERF GO AROUND pages.

DISARMING CONDITIONS

Ident.: DSC-22_30-40-40-20-00025584.0001001 / 18 MAY 22
Applicable to: ALL

CLB disarms, when one of the following occurs:
- Another vertical mode engages, or
- NAV disarms, or NAV disengages, or
- L2 The flight crew sets the FCU target altitude at or below the altitude constraint, when ALT CST* or ALT CST is engaged, or
- The ACCEL altitude becomes equal to, or above the subsequent target altitude, when the aircraft is on ground, or when SRS TO or SRS GA is engaged, or
- L1 The FCU selected altitude is set to be below the aircraft altitude, or
- The FMS flight phase changes to DES or APPR phase.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-40-20-00025585.0001001 / 18 MAY 22
Applicable to: ALL

CLB engages, when all of the following are applicable:
- NAV is engaged, and
- The FMS flight phase is neither DES, APPR, nor go-around phase, and
- The vertical flight plan is valid, and
- The aircraft is airborne for at least 5 s.

CLB mode engages, when one of the following is applicable:
- SRS TO or SRS GA is engaged with CLB armed, and the aircraft reaches the ACCEL altitude, or
- ALT CST is engaged with CLB armed, and the aircraft sequences the altitude constraint, or
- The FCU selected altitude is set to be above the aircraft altitude, and the flight crew pushes the ALT knob.
  This scenario is applicable if CLB is not yet armed.

  Note: *If the aircraft altitude is within the capture zone of the FCU selected altitude, CLB will immediately disengage, and ALT* will engage.*

CLB ASSOCIATION WITH ALTITUDE MODES

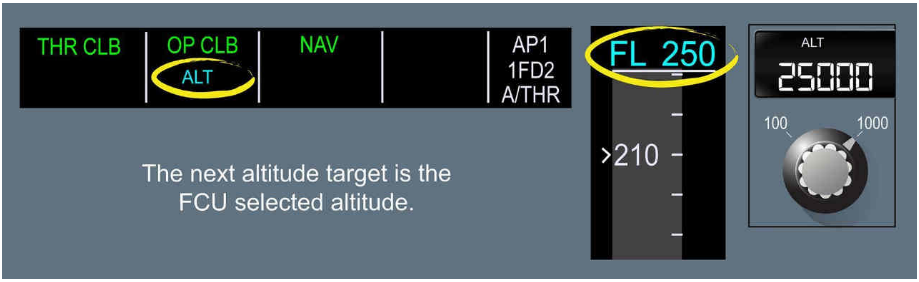
Ident.: DSC-22_30-40-40-20-00025586.0001001 / 18 MAY 22
Applicable to: ALL

CLB is always associated to an altitude mode.
When CLB is engaged:

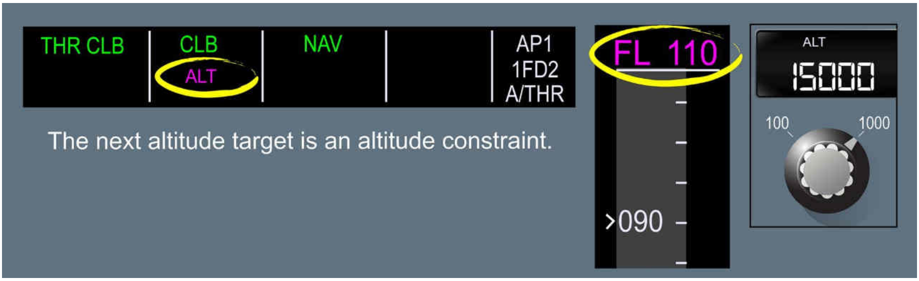
Conditions	The FMA displays the following message on Line 2 of the "AP/FD Vertical Modes" column:
The next altitude target is the FCU selected altitude. In addition, the FCU selected altitude is not set to the cruise altitude. However, the FCU selected altitude can be equal to an altitude constraint.	ALT is armed
The next altitude target is an altitude constraint, and the FCU selected altitude is above the altitude constraint.	ALT CST is armed
The next altitude target is the cruise altitude. In this case, the FCU selected altitude is equal to the cruise altitude. *Note:* *The cruise altitude is defined in the FMS PROG page.*	ALT CRZ is armed

The following are examples:

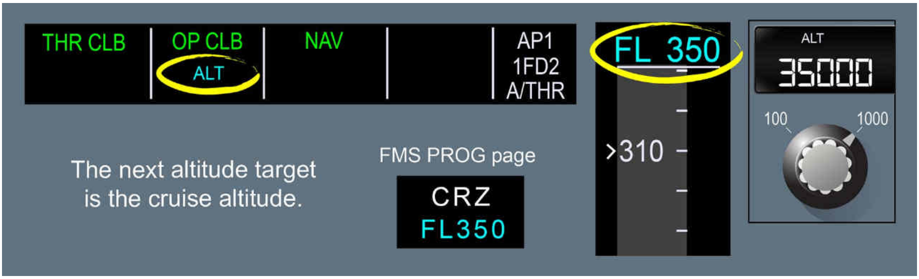
ALT arms


THR CLB
OP CLB
ALT
NAV
AP1
1FD2
A/THR
FL 250
210
ALT
25000
100
1000
The next altitude target is the
FCU selected altitude.

ALT CST arms


THR CLB
CLB
ALT
NAV
AP1
1FD2
A/THR
FL 110
090
ALT
15000
100
1000
The next altitude target is an altitude constraint.

ALT CRZ arms



The next altitude target is the cruise altitude.

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-40-20-A-00025587.0001001 / 18 MAY 22

CLB disengages, when another vertical mode engages.

Ident.: DSC-22_30-40-40-20-A-00025588.0001001 / 18 MAY 22

REVERSIONS

CLB also disengages, when one of the following reversions occurs:

- NAV disengages when:
  - The aircraft reaches a flight plan discontinuity, or
  - The next altitude target is an altitude constraint, and the flight crew engaged the HDG/TRK mode

  OP CLB engages
- The flight crew sets the FCU selected altitude below the aircraft altitude: V/S/FPA engages
- The vertical flight plan becomes invalid: OP CLB engages
- The FMS flight phase changes to DES or APPR phase: OP CLB engages.

Ident.: DSC-22_30-40-40-20-A-00025589.0001001 / 18 MAY 22

When the reversion occurs:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

EXP CLB Mode

GENERAL

Ident.: DSC-22_30-40-40-30-00025501.0001001 / 18 MAY 22

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

EXP CLB is a vertical selected mode.
EXP CLB guides the aircraft vertically to the FCU selected altitude.

When EXP CLB is engaged:
- The speed target is Green Dot
- The AP/FD adjusts the pitch in order to maintain the speed target
- If the A/THR is active, the A/THR controls the thrust, THR CLB engages
- All the altitude constraints, the speed constraints and the SPD LIM are disregarded.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-40-30-00025502.0001001 / 18 MAY 22

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

EXP CLB engages, when all of the following are applicable:
- The aircraft is airborne for at least 5 s, and
- The managed speed is available, and
- The FCU selected altitude is above than the aircraft altitude, and the flight crew pushes the EXPED pb.

DISENGAGEMENT CONDITIONS

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-22_30-40-40-30-A-00025503.0001001 / 18 MAY 22

3

MANUAL DISENGAGEMENT

EXP CLB disengages manually, when one of the following condition occurs:
- The flight crew pulls the V/S / FPA knob, V/S / FPA engages, or
- The flight crew pulls the ALT knob, OP CLB engages, or
- The flight crew pushes the ALT knob, CLB engages provided that the engagement conditions are met.

AUTOMATIC DISENGAGEMENT

EXP CLB disengages automatically when ALT* engages.

Ident.: DSC-22_30-40-40-30-A-00025504.0001001 / 18 MAY 22

4

REVERSIONS

EXP CLB reverts to V/S / FPA, when one the following condition occurs:

- AP ON and FD ON, the aircraft exceeds VLS or VMAX, or
- AP OFF and FD ON, the flight crew not does not follow the FD orders and the aircraft speed reaches VMAX + 4 kt, or
- The flight crew selects an altitude below the aircraft altitude.

EXP CLB reverts to OP CLB, when the flight crew pulls the SPD / MACH knob.

Ident.: DSC-22_30-40-40-30-A-00025505.0001001 / 18 MAY 22

5

When the reversion occurs:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flashes for 10 s.

ALT

GENERAL

Ident.: DSC-22_30-40-50-10-A-00025809.0001001 / 18 MAY 22
Applicable to: ALL

ALT* mode guides the aircraft to acquire the selected FCU altitude.
ALT mode maintains the selected FCU altitude.

The ALT* mode:
- Has an internal V/S guidance that is a direct function of the difference between present altitude and the altitude target

Ident.: DSC-22_30-40-50-10-A-00025864.0001001 / 18 MAY 22
Applicable to: ALL

- Has an internal protection that decreases the vertical speed when VLS or VMAX is reached (VLS or VMAX becomes the priority target)

Ident.: DSC-22_30-40-50-10-A-00025856.0001001 / 18 MAY 22
1 **Applicable to: MSN 10949-11597**

- In the case of TA, in order to avoid spurious RA, automatically adjusts the V/S to reach the target altitude

Ident.: DSC-22_30-40-50-10-A-00025858.0001001 / 18 MAY 22
Applicable to: ALL

The system switches automatically to ALT mode when the altitude deviation becomes less than 20 ft.

Note: If the baro setting is changed during ALT mode, this may lead to an FCU target overshoot due to the change of the current value of the altitude. However ALT* mode will enable the FCU altitude to be regained.*

ALT ARMING CONDITIONS

Ident.: DSC-22_30-40-50-10-00025812.0001001 / 18 MAY 22
Applicable to: ALL

ALT arms, with FD/AP engaged, when the aircraft climbs or descends toward the FCU selected altitude.
However, ALT does not arm, when one of the following modes is engaged: G/S*, G/S, F-G/S* ⊲, F-G/S ⊲, FINAL APP, LAND, FLARE, ROLL OUT.

L2 ALT arms, if one of the following conditions occurs:
- The flight crew changes the altitude target on the FCU, or
- The flight crew changes the barometric reference (QNH, QFE, or STD) on the EFIS CP, or

- The AP/FD TCAS ◁ mode engages, or
- The difference between the aircraft altitude and the altitude set on the FCU is more than 250 ft.

L1 ALT arms, when one of the following occurs:

- OP CLB engages, and the FCU selected altitude is not set to the cruise altitude, or
- OP DES engages, or
- CLB engages, when the next altitude target is:
  - Equal to the FCU selected altitude
  - Not equal to the cruise altitude.
- DES engages, and the next altitude target is the FCU selected altitude, or
- V/S / FPA engages, and the next altitude target is the FCU selected altitude, or
- SRS TO or SRS GA engages, and the altitude target set on the FCU is above the current aircraft altitude.

ALT DISARMING CONDITIONS

Ident.: DSC-22_30-40-50-10-00025816.0001001 / 18 MAY 22
Applicable to: ALL

ALT disarms when one of the following occurs:

- ALT* engages, or
- G/S*, F-G/S* ◁ , or FINAL APP engages, or
- ALT CST arms.

ALT* ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-50-10-00025818.0001001 / 18 MAY 22
Applicable to: ALL

ALT* engages, when ALT is armed, and the aircraft reaches the capture zone of the altitude target.

L2 ALT* engagement is inhibited during 3 s after the selected altitude is changed on the FCU.

ALT* DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-50-10-B-00025821.0001001 / 18 MAY 22

ALT* disengages when another vertical mode engages.

Ident.: DSC-22_30-40-50-10-B-00025823.0001001 / 18 MAY 22

REVERSIONS

ALT* reverts to V/S / FPA when the flight crew changes the FCU selected altitude by more than 250 ft.

Ident.: DSC-22_30-40-50-10-B-00025825.0001001 / 18 MAY 22

If within 5 s after reversion to V/S / FPA, to confirm the altitude target change, the flight crew does not:

- Pull the ALT knob, or
- Set a new V/S / FPA target, or
- Push the ALT pb on the FCU.

Then:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

ALT ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-50-10-00025830.0001001 / 18 MAY 22
Applicable to: ALL

ALT engages, when ALT* is engaged, and the aircraft reaches the altitude target.

L2 The aircraft is at the altitude target when the difference between the aircraft altitude and the altitude target is less than 40 ft for more than two seconds.

ALT engages, when one of the following occurs:

- ALT CST is engaged, and the flight crew sets the FCU selected altitude to the altitude constraint, or
- ALT CST is engaged, and NAV disengages.

ALT DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-50-10-C-00025841.0001001 / 18 MAY 22

ALT disengages, when any other vertical mode engages.

Ident.: DSC-22_30-40-50-10-C-00025842.0001001 / 18 MAY 22

MANUAL DISENGAGEMENT

ALT manually disengages, when one of the following occurs:

- The flight crew pulls the ALT knob: OP CLB or OP DES engages
- The flight crew pushes the ALT knob, and all of the following conditions are applicable:
  - The FCU selected altitude is above the aircraft altitude
  - NAV is engaged
  - The FMS flight phase is neither descent, nor approach

  CLB engages

- The flight crew pushes the ALT knob, and all of the following conditions are applicable:
  - The FCU selected altitude is below the aircraft altitude
  - One of the following mode is engaged : NAV, LOC *, LOC, LOC B/C* ◁ , LOC B/C ◁
  - The FMS flight phase is not one of the following: takeoff, climb, go-around

  DES engages

L2 - The flight crew pushes the ALT knob, and all of the following conditions are applicable:
  - The aircraft altitude is equal to the altitude constraint
  - The FCU selected altitude is set above the aircraft altitude
    The FCU selected altitude is at least 250 ft above the aircraft altitude
  - NAV is engaged
  - The FMS flight phase is neither descent, nor approach

  ALT CST engages
- The flight crew pushes the ALT knob, and all of the following conditions are applicable:
  - The aircraft altitude is equal to the altitude constraint
  - The FCU selected altitude is set below the aircraft altitude
    The FCU selected altitude is at least 250 ft below the aircraft altitude
  - One of the following mode is engaged : NAV, LOC *, LOC, LOC B/C* ◁ , LOC B/C ◁
  - The FMS flight phase is not one of the following: takeoff, climb, go-around

  ALT CST engages
- The aircraft altitude is equal to the FCU selected altitude, and the flight crew sets the cruise altitude to the aircraft altitude: ALT CRZ engages

L1 - The flight crew pulls or pushes the V/S / FPA knob: V/S / FPA engages
- The flight crew engages go-around: SRS GA engages.

Ident.: DSC-22_30-40-50-10-C-00025903.0001001 / 18 MAY 22

AUTOMATIC DISENGAGEMENT

ALT automatically disengages, when one of the following occurs:

Ident.: DSC-22_30-40-50-10-C-00025843.0001001 / 18 MAY 22

- The aircraft reaches the G/S capture zone when:
  - LOC* or LOC is engaged
  - G/S is armed

  G/S* engages

Ident.: DSC-22_30-40-50-10-C-00025844.0001001 / 18 MAY 22

- The aircraft reaches the F-G/S ◁ capture zone when:
  - LOC*, LOC, F-LOC ◁ * or F-LOC ◁ is engaged, and
  - F-G/S ◁ is armed

  F-G/S* ◁ engages

Ident.: DSC-22_30-40-50-10-C-00025845.0001001 / 18 MAY 22

- The aircraft reaches the FINAL capture zone, when:
  - APP NAV is engaged
  - FINAL is armed

  FINAL APP engages.

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ALT CST

GENERAL

Ident.: DSC-22_30-40-50-20-A-00025810.0001001 / 18 MAY 22
Applicable to: ALL

ALT CST* guides the aircraft to acquire an altitude constraint.
ALT CST maintains the altitude constraint delivered by the FMS.

The ALT CST* mode:
- Has an internal V/S guidance that is a direct function of the difference between present altitude and the altitude target

Ident.: DSC-22_30-40-50-20-A-00025865.0001001 / 18 MAY 22
Applicable to: ALL

- Has an internal protection that decreases the vertical speed when VLS or VMAX is reached (VLS or VMAX becomes the priority target)

Ident.: DSC-22_30-40-50-20-A-00025861.0001001 / 18 MAY 22
1 **Applicable to: MSN 10949-11597**

- In the case of TA, in order to avoid spurious RA, automatically adjusts the V/S to reach the target altitude

Ident.: DSC-22_30-40-50-20-A-00025862.0001001 / 18 MAY 22
Applicable to: ALL

The system switches automatically to ALT CST mode when the altitude deviation becomes less than 20 ft.

Note: *For aircraft equipped with QFE option, a switching from STD to QFE (or QFE to STD) in ALT CST* mode, will change the target value and a reversion to V/S may occur if the target value is modified by 250 ft or more.*

ALT CST ARMING CONDITIONS

Ident.: DSC-22_30-40-50-20-00025814.0001001 / 18 MAY 22
Applicable to: ALL

ALT CST arms, with FD/AP engaged, when the aircraft climbs or descends toward an altitude constraint delivered by the FMS.
However, ALT CST does not arm, when one of the following mode is engaged: G/S*, G/S, F-G/S* ◁ , F-G/S ◁ , FINAL APP, LAND, FLARE, ROLL OUT.

L2 ALT CST arms, if one of the following condition occurs:
- The flight crew changes the barometric reference (QNH, QFE, or STD) on the EFIS CP, or
- The AP/FD TCAS ◁ mode engages, or
- The difference between the aircraft altitude and the altitude constraint delivered by the FMS is more than 250 ft.

L1 ALT CST arms, when CLB (DES) engages, and:
- The next altitude target is an altitude constraint delivered by the FMS, and
- The FCU selected altitude is above (below) the altitude constraint.

ALT CST DISARMING CONDITIONS

Ident.: DSC-22_30-40-50-20-00025817.0001001 / 18 MAY 22
Applicable to: ALL

ALT CST disarms when one of the following occurs:
- ALT CST* engages, or
- G/S*, F-G/S* ◁ , or FINAL APP engages, or
- CLB is engaged, and one of the following occurs:
  - The FCU selected altitude becomes the next altitude target, or
  - OP CLB or V/S / FPA engages.
- DES is engaged, and one of the following occurs:
  - The FCU selected altitude becomes the next altitude target, or
  - OP DES or V/S / FPA engages, or
  - SRS GA engages.

ALT CST* ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-50-20-00025820.0001001 / 18 MAY 22
Applicable to: ALL

ALT CST* engages, when ALT CST is armed, and the aircraft reaches the capture zone of the altitude target.

L2 ALT CST* engagement is inhibited during 3 s after the selected altitude is changed on the FCU.

ALT CST* DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-50-20-B-00025827.0001001 / 18 MAY 22

ALT CST* disengages when another vertical mode engages.

Ident.: DSC-22_30-40-50-20-B-00025828.0001001 / 18 MAY 22

REVERSIONS

ALT CST* reverts to V/S / FPA if NAV disengages.

Ident.: DSC-22_30-40-50-20-B-00025829.0001001 / 18 MAY 22

If within 5 s after reversion to V/S / FPA, to confirm the altitude target change, the flight crew does not:
- Pull the ALT knob, or
- Set a new V/S / FPA target, or
- Push the ALT pb on the FCU.

Then:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

ALT CST ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-50-20-00025831.0001001 / 18 MAY 22
Applicable to: ALL

ALT CST engages, when ALT CST* is engaged, and the aircraft reaches the altitude target.

L2 ALT CST engages, when one of the following occurs:

- The flight crew pushes the ALT knob, and all the following conditions are applicable:
  - ALT is engaged, and
  - The aircraft altitude is equal to the altitude constraint, and
  - The FCU selected altitude is set above the aircraft altitude
    The FCU selected altitude is at least 250 ft above the aircraft altitude
  - NAV is engaged, and
  - The FMS flight phase is neither descent, nor approach, and
  - The vertical flight plan is valid

  CLB arms, or
- The flight crew pushes the ALT knob, and all the following conditions are applicable:
  - ALT is engaged, and
  - The aircraft altitude is equal to the altitude constraint, and
  - The FCU selected altitude is set below the aircraft altitude, and
    The FCU selected altitude is at least 250 ft below the aircraft altitude
  - One of the following modes is engaged: NAV, LOC*, LOC, LOC B/C*, LOC B/C, F-LOC*, F-LOC and
  - The FMS flight phase is not one of the following: takeoff, climb, go-around

  DES arms.

ALT CST DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-50-20-C-00025853.0001001 / 18 MAY 22

ALT CST disengages, when any other vertical modes engages.

Ident.: DSC-22_30-40-50-20-C-00025854.0001001 / 18 MAY 22

MANUAL DISENGAGEMENT

ALT CST manually disengages, when one of the following occurs:

- The flight crew pulls the ALT knob: OP CLB or OP DES engages
- The flight crew pulls or pushes the V/S / FPA knob: V/S / FPA engages
- The flight crew sets the altitude target on the FCU to the altitude constraint: ALT engages
- The flight crew removes the altitude constraint: CLB or DES engages
- The flight crew engages go-around: SRS GA engages.

Ident.: DSC-22_30-40-50-20-C-00025855.0001001 / 18 MAY 22

AUTOMATIC DISENGAGEMENT

ALT CST automatically disengages, when one of the following occurs:

- The aircraft sequences the waypoint, for which the altitude constraint is associated
- NAV disengages: ALT engages

Ident.: DSC-22_30-40-50-20-C-00025857.0001001 / 18 MAY 22

- The aircraft reaches the G/S capture zone when:
  - LOC* or LOC is engaged
  - G/S is armed

  G/S* engages

Ident.: DSC-22_30-40-50-20-C-00025859.0001001 / 18 MAY 22

- The aircraft reaches the F-G/S ◁ capture zone when:
  - LOC*, LOC, F-LOC ◁ * or F-LOC ◁ is engaged, and
  - F-G/S ◁ is armed

  F-G/S* ◁ engages

Ident.: DSC-22_30-40-50-20-C-00025860.0001001 / 18 MAY 22

- The aircraft reaches the FINAL capture zone, when:
  - APP NAV is engaged
  - FINAL is armed

  FINAL APP engages.

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ALT CRZ

GENERAL

Ident.: DSC-22_30-40-50-30-A-00025808.0001001 / 18 MAY 22
Applicable to: ALL

ALT CRZ* mode guides the aircraft to acquire the cruise altitude, as selected on the FMS PROG page and on the FCU.
ALT CRZ mode maintains the cruise altitude, as selected on the FMS PROG page and on the FCU.

The ALT CRZ* mode:
- Has an internal V/S guidance that is a direct function of the difference between present altitude and the altitude target

Ident.: DSC-22_30-40-50-30-A-00025866.0001001 / 18 MAY 22
Applicable to: ALL

- Has an internal protection that decreases the vertical speed when VLS or VMAX is reached (VLS or VMAX becomes the priority target).

Ident.: DSC-22_30-40-50-30-A-00025867.0001001 / 18 MAY 22
1 **Applicable to: MSN 10949-11597**

- In the case of TA, in order to avoid spurious RA, automatically adjusts the V/S to reach the target altitude.

Ident.: DSC-22_30-40-50-30-A-00025868.0001001 / 18 MAY 22
Applicable to: ALL

The system switches automatically to ALT CRZ mode when the altitude deviation becomes less than 20 ft. Once ALT CRZ engages, the Altitude SOFT mode engages.
The Altitude SOFT mode corrects minor deviations from the Mach target by allowing a ±50 ft variation from the CRZ FL. This feature enhance fuel efficiency, passenger comfort and minimizes the changes in thrust.

Note: *If the baro setting is changed during ALT CRZ* mode, this may lead to an FCU target overshoot due to the change of the current value of the altitude. However ALT CRZ* mode will enable the FCU altitude to be regained.*

ALT CRZ ARMING CONDITIONS

Ident.: DSC-22_30-40-50-30-00025811.0001001 / 18 MAY 22
Applicable to: ALL

ALT CRZ arms, with FD/AP engaged, when the aircraft climbs or descends toward the cruise altitude, as selected on the FMS PROG page and on the FCU.

However, ALT CRZ does not arm, when one of the following modes is engaged: G/S*, G/S, F-G/S* ◁✻ , F-G/S ◁✻ , FINAL APP, LAND, FLARE or ROLL OUT.

ALT CRZ arms, if one of the following condition occurs:
- The flight crew changes the altitude target on the FCU to the cruise altitude, as selected on the FMS PROG page, or
- ALT CRZ is engaged and the flight crew changes the altitude target on the FCU, or
- The flight crew changes the barometric reference (QNH, QFE, or STD) on the EFIS CP, or
- The AP/FD TCAS ◁✻ mode engages.

ALT CRZ DISARMING CONDITIONS

Ident.: DSC-22_30-40-50-30-00025815.0001001 / 18 MAY 22
Applicable to: ALL

ALT CRZ disarms when one of the following occurs:
- ALT CRZ* engages, or
- The altitude target on the FCU is set below the cruise altitude: ALT arms.

ALT CRZ* ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-50-30-00025819.0001001 / 18 MAY 22
Applicable to: ALL

ALT CRZ* engages, when one of the following occurs:
- ALT CRZ is armed, and the aircraft reaches the capture zone of the altitude target, or
- ALT CRZ is engaged and the flight crew selects another FCU target altitude within the capture zone.

ALT CRZ* DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-50-30-B-00025822.0001001 / 18 MAY 22

ALT CRZ* disengages when another vertical mode engages.

Ident.: DSC-22_30-40-50-30-B-00025824.0001001 / 18 MAY 22

REVERSIONS

ALT CRZ* reverts to V/S / FPA if NAV disengages.

Ident.: DSC-22_30-40-50-30-B-00025826.0001001 / 18 MAY 22

If within 5 s after reversion to V/S / FPA, to confirm the altitude target change, the flight crew does not:
- Pull the ALT knob, or
- Set a new V/S / FPA target, or
- Push the ALT pb on the FCU.

Then:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

ALT CRZ ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-50-30-00025832.0001001 / 18 MAY 22
Applicable to: ALL

ALT CRZ engages, when ALT CRZ* is engaged, and the aircraft reaches the altitude target.

L2 ALT CRZ engages, when all of the following occur:
- ALT is engaged, and
- The aircraft altitude is equal to the FCU selected altitude, and
- The flight crew sets the cruise altitude to the aircraft altitude.

ALT CRZ DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-50-30-00025863.0001001 / 18 MAY 22
Applicable to: ALL

ALT CRZ disengages, when any other vertical mode engages.

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General

GENERAL

Ident.: DSC-22_30-40-60-10-00025590.0001001 / 18 MAY 22
Applicable to: ALL

During descent, OP DES or DES guides the aircraft vertically to an altitude target, or to a G/S or F-G/S ◁ capture zone.

Intentionally left blank

OP DES Mode

GENERAL

Ident.: DSC-22_30-40-60-20-00025591.0001001 / 18 MAY 22
Applicable to: ALL

OP DES is a vertical selected mode.
When OP DES is engaged, the AP/FD adjusts the pitch in order to maintain a Speed/Mach target (selected or managed). The A/THR then maintains idle thrust.
All the altitude constraints are disregarded.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-60-20-00025592.0001001 / 18 MAY 22
Applicable to: ALL

OP DES engages, if the FCU selected altitude is below the aircraft altitude and if one of the following occurs:

- The flight crew pulls the ALT knob, or
- EXP DES is engaged, and the flight crew pulls the SPD/MACH knob.

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-60-20-A-00025593.0001001 / 18 MAY 22

MANUAL DISENGAGEMENT

OP DES disengages manually, when one of the following occurs:

- The flight crew pushes the EXPED pb ◁ to engage EXP DES ◁ .
- The flight crew pushes the ALT knob, and all the following conditions are applicable:
  - One of the following modes is engaged: NAV, LOC*, LOC, F-LOC ◁ *, F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁
  - The FCU selected altitude is below the aircraft altitude
  - The FMS flight phase is cruise, or descent
  - The vertical flight plan is valid

  DES engages, or
- The flight crew pulls or pushes the V/S/FPA knob: V/S/FPA engages, or
- The flight crew engages go-around: SRS GA engages.

Ident.: DSC-22_30-40-60-20-A-00025594.0001001 / 18 MAY 22

AUTOMATIC DISENGAGEMENT

OP DES disengages automatically, when one of the following occurs:

- ALT is armed, the aircraft reaches the capture zone of the FCU selected altitude: ALT* engages
- ALT CRZ is armed, and the aircraft reaches the capture zone of the cruise altitude: ALT CRZ* engages

Ident.: DSC-22_30-40-60-20-A-00025595.0001001 / 18 MAY 22

- The aircraft reaches the G/S capture zone when:
  - LOC* or LOC is engaged
  - G/S is armed

  G/S* engages

Ident.: DSC-22_30-40-60-20-A-00025596.0001001 / 18 MAY 22

- The aircraft reaches the F-G/S ◁ capture zone when:
  - LOC*, LOC, F-LOC ◁ * or F-LOC ◁ is engaged
  - F-G/S ◁ is armed

  F-G/S ◁ * engages

Ident.: DSC-22_30-40-60-20-A-00025597.0001001 / 18 MAY 22

- The aircraft reaches the FINAL capture zone when:
  - APP NAV is engaged
  - FINAL is armed

  FINAL APP engages

Ident.: DSC-22_30-40-60-20-A-00025598.0001001 / 18 MAY 22

- AP/FD TCAS ◁ mode engages.

Ident.: DSC-22_30-40-60-20-A-00025599.0001001 / 18 MAY 22

REVERSION

OP DES reverts to V/S/FPA, if the flight crew sets the FCU selected altitude above the aircraft altitude.

Ident.: DSC-22_30-40-60-20-A-00025600.0001001 / 18 MAY 22

If within 5 s after reversion to V/S/FPA, the flight crew does not confirm the altitude target change by another expected action, then:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

Intentionally left blank

DES Mode

GENERAL

Ident.: DSC-22_30-40-60-30-00025601.0001001 / 18 MAY 22
Applicable to: ALL

DES is a managed vertical mode.
DES guides the aircraft vertically along the vertical flight plan. All the altitude constraints associated to waypoints are taken into account.
When DES is engaged in idle path, the AP/FD adjusts the pitch in order to maintain a speed/Mach target. The A/THR then maintains the idle thrust.
When DES is engaged in geometric path, the AP/FD controls the vertical trajectory. The A/THR is then in SPEED/MACH.

ARMING CONDITIONS

Ident.: DSC-22_30-40-60-30-00025602.0001001 / 18 MAY 22
Applicable to: ALL

DES can only arm when:

- The altitude on the FCU is below the aircraft altitude
- NAV is armed, or engaged
- The FMS flight phase is cruise, descent, or approach
- The vertical flight plan path is valid.

DES arms, when one of the following occurs:

- DES is previously engaged with ALT CST armed, and ALT CST* engages, or
- ALT CST* or ALT CST is engaged, the flight crew pushes the ALT knob and the FMS authorizes DES to arm in accordance with the flight plan.

DISARMING CONDITIONS

Ident.: DSC-22_30-40-60-30-00025603.0001001 / 18 MAY 22
Applicable to: ALL

DES disarms, when one of the following occurs:

- NAV, LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁ mode disengages, or
- Another vertical mode engages, or
- ALT CST* or ALT CST is engaged, and the flight crew sets the FCU selected altitude to the altitude constraint, or
- The flight crew sets an altitude on the FCU above the aircraft altitude, or
- The vertical flight plan is lost.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-60-30-00025604.0001001 / 18 MAY 22
Applicable to: ALL

DES engages, when one of the following occurs:

- ALT CST is engaged with DES armed, and the aircraft sequences an ALT CST waypoint, or
- The flight crew pushes the ALT knob, and all the following conditions are applicable:
  - The FCU selected altitude is below the aircraft altitude
  - One of the following lateral modes is engaged: NAV, LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁
  - One of the following vertical modes is engaged: OP DES, V/S/FPA, ALT*, ALT, ALT CRZ*, ALT CRZ, AP/FD TCAS ◁
  - The FMS flight phase is cruise, descent or approach
  - The vertical flight plan is valid.

Note: *DES will not engage if one of the following modes is engaged: G/S*, G/S, F-G/S ◁ *, F-G/S ◁ , FINAL APP, LAND.*

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-60-30-A-00025605.0001001 / 18 MAY 22

MANUAL DISENGAGEMENT

DES disengages manually, when one of the following occurs:

- The flight crew pushes the EXPED pb ◁ to engage EXP DES ◁
- The flight crew pulls the ALT knob: OP DES engages
- The flight crew pulls or pushes the V/S/FPA knob: V/S/FPA engages
- The flight crew engages go-around: SRS GA engages.

Ident.: DSC-22_30-40-60-30-A-00025606.0001001 / 18 MAY 22

AUTOMATIC DISENGAGEMENT

DES disengages automatically, when one of the following occurs:

- The aircraft reaches the capture zone of the FCU selected altitude: ALT* engages
- The aircraft reaches the capture zone of the altitude constraint: ALT CST* engages

Ident.: DSC-22_30-40-60-30-A-00025607.0001001 / 18 MAY 22

- The aircraft reaches the G/S capture zone when:
  - LOC* or LOC is engaged
  - G/S is armed

  G/S* engages

Ident.: DSC-22_30-40-60-30-A-00025608.0001001 / 18 MAY 22

- The aircraft reaches the F-G/S ◁ capture zone when:
  - LOC*, LOC, F-LOC ◁ * or F-LOC ◁ is engaged, and
  - F-G/S ◁ is armed

  F-G/S* ◁ engages

Ident.: DSC-22_30-40-60-30-A-00025609.0001001 / 18 MAY 22

- The aircraft reaches the FINAL capture zone, when:
  - APP NAV is engaged
  - FINAL is armed

  FINAL APP engages

Ident.: DSC-22_30-40-60-30-A-00025610.0001001 / 18 MAY 22

- AP/FD TCAS ◁ mode engages.

Ident.: DSC-22_30-40-60-30-A-00025611.0001001 / 18 MAY 22

REVERSIONS

DES reverts to V/S/FPA, when one the following occurs:

- The flight crew sets the FCU selected altitude above the aircraft altitude
- One of the following modes was engaged, and disengages: NAV, LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁
- The vertical flight plan is lost.

Ident.: DSC-22_30-40-60-30-A-00025612.0001001 / 18 MAY 22

When the reversion occurs:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

Intentionally left blank

EXP DES Mode

GENERAL

Ident.: DSC-22_30-40-60-40-00025538.0001001 / 18 MAY 22

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

EXP DES is a vertical selected mode.
EXP DES guides the aircraft vertically to the FCU selected altitude.

When EXP DES is engaged:
- The speed target is 340 kt or M 0.8
- The AP/FD adjusts the pitch in order to maintain the speed target
- If the A/THR is active, the A/THR controls the thrust, THR IDLE engages
- All the altitude constraints, the speed constraints and the SPD LIM are disregarded.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-60-40-00025540.0001001 / 18 MAY 22

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

EXP DES engages, when all of the following are applicable:
- The aircraft is airborne for at least 5 s, and
- The managed speed is available, and
- The FCU selected altitude is below the aircraft altitude, and the flight crew pushes the EXPED pb.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-60-40-A-00025543.0001001 / 18 MAY 22

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

MANUAL DISENGAGEMENT

EXP DES disengages manually, when one of the following condition occurs:
- The flight crew pulls the V/S / FPA knob, V/S / FPA engages, or
- The flight crew pulls the ALT knob, OP DES engages, or
- The flight crew pushes the ALT knob, DES engages provided that the engagement conditions are met.

AUTOMATIC DISENGAGEMENT

EXP DES disengages automatically when ALT* engages.

Ident.: DSC-22_30-40-60-40-A-00025546.0001001 / 18 MAY 22

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

REVERSIONS

EXP DES reverts to V/S / FPA, when one the following condition occurs:
- AP ON and FD ON, the aircraft exceeds VLS or VMAX, or
- AP OFF and FD ON, the flight crew not does not follow the FD orders and the aircraft speed reaches VLS - 2 kt if the speed brakes are retracted or VLS - 17 kt if the speed brakes are extended, or
- The flight crew selects an altitude above the aircraft altitude.

EXP DES reverts to OP DES, when the flight crew pulls the SPD / MACH knob.

Ident.: DSC-22_30-40-60-40-A-00025548.0001001 / 18 MAY 22

Applicable to: MSN 02014

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flashes for 10 s.

GENERAL

Ident.: DSC-22_30-40-70-00025759.0001001 / 18 MAY 22
Applicable to: ALL

V/S and FPA are selected vertical modes. They are the basic modes of vertical guidance.
V/S/FPA acquires and holds the vertical speed or the flight path angle, that is displayed in the V/S/FPA window of the FCU.
When V/S/FPA engages following a reversion, the V/S/FPA target synchronizes on the current V/S/FPA of the aircraft, or the preselected V/S/FPA that is displayed in the V/S/FPA window of the FCU.

ENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-70-A-00025760.0001001 / 18 MAY 22

V/S/FPA engages, when one of the following occurs:
- The flight crew pushes or pulls the V/S/FPA knob

L2 V/S/FPA will not engage if LAND is engaged, or SRS GA is engaged below 100 ft RA

L1
- The APs and FDs are disengaged, and the flight crew engages the FDs or the AP HDG/TRK also engages
- The aircraft is airborne for at least 5 s, with no other vertical mode engaged.

V/S/FPA engages, in accordance with the HDG-V/S/TRK-FPA selection.

Ident.: DSC-22_30-40-70-A-00025761.0001001 / 18 MAY 22

REVERSIONS TO V/S / FPA

A vertical mode reverts to V/S/FPA, when one of the following occurs:
- OP DES, or DES is engaged and the FCU selected altitude is set above the aircraft altitude
- OP CLB, or CLB is engaged and the FCU selected altitude is set below the aircraft altitude
- DES is engaged and one of the following mode disengages: NAV, LOC*, LOC, F-LOC* ◁ , F-LOC ◁ , LOC B/C* ◁ , LOC B/C ◁
- FINAL APP is engaged and NAV disengages

L2
- The vertical flight plan is lost, when one of the following modes is engaged: DES, FINAL APP

L1
- G/S* or G/S is engaged, and LOC*or LOC disengages
- F-G/S* ◁ or F-G/S ◁ is engaged, and F-LOC* ◁ or F-LOC ◁ disengages
- The flight crew presses the LOC pb, or the APPR pb, when G/S*, G/S, F-G/S* ◁ or F-G/S ◁ is engaged

- ALT* is engaged, and the flight crew modifies the FCU selected altitude
- L2 The flight crew changes the approach, when one of the following vertical approach mode is engaged:
  - FINAL APP is engaged
  - G/S* or G/S is engaged, and the aircraft is below 700 ft RA
  - F-G/S* ◁ or F-G/S ◁ is engaged.

L1 Note: *The aircraft will target the V/S/FPA value displayed on the FCU instead of the current value, if the reversion occurs within 45 s after the preselection of a V/S/FPA value. As a consequence, this new V/S/FPA value may lead the aircraft to a path opposite to the current one, or to a steeper one.*

The AP/FD TCAS ◁ mode can also disengaged to revert to V/S mode.

Ident.: DSC-22_30-40-70-A-00025762.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-70-B-00025763.0001001 / 18 MAY 22

MANUAL DISENGAGEMENT

V/S/FPA disengages manually, when one of the following occurs:
- The flight crew pulls the ALT knob: OP CLB or OP DES engages
- The flight crew pushes the ALT knob
  - NAV engages.
  - The FCU selected altitude is above the aircraft altitude
  - The FMS flight phase is neither descent, nor approach
  - The vertical flight plan is valid

  CLB engages
- The flight crew pushes the ALT knob
  - One of the following modes is engaged: NAV, LOC*, LOC, LOC B/C* ◁ , LOC B/C ◁ , F-LOC* ◁ , F-LOC ◁
  - The FCU selected altitude is below the aircraft altitude
  - The FMS flight phase is cruise, or descent
  - The vertical flight plan is valid

  DES engages

- The flight crew pushes the EXPED pb ◁ : EXP CLB or EXP DES engages
- The flight crew engages go-around: SRS GA engages.

Ident.: DSC-22_30-40-70-B-00025764.0001001 / 18 MAY 22

AUTOMATIC DISENGAGEMENT

V/S/FPA disengages automatically, when one of the following occurs:

- The aircraft reaches the capture zone of the FCU selected altitude: ALT* engages
- ALT CRZ is armed, and the aircraft reaches the capture zone of the cruise altitude: ALT CRZ* engages

Ident.: DSC-22_30-40-70-B-00025765.0001001 / 18 MAY 22

- The aircraft reaches the G/S capture zone when:
  - LOC* or LOC is engaged
  - G/S is armed

  G/S* engages

Ident.: DSC-22_30-40-70-B-00025766.0001001 / 18 MAY 22

- The aircraft reaches the F-G/S ◁ capture zone when:
  - LOC*, LOC, F-LOC* ◁ or F-LOC ◁ is engaged
  - F-G/S ◁ is armed

  F-G/S* ◁ engages

Ident.: DSC-22_30-40-70-B-00025768.0001001 / 18 MAY 22

- The aircraft reaches the FINAL capture zone, when:
  - APP NAV is engaged
  - FINAL is armed

  FINAL APP engages

Ident.: DSC-22_30-40-70-B-00025769.0001001 / 18 MAY 22

- AP/FD TCAS ◁ mode engages.

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General

GENERAL

Ident.: DSC-22_30-40-80-00-A-00025795.0001001 / 18 MAY 22
Applicable to: ALL

Flight guidance can perform different types of approaches.

Type of Guidance	Approach type
LOC G/S	- ILS approach - GLS approach - RNAV(GNSS) approach with LPV minima (with SLS)
LOC FPA	- RNAV(GNSS) with LP minima (with SLS)
F-LOC or LOC F-G/S	- RNAV(GNSS) with LNAV/VNAV or LNAV only minima - Navaids approaches (e.g. VOR, VOR/DME...) - ILS approach with glideslope failed - LOC only approach with no ILS glideslope - LOC B/C approach
FINAL APP	- RNAV(GNSS) with LNAV/VNAV or LNAV only minima - Navaids approaches (e.g. VOR, VOR/DME...) - RNAV (RNP) approach
NAV FPA	- RNAV(GNSS) with LNAV only minima - Navaids approaches (e.g. VOR, VOR/DME...)

Note: *The FLS guidance is only available if FLS parameters associated to the selected approach are available in the FMS database.*

Ident.: DSC-22_30-40-80-00-A-00025796.0001001 / 18 MAY 22
Applicable to: ALL

APPROACH SELECTION

STANDARD SELECTION

The flight crew selects the approach via the ARRIVAL page.

Ident.: DSC-22_30-40-80-00-A-00025797.0001001 / 18 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

MANUAL TUNING ON THE FMS

If the flight crew manually-tunes an LS approach on the RADIO NAV page, the flight guidance system will disregard the manual tuning and guide the aircraft on the approach selected on the ARRIVAL page.

L2 If the approach selected on the ARRIVAL page and the LS approach set on the RADIO NAV page are different:

- The manually-tuned LS approach on the RADIO NAV page is disregarded, and the CHECK APPR SEL message is displayed on the FMA, and on the MCDU Scratchpad.
- The aircraft will fly the approach selected on the ARRIVAL page.

Ident.: DSC-22_30-40-80-00-A-00025797.0002001 / 18 MAY 22
1 **Applicable to: MSN 10949-11597**

MANUAL TUNING ON THE FMS

If the flight crew manually-tunes an LS approach on the RADIO NAV page, the flight guidance system will guide the aircraft on the manually-tuned approach.

L2 If the approach selected on the ARRIVAL page and the LS approach set on the RADIO NAV page are different:

- The approach selected on the ARRIVAL page is disregarded, and the CHECK APPR SEL message is displayed on the FMA, and on the MCDU Scratchpad
- The aircraft will fly the manually-tuned LS approach on the RADIO NAV page.

Ident.: DSC-22_30-40-80-00-A-00025798.0001001 / 18 MAY 22
Applicable to: ALL

MANUAL TUNING ON THE RMP (BACKUP)

If all the FMCs are fault, the flight crew selects the NAV key on the RMP 1 or 2, in order to manually-tune the frequency, or select a GLS ◁ approach, or an ILS approach.

Ident.: DSC-22_30-40-80-00-A-00025799.0001001 / 18 MAY 22
Applicable to: ALL

SELECTION IN THE MMRS

When an approach is selected on the ARRIVAL page, or manually-tuned on RADIO NAV page, or via the RMP, the approach frequency and course are sent to both MMRs.
In case of discrepancy between both MMRs the NAV LS TUNING DISAGREE alert triggers.

Note: *Below 700 ft RA, when an approach mode is engaged, the flight guidance system freezes the LS selection in the MMR. As a result, the MMR does not take into account any change of the LS selection.*

ILS/GLS (IF INSTALLED)/SLS (IF INSTALLED) GUIDANCE MODE

Applicable to: ALL

Ident.: DSC-22_30-40-80-00-B-00025800.0001001 / 18 MAY 22

ILS GUIDANCE MODE

An ILS guidance mode uses the Localizer and Glideslope signals from localizer antennas and a glideslope antenna on ground.

L2 The MMR computes the ILS lateral and vertical angular deviations.

L1 The ILS lateral deviation is referred to as the LOC deviation, and the ILS vertical deviation is referred to as the G/S deviation.

The FG uses the LOC and G/S deviations in order to fly the aircraft along the LOC and G/S beams.

APPROACH MODES

The ILS guidance modes are:

	Lateral Guidance	Vertical Guidance
Above 400 ft RA	LOC*: Capture of the LOC beam LOC: Track of the LOC beam	G/S*: Capture of the G/S beam G/S: Track of the G/S beam
Below 400 ft RA, and until end of roll out	LAND: Track of LOC and G/S beams FLARE: Alignment of the yaw axis on the runway centerline, and flare on the pitch axis ROLL OUT: Track of the runway centerline, and nose down	

APPROACH AND LANDING CAPABILITY

In accordance with the approach minima and the landing technique, minimum approach and landing capabilities are required.

Ident.: DSC-22_30-40-80-00-B-00025801.0001001 / 18 MAY 22

GLS ⊲ GUIDANCE MODE

The GLS guidance mode uses the GNSS position with a correction and integrity signal from a ground station also known as GBAS.

L2 The MMR computes the GLS deviations.

L1 The GLS lateral deviation is referred to as the LOC deviation, and the GLS vertical deviation is referred to as the G/S deviation.

Note: *The computed lateral and vertical deviations are available up to 20 NM from the runway threshold.*

The FG uses the LOC and G/S deviations in order to fly the aircraft along the LOC and G/S approach path, like ILS.

APPROACH MODES

The GLS guidance modes are:

	Lateral Guidance	Vertical Guidance
Above 400 ft RA	LOC*: Capture of the LOC beam LOC: Track of the LOC beam	G/S*: Capture of the G/S beam G/S: Track of the G/S beam
Below 400 ft RA, and until end of roll out	LAND: Track of LOC and G/S beams FLARE: Alignment of the yaw axis on the runway centerline, and flare on the pitch axis ROLL OUT: Track of the runway centerline, and nose down	

APPROACH AND LANDING CAPABILITY

In accordance with the approach minima and the landing technique, minimum approach and landing capabilities are required.

Ident.: DSC-22_30-40-80-00-B-00025802.0001001 / 18 MAY 22

SLS ◁ GUIDANCE MODE

The SLS guidance mode uses the GNSS position with a correction and integrity signal from satellite constellations also known as SBAS.
The SLS guidance mode enables the flight crew to fly an RNAV (GNSS) straight-in approach with LPV minima, or LP minima with the LOC guidance mode only.
L2 The MMR computes the SLS deviations.
L1 The SLS lateral deviation is referred to as the LOC deviation, and the SLS vertical deviation is referred to as the G/S deviation.
The FG uses the LOC and G/S deviations in order to fly the aircraft along the LOC and G/S approach path, like ILS.

APPROACH MODES

The SLS guidance modes are:

	Lateral Guidance	Vertical Guidance
Above 400 ft RA	LOC*: Capture of the LOC beam LOC: Track of the LOC beam	G/S*: Capture of the G/S beam G/S: Track of the G/S beam
Below 400 ft RA	LAND: Track of LOC and G/S beams FLARE: Alignment of the yaw axis on the runway centerline, and flare on the pitch axis ROLL OUT: Track of the runway centerline, and nose down	

APPROACH AND LANDING CAPABILITY

In accordance with the approach minima and the landing technique, minimum approach and landing capabilities are required.

FLS GUIDANCE MODE

Applicable to: MSN 11531

2 Ident.: DSC-22_30-40-80-00-C-00025803.0001001 / 18 MAY 22

GUIDANCE SELECTION

The default guidance mode is the FLS mode.
The flight crew can check/select the appropriate guidance mode (FLS or FINAL APP) through the PERF APPR page.

CAUTION	For RNAV(RNP), FINAL APP must be selected.

3 Ident.: DSC-22_30-40-80-00-C-00025804.0001001 / 18 MAY 22

FLS FUNCTION AVAILABILITY

The FLS function is available, if the flight crew selects:
- A VOR, RNAV, GNSS, LOC or LOC B/C approach on the ARRIVAL page
- An ILS approach on the ARRIVAL page, and LOC pb on the FCU.

However, the FLS function is not available, if:
- The MAP is before the runway threshold, and
- The difference between the final approach course and the runway course is more than 50 °.

If the FLS function is not available for an approach, the NO FLS FOR THIS APPR message appears in the MCDU Scratchpad.

4 Ident.: DSC-22_30-40-80-00-C-00025805.0001001 / 18 MAY 22

APPROACHES FLOWN WITH LATERAL AND VERTICAL FLS GUIDANCE

The flight crew can use the FLS function to fly the following approaches with a lateral and vertical FLS guidance:
- NAVAIDS approaches (e.g. VOR, VOR/DME...)
- RNAV approach
- RNAV(GNSS) approach with LNAV/VNAV or LNAV minima only.

L2 The MMR computes the FLS deviations.

L1 The FLS function provides the flight crew with flight guidances like ILS, with:
- A pseudo LOC deviation, referred to as F-LOC deviation
- A pseudo G/S deviation, referred to as F-G/S deviation.

For more information on the FLS beam computation, *Refer to DSC-22_20-20-60 FLS Beam Computation - General*.

APPROACH MODES

The FLS guidance modes are:

Lateral Guidance	Vertical Guidance
F-LOC *: Capture of the F-LOC beam F-LOC: Track of the F-LOC beam	F-G/S *: Capture of the F-G/S beam F-G/S: Track of the F-G/S beam

5 Ident.: DSC-22_30-40-80-00-C-00025806.0001001 / 18 MAY 22

APPROACHES FLOWN WITH VERTICAL FLS GUIDANCE

The flight crew can use the FLS function to fly the following approaches with a vertical FLS guidance:
- ILS approach with glideslope out
- LOC only approach
- LOC B/C ◁ approach.

L2 The MMR computes the FLS deviations.

L1 The FLS function provides the flight crew with flight guidances like ILS, with:
- A LOC ILS deviation
- A pseudo G/S deviation, referred to as F-G/S deviation.

APPROACH MODES

The approach modes are:

Type of Approach	Lateral Guidance	Vertical Guidance
ILS with glideslope out **LOC only**	LOC*: Capture of the LOC beam LOC: Track of the LOC beam.	F-G/S*: Capture of the F-G/S beam F-G/S: Track of the F-G/S beam.
LOC B/C ◁	LOC B/C* ◁ : Capture of the LOC beam LOC B/C ◁ : Track of the LOC beam.	

FINAL APP GUIDANCE MODE

Ident.: DSC-22_30-40-80-00-00025906.0001001 / 18 MAY 22
Applicable to: ALL

APPROACH WITH FINAL APP GUIDANCE

The flight crew can use the FINAL APP mode in order to guide the aircraft laterally and vertically down to the Minimum, along the final descent profile computed by the FMS.

APPROACH MODES

The approach modes are:

Lateral Guidance	Vertical Guidance
APP NAV	FINAL
FINAL APP	

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LOC Mode

GENERAL

Ident.: DSC-22_30-40-80-10-00025415.0001001 / 18 MAY 22
Applicable to: ALL

The LOC* mode captures the localizer beam of the ILS/GLS ◁ /SLS ◁ .
The LOC mode tracks the localizer beam of the ILS/GLS ◁ /SLS ◁ .

LOC ARMING CONDITIONS

Ident.: DSC-22_30-40-80-10-00025416.0001001 / 18 MAY 22
Applicable to: ALL

LOC arms, when the flight crew presses the APPR pb, or the LOC pb, and one of the following conditions is applicable:

- An ILS, GLS ◁ , or RNAV(GNSS) with LPV(LP) minima (with SLS ◁ option) approach is set on the ARRIVAL page
- An ILS, GLS ◁ is manually-tuned on the RADIO NAV page

L2 *Note:* *If the flight crew sets a different ILS approach on the ARRIVAL page:*
- *The aircraft will fly the manually-tuned LS*
- *The MCDU displays the RWY/LS MISMATCH message.*

- At least one LS receiver must be operative. If both receivers are operative, the LS parameters must be the same in both LS receivers

L1 - A LOC only approach is set on the ARRIVAL page

L2 *Note:* *On aircraft equipped with the FLS ◁ function , the flight crew can also deselect the G/S of an ILS approach on the RADIO NAV page.*

L1 - The ILS frequency/GLS ◁ channel and course are manually-tuned on the RMP.

L2 LOC can only arm when all of the following are applicable:

- HDG/TRK or NAV is engaged, and
- The vertical mode is not SRS TO, nor SRS GA, and
- The aircraft is above 400 ft RA.

LOC DISARMING CONDITIONS

Ident.: DSC-22_30-40-80-10-00025417.0002001 / 18 MAY 22
1 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

LOC disarms, when LOC* engages.

L2 LOC also disarms, when one of the following occurs:

- G/S or F-G/S ◁✳ is armed, and the flight crew presses the APPR pb, or
- Neither G/S, nor F-G/S ◁✳ is armed, and the flight crew presses the LOC pb, or
- NAV arms, or
- The flight crew engages go-around, or
- The flight crew modifies the approach selection, or

  Note: The flight crew can change the approach selection, only when the aircraft is above 700 ft RA.

- The LS parameters are different in both LS receivers.

LOC DISARMING CONDITIONS

Ident.: DSC-22_30-40-80-10-00025417.0001001 / 18 MAY 22

2 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

LOC disarms, when LOC* engages.

L2 LOC also disarms, when one of the following occurs:

- G/S or F-G/S ◁✳ is armed, and the flight crew presses the APPR pb, or
- Neither G/S, nor F-G/S ◁✳ is armed, and the flight crew presses the LOC pb, or
- NAV arms, or
- The flight crew engages go-around, or
- The LS parameters are different in both LS receivers.

LOC* ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-10-A-00025418.0002001 / 18 MAY 22

Applicable to: ALL

LOC* engages, when LOC is armed, and the aircraft reaches the capture zone, or the pre-capture zone of the LOC beam.

PRE-CAPTURE ZONE OF THE LOC BEAM (ENHANCED LOC CAPTURE FUNCTION)

The pre-capture zone of the LOC beam is introduced through the Enhanced LOC Capture function. With the enhanced LOC Capture function, the aircraft uses the aircraft position and the FMS trajectory to provide guidance in order to pre-capture the LOC beam.

The pre-capture of the LOC beam allows to:

- Enhance the performance of the LOC capture
- Avoid a false capture
- Capture the LOC beam without overshoot.

The pre-capture zone is available, when all of the following conditions are applicable:
- The LOC deviation is more than 2.3 dots, and
- The FMS is in GPS PRIMARY , and
- L2 The difference between the track and the LOC course is between 25 ° and 115 °, and
- The roll order is such that LOC* will capture the LOC beam with a single turn.

L1 *Note:* *On the PFD and on the ND, the flight crew observes movement of the LOC deviation toward the center of the scale, only when the LOC deviation is less than 2 dots. This occurs when the aircraft is in the capture zone.*

Ident.: DSC-22_30-40-80-10-A-00025420.0001001 / 18 MAY 22
Applicable to: ALL

CAPTURE ZONE OF THE LOC BEAM

The aircraft reaches the capture zone of the LOC beam, when one of the following occurs:
- The LOC deviation is less than 2.3 dots, and:
  - L2 The difference between the track and the LOC course is between 25 ° and 115 ° , and
  - The roll order is such that LOC* will capture the LOC beam with a single turn.
- L1 The LOC deviation is less than 1.3 dot, and the difference between the track and the LOC course is less than 15 °.

L2 If the approach is an ILS, the LOC* mode uses the ILS LOC deviation to perform the capture.

L1 *Note:* *During the LOC capture, the LOC deviation starts to move toward the center of the LS scale, on the PFD and ND, when the LOC deviation is less than 2 dots.*

Ident.: DSC-22_30-40-80-10-A-00025421.0001001 / 18 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

LOC CONVERGENCE FUNCTION

The purpose of the LOC convergence function is to help to intercept and capture the LOC axis.

The flight guidance intercepts the LOC axis with a 20 ° track convergence, when all the following conditions are applicable:
- The LOC mode is armed, and
- The NAV mode is engaged, and
- The aircraft is within 20 NM of the destination runway, and
- The difference between the aircraft track and the runway course is less than 20 °.

LOC* DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-80-10-B-00025422.0001001 / 18 MAY 22

LOC* disengages, when another lateral mode engages.

L2 LOC* disengages, when one of the following occurs:
- The aircraft becomes established on the LOC beam: LOC engages, or
- The flight crew presses the LOC pb, and there is no vertical managed mode of approach armed or engaged: HDG/TRK engages, or
- The flight crew pulls the HDG/TRK knob: HDG/TRK engages, or
- The aircraft is above 700 ft RA, and the flight crew inserts a DIRECT TO: NAV engages, or
- The flight crew performs a go-around.

Ident.: DSC-22_30-40-80-10-B-00025423.0001001 / 18 MAY 22

REVERSIONS

LOC* reverts to HDG/TRK, when one of the following occurs:
- The flight crew presses the APPR pb, and one of the following conditions is applicable:
  - G/S is armed, or
  - G/S* is engaged, or
  - G/S is engaged, or
  - F-G/S ◁ is armed, or
  - F-G/S* ◁ is engaged, or
  - F-G/S ◁ is engaged.
- The flight crew inserts a DIRECT TO RADIAL IN or DIRECT TO RADIAL OUT in the active flight plan
- L2 The flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page
- The FG detects a difference between both MMRs.

L1 When LOC* reverts to HDG/TRK, the vertical mode also reverts to V/S / FPA.

Ident.: DSC-22_30-40-80-10-B-00025424.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

LOC ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-10-00025425.0001001 / 18 MAY 22
Applicable to: ALL

LOC engages, when LOC* is engaged, and the aircraft becomes established on the LOC beam.

LOC DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-80-10-C-00025426.0001001 / 18 MAY 22

LOC disengages, when another lateral mode engages.

L2 LOC disengages, when one of the following occurs:
- G/S is engaged, and LAND engages, or
- The flight crew presses the LOC pb, and there is no vertical managed mode of approach, armed or engaged, HDG/TRK engages, or
- The flight crew pulls the HDG/TRK knob, HDG/TRK engages, or
- The aircraft is above 700 ft RA, and the flight crew inserts a DIRECT TO, NAV engages, or
- The flight crew performs a go-around.

Ident.: DSC-22_30-40-80-10-C-00025427.0001001 / 18 MAY 22

REVERSIONS

LOC reverts to HDG/TRK, when one of the following occurs:
- The flight crew presses the APPR pb, and one of the following conditions is applicable:
  - G/S is armed, or
  - G/S* is engaged, or
  - G/S is engaged, or
  - F-G/S ◁ is armed, or
  - F-G/S* ◁ is engaged, or
  - F-G/S ◁ is engaged.
- The flight crew inserts a DIRECT TO RADIAL IN or DIRECT TO RADIAL OUT in the active flight plan
- L2 The flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page
- The FG detects a difference between both MMRs.

L1 When LOC reverts to HDG/TRK, the vertical mode also reverts to V/S / FPA.

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

G/S Mode

GENERAL

Ident.: DSC-22_30-40-80-20-00025429.0001001 / 18 MAY 22
Applicable to: ALL

The G/S* mode captures the glide slope beam of the ILS / GLS / SLS.
The G/S mode tracks the glide slope beam of the ILS / GLS / SLS.

Note: In accordance with the below G/S and G/S engagement conditions, G/S or G/S* modes may engage at altitudes that are above the radio altimeter validity (8 000 ft for TRT, and 5 000 ft for Collins and Honeywell radio altimeters). In that case, the landing capability displayed on the FMA (CAT1) reflects the lack of radio altimeter validity until the radio altimeter becomes active. If the radio altimeters fail, or if the FGs don't receive any radio altimeter data, then LOC, G/S and both AP/FDs disengage and FDs re-engage on basic modes.*

G/S ARMING CONDITIONS

Ident.: DSC-22_30-40-80-20-00025430.0001001 / 18 MAY 22
Applicable to: ALL

G/S arms, when the flight crew presses the APPR pb, and one of the following conditions is applicable:

- An ILS, GLS, or RNAV(GNSS) with LPV minima (with SLS option) approach is set on the ARRIVAL page
- An ILS, or GLS approach is manually tuned on the RADIO NAV page

  Note: If the flight crew sets a different LS approach on the ARRIVAL page:
  - *The aircraft will fly the manually-tuned LS*
  - *The MCDU displays the RWY/LS MISMATCH message.*

L2 - At least one LS receiver must be operative. If both receivers are operative, the LS parameters must be the same in both LS receivers

L1 - The ILS frequency / GLS channel and course are manually-tuned on the RMP .

L2 G/S can only arm when all of the following are applicable:

- The mode is not SRS, RWY, RWY TRK, GA TRK
- The aircraft is above 400 ft RA.

G/S DISARMING CONDITIONS

Ident.: DSC-22_30-40-80-20-00025431.0002001 / 18 MAY 22

1 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

G/S disarms, when G/S* engages.

L2 G/S also disarms, when one of the following occurs:
- The flight crew presses the APPR pb, or the LOC pb, or
- LOC disarms, or
- LOC*, or LOC is lost, or
- The AP/FD TCAS ◁ mode engages upon a RA, or
- The flight crew modifies the approach selection, or

  Note: *The flight crew can change the approach selection, only when the aircraft is above 700 ft RA.*

- The flight crew performs a go around, SRS GA and GA TRK engage.

G/S DISARMING CONDITIONS

Ident.: DSC-22_30-40-80-20-00025431.0001001 / 18 MAY 22

2 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

G/S disarms, when G/S* engages.

L2 G/S also disarms, when one of the following occurs:
- The flight crew presses the APPR pb, or the LOC pb, or
- LOC disarms, or
- LOC*, or LOC is lost, or
- The AP/FD TCAS ◁ mode engages upon a RA, or
- The flight crew performs a go around, SRS GA and GA TRK engage.

G/S* ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-20-00025432.0001001 / 18 MAY 22

Applicable to: ALL

G/S* engages when the aircraft reaches the capture zone of the G/S beam, and all of the following conditions are applicable:
- G/S is armed, and
- LOC* or LOC is engaged.

L2 The aircraft reaches the capture zone of the G/S beam, when one of the following occurs:
- Passage far from the G/S beam:
  - The G/S deviation is less than 2 dots, and
  - The pitch order is such that G/S* will capture the G/S beam with a single resource.
- Passage near the G/S beam: The G/S deviation is less than a threshold depending on the radio altitude.
  This threshold is between 0.1 and 1/3 dot.

G/S* DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-80-20-A-00025433.0001001 / 18 MAY 22

G/S* disengages, when another vertical mode engages.

L2 G/S* disengages, when one of the following occurs:
- The aircraft becomes established on the G/S beam: G/S engages
  G/S* is engaged for more than 15 s, and the G/S deviation becomes less than 1/3 dot
- The flight crew pushes or pulls the V/S / FPA knob: V/S / FPA engages
- The flight crew pulls the ALT knob: OP CLB or OP DES engages
- The flight crew presses the ALT knob: ALT engages
- The AP/FD TCAS ◁ mode engages upon a RA (if LOC is engaged, LOC remains engaged, APPR pb comes off and the LOC pb comes on)
- The flight crew performs a go-around.

Ident.: DSC-22_30-40-80-20-A-00025434.0001001 / 18 MAY 22

REVERSIONS

G/S* reverts to V/S / FPA, when one of the following occurs:
- LOC disengages: The lateral mode also reverts to HDG/TRK
- The flight crew presses the APPR pb: The lateral mode also reverts to HDG/TRK
- The flight crew pulls the HDG/TRK knob: The lateral mode also reverts to HDG/TRK
- The flight crew presses the LOC pb
- L2 The aircraft is above 700 ft RA, and the flight crew changes the approach on the FMS ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page. The lateral mode also reverts to HDG/TRK
- The FG detects a difference between both MMRs.

Ident.: DSC-22_30-40-80-20-A-00025435.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

G/S ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-20-00025436.0001001 / 18 MAY 22
Applicable to: ALL

G/S engages, when G/S* is engaged, and the aircraft becomes established on the G/S beam.

G/S DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-80-20-B-00025437.0001001 / 18 MAY 22

G/S disengages, when another vertical mode engages.

L2 G/S disengages, when one of the following occurs:
- LAND engages at 400 ft, if the approach and landing capability is CAT1, CAT2 or CAT3, or
- The flight crew pushes or pulls the V/S / FPA knob, V/S / FPA engages, or
- The flight crew pulls the ALT knob, OP CLB or OP DES engages, or
- The flight crew presses the ALT knob, ALT engages, or
- The AP/FD TCAS ◁ mode engages upon a RA (if LOC is engaged, LOC remains engaged, APPR pb comes off and the LOC pb comes on), or
- The flight crew performs a go-around.

Ident.: DSC-22_30-40-80-20-B-00025438.0001001 / 18 MAY 22

REVERSIONS

G/S reverts to V/S / FPA, when one of the following occurs:
- LOC disengages: The lateral mode also reverts to HDG/TRK
- The flight crew presses the APPR pb: The lateral mode also reverts to HDG/TRK
- The flight crew presses the LOC pb
- The flight crew pulls the HDG/TRK knob: The lateral mode also reverts to HDG/TRK
- L2 The aircraft is above 700 ft RA, and the flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page. The lateral mode also reverts to HDG/TRK
- The FG detects a difference between both MMRs.

Ident.: DSC-22_30-40-80-20-B-00025439.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

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LAND Mode

GENERAL

Ident.: DSC-22_30-40-80-30-00025440.0001001 / 18 MAY 22
Applicable to: ALL

The LAND mode is a common vertical and lateral mode.
The LAND mode tracks the LOC and G/S beams from 400 ft RA to approximately 40 ft RA.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-30-00025441.0001001 / 18 MAY 22
Applicable to: ALL

LAND automatically engages, when all the following conditions are applicable:
- The approach and landing capability is CAT1, CAT2 or CAT3, and
- LOC and G/S are engaged, and
- The aircraft is below 400 ft RA.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-30-00025442.0002001 / 18 MAY 22
Applicable to: ALL

LAND automatically disengages:

- When the aircraft approximately reaches 40 ft RA: FLARE engages, or
- When the flight crew disengages both AP/FD, or
- When the flight crew performs a go-around.

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FLARE Mode

GENERAL

Ident.: DSC-22_30-40-80-40-00025443.0001001 / 18 MAY 22
Applicable to: ALL

The FLARE mode is a common lateral and vertical mode:
- Lateral guidance: The FLARE mode reduces the slideslip angle, such that the aircraft will be aligned with the runway centerline at the aircraft touchdown
- Vertical guidance: The FLARE mode decreases the descent rate, in order to ensure a comfortable transition between the glide tracking, and the aircraft touchdown
- If the A/THR is active, the thrust is automatically reduced to IDLE.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-40-00025445.0001001 / 18 MAY 22
Applicable to: ALL

FLARE engages, if all the following conditions are applicable:
- The aircraft approximately reaches 40 ft RA
- The approach that the flight crew selects is either an ILS approach, a GLS approach, or an RNAV(GNSS) approach with LPV minima (with SLS).

L2 FLARE engages only if the following conditions are applicable:
- The slats/flaps are extended, or the landing gears are extended
- One valid RA.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-40-00025446.0002001 / 18 MAY 22
Applicable to: ALL

FLARE automatically disengages:
- When the aircraft touches down: ROLL OUT engages, or
- When the flight crew disengages both AP/FD, or
- When the flight crew perform a go-around.

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ROLL OUT Mode

GENERAL

Ident.: DSC-22_30-40-80-50-00025447.0001001 / 18 MAY 22
Applicable to: ALL

The ROLL OUT mode is a common lateral and vertical mode:
- Lateral guidance: The ROLL OUT mode guides the aircraft along the runway centerline
- Vertical guidance: The ROLL OUT mode lands the nose landing gear.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-50-00025448.0001001 / 18 MAY 22
Applicable to: ALL

The FLARE mode changes to the ROLL OUT mode when the aircraft touches down.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-50-00025449.0001001 / 18 MAY 22
Applicable to: ALL

ROLL OUT disengages, when one of the following occurs:
- The aircraft exits the runway, or

L2 *Note:* *When the difference between the aircraft track and the runway track is more than 20°, the ROLL OUT disengages due to the APs and FDs disengagement.*

L1
- The flight crew engages a go-around.

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F-LOC Mode

GENERAL

1 Ident.: DSC-22_30-40-80-60-00025450.0001001 / 18 MAY 22
Applicable to: MSN 11531

The F-LOC* mode captures the F-LOC beam.
The F-LOC mode tracks the F-LOC beam.

F-LOC ARMING CONDITIONS

2 Ident.: DSC-22_30-40-80-60-00025480.0003001 / 18 MAY 22
Applicable to: MSN 11531

L2 F-LOC can only arm when all of the following are applicable:

- At least one FMS is operative, and
- At least one MMR is able to compute the F-LOC and F-G/S deviations, and

  Note: *If the NO FLS FOR THIS APPR message appears on the MCDU, the MMR(s) will not be able to compute the F-LOC and F-G/S deviations.*

- When both MMRs are operative, the runway headings of the approach that the flight crew selects must be the same in both MMRs, and
- HDG/TRK or NAV is engaged, and
- The aircraft is above 400 ft RA, and
- The vertical mode is not SRS TO, nor SRS GA.

L1 F-LOC arms, when all of the following conditions are applicable:

- The approach selected in the ARRIVAL page is compatible with the FLS function (e.g. NDB, NDB/DME, VOR, VOR/DME, RNAV(GNSS),...), and

  Note: *If the NO FLS FOR THIS APPR message appears on the MCDU, the FLS function is not applicable.*

- The FLS mode is selected in the PERF APPR page of the MCDU, and
- The flight crew presses the APPR pb, or the LOC pb.

F-LOC DISARMING CONDITIONS

3 Ident.: DSC-22_30-40-80-60-00025481.0001001 / 18 MAY 22
Applicable to: MSN 11531

F-LOC disarms, when F-LOC* engages.

L2 F-LOC also disarms, when one of the following occurs:
- F-G/S is armed, and the flight crew presses the APPR pb, or
- F-G/S is not armed, and the flight crew presses the LOC pb, or
- NAV arms, or
- The flight crew engages go-around, or
- The flight crew modifies the approach selection, or

  Note: The flight crew can change the approach selection, only when the aircraft is above 700 ft RA.

- The LS parameters are different in both LS receivers.

F-LOC* ENGAGEMENT CONDITIONS

4 Ident.: DSC-22_30-40-80-60-00025451.0001001 / 18 MAY 22
Applicable to: MSN 11531

F-LOC* engages, when F-LOC is armed, and the aircraft reaches the capture zone or the pre-capture zone of the F-LOC beam.

PRE-CAPTURE ZONE OF THE F-LOC BEAM (ENHANCED LOC CAPTURE FUNCTION)

The pre-capture zone of the F-LOC beam is introduced through the Enhanced F-LOC Capture function. With the enhanced F-LOC Capture function, the aircraft uses the aircraft position and the FMS trajectory to provide guidance in order to pre-capture the F-LOC beam.

The pre-capture of the F-LOC beam allows to:
- Enhance the performance of the F-LOC capture
- Avoid a false capture
- Capture the F-LOC beam without overshoot.

The pre-capture zone is available, when all of the following conditions are applicable:
- The F-LOC deviation is more than 2.3 dots, and
- The FMS is in GPS PRIMARY ◁ , and
- L2 The difference between the track and the F-LOC course is between 25 ° and 115 °, and
- The roll order is such that F-LOC* will capture the F-LOC beam with a single turn.

L1 **CAPTURE ZONE OF THE LOC BEAM**

The aircraft reaches the capture zone of the F-LOC beam, when one of the following occurs:
- The F-LOC deviation is less than 2.3 dots, and:

L2
  - The difference between the track and the F-LOC course is between 25 ° and 115 °, and
  - The roll order is such that F-LOC* will capture the F-LOC beam with a single turn.

L1
- The F-LOC deviation is less than 1.3 dot, and the difference between the track and the F-LOC course is less than 15 °.

F-LOC* DISENGAGEMENT CONDITIONS

Applicable to: MSN 11531

5 Ident.: DSC-22_30-40-80-60-A-00025482.0001001 / 18 MAY 22

F-LOC* disengages, when another lateral mode engages.

L2 F-LOC* disengages, when one of the following occurs:
- The aircraft becomes established on the F-LOC beam: F-LOC engages, or
- The flight crew presses the LOC pb, and there is no vertical managed mode of approach armed or engaged: HDG/TRK engages, or
- The flight crew pulls the HDG/TRK knob: HDG/TRK engages, or
- The aircraft is above 700 ft RA, and the flight crew inserts a DIRECT TO: NAV engages, or
- The flight crew performs a go-around.

6 Ident.: DSC-22_30-40-80-60-A-00025483.0001001 / 18 MAY 22

REVERSIONS

F-LOC* reverts to HDG/TRK, when one of the following occurs:
- The flight crew presses the APPR pb, and one of the following conditions is applicable:
  - F-G/S is armed
  - F-G/S* is engaged
  - F-G/S is engaged.
- The flight crew inserts a DIRECT TO RADIAL IN or DIRECT TO RADIAL OUT in the active flight plan

L2
- The flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page
- The FG detects a difference between both MMRs.

L1 When F-LOC* reverts to HDG/TRK, the vertical mode also reverts to V/S / FPA.

7 Ident.: DSC-22_30-40-80-60-A-00025484.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

F-LOC ENGAGEMENT CONDITIONS

8 Ident.: DSC-22_30-40-80-60-00025485.0001001 / 18 MAY 22
Applicable to: MSN 11531

F-LOC engages, when F-LOC* is engaged, and the aircraft becomes established on the F-LOC beam.

F-LOC DISENGAGEMENT CONDITIONS

Applicable to: MSN 11531

9 Ident.: DSC-22_30-40-80-60-B-00025486.0001001 / 18 MAY 22

F-LOC disengages, when another lateral mode engages.

L2 F-LOC disengages, when one of the following occurs:
- The flight crew presses the LOC pb, and there is no vertical managed mode of approach armed or engaged: HDG/TRK engages, or
- The flight crew pulls the HDG/TRK knob: HDG/TRK engages, or
- The aircraft is above 700 ft RA, and the flight crew inserts a DIRECT TO: NAV engages, or
- The flight crew performs a go-around.

10 Ident.: DSC-22_30-40-80-60-B-00025487.0001001 / 18 MAY 22

REVERSIONS

F-LOC reverts to HDG/TRK, when one of the following occurs:
- The flight crew presses the APPR pb, and one of the following conditions is applicable:
  - F-G/S is armed
  - F-G/S* is engaged
  - F-G/S is engaged.
- The flight crew inserts a DIRECT TO RADIAL IN or DIRECT TO RADIAL OUT in the active flight plan

L2
- The flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page
- The FG detects a difference between both MMRs.

L1 When F-LOC reverts to HDG/TRK, the vertical mode also reverts to V/S / FPA.

11 Ident.: DSC-22_30-40-80-60-B-00025488.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10s
- The FD bars flash for 10s.

Intentionally left blank

F-G/S Mode

GENERAL

1 Ident.: DSC-22_30-40-80-70-00025506.0001001 / 18 MAY 22
Applicable to: MSN 11531

The F-G/S* mode captures the F-G/S beam.
The F-G/S mode tracks the F-G/S beam.

F-G/S ARMING CONDITIONS

2 Ident.: DSC-22_30-40-80-70-00025507.0003001 / 18 MAY 22
Applicable to: MSN 11531

L2 F-G/S can only arm when all of the following are applicable:
- At least one FMS is operative, and
- At least one MMR is able to compute the F-G/S deviations, and
- When both MMRs are operative, the runway headings of the approach that the flight crew selects must be the same in both MMRs, and
- The aircraft is above 400 ft RA, and
- The vertical mode is not SRS TO, nor SRS GA.

L1 F-G/S arms, when all of the following conditions are applicable:
- The approach selected in the ARRIVAL page that is compatible with the FLS function (e.g. NDB, NDB/DME, VOR, VOR/DME, RNAV(GNSS),...), and

  Note: *If the NO FLS FOR THIS APPR message appears on the MCDU, the FLS function is not applicable.*

- The FLS mode is selected in the PERF APPR page of the MCDU, and
- The flight crew presses the APPR pb.

F-G/S DISARMING CONDITIONS

3 Ident.: DSC-22_30-40-80-70-00025508.0001001 / 18 MAY 22
Applicable to: MSN 11531

F-G/S disarms, when F-G/S* engages.

L2 F-G/S also disarms, when one of the following occurs:
- The flight crew presses the APPR pb, or the LOC pb, or
- LOC or F-LOC disarms, or
- LOC*, LOC, LOC B/C*, LOC B/C, F-LOC*, or F-LOC is lost, or

- The flight crew performs a go around: SRS GA and GA TRK engage, or
- The AP/FD TCAS ◁✳ mode engages.

F-G/S* ENGAGEMENT CONDITIONS

4 Ident.: DSC-22_30-40-80-70-00025509.0001001 / 18 MAY 22

Applicable to: MSN 11531

F-G/S* engages, when the aircraft reaches the capture zone of the F-G/S beam, and all of the following conditions are applicable:
- F-G/S is armed, and
- LOC*, LOC, LOC B/C*, LOC B/C, F-LOC* or F-LOC is engaged.

L2 The aircraft reaches the capture zone of the F-G/S beam, when one of the following occurs:
- Passage far from the F-G/S beam:
  - The F-G/S deviation is less than 2 dots, and
  - The pitch order is such that F-G/S* will capture the F-G/S beam with a single resource.
- Passage near the F-G/S beam: The F-G/S deviation is less than a threshold depending on the radio altitude.
  This threshold is between 0.1 and 1/3 dot.

F-G/S* DISENGAGEMENT CONDITIONS

Applicable to: MSN 11531

5 Ident.: DSC-22_30-40-80-70-A-00025510.0001001 / 18 MAY 22

F-G/S* disengages, when another vertical mode engages.

L2 F-G/S* disengages, when one of the following occurs:
- The aircraft becomes established on the F-G/S beam: F-G/S engages
  F-G/S* is engaged for more than 15 s, and the F-G/S deviation becomes less than 1/3 dot
- The flight crew pushes or pulls the V/S / FPA knob: V/S / FPA engages
- The flight crew pulls the ALT knob: OP CLB or OP DES engages
- The flight crew presses the ALT knob: ALT engages
- The flight crew performs a go-around.

6 Ident.: DSC-22_30-40-80-70-A-00025511.0001001 / 18 MAY 22

REVERSIONS

F-G/S* reverts to V/S / FPA, when one of the following occurs:
- The flight crew presses the APPR pb: The lateral mode also reverts to HDG/TRK
- F-LOC disengages: The lateral mode also reverts to HDG/TRK
- The flight crew presses the LOC pb
- The flight crew pulls the HDG/TRK knob: The lateral mode also reverts to HDG/TRK
- L2 The flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page
  The lateral mode also reverts to HDG/TRK.
- The FG detects a difference between both MMRs.

7 Ident.: DSC-22_30-40-80-70-A-00025512.0001001 / 18 MAY 22

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

F-G/S ENGAGEMENT CONDITIONS

8 Ident.: DSC-22_30-40-80-70-00025513.0001001 / 18 MAY 22
Applicable to: MSN 11531

F-G/S engages, when F-G/S* is engaged, and the aircraft becomes established on the F-G/S beam.

F-G/S DISENGAGEMENT CONDITIONS

Applicable to: MSN 11531

9 Ident.: DSC-22_30-40-80-70-B-00025515.0001001 / 18 MAY 22

F-G/S disengages, when another vertical mode engages.

L2 F-G/S disengages, when one of the following occurs:
- The flight crew pushes or pulls the V/S / FPA knob: V/S / FPA engages
- The flight crew pulls the ALT knob: OP CLB or OP DES engages
- The flight crew presses the ALT knob: ALT engages
- The AP/FD TCAS mode engages upon a RA
- The flight crew performs a go-around, SRS GA and GA TRK engage.

10 Ident.: DSC-22_30-40-80-70-B-00025516.0001001 / 18 MAY 22

REVERSIONS

F-G/S reverts to V/S / FPA, when one of the following occurs:

- The flight crew presses the APPR pb: The lateral mode also reverts to HDG/TRK
- F-LOC disengages: The lateral mode also reverts to HDG/TRK
- The flight crew presses the LOC pb
- The flight crew pulls the HDG/TRK knob: The lateral mode also reverts to HDG/TRK
- L2 The aircraft is above 700 ft RA, and the flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page. The lateral mode also reverts to HDG/TRK
- The FG detects a difference between both MMRs.

11 Ident.: DSC-22_30-40-80-70-B-00025517.0001001 / 18 MAY 22

When the reversion occurs:

- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

FINAL APP Mode

GENERAL

Ident.: DSC-22_30-40-80-90-00025519.0001001 / 18 MAY 22
Applicable to: ALL

FINAL APP is a lateral and vertical managed guidance approach mode that guides the aircraft during the final approach.

The FINAL APP mode includes the following modes:
- APP NAV mode for lateral guidance
- FINAL mode for vertical guidance.

APP NAV AND FINAL ARMING CONDITIONS

Ident.: DSC-22_30-40-80-90-00025520.0001001 / 18 MAY 22
Applicable to: ALL

APP NAV and FINAL modes arms, when all the following conditions are applicable:
- The flight crew presses the APPR pb
- The active flight plan is valid (lateral and vertical profile)
- The approach selected in the ARRIVAL page is compatible with the FINAL APP function (*Refer to PRO-NOR-SOP-18-A Cross-Reference Table*).

Note: *If an RNAV visual approach is selected, the flight crew must deselect the FLS mode via the PERF APPR page.*

APP NAV AND FINAL DISARMING CONDITIONS

Ident.: DSC-22_30-40-80-90-00025521.0001001 / 18 MAY 22
1 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

APP NAV and FINAL modes disarms, when one of the following conditions occurs:
- The flight crew presses the APPR pb: NAV remains armed or NAV remains engaged
- The flight crew presses the LOC pb arming LOC mode
- NAV disarms, or NAV engages
- The flight crew performs a go around
- The FMS vertical profile is lost
- AP/FD TCAS mode engages. In this case, FINAL disengages and NAV remains engaged.

APP NAV AND FINAL DISARMING CONDITIONS

Ident.: DSC-22_30-40-80-90-00025521.0002001 / 18 MAY 22

2 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

APP NAV and FINAL modes disarms, when one of the following conditions occurs:
- The flight crew presses the APPR pb: NAV remains armed or NAV remains engaged
- The flight crew presses the LOC pb arming LOC mode
- NAV disarms, or NAV engages
- The flight crew performs a go around
- The flight crew selects another approach than the one currently flown
- The FMS vertical profile is lost
- AP/FD TCAS mode engages. In this case, FINAL disengages and NAV remains engaged.

APP NAV ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-90-00025522.0001001 / 18 MAY 22

Applicable to: ALL

APP NAV and NAV modes engage under the same conditions:
- If NAV is engaged, APP NAV engages immediately
- If HDG/TRK is engaged, APP NAV engages when the intercept conditions are met (the aircraft track line must intercept the flight plan active leg).

APP NAV DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-90-00025523.0001001 / 18 MAY 22

Applicable to: ALL

APP NAV and NAV modes disengage under the same conditions (*Refer to DSC-22_30-40-30-20 Disengagement Conditions*).

FINAL APP ENGAGEMENT CONDITIONS

3 Ident.: DSC-22_30-40-80-90-A-00025524.0001001 / 18 MAY 22

Applicable to: MSN 11531

FINAL APP mode engages when all the following conditions are applicable:
- The aircraft is in the capture zone of the vertical FMS profile

L2 The vertical capture zone above and below the vertical FMS profile is defined as follow:
- Laterally: ±1.5 NM from the Final Descent Point
- Vertically: +150 ft above the Final Descent Point.

Ident.: DSC-22_30-40-80-90-A-00025524.0002001 / 18 MAY 22

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

FINAL APP mode engages when all the following conditions are applicable:

- The aircraft is in the capture zone of the vertical FMS profile

L2 The vertical capture zone above and below the vertical FMS profile is defined as follow:

- Laterally: ±1.5 NM from the Final Descent Point
- Vertically: +250 ft above the Final Descent Point.

5 Ident.: DSC-22_30-40-80-90-A-00025525.0001001 / 18 MAY 22
Applicable to: MSN 11531

- NAV or APP NAV is engaged
- FINAL is armed
- Predictions are available in FMS
- APPROACH phase is active, and the deceleration point has sequenced

  Note: *APPROACH phase may have to be manually activated on PERF APPR page if the approach starts at high altitude above aerodrome level (i.e. RNAV(RNP) approaches).*

- The aircraft intercepts a descending leg of the vertical flight path.

  Note: *If APPR pb is pressed earlier, FINAL APP mode may engage. As a consequence, resulting speed and altitude management in the FINAL APP may be inappropriate before FDP.*

A blue arrow is displayed on NDs to indicate where the FINAL APP engagement conditions are met and where the final descent will begin automatically.
If the same arrow is displayed in white, at least one engagement condition is not fulfilled, FINAL APP will not engage and the aircraft will not descend automatically.

Ident.: DSC-22_30-40-80-90-A-00025525.0002001 / 18 MAY 22

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

- NAV or APP NAV is engaged
- FINAL is armed
- Predictions are available in FMS

- APPROACH phase is active

  Note: *APPROACH phase may have to be manually activated on PERF APPR page if the approach starts at high altitude above aerodrome level (i.e. RNAV(RNP) approaches).*

- The aircraft intercepts a descending leg of the vertical flight path.

  Note: *If APPR pb is pressed earlier, FINAL APP mode may engage. As a consequence, resulting speed and altitude management in the FINAL APP may be inappropriate before FDP.*

A blue arrow is displayed on NDs to indicate where the FINAL APP engagement conditions are met and where the final descent will begin automatically.
If the same arrow is displayed in white, at least one engagement condition is not fulfilled, FINAL APP will not engage and the aircraft will not descend automatically.

Ident.: DSC-22_30-40-80-90-A-00025526.0001001 / 18 MAY 22
Applicable to: ALL

DEFINITION OF THE FINAL DESCENT POINT (ALSO CALLED VERTICAL INTERSECTION POINT "VIP" FOR RNAV (RNP) APPROACHES)

The FDP is the waypoint from which starts the FMS segment with coded FPA. For RNAV(RNP) approaches, this point may be indicated on the chart as FDP or "VIP".

This point is defined in the Navigation Database by:
- A constant vertical flight path beyond this point,
- A coded altitude constraint that may be "at" or "at or above" (e.g. +3 000 ft). This constraint is displayed on ND (in magenta), next to the corresponding waypoint, when the CSTR key is selected on the EFIS Control Panel. It is also shown on the F-PLN page at this WPT.

Note: *The FAF is the position from where the obstacle clearance is defined relative to an OCS. Obstacle clearance is only ensured if the aircraft is flying on the defined vertical flight path. Before the FAF, minimum altitudes are published with fixed MOC. The FDP is the point in the procedure at or before the FAF from which a constant vertical flight path is defined.*

FINAL APP DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-80-90-B-00025527.0001001 / 18 MAY 22
Applicable to: ALL

The FINAL APP mode disengages:
- When the AP/FD TCAS mode engages upon a RA, the FINAL mode disengages and the lateral NAV mode remains engaged. The APPR pb comes off

Ident.: DSC-22_30-40-80-90-B-00025528.0002001 / 18 MAY 22
Applicable to: ALL

- The flight crew pushes, or pulls out the V/S / FPA knob: V/S / FPA engages, NAV remains engaged

Ident.: DSC-22_30-40-80-90-B-00025529.0002001 / 18 MAY 22
Applicable to: ALL

- Automatically at MAP
- The flight crew performs a go-around.

Ident.: DSC-22_30-40-80-90-B-00025530.0001001 / 18 MAY 22
7 **Applicable to: MSN 01143-01251, 01801, 01826, 01855, 11531**

REVERSIONS

FINAL APP reverts to V/S/FPA, when one of the following occurs:
- NAV disengages: The lateral mode also reverts to HDG/TRK, or
- If the flight crew pulls out the HDG/TRK knob: The lateral mode also reverts to HDG/TRK, or
- The flight crew presses the APPR pb: The lateral mode remains engaged in NAV, or
- If the flight crew presses the LOC pb: The lateral mode also reverts to HDG-V/S and LOC arms if an ILS/GLS ◁✳ approach is selected, or
- The FMS flight phase is no longer cruise (CRZ), descent (DES) or approach (APPR).

Ident.: DSC-22_30-40-80-90-B-00025530.0002001 / 18 MAY 22
8 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

REVERSIONS

FINAL APP reverts to V/S/FPA, when one of the following occurs:
- NAV disengages: The lateral mode also reverts to HDG/TRK, or
- If the flight crew pulls out the HDG/TRK knob: The lateral mode also reverts to HDG/TRK, or
- The flight crew presses the APPR pb: The lateral mode remains engaged in NAV, or
- If the flight crew presses the LOC pb: The lateral mode also reverts to HDG-V/S and LOC arms if an ILS/GLS ◁✳ approach is selected, or
- The FMS flight phase is no longer cruise (CRZ), descent (DES) or approach (APPR), or
- L2 The flight crew changes the approach on the ARRIVAL page, the frequency, the identification, or the course of the LS station on the RADIO NAV page.
  The lateral mode also reverts to HDG/TRK.

Ident.: DSC-22_30-40-80-90-B-00025531.0001001 / 18 MAY 22
Applicable to: ALL

When the reversion occurs:
- The triple click sounds
- The new guidance mode is boxed for 10 s
- The FD bars flash for 10 s.

General

GENERAL

Ident.: DSC-22_30-40-90-10-00025614.0002001 / 18 MAY 22
Applicable to: MSN 01376

Go-around combines SRS GA vertical mode, and GA TRK lateral mode.
SRS GA and GA TRK engage at the same time. They disengage at different moment.

At go-around engagement (i.e. SRS GA and GA TRK engage):
- The FMS flight phase becomes go-around
- If not previously engaged, the FDs automatically engage
- If FPD/FPV was previously displayed, it reverts to FD bars.

GENERAL

Ident.: DSC-22_30-40-90-10-00025614.0004001 / 18 MAY 22

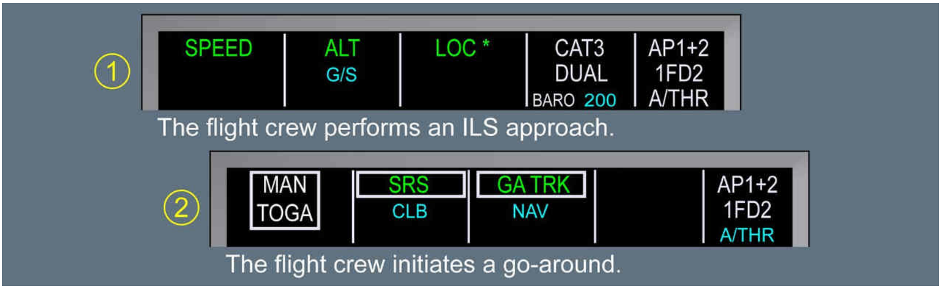
1 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

When the flight crew initiates a go-around, the SRS GA vertical mode engages. In addition, one of the following occurs:

- If a lateral managed mode is engaged (except NAV mode), GA TRK engages, and NAV mode arms
  NAV automatically engages as soon as the aircraft reaches the capture zone of the flight plan active leg.

  Note: *If a HDG/TRK was preset, NAV mode does not arm. GA TRK engages, until the flight crew pulls the HDG/TRK knob to follow the preset target.*

Example: Go-around during an ILS approach

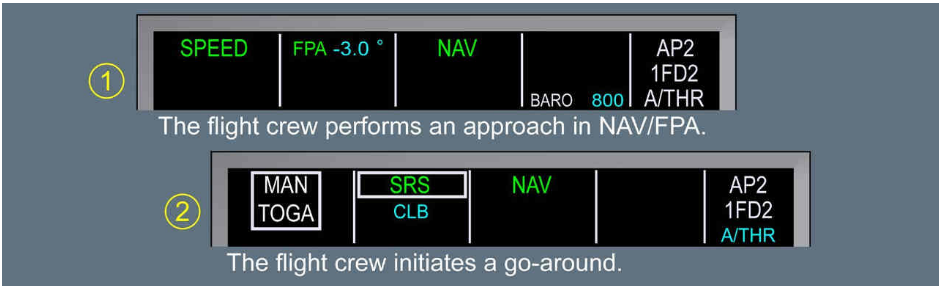

①
SPEED
ALT
G/S
LOC *
CAT3
DUAL
BARO 200
AP1+2
1FD2
A/THR
②
MAN
TOGA
SRS
CLB
GA TRK
NAV
AP1+2
1FD2
A/THR

The flight crew performs an ILS approach.

The flight crew initiates a go-around.

- If NAV mode is engaged, it remains engaged

Example: Go-around during an approach in NAV/FPA

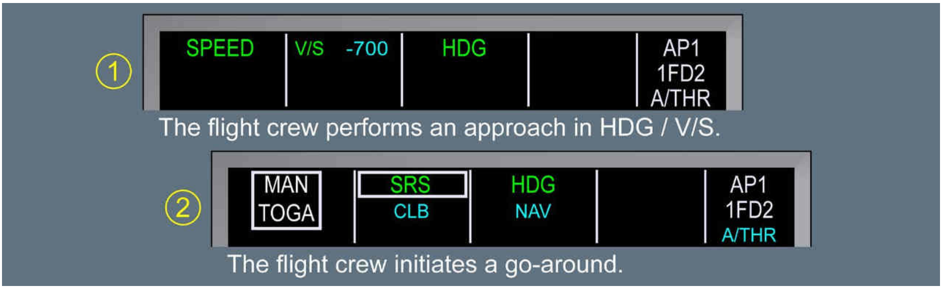

①
SPEED
FPA -3.0 °
NAV
BARO 800
AP2
1FD2
A/THR
②
MAN
TOGA
SRS
CLB
NAV
AP2
1FD2
A/THR

The flight crew performs an approach in NAV/FPA.

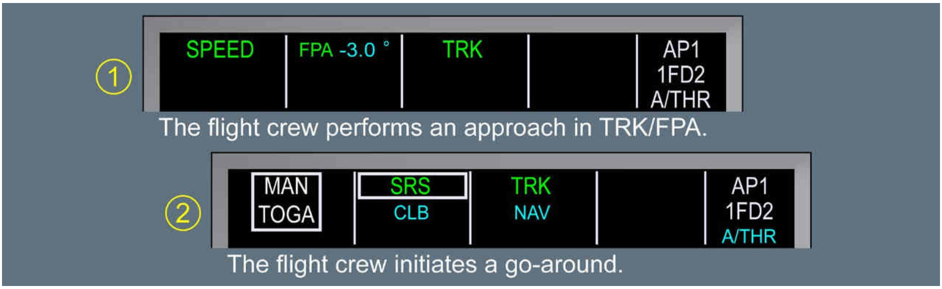
The flight crew initiates a go-around.

- If HDG/TRK mode is engaged, it remains engaged, and NAV mode arms
  NAV automatically engages as soon as the aircraft reaches the capture zone of the flight plan active leg.

Example: Go-around during an approach in HDG / V/S


①
SPEED
V/S -700
HDG
AP1
1FD2
A/THR
The flight crew performs an approach in HDG / V/S.
②
MAN
TOGA
SRS
CLB
HDG
NAV
AP1
1FD2
A/THR
The flight crew initiates a go-around.

Example: Go-around during an approach in TRK/FPA


①
SPEED
FPA -3.0 °
TRK
AP1
1FD2
A/THR
The flight crew performs an approach in TRK/FPA.
②
MAN
TOGA
SRS
CLB
TRK
NAV
AP1
1FD2
A/THR
The flight crew initiates a go-around.

In addition, at go-around engagement:
- The FMS flight phase becomes go-around
- If not previously engaged, the FDs automatically engage
- If FPD/FPV was previously displayed, it reverts to FD bars.

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SRS GA Mode

GENERAL

Ident.: DSC-22_30-40-90-20-A-00025615.0002001 / 18 MAY 22

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

The SRS mode is a managed vertical mode. This mode is applicable during takeoff and go-around.
This chapter is only about the SRS mode during go-around, also referred to as SRS GA mode.
The FMA displays SRS, when the SRS GA mode engages.
The SRS GA controls the speed target via the elevators.

L2 The guidance law also includes:
- A flight path angle protection, that ensures a positive climb
- A pitch angle protection to reduce the aircraft nose-up (18 ° of maximum pitch altitude or 22.5 °maximum in case of windshear)
- A speed protection, that ensures the aircraft does not exceed VFE.

L1 The speed target is the memorized aircraft speed at SRS GA engagement or VAPP, whichever is higher.

L2 The higher limit of the target is the lowest value between:
- 25 kt above VLS (or 15 kt above VLS when one engine is inoperative)
- 5 kt below VMAX.

L1 *Note:* *At SRS GA engagement, the speed becomes managed.*

2 Ident.: DSC-22_30-40-90-20-A-00025615.0014001 / 18 MAY 22
Applicable to: MSN 11531

The SRS mode is a managed vertical mode. This mode is applicable during takeoff and go-around.
This chapter is only about the SRS mode during go-around, also referred to as SRS GA mode.
The FMA displays SRS, when the SRS GA mode engages.
The SRS GA controls the speed target via the elevators.

L2 The guidance law also includes:
- A flight path angle protection, that ensures a positive climb
- A pitch angle protection to reduce the aircraft nose-up (15 ° of maximum pitch altitude or 22.5 °maximum in case of windshear)
- A speed protection, that ensures the aircraft does not exceed VFE.

L1 The speed target is the memorized aircraft speed at SRS GA engagement or VAPP, whichever is higher.

L2 The higher limit of the target is the lowest value between:
- 25 kt above VLS (or 15 kt above VLS when one engine is inoperative)
- 5 kt below VMAX.

L1 Note: *At SRS GA engagement, the speed becomes managed.*

Ident.: DSC-22_30-40-90-20-A-00025622.0002001 / 18 MAY 22
Applicable to: ALL

When the SRS GA mode disengages, the speed target becomes the smaller of Green Dot Speed or the speed constraints.

Note: *If the FMS flight phase is cruise, the SPD LIM or the SPD CSTR are still respected.*

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-90-20-00025616.0001001 / 18 MAY 22
Applicable to: ALL

SRS GA engages when all of the following conditions are applicable:
- The flight crew sets at least one thrust lever to the TOGA detent
- The slats or the flaps are extended
- The aircraft is airborne, or on ground for less than 30 s.

SRS GA mode can be engaged regardless of the vertical mode (except SRS TO).

DISENGAGEMENT CONDITIONS

Applicable to: ALL

Ident.: DSC-22_30-40-90-20-B-00025617.0001001 / 18 MAY 22

The SRS GA mode disengages when one of the following occur:
- At the go-around acceleration altitude (GA ACC ALT), or if ALT* or ALT CST* engages (above 400 ft RA)
- If the flight crew engages another vertical mode
- If the selected target altitude is above the aircraft altitude and the flight crew selects a speed: SRS GA reverts to OP CLB
- If the AP/FD TCAS ◁ mode engages upon a RA.

Note:
1. *In Engine Out conditions, the SRS GA mode does not automatically disengage at EO ACC ALT.*
2. *In dual AP configuration, disengagement of the go-around mode, on either axis, causes AP 2 to disconnect.*

Ident.: DSC-22_30-40-90-20-B-00025618.0001001 / 18 MAY 22

REVERSIONS

When SRS GA reverts to OP CLB, the following occurs:

- The triple click sounds
- The new guidance mode is boxed for 10 s.

Intentionally left blank

GA TRK Mode

GENERAL

Ident.: DSC-22_30-40-90-30-00025619.0001001 / 18 MAY 22
Applicable to: ALL

The GA TRK mode is a managed lateral mode that is applicable during go-around.
The GA TRK mode maintains the track of the aircraft, when the mode engages.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-90-30-00025620.0002001 / 18 MAY 22
1 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

GA TRK engages when all of the following conditions are applicable:
- The flight crew sets at least one thrust lever to the TOGA detent
- The slats or the flaps are extended
- The aircraft is airborne, or on ground for less than 30 s
- NAV, HDG, or TRK is not engaged.

GA TRK simultaneously engages with SRS GA.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-90-30-00025620.0001001 / 18 MAY 22
Applicable to: MSN 01376

GA TRK engages, when all of the following conditions are applicable:
- The flight crew sets at least one thrust lever to the TOGA detent
- The slats or the flaps are extended
- The aircraft is airborne, or on ground for less than 30 s.

GA TRK simultaneously engages with SRS GA.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-90-30-00025621.0001001 / 18 MAY 22
Applicable to: ALL

GA TRK disengages when another lateral mode engages.
L2 GA TRK cannot be disengaged below 100 ft RA.

Intentionally left blank

GENERAL

Ident.: DSC-22_30-40-100-00025773.0001001 / 18 MAY 22

1 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The AP/FD TCAS mode is an AP/FD vertical mode, that provides vertical guidance in the case of a RA alert, generated by the TCAS.
When a TA is triggered, the AP/FD TCAS mode arms.

When an RA is triggered, the AP/FD TCAS mode engages to provide guidance in accordance with the RA order:

- The AP status does not change: Remains engaged or disengaged
- If not previously engaged, the FDs automatically engage.

When the "CLEAR OF CONFLICT" aural alert sounds, the AP/FD TCAS mode disengages.
The AP/FD provides guidance toward the latest target altitude set on the FCU.

AP/FD TCAS MODE AVAILABILITY

Ident.: DSC-22_30-40-100-00025774.0001001 / 18 MAY 22

2 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The AP/FD TCAS mode is available, when all of the following conditions are met:

- The aircraft is above 900 ft RA
- The TCAS is not failed (i.e. the ECAM did not trigger NAV TCAS FAULT)
- TCAS is in TA/RA mode
- At least one AP, or one FD is available
- The AP/FD TCAS mode is not failed (i.e. the ECAM did not trigger the AUTO FLT TCAS MODE FAULT alert)
- EGPWS, WINDSHEAR, or STALL warning is not triggered.

To arm or engage, the AP/FD TCAS mode must be available.

ARMING CONDITIONS

Ident.: DSC-22_30-40-100-00025775.0001001 / 18 MAY 22

3 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The AP/FD TCAS mode arms, when a TA alert is triggered.
The AP/FD TCAS mode arms, even if both APs, and both FDs are disengaged. In this case, the APs and FDs remain disengaged.

Note: *The arming of the AP/FD TCAS mode is inhibited when one of the following is applicable:*

- *The TA ONLY mode of the TCAS is selected, or*
- *The STANDBY mode of the TCAS is selected.*

DISARMING CONDITIONS

Ident.: DSC-22_30-40-100-00025776.0001001 / 18 MAY 22

4 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The AP/FD TCAS mode disarms, when one of the following occurs:
- The intruder becomes white on the ND, or
- The AP/FD TCAS mode engages upon a RA alert, or
- The TA ONLY mode of the TCAS is selected, or
- The STANDBY mode of the TCAS is selected, or
- The AP/FD TCAS mode fails (i.e the ECAM triggers the AUTO FLT TCAS MODE FAULT alert).

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-100-00025777.0001001 / 18 MAY 22

5 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The AP/FD TCAS mode engages, when a RA is triggered.
The AP/FD TCAS mode engages, even if both APs, and both FDs are disengaged. In this case, the FDs automatically engage.

Note:
- *When the AP/FD TCAS mode engages, the triple click audio indicator does not sound, and the FD pitch bar does not flash*
- *The engagement of the AP/FD TCAS mode is inhibited when one of the following is applicable:*
  - *The TA ONLY mode of the TCAS is selected, or*
  - *The STANDBY mode of the TCAS is selected.*

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-40-100-00025778.0001001 / 18 MAY 22

6 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The AP/FD TCAS mode automatically disengages, when the "CLEAR OF CONFLICT" aural alert sounds.
Then the AP/FD engages in a vertical mode that leads the aircraft toward the target altitude set on the FCU.

The AP/FD TCAS mode also automatically disengages, if one of the following occurs:
- The TA ONLY mode of the TCAS is selected.
  The FMA then displays the TCAS RA INHIBITED message on Line 3 of the "Special Messages" column
- The STANDBY mode of the TCAS is selected.
  The FMA then displays the TCAS RA INHIBITED message on Line 3 of the "Special Messages" column

- The ECAM triggers the AP/FD AUTO FLT TCAS MODE FAULT alert, or
- The flight crew engages another AP/FD vertical mode (e.g. in the case of go-around).

Note: *If the AP/FD TCAS mode is lost while engaged, the vertical mode reverts to V/S. The vertical speed target is:*
- *0 ft/min if the RA order was to descend*
- *The TCAS vertical speed target at the time of the failure, if the RA order was to climb.*

NORMAL OPERATIONS - WHEN A TA IS TRIGGERED

Ident.: DSC-22_30-40-100-00025779.0001001 / 18 MAY 22

7 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

When a TA alert is triggered, the AP/FD TCAS mode arms.

CONSEQUENCE ON AP AND FD

When the AP/FD TCAS mode arms, the AP and FDs engagement status does not change.

CONSEQUENCE ON AP/FD LATERAL MODE

When the AP/FD TCAS mode arms, any engaged (armed) AP/FD lateral mode remains engaged (armed).

CONSEQUENCE ON AP/FD VERTICAL MODE

When the AP/FD TCAS mode arms, any armed (engaged) AP/FD vertical mode remains armed (engaged).
The FMA displays TCAS on Line 3 of the "AP/FD Vertical Modes" column. Therefore, if another AP/FD vertical mode is armed, the FMA displays both modes.

NORMAL OPERATIONS - WHEN A RA IS TRIGGERED

Applicable to: MSN 01459, 08495-09324, 10949-11597

Ident.: DSC-22_30-40-100-A-00025780.0001001 / 18 MAY 22

8 At occurrence of any preventive or corrective RA, the AP/FD TCAS mode engages. It provides vertical guidance in accordance with the TCAS vertical speed orders.

Ident.: DSC-22_30-40-100-A-00025781.0001001 / 18 MAY 22

9

CONSEQUENCE ON AP AND FD

When the AP/FD TCAS mode engages:
- The AP engagement status does not change
- If not previously engaged, the FDs automatically engage.

Ident.: DSC-22_30-40-100-A-00025782.0001001 / 18 MAY 22

10
CONSEQUENCE ON AP/FD LATERAL MODE

When the AP/FD TCAS mode engages, any engaged (armed) AP/FD lateral mode remains engaged (armed).
If both APs and both FDs are disengaged, when the AP/FD TCAS mode engages, HDG automatically engages. The heading target is the aircraft heading at HDG engagement.

Note: *When the AP/FD TCAS mode disengages (e.g. at the CLEAR OF CONFLICT), the FMA displays the TRK FPA DESELECTED message for 10 s on Line 3 of the "Special Messages" column, if the flying reference was TRK-FPA before the AP/FD TCAS mode engagement.*

Ident.: DSC-22_30-40-100-A-00025783.0001001 / 18 MAY 22

11
CONSEQUENCE ON AP/FD VERTICAL MODE

GUIDANCE

Depending on the RA and the FCU selected altitude, the AP/FD TCAS mode uses the guidance law of one of the following modes: V/S, ALT*, ALT, ALT CRZ*, ALT CRZ.

V/S Guidance

The AP/FD TCAS mode uses the guidance law of the V/S mode if:

- ALT/ALT CRZ is not armed, or
- The FCU selected altitude of ALT*, ALT, ALT CRZ* or ALT CRZ is not compatible with the RA order.

The vertical speed target is one of the following values:

- The aircraft vertical speed at the engagement of the AP/FD TCAS mode, if a preventive RA is triggered, or
- The limit between the green and red area of the vertical speed scale, ± 200 ft/min if the aircraft should climb (descend).

L2 The AP/FD TCAS mode ensures that the aircraft speed remains between VLS - 5 kt (VLS - 2 kt in landing configuration) and VMAX.

L1 *Note:* *In order to ensure a rapid response to the RA, the initial vertical speed may temporarily exceed the vertical speed target of the TCAS. The peak of the vertical speed is reached in less than 5 s after the vertical speed enters the TCAS green area.*

If the RA order changes, the AP/FD TCAS mode follows the new target.

ALT*, ALT, ALT CRZ* or ALT CRZ Guidance

The AP/FD TCAS mode uses the guidance law of the ALT / ALT CRZ / ALT* / ALT CRZ* mode if:

- ALT / ALT CRZ is armed, and
- The FCU selected altitude of ALT*, ALT, ALT CRZ* or ALT CRZ is compatible with the RA order.

Ident.: DSC-22_30-40-100-A-00025784.0001001 / 18 MAY 22

12 AP/FD VERTICAL MODE ENGAGED AT OCCURRENCE OF THE RA

When the AP/FD TCAS mode engages, any engaged AP/FD vertical mode disengages.

Note:
- *If G/S / F-G/S ◁ is engaged, when the AP/FD TCAS mode engages:*
  - *G/S / F-G/S ◁ disengages*
  - *LOC / F-LOC ◁ remains engaged*
  - *The APPR pb comes off, and the LOC pb comes on.*
- *If FINAL APP is engaged , when the AP/FD TCAS mode engages:*
  - *FINAL APP disengages*
  - *Managed lateral guidance remains engaged with NAV engaged*
  - *The APPR pb comes off.*

Ident.: DSC-22_30-40-100-A-00025785.0001001 / 18 MAY 22

13 AP/FD VERTICAL MODE ARMED AT OCCURRENCE OF THE RA

When the AP/FD TCAS mode engages, any armed AP/FD vertical mode disarms, except ALT / ALT CRZ if the altitude capture is compatible with the RA order.

Note:
- *If G/S / F-G/S ◁ is armed, when the AP/FD TCAS mode engages:*
  - *G/S / F-G/S ◁ disarms*
  - *The APPR pb comes off, and the LOC pb comes on.*
- *If FINAL is armed , when the AP/FD TCAS mode engages:*
  - *FINAL disarms*
  - *Managed lateral guidance remains engaged with NAV engaged*
  - *The APPR pb comes off.*

Note: If the approach is re-armed and if the capture conditions are fulfilled, the corresponding approach mode engages. The AP/FD TCAS mode disengages (even if it is not CLEAR OF CONFLICT). A RA may be triggered again.

CAPTURE OF THE SELECTED ALTITUDE IN AP/FD TCAS MODE

If ALT / ALT CRZ is armed, when the AP/FD TCAS mode engages:

- ALT / ALT CRZ remains armed if the capture of the FCU selected altitude is compatible with the RA order, and if the selected level is reached before the CLEAR OF CONFLICT.
  L2 If ALT / ALT CRZ is armed, and ALT capture conditions occur during the RA, the AP/FD TCAS mode captures the FCU selected altitude (without ALT* indicated on the FMA).
  This can occur when the TCAS triggers a preventive RA "MONITOR VERTICAL SPEED", or a corrective RA "ADJUST VERTICAL SPEED, ADJUST" aural alert.
  However, if the vertical speed order of the RA is zero, ALT / ALT CRZ disarms.
- L1 ALT / ALT CRZ disarms, if the capture of the FCU selected altitude is not compatible with the RA order.

WHITE BOX ON FMA

When a vertical mode disarms at AP/FD TCAS mode engagement, the FMA displays a white box for 10 s.

Ident.: DSC-22_30-40-100-A-00025786.0001001 / 18 MAY 22

14

CONSEQUENCE ON A/THR AND SPEED/MACH CONTROL

When the AP/FD TCAS mode engages:

- If the A/THR is disconnected, it becomes armed or active, depending on the thrust lever position
- If the A/THR is armed, it remains armed
- If the A/THR is active, it remains active.

A/THR ACTIVE

When the AP/FD TCAS mode engages, if the A/THR becomes / remains active, the SPEED/MACH mode engages.
The speed/Mach control becomes selected, and the speed/Mach target becomes the aircraft speed/Mach at the occurrence of the RA.
L2 If a new RA order occurs, the speed/Mach target changes, and becomes the aircraft speed/Mach at the occurrence of the new RA.

L1 A/THR ARMED

When the AP/FD TCAS mode engages, if the A/THR becomes / remains armed, the thrust target does not change.
The FMA displays the A/THR message, in accordance with the thrust lever position (e.g. MAN THR, MAN TOGA).

L2 Note: *If the flight crew sets the thrust levers to the CL detent, the A/THR activates. The SPEED/MACH mode engages. The speed/Mach control becomes selected, and the speed/Mach target becomes the aircraft speed/Mach at the A/THR activation.*

L1 LVR CLB Message on the FMA

In the case of AP/FD TCAS mode engagement when the A/THR is armed (e.g. RA order triggers below the THR RED ALT):

- If the vertical speed order of the RA is above 500 ft/min, the LVR CLB message is inhibited.
  However, if the speed becomes greater than VFE - 20 kt, the LVR CLB message flashes on the FMA.
- If the vertical speed order of the RA is equal to, or below 500 ft/min, the LVR CLB message flashes on the FMA even when below the THR RED ALT.

Ident.: DSC-22_30-40-100-A-00025787.0001001 / 18 MAY 22

15

CONSEQUENCE ON ALPHA FLOOR

When AP/FD TCAS mode is engaged, ALPHA FLOOR is temporarily inhibited:

- If all thrust levers are set to CLB detent when the RA is triggered, ALPHA FLOOR is inhibited while AP/FD TCAS mode is engaged.
- If at least one thrust lever is below the CLB detent when the RA is triggered, LVR CLB flashes on the FMA and ALPHA FLOOR is inhibited during 5 s, then:
  - If all thrust levers are set to the CLB detent, ALPHA FLOOR inhibition is maintained while AP/FD TCAS mode is engaged
  - If at least one thrust lever remains below the CLB detent, ALPHA FLOOR is reactivated.

NORMAL OPERATIONS - WHEN CLEAR OF CONFLICT

Ident.: DSC-22_30-40-100-00025788.0001001 / 18 MAY 22

16 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

When the "CLEAR OF CONFLICT" aural alert sounds, the AP/FD TCAS mode automatically disengages. The AP/FD provides guidance toward the previous FCU selected altitude.

CONSEQUENCE ON AP/FD LATERAL MODE

When the AP/FD TCAS mode disengages, any engaged/armed AP/FD lateral mode remains engaged/armed.

CONSEQUENCE ON AP/FD VERTICAL MODE

When the AP/FD TCAS mode disengages, one of the following modes engages: V/S, ALT*, ALT, ALT CRZ*, or ALT CRZ.

AP/FD TCAS MODE REVERSION TO ALT / ALT CRZ / ALT* / ALT CRZ*

If ALT / ALT CRZ is armed, when the AP/FD TCAS mode disengages:
- ALT*/ALT CRZ* engages, if the aircraft is within the capture zone of the FCU selected altitude
- ALT/ALT CRZ engages, if the aircraft altitude is equal to the FCU selected altitude
- In all other cases, V/S engages.

AP/FD TCAS MODE REVERSION TO V/S

When the AP/FD TCAS mode reverts to V/S when clear of conflict, all of the following occurs:
- ALT or ALT CRZ arms
- A triple click audio indicator sounds, and the pitch bar flashes for 10 s
- The vertical speed target depends on whether a preventive RA occurred, or a corrective RA occurred.

Vertical Speed Target - A Preventive RA Occurred

The vertical speed target remains the vertical speed target at the triggering of the RA.

Vertical Speed Target - A Corrective RA Occurred

The vertical speed target becomes:
- 500 ft/min, if the aircraft is at, or above 30 000 ft, and the FCU selected altitude is above the aircraft
- ±1 000 ft/min, in all other cases.
  V/S leads the aircraft toward the FCU selected altitude.

AP/FD MODE REVERSIONS

Ident.: DSC-22_30-40-110-A-00025789.0001001 / 18 MAY 22
Applicable to: ALL

REVERSION DUE TO FCU ALTITUDE CHANGES

Conditions	Event	Consequence
OP CLB engaged CLB engaged EXP CLB engaged	FCU selected altitude set below A/C altitude	V/S-FPA engages (*Refer to DSC-22_30-40-70 Reversions to V/S / FPA*)
OP DES engaged DES engaged EXP DES engaged	FCU selected altitude set above A/C altitude	
ALT * active	FCU selected altitude modification (greater than 250 ft)	

Ident.: DSC-22_30-40-110-A-00025790.0001001 / 18 MAY 22
Applicable to: ALL

REVERSION DUE TO THE LOSS OF NAV MODE

Conditions	Event	Consequence
CLB engaged	Loss of lateral managed mode: NAV	OP CLB engages
DES engaged		V/S engages (*Refer to DSC-22_30-40-70 Reversions to V/S / FPA*)

Ident.: DSC-22_30-40-110-A-00025791.0002001 / 18 MAY 22
Applicable to: ALL

SPEED PROTECTION WHEN FD ORDERS ARE NOT FOLLOWED BY THE FLIGHT CREW (AP NOT ENGAGED)

Conditions	Event	Consequence
FD engaged with: - AP OFF, and - OP DES, DES or EXP DES engaged, and - A/THR active (IDLE thrust).	IAS = VLS-2 kt (between VLS-2 kt and VLS-19 kt depending on the position of the speedbrakes)	FD bars disappear. If A/THR active, automatic engagement of SPEED mode on the A/THR. Thrust increases to recover the speed target.
FD is engaged with: - AP off, and - OP CLB, CLB or EXP CLB engaged, and - A/THR active (CLIMB thrust).	IAS = VMAX+4 kt	FD bars disappear. If A/THR active, automatic engagement of SPEED mode on the A/THR. Thrust decreases to recover the speed target.

Ident.: DSC-22_30-40-110-A-00025792.0004001 / 18 MAY 22
Applicable to: ALL

SPEED PROTECTION DUE TO EXCESSIVE V/S

Conditions	Event	Consequence
Excessive V/S or FPA selected in climb	IAS = VLS (or VLS-5 kt if target is VLS)	The selected V/S (or FPA) target is temporarily disregarded to maintain VLS in climb, or VMAX in descent.
Excessive V/S or FPA selected in descent	IAS = VMAX	

Note: *When flying with FD bars only (AP OFF), the FMGS adjusts the pitch so that VLS in climb, or VMAX in descent is maintained. However, no triple click is generated and the V/S target displayed on the FMA remains unchanged.*

Ident.: DSC-22_30-40-110-A-00025793.0001001 / 18 MAY 22
1 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

SPEED PROTECTION DUE TO EXCESSIVE V/S TARGET (AP/FD TCAS MODE ENGAGED)

Conditions	Event	Consequence
Excessive V/S target in climb	IAS reaching VLS (or VLS - 5 kt if target is VLS or VLS - 2 kt if target is VLS in landing configuration)	The TCAS RA V/S target is temporarily disregarded to maintain VLS in climb, or VMAX in descent.
Excessive V/S target in descent	IAS reaching VMAX	

Note: *When flying with FD bars only (AP OFF), the FMGS adjusts the pitch so that VLS in climb, or VMAX in descent is maintained. However, no triple click is generated and the V/S target displayed on the FMA remains unchanged.*

Takeoff

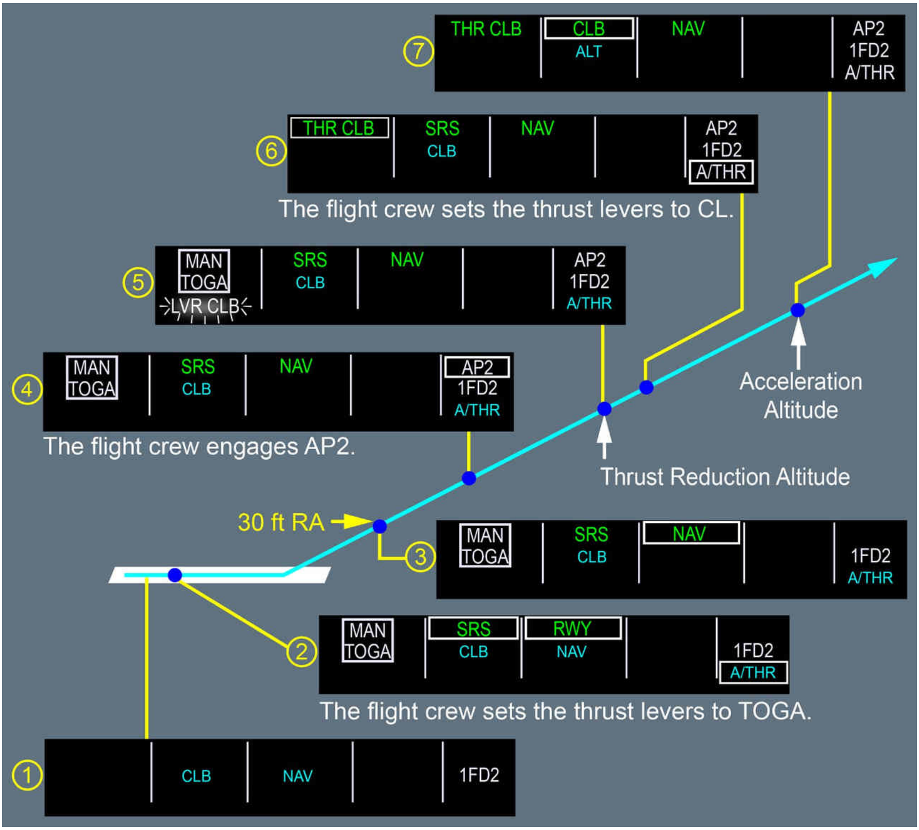
TAKEOFF WITH NAV

Ident.: DSC-22_30-40-120-20-00025278.0001001 / 18 MAY 22
Applicable to: ALL

NAV and CLB arm when the aircraft is on ground, and:
- The FDs are engaged
- A runway and a SID are selected in the flight plan
- V2 is inserted in the PERF TAKE OFF page
- No FLX TO temperature, nor DRT TO level (Derated Takeoff ◁✱) is entered in the PERF TAKEOFF page
- The FCU selected altitude is set above the acceleration altitude
- The slats are extended.

When the aircraft is at the runway threshold, and the flight crew sets the thrust levers to TOGA, SRS and RWY engage, and MAN TOGA appears on the FMA.
At least 5 s after liftoff, the flight crew can engage one AP.
At 30 ft RA, RWY disengages, and NAV engages.
When the aircraft reaches the thrust reduction altitude, LVR CLB flashes. The flight crew sets the thrust levers to the CL detent, MAN TOGA disappears, and THR CLB engages.
At the acceleration altitude, SRS disengages, and CLB engages.
From liftoff to the acceleration altitude, the managed speed target is V2+10 kt. At the acceleration altitude, the managed speed target becomes the applicable FMS speed target (e.g. CLB SPD LIM, ECON speed).

Takeoff with NAV


⑦
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
⑥
THR CLB
SRS
CLB
NAV
AP2
1FD2
A/THR
The flight crew sets the thrust levers to CL.
⑤
MAN
TOGA
LVR CLB
SRS
CLB
NAV
AP2
1FD2
A/THR
④
MAN
TOGA
SRS
CLB
NAV
AP2
1FD2
A/THR
The flight crew engages AP2.
Acceleration Altitude
Thrust Reduction Altitude
30 ft RA
③
MAN
TOGA
SRS
CLB
NAV
1FD2
A/THR
②
MAN
TOGA
SRS
CLB
RWY
NAV
1FD2
A/THR
The flight crew sets the thrust levers to TOGA.
①
CLB
NAV
1FD2

TAKEOFF WITH HDG/TRK PRESET

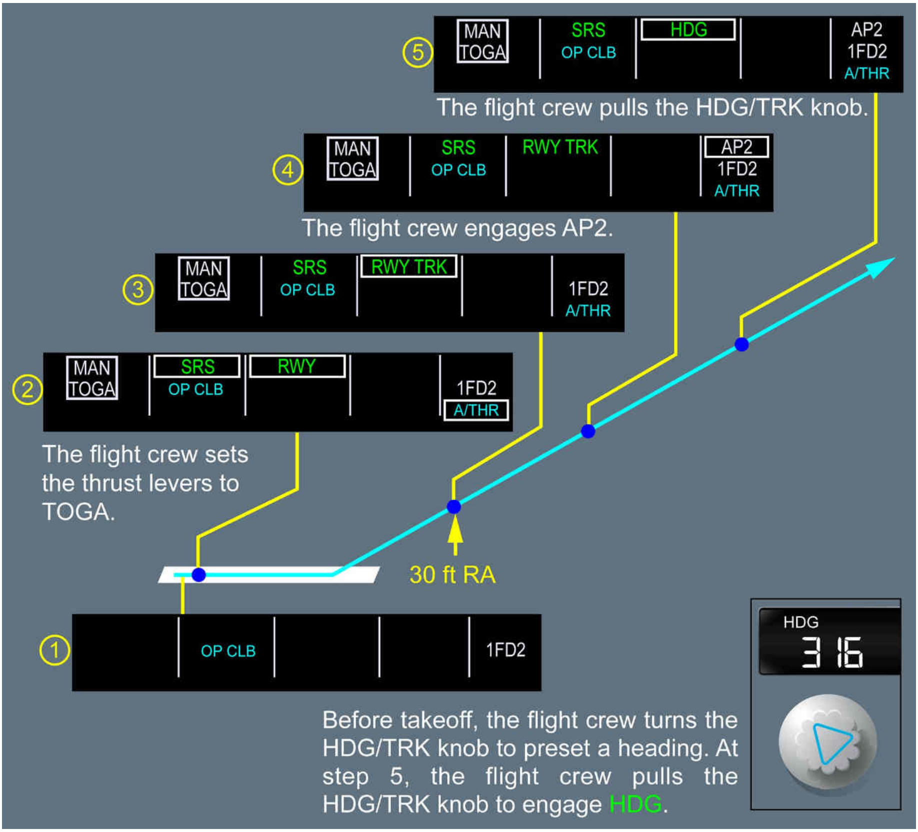
Ident.: DSC-22_30-40-120-20-00025280.0001001 / 18 MAY 22
Applicable to: ALL

OP CLB arms when the aircraft is on ground, and:
- The FDs are engaged
- A runway is selected in the flight plan
- V2 is inserted in the PERF TAKEOFF page
- No FLX TO temperature, nor DRT TO level (Derated Takeoff ⩤) is entered in the PERF TAKEOFF page
- The FCU selected altitude is set above the acceleration altitude

- The flight crew turned the HDG/TRK knob on the FCU to select a heading (or track) preset The HDG/TRK window displays the heading (or track). The display remains, as long as RWY, RWY TRK, and HDG (or TRK) are engaged.
- The slats are extended.

When the aircraft is at the runway threshold, and the flight crew sets the thrust levers to TOGA, SRS and RWY engage, and MAN TOGA appears on the FMA.
At least 5 s after liftoff, the flight crew can engage one AP.
At 30 ft RA, RWY disengages, and RWY TRK engages.
When the flight crew pulls the HDG/TRK knob, HDG engages (HDG-V/S is selected).
At the thrust reduction altitude, THR CLB engages.
At the acceleration altitude, OP CLB engages.
From liftoff to the acceleration altitude, the managed speed target is V2+10 kt. At the acceleration altitude, the managed speed target becomes the applicable FMS speed target (e.g. CLB SPD LIM, ECON speed).

Takeoff with HDG/TRK Preset


⑤
MAN
TOGA
SRS
OP CLB
HDG
AP2
1FD2
A/THR
④
MAN
TOGA
SRS
OP CLB
RWY TRK
AP2
1FD2
A/THR
③
MAN
TOGA
SRS
OP CLB
RWY TRK
1FD2
A/THR
②
MAN
TOGA
SRS
OP CLB
RWY
1FD2
A/THR
30 ft RA
①
OP CLB
1FD2
HDG
316

The flight crew pulls the HDG/TRK knob.

The flight crew engages AP2.

The flight crew sets the thrust levers to TOGA.

Before takeoff, the flight crew turns the HDG/TRK knob to preset a heading. At step 5, the flight crew pulls the HDG/TRK knob to engage HDG.

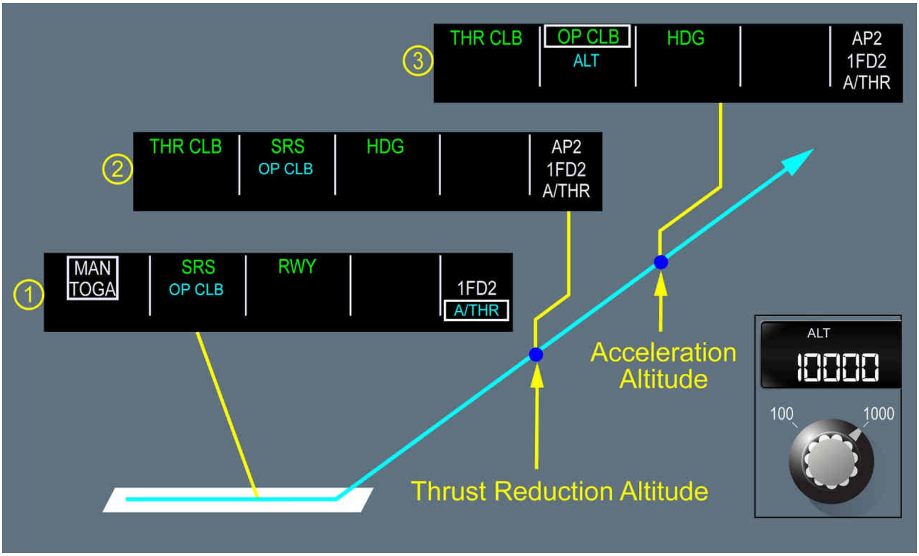
Climb with OP CLB Mode

AT THE ACCELERATION ALTITUDE

Ident.: DSC-22_30-40-120-30-00025281.0001001 / 18 MAY 22
Applicable to: ALL

On ground, OP CLB arms, if NAV is not armed.
OP CLB automatically engages at the acceleration altitude.

At the Acceleration Altitude

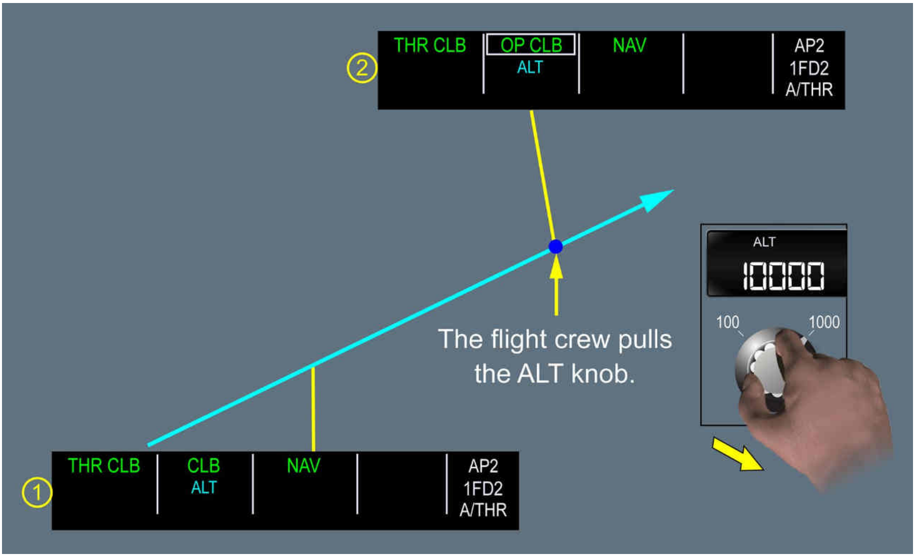

③
THR CLB
OP CLB
ALT
HDG
AP2
1FD2
A/THR
②
THR CLB
SRS
OP CLB
HDG
AP2
1FD2
A/THR
①
MAN
TOGA
SRS
OP CLB
RWY
1FD2
A/THR
Acceleration Altitude
Thrust Reduction Altitude
ALT
10000
100
1000

THE FLIGHT CREW PULLS THE ALT KNOB

Ident.: DSC-22_30-40-120-30-00025282.0001001 / 18 MAY 22
Applicable to: ALL

If CLB is engaged, and the flight crew pulls the ALT knob, OP CLB engages.

The Flight Crew Pulls the ALT Knob


②
THR CLB
OP CLB
ALT
NAV
AP2
1FD2
A/THR
ALT
10000
100
1000
The flight crew pulls the ALT knob.
①
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR

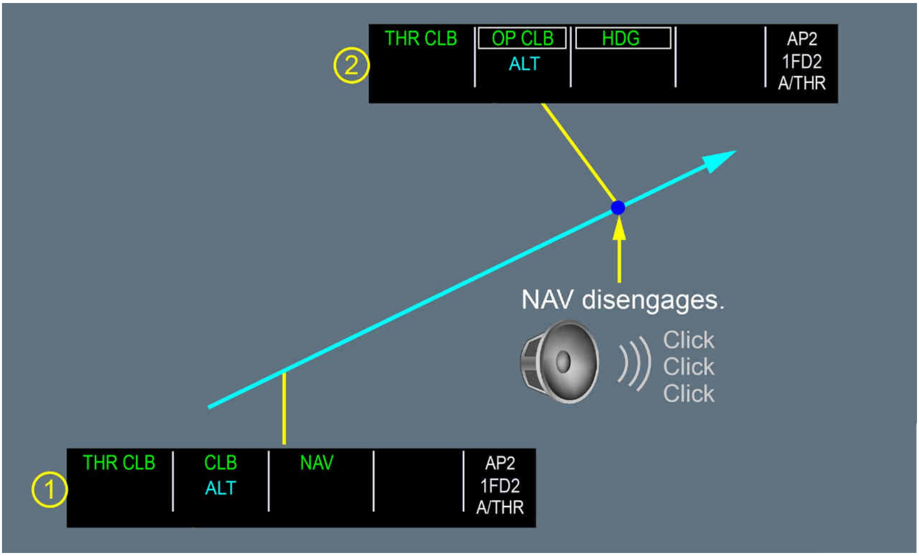
NAV DISENGAGES

Ident.: DSC-22_30-40-120-30-00025283.0001001 / 18 MAY 22
Applicable to: ALL

If CLB and NAV are engaged and NAV disengages, CLB disengages, and OP CLB engages.

The transition from CLB to OP CLB is a reversion with a triple click, if NAV disengages due to one of the following conditions:
- The aircraft reaches a flight plan discontinuity
- The next altitude target is an altitude constraint, and the flight crew engages HDG/TRK mode.

NAV Disengages


②
THR CLB
OP CLB
ALT
HDG
AP2
1FD2
A/THR
NAV disengages.
Click
Click
Click
①
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR

Intentionally left blank

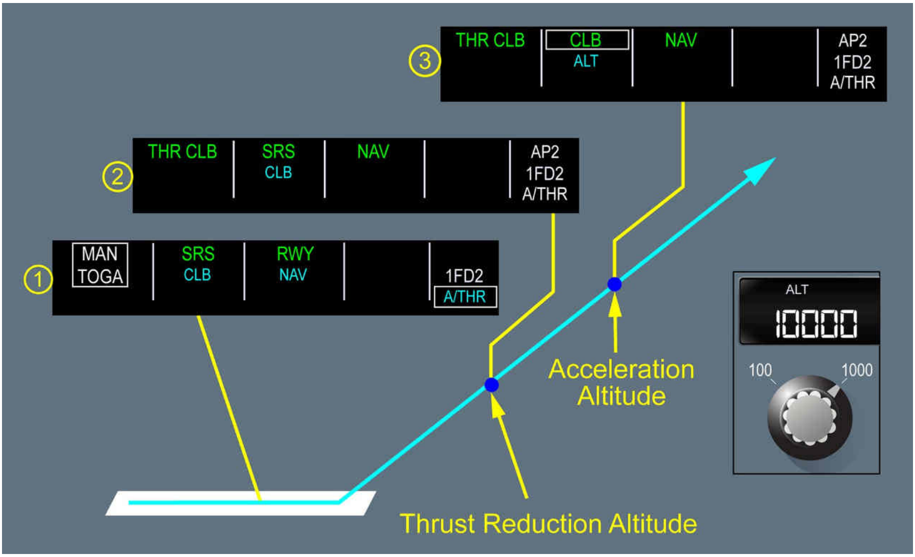
Climb with CLB Mode

AT THE ACCELERATION ALTITUDE

Ident.: DSC-22_30-40-120-40-00025284.0001001 / 18 MAY 22
Applicable to: ALL

On ground, with NAV armed, CLB arms. CLB automatically engages at the acceleration altitude.

At the Acceleration Altitude

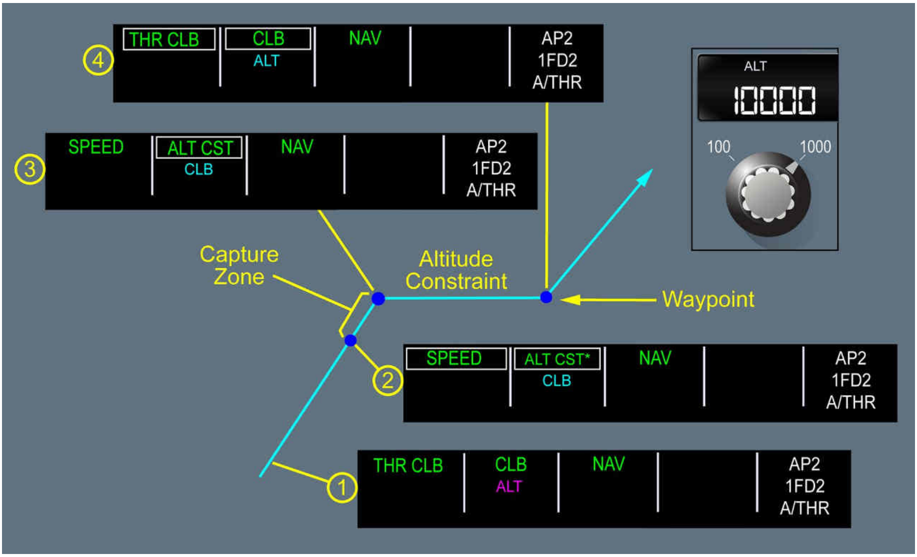

③
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
②
THR CLB
SRS
CLB
NAV
AP2
1FD2
A/THR
①
MAN
TOGA
SRS
CLB
RWY
NAV
1FD2
A/THR
ALT
10000
100
1000
Acceleration Altitude
Thrust Reduction Altitude

CLIMBING TOWARD AN ALTITUDE CONSTRAINT

Ident.: DSC-22_30-40-120-40-00025285.0001001 / 18 MAY 22
Applicable to: ALL

If the aircraft reaches an altitude constraint when CLB is engaged, the ALT CST mode engages and CLB becomes arms.
When the aircraft sequences the waypoint that defines the end of the altitude constraint of the FMS flight plan, CLB recovers.

Climbing toward an Altitude Constraint


THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
④
ALT
10000
100
1000
SPEED
ALT CST
CLB
NAV
AP2
1FD2
A/THR
③
Capture
Zone
Altitude
Constraint
Waypoint
②
SPEED
ALT CST*
CLB
NAV
AP2
1FD2
A/THR
①
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR

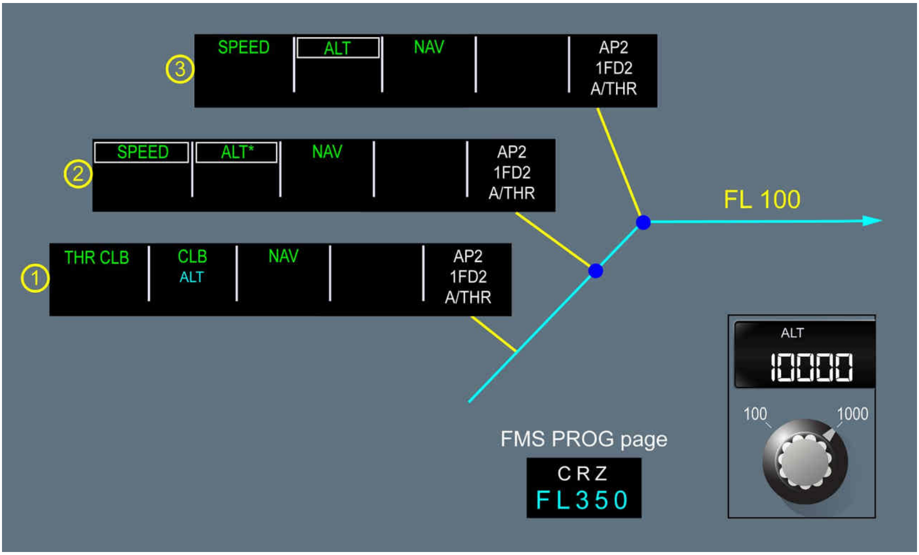
Altitude with ALT

CLB AND ALT - EXAMPLE 1

Ident.: DSC-22_30-40-120-50-00025286.0001001 / 18 MAY 22
Applicable to: ALL

The vertical guidance is managed, and the aircraft climbs toward the FCU selected altitude (e.g. FL 100), with no altitude constraint.

CLB and ALT - Example 1

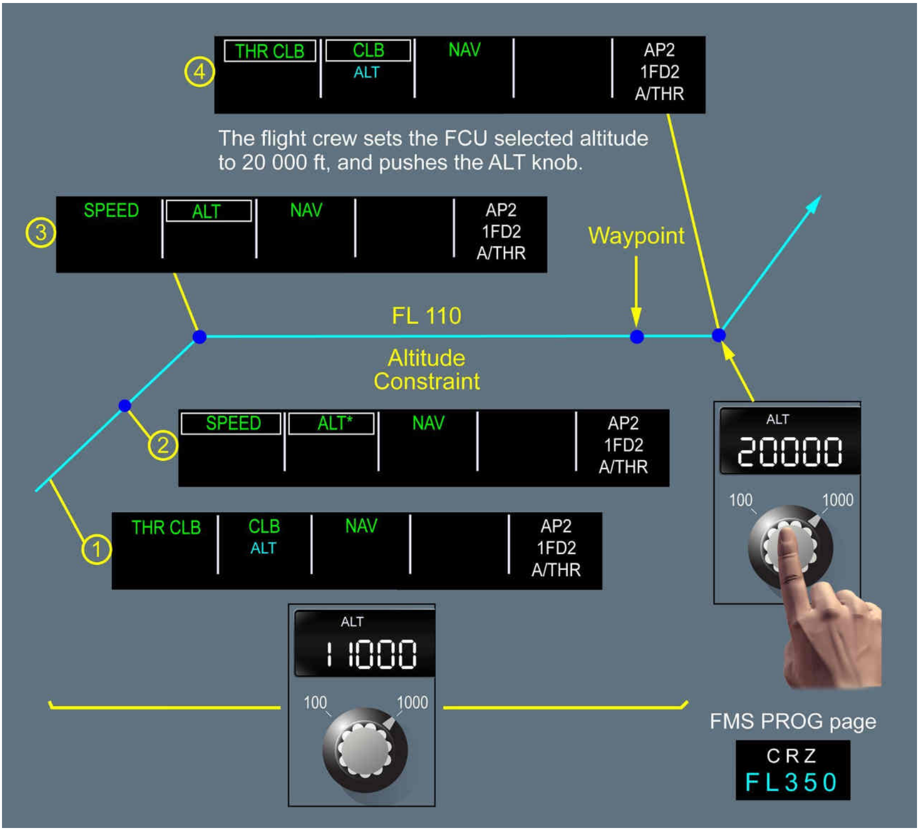

③
SPEED
ALT
NAV
AP2
1FD2
A/THR
②
SPEED
ALT*
NAV
AP2
1FD2
A/THR
①
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
FL 100
ALT
10000
100
1000
FMS PROG page
CRZ
FL350

CLB AND ALT - EXAMPLE 2

Ident.: DSC-22_30-40-120-50-00025287.0001001 / 18 MAY 22
Applicable to: ALL

The vertical guidance is managed, and:
- The FCU selected altitude (e.g. FL 110) is equal to the altitude constraint (e.g. FL 110)
- The aircraft climbs toward the altitude constraint.

CLB and ALT - Example 2

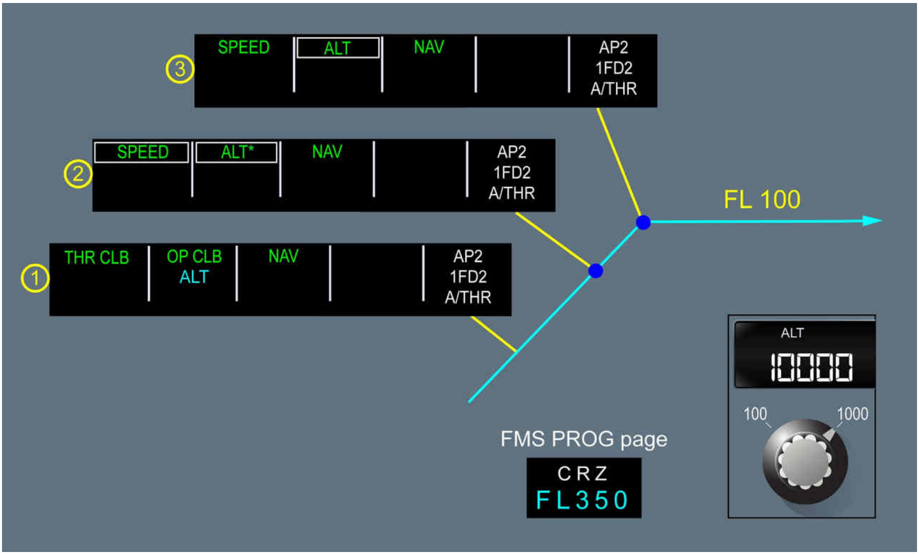

④
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
The flight crew sets the FCU selected altitude to 20 000 ft, and pushes the ALT knob.
③
SPEED
ALT
NAV
AP2
1FD2
A/THR
Waypoint
FL 110
Altitude Constraint
②
SPEED
ALT*
NAV
AP2
1FD2
A/THR
①
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
ALT
20000
100
1000
ALT
11000
100
1000
FMS PROG page
CRZ
FL350

OP CLB AND ALT

Ident.: DSC-22_30-40-120-50-00025288.0001001 / 18 MAY 22
Applicable to: ALL

OP CLB is engaged, and the aircraft climbs toward the FCU selected altitude (e.g. FL 100).

OP CLB and ALT


③
SPEED
ALT
NAV
AP2
1FD2
A/THR
②
SPEED
ALT*
NAV
AP2
1FD2
A/THR
①
THR CLB
OP CLB
ALT
NAV
AP2
1FD2
A/THR
FL 100
ALT
10000
100
1000
FMS PROG page
CRZ
FL350

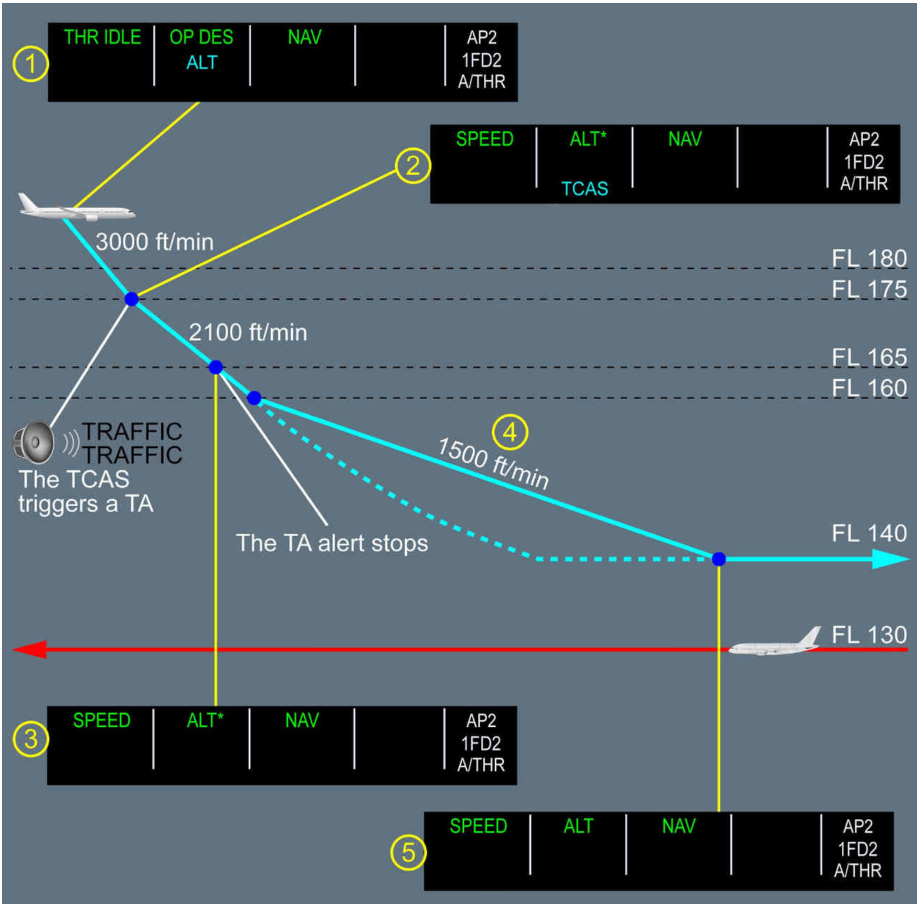
ALT IN DESCENT WITH TCAS TA

Ident.: DSC-22_30-40-120-50-00025290.0001001 / 18 MAY 22

1 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The aircraft levels off in descent with a TCAS Traffic Advisory (TA).

ALT in Descent with TCAS TA


①
THR IDLE
OP DES
ALT
NAV
AP2
1FD2
A/THR
②
SPEED
ALT*
TCAS
NAV
AP2
1FD2
A/THR
3000 ft/min
FL 180
FL 175
2100 ft/min
FL 165
FL 160
TRAFFIC
TRAFFIC
The TCAS
triggers a TA
④
1500 ft/min
The TA alert stops
FL 140
FL 130
③
SPEED
ALT*
NAV
AP2
1FD2
A/THR
⑤
SPEED
ALT
NAV
AP2
1FD2
A/THR

Altitude with ALT CST

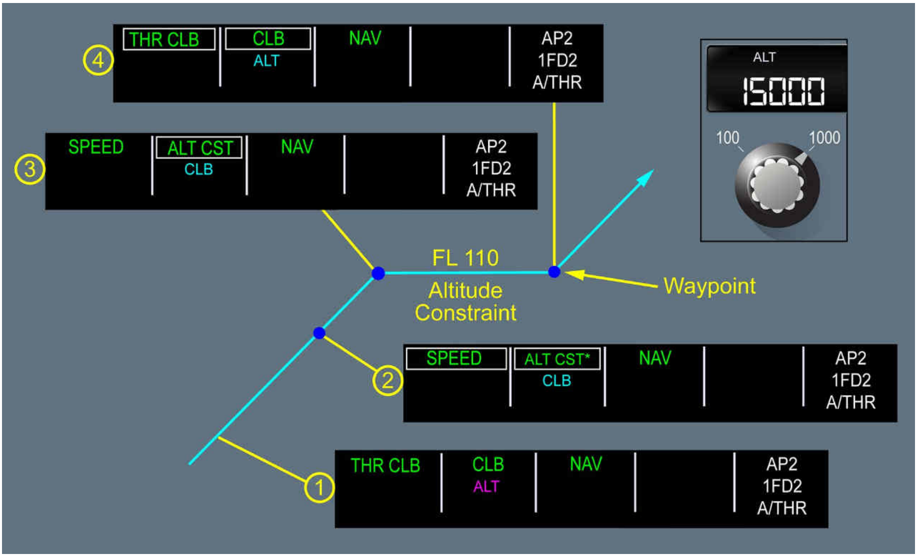
CLB AND ALT CST

Ident.: DSC-22_30-40-120-60-00025291.0001001 / 18 MAY 22
Applicable to: ALL

The vertical guidance is managed, and:

- The FCU selected altitude (e.g. FL 150) is above an altitude constraint (e.g. FL 110)
- The aircraft climbs toward the altitude constraint.

CLB and ALT CST


4
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
ALT
15000
100
1000
3
SPEED
ALT CST
CLB
NAV
AP2
1FD2
A/THR
FL 110
Altitude
Constraint
Waypoint
2
SPEED
ALT CST*
CLB
NAV
AP2
1FD2
A/THR
1
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR

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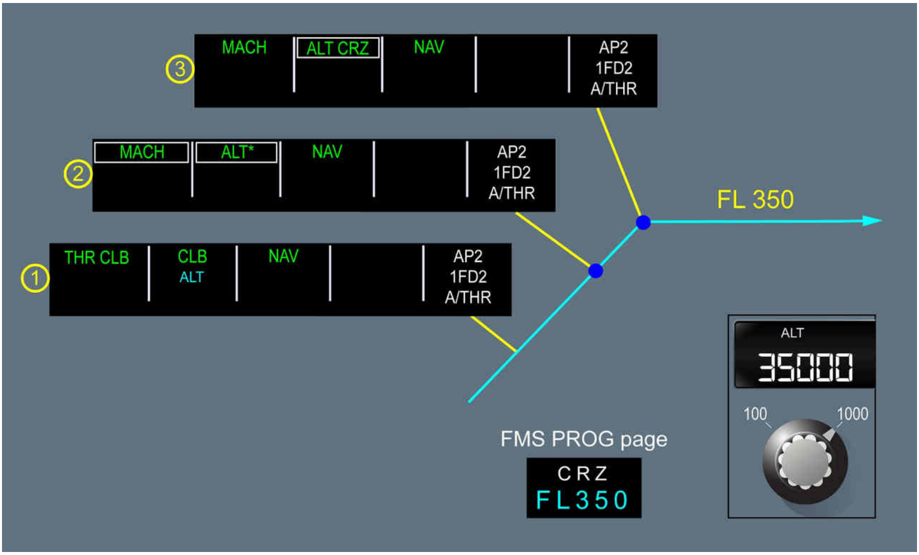
Altitude with ALT CRZ

CLB AND ALT CRZ

Ident.: DSC-22_30-40-120-70-00025292.0001001 / 18 MAY 22
Applicable to: ALL

The vertical guidance is managed, and:
- The FCU selected altitude is equal to the cruise altitude (e.g. FL 350)
- The aircraft climbs toward the cruise altitude.

CLB and ALT CRZ

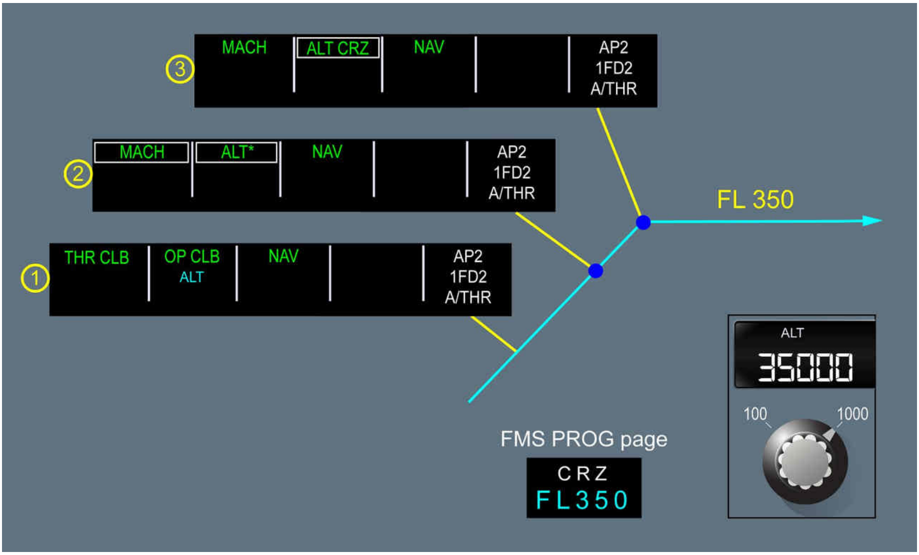

③
MACH
ALT CRZ
NAV
AP2
1FD2
A/THR
②
MACH
ALT*
NAV
AP2
1FD2
A/THR
①
THR CLB
CLB
ALT
NAV
AP2
1FD2
A/THR
FL 350
ALT
35000
100
1000
FMS PROG page
CRZ
FL350

OP CLB AND ALT CRZ

Ident.: DSC-22_30-40-120-70-00025293.0001001 / 18 MAY 22
Applicable to: ALL

OP CLB is engaged, and:
- The FCU selected altitude is equal to the cruise altitude (e.g. FL 350)
- The aircraft climbs toward the cruise altitude (e.g. FL 350).

OP CLB and ALT CRZ


③
MACH
ALT CRZ
NAV
AP2
1FD2
A/THR
②
MACH
ALT*
NAV
AP2
1FD2
A/THR
①
THR CLB
OP CLB
ALT
NAV
AP2
1FD2
A/THR
FL 350
ALT
35000
100
1000
FMS PROG page
CRZ
FL350

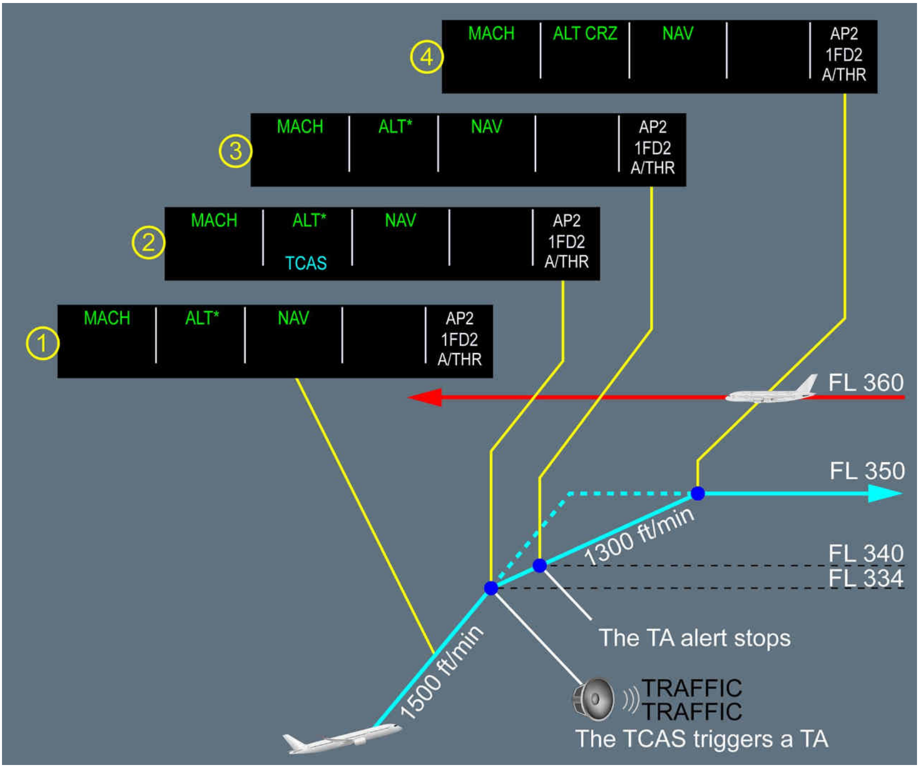
ALT CRZ WITH TCAS TA

Ident.: DSC-22_30-40-120-70-00025294.0001001 / 18 MAY 22

1 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The aircraft levels off at the cruise altitude, with a TCAS Traffic Advisory (TA).

ALT CRZ with TCAS TA


④
MACH
ALT CRZ
NAV
AP2
1FD2
A/THR
③
MACH
ALT*
NAV
AP2
1FD2
A/THR
②
MACH
ALT*
TCAS
NAV
AP2
1FD2
A/THR
①
MACH
ALT*
NAV
AP2
1FD2
A/THR
FL 360
FL 350
FL 340
FL 334
1300 ft/min
1500 ft/min
The TA alert stops
TRAFFIC
TRAFFIC
The TCAS triggers a TA

Note: The same principle applies, if the aircraft levels off at the cruise altitude with the ALT mode.

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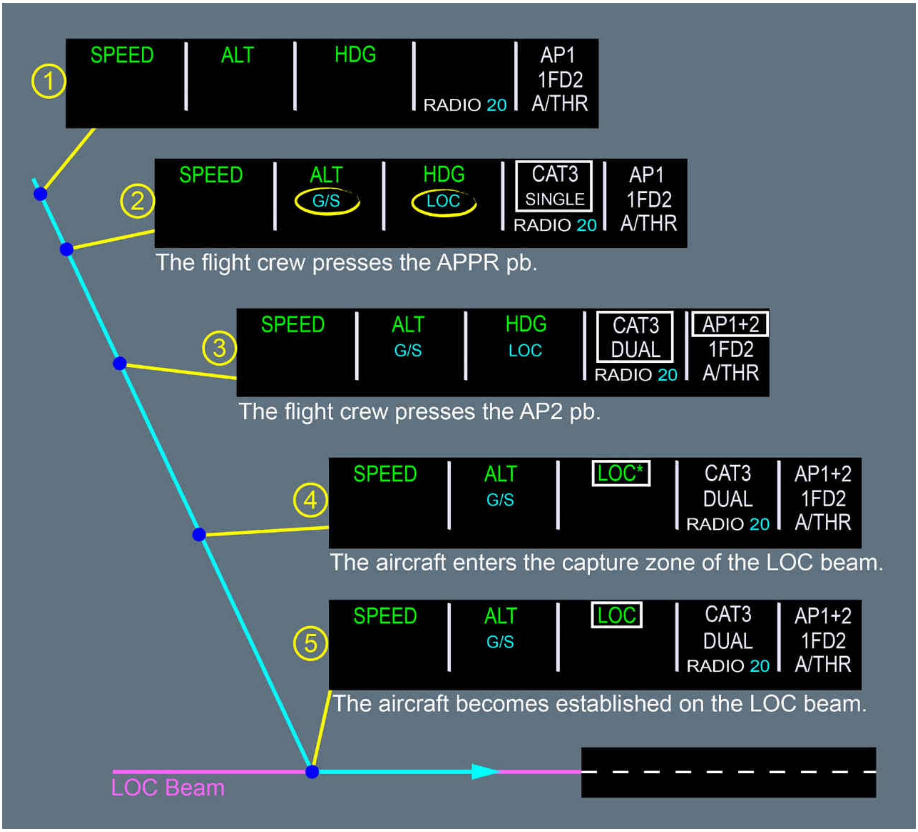
Approach and Landing

ILS APPROACH AND AUTOLAND

Ident.: DSC-22_30-40-120-80-00025296.0001001 / 18 MAY 22
Applicable to: ALL

The flight crew selected an ILS approach on the ARRIVAL page.
AP1 is engaged, and a heading is selected to fly toward the LOC beam.

ILS Approach and Autoland - Step 1 to 5


①
SPEED
ALT
HDG
RADIO 20
AP1
1FD2
A/THR
②
SPEED
ALT
G/S
HDG
LOC
CAT3
SINGLE
RADIO 20
AP1
1FD2
A/THR
③
SPEED
ALT
G/S
HDG
LOC
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
④
SPEED
ALT
G/S
LOC*
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
⑤
SPEED
ALT
G/S
LOC
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
LOC Beam

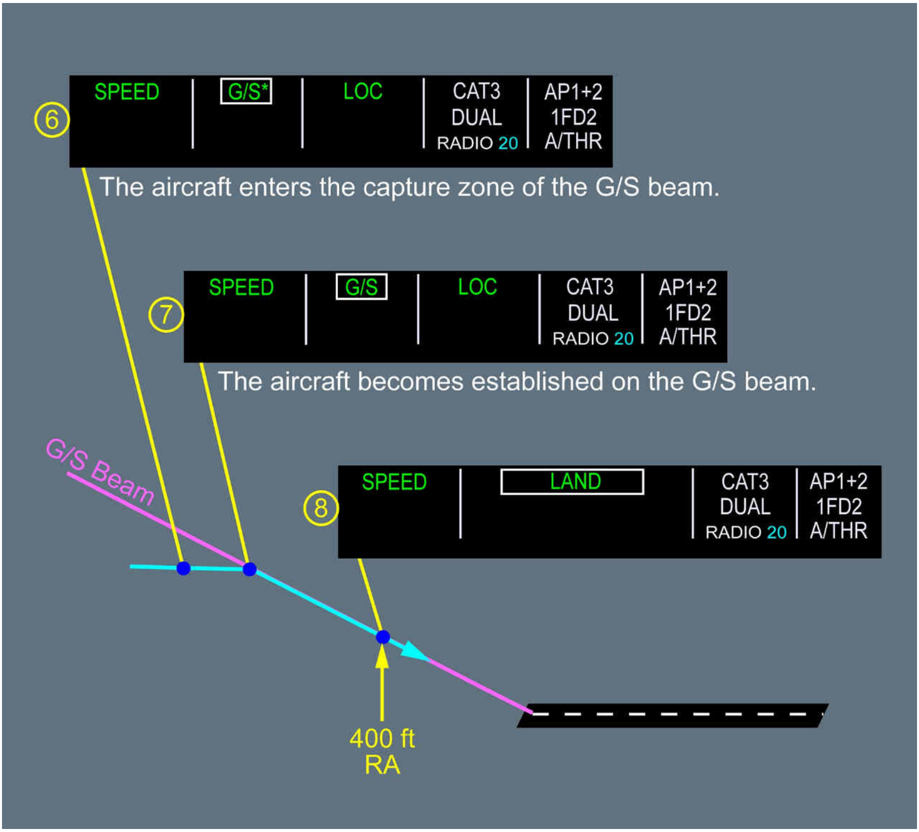
The flight crew presses the APPR pb.

The flight crew presses the AP2 pb.

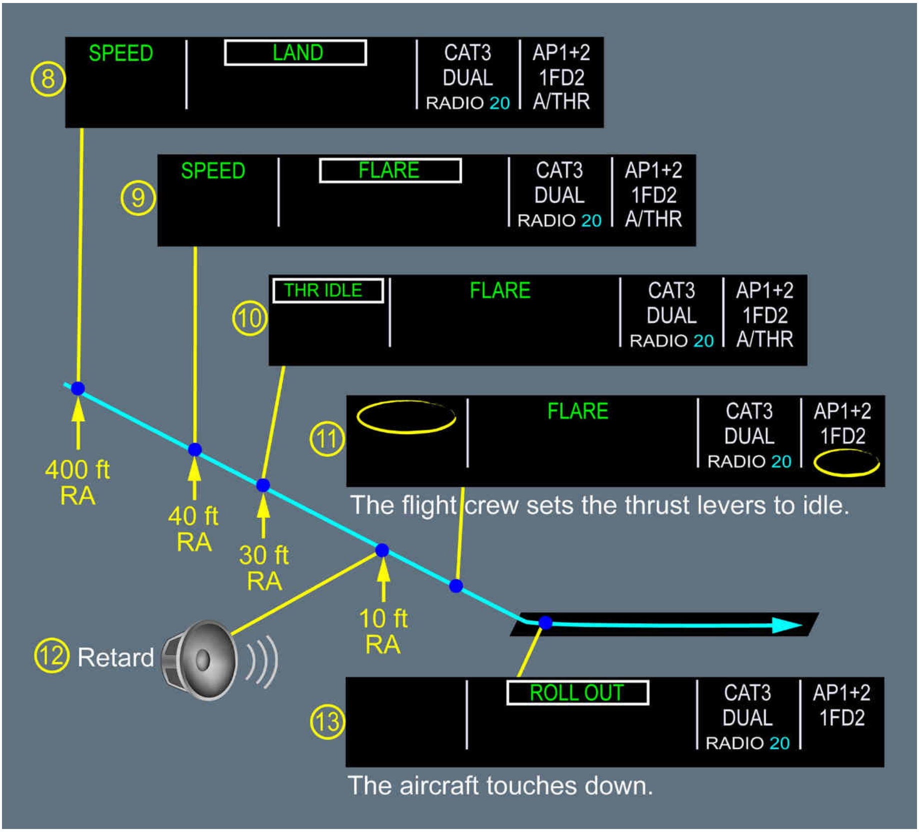
The aircraft enters the capture zone of the LOC beam.

The aircraft becomes established on the LOC beam.

ILS Approach and Autoland - Step 6 to 8


⑥
SPEED
G/S*
LOC
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
The aircraft enters the capture zone of the G/S beam.
⑦
SPEED
G/S
LOC
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
The aircraft becomes established on the G/S beam.
G/S Beam
⑧
SPEED
LAND
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
400 ft
RA

ILS Approach and Autoland - Step 8 to 13


⑧
SPEED
LAND
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
⑨
SPEED
FLARE
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
⑩
THR IDLE
FLARE
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
⑪
FLARE
CAT3
DUAL
RADIO 20
AP1+2
1FD2
400 ft
RA
40 ft
RA
30 ft
RA
10 ft
RA
⑫ Retard
⑬
ROLL OUT
CAT3
DUAL
RADIO 20
AP1+2
1FD2

The flight crew sets the thrust levers to idle.

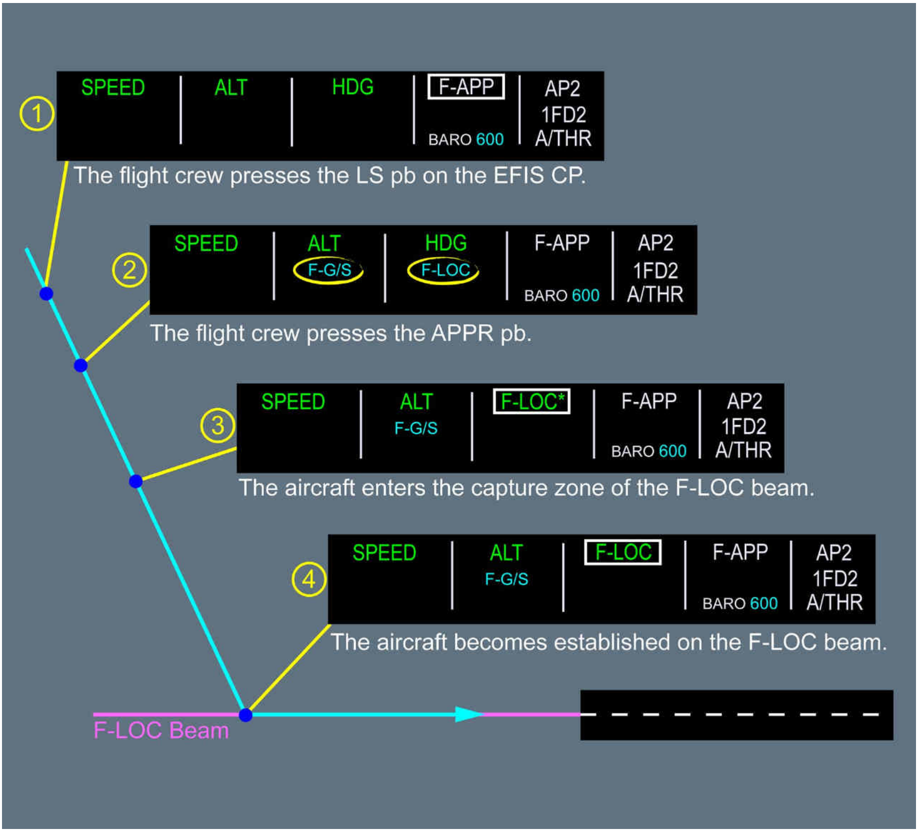
The aircraft touches down.

VOR APPROACH FLOWN WITH FLS FUNCTION

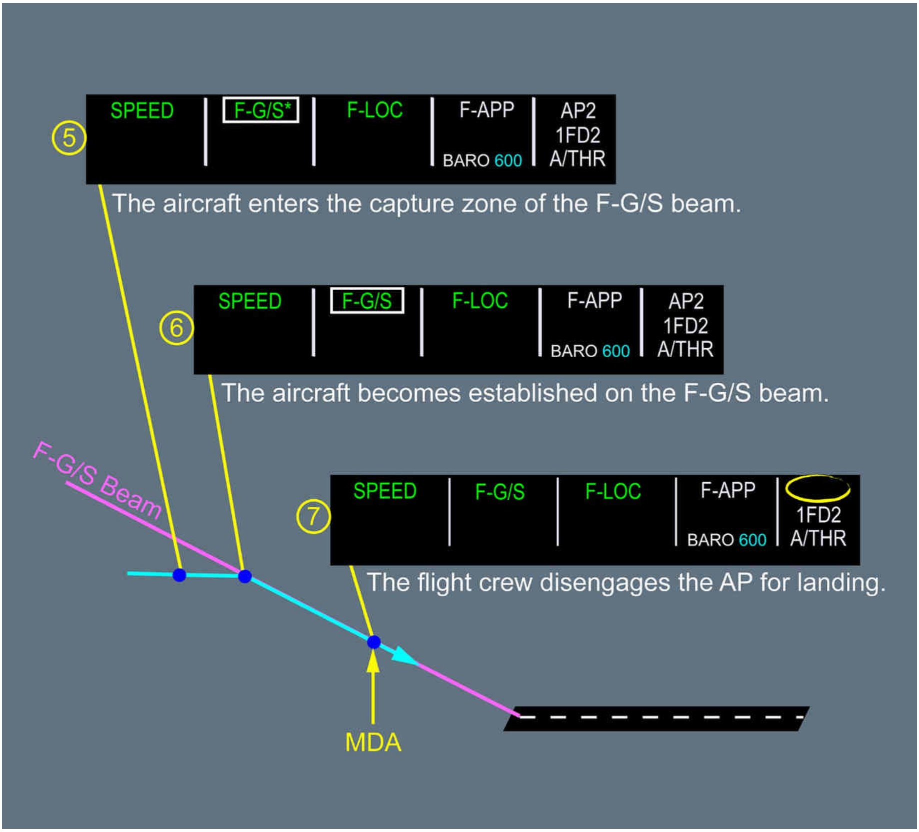
1 Ident.: DSC-22_30-40-120-80-00025297.0001001 / 18 MAY 22
Applicable to: MSN 11531

The flight crew selected a VOR approach on the ARRIVAL page. The FMS approach phase is activated.
AP2 is engaged, and a heading is selected to fly toward the F-LOC beam.

VOR Approach Flown with FLS Function - Step 1 to 4


SPEED
ALT
HDG
F-APP
BARO 600
AP2
1FD2
A/THR
①
The flight crew presses the LS pb on the EFIS CP.
SPEED
ALT
F-G/S
HDG
F-LOC
F-APP
BARO 600
AP2
1FD2
A/THR
②
The flight crew presses the APPR pb.
SPEED
ALT
F-G/S
F-LOC*
F-APP
BARO 600
AP2
1FD2
A/THR
③
The aircraft enters the capture zone of the F-LOC beam.
SPEED
ALT
F-G/S
F-LOC
F-APP
BARO 600
AP2
1FD2
A/THR
④
The aircraft becomes established on the F-LOC beam.
F-LOC Beam

VOR Approach Flown with FLS Function - Step 5 to 7

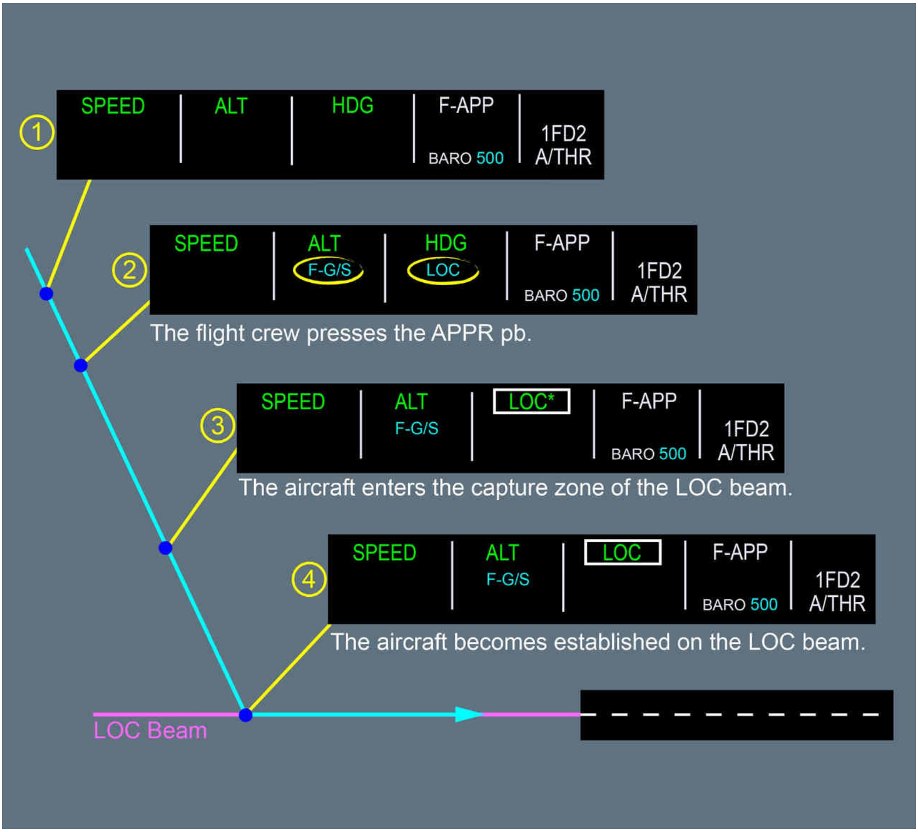

5
SPEED
F-G/S*
F-LOC
F-APP
BARO 600
AP2
1FD2
A/THR
The aircraft enters the capture zone of the F-G/S beam.
6
SPEED
F-G/S
F-LOC
F-APP
BARO 600
AP2
1FD2
A/THR
The aircraft becomes established on the F-G/S beam.
F-G/S Beam
7
SPEED
F-G/S
F-LOC
F-APP
BARO 600
1FD2
A/THR
The flight crew disengages the AP for landing.
MDA

LOC ONLY APPROACH FLOWN WITH FLS FUNCTION

2 Ident.: DSC-22_30-40-120-80-00025298.0001001 / 18 MAY 22
Applicable to: MSN 11531

The flight crew selected a LOC approach on the ARRIVAL page.
The FMS approach phase is activated, the FD is engaged and the AP is not engaged.
A heading, is selected to fly toward the LOC beam, and the flight crew already pressed the LS pb to display the approach and landing capability.

LOC only Approach Flown with FLS Function - Step 1 to 4

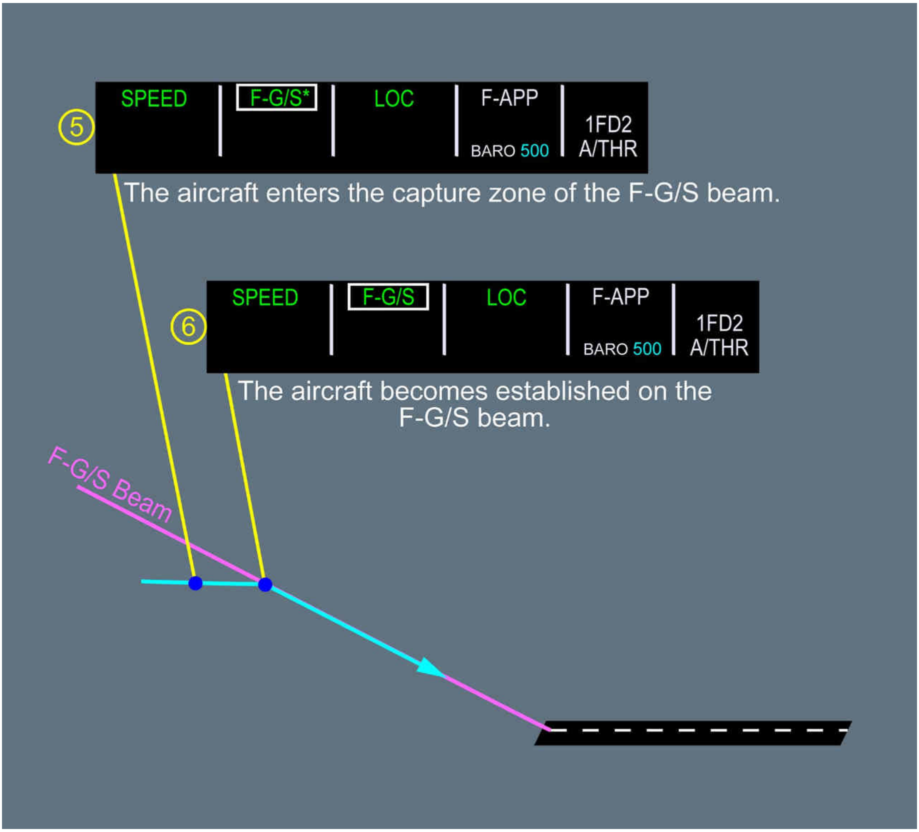

①
SPEED
ALT
HDG
F-APP
BARO 500
1FD2
A/THR
②
SPEED
ALT
F-G/S
HDG
LOC
F-APP
BARO 500
1FD2
A/THR
③
SPEED
ALT
F-G/S
LOC*
F-APP
BARO 500
1FD2
A/THR
④
SPEED
ALT
F-G/S
LOC
F-APP
BARO 500
1FD2
A/THR
LOC Beam

The flight crew presses the APPR pb.

The aircraft enters the capture zone of the LOC beam.

The aircraft becomes established on the LOC beam.

LOC only Approach Flown with FLS Function - Step 5 to 6

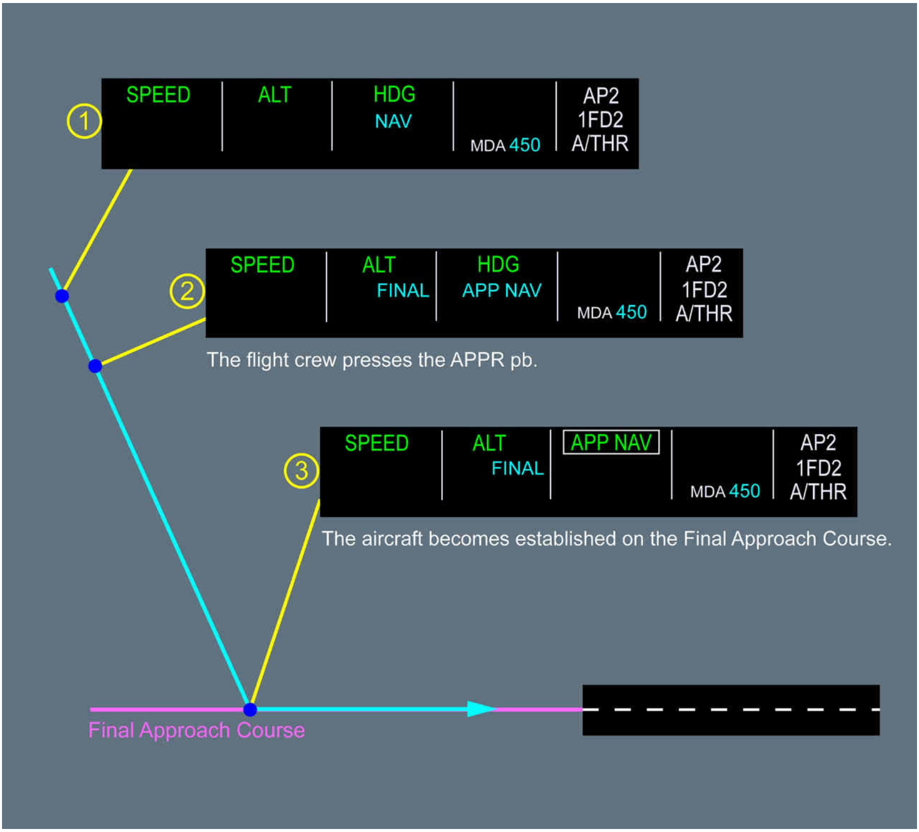

⑤
SPEED
F-G/S*
LOC
F-APP
BARO 500
1FD2
A/THR
The aircraft enters the capture zone of the F-G/S beam.
⑥
SPEED
F-G/S
LOC
F-APP
BARO 500
1FD2
A/THR
The aircraft becomes established on the F-G/S beam.
F-G/S Beam

VOR APPROACH FLOWN WITH FINAL APP GUIDANCE MODE

Ident.: DSC-22_30-40-120-80-00025299.0001001 / 18 MAY 22
Applicable to: ALL

The flight crew selected a VOR approach on the ARRIVAL page. The FMS approach phase is activated.
AP2 is engaged, and a heading is selected to fly toward the Final Approach Course.

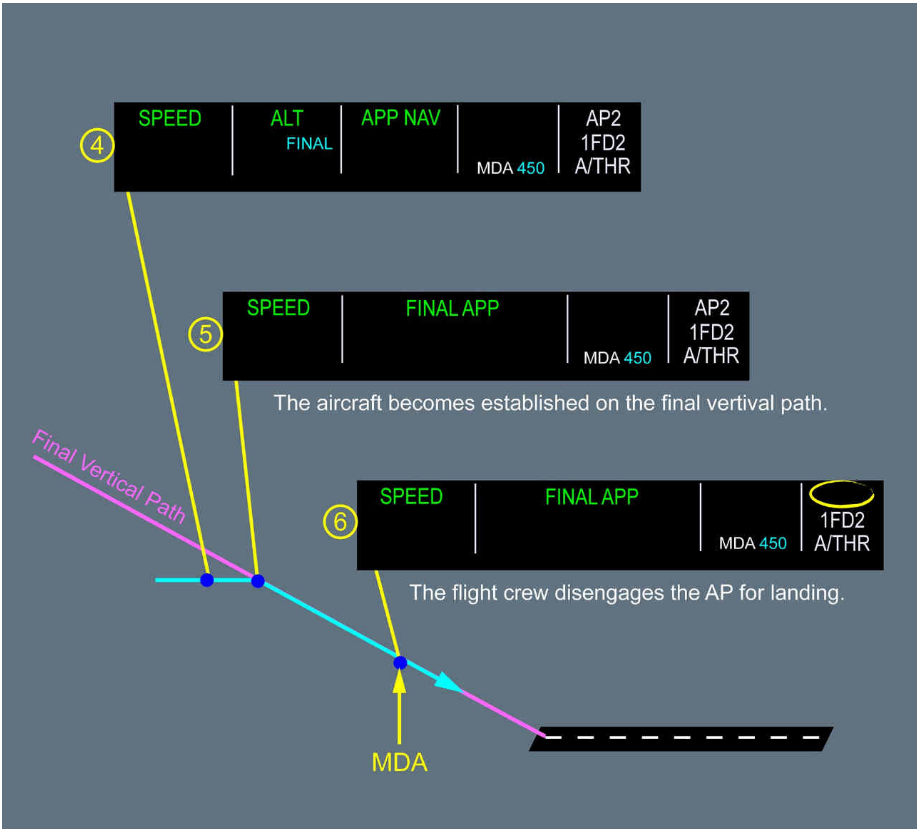
VOR Approach Flown with FINAL APP Guidance Mode - Step 1 to 3


①
SPEED
ALT
HDG
NAV
MDA 450
AP2
1FD2
A/THR
②
SPEED
ALT
FINAL
HDG
APP NAV
MDA 450
AP2
1FD2
A/THR
③
SPEED
ALT
FINAL
APP NAV
MDA 450
AP2
1FD2
A/THR
Final Approach Course

The flight crew presses the APPR pb.

The aircraft becomes established on the Final Approach Course.

VOR Approach Flown with FINAL APP Guidance Mode - Step 4 to 6


④
SPEED
ALT
FINAL
APP NAV
MDA 450
AP2
1FD2
A/THR
⑤
SPEED
FINAL APP
MDA 450
AP2
1FD2
A/THR
⑥
SPEED
FINAL APP
MDA 450
1FD2
A/THR
Final Vertical Path
MDA

The aircraft becomes established on the final vertival path.

The flight crew disengages the AP for landing.

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GENERAL

Ident.: DSC-22_30-50-10-00025367.0001001 / 18 MAY 22
Applicable to: ALL

The A/THR manages the engine thrust.
The A/THR is either armed, active, or disconnected.

When active, two different types of A/THR modes are available:
- The SPEED/MACH mode:
  The A/THR continuously adjusts the thrust in order to maintain a Speed/Mach target (e.g. during cruise, and approach).
- The THRUST modes:
  The A/THR controls a fixed thrust, in accordance with the engaged THRUST mode.

The A/THR modes are automatically linked to the AP/FD vertical modes:
- When an AP/FD vertical mode controls the trajectory (e.g. altitude acquire modes, altitude hold modes, V/S/FPA, G/S, F-G/S ◁✻), the A/THR is in SPEED/MACH mode.
- When an AP/FD vertical mode adjusts the aircraft pitch in order to maintain a speed/Mach target (e.g. climb, descent), the A/THR is in THRUST mode.

When the A/THR is active, the A/THR thrust target is sent to the FADECs. The FADECs computes thrust commands, in accordance with the aircraft environment and status. The thrust commands are then sent to the engines.
When the A/THR is armed, the FADECs compute the thrust commands in accordance with the thrust lever positions, and the selection of PERF TAKEOFF page.
When the A/THR is disconnected, the FADECs compute the thrust commands in accordance with the thrust lever positions.

Intentionally left blank

THRUST LEVERS

Ident.: DSC-22_30-50-20-00025369.0001001 / 18 MAY 22
Applicable to: ALL

The position of the thrust levers determines the A/THR status: active, armed or disconnected.

The thrust levers have:
- Four detents: IDLE, CL, FLX-MCT, TOGA
- Two instinctive disconnect pushbuttons.

The flight crew uses the thrust levers to:
- Arm, activate, or disconnect the A/THR
- Engage the takeoff and go-around modes
- Manually control the thrust of each engine, when the A/THR is disconnected
- Engage reverse thrust.

Intentionally left blank

PRELIMINARY CONDITIONS REQUIRED FOR A/THR ARMING AND ACTIVATION

Applicable to: ALL

Ident.: DSC-22_30-50-30-A-00025370.0001001 / 18 MAY 22

A/THR can only arm when all of the following are applicable:
- At least one FMGC is available, and
- At least one FAC is available, and
- Two ADIRUs are available, and
- Two FADECs are available, and
- At least one channel of the FCU is available, and
- At least one LGCIU is available, and
- The A/THR is not manually disabled (Instinctive Disconnect pb has not been pressed for more than 15 s).

A/THR ARMING

Ident.: DSC-22_30-50-30-B-00025374.0001001 / 18 MAY 22
Applicable to: ALL

ARMING CONDITIONS

The A/THR arms, if one of the following occurs:
- At takeoff, the flight crew sets at least one thrust lever:
  - To the TOGA detent, or
  - To the FLX-MCT detent, when a FLX TO temperature or a DRT TO level (Derated Takeoff ◁) is entered in the PERF TAKEOFF page

  SRS TO engages
- By engaging a go-around (MAN TOGA), the flight crew sets the thrust levers to the TOGA detent: SRS GA engages
- By engaging a Soft Go-Around ◁ (MAN GA SOFT), the flight crew sets the thrust levers to the TOGA detent, then to the FLX/MCT detent: SRS GA engages
- The flight crew presses the A/THR pb on the FCU, when the A/THR is disconnected, provided that all the following occur:
  - The thrust levers are outside of the A/THR active range:
    - Above CL detent (AEO), or
    - Above FLX-MCT detent (OEI)
  - The aircraft is above 100 ft RA, or all RAs are failed
  - LAND or FLARE is not engaged.
- AP/FD TCAS ◁ engages due to a RA, when the A/THR is disconnected and the thrust levers are outside of the A/THR active range.

Ident.: DSC-22_30-50-30-B-00025631.0001001 / 18 MAY 22
Applicable to: MSN 10949-11597

- When the aircraft is in an overspeed situation above 400 ft:
  - The speed is above VMAX + 5 kt in clean configuration, or
  - The speed is above VMAX + 9 kt, when slats or flaps are extended.

  Note: *A triple click sounds when the A/THR arms.*

Ident.: DSC-22_30-50-30-B-00025632.0001001 / 18 MAY 22
Applicable to: ALL

In addition, A/THR can be armed by a flight crew action on the thrust levers, when the A/THR is active.

Ident.: DSC-22_30-50-30-B-00025376.0001001 / 18 MAY 22
Applicable to: ALL

ANNUNCIATION

When the A/THR is armed:
- The A/THR pb light of the FCU is on
- The FMA displays:
  - A/THR on Line 3 of the "AP, FD, and A/THR Engagement Status" column
  - One of the following A/THR modes in the "A/THR messages and modes" column: MAN TOGA, MAN FLEX +XX, MAN DTO, MAN GA SOFT ◁✻ , MAN MCT, or MAN THR

As long as the A/THR is not active, the A/THR messages on the FMA displays the manual thrust as follows:

Conditions		Thrust lever position	FMA Message(1)
From takeoff, and until the thrust reduction altitude	The flight crew performs a takeoff with no selected FLX TO temperature, or DRT TO level (Derated Takeoff ◁✻)	TOGA (2) (3)	MAN TOGA
	The flight crew entered a FLX TO temperature in the FMS PERF TAKEOFF page	FLX-MCT (3)	MAN FLX +XX
	The flight crew entered a DRT TO level (Derated Takeoff ◁✻) in the PERF TAKEOFF page	FLX-MCT (3)	MAN DTO

Continued on the following page

Continued from the previous page

Conditions		Thrust lever position	FMA Message(1)
In descent, or approach	The flight crew performs a go-around	TOGA *(3)* *(4)*	MAN TOGA
	The flight crew performs a soft go-around ◁	TOGA then FLX-MCT *(3)* *(4)*	MAN GA SOFT

(1) *The FMA message appears in a white box, on the first and second lines of the "A/THR messages and modes" column.*

(2) *If the flight crew sets the thrust levers to FLX-MCT, MAN MCT will appear on FMA.*

(3) *If the flight crew sets the thrust levers between CL and TOGA, but not at the CL, FLX-MCT, or TOGA detent, MAN THR will appear on FMA.*

(4) *If the flight crew sets the thrust levers directly to FLX-MCT and not TOGA then FLX-MCT, the MAN THR will appear on the FMA.*

A/THR ACTIVATION

Ident.: DSC-22_30-50-30-C-00025377.0001001 / 18 MAY 22
Applicable to: ALL

GENERAL

When active, the A/THR controls:
- The thrust, when an A/THR THRUST mode is engaged, or
- The speed/Mach, when the A/THR SPEED/MACH mode is engaged.

The thrust lever positions determine the maximum thrust that the A/THR can command (except in A.FLOOR).

The normal position of the thrust levers is with A/THR active is:
- The CL detent (AEO)
- The FLX-MCT detent for the operative engine (OEI).

Note: *The thrust lever of a failed engine should be in the IDLE detent.*

Ident.: DSC-22_30-50-30-C-00025378.0001001 / 18 MAY 22
Applicable to: ALL

ACTIVATION CONDITIONS

The A/THR activates, if one of the following occurs:

- The A/THR is armed, and the flight crew sets the thrust levers in the active range:

L12

Engine Condition	Active Range
AEO	Both thrust levers are above idle, and at or below the CL detent. The A/THR also activates when: - One thrust lever is above the idle detent, and at or below the CL detent, and - The other thrust lever is • At the idle detent, or • Above the CL detent, and at or below the FLX-MCT detent. *Note: In the case of takeoff with FLEX or Derated Takeoff ⊲ selection, the thrust lever must be below the FLX-MCT detent.*
OEI(1)	One thrust levers is above the idle detent, and at or below FLX-MCT detent. If the engine-out occurs during a FLEX or Derated Takeoff ⊲ , the flight crew activates the A/THR by: 1. Setting the thrust lever of the operative engine below FLX-MCT, 2. Then, settings the thrust lever of the operative engines back to FLX-MCT.

(1) *The thrust lever of the failed engine should be at the idle detent.*

- The flight crew presses the A/THR pb on the FCU when the A/THR is disconnected, provided that:
  - The thrust levers are in the active range
  - L2 The aircraft is above 100 ft RA, or all RAs are failed
  - LAND or FLARE is not engaged.
- L1 A.FLOOR engages

  Note: A.FLOOR engages regardless of the initial A/THR status, and the position of the thrust levers.

- AP/FD TCAS ⊲ engages, upon a RA, when the A/THR is disconnected and the thrust levers are in the active range.

Ident.: DSC-22_30-50-30-C-00025379.0001001 / 18 MAY 22
Applicable to: ALL

ANNUNCIATION

When the A/THR is active:
- The A/THR pb light is illuminated on the FCU
- The EWD displays the thrust target
- The FMA displays:
  - A/THR on Line 3 of the "AP, FD, and A/THR Engagement Status" column
  - A/THR mode on Line 1 of the "A/THR messages and modes" column.

Ident.: DSC-22_30-50-30-C-00025848.0001001 / 18 MAY 22
2 **Applicable to: MSN 10949-11597**

A/THR IN OVERSPEED

When the A/THR is active in an overspeed situation, the A/THR targets one of the following speed, whichever is lower:
- The speed bug indicated on the PFD, or
- VMAX - 5 kt in clean configuration, or
- VMAX when slats or flaps are extended.

Note: *When the A/THR is active, the FMA displays SPEED or MACH associated with a flashing amber box.*

Ident.: DSC-22_30-50-30-C-00025380.0001001 / 18 MAY 22
Applicable to: ALL

EFFECT OF THRUST LEVER MOVEMENT WHEN THE A/THR IS ACTIVE

A/THR TRANSITION FROM ACTIVE TO ARMED

When the A/THR is active, the A/THR becomes armed as described in the following table:

L12

Engine Condition	Thrust Lever Position
AEO	All the thrust levers are above the CL detent. Or at least one thrust lever is above the FLX-MCT detent.
OEI	The thrust lever of the operative engine is above the FLX-MCT detent.

When the A/THR becomes armed, the thrust immediately increases, in accordance with the thrust lever position (above CL detent (AEO) or above FLX-MCT detent (OEI)).
The FMA displays MAN THR on Line 1 of the "A/THR Modes and Messages" column.

A/THR LIMITED

The A/THR limits the engine thrust at the thrust levers position when:

- All the thrust levers are set below the CL detent (AEO), or
- The thrust lever of all operative engines are set below FLX-MCT detent (OEI).

When the thrust is limited, the AUTO FLT A/THR LIMITED alert triggers.
L2 The AUTO FLT A/THR LIMITED alert is repeated every 5 s, until the flight crew moves the thrust levers to the CL detent (AEO) or FLX-MCT detent (OEI).
L1 The FMA displays THR LVR on Line 1 of the "A/THR Modes and Messages" column.
LVR CLB or LVR MCT flashes on Line 3 in the "A/THR Modes and Messages" of the FMA.
This reminds the flight crew that the normal position of the thrust levers, when A/THR is active, is the CL detent (AEO) or the FLX-MCT detent (OEI).

L2 LVR CLB flashes on the FMA, when all the following conditions are applicable:
- All engines are operative (AEO)
- The position of the thrust levers are not appropriate:
  - Both thrust levers are below the CL detent, or
  - One thrust lever is above CL detent
- The aircraft is above 100 ft
- No windshear is detected.

LVR MCT flashes on the FMA, when all the following conditions are applicable:
- One engine is inoperative (OEI)
- The position of the thrust lever of the operative engines is not appropriate:
  - The thrust lever is below the FLX-MCT detent, or
  - The aircraft is above the thrust reduction altitude, and the thrust lever is above FLX-MCT
- The aircraft is above 100 ft
- No windshear is detected.

L1 ASYMMETRIC THRUST LEVERS

LVR ASYM flashes on the FMA if all the following conditions are satisfied:
- The A/THR is armed or active, and
- At least one thrust lever is set to CL detent or FLX-MCT detent , and
- One thrust lever is not in the same position, and
- L2 The aircraft is above 100 ft RA.

L1 *Note:* ***LVR ASYM*** *flashes until the flight crew sets all thrust levers to the CL detent or the FLX-MCT detent.*
LVR ASYM *will not be displayed in the case of OEI or if the flight crew sets one thrust lever to the IDLE detent.*

A/THR DISCONNECTION

Ident.: DSC-22_30-50-40-A-00025381.0001001 / 18 MAY 22
Applicable to: ALL

GENERAL

STANDARD DISCONNECTION

The A/THR disconnects if one of the following occurs:
- The flight crew presses an A/THR instinctive disconnect pb, or

  Note: *In normal operation, if the flight crew presses the A/THR instinctive disconnect pb, the engine thrust target is set to the thrust lever position.*
- The flight crew sets all the thrust levers to the IDLE detent.

NON-STANDARD DISCONNECTION

The A/THR disconnects if one of the following occurs:
- The flight crew presses the A/THR pb on the FCU
- The A/THR becomes inoperative

L2 One of the preliminary conditions required for A/THR arming or activation is no longer applicable.

Ident.: DSC-22_30-50-40-A-00025633.0002001 / 18 MAY 22
1 **Applicable to: MSN 10949-11597**

- When the airspeed reaches VLS after an A.FLOOR activation, the A/THR disconnects if not connected before the A.FLOOR activation.

Ident.: DSC-22_30-50-40-A-00025634.0001001 / 18 MAY 22
2 **Applicable to: MSN 10949-11597**

- When the airspeed reaches VMAX after an automatic arming or activation due to an overspeed situation, the A/THR disconnects if not armed nor active before the overspeed situation.

Ident.: DSC-22_30-50-40-A-00025635.0001001 / 18 MAY 22
Applicable to: ALL

L2 For more information on how to the set the autothrust to off, *Refer to FCTM/AS-FG-10-2 To Set Autothrust To Off*.

L1

CAUTION	If the flight crew presses, and holds one A/THR instinctive disconnect pb for more than 15 s, the A/THR will disconnect for the remainder of the flight. All A/THR modes, including A.FLOOR, will be lost. The A/THR will be recovered at the next FMGC power-up on the ground.

Ident.: DSC-22_30-50-40-A-00025382.0002001 / 18 MAY 22
Applicable to: ALL

THRUST LOCK FUNCTION

The thrust lock function activates if an A/THR non-standard disconnection occurs.

As long as the thrust lock function is active, all the following are applicable:
- The engines maintain the thrust at the value set before the A/THR disconnection
- The FMA displays the flashing THR LK message on the third line of the first column
- The ECAM alert ENG THRUST LOCKED appears every 5 s.

The thrust lock deactivates as soon as the flight crew moves the thrust levers.

A/THR ANNUNCIATION AND WARNINGS

Applicable to: ALL

Ident.: DSC-22_30-50-40-B-00025383.0001001 / 18 MAY 22

STANDARD DISCONNECTION

In the case of a standard disconnection (*Refer to DSC-22_30-50-40 A/THR Disconnection*), all the following occur:
- The ECAM alert AUTO FLT A/THR OFF appears
  L2 The maximum duration is 9 s
- L1 The MASTER CAUT light comes on
  L2 The maximum duration is 3 s
- L1 The single chime sounds.

The flight crew can press the A/THR instinctive disconnect pb, or the MASTER CAUT light to clear all the associated indicators.

Note: *If the aircraft is below 50 ft RA, and the flight crew sets all thrust levers to IDLE, no alert appears.*

Ident.: DSC-22_30-50-40-B-00025384.0001001 / 18 MAY 22

NON-STANDARD DISCONNECTION

In the case of a non-standard disconnection (*Refer to DSC-22_30-50-40 A/THR Disconnection*), all the following occur:

- The ECAM alert AUTO FLT A/THR OFF appears
- The MASTER CAUT light comes on
- The single chime sounds.

The alerts disappear if the flight crew:

- Presses the A/THR instinctive disconnect pb, or
- Presses the MASTER CAUT pb, or
- Arms or activates the A/THR.

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GENERAL

Ident.: DSC-22_30-50-50-00025386.0001001 / 18 MAY 22
Applicable to: ALL

When the A/THR is active, an A/THR mode is engaged.
The A/THR modes are: THRUST, SPEED/MACH, RETARD and ALPHA FLOOR.

THRUST MODE

Ident.: DSC-22_30-50-50-00025387.0001001 / 18 MAY 22
Applicable to: ALL

The A/THR is in THRUST mode if the engaged vertical AP/FD modes is SRS TO, OP CLB, CLB, OP DES, DES, or SRS GA in idle path. The target thrust depends on the engaged THRUST mode and can be limited by the thrust lever position, if the thrust levers are below the CL detent (AEO) or the FLX-MCT detent (OEI).
The following table shows the engagement conditions of the THRUST mode with the associated target thrust :

THRUST mode (Displayed on FMA)	Engagement Conditions (1)	Target Thrust
THR CLB	All of the following conditions are applicable: - SRS TO, CLB, OP CLB, EXP CLB ◁ or SRS GA is engaged, and - The most forward thrust lever is set to CL detent.	CLB
THR MCT	All of the following conditions are applicable: - SRS TO, CLB, OP CLB, EXP CLB ◁ or SRS GA is engaged, and - The most forward thrust lever is set to MCT detent, and - One engine is inoperative.	MCT
THR IDLE	DES, OP DES, EXP DES ◁ or the A/THR RETARD mode is engaged.	IDLE
THR LVR	One of the following conditions is applicable: - All thrust levers are below CL detent, and SRS TO, CLB, OP CLB, EXP CLB ◁ or SRS GA is engaged, or - The most forward thrust lever is between CL and MCT detents, and SRS TO, CLB, OP CLB, EXP CLB ◁ or SRS GA is engaged.	Thrust corresponding to thrust levers position

(1) *The thrust lever position refers to the thrust lever of operative engines. The thrust lever of an inoperative engine should be at the IDLE detent.*

SPEED/MACH MODE

Ident.: DSC-22_30-50-50-A-00025388.0001001 / 18 MAY 22
Applicable to: ALL

The SPEED or MACH mode of the A/THR adjusts the thrust to acquire and maintain a target speed or Mach.

The A/THR is in SPEED or MACH mode if one of the following AP/FD vertical modes is engaged:
- V/S / FPA, or
- Altitude capture and hold modes: ALT*, ALT, ALT CST*, ALT CST, ALT CRZ*, ALT CRZ, or
- DES in geometric path, or
- Approach modes: G/S*, G/S, F-G/S* ◁✻ , F-G/S ◁✻ , FINAL APP, or
- AP/FD TCAS ◁✻ .

If all APs and all FDs are disengaged and the A/THR is active, the A/THR is in SPEED/MACH mode.

Ident.: DSC-22_30-50-50-A-00025389.0001001 / 18 MAY 22
Applicable to: ALL

The speed/Mach target is:
- **Selected** if the target comes from the SPD/MACH value that the flight crew selects on the FCU
- **Managed** if the target comes from the FMS.

When in SPEED or MACH mode, the A/THR does not allow speed excursions beyond the following limits, regardless of the target speed or Mach number:
- As a maximum speed VMAX in high lift configuration, VMAX - 5 kt in clean configuration
- As a minimum speed:
  - For a selected speed target, VLS
  - For a managed speed target, the maneuvering speed of the current slats/flaps configuration (VAPP, F, S, GD).

Ident.: DSC-22_30-50-50-A-00025390.0001001 / 18 MAY 22
Applicable to: ALL

Note: *The changeover from SPEED to MACH or vice versa can be done automatically by the FMGC or manually by the flight crew by pressing the SPD/MACH pb on the FCU.*

Ident.: DSC-22_30-50-50-A-00025391.0001001 / 18 MAY 22
1 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 02924-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

A/THR APPROACH MODE

Below 3 200 ft RA, with at least CONF 1, the A/THR behavior is optimized:

- Above 150 ft RA, to be more responsive to speed variations
- Below 150 ft RA, to be less responsive to speed variations. This logic exists to avoid large thrust increases during the lower segment of the approach that may lead to destabilization and possible long flare.

RETARD MODE

Ident.: DSC-22_30-50-50-00025393.0001001 / 18 MAY 22
Applicable to: ALL

The A/THR RETARD mode is only available during an automatic landing.

The RETARD mode engagement occurs as follows:
1. At least one AP is engaged. LAND and A/THR SPEED mode are engaged
2. FLARE engages
3. When the aircraft reaches approximately 30 ft RA, the A/THR RETARD mode automatically engages. The FMA displays THR IDLE and the A/THR sets the thrust to idle
4. A RETARD callout triggers at 10 ft RA, asking the flight crew to set the thrust levers to the IDLE detent
5. The flight crew sets the thrust levers to IDLE detent: The A/THR disconnects, and the RETARD mode disengages.

If the last AP disengages when RETARD is engaged, RETARD disengages, and SPEED engages.

Note: *In manual landing, the RETARD callout triggers at 20 ft RA.*

In manual or automatic landing, the RETARD callout triggers, independently of the thrust levers position (*Refer to DSC-22_30-40-120-80 ILS Approach and Autoland*).

A/THR MODE REVERSIONS

Ident.: DSC-22_30-50-50-00025368.0001001 / 18 MAY 22
Applicable to: ALL

The following table presents the A/THR mode reversions:

Initial A/THR Mode	A/THR Mode after Reversion	Conditions Leading to A/THR Mode Reversion	Warning
THRUST	SPEED/MACH	The aircraft does not follow the speed target: - The aircraft speed is below VLS - 2 kt when DES, OP DES or EXP DES ◁✳ is engaged, or - The aircraft speed is above VMAX + 4 kt when CLB , OP CLB or EXP CLB ◁✳ is engaged. Note: *If the FD is engaged, the FD also disengages.*	A triple click audio indicator sounds. If the aircraft speed goes above VMAX + 4 kt, the OVERSPEED alert triggers.
Whatever A/THR mode. The A/THR can be armed, active, or disconnected.	A.FLOOR	*Refer to DSC-27-20-10-20 Protections - High Angle of Attack Protection*	*Refer to DSC-22_30-50-50 ALPHA FLOOR*

ALPHA FLOOR

Ident.: DSC-22_30-50-50-00025394.0002001 / 18 MAY 22

2 **Applicable to: MSN 10949-11597**

ALPHA FLOOR is a protection that commands TOGA thrust, regardless of the position of the thrust levers. This protection is available from lift-off to 100 ft RA on approach.
When ALPHA FLOOR conditions are met, the FMA displays A.FLOOR surrounded by a flashing amber box and the EWD displays A.FLOOR.

When ALPHA FLOOR conditions are no longer applicable and the speed is above VLS:
- If the A/THR was not active before A.FLOOR mode engagement, the thrust reverts to manual thrust. The level of thrust is set in accordance with the position of the thrust levers.
- If the A/THR was active before A.FLOOR mode engagement, the thrust reverts to the A/THR mode which corresponds to the current AP/FD.

For more information on the ALPHA FLOOR activation and inhibition conditions, *Refer to DSC-27-20-10-20 Protections - General*.

ALPHA FLOOR

Ident.: DSC-22_30-50-50-00025394.0001001 / 18 MAY 22

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

ALPHA FLOOR is a protection that commands TOGA thrust, regardless of the position of the thrust levers. This protection is available from lift-off to 100 ft RA on approach.

When ALPHA FLOOR conditions are met, the FMA displays A.FLOOR surrounded by a flashing amber box and the EWD displays A.FLOOR.

When ALPHA FLOOR conditions are no longer applicable and the speed is above VLS:
- The FMA displays TOGA LK surrounded by a flashing amber box,
- The TOGA thrust is frozen.

To cancel A.FLOOR or TOGA LK, the flight crew must disconnect the autothrust.
For more information on the ALPHA FLOOR activation and inhibition conditions, *Refer to DSC-27-20-10-20 Protections - General*.

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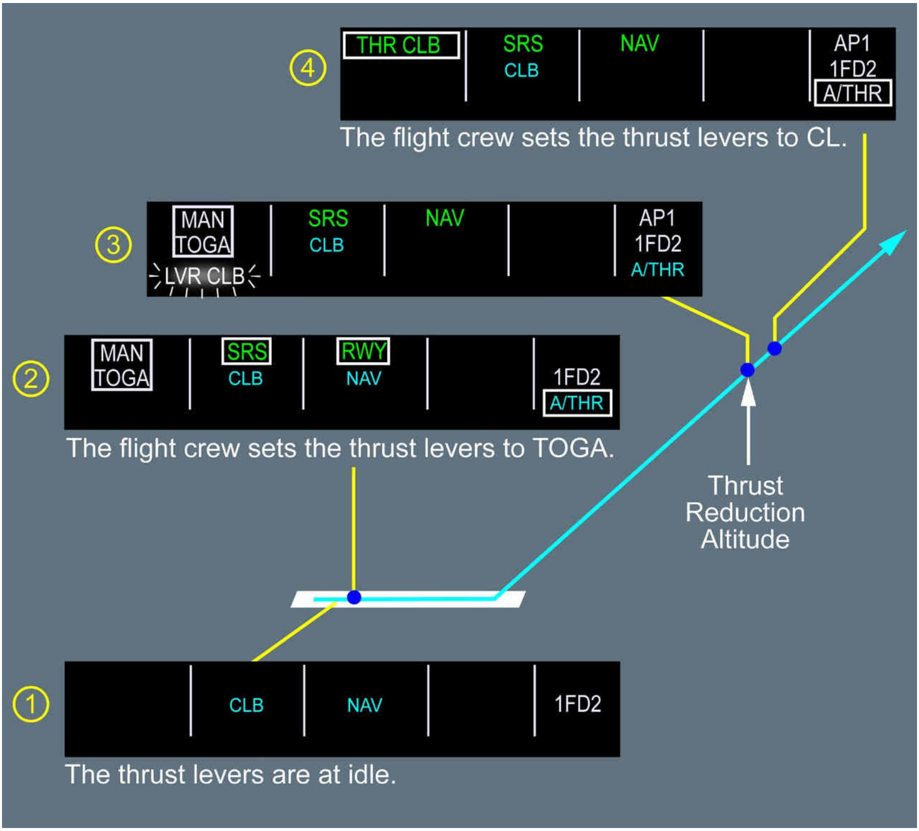
FROM TAKEOFF TO THRUST REDUCTION ALTITUDE

Ident.: DSC-22_30-50-60-00025349.0001001 / 18 MAY 22
Applicable to: ALL

The aircraft is on ground, and the flight crew performs a takeoff with no selected FLX TO temperature, or DRT TO level (Derated Takeoff ◁) in the PERF TAKEOFF page:

1. The thrust levers are in the IDLE detent
2. The flight crew sets the thrust levers to TOGA:
   - A/THR arms
   - The engines thrust increases to TOGA
   - MAN TOGA appears on the FMA
   - SRS TO engages.
3. When the aircraft reaches the thrust reduction altitude, LVR CLB flashes
4. The flight crew sets the thrust levers to the CL detent:
   - A/THR activates
   - THRCLB appears on the FMA.


④
THR CLB
SRS
CLB
NAV
AP1
1FD2
A/THR
The flight crew sets the thrust levers to CL.
③
MAN
TOGA
LVR CLB
SRS
CLB
NAV
AP1
1FD2
A/THR
②
MAN
TOGA
SRS
CLB
RWY
NAV
1FD2
A/THR
The flight crew sets the thrust levers to TOGA.
Thrust
Reduction
Altitude
①
CLB
NAV
1FD2
The thrust levers are at idle.

FROM SOFT GO-AROUND TO THRUST REDUCTION ALTITUDE

Ident.: DSC-22_30-50-60-00025350.0001001 / 03 NOV 22

1 **Applicable to: MSN 08495-09324, 10949-11597**

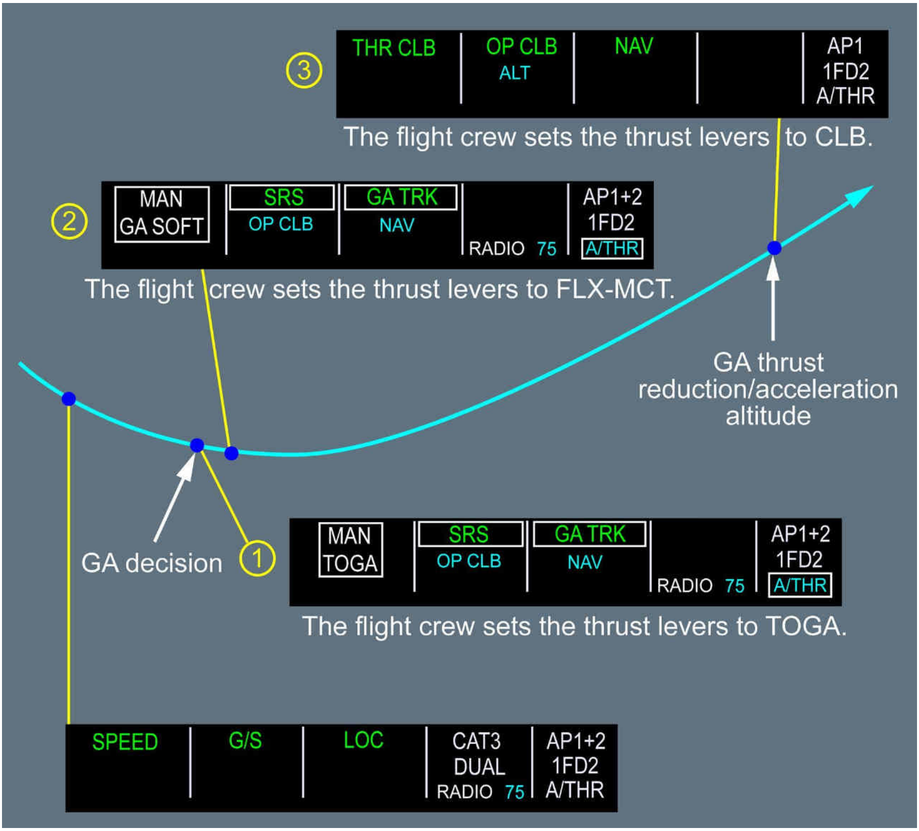
The flight crew performs a soft go-around when the thrust levers are set to TOGA then to FLX-MCT detent:

1. The flight crew sets the thrust levers to the TOGA detent:
   - A/THR arms
   - The engines thrust increases to TOGA

- MAN TOGA appears on the FMA
- SRS GA vertical mode engages on the FMA.

2. Then, the flight crew sets the thrust levers to the FLX-MCT detent:
   - A/THR remains armed
   - The engines apply a computed thrust to target a vertical speed of approximately 2 300 ft/min, or TOGA if 2 300 ft/min cannot be reached
   - MAN GA SOFT appears on the FMA
   - SRS GA vertical mode remains engaged.
3. When the aircraft reaches the thrust reduction altitude, LVR CLB flashes, and the flight crew sets the thrust levers to the CL detent:
   - A/THR activates
   - THR CLB appears on the FMA.

Note:
- *The soft go-around function is only available with both engines operative. Therefore, if one engine is inoperative, the flight crew must apply and keep TOGA during go-around. Then, to activate the climb phase, the flight crew must set the thrust levers to the FLX-MCT detent.*
- *If an engine failure occurs when the soft go-around function is engaged, LVR TOGA flashes on the FMA.*


③
THR CLB
OP CLB
ALT
NAV
AP1
1FD2
A/THR
The flight crew sets the thrust levers to CLB.
②
MAN
GA SOFT
SRS
OP CLB
GA TRK
NAV
RADIO 75
AP1+2
1FD2
A/THR
The flight crew sets the thrust levers to FLX-MCT.
GA thrust
reduction/acceleration
altitude
GA decision
①
MAN
TOGA
SRS
OP CLB
GA TRK
NAV
RADIO 75
AP1+2
1FD2
A/THR
The flight crew sets the thrust levers to TOGA.
SPEED
G/S
LOC
CAT3
DUAL
RADIO 75
AP1+2
1FD2
A/THR

GENERAL

Ident.: DSC-22_30-60-10-00025742.0001001 / 18 MAY 22
Applicable to: ALL

The speed/Mach control is:
- Managed, when the target comes from the FMS
- Selected, when the target comes from the SPD/MACH FCU window.

In flight, either the AP/FD pitch control or the A/THR may acquire and hold a target speed or Mach number, according to the engaged modes.

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GENERAL

Ident.: DSC-22_30-60-20-00025743.0001001 / 18 MAY 22
Applicable to: ALL

When the speed target is managed, the SPD/MACH window of the FCU shows dashes, and the corresponding dot is lighted. The PFD speed scale shows the speed target in magenta.
For more information on the Speed/Mach Control Area, *Refer to DSC-22_10-40-20 Speed/Mach Control Area*.
For more information on the PFD Airspeed Indications, *Refer to DSC-31-40 Airspeed*.

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-60-20-00025744.0001001 / 18 MAY 22
Applicable to: ALL

The SPD target is managed whenever AP or FD is engaged and one of the following occurs:
- On ground, when V2 is inserted in the PERF TAKEOFF page, or

Note: At takeoff, SRS TO will not engage if V2 is not available.

- The SRS TO or SRS GA is engaged, or
- The flight crew pushes the SPD/MACH knob on the FCU, and a managed speed/Mach target is available, or
- The EXP CLB ◁ or EXP DES ◁ is engaged, or
- The AP/FD TCAS ◁ mode is engaged.

Note:
1. *If all the APs and FDs are off, the managed speed/Mach is only available when the flight phase of the FMS is the approach phase. The A/THR is then in SPEED mode.*
2. *The flight crew may insert a speed/Mach in the PERF DES page to replace the ECON DES SPD.*
   In this case, although the value is entered by the flight crew, this speed target is still managed and is taken into account to compute the top of descent and the descent profile.

MANAGED SPEED/MACH TARGET

Applicable to: ALL

Ident.: DSC-22_30-60-20-A-00025745.0002001 / 18 MAY 22

For managed speed/Mach, the lowest target is VLS, and the highest target is:
- VMAX in the case VMAX is equal to VFE, or
- VMAX - 5 kt in the case VMAX is equal to VMO/MMO.

When speed/Mach is managed, the target is defined as follows:

L123

AP/FD Engaged Mode or FMS Flight Phase	Managed Speed/Mach Target
SRS TO is engaged, and the aircraft is on ground.	V2
SRS TO is engaged, and the aircraft is airborne.	V2 + 10 kt *Note:* *However, the magenta triangle appears on the V2 value, on the PFDs.*
SRS TO is engaged, and one engine is out.	Memorized aircraft speed at engine-out detection. The target value is limited by V2 and V2 + 15 kt.
SRS GA is engaged.	Memorized aircraft speed at SRS GA engagement. The lower limit of the target is the VAPP memorized at 700 ft RA. The higher limit of the target is the lowest value between: - VLS + 25 kt (or VLS + 15 kt OEI) - VMAX - 5 kt.
- The FMS flight phase is the approach phase In this case, the APs and/or FDs may be on or off Or - F-G/S ◁✳ , G/S, LAND, FLARE or ROLL OUT is engaged	VAPP, corrected by the Ground Speed Mini function (*Refer to DSC-22_30-60-20 Ground Speed Mini Function*). Before reaching the landing configuration, the speed will not go below: - Green Dot, in clean configuration - S, in CONF 1 - F, in CONF 2 - F, in CONF 3, when CONF FULL is the landing configuration (as defined in the PERF APPR page). VAPP is memorized at 700 ft RA, so if the FMS loses the VAPP below 700 ft RA, the managed speed target will still be computed. The lower limit of the managed speed target is the VAPP that is computed by the FMS, and displayed on the MCDU. If the VAPP computed by the FMS is not available, the VAPP is VLS + 5 kt. The higher limit of the managed speed target is the VFE NEXT (or VFE - 5 kt in full configuration) of the landing configuration.
For all other cases	The managed speed/Mach target is provided by the FMS: - If NAV is engaged, the managed speed/Mach target will be defined by the speed/Mach profile of the FMS flight plan. All the speed/Mach constraints are taken into account. - If NAV is not engaged, the managed speed/Mach target will be defined by the speed/Mach profile of the FMS flight plan. But the speed/Mach constraints are not taken into account. For information on the speed/Mach profile, *Refer to DSC-22_20-30-20-05 Flight Phases*.

Ident.: DSC-22_30-60-20-A-00025746.0001001 / 18 MAY 22

MANAGED SPEED TARGET MEMORIZATION

A dual FM failure has different consequences when it occurs in different phases of the flight.

The system handles target speed and SPD mode as follows:
- During approach with LOC and G/S, or F-LOC ◁ and F-G/S ◁ , or LOC and F-G/S ◁ , or LOC B/C ◁ and F-G/S ◁ engaged, and radio height <700 ft, the target speed is set to VAPP as previously memorized, and managed SPD target is maintained
- At go-around, the target speed becomes the memorized go-around speed, which is the higher of VAPP or the speed when go-around was initiated. Managed SPD target is maintained
- In all other cases, managed target speed reverts to selected, the value being the speed at the moment of the failure.

GROUND SPEED MINI FUNCTION

Ident.: DSC-22_30-60-20-B-00025747.0001001 / 18 MAY 22
Applicable to: ALL

GENERAL

When the aircraft flies an approach in managed speed, the managed speed target, displayed by the magenta triangle on the PFDs, is variable. This managed speed target is the VAPP, displayed on the PERF APPR page, corrected by the Ground Speed Mini function.

ACTIVATION CONDITIONS

The Ground Speed Mini function is active when:

- The speed is managed
- The FMS flight phase is the approach phase.

The Ground Speed Mini function does not correct Green Dot, S and F speeds.

PRINCIPLE

The Ground Speed Mini function takes advantage of the aircraft inertia when the wind varies during the approach in order to provide an appropriate indicated target speed (i.e. the managed target speed represented by the magenta triangle on the PFD). When the flight crew flies this indicated target speed, the energy of the aircraft is maintained above a minimum level that ensures standard aerodynamic margins versus the stall.
The minimum energy level is the energy level the aircraft will have at touchdown with an indicated airspeed equal to VAPP, and with the wind equal to the tower reported wind as inserted in the PERF APPR page. The ground speed then equals the Ground Speed Mini.
The Ground Speed Mini is not displayed to the flight crew.

During the approach, the FMGS continuously computes the managed target speed in order to keep the ground speed at or above the Ground Speed Mini.

Ident.: DSC-22_30-60-20-B-00025748.0001001 / 18 MAY 22
Applicable to: ALL

MANAGED SPEED TARGET COMPUTATION

The computation of the managed speed target uses the tower headwind component, the current headwind component, and the VAPP.

TOWER HEADWIND COMPONENT

The tower wind is the average wind provided by the ATIS or the tower. The flight crew enters the tower wind in the MAG WIND field in the PERF APPR page.
The tower headwind component is the projection of the MAG WIND on the runway axis. This computation is based on the runway inserted in the FMS active F-PLN.

CURRENT HEADWIND COMPONENT

The projection of the current wind measured by the ADIRS on the aircraft longitudinal axis is the current headwind component (instantaneous headwind).

Ident.: DSC-22_30-60-20-B-00025749.0002001 / 18 MAY 22
Applicable to: ALL

VAPP COMPUTATION

The FMS computes the VAPP, and displays it on the PERF APPR page. The VAPP computation takes into account the tower headwind component. VAPP is the highest of the following computations:

- VAPP = VLS + 1/3 x TWR HEADWIND COMPONENT, or
- VAPP = VLS + 5 kt.

Note: *"1/3 of the TWR HEADWIND COMPONENT" has 2 limits:*

- *0 kt as the minimum value (no wind or tailwind)*
- *+15 kt as the maximum value.*

The flight crew can manually modify the VAPP and the MAG WIND values on the PERF APPR page.

Ident.: DSC-22_30-60-20-B-00025750.0004001 / 18 MAY 22

1 **Applicable to: MSN 08495-09324, 10949-11597**

MANAGED SPEED TARGET COMPUTATION

The FG continuously computes the managed speed target that is equal to VAPP plus an additional increment. This increment takes into account the headwind variation during the final approach.

Managed speed target = VAPP + 1/3 x (CURRENT HEADWIND COMPONENT - TWR HEADWIND COMPONENT).

The managed speed target has the following limits:

- VAPP, as the minimum value
- VFE next, in CONF 0, 1, 2, 3, VFE - 5 kt in CONF FULL, as the maximum value.

Ident.: DSC-22_30-60-20-B-00025750.0002001 / 18 MAY 22

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**

MANAGED SPEED TARGET COMPUTATION

The FG continuously computes the managed speed target that is equal to VAPP plus an additional increment. This increment takes into account the headwind variation during the final approach.

Managed speed target = VAPP + (CURRENT HEADWIND COMPONENT - TWR HEADWIND COMPONENT).

The managed speed target has the following limits:

- VAPP, as the minimum value
- VFE next, in CONF 0, 1, 2, 3, VFE - 5 kt in CONF FULL, as the maximum value.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-60-20-00025751.0001001 / 18 MAY 22

Applicable to: ALL

Managed speed disengages any time the flight crew selects a speed target on the FCU, or if the speed was preselected.

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GENERAL

Ident.: DSC-22_30-60-30-00025752.0001001 / 18 MAY 22
Applicable to: ALL

When the speed target is selected, the SPD/MACH window of the FCU displays this speed target. The PFD displays the associated speed target on the airspeed scale. The flight crew uses the knob on the FCU to set this speed target.
For more information on the Speed/Mach Control Area, *Refer to DSC-22_10-40-20 Speed/Mach Control Area*.
For more information on the PFD Airspeed Indications, *Refer to DSC-31-40 Airspeed*.

Note: *If the selected speed/Mach target is set below VLS or above VMAX, with the autothrust active, the FMGS automatically limits the speed to:*
- *VLS, or*
- *VMAX in the case VMAX is equal to VFE, or*
- *VMAX - 5 kt in the case VMAX is equal to VMO/MMO.*

Selected speed has priority over managed speed. The only automatic change-over from selected to managed speed target may occur at go-around mode engagement.
In flight, if the situation calls for managed speed, both the PFD and the MCDU display a message proposing a manual change to managed speed (for example SET MANAGED SPEED, CHECK SPEED MODE, SET HOLD SPEED).

ENGAGEMENT CONDITIONS

Ident.: DSC-22_30-60-30-00025753.0001001 / 18 MAY 22
Applicable to: ALL

The speed/Mach target becomes selected, if one of the following occurs:
- The flight crew pulls out the SPD/MACH knob (earliest 5 s after lift-off), or
- Both AP/FDs are OFF (except in APPR phase), or
- The FM speed target is lost except in SRS, G/S, LAND, or go-aound or,
- The MCDU has a preselected speed for the next phase, and the aircraft transitions into that phase, or
- The FMGC is powered up in flight, or
- The AP/FD TCAS mode due to a RA.

DISENGAGEMENT CONDITIONS

Ident.: DSC-22_30-60-30-00025754.0001001 / 18 MAY 22
Applicable to: ALL

The selected speed target disengages when:

- The managed speed target engages, or
- On ground at engine start.

Note: *It is not possible to activate selected speed mode on ground with engines running and FD ON until after takeoff.*

SPEED/MACH FCU WINDOW SYNCHRONIZATION

Ident.: DSC-22_30-60-40-00025755.0001001 / 18 MAY 22
Applicable to: ALL

However, the window of the FCU displays the target speed or MACH in the following situations:

- The flight crew turns the SPD/MACH knob.
  The value in the window first synchronizes with the current SPD/MACH, then displays the manual selection. It remains displayed for 10 s depending upon FCU standard, then reverts to dashes if the flight crew does not pull the knob
- The flight crew manually engages a selected SPD target
- If the flight crew has manually preselected that speed or Mach value for the next phase on the PERF page:
  - That preselected speed or Mach value engages when the aircraft enters that phase, and
  - The FCU window then displays this preselected speed or Mach as the target
- If the FMGS is powered up in flight, the synchronized speed/Mach value is the current aircraft speed or Mach
- If no V2 is entered at takeoff, the V/S mode engages 5 s after lift-off (no SRS TO). The FCU speed target is the speed at V/S mode engagement. (A/THR becomes active when the thrust levers are set in the active range).

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GENERAL

Ident.: DSC-22_30-70-A-00025834.0001001 / 18 MAY 22
Applicable to: ALL

The approach and landing capability provides the flight crew with the aircraft capability to perform an approach, and land the aircraft.
The FMA displays this capability.

The approach and landing capability depends on:
- The availability of aircraft systems,
- The type of approach selected on the ARRIVAL page.

For more information about the minimum required equipment to compute approach and landing capabilities, *Refer to QRH/OPS Required Equipment for CAT2 and CAT3*.

The approach and landing capability enables the flight crew to determine:
- The available minima of the approach
- The available landing technique.

Ident.: DSC-22_30-70-A-00025835.0001001 / 18 MAY 22
Applicable to: ALL

APPROACH AND LANDING CAPABILITY WITH ILS/GLS /SLS

Approach and Landing Capability	Type of Approach Selected	Available FMA Guidance	Lowest Available Minima	Aircraft Landing Capability
CAT3 DUAL	ILS CAT I, II, III	LOC - G/S	Down to CAT III B	Autoland(1)
CAT3 SINGLE	ILS CAT I, II, III	LOC - G/S	Down to CAT III A	Autoland(1)
CAT2	ILS CAT I, II	LOC - G/S	Down to CAT II	Autoland(1)
AUTO LAND	GLS	LOC - G/S	Down to CAT I	Autoland(1)
CAT1	ILS CAT I	LOC - G/S	Down to CAT I	Manual landing
	GLS			
APPR1	RNAV(GNSS) with LPV minima (with SLS).	LOC - G/S	Down to LPV	Manual landing

(1) *The flight crew shall refer to the QRH to establish the actual landing capability, if some equipments not monitored by the FMGS are inoperative. Refer to QRH/OPS Required Equipment for CAT2 and CAT3.*

Note: *No approach and landing capability is displayed on FMA for RNAV(GNSS) with LP minima (with SLS).*

1 Ident.: DSC-22_30-70-A-00025837.0001001 / 18 MAY 22
Applicable to: MSN 11531

APPROACH AND LANDING CAPABILITY WITH FLS

Approach and Landing Capability	Type of Approach Selected	Available FMA Guidance	Lowest Available Minima	Aircraft Landing Capability
F-APP or F-APP +RAW	Approaches that are available in FMS database with the FLS function, as: - ILS with glideslope out - LOC only with no glideslope - LOC B/C ◁ - NAVAIDS approach (VOR / VOR/DME, NDB, NDB-DME)	LOC - F-G/S or LOC B/C ◁ - F-G/S or F-LOC - F-G/S	Down to MDA/H	Manual Landing
F-APP	RNAV(GNSS) approach with LNAV/VNAV or LNAV only minima.	F-LOC - F-G/S	Down to LNAV/VNAV or LNAV	Manual Landing
RAW ONLY	All approaches that are not compatible with FLS function or not available in FMS database.	NAV - FPA or TRK - FPA	Down to MDA/H	Manual Landing

Ident.: DSC-22_30-70-A-00025838.0001001 / 18 MAY 22
2 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-08495, 08596, 10949-11597**

Note: *If the autoland capability is not available, the DISCONNECT AP FOR LDG message appears on the FMA when the aircraft is below 150 ft.*

FAIL CONCEPT

Ident.: DSC-22_30-70-00025839.0001001 / 18 MAY 22
Applicable to: ALL

FAIL-OPERATIONAL AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-operational if, in the event of a failure below alert height, the remaining part of the automatic landing system allows the aircraft to complete the approach, flare, and landing.
The CAT3 DUAL approach and landing capability is fail-operational automatic landing system.

Note: *In the event of a failure, the automatic landing system operates as a fail-passive system.*

FAIL-PASSIVE AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-passive if, in the event of a failure, there is no significant out-of-trim condition, or deviation of flight path or attitude, but the landing is not completed automatically.

The following approach and landing capabilities are fail-passive automatic landing system.
- CAT3 SINGLE
- CAT2
- CAT1

Note: *With a fail-passive automatic landing system, the flight crew controls the aircraft after a failure.*

DISPLAY

Ident.: DSC-22_30-70-00025840.0001001 / 18 MAY 22
Applicable to: ALL

The approach and landing capability is displayed in the "Approach and Landing Capability" column of the FMA and of the HUD ◁ , when:
- An LS approach is manually or automatically selected on the ARRIVAL page
- The flight crew presses one of the following pushbutton on the FCU:
  - The LS pb, or
  - The LOC pb, or
  - The APPR pb.

The FMAs displays the approach and landing capability in accordance with the state of the aircraft systems, and the flight guidance systems that are engaged.

Note: *No approach and landing capability is displayed when an RNAV (RNP) approach is selected in the FMS.*

L2 If the FMGC is not able to compute the approach and landing capability, CAT 1 capability is displayed on the FMA, regardless of the FMS flight phase.

L1 APPROACH WITHOUT FLS ◁ FUNCTION

Depending on the approach selected, the CAT 1 approach and landing capability appears as soon as the flight crew presses one of the LS pb.
The computation of the CAT 1, CAT 2, CAT 3 SINGLE or CAT 3 DUAL approach and landing capability depends on the AP engagement. Therefore, when the flight crew presses the APPR pb to arm or engage the final approach mode, and one or both AP(s) is engaged then CAT 1, CAT 2, CAT 3 SINGLE or CAT 3 DUAL approach and landing capability can be displayed (both APs are necessary for CAT 3 DUAL).
However, if the North reference is TRUE, the CAT 1 is the only available capability.

L2 *Note:* 1. *CAT 1, CAT 2, CAT 3 SINGLE or CAT 3 DUAL approach and landing capability is computed only if the aircraft is above 400 ft when the flight crew arms the approach modes*

2. *Below 200 ft RA, CAT 3 SINGLE, or CAT 3 DUAL is memorized and remains displayed as long as:*
   - *At least one AP is engaged, and*
   - *LAND, FLARE, or ROLL OUT is engaged.*

L1 APPROACH WITH FLS ◁ FUNCTION

If the flight crew selects an approach with the FLS ◁ function, and the active FMS flight phase is CRZ, DES or APPR, the approach and landing capability appears as soon as the flight crew presses the LS pb.

AUTOLAND WARNING LIGHT

Ident.: DSC-22_30-80-10-00012386.0005001 / 18 MAY 22

1 **Applicable to: MSN 08635, 10949-11597**

The AUTOLAND warning flashes when:

- At least one AP is engaged below 200 ft with LOC and G/S armed, or with LOC, G/S, LAND or FLARE mode on the FMA and the difference between both RA indications is more than 15 ft RA, or
- At least one AP is engaged below 200 ft with LAND or FLARE mode on the FMA and one of the following conditions occurs:
  - The LOC deviation exceeds 1/4 dot and the aircraft is above 15 ft RA (the LOC scale flashes on the PFD), or
  - The GLIDE deviation exceeds 1 dot and the aircraft is above 100 ft RA (the GLIDE scale flashes on the PFD), or
  - Loss of LOC signal above 15 ft RA (the FD vertical bar flashes on the PFD), or
  - Loss of GLIDE signal above 100 ft RA (the FD horizontal bar flashes on the PFD), or
  - The last AP disengages, or
  - The FMGS detects a long flare, or
  - The FMGS detects an untimely flare condition.

L2 The FMGS detects an untimely flare condition when the time between LAND engagement (measured radio height is below 400 ft) and FLARE condition (measured radio height is below 50 ft) is less than 2 s.

AUTOLAND WARNING LIGHT

Ident.: DSC-22_30-80-10-00012386.0003001 / 18 MAY 22

2 **Applicable to: MSN 01459, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05987, 06097, 06121, 06139-08596, 09190-09324**

The AUTOLAND warning flashes when:

- At least one RA indicates a height below 200 ft, and
- At least one AP is engaged with LAND or FLARE mode on the FMA, and
- At least one of the following conditions occurs:
  - The LOC deviation exceeds 1/4 dot and the aircraft is above 15 ft RA (the LOC scale flashes on the PFD), or
  - The GLIDE deviation exceeds 1 dot and the aircraft is above 100 ft RA (the GLIDE scale flashes on the PFD), or
  - Loss of LOC signal above 15 ft RA (The FD vertical bar flashes on the PFD), or
  - Loss of GLIDE signal above 100 ft RA (The FD horizontal bar flashes on the PFD), or
  - The difference between both RA indications is greater than 15 ft RA, or
  - The last autopilot disengages, or
  - The FMGS detects a long flare, or
  - The FMGS detects an untimely Flare condition.

L2 The FMGS detects an untimely Flare condition when the time between LAND engagement (measured radio height is below 400 ft) and FLARE condition (measured radio height is below 50 ft) is less than 2 s.

AUTOLAND WARNING LIGHT

Ident.: DSC-22_30-80-10-00012386.0002001 / 09 APR 15

3 **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528**

The AUTOLAND warning flashes when:
- At least one RA indicates a height below 200 ft, and
- At least one AP is engaged with LAND or FLARE mode on the FMA, and
- At least one of the following conditions occurs:
  - The LOC deviation exceeds 1/4 dot and the aircraft is above 15 ft RA (the LOC scale flashes on the PFD), or
  - The GLIDE deviation exceeds 1 dot and the aircraft is above 100 ft RA (the GLIDE scale flashes on the PFD), or
  - Loss of LOC signal above 15 ft RA (The FD vertical bar flashes on the PFD), or
  - Loss of GLIDE signal above 100 ft RA (The FD horizontal bar flashes on the PFD), or
  - The difference between both RA indications is greater than 15 ft RA, or
  - The last autopilot disengages, or
  - The FMGS detects a long flare.

AUTOLAND WARNING LIGHT

Ident.: DSC-22_30-80-10-00012386.0001001 / 03 JUN 14

4 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

The following situations, when occurring below 200 ft RA with the aircraft in LAND mode, trigger the flashing Autoland red warning:
- Both APs OFF below 200 ft RA.
- Excessive deviation in LOC (1/4 dot above 15 ft RA) or GLIDE (1 dot above 100 ft RA). In addition, LOC and GLIDE scales flash on the PFD.
- Loss of LOC signal above 15 ft, or loss of GLIDE signal above 100 ft. The FD bars flash on the PFD. The LAND mode remains engaged.
- The difference between both radio altimeter indications is greater than 15 ft.

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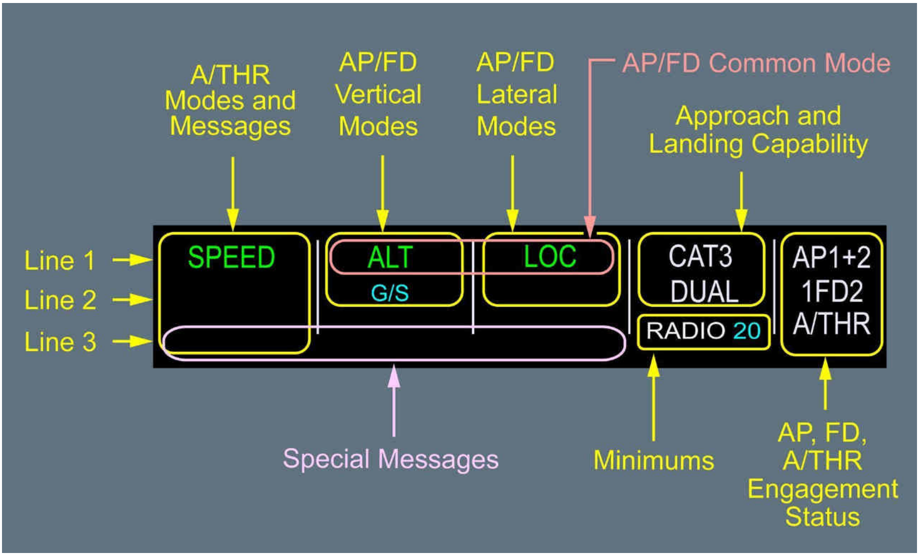
FMA DISPLAY

Ident.: DSC-22_30-80-20-00025412.0001001 / 18 MAY 22

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**

The FMA is located on the upper part of the PFD, and displays the following information, associated to flight guidance:

- A/THR messages and modes
- AP/FD modes (Vertical, Lateral, Common)
- Approach and landing capability
- AP, FD, and A/THR engagement status
- Special Messages.


A/THR Modes and Messages
AP/FD Vertical Modes
AP/FD Lateral Modes
AP/FD Common Mode
Approach and Landing Capability
Line 1
Line 2
Line 3
SPEED
ALT
G/S
LOC
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
Special Messages
Minimums
AP, FD, A/THR Engagement Status

A white box appears for 10 s around the annunciation of:

- An A/THR mode engagement
- An AP/FD mode engagement
- The approach and landing capability (or the change of the approach and landing capability)
- An AP, FD, or A/THR engagement status change.

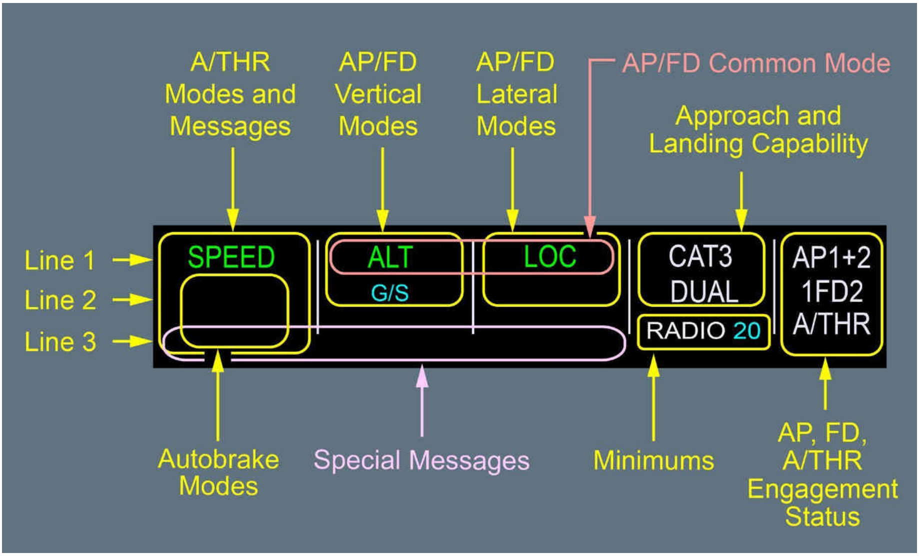
Special Messages displays three types of messages by the following priority:
- First priority is given to F/CTL messages
- Then vertical FMS messages
- Then EFIS reconfiguration messages.

FMA DISPLAY

Ident.: DSC-22_30-80-20-00025412.0002001 / 18 MAY 22

2 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**

The FMA is located on the upper part of the PFD, and displays the following information, associated to flight guidance:
- A/THR messages and modes
- AP/FD modes (Vertical, Lateral, Common)
- Approach and landing capability
- AP, FD, and A/THR engagement status
- Special Messages
- Autobrake modes.


A/THR Modes and Messages
AP/FD Vertical Modes
AP/FD Lateral Modes
AP/FD Common Mode
Approach and Landing Capability
Line 1
Line 2
Line 3
SPEED
ALT
G/S
LOC
CAT3
DUAL
RADIO 20
AP1+2
1FD2
A/THR
Autobrake Modes
Special Messages
Minimums
AP, FD, A/THR Engagement Status

A white box appears for 10 s around the annunciation of:
- An A/THR mode engagement
- An AP/FD mode engagement

- The approach and landing capability (or the change of the approach and landing capability)
- An AP, FD, or A/THR engagement status change.

Special Messages displays three types of messages by the following priority:
- First priority is given to F/CTL messages
- Then vertical FMS messages
- Then EFIS reconfiguration messages.

- FD 2

Ident.: DSC-22_30-80-20-00025514.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	- FD 2
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	FD2 is engaged.

1 FD -

Ident.: DSC-22_30-80-20-00025740.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	1 FD -
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	FD1 is engaged.

1 FD 2

Ident.: DSC-22_30-80-20-00025518.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	1 FD 2
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	FD1 and FD2 are engaged.

A.FLOOR

Ident.: DSC-22_30-80-20-00025533.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	A.FLOOR with a flashing amber box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active and the engines apply maximum thrust, while A.FLOOR conditions are applicable.

ALT (ARMED)

Ident.: DSC-22_30-80-20-00025534.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Altitude mode is armed. The target altitude is the FCU selected altitude. If the FCU selected altitude is equal to the cruise altitude, *Refer to DSC-22_30-80-20 ALT CRZ (Armed)*. *Note: G/S, F-G/S ◁ or FINAL can be simultaneously displayed with ALT, ALT CST or DES.*

ALT (ENGAGED)

Ident.: DSC-22_30-80-20-00025535.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The aircraft maintains the FCU selected altitude.

ALT*

Ident.: DSC-22_30-80-20-00025536.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT *
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The altitude capture mode is engaged, and acquires the FCU selected altitude. If the FCU selected altitude is equal to the cruise altitude, *Refer to DSC-22_30-80-20 ALT CRZ**.

ALT CRZ (ARMED)

Ident.: DSC-22_30-80-20-00025539.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT CRZ
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The altitude mode is armed. The target altitude is the CRZ FL.

ALT CRZ (ENGAGED)

Ident.: DSC-22_30-80-20-00025541.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT CRZ
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The aircraft maintains the cruise altitude. The SOFT ALT mode is engaged.

ALT CRZ*

Ident.: DSC-22_30-80-20-00025542.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT CRZ *
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The altitude capture mode is engaged, and acquires the cruise altitude.

ALT CST (ARMED)

Ident.: DSC-22_30-80-20-00025544.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT CST
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Altitude mode is armed. The target altitude is an altitude constraint. *Note:* *G/S, F-G/S ◁ or FINAL can be simultaneously displayed with ALT, ALT CST or DES.*

ALT CST (ENGAGED)

Ident.: DSC-22_30-80-20-00025545.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT CST
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The aircraft maintains the altitude constraint.

ALT CST*

Ident.: DSC-22_30-80-20-00025547.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ALT CST *
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The altitude capture mode is engaged, and acquires an altitude constraint.

AP1

Ident.: DSC-22_30-80-20-00025549.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	AP 1
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	AP1 is engaged.

AP1+2

Ident.: DSC-22_30-80-20-00025550.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	AP 1+2
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	AP1 and AP2 are engaged.

AP2

Ident.: DSC-22_30-80-20-00025551.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	AP 2
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	AP2 is engaged.

APP NAV (ARMED)

Ident.: DSC-22_30-80-20-00025553.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	APP NAV
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Navigation mode is armed for a non precision approach.

APP NAV (ENGAGED)

Ident.: DSC-22_30-80-20-00025554.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	APP NAV
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Navigation mode is engaged during a non precision approach.

APPR1 (SLS ◁)

Ident.: DSC-22_30-80-20-00025741.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	APPR 1 (SLS ◁)
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	SLS function is available for LPV approach. The type of the guidance for the selected approach is LOC and G/S.

A/THR (ACTIVATED)

Ident.: DSC-22_30-80-20-00025555.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	A/THR
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The A/THR is active.

A/THR (ARMED)

Ident.: DSC-22_30-80-20-00025556.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	A/THR
Column	AP, FD, and A/THR Engagement Status - Column 5 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The A/THR is armed and not active.

AUTO LAND (GLS ◁)

Ident.: DSC-22_30-80-20-00025557.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	AUTO LAND (GLS ◁)
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A GLS ◁ approach is selected and the GLS ◁ automatic landing capability is available.

BARO XXXXX

Ident.: DSC-22_30-80-20-00025734.0002001 / 18 MAY 22
Applicable to: ALL

FMA Display	BARO XXXXX
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Minimum Descent Altitude or Minimum Descent Height as inserted by the flight crew on the PERF APPR page.

BRK LO (ARMED)

Ident.: DSC-22_30-80-20-00025677.0001001 / 18 MAY 22
3 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**

FMA Display	BRK LO
Column	Autobrake Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/BRK is armed in LO mode.

BRK LO (ACTIVATED)

Ident.: DSC-22_30-80-20-00025678.0001001 / 18 MAY 22
4 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**

FMA Display	BRK LO with permanent white box
Column	Autobrake Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/BRK is active in LO mode.

BRK MAX (ACTIVATED)

Ident.: DSC-22_30-80-20-00025680.0001001 / 18 MAY 22
5 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**

FMA Display	BRK MAX whit permanent white box
Column	Autobrake Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/BRK is active in MAX mode.

BRK MAX (ARMED) ON LINE 2

Ident.: DSC-22_30-80-20-00025681.0001001 / 18 MAY 22
6 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**

FMA Display	BRK MAX
Column	Autobrake Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/BRK is armed in MAX mode.

BRK MAX (ARMED) ON LINE 3

Ident.: DSC-22_30-80-20-00025682.0001001 / 18 MAY 22
7 **Applicable to: MSN 10949-11597**

FMA Display	BRK MAX
Column	Autobrake Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/BRK is armed in MAX mode. The BRK MAX message is displayed on Line 2 if Line 3 is not available.

BRK MED (ARMED)

Ident.: DSC-22_30-80-20-00025683.0001001 / 18 MAY 22
8 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**

FMA Display	BRK MED
Column	Autobrake Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/BRK is armed in MED mode.

BRK MED (ACTIVATED)

Ident.: DSC-22_30-80-20-00025684.0001001 / 18 MAY 22
9 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098, 10949-11597**

FMA Display	BRK MED with permanent white box
Column	Autobrake Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/BRK is active in MED mode.

CAT1

Ident.: DSC-22_30-80-20-00025559.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	CAT 1
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	CAT1 approach capability is available. The type of guidance for the selected approach is LOC and G/S.

CAT2

Ident.: DSC-22_30-80-20-00025558.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	CAT 2
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	CAT2 approach capability is available. The type of guidance for the selected approach is LOC and G/S.

CAT3 DUAL

Ident.: DSC-22_30-80-20-00025560.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	CAT3 DUAL
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	CAT3 approach capability is available, with FAIL OPERATIONAL condition. The type of guidance for the selected approach is LOC and G/S.

CAT3 SINGLE

Ident.: DSC-22_30-80-20-00025561.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	CAT 3 SINGLE
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	CAT3 approach capability is available, with FAIL PASSIVE condition. The type of the guidqnce for the selected approach is LOC and G/S.

CHECK APP SEL

Ident.: DSC-22_30-80-20-00025685.0001001 / 18 MAY 22

10 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**

FMA Display	CHECK APP SEL
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The flight crew manually tuned an ILS / GLS ◁ on the FMS RADIO NAV page. This manually-tuned landing system does not correspond to the approach that is selected in the flight plan. The message is displayed when the aircraft is in cruise at less than 100 NM from the Top of Descent or in descent or in approach.

CHECK APPR SELECTION

Ident.: DSC-22_30-80-20-00025723.0001001 / 18 MAY 22

11 **Applicable to: MSN 01459, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

FMA Display	CHECK APPR SELECTION
Column	Special Messages- Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The flight crew manually tuned an ILS / GLS ◁ on the FMS RADIO NAV page. This manually-tuned landing system does not correspond to the approach that is selected in the flight plan. The message is displayed when the aircraft is in cruise at less than 100 NM from the Top of Descent or in descent or in approach. In approach, pressing the APPR pb arms LOC and G/S modes on the manually-tuned landing system.

CHECK SPEED MODE

Ident.: DSC-22_30-80-20-00025686.0002001 / 18 MAY 22

12 **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

FMA Display	CHECK SPEED MODE
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The SPEED target is selected and the flight crew didn't enter a speed target in the PERF CLB page, or a speed/Mach target in the PERF DES page.

CLB (ARMED)

Ident.: DSC-22_30-80-20-00025562.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	CLB
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Climb mode is armed.

CLB (ENGAGED)

Ident.: DSC-22_30-80-20-00025563.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	CLB
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Climb mode is engaged. The selected target altitude is higher than the actual altitude. Altitude constraints are taken into account.

DECELERATE

Ident.: DSC-22_30-80-20-00025687.0001001 / 18 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974

FMA Display	DECELERATE
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The thrust is not reduced when passing the Top of Descent, and the aircraft is above the flight profile.

DES (ARMED)

Ident.: DSC-22_30-80-20-00025564.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	DES
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The descent mode is armed. *Note:* *G/S, F-G/S ◁* or FINAL can be simultaneously displayed with ALT, ALT CST or DES.*

DES (ENGAGED)

Ident.: DSC-22_30-80-20-00025565.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	DES
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Descent mode is engaged. The selected target altitude is lower than the actual altitude. Altitude constraints are taken into account.

DISCONNECT AP FOR LDG

Ident.: DSC-22_30-80-20-00025690.0001001 / 18 MAY 22
13 **Applicable to: MSN 01459, 02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08529, 08635-09324**

FMA Display	DISCONNECT AP FOR LDG
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The flight crew must disconnect the AP for landing. This message is displayed when, during a Non-Precision Approach, the AP/FD remains engaged at: - Minimum -50 ft, or - 400 ft AGL (if no minimum entered).

DISCONNECT AP FOR LDG

Ident.: DSC-22_30-80-20-00025690.0002001 / 18 MAY 22

14 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-08495, 08596, 10949-11597**

FMA Display	DISCONNECT AP FOR LDG
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The flight crew must disconnect the AP for landing. This message is displayed when the AP/FD remains engaged at: - 150 ft RA during a non-precision approach, or - 150 ft RA during an ILS/ GLS ◁✻ approach when the CAT 1 approach capability is displayed on the FMA, or - 150 ft RA during an LPV approach (with SLS ◁✻) when APPR1 approach capability is displayed on the FMA.

EXP CLB

Ident.: DSC-22_30-80-20-00025691.0001001 / 18 MAY 22

15 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

FMA Display	EXP CLB
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Expedite Climb mode is engaged. The selected target altitude is higher than the actual altitude. Green Dot is maintained, altitude constraints are disregarded.

EXP DES

Ident.: DSC-22_30-80-20-00025692.0001001 / 18 MAY 22

16 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

FMA Display	EXP DES
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Expedite Descent mode is engaged. The selected target altitude is lower than the actual altitude. M 0.80/340 kt is maintained, altitude constraints are disregarded.

F-APP

17 Ident.: DSC-22_30-80-20-00025693.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-APP
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The type of guidance for the selected approach is FLS, and the approach and landing capability is optimum. FLS deviations and guidance with F-LOC and F-G/S modes are reliable.

F-APP + RAW

18 Ident.: DSC-22_30-80-20-00025694.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-APP +RAW
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The type of guidance for the selected approach is FLS, and the approach and landing capability is degraded. The flight crew can refer to FLS deviations but must cross-check with NAVAID raw data, i.e. VOR, NDB, DME.

F-G/S (ARMED)

19 Ident.: DSC-22_30-80-20-00025758.0002001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-G/S
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The FLS Glide Slope mode is armed. *Note: G/S, F-G/S or FINAL can be simultaneously displayed with ALT, ALT CST or DES.*

F-G/S (ENGAGED)

20 Ident.: DSC-22_30-80-20-00025697.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-G/S
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	FLS Glide Slope track mode is engaged.

F-G/S*

21 Ident.: DSC-22_30-80-20-00025698.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-G/S *
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	FLS Glide Slope capture mode is engaged.

FINAL (ARMED)

Ident.: DSC-22_30-80-20-00025699.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	FINAL
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The FINAL descent mode is armed. *Note:* *G/S, F-G/S ◁ or FINAL can be simultaneously displayed with ALT, ALT CST or DES.*

FINAL APP

Ident.: DSC-22_30-80-20-00025700.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	FINAL APP
Column	AP/FD Vertical Modes - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	APP NAV and FINAL modes are engaged during a non precision approach.

FINAL APP SELECTED

Ident.: DSC-22_30-80-20-00025701.0001001 / 18 MAY 22
22 **Applicable to: MSN 11531**

FMA Display	FINAL APP SELECTED
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The FINAL APP guidance mode is selected in the PERF APPR page, and the flight crew pressed the LS pb.

FLARE

Ident.: DSC-22_30-80-20-00025702.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	FLARE
Column	AP/FD Common Modes - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Flare mode is engaged.

F-LOC (ARMED)

23 Ident.: DSC-22_30-80-20-00025704.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-LOC
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The FLS Localizer mode is armed.

F-LOC (ENGAGED)

24 Ident.: DSC-22_30-80-20-00025724.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-LOC
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The FLS Localizer track mode is engaged.

F-LOC*

25 Ident.: DSC-22_30-80-20-00025725.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	F-LOC *
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The FLS Localizer capture mode is engaged.

FOR GA: SET TOGA

Ident.: DSC-22_30-80-20-00025726.0002001 / 18 MAY 22
26 **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

FMA Display	FOR GA : SET TOGA
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The flight crew must set the thrust levers to the TOGA detent to perform a go-around. During approach, the flight crew sets the thrust levers to or above the FLX/ MCT detent (but below TOGA), and: - The aircraft is below 1 000 ft RA - The AP and/or the FD are engaged.

FPA

Ident.: DSC-22_30-80-20-00025707.0002001 / 18 MAY 22
Applicable to: ALL

FMA Display	FPA +/-X.X°
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Flight Path Angle mode is engaged to acquire and maintain the FPA selected on the FCU. The target is displayed in blue. If the aircraft reaches VLS or VMAX and cannot maintain the target, the indication is boxed amber and flashes, and the target pulses.

GA TRK

Ident.: DSC-22_30-80-20-00025566.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	GA TRK
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Go-Around Track mode is engaged.

G/S (ARMED)

Ident.: DSC-22_30-80-20-00025567.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	G/S
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Glide Slope mode is armed. *Note:* *G/S, F-G/S ◁ or FINAL can be simultaneously displayed with ALT, ALT CST or DES.*

G/S (ENGAGED)

Ident.: DSC-22_30-80-20-00025568.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	G/S
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Glide Slope track mode is engaged.

G/S*

Ident.: DSC-22_30-80-20-00025569.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	G/S *
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Glide Slope capture mode is engaged.

HDG

Ident.: DSC-22_30-80-20-00025570.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	HDG
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Heading mode is engaged.

LAND

Ident.: DSC-22_30-80-20-00025571.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	LAND
Column	AP/FD Common Modes - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Land mode is engaged below 400 ft RA.

LOC (ARMED)

Ident.: DSC-22_30-80-20-00025572.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	LOC
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Localizer mode is armed.

LOC (ENGAGED)

Ident.: DSC-22_30-80-20-00025573.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	LOC
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Localizer track mode is engaged.

LOC*

Ident.: DSC-22_30-80-20-00025574.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	LOC *
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Localizer capture mode is engaged.

LVR ASYM

Ident.: DSC-22_30-80-20-00025575.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	LVR ASYM
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	One thrust lever is in a detent (CLB or MCT) while all others are not in this detent.

LVR CLB

Ident.: DSC-22_30-80-20-00025712.0001001 / 18 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

FMA Display	LVR CLB (flashing)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Request to set the thrust levers in CL detent. LVR CLB flashes and a single chime sounds every 5 s, as long as the flight crew does not take action. *Note:* *If the thrust levers are below the CL detent, the MASTER CAUT light flashes and a single chime sounds every 5 s until the flight crew takes appropriate action.*

LVR CLB

Ident.: DSC-22_30-80-20-00025712.0002001 / 18 MAY 22
27 **Applicable to: MSN 10949-11597**

FMA Display	LVR CLB (flashing)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Request to set the thrust levers in CL detent. LVR CLB flashes and a single chime sounds every 5 s, as long as the flight crew does not take action. Inhibited when the aircraft is in overspeed. *Note:* *If the thrust levers are below the CL detent, the MASTER CAUT light flashes and a single chime sounds every 5 s until the flight crew takes appropriate action.*

LVR MCT

Ident.: DSC-22_30-80-20-00025727.0001001 / 18 MAY 22

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

FMA Display	LVR MCT (flashing)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Request to set the thrust levers in MCT detent. LVR MCT flashes and a single chime sounds every 5 s, as long as the flight crew does not take action. *Note:* *If the thrust levers are below the FLX/MCT detent, the MASTER CAUT light flashes and a single chime sounds every 5 s until the flight crew takes appropriate action.*

LVR MCT

Ident.: DSC-22_30-80-20-00025727.0002001 / 18 MAY 22

28 **Applicable to: MSN 10949-11597**

FMA Display	LVR MCT (flashing)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Request to set the thrust levers in MCT detent. LVR MCT flashes and a single chime sounds every 5 s, as long as the flight crew does not take action. Inhibited when the aircraft is in overspeed. *Note:* *If the thrust levers are below the FLX/MCT detent, the MASTER CAUT light flashes and a single chime sounds every 5 s until the flight crew takes appropriate action.*

LVR TOGA

Ident.: DSC-22_30-80-20-00025398.0035001 / 15 NOV 22

29 **Applicable to: MSN 10949-11597**

FMA Display	LVR TOGA (flashing)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)

Display Conditions	Request to set the thrust levers to the TOGA detent, if one of the following conditions is applicable:
	During takeoff:
	- Upon selection of thrust levers to FLX/MCT detent without selecting FLEX or (Derated Takeoff) mode on the PERF TAKEOFF page.
	During a go-around:
	- Upon a go-around performed with one engine inoperative (engine failed or corresponding thrust levers is set to idle), and the flight crew reduces the thrust lever of operative engine to FLX/MCT detent before reaching the thrust reduction altitude.
	- Upon a Soft Go-Around :
	  - One engine fails, or
	  - One thrust lever is set to idle position, or
	  - One engine is not in soft go-around thrust mode, or
	  - The soft go-around function is lost.
	Note: *If the thrust levers are below the TOGA detent, the MASTER CAUT light comes on and a single chime sounds.*

LVR TOGA

Ident.: DSC-22_30-80-20-00025398.0003001 / 15 NOV 22

30 **Applicable to: MSN 05947-05987, 06634, 06871, 07081-09324**

FMA Display	LVR TOGA (flashing)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)

Continued on the following page

Continued from the previous page

Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)

Display Conditions	Request to set the thrust levers to the TOGA detent, if during a go-around, one of the following occur:
	- Upon a go-around performed with one engine inoperative (engine failed or corresponding thrust levers is set to idle), and the flight crew reduces the thrust lever of operative engine to FLX/MCT detent before reaching the thrust reduction altitude.
	- Upon a Soft Go-Around :
	  - One engine fails, or
	  - One thrust lever is set to idle position, or
	  - One engine is not in soft go-around thrust mode, or
	  - The soft go-around function is lost.
	Note: *If the thrust levers are below the TOGA detent, the MASTER CAUT light comes on and a single chime sounds.*

LVR TOGA

Ident.: DSC-22_30-80-20-00025398.0001001 / 15 NOV 22

31 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005**

FMA Display	LVR TOGA (flashing) (Soft Go-Around)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Request to set the thrust levers to the TOGA detent, if during a Soft Go-Around , one of the following occur: - One engine fails, or - One thrust lever is set to idle position, or - One engine is not in soft go-around thrust mode, or - The soft go-around function is lost. *Note:* *If the thrust levers are below the TOGA detent, the MASTER CAUT light comes on and a single chime sounds.*

MACH

Ident.: DSC-22_30-80-20-00025714.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	MACH
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active and controls a MACH target.

MACH (WITH A FLASHING AMBER BOX)

Ident.: DSC-22_30-80-20-00025728.0001001 / 18 MAY 22

32 **Applicable to: MSN 10949-11597**

FMA Display	MACH with a flashing amber box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active while overspeed conditions are met.

MACH SEL:.XX

Ident.: DSC-22_30-80-20-00025640.0001001 / 18 MAY 22

Applicable to: ALL

FMA Display	MACH SEL:.XX
Column	Special Messages - Column 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Indicates a preset Mach associated with the cruise, climb or descent phase.

MAN FLX XX

Ident.: DSC-22_30-80-20-00025771.0001001 / 18 MAY 22

Applicable to: ALL

FMA Display	MAN FLX XX with a permanent white box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is armed, at least one thrust lever is in FLX/MCT detent, with FLX TO temperature (displayed in blue), set by the flight crew in the PERF TAKEOFF page. The related engine apply flexible thrust, with FLX TO temperature set by the flight crew. The other thrust lever is at, or below the FLX/MCT detent.

MAN GA SOFT

Ident.: DSC-22_30-80-20-00025641.0001001 / 18 MAY 22
33 **Applicable to: MSN 08495-09324, 10949-11597**

FMA Display	MAN GA SOFT with a permanent white box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is armed, at least one engine is in soft go-around thrust and the thrust levers are above the CL detent and at or below the FLX-MCT detent. The soft go-around thrust mode engages if all the following conditions are applicable when the flight crew sets the thrust levers to TOGA, then to the FLX-MCT detent during the go-around: - All engines are operative - The slats/flaps are extended - The aircraft is below the go-around thrust reduction altitude, and below 16 000 ft - The aircraft is in flight and not performing a touch and go. *Note:* *The soft go-around function remains operative on the operative engine, and MAN GA SOFT is still displayed if one of the following occurs:* - *One engine fails, or* - *One thrust lever is set to idle position, or* - *One engine is not in soft go-around thrust mode. However, LVR TOGA appears and requests the flight crew to set the thrust lever of the operative engine to the TOGA detent.*

MAN MCT

Ident.: DSC-22_30-80-20-00025642.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	MAN MCT with a permanent white box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 - (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is armed, at least one thrust lever is in FLX/MCT detent. The other thrust levers are at, or below this detent and no FLX TO temperature, nor a Derated Takeoff ◁ level is entered.

MAN PITCH TRIM ONLY

Ident.: DSC-22_30-80-20-00025643.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	MAN PITCH TRIM ONLY
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Displayed in case of loss of L + R elevators.

MAN THR

Ident.: DSC-22_30-80-20-00025644.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	MAN THR with a permanent amber box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is armed, and: - The most advanced thrust lever is between FLX/MCT and TOGA detent, or - All thrust levers are above CL detent (AEO) but not in FLX/MCT or TOGA detent, or - The most advanced thrust lever is between CL and FLX/MCT detent, or - All thrust levers are below CL detent. *Note:* *In the case of OEI, corresponding thrust lever is not taken into account. The operative engines apply a thrust defined by the thrust lever position.* *Note:* *In the case of a Soft Go-Around* ◁ *, if the flight crew sets the thrust levers directly to FLX/MCT and not to TOGA then FLX/MCT, MAN THR will appear.*

MAN TOGA

Ident.: DSC-22_30-80-20-00025645.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	MAN TOGA with a permanent white box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is armed, at least one thrust lever is in TOGA detent. The related engine applies maximum thrust.

MORE DRAG

Ident.: DSC-22_30-80-20-00025717.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	MORE DRAG
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3(*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	DES is engaged, idle is selected, and either: - The aircraft is above the vertical profile and the predicted intercept point of the theoretical profile is less than 2 NM from the next altitude constraint, or - The aircraft enters a speedbrake decelerating segment.

NAV (ARMED)

Ident.: DSC-22_30-80-20-00025647.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	NAV
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Navigation mode is armed.

NAV (ENGAGED)

Ident.: DSC-22_30-80-20-00025648.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	NAV
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Navigation mode is engaged to guide the aircraft along the lateral flight plan.

NO DH

Ident.: DSC-22_30-80-20-00025649.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	NO DH
Column	Minimums - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	When NO is inserted in the PERF APPR page.

OP CLB (ARMED)

Ident.: DSC-22_30-80-20-00025652.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	OP CLB
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Open Climb mode is armed.

OP CLB (ENGAGED)

Ident.: DSC-22_30-80-20-00025653.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	OP CLB
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Open Climb mode is engaged. The selected target altitude is higher than the actual altitude.

OP DES

Ident.: DSC-22_30-80-20-00025654.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	OP DES
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Open Descent mode is engaged. The selected target altitude is lower than the actual altitude.

RADIO XXX

Ident.: DSC-22_30-80-20-00025738.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	RADIO XXX
Column	Minimums - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Decision Height as inserted by the flight crew in the PERF APPR page.

RAW ONLY

34 Ident.: DSC-22_30-80-20-00025720.0001001 / 18 MAY 22
Applicable to: MSN 11531

FMA Display	RAW ONLY
Column	Approach and Landing Capability - Column 4 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The type of guidance for the selected approach is FLS, and the approach and landing capability is degraded. The FLS function is not available to perform approaches. The flight crew must refer exclusively to NAVAID raw data, i.e. VOR, NDB or DME to perform the approach.

ROLL OUT

Ident.: DSC-22_30-80-20-00025655.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	ROLL OUT
Column	AP/FD Common Modes - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Roll Out mode is engaged.

RWY

Ident.: DSC-22_30-80-20-00025656.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	RWY
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Runway mode is engaged.

RWY TRK

Ident.: DSC-22_30-80-20-00025657.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	RWY TRK
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Runway Track mode is engaged once airborne at, or above 30 ft.

SET GREEN DOT SPEED

Ident.: DSC-22_30-80-20-00025658.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	SET GREEN DOT SPEED
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The aircraft is in Engine-Out mode and the SPEED target is selected. This message is displayed if the FCU selected speed is: - Equal to or less than Green Dot -10 kt, or - Equal to or greater than Green Dot +10 kt except in ALT* and ALT mode.

SET HOLD SPEED

Ident.: DSC-22_30-80-20-00025659.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	SET HOLD SPEED
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The aircraft is in selected SPEED control, an HM leg is inserted in the F-PLN and the aircraft is 30 s before the deceleration point to the precomputed HOLD SPEED.

SET MANAGED SPEED

Ident.: DSC-22_30-80-20-00025660.0001001 / 18 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974

FMA Display	SET MANAGED SPEED
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The SPEED target is selected and a preselected SPEED does not exist for the next flight phase.

SPEED

Ident.: DSC-22_30-80-20-00025661.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	SPEED
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active and controls a speed target target.

SPEED WITH A FLASHING AMBER BOX

Ident.: DSC-22_30-80-20-00025731.0001001 / 18 MAY 22
35 **Applicable to: MSN 10949-11597**

FMA Display	SPEED with a flashing amber box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active while overspeed conditions are met.

SPEED SEL:XXX

Ident.: DSC-22_30-80-20-00025662.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	SPEED SEL:XXX
Column	Special Messages - Column 1 and 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	Indicates a preset speed associated with the cruise, climb or descent phase.

SRS

Ident.: DSC-22_30-80-20-00025663.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	SRS
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)

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Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The speed reference system mode is engaged during takeoff or go-around.

TCAS (ARMED)

Ident.: DSC-22_30-80-20-00025664.0001001 / 18 MAY 22

36 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

FMA Display	TCAS
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The AP/FD TCAS mode is armed.

TCAS (ENGAGED)

Ident.: DSC-22_30-80-20-00025665.0001001 / 18 MAY 22

37 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

FMA Display	TCAS
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The AP/FD TCAS mode is engaged. The FG provides a vertical guidance in the case of a RA alert, generated by the TCAS.

TCAS RA INHIBITED

Ident.: DSC-22_30-80-20-00025666.0004001 / 18 MAY 22

38 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

FMA Display	TCAS RA INHIBITED
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The AP/FD TCAS mode disengages because the TA only or the STBY mode of the TCAS is selected (*Refer to DSC-22_30-80-20 FMA Display*).

T/D REACHED

Ident.: DSC-22_30-80-20-00025667.0002001 / 18 MAY 22
39 **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

FMA Display	T/D REACHED
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The thrust is not reduced when passing the Top of Descent, and the aircraft is above the flight profile.

THR CLB

Ident.: DSC-22_30-80-20-00025668.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	THR CLB
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active in thrust mode and the most advanced thrust lever is in the CL detent.

THR IDLE

Ident.: DSC-22_30-80-20-00025669.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	THR IDLE
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active in thrust mode and the engines apply idle thrust.

THR LK

Ident.: DSC-22_30-80-20-00025670.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	THR LK (flashing)
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The thrust is frozen due to a non-standard A/THR disconnection (FCU disconnection or failure). MASTER CAUT light flashes and a single chime sounds every 5 s, as long as the flight crew does not take action.

THR LVR

Ident.: DSC-22_30-80-20-00025671.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	THR LVR
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active in thrust mode, all thrust levers are below CL detent, or the most advanced thrust lever(s) is between CL and MCT detent with at least one thrust lever in CL detent.

THR MCT

Ident.: DSC-22_30-80-20-00025672.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	THR MCT
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active in thrust mode and the most advanced thrust lever is in the MCT detent (OEI). The operative engines apply maximum continuous thrust.

TOGA LK

Ident.: DSC-22_30-80-20-00025721.0001001 / 18 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

FMA Display	TOGA LK with a flashing amber box
Column	A/THR Messages and Modes - Column 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	A/THR is active and TOGA thrust is frozen (A.FLOOR conditions are no longer applicable).

TRK

Ident.: DSC-22_30-80-20-00025673.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	TRK
Column	AP/FD Lateral Modes - Column 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Track mode is engaged.

TRK FPA DESELECTED

Ident.: DSC-22_30-80-20-00025722.0001001 / 18 MAY 22
40 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

FMA Display	TRK FPA DESELECTED
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	At clear of conflict, informs that the flight reference TRK/FPA changed to HDG / V/S following AP/FD engagement.

USE MAN PITCH TRIM

Ident.: DSC-22_30-80-20-00025674.0001001 / 18 MAY 22
Applicable to: ALL

FMA Display	USE MAN PITCH TRIM
Column	Special Messages - Column 2 and 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 3 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	F/CTL are in direct law or in flare law with dual RA failure.

V/S

Ident.: DSC-22_30-80-20-00025675.0002001 / 18 MAY 22
Applicable to: ALL

FMA Display	V/S ±XXXX
Column	AP/FD Vertical Modes - Column 2 (*Refer to DSC-22_30-80-20 FMA Display*)
Line	Line 1 (*Refer to DSC-22_30-80-20 FMA Display*)
Display Conditions	The Vertical Speed mode is engaged to acquire and maintain the V/S selected on the FCU. The target is displayed in blue. If the aircraft reaches VLS or VMAX and cannot maintain the target, the indication is boxed amber and flashes, and the target pulses.

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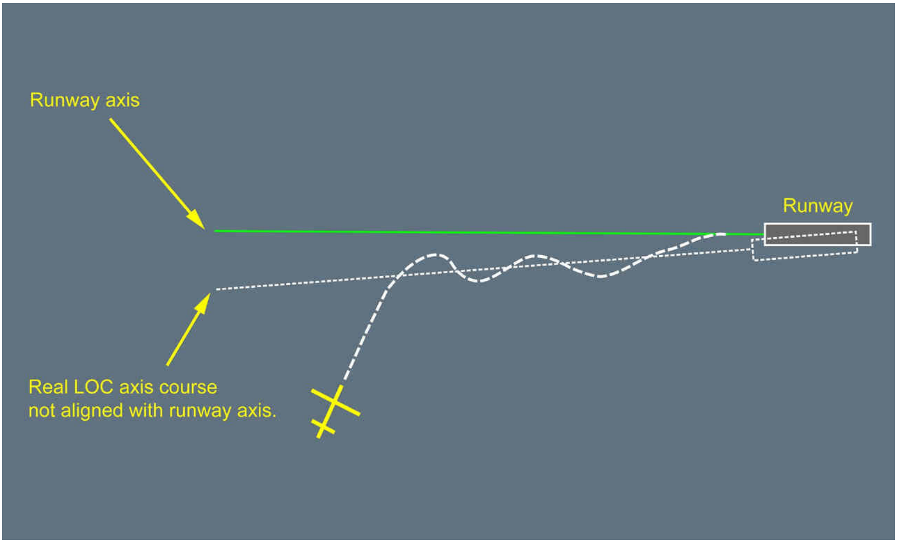
MISBEHAVIOUR OF THE ENHANCED LOC CAPTURE FUNCTION

Ident.: DSC-22_30-110-00023202.0001001 / 10 MAY 21
Applicable to: ALL

DESCRIPTION

With the Enhanced LOC capture function, the aircraft may oscillate on one side of the LOC axis when one of the following occurs:

- The LOC ground antenna position is unusual (ahead of runway threshold or not aligned with runway axis), or
- The LOC course is not aligned with runway axis.



OPERATIONAL RECOMMENDATION

On runway with unusual LOC position or with LOC course not aligned with runway axis, in case of roll oscillations during LOC capture, the flight crew shall consider to discontinue the approach. On the next approach, the flight crew must manually tune the ILS via the RMP before arming the APPR mode (or the LOC mode).

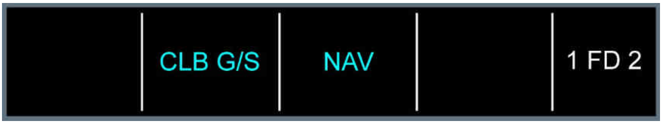
UNEXPECTED G/S MODE ARMED

Ident.: DSC-22_30-110-00022028.0001001 / 12 JUL 18
Applicable to: ALL

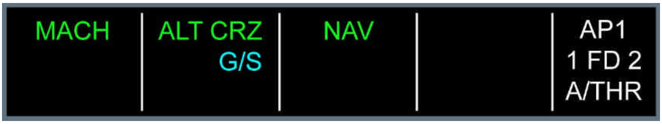
During the approach phase with Glide Slope (G/S) mode armed (displayed blue on Flight Mode Annunciator (FMA)), the Flight Guidance may not disarm the G/S mode if the following conditions are satisfied in a time frame of less than 1.5 s:
- AP1+2 set to OFF
- FD1+2 set to OFF
- A/THR set to OFF.

As expected, AP/FDs are OFF and G/S mode is correctly disarmed (G/S mode no longer displayed on FMA). However, regardless of the subsequent flight phases (go-around, new approach, take-off, etc), the G/S mode will arm again as soon as the FDs are back to ON. G/S mode armed is displayed in addition to the current vertical mode armed.
The following three illustrations provide non exhaustive examples of unexpected G/S mode armed:

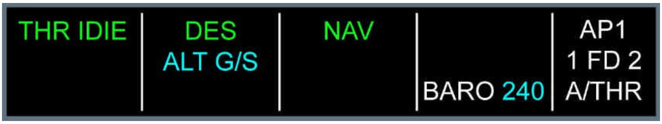
Example of FMA During Cockpit Preparation:



Example of FMA during Cruise:



Example of FMA During Descent:



On ground, misbehavior cancel sequence:
With FDs ON, if G/S is armed, the flight crew shall perform an aircraft power OFF.

In flight, misbehavior cancel sequence:

- Push the FCU APPR push-button to arm the approach modes, confirmed by both LOC and G/S displayed blue on FMA. To do so the arming conditions for approach modes must be satisfied.
- Push again the FCU APPR push-button to disarm the approach modes, confirmed by both LOC and G/S no longer displayed on FMA.

OPERATIONAL RECOMMENDATIONS:

If the misbehavior occurs during the flight, and an approach with FCU LOC push-button is required (LOC only procedure or ILS approach with early LOC interception requested by Air Traffic Control (ATC)), **first perform** the above-mentioned **In flight misbehavior cancel sequence** to remove the G/S mode armed. Then the approach can be flown as usual.

LEFT TURN NOT EXPECTED WHILE IN HDG OR TRK MODE

Ident.: DSC-22_30-110-00015029.0001001 / 08 AUG 13

1 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

The AP/FD may erroneously order a left turn if the following conditions are fulfilled:

- The aircraft is in a right turn in HDG or TRK mode
- Within 180 ms, the difference between the target selected on the FCU and the current aircraft heading/track, initially above 85 °:
  1. First goes below 85 °
  2. Then goes above 95 °.

The flight crew may encounter this misbehavior in two different situations:

- The flight crew requests a right turn, then rapidly reduces and increases again the target selected on the FCU
- The flight crew increases the target selected on the FCU according to the above conditions, while the aircraft is already in a right turn.

The misbehavior may affect either one AP/FD or both AP/FD.

OPERATIONAL RECOMMENDATIONS:

The flight crew must immediately take appropriate actions:

- The flight crew must disconnect the AP and the FD, and manually turn.
- When established on the intended trajectory, the flight crew can reengage the FD first, and then the AP.

SPURIOUS CAT 2 INOP

Ident.: DSC-22_30-110-00022057.0001001 / 10 MAY 21

2 **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05752, 06895**

DESCRIPTION:

A spurious CAT 2 INOP SYS may occur on ground or in flight.

- On ground, a CAT 2 INOP SYS may be displayed without additional ECAM alert
- In flight, a CAT 2 INOP SYS may be displayed with the NAV LS TUNING DISAGREE alert, while there is no real landing system tuning disagree.

Note: *The case of spurious CAT 2 INOP SYS in flight may occur at the recovery from an FMGC reset, or when the flight crew uses the RMP to tune an ILS frequency/ILS course.*

A spurious CAT 2 INOP SYS is caused by the erroneous detection of a difference in ILS tuning between FMGC1 and FMGC2.

OPERATIONAL RECOMMENDATIONS:

If a CAT 2 INOP SYS is displayed on ground or in flight as indicated in the description above, the flight crew shall perform all of the following:

- On RADNAV page of any FMS, insert the following ILS frequency/ILS course: 108.0/0 °
- Check that CAT 2 no longer appears on the ECAM INOP SYS
- Clear the ILS frequency/ILS course insertions from RADNAV page.

Note: *1. 108.0/0 ° is the default value of ILS frequency/ILS course for the FMS.*
2. Clearing ILS insertions on RADNAV page restores the automatic NAVAID tuning.

AIRCRAFT SYSTEMS

AUTO FLIGHT - FLIGHT AUGMENTATION

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DSC-22_40-10 General

GENERAL........ A

DSC-22_40-20 Yaw Functions

YAW DAMPING........ A
RUDDER TRIM........ B
RUDDER TRAVEL LIMITATION........ C

DSC-22_40-30 Flight Envelope Function

GENERAL........ A
PFD Speed Scale Management........ B
Alpha-Floor Protection........ C
Low - Energy Aural Alert........ D

DSC-22_40-40 Windshear Detection Function

Windshear Detection Function........ A
WINDSHEAR DETECTION PRINCIPLES........ B

DSC-22_40-50 Controls and Indicators

FAC ENGAGEMENT........ A
RUDDER TRIM OPERATION........ B

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Localization Title	Toc Index	ID	Reason
DSC-22_40-20 RUDDER TRAVEL LIMITATION	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_40-30 PFD Speed Scale Management	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_40-30 Alpha-Floor Protection - Inhibition Conditions - FAC	C	2	Effectivity update: The information now also applies to MSN 01459, 01593, 01825, 02014, 03032, 03111, 03222, 03284, 03313, 03565, 03662, 03733, 03816, 04171, 04441, 04446, 04544, 04953, 05749, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-22_40-10-00000840.0001001 / 24 FEB 15
Applicable to: ALL

The aircraft has two flight augmentation computers (FACs) that perform four main functions:

- Yaw function
  - Yaw damping and turn coordination
  - Rudder trim
  - Rudder travel limitation
- Flight envelope function
  - PFD speed scale management
    - Minimum/maximum speed computation
    - Maneuvering speed computation
  - Alpha-floor protection
- Low-Energy Aural Alert function ◁
- Windshear detection function ◁

In performing these functions the FAC uses independent channels :
Yaw damper
Rudder trim
Rudder travel limit
Flight envelope

Each FAC interfaces with the elevator aileron computers (ELACs) when the APs are disengaged, or with the FMGS when at least one AP is engaged.
Both FACs engage automatically at power-up.
The pilot can disengage or reset each FAC (in case of failure) by means of a pushbutton on the flight control overhead panel.
When a FAC is disengaged (FAC pushbutton set off) but still valid, the flight envelope function of the FAC remains active.
If both FACs are valid, FAC1 controls the yaw damper, turn coordination, rudder trim, and rudder travel limit, and FAC2 is in standby.
FAC1 keeps the aircraft within the flight envelope through FD1 ; FAC2 performs this function through FD2.
If a failure is detected on any channel of FAC1, FAC2 takes over the corresponding channel.

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YAW DAMPING

Ident.: DSC-22_40-20-00000851.0001001 / 18 MAR 11
Applicable to: ALL

Yaw damping stabilizes the aircraft in yaw and coordinates its turns.
In automatic flight (AP engaged) during takeoff and go around, it assists rudder application after an engine failure (short-term yaw compensation).

Note: *When the AP is engaged, the FMGS sends orders to the FAC to give :*
- *Yaw damping during approach*
- *Yaw control for runway alignment in ROLL OUT mode*

RUDDER TRIM

Ident.: DSC-22_40-20-00000855.0001001 / 09 DEC 09
Applicable to: ALL

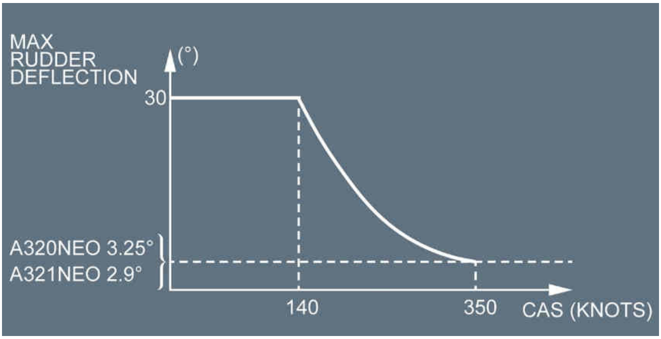
The rudder trim function :
- Executes trim orders, entered by the pilot by using the manual trim knob.
- When AP is engaged
  - ■ executes trim orders from the FMGS.
  - ■ Assists the system in recovering from engine failure (long-term yaw compensation) in all flight guidance modes.
  - ■ If the pilot pushes the rudder more than 10 ° out of trim, it disengages the AP.

Note: *When the AP is engaged, the rudder trim knob is inoperative : the master FMGC sends rudder trim orders to the FAC.*

RUDDER TRAVEL LIMITATION

Ident.: DSC-22_40-20-00000857.0004001 / 28 MAY 20
1 **Applicable to: MSN 08495-09324, 10949-11597**

This function limits rudder deflection is based on speed in order to avoid high structural loads. It is governed by the following law :

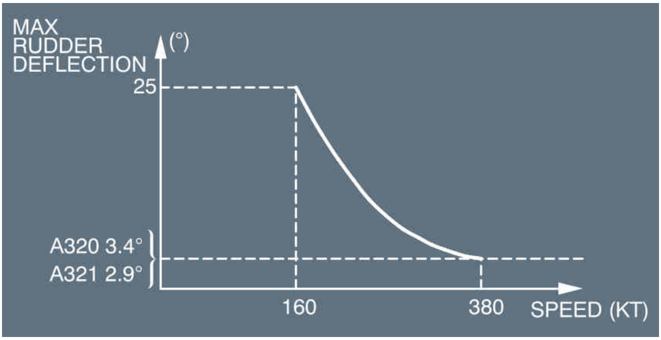


If both FACs lose the rudder travel limitation function, the value of the rudder deflection limit is locked at the time of the second failure.
When the slats are extended, the FACs automatically set the rudder deflection limit at the low-speed setting (maximum authorized deflection).

RUDDER TRAVEL LIMITATION

Ident.: DSC-22_40-20-00000857.0001001 / 01 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-07098

This function limits rudder deflection is based on speed in order to avoid high structural loads. It is governed by the following law :



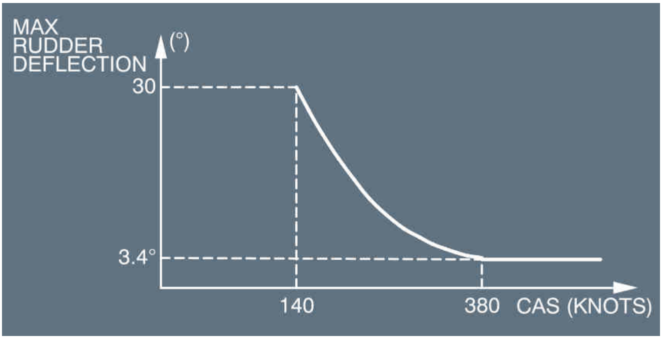
If both FACs lose the rudder travel limitation function, the value of the rudder deflection limit is locked at the time of the second failure.
When the slats are extended, the FACs automatically set the rudder deflection limit at the low-speed setting (maximum authorized deflection).

RUDDER TRAVEL LIMITATION

Ident.: DSC-22_40-20-00000857.0003001 / 01 OCT 12

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

This function limits rudder deflection is based on speed in order to avoid high structural loads. It is governed by the following law :



If both FACs lose the rudder travel limitation function, the value of the rudder deflection limit is locked at the time of the second failure.

When the slats are extended, the FACs automatically set the rudder deflection limit at the low-speed setting (maximum authorized deflection).

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GENERAL

Ident.: DSC-22_40-30-00000859.0001001 / 09 DEC 09
Applicable to: ALL

As long as one Flight Augmentation Computer (FAC) is valid, it governs the flight envelope function, the rudder position display, and the rudder trim indication regardless of what the flight crew does with the FAC pushbutton.

PFD SPEED SCALE MANAGEMENT

Ident.: DSC-22_40-30-00000860.0001001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05240, 05345

The FAC controls the speed scale on the PFD (*Refer to DSC-31-40 Attitude Data*).
When both FACs are operative, FAC1 supplies data to PFD1 and FAC2 supplies it to PFD2.

The FAC computes:
- The minimum and maximum speeds:
  - VSW
  - VLS
  - VFE and VFE for the next configuration
  - VLE
  - VMO/MMO.
- The maneuvering speeds:
  - Green Dot Speed
  - S speed
  - F speed.

The FAC also computes the speed trend and displays it as an arrow on the PFD speed scale.
The PFD displays these various speeds as appropriate, and they also go to the FMGC to be used as limits for various guidance modes.

Note: *The principle of the speed computation is as follows:*
- *The FAC computes VS1G. From VS1G it computes the FAC GW which is also sent to the ELAC:*
  - *When the aircraft is below 14 625 ft and 250 kt, it computes this from current angle of attack, speed/Mach, altitude, thrust, and CG*
  - *When the aircraft is above 14 625 ft or 250 kt, it computes this out of the GW, which it has memorized and updated with a fuel consumption model set in the FAC.*
- *The FAC computes the various minimum and maneuvering speeds, Vα prot and VSW*
- *The accuracies of the various minimum and maximum speeds are functions of the accuracy with which the FAC computes aircraft gross weight. Normal accuracy for VLS in CONF FULL is about ± 3 kt.*

PFD SPEED SCALE MANAGEMENT

Ident.: DSC-22_40-30-00000860.0002001 / 10 MAY 21

1 **Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**

The FAC controls the speed scale on the PFD (*Refer to DSC-31-40 Attitude Data*).
When both FACs are operative, FAC1 supplies data to PFD1 and FAC2 supplies it to PFD2.

The FAC computes:
- The minimum and maximum speeds:
  - VSW
  - VLS
  - VFE and VFE for the next configuration
  - VLE
  - VMO/MMO.
- The maneuvering speeds:
  - Green Dot Speed
  - S speed
  - F speed.

The FAC also computes the speed trend and displays it as an arrow on the PFD speed scale.
The PFD displays these various speeds as appropriate, and they also go to the FMGC to be used as limits for various guidance modes.

Note: *The FAC computes the operating speeds based on the FMS gross weight. This allows to have consistent and accurate operating speeds between the PFD and the MCDU. In parallel, the FAC also computes its own GW and CG, based on aerodynamic data, which is used by the ELAC and the FMS for gross weight crosscheck (CHECK GW MCDU message), and as a backup for speeds computation in the case of dual FMS failure. The principle of the FAC GW/CG computation based on aerodynamic data is as follows:*

- *The FAC computes VS1G. From VS1G it computes the FAC GW which is also sent to the ELAC:*
  - *When the aircraft is below 14 625 ft and 250 kt, it computes this from current angle of attack, speed/Mach, altitude, thrust, and CG*
  - *When the aircraft is above 14 625 ft or 250 kt, it computes this out of the GW, which it has memorized and updated with a fuel consumption model set in the FAC.*

ALPHA-FLOOR PROTECTION

Ident.: DSC-22_40-30-A-00025190.0001001 / 18 MAY 22
Applicable to: ALL

GENERAL

The Alpha-floor function automatically applies TOGA thrust, when the angle of attack exceeds the Alpha-floor threshold (between αPROT and αMAX). TOGA thrust is applied regardless of the thrust lever position and the A/THR engagement status.
The A/THR engages in A.FLOOR mode. For more information on A.FLOOR A/THR mode, *Refer to DSC-22_30-50-50 ALPHA FLOOR*.

ALPHA-FLOOR PROTECTION ACTIVATION

The Alpha-floor function activates when one of the following conditions occurs:

- The angle of attack is above Alpha-floor (Alpha-floor depends on the aircraft configuration, and the aircraft deceleration rate), or
- The side stick deflection is close to full back stick, with either:
  - The pitch attitude protection active (*Refer to DSC-27-20-10-20 Protections - Pitch Attitude Protection*), or
  - The angle of attack protection active (*Refer to DSC-27-20-10-20 Protections - High Angle of Attack Protection*).

Ident.: DSC-22_40-30-A-00025194.0001001 / 05 MAY 22
Applicable to: ALL

ALPHA-FLOOR PROTECTION INHIBITION

The Alpha-floor protection is inhibited when one of the following conditions occurs:

- The AP/FD TCAS ◁ mode is engaged, or

Ident.: DSC-22_40-30-A-00025191.0001001 / 05 MAY 22
2 **Applicable to: MSN 01376-01459, 01593-01628, 01825, 02014-02321, 02734-03111, 03211-03284, 03313-03662, 03733-04563, 04662-04974, 05066, 05101-05987, 06097, 06121, 06139-06871, 06895-09324, 10949-11597**

- The aircraft airspeed is above M 0.6, or

Ident.: DSC-22_40-30-A-00025192.0001001 / 05 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

- Both FADEC are in N1 mode, or

Ident.: DSC-22_40-30-A-00025193.0001001 / 05 MAY 22
Applicable to: ALL

- One engine is inoperative with slats/flaps extended, or
- One EIU is failed, or
- Both SFCC1 and FMGC2 are failed, or
- Both SFCC2 and FMGC1 are failed, or
- Both FCU channels are failed, or
- Both FMGCs are failed, or
- Alternate or direct law is active.

LOW - ENERGY AURAL ALERT

Ident.: DSC-22_40-30-00006197.0001001 / 03 NOV 21
Applicable to: ALL

An aural low-energy “SPEED SPEED SPEED” alert, repeated every 5 s, warns the flight crew that the aircraft’s energy level is going below a threshold under which the flight crew has to increase thrust, in order to regain a positive flight path angle through pitch control.

It is available in Configuration 2, 3, and FULL. The FAC computes the energy level with the following inputs:

- Aircraft configuration
- Horizontal deceleration rate
- Flight path angle.

The aural alert is inhibited when:

- TOGA is selected, or
- Below 100 ft RA, or
- Above 2 000 ft RA, or
- Alpha-floor, or the ground proximity warning system alert is triggered, or
- In alternate or direct law, or
- If both radio altimeters fail.

During deceleration, the low-energy aural alert is triggered before alpha floor (unless alpha floor is triggered by stick deflection). The amount of time between the two alerts depends on the deceleration rate.

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WINDSHEAR DETECTION FUNCTION

Ident.: DSC-22_40-40-00006194.0001001 / 07 JUL 11
Applicable to: ALL

The windshear detection function is provided by the Flight Augmentation Computer (FAC) in takeoff and approach phase in the following conditions:
- At takeoff, 3 s after liftoff, up to 1 300 ft RA
- At landing, from 1 300 ft RA to 50 ft RA
- With at least CONF 1 selected.

The warning consists of:
- A visual “WINDSHEAR” red message displayed on both PFDs for a minimum of 15 s.
- An aural synthetic voice announcing “WINDSHEAR” three times.

WINDSHEAR DETECTION PRINCIPLES

Ident.: DSC-22_40-40-00006195.0001001 / 23 JUN 15
Applicable to: ALL

The FACs generate the windshear warning whenever the predicted energy level for the aircraft falls below a predetermined threshold.
In computing this energy level prediction, the FACs use data from different sources. From ADIRS comes data such as vertical speed, air and ground speeds and slope ; from other sources come such derived parameters as total slope, longitudinal wind gradient, and vertical wind.
The FACs express this energy level as an angle of attack and compare it with an angle-of-attack threshold above which windshear conditions are most likely and pilot action is required.

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FAC ENGAGEMENT

Ident.: DSC-22_40-50-00000861.0001001 / 09 DEC 09
Applicable to: ALL

Refer to DSC-27-10-20 Yaw Control - General

RUDDER TRIM OPERATION

Ident.: DSC-22_40-50-00000862.0001001 / 09 DEC 09
Applicable to: ALL

Refer to DSC-27-10-20 Yaw Control - General

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AIRCRAFT SYSTEMS

AUTO FLIGHT - AOC FUNCTIONS

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PRELIMINARY PAGES - TABLE OF CONTENTS

General....................A
Flight Plan Initialization Function....................B
Takeoff Data Function....................C
Wind Data Function....................D
Flight Reports....................E

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Localization Title	Toc Index	ID	Reason
DSC-22_45 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Flight Plan Initialization Function	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Takeoff Data Function	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Wind Data Function	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_45 Flight Reports	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-22_45-00000864.0001001 / 18 MAR 11

1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The FMS AOC function gives an interface between a ground station and one onboard FMGC, allowing data transmission between these two computers via the ACARS Management Unit or the ATSU.

Two different sets of message can be exchanged:
UPLINK messages from the ground station. They consist in reception of data requested or directly sent to the crew.
DOWNLINK messages from the FMGC (master). They consist in reports or requests sent to the ground station.

The FMGS/ACARS or FMGS/ATSU interface enables the following AOC capabilities.
- F-PLN initialization (flight plan and performance data)
- Takeoff data
- Wind data
- Flight reports
- Broadcast data

Crews can send message using ACARS FUNCTION pages or relevant MCDU pages.
Only one FMGC talks to the ground station. This FMGC is called FMGC “master”.

GENERAL SCRATCHPAD MESSAGES

NOT XMITTED TO ACARS:	A crew request or report was sent to the ground but the communication was not established or not acknowledged.
NO ANSWER TO REQUEST :	A crew request was previously sent to the ground and no answer (uplink message) was received within 4 min.

FLIGHT PLAN INITIALIZATION FUNCTION

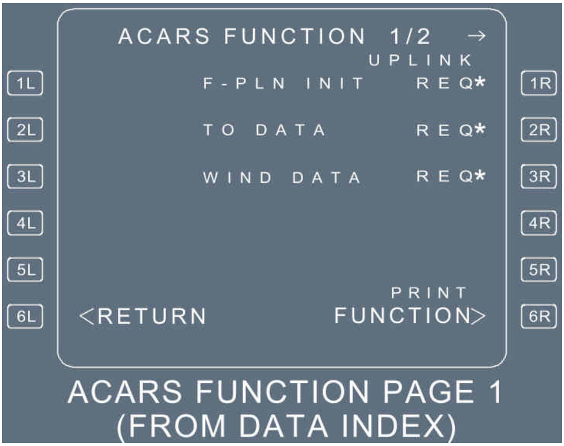
Ident.: DSC-22_45-00000865.0001001 / 18 MAR 11

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

This function enables lateral and vertical flight plan data as well as initialization data to be exchanged between the aircraft and a ground station. The aircraft may send flight plan requests for active and secondary flight plan. (downlink messages). The ground station may send flight plan and initialization data (uplink messages) either under aircraft request or automatically without any request.
Each uplink message concerns either the active or secondary flight plan but never both flight plans at the same time. The data sent to the aircraft are checked for flight plan consistency.
A MCDU message comes up when an uplink message is received. “ACT (or SEC) RTE UPLINK”.

If an error prevents the decoding process of the message, “INVALID RTE UPLINK” is displayed on MCDUs.
An uplink message can be routed to the active flight plan if no engine is started and no active flight plan exists. Otherwise, it is routed to the secondary. The crew will insert it into the secondary flight plan or will reject it using the CLR key.

Note: *The flight plan may also be initialized using the ACARS FUNCTION page selected from DATA INDEX page.*



ACARS FUNCTION 1/2 →
UPLINK
F-PLN INIT REQ*
TO DATA REQ*
WIND DATA REQ*
PRINT
<RETURN FUNCTION>

ACARS FUNCTION PAGE 1
(FROM DATA INDEX)

PERFORMANCE DATA

On ground and before engine start, the ground station may also send performance data to the aircraft.
Performance data are always associated with the uplink flight plan. It is either automatically inserted with the active flight plan data, or stored in the secondary with the corresponding flight plan.
This message contains part or all of the following data:
ZFW, ZFWCG, taxi fuel, block fuel, cruise flight level, tropopause altitude, cruise temperature, transition altitude, cost index, performance factor.

Note: *After engine start an uplink performance data message is rejected automatically without any scratchpad message.*

SCRATCHPAD MESSAGES RELATED TO FLIGHT PLAN AND PERFORMANCE

INVALID RTE UPLINK	An error is detected, the uplink message is rejected.
ACT or SEC RTE UPLINK	A F-PLN is stored in the active or secondary flight plan.

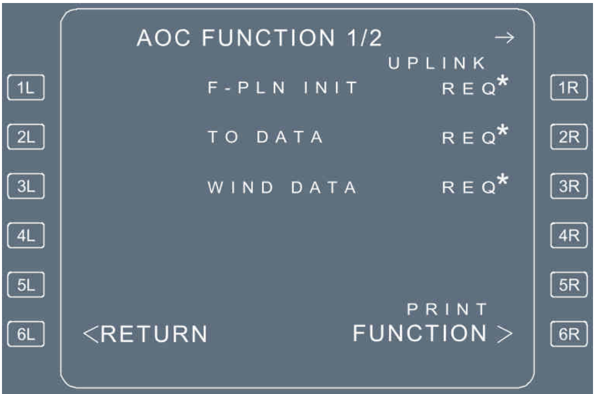
FLT NUMBER UPLINK	FLT NBR has been initialized within a F-PLN message without previous request.
CHECK FLT NUMBER	The uplinked FLT NBR differs from the one specified in the request.
CHECK CO RTE	The uplinked CO RTE ident differs from the one specified in the request.
INVALID FLT NBR UPLINK	The uplink contains a valid F-PLN but the FLT NBR is invalid.
PERF DATA UPLINK	Performance data is received
INVALID PERF UPLINK	Performance uplink message has been rejected
RTE DATALINK IN PROG	A flight plan modification is performed after a F-PLN INIT request has been sent; this message is displayed until the uplink is received.
UPLINK INSERT IN PROG	This message is displayed during insertion of a Flight Plan.

FLIGHT PLAN INITIALIZATION FUNCTION

Ident.: DSC-22_45-00000865.0010001 / 18 MAR 11
Applicable to: MSN 04827-04860

This function enables lateral and vertical flight plan data as well as initialization data to be exchanged between the aircraft and a ground station. The aircraft may send flight plan requests for active and secondary flight plan. (downlink messages). The ground station may send flight plan and initialization data (uplink messages) either under aircraft request or automatically without any request.
Each uplink message concerns either the active or secondary flight plan but never both flight plans at the same time. The data sent to the aircraft are checked for flight plan consistency.
An MCDU message comes up when an uplink message is received. “ACT (or SEC) RTE UPLINK”.
If an error prevents the decoding process of the message, “INVALID RTE UPLINK” is displayed on the MCDUs.
An uplink message can be routed to the active flight plan if no engine is started and no active flight plan exists. Otherwise, it is routed to the secondary flight plan. The flight crew will insert it into the secondary flight plan or will reject it using the CLR key.

Note: *The flight plan may also be initialized using the AOC FUNCTION page selected from DATA INDEX page.*



```
        AOC FUNCTION 1/2           →
                          UPLINK
           F-PLN INIT        REQ*

           TO DATA           REQ*

           WIND DATA         REQ*



                            PRINT
 <RETURN                 FUNCTION >
```

AOC FUNCTION PAGE 1
(FROM DATA INDEX)

INITIALIZATION DATA

On ground and before engine start, the ground station may also send data to initialize the F-PLN. This data is always associated with the uplink flight plan. It is either automatically inserted with the active flight plan data, or stored in the secondary with the corresponding flight plan.
Initialization data is made of part or all of the following elements:
ZFW, ZFWCG, taxi fuel, block fuel, cruise flight level, tropopause altitude, cruise temperature, transition altitude, cost index, performance factor.

Note: *After engine start an uplink initialization data message is rejected automatically without any scratchpad message.*

SCRATCHPAD MESSAGES RELATED TO FLIGHT PLAN AND INITIALIZATION DATA

INVALID RTE UPLINK	An error is detected, the uplink message is rejected.
ACT or SEC RTE UPLINK	A F-PLN is stored in the active or secondary flight plan.
FLT NUMBER UPLINK	FLT NBR has been initialized within a F-PLN message without previous request.
CHECK FLT NUMBER	The uplinked FLT NBR differs from the one specified in the request.
CHECK CO RTE	The uplinked CO RTE ident differs from the one specified in the request.
INVALID FLT NBR UPLINK	The uplink contains a valid F-PLN but the FLT NBR is invalid.
INIT DATA UPLINK	Initialization data is received
INVALID INIT UPLINK	Initialization uplink message has been rejected

RTE DATALINK IN PROG	A flight plan modification is performed after a F-PLN INIT request has been sent; this message is displayed until the uplink is received.
UPLINK INSERT IN PROG	This message is displayed during insertion of a Flight Plan.

TAKEOFF DATA FUNCTION

Ident.: DSC-22_45-00000866.0001001 / 03 NOV 21

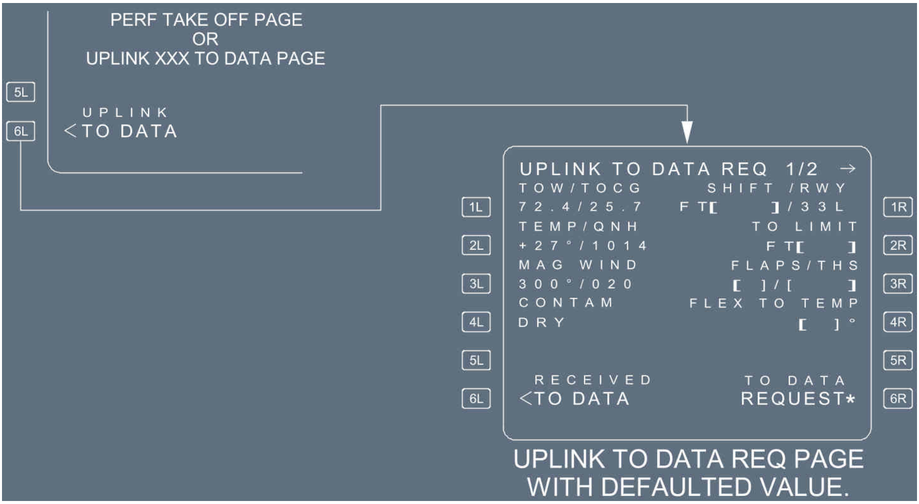
3 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The takeoff data function is available for the active flight plan only. It is used to request to the ground station, information data for up to 2 runways and to receive this data for up to 4 runways.
The flight crew sends a request indicating the departure airport, runway idents, CG, GW and weather conditions (such as BARO setting wind, temperature...). In response the flight crew receives the takeoff speeds for up to 4 runways but only one set of data may be inserted in the active flight plan for the selected active runway.
Takeoff speeds are computed for max and flex takeoff.

The takeoff data function has required the modification of the standard PERF TAKEOFF page and the addition of 2 news pages:

- UPLINK TO DAT REQ page that enables the flight crew to specify a request to the ground.
- UPLINK XXX TO DATA page (XXX for MAX or FLEX)

These 2 pages are accessed from the PERF TAKEOFF page in PREFLIGHT and DONE phase only.



```
UPLINK TO DATA REQ  1/2  →
TOW/TOCG            SHIFT /RWY
72.4/25.7       FT[      ]/33L
TEMP/QNH              TO LIMIT
+27°/1014           FT[      ]
MAG WIND            FLAPS/THS
300°/020          [  ]/[     ]
CONTAM          FLEX TO TEMP
DRY                    [   ]°

 RECEIVED            TO DATA
<TO DATA            REQUEST*
```

UPLINK TO DATA REQ PAGE WITH DEFAULTED VALUE.

SCRATCHPAD MESSAGES RELATED TO TAKEOFF DATA

TAKEOFF DATA UPLINK	:	Takeoff data uplink message is received
INVALID TAKEOFF UPLINK	:	The UPLINK message is rejected

WIND DATA FUNCTION

Ident.: DSC-22_45-00000867.0001001 / 17 MAY 21

4 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

This function enables the crew to request and to receive forecasted winds associated to the active or secondary flight plan.
The uplink message (ground station to aircraft) may be received upon crew request or automatically without crew request.
The request is initiated from WIND pages or from ACARS FUNCTION page (*Refer to DSC-22_20-70 Wind Data - Request for Wind Data*).

The uplink wind data when received are directly displayed on the wind pages but not inserted in the flight plan, one set for each flight phase: CLIMB, CRUISE, DESCENT. The alternate wind at alternate cruise flight level is displayed on DESCENT page.

- Winds are associated to altitude for climb and descent phases
- Winds are associated to waypoint for cruise phase and step level. One wind per waypoint.
  - On ground and without entered winds, an uplink message is directly inserted in the flight plan.
  - In flight, winds are temporary stored until the crew inserts it phase per phase.
    Phase of flight is indicated in the WIND title page.
  - Clearing the INSERT UPLINK* prompt using the CLR key deletes the uplink wind data for the selected phase.

When uplink winds are deleted, the wind page reverts to the previous status.
The flight plan B page is modified of the uplink wind only after it is inserted by the crew. AOC uplink winds are then considered as crew manual entries (large font).

SCRATCHPAD MESSAGES RELATED TO WIND DATA

INVALID WIND UPLINK	An error is detected, the uplink is rejected.
WIND DATA UPLINK	Uplinked winds are received.
WIND UPLINK PENDING	A temporary flight plan exists or a DIR TO page is displayed when a wind uplink is received. The message is stored.
WIND UPLINK EXISTS	A F-PLN modification (active or secondary) is attempted when uplink winds are not inserted. This message disappears automatically when the wind uplink is inserted or deleted.

CHECK DEST DATA	The aircraft is at 180 NM from destination, and the destination QNH, TEMP or WIND displayed on the PERF APPR page was received by AOC uplink or, if following insertion of a descent wind uplink, a conflict concerning the above parameters exists.
CHECK ALTN WIND	The uplinked alternate cruise flight level differs from the default alternate cruise flight level.

FLIGHT REPORTS

Ident.: DSC-22_45-00000868.0001001 / 10 MAY 22

5 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Flight reports provide real time information to the ground concerning the aircraft current situation and position.

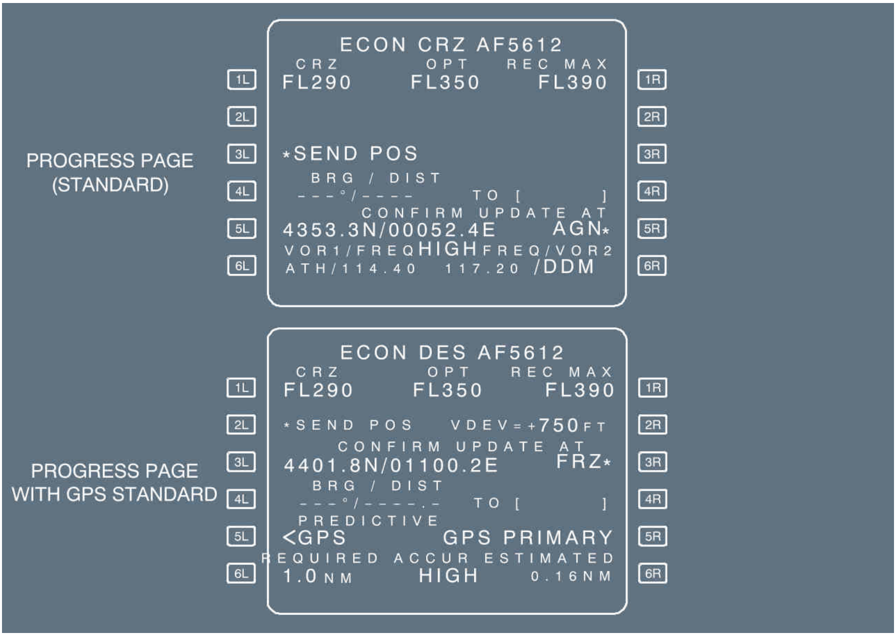
Several types of flight reports are available:
- The Position report : provides current aircraft position
- the Progress report : provides data relative to the destination
- The Flight-Plan report : provides the active route
- the Performance Data report : provides performance data currently used by FMS.

These reports may be manually initiated via a dedicated prompt or automatically sent in response to a ground request or upon specific conditions.

POSITION REPORT

This report is sent:
- manually via a MCDU prompt or
- following a ground request or
- automatically upon sequencing a designated reporting fix (designated by the ground in a uplink message).

The manual POSITION REPORT downlink prompt is displayed on the PROG page. (SEND POS prompt).



PROGRESS PAGE (STANDARD)

```
    ECON CRZ AF5612
 CRZ         OPT     REC MAX
FL290       FL350      FL390

*SEND POS
  BRG / DIST
 ---°/----      TO [        ]
       CONFIRM UPDATE AT
4353.3N/00052.4E        AGN*
VOR1/FREQ HIGH FREQ/VOR2
ATH/114.40    117.20 /DDM
```

PROGRESS PAGE WITH GPS STANDARD

```
    ECON DES AF5612
 CRZ         OPT     REC MAX
FL290       FL350      FL390
*SEND POS    VDEV=+750FT
     CONFIRM UPDATE AT
4401.8N/01100.2E       FRZ*
  BRG / DIST
 ---°/-----.-    TO [        ]
 PREDICTIVE
<GPS          GPS PRIMARY
REQUIRED ACCUR ESTIMATED
1.0NM        HIGH     0.16NM
```

Note: Position report are initiated from active flight plan only.

POSITION REPORT CONTENT

- Aircraft position
- Overfly reporting waypoint
- Time of report (UTC)
- Aircraft altitude
- Next reporting waypoint
- ETA at next reporting waypoint
- Reporting waypoint following next report
- SAT
- Current wind
- Remaining fuel

PROGRESS REPORT

A progress report contains data relative to the aircraft arrival time and EFOB at destination for the active F-PLN.

This downlink message is automatically sent following:

- a ground request or
- a change of destination or
- a change of runway or
- a specific event. The possible events that can be selected in the navigation database policy file are :
  - X minutes to Top of Descent
  - Z minutes to Destination
  - ETA changes more than W minutes from the previous report.
    X, Z and W are minutes of time set in the navigation database policy file.

The progress report cannot be manually sent by the crew via a dedicated MCDU prompt.

PROGRESS REPORT CONTENT

- Flight Number
- Arrival Airport Ident
- Destination Runway Ident
- Predicted remaining fuel
- ETA at destination
- Reason for report (specific event, ground request...).

FLIGHT PLAN REPORT

The F-PLN report broadcasts flight plan data to the ground. Only data from the active flight plan can be sent.

This downlink message is sent to the ground:

- automatically following a ground request
- manually by the crew using a prompt displayed on the ACARS FUNCTION page (DSC-22_20 Auto Flight - Flight Management/50 Controls and Indicators/10 MCDU - Page Description/25 FMS2 Honeywell/ACARS Function Page). This prompt may be invalidated through the navigation database policy file.

The Flight Plan report can be downlinked either while on ground or in flight during any flight phase.

FLIGHT PLAN REPORT CONTENT

The report contains the active and alternate flight plan.

PERFORMANCE DATA REPORT

The Performance Data report is a downlink message that allows the transmission of performance data (CG, FUEL, and etc.) relative to the active F-PLN.
This message is automatically sent following a ground request. Manual sending is not possible.

PERFORMANCE DATA REPORT CONTENT

Sends to the ground:

- Current GW
- Cruise Altitude
- Current CG
- Fuel on Board
- Block Fuel
- Reserve Fuel
- Cost Index
- Top of Climb Temperature
- Climb Transition Altitude
- Tropopause Altitude
- Taxi Fuel
- ZFW
- ZFWCG

AIRCRAFT SYSTEMS

AUTO FLIGHT - PRINT INTERFACE

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PRELIMINARY PAGES - TABLE OF CONTENTS

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AOC/Printer Programming Options ◁ ....B

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PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
DSC-22_46 Print Function	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-22_46 AOC/Printer Programming Options ◁	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRINT FUNCTION

Ident.: DSC-22_46-00000869.0003001 / 01 APR 11

1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The print function enables several types of data and report to be printed :
- Flight plan initialization data
- Takeoff data
- Wind data
- Preflight report
- In flight report
- Post flight report

The 3 first reports may differ when automatically or manually printed for the following reason :
The automatic process prints the uplink message although the manual process prints the current active data as displayed on the relevant MCDU pages.
The last 3 reports being processed from the same sources are identical in automatic or manual printing.

Note: *ACARS is not necessary linked to printing process. The printing function may be activated within the FMGS and selected independently from the ACARS.*

- One or several print functions may be deactivated *Refer to DSC-22_20-50-10-25 Print Function Pages*.
- If an ACARS function is not active, (not selected in the nav database policy file) the printing process is invalidated for this specific ACARS function.

PRINT FUNCTION

Ident.: DSC-22_46-00000869.0004001 / 01 APR 11

Applicable to: MSN 04827-04860

The print function enables several types of data and report to be printed :
- Flight plan initialization data
- Takeoff data
- Wind data
- Preflight report
- In flight report
- Post flight report

The 3 first reports may differ when automatically or manually printed for the following reason :
The automatic process prints the uplink message although the manual process prints the current active data as displayed on the relevant MCDU pages.

The last 3 reports being processed from the same sources are identical in automatic or manual printing.

Note: *ACARS is not necessary linked to printing process. The printing function may be activated within the FMGS and selected independently from the ACARS.*

- One or several print functions may be deactivated *Refer to DSC-22_20-50-10-28 PRINT FUNCTION Pages*.
- If an ACARS function is not active, (not selected in the nav database policy file) the printing process is invalidated for this specific ACARS function.

AOC/PRINTER PROGRAMMING OPTIONS ⊲

Ident.: DSC-22_46-00000870.0002001 / 11 FEB 11

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Option programming for the AOC/PRINTER functions is obtained through the Navigation Data Base policy file or the Airline Modifiable Information (AMI) file.

The list summarizes the possible options:

Data Link (ACARS or AOC) Inhibit	Disables AOC function
F-PLN Data Request Inhibit	Disables uplink and downlink requests of F-PLN initialization data
Performance Data Request Inhibit	Disables uplink and downlink requests of Performance Initialization data
Takeoff Data Request Inhibit	Disables uplink and downlink request of Takeoff Initialization data
Wind Data Request Inhibit	Disables uplink and downlink request of predicted wind data
Flight Number Enable	Flight Number is included within the F-PLN Request or Progress Report downlinks
Position Report Inhibit	Disables a manual Position Report downlink
Progress Report Triggers	Defines the triggers for the automatic downlink of the Progress Report
F-PLN Report Inhibit	Disables the manual downlink of the F-PLN Report

Auto Print of ACARS or AOC uplinks	Selects/Deselects the automatic printing of the F-PLN, INIT, TO and wind data uplinks. If Autoprint is selected, the crew can deselect it manually. If auto printing is deselected, the crew cannot manually reselect it.
Auto Print of Flight Reports	Selects/Deselects the automatic printing of the Preflight, Inflight, Postflight reports. If selected, the crew can deselect it manually. If autoprint is deselected, the crew cannot manually preselected it.

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AIRCRAFT SYSTEMS

COMMUNICATIONS

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DSC-23-10-20 Radio Tuning

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DSC-23-10-30 Intercommunication Systems

Audio Management System....A
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DSC-23-10-50 Controls

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DSC-23-30-10 Radio Communication

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DSC-23-40 Emergency Communication

DSC-23-40-10 Emergency Evacuation

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DSC-23-40-30 Emergency Locator Transmitter

Controls and Indicators.......... A

DSC-23-45 Controls and Indicators

DSC-23-45-10 RMP - Page Description

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VHF Page.......... E

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DSC-23-60 How to

VHF, HF Utilization .... A

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Localization Title	Toc Index	ID	Reason
DSC-23-10-10 Communication System Architecture	B	1	Documentation update: Addition of "Communication System Architecture" documentary unit
DSC-23-10-20 Description	C	3	Documentation update: Addition of "Description" documentary unit
DSC-23-10-20 RMP	C	4	Documentation update: Addition of "RMP" documentary unit
DSC-23-10-20 RMP synchronization	C	5	Documentation update: Addition of "RMP synchronization" documentary unit
DSC-23-10-20 Active communication	C	6	Documentation update: Addition of "Active communication" documentary unit
DSC-23-10-20 Standby Control	C	7	Documentation update: Addition of "Standby Control" documentary unit
DSC-23-10-30 Audio Management System	A	2	Documentation update: Addition of "Audio Management System" documentary unit
DSC-23-10-40 Description	A	1	Documentation update: Addition of "Description" documentary unit
DSC-23-20-20 Cabin Interphone	B	2	Documentation update: Addition of "Cabin Interphone" documentary unit
DSC-23-20-40 Description	A	1	Documentation update: Addition of "Description" documentary unit
DSC-23-20-40 Controls and Indicators	B	4	Documentation update: Addition of "Controls and Indicators" documentary unit
DSC-23-30-10 Description	A	2	Documentation update: Addition of "Description" documentary unit
DSC-23-30-10 VHF	B	4	Documentation update: Addition of "VHF" documentary unit
DSC-23-30-10 SELCAL	E	8	Documentation update: Addition of "SELCAL" documentary unit
DSC-23-45-10 HF ◁ Page	A	1	Documentation update: Addition of "HF (If Installed) Page" documentary unit
DSC-23-45-10 MENU Page	B	2	Documentation update: Addition of "MENU Page" documentary unit
DSC-23-45-10 RMP External Communication	C	3	Documentation update: Addition of "RMP External Communication" documentary unit
DSC-23-45-10 RMP Overview	D	4	Documentation update: Addition of "RMP Overview" documentary unit
DSC-23-45-10 VHF Page	E	5	Documentation update: Addition of "VHF Page" documentary unit
DSC-23-45-20 RMP Messages on the RMP Page Area	A	1	Documentation update: Addition of "RMP Messages on the RMP Page Area" documentary unit

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Localization Title	Toc Index	ID	Reason
DSC-23-45-20 RMP Messages on the RMP Message Area	B	2	Documentation update: Addition of "RMP Messages on the RMP Message Area" documentary unit
DSC-23-50 Loudspeakers	E	3	Documentation update: Addition of "Loudspeakers" documentary unit
DSC-23-10-10 Communication System Architecture	B	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-10-20 Description	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.

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Localization Title	Toc Index	ID	Reason
DSC-23-10-20 Radio Management Panel	B	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-30 Audio Management System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-30 Cabin Intercommunication Data System	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-10-40 Description	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-50 Audio Control Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-10-50 Audio Switching	D	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-20-20 Introduction	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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Localization Title	Toc Index	ID	Reason
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DSC-23-20-20 Calls from the Cabin	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-20-40 Description	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-20-40 Controls and Indicators	B	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098,

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Localization Title	Toc Index	ID	Reason
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DSC-23-30-10 Description	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-30-10 VHF	B	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-30-10 HF	C	5	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-23-30-10 HF	C	6	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-23-30-10 SELCAL (Selective calling)	D	7	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-40-30 Controls and Indicators	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-50 AUDIO 3 XFRD	C	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-23-50 SATCOM ◁	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-23-60 VHF, HF Utilization - Tuning	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593,

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Localization Title	Toc Index	ID	Reason
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DSC-23-60 VHF, HF Utilization - Transmission and Reception	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.

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INTRODUCTION

Ident.: DSC-23-10-10-00022672.0001001 / 25 MAY 20
Applicable to: ALL

The communication system enables:

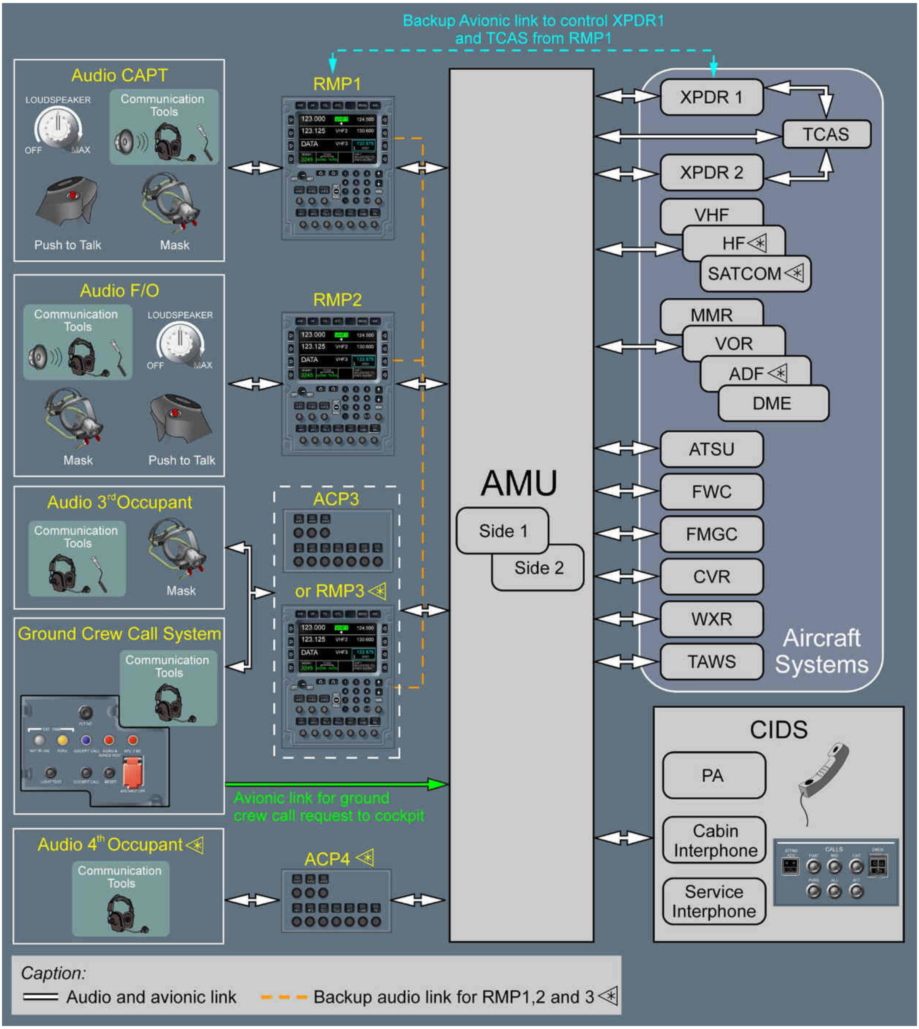
- Internal communication between the:
  - Flight crew and additional cockpit occupant(s)
  - Cabin crew
  - Ground crew
  - Passengers (i.e. for flight or cabin crew announcements).

  Internal communication is possible via the flight, cabin, and service interphones, and via the Passenger Address (PA).
- External communication via radio communication (HF ◁ or VHF) or Satellite Communication (SATCOM ◁), either in voice mode or data mode.

COMMUNICATION SYSTEM ARCHITECTURE

1 Ident.: DSC-23-10-10-00018503.0002001 / 18 MAY 21
Applicable to: MSN 11482-11597

The communication system comprises the following subsystems:


Backup Avionic link to control XPDR1 and TCAS from RMP1
Audio CAPT
LOUDSPEAKER
OFF
MAX
Communication Tools
Push to Talk
Mask
RMP1
Audio F/O
Communication Tools
LOUDSPEAKER
OFF
MAX
Mask
Push to Talk
RMP2
Audio 3rd Occupant
Communication Tools
Mask
ACP3
or RMP3
Ground Crew Call System
Communication Tools
Avionic link for ground crew call request to cockpit
Audio 4th Occupant
Communication Tools
ACP4
AMU
Side 1
Side 2
XPDR 1
TCAS
XPDR 2
VHF
HF
SATCOM
MMR
VOR
ADF
DME
ATSU
FWC
FMGC
CVR
WXR
TAWS
Aircraft Systems
CIDS
PA
Cabin Interphone
Service Interphone
Caption:
Audio and avionic link
Backup audio link for RMP1,2 and 3

RMPs and ACPs are directly interfaced with:

- Cockpit and ground crew audio peripherals
- AMU (for control setting and audio management)
- The other RMPs (for audio signal backup).

Note: *1. ACPs are not interfaced with other ACPs or RMPs.*
2. RMP 3 ◁ is not backed-up for RMP1 nor RMP2.

Ground crew call audio function is directly interfaced with AMU through ACP 3 or RMP3 ◁ . In case of loss of ACP 3 or RMP3 ◁ , the ground crew call audio function is lost.
AMU is directly interfaced with different aircraft systems to provide audio functions and radio navigation backup functions.
In the case of AMU total failure, audio functions are lost and RMP 1 automatically activates the RMP 1 XPDR1/ TCAS backup control mode and:

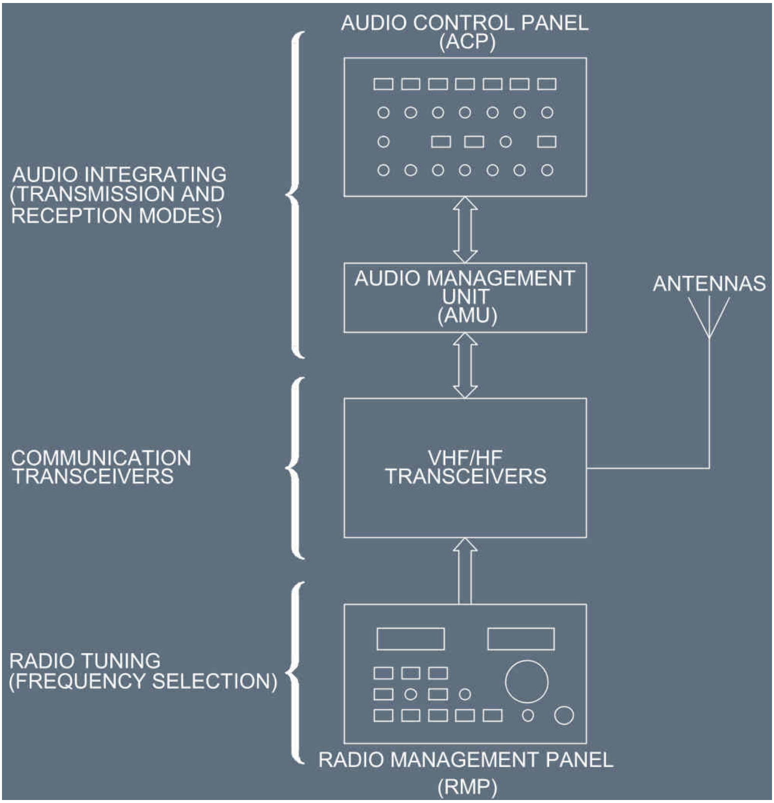
- Flight crew controls XPDR 1 through RMP 1
- XPDR 2 control function is lost
- XPDR/TCAS control function is lost in RMP 2 and RMP3 ◁ .

COMMUNICATION SYSTEM ARCHITECTURE

Ident.: DSC-23-10-10-00018503.0001001 / 18 MAY 21

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

The communications system comprises the following subsystems :
- VHF/HF transceivers
- Radio tuning systems (Radio Management Panels).
- Audio integrating system (Audio Management Unit, Audio Control Panels).


AUDIO CONTROL PANEL
(ACP)
AUDIO INTEGRATING
(TRANSMISSION AND
RECEPTION MODES)
AUDIO MANAGEMENT
UNIT
(AMU)
ANTENNAS
COMMUNICATION
TRANSCEIVERS
VHF/HF
TRANSCEIVERS
RADIO TUNING
(FREQUENCY SELECTION)
RADIO MANAGEMENT PANEL
(RMP)

DESCRIPTION

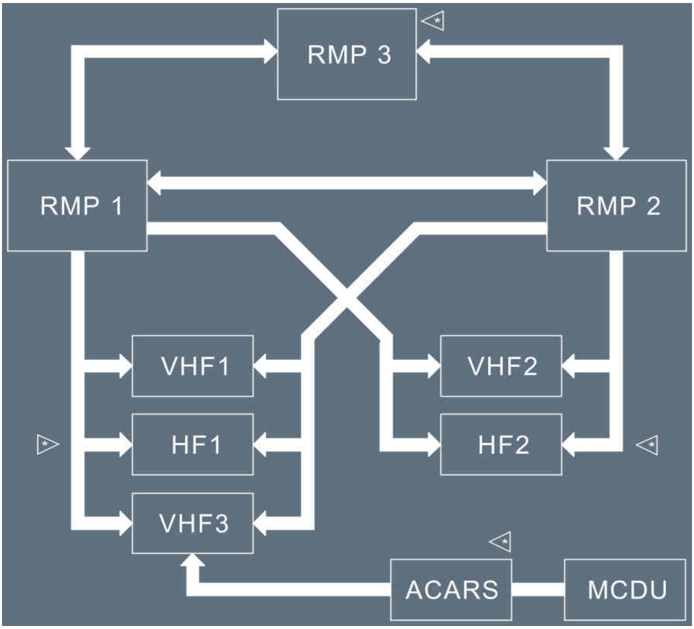
Ident.: DSC-23-10-20-00018494.0001001 / 17 MAY 21

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

Identical Radio Management Panels (RMPs):

- Give the flight crew control of all VHF radio communication systems (HF systems ◁).
- Provide backup to the FMGCs for controlling radio navigation systems (*Refer to DSC-34-NAV-30-10 General*).

The two RMPs are on the center pedestal (and the third ◁ is on the overhead panel).
Each RMP can control any VHF (HF ◁) transceiver. RMP1 and RMP2 are connected directly to all VHF (HF ◁) transceivers, (whereas RMP3 ◁ is connected to them via RMP1 and RMP2). RMPs are connected together so that each RMP is updated to the selections made on the other RMPs.
Only RMP1 functions in EMER ELEC CONFIG.

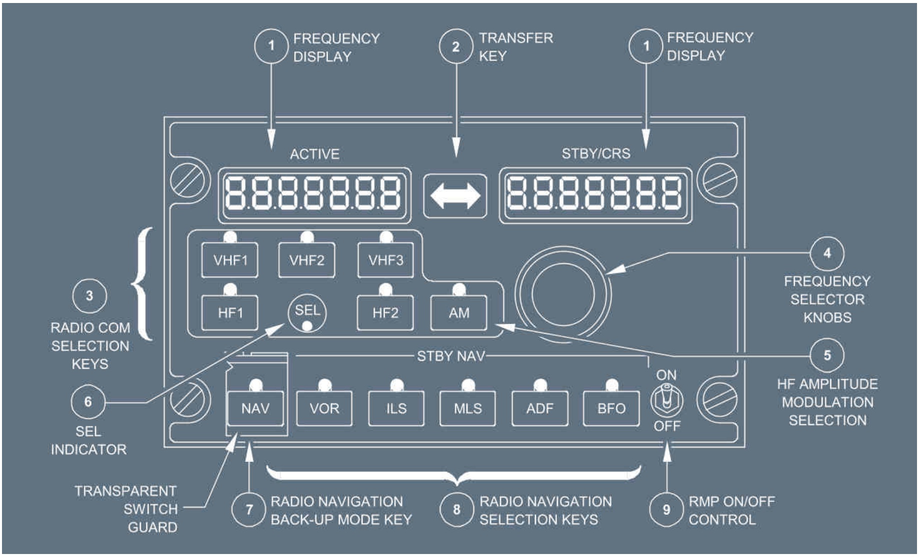


If one RMP fails, the remaining one controls all the VHF (HF ◁) transceivers except if RMP3 is not installed and ACARS is connected to VHF3. In such case, the VHF3 can only be tuned in data by the ACARS.

RADIO MANAGEMENT PANEL

Ident.: DSC-23-10-20-00018495.0001001 / 22 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05345, 05591-05752


1 FREQUENCY DISPLAY
2 TRANSFER KEY
1 FREQUENCY DISPLAY
ACTIVE
STBY/CRS
8888888
8888888
VHF1
VHF2
VHF3
HF1
SEL
HF2
AM
3 RADIO COM SELECTION KEYS
4 FREQUENCY SELECTOR KNOBS
5 HF AMPLITUDE MODULATION SELECTION
STBY NAV
6 SEL INDICATOR
NAV
VOR
ILS
MLS
ADF
BFO
ON
OFF
TRANSPARENT SWITCH GUARD
7 RADIO NAVIGATION BACK-UP MODE KEY
8 RADIO NAVIGATION SELECTION KEYS
9 RMP ON/OFF CONTROL

(1) Frequency displays
The ACTIVE display window shows the active frequency of the selected radio, which is identified by a green light on the selection key.
The STBY/CRS (standby/course) display window shows a standby frequency that the pilot can activate by pressing the transfer key or change by rotating the tuning knobs. (For a description of the CRS function *Refer to DSC-34-NAV-30-30 Radio Management Panel (RMP)*).

(2) Transfer key
Pressing this key moves the active frequency to the standby window and the standby frequency to the active window.
This tunes the selected receiver to the new active frequency.

(3) Radio com selection keys

When the pilot presses one of these keys:
- The ACTIVE window displays the frequency set on that radio.
- The STBY/CRS window displays the selected standby frequency or course.
- The selected key displays a green monitor light.

(4) Frequency selector knobs
The pilot uses these concentric knobs to select the STBY frequency or CRS.
The outer knob controls whole numbers; the inner knob controls decimal fractions.

(5) AM pushbutton
If the aircraft has HF radios and the flight crew has selected an HF tranceiver, this switch selects the AM mode. (The default mode is the SSB, or single side-band mode).
This key displays a green monitor light when the AM mode is active.

(6) SEL indicator

The SEL indicator on both RMPs comes on amber when a transceiver, normally associated with one RMP, is tuned by another:

- If 2 RMP installed:
  - VHF1 (VHF3, ◁ , HF1 ◁), tuned by RMP2,
  - VHF2 (HF2 ◁), tuned by RMP1.
- If 3 RMP installed:
  - VHF1 tuned by RMP2 or RMP3,
  - VHF2 tuned by RMP1 or RMP3,
  - VHF3, HF1, (HF2 ◁) tuned by RMP1 or RMP2.

(7) NAV pushbutton (with transparent switchguard)
The pilot presses this key to select navigation receivers and courses through the RMP.
It does not affect the selection of communication radios and their frequencies. (*Refer to DSC-34-NAV-30-30 Radio Management Panel (RMP)*, for additional information).

(8) Radio navigation selection keys
The pilot presses one of these keys to select a navigation radio to control through this RMP.
This turns on the key's green monitor light.
Refer to DSC-34-NAV-30-30 Radio Management Panel (RMP), for additional information.

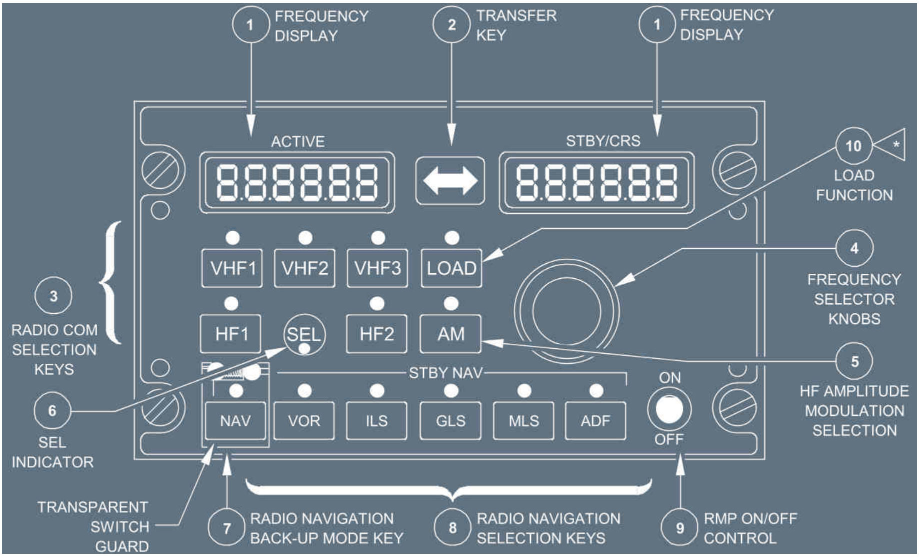
(9) ON/OFF switch
This switch controls the RMP power supply.

Note: *RMP3 is able to control VHF and HF transceivers through RMP1 and RMP2 even when either of the latter is OFF.*

RADIO MANAGEMENT PANEL

Ident.: DSC-23-10-20-00018495.0002001 / 17 MAR 17

2 **Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05528, 05883-05987, 06097, 06121, 06139-09324, 10949-11293**


1 FREQUENCY DISPLAY
2 TRANSFER KEY
1 FREQUENCY DISPLAY
ACTIVE
STBY/CRS
888888
888888
10 LOAD FUNCTION
4 FREQUENCY SELECTOR KNOBS
5 HF AMPLITUDE MODULATION SELECTION
3 RADIO COM SELECTION KEYS
VHF1
VHF2
VHF3
LOAD
HF1
SEL
HF2
AM
6 SEL INDICATOR
STBY NAV
NAV
VOR
ILS
GLS
MLS
ADF
ON
OFF
TRANSPARENT SWITCH GUARD
7 RADIO NAVIGATION BACK-UP MODE KEY
8 RADIO NAVIGATION SELECTION KEYS
9 RMP ON/OFF CONTROL

(1) Frequency displays
The ACTIVE display window shows the active frequency of the selected radio, which is identified by a green light on the selection key.
The STBY/CRS (standby/course) display window shows a standby frequency that the pilot can activate by pressing the transfer key or change by rotating the tuning knobs. (For a description of the CRS function *Refer to DSC-34-NAV-30-30 Radio Management Panel (RMP)*).

(2) Transfer key
Pressing this key moves the active frequency to the standby window and the standby frequency to the active window.
This tunes the selected receiver to the new active frequency.

(3) Radio com selection keys

When the pilot presses one of these keys:
- The ACTIVE window displays the frequency set on that radio.
- The STBY/CRS window displays the selected standby frequency or course.
- The selected key displays a green monitor light.

(4) Frequency selector knobs
The pilot uses these concentric knobs to select the STBY frequency or CRS.
The outer knob controls whole numbers; the inner knob controls decimal fractions.

(5) AM pb-sw
If the aircraft has HF radios and the flight crew has selected an HF tranceiver, this switch selects the AM mode. (The default mode is the SSB, or single side-band, mode).
This key displays a green monitor light when the AM mode is active.

(6) SEL indicator

The SEL indicator on both RMPs comes on amber when a transceiver normally associated with one RMP is tuned by another:
- VHF 1 tuned by RMP 2 or RMP 3,
- VHF 2 tuned by RMP 1 or RMP 3.
- VHF 3, HF 1, HF 2 (◁✳) tuned by RMP 1 or RMP 2.

(7) NAV pb sw (with transparent switchguard)
The pilot presses this key to be able to select navigation receivers and courses through the RMP. It does not affect the selection of communication radios and their frequencies. (*Refer to DSC-34-NAV-30-30 Radio Management Panel (RMP)*, for additional information).

(8) Radio navigation selection keys
The pilot presses one of these keys to select a navigation radio to control through this RMP. This turns on the green monitor light in the key.
Refer to DSC-34-NAV-30-30 Radio Management Panel (RMP), for additional information.

(9) ON/OFF sw
This switch controls the power supply to the RMP.

Note: *RMP 3 is able to control VHF and HF transceivers through RMP 1 and RMP 2 even when they are OFF.*

(10) LOAD FUNCTION ◁✳
When the ATC sends (CONTACT or MONITOR) CPDLC messages to the flight crew, a white light above the LOAD key comes on to indicate that the sent frequency is available to be loaded.
Press on this LOAD key before closing the CONTACT/MONITOR messages to load this VHF frequency to the STBY/CRS window.

Note: *When a frequency from the ATC services (sent label via datalink) has been received, the ATSU validates the frequency and simultaneously sends the information to all the RMP in order to activate the LOAD function.*
When the LOAD function is activated, the flight crew can repeatedly load the frequency on each RMP as often as necessary; except if DATA is present on standby window.

RMP ARCHITECTURE

Applicable to: MSN 11482-11597

3 Ident.: DSC-23-10-20-A-00024135.0001001 / 25 MAY 20

Identical Radio Management Panels (RMPs):
- Give the flight crew control of all VHF radio communication systems (HF ◁✱ systems).
- Provide backup to the FMGCs for controlling radio navigation systems (*Refer to DSC-34-NAV-30-10 General*).

The two RMPs are on the center pedestal (and the third ◁✱ is on the overhead panel).

4 Ident.: DSC-23-10-20-A-00022684.0001001 / 25 MAY 20

RADIO MANAGEMENT PANEL (RMP)

There are two Radio Management Panels (RMPs) (third RMP ◁✱) in the cockpit. The flight crew uses these RMPs to control the communication system.

On each RMP, the flight crew can:
- Manage the radio communication means:
  - Select the communication means in transmission and/or reception mode(s)
  - Control the volume of the communication means
  - Tune HF ◁✱ and VHF frequencies
  - Dial SATCOM ◁✱ Telephone (TEL) numbers
  - Load frequencies and phone numbers from the DCDU
  - Select voice or data mode.
- Manage the Flight Interphone, the Passenger Address, the Cabin Interphone and the Ground Crew communication means

- Manage the radio navigation systems:
  - Adjust the volume for voice communication and for NAVAID identification.
  - Select Standby Radio Navigation (STBY RAD NAV) and tune the NAVAIDs (only via RMP 1 and RMP 2).
    For information on standby radio navigation tuning, *Refer to DSC-34-NAV-30-30 NAV Page*.
- Manage the transponders:
  - Select the transponder settings
  - Enter the Squawk (SQWK) code and squawk IDENT
  - Select the TCAS settings

In addition to the RMPs, the flight crew uses:
- The CALLS panel to generate visual, and aural call indications (in the cabin and/or on the steering nose gear panel) via the flight and cabin interphones
- The Evacuation (EVAC) panel ◁ , to initiate evacuation of the aircraft
- The Emergency Locator Transmitter (ELT) panel, to control the ELT.

5 Ident.: DSC-23-10-20-A-00022674.0001001 / 25 MAY 20

RMP SYNCHRONIZATION

The RMPs share selections and inputs in order to enable the flight crew to control all radio communication via any RMP.

L2 The RMPs share mainly the following data:
- Active and standby frequencies
- SATCOM ◁ channels and their status (e.g. logged on/off, cabin calls enabled/disabled, connected)
- Active function displays (e.g. Amplitude Modulation (AM)).

L1 However, it is possible to display a different page on each RMP.

6 Ident.: DSC-23-10-20-A-00022675.0001001 / 18 MAY 21

ACTIVE COMMUNICATION

In normal operation:
- The Captain controls communication via RMP 1
- The First Officer controls communication via RMP 2
- The third occupant controls communication via ACP 3 or RMP 3 ◁ .
- The fourth occupant controls communications via ACP 4 ◁ .

7 Ident.: DSC-23-10-20-A-00022676.0001001 / 25 MAY 20

STANDBY CONTROL

If a connection or an RMP fails, the communication system can automatically reconfigure to ensure continued communication control.
Standby connections are activated instead of the failed connections.
RMP 3 can be used, as a backup, instead of the failed RMP (except for STBY RAD NAV control).
If the FMS can no longer control the radio NAVAIDS (e.g. FMS failure), RMPs 1 and 2 can also be used, as a backup, to tune the NAVAIDS.

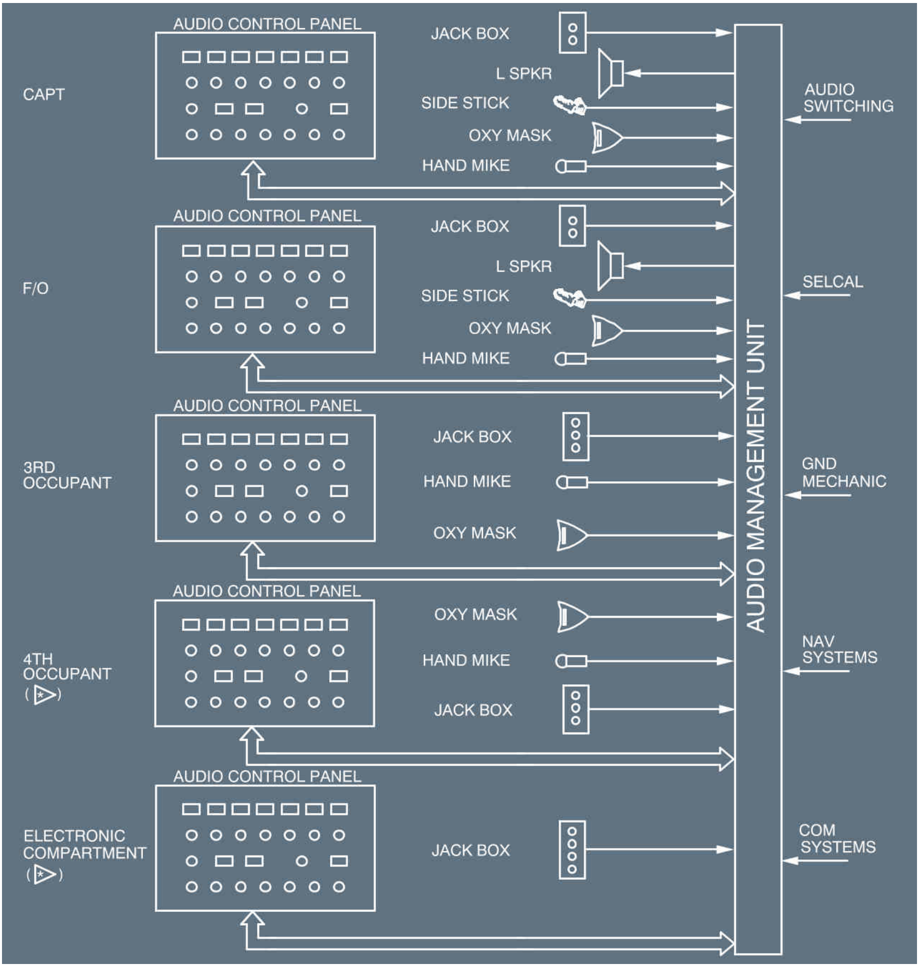
AUDIO MANAGEMENT SYSTEM

Ident.: DSC-23-10-30-00018496.0002001 / 17 MAR 17
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

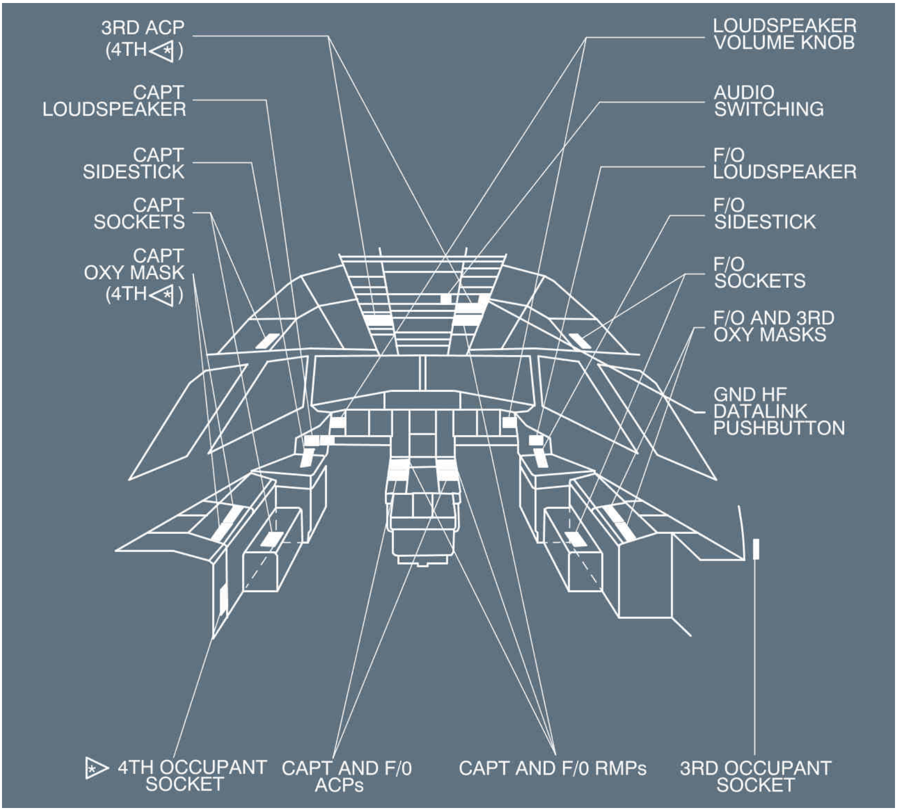
The audio management system allows the flight crew to use :
- All the radio communication and radio navigation facilities installed on the aircraft in transmission and reception mode.
- The interphone systems.
- The call systems.
- The passenger address system.

The audio management system includes :
- An audio management unit (AMU).
- Three audio control panels (ACPs) (fourth and fifth optional).
- Sockets at each station:
  - Headset jack and boomset connector (hand microphone connector ◁) for pilot, copilot, and third occupant.
  - Headset jack for fourth occupant.
- One interphone jack at the ground power receptacle.
- Boomsets for the pilot, copilot, and third occupant, and three hand microphones (fourth ◁).
- Three cockpit oxygen mask microphones.
- One radio press-to-talk switch on each sidestick.
- One SELCAL code selection panel (avionics compartment).
- Two cockpit loudspeakers with separate volume controls.
- If installed, a jack panel in the electronic compartment that groups the headset jack, service interphone jack, hand mike connector, and boomset.
- An audio switching facility.

If audio channel 1 or 2 fails due to a failure either in an ACP or the corresponding AMU, the crew can use the AUDIO SWITCHING selector to select the third audio channel.


AUDIO CONTROL PANEL
CAPT
JACK BOX
L SPKR
SIDE STICK
OXY MASK
HAND MIKE
AUDIO CONTROL PANEL
F/O
JACK BOX
L SPKR
SIDE STICK
OXY MASK
HAND MIKE
AUDIO CONTROL PANEL
3RD OCCUPANT
JACK BOX
HAND MIKE
OXY MASK
AUDIO CONTROL PANEL
4TH OCCUPANT
OXY MASK
HAND MIKE
JACK BOX
AUDIO CONTROL PANEL
ELECTRONIC COMPARTMENT
JACK BOX
AUDIO MANAGEMENT UNIT
AUDIO SWITCHING
SELCAL
GND MECHANIC
NAV SYSTEMS
COM SYSTEMS

LOCATION OF COMPONENTS (PILOT'S STATION)


3RD ACP
(4TH ⊲*)
CAPT
LOUDSPEAKER
CAPT
SIDESTICK
CAPT
SOCKETS
CAPT
OXY MASK
(4TH ⊲*)
LOUDSPEAKER
VOLUME KNOB
AUDIO
SWITCHING
F/O
LOUDSPEAKER
F/O
SIDESTICK
F/O
SOCKETS
F/O AND 3RD
OXY MASKS
GND HF
DATALINK
PUSHBUTTON
▷* 4TH OCCUPANT
SOCKET
CAPT AND F/0
ACPs
CAPT AND F/0 RMPs
3RD OCCUPANT
SOCKET

AUDIO MANAGEMENT SYSTEM

Ident.: DSC-23-10-30-00018496.0001001 / 17 MAR 17

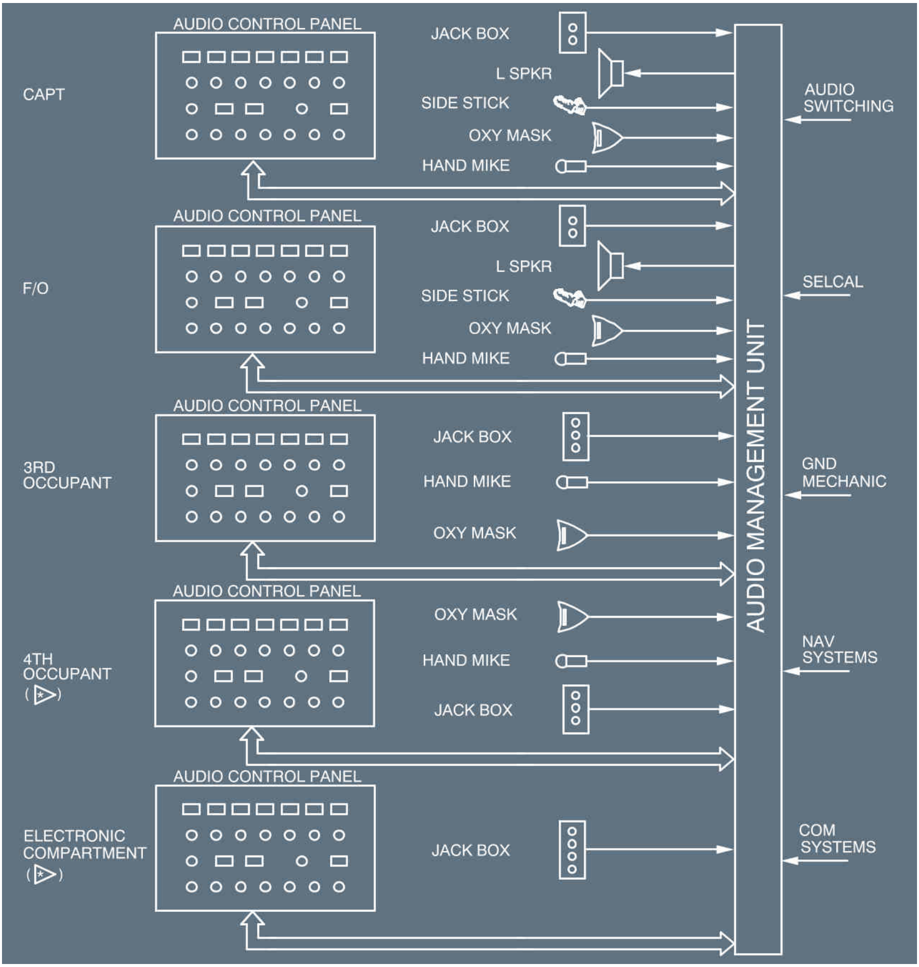
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11293**

The audio management system allows the flight crew to use :
- All the radio communication and radio navigation facilities installed on the aircraft in transmission and reception mode.
- The interphone systems
- The call systems
- The passenger address system

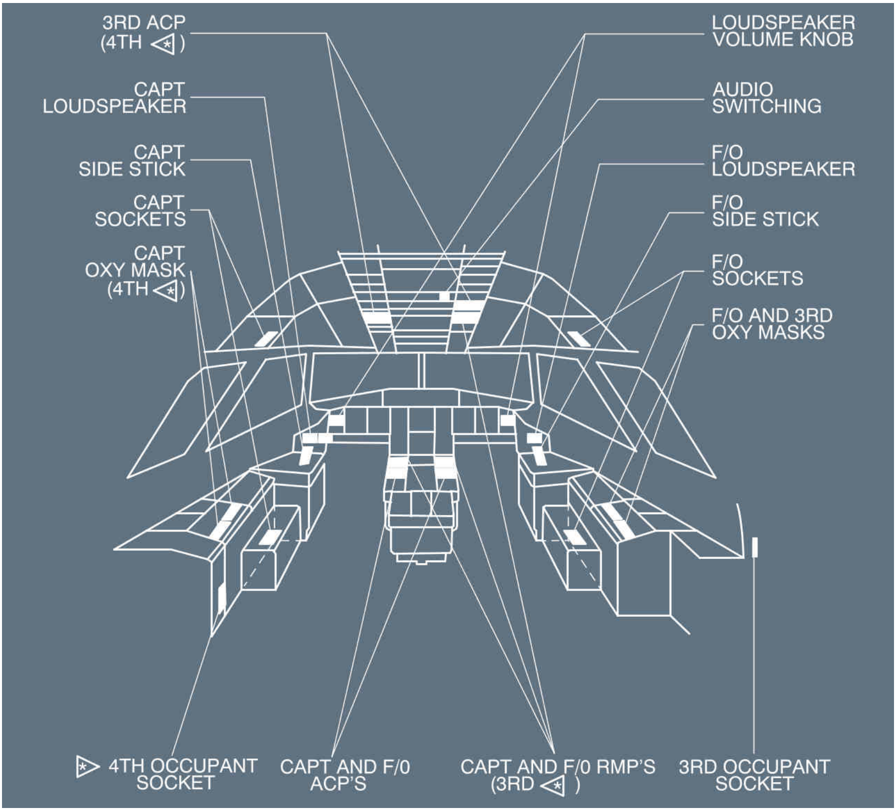
The audio management system includes :

- An audio management unit (AMU)
- Three audio control panels (ACPs) (fourth and fifth optional)
- Sockets at each station
  - Headset jack and boomset connector (hand microphone connector ◁✻) for pilot, copilot, and third occupant
  - Headset jack for fourth occupant
- One interphone jack at the ground power receptacle
- Boomsets for the pilot, copilot, and third occupant, and three hand microphones (fourth ◁✻)
- Three cockpit oxygen mask microphones
- One radio press-to-talk switch on each sidestick
- One SELCAL code selection panel (avionics compartment)
- Two cockpit loudspeakers with separate volume controls
- If installed, a jack panel in the electronic compartment that groups the headset jack, service interphone jack, hand mike connector, and boomset
- An audio switching facility

If audio channel 1 or 2 fails due to a failure either in an ACP or the corresponding AMU, the crew can use the AUDIO SWITCHING selector to select the third audio channel.


CAPT
F/O
3RD OCCUPANT
4TH OCCUPANT
ELECTRONIC COMPARTMENT
AUDIO CONTROL PANEL
JACK BOX
L SPKR
SIDE STICK
OXY MASK
HAND MIKE
AUDIO MANAGEMENT UNIT
AUDIO SWITCHING
SELCAL
GND MECHANIC
NAV SYSTEMS
COM SYSTEMS

LOCATION OF COMPONENTS (PILOT'S STATION)


3RD ACP
(4TH ◁)
CAPT
LOUDSPEAKER
CAPT
SIDE STICK
CAPT
SOCKETS
CAPT
OXY MASK
(4TH ◁)
LOUDSPEAKER
VOLUME KNOB
AUDIO
SWITCHING
F/O
LOUDSPEAKER
F/O
SIDE STICK
F/O
SOCKETS
F/O AND 3RD
OXY MASKS
▷ 4TH OCCUPANT
SOCKET
CAPT AND F/0
ACP'S
CAPT AND F/0 RMP'S
(3RD ◁)
3RD OCCUPANT
SOCKET

AUDIO MANAGEMENT SYSTEM

2 Ident.: DSC-23-10-30-00018496.0003001 / 09 NOV 21

Applicable to: MSN 11482-11597

The Audio Management Unit (AMU) is located in the avionic bay.

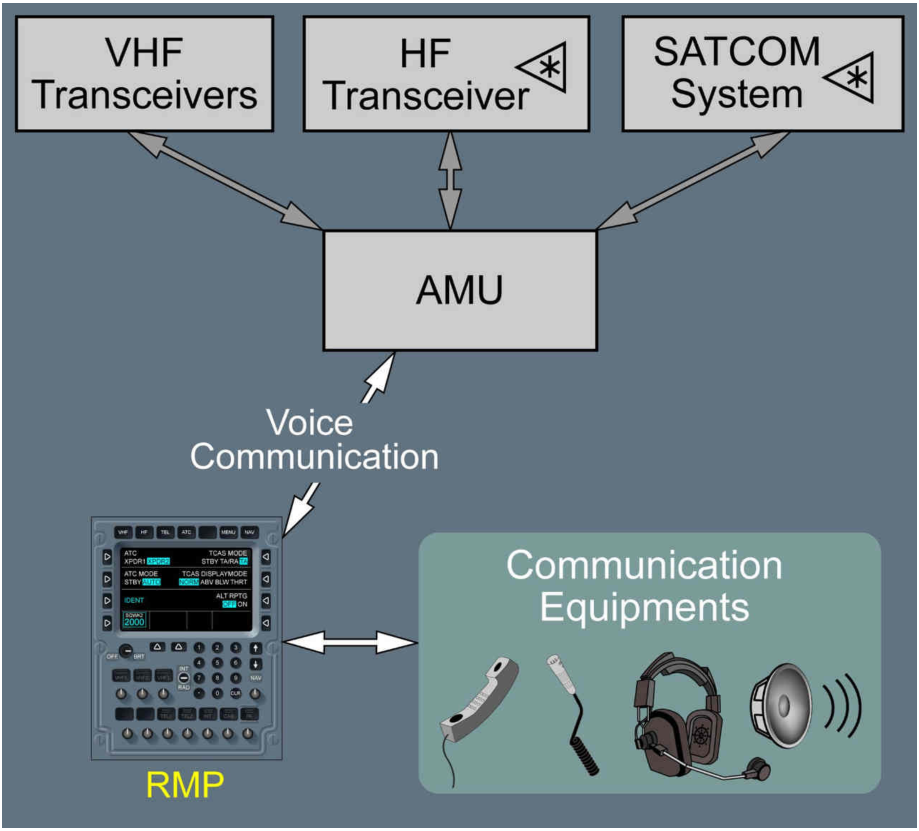
The AMU manages:
- Communication transmission / reception of all the radio communication and radio navigation facilities
- Internal communication.

The AMU manages and adjusts the volume of audio signals (analog) between the communication equipment and the:

- VHF / HF ◁ transceivers
- SATCOM ◁ system
- SELCAL
- NAVAID receivers (for NAVAID identification in STBY RAD NAV)
- Flight interphone
- Cabin Intercommunication Data System (CIDS) that includes:
  - The cabin interphone
  - The service interphone
  - The Passenger Address (PA).

Note: *The cockpit handset is directly connected to the CIDS.*

The AMU is the interface for the voice.


VHF Transceivers
HF Transceiver
SATCOM System
AMU
Voice Communication
RMP
Communication Equipments

CABIN INTERCOMMUNICATION DATA SYSTEM

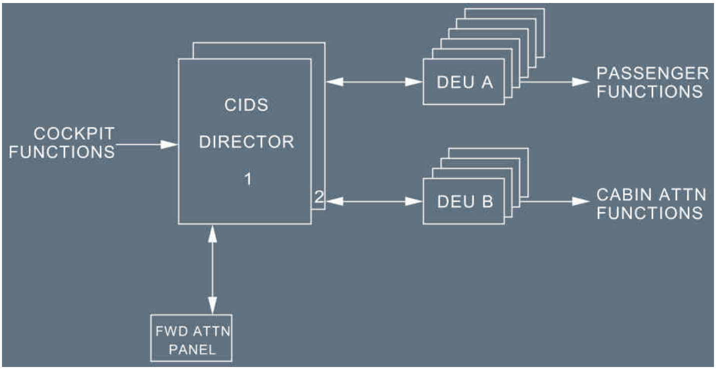
Ident.: DSC-23-10-30-00018497.0001001 / 03 OCT 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The Cabin Intercommunication Data System (CIDS) transmits, controls, and processes signals for the following cabin systems:

- Cabin and service interphone
- Passenger address
- Passenger lighted signs
- Reading light
- General cabin illumination
- Emergency evacuation signalling

- Lavatory smoke indication
- Passenger entertainment system ◁
- Escape slide bottle pressure monitoring ◁ .

The CIDS has the following main components:
- Two CIDS directors connected in parallel, one active, and the other on standby
- Forward attendant panel for control of the cabin systems
- Programming and test module that allows the system to be reprogrammed after changes are made in the cabin configuration.



Decoder/Encoder Units (DEUs) linked to the two directors:
- Type A units (for passengers) installed along each side of the passenger cabin.
  The loudspeakers, lighted signs, call buttons, call lights and general illumination ballast units are divided into small groups, each connected to a type A DEU
- Type B units (for attendants) installed near the exit doors. The Area Call panels, attendant handsets, slide and door pressure sensors, and attendant indicator panels, are connected to type B DEUs.

CABIN INTERCOMMUNICATION DATA SYSTEM

Ident.: DSC-23-10-30-00018497.0002001 / 10 MAY 22

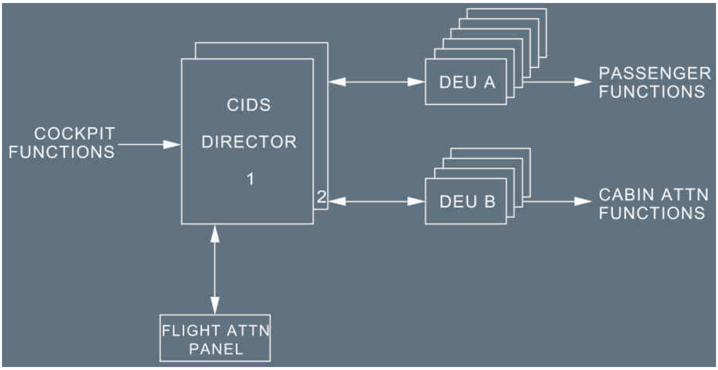
3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The Cabin Intercommunication Data System (CIDS) transmits, controls, and processes signals for the following cabin systems :
- Cabin and service interphone
- Passenger address
- Passenger lighted signs
- Reading lights (LED technology)
- General cabin illumination

- Emergency evacuation signalling
- Lavatory smoke detectors and indicators
- Passenger entertainment system
- Escape slide bottle pressure monitoring
- Vacuum system control function
- Cargo and lavatory smoke detection function.

The CIDS has the following main components :

- Two CIDS directors connected in parallel ; one active, and the other on standby
- Flight Attendant Panel (FAP) to monitor and control the cabin systems
- Attendant Indication Panels (AIP), After Attendant Panels (AAP) and Area Call Panels (ACP)
- Decoder/Encoder Units (DEUs) linked to the two directors:
    - Type A units (for passengers) installed along the cabin.
      The loudspeakers, lighted signs, call buttons, call lights and general illumination ballast units are divided into small groups, each connected to a type A DEU
    - Type B units (for attendants) installed near the exit doors. The Area Call panels, smoke detectors, attendant handsets, slide and door pressure sensors, and attendant indicator panels, are connected to type B DEUs.



DESCRIPTION

1 Ident.: DSC-23-10-40-00018569.0011001 / 13 DEC 22
Applicable to: MSN 11482-11597

The CVR records:
- Direct conversations between crew members in the cockpit
- All aural warnings sounded in the cockpit
- Audio communications received and transmitted
- Intercommunications conversations between crew members
- Announcements transmitted over the PA system.

Only the last 25 h of recording are retained.

The CVR system consists of:
- A cockpit area microphone
- A “hot mike” function, which records the crew members voice directly from their microphone, even if the push to talk switch is not activated
- A crashproof four-track recorder, equipped with an underwater locating beacon, in the aft section of the aircraft
- A control panel on the overhead panel.

The CVR is recording automatically:
- On ground during the first 5 min after the aircraft electrical network is energized
- On ground with one engine running
- In flight
- On ground until 5 min after the last engine shutdown.

On ground, when GND CTL pb-sw is pressed, the CVR is recording.

DESCRIPTION

Ident.: DSC-23-10-40-00018569.0007001 / 10 MAY 21
2 **Applicable to: MSN 10949-11293**

The CVR records:
- Direct conversations between crew members in the cockpit
- All aural warnings sounded in the cockpit
- Audio communications received and transmitted
- Intercommunications conversations between crew members
- Announcements transmitted over the PA system, if PA reception is selected on at least one audio control panel.

Only the last 25 h of recording are retained.

The CVR system consists of:
- A cockpit area microphone
- A “hot mike” function, which records the crew members voice directly from their microphone, even if the push to talk switch is not activated
- A crashproof memory unit, equipped with an underwater locating beacon
- A control panel on the overhead panel.

The CVR is recording automatically:
- On ground during the first 5 min after the aircraft electrical network is energized
- On ground with one engine running
- In flight.
- On ground until 5 min after the last engine shutdown.

On ground, when GND CTL pb-sw is pressed, the CVR is recording.

DESCRIPTION

Ident.: DSC-23-10-40-00018569.0001001 / 10 MAY 21
Applicable to: MSN 01459

The CVR records:
- Direct conversations between crew members in the cockpit
- All aural warnings sounded in the cockpit
- Audio communications received and transmitted
- Intercommunications conversations between crew members
- Announcements transmitted over the PA system, if PA reception is selected on at least one audio control panel.

Only the last 2 h of recording are retained.

The CVR system consists of:
- A remote microphone behind the overhead panel
- A crashproof four-track recorder, equipped with an underwater locating beacon, in the aft section of the aircraft
- A control panel on the overhead panel.

The CVR is recording automatically:
- On ground during the first 5 min after the aircraft electrical network is energized
- On ground with one engine running
- In flight
- On ground until 5 min after the last engine shutdown provided the CVR jack is not used.

On ground, when GND CTL pb-sw is pressed, the CVR is recording.

DESCRIPTION

Ident.: DSC-23-10-40-00018569.0002001 / 10 MAY 21

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

The CVR records:
- Direct conversations between crew members in the cockpit
- All aural warnings sounded in the cockpit
- Audio communications received and transmitted
- Intercommunications conversations between crew members
- Announcements transmitted over the PA system, if PA reception is selected on at least one audio control panel.

Only the last 2 h of recording are retained.

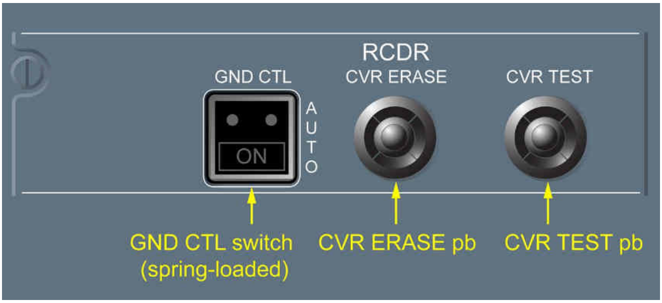
The CVR system consists of:
- A remote microphone behind the overhead panel
- A “hot mike” function, which records the crew members voice directly from their microphone, even if the push to talk switch is not activated
- A crashproof four-track recorder, equipped with an underwater locating beacon, in the aft section of the aircraft
- A control panel on the overhead panel.

The CVR is recording automatically:
- On ground during the first 5 min after the aircraft electrical network is energized
- On ground with one engine running
- In flight
- On ground until 5 min after the last engine shutdown provided the CVR jack is not used.

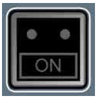
On ground, when GND CTL pb-sw is pressed, the CVR is recording.

CONTROLS AND INDICATORS

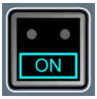
Ident.: DSC-23-10-40-00018570.0001001 / 04 SEP 18
Applicable to: ALL


RCDR
GND CTL
CVR ERASE
CVR TEST
ON
A
U
T
O
GND CTL switch
(spring-loaded)
CVR ERASE pb
CVR TEST pb

GND CTL pb-sw



The CVR, DFDR and QAR ◁ automatically operate (AUTO), according to the logic (*Refer to DSC-23-10-40 Description*).



The flight crew manually starts the CVR, DFDR, and QAR ◁ .
After engine start, the ON light goes off and the recorders automatically operate.

Note: *The GND CTL pb-sw may revert to AUTO (active or inactive, according to the logic) during an electrical transient.*

CVR ERASE pb

When pressed for 2 s, the CVR ERASE function ◁ erases the CVR full recording, if:
- The aircraft is on the ground, and
- The parking brake is on.

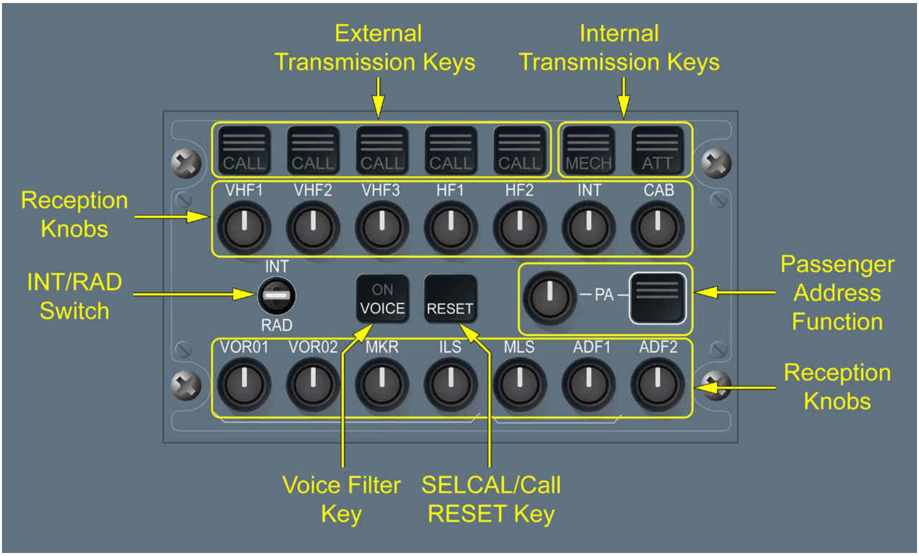
CVR TEST pb

When pressed and held:
This activates the test, if the CVR is on (the GND CTL pb-sw pressed, or during the first 5 min after energization of the aircraft electrical network), and the parking brake is on.

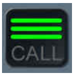
AUDIO CONTROL PANEL

Ident.: DSC-23-10-50-00018498.0001001 / 05 MAY 22

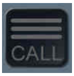
1 **Applicable to: MSN 01459, 02014-02321, 02887, 03032, 04563, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11293**


External Transmission Keys
Internal Transmission Keys
CALL
CALL
CALL
CALL
CALL
MECH
ATT
VHF1
VHF2
VHF3
HF1
HF2
INT
CAB
Reception Knobs
INT/RAD Switch
INT
RAD
ON
VOICE
RESET
PA
Passenger Address Function
VOR01
VOR02
MKR
ILS
MLS
ADF1
ADF2
Reception Knobs
Voice Filter Key
SELCAL/Call RESET Key

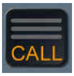
EXTERNAL TRANSMISSION KEYS



The associated communication means (i.e. VHF 1(2)(3), HF 1(2)) is in transmission mode. When pressed, the transmission key turns off the transmission mode of the associated channel.

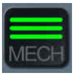


The associated communication means (i.e. VHF 1(2)(3), HF 1(2)) is not in transmission mode. When pressed, the transmission key turns on the transmission mode of the associated channel.



Flashes to indicate an incoming SELCAL.
When a SELCAL is received, a buzzer sounds in the cockpit until it is reset, via SELCAL/Call RESET Key.

INTERNAL TRANSMISSION KEYS (INT/CAB)



The INT interphone is in transmission mode. When pressed, the transmission key turns off the transmission mode of the associated interphone.

The INT interphone is not in transmission mode. When pressed, the transmission key turns on the transmission mode of the associated interphone.

Flashes to indicate an incoming call from the ground crew.
The MECH light goes off after 60 s, if it is not reset.

The CAB interphone is in transmission mode. When pressed, the transmission key turns off the transmission mode of the associated interphone.

The CAB interphone is not in transmission mode. When pressed, the transmission key turns on the transmission mode of the associated interphone.

Flashes to indicate an incoming call from the cabin crew.
The ATT light goes off after 60 s, if it is not reset.

PASSENGER ADDRESS (PA) FUNCTION

Refer to DSC-23-20-40 Description.

RECEPTION KNOBS

The associated communication means or interphone (i.e. VHF 1(2)(3), HF 1(2), INT, or CAB) is not in reception mode.
When pressed and released in the out position, the reception knob turns on the reception mode.

The associated communication means or interphone (i.e. VHF 1(2)(3), HF 1(2), INT, or CAB) is in reception mode.

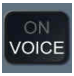
Note: *For the reception of DME audio navigation signals associated with an ILS station, the LS pb on the FCU must also be selected.*
The INTEG LT knob or the ANN LT knob controls the brightness of the reception knob.

SELCAL/CALL RESET KEY

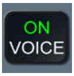
When pressed, the buzzer sound is cancelled.

VOICE FILTER KEY

VOICE filter key allows the flight crew to inhibit the most commonly used audio navigation signals (VOR, ADF).



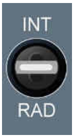
Audio filter is not active. When pressed, the VOICE filter key turns on the IDENT signals filter.



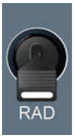
Audio filter is active. When pressed, the VOICE filter key turns off the IDENT signals filter.

INT/RAD SWITCH

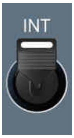
The flight crew uses the interphone/radio Push-To-Talk switch (INT/RAD sw) to activate the boomset, or oxygen mask microphones.



The INT/RAD sw is in the off position.



When set to RAD, the INT/RAD sw activates the boomset or the oxygen mask microphone. However, the appropriate key should be selected first, in order to transmit the message.
When released, the INT/RAD sw returns to the off position.

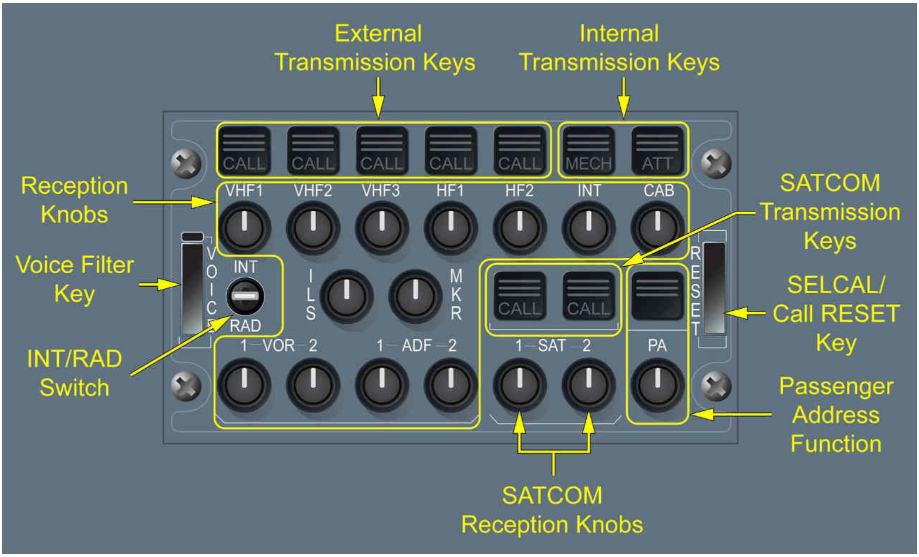


When set to INT, the INT/RAD sw activates the boomset or the oxygen mask microphone.
When released, the INT/RAD sw remains in the INT position, until the flight crew selects another switch position.

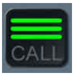
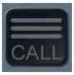
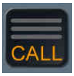
AUDIO CONTROL PANEL

Ident.: DSC-23-10-50-00018498.0002001 / 05 MAY 22

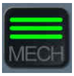
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

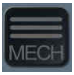

External Transmission Keys
Internal Transmission Keys
CALL
CALL
CALL
CALL
CALL
MECH
ATT
Reception Knobs
VHF1
VHF2
VHF3
HF1
HF2
INT
CAB
SATCOM Transmission Keys
Voice Filter Key
VOICE
INT
RAD
ILS
MKR
CALL
CALL
RESET
SELCAL/ Call RESET Key
INT/RAD Switch
1 VOR 2
1 ADF 2
1 SAT 2
PA
Passenger Address Function
SATCOM Reception Knobs

EXTERNAL TRANSMISSION KEYS

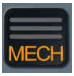
	The associated communication means (i.e. VHF 1(2)(3), HF 1(2)) is in transmission mode. When pressed, the transmission key turns off the transmission mode of the associated channel.
	The associated communication means (i.e. VHF 1(2)(3), HF 1(2)) is not in transmission mode. When pressed, the transmission key turns on the transmission mode of the associated channel.
	Flashes to indicate an incoming SELCAL. When a SELCAL is received, a buzzer sounds in the cockpit until it is reset, via SELCAL/Call RESET Key.

INTERNAL TRANSMISSION KEYS (INT/CAB)

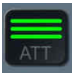
	The INT interphone is in transmission mode. When pressed, the transmission key turns off the transmission mode of the associated interphone.



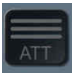
The INT interphone is not in transmission mode. When pressed, the transmission key turns on the transmission mode of the associated interphone.



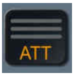
Flashes to indicate an incoming call from the ground crew.
The MECH light goes off after 60 s, if it is not reset.



The CAB interphone is in transmission mode. When pressed, the transmission key turns off the transmission mode of the associated interphone.

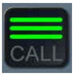


The CAB interphone is not in transmission mode. When pressed, the transmission key turns on the transmission mode of the associated interphone.

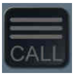


Flashes to indicate an incoming call from the cabin crew.
The ATT light goes off after 60 s, if it is not reset.

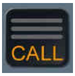
SATCOM TRANSMISSION KEYS



Steady green light indicates when the associated SATCOM channel is in transmission mode. When pressed, the transmission key turns off the transmission mode of the associated SATCOM channel.
Flashing green light indicates the establishment of air to ground call of the associated SATCOM channel or the associated SATCOM call is on hold.

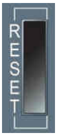


The associated SATCOM channel is not in transmission mode. When pressed, the transmission key turns on the transmission mode of the associated SATCOM channel.



Flashes to indicate an incoming call from ground via SATCOM channel.

SELCAL/CALL RESET KEY



When pressed, the buzzer sound is cancelled.

PASSENGER ADDRESS (PA) FUNCTION

Refer to DSC-23-20-40 Description.

SATCOM RECEPTION KNOBS

The associated SATCOM channel is not in reception mode. When pressed and released in the out position, the reception knob turns on the reception mode.

The associated SATCOM channel is in reception mode. When pressed and released in the in position, the reception knob turns off the reception mode. When turned, the reception knob adjusts the volume of the headset.

Note: The INTEG LT knob or ANN LT knob controls the brightness of the reception knob.

INT/RAD SWITCH

The flight crew uses the interphone/radio Push-To-Talk switch (INT/RAD sw) to activate the boomset, or oxygen mask microphones.

The INT/RAD sw is in the off position.

When set to RAD, the INT/RAD sw activates the boomset or the oxygen mask microphone. However, the appropriate key should be selected first, in order to transmit the message.
When released, the INT/RAD sw returns to the off position.

When set to INT, the INT/RAD sw activates the boomset or the oxygen mask microphone.
When released, the INT/RAD sw remains in the INT position, until the flight crew selects another switch position.

VOICE FILTER KEY

VOICE filter key allows the flight crew to inhibit the most commonly used audio navigation signals (VOR, ADF).

Audio filter is not active. When pressed, the VOICE filter key turns on the IDENT signals filter.

Audio filter is active. When pressed, the VOICE filter key turns off the IDENT signals filter.

RECEPTION KNOBS

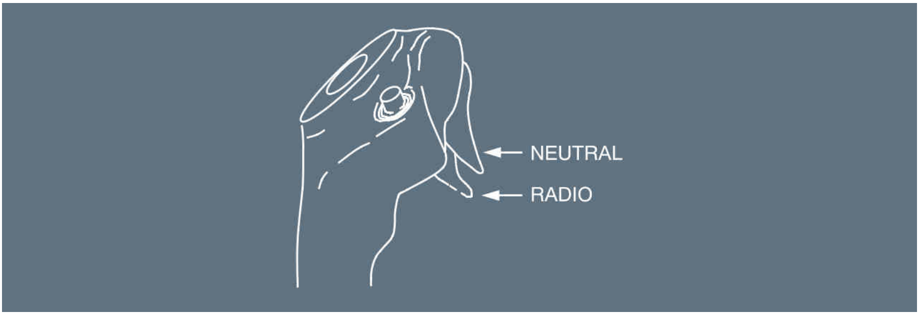
The associated communication means or interphone (i.e. VHF 1(2)(3), HF 1(2), INT, or CAB) is not in reception mode.
When pressed and released in the out position, the reception knob turns on the reception mode.

The associated communication means or interphone (i.e. VHF 1(2)(3), HF 1(2), INT, or CAB) is in reception mode.

Note: *For the reception of DME audio navigation signals associated with an ILS station, the LS pb on the FCU must also be selected.*
The INTEG LT knob or ANN LT knob controls the brightness of the reception knob.

SIDE STICK RADIO SELECTOR

Ident.: DSC-23-10-50-00018499.0001001 / 17 MAR 17
Applicable to: ALL



This selector has the same function as the INT/RAD switch on the ACP.

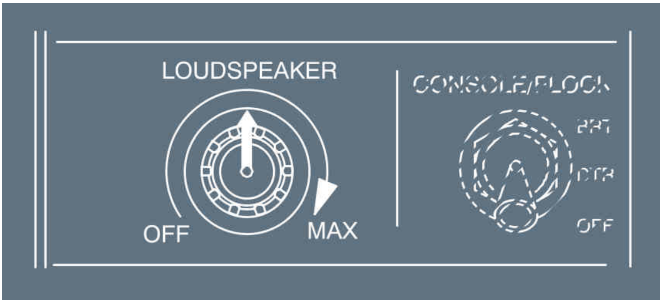
NEUTRAL (spring-loaded) : Boom and mask mikes are dead.
Reception is normal.

RADIO (squeezed) : Boom and mask mikes transmit through the equipment selected by the transmission key on the ACP.

Note: *If RADIO is selected on the side stick when the INT/RAD switch is on INT, the radio function has priority over the interphone function.*

LOUDSPEAKER VOLUME KNOB

Ident.: DSC-23-10-50-00018500.0001001 / 17 MAR 17
Applicable to: ALL



This knob adjusts the volume of the loudspeaker for radio communication.

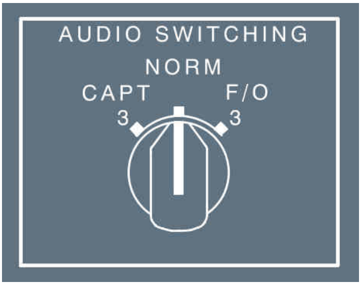
OFF	:	Loudspeaker does not respond to signals from the aircraft's radio equipment.
Clockwise rotation	:	Loudspeaker broadcasts signals from the aircraft's radio equipment at increasing volume.

Note: *This knob does not control the loudness of aural alert and voice messages.*
In the case of acoustic feedback (i.e. Larsen effect) from the cockpit loudspeaker, the flight crew should reduce the volume of the cockpit loudspeaker. However, the flight crew should ensure that the volume of the cockpit loudspeaker is sufficient to hear radio communication.

AUDIO SWITCHING

Ident.: DSC-23-10-50-00018501.0001001 / 17 MAR 17

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**



The crew can switch to the third ACP if ACP1 or ACP2 fails.
When the crew does this, it takes away the third occupant's access to the acoustic equipment.
AUDIO 3 XFRD appears in green on the ECAM MEMO display.

NORM :	Each crew member uses his dedicated communication equipment.
CAPT 3:	The pilot uses his acoustic equipment and the third occupant's ACP.
F/O 3 :	The copilot uses his acoustic equipment and the third occupant's ACP.

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FLIGHT INTERPHONE

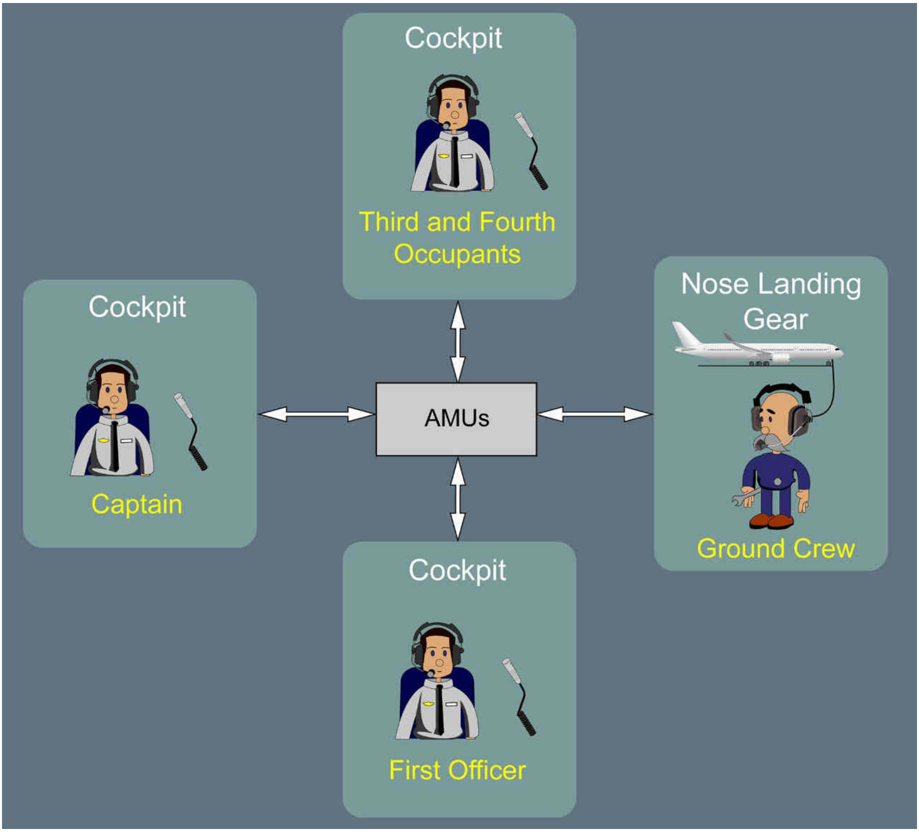
Ident.: DSC-23-20-10-00019716.0001001 / 18 MAY 21
Applicable to: ALL

AMUs hosts the flight interphone.

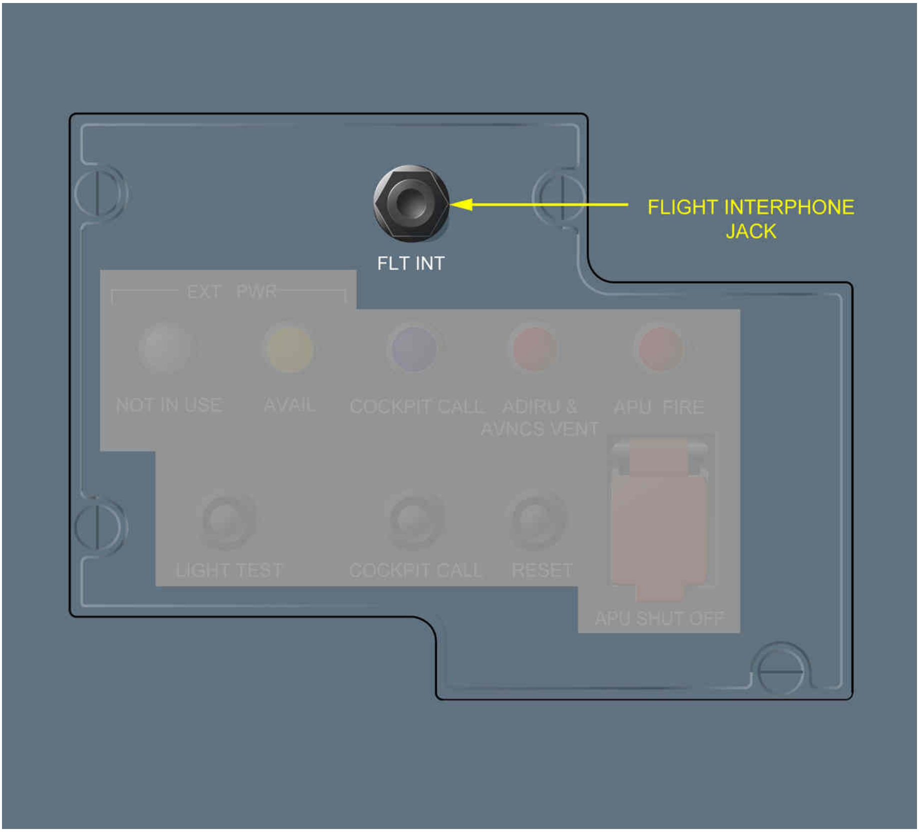
Flight crewmembers use the flight interphone to communicate with each other and with the ground crew via:
- Boomsets/headsets
- Hand microphones
- Microphones on the oxygen masks.

Ground crew can communicate with flight crew via the FLT INT jack on the maintenance nose landing gear panel (FWD of the nose L/G bay).

Flight Interphone


Cockpit
Third and Fourth Occupants
Cockpit
Captain
AMUs
Nose Landing Gear
Ground Crew
Cockpit
First Officer

EXTERNAL POWER PANEL (FORWARD OF THE NOSE L/G BAY)


FLT INT
FLIGHT INTERPHONE JACK
EXT PWR
NOT IN USE
AVAIL
COCKPIT CALL
ADIRU & AVNCS VENT
APU FIRE
LIGHT TEST
COCKPIT CALL
RESET
APU SHUT OFF

Before transmitting via the flight interphone, on the RMP the flight crewmember must:

- Press and release the INT reception knob to the out position
- Press the INT transmission key
- Press a PTT sw or set the INT/RAD sw to RAD to transmit.

Intentionally left blank

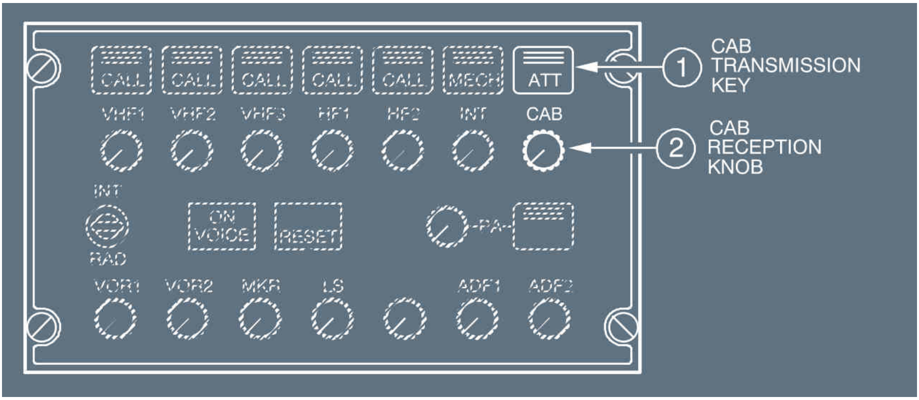
INTRODUCTION

Ident.: DSC-23-20-20-00018481.0001001 / 20 JUL 17

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

The system allows the flight crew to communicate with the flight attendants, and the flight attendants to communicate among themselves.

Note: *Cabin interphone monitoring may be deactivated in flight depending on CIDS customization.*


CALL
CALL
CALL
CALL
CALL
MECH
ATT
VHF1
VHF2
VHF3
HF1
HF2
INT
CAB
INT
RAD
ON VOICE
RESET
PA
VOR1
VOR2
MKR
LS
ADF1
ADF2
1
CAB TRANSMISSION KEY
2
CAB RECEPTION KNOB

(1) CAB transmission key

Pressed: Three green lines come on.
Boom, mask, and hand mikes may be used for cabin interphone.

(2) CAB reception knob

Pressed and released (knob out) : The integral white light comes on.
The station receives audio signals from the cabin.
Rotating the knob adjusts the volume.

Pressed (knob in) : The white light goes out.
The cabin interphone is disconnected.

CABIN INTERPHONE

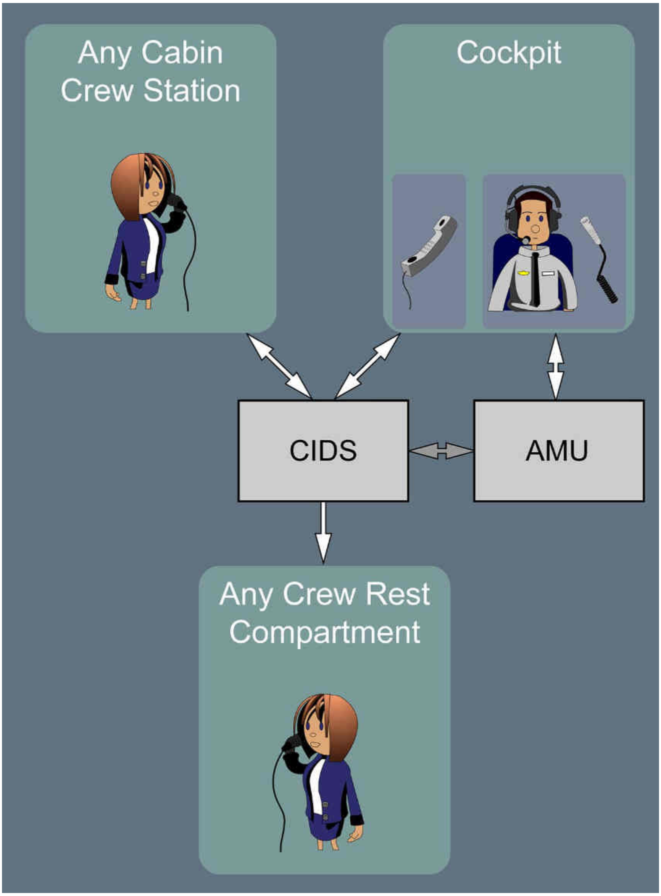
2 Ident.: DSC-23-20-20-00018481.0002001 / 25 MAY 20

Applicable to: MSN 11482-11597

L3 The Cabin Intercommunication Data System (CIDS) hosts the cabin interphone.

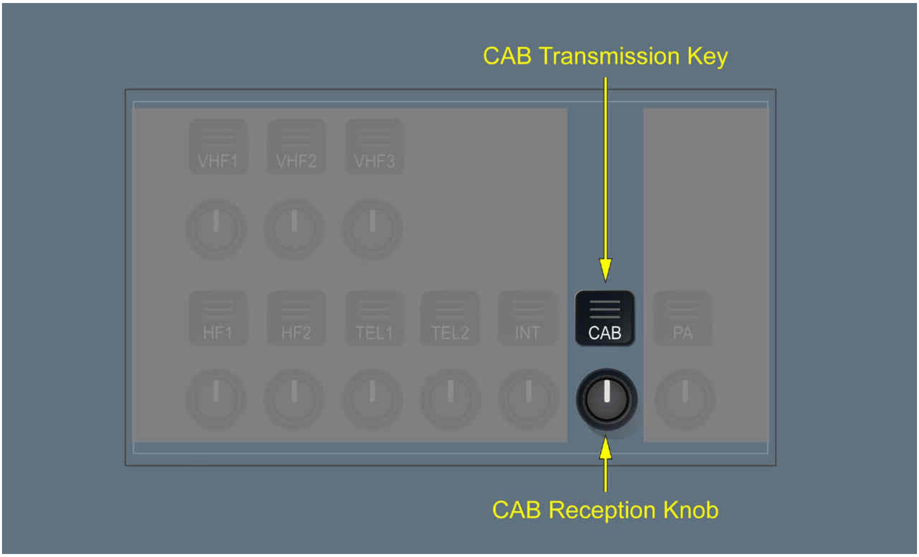
L1 The flight crew can use the cabin interphone to communicate with the cabin crew at any cabin crew station, and the cabin crew may communicate among themselves via the:
- Boomsets/headsets
- Hand microphones
- Microphones on the oxygen masks
- Cockpit handset.

Note: *Cabin crewmembers can use the cabin interphone to communicate with other cabin crewmembers that are at different attendant stations.*

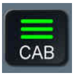
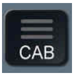
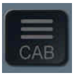
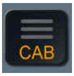

Any Cabin Crew Station
Cockpit
CIDS
AMU
Any Crew Rest Compartment

Before transmitting via any other appropriate equipment, on the RMP the flight crew should:

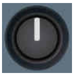
- Press and release the CAB reception knob in the out position
- Press the CAB transmission key
- Press a PTT sw or set the INT/RAD sw to RAD to transmit.



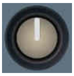
CAB TRANSMISSION KEY

	The CAB interphone is in transmission mode. When pressed, the transmission key turns off the transmission mode.
	The CAB interphone is not in transmission mode. When pressed, the transmission key turns on the transmission mode.
	Indicates that the CAB interphone is not installed.
	Flashes to indicate an incoming call from the cabin crew. When a cabin crew call is received, a buzzer sounds in the cockpit and the CAB light flashes for 60 s, or until the flight crew answers the call.

CAB RECEPTION KNOB



The CAB interphone is not in reception mode.
When pressed and released in the out position, the reception knob turns on the reception mode.



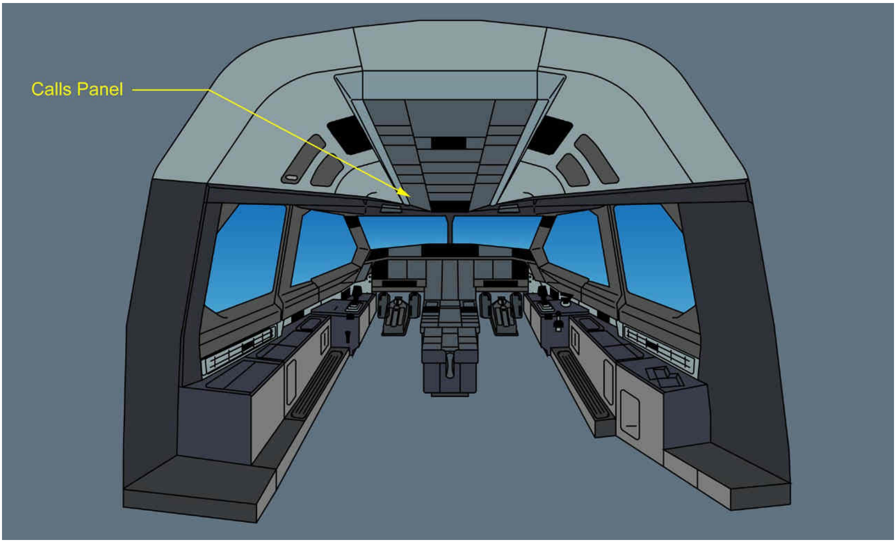
The CAB interphone is in reception mode.
When turned, the reception knob adjusts the volume of the headsets and the loudspeakers.
When pressed and released in the in position, the reception knob turns off the reception mode.

CABIN CALL SYSTEM

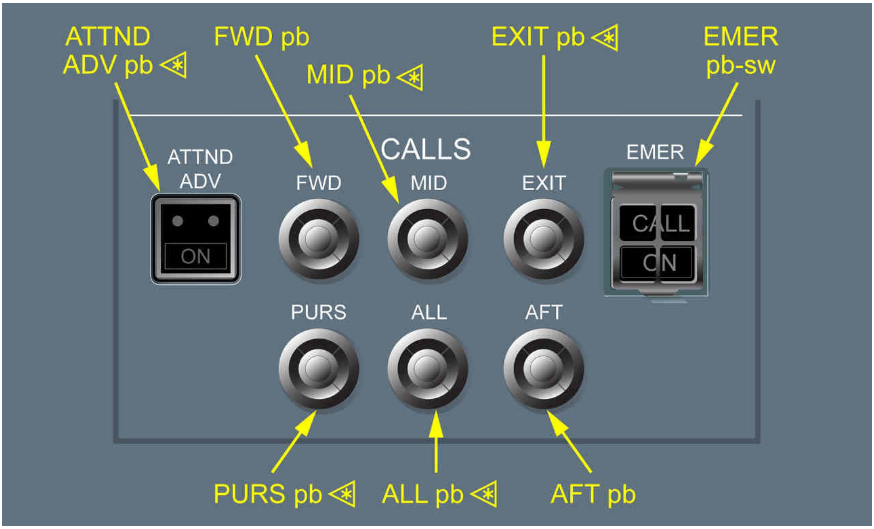
Ident.: DSC-23-20-20-10-00018482.0001001 / 19 MAY 21
Applicable to: ALL

CALLS FROM THE COCKPIT

The pushbuttons described here below are installed on the CALLS panel in the overhead panel.



CALLS PANEL


ATTND ADV pb ⊲
FWD pb
MID pb ⊲
EXIT pb ⊲
EMER pb-sw
ATTND ADV
ON
CALLS
FWD
MID
EXIT
EMER
CALL
ON
PURS
ALL
AFT
PURS pb ⊲
ALL pb ⊲
AFT pb

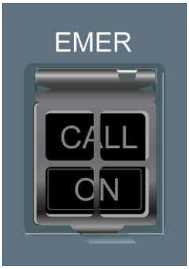
PURS ⊲ /FWD/MID ⊲ /EXIT ⊲ /AFT pb

When pressed:
- Two steady pink lights come on, on the corresponding area call panel
- “CAPTAIN CALL” message appears on the corresponding AIP, and a green light comes on
- A high-low chime sounds through corresponding loudspeaker.

ALL pb ⊲

When pressed: all stations respond as indicated above.

EMER pb-sw (GUARDED)

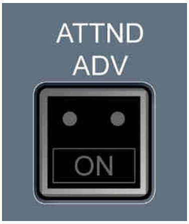


When pressed:
- Two pink lights flash on all area call panels
- “EMERGENCY CALL” message appears on all AIPs
- A high-low chime is repeated three times through all loudspeakers
- Depending on the aircraft configuration, the ON light and the CALL light comes on.

For an emergency call from the cabin to the cockpit:
- The CALL light flashes
- The ATT light flashes on all ACPs
- The buzzer is repeated three times in the cockpit (for approximately three seconds each).

The cabin call system resets when a cabin crewmember hangs up the associated handset.

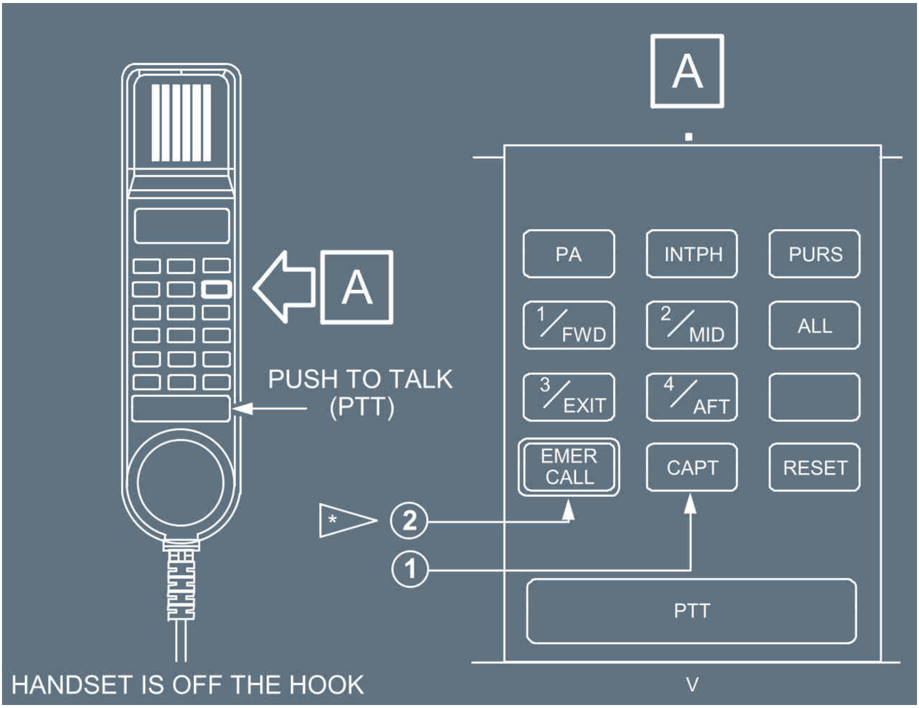
ATTND adv pb ⋞



When pressed, the ON light comes on. A green light on the attendant area call panel comes on. This pushbutton is used to inform cabin crew in the case of imminent takeoff or landing.

Ident.: DSC-23-20-20-10-00018483.0003001 / 17 MAR 17

3 **Applicable to: MSN 03035-03111, 03222-03229, 03294, 03588, 03630-03710, 03733-03816, 04163-05987, 06097, 06121, 06139-09324, 10949-11597**



(1) CAPT key

When pressed, the following aural and visual alerts will trigger in the cockpit:

- The ATT lights will flash on all Audio Control Panels (ACPs).
- A buzzer (inhibited during takeoff and landing) will sound.

In the cabin, the “CAPTAIN” message will appear on the Attendant Indication Panel (AIP) for which the CAPT key was pressed.

(2) EMER CALL key ◁*

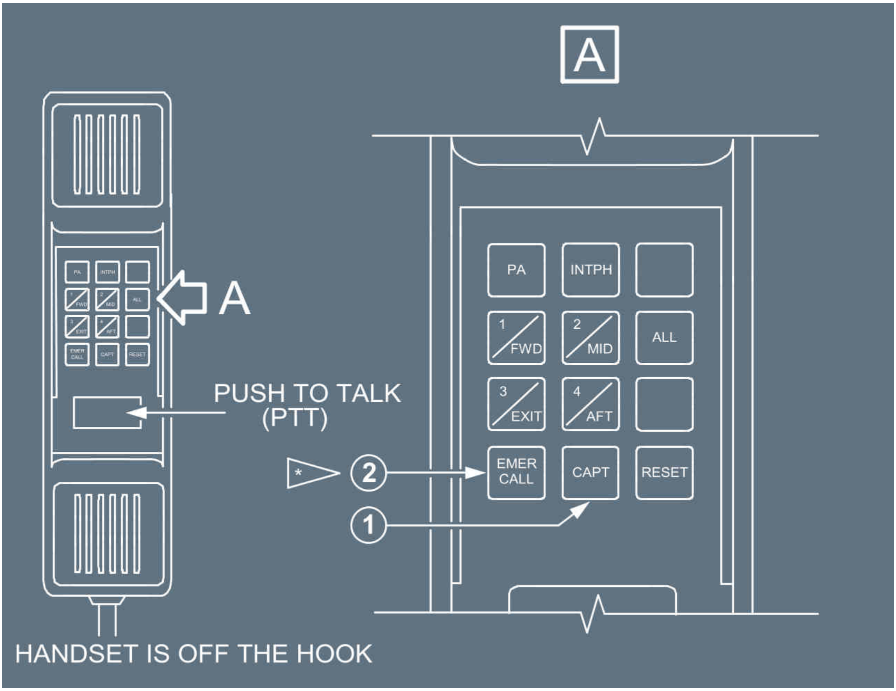
When pressed, the following aural and visual alerts will trigger in the cockpit:

- On the EMER pb-sw: The ON light flashes in white, and the CALL light flashes in amber.
- The ATT lights will flash on all ACPs.
- Three buzzers (inhibited during takeoff and landing) will sound consecutively.

In the cabin, the “EMERGENCY CALL” message will appear on all AIPs or on the AIP of the originating station based on its customization.

Ident.: DSC-23-20-20-10-00018483.0002001 / 17 MAR 17
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-03032, 03180-03211, 03266-03284, 03313-03565, 03595, 04000

CALLS FROM THE CABIN


A
A
PUSH TO TALK
(PTT)
*
2
1
PA
INTPH
1 FWD
2 MID
ALL
3 EXIT
4 AFT
EMER CALL
CAPT
RESET
HANDSET IS OFF THE HOOK

(1) CAPT key

When pressed, the following aural and visual alerts will trigger in the cockpit:
- The ATT lights will flash on all Audio Control Panels (ACPs).
- A buzzer (inhibited during takeoff and landing) will sound.

In the cabin, the “CAPTAIN” message will appear on the Attendant Indication Panel (AIP) for which the CAPT key was pressed.

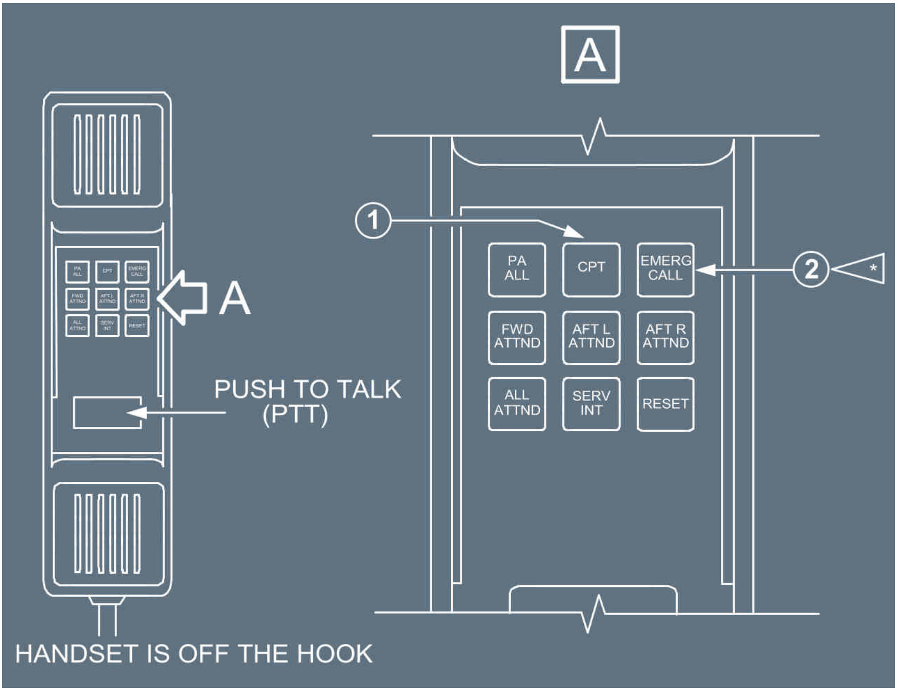
(2) EMER CALL key ◁*

When pressed, the following aural and visual alerts will trigger in the cockpit:
- On the EMER pb-sw: The ON light flashes in white, and the CALL light flashes in amber.
- The ATT lights will flash on all ACPs.
- Three buzzers (inhibited during takeoff and landing) will sound consecutively.

In the cabin, the “EMERGENCY CALL” message will appear on all AIPs or on the AIP of the originating station based on its customization.

Ident.: DSC-23-20-20-10-00018483.0001001 / 17 MAR 17
Applicable to: MSN 01459, 02734

CALLS FROM THE CABIN


A
PA ALL
CPT
EMERG CALL
FWD ATTND
AFT L ATTND
AFT R ATTND
ALL ATTND
SERV INT
RESET
A
PUSH TO TALK (PTT)
1
2
*
PA ALL
CPT
EMERG CALL
FWD ATTND
AFT L ATTND
AFT R ATTND
ALL ATTND
SERV INT
RESET
HANDSET IS OFF THE HOOK

(1) CPT key

When pressed, the following aural and visual alerts will trigger in the cockpit:
- The ATT lights will flash on all Audio Control Panels (ACPs).
- A buzzer (inhibited during takeoff and landing) will sound.

In the cabin, the “CAPTAIN” message will appear on the Attendant Indication Panel (AIP) for which the CPT key was pressed.

(2) EMER CALL key

When pressed, the following aural and visual alerts will trigger in the cockpit:
- On the EMER pb-sw: The ON light flashes in white, and the CALL light flashes in amber.
- The ATT lights will flash on all ACPs.
- Three buzzers (inhibited during takeoff and landing) will sound consecutively.

In the cabin, the “EMERGENCY CALL” message will appear on all AIPs or on the AIP of the originating station based on its customization.

INTRODUCTION

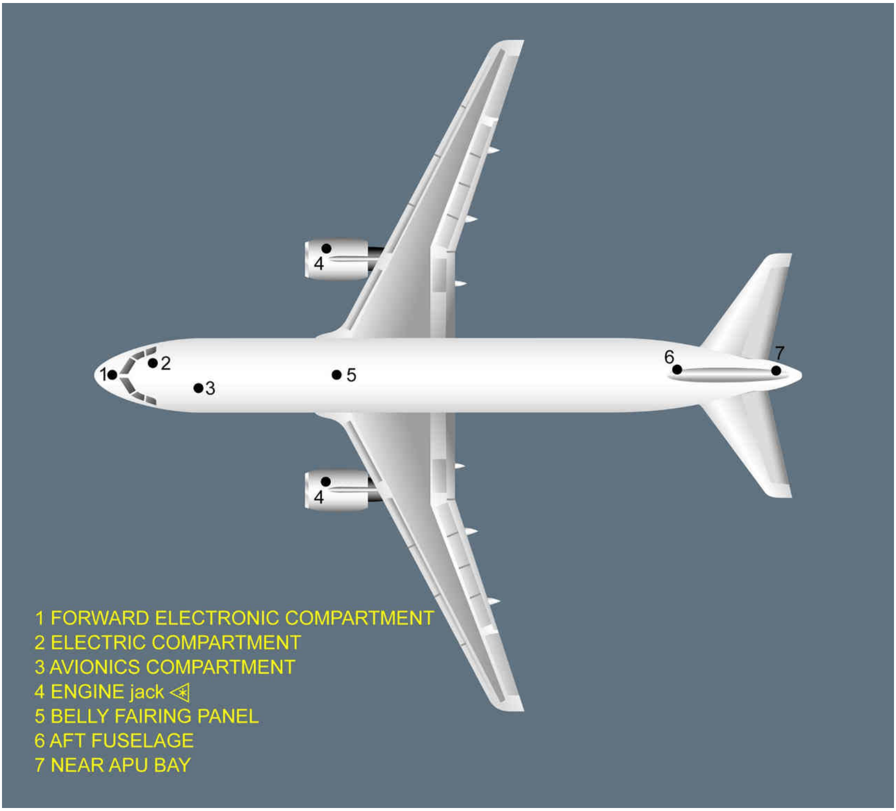
Ident.: DSC-23-20-30-00018485.0001001 / 18 MAY 21
Applicable to: ALL

L3 CIDS hosts the service interphone.

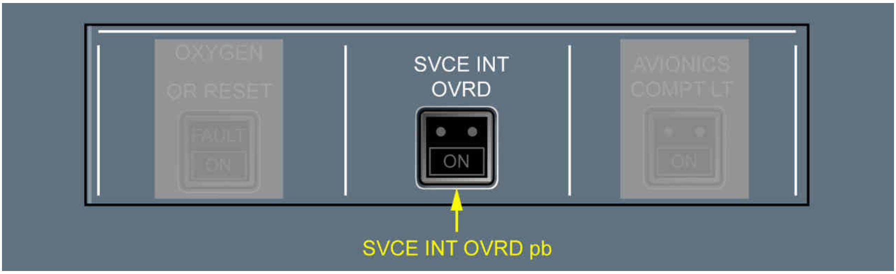
L1 Service interphone system enables the communication between:
- Flight crew and service interphone jacks
- Flight attendant stations and service interphone jacks
- Different service interphone jacks.

Service interphone system includes:
- 7 interphone jacks
- An OVRD sw located on the overhead panel.

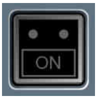
LOCATION OF INTERPHONE JACKS


1
2
3
4
4
5
6
7
1 FORWARD ELECTRONIC COMPARTMENT
2 ELECTRIC COMPARTMENT
3 AVIONICS COMPARTMENT
4 ENGINE jack ◁
5 BELLY FAIRING PANEL
6 AFT FUSELAGE
7 NEAR APU BAY

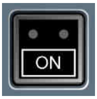
CONTROLS AND INDICATORS AT OVERHEAD PANEL


OXYGEN
OR RESET
FAULT
ON
SVCE INT
OVRD
ON
AVIONICS
COMPT LT
ON
SVCE INT OVRD pb

SVCE INT OVRD PB



Ground personnel can communicate with the flight crew by means of the service interphone jacks 10 s after the aircraft has landed. The landing gear must be locked down.



If the landing gear is not locked down, communication is still possible by pressing the SVCE INT OVRD pb.

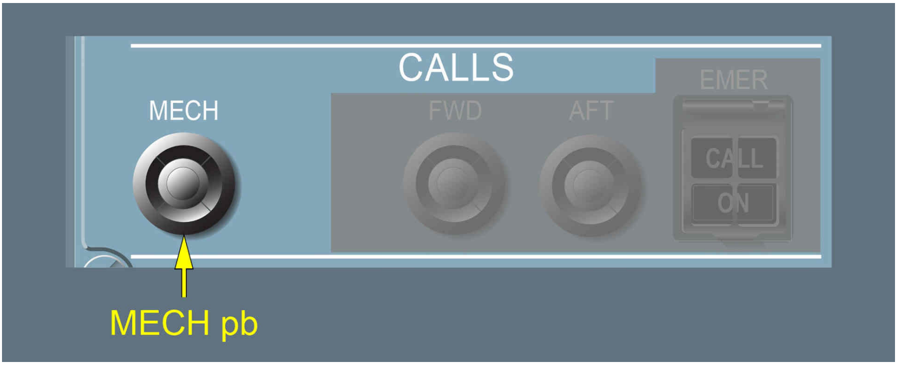
Before transmitting via any other appropriate equipment, on the RMP the flight crewmember should:
- Press and release the CAB reception knob in the out position
- Press the CAB transmission key
- Press a PTT sw or set the INT/RAD sw to RAD to transmit.

GROUND MECHANIC CALL SYSTEM

Applicable to: ALL

Ident.: DSC-23-20-30-10-00018486.0001001 / 05 MAY 22

CONTROLS AND INDICATORS ON OVERHEAD PANEL

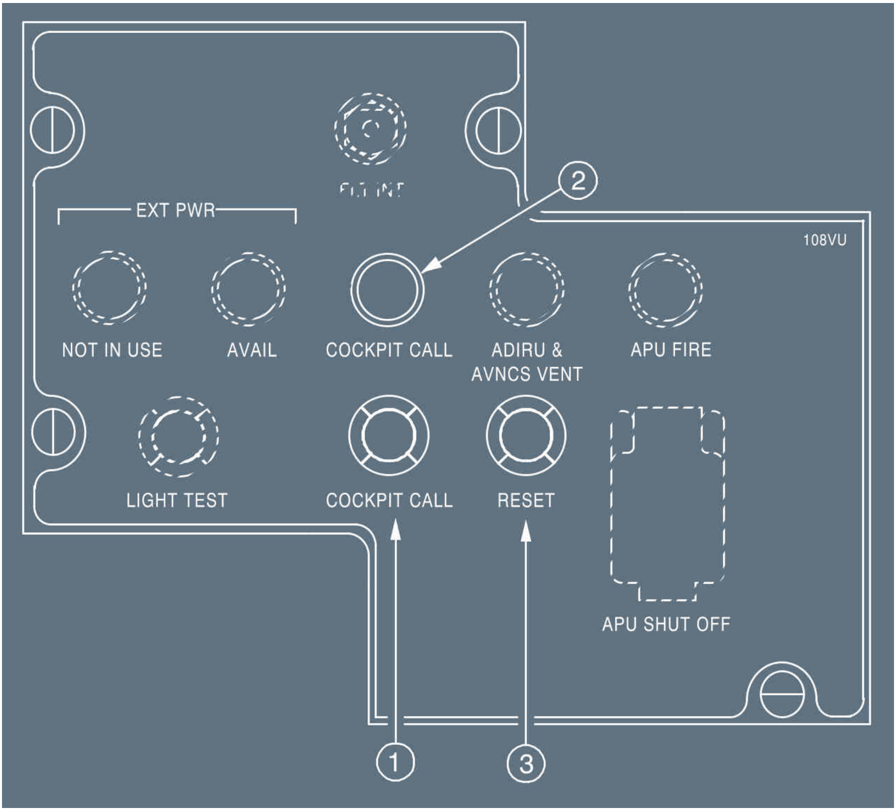


MECH pb

When pressed (and held), the COCKPIT CALL light comes on blue on the external power panel in the nose L/G bay and an external horn sounds.
When released, the COCKPIT CALL light remains. The ground mechanic can extinguish it by pressing the RESET pb on the external power panel. The external horn stops sounding.

Ident.: DSC-23-20-30-10-00018487.0001001 / 17 MAR 17

CONTROLS AND INDICATORS ON THE EXTERNAL POWER PANEL


FLT INT
②
EXT PWR
108VU
NOT IN USE
AVAIL
COCKPIT CALL
ADIRU &
AVNCS VENT
APU FIRE
LIGHT TEST
COCKPIT CALL
RESET
APU SHUT OFF
①
③

(1) COCKPIT CALL pushbutton

Pressed : This calls the cockpit.
The MECH lights flash amber on the ACPs and a buzzer sounds.

Released : The MECH lights go out after 60 s if they are not reset on the ACPs.
The buzzer stops.

(2) COCKPIT CALL light

The blue light appears when cockpit calls the ground mechanic. An external horn also sounds.

(3) RESET pushbutton

Pressed The COCKPIT CALL light goes out.

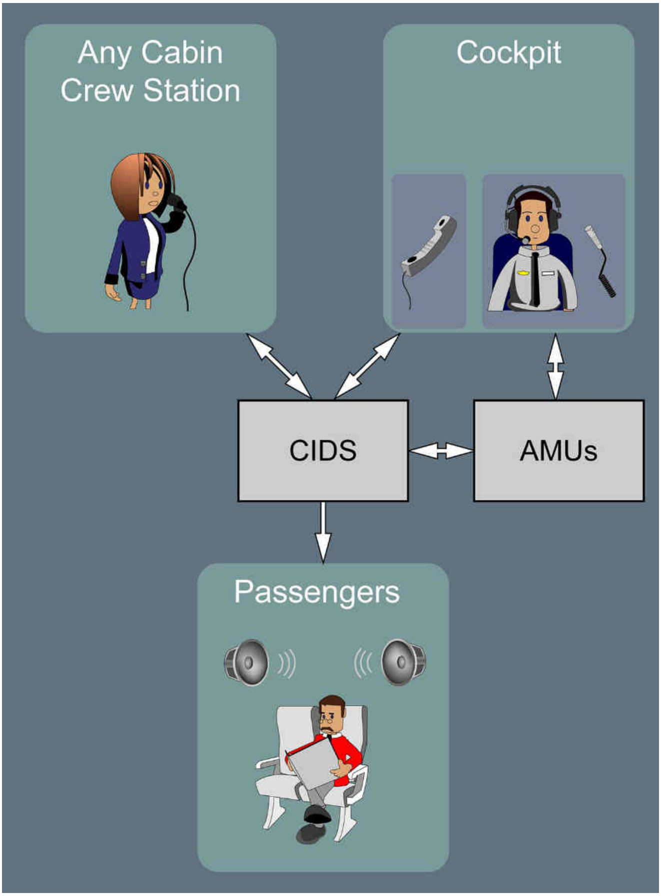
Intentionally left blank

DESCRIPTION

1 Ident.: DSC-23-20-40-00018685.0002001 / 05 MAY 22
Applicable to: MSN 11482-11597

L3 CIDS hosts the PA.

L1 Flight crew and cabin crew can use the PA to make announcements to passengers via:
- Boomsets/headsets
- Hand microphones
- Microphones on the oxygen masks
- Cockpit handset.


Any Cabin Crew Station
Cockpit
CIDS
AMUs
Passengers

Before making an announcement via any other appropriate equipment, on the RMP the flight crewmember should:

- Press and release the PA reception knob to the out position
- Press and hold the PA transmission key on the RMP to make the announcement.

Note: *It is not necessary to use a PTT sw.*

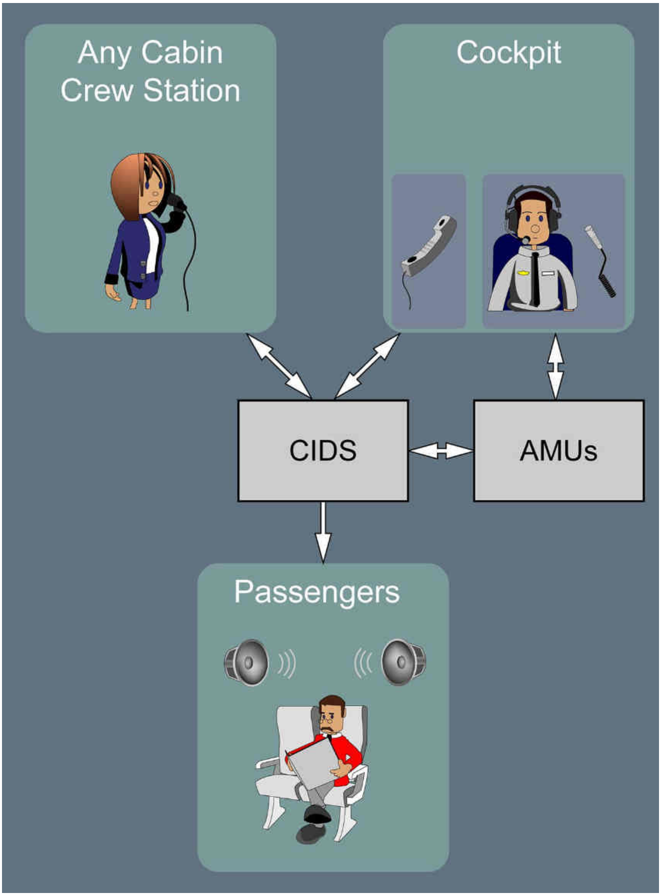
DESCRIPTION

Ident.: DSC-23-20-40-00018685.0001001 / 05 MAY 22

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

L3 CIDS hosts the PA.

L1 Flight crew and cabin crew can use the PA to make announcements to passengers via:
- Boomsets/headsets
- Hand microphones
- Microphones on the oxygen masks
- Cockpit handset.


Any Cabin Crew Station
Cockpit
CIDS
AMUs
Passengers

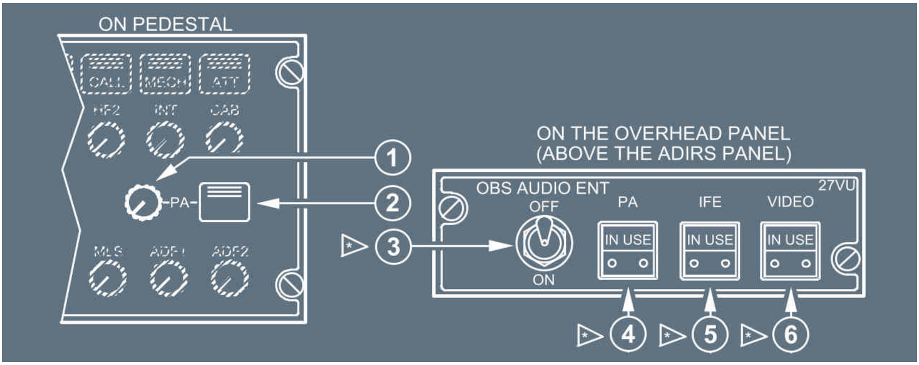
Before making an announcement via any other appropriate equipment, on the ACP the flight crewmember should:
- Press and release the PA reception knob to the out position
- Press and hold the PA transmission key on the ACP to make the announcement.

Note: It is not necessary to use a PTT sw.

CONTROLS AND INDICATORS

Ident.: DSC-23-20-40-00018686.0001001 / 20 JUL 17

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**


ON PEDESTAL
CALL
MECH
ATT
HF2
INT
CAB
PA
MLS
ADF1
ADF2
ON THE OVERHEAD PANEL
(ABOVE THE ADIRS PANEL)
OBS AUDIO ENT
OFF
ON
PA
IFE
VIDEO
27VU
IN USE
IN USE
IN USE
1
2
3
4
5
6

(1) PA reception knob

Pressed and released (knob out) : The message goes to the loudspeakers, and the integral white light comes on.
The flight crew can turn the knob to adjust the volume.

Pressed (knob in) : The PA reception to the loudspeakers is disconnected.
The white light goes out.

(2) PA transmission key

Pressed and held : The flight crew may use a boom, mask, or hand mike to make an announcement.
Three green lines come on.

Note: *The flight crew may use a cockpit handset to make PA announcements without action on the ACPs.*

(3) OBS AUDIO ENT sw ◁

ON : Announcement from the cockpit can be heard through channel 9 of Passenger Entertainment System (PES).

OFF : Normal functionning of PES is restored.

(4) PA IN USE light ◁

The light comes on when the PA is activated from the cockpit or from the cabin (cabin attendant or prerecorded announcement).

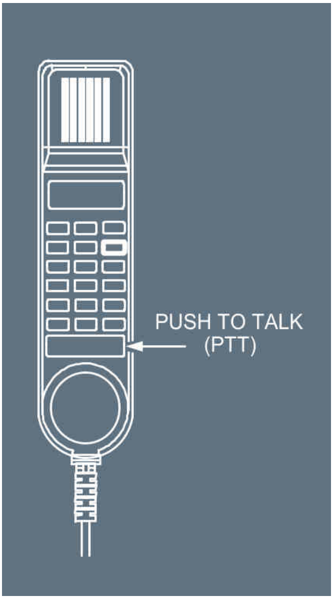
(5) IFE IN USE light

The light comes on when the IFE system is in use.

(6) VIDEO IN USE light

The light comes on when the video system is in use.

The flight crew can also use the cockpit handset, located at the bottom of the pedestal, for PA announcements.

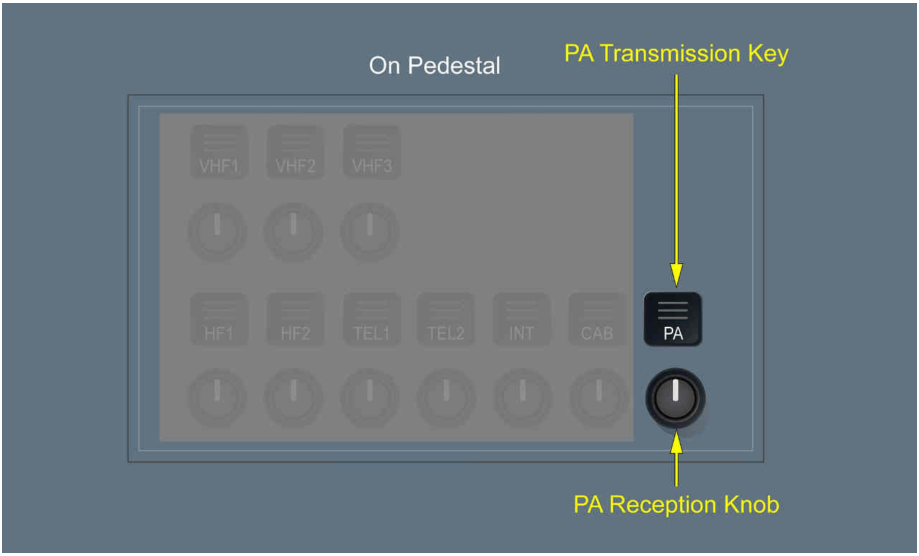


Note: Due to numerous customizations of the handset and keypad, their functions are not described in detail.

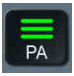
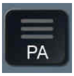
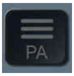
CONTROLS AND INDICATORS

4 Ident.: DSC-23-20-40-00018686.0002001 / 25 MAY 20

Applicable to: MSN 11482-11597

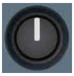

On Pedestal
PA Transmission Key
VHF1
VHF2
VHF3
HF1
HF2
TEL1
TEL2
INT
CAB
PA
PA Reception Knob

PA TRANSMISSION KEY

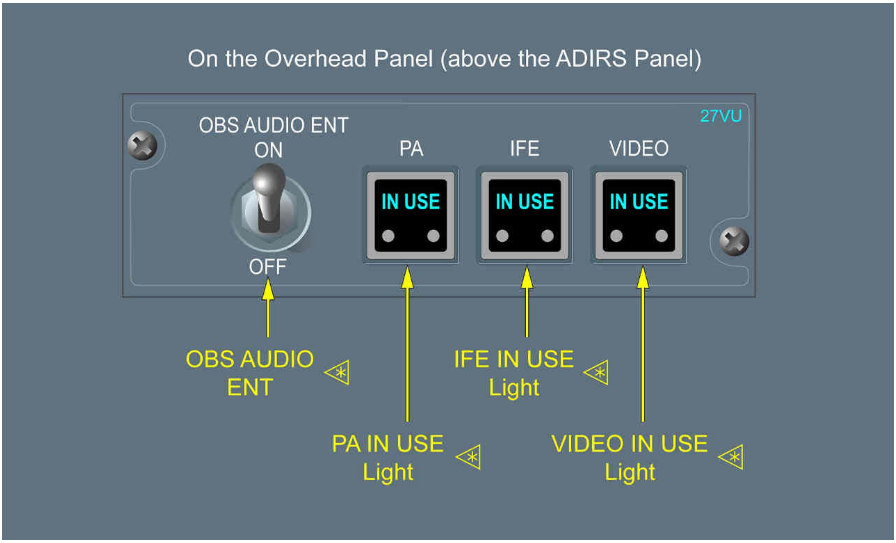
	The PA interphone is in transmission mode. When pressed, the transmission key turns off the transmission mode. The flight crew may use a boom, mask, or hand mike to make an announcement.
	The PA interphone is not in transmission mode. When pressed, the transmission key turns on the transmission mode.
	Indicates that the PA interphone is not installed.

Note: *The flight crew may use a cockpit handset to make PA announcement without action on the RMPs or the ACP* ◁ .

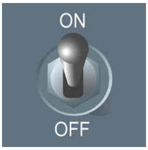
PA RECEPTION KNOB

	The PA interphone is not in reception mode. When pressed and released in the out position, the reception knob turns on the reception mode.

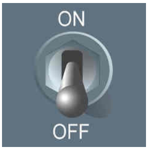
The PA interphone channel is in reception mode.
When turned, the reception knob adjusts the volume of the headsets and the loudspeakers.
When pressed and released in the in position, the reception knob turns off the reception mode.


On the Overhead Panel (above the ADIRS Panel)
27VU
OBS AUDIO ENT
ON
OFF
PA
IFE
VIDEO
IN USE
IN USE
IN USE
OBS AUDIO ENT ◁
IFE IN USE Light ◁
PA IN USE Light ◁
VIDEO IN USE Light ◁

OBS AUDIO ENT ◁



Announcement from the cockpit can be heard through channel 9 of Passenger Entertainment System (PES).



Normal Functioning or PES is restored.

PA IN USE light ◁

The PA interphone is activated from the cockpit or from the cabin (the cabin crew or prerecorded announcement).

The PA interphone channel is inactive.

IFE IN USE light ⊲

The IFE system is in use.

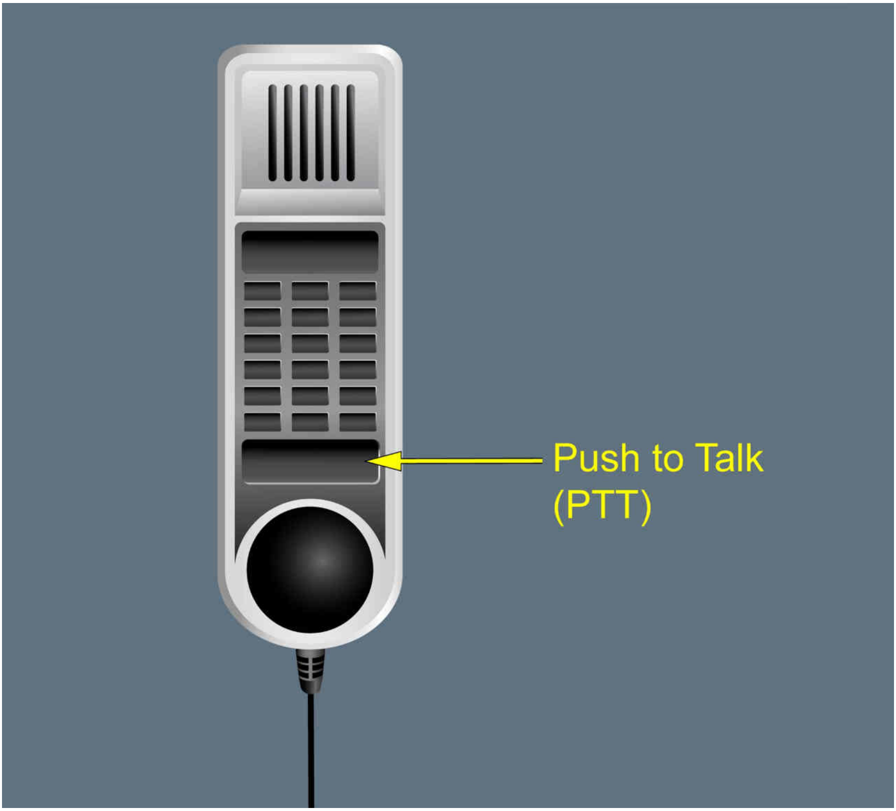
The IFE system is not in use.

VIDEO IN USE light ⊲

The video system is in use.

The video system is not in use.

The flight crew can also use the cockpit handset, located at the bottom of the pedestal, for PA announcements.



Note: *Due to numerous customizations of the handset and keypad, their functions are not described in detail.*

DESCRIPTION

Ident.: DSC-23-30-10-00018475.0001001 / 17 MAR 17

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

Either of the two Radio Management Panels (RMPs) (third RMP ◁) can be used to tune each transceiver.
To transmit, the flight crew uses the Audio Control Panel (ACP) to select a VHF or HF system. The ACP works through the Audio Management Unit (AMU). Each system is connected to the RMPs, for frequency selection, and to the AMU for connection to the audio integrating and SELCAL (selective calling) systems.

DESCRIPTION

2 Ident.: DSC-23-30-10-00018475.0002001 / 25 MAY 20
Applicable to: MSN 11482-11597

Either of the two Radio Management Panels (RMPs) (third RMP ◁) can be used to tune each transceiver and select a VHF or HF system.
The RMP works through the Audio Management Unit (AMU), for frequency selection, and for connection to the audio integrating and SELCAL (selective calling) systems.

VHF

Ident.: DSC-23-30-10-00018472.0001001 / 27 APR 17

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

Two identical VHF communication systems (third VHF system ◁) are installed.
Each system has a transceiver in the avionics compartment, and an antenna on the fuselage. Only VHF1 functions in EMER ELEC CONFIG. Its range is from 118.0 to 136.975 MHz.

VHF

4 Ident.: DSC-23-30-10-00018472.0002001 / 25 MAY 20
Applicable to: MSN 11482-11597

The communication system has two VHF (third VHF system ◁) channels, and each channel has its own antenna.
Each VHF transceiver operates within a frequency band that ranges from 118.000 MHz to 136.975 MHz, by increments of 8.33 kHz.
VHF 1 and VHF 2 are for short-range communication in voice mode only.
VHF 3 ◁ is mainly for short-range communication in data mode. VHF 3 ◁ can be a backup for communication in voice mode.

L2 Data communication is automatically transferred to the SATCOM ⊲✳ if:
- VHF 3 ⊲✳ is in voice mode, or
- The aircraft is outside the range of a VHF station.

HF

Ident.: DSC-23-30-10-00018473.0001001 / 27 OCT 17

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11293**

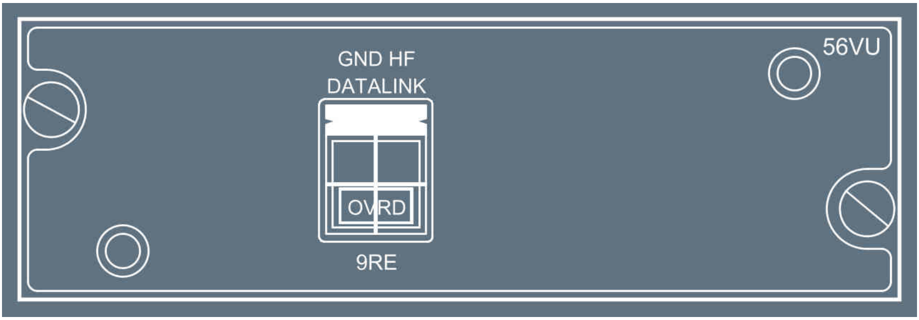
Two identical HF communication systems are optional. Each has a transceiver in the avionics compartment, and a coupler (located in AFT fuselage) and antenna in the vertical stabilizer. Its range is from 2.8 to 24 MHz.
If the HF is used on ground, it is important to check that nobody stays in the direct vicinity of the antenna. HF must not be used during refueling or transfer operation.
The HF VOICE MODE is not inhibited on ground but the use of HF on ground must be limited to operational needs.

HF

Ident.: DSC-23-30-10-00018473.0003001 / 27 OCT 17

6 **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11482-11597**

Two identical HF communication systems are optional. Each has a transceiver in the avionics compartment, and a coupler (located in AFT fuselage) and antenna in the vertical stabilizer. Its range is from 2.8 to 24 MHz.
If the HF is used on ground, it is important to check that nobody stays in the direct vicinity of the antenna. HF must not be used during refueling or transfer operation.
The HF DATA transmission is inhibited on ground. A GND HF DATALINK pb, located on the overhead panel, enables to override the inhibition. .
The HF VOICE MODE is not inhibited on ground but the use of HF on ground must be limited to operational needs.



SELCAL (SELECTIVE CALLING)

Ident.: DSC-23-30-10-00018476.0001001 / 17 MAR 17

7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

Upon receiving a call code corresponding to that of the aircraft, the SELCAL system aurally and visually advises the flight crew that a ground station is calling the aircraft.
The aural warning is inhibited during takeoff and landing.

SELCAL

8 Ident.: DSC-23-30-10-00018476.0002001 / 25 MAY 20
Applicable to: MSN 11482-11597

In order to help the selection of the numerous VHF or HF ◁ messages, the Selective Calling (SELCAL) identifies incoming VHF or HF ◁ calls that have the aircraft-specific SELCAL code. SELCAL then triggers visual and aural alerts:

- On the RMP, the corresponding VHF or HF ◁ transmission key flashes in amber and the RESET SELCAL RMP message appears (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*)
- On the ACP ◁ , the RESET key flashes
- A buzzer sounds in the cockpit until the flight crew presses the RMP R4 key (or the SELCAL/Call RESET key on the ACP ◁), or the flight crew answers the call.

Note: *The buzzer sounds when an incoming call is identified, regardless of the setting of the loudspeaker volume, but is inhibited during takeoff and landing.*

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General

GENERAL

Ident.: DSC-23-30-20-10-00019717.0001001 / 17 MAR 17

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

The Satellite Communication (SATCOM) system allows the exchange of information between the aircraft and a ground network.

It provides both voice and data channels:
- One or several channels are used for voice transmissions (cockpit or cabin voice). The cockpit voice function must be activated, in order to be available. The cabin telephone system must be installed, to be able to use cabin voice function.
- One channel is used for data transmissions (ATSU or ACARS).
  The ATSU or ACARS normally transmit via VHF3. They automatically switch to SATCOM when VHF3 is not available.

The cockpit voice interface is controlled by the Audio Control Panels (ACPs) for call set-up and call termination, and by the MCDU for the call number selection. It allows the crew:
- To initiate air to ground calls and to receive ground to air calls
- To select the call priority, in case of air to ground calls
- To use manual dial or pre-recorded phone numbers.

If a SATCOM telephone handset is installed in the cockpit, the crew can set up a call without the use of the MCDU.
SATCOM functions are programmed through the Owner Requirement Table (ORT), according to airline needs.
Due to the highly customized programming, the SATCOM functions may vary for different airlines and are, therefore, not described in detail.

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Controls and Indicators

ACP INTERFACE

Ident.: DSC-23-30-20-20-00019718.0001001 / 17 MAR 17
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883

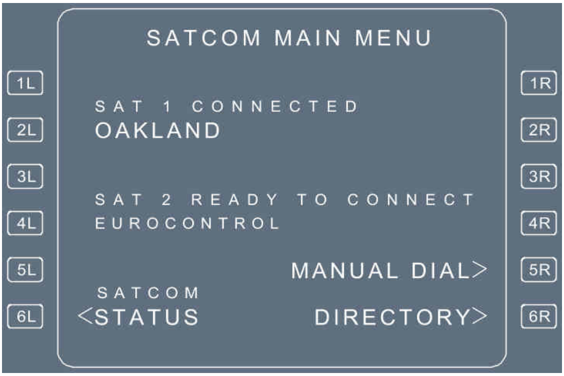
Refer to DSC-23-10-30 Audio Management System

MCDU INTERFACE

Ident.: DSC-23-30-20-20-A-00019719.0003001 / 17 MAR 17
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

SATCOM MAIN MENU PAGE

The crew accesses this page by selecting SAT on the MCDU MAIN page.



SATCOM MAIN MENU

SAT 1 CONNECTED
OAKLAND

SAT 2 READY TO CONNECT
EUROCONTROL

MANUAL DIAL>

SATCOM
<STATUS

DIRECTORY>

2L (4L) (Label line) : This field displays the SATCOM ◁* Channel 1 (2) status:

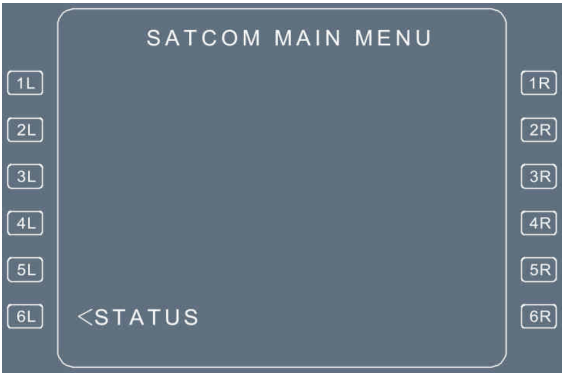
- READY TO CONNECT	:	The channel is ready to support a call
- NOT AVAILABLE	:	The channel is not available (failed or not logged)
- DIALING	:	Cockpit call in progress
- INCOMING CALL	:	Advises of an incoming ground to air call
- CONNECTED	:	The circuit is connected
- CALL FAILED	:	The transmission is interrupted.

2L (4L) (Data line)	:	This field displays: - The title of the selected phone number, in case of an air to ground call - The number, if the MANUAL DIAL option is used - GRND-AIR CALL, in case of a ground to air call.
5R	:	This key provides access to the Manual Dial page. This page allows the dialing of a phone number.
6L	:	This key provides access to the SATCOM STATUS page, which contains LOG ON and channel status information.
6R	:	This key provides access to the SATCOM DIRECTORY PAGE.

Ident.: DSC-23-30-20-20-A-00019719.0001001 / 17 MAR 17
Applicable to: MSN 01801, 01826, 01837-01855

SATCOM MAIN MENU PAGE

The crew accesses this page by selecting SAT on the MCDU MAIN page.

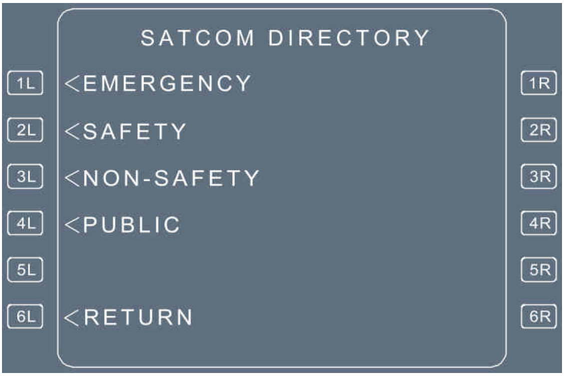

SATCOM MAIN MENU
<STATUS

6L	This key provides access to the SATCOM STATUS page, which contains LOG ON and channel status information.

Ident.: DSC-23-30-20-20-A-00019720.0001001 / 17 MAR 17
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

SATCOM DIRECTORY PAGE

This page provides access to 4 phone number lists, where phone numbers can be memorized, according to their priority.



```
        SATCOM DIRECTORY
<EMERGENCY
<SAFETY
<NON-SAFETY
<PUBLIC

<RETURN
```

1L : EMERGENCY for Priority 1 - Reserved for emergency and distress phone numbers only.

2L : SAFETY for Priority 2 - Reserved for regulatory and flight safety phone numbers only.

3L : NON-SAFETY for Priority 3 - Reserved for non flight safety phone numbers.

4L : PUBLIC for Priority 4 - Reserved for personal phone numbers.

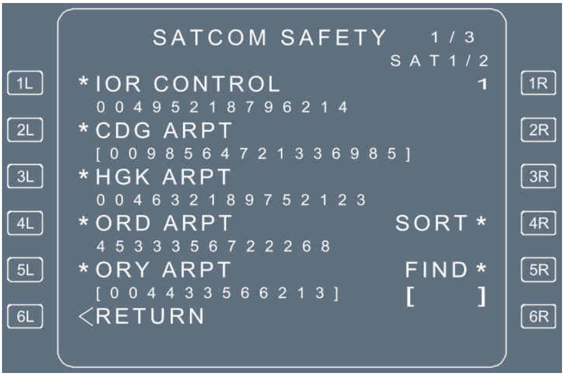
6L : This key is used to return to the SATCOM MAIN MENU page.

Ident.: DSC-23-30-20-20-A-00019721.0001001 / 17 MAR 17

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

SATCOM CATEGORY NUMBERS PAGE

The CATEGORY NUMBERS page provides access to the pre-recorded phone numbers.
As an example, the following figure shows the SAFETY CATEGORY NUMBER page.



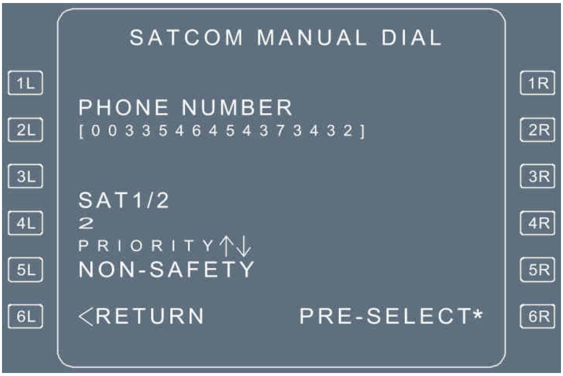
```
     SATCOM SAFETY     1/3
                      SAT1/2
*IOR CONTROL               1
 00495218796214
*CDG ARPT
 [0098564721336985]
*HGK ARPT
 00463218975212 3
*ORD ARPT             SORT*
 4533356722268
*ORY ARPT             FIND*
 [00443356621 3]      [    ]
<RETURN
```

1L, 2L, 3L, 4L, 5L:	These fields display the phone numbers and their titles. When pressed, they dial the corresponding phone number. There are two types of numbers: - Protected : Displayed in green - Unprotected : Displayed in blue brackets.
1R :	This field displays the selected SATCOM channel.
4R :	This function alphabetically sorts the phone numbers, within the category, by title.
5R :	This function automatically searches for a phone number from the beginning of this category, by entering up to the first three letters of the title into the scratchpad, and by pressing 5R.
6L :	This key is used to return to the SATCOM DIRECTORY page.

Ident.: DSC-23-30-20-20-A-00019722.0001001 / 17 MAR 17
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

SATCOM MANUAL DIAL PAGE

The MANUAL DIAL PAGE enables the crew to initiate an air to ground call by manually entering a phone number.



SATCOM MANUAL DIAL

PHONE NUMBER
[0033546454373432]

SAT1/2
2
PRIORITY↑↓
NON-SAFETY
<RETURN PRE-SELECT*

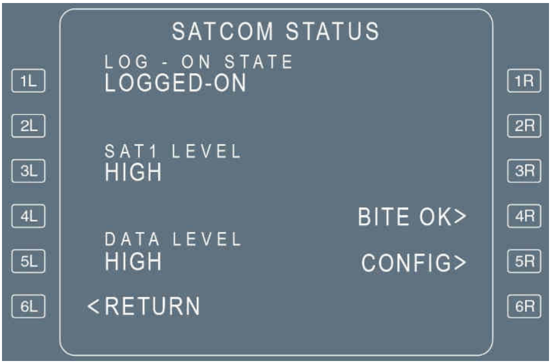
2L (data line) :	This field displays the phone number in blue brackets, after having been entered in the scratchpad.
4L :	If two channels are available, this field displays the selected SATCOM channel. If only one channel is available, this field is blank.
5L :	This field displays the priority for the manual dial number. The priority can be changed by pressing the slew up or down keys on the MCDU keyboard.

6L : This key is used to return to the SATCOM MAIN MENU page.

Ident.: DSC-23-30-20-20-A-00021870.0001001 / 03 AUG 17
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

SATCOM STATUS PAGE

The crew accesses this page by selecting SATCOM STATUS on the SATCOM MAIN MENU page.



SATCOM STATUS
LOG - ON STATE
LOGGED-ON
SAT1 LEVEL
HIGH
BITE OK>
DATA LEVEL
HIGH
CONFIG>
<RETURN

1L	Provides the current LOG-ON status: - LOGGED-ON - LOGGED-OFF - SATCOM INOP.
3L (4L) (5L) (Data Line)	Provides the signal level (HIGH or LOW) for: - The voice channel 1 (SAT 1) - The voice channel 2 (SAT 2) ◁✱ - The data link channel (DATA).
4R	Displays the status of the SATCOM BITE: - BITE OK : The BITE status of all SATCOM items is OK - BITE FAIL : At least the BITE status of one SATCOM items is failed. Gives access to the SATCOM BITE STATUS page.
5R	Displays the SATCOM CONFIG page.
6L	Displays the SATCOM MAIN MENU page.

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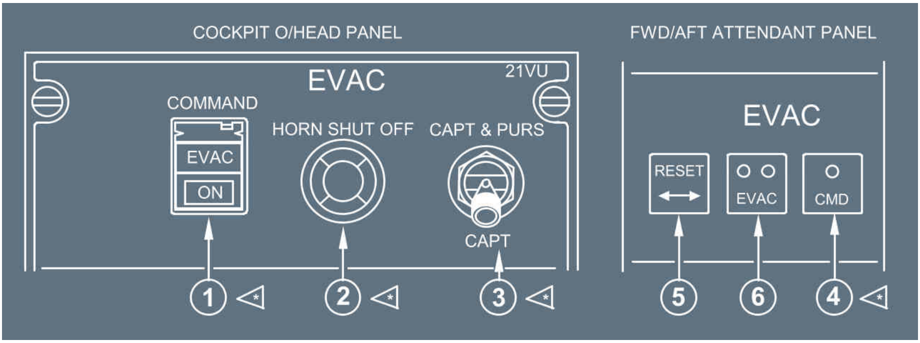
CONTROLS AND INDICATORS

Ident.: DSC-23-40-10-00018468.0001001 / 18 MAY 17
Applicable to: ALL


COCKPIT O/HEAD PANEL
EVAC
21VU
COMMAND
EVAC
ON
HORN SHUT OFF
CAPT & PURS
CAPT
1
2
3
FWD/AFT ATTENDANT PANEL
EVAC
RESET
EVAC
CMD
5
6
4

(1) COMMAND pb (guarded) ◁

ON : In the cockpit :
- EVAC light flashes red.
- Depending on aircraft configuration, horn sounds.

In the cabin :
- EVAC lights flash at FWD and AFT attendant panels.
- Evacuation tone sounds.

OFF : The alert is stopped.
The EVAC light flashes red when the alert is activated.

(2) HORN SHUT OFF pb ◁
Pressing this button silences the cockpit horn.

(3) CAPT and PURS/CAPT sw ◁

CAPT and PURS : The alert may either be activated from the cockpit or the cabin.

CAPT : The alert may only be activated from the cockpit.
If one of the cabin CMD pb is pressed, only the cockpit horn sounds for 3 s.

(4) CMD pb ◁
Pressing this button activates the alert, if the cockpit switch is at the CAPT & PURS position.
Pressing it again stops the alert.

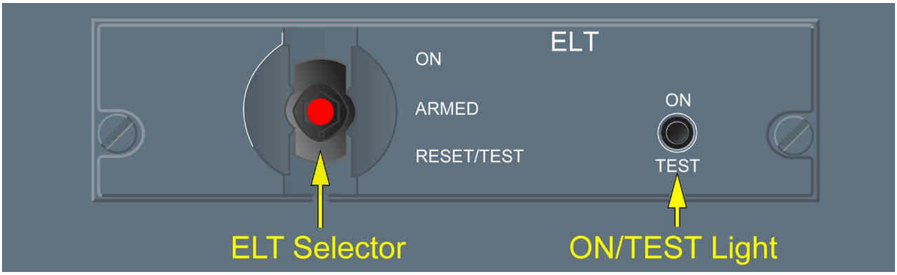
(5) RESET pb
Pressing this button silences the EVAC tone.

(6) EVAC light
This light flashes when the alert is activated.

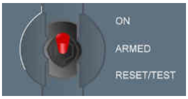
CONTROLS AND INDICATORS

Ident.: DSC-23-40-30-00018516.0007001 / 08 NOV 22
Applicable to: MSN 04827-04860

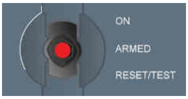
OVERHEAD PANEL


ELT
ON
ARMED
RESET/TEST
ON
TEST
ELT Selector
ON/TEST Light

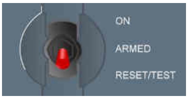
ELT selector


ON
ARMED
RESET/TEST

The ELT transmits an emergency signal.


ON
ARMED
RESET/TEST

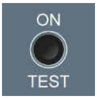
The ELT transmits an emergency signal, in the case of impact.


ON
ARMED
RESET/TEST

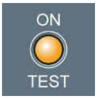
If held for 2 s, the ELT stops transmitting.
If held for 10 s, the ELT starts an automatic test.

Note: *If the ELT is unduly triggered while in ARMED mode (e.g due to a hard landing), hold the RESET/TEST position for 2 s to reset the ELT and stop the signal.*

ON/TEST light

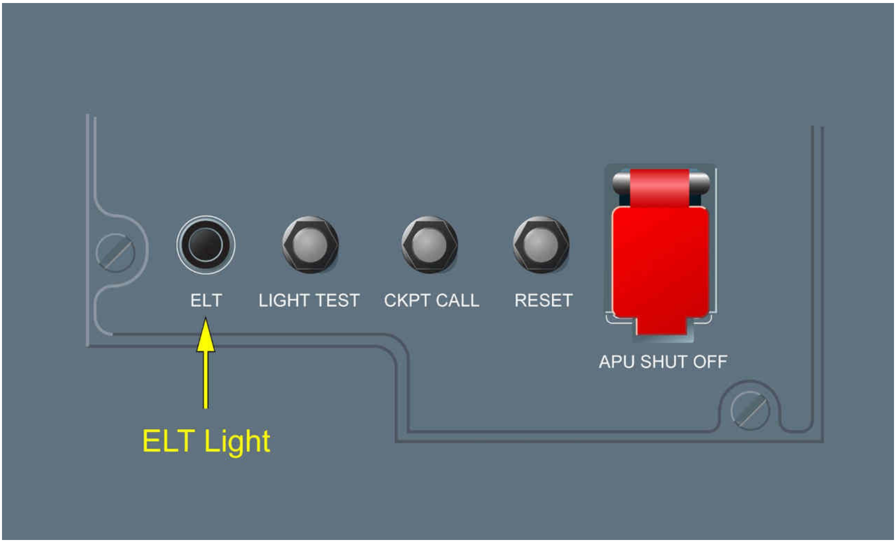


The ELT is not transmitting.

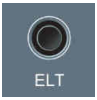
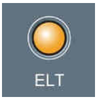


The ELT is transmitting or is in automatic test.
If the ELT is transmitting when the aircraft is on ground, the external horn sounds.
When the ELT is transmitting, the light flashes every 5 s. After a RESET, the light flashes every second before stopping.

EXTERNAL POWER PANEL

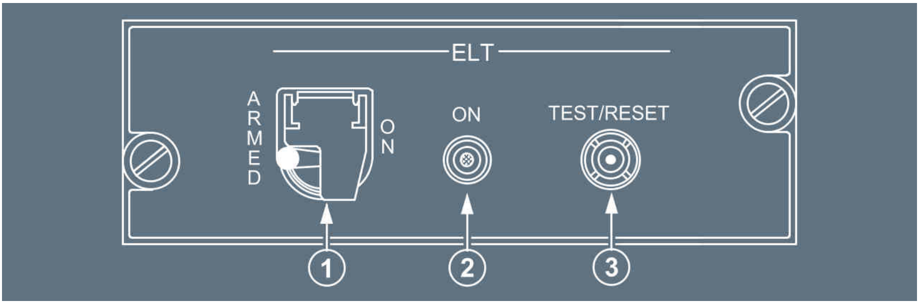

ELT
LIGHT TEST
CKPT CALL
RESET
APU SHUT OFF
ELT Light

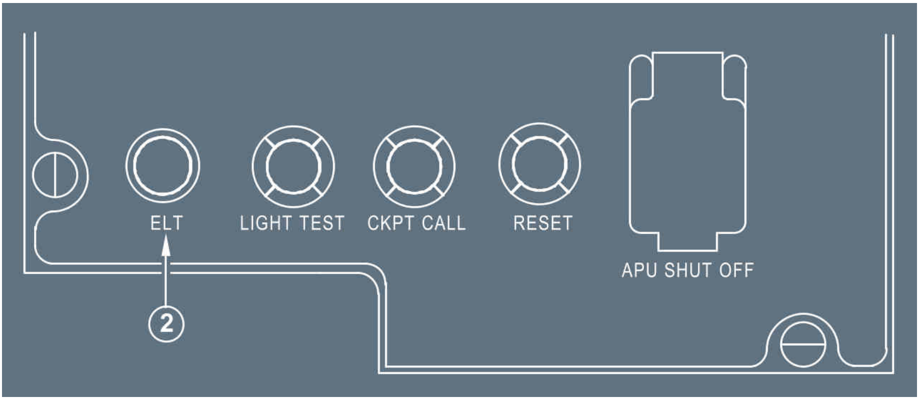
ELT light

	The ELT is not transmitting.
	The ELT is transmitting or is in automatic test. If the ELT is transmitting when the aircraft is on ground, the external horn sounds.

CONTROLS AND INDICATORS

Ident.: DSC-23-40-30-00018516.0003001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03002-03032, 04563, 05005, 05097





(1) ELT sw
The guard keeps this switch in the ARMED position.

ON : The Emergency Locator Transmitter (ELT) transmits an emergency signal.

ARMED : In the case of impact, the ELT transmits an emergency signal (on 121.5, 243 and 406.025 MHz).

(2) ON and ELT light
These lights come on amber either when the emergency signal is transmitted, or during ELT autotest.

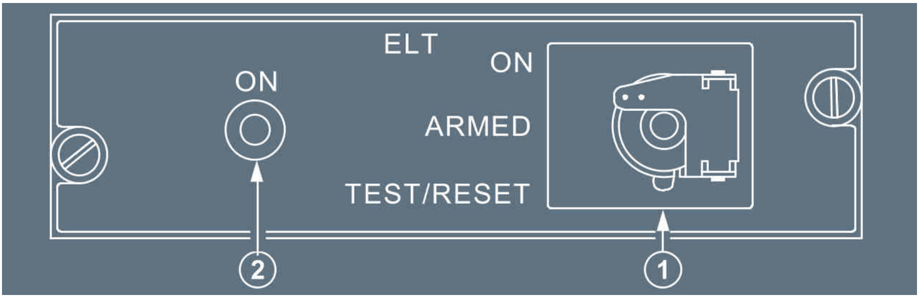
(3) TEST/RESET pb
Pressing this pushbutton starts the ELT auto test.

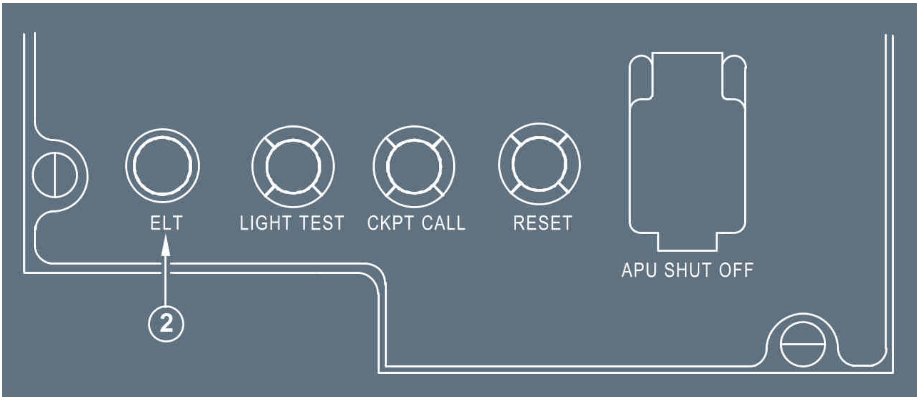
Note: *If the ELT is unduly triggered in ARMED mode (by an external impact, hard landing, etc.), select the TEST/RESET position to reset the ELT and stop signal transmission.*

CONTROLS AND INDICATORS

Ident.: DSC-23-40-30-00018516.0002001 / 17 MAR 17

1 **Applicable to: MSN 02924, 03035-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05987, 06097, 06121, 06139-09324, 10949-11597**





(1) ELT selector

ON : The Emergency Locator Transmitter (ELT) transmits an emergency signal.

ARMED : In case of impact, the ELT transmits an emergency signal (on 121.5, 243 and 406 MHz).

TEST/RESET : Starts the ELT autotest.

Note: *If the ELT is unduly triggered in ARMED mode (by an external impact, hard landing, etc.), select the TEST/RESET position to reset the ELT and stop signal transmission.*

(2) ON light and ELT light

These lights come on amber either when the emergency signal is transmitted, or during ELT autotest.

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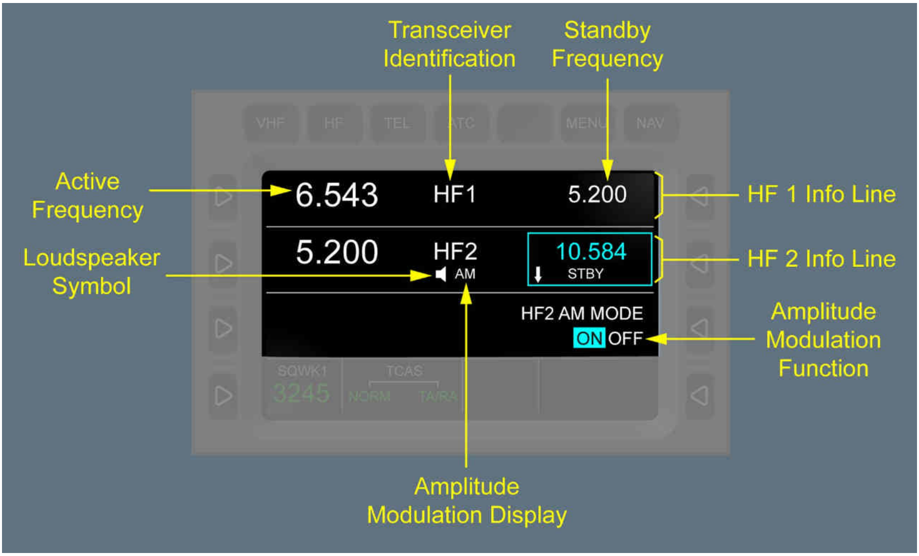
HF ◁ PAGE

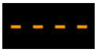
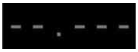
1 Ident.: DSC-23-45-10-00022708.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597


Transceiver Identification
Standby Frequency
VHF
HF
TEL
ATC
MENU
NAV
Active Frequency
6.543
HF1
5.200
HF 1 Info Line
Loudspeaker Symbol
5.200
HF2
AM
10.584
STBY
HF 2 Info Line
HF2 AM MODE
ON OFF
Amplitude Modulation Function
SQWK1
3245
TCAS
NORM
TA/RA
Amplitude Modulation Display

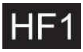
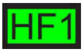
The illustration indicates:
- HF 2 is in transmission (AM mode) and reception mode (loudspeaker symbol)
- The active frequency is 5.200 MHz
- The Standby Frequency is boxed to indicate that it is selected for modification.

ACTIVE FREQUENCY

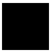
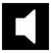
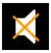
5.200	The HF transceiver is tuned on the displayed frequency. The flight crew can press the RMP L1 or L2 key to swap the Active frequency and the Standby frequency.
- - . - - -	The HF transceiver is in voice mode, and is either failed or not available.
DATA	The HF transceiver is in data mode (HF Datalink ◁).
DATA DISCONNECTING	The flight crew pressed the RMP L1 or L2 key, the DATA is disconnecting (HF Datalink ◁). After disconnection, the DATA and the Standby Frequency are swapping.

	The HF transceiver is in data mode (HF Datalink ◁), and is either failed or not available.
	The RMPs are not synchronized, or an internal failure has occurred.

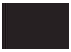
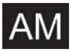
TRANSCEIVER IDENTIFICATION

	HF 1(2) is not in transmission mode.
	HF 1(2) is in transmission mode.

LOUDSPEAKER SYMBOL

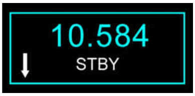
	When there is no display, indicates that reception mode is off.
	The active frequency is in reception mode.
	The active frequency is in transmission mode, but not in reception mode. When the flight crew turns on the transmission mode only, the symbol flashes for 2 s, and then remains steady.

AMPLITUDE MODULATION DISPLAY

	When there is no display, indicates that Single Side Band (SSB) mode is active.
	Amplitude Modulation (AM) mode is active.

STANDBY FREQUENCY

L12



The flight crew presses the RMP R1 or R2 key and selects the HF 1(2) Standby frequency for modification.

A voice standby frequency displays:
- In large characters until the flight crew validates it
- In small characters after validation.

Note: *After a flight crew modifies the Standby Frequency, they should validate it, in order to prevent inadvertent modification of the frequency.*

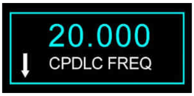
The current HF 1(2) Standby frequency is validated and deselected when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew swaps the Active frequency and the related Standby frequency, or
- The flight crew selects another Standby frequency, or
- The flight crew displays another RMP page, or
- The flight crew presses one of the scroll keys, or
- Automatically when the frequency is complete and valid.

If at validation, the HF frequency is not complete, then all of the following occur:
- The current HF frequency remains selected
- The HF1(2) FREQ NOT COMPLETE RMP message is displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

The up-arrow and the down-arrow indicate that the list of frequencies can be scrolled up, or down.

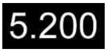
The list contains the following frequencies:
- Modifiable frequency
- DATA (HF Datalink ◁✳)
- Emergency frequency 8.364 MHz.

When the flight crew enters a frequency, via the numerical keypad, the modifiable frequency appears automatically whatever the current display.
The flight crew can clear a digit, via the CLR key.
The flight crew can press and maintain the CLR key , in order to remove all the entered digits and display the previous valid HF frequency.



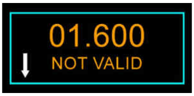
20.000
↓ CPDLC FREQ

In case of CPDLC frequency upload, the flight crew pressed the RMP R4 key to load the CPDLC frequency into the RMP.



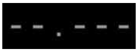
5.200

The flight crew validated the Standby Frequency. No modification is possible. The flight crew should select the appropriate RMP key to modify the Standby Frequency.



01.600
↓ NOT VALID

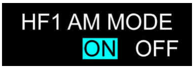
The Standby Frequency is not a standard HF voice frequency. The flight crew can clear the erroneous digits, via the CLR key, until the Standby Frequency displays in cyan again.



- - . - - -

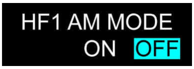
The RMPs are not synchronized.

AMPLITUDE MODULATION FUNCTION



HF1 AM MODE
ON OFF

HF 1(2) is in AM mode. When the flight crew presses the RMP R3 key, the SSB mode activates.

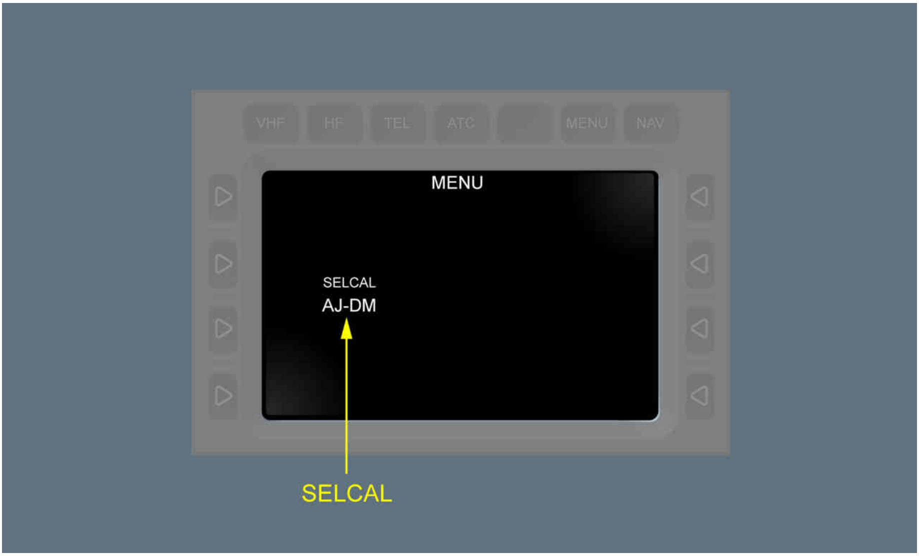


HF1 AM MODE
ON OFF

HF 1(2) is in SSB mode. When the flight crew presses the RMP R3 key, the AM mode activates.

MENU PAGE

2 Ident.: DSC-23-45-10-00024139.0005001 / 18 MAY 21
Applicable to: MSN 11482-11597



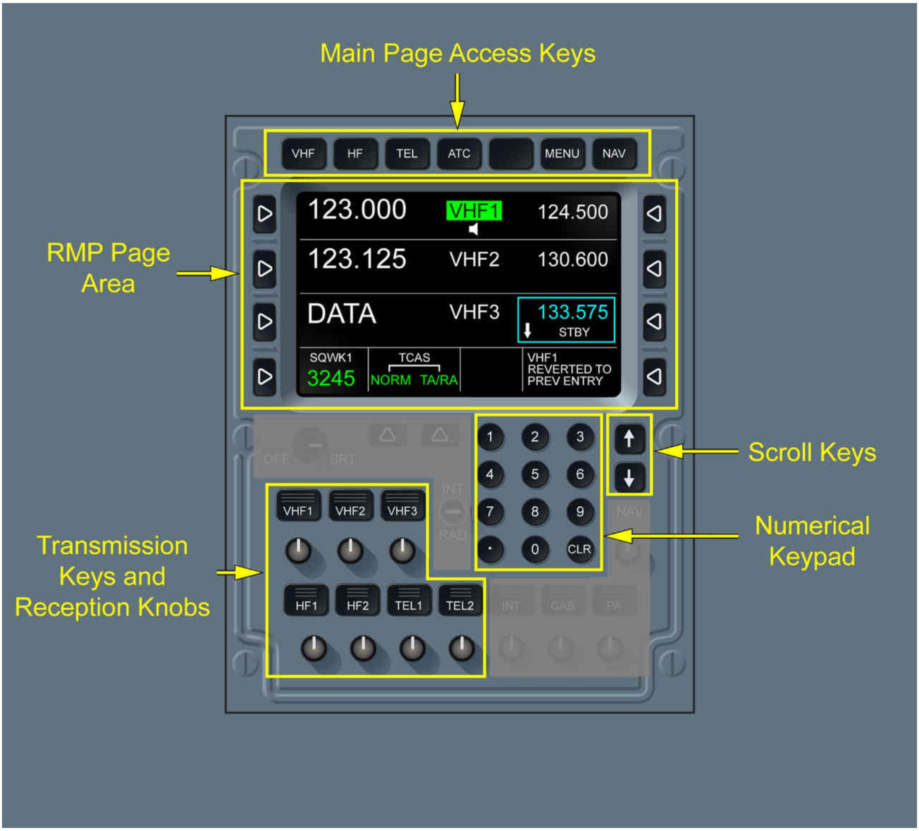
SELCAL

AJ-DM	Indicates the A/C identification for selective call.
_ _ - _ _	A/C identification for selective call is not available.

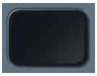
RMP EXTERNAL COMMUNICATION

3 Ident.: DSC-23-45-10-00022706.0001001 / 25 MAY 20

Applicable to: MSN 11482-11597


Main Page Access Keys
VHF
HF
TEL
ATC
MENU
NAV
RMP Page Area
123.000
VHF1
124.500
123.125
VHF2
130.600
DATA
VHF3
133.575
STBY
SQWK1
3245
TCAS
NORM TA/RA
VHF1 REVERTED TO PREV ENTRY
OFF
BRT
1 2 3 4 5 6 7 8 9 · 0 CLR
Scroll Keys
Numerical Keypad
INT
RAD
NAV
Transmission Keys and Reception Knobs
VHF1
VHF2
VHF3
HF1
HF2
TEL1
TEL2
INT
CAB
PA

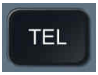
MAIN PAGE ACCESS KEYS



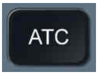
Indicates that the associated system is not installed.

Displays the VHF page (*Refer to DSC-23-45-10 VHF Page*).

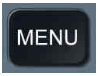
Displays the HF page (*Refer to DSC-23-45-10 HF (If Installed) Page*).



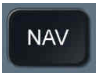
Displays the TEL page (SATCOM ◁✳) (*Refer to DSC-23-45-10 TEL Page*).



Displays the ATC page with XPDR and TCAS data.
For the XPDR part *Refer to DSC-34-SURV-10-20 Control Panels* .
For TCAS part *Refer to DSC-34-SURV-60-20 ATC/TCAS Panel* .



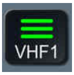
Displays the MENU page (*Refer to DSC-23-45-10 MENU Page*).



Displays the NAV page (*Refer to DSC-34-NAV-30-30 NAV Page*).

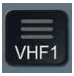
EXTERNAL TRANSMISSION KEYS AND RECEPTION KNOBS

VHF TRANSMISSION KEYS

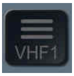


The associated communication means (i.e. VHF 1(2)(3)) is in transmission mode. When pressed, the transmission key turns off the transmission mode.

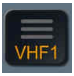
Note: *Only one communication means at a time (internal and external communication) can be in transmission mode on each RMP.*



The associated communication means (i.e. VHF 1(2)(3)) is not in transmission mode. When pressed, the transmission key turns on the transmission mode.

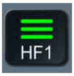


Indicates that the associated communication means (i.e. VHF 1(2)(3)) is not installed.

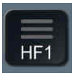


Flashes to indicate an incoming SELCAL.
When a SELCAL is received, a buzzer sounds in the cockpit until it is reset, via the RMP R4 key.

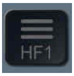
HF TRANSMISSION KEYS



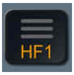
The associated communication means (i.e. HF 1(2) ◁✳) is in transmission mode. When pressed, the transmission key turns off the transmission mode.



The associated communication means (i.e. HF 1(2) ◁✳) is not in transmission mode. When pressed, the transmission key turns off the transmission mode.

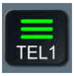


Indicates that the associated communication means (i.e. HF 1(2) ◁✳) is not installed.

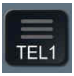


Flashes to indicate an incoming SELCAL.
When a SELCAL is received, a buzzer sounds in the cockpit until it is reset, via the RMP R4 key.

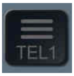
TEL TRANSMISSION KEYS



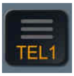
The associated communication means (i.e. TEL 1(2) (SATCOM ◁)) is in transmission mode. When pressed, the transmission key turns off the transmission mode.



The associated communication means (i.e. TEL 1(2) (SATCOM ◁)) is not in transmission mode. When pressed, the transmission key turns on the transmission mode.



Indicates that the associated communication means (i.e. TEL 1(2) (SATCOM ◁) is not installed.



Flashes to indicate an incoming CALL.
When a CALL is received, a buzzer sounds in the cockpit until it is reset, via the RMP R4 key.

RECEPTION KNOBS

The associated communication means or interphone (i,e, VHF 1(2)(3), HF 1(2) ◁ , TEL 1(2) (SATCOM ◁)) is not in reception mode.
When pressed and released in the out position, the reception knob turns on the reception mode.

The associated communication means or interphone (i.e. VHF 1(2)(3), HF 1(2) ◁ , TEL 1(2) (SATCOM ◁)) is in reception mode.
When turned, the reception knob adjusts the volume of the headsets and the loudspeakers.
When pressed and released in the in position, the reception knob turns off the reception mode.

SCROLL KEYS

UP KEY

- When pressed and released, scrolls up a list of items provided that an up-arrow is displayed in the field that is selected for modification
- When pressed and maintained, displays the first item of the list.

DOWN KEY

- When pressed and released, scrolls down a list of items provided that a down-arrow is displayed in the field that is selected for modification
- When pressed and maintained, displays the last item of the list.

NUMERICAL KEYPAD

NUMBER KEYS

When pressed, inserts the corresponding number at the cursor position, in the field selected for modification.

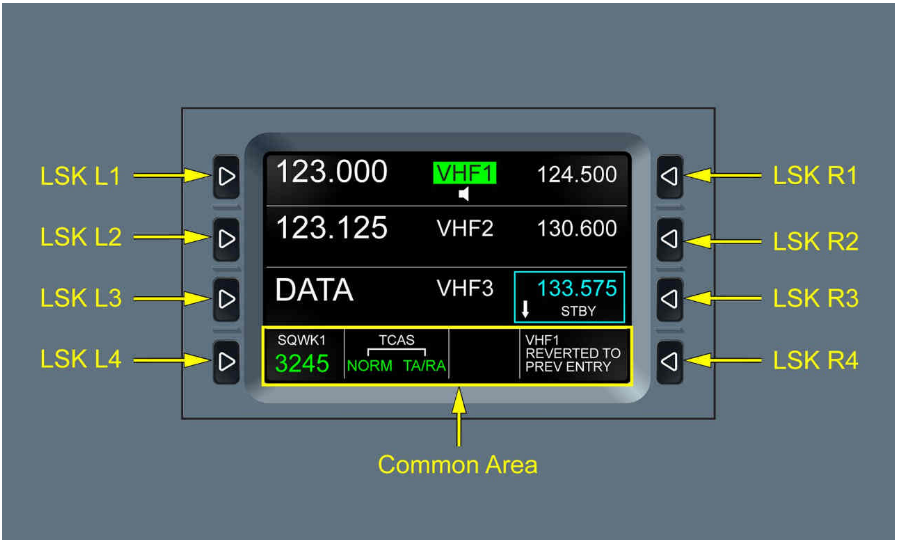
DECIMAL KEY

When pressed, inserts a decimal.
The decimal is automatically entered where necessary.

CLR KEY

- When pressed and released, clears the last digit
- When pressed and maintained, clears the field selected for modification, and displays the last validated entry.

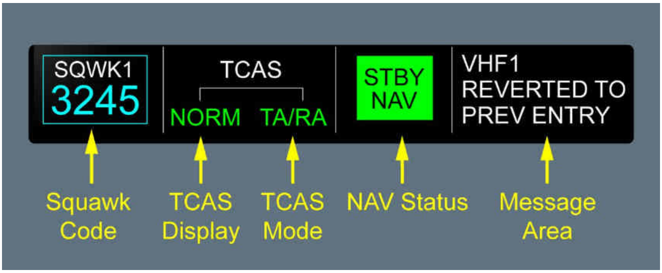
RMP PAGE AREA


LSK L1
LSK L2
LSK L3
LSK L4
123.000
VHF1
124.500
123.125
VHF2
130.600
DATA
VHF3
133.575
STBY
SQWK1
3245
TCAS
NORM TA/RA
VHF1
REVERTED TO
PREV ENTRY
LSK R1
LSK R2
LSK R3
LSK R4
Common Area

LINE SELECTION KEYS (LSK)

When pressed, dials, selects, validates, or activates the corresponding displays (e.g. frequencies, functions, page titles).

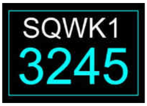
COMMON AREA


SQWK1
3245
TCAS
NORM
TA/RA
STBY
NAV
VHF1
REVERTED TO
PREV ENTRY
Squawk Code
TCAS Display
TCAS Mode
NAV Status
Message Area

The Common Area can be displayed on the following radio pages:

- VHF Page
- HF ◁✻ Page
- TEL (SATCOM ◁✻) Page
- ATC Page.

Squawk Code



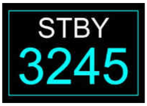
The XPDR 1(2) is in AUTO mode.
The flight crew presses the RMP L4 key and selects the Squawk code for modification. Each digit of the Squawk code must be in the range from 0 to 7.

The current SQWK code is validated and deselected when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew presses another RMP key, or
- The flight crew enters a last digit of the Squawk code.

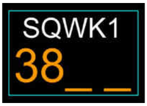
When the flight crew enters a Squawk code, the system does not complete the code. Underscore "_" are displayed in place of net yet entered digits.

If at validation, the Squawk code is not complete, then all of the following occur:
- The squawk code reverts to the previous valid code
- The **SQWK REVERTED TO PREV ENTRY** RMP message appears (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

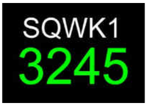
The flight crew can clear a digit , via the CLR key.
The flight crew can press and maintain the CLR key, in order to remove all the entered digits and display the previous valid Squawk code.
The SQWK REVERTED TO PREV ENTRY RMP message is also displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).



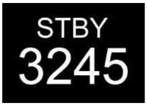
The XPDR is in standby mode.
The flight crew presses the RMP L4 key and selects the Squawk code for modification. Each digit of the Squawk code must be in the range from 0 to 7.



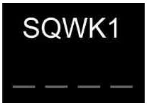
The flight crew enters an erroneous digit in the SQWK code. They can clear the erroneous digits, via the CLR key, until the SQWK code displays in cyan again.
The SQWK CODE NOT VALID RMP message is also displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).



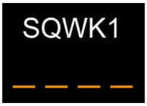
The XPDR 1(2) is in AUTO mode and responds to requests.



The XPDR is in standby mode and does not respond to requests from ATC, nor to other aircraft.

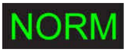


The RMPs are not synchronized or an internal failure has occurred.



XPDR 1(2) is failed.

TCAS Display

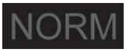


The NORM (ABV, BLW) TCAS display mode is selected with all of the following conditions:

- The selected XPDR is in AUTO mode, and
- The TCAS is in TA/RA or TA mode.

The flight crew can press the left TCAS Generic key to change the mode selection.

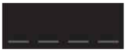
The flight crew can select the THRT TCAS display mode only on the ATC page (*Refer to DSC-34-SURV-10-20 Control Panels*).



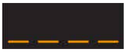
The NORM (ABV, BLW) TCAS display mode is selected with one of the following conditions:

- Tthe selected XPDR is in STBY mode, or
- The TCAS is in STBY mode, or
- The altitude data transmission (ALT RPTG) is not activated.

The flight crew cannot change the mode selection.

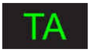


The link between RMP1 and AMU is failed. The flight crew cannot modify the TCAS display.



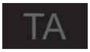
The related XPDR is failed. The flight crew cannot modify the TCAS display.

TCAS Mode



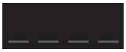
The TA (TA/RA, STBY) TCAS mode is selected with the selected XPDR in AUTO mode.
The TA/RA, STBY (TA) TCAS mode are not selected. The flight crew can press the right TCAS Generic key to change the mode selection.
On ground, the flight crew can select all TCAS modes.

In flight:
- The flight crew can only select TA or TA/RA TCAS modes.
- The flight crew can select the STBY TCAS mode only on the ATC page (*Refer to DSC-34-SURV-10-20 Control Panels*).

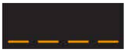


The TA (TA/RA, STBY) TCAS (ABV, BLW) TCAS display mode is selected with one of the following conditions:
- The TCAS is in STBY mode, or
- The altitude data transmission (ALT RPTG) is not activated.

The flight crew cannot change the mode selection.



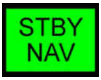
The link between RMP1 and AMU is failed. The flight crew cannot modify the TCAS mode.



The related XPDR is failed. The flight crew cannot modify the TCAS mode.

NAV Status

L12



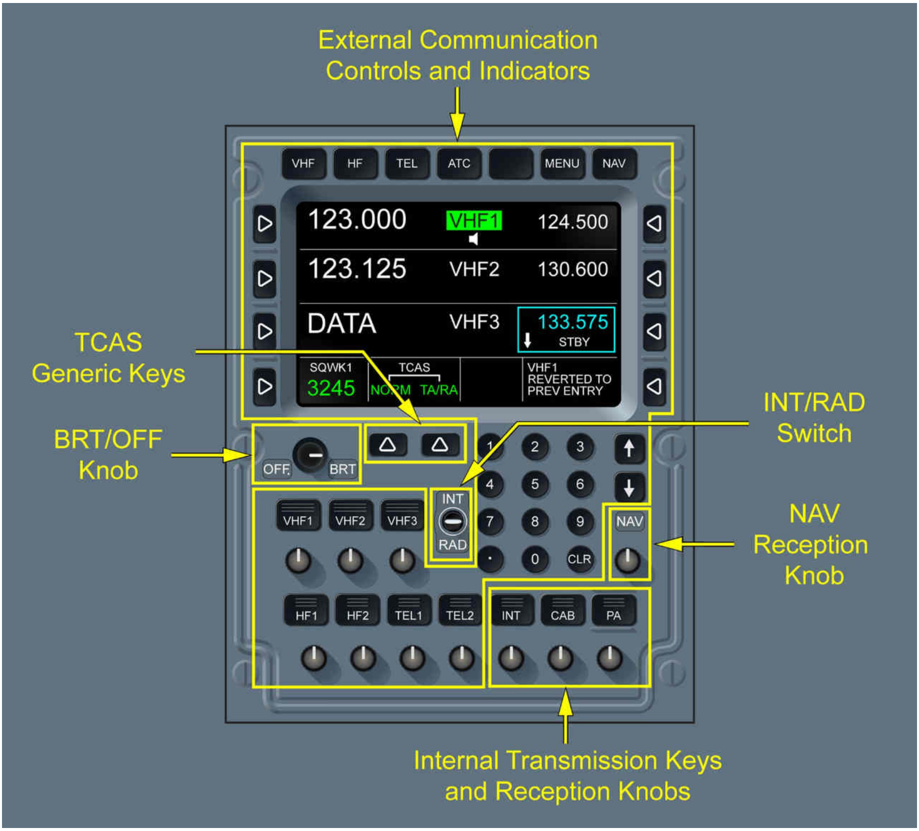
The NAV status is in STBY mode.
Displayed only on RMP1 and RMP2.

Message Area

Refer to DSC-23-45-20 RMP Messages on the RMP Message Area.

RMP OVERVIEW

4 Ident.: DSC-23-45-10-00022705.0001001 / 18 MAY 21
Applicable to: MSN 11482-11597


External Communication
Controls and Indicators
VHF
HF
TEL
ATC
MENU
NAV
123.000
VHF1
124.500
123.125
VHF2
130.600
DATA
VHF3
133.575
STBY
SQWK1
3245
TCAS
NORM
TA/RA
VHF1
REVERTED TO
PREV ENTRY
TCAS
Generic Keys
BRT/OFF
Knob
OFF
BRT
INT/RAD
Switch
INT
RAD
1
2
3
4
5
6
7
8
9
0
CLR
NAV
NAV
Reception
Knob
VHF1
VHF2
VHF3
HF1
HF2
TEL1
TEL2
INT
CAB
PA
Internal Transmission Keys
and Reception Knobs

INTERNAL TRANSMISSION KEYS AND RECEPTION KNOBS

INT TRANSMISSION KEYS AND RECEPTION KNOBS

Refer to DSC-23-20-10 Flight Crew Interphone System.

CAB TRANSMISSION KEYS AND RECEPTION KNOBS

Refer to DSC-23-20-20 Introduction.

PASSENGER ADDRESS FUNCTION

Refer to DSC-23-20-40 Description.

INT/RAD SWITCH

The flight crew uses the interphone/Radio Push-To-Talk switch (INT/RAD sw) to activate the boomset or oxygen mask microphones.

The switch on:
- RMP 1 controls the microphones for the Captain
- RMP 2 controls the microphones for the First Officer
- RMP 3 ◁ controls the microphones for the third occupant.

The INT/RAD sw is in the off position.

- When set to RAD, the INT/RAD sw activates the boomset or the oxygen mask microphone. However, the appropriate key should be selected first, in order to transmit the message
- When released, the INT/RAD sw returns to the off position.

- When set to INT, the INT/RAD sw activates the boomset or the oxygen mask microphone
- When released, the INT/RAD sw remains in the INT position, until the flight crew selects another switch position.

BRT/OFF KNOB

Turn the BRT/OFF knob to adjust the brightness level of the screen.

Set to OFF the BRT/OFF knob to switch off the RMP.

EXTERNAL COMMUNICATION CONTROLS AND INDICATORS

Refer to DSC-23-45-10 RMP External Communication

NAV RECEPTION KNOB

Refer to DSC-34-NAV-30-30 NAV Page

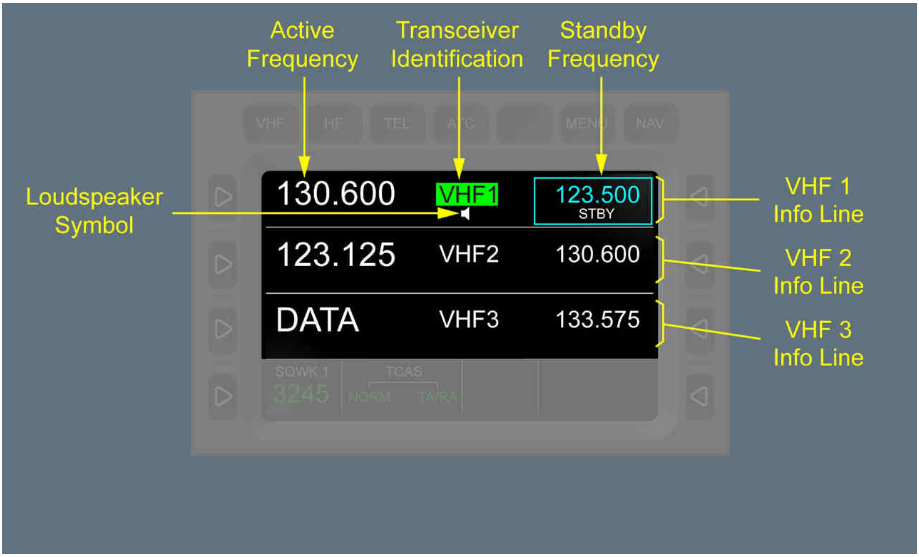
TCAS GENERIC KEYS

The flight crew selects the left TCAS Generic key to modify the TCAS display mode selection.
The flight crew selects the right TCAS Generic key to modify the TCAS mode selection.
For the use of the TCAS Generic Keys, *Refer to DSC-23-45-10 RMP External Communication*

VHF PAGE

5 Ident.: DSC-23-45-10-00022707.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597

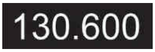
L2 After an RMP power-up or reset, or after deactivation of the RAD NAV STBY mode, the RMP displays the VHF page by default.


Active Frequency
Transceiver Identification
Standby Frequency
VHF HF TEL ATC MENU NAV
Loudspeaker Symbol
130.600
VHF1
123.500
STBY
VHF 1 Info Line
123.125
VHF2
130.600
VHF 2 Info Line
DATA
VHF3
133.575
VHF 3 Info Line
SQWK 1
3245
TCAS
NORM
TA/RA

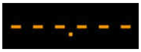
L1 The illustration indicates:

- VHF 1 is in transmission (transceiver identification in reverse video) and reception mode (loudspeaker symbol)
- The VHF 1 Active Frequency is 130.600 MHz
- The VHF 1 Standby Frequency is 123.500 MHz and is boxed to indicate that it is selected for modification
- VHF 2 and VHF 3 is neither in transmission nor in reception mode.

ACTIVE FREQUENCY



VHF is tuned on the displayed frequency.
The flight crew can press the RMP L1, L2 or L3 key to swap the Active frequency and the Standby frequency.



VHF is in voice mode, and is either failed or not available.

FOR VHF 3 ONLY

DATA	DATA mode is active.
DATA DISCONNECTING	The flight crew pressed the RMP L3 key, the DATA mode is disconnecting. After disconnection, the DATA and the Standby Frequency are swapping.

TRANSCEIVER IDENTIFICATION

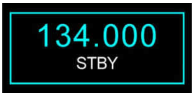
VHF1	VHF 1(2)(3) is not in transmission mode.
VHF1	VHF 1(2)(3) is in transmission mode.

LOUDSPEAKER SYMBOL

■	When there is no display, indicates that reception mode is off.
🔈	The active frequency is in reception mode.
🔇	The active frequency is in transmission mode, but not in reception mode. When the flight crew turns on the transmission mode only, the symbol flashes for 2 s, and then remains steady.

STANDBY FREQUENCY

L12



The flight crew pressed the RMP R1, R2 or R3 key. The flight crew can modify the Standby Frequency.

A voice standby frequency appears:
- In large characters until it is inserted, via the appropriate RMP key
- In small characters after insertion.

Note: *After a flight crew modifies the Standby Frequency, they should insert it, in order to prevent inadvertent modification of the frequency.*

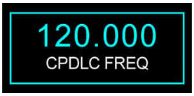
The current VHF 1(2)(3) Standby frequency is validated and deselected when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew swaps the Active frequency and the related Standby frequency, or
- The flight crew selects another Standby frequency, or
- The flight crew displays another RMP page, or
- The flight crew presses one of the scroll keys, or
- Automatically when the frequency is complete and valid.

If at validation, the VHF frequency is not complete, then all of the following occur:
- The current VHF frequency remains selected
- The VHF1(2)(3) FREQ NOT COMPLETE RMP message is displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

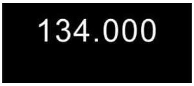
The up-arrow and the down-arrow indicate that the list of frequencies can be scrolled up, or down.

The list contains the following frequencies:
- Modifiable frequency
- DATA (VHF Datalink ◁)
- Emergency frequency 121.500 MHz.

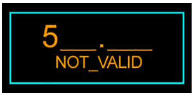
When the flight crew enters a frequency, via the numerical pad, the modifiable frequency appears automatically whatever the current display.
The flight crew can clear a digit, via the CLR key.
The flight crew can press and maintain the CLR key , in order to remove all the entered digits and display the previous valid VHF frequency.



In case of CPDLC frequency upload, the flight crew pressed the RMP R4 key. The DRMP is loading the CPDLC frequency into the RMP.



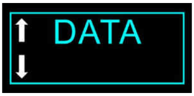
The flight crew validated the Standby Frequency. No modification is possible. The flight crew should select the appropriate RMP key to modify the Standby Frequency.



The modified standby frequency is not a standard VHF voice frequency. The flight crew can clear the erroneous digits, via the CLR key, until the standby frequency displays in blue again. The VHF1(2) FREQ NOT COMPLETE RMP message is also displayed.

FOR VHF 3 ONLY

L12



The flight crew pressed RMP R3 key. When boxed, the standby frequency can be modified.

The standby frequency (except DATA) appears:
- In large characters until it is inserted, via the appropriate RMP key.
- In small characters after insertion.

Note: *After a flight crew modifies the Standby Frequency, they should insert it, in order to prevent inadvertent modification of frequency.*

When entering a frequency, the system assists you and completes the digits of the frequency.
The up-arrow and the down-arrow indicate that the flight crew can use the up and down keys to scroll through the list of frequencies.

The list contains the following frequencies:
- The modifiable frequency
- DATA
- 121.500 MHz.

When the flight crew enters a frequency, via the numerical pad, the modifiable frequency appears automatically whatever the current display.

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RMP MESSAGES ON THE RMP PAGE AREA

1 Ident.: DSC-23-45-20-00024140.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597

The following messages are displayed on the whole RMP page area.

Message	Condition
HF PAGE NOT AVAIL	This message is displayed in HF page on RMP1 when communication between RMP1 and AMU is failed.
MENU PAGE NOT AVAIL	This message is displayed in MENU page on RMP1 when communication between RMP1 and AMU is failed.
NAV PAGE NOT AVAIL	This message is displayed in NAV page on RMP1 when communication between RMP1 and AMU is failed.
RMP2(3) NOT AVAIL	This message is displayed on RMP2/RMP3 when communication between RMP2/RMP3 and AMU is failed.
TEL PAGE NOT AVAIL	This message is displayed in TEL page (SATCOM) on RMP1 when communication between RMP1 and AMU is failed.
TEST IN PROGRESS	This message is displayed when the aircraft is on ground and RMP is started after a power cut of more than 5 s.
VHF PAGE NOT AVAIL	This message is displayed in VHF page on RMP1 when communication between RMP1 and AMU is failed.

RMP MESSAGES ON THE RMP MESSAGE AREA

2 Ident.: DSC-23-45-20-00022683.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597

The RMP displays messages to inform the flight crew, when:
- An action is not appropriate, or not complete, or
- A connection is failed, or
- Voice or data mode is not available.

L3 An RMP message can be displayed on all RMPs simultaneously (global display), or on one RMP only (local display). However, some local messages can be displayed on more than one RMP, provided that the same page is displayed.
RMP messages are displayed according to their priority levels.
If several messages with different priority levels can be displayed, the message with the highest priority is displayed first.
If several messages with the same priority levels can be displayed, the most recent one is displayed first.
The flight crew must check, and clear the active messages, one by one, in order to cancel the queue.
L1 The various RMP communication messages are listed below:

Message	Priority	Condition
🔈 ADF1(2)	3	On ADF page, the ADF1(2) is activated in reception mode.
ADF1(2) FREQ NOT COMPLETE	1	The flight crew tries to validate a frequency that is not complete.
DATA FIELD NOT MODIFIABLE	1	The flight crew tries to modify a field, that cannot be modified.
DIALING NOT ALLOWED	1	On TEL page, the flight crew enters a telephone number on TEL1(2) Channel Info while connection/disconnection is in progress or TEL1(2) is connected.
GLS CHAN NOT COMPLETE (GLS ◁)	1	The flight crew tries to validate a channel that is not complete.
GLS CRS NOT COMPLETE (GLS ◁)	1	The flight crew tries to validate a course that is not complete.
HF1(2) DATA MODE NOT AVAIL (HF ◁)	1	The flight crew tries to activate the DATA mode on HF1(2) but the data mode is not available.
HF1(2) FREQ NOT COMPLETE (HF ◁)	1	The flight crew tries to validate a frequency that is not complete.
HF1(2) NOT INSTALLED (HF ◁)	1	The flight crew selects the HF Main Page Access key or the HF1(2) transmission key whereas the HF1(2) system is not installed.
HF1(2) RECEPTION NOT SELECTED (HF ◁)	1	The flight crew selects the HF1(2) transmission key whereas the HF2(1) reception knob is selected. No PTT is activated.
HF1(2) RECEPTION NOT SELECTED (HF ◁)	1	The flight crew selects the HF1(2) transmission key whereas the HF2(1) reception knob is selected. One PTT is activated.
HF1(2) STBY REVERTED TO PREV ENTRY (HF ◁)	1	On HF page, the flight crew attempts to manually validate an erroneous or incomplete HF frequency. The entry from the flight crew is replaced by the previous valid HF frequency.
HF1(2) VOICE MODE NOT AVAIL (HF ◁)	1	On HF page, the flight crew tries to activate HF1(2) in voice mode, but the voice mode is not available.
ILS CRS NOT COMPLETE	1	On LS page, the flight crew tries to validate a course that is not complete.
ILS FREQ NOT COMPLETE	1	On LS page, the flight crew tries to validate a frequency that is not complete.
LIST NUMBER NOT VALID	1	On TEL DIRECTORY page, the flight crew enters an invalid Telephone Number item.
LOAD XX.XXXX ON HF	1	On HF page, the flight crew can press the RMP R4 key to load the received CPDLC frequency in the selected STBY frequency. XX.XXXX is replaced by the digits of the received CPDLC frequency.

Continued on the following page

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Message	Priority	Condition
LOAD XXXXXX ON TEL	1	On TEL page, the flight crew can press the RMP R4 key to load the received CPDLC telephone number in the selected Telephone Information. XXXXXX is replaced by the digits of the received CPDLC telephone number.
LOAD XXX.XXX ON VHF	1	On VHF page, the flight crew can press the RMP R4 key to load the received CPDLC frequency in the selected STBY frequency. XXX.XXX is replaced by the digits of the received CPDLC frequency.
LOG OFF TO MODIFY SATCOM SETTINGS	1	On SATCOM SETTINGS page, the flight crew tries to modify entries from the SAT zone or from the GES zone while the SATCOM Connection Status is LOGGED (AUTO or MANUAL).
🔈 LS	3	On LS page, the ILS, GLS ◁✱ or MLS ◁✱ is activated in reception mode.
🔈 MKR	3	The MKR is activated in reception mode.
MLS CHAN NOT COMPLETE (MLS ◁✱)	1	The flight crew tries to validate a channel that is not complete.
MLS CRS NOT COMPLETE (MLS ◁✱)	1	The flight crew tries to validate a course that is not complete.
NO NUMBER DIALED	1	On TEL page, the flight crew tries to make a telephone call by This message is displayed when the flight crew triggers a phone connection while no number has been dialed.
PLEASE WAIT	1	The load of the content of a displayed field is progress.
RESET CABIN	1	This message is displayed when a CALL is received.
RESET CALL	1	This message is displayed when a CALL is received.
RESET MECH	1	This message is displayed when a CALL is received.
RESET SELCAL	1	This message is displayed when a SELCAL is received.
SATCOM LOG ON FAILED	2	On the SATCOM Settings page, the flight crew tries to log on the SATCOM, but the log on fails.
SQWK CODE NOT VALID	1	The flight crew enters an erroneous SQWK code.
SQWK REVERTED TO PREV ENTRY	1	The flight crew attempts to manually validate an erroneous or incomplete SQWK code. The flight crew entry is replaced by the previous valid SQWK code.

Continued on the following page

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Message	Priority	Condition
TEL1(2) BUSY	1	On TEL page, the flight crew presses the RMP R4 key to load the received CPDLC telephone number while connection/disconnection is in progress or TEL1(2) is already connected.
TEL1(2) CONNECTION FAILED	2	On TEL page, the flight crew tries to make a telephone call, but it cannot be established or it is interrupted due to a failure.
TEL CONTROL THROUGH MCDU	1	The flight crew presses the TEL1(2) transmission key whereas the SATCOM is managed by the MCDU.
TEL NBR NOT IN DIRECTORY	1	On TEL page, the flight crew enters an telephone number which does not belong to the Telephone Number List.
TEL1(2) NOT CONNECTED	1	The flight crew selects the TEL1(2) transmission key whereas no TEL1(2) connection is established.
TEL1(2) NOT INSTALLED	1	The flight crew selects the TEL Main Page Access key or the TEL1(2) transmission key whereas the TEL system is not installed.
TEL1(2) RECEPTION NOT SELECTED	1	The flight crew selects the TEL1(2) transmission key whereas the TEL2(1) reception knob is selected. No PTT is activated.
TEL1(2) RECEPTION NOT SELECTED	1	The flight crew selects the TEL1(2) transmission key whereas the TEL2(1) reception knob is selected. One PTT is activated.
TEL1(2) REVERTED TO PREV ENTRY	1	On TEL page, the flight crew attempts to manually validate an erroneous or incomplete telephone number. The entry from the flight crew is replaced by the previous valid telephone number.
TEL1(2) STILL CONNECTED	1	Within the last 2 min, the flight crew selects the TEL2(1) transmission key whereas TEL1(2) is connected.
TEL1(2) STILL CONNECTED	1	For more than 2 min, the flight crew selects the TEL2(1) transmission key whereas TEL1(2) is connected.
UPDATE MMR ON ALL RMP	1	On LS page, in the case of an RMP synchronization failure, the flight crew must update each modified data on each RMP.
UPDATE ATC ON ALL RMP	1	On ATC page, in the case of an RMP synchronization failure, the flight crew must update each modified data on each RMP.
VHF1(2)(3) DATA MODE NOT AVAIL	1	The flight crew tries to activate the DATA mode on VHF1(2)(3) but the data mode is not available.
VHF1(2)(3) FREQ NOT COMPLETE	1	The flight crew tries to validate a frequency that is not complete.

Continued on the following page

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Message	Priority	Condition
VHF1(2)(3) RECEPTION NOT SELECTED	1	The flight crew selects the VHF1(2)(3) transmission key whereas the VHF2(3)(1) reception knob is selected. No PTT is activated.
VHF1(2)(3) RECEPTION NOT SELECTED	1	The flight crew selects the VHF1(2)(3) transmission key whereas the VHF2(3)(1) reception knob is selected. One PTT is activated.
VHF1(2) STBY REVERTED TO PREV ENTRY	1	On VHF page, the flight crew attempts to manually validate an erroneous or incomplete VHF frequency. The entry from the flight crew is replaced by the previous valid VHF frequency.
🔈 VOR1(2)	3	On VOR page, the VOR1(2) is activated in reception mode.
VOR1(2) CRS NOT COMPLETE	1	The flight crew tries to validate a course that is not complete.
VOR1(2) FREQ NOT COMPLETE	1	The flight crew tries to validate a frequency that is not complete.

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ACARS ◁

Ident.: DSC-23-50-00018505.0001001 / 31 AUG 17
Applicable to: ALL

ACARS CALL : This memo appears in green when ACARS has received a message from the ground requesting a voice communication on VHF. This message is pulsing green during 60 s then steady.

VHF 3 VOICE : This memo appears in green when VHF 3 is operating in voice mode and ACARS communication is interrupted.

ACARS MSG : This memo appears in green when ACARS has received a message from the ground. This message is pulsing green during 60 s then steady.

ACARS STBY : This memo appears in green when ACARS communications between the aircraft and the ground are lost, or when a failure occurs at ATSU initialization to indicate to the crew to enter some initialization parameters.

ATSU ◁

Ident.: DSC-23-50-00018506.0001001 / 31 AUG 17
Applicable to: ALL

VHF 3 VOICE : This memo appears in green, if VHF 3 is operating in voice mode and ACARS communication is interrupted.

HF VOICE : This memo appears in green, if both HFs ◁ are operating in voice mode. This message flashes for 10 s and then steady.

AUDIO 3 XFRD

Ident.: DSC-23-50-00018507.0001001 / 17 MAR 17
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

AUDIO 3 XFRD : This memo appears in green, if the AUDIO SWITCHING selector is not on NORM.

SATCOM ◁

Ident.: DSC-23-50-00018508.0002001 / 03 APR 18
2 **Applicable to: MSN 08635, 10949-11597**

SATCOM ALERT : This memo appears in green when a message with priority level below 4 is received from the ground.

L12

TEL EMER(ATC)(CPNY) CALL : This memo appears in green when the flight crew receives an EMERGENCY(ATC)(COMPANY) telephone call via the SATCOM.
Appears on the E/WD.

SATCOM

Ident.: DSC-23-50-00018508.0001001 / 31 AUG 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

SATCOM ALERT : This memo appears in green when a message with priority level below 4 is received from the ground.

LOUDSPEAKERS

3 Ident.: DSC-23-50-00025038.0001001 / 03 NOV 21
Applicable to: MSN 11482-11597

L SPKR OFF	Appears when the left loudspeaker is switched off.
R SPKR OFF	Appears when the right loudspeaker is switched off.
L+R SPKR OFF	Appears when the left and right loudspeakers are switched off.
L SPKR LOW	Appears when the volume of the left loudspeaker is low.
R SPKR LOW	Appears when the volume of the right loudspeaker is low.
L+R SPKR LOW	Appears when the volume of the left and right loudspeakers is low.

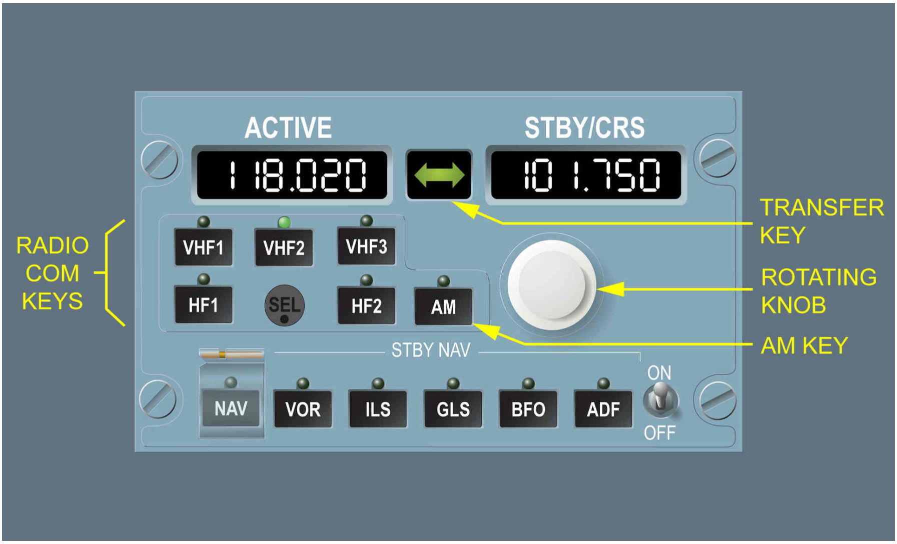
VHF, HF UTILIZATION

Ident.: DSC-23-60-A-00002211.0001001 / 05 MAR 18

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

TUNING

The pilot should normally use his onside RMP to tune any one of the VHF or HF radios.
If a frequency is tuned on the RMP not dedicated to its associated VHF (e.g. VHF 1 tuned on RMP 2), the SEL lights come on (on the 3 RMP) to remind the pilot at least one radio system is not selected on its associated RMP. After each tuning, in order to be able to read VHF 1 and VHF 2 frequencies, the pilot should select the radio system associated with his RMP, this will extinguish the SEL lights.


ACTIVE
118.020
STBY/CRS
101.750
TRANSFER KEY
RADIO COM KEYS
VHF1
VHF2
VHF3
HF1
SEL
HF2
AM
ROTATING KNOB
AM KEY
STBY NAV
NAV
VOR
ILS
GLS
BFO
ADF
ON
OFF

ON/OFF switch.. CHECK ON
VHF or HF key.. PRESS

The green light comes on.
ACTIVE and STBY/CRS windows display active and preset frequencies, respectively.

HOW TO CHANGE FREQUENCY

Rotating knob.. TURN

Select the new frequency in the STBY/CRS window.
Outer knob is for units, inner knob for decimals.

Transfer key..PRESS

This interchanges the ACTIVE and STBY frequencies.
The receiver is now tuned to the new ACTIVE frequency.

AM key (if necessary)..PRESS

Green light comes on.

FAILURE CASES

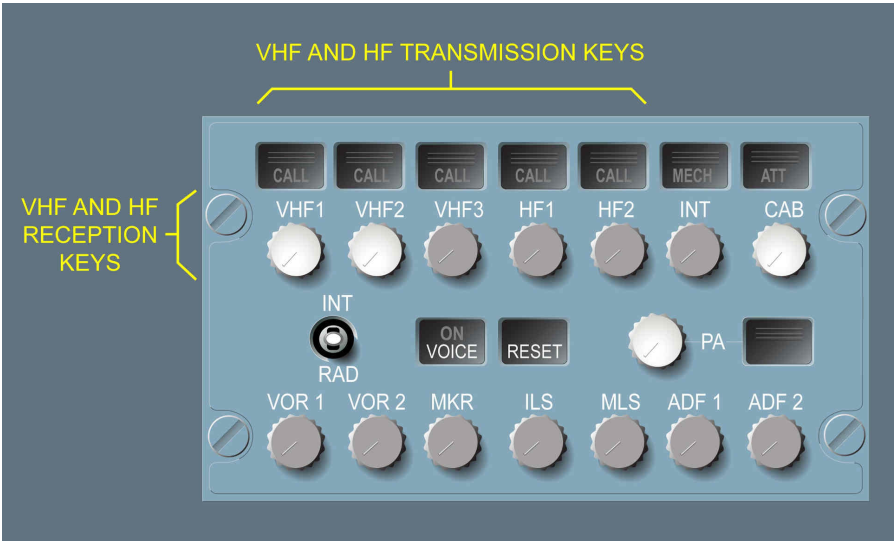
When an RMP fails :
- The affected RMP no longer controls the selected receiver.
- The frequency displays disappear and the green VHF or HF lights go out.

Affected RMP..SWITCH OFF

One RMP can control all receivers.

Ident.: DSC-23-60-A-00002212.0001001 / 05 MAR 18
Applicable to: MSN 01459

TRANSMISSION AND RECEPTION


VHF AND HF TRANSMISSION KEYS
VHF AND HF RECEPTION KEYS
CALL
CALL
CALL
CALL
CALL
MECH
ATT
VHF1
VHF2
VHF3
HF1
HF2
INT
CAB
INT
RAD
ON VOICE
RESET
PA
VOR 1
VOR 2
MKR
ILS
MLS
ADF 1
ADF 2

VHF or HF reception key..PRESS

The integrated white light comes on.
The receiver brings in the selected system.
To adjust the volume, turn the key.

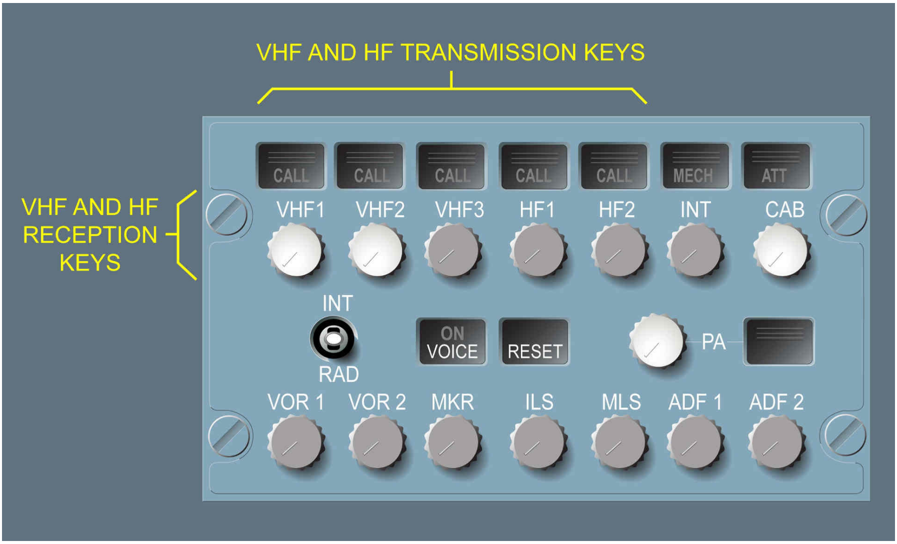
VHF or HF transmission key.. PRESS

Green bars on the selected system key light up.
Microphones and PTT command are connected to the selected system.

Ident.: DSC-23-60-A-00002212.0004001 / 28 MAY 20

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

TRANSMISSION AND RECEPTION


VHF AND HF TRANSMISSION KEYS
VHF AND HF RECEPTION KEYS
CALL
CALL
CALL
CALL
CALL
MECH
ATT
VHF1
VHF2
VHF3
HF1
HF2
INT
CAB
INT
RAD
ON VOICE
RESET
PA
VOR 1
VOR 2
MKR
ILS
MLS
ADF 1
ADF 2

VHF or HF reception key.. PRESS

The integrated white light comes on.
The receiver brings in the selected system.
To adjust the volume, turn the key.

VHF or HF transmission key.. PRESS

Green bars on the selected system key light up.
Microphones and PTT command are connected to the selected system.

Note:

1. *If ACARS is installed, do not use VHF 3 for voice communications with ATC, unless VHF 1 and VHF 2 are inoperative.*
2. *If the VHF 3 VOICE DIRECTORY page is customized with user frequencies:*
   - *Use it as a pure directory*
   - *Do not press the key adjacent to the desired frequency for direct tuning*
   - *VHF 3 in VOICE mode should either be tuned using the MANUAL FREQ field, or using the RMP.*
3. *If two frequencies are closer than 2 MHz (between VHF 1 and 2, or between VHF 2 and 3), or closer than 6 MHz (between VHF 1 and 3), some interference may occur.*
4. *If interference occurs, use VHF 2 for voice communication with ATC. The flight crew can also switch VHF 3 to VOICE.*

AIRCRAFT SYSTEMS

ELECTRICAL

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DSC-24-10 Description

DSC-24-10-10 General

General....A

DSC-24-10-20 Generation of Electrical Power

AC Generators....A
DC Generation....B
Circuit Breakers (C/Bs)....C

DSC-24-10-30 Operations

DSC-24-10-30-10 General

General....A

DSC-24-10-30-20 Normal Configuration

In Flight....A
On Ground....B

DSC-24-10-30-30 Abnormal Configurations

Failure of One Engine Generator....A
Failure of AC BUS 1....B
Failure of One TR....C
Failure of TR 1 and TR 2....D
Emergency Generation after Loss of All Main Generators....E
EMER GEN Running....F
EMER GEN Running (Cont'd)....G
Flight with Batteries Only....H
On Ground, Batteries Only (Speed < 50 kt)....I
Smoke Configuration....J

DSC-24-10-30-40 Distribution Table

Distribution Table....A

DSC-24-20 Controls and Indicators

Overhead Panel....A
Overhead Panel (Cont'd)....B
External Power Panel....C
Forward Cabin....D
ECAM ELEC Page....E
Memo Display....F

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Localization Title	Toc Index	ID	Reason
DSC-24-10-30-20 In Flight	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-20 On Ground	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of One Engine Generator	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of AC BUS 1	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of One TR	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Failure of TR 1 and TR 2	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 EMER GEN Running	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-10-30-30 Smoke Configuration	J	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-24-20 ECAM ELEC Page	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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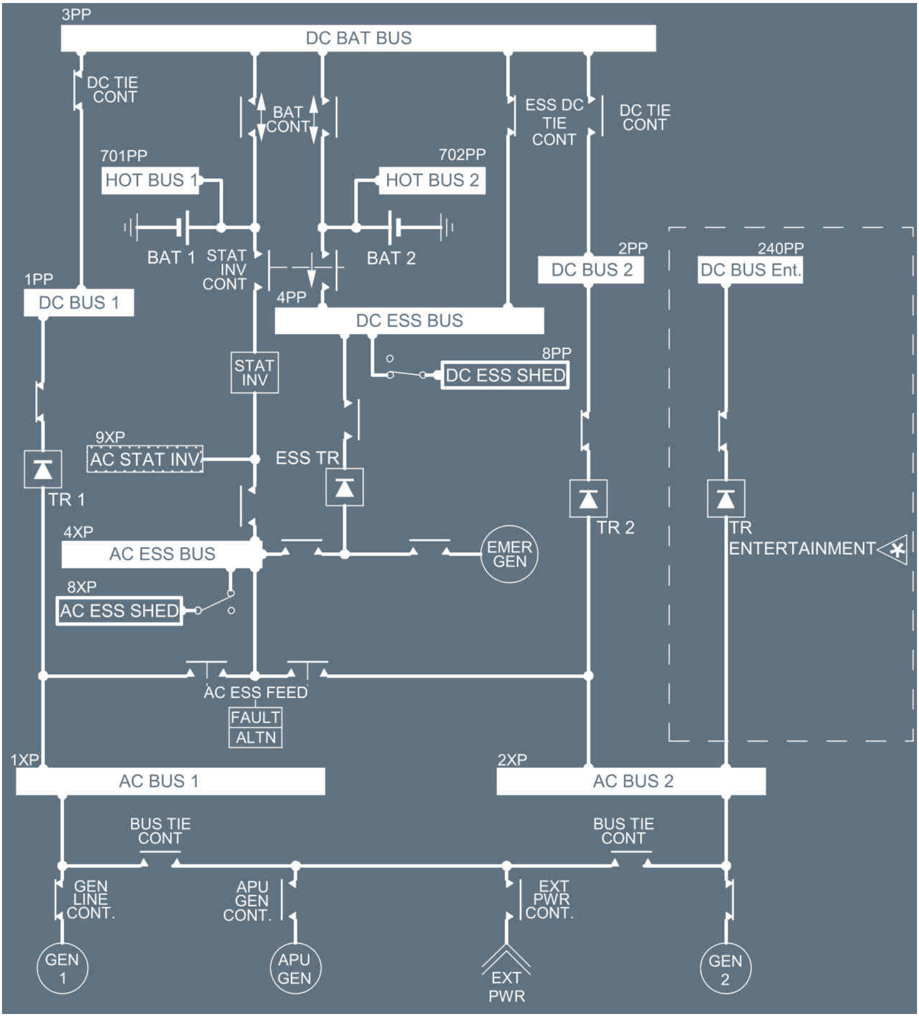
GENERAL

Ident.: DSC-24-10-10-00017750.0001001 / 21 MAR 16
Applicable to: ALL

The electrical power system consists of a three-phase 115/200 V 400 Hz constant-frequency AC system and a 28 V DC system. Electrical transients are acceptable for equipment. Commercial supply has secondary priority.
In normal configuration, the electrical power system provides AC power. The electrical power system is constituted of 2 engine generators and 1 APU generator. Each generator can provide AC power to all electrical bus bars. A part of this AC power is converted into DC power for certain applications.
In the event that normal AC power is not available, an emergency generator can provide AC power.
In the event that all AC power is not available, the electrical power system can invert DC power from the batteries into AC power.


3PP
DC BAT BUS
DC TIE CONT
BAT CONT
ESS DC TIE CONT
DC TIE CONT
701PP
HOT BUS 1
702PP
HOT BUS 2
BAT 1
STAT INV CONT
BAT 2
1PP
DC BUS 1
4PP
DC ESS BUS
2PP
DC BUS 2
240PP
DC BUS Ent.
STAT INV
8PP
DC ESS SHED
9XP
AC STAT INV
ESS TR
TR 1
TR 2
TR ENTERTAINMENT
4XP
AC ESS BUS
EMER GEN
8XP
AC ESS SHED
AC ESS FEED
FAULT
ALTN
1XP
AC BUS 1
2XP
AC BUS 2
BUS TIE CONT
BUS TIE CONT
GEN LINE CONT.
APU GEN CONT.
EXT PWR CONT.
GEN 1
APU GEN
EXT PWR
GEN 2

AC GENERATORS

Ident.: DSC-24-10-20-00017751.0001001 / 21 MAR 16
Applicable to: ALL

ENGINE – DRIVEN GENERATORS

Two AC generators (GEN 1, GEN 2), one driven by each main engine through an integrated drive, supply aircraft electrical power. Each generator can supply up to 90 KVA of three phase 115/200 V 400 Hz power.

Two Generators Control Units (GCU) control the output of their respective generator. The main functions of each GCU are :
- Control the frequency and voltage of the generator output.
- Protect the network by controlling the associated generator line contactor.

APU GENERATOR AND EXTERNAL POWER

A third generator (APU GEN), driven directly by the APU and producing the same output as each main engine generator, can replace either or both main engine generators at any time.
A ground power connector near the nosewheel allows ground power to be supplied to all busbars.

A Ground Power Control Unit (GPCU) :
- Protects the network by controlling the external power contactor, or

A Ground and Auxiliary Power Control Unit (GAPCU) ◁ :
- Regulates, via the APU Electronic Control Box, the frequency and voltage of the APU generator.
- Protects the network by controlling the external power contactor and the APU generator line contactor.

EMERGENCY GENERATOR

The blue hydraulic circuit drives an emergency generator that automatically supplies emergency AC power to the aircraft electrical system, if all main generators fail. This generator supplies 5 KVA of three-phase 115 and 200 V 400 Hz power.

A Generator Control Unit (GCU) :
- Keeps the emergency generator at a constant speed,
- Controls the generator's output voltage,
- Protects the network by the controlling the emergency generator line contactor, and
- Controls the emergency generator start-up.

STATIC INVERTER

A static inverter transforms DC power from Battery 1 into one KVA of single-phase 115 V 400 Hz AC power, which is then supplied to part of the AC essential bus. When the aircraft speed is above

50 kt, the inverter is automatically activated, if only the batteries are supplying electrical power to the aircraft, regardless of the BAT 1 and BAT 2 pushbutton positions.
When the aircraft speed is below 50 kt, the inverter is activated, if only the batteries are supplying electrical power to the aircraft, and both BAT 1 and BAT 2 pushbuttons are on.

DC GENERATION

Ident.: DSC-24-10-20-00017752.0001001 / 21 MAR 16
Applicable to: ALL

TRANSFORMER RECTIFIERS (TRS)

Two main transformer rectifiers, TR 1 and TR 2, supply the aircraft's electrical system, with up to 200 A of DC current.
A third (identical) Transformer Rectifier, the ESS TR, can power the essential DC circuit from the emergency generator, if the engine and APU generators all fail, or if TR 1 or TR 2 fails.
Each TR controls its contactor by internal logic.
A fourth Transformer Rectifier (TR Entertainment ◁) powers the DC Entertainment bus bar dedicated to the In-Flight Entertainment system (IFE) in order to take into account IFE needs.

BATTERIES

Two main batteries, each with a normal capacity of 23 Ah, are permanently connected to the two hot buses.
Each battery has an associated Battery Charge Limiter (BCL).
The BCL monitors battery charging and controls its battery contactor.

CIRCUIT BREAKERS (C/BS)

Ident.: DSC-24-10-20-00000874.0002001 / 15 FEB 11
Applicable to: ALL

The aircraft has two types of C/Bs:
- Monitored (green): When out for more than 1 min, the C/B TRIPPED warning is triggered on the ECAM.
- Non-monitored (black).

The Wing Tip Brake (WTB) C/Bs have red caps on them to prevent them from being reset.
The C/B TRIPPED warning on the ECAM indicates the location of the affected C/B. The following panels are monitored: OVHD PNL, L(R) ELEC BAY, REAR PNL J-M or N-R or S-V or W-Z.

Note: *The flight crew can clear the ECAM C/B TRIPPED caution by pressing:*

- *The EMER CANC pb: When pressed, this pushbutton clears and inhibits the ECAM C/B TRIPPED caution for the remainder of the flight, or*
- *The CLR pb: When pressed, this pushbutton only clears the ECAM C/B TRIPPED caution. If the C/B remains pulled, any additional tripped circuit breakers on the same panel will not be detected, and the ECAM will not trigger the caution. However, if the C/B is pushed, any additional tripped circuit breakers will be detected, and the ECAM will trigger the caution again.*

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General

GENERAL

Ident.: DSC-24-10-30-10-00017759.0001001 / 21 MAR 16
Applicable to: ALL

GEN 1 and 2 when operating have priority over the APU generator and over external power.
External power has priority over the APU generator when the EXT PWR pb switch is ON.
The APU generator or external power can supply the entire network.
One engine generator can supply the entire network, except the DC BUS Entertainment.
The generators cannot be connected in parallel.

Note: *Two generators are needed to supply the DC BUS Entertainment* ◁ *, except on ground, where the APU generator (if not overloaded) or the external power is sufficient.*

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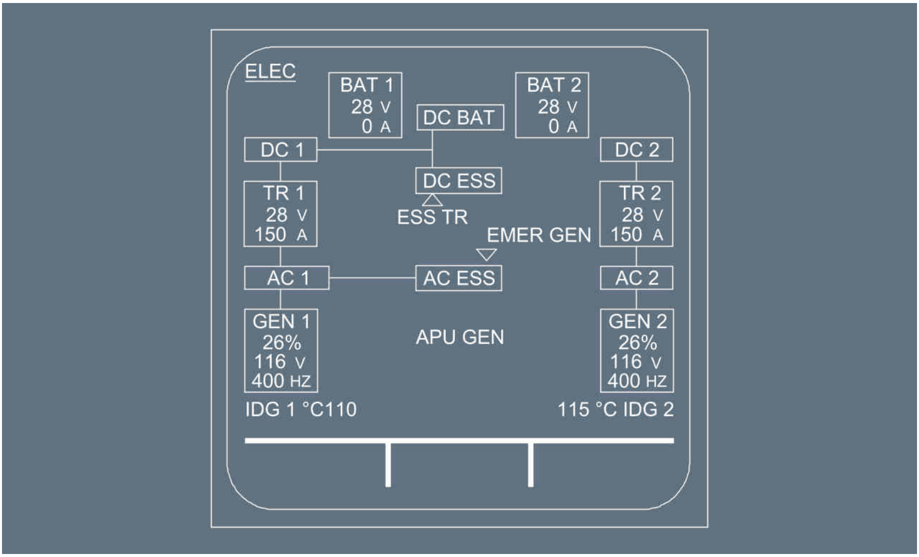
Normal Configuration

IN FLIGHT

Ident.: DSC-24-10-30-20-00000876.0001001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Each engine-driven generator supplies its associated AC BUS (1 and 2) via its generator line contactor (GLC 1 and GLC 2).
AC BUS 1 normally supplies the AC ESS BUS via a contactor.
TR 1 normally supplies DC BUS 1, DC BAT BUS, and DC ESS BUS.
TR 2 normally supplies DC BUS 2.
The two batteries are connected to the DC BAT BUS, if they need charging. When they are fully charged, the battery charge limiter disconnects them.

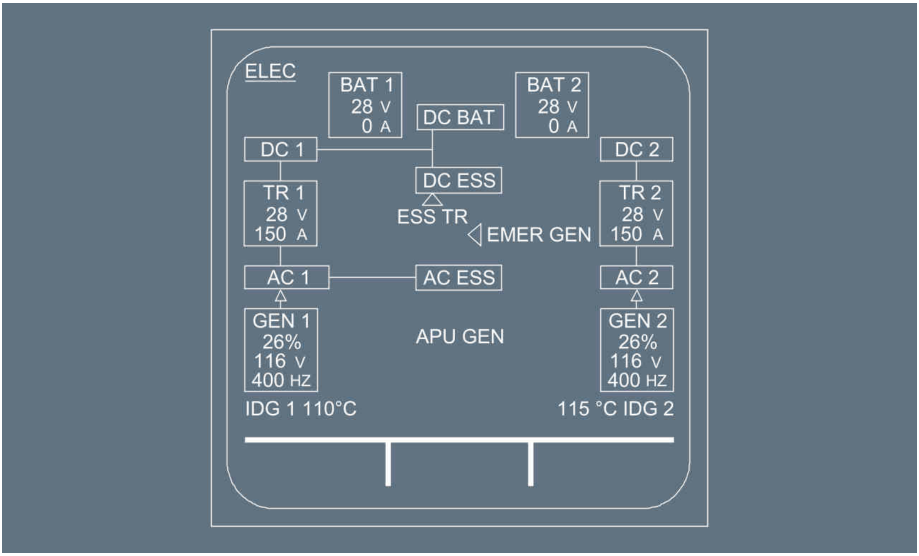

ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
28 V
150 A
ESS TR
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
26%
116 V
400 HZ
APU GEN
GEN 2
26%
116 V
400 HZ
IDG 1 °C110
115 °C IDG 2

IN FLIGHT

Ident.: DSC-24-10-30-20-00000876.0002001 / 09 OCT 12
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Each engine-driven generator supplies its associated AC BUS (1 and 2) via its generator line contactor (GLC 1 and GLC 2).
AC BUS 1 normally supplies the AC ESS BUS via a contactor.

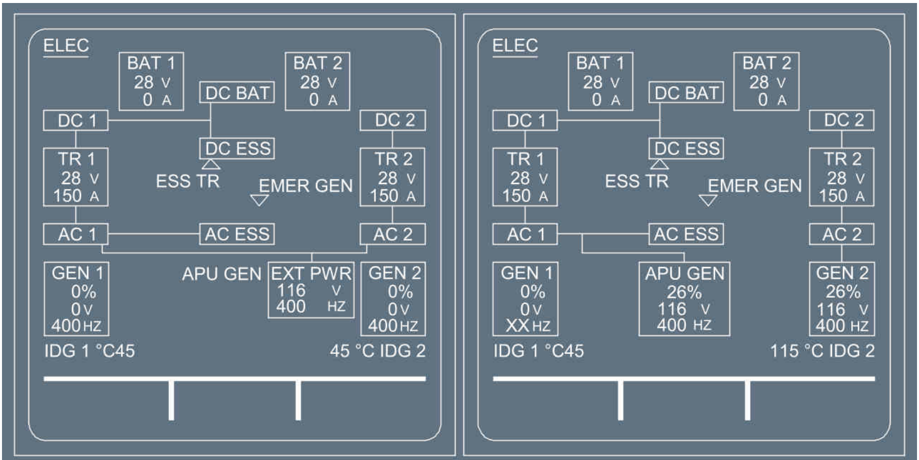
TR 1 normally supplies DC BUS 1, DC BAT BUS, and DC ESS BUS.
TR 2 normally supplies DC BUS 2.
The two batteries are connected to the DC BAT BUS, if they need charging. When they are fully charged, the battery charge limiter disconnects them.


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
28 V
150 A
ESS TR
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
26%
116 V
400 HZ
APU GEN
GEN 2
26%
116 V
400 HZ
IDG 1 110°C
115 °C IDG 2

ON GROUND

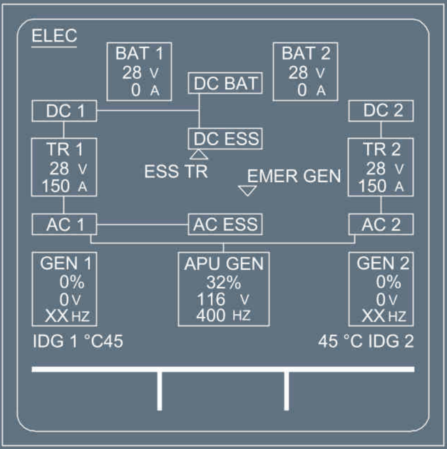
Ident.: DSC-24-10-30-20-00000877.0001001 / 22 MAY 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Either the APU generator, or external power, may supply the complete system.


ELEC
BAT 1 28 V 0 A
BAT 2 28 V 0 A
DC BAT
DC 1
DC 2
DC ESS
TR 1 28 V 150 A
ESS TR
EMER GEN
TR 2 28 V 150 A
AC 1
AC ESS
AC 2
GEN 1 0% 0 V 400 HZ
APU GEN
EXT PWR 116 V 400 HZ
GEN 2 0% 0 V 400 HZ
IDG 1 °C45
45 °C IDG 2
ELEC
BAT 1 28 V 0 A
BAT 2 28 V 0 A
DC BAT
DC 1
DC 2
DC ESS
TR 1 28 V 150 A
ESS TR
EMER GEN
TR 2 28 V 150 A
AC 1
AC ESS
AC 2
GEN 1 0% 0 V XX HZ
APU GEN 26% 116 V 400 HZ
GEN 2 26% 116 V 400 HZ
IDG 1 °C45
115 °C IDG 2

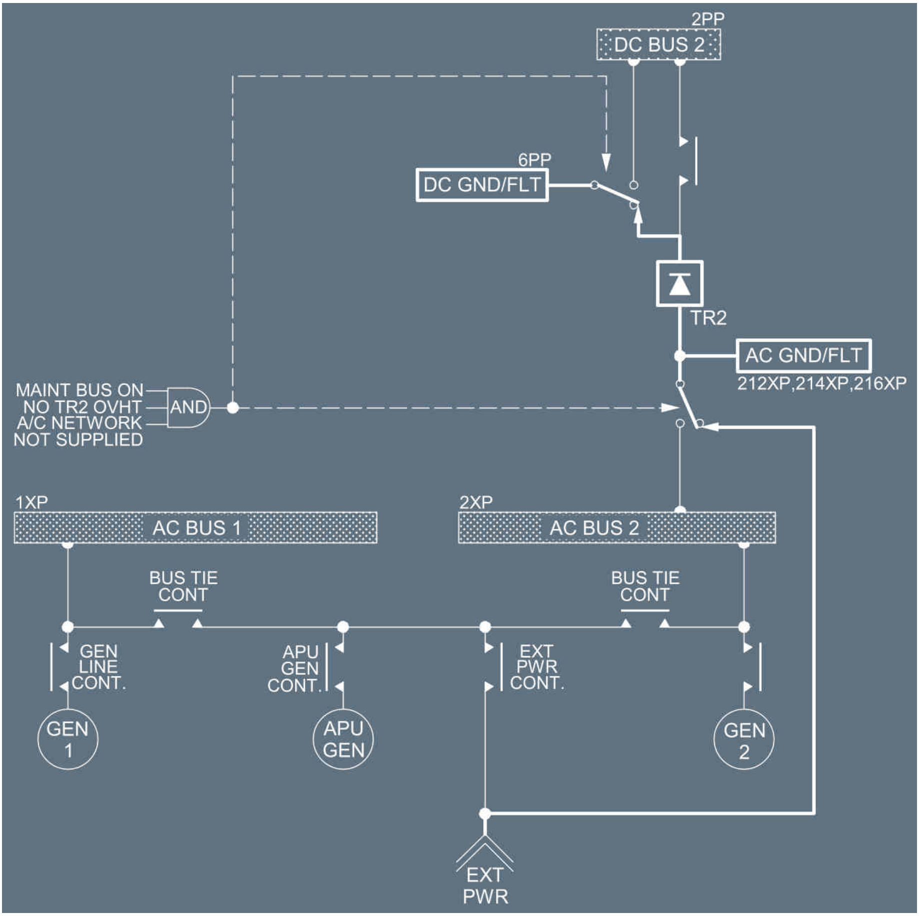
EXTERNAL POWER ONLY

APU GEN + GEN 2


ELEC
BAT 1 28 V 0 A
BAT 2 28 V 0 A
DC BAT
DC 1
DC 2
DC ESS
TR 1 28 V 150 A
ESS TR
EMER GEN
TR 2 28 V 150 A
AC 1
AC ESS
AC 2
GEN 1 0% 0 V XX HZ
APU GEN 32% 116 V 400 HZ
GEN 2 0% 0 V XX HZ
IDG 1 °C45
45 °C IDG 2

APU GEN ONLY

On ground, when only ground services are required, external power can supply the AC and DC GND/FLT BUSES directly without supplying the entire aircraft network.
Personnel select this configuration with the MAINT BUS switch in the forward entrance area.

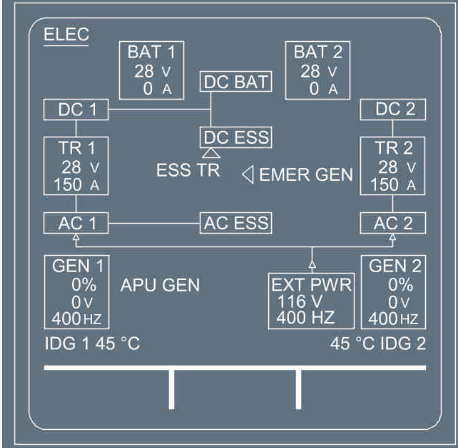

2PP
DC BUS 2
6PP
DC GND/FLT
TR2
AC GND/FLT
212XP,214XP,216XP
MAINT BUS ON
NO TR2 OVHT
A/C NETWORK
NOT SUPPLIED
AND
1XP
AC BUS 1
2XP
AC BUS 2
BUS TIE
CONT
BUS TIE
CONT
GEN
LINE
CONT.
APU
GEN
CONT.
EXT
PWR
CONT.
GEN
1
APU
GEN
GEN
2
EXT
PWR

ON GROUND

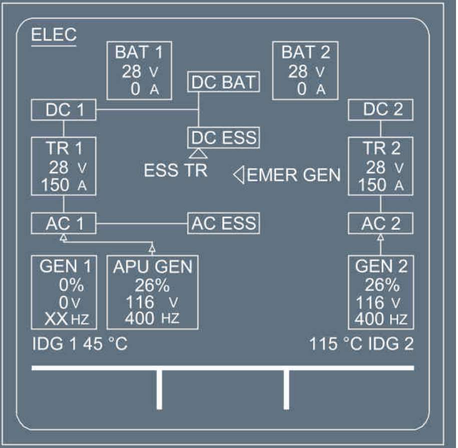
Ident.: DSC-24-10-30-20-00000877.0002001 / 22 MAY 12

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

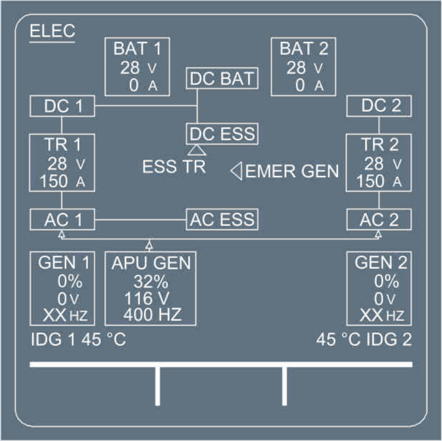
Either the APU generator, or external power, may supply the complete system.


ELEC
BAT 1 28 V 0 A
DC BAT
BAT 2 28 V 0 A
DC 1
DC 2
DC ESS
TR 1 28 V 150 A
ESS TR
EMER GEN
TR 2 28 V 150 A
AC 1
AC ESS
AC 2
GEN 1 0% 0 V 400 HZ
APU GEN
EXT PWR 116 V 400 HZ
GEN 2 0% 0 V 400 HZ
IDG 1 45 °C
45 °C IDG 2

EXTERNAL POWER ONLY

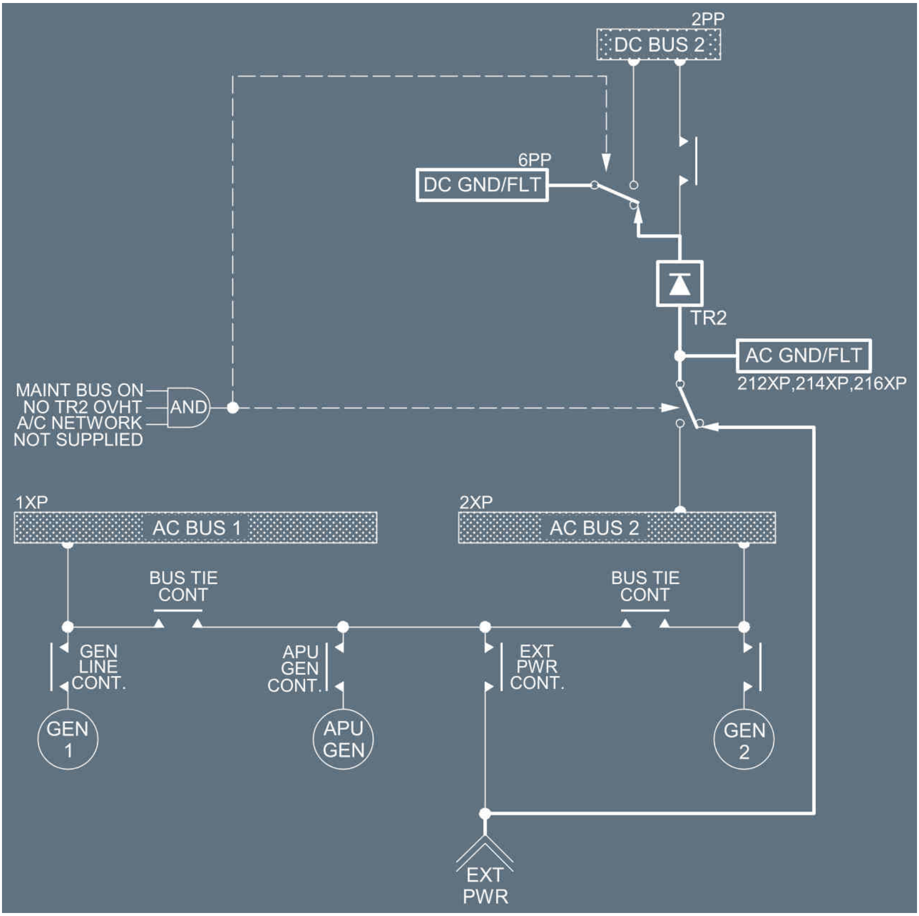

ELEC
BAT 1 28 V 0 A
DC BAT
BAT 2 28 V 0 A
DC 1
DC 2
DC ESS
TR 1 28 V 150 A
ESS TR
EMER GEN
TR 2 28 V 150 A
AC 1
AC ESS
AC 2
GEN 1 0% 0 V XX HZ
APU GEN 26% 116 V 400 HZ
GEN 2 26% 116 V 400 HZ
IDG 1 45 °C
115 °C IDG 2

APU GEN + GEN 2


ELEC
BAT 1 28 V 0 A
DC BAT
BAT 2 28 V 0 A
DC 1
DC 2
DC ESS
TR 1 28 V 150 A
ESS TR
EMER GEN
TR 2 28 V 150 A
AC 1
AC ESS
AC 2
GEN 1 0% 0 V XX HZ
APU GEN 32% 116 V 400 HZ
GEN 2 0% 0 V XX HZ
IDG 1 45 °C
45 °C IDG 2

APU GEN ONLY

On ground, when only ground services are required, external power can supply the AC and DC GND/FLT BUSES directly without supplying the entire aircraft network.
Personnel select this configuration with the MAINT BUS switch in the forward entrance area.


2PP
DC BUS 2
6PP
DC GND/FLT
TR2
AC GND/FLT
212XP,214XP,216XP
MAINT BUS ON
NO TR2 OVHT
A/C NETWORK
NOT SUPPLIED
AND
1XP
AC BUS 1
2XP
AC BUS 2
BUS TIE
CONT
BUS TIE
CONT
GEN
LINE
CONT.
APU
GEN
CONT.
EXT
PWR
CONT.
GEN
1
APU
GEN
GEN
2
EXT
PWR

Abnormal Configurations

FAILURE OF ONE ENGINE GENERATOR

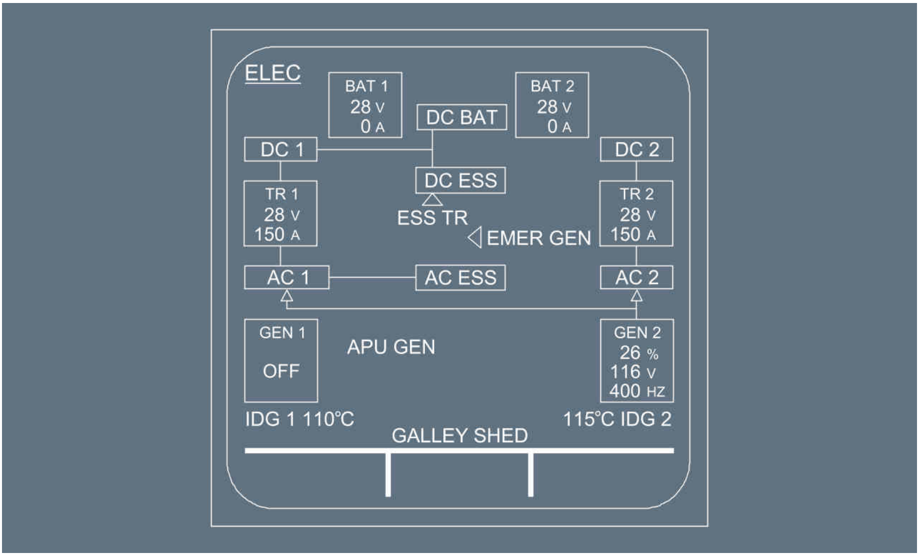
Ident.: DSC-24-10-30-30-00017760.0002001 / 21 MAR 16

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The system automatically replaces the failed generator, with the :
- APU GEN, if available, or
- Other engine generator.

Part of the galley load and the DC BUS Ent ◁ are automatically shed.

Note: *The Galley Load Automatic Shedding ◁ allows all the galley load to be automatically shed.*


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
28 V
150 A
ESS TR
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
OFF
APU GEN
GEN 2
26 %
116 V
400 HZ
IDG 1 110°C
115°C IDG 2
GALLEY SHED

FAILURE OF ONE ENGINE GENERATOR

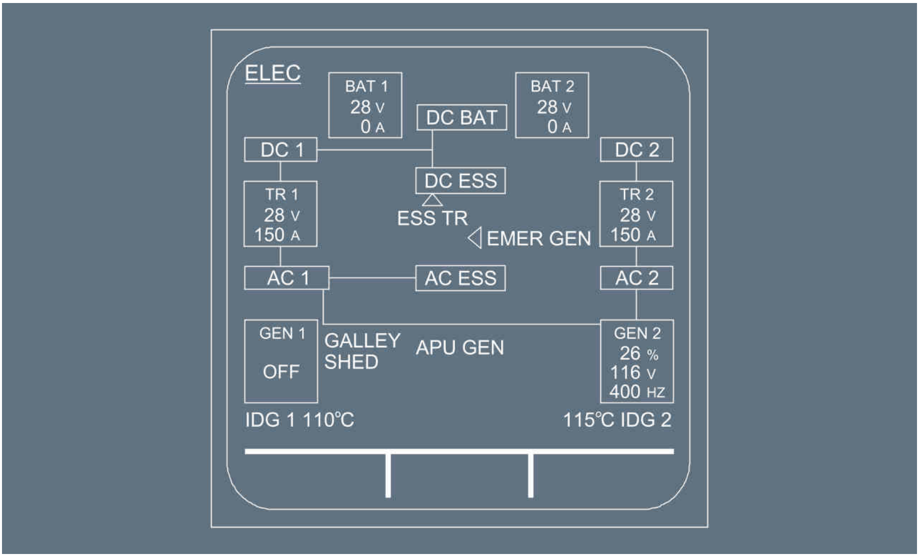
Ident.: DSC-24-10-30-30-00017760.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The system automatically replaces the failed generator, with the :
- APU GEN, if available, or
- Other engine generator.

Part of the galley load and the DC BUS Ent ◁ are automatically shed.

Note: *The Galley Load Automatic Shedding ◁ allows all the galley load to be automatically shed.*

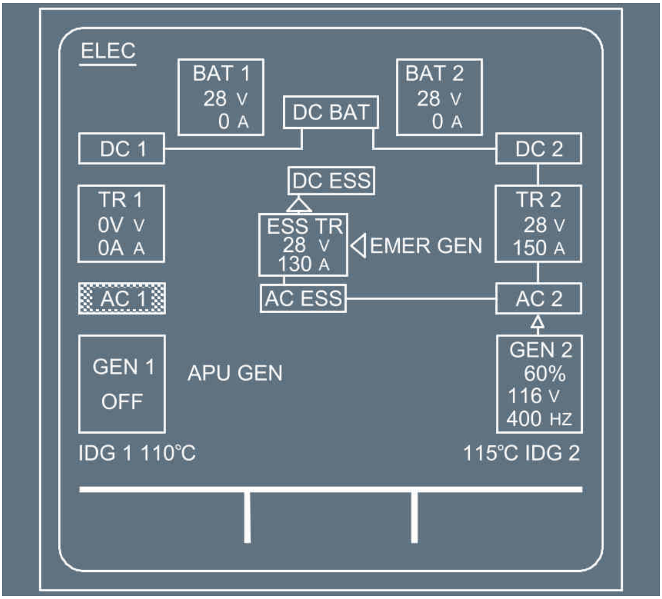

ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
28 V
150 A
ESS TR
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
OFF
GALLEY
SHED
APU GEN
GEN 2
26 %
116 V
400 HZ
IDG 1 110°C
115°C IDG 2

FAILURE OF AC BUS 1

Ident.: DSC-24-10-30-30-00017761.0002001 / 21 MAR 16

2 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

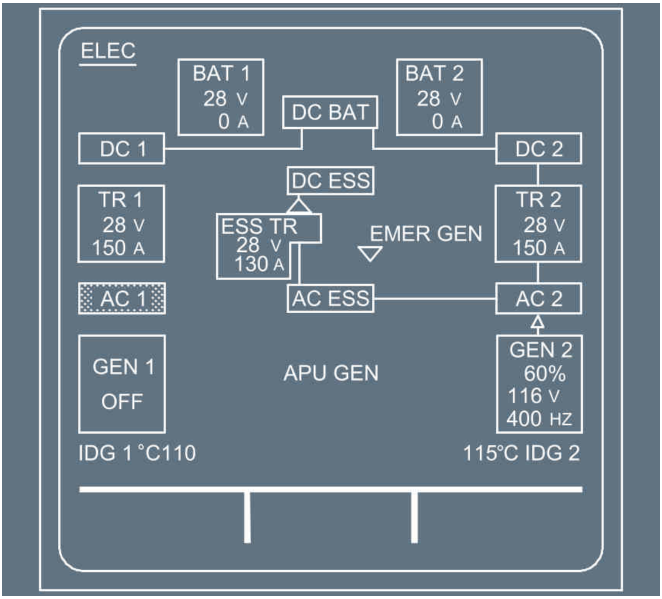
- AC BUS 2 can supply AC ESS BUS, and ESS TR can supply DC ESS BUS, both via the AC ESS FEED pb. This is done automatically with the AC ESS FEED Auto Switching ◁ .
- DC BUS 2 supplies DC BUS 1 and DC BAT BUS automatically after 5 s.


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
0V V
0A A
ESS TR
28 V
130 A
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
OFF
APU GEN
GEN 2
60%
116 V
400 HZ
IDG 1 110°C
115°C IDG 2

FAILURE OF AC BUS 1

Ident.: DSC-24-10-30-30-00017761.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

- AC BUS 2 can supply AC ESS BUS, and ESS TR can supply DC ESS BUS, both via the AC ESS FEED pb. This is done automatically with the AC ESS FEED Auto Switching ⊲ .
- DC BUS 2 supplies DC BUS 1 and DC BAT BUS automatically after 5 s.

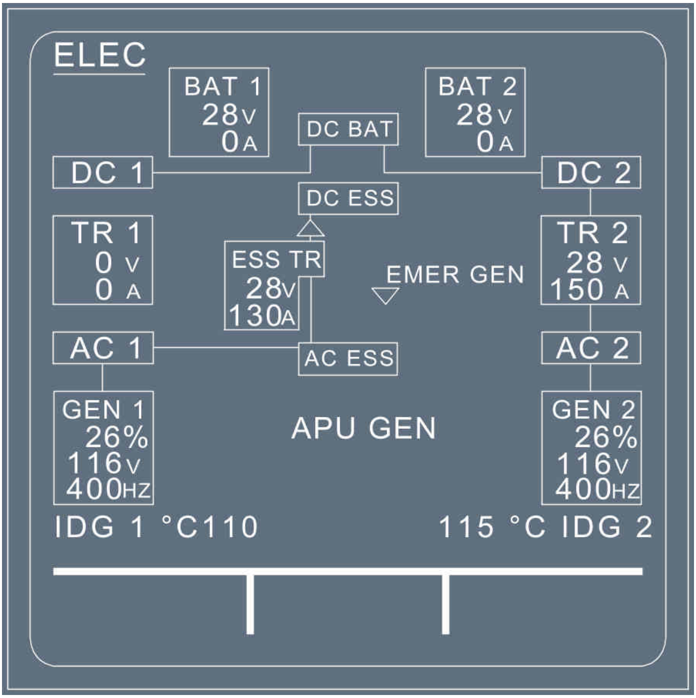

ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
28 V
150 A
ESS TR
28 V
130 A
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
OFF
APU GEN
GEN 2
60%
116 V
400 HZ
IDG 1 °C110
115°C IDG 2

FAILURE OF ONE TR

Ident.: DSC-24-10-30-30-00000880.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The contactor of each TR opens automatically, in case of :
- Overheat
- Minimum current

The other TR automatically replaces the faulty one.
The ESS TR supplies the DC ESS BUS.


ELEC
BAT 1
28V
0A
DC BAT
BAT 2
28V
0A
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28V
130A
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
26%
116V
400HZ
APU GEN
GEN 2
26%
116V
400HZ
IDG 1 °C110
115 °C IDG 2

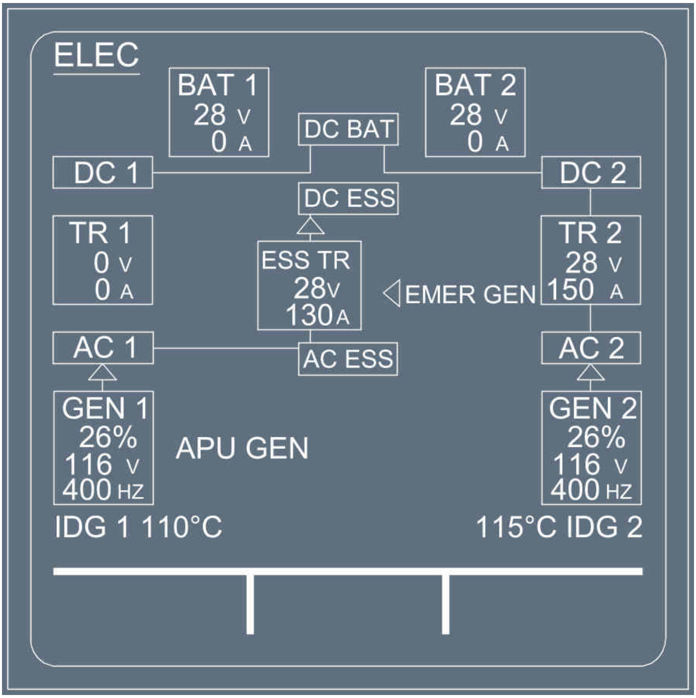
FAILURE OF ONE TR

Ident.: DSC-24-10-30-30-00000880.0002001 / 21 MAR 16

3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The contactor of each TR opens automatically, in case of :
- Overheat
- Minimum current

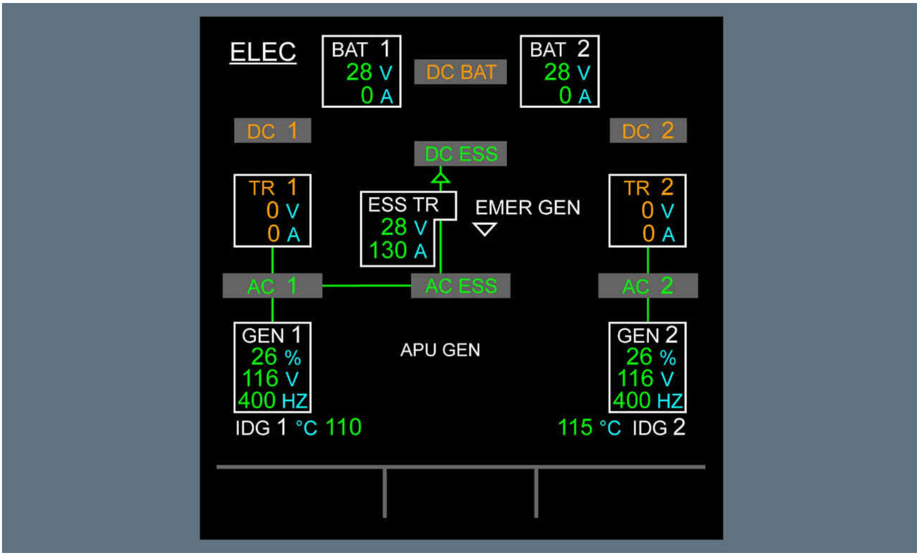
The other TR automatically replaces the faulty one.
The ESS TR supplies the DC ESS BUS.


ELEC
BAT 1
28 V
0 A
BAT 2
28 V
0 A
DC BAT
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28V
130A
EMER GEN
TR 2
28 V
150 A
AC 1
AC ESS
AC 2
GEN 1
26%
116 V
400 HZ
APU GEN
GEN 2
26%
116 V
400 HZ
IDG 1 110°C
115°C IDG 2

FAILURE OF TR 1 AND TR 2

Ident.: DSC-24-10-30-30-00000881.0001001 / 04 JUN 19
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

If TR 1 and TR 2 are lost, DC BUS 1, DC BUS 2, and DC BAT BUS are lost. The DC ESS BUS is supplied by the ESS TR.

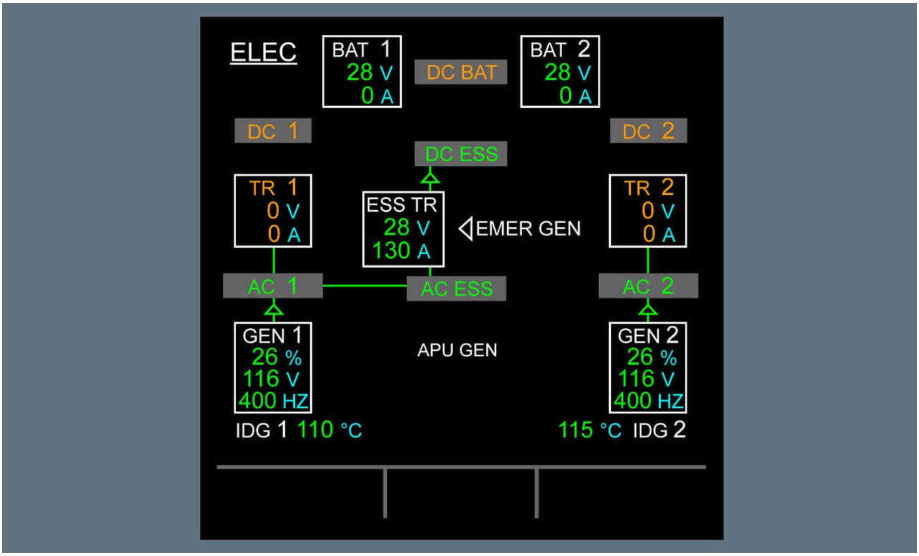

ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28 V
130 A
EMER GEN
TR 2
0 V
0 A
AC 1
AC ESS
AC 2
GEN 1
26 %
116 V
400 HZ
APU GEN
GEN 2
26 %
116 V
400 HZ
IDG 1 °C 110
115 °C IDG 2

FAILURE OF TR 1 AND TR 2

Ident.: DSC-24-10-30-30-00000881.0002001 / 04 JUN 19

4 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

If TR 1 and TR 2 are lost, DC BUS 1, DC BUS 2, and DC BAT BUS are lost. The DC ESS BUS is supplied by the ESS TR.


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28 V
130 A
EMER GEN
TR 2
0 V
0 A
AC 1
AC ESS
AC 2
GEN 1
26 %
116 V
400 HZ
APU GEN
GEN 2
26 %
116 V
400 HZ
IDG 1 110 °C
115 °C IDG 2

EMERGENCY GENERATION AFTER LOSS OF ALL MAIN GENERATORS

Ident.: DSC-24-10-30-30-00000882.0002001 / 21 MAR 16
Applicable to: ALL

If both AC BUS 1 and AC BUS 2 are lost and the aircraft speed is above 100 kt, the Ram Air Turbine (RAT) extends automatically. This powers the blue hydraulic system, which drives the emergency generator by means of a hydraulic motor. This generator supplies the AC ESS BUS, and the DC ESS BUS via the ESS TR.
If the RAT stalls, or if the aircraft is on the ground with a speed below 100 kt, the emergency generator has nothing to drive it. The emergency generation network automatically transfers to the batteries and static inverter, and the system automatically sheds the AC SHED ESS and DC SHED ESS buses.

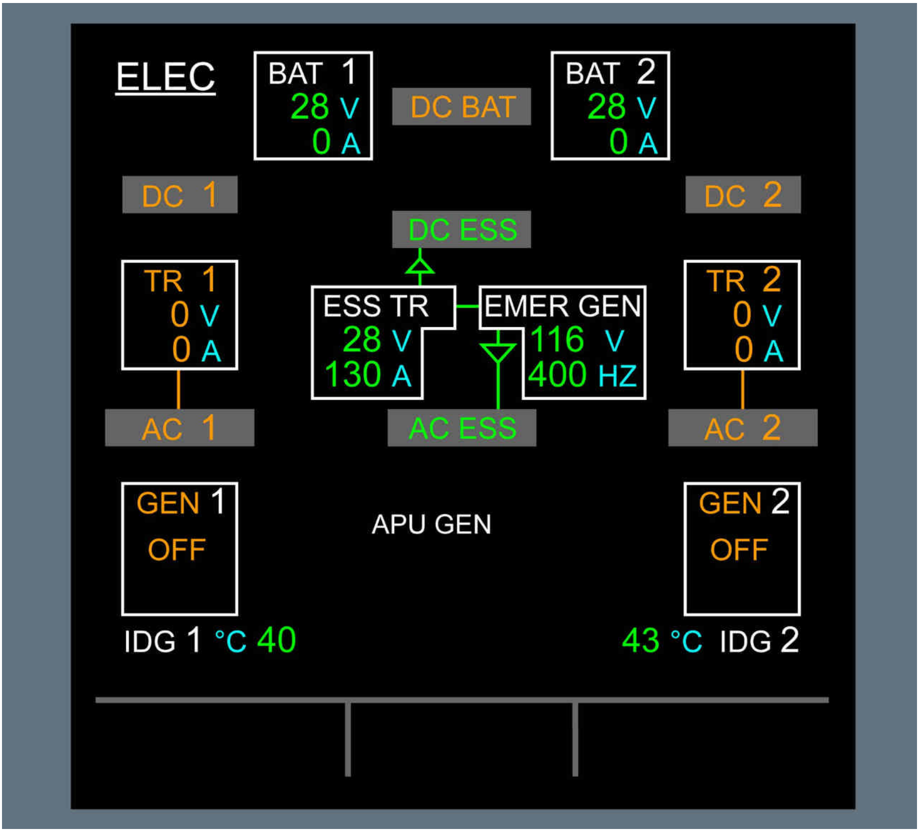
When the aircraft is on ground :
- Below 100 kt, DC BAT BUS is automatically connected to the batteries.
- Below 50 kt, AC ESS BUS is automatically shed, leading to the loss of all display units.

Note: *1. During RAT extension and emergency generator coupling (about 8 s), the batteries power the emergency generation network.*
2. On ground, if only the batteries are powering the emergency generation network, APU start is only available when the speed is below 100 kt.

EMER GEN RUNNING

Ident.: DSC-24-10-30-30-00000883.0001001 / 04 JUN 19

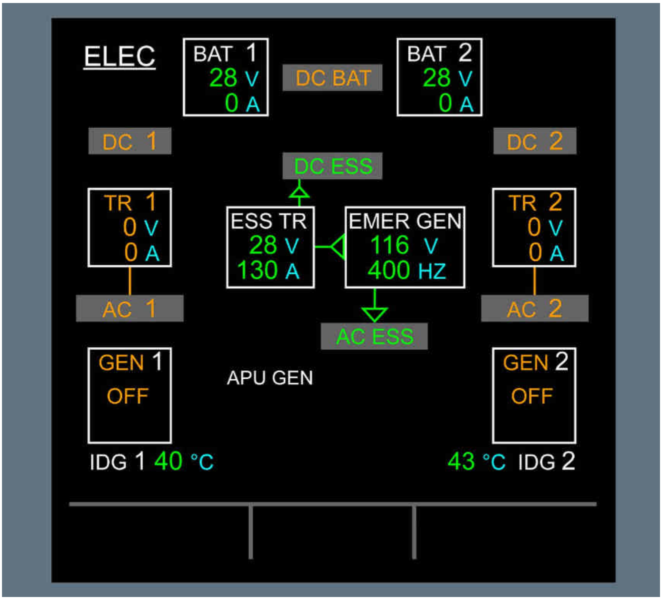
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28 V
130 A
EMER GEN
116 V
400 HZ
TR 2
0 V
0 A
AC 1
AC ESS
AC 2
GEN 1
OFF
APU GEN
GEN 2
OFF
IDG 1 °C 40
43 °C IDG 2

EMER GEN RUNNING

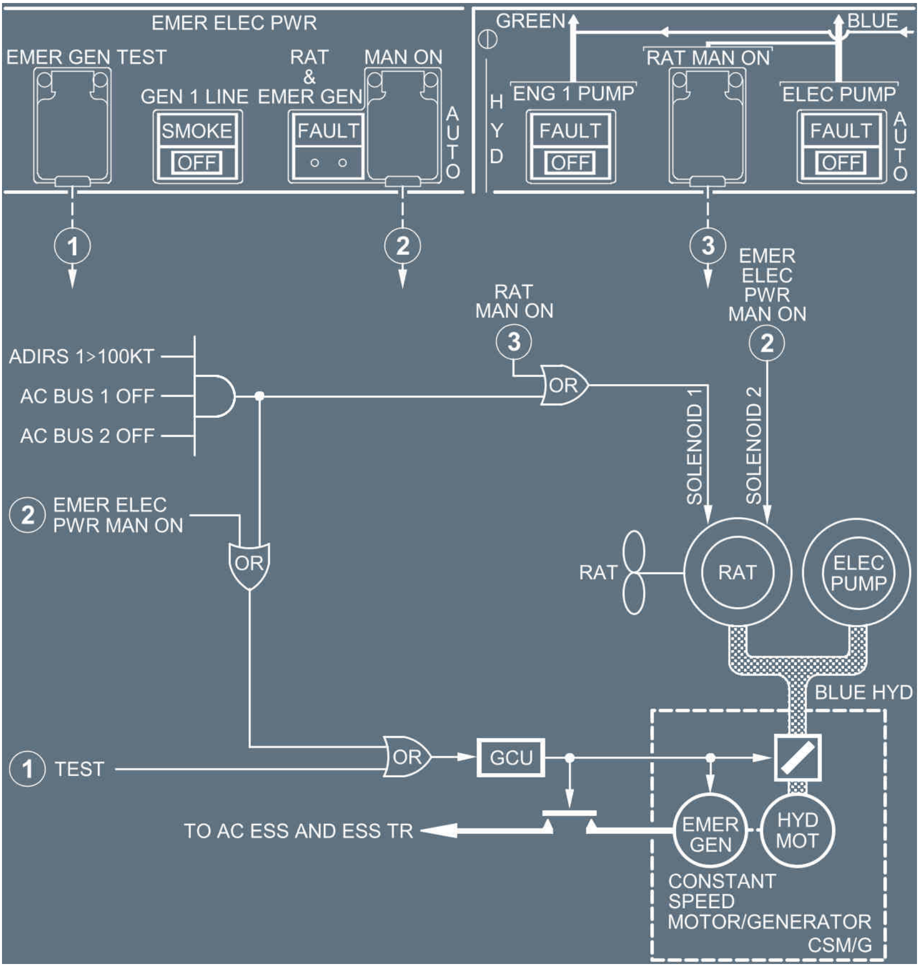
Ident.: DSC-24-10-30-30-00000883.0002001 / 04 JUN 19

5 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28 V
130 A
EMER GEN
116 V
400 HZ
TR 2
0 V
0 A
AC 1
AC 2
AC ESS
GEN 1
OFF
APU GEN
GEN 2
OFF
IDG 1 40 °C
43 °C IDG 2

EMER GEN RUNNING (CONT'D)

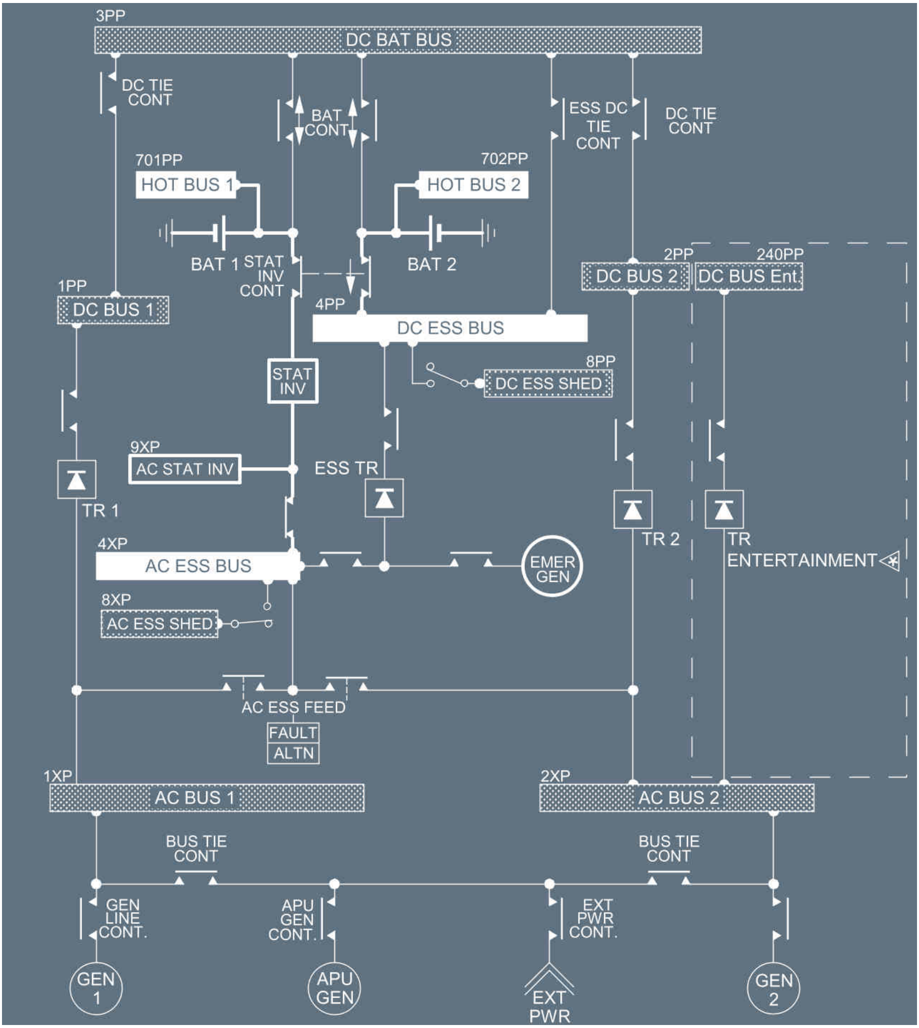
Ident.: DSC-24-10-30-30-00000884.0002001 / 21 MAR 16
Applicable to: ALL


EMER ELEC PWR
EMER GEN TEST
RAT & EMER GEN
MAN ON
GEN 1 LINE
SMOKE
OFF
FAULT
AUTO
GREEN
BLUE
HYD
RAT MAN ON
ENG 1 PUMP
FAULT
OFF
ELEC PUMP
FAULT
OFF
AUTO
1
2
3
EMER ELEC PWR MAN ON
RAT MAN ON
3
2
ADIRS 1>100KT
AC BUS 1 OFF
AC BUS 2 OFF
OR
SOLENOID 1
SOLENOID 2
2 EMER ELEC PWR MAN ON
OR
RAT
RAT
ELEC PUMP
BLUE HYD
1 TEST
OR
GCU
TO AC ESS AND ESS TR
EMER GEN
HYD MOT
CONSTANT SPEED MOTOR/GENERATOR CSM/G

FLIGHT WITH BATTERIES ONLY

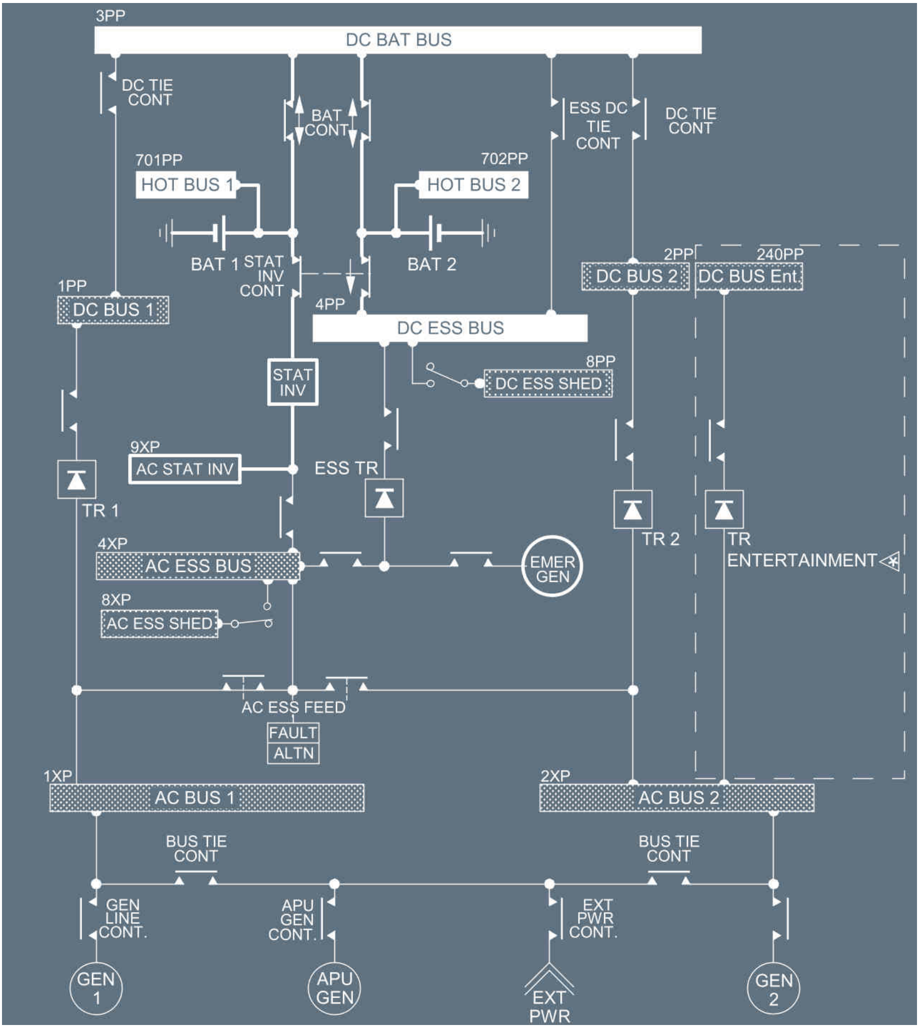
Ident.: DSC-24-10-30-30-00017762.0001001 / 21 MAR 16

Applicable to: ALL


3PP
DC BAT BUS
DC TIE CONT
BAT CONT
ESS DC TIE CONT
DC TIE CONT
701PP
HOT BUS 1
702PP
HOT BUS 2
BAT 1
STAT INV CONT
BAT 2
1PP
DC BUS 1
2PP
DC BUS 2
240PP
DC BUS Ent
4PP
DC ESS BUS
STAT INV
8PP
DC ESS SHED
9XP
AC STAT INV
ESS TR
TR 1
TR 2
TR ENTERTAINMENT
4XP
AC ESS BUS
EMER GEN
8XP
AC ESS SHED
AC ESS FEED
FAULT
ALTN
1XP
AC BUS 1
2XP
AC BUS 2
BUS TIE CONT
BUS TIE CONT
GEN LINE CONT.
APU GEN CONT.
EXT PWR CONT.
GEN 1
APU GEN
EXT PWR
GEN 2

ON GROUND, BATTERIES ONLY (SPEED < 50 KT)

Ident.: DSC-24-10-30-30-00017763.0001001 / 21 MAR 16
Applicable to: ALL


3PP
DC BAT BUS
DC TIE CONT
BAT CONT
ESS DC TIE CONT
DC TIE CONT
701PP
HOT BUS 1
702PP
HOT BUS 2
BAT 1
STAT INV CONT
BAT 2
2PP
DC BUS 2
240PP
DC BUS Ent
1PP
DC BUS 1
4PP
DC ESS BUS
8PP
DC ESS SHED
STAT INV
9XP
AC STAT INV
ESS TR
TR 1
TR 2
TR ENTERTAINMENT
4XP
AC ESS BUS
EMER GEN
8XP
AC ESS SHED
AC ESS FEED
FAULT
ALTN
1XP
AC BUS 1
2XP
AC BUS 2
BUS TIE CONT
BUS TIE CONT
GEN LINE CONT.
APU GEN CONT.
EXT PWR CONT.
GEN 1
APU GEN
EXT PWR
GEN 2

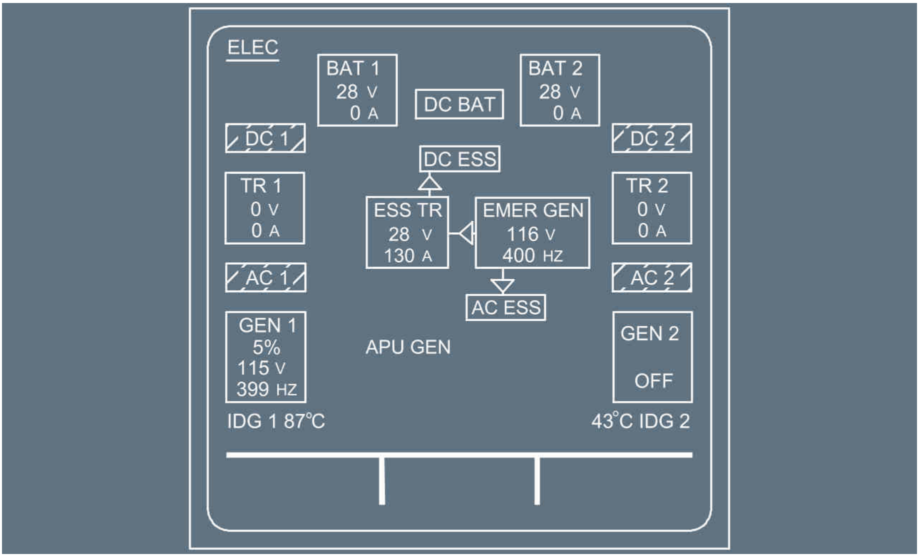
SMOKE CONFIGURATION

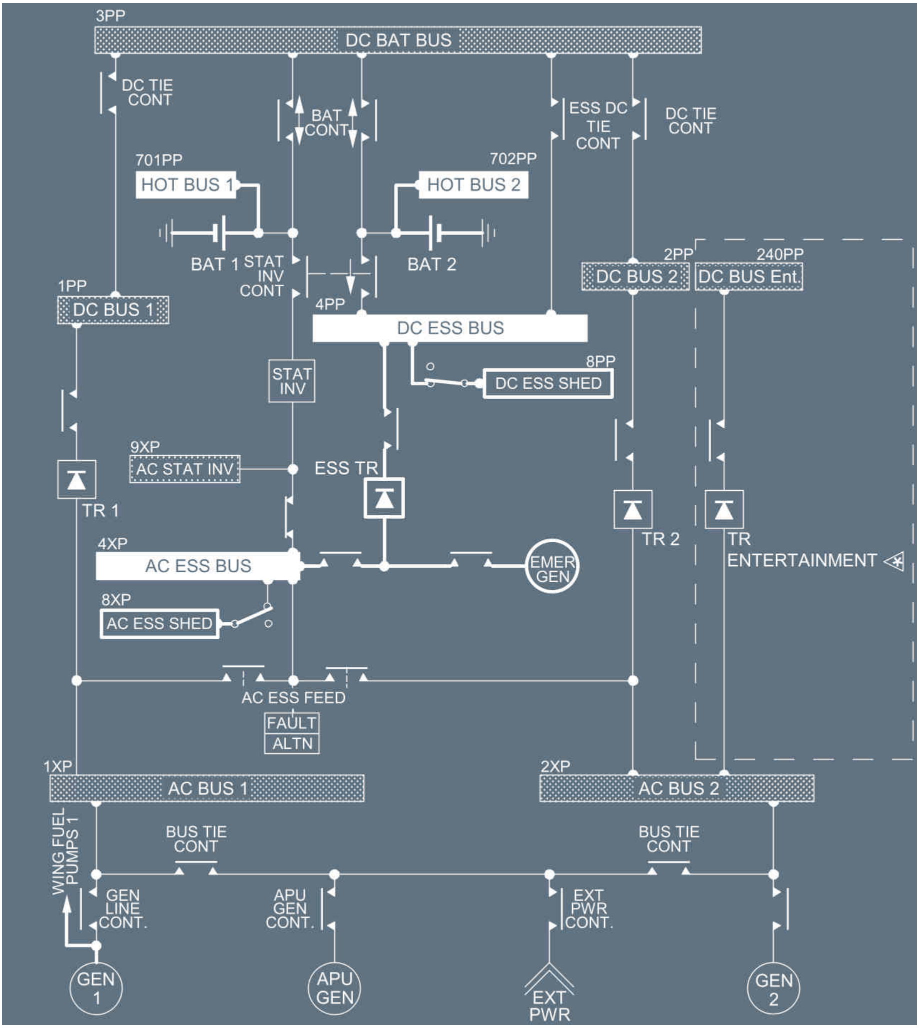
Ident.: DSC-24-10-30-30-00017764.0002001 / 21 MAR 16

6 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

In this configuration the main busbars are shed. The electrical distribution is the same as it is in the emergency electrical configuration (loss of main generators), except the fact that in smoke configuration the fuel pumps are connected upstream of the GEN 1 line connector.

The procedure sheds approximately 75 % of electrical equipment. All equipment that remains powered is supplied via the circuit breakers on the overhead panel (except for equipment supplied by hot buses).


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28 V
130 A
EMER GEN
116 V
400 HZ
TR 2
0 V
0 A
AC 1
AC 2
AC ESS
GEN 1
5%
115 V
399 HZ
APU GEN
GEN 2
OFF
IDG 1 87°C
43°C IDG 2


3PP
DC BAT BUS
DC TIE CONT
BAT CONT
ESS DC TIE CONT
DC TIE CONT
701PP
HOT BUS 1
702PP
HOT BUS 2
BAT 1
STAT INV CONT
BAT 2
2PP
DC BUS 2
240PP
DC BUS Ent.
1PP
DC BUS 1
4PP
DC ESS BUS
STAT INV
8PP
DC ESS SHED
9XP
AC STAT INV
ESS TR
TR 1
TR 2
TR ENTERTAINMENT
4XP
AC ESS BUS
EMER GEN
8XP
AC ESS SHED
AC ESS FEED
FAULT
ALTN
1XP
AC BUS 1
2XP
AC BUS 2
WING FUEL PUMPS 1
BUS TIE CONT
BUS TIE CONT
GEN LINE CONT.
APU GEN CONT.
EXT PWR CONT.
GEN 1
APU GEN
EXT PWR
GEN 2

Note: ECAM ELEC page is identical to that for emergency generator running.

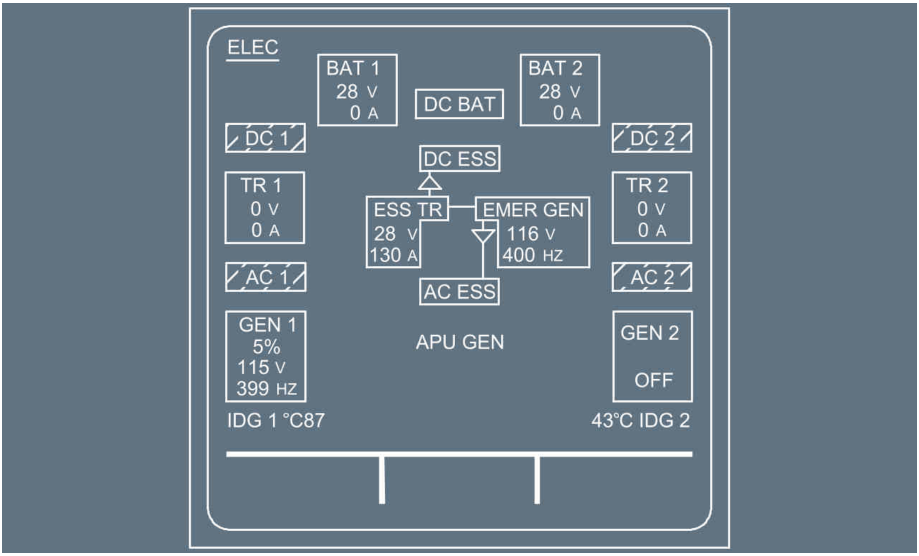
SMOKE CONFIGURATION

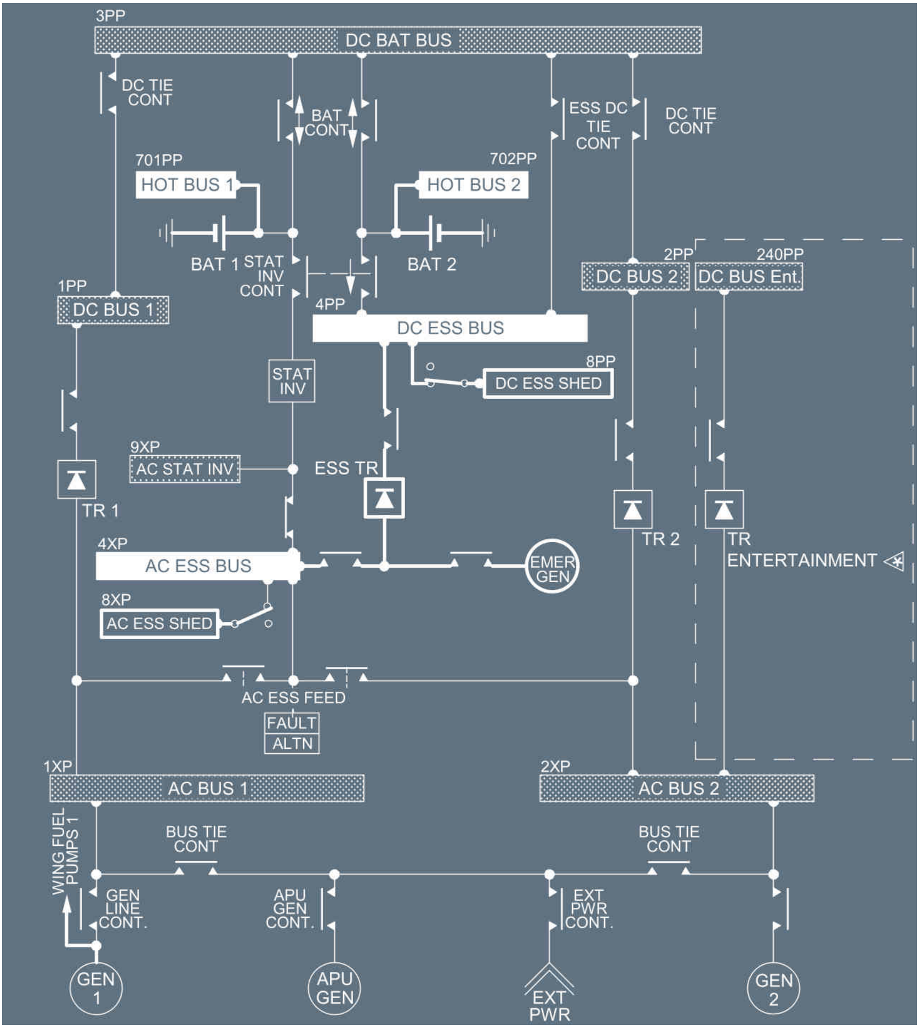
Ident.: DSC-24-10-30-30-00017764.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

In this configuration the main busbars are shed. The electrical distribution is the same as it is in the emergency electrical configuration (loss of main generators), except the fact that in smoke configuration the fuel pumps are connected upstream of the GEN 1 line connector.

The procedure sheds approximately 75 % of electrical equipment. All equipment that remains powered is supplied via the circuit breakers on the overhead panel (except for equipment supplied by hot buses).


ELEC
BAT 1
28 V
0 A
DC BAT
BAT 2
28 V
0 A
DC 1
DC 2
DC ESS
TR 1
0 V
0 A
ESS TR
28 V
130 A
EMER GEN
116 V
400 HZ
TR 2
0 V
0 A
AC 1
AC ESS
AC 2
GEN 1
5%
115 V
399 HZ
APU GEN
GEN 2
OFF
IDG 1 °C87
43°C IDG 2


3PP
DC BAT BUS
DC TIE CONT
BAT CONT
ESS DC TIE CONT
DC TIE CONT
701PP
HOT BUS 1
702PP
HOT BUS 2
BAT 1
STAT INV CONT
BAT 2
2PP
240PP
DC BUS 2
DC BUS Ent.
1PP
DC BUS 1
4PP
DC ESS BUS
8PP
DC ESS SHED
STAT INV
9XP
AC STAT INV
ESS TR
TR 1
TR 2
TR ENTERTAINMENT
4XP
AC ESS BUS
EMER GEN
8XP
AC ESS SHED
AC ESS FEED
FAULT
ALTN
1XP
AC BUS 1
2XP
AC BUS 2
WING FUEL PUMPS 1
BUS TIE CONT
BUS TIE CONT
GEN LINE CONT.
APU GEN CONT.
EXT PWR CONT.
GEN 1
APU GEN
EXT PWR
GEN 2

Note: ECAM ELEC page is identical to that for emergency generator running.

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Distribution Table

DISTRIBUTION TABLE

Ident.: DSC-24-10-30-40-00017765.0002001 / 10 MAY 21
Applicable to: ALL

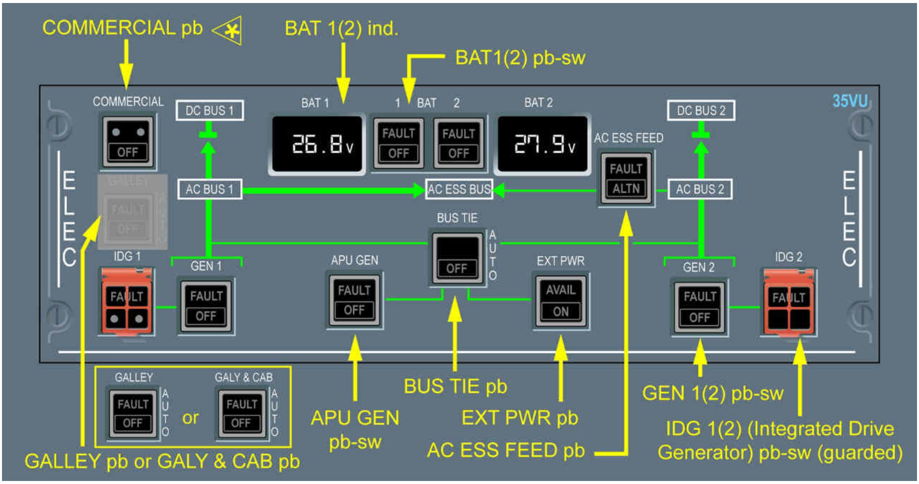
	AC BUS 1	**AC BUS 2**	**AC ESS BUS**	**AC SHED ESS**	**AC STAT INV**	**TR 1**	**TR 2**	**ESS TR**	**TR Ent. ◁** *(1)*	**DC BUS 1**	**DC BUS 2**	**DC BUS Ent.** *(1)*	**DC BAT BUS**	**DC ESS BUS**	**DC SHED ESS**	**HOT BUS 1**	**HOT BUS 2**
NORM CONF	GEN 1	GEN 2	GEN 1	GEN 1	-	GEN 1	GEN 2	-	GEN 2	TR 1 GEN 1	TR 2 GEN 2	TR ENT GEN 2	TR 1 GEN 1	TR 1 GEN 1	TR 1 GEN 1	BAT 1	BAT 2
ONE GEN INOP AVAIL-X- (1, 2 or APU)	GEN X	GEN X	GEN X	GEN X	-	GEN X	GEN X	-	GEN X	TR 1 GEN X	TR 2 GEN X	TR ENT GEN X	TR 1 GEN X	TR 1 GEN X	TR 1 GEN X	BET 1	BAT 2
EMER CONF **• BEFORE EMER GEN AVAILABILITY (about 8 s)**	-	-	ST INV BAT1	-	ST INV BAT1	-	-	-	-	-	-	-	-	BAT 2	-	BAT 1	BAT 2
• EMER GEN RUNNING	-	-	EMER GEN	EMER GEN	-	-	-	EMER GEN	-	-	-	-	-	ESS TR EMER GEN	ESS TR EMER GEN	BAT 1	BAT 2
TR 1 FAULT	GEN 1	GEN 2	GEN 1	GEN 1	-	-	GEN 2	GEN 1	-	TR 2 GEN 2	TR 2 GEN 2	-	TR 2 GEN 2	ESS TR GEN 1	ESS TR GEN 1	BAT 1	BAT 2
TR 2 FAULT	GEN 1	GEN 2	GEN 1	GEN 1	-	GEN 1	-	GEN 1	-	TR 1 GEN 1	TR 1 GEN 1	-	TR 1 GEN 1	ESS TR GEN 1	ESS TR GEN 1	BAT 1	BAT 2
TR 1 + 2 FAULT	GEN 1	GEN 2	GEN 1	GEN 1	-	-	-	GEN 1	-	-	-	-	-	ESS TR -GEN 1	ESS TR -GEN 1	BAT 1	BAT 2

(1) *Two generators are needed to supply the DC BUS Entertainment ◁ , except on ground, where the APU generator (if not overloaded) or the external power is sufficient.*

ON GROUND BAT ONLY	AC BUS 1	AC BUS 2	AC ESS BUS	AC SHED ESS	AC STAT INV	TR 1	TR 2	ESS TR	TR Ent. ◁	DC BUS 1	DC BUS 2	DC BUS Ent.	DC BAT BUS	DC ESS BUS	DC SHED ESS	HOT BUS 1	HOT BUS 2
Speed > 100 kt	-	-	EMER GEN	EMER GEN	-	-	-	EMER GEN	-	-	-	-	-	ESS TR EMER GEN	ESS TR EMER GEN	BAT 1	BAT 2
Rat stall or 50 kt < speed ≤ 100 kt	-	-	ST INV BAT1	-	ST INV BAT1	-	-	-	-	-	-	-	BAT 1-2	BAT 2	-	BAT 1	BAT 2
Speed ≤ 50 kt	-	-	-	-	ST INV BAT1	-	-	-	-	-	-	-	BAT 1-2	BAT 2	-	BAT 1	BAT 2

OVERHEAD PANEL

Ident.: DSC-24-20-00017766.0004001 / 28 MAY 20
Applicable to: ALL


COMMERCIAL pb
BAT 1(2) ind.
BAT1(2) pb-sw
COMMERCIAL
OFF
DC BUS 1
BAT 1
1 BAT 2
BAT 2
26.8V
FAULT
OFF
FAULT
OFF
27.9V
35VU
DC BUS 2
AC ESS FEED
FAULT
ALTN
ELEC
AC BUS 1
AC ESS BUS
AC BUS 2
ELEC
GALLEY
FAULT
OFF
BUS TIE
AUTO
OFF
IDG 1
FAULT
GEN 1
FAULT
OFF
APU GEN
FAULT
OFF
EXT PWR
AVAIL
ON
GEN 2
FAULT
OFF
IDG 2
FAULT
GALLEY
FAULT
OFF
AUTO
or
GALY & CAB
FAULT
OFF
AUTO
BUS TIE pb
APU GEN pb-sw
EXT PWR pb
AC ESS FEED pb
GEN 1(2) pb-sw
IDG 1(2) (Integrated Drive Generator) pb-sw (guarded)
GALLEY pb or GALY & CAB pb

BAT 1(2) IND.

Shows battery voltage.

BAT 1(2) pb-sw

Controls the operation of the corresponding battery charge limiter.

The battery charge limiter controls automatically the connection and the disconnection of the corresponding battery to the DC BAT BUS (3 PP) by closing and opening of the battery line contactor.

- The batteries are connected to the DC BAT BUS in the following cases:
  - APU starting (MASTER SW pb-sw at ON and N less than 95 %)

    Note: The connection is limited to 3 min when the emergency generator is running.

  - Battery voltage below 26.5 V (battery charge). The charging cycle ends when battery charge current goes below 4 A.
    - ■ On ground, immediately
    - ■ In flight, after a time delay of 30 min.
  - Loss of AC BUS 1 and 2 when below 100 kt (EMER GEN not supplying).
- If AC BUS 1 and 2 are not energized and the EMER GEN is not supplying:
  - Battery 1 supplies the AC STAT INV BUS, and, if speed is greater than 50 kt, the AC ESS BUS
  - Battery 2 supplies the DC ESS BUS.

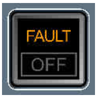
    Note: In normal configuration the batteries are disconnected most of the time.

    Note: A battery automatic cut-off logic prevents the batteries from discharging completely when the aircraft is on the ground (parking).

    Automatic battery contactors open when:
    - *The aircraft is on the ground*
    - *The BAT pb switches are at AUTO*
    - *The main power supply (EXT PWR + GEN) is cut off*
    - *Battery voltage is low.*

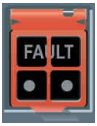
    The flight crew can reset the contactors by switching the BAT pb-sw to OFF then to AUTO.

The battery charge limiter is not operating: the battery line contactor is open. The DC BAT BUS is supplied. Hot buses remain supplied.



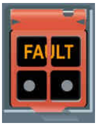
The battery charge limiter is in fault. It is accompanied by an ECAM alert, when the charging current for the corresponding battery is outside limits.
In this case the battery contactor opens.

IDG 1(2) (Integrated Drive Generator) pb-sw (GUARDED)



CAUTION	1. Maintaining the IDG pb-sw during more than 3 s may damage the IDG disconnection mechanism. 2. Disconnect the IDG only when the engine is running or windmilling. If not, the IDG will be damaged when starting the engine.

The IDG switches are normally springloaded out.
Pressing this switch disconnects the IDG from its driveshaft: only maintenance personnel can reconnect it.

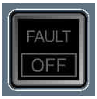


The FAULT light comes on, if:
- IDG oil outlet overheats (above 180 °C), or
- IDG oil pressure is low (inhibited at low engine speed: N2 below 14 %).

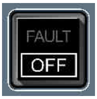
It extinguishes when the IDG is disconnected.

Note: *An automatic thermal disconnection of the IDG will occur if the temperature reaches 200 °C.*

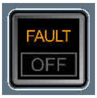
GEN 1 (2) pb-sw



The generator field is energized and the line contactor closes if electrical parameters are normal.



The generator field is de-energized and the line contactors opens.
The fault circuit is reset.

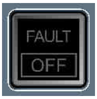


The FAULT light comes on, if:
- The associated generator control unit (GCU) trips it

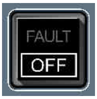
  Note: *If a differential fault trips the protection, reset action has no effect after two attempts.*

- Opening of the line contactor (except if the GEN pb-sw is selected OFF).

APU GEN pb-sw

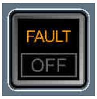


The APU generator field is energized and the line contactor closes if parameters are normal and the EXT PWR line contactor is open.
The bus tie contactor 1(2) closes automatically if GEN 1(2) is not operating.



The generator field is de-energized and the line contactor opens. The fault circuit is reset.

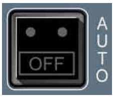
L12



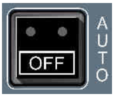
Same as GEN 1 or GEN 2 FAULT.
Associated with the following ECAM alert: ELEC APU GEN FAULT (*Refer to procedure*).
The APU GEN FAULT light is inhibited when:

- APU speed is too low, or
- The APU GEN line contactor opens after EXT PWR or ENG GEN takes over.

BUS TIE pb

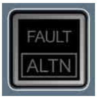


The bus tie contactors (BTCs) automatically open or close to maintain power supply to both AC BUS 1 and 2.
- One contactor is closed, when:
  - One engine generator supplies the associated AC BUS, and
  - The APU generator, or external power supplies the other side.
- Both contactors are closed during single-engine operation, or operation on the APU generator, or external power supply.

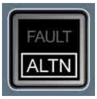


Both bus tie contactors open.

AC ESS FEED pb

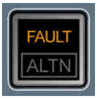


The AC ESS BUS is supplied by AC BUS 1.



The AC ESS BUS is supplied by AC BUS 2. Comes on when manually selected.

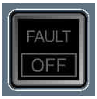
Note: *With the AC ESS FEED Auto Switching ◁, AC BUS 2 will automatically supply AC ESS BUS when AC BUS 1 is lost.*



The FAULT light come on, when the AC ESS BUS is not electrically-supplied.

Note: *In case of a total loss of the main generators, the AC ESS BUS is automatically supplied by the emergency generator, or by the static inverter, if the emergency generator is not available.*

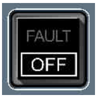
GALLEY pb OR GALY & CAB pb



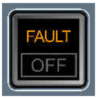
Main galley, secondary galley, in-seat power supply ◁ and IFE ◁ system (prerecorded announcement, telephone system, video/airshow, music…), are supplied.

The main galley, the in-seat power supply ◁ and the IFE ◁ systems are automatically shed:
- In flight: When only one generator is operating
- On ground: When only one engine generator is operating. (All galleys are available when the APU GEN or EXT PWR is supplying power.)

Note: *With the Galley Load Automatic Shedding ◁ the secondary galley is also automatically shed.*

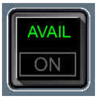


The main galley, secondary galley, in-seat power supply ◁ and IFE ◁ system (prerecorded announcement, telephone system, video/airshow, music ....) are not supplied.
The electrical supply of the heating floor panels is shed.



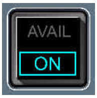
The FAULT light comes on, when the load on any generator is more than 100 % of rated output.

EXT PWR pb

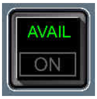


- External power is plugged in, and
- External power parameters are normal.

When pressed:



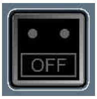
- The external power line contactor closes.



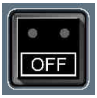
- The external power line contactor opens.

Note: *1. External power has priority over the APU generator. The engine generators have priority over external power.*
2. The ON light stays on, even when the engine generators supply the aircraft.

COMMERCIAL pb ◁✳



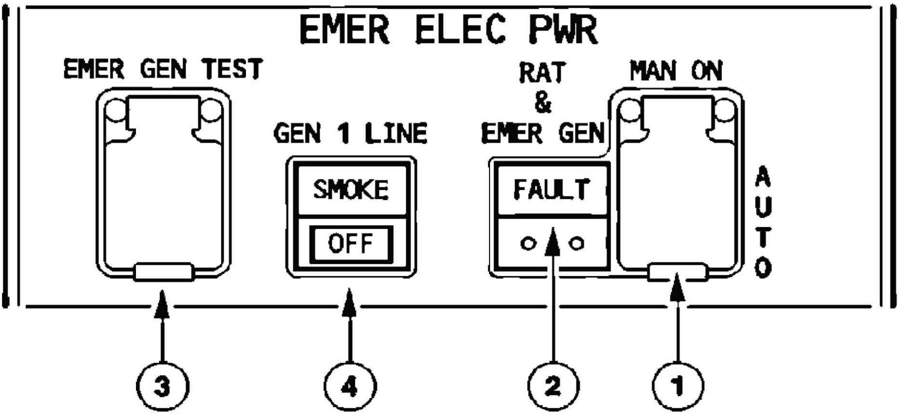
All aircraft commercial electrical loads are supplied:
- Cabin and cargo lights
- Water and toilet system
- Drain mast ice protection
- Galley
- Passenger entertainment system
- Semi-automatic cargo loading ◁✳ .



Switches off all aircraft commercial electrical loads.

OVERHEAD PANEL (CONT'D)

Ident.: DSC-24-20-00017778.0002001 / 21 MAR 17
Applicable to: ALL


EMER ELEC PWR
EMER GEN TEST
GEN 1 LINE
SMOKE
OFF
RAT
&
EMER GEN
FAULT
MAN ON
AUTO
3
4
2
1

(1) MAN ON pb (guarded)

AUTO : When the following conditions are met:
- AC BUS 1 is not electrically supplied, and
- AC BUS 2 is not electrically supplied, and
- Aircraft speed is greater than 100 kt.
    - The RAT extends, and
    - The blue hydraulic system drives the emergency generator.

As soon as the emergency generator electrical parameters are within tolerance the emergency generator is connected to the aircraft network.

Pressed : This selects manual RAT extension.
Emergency generator coupling occurs 3 s after the RAT supplies the emergency generator.

(2) FAULT light

This light comes on red if the emergency generator is not supplying power when AC BUS 1 and AC BUS 2 are not powered.

(3) EMER GEN TEST pb (guarded)

Pressed and held:
- If AC NORMAL BUSES are supplied:
    - The EMER GEN is driven hydraulically if the blue electric pump is running.
      The AC ESS BUS and the DC ESS BUS are connected to the emergency generator.
      (The DC ESS SHED and AC ESS SHED buses are not powered.)
    - ECAM displays the ELEC page automatically (only on the ground).
- If only the batteries supply the aircraft:
    - The static inverter powers the AC ESS BUS.

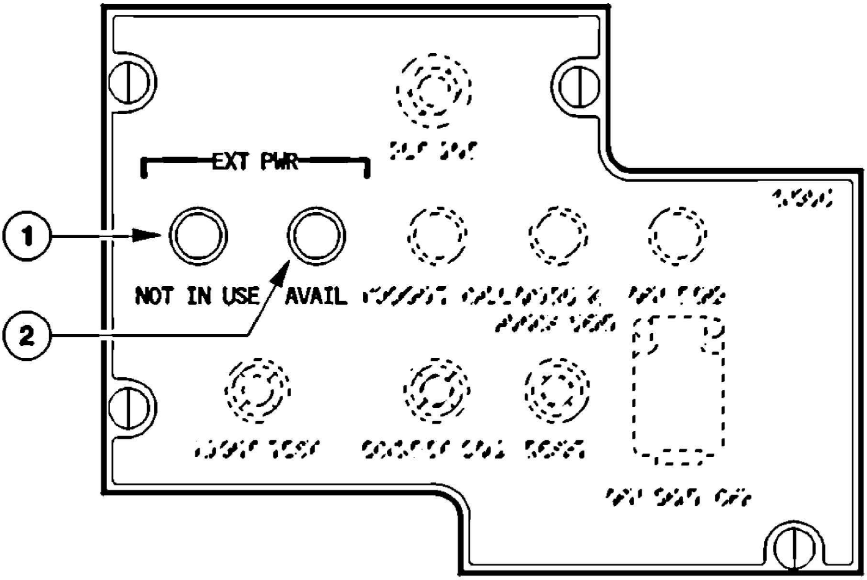
(4) GEN 1 LINE pb-sw

OFF : GEN 1 line contactor opens.
The AC BUS 1 channel is supplied from GEN 2 through bus tie contactors. This is used for smoked drill.

SMOKE light : *Refer to DSC-26-30-20 GEN 1 LINE pb-sw*.

EXTERNAL POWER PANEL

Ident.: DSC-24-20-00000891.0001001 / 21 MAR 16
Applicable to: ALL



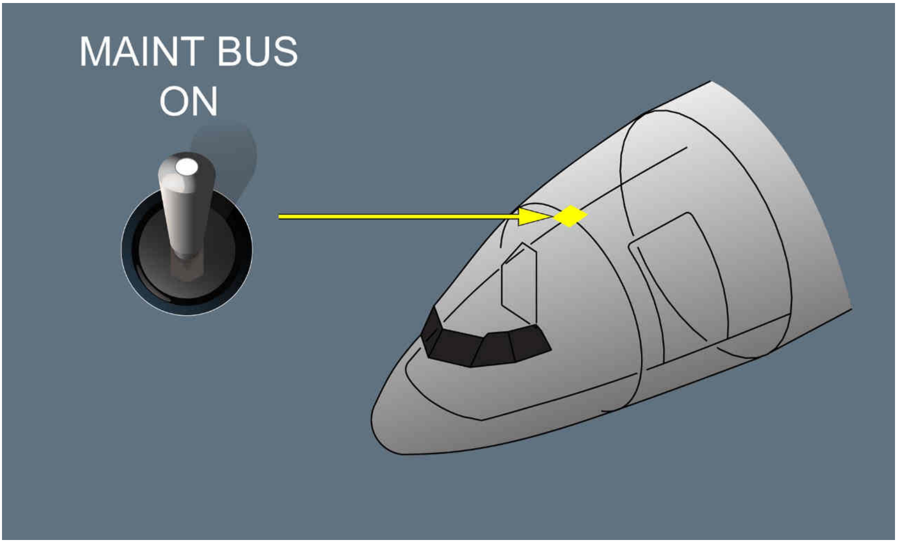
(1) EXT PWR NOT IN USE
This white light comes on to inform ground personnel that the ground power unit is not supplying the aircraft network and can be removed.

(2) EXT PWR AVAIL
This amber light comes on to indicate that external power is available and the voltage is correct.

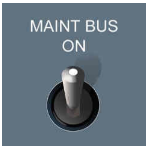
FORWARD CABIN

Ident.: DSC-24-20-00000892.0001001 / 10 MAY 21
Applicable to: ALL

MAINT BUS SW:



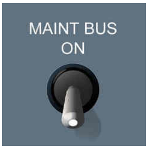
This switch allows personnel to energize electrical circuits for ground servicing without energizing the entire aircraft electrical system.



The switch latches magnetically if external power is connected and normal (AVAIL light on).

The AC and DC GND/FLT buses have power and the following loads can be energized:
- Passenger compartment lighting
- Galley lighting
- Entrance area lights
- Lavatory lighting and service
- Vacuum cleaner sockets
- Flight compartment service outlets
- Hydraulic pump (yellow system)
- Flight compartment flood lighting
- Fuel quantity indications
- Refueling
- Cargo hold lighting
- Main and nose landing gear compartment lighting
- Belly fairing panel service outlets
- Ground call
- Equipment compartment lights and service outlets
- Navigation lights
- Passenger address
- Interphone.

The switch trips when the external source is removed.

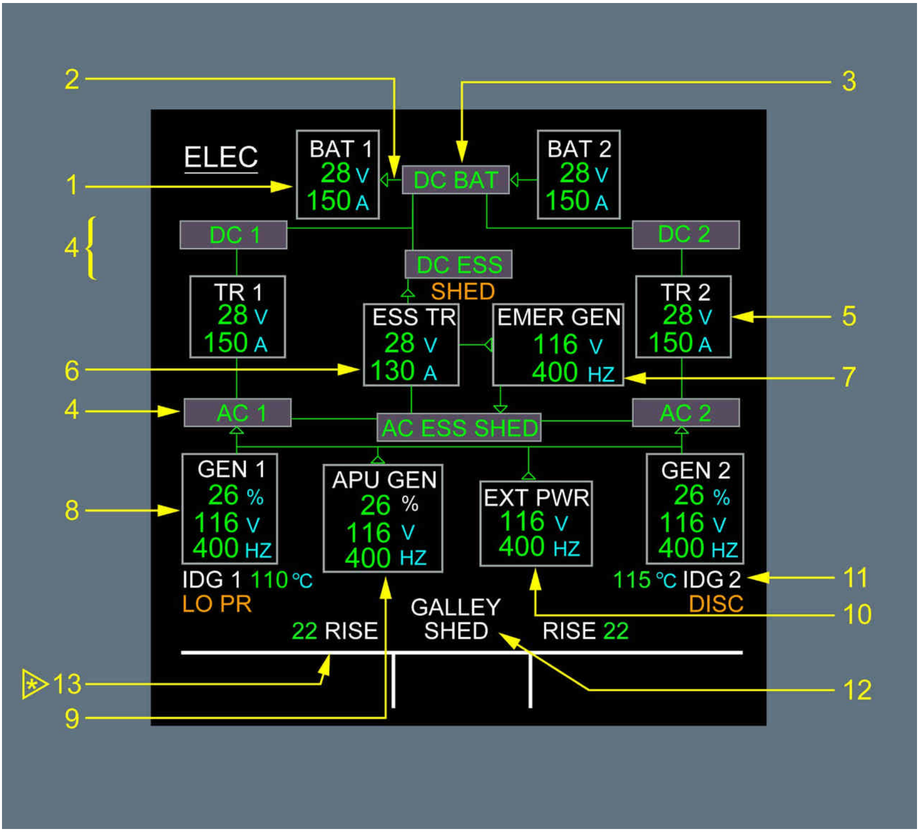


The AC and DC GND/FLT buses are connected to AC BUS 2 and DC BUS 2.

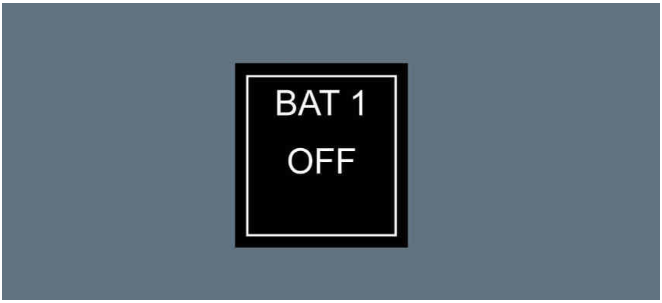
ECAM ELEC PAGE

Ident.: DSC-24-20-00017780.0002001 / 28 MAY 20

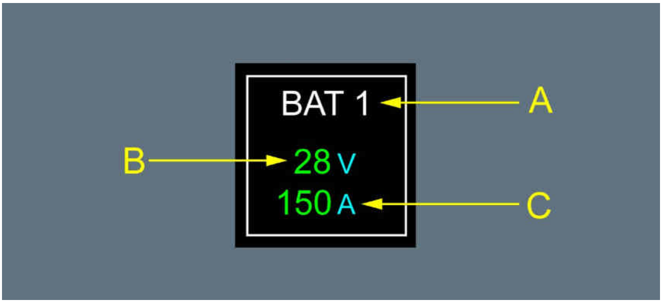
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


2
3
ELEC
1
BAT 1
28 V
150 A
DC BAT
BAT 2
28 V
150 A
4
DC 1
DC 2
DC ESS
SHED
TR 1
28 V
150 A
ESS TR
28 V
130 A
EMER GEN
116 V
400 HZ
TR 2
28 V
150 A
5
6
7
4
AC 1
AC ESS SHED
AC 2
GEN 1
26 %
116 V
400 HZ
APU GEN
26 %
116 V
400 HZ
EXT PWR
116 V
400 HZ
GEN 2
26 %
116 V
400 HZ
8
IDG 1 110 °C
LO PR
115 °C IDG 2
DISC
11
10
22 RISE
GALLEY
SHED
RISE 22
13
9
12

(1) Battery indications
BAT pb-sw at OFF:



BAT pb-sw at Auto:



(A) BAT 1(2) Indication

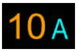
BAT 1	Normal operation.
BAT 1	This indication is displayed when: - Battery voltage and battery current indications become amber, or - In case of a BAT FAULT alert.

(B) Battery voltage indication

28 V	The battery voltage is normal.
19 V	The battery voltage is below 25 V, or above 31 V.

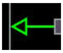
(C) Battery current indication

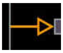
1 A	The battery current is normal.

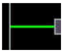


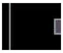
The battery discharge current is above 5 A.

(2) Battery charge/discharge indication

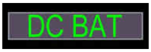

Battery contactor closed. Battery charging current is above 1 A.


Battery contactor closed. Battery discharge current is above 1 A.

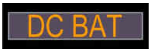

Battery contactor closed. Battery current is less than 1 A.


Battery contactor open.

(3) DC BAT indication

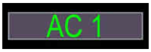


The DC battery is normal.

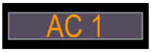


The DC battery voltage is equal to, or less than 25 V.

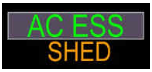
(4) Bus bar indication



The bus bar is normal.

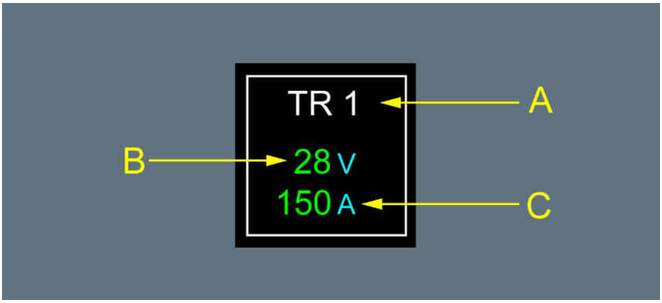


The corresponding bus bar is not powered.

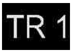


SHED appears when AC or DC SHED ESS BUS is shed.

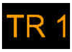
(5) TR 1(2) indication



(A) TR legend indication



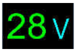
The TR is powered.



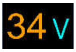
This indication is displayed when:

- The TR voltage indication becomes amber, and
- The TR current indication becomes amber.

(B) TR voltage indication

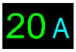


The TR voltage is normal.

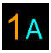


The TR voltage is below 25 V, or above 31 V.

(C) TR current indication

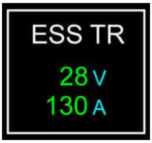


The TR current is normal.

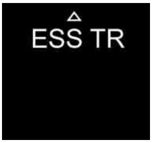


The TR current is equal to, or below 5 A.

(6) ESS TR indication

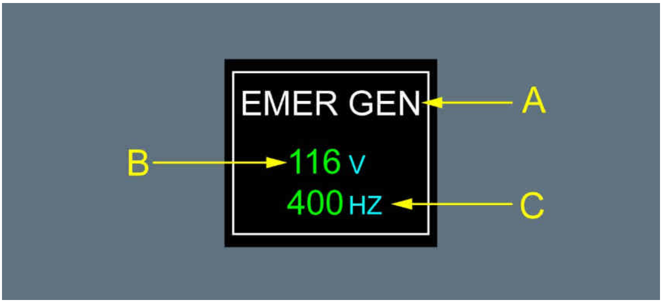


The ESS TR is normal. This legend follows the logic of the above-noted TR 1(2) legend.



The ESS TR contactor is open.

(7) EMER GEN indication



(A) EMER GEN legend indication

EMER GEN	Normal operation.
EMER GEN	This indication is displayed when: - The EMER GEN voltage indication becomes amber, or - The EMER GEN frequency indication becomes amber.

(B) EMER GEN voltage indication

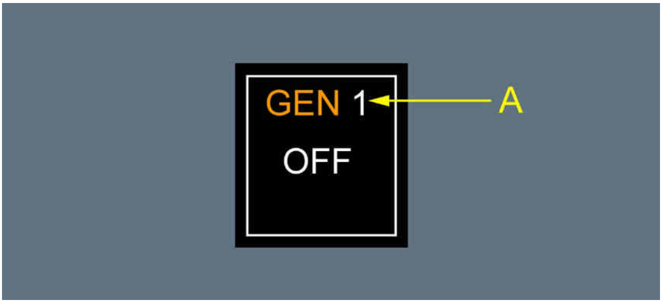
116 V	The EMER GEN voltage is normal.
135 V	The EMER GEN voltage is below 110 V, or above 120 V.

(C) EMER GEN frequency indication

400 HZ	The EMER GEN frequency is normal.
425 HZ	The EMER GEN frequency is below 390 Hz, or above 410 Hz.

Note: The voltage and frequency indications are not displayed, when the EMER GEN line contactor is open.

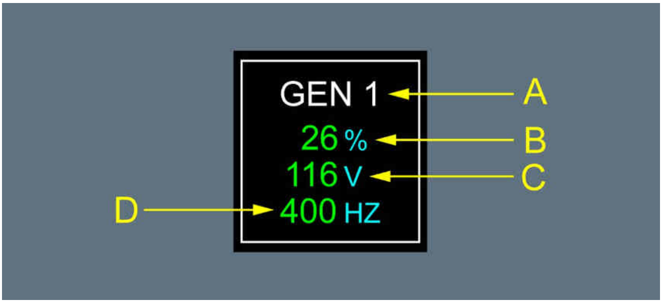
(8) GEN 1(2) indications
When the GEN pb-sw is OFF:



(A) GEN number indication

1	The associated engine is running.
1	The associated engine is not running.

When the GEN pb-sw is ON:



(A) GEN legend indication

GEN 1	Normal operation.
GEN 1	The GEN operation becomes amber, if: - The GEN load indication becomes amber, or - The GEN voltage indication becomes amber, or - The GEN frequency indication becomes amber.

(B) GEN load indication

42 %	Normal operation.

110 %	The engine generator load is above 100 %.

(C) GEN voltage indication

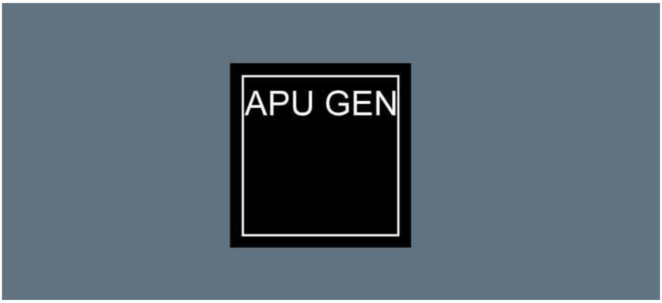
115 V	The engine generator voltage is normal.
125 V	The engine generator voltage is below 110 V, or above 120 V.

(D) GEN frequency indication

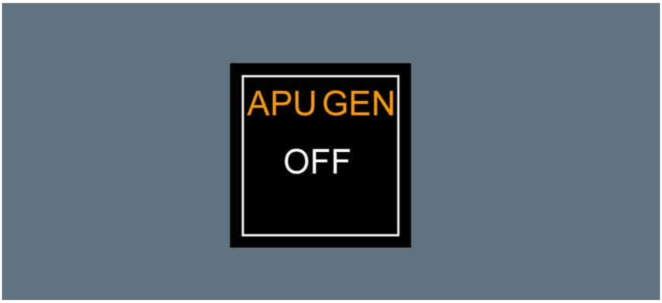
400 HZ	The engine generator frequency is normal.
413 HZ	The engine generator frequency is below 390 Hz, or above 410 Hz.

(9) APU GEN indications

When the APU MASTER SW is OFF regardless of the position of the APU GEN pb-sw:

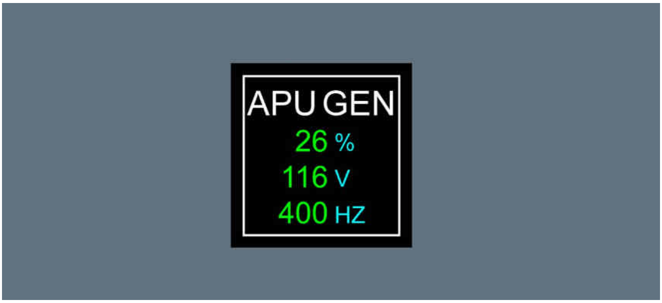


When the APU MASTER SW is ON, and the APU GEN pb-sw is OFF:



When the APU MASTER SW is ON, and the APU GEN pb-sw is ON:

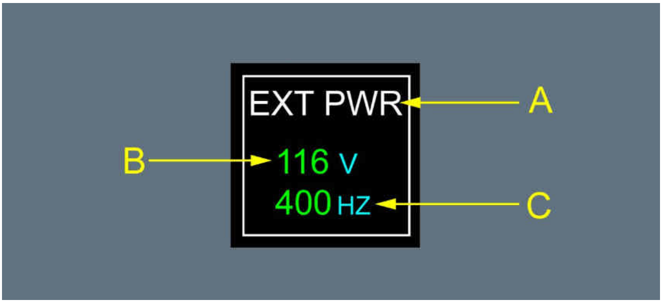
The indications are the same as for GEN 1(2).


APU GEN
26 %
116 V
400 HZ

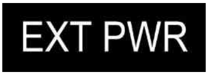
(10) EXT PWR indications

When external power is not available:

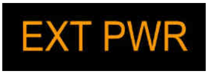
When external power is available:


EXT PWR
116 V
400 HZ
A
B
C

(A) EXT PWR legend indication

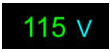


Normal operation.

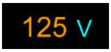


The external power operation becomes amber, if:
- The external power voltage indication becomes amber, or
- The external power frequency indication becomes amber.

(B) EXT PWR voltage indication

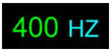


The external power voltage is normal.

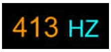


The external power voltage is below 110 V, or above 120 V.

(C) EXT PWR frequency indication

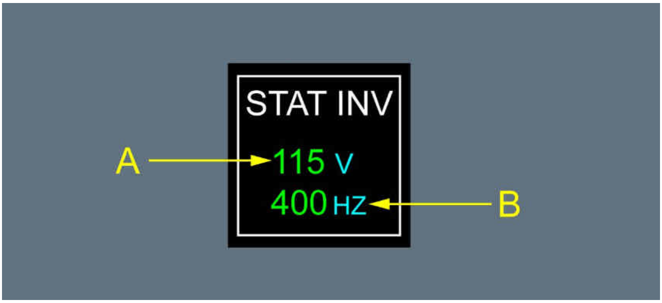


The external power frequency is normal.

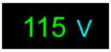


The external power frequency is below 390 Hz, or above 410 Hz.

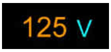
During the static inverter test, and when pressing the ELEC pb on the ECAM control panel while ESS BUSES are supplied by the batteries:



(A) STAT INV voltage indication



The static inverter voltage is normal.

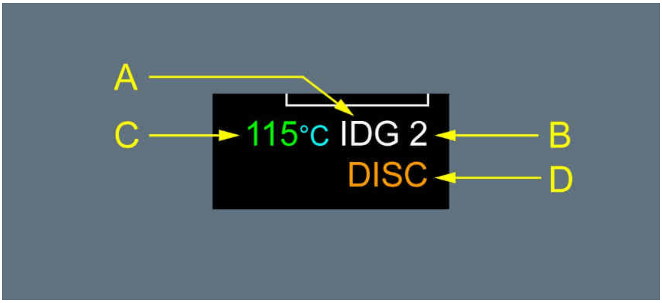


The static inverter voltage is below 110 V, or above 120 V.

(B) STAT INV frequency indication

400 HZ	The static inverter frequency is normal.
413 HZ	The static inverter frequency is below 390 Hz, or above 410 Hz.

(11) IDG indications



(A) IDG legend indication

IDG	Normal operation.
IDG	This indication is displayed, when: - IDG oil outlet temperature overheat (above 180 °C), or - IDG oil pressure gets too low, or - IDG disconnection.

(B) IDG number indication

2	The associated engine is running.
2	The associated engine is not running and the FADEC is powered.

(C) IDG oil outlet temperature indication

72 °C	Normal operation.
153 °C	It pulses in case of advisory (when the temperature is above 147 °C and when it is at or below 180 °C).
187 °C	There is an overheat on the IDG (above 180 °C).

(D) DISC/LO PR indication

The IDG is disconnected.

This legend appears when IDG low pressure is detected and the associated engine is running.

(12) GALLEY SHED indication

GALLEY
SHED

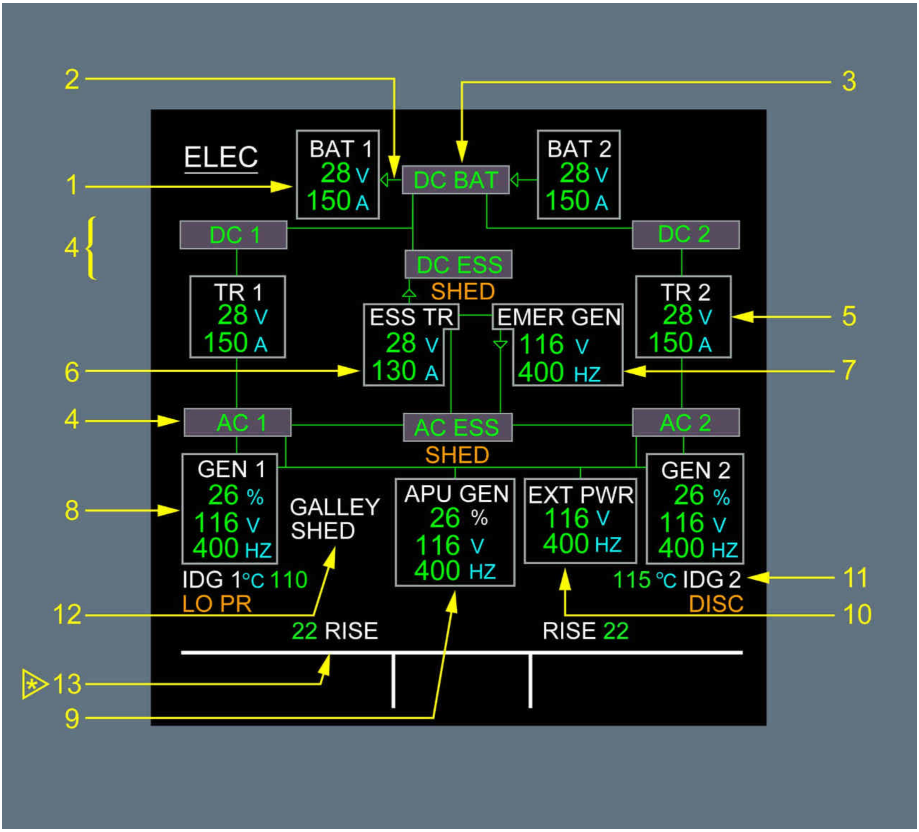
This legend appears when:
- The GALLEY pb-sw is OFF, or
- The main gelleys are shed, meaning:
  - In flight, only one generator is operating.
  - On ground, the aircraft is being supplied by one engine generator only.

(13) RISE indication ◁

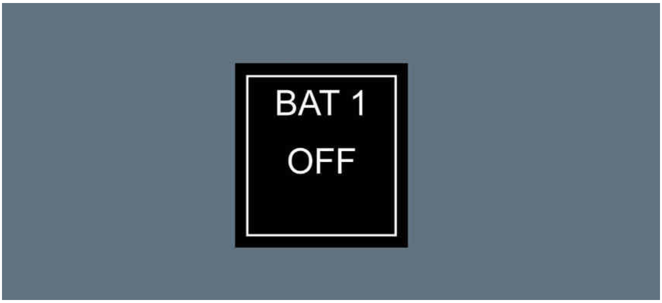
This legend appears when there is a difference between the temperature at the IDG inlet and that at the IDG outlet.

ECAM ELEC PAGE

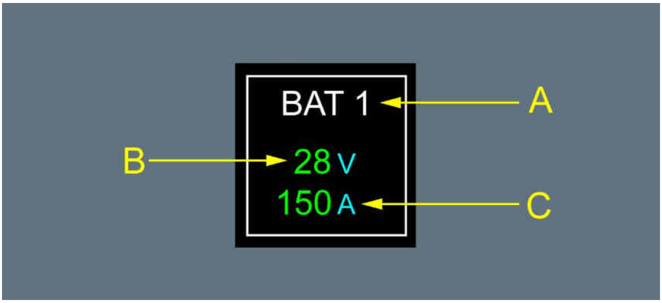
Ident.: DSC-24-20-00017780.0001001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


2
3
ELEC
BAT 1
28 V
150 A
DC BAT
BAT 2
28 V
150 A
1
4
DC 1
DC 2
DC ESS
SHED
TR 1
28 V
150 A
ESS TR
28 V
130 A
EMER GEN
116 V
400 HZ
TR 2
28 V
150 A
5
6
7
4
AC 1
AC ESS
SHED
AC 2
GEN 1
26 %
116 V
400 HZ
GALLEY
SHED
APU GEN
26 %
116 V
400 HZ
EXT PWR
116 V
400 HZ
GEN 2
26 %
116 V
400 HZ
8
IDG 1 °C 110
LO PR
115 °C IDG 2
DISC
11
12
10
22 RISE
RISE 22
13
9

(1) Battery indications
BAT pb-sw at OFF:



BAT pb-sw at Auto:



(A) BAT 1(2) Indication

BAT 1	Normal operation.
BAT 1	This indication is displayed when: - Battery voltage and battery current indications become amber, or - In case of a BAT FAULT alert.

(B) Battery voltage indication

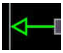
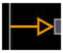
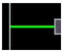
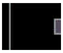
28 V	The battery voltage is normal.
19 V	The battery voltage is below 25 V, or above 31 V.

(C) Battery current indication

1 A	The battery current is normal.

10 A	The battery discharge current is above 5 A.

(2) Battery charge/discharge indication

	Battery contactor closed. Battery charging current is above 1 A.
	Battery contactor closed. Battery discharge current is above 1 A.
	Battery contactor closed. Battery current is less than 1 A.
	Battery contactor open.

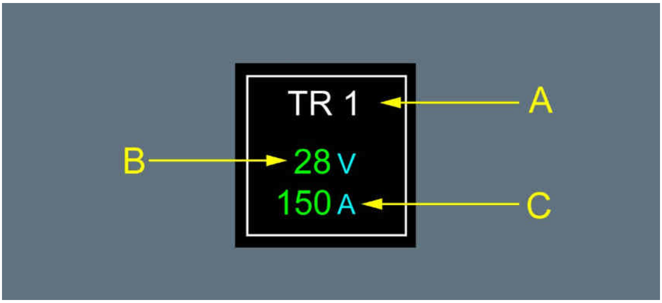
(3) DC BAT indication

DC BAT	The DC battery is normal.
DC BAT	The DC battery voltage is equal to, or less than 25 V.

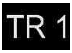
(4) Bus bar indication

AC 1	The bus bar is normal.
AC 1	The corresponding bus bar is not powered.
AC ESS SHED	SHED appears when AC or DC SHED ESS BUS is shed.

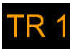
(5) TR 1(2) indication



(A) TR legend indication

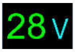


The TR is powered.

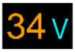


This indication is displayed when:
- The TR voltage indication becomes amber, and
- The TR current indication becomes amber.

(B) TR voltage indication

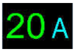


The TR voltage is normal.

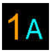


The TR voltage is below 25 V, or above 31 V.

(C) TR current indication

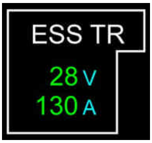


The TR current is normal.

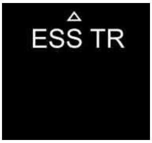


The TR current is equal to, or below 5 A.

(6) ESS TR indication

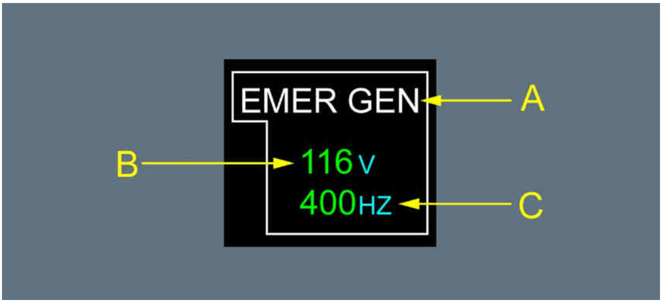


The ESS TR is normal. This legend follows the logic of the above-noted TR 1(2) legend.



The ESS TR contactor is open.

(7) EMER GEN indication



(A) EMER GEN legend indication

EMER GEN	Normal operation.
EMER GEN	This indication is displayed when: - The EMER GEN voltage indication becomes amber, or - The EMER GEN frequency indication becomes amber.

(B) EMER GEN voltage indication

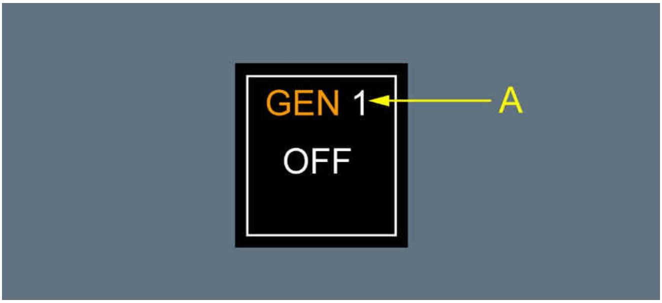
116 V	The EMER GEN voltage is normal.
135 V	The EMER GEN voltage is below 110 V, or above 120 V.

(C) EMER GEN frequency indication

400 HZ	The EMER GEN frequency is normal.
425 HZ	The EMER GEN frequency is below 390 Hz, or above 410 Hz.

Note: The voltage and frequency indications are not displayed, when the EMER GEN line contactor is open.

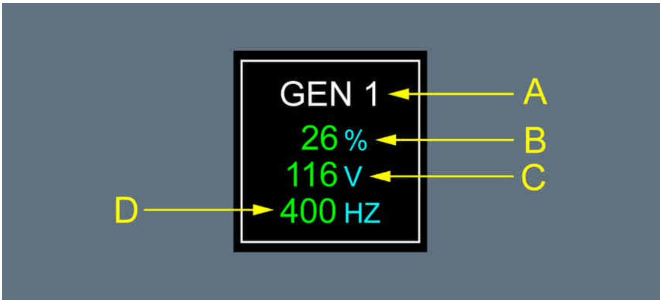
(8) GEN 1(2) indications
When the GEN pb-sw is OFF:



(A) GEN number indication

1	The associated engine is running.
1	The associated engine is not running.

When the GEN pb-sw is ON:



(A) GEN legend indication

GEN 1	Normal operation.
GEN 1	The GEN operation becomes amber, if: - The GEN load indication becomes amber, or - The GEN voltage indication becomes amber, or - The GEN frequency indication becomes amber.

(B) GEN load indication

42 %	Normal operation.

110 %	The engine generator load is above 100 %.

(C) GEN voltage indication

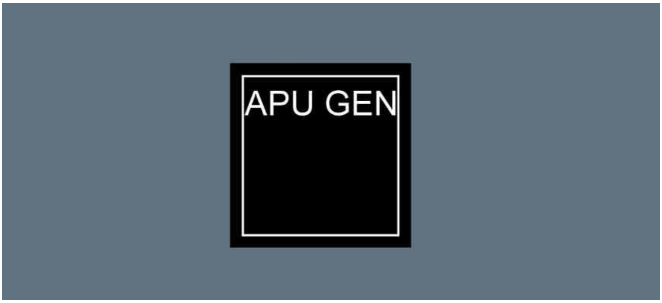
115 V	The engine generator voltage is normal.
125 V	The engine generator voltage is below 110 V, or above 120 V.

(D) GEN frequency indication

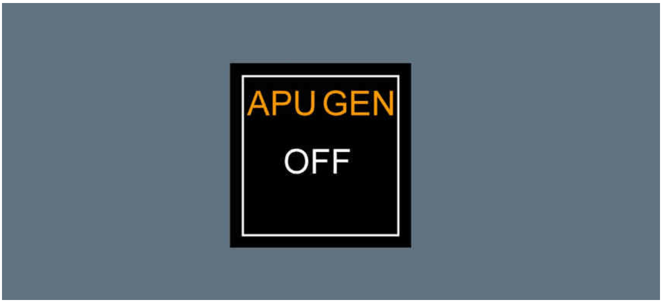
400 HZ	The engine generator frequency is normal.
413 HZ	The engine generator frequency is below 390 Hz, or above 410 Hz.

(9) APU GEN indications

When the APU MASTER SW is OFF regardless of the position of the APU GEN pb-sw:

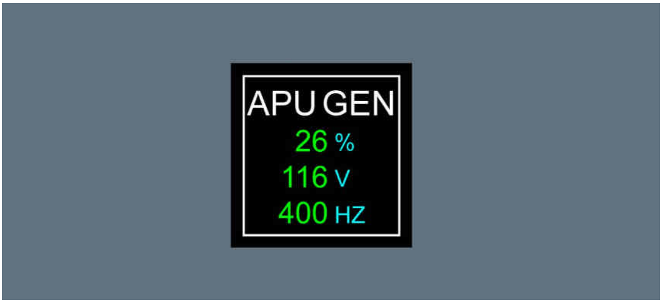


When the APU MASTER SW is ON, and the APU GEN pb-sw is OFF:



When the APU MASTER SW is ON, and the APU GEN pb-sw is ON:

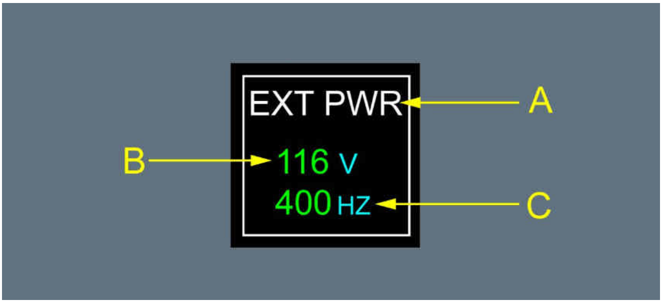
The indications are the same as for GEN 1(2).


APU GEN
26 %
116 V
400 HZ

(10) EXT PWR indications

When external power is not available:

When external power is available:


EXT PWR
116 V
400 HZ
A
B
C

(A) EXT PWR legend indication

EXT PWR	Normal operation.
EXT PWR	The external power operation becomes amber, if: - The external power voltage indication becomes amber, or - The external power frequency indication becomes amber.

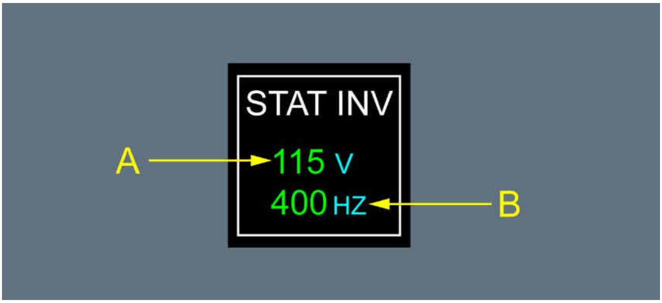
(B) EXT PWR voltage indication

115 V	The external power voltage is normal.
125 V	The external power voltage is below 110 V, or above 120 V.

(C) EXT PWR frequency indication

400 HZ	The external power frequency is normal.
413 HZ	The external power frequency is below 390 Hz, or above 410 Hz.

During the static inverter test, and when pressing the ELEC pb on the ECAM control panel while ESS BUSES are supplied by the batteries:



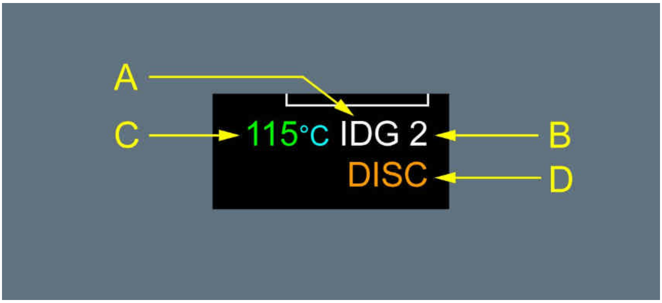
(A) STAT INV voltage indication

115 V	The static inverter voltage is normal.
125 V	The static inverter voltage is below 110 V, or above 120 V.

(B) STAT INV frequency indication

400 HZ	The static inverter frequency is normal.
413 HZ	The static inverter frequency is below 390 Hz, or above 410 Hz.

(11) IDG indications



(A) IDG legend indication

IDG	Normal operation.
IDG	This indication is displayed, when: - IDG oil outlet temperature overheat (above 180 °C), or - IDG oil pressure gets too low, or - IDG disconnection.

(B) IDG number indication

2	The associated engine is running.
2	The associated engine is not running and the FADEC is powered.

(C) IDG oil outlet temperature indication

72 °C	Normal operation.
153 °C	It pulses in case of advisory (when the temperature is above 147 °C and when it is at or below 180 °C).
187 °C	There is an overheat on the IDG (above 180 °C).

(D) DISC/LO PR indication

DISC	The IDG is disconnected.
LO PR	This legend appears when IDG low pressure is detected and the associated engine is running.

(12) GALLEY SHED indication

GALLEY SHED

This legend appears when:
- The GALLEY pb-sw is OFF, or
- The main gelleys are shed, meaning:
  - In flight, only one generator is operating.
  - On ground, the aircraft is being supplied by one engine generator only.

(13) RISE indication

22 RISE	This legend appears when there is a difference between the temperature at the IDG inlet and that at the IDG outlet.

MEMO DISPLAY

Ident.: DSC-24-20-00016808.0001001 / 21 MAR 16
Applicable to: ALL

EMER GEN : This memo appears in green, when the emergency generator is running.

AIRCRAFT SYSTEMS

EQUIPMENT

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DSC-25-10 Flight Deck

DSC-25-10-10 General

General....A
Principles For Pushbuttons With Integrated Indications....B
General Arrangement....C

DSC-25-10-20 Cockpit Plan

General....A
Right Rear Corner....B
Left Rear Corner....C

DSC-25-10-30 Seats

Pilot Seats....A
Pilot Seat Mechanical Adjustment....B
Pilot Seat Electrical Adjustment....C
Head Rest Adjustment....D
Armrest Adjustment....E
Observer Seat....F
Observer Seat Adjustment....G
Pilot Seat Outboard Armrest Adjustment....H

DSC-25-10-40 Main Instrument Panels

Main Instrument Panel - Captain Side....A
Main Instrument Panel - First Officer Side....B

DSC-25-10-50 Pedestal

Pedestal....A

DSC-25-10-60 Overhead Panel

Overhead Panel....A

DSC-25-10-70 C/B Panels

C/B Panels....A

DSC-25-10-80 Foot Warmer (If Installed)

General....A
Controls....B

DSC-25-20 Emergency Equipment

Emergency Equipment....A

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AIRCRAFT SYSTEMS

EQUIPMENT

PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
DSC-25-10-50 Pedestal	A	1	Documentation update: Addition of "Pedestal" documentary unit
DSC-25-10-60 Overhead Panel	A	1	Documentation update: Addition of "Overhead Panel" documentary unit
DSC-25-10-40 Main Instrument Panel - First Officer Side	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-25-10-50 Pedestal	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-25-10-60 Overhead Panel	A	2	Effectivity update: The information now also applies to MSN 11228, 11293.

Intentionally left blank

GENERAL

Ident.: DSC-25-10-10-00020853.0001001 / 17 MAR 17
Applicable to: ALL

The aircraft and system controls, required for piloting the aircraft, are arranged in such a way that the crew faces forward and all crewmembers can monitor instruments and systems.
The designers concentrated system controls on the overhead panel by making extensive use of pushbuttons, directly installed in the system synoptic.

Note: *This chapter describes the panels and equipment of the basic aircraft configuration, and may not correspond to the customized configuration of a specific aircraft.*
For more information on the installed equipment or panels, refer to the relevant chapter's system description.

PRINCIPLES FOR PUSHBUTTONS WITH INTEGRATED INDICATIONS

Ident.: DSC-25-10-10-00000983.0001001 / 21 MAR 16
Applicable to: ALL

Whenever possible, pushbuttons used for corrective actions, have integrated status and failure indications.

The pushbutton positions, and their illuminated indications, follow the "lights out" principle.

- While corresponding to particular aircraft configurations, indications also have the following color codes :
  - Warnings
    RED : A failure requiring immediate action.
  - Cautions
    AMBER : A failure, of which the flight crew should be aware, but does not call for immediate action.
  - Indications
    GREEN : For normal system operation.
    BLUE : For normal operation of a system used temporarily
    WHITE :
      - For an abnormal pushbutton position.
      - For a test result or maintenance information.

  When the aircraft is in a normal configuration, only green lights can be permanently lit, whereas blue lights can be intermittently.
- Pushbutton positions :

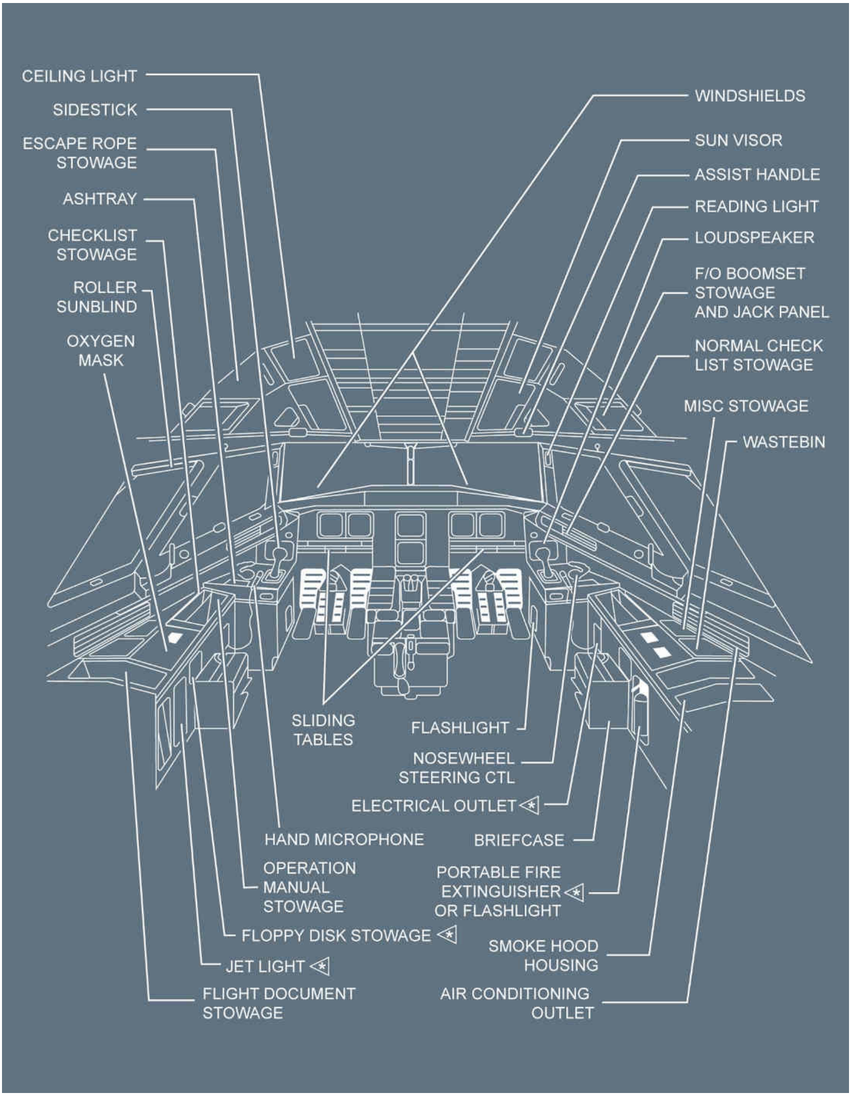
POSITION	**BASIC FUNCTION**
Pressed In	ON, AUTO, OVRD, OPEN
Released Out	OFF, MAN, ALTN, SHUT

Note: *1. Certain pushbutton lights have two dots, indicating that the corresponding part of the pushbutton is not used.*
2. Certain pushbuttons do not remain pressed in. These are referred to as “Momentary Action” pushbuttons.

GENERAL ARRANGEMENT

Ident.: DSC-25-10-10-00018419.0001001 / 17 MAR 17

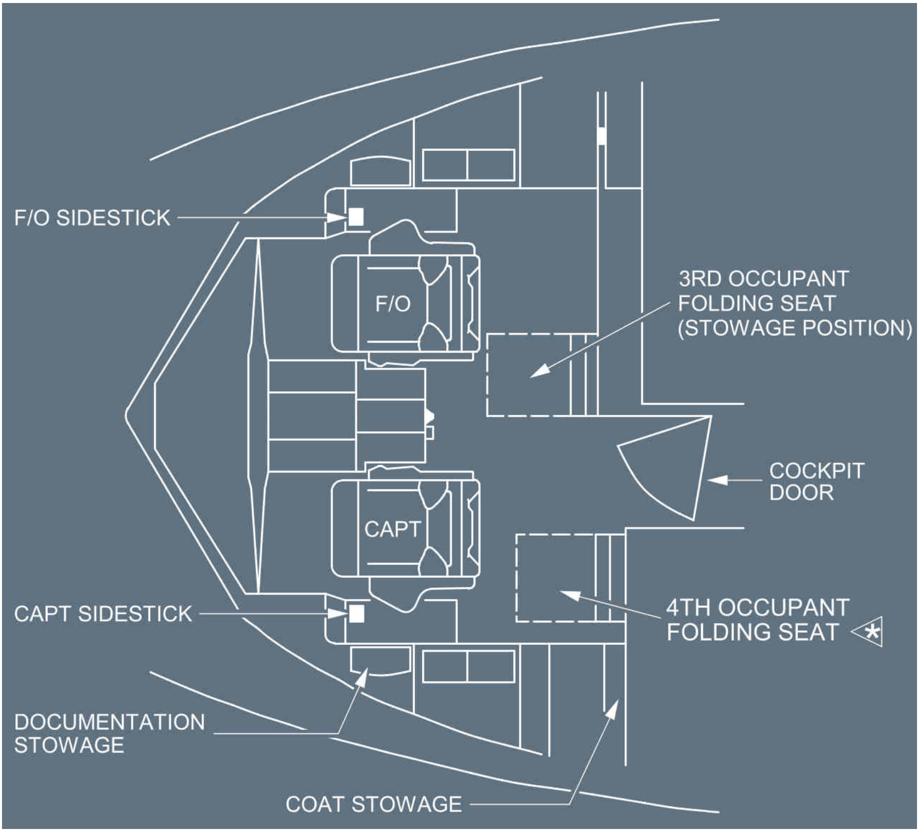
Applicable to: ALL


CEILING LIGHT
SIDESTICK
ESCAPE ROPE STOWAGE
ASHTRAY
CHECKLIST STOWAGE
ROLLER SUNBLIND
OXYGEN MASK
WINDSHIELDS
SUN VISOR
ASSIST HANDLE
READING LIGHT
LOUDSPEAKER
F/O BOOMSET STOWAGE AND JACK PANEL
NORMAL CHECK LIST STOWAGE
MISC STOWAGE
WASTEBIN
SLIDING TABLES
FLASHLIGHT
NOSEWHEEL STEERING CTL
ELECTRICAL OUTLET ◁
HAND MICROPHONE
BRIEFCASE
OPERATION MANUAL STOWAGE
PORTABLE FIRE EXTINGUISHER ◁ OR FLASHLIGHT
FLOPPY DISK STOWAGE ◁
SMOKE HOOD HOUSING
JET LIGHT ◁
FLIGHT DOCUMENT STOWAGE
AIR CONDITIONING OUTLET

GENERAL

Ident.: DSC-25-10-20-00017002.0001001 / 17 MAR 17
Applicable to: ALL

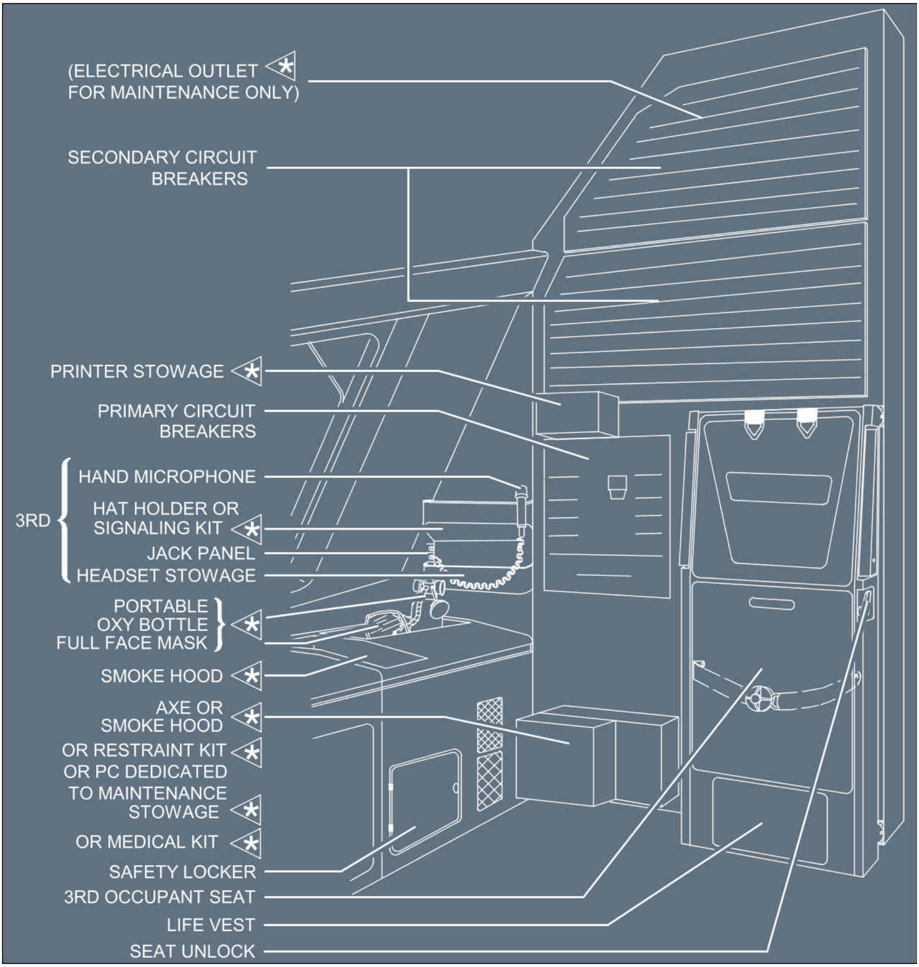
The cockpit can accommodate two crewmembers, plus a third and fourth occupant ◁* .
The two pilot seats are mounted on columns.
The third and fourth occupant seats are folding seats.


F/O SIDESTICK
F/O
3RD OCCUPANT FOLDING SEAT (STOWAGE POSITION)
COCKPIT DOOR
CAPT
CAPT SIDESTICK
4TH OCCUPANT FOLDING SEAT ◁*
DOCUMENTATION STOWAGE
COAT STOWAGE

RIGHT REAR CORNER

Ident.: DSC-25-10-20-00000986.0001001 / 06 DEC 16

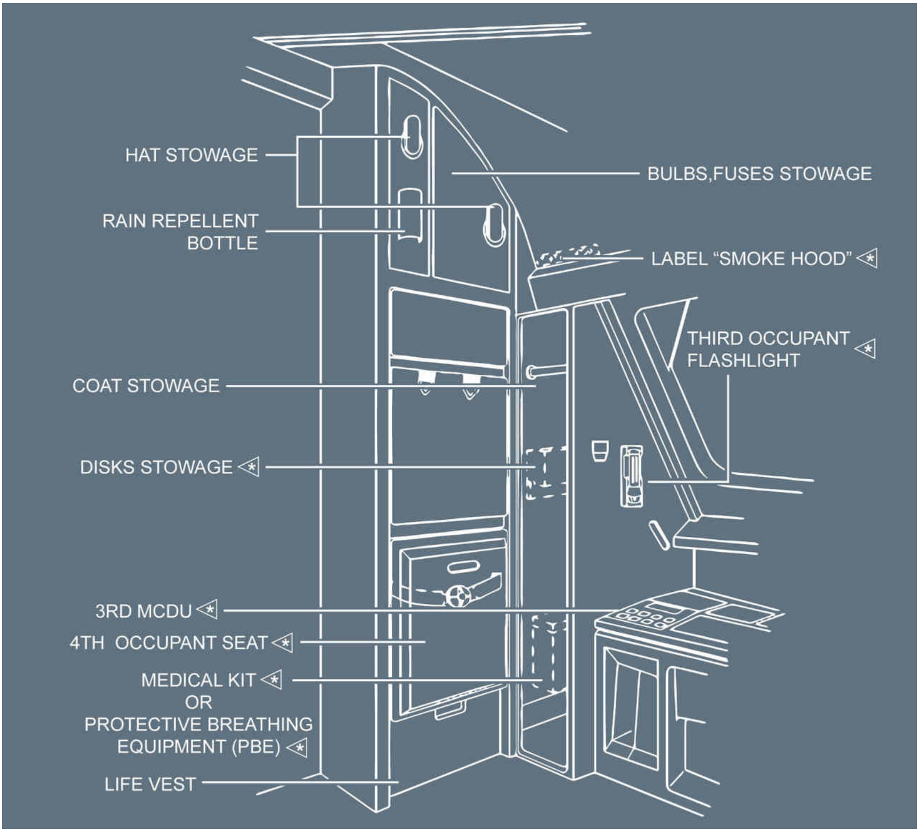
Applicable to: ALL


(ELECTRICAL OUTLET FOR MAINTENANCE ONLY) ✱
SECONDARY CIRCUIT BREAKERS
PRINTER STOWAGE ✱
PRIMARY CIRCUIT BREAKERS
3RD
HAND MICROPHONE
HAT HOLDER OR SIGNALING KIT ✱
JACK PANEL
HEADSET STOWAGE
PORTABLE OXY BOTTLE FULL FACE MASK ✱
SMOKE HOOD ✱
AXE OR SMOKE HOOD ✱
OR RESTRAINT KIT ✱
OR PC DEDICATED TO MAINTENANCE STOWAGE ✱
OR MEDICAL KIT ✱
SAFETY LOCKER
3RD OCCUPANT SEAT
LIFE VEST
SEAT UNLOCK

LEFT REAR CORNER

Ident.: DSC-25-10-20-00018428.0001001 / 17 MAR 17

Applicable to: ALL


HAT STOWAGE
RAIN REPELLENT BOTTLE
COAT STOWAGE
DISKS STOWAGE ⊲*
3RD MCDU ⊲*
4TH OCCUPANT SEAT ⊲*
MEDICAL KIT ⊲*
OR
PROTECTIVE BREATHING EQUIPMENT (PBE) ⊲*
LIFE VEST
BULBS,FUSES STOWAGE
LABEL "SMOKE HOOD" ⊲*
THIRD OCCUPANT FLASHLIGHT ⊲*

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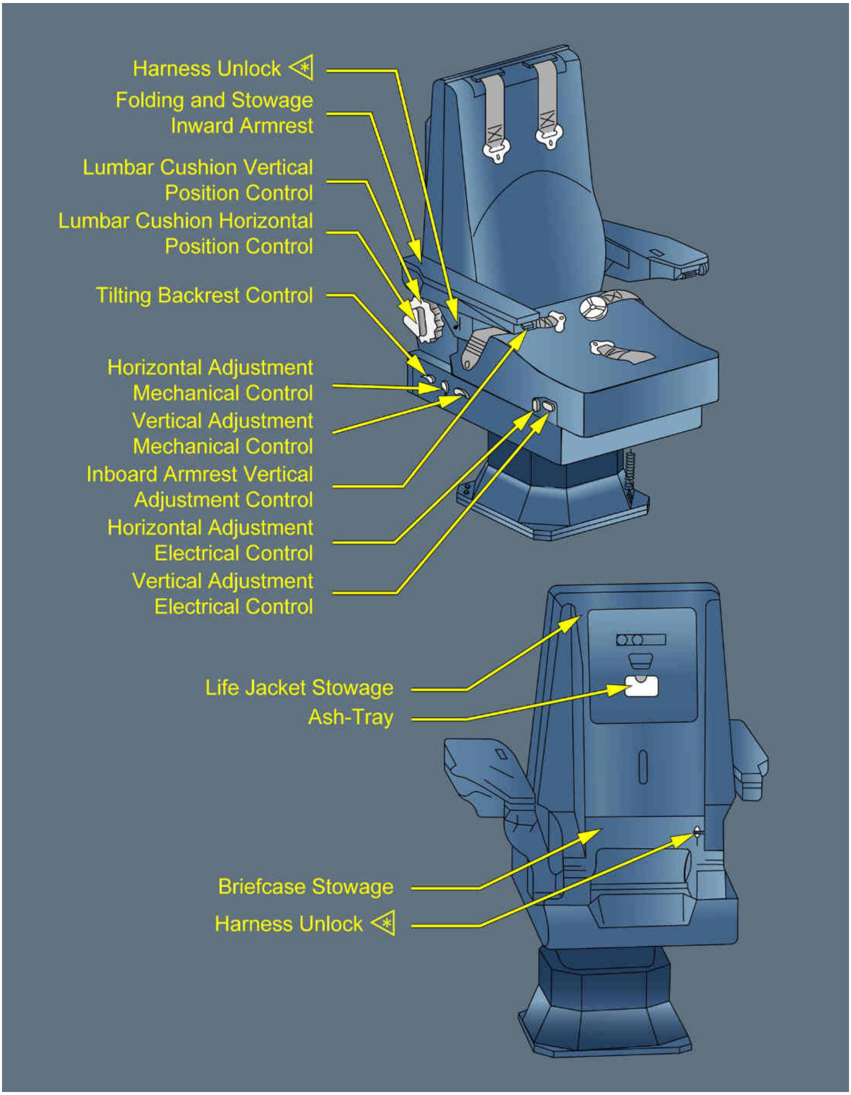
PILOT SEATS

Ident.: DSC-25-10-30-00018429.0002001 / 26 NOV 19


Harness Unlock
Folding and Stowage Inward Armrest
Lumbar Cushion Vertical Position Control
Lumbar Cushion Horizontal Position Control
Tilting Backrest Control
Horizontal Adjustment Mechanical Control
Vertical Adjustment Mechanical Control
Inboard Armrest Vertical Adjustment Control
Horizontal Adjustment Electrical Control
Vertical Adjustment Electrical Control
Life Jacket Stowage
Ash-Tray
Briefcase Stowage
Harness Unlock

PILOT SEAT MECHANICAL ADJUSTMENT

Ident.: DSC-25-10-30-00000989.0001001 / 26 NOV 19
Applicable to: ALL

To mechanically adjust a seat, the occupant must lift the appropriate control handle. This unlocks the seat so that it may be moved. To return the seat to its spring-loaded locked position, release the control handle. On electrically-powered seats, the mechanical adjustment is a backup: Electrically adjust the seat.

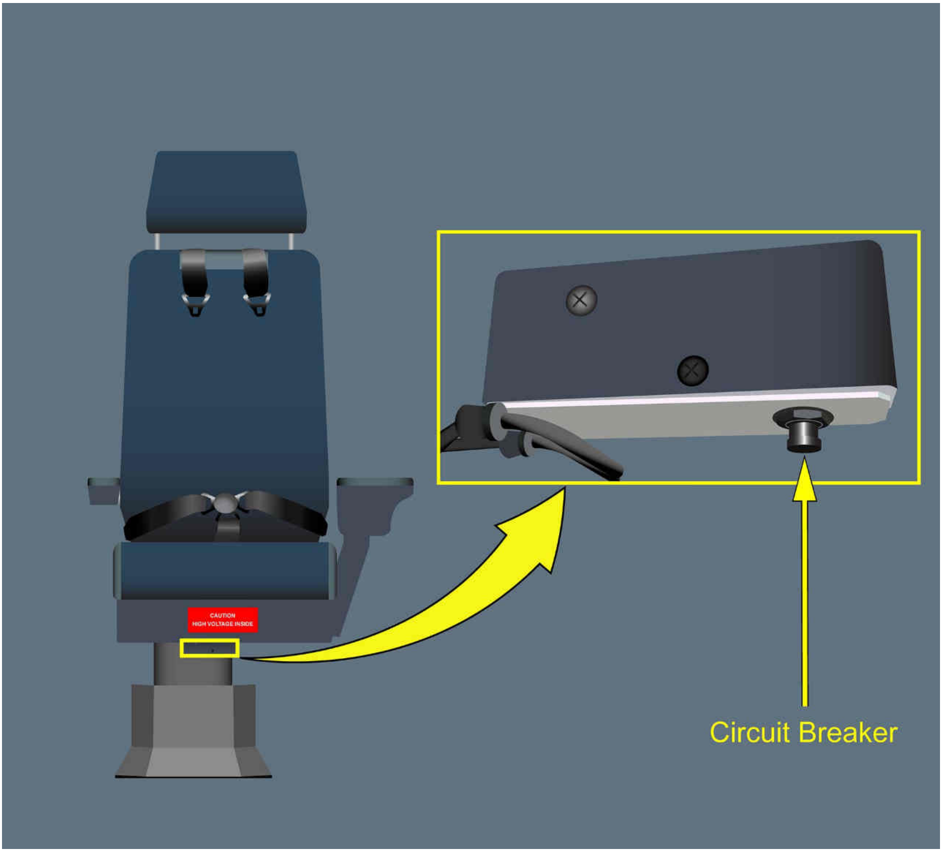
To adjust the vertical position of the lumbar cushion, the occupant must perform all of the following:
- Pull the control handle to the unlocked position
- Turn the control handle, in order to adjust the position of the cushion
- Push the control handle to the locked position.

PILOT SEAT ELECTRICAL ADJUSTMENT

Ident.: DSC-25-10-30-00018405.0001001 / 26 NOV 19
Applicable to: ALL

To electrically adjust a seat, the occupant must press the appropriate control switch in the desired direction. When the seat reaches the desired position, the occupant must release the control switch. The control switch then returns to the spring-loaded neutral position.

L2 Note: *A circuit breaker is under the seat. When this circuit breaker is pulled, it stops the electrical power to the seat.*



HEAD REST ADJUSTMENT

Ident.: DSC-25-10-30-00018406.0001001 / 17 MAR 17
Applicable to: ALL

To adjust the headrest in inclination, the occupant presses the inclination control button, and releases it to lock the position.
To control the height of the headrest, the occupant must push it horizontally, adjust the height, and release it to lock the position.

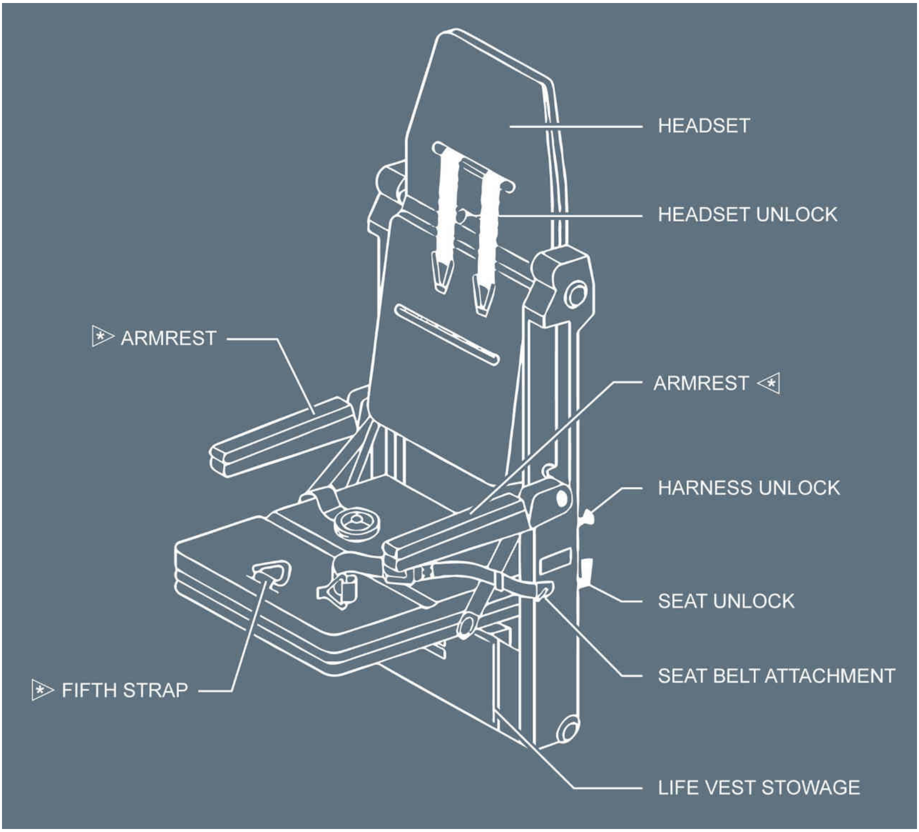
ARMREST ADJUSTMENT

Ident.: DSC-25-10-30-00000993.0001001 / 21 MAR 17
Applicable to: ALL

To adjust the inboard armrest, the occupant must turn the knurled knob, located on the bottom surface of the armrest.

OBSERVER SEAT

Ident.: DSC-25-10-30-00018430.0001001 / 17 MAR 17
Applicable to: ALL


HEADSET
HEADSET UNLOCK
ARMREST
ARMREST
HARNESS UNLOCK
SEAT UNLOCK
SEAT BELT ATTACHMENT
FIFTH STRAP
LIFE VEST STOWAGE

OBSERVER SEAT ADJUSTMENT

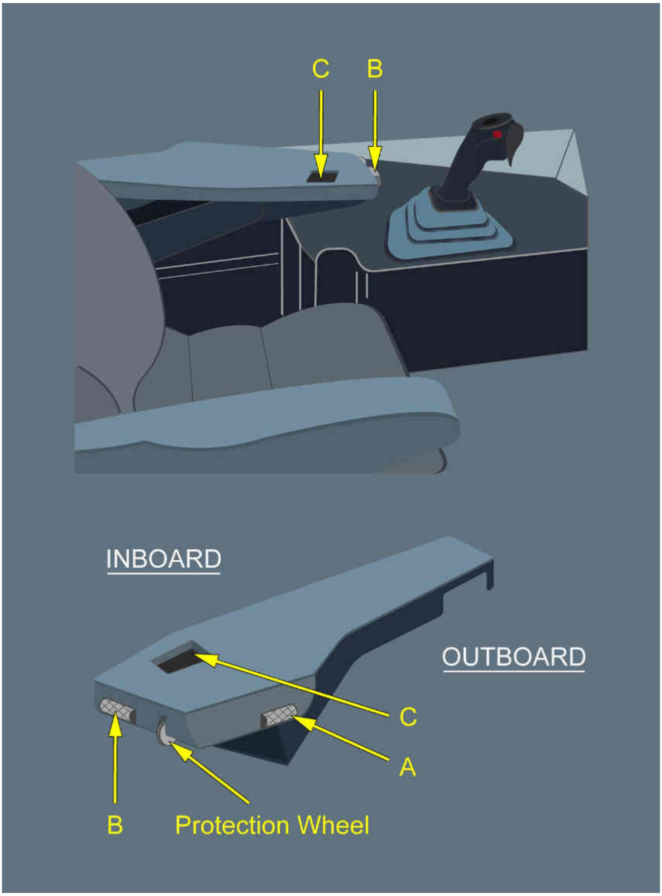
Ident.: DSC-25-10-30-00000995.0001001 / 21 MAR 17
Applicable to: ALL

This seat has three positions :

- Normal : Centered on aircraft axis.
- Intermediate : Clear of the cockpit entrance.
- Stowed : Seat vertical and headrest folded back. The seat is usable in this position, and does not impede access to the documents and equipment on the right side of the cockpit.

PILOT SEAT OUTBOARD ARMREST ADJUSTMENT

Ident.: DSC-25-10-30-00018431.0001001 / 26 NOV 19
Applicable to: ALL



The position of the armrest adjusts as follows:
A. Height adjustment
B. Pitch adjustment

The armrest also has a memory display (C) that displays pitch and height.

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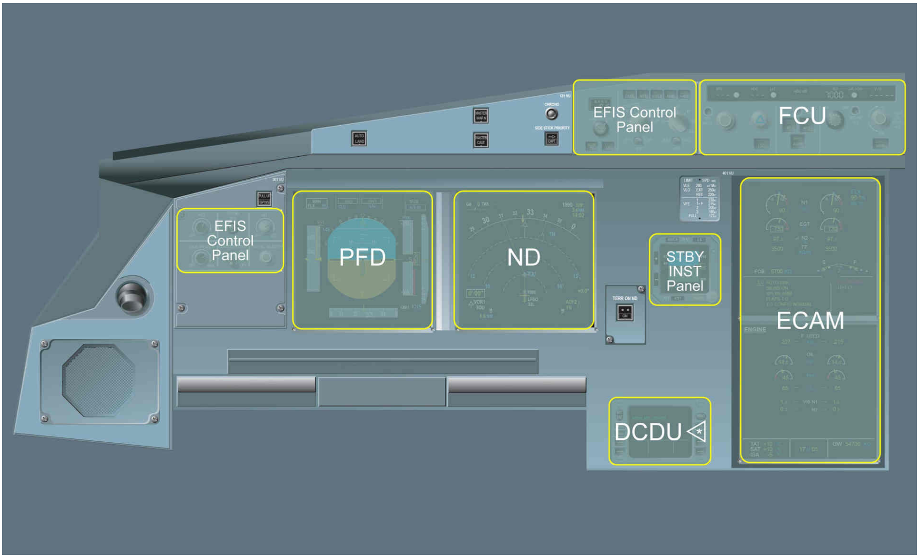
MAIN INSTRUMENT PANEL - CAPTAIN SIDE

Ident.: DSC-25-10-40-00020851.0001001 / 21 MAR 17

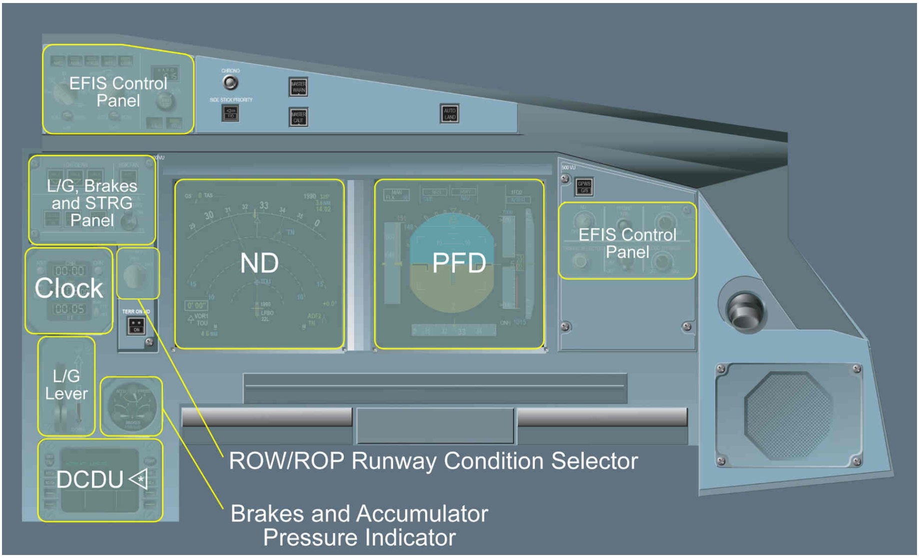
Applicable to: ALL


EFIS Control Panel
FCU
EFIS Control Panel
PFD
ND
STBY INST Panel
ECAM
DCDU

MAIN INSTRUMENT PANEL - FIRST OFFICER SIDE

Ident.: DSC-25-10-40-00020852.0002001 / 28 MAY 20

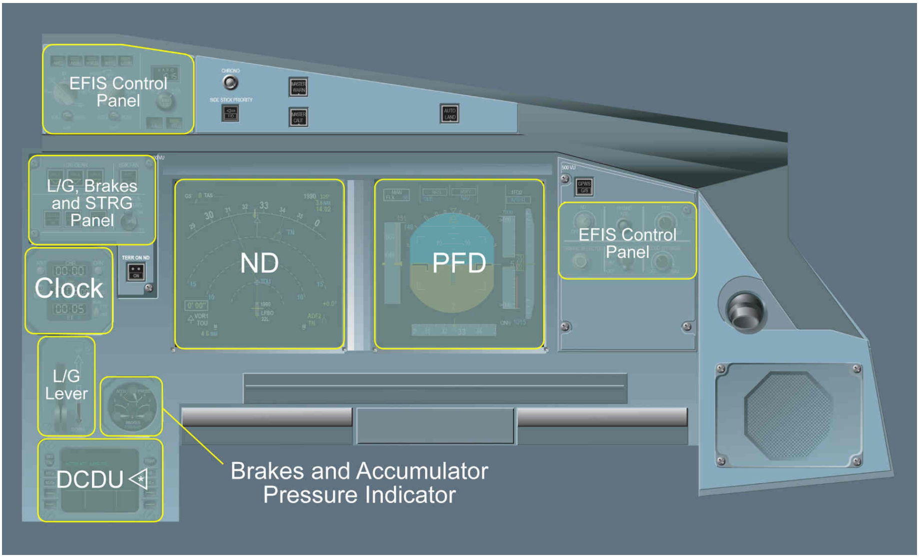
1 **Applicable to: MSN 10949-11597**


EFIS Control Panel
L/G, Brakes and STRG Panel
Clock
L/G Lever
DCDU
ND
PFD
EFIS Control Panel
ROW/ROP Runway Condition Selector
Brakes and Accumulator Pressure Indicator

MAIN INSTRUMENT PANEL - FIRST OFFICER SIDE

Ident.: DSC-25-10-40-00020852.0001001 / 25 MAR 20

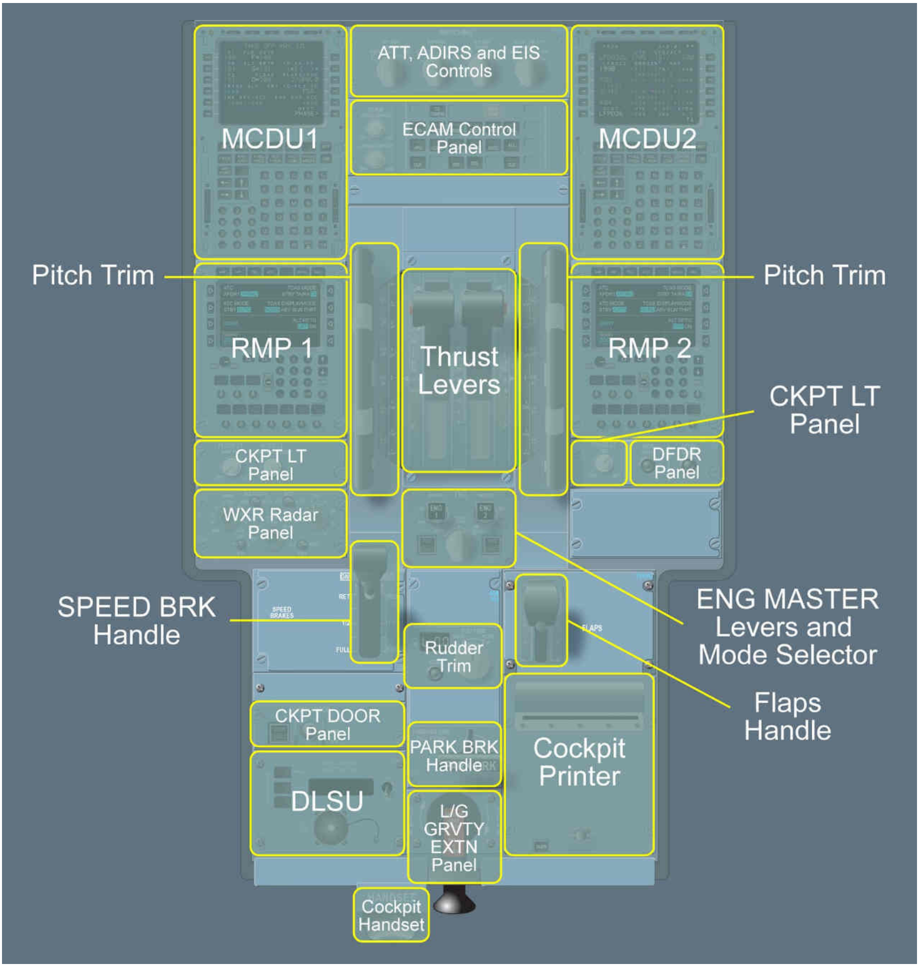
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324


EFIS Control Panel
L/G, Brakes and STRG Panel
Clock
L/G Lever
DCDU
ND
PFD
EFIS Control Panel
Brakes and Accumulator Pressure Indicator

Intentionally left blank

PEDESTAL

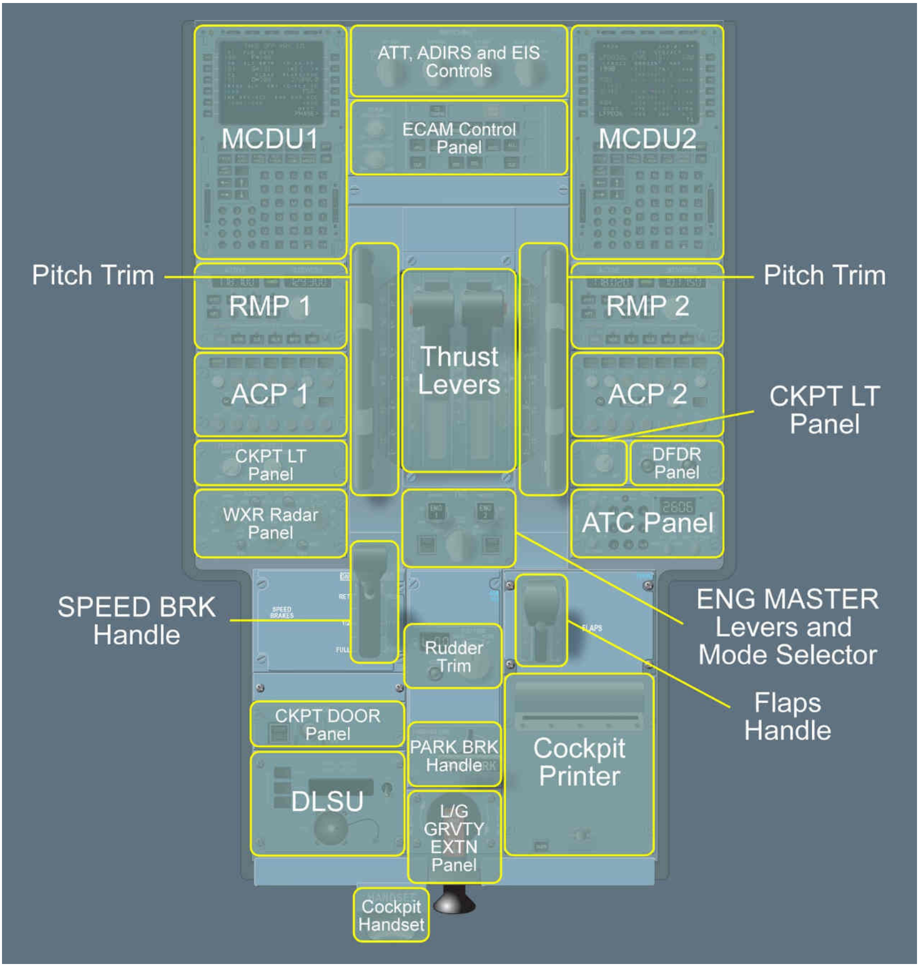
1 Ident.: DSC-25-10-50-00020854.0004001 / 05 MAY 22
Applicable to: MSN 11482-11597


ATT, ADIRS and EIS Controls
ECAM Control Panel
MCDU1
MCDU2
Pitch Trim
Pitch Trim
RMP 1
Thrust Levers
RMP 2
CKPT LT Panel
CKPT LT Panel
DFDR Panel
WXR Radar Panel
SPEED BRK Handle
ENG MASTER Levers and Mode Selector
Rudder Trim
Flaps Handle
CKPT DOOR Panel
PARK BRK Handle
Cockpit Printer
DLSU
L/G GRVTY EXTN Panel
Cockpit Handset

PEDESTAL

Ident.: DSC-25-10-50-00020854.0003001 / 05 MAY 22

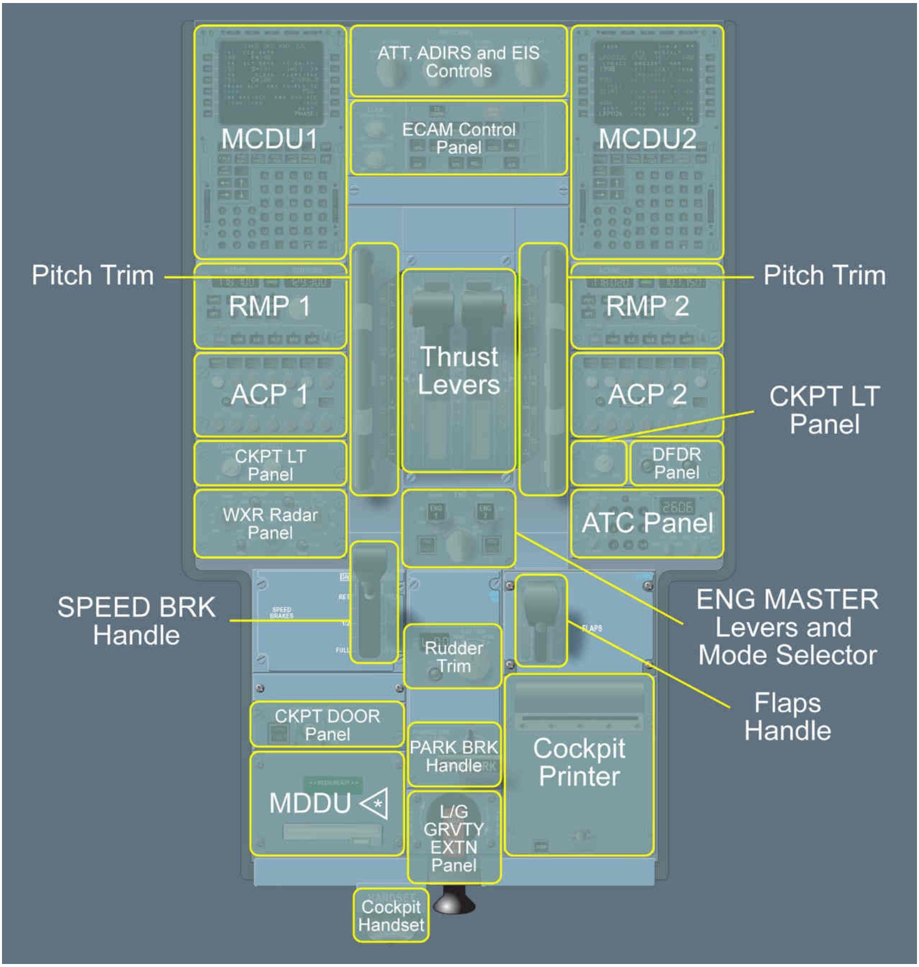
2 **Applicable to: MSN 10949-11293**


ATT, ADIRS and EIS Controls
MCDU1
ECAM Control Panel
MCDU2
Pitch Trim
RMP 1
Thrust Levers
RMP 2
Pitch Trim
ACP 1
ACP 2
CKPT LT Panel
CKPT LT Panel
DFDR Panel
WXR Radar Panel
ATC Panel
SPEED BRK Handle
ENG MASTER Levers and Mode Selector
Rudder Trim
Flaps Handle
CKPT DOOR Panel
PARK BRK Handle
Cockpit Printer
DLSU
L/G GRVTY EXTN Panel
Cockpit Handset

PEDESTAL

Ident.: DSC-25-10-50-00020854.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324


MCDU1
ATT, ADIRS and EIS Controls
ECAM Control Panel
MCDU2
Pitch Trim
RMP 1
Thrust Levers
RMP 2
Pitch Trim
ACP 1
ACP 2
CKPT LT Panel
CKPT LT Panel
DFDR Panel
WXR Radar Panel
ATC Panel
SPEED BRK Handle
ENG MASTER Levers and Mode Selector
Rudder Trim
Flaps Handle
CKPT DOOR Panel
PARK BRK Handle
Cockpit Printer
MDDU
L/G GRVTY EXTN Panel
Cockpit Handset

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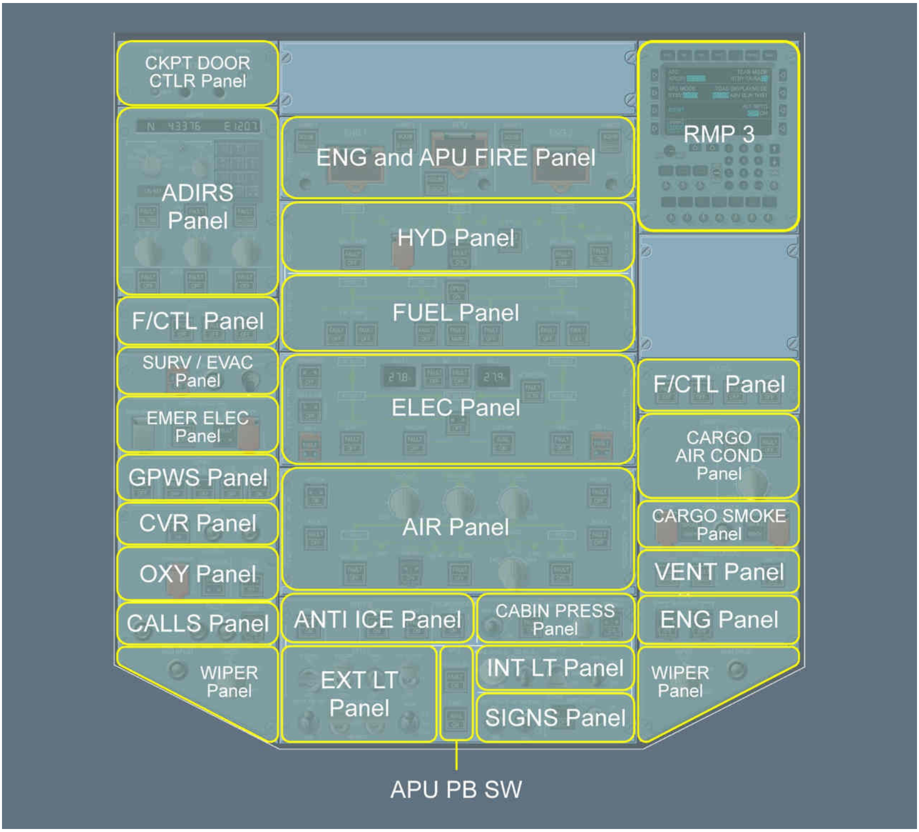
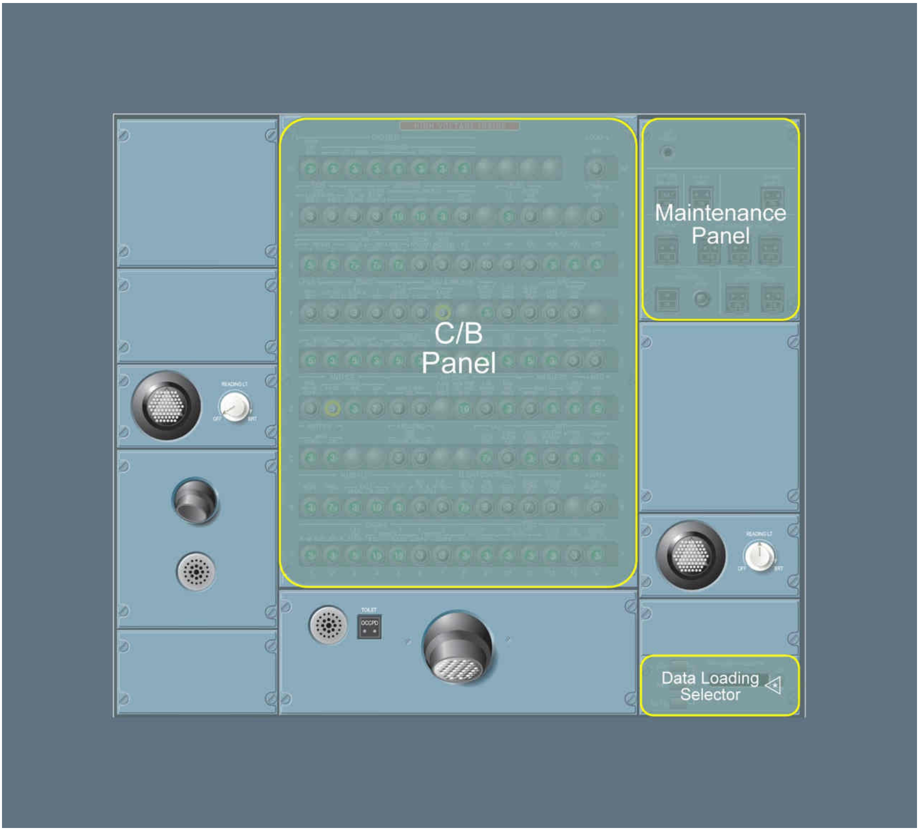
OVERHEAD PANEL

1 Ident.: DSC-25-10-60-00020855.0007001 / 28 MAY 20
Applicable to: MSN 11482-11597

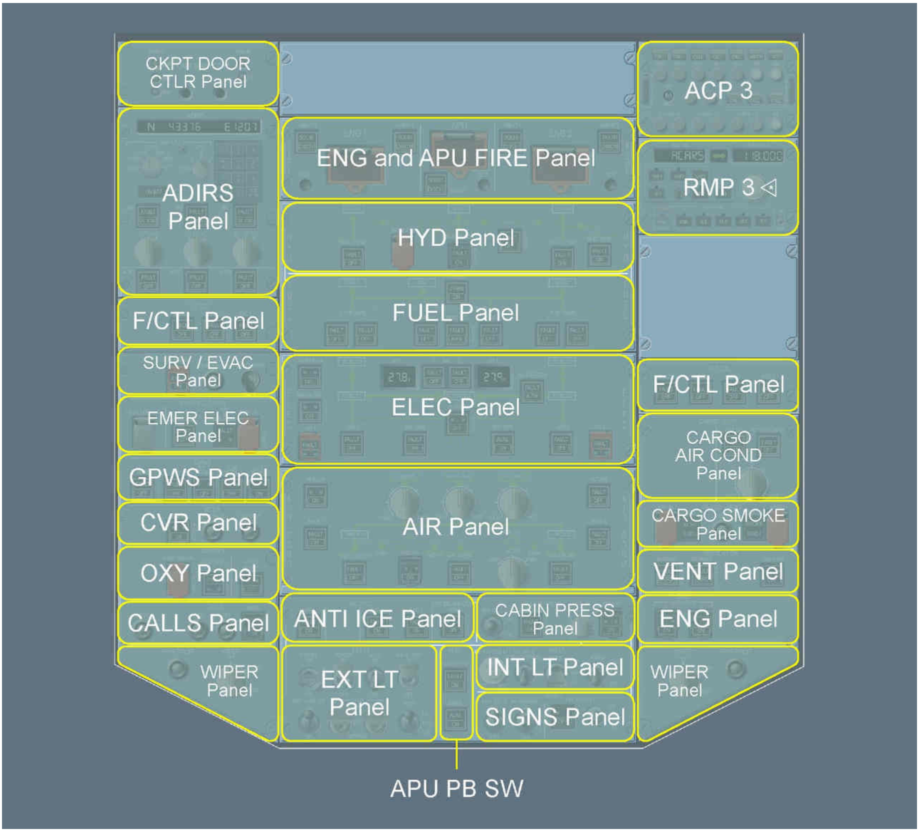

CKPT DOOR CTLR Panel
ADIRS Panel
F/CTL Panel
SURV / EVAC Panel
EMER ELEC Panel
GPWS Panel
CVR Panel
OXY Panel
CALLS Panel
WIPER Panel
ENG and APU FIRE Panel
HYD Panel
FUEL Panel
ELEC Panel
AIR Panel
ANTI ICE Panel
CABIN PRESS Panel
EXT LT Panel
INT LT Panel
SIGNS Panel
APU PB SW
RMP 3
F/CTL Panel
CARGO AIR COND Panel
CARGO SMOKE Panel
VENT Panel
ENG Panel
WIPER Panel

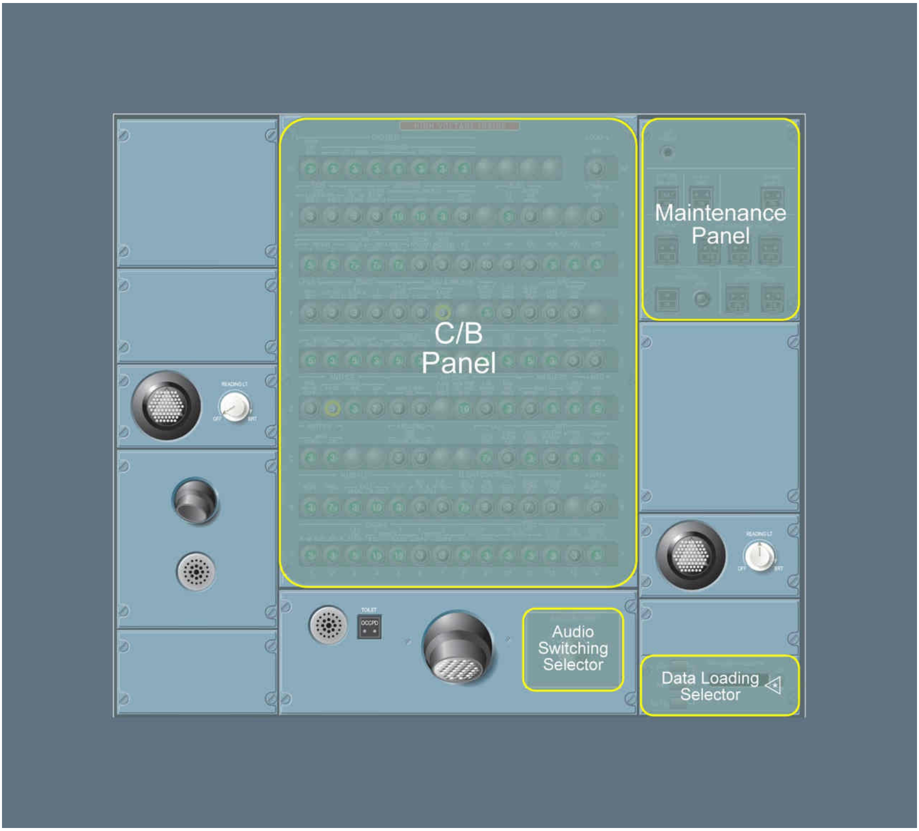

Maintenance Panel
C/B Panel
Data Loading Selector
READING LT
OFF
BRT
TOILET
OCCPD

OVERHEAD PANEL

Ident.: DSC-25-10-60-00020855.0005001 / 03 NOV 22

Applicable to: MSN 10949-11293

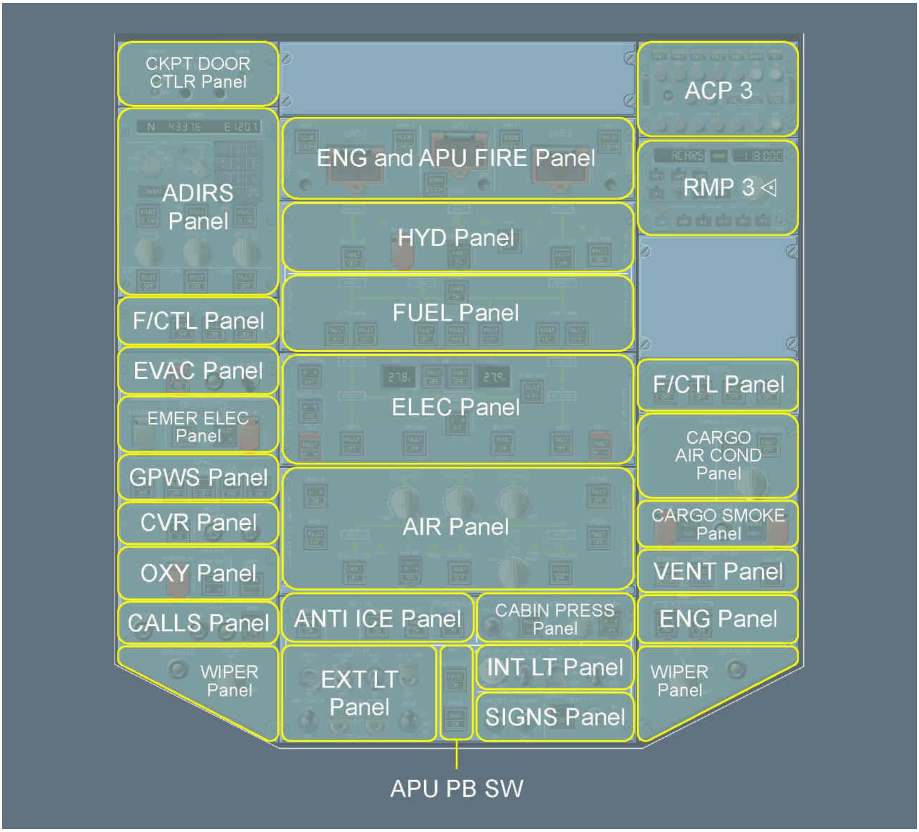

CKPT DOOR CTLR Panel
ACP 3
ENG and APU FIRE Panel
ADIRS Panel
RMP 3
HYD Panel
F/CTL Panel
FUEL Panel
SURV / EVAC Panel
F/CTL Panel
ELEC Panel
EMER ELEC Panel
CARGO AIR COND Panel
GPWS Panel
CVR Panel
AIR Panel
CARGO SMOKE Panel
OXY Panel
VENT Panel
CALLS Panel
ANTI ICE Panel
CABIN PRESS Panel
ENG Panel
WIPER Panel
EXT LT Panel
INT LT Panel
WIPER Panel
SIGNS Panel
APU PB SW

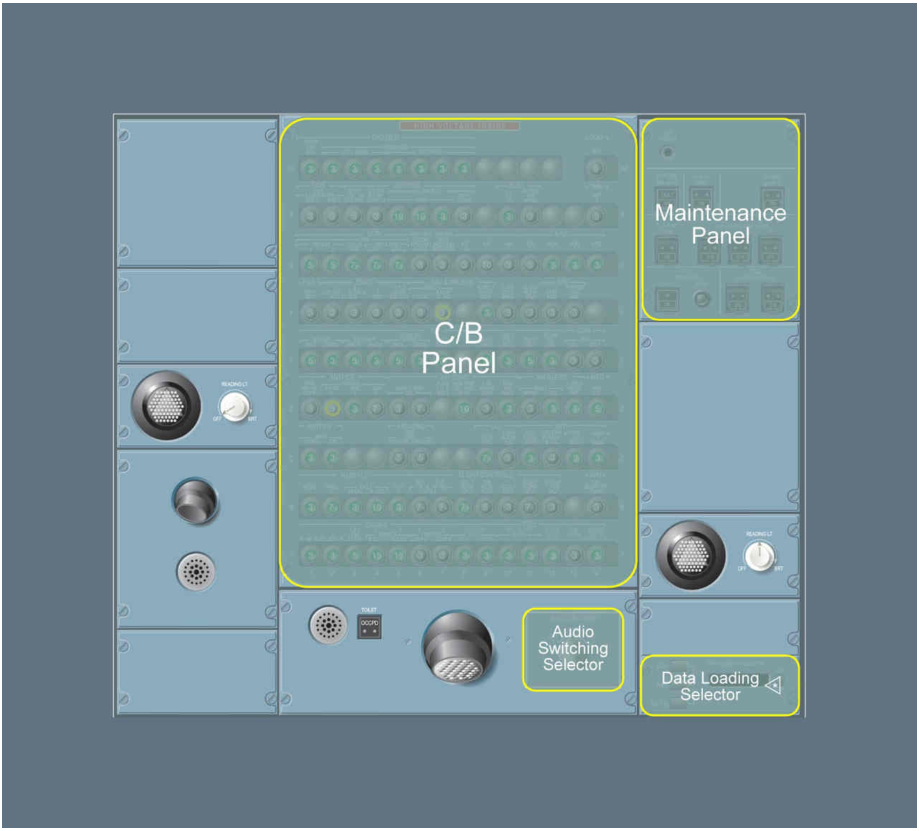

C/B
Panel
Maintenance
Panel
Audio
Switching
Selector
Data Loading
Selector
READING LT
OFF
BRT
TOILET
OCCPD

OVERHEAD PANEL

Ident.: DSC-25-10-60-00020855.0001001 / 03 NOV 22

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

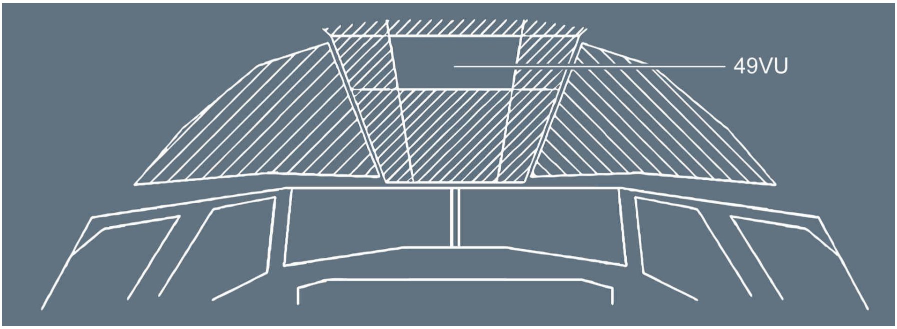

CKPT DOOR CTLR Panel
ACP 3
ENG and APU FIRE Panel
RMP 3
ADIRS Panel
HYD Panel
F/CTL Panel
FUEL Panel
EVAC Panel
F/CTL Panel
ELEC Panel
EMER ELEC Panel
CARGO AIR COND Panel
GPWS Panel
AIR Panel
CARGO SMOKE Panel
CVR Panel
VENT Panel
OXY Panel
CALLS Panel
ANTI ICE Panel
CABIN PRESS Panel
ENG Panel
WIPER Panel
EXT LT Panel
INT LT Panel
SIGNS Panel
WIPER Panel
APU PB SW


Maintenance Panel
C/B Panel
Audio Switching Selector
Data Loading Selector

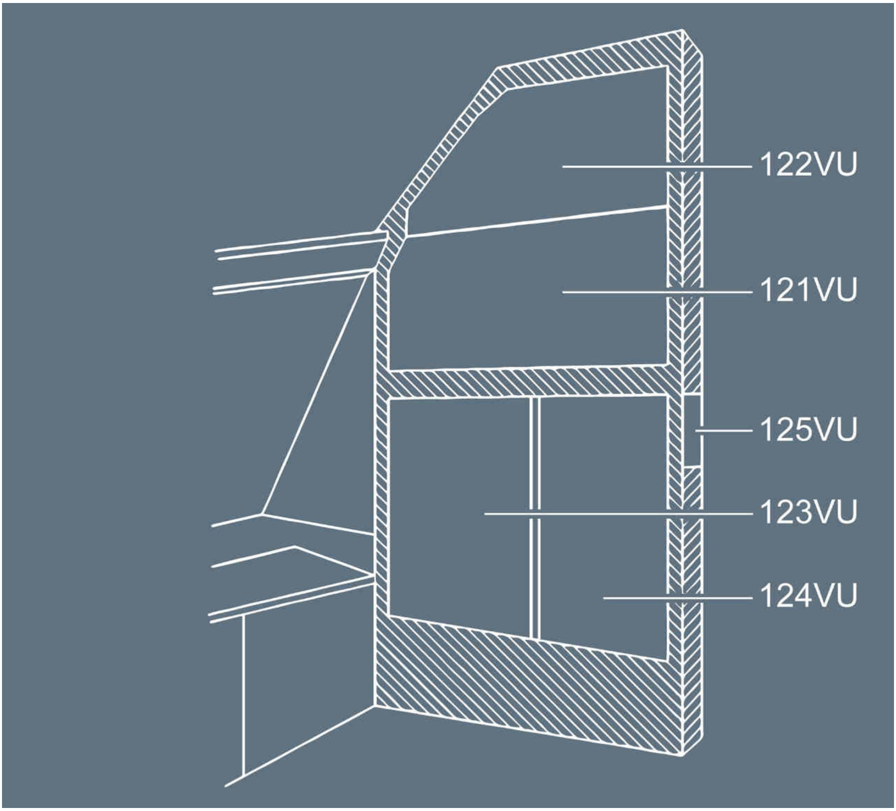
C/B PANELS

Ident.: DSC-25-10-70-00018436.0001001 / 17 MAR 17
Applicable to: ALL

OVERHEAD PANEL



RIGHT REAR PANEL


122VU
121VU
125VU
123VU
124VU

GENERAL

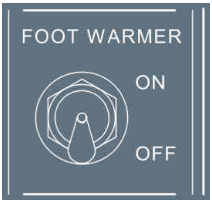
Ident.: DSC-25-10-80-00017009.0001001 / 17 MAR 17
Applicable to: ALL

The foot warmer system ◁ has a heating panel attached to each pedal. The temperature of the panels is about 20 °C (68 °F).

CONTROLS

Ident.: DSC-25-10-80-00017008.0001001 / 17 MAR 17
Applicable to: ALL

The Foot Warmer ON/OFF control switch ◁ is located on the main instrument panel, on the captain's and first officer's side.



FOOT WARMER sw

Operation of the associated heating panel on captain's pedals or first officer's pedals.

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EMERGENCY EQUIPMENT

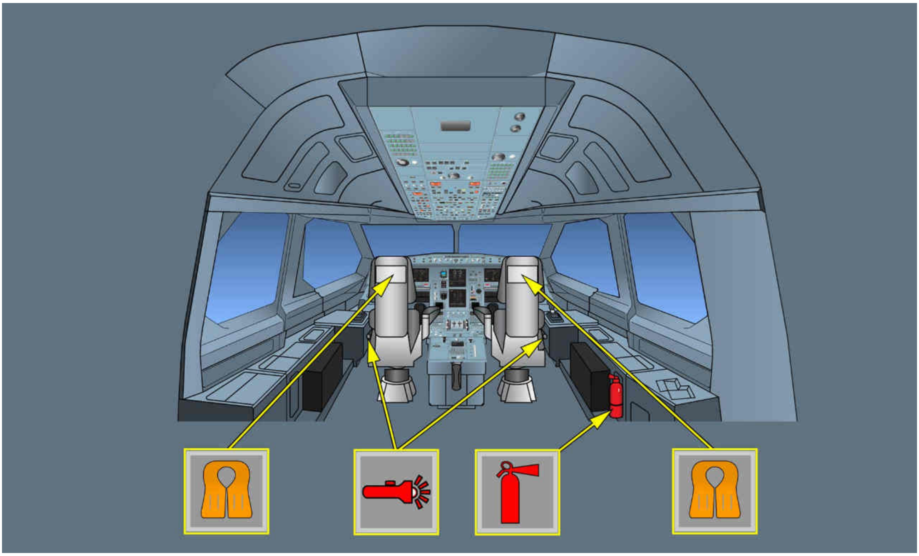
Applicable to: ALL

Ident.: DSC-25-20-10-00022066.0001001 / 04 DEC 17

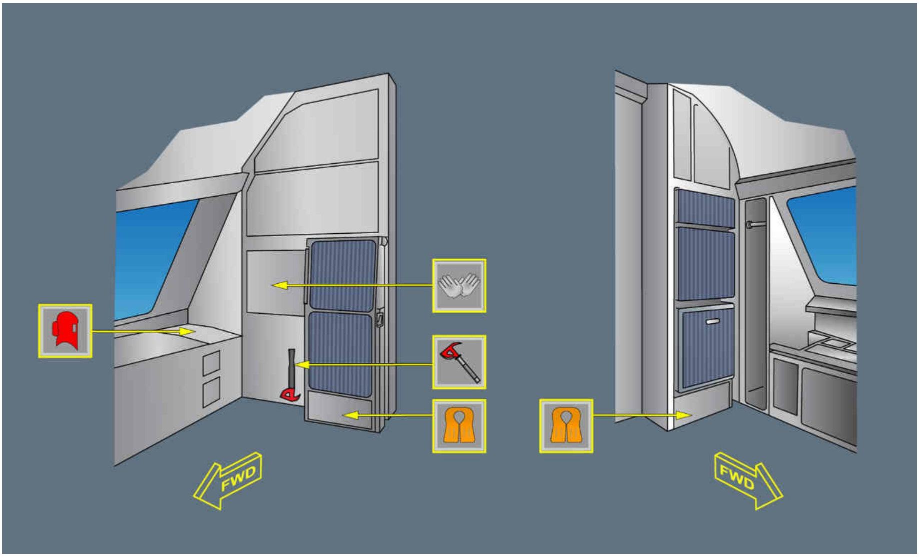
Placards indicate the location of emergency equipment on board the aircraft. To consult the list of symbols, *Refer to CCOM/11-010 Symbol List*.

Ident.: DSC-25-20-10-00022067.0001001 / 04 DEC 18

Cockpit Front View



Cockpit Rear View



Note: *The illustration shows the typical emergency equipment in this area. The location and the type of emergency equipment may vary. Placards indicate the location and the type.*

Ident.: DSC-25-20-10-00022068.0001001 / 04 DEC 17

For the description of the cabin emergency equipment, Refer to CCOM/EMERGENCY EQUIPMENT/PORTABLE EMERGENCY EQUIPMENT.

AIRCRAFT SYSTEMS

FIRE PROTECTION

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DSC-26-10 General

Description.......A

DSC-26-20 Engines and APU

DSC-26-20-10 System Description

Fire Detection.......A
Extinguishing.......B
Fire Detection and Detection Fault Logic.......C

DSC-26-20-20 Controls and Indicators

FIRE Panel.......A
ENG MASTER Panel.......B
EXTERNAL POWER Panel.......C
MAINTENANCE Panel.......D

DSC-26-30 Avionics Bay

DSC-26-30-10 System Description

Smoke Detection.......A

DSC-26-30-20 Controls and Indicators

EMER ELEC PWR Panel.......A
VENTILATION Panel.......B

DSC-26-40 Lavatory

DSC-26-40-10 System Description

Smoke Detection.......A
Wastebin Fire Extinguishing.......B

DSC-26-50 Cargo Compartments

DSC-26-50-10 System Description

Smoke Detection.......A
Fire Extinguishing.......B

DSC-26-50-20 Controls and Indicators

CARGO SMOKE Panel.......A

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Localization Title	Toc Index	ID	Reason
DSC-26-50-10 Fire Extinguishing	B	3	Documentation update: Addition of "Fire Extinguishing" documentary unit
DSC-26-50-20 CARGO SMOKE Panel	A	1	Documentation update: Addition of "CARGO SMOKE Panel" documentary unit
DSC-26-50-20 BTL Light	A	7	Documentation update: Addition of "BTL Light" documentary unit
DSC-26-50-10 Smoke Detection	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-26-50-10 Smoke Detection	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-26-50-10 Fire Extinguishing	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-26-50-20 CARGO SMOKE Panel	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-26-50-20 SMOKE Light	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-26-50-20 TEST pb	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-26-50-20 DISCH Light	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-26-50-20 DISCH pb	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DESCRIPTION

Ident.: DSC-26-10-00021387.0006001 / 17 MAR 17
Applicable to: ALL

The fire and smoke protection system includes:
- Fire and overheat detection for the engines and APU
- Smoke detection for the cargo compartments, the lavatories, and the avionics bay
- Fire extinguishing for the cargo compartments, the engines, the APU, and the lavatories.

In addition, the aircraft includes portable fire extinguishers in the cockpit and in the cabin areas.

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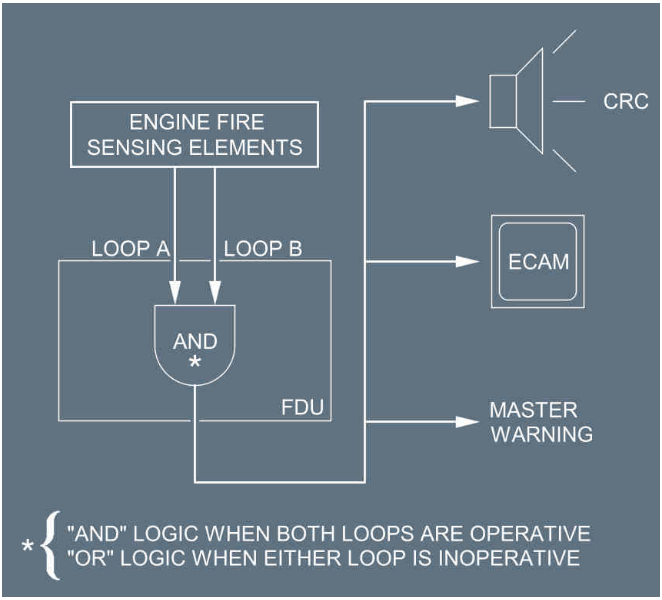
FIRE DETECTION

Ident.: DSC-26-20-10-00021393.0001001 / 17 MAR 17
Applicable to: ALL

The engines and the APU each have a fire and overheat detection system consisting of:
- Two identical detection loops (A and B) mounted in parallel
- A Fire Detection Unit (FDU).

The fire detection loops consist of:
- Three or four (as installed) engine fire sensing elements, in the pylon nacelle, in the engine core, and in the engine fan section
- One fire sensing element in the APU compartment.


ENGINE FIRE SENSING ELEMENTS
LOOP A
LOOP B
AND *
FDU
CRC
ECAM
MASTER WARNING
* "AND" LOGIC WHEN BOTH LOOPS ARE OPERATIVE
"OR" LOGIC WHEN EITHER LOOP IS INOPERATIVE

When a sensing element is subjected to heat, it sends a signal to the FDU. As soon as loops A and B detect temperature above a preset level, the fire warning system is triggered.
A fault in one loop (break or loss of electrical supply) does not affect the warning system and the unaffected loop still protects the aircraft.

EXTINGUISHING

Ident.: DSC-26-20-10-00021395.0001001 / 04 JUL 17
Applicable to: ALL

ENGINES

Each engine has two fire extinguisher bottles, with electrically-operated squibs to discharge their agents. Each squib has a dual electric supply. The flight crew controls the discharge of the fire extinguisher bottles from the FIRE panel in the cockpit.

APU

The APU has one fire extinguisher bottle, with two electrically-operated squibs to discharge its agent. The flight crew controls the discharge of the fire extinguisher bottle from the FIRE panel in the cockpit. When an APU fire is detected on the ground, the APU automatically shuts down, and the extinguisher bottle discharges automatically.

FIRE DETECTION AND DETECTION FAULT LOGIC

Ident.: DSC-26-20-10-00021394.0001001 / 26 OCT 22
Applicable to: ALL

The FDUs process all the warnings and cautions originating in the sensing elements.

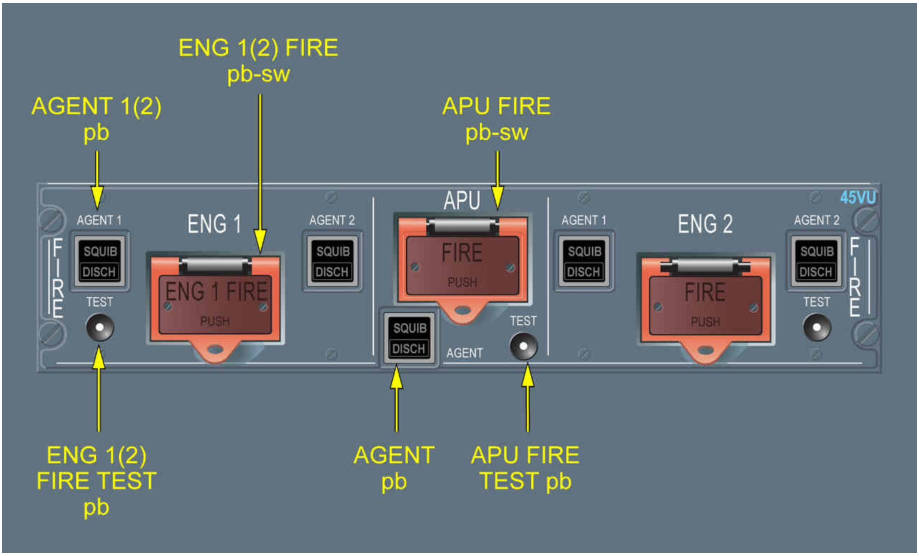
A fire warning appears, if:
- Both loops A and B send a fire signal, or
- One loop sends a fire signal and the other one is failed, or
- Breaks occur in both loops within 5 s of each other (flame effect), or
- A test is performed on the FIRE panel

A loop-fault caution appears, if the associated loop is failed.

FIRE PANEL

Applicable to: ALL

Ident.: DSC-26-20-20-10-00021396.0002001 / 05 MAY 22


ENG 1(2) FIRE
pb-sw
AGENT 1(2)
pb
APU FIRE
pb-sw
45VU
AGENT 1
ENG 1
AGENT 2
APU
AGENT 1
ENG 2
AGENT 2
FIRE
SQUIB
DISCH
TEST
ENG 1 FIRE
PUSH
FIRE
PUSH
AGENT
TEST
FIRE
PUSH
ENG 1(2)
FIRE TEST
pb
AGENT
pb
APU FIRE
TEST pb

Ident.: DSC-26-20-20-10-00021415.0001001 / 10 MAY 22

ENG 1(2) FIRE PB-SW

The PB-SW normal position is in, and guarded. When the flight crew pushes it, the PB-SW is released and sends an electrical signal that performs the following for the corresponding engine:

- Silences the aural fire warning
- Arms the fire extinguisher squibs
- Closes the low-pressure fuel valve
- Closes the hydraulic fire shut off valve
- Closes the engine bleed valve
- Closes the pack flow control valve
- Cuts off the FADEC power supply
- Deactivates the IDG.

The red lights come on, regardless of the PB-SW position, whenever the fire warning for the corresponding engine is activated.

Ident.: DSC-26-20-20-10-00021420.0001001 / 10 MAY 22

AGENT 1(2) PB

Both AGENT pbs of an affected engine become active when the flight crew releases the ENG 1(2) FIRE pb-sw.
A brief push on the PB discharges the corresponding fire agent.

- “SQUIB” comes on white when the flight crew releases the ENG 1(2) FIRE pb-sw to help the flight crew identify the AGENT pb to be activated.
- “DISCH” comes on amber when the corresponding fire extinguisher bottle has lost pressure.

Ident.: DSC-26-20-20-10-00021421.0001001 / 10 MAY 22

ENG 1(2) FIRE TEST PB

This PB tests the operation of the fire detection and extinguishing system for ENG 1(2).

When pressed:
- A CRC sounds
- The MASTER WARNING lights flash
- ENG FIRE warning appears on ECAM.
- On the FIRE panel:
  - The ENG 1(2) FIRE pb-sw lights up red
  - The SQUIB lights come on white if discharge supplies are available
  - The DISCH lights come on amber.
- On the ENG MASTER panel (pedestal):
  - The FIRE lights come on red.

Note: *The FIRE lights do not illuminate in case of Engine Fire Detection Loop A fault on the Engine 1 or Engine Fire Detection Loop B fault on the Engine 2.*

Ident.: DSC-26-20-20-10-00021423.0001001 / 10 MAY 22

APU FIRE PB-SW

The PB-SW normal position is in, and guarded. When the flight crew pushes it, the PB-SW is released and sends an electrical signal that performs the following for the APU:
- Shuts down the APU
- Silences the aural warning
- Arms the squib on the APU fire extinguisher
- Closes the low-pressure fuel valve
- Shuts off the APU fuel pump
- Closes the APU bleed valve and X bleed valve and deactivates the APU generator.

The red lights come on, regardless of the PB-SW position, whenever an APU fire warning is activated.

Ident.: DSC-26-20-20-10-00021424.0001001 / 10 MAY 22

AGENT PB

The APU AGENT pb becomes active when the flight crew releases the APU FIRE pb-sw.
A brief push on the pushbutton discharges the corresponding fire agent.

- “SQUIB” comes on white when the pilot releases the APU FIRE pb-sw.
- “DISCH” comes on amber when the fire extinguisher bottle has lost pressure.

Note: *A red disk, which is outside at the rear of the fuselage, signals that the agent is not discharged overboard due to bottle overpressure.*

Ident.: DSC-26-20-20-10-00021425.0001001 / 10 MAY 22

APU FIRE TEST PB

This PB tests the operation of the APU fire detection and extinguishing system.

When pressed:
- A CRC sounds
- The MASTER WARN light flash
- APU FIRE warning appears on ECAM.
- On the FIRE panel:
  - The APU FIRE pb-sw lights up red
  - The SQUIB light comes on white if discharge supplies are available
  - The DISCH light comes on amber.

Note: *The automatic shutdown of the APU on ground may occur if the flight crew performs this test for more than 3 seconds.*

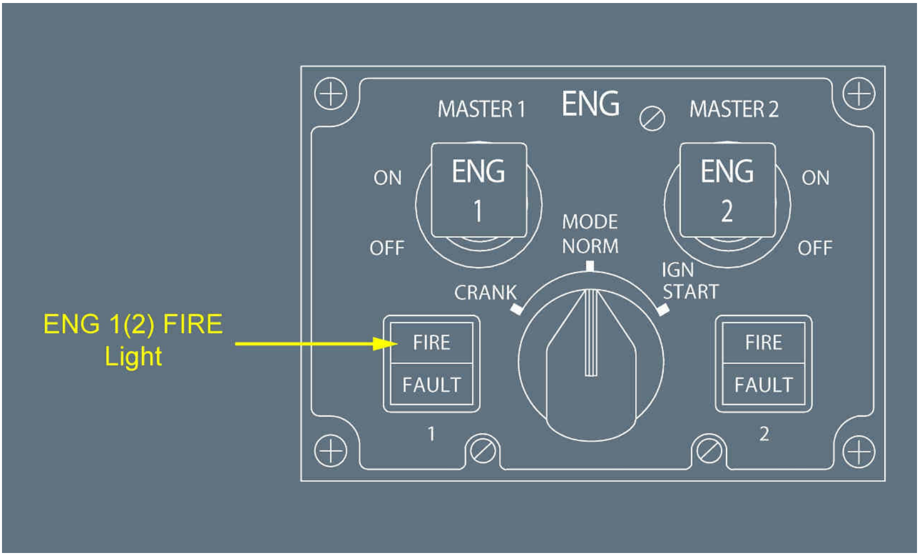
Note: *If the fire test is performed on ground with only batteries to supply the electrical network, both of the following apply:*

- *The SQUIB light and DISCH light come on, without ECAM warnings*
- *The red APU FIRE pb-sw light partially comes on, as one of the sets of bulbs is not electrically available.*

ENG MASTER PANEL

Applicable to: ALL

Ident.: DSC-26-20-20-20-00021427.0001001 / 17 MAR 17


ENG 1(2) FIRE
Light
MASTER 1
ENG
MASTER 2
ON
ENG
1
OFF
ENG
2
ON
OFF
MODE
NORM
CRANK
IGN
START
FIRE
FAULT
1
FIRE
FAULT
2

Ident.: DSC-26-20-20-20-00021428.0001001 / 17 MAR 17

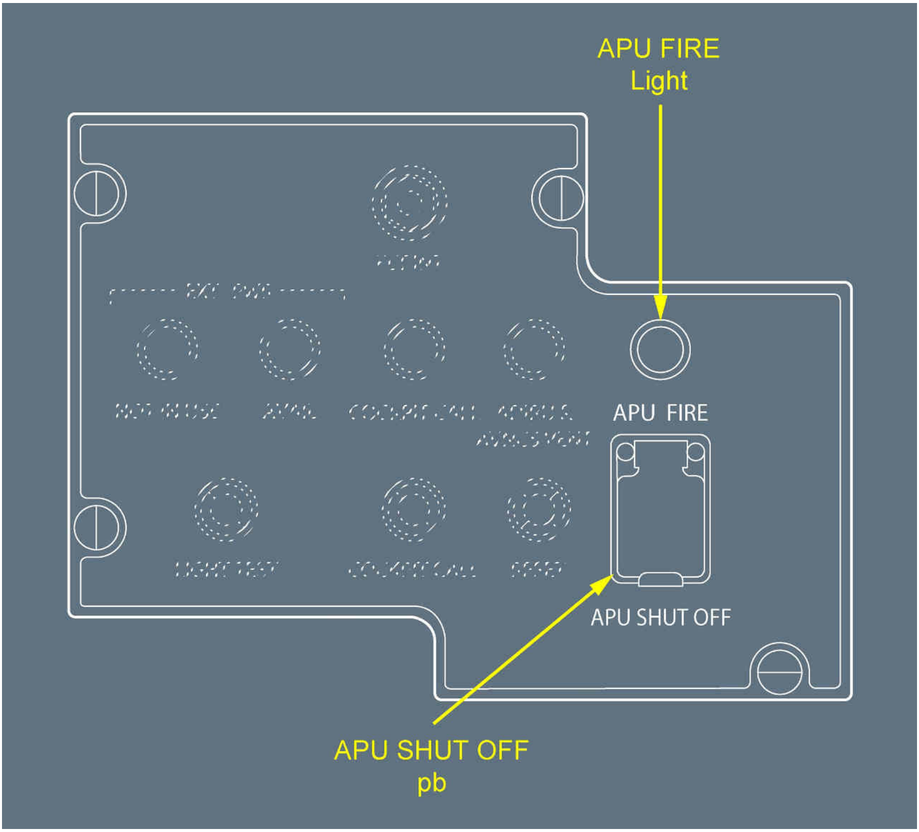
ENG 1(2) FIRE LIGHT

This light identifies the engine to be shutdown in the case of fire.
The light comes on red when an engine fire warning is triggered.

EXTERNAL POWER PANEL

Applicable to: ALL

Ident.: DSC-26-20-20-30-00021429.0001001 / 17 MAR 17



Ident.: DSC-26-20-20-30-00021430.0001001 / 17 MAR 17

APU FIRE LIGHT

The red APU FIRE light comes on and an external warning horn sounds when the system detects an APU fire.
The APU fire extinguisher discharges automatically 3 s after the appearance of the fire warning.
The light goes out when the fire has been extinguished.

Ident.: DSC-26-20-20-30-00021431.0001001 / 17 MAR 17

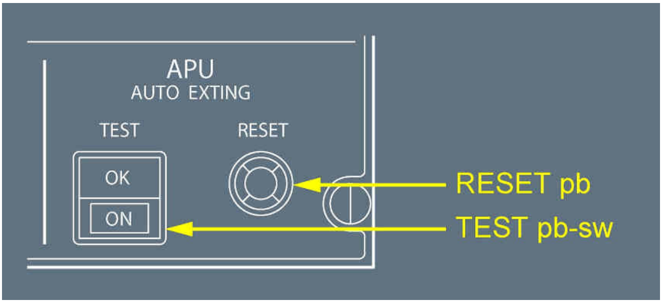
APU SHUT OFF PB

This pushbutton is used for manual APU emergency shutdown, if an emergency situation is detected on ground by the ground crew. When this pushbutton is pressed, the APU low pressure fuel shutoff valve closes, and the ECB receives a signal that starts the shutdown sequence. The shutdown sequence is the same as the APU automatic shutdown sequence, except that there is no cool down cycle. Pressing this pushbutton also silences the external warning horn.

MAINTENANCE PANEL

Applicable to: ALL

Ident.: DSC-26-20-20-40-00021432.0001001 / 17 MAR 17



Ident.: DSC-26-20-20-40-00021435.0001001 / 17 MAR 17

TEST PB-SW

When pressed, tests the following APU circuits:
- Fire warning
- Auto extinguishing
- Shutdown.

During the test sequence, the APU MASTER sw must be ON.
If all circuits are operating correctly, the OK light comes on.

Note: *If the APU was running, it shuts down.*

Ident.: DSC-26-20-20-40-00021436.0001001 / 17 MAR 17

RESET PB

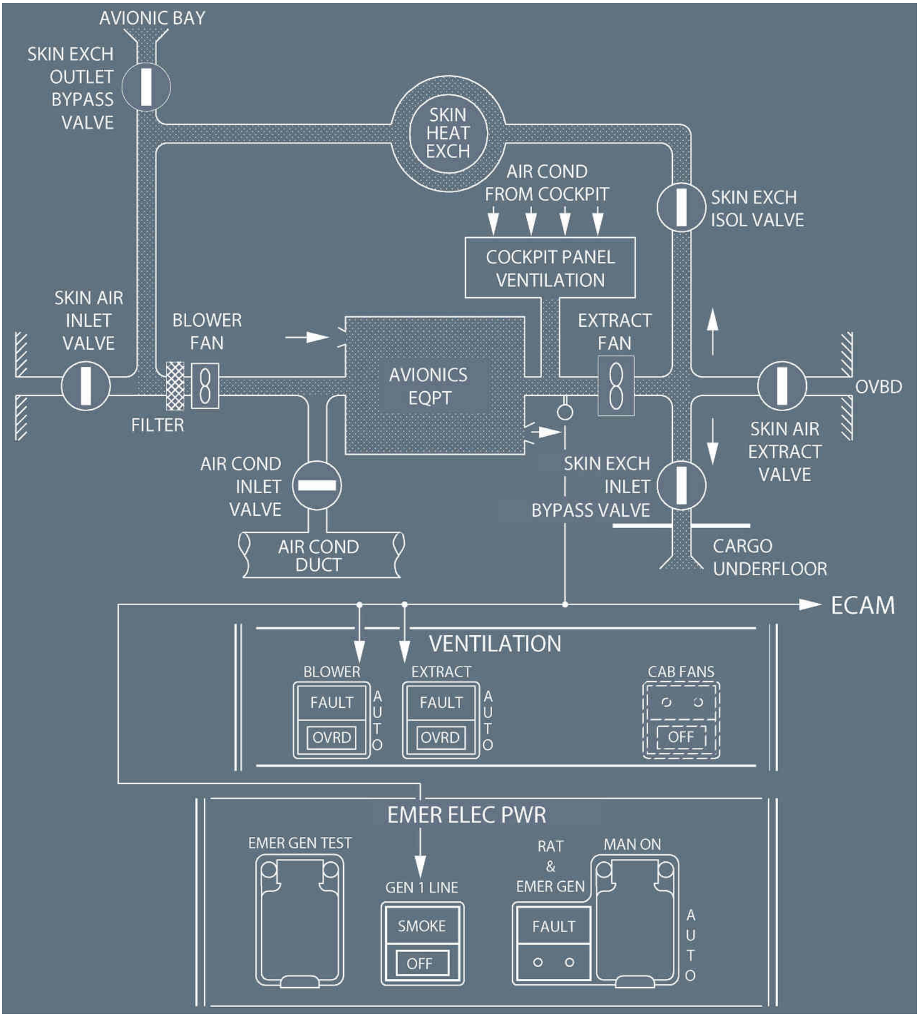
When pressed, resets the test circuit.

SMOKE DETECTION

Ident.: DSC-26-30-10-00021401.0001001 / 17 MAR 17
Applicable to: ALL

The air extraction duct of the avionics ventilation system has one smoke detector.

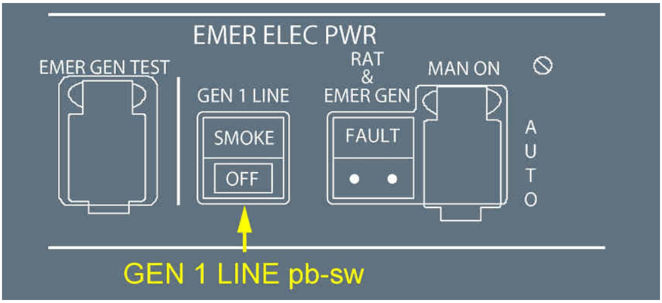
When smoke is detected for more than 5 s:
- The Single Chime (SC) sounds
- The MASTER CAUTION lights flash
- The ECAM AVIONICS SMOKE alert triggers
- On the EMER ELEC PWR panel, the SMOKE light of the GEN 1 LINE pb-sw comes on
- On the VENTILATION panel, the FAULT lights of the BLOWER pb-sw and the EXTRACT pb-sw come on.


AVIONIC BAY
SKIN EXCH OUTLET BYPASS VALVE
SKIN HEAT EXCH
AIR COND FROM COCKPIT
SKIN EXCH ISOL VALVE
COCKPIT PANEL VENTILATION
SKIN AIR INLET VALVE
BLOWER FAN
EXTRACT FAN
AVIONICS EQPT
OVBD
FILTER
SKIN AIR EXTRACT VALVE
AIR COND INLET VALVE
SKIN EXCH INLET BYPASS VALVE
AIR COND DUCT
CARGO UNDERFLOOR
ECAM
VENTILATION
BLOWER
FAULT
OVRD
AUTO
EXTRACT
FAULT
OVRD
AUTO
CAB FANS
OFF
EMER ELEC PWR
EMER GEN TEST
GEN 1 LINE
SMOKE
OFF
RAT & EMER GEN
FAULT
MAN ON
AUTO

EMER ELEC PWR PANEL

Applicable to: ALL

Ident.: DSC-26-30-20-A-00021439.0001001 / 17 MAR 17


EMER ELEC PWR
EMER GEN TEST
GEN 1 LINE
SMOKE
OFF
RAT
&
EMER GEN
FAULT
MAN ON
AUTO
GEN 1 LINE pb-sw

Ident.: DSC-26-30-20-A-00021440.0001001 / 17 MAR 17

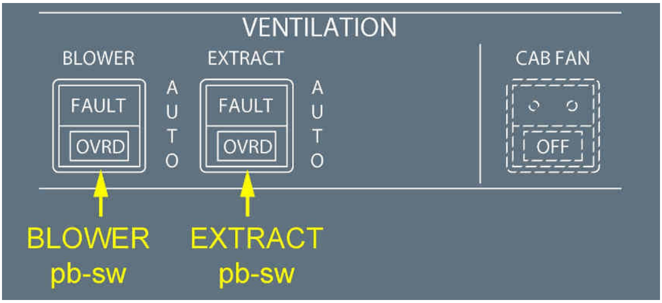
GEN 1 LINE PB-SW

SMOKE light on : The amber light comes on when smoke is detected in the avionics ventilation duct.

VENTILATION PANEL

Applicable to: ALL

Ident.: DSC-26-30-20-B-00021402.0001001 / 17 MAR 17


VENTILATION
BLOWER
FAULT
OVRD
AUTO
EXTRACT
FAULT
OVRD
AUTO
CAB FAN
OFF
BLOWER pb-sw
EXTRACT pb-sw

Ident.: DSC-26-30-20-B-00021437.0001001 / 17 MAR 17

BLOWER PB-SW

FAULT light on	:	The amber light comes on when smoke is detected in the avionics ventilation duct.

Ident.: DSC-26-30-20-B-00021438.0001001 / 17 MAR 17

EXTRACT PB-SW

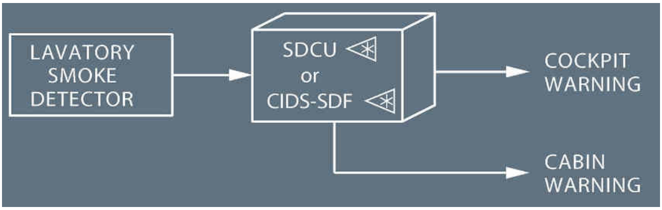
FAULT light on	:	The amber light comes on when smoke is detected in the avionics ventilation duct.

SMOKE DETECTION

Ident.: DSC-26-40-10-00021441.0001001 / 17 MAR 17
Applicable to: ALL

The lavatory smoke detection system consists of:
- One smoke detector, in the air extraction duct of the lavatory
- A double channel Smoke Detection Control Unit (SDCU) ◁ or a Cabin Intercommunication Data Systems (CIDS) with a Smoke Detection Function (SDF) ◁ that triggers the applicable alerts (cockpit and cabin).

In the case of smoke in a lavatory, the detector sends a signal to the SDCU or CIDS, which transmits it to the Flight Warning Computer (FWC) for warning in the cockpit and in the cabin.



WASTEBIN FIRE EXTINGUISHING

Ident.: DSC-26-40-10-00001034.0001001 / 21 MAR 16
Applicable to: ALL

Each lavatory wastebin has an automatic fire extinguishing system.

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SMOKE DETECTION

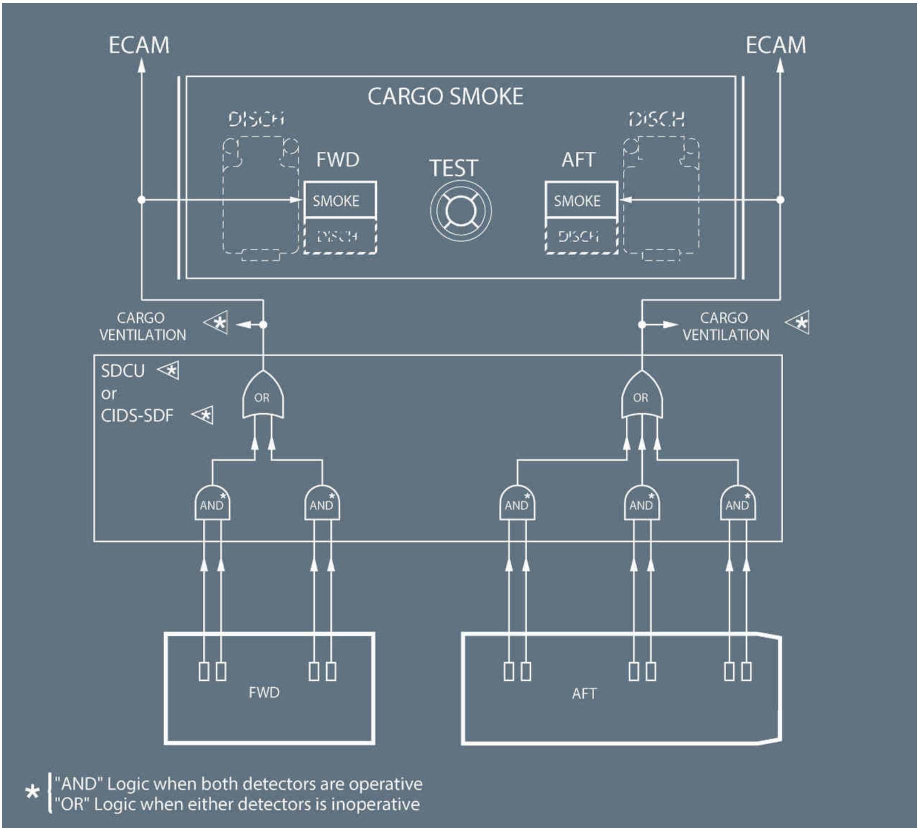
Ident.: DSC-26-50-10-00021442.0004001 / 17 MAR 17

1 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

The forward and aft cargo compartments smoke detection system consists of:
- 4 smoke detectors that are in the forward cargo compartment ceiling panel cavities. Each detector is linked to one of the two detection loops (dual loop principle).
- 6 smoke detectors that are in the aft cargo compartment ceiling panel cavities. Each detector is linked to one of the two detection loops (dual loop principle).
- A Smoke Detection Control Unit (SDCU) ◁ with two identical channels, or a Cabin Intercommunication Data Systems (CIDS) with a Smoke Detection Function (SDF) ◁ , that receives signals from the smoke detectors, and transmits it to the ECAM.

Smoke in one cavity activates the cargo smoke warning if:
- Both smoke detectors detect smoke, or
- One smoke detector detects smoke and the other is inoperative.

Cargo isolation valves ◁ close automatically, and the extraction fan ◁ stops when the cargo smoke warning is activated.


ECAM
ECAM
CARGO SMOKE
DISCH
DISCH
FWD
TEST
AFT
SMOKE
DISCH
SMOKE
DISCH
CARGO VENTILATION
CARGO VENTILATION
SDCU
or
CIDS-SDF
OR
OR
AND
AND
AND
AND
AND
FWD
AFT
* "AND" Logic when both detectors are operative
"OR" Logic when either detectors is inoperative

SMOKE DETECTION

Ident.: DSC-26-50-10-00021442.0003001 / 17 MAR 17

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

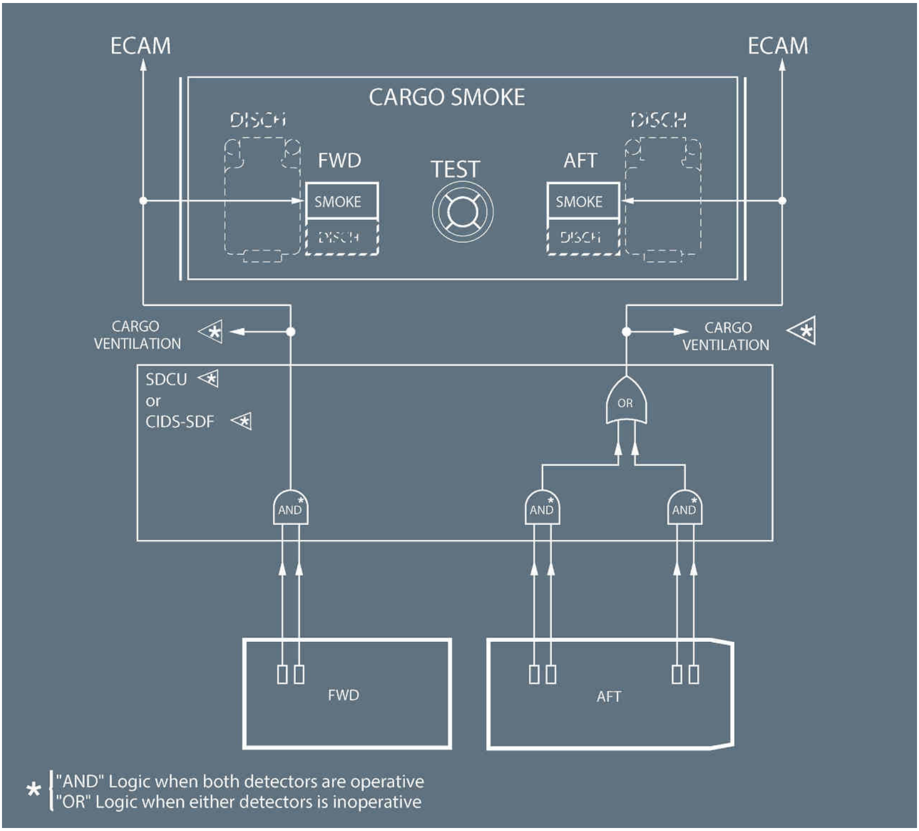
The forward and aft cargo compartments smoke detection system consists of:

- Two smoke detectors that are in the forward cargo compartment ceiling panel cavities. Each detector is linked to one of the two detection loops (dual loop principle).
- Four smoke detectors that are in the aft cargo compartment ceiling panel cavities. Each detector is linked to one of the two detection loops (dual loop principle).
- A Smoke Detection Control Unit (SDCU) ◁ with two identical channels, or a Cabin Intercommunication Data Systems (CIDS) with a Smoke Detection Function (SDF) ◁ , that receives signals from the smoke detectors, and transmits it to the ECAM.

Smoke in one cavity activates the cargo smoke warning if:

- Both smoke detectors detect smoke, or
- One smoke detector detects smoke and the other is inoperative.

Cargo isolation valves ◁ close automatically, and the extraction fan ◁ stops when the cargo smoke warning is activated.


ECAM
ECAM
CARGO SMOKE
DISCH
DISCH
FWD
TEST
AFT
SMOKE
DISCH
SMOKE
DISCH
CARGO VENTILATION
CARGO VENTILATION
SDCU
or
CIDS-SDF
OR
AND
AND
AND
FWD
AFT
* "AND" Logic when both detectors are operative
"OR" Logic when either detectors is inoperative

FIRE EXTINGUISHING

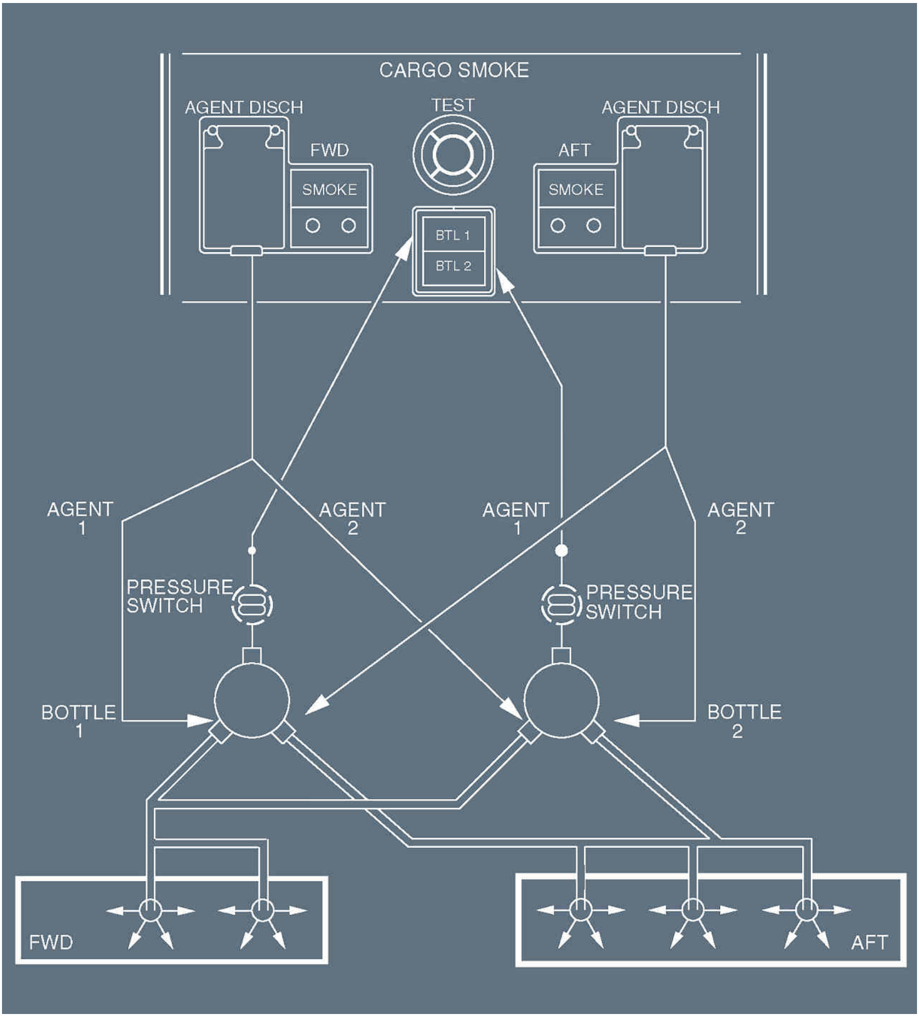
3 Ident.: DSC-26-50-10-00021443.0024001 / 22 MAR 18

Applicable to: MSN 11531

A fire extinguishing system protects the forward and aft cargo compartments.

Two fire bottles with two discharge heads, one for each compartment, supply five nozzles:
- Two nozzles in the forward cargo compartment
- Three nozzles in the aft cargo compartment.

When the FWD(AFT) SMOKE light comes on, the flight crew selects the corresponding DISCH pb. This action simultaneously ignites the corresponding squib on the fire bottles, which then discharge the extinguishing agent into that compartment.
Bottle 1 discharges in approximately 60 s. A flow metering system controls the discharge of bottle 2 for at least 75 min.
When bottle 1(2) is empty, the BTL1(2) light comes on amber.


CARGO SMOKE
AGENT DISCH
FWD
SMOKE
TEST
BTL 1
BTL 2
AFT
SMOKE
AGENT DISCH
AGENT 1
AGENT 2
AGENT 1
AGENT 2
PRESSURE SWITCH
PRESSURE SWITCH
BOTTLE 1
BOTTLE 2
FWD
AFT

FIRE EXTINGUISHING

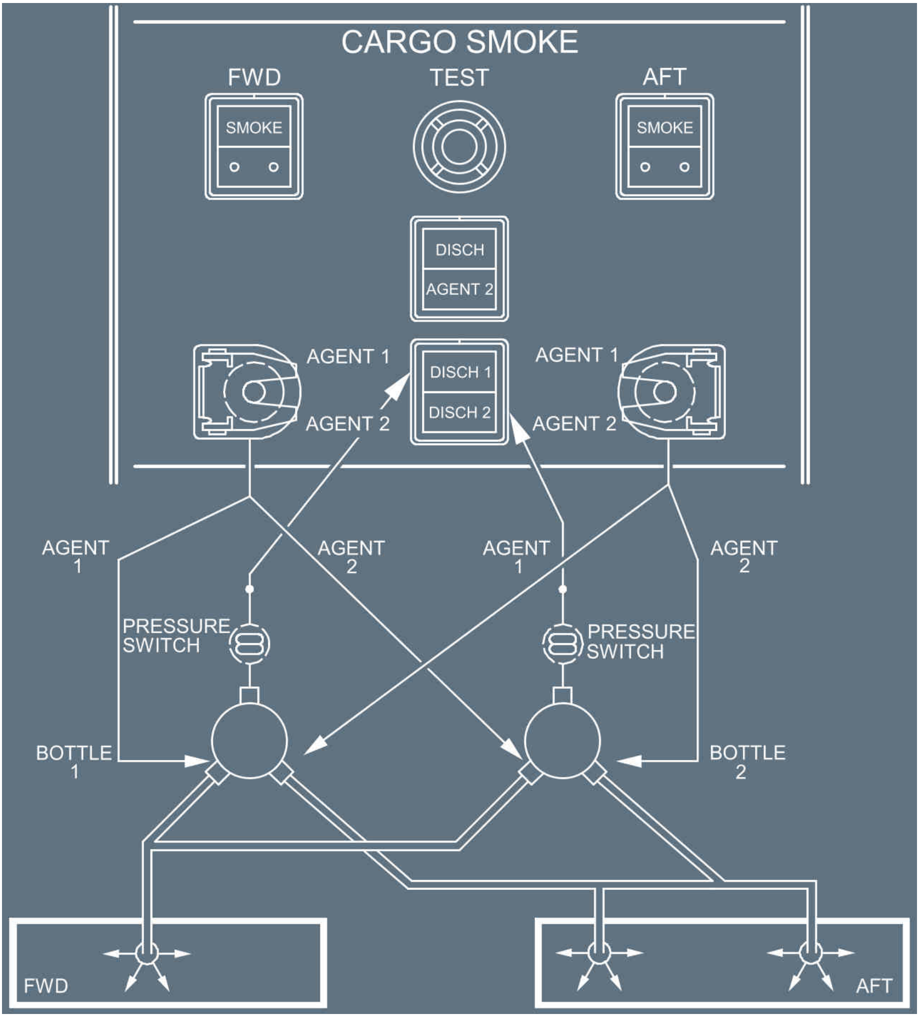
Ident.: DSC-26-50-10-00021443.0007001 / 17 MAR 17

Applicable to: MSN 02014, 04827-04860

A fire extinguishing system protects the forward and aft cargo compartments.

Two fire bottles with two discharge heads, one for each compartment, supply three nozzles:
- One nozzle in the forward cargo compartment
- Two nozzles in the aft cargo compartment.

When the FWD(AFT) SMOKE light comes on, the flight crew selects AGENT 1 with the corresponding DISCH sw. This action ignites the corresponding squib on the fire bottle, which then discharges the extinguishing agent into that compartment.
60 min after the discharge of AGENT 1, the DISCH AGENT 2 light comes on to indicate that the flight crew has to discharge AGENT 2 to maintain the required extinguisher concentration in the cargo compartment.
Bottle 1 discharges in approximately 60 s. A flow metering system controls the discharge of bottle 2 in approximately 90 min. This ensures sufficient agent concentration for 205 min.
When bottle 1(2) is empty, the DISCH 1(2) light comes on amber.


CARGO SMOKE
FWD
TEST
AFT
SMOKE
SMOKE
DISCH
AGENT 2
AGENT 1
AGENT 2
DISCH 1
DISCH 2
AGENT 1
AGENT 2
AGENT 1
AGENT 2
AGENT 1
AGENT 2
PRESSURE SWITCH
PRESSURE SWITCH
BOTTLE 1
BOTTLE 2
FWD
AFT

FIRE EXTINGUISHING

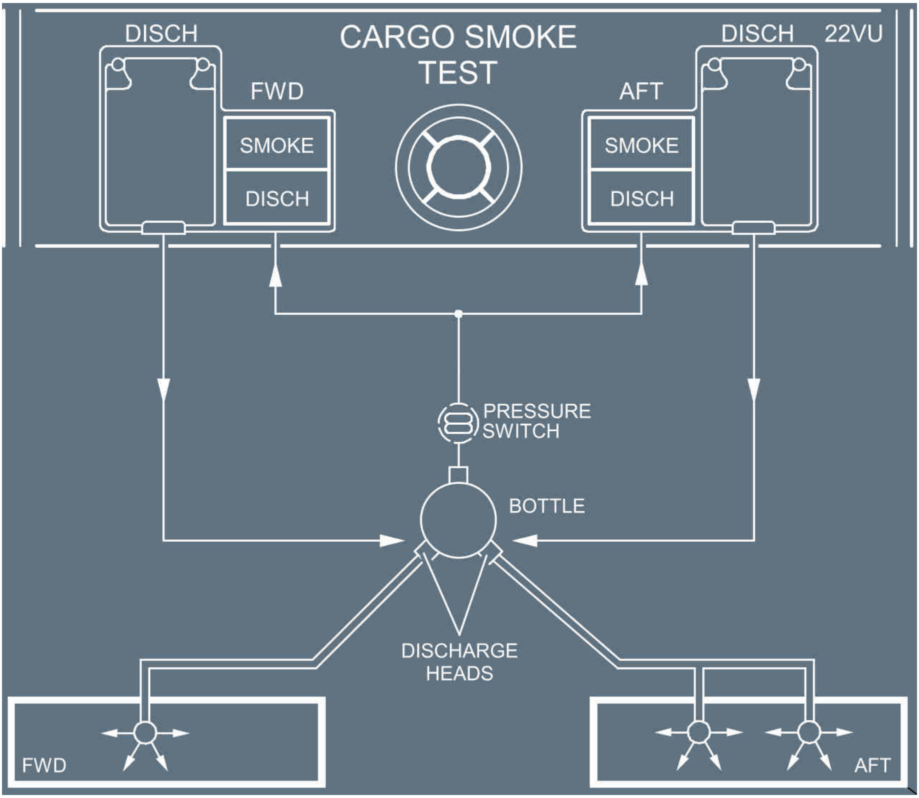
Ident.: DSC-26-50-10-00021443.0005001 / 17 MAR 17

4 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

A fire extinguishing system protects the forward and aft cargo compartments.

One fire bottle with two discharge heads, one for each compartment, supplies three nozzles:
- One nozzle in the forward cargo compartment
- Two nozzles in the aft cargo compartment.

When the flight crew presses the FWD(AFT) DISCH pb, the action ignites the corresponding squib on the fire bottle, which then discharges the extinguisher agent into that cargo compartment.
When the bottle is empty, the DISCH light comes on amber.


DISCH
CARGO SMOKE
TEST
DISCH
22VU
FWD
AFT
SMOKE
DISCH
SMOKE
DISCH
PRESSURE
SWITCH
BOTTLE
DISCHARGE
HEADS
FWD
AFT

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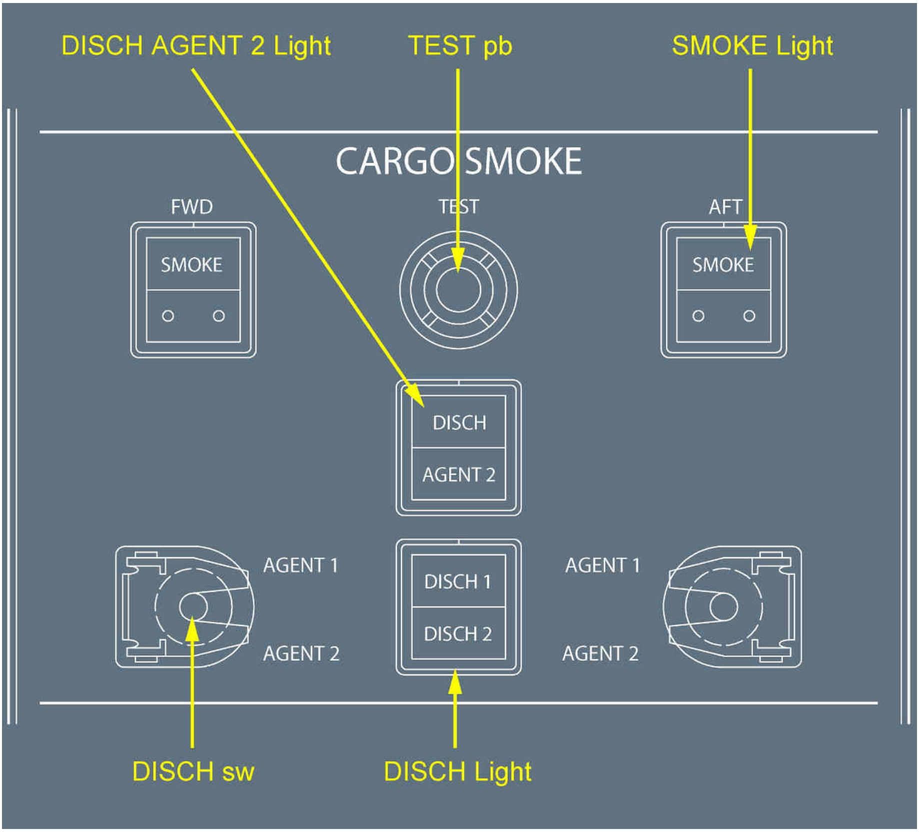
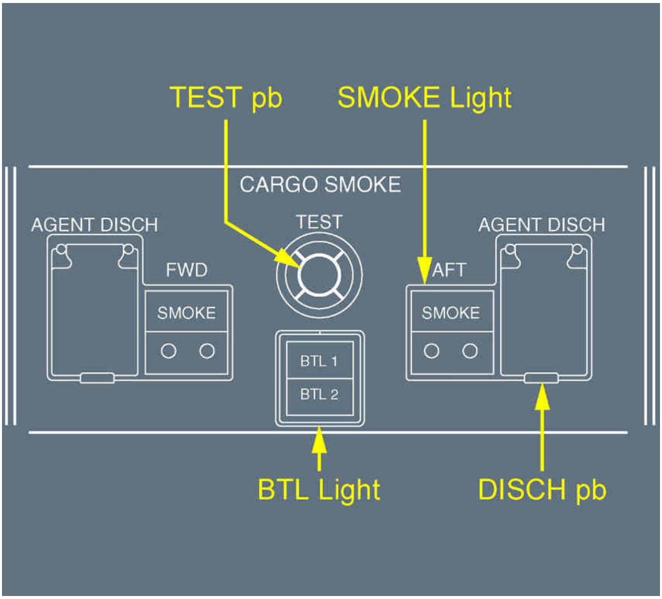
CARGO SMOKE PANEL

Ident.: DSC-26-50-20-10-00021446.0007001 / 17 MAR 17
Applicable to: MSN 02014, 04827-04860

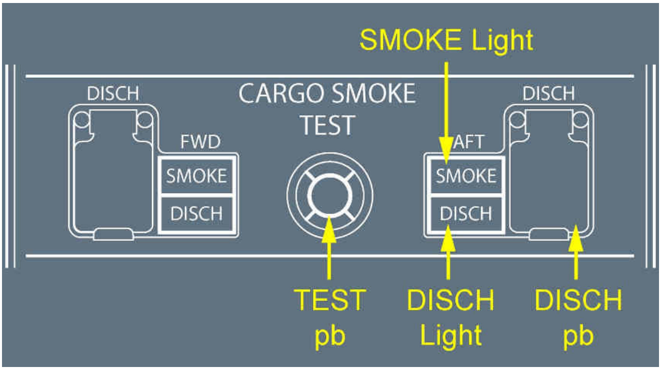

DISCH AGENT 2 Light
TEST pb
SMOKE Light
CARGO SMOKE
FWD
TEST
AFT
SMOKE
SMOKE
DISCH
AGENT 2
AGENT 1
AGENT 2
DISCH 1
DISCH 2
AGENT 1
AGENT 2
DISCH sw
DISCH Light

1 Ident.: DSC-26-50-20-10-00021446.0015001 / 22 MAR 18
Applicable to: MSN 11531


TEST pb
SMOKE Light
CARGO SMOKE
AGENT DISCH
TEST
AGENT DISCH
FWD
AFT
SMOKE
SMOKE
BTL 1
BTL 2
BTL Light
DISCH pb

Ident.: DSC-26-50-20-10-00021446.0005001 / 17 MAR 17

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**


SMOKE Light
DISCH
CARGO SMOKE
TEST
DISCH
FWD
AFT
SMOKE
DISCH
SMOKE
DISCH
TEST pb
DISCH Light
DISCH pb

Ident.: DSC-26-50-20-10-00021450.0001001 / 17 MAR 17

3 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

SMOKE LIGHT

This red light, and the associated ECAM warning, come on when the system detects smoke in the indicated cargo compartment. This light comes on, if:
- Both channels detect smoke, or
- One channel detects smoke and the other channel is faulty.

Ident.: DSC-26-50-20-10-00021451.0002001 / 17 MAR 17

4 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

TEST PB

Tests the operation of the cargo smoke detection system.

When pressed for at least 3 s, and until released:
- Tests the smoke detectors in sequence
- Turns on the red SMOKE lights twice, and displays the ECAM warning
- Closes the isolation valves of the cargo ventilation system ⊲
- The DISCH lights come on in amber.

Ident.: DSC-26-50-20-10-00021452.0001001 / 17 MAR 17

5 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

DISCH LIGHT

Within 60 s after pressing the discharge pushbutton, the amber DISCH light comes on when the associated bottle is fully discharged.

Ident.: DSC-26-50-20-10-00021454.0001001 / 17 MAR 17

6 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

DISCH PB

The DISCH pb ignites the squib, thereby discharging the extinguishing agent in the affected cargo compartment.

Ident.: DSC-26-50-20-10-00021455.0001001 / 17 MAR 17

Applicable to: MSN 02014, 04827-04860

DISCH AGENT 2 LIGHT

This light comes on amber, 60 min after the discharge of AGENT 1 in the affected cargo compartment. The light goes off when the AGENT 2 squib is ignited.

Ident.: DSC-26-50-20-10-00021456.0001001 / 17 MAR 17
Applicable to: MSN 02014, 04827-04860

DISCH SW

The guarded DISCH sw permits ignition of the corresponding squib for discharge of extinguishing AGENT 1(2) in the respective cargo compartment (FWD or AFT).

7 Ident.: DSC-26-50-20-10-00022194.0001001 / 22 MAR 18
Applicable to: MSN 11531

BTL LIGHT

The amber BTL light comes on when the associated bottle is fully discharged.

AIRCRAFT SYSTEMS

FLIGHT CONTROLS

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DSC-27-10 General

DSC-27-10-10 General

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Localization Title	Toc Index	ID	Reason
DSC-27-10-20 Roll Control - General	C	1	Documentation update: Addition of "Roll Control - General" documentary unit
DSC-27-20-10-10 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-27-20-10-20 Flight Mode	C	2	Documentation update: Addition of "Flight Mode" documentary unit
DSC-27-20-10-20 Flight Mode	C	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-20-10-20 Flare Mode	D	5	Documentation update: Addition of "Flare Mode" documentary unit
DSC-27-20-10-30 Normal Law	A	2	Documentation update: Addition of "Normal Law" documentary unit
DSC-27-20-20 Alternate Law	C	5	Documentation update: Addition of "Alternate Law" documentary unit
DSC-27-20-30 Glareshield	C	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-20-30 ECAM F/CTL Page	F	3	Documentation update: Addition of "ECAM F/CTL Page" documentary unit
DSC-27-30-20 Pedestal	A	1	Documentation update: Addition of "Pedestal" documentary unit
DSC-27-30-20 Pedestal	A	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	3	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	5	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	6	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	7	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	8	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	9	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-27-30-20 Pedestal	A	10	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

DSC-27-10-20 Roll Control - General	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-27-10-20 Speed Brakes and Ground Spoilers - Speed Brake Control	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-10-20 Speed Brakes and Ground Spoilers - Speed Brake Control	D	4	Effectivity update: The information now also applies to MSN 11531.
DSC-27-10-20 Short Airfield Package (SHARP)	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-10 General	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-20 Ground Mode	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-20-10-20 Flight Mode	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to MSN 02904.
DSC-27-20-10-20 Flare Mode	D	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-27-20-10-20 Protections - High Speed Protection - Pitch Trim Setting	E	7	Effectivity update: The information now also applies to MSN 11531.
DSC-27-20-10-20 Protections - High Speed Protection - Pitch Trim Setting	E	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-20	E	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
Protections - High Speed Protection - Overspeed			
DSC-27-20-10-30 Normal Law	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-30 Bank Angle Protection	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-10-30 Bank Angle Protection	B	4	Effectivity update: The information now also applies to MSN 11531.
DSC-27-20-10-40 Load Alleviation Function (LAF)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-20-20 Flight Controls Law Reconfiguration	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-20-20 Flight Controls Law Reconfiguration	B	2	Effectivity update: The information now also applies to MSN 11531.
DSC-27-20-20 Alternate Law	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-20-20 Alternate Law	C	4	Effectivity update: The information no longer applies to MSN 05947, 05987, 06634, 06871, 07081, 07098, 08495, 08596.
DSC-27-20-30 Glareshield	C	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-27-20-30 ECAM F/CTL Page	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-27-20-30 ECAM Wheel Page	G	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-27-30-10 General - Slat Flap surface	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-27-30-10 General - Slat Flap surface	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-30-10 Architecture	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-30-10 Architecture	B	4	Effectivity update: The information now also applies to MSN 11531.
DSC-27-30-10 Alpha/Speed Lock Function (Slats)	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-27-30-10 Alpha/Speed Lock Function (Slats)	D	6	Effectivity update: The information now also applies to MSN 11531.
DSC-27-30-20 ECAM Upper Display	B	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

GENERAL

Ident.: DSC-27-10-10-00001043.0001001 / 21 MAR 16
Applicable to: ALL

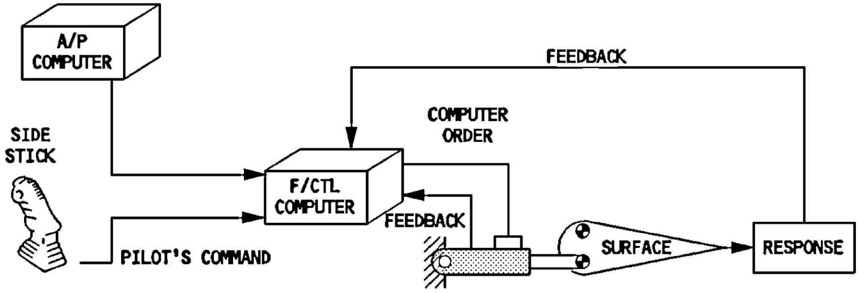
The fly-by-wire system was designed and certified to render the new generation of aircraft even more safe, cost effective, and pleasant to fly.

BASIC PRINCIPLE

Ident.: DSC-27-10-10-00001044.0001001 / 17 MAY 21
Applicable to: ALL

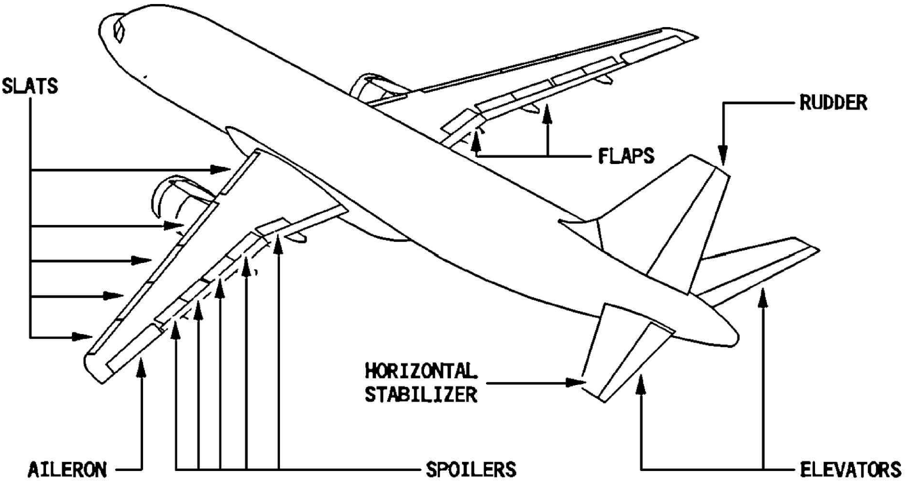
Flight control surfaces are all :
- Electrically-controlled, and
- Hydraulically-actuated.

The stabilizer and rudder can also be mechanically-controlled.
Pilots use sidesticks to fly the aircraft in pitch and roll (and in yaw, indirectly, through turn coordination).
Computers interpret pilot input and move the flight control surfaces, as necessary, to follow their orders.
However, when in normal law, regardless of the pilot’s input, the computers will prevent excessive maneuvers and exceedance of the safe envelope in pitch and roll axis.
However, as on conventional aircraft, the rudder has no such protection.



CONTROL SURFACES

Ident.: DSC-27-10-10-00001045.0001001 / 21 MAR 16
Applicable to: ALL



The flight controls are electrically or mechanically controlled as follows :

PITCH AXIS

Elevator = Electrical
Stabilizer = Electrical for normal or alternate control. Mechanical for manual trim control

ROLL AXIS

Ailerons = Electrical
Spoilers = Electrical

YAW AXIS

Rudder = Mechanical, however control for yaw damping, turn coordination and trim is electrical.

SPEED BRAKES

Speed brakes = Electrical

Note: *All surfaces are hydraulically actuated.*

COCKPIT CONTROLS

Ident.: DSC-27-10-10-00001046.0001001 / 21 MAR 16
Applicable to: ALL

- Each pilot has a sidestick controller with which to exercise manual control of pitch and roll. These are on their respective lateral consoles.
  The two sidestick controllers are not coupled mechanically, and they send separate sets of signals to the flight control computers.
- Two pairs of pedals, which are rigidly interconnected, give the pilot mechanical control of the rudder.
- The pilots control speed brakes with a lever on the center pedestal.
- The pilots use mechanically interconnected handwheels on each side of the center pedestal to control the trimmable horizontal stabilizer.
- The pilots use a single switch on the center pedestal to set the rudder trim.
- There is no manual switch for trimming the ailerons.

COMPUTERS

Ident.: DSC-27-10-10-00001047.0001001 / 21 MAR 16
Applicable to: ALL

Seven flight control computers process pilot and autopilot inputs according to normal, alternate, or direct flight control laws.
The computers are :

2 ELACs

(Elevator Aileron Computer)

For : Normal elevator and stabilizer control.
Aileron control.

3 SECs

(Spoilers Elevator Computer)

For : Spoilers control.
Standby elevator and stabilizer control.

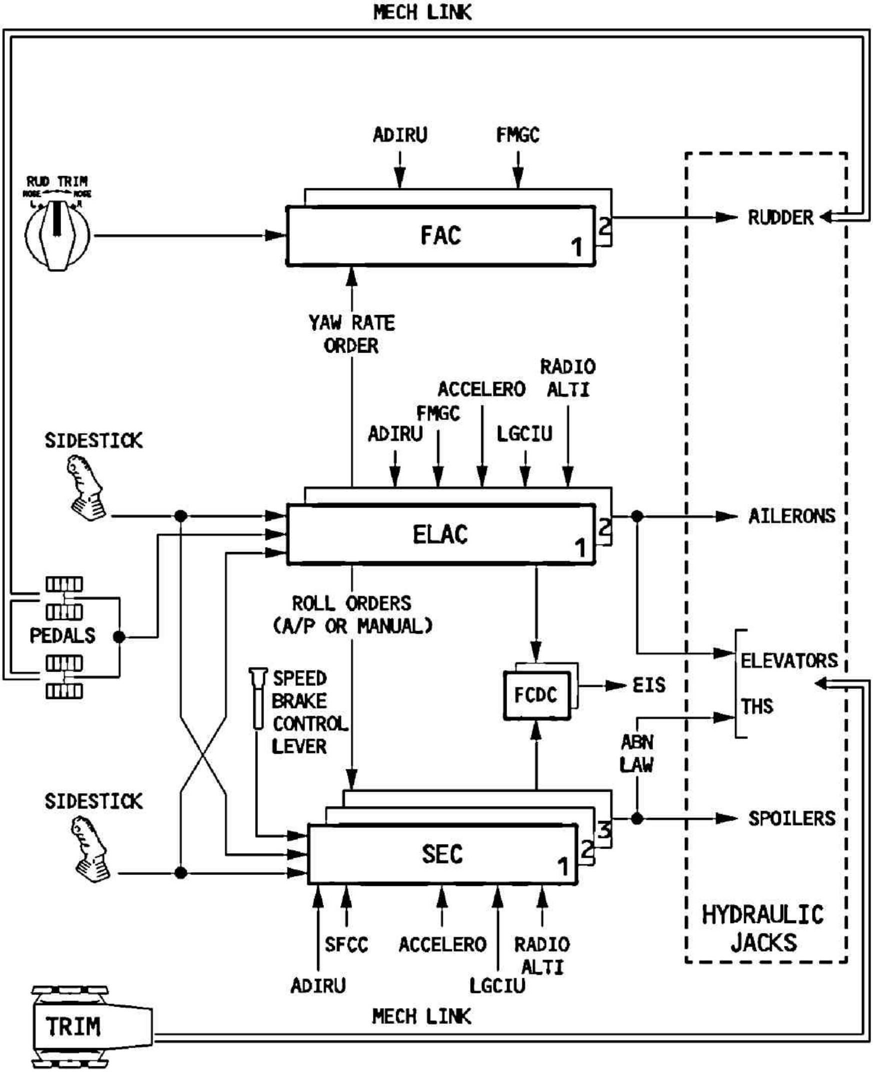
2 FACs

(Flight Augmentation Computer)

For : Electrical rudder control.

IN ADDITION 2 FCDC

Flight Control Data Concentrators (FCDC) acquire data from the ELACs and SECs and send it to the electronic instrument system (EIS) and the centralized fault display system (CFDS).


MECH LINK
ADIRU
FMGC
RUD TRIM
NOSE L
NOSE R
FAC
1
2
RUDDER
YAW RATE ORDER
RADIO ALTI
ACCELERO
FMGC
ADIRU
LGCIU
SIDESTICK
ELAC
1
2
AILERONS
PEDALS
ROLL ORDERS (A/P OR MANUAL)
SPEED BRAKE CONTROL LEVER
FCDC
EIS
ELEVATORS
THS
ABN LAW
SIDESTICK
SEC
1
2
3
SPOILERS
HYDRAULIC JACKS
SFCC
ACCELERO
RADIO ALTI
ADIRU
LGCIU
TRIM
MECH LINK

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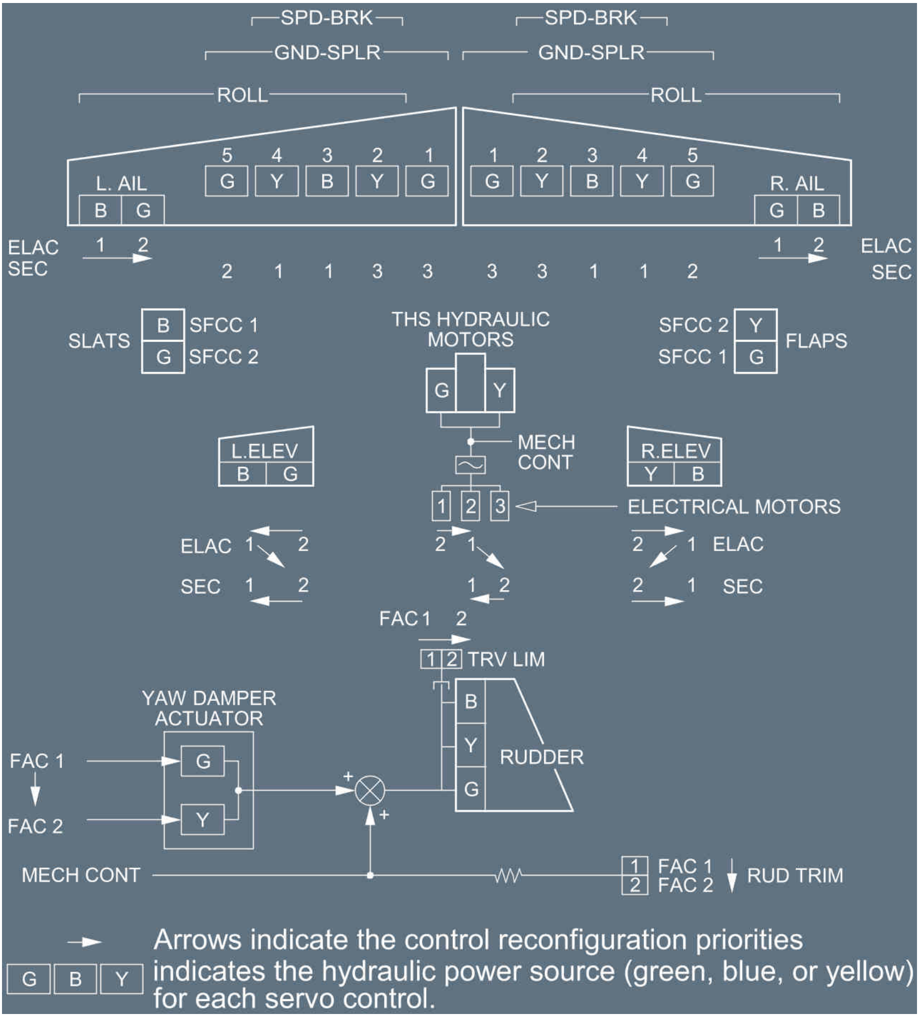
GENERAL ARCHITECTURE

Ident.: DSC-27-10-20-00001048.0002001 / 13 JAN 14
Applicable to: ALL


SPD-BRK
SPD-BRK
GND-SPLR
GND-SPLR
ROLL
ROLL
5 4 3 2 1
G Y B Y G
1 2 3 4 5
G Y B Y G
L. AIL
B G
R. AIL
G B
ELAC
SEC
1 2
2 1 1 3 3
3 3 1 1 2
1 2
ELAC
SEC
SLATS
B SFCC 1
G SFCC 2
THS HYDRAULIC
MOTORS
G Y
SFCC 2 Y
SFCC 1 G
FLAPS
L.ELEV
B G
MECH
CONT
R.ELEV
Y B
1 2 3
ELECTRICAL MOTORS
ELAC 1 2
SEC 1 2
2 1
1 2
2 1 ELAC
2 1 SEC
FAC 1 2
1 2 TRV LIM
YAW DAMPER
ACTUATOR
FAC 1
FAC 2
G
Y
+
+
B
Y
G
RUDDER
MECH CONT
1 FAC 1
2 FAC 2
RUD TRIM
G B Y

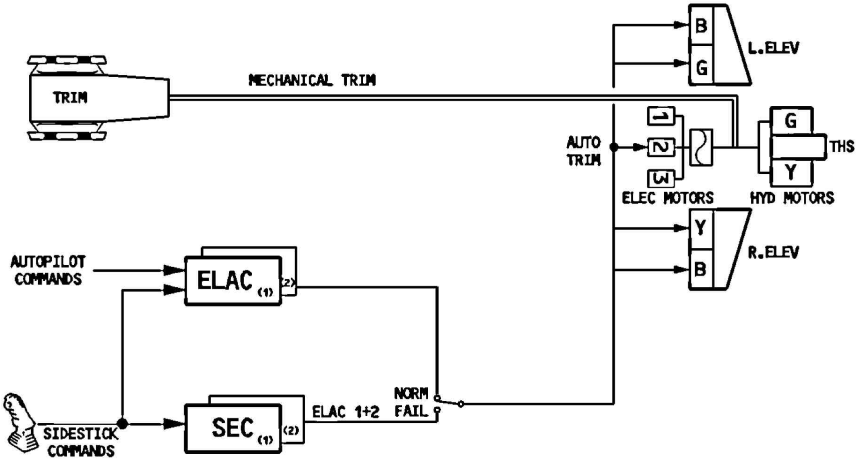
Arrows indicate the control reconfiguration priorities
G B Y indicates the hydraulic power source (green, blue, or yellow) for each servo control.

PITCH CONTROL

Applicable to: ALL

Ident.: DSC-27-10-20-A-00001049.0001001 / 21 MAR 16

GENERAL


B
G
L.ELEV
MECHANICAL TRIM
TRIM
AUTO
TRIM
1
2
3
ELEC MOTORS
G
Y
THS
HYD MOTORS
Y
B
R.ELEV
AUTOPILOT
COMMANDS
ELAC (1) (2)
NORM
FAIL
ELAC 1+2
SIDESTICK
COMMANDS
SEC (1) (2)

Two elevators and the Trimmable Horizontal Stabilizer (THS) control the aircraft in pitch. The maximum elevator deflection is 30 ° nose up, and 17 ° nose down. The maximum THS deflection is 13.5 ° nose up, and 4 ° nose down.

Ident.: DSC-27-10-20-A-00001050.0001001 / 21 MAR 16

ELECTRICAL CONTROL

- In normal operations, ELAC2 controls the elevators and the horizontal stabilizer, and the green and yellow hydraulic jacks drive the left and right elevator surfaces respectively.
  The THS is driven by N° 1 of three electric motors.
- If a failure occurs in ELAC2, or in the associated hydraulic systems, or with the hydraulic jacks, the system shifts pitch control to ELAC1. ELAC1 then controls the elevators via the blue hydraulic jacks and controls the THS via the N° 2 electric motor.
- If neither ELAC1 nor ELAC2 is available, the system shifts pitch control either to SEC1 or to SEC2, (depending on the status of the associated circuits), and to THS motor N° 2 or N° 3.

In case of failure, the actuators are reconfigured, *Refer to DSC-27-10-20 Pitch Control - Schematic*.

Ident.: DSC-27-10-20-A-00001051.0001001 / 21 MAR 16

MECHANICAL CONTROL

Mechanical control of the THS is available from the pitch trim wheel at any time, if either the green or yellow hydraulic system is functioning.
Mechanical control from the pitch trim wheel has priority over electrical control.

Ident.: DSC-27-10-20-A-00001053.0002001 / 21 MAR 16

ACTUATION

ELEVATORS

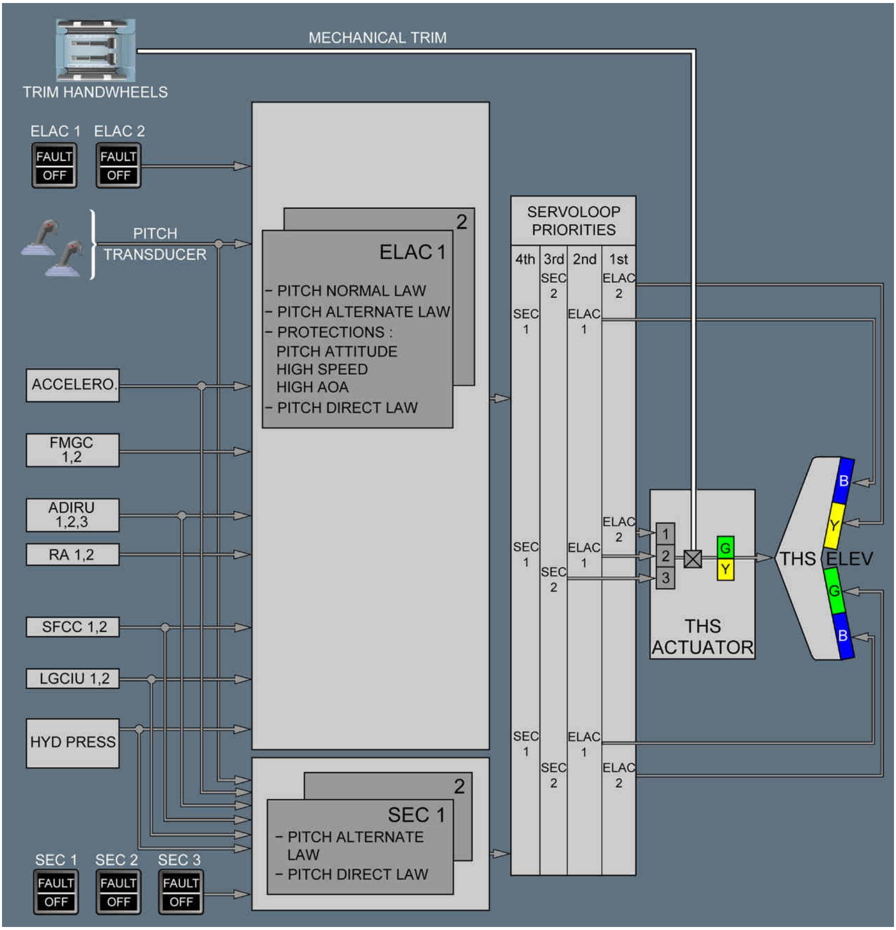
- Two electrically-controlled hydraulic servojacks drive each elevator.

  Each servojack has three control modes :
  - Active : The jack position is electrically-controlled.
  - Damping : The jack follows surface movement.
  - Centering : The jack is hydraulically retained in the neutral position.
- In normal operation :
  - One jack is in active mode.
  - The other jack is in damping mode.
  - Some maneuvers cause the second jack to become active.
- If the active servojack fails, the damped one becomes active, and the failed jack is automatically switched to damping mode.
- If neither jack is being controlled electrically, both are automatically switched to the centering mode.
- If neither jack is being controlled hydraulically, both are automatically switched to damping mode.
- If one elevator fails, the deflection of the remaining elevator is limited in order to avoid putting excessive asymmetric loads on the horizontal tailplane or rear fuselage.

STABILIZER

- A screwjack driven by two hydraulic motors drives the stabilizer.
- The two hydraulic motors are controlled by :
  - One of three electric motors, or
  - The mechanical trim wheel.

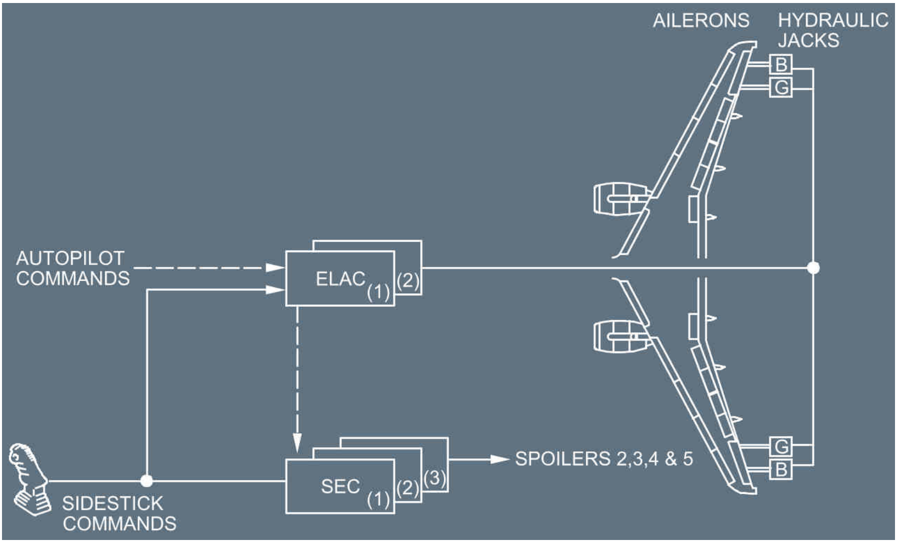
SCHEMATIC


MECHANICAL TRIM
TRIM HANDWHEELS
ELAC 1
ELAC 2
FAULT
OFF
PITCH
TRANSDUCER
ACCELERO.
FMGC 1,2
ADIRU 1,2,3
RA 1,2
SFCC 1,2
LGCIU 1,2
HYD PRESS
SEC 1
SEC 2
SEC 3
2
ELAC 1
- PITCH NORMAL LAW
- PITCH ALTERNATE LAW
- PROTECTIONS :
PITCH ATTITUDE
HIGH SPEED
HIGH AOA
- PITCH DIRECT LAW
2
SEC 1
- PITCH ALTERNATE LAW
- PITCH DIRECT LAW
SERVOLOOP PRIORITIES
4th
3rd
2nd
1st
SEC 2
ELAC 2
SEC 1
ELAC 1
THS ACTUATOR
1
2
3
G
Y
THS
ELEV
B
Y
G
B

ROLL CONTROL

Ident.: DSC-27-10-20-B-00001055.0002001 / 09 OCT 12
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

GENERAL

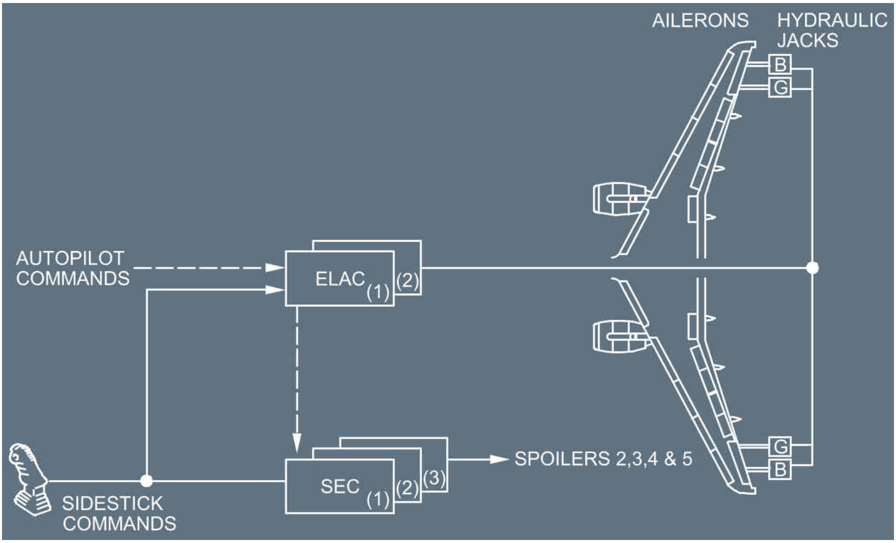

AILERONS
HYDRAULIC JACKS
B
G
AUTOPILOT COMMANDS
ELAC
(1)
(2)
SEC
(1)
(2)
(3)
SPOILERS 2,3,4 & 5
G
B
SIDESTICK COMMANDS

One aileron and four spoilers on each wing control the aircraft about the roll axis.
The maximum deflection of the ailerons is 25 °.
The ailerons extend 5 ° down when the flaps are extended (aileron droop).

The maximum deflection of the spoilers is:
- 35 ° for spoilers 2, 4, and 5
- 7 ° for spoilers 3.

1 Ident.: DSC-27-10-20-B-00001055.0005001 / 14 OCT 14
Applicable to: MSN 11531

GENERAL


AILERONS
HYDRAULIC JACKS
B
G
AUTOPILOT COMMANDS
ELAC (1) (2)
SEC (1) (2) (3)
SPOILERS 2,3,4 & 5
G
B
SIDESTICK COMMANDS

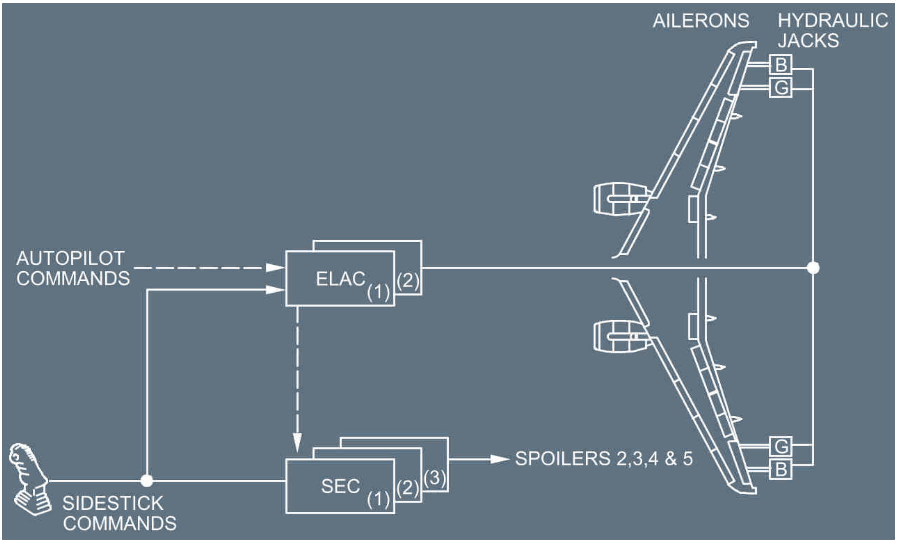
One aileron and four spoilers on each wing control the aircraft about the roll axis.
The maximum deflection of the ailerons is 25 °.
The ailerons extend 10 ° down when the flaps are extended (aileron droop).

The maximum deflection of the spoilers is:
- 35 ° for spoilers 2, 4, and 5
- 7 ° for spoilers 3.

Ident.: DSC-27-10-20-B-00001055.0003001 / 09 OCT 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

GENERAL



One aileron and four spoilers on each wing control the aircraft about the roll axis.
The maximum deflection of the ailerons is 25 °.
The ailerons extend 5 ° down when the flaps are extended (aileron droop).
The maximum deflection of the spoilers is 35 °.

Ident.: DSC-27-10-20-B-00001056.0001001 / 21 MAR 16
Applicable to: ALL

ELECTRIC CONTROL

- The ELAC 1 normally controls the ailerons.
  If ELAC1 fails, the system automatically transfers aileron control to ELAC2.
  If both ELACs fail, the ailerons revert to the damping mode.
- SEC3 controls the N° 2 spoilers, SEC1 the N° 3 and 4 spoilers, and SEC2 the N° 5 spoilers.
  If a SEC fails, the spoilers it controls are automatically retracted.

Ident.: DSC-27-10-20-B-00001057.0001001 / 21 MAR 16
Applicable to: ALL

ACTUATION

AILERONS

Each aileron has two electrically controlled hydraulic servojacks.
One of these servojacks per aileron operates at a time.

Each servojack has two control modes :

Active : Jack position is controlled electrically
Damping : Jack follows surface movement.

The system automatically selects damping mode, if both ELACs fail or in the event of blue and green hydraulic low pressure.

SPOILERS

A servojack positions each spoiler. Each servojack receives hydraulic power from either the green, yellow, or blue hydraulic system, controlled by the SEC1, 2 or 3 (*Refer to DSC-27-10-20 General Architecture* diagram).
The system automatically retracts the spoilers to their zero position, if it detects a fault or loses electrical control.
If the system loses hydraulic pressure, the spoiler retains the deflection it had at the time of the loss, or a lesser deflection if aerodynamic forces push it down.
When a spoiler surface on one wing fails, the symmetric one on the other wing is inhibited.

SPEED BRAKES AND GROUND SPOILERS

Ident.: DSC-27-10-20-C-00001058.0017001 / 28 NOV 19
Applicable to: MSN 04441-04544, 04827-04974, 05066, 05101-05222, 05342, 05591-05643

SPEED BRAKE CONTROL

The pilot controls the speedbrakes with the speed brake lever.
The speedbrakes are actually spoilers 2, 3 and 4.

Speedbrake extension is inhibited, if:
- SEC 1 and SEC 3 both have faults, or
- An elevator (L or R) has a fault, or
- Angle-of-attack protection is active, or
- Flaps are in configuration FULL, or
- Thrust levers above MCT position, or
- Alpha Floor activation.

If an inhibition occurs when the speedbrakes are extended, they retract automatically and stay retracted until the inhibition condition disappears and the flight crews reset the lever. (The speedbrakes can be extended again 10 s or more after the lever is reset).
When a speedbrake surface on one wing fails, the symmetric one on the other wing is inhibited.

Note: 1. *For maintenance purposes, the speedbrake lever will extend the N° 1 surfaces when the aircraft is stopped on ground, whatever the slat/flap configuration*
2. *When the aircraft is flying faster than 315 kt or M 0.75 with the autopilot engaged, the speedbrake retraction rate is reduced (retraction from FULL to CLEAN takes about 25 s).*

L2 The maximum speedbrake deflection in manual flight is:
40 ° for spoilers 3 and 4 (reduced to 25 ° in CONF 0 when GW > MLW + 2 t)
20 ° for spoiler 2 (reduced to 12.5 ° in CONF 0 when GW > MLW + 2 t).

The maximum speedbrake deflection with the autopilot engaged is:
25 ° for spoilers 3 and 4
12.5 ° for spoiler 2.

The maximum speedbrake deflection achievable with the autopilot engaged is obtained by setting the speedbrake lever to the half way position. On setting the position of the speedbrake lever from half to full, no increase in speedbrake deflection will be achieved.
For these surfaces (which perform both roll and speedbrake functions) the roll function has priority. When the sum of a roll order and a simultaneous speedbrake order on one surface is greater than the maximum deflection available in flight, the same surface on the other wing is retracted until the difference between the two surfaces is equal to the roll order.

Ident.: DSC-27-10-20-C-00001058.0011001 / 10 MAY 21

3 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 05240, 05749-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

SPEED BRAKE CONTROL

The flight crew controls the speedbrakes with the speed brake lever.
The speedbrakes are spoilers 2, 3 and 4.

Speedbrake extension is inhibited, if one of the following occurs:
- SEC1 and SEC3 both are faulty, or
- An elevator (L or R) is faulty, or
- Angle-of-attack protection is active, or
- Flaps are in configuration FULL, or
- Thrust levers are above MCT position, or
- Alpha Floor is activated.

If an inhibition occurs when the speedbrakes are extended, they retract automatically and stay retracted until the inhibition condition disappears and the flight crew resets the lever (the speedbrakes can be extended again 10 s or more after the lever is reset).
When a speedbrake surface on one wing fails, the symmetric speedbrake surface on the other wing is inhibited.

Note: 1. *For maintenance purposes, the speedbrake lever will extend the N° 1 surfaces when the aircraft is stopped on ground, whatever the slat/flap configuration.*
2. *When the aircraft is flying faster than 315 kt or M 0.75 with the autopilot engaged, the speedbrake retraction rate is reduced (retraction from FULL to CLEAN takes about 25 s).*

L2 The maximum speedbrake deflection in manual flight is:
- 40 ° for spoilers 3 and 4
- 20 ° for spoiler 2.

The maximum speedbrake deflection with the autopilot engaged is:
- 25 ° for spoilers 3 and 4
- 12.5 ° for spoiler 2.

The maximum speedbrake deflection achievable with the autopilot engaged is obtained by setting the speedbrake lever to the half way position. On setting the position of the speedbrake lever from half to full, no increase in speedbrake deflection will be achieved.
For these surfaces (which perform both roll and speedbrake functions) the roll function has priority: When the sum of a roll order and a simultaneous speedbrake order on one surface is more than the maximum deflection available in flight, the symmetric speedbrake on the other wing is retracted until the difference between the two surfaces is equal to the roll order.

Ident.: DSC-27-10-20-C-00001058.0013001 / 10 MAY 21

4 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

The flight crew controls the speedbrakes with the speedbrake lever.
The speedbrakes are spoilers 2, 3 and 4.

Speedbrake extension is inhibited, if one of the following occurs:
- SEC1 and SEC3 both are faulty, or
- An elevator (L or R) is faulty, or
- Angle-of-attack protection is active, or
- Flaps are in configuration 3 or FULL, or
- Thrust levers are above MCT position, or
- Alpha Floor is activated.

If an inhibition occurs when the speedbrakes are extended, they automatically retract and remain retracted until the inhibition condition disappears and the flight crew resets the lever (the speedbrakes can be extended again, 10 s or more after the lever is reset).
When a speedbrake surface on one wing fails, the symmetric speedbrake surface on the other wing is inhibited.

Note: 1. *For maintenance purposes, the speedbrake lever will extend the N° 1 surfaces when the aircraft is stopped on ground, regardless of the slat/flap configuration.*
2. *When the aircraft is flying faster than 315 kt or M 0.75 with the autopilot engaged, the speedbrake retraction rate is reduced (retraction from FULL to CLEAN takes about 25 s).*

L2 The maximum deflection for the spoilers 2, 3 and 4 is 25 °.
For these surfaces (which perform both roll and speedbrake functions) the roll function has priority: When the sum of a roll order and a simultaneous speedbrake order on one surface is more than the maximum deflection available in flight, the symmetric speedbrake on the other wing is retracted until the difference between the two surfaces is equal to the roll order.

Ident.: DSC-27-10-20-C-00001058.0014001 / 10 MAY 21
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

The flight crew controls the speedbrakes with the speedbrake lever.
The speedbrakes are spoilers 2, 3 and 4.

Speedbrake extension is inhibited, if one of the following occurs:
- SEC1 and SEC3 both are faulty, or
- An elevator (L or R) is faulty, or
- Angle-of-attack protection is active, or
- Flaps are in configuration FULL, or
- Thrust levers are above MCT position, or
- Alpha Floor is activated.

If an inhibition occurs when the speedbrakes are extended, they automatically retract and remain retracted until the inhibition condition disappears and the flight crew resets the lever (the speedbrakes can be extended again, 10 s or more after the lever is reset).
When a speedbrake surface on one wing fails, the symmetric speedbrake surface on the other wing is inhibited.

Note: 1. *For maintenance purposes, the speedbrake lever will extend the N° 1 surfaces when the aircraft is stopped on ground, regardless of the slat/flap configuration.*
2. *When the aircraft is flying faster than 315 kt or M 0.75 with the autopilot engaged, the speedbrake retraction rate is reduced (retraction from FULL to CLEAN takes about 25 s).*

L2 The maximum deflection for the spoilers is:

- 25 ° for spoilers 3 and 4
- 12.5 ° for spoiler 2 in configuration 3, and 17.5 ° in other configurations.

For these surfaces (which perform both roll and speedbrake functions) the roll function has priority: When the sum of a roll order and a simultaneous speedbrake order on one surface is more than the maximum deflection available in flight, the symmetric speedbrake on the other wing is retracted until the difference between the two surfaces is equal to the roll order.

Ident.: DSC-27-10-20-C-00017787.0002001 / 03 NOV 21
Applicable to: ALL

GROUND SPOILER CONTROL

The ground spoiler function involves all spoilers (full extension) and ailerons (Aileron Anti Droop ◁✳).
When a ground spoiler surface on one wing fails, the symmetric ground spoiler surface on the other wing is inhibited.

ARMING

The pilot arms the ground spoilers by pulling the speedbrake control lever up into the armed position.

FULL EXTENSION – REJECTED TAKEOFF PHASE

- ■ If the ground spoilers are armed and the wheel speed exceeds 72 kt, the ground spoilers will automatically extend as soon as both thrust levers are reset to idle.
- ■ If the ground spoilers are not armed and the wheel speed exceeds 72 kt, the ground spoilers will automatically extend as soon as reverse is selected on one engine (the other thrust lever remains at idle).

FULL EXTENSION - LANDING PHASE

The ground spoilers will automatically extend when the following conditions are met:

- Speed brake lever not in the retracted position or ground spoilers armed and:
  - Both main landing gears on ground,
  - Both thrust levers at or below Idle position, or Reverse selected on at least one engine (and the other thrust lever below MCT position).
- Speed brake lever in the retracted position but ground spoilers not armed and:
  - Both main landing gears on ground,
  - Reverse selected on at least one engine (and the other thrust lever below MCT position).

The ailerons are fully-extended (Aileron Anti Droop ◁✳), provided one aileron servocontrol is available on each side, when:
- The ground spoilers are fully extended
- Flaps are not in clean CONF
- Pitch attitude is lower than 2.5 °
- Flying manually
- In normal law only.

PARTIAL EXTENSION

In order to accelerate the full spoiler extension, the Phased Lift Dumping (PLD) function allows the ground spoilers to deploy with a reduced deflection when the following conditions are met:
- Speed brake lever not in the retracted position or ground spoilers armed and:
  - One main landing gear on ground,
  - Both thrust levers at or below Idle position.
- Speed brake lever in the retracted position but ground spoilers not armed and:
  - One main landing gear on ground,
  - Reverse selected on at least one engine (and the other thrust lever below MCT position).

In order to reduce the bounce severity at landing in the case of an inappropriate thrust lever handling during flare, ground spoilers are also partially deployed when the following conditions are met:
- Ground spoilers armed,
- Both main landing gears on ground,
- Both thrust levers at or below the Climb position.

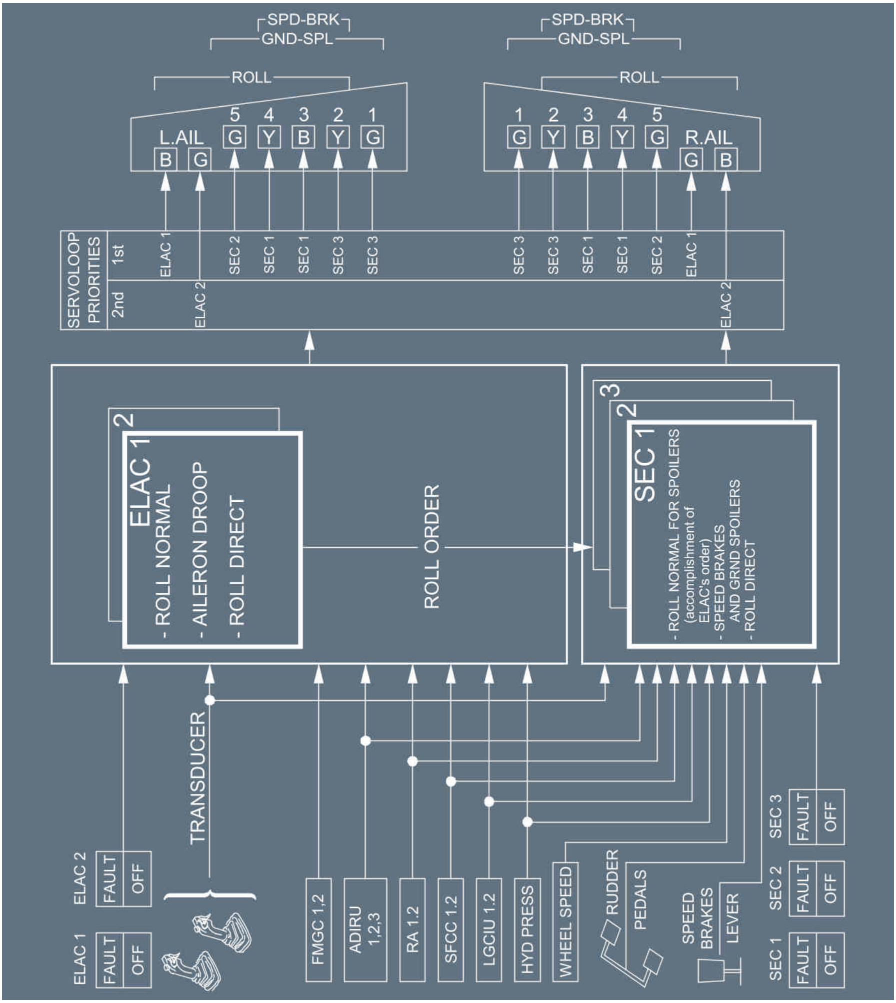
RETRACTION

The ground spoilers retract:
- After landing, when the ground spoilers are disarmed
- After a rejected takeoff, when the ground spoilers are disarmed
- During a touch and go, when at least one thrust lever is advanced above 20 °.

Ident.: DSC-27-10-20-C-00001060.0002001 / 22 MAY 12

Applicable to: ALL

ROLL CONTROL - SCHEMATIC

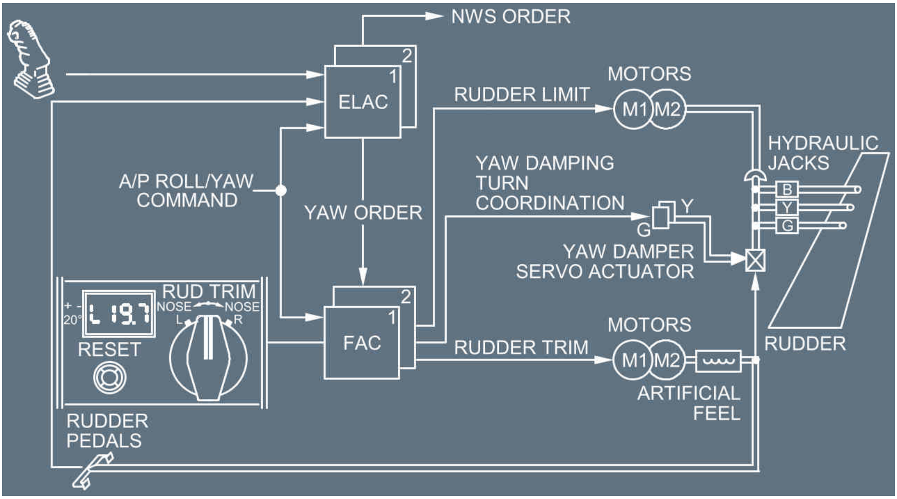

SPD-BRK
GND-SPL
ROLL
L.AIL
B
G
5
G
4
Y
3
B
2
Y
1
G
SPD-BRK
GND-SPL
ROLL
1
G
2
Y
3
B
4
Y
5
G
R.AIL
G
B
SERVOLOOP PRIORITIES
1st
2nd
ELAC 1
ELAC 2
SEC 2
SEC 1
SEC 1
SEC 3
SEC 3
SEC 3
SEC 3
SEC 1
SEC 1
SEC 2
ELAC 1
ELAC 2
2
ELAC 1
- ROLL NORMAL
- AILERON DROOP
- ROLL DIRECT
ROLL ORDER
3
2
SEC 1
- ROLL NORMAL FOR SPOILERS (accomplishment of ELAC's order)
- SPEED BRAKES AND GRND SPOILERS
- ROLL DIRECT
TRANSDUCER
ELAC 2
FAULT
OFF
ELAC 1
FAULT
OFF
FMGC 1,2
ADIRU 1,2,3
RA 1,2
SFCC 1,2
LGCIU 1,2
HYD PRESS
WHEEL SPEED
RUDDER
PEDALS
SPEED BRAKES
LEVER
SEC 3
FAULT
OFF
SEC 2
FAULT
OFF
SEC 1
FAULT
OFF

YAW CONTROL

Applicable to: ALL

Ident.: DSC-27-10-20-D-00001061.0001001 / 09 OCT 12

GENERAL


NWS ORDER
2
1
ELAC
MOTORS
RUDDER LIMIT
M1
M2
HYDRAULIC
JACKS
A/P ROLL/YAW
COMMAND
YAW ORDER
YAW DAMPING
TURN
COORDINATION
Y
G
B
Y
G
YAW DAMPER
SERVO ACTUATOR
RUD TRIM
NOSE
NOSE
L
R
+
-
20°
L 19.7
RESET
2
1
FAC
MOTORS
RUDDER TRIM
M1
M2
RUDDER
ARTIFICIAL
FEEL
RUDDER
PEDALS

One rudder surface controls yaw.

Ident.: DSC-27-10-20-D-00001062.0001001 / 21 MAR 16

ELECTRICAL RUDDER CONTROL

The yaw damping and turn coordination functions are automatic.
The ELACs compute yaw orders for coordinating turns and damping yaw oscillations, and transmit them to the FACs.

Ident.: DSC-27-10-20-D-00001063.0001001 / 21 MAR 16

MECHANICAL RUDDER CONTROL

The pilots can use conventional rudder pedals to control the rudder.

Ident.: DSC-27-10-20-D-00001064.0001001 / 21 MAR 16

RUDDER ACTUATION

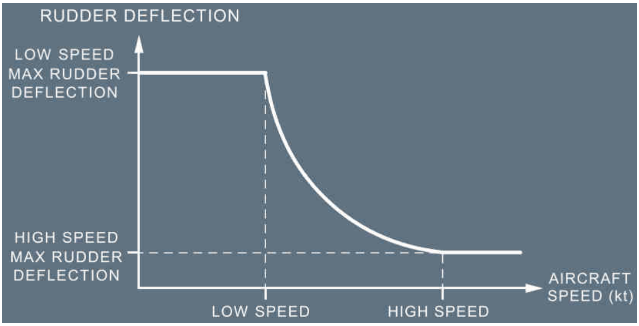
Three independent hydraulic servojacks, operating in parallel, actuate the rudder. In automatic operation (yaw damping, turn coordination) a green servo actuator drives all three servojacks. A yellow servo actuator remains synchronized and takes over if there is a failure.

There is no feedback to the rudder pedals from the yaw damping and turn coordination functions.

Ident.: DSC-27-10-20-D-00001065.0003001 / 21 MAR 16

RUDDER TRAVEL LIMIT

The maximum rudder travel deflection gradually reduces as the speed increases, to avoid structural loads:



In the case of a failure that causes loss of the Rudder Travel limit system, the rudder deflection limit stops at the last value reached. At slats extension, full rudder travel authority is recovered.
In all cases, the available rudder deflection provides sufficient yaw control within the entire flight envelope. This includes the case of maximum asymmetric thrust.

Ident.: DSC-27-10-20-D-00015506.0001001 / 21 MAR 16

RELATIONSHIP BETWEEN SIDESLIP/RUDDER DEFLECTION/RUDDER PEDAL TRAVEL

Regardless of the aircraft speed, therefore the maximum rudder deflection, full rudder pedal travel remains available. However, except at low speed, maximum rudder deflection is achieved before reaching maximum rudder pedal travel.

Ident.: DSC-27-10-20-D-00001066.0002001 / 21 MAR 16

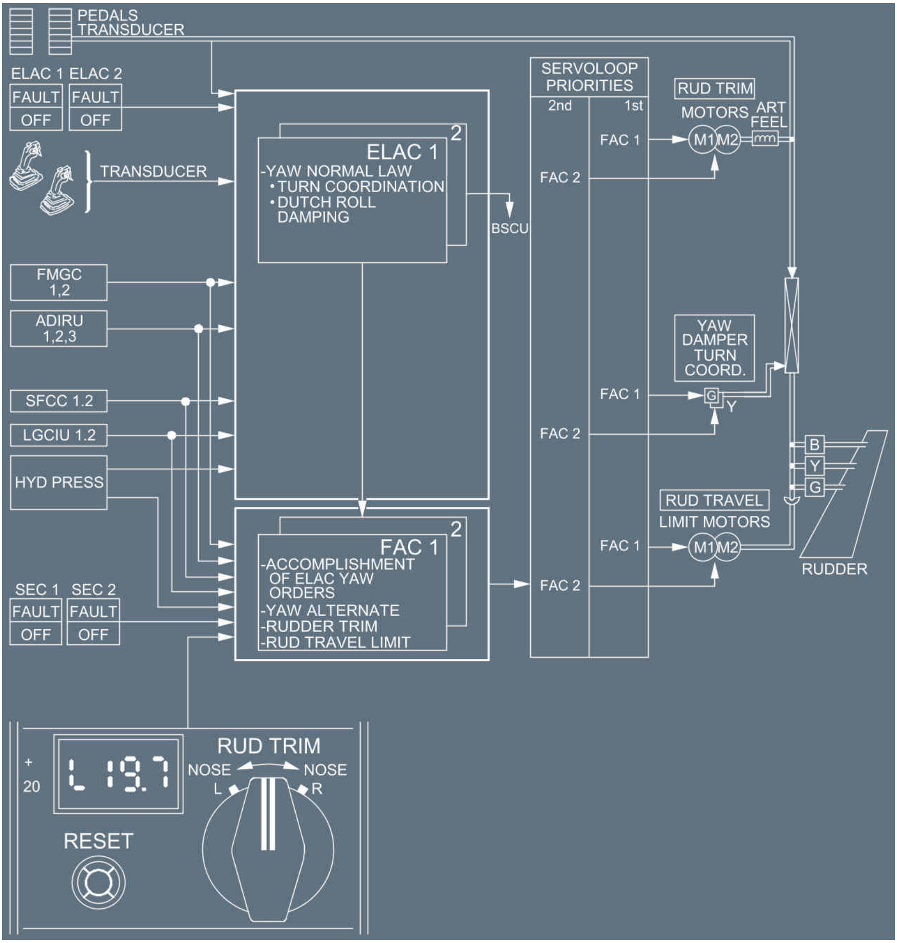
RUDDER TRIM

The two electric motors that position the artificial feel unit also trim the rudder. In normal operation, motor N° 1 (controlled by FAC1), powers the trim, and FAC2 with motor N° 2 remains synchronized as a backup.
In manual flight, the pilot can apply rudder trim via the rotary RUD TRIM switch on the pedestal.
The pilot can use a button on the RUD TRIM panel to reset the rudder trim to zero.

Note: *With the autopilot engaged, the FMGC computes the rudder trim orders. The rudder trim rotary switch and the rudder trim reset pushbutton are not active.*

Ident.: DSC-27-10-20-D-00001067.0001001 / 21 MAR 16

SCHEMATIC


PEDALS TRANSDUCER
ELAC 1
ELAC 2
FAULT
OFF
TRANSDUCER
FMGC 1,2
ADIRU 1,2,3
SFCC 1.2
LGCIU 1.2
HYD PRESS
SEC 1
SEC 2
ELAC 1
2
-YAW NORMAL LAW
•TURN COORDINATION
•DUTCH ROLL DAMPING
BSCU
FAC 1
-ACCOMPLISHMENT OF ELAC YAW ORDERS
-YAW ALTERNATE
-RUDDER TRIM
-RUD TRAVEL LIMIT
SERVOLOOP PRIORITIES
2nd
1st
FAC 1
FAC 2
RUD TRIM MOTORS
ART FEEL
M1
M2
YAW DAMPER TURN COORD.
G
Y
B
RUD TRAVEL LIMIT MOTORS
RUDDER
RUD TRIM
NOSE L
NOSE R
L 19.7
+
20
RESET

SHORT AIRFIELD PACKAGE (SHARP)

Ident.: DSC-27-10-20-00021696.0003001 / 01 JUN 17

5 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

SHARP (Short Airfield Package) is a set of aircraft modifications allowing operations on short runway:

- An improved leading edge root fillet
- A Vortex Generators on trailing edge panels.

SHARP improves aerodynamic Vertical Tail Plane (VTP) efficiency during take-off, approach speed and braking phases at landing.

General

GENERAL

1 Ident.: DSC-27-20-10-10-00001068.0006001 / 04 JUN 19
Applicable to: MSN 11531

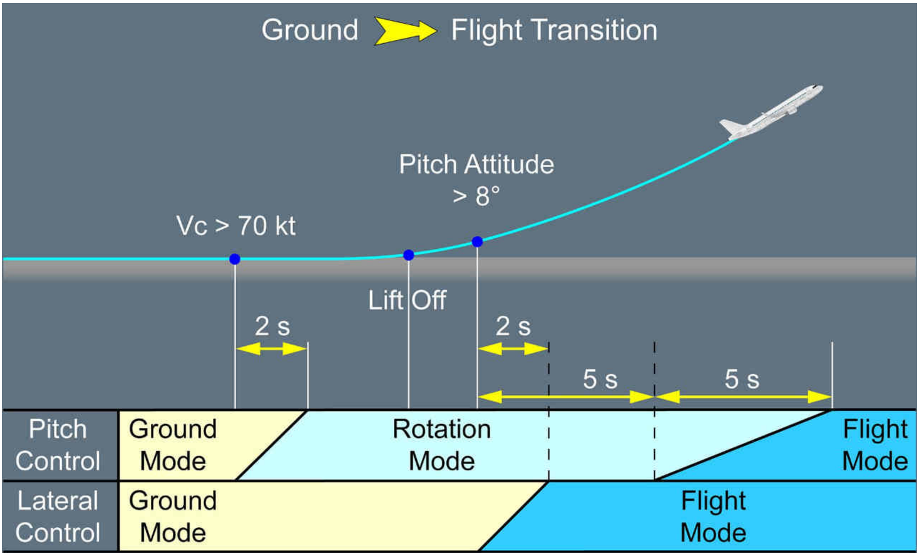
The normal flight control laws provides:
- Aircraft control on the 3 axis
- Flight envelope protection
- Alleviation of maneuver loads.

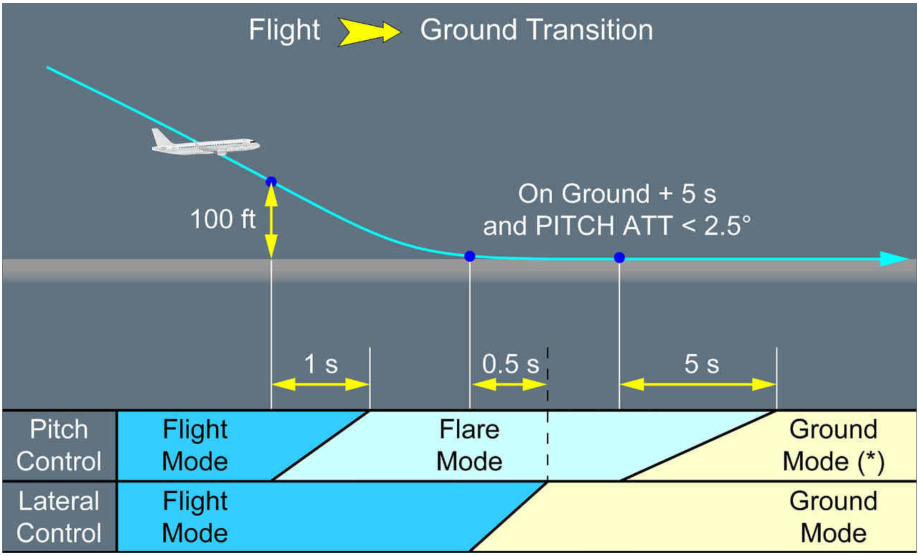
One of the PF's primary tasks is to maintain the aircraft within the limits of the normal flight envelope. However, some circumstances, due to extreme situations or aircraft mishandling, may provoke the violation of these limits.
Despite system protections, the PF must not deliberately exceed the normal flight envelope. In addition, these protections are not designed to be structural limit protections (e.g. opposite rudder pedal inputs). Rather, they are designed to assist the PF in emergency and stressful situations, where only instinctive and rapid reactions will be effective.

Protections are intended to:
- Provide maximum authority to the PF to consistently achieve the best possible aircraft performance in extreme conditions
- Reduce the risks of overcontrolling, or overstressing the aircraft
- Provide PF with an instinctive and immediate procedure to ensure that the PF achieves the best possible result.

NORMAL LAW Protection	Pitch Control			
	Ground Mode	Rotation Mode	Flight Mode	Flare Mode
Pitch Attitude		X	X	
Load Factor			X	
High Speed			X	
High Angle of Attack		X	X	X

NORMAL LAW Protection	Lateral Control			
	Ground Mode	Rotation Mode	Flight Mode	Flare Mode
Bank Angle			X	


Ground
Flight Transition
Pitch Attitude
> 8°
Vc > 70 kt
Lift Off
2 s
2 s
5 s
5 s
Pitch Control
Ground Mode
Rotation Mode
Flight Mode
Lateral Control
Ground Mode
Flight Mode


Flight
Ground Transition
100 ft
On Ground + 5 s
and PITCH ATT < 2.5°
1 s
0.5 s
5 s
Pitch Control
Flight Mode
Flare Mode
Ground Mode (*)
Lateral Control
Flight Mode
Ground Mode

(*) Once the flight crew set the THR lever to a position more than CLB, the Rotation Mode activate after a transition phase of 2 s.

GENERAL

Ident.: DSC-27-20-10-10-00001068.0005001 / 04 JUN 19
2 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

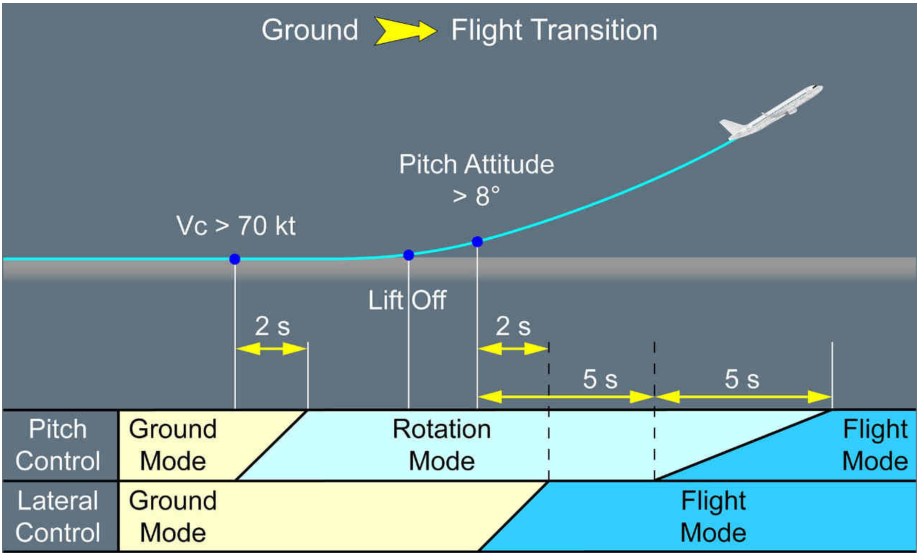
The normal flight control laws provides:
- Aircraft control on the 3 axis
- Flight envelope protection
- Alleviation of maneuver loads.

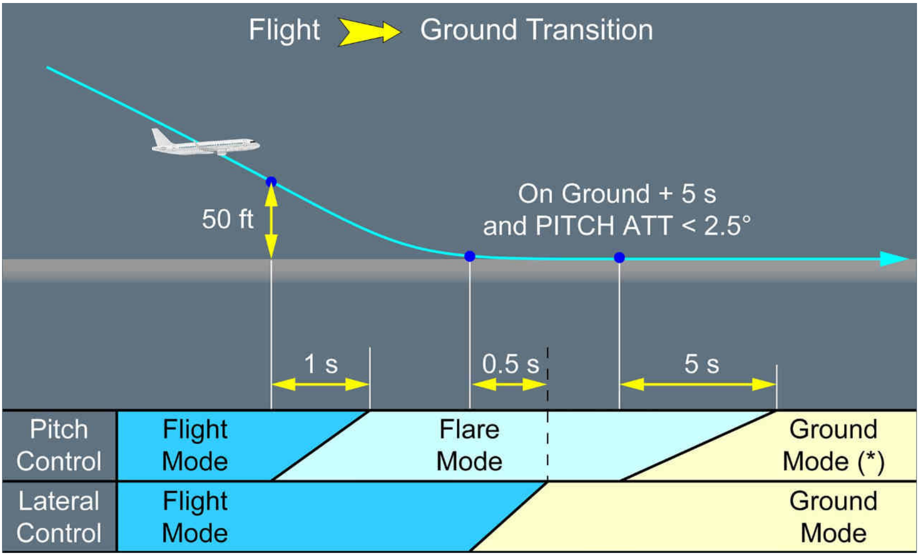
One of the PF's primary tasks is to maintain the aircraft within the limits of the normal flight envelope. However, some circumstances, due to extreme situations or aircraft mishandling, may provoke the violation of these limits.
Despite system protections, the PF must not deliberately exceed the normal flight envelope. In addition, these protections are not designed to be structural limit protections (e.g. opposite rudder pedal inputs). Rather, they are designed to assist the PF in emergency and stressful situations, where only instinctive and rapid reactions will be effective.

Protections are intended to:
- Provide maximum authority to the PF to consistently achieve the best possible aircraft performance in extreme conditions
- Reduce the risks of overcontrolling, or overstressing the aircraft
- Provide PF with an instinctive and immediate procedure to ensure that the PF achieves the best possible result.

NORMAL LAW Protection	Pitch Control			
	Ground Mode	Rotation Mode	Flight Mode	Flare Mode
Pitch Attitude		X	X	
Load Factor			X	
High Speed			X	
High Angle of Attack		X	X	X

NORMAL LAW Protection	Lateral Control			
	Ground Mode	Rotation Mode	Flight Mode	Flare Mode
Bank Angle			X	


Ground
Flight Transition
Pitch Attitude > 8°
Vc > 70 kt
Lift Off
2 s
2 s
5 s
5 s
Pitch Control
Ground Mode
Rotation Mode
Flight Mode
Lateral Control
Ground Mode
Flight Mode


Flight
Ground Transition
50 ft
On Ground + 5 s and PITCH ATT < 2.5°
1 s
0.5 s
5 s
Pitch Control
Flight Mode
Flare Mode
Ground Mode (*)
Lateral Control
Flight Mode
Ground Mode

(*) Once the flight crew set the THR lever to a position more than CLB, the Rotation Mode activate after a transition phase of 2 s.

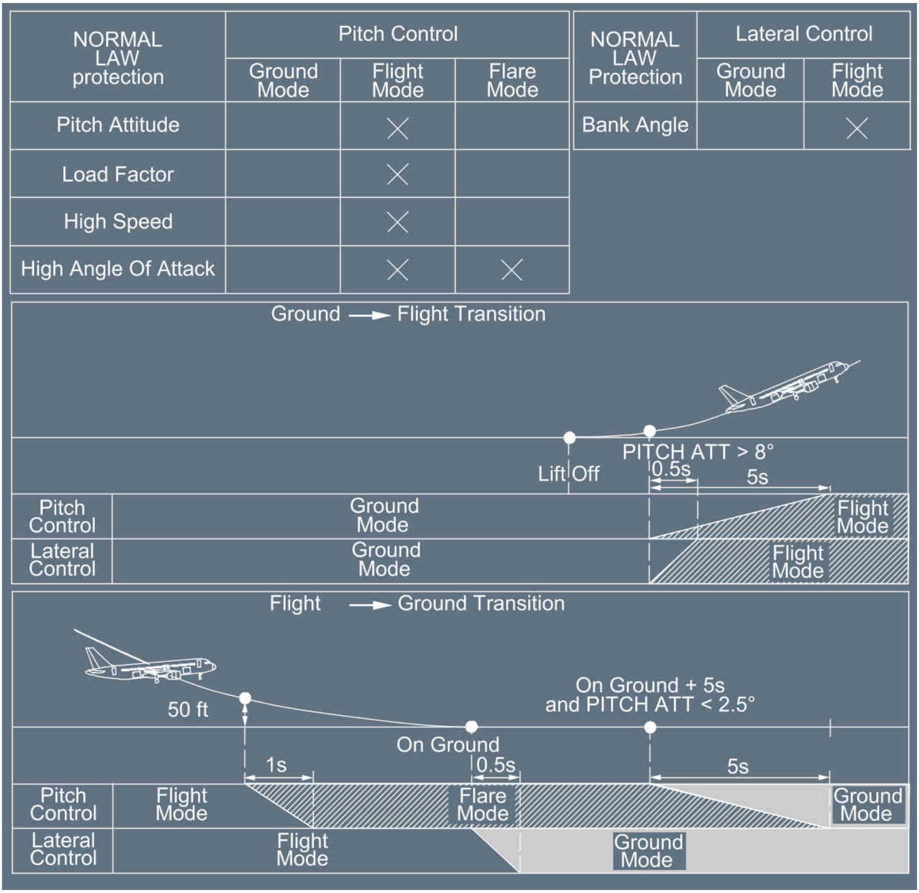
GENERAL

Ident.: DSC-27-20-10-10-00001068.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Flight control normal law covers:

- three-axis control
- flight envelope protection
- alleviation of maneuver loads



NORMAL LAW protection	Pitch Control		
	Ground Mode	Flight Mode	Flare Mode
Pitch Attitude		×	
Load Factor		×	
High Speed		×	
High Angle Of Attack		×	×

NORMAL LAW Protection	Lateral Control	
	Ground Mode	Flight Mode
Bank Angle		×

Ground → Flight Transition
Lift Off
PITCH ATT > 8°
0.5s
5s
Pitch Control
Ground Mode
Flight Mode
Lateral Control
Ground Mode
Flight Mode
Flight → Ground Transition
50 ft
1s
On Ground
0.5s
On Ground + 5s
and PITCH ATT < 2.5°
5s
Pitch Control
Flight Mode
Flare Mode
Ground Mode
Lateral Control
Flight Mode
Ground Mode

One of the PF's primary tasks is to maintain the aircraft within the limits of the normal flight envelope. However, some circumstances, due to extreme situations or aircraft mishandling, may provoke the violation of these limits.

Despite system protections, the PF must not exceed deliberately the normal flight envelope. In addition, these protections are not designed to be structural limit protections (e.g. opposite rudder pedal inputs). Rather, they are designed to assist the PF in emergency and stressful situations, where only instinctive and rapid reactions will be effective.

Protections are intended to:
- Provide full authority to the PF to consistently achieve the best possible aircraft performance in extreme conditions
- Reduce the risks of overcontrolling, or overstressing the aircraft
- Provide PF with an instinctive and immediate procedure to ensure that the PF achieves the best possible result.

Intentionally left blank

Pitch Control

GROUND MODE

Ident.: DSC-27-20-10-20-00001069.0005001 / 10 MAY 21
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

Ground mode is a direct relationship between sidestick deflection and elevator deflection.
There is no auto trim. The THS is automatically set at 0 ° (inside the green band). However, when the flight crew enters manually a THS setting to adjust the CG, this one has priority for the take off.
During the take off roll, the system may reduce the maximum up elevator deflection from 30 ° to 20 °, depending on weight and CG.

GROUND MODE

Ident.: DSC-27-20-10-20-00001069.0001001 / 10 MAY 21
1 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**

Ground mode is a direct relationship between sidestick deflection and elevator deflection.
There is no auto trim. The THS is automatically set at 0 ° (inside the green band). However, when the flight crew enters manually a THS setting to adjust the CG, this one has priority for the take off.
During the take off roll, the system reduces the maximum up elevator deflection from 30 ° to 20 °.

ROTATION MODE

Ident.: DSC-27-20-10-20-00023155.0002001 / 26 OCT 22
Applicable to: MSN 08495-09324, 10949-11139

The objective of the rotation mode is to provide a homogeneous rotation for all possible weight, CG and configurations, while minimizing the risk of a tail strike. The rotation mode is a pitch rate demand control law, providing tail strike protection.
L2 The flight crew can override the tail strike protection.

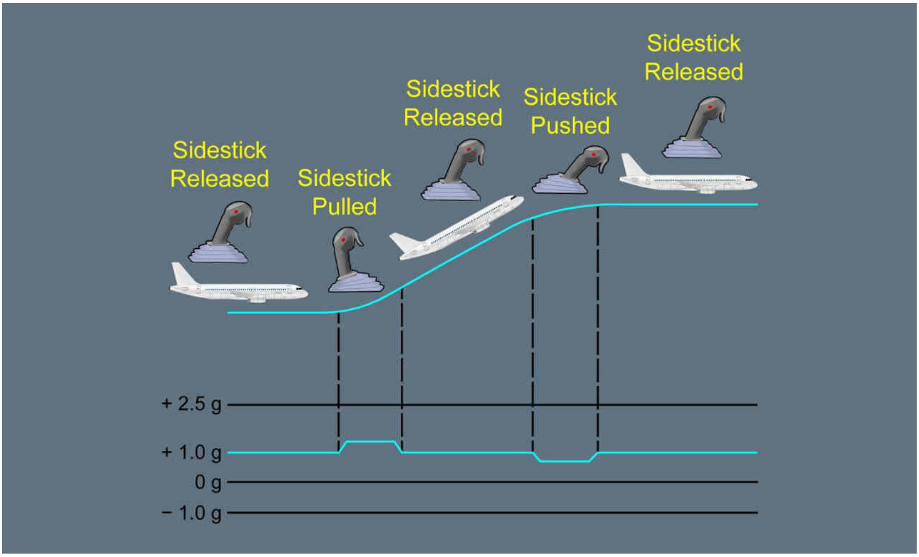
The rotation mode depends on:
- The pitch rate
- The tail clearance
- The sidestick position.

L1 The rotation mode is active from 70 kt during takeoff roll until 10 s after lift-off and pitch attitude is above 8 °.

FLIGHT MODE

2 Ident.: DSC-27-20-10-20-00001070.0007001 / 05 MAY 22
Applicable to: MSN 11531

The normal-law flight mode is a load-factor-demand mode with automatic trim and protection throughout the flight envelope.
Based on normal law, the sidestick controllers set the elevator and THS to maintain the load factor proportional to sidestick deflection and independent of speed.
With the sidestick at neutral, wings level, the system maintains 1 g in pitch (corrected for pitch attitude), and there is no need for the flight crew to trim by changing speed or configuration.
Therefore, if the aircraft deviates from the intended flight path, the flight crew only needs to perform small corrections on the sidestick. If the flight crew senses an overcontrol, the sidestick should be released.



Pitch trim is automatic both in manual mode and when the autopilot is engaged. In normal turns (up to 33 ° of bank) the flight crew must not make any pitch corrections when the turn is established.
The flight mode is active from takeoff to landing, and follows the logic shown schematically (*Refer to DSC-27-20-10-10 General*).

Automatic pitch trim freezes in the following situations:
- The flight crew enters a manual trim order
- The radio height is below 100 ft

- The load factor goes below 0.5 g
- The aircraft is in high-speed or high-Mach protection.

When angle-of-attack protection is active, the THS setting is limited between the setting at entry of the aircraft into this protection and 4 ° nose down. Neither the flight crew nor the system can apply additional nose-up trim.
Similarly, when the load factor is higher than 1.25 g or when the aircraft exceeds 33 ° of bank, the THS setting is limited to values between the current setting and 3.5 ° nose down.

CONTROL WITH AUTOPILOT ENGAGED

- The ELACs and SECs limit what the autopilot can order
- The flight crew must overcome a restraining force to move the sidestick when the autopilot is engaged. If they overcome this force and move the sidestick, they disconnect the autopilot.
- The flight crew can also disconnect the autopilot when they push the rudder pedals (10 ° out of trim), or they move the pitch trim wheel beyond a certain threshold
- All protections of normal laws remain effective except pitch attitude protection.

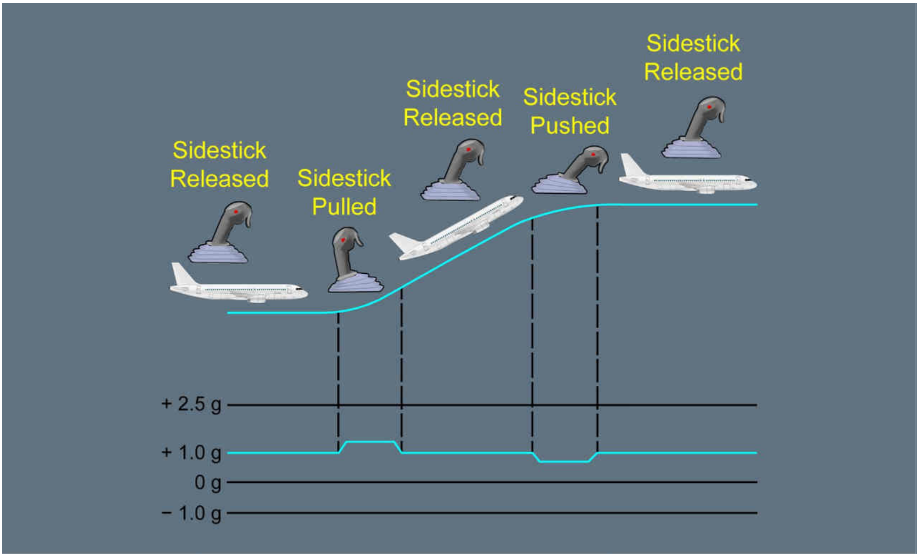
FLIGHT MODE

Ident.: DSC-27-20-10-20-00001070.0004001 / 28 MAY 20

3 **Applicable to: MSN 01855, 04352-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

The normal-law flight mode is a load-factor-demand mode with automatic trim and protection throughout the flight envelope.
Based on normal law, the sidestick controllers set the elevator and THS to maintain the load factor proportional to sidestick deflection and independent of speed.
With the sidestick at neutral, wings level, the system maintains 1 g in pitch (corrected for pitch attitude), and there is no need for the flight crew to trim by changing speed or configuration.
Therefore, if the aircraft deviates from the intended flight path, the flight crew only needs to perform small corrections on the sidestick. If the flight crew senses an overcontrol, the sidestick should be released.

Airbus Pitch Characteristic



Pitch trim is automatic both in manual mode and when the autopilot is engaged. In normal turns (up to 33 ° of bank) the flight crew must not make any pitch corrections when the turn is established. The flight mode is active from takeoff to landing, and follows the logic shown schematically (*Refer to DSC-27-20-10-10 General*).

Automatic pitch trim freezes in the following situations:
- The flight crew enters a manual trim order
- The radio height is below 50 ft (100 ft with autopilot engaged)
- The load factor goes below 0.5 g
- The aircraft is in high-speed or high-Mach protection.

When angle-of-attack protection is active, the THS setting is limited between the setting at entry of the aircraft into this protection and 4 ° nose down. Neither the flight crew nor the system can apply additional nose-up trim.
Similarly, when the load factor is higher than 1.25 g or when the aircraft exceeds 33 ° of bank, the THS setting is limited to values between the current setting and 3.5 ° nose down.

CONTROL WITH AUTOPILOT ENGAGED

- The ELACs and SECs limit what the autopilot can order.
- The flight crew must overcome a restraining force to move the sidestick when the autopilot is engaged. If they overcome this force and move the sidestick, they disconnect the autopilot.

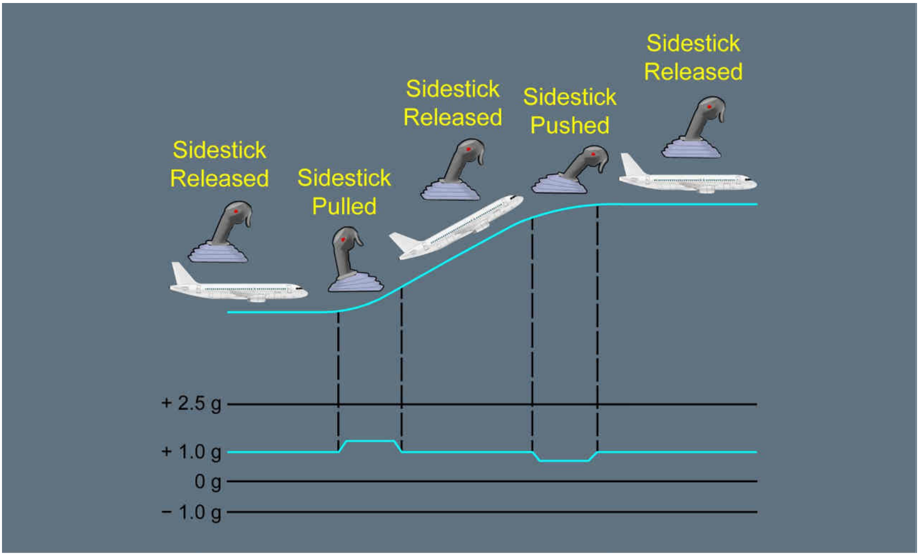
- The flight crew can also disconnect the autopilot when they push the rudder pedals (10 ° out of trim), or they move the pitch trim wheel beyond a certain threshold.
- All protections of normal laws remain effective except pitch attitude protection.

FLIGHT MODE

Ident.: DSC-27-20-10-20-00001070.0001001 / 28 MAY 20
Applicable to: MSN 01801, 01826, 01837, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04192

The normal-law flight mode is a load-factor-demand mode with automatic trim and protection throughout the flight envelope.
Based on normal law, the sidestick controllers set the elevator and THS to maintain the load factor proportional to sidestick deflection and independent of speed.
With the sidestick at neutral, wings level, the system maintains 1 g in pitch (corrected for pitch attitude), and there is no need for the flight crew to trim by changing speed or configuration.
Therefore, if the aircraft deviates from the intended flight path, the flight crew only needs to perform small corrections on the sidestick. If the flight crew senses an overcontrol, the sidestick should be released.

Airbus Pitch Characteristic



Pitch trim is automatic both in manual mode and when the autopilot is engaged. In normal turns (up to 33 ° of bank) the flight crew must not make any pitch corrections when the turn is established.

The flight mode is active from takeoff to landing, and follows the logic shown schematically (*Refer to DSC-27-20-10-10 General*).

Automatic pitch trim freezes in the following situations:
- The flight crew enters a manual trim order
- The radio height is below 50 ft (100 ft with autopilot engaged)
- The load factor goes below 0.5 g
- The aircraft is in high-speed or high-Mach protection.

When angle-of-attack protection is active, the THS setting is limited between the setting at entry of the aircraft into this protection and 3.5 ° nose down. Neither the flight crew nor the system can apply additional nose-up trim.
Similarly, when the load factor is higher than 1.25 g or when the aircraft exceeds 33 ° of bank, the THS setting is limited to values between the current setting and 3.5 ° nose down.

CONTROL WITH AUTOPILOT ENGAGED

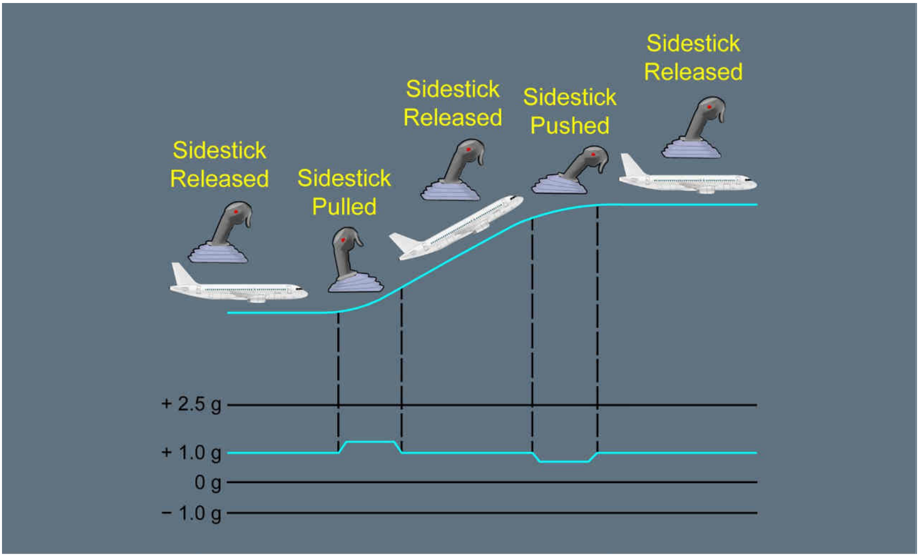
- The ELACs and SECs limit what the autopilot can order.
- The flight crew must overcome a restraining force to move the sidestick when the autopilot is engaged. If they overcome this force and move the sidestick, they disconnect the autopilot.
- The flight crew can also disconnect the autopilot when they push the rudder pedals (10 ° out of trim), or they move the pitch trim wheel beyond a certain threshold.
- All protections of normal laws remain effective except pitch attitude protection.

FLIGHT MODE

Ident.: DSC-27-20-10-20-00001070.0003001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662

4 The normal-law flight mode is a load-factor-demand mode with automatic trim and protection throughout the flight envelope.
Following normal law, the sidestick controllers set the elevator and THS to maintain load factor proportional to stick deflection and independent of speed.
With the sidestick at neutral, wings level, the system maintains 1 g in pitch (corrected for pitch attitude), and there is no need for the flight crew to trim by changing speed or configuration.
Therefore the flight crew only need to perform minor corrections on the sidestick, if the aircraft deviates from its intended flight path. If the flight crew senses an overcontrol, the sidestick should be released.
Pitch trim is automatic both in manual mode and when the autopilot is engaged. In normal turns (up to 33 ° of bank) the flight crew does not have to make any pitch corrections once the turn is established.
The flight mode is active from takeoff to landing, and follows the logic shown schematically (*Refer to DSC-27-20-10-10 General*).

Airbus Pitch Characteristic



Automatic pitch trim freezes in the following situations:
- The flight crew enters a manual trim order.
- The radio height is below 50 ft (100 ft with autopilot engaged).
- The load factor goes below 0.5 g.

When angle-of-attack protection is active, the THS setting is limited between the setting at the aircraft's entry into this protection and 3.5 ° nose down. (Neither the flight crew nor the system can apply additional nose-up trim).
Similarly, when the load factor is higher than 1.25 g or when the aircraft exceeds 33 ° of bank, the THS setting is limited to values between the actual setting and 3.5 ° nose down.
When High Speed or High Mach Protection is active, the THS Setting is limited between the setting at the aircraft's entry into this protection and 11 ° nose-up.

CONTROL WITH AUTOPILOT ENGAGED

- The ELACs and SECs limit what the autopilot can order.
- The flight crew has to overcome a restraining force in order to move the sidestick when the autopilot is engaged. If the flight crew overcomes this force, the flight crew disconnects the autopilot.

- The flight crew can also disconnect the autopilot by pushing on the rudder pedals (10 ° out of trim), or by moving the pitch trim wheel beyond a certain threshold.
- All protections of normal laws remain effective except pitch attitude protection.

FLARE MODE

5 Ident.: DSC-27-20-10-20-00001071.0005001 / 03 NOV 21
Applicable to: MSN 11531

When passing 100 ft RA, the THS is frozen and the normal flight mode changes to flare mode as the aircraft descends to land. The flare mode is a direct stick-to-elevator law without auto trim, with some damping provided by load factor and pitch rate feedback. The flare law provides full elevator authority. The flare law does not compensate the ground or thrust effect.

FLARE MODE

Ident.: DSC-27-20-10-20-00001071.0001001 / 21 MAR 16
6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

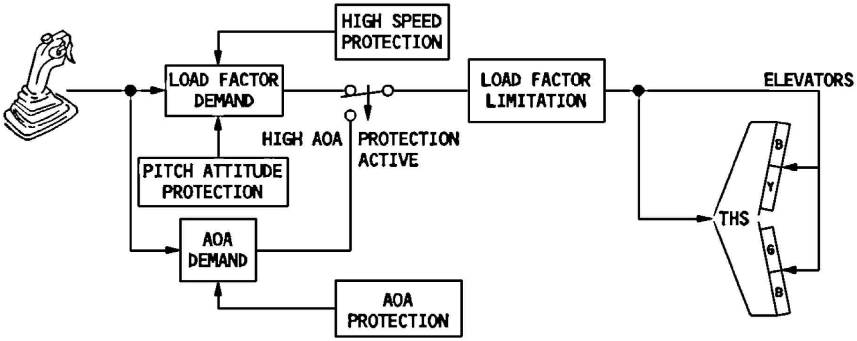
When the aircraft passes 50 ft RA, the THS is frozen and the normal flight mode changes to flare mode as the aircraft descends to land. Flare mode is essentially a direct stick-to-elevator relationship (with some damping provided by the load factor and the pitch rate feedbacks).
The system memorizes the aircraft's attitude at 50 ft, and it becomes the initial reference for pitch attitude control.
As the aircraft descends through 30 ft, the system begins to reduce the pitch attitude to -2 °nose down over a period of 8 s. Consequently, to flare the aircraft, a gentle nose-up action by the pilot is required.

PROTECTIONS

Ident.: DSC-27-20-10-20-A-00001072.0001001 / 21 MAR 16
Applicable to: ALL

GENERAL

The normal law protects the aircraft throughout the flight envelope, as follows :
- load factor limitation
- pitch attitude protection
- high-angle-of-attack (AOA) protection
- high-speed protection.


HIGH SPEED PROTECTION
LOAD FACTOR DEMAND
HIGH AOA
PROTECTION ACTIVE
LOAD FACTOR LIMITATION
ELEVATORS
PITCH ATTITUDE PROTECTION
AOA DEMAND
AOA PROTECTION
THS
B
Y
G
B

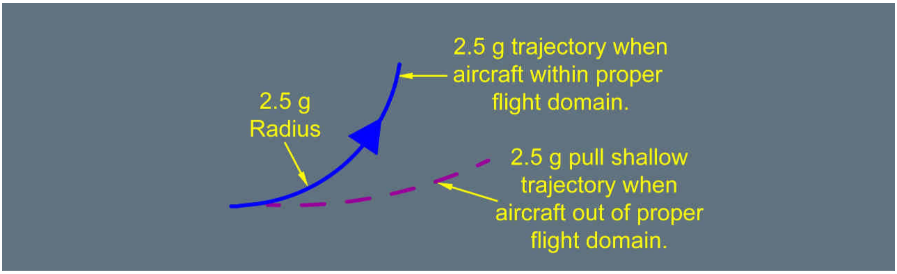
Ident.: DSC-27-20-10-20-A-00001073.0001001 / 17 MAR 17
Applicable to: ALL

LOAD FACTOR PROTECTION

High load factors can be encountered during evasive maneuvers due to potential collisions, or CFIT ...
Pulling "g" is efficient, if the resulting maneuver is really flown with this "g" number. If the aircraft is not able to fly this trajectory, or to perform this maneuver, pulling "g" will be detrimental.

The load factor is automatically limited to:
- +2.5 g to -1 g for clean configuration.
- +2 g to 0 for other configurations.

Airbus LOAD FACTOR PROTECTION AND SAFETY


2.5 g trajectory when aircraft within proper flight domain.
2.5 g Radius
2.5 g pull shallow trajectory when aircraft out of proper flight domain.

On most commercial aircraft, the potential for an efficient 2.5 g maneuver is very remote. Furthermore, as G Load information is not continuously provided in the cockpit, airline pilots are not used to controlling this parameter. This is further evidenced by inflight experience, which reveals that: In emergency situations, initial PF reaction on a yoke or sidestick is hesitant, then aggressive.

With load factor protection, the PF may immediately and instinctively pull the sidestick full aft: The aircraft will initially fly a 2.5 g maneuver without losing time. Then, if the PF still needs to maintain the sidestick full aft stick, because the danger still exists, then the high AOA protection will take over. Load factor protection enhances this high AOA protection.
Load factor protection enables immediate PF reaction, without any risk of overstressing the aircraft.
Flight experience has also revealed that an immediate 2.5 g reaction provides larger obstacle clearance, than a hesitant and delayed high G Load maneuver (two-second delay).

Ident.: DSC-27-20-10-20-A-00001074.0001001 / 17 MAR 17
Applicable to: ALL

PITCH ATTITUDE PROTECTION

Excessive pitch attitudes, caused by upsets or inappropriate maneuvers, lead to hazardous situations:

- Too high a nose-up ▸ Very rapid energy loss
- Too low a nose-down ▸ Very rapid energy gain

Furthermore, there is no emergency situation that requires flying at excessive attitudes. For these reasons, pitch attitude protection limits pitch attitude:

- 30 ° nose up in conf 0 to 3 (progressively reduced to 25 ° at low speed).
- 25 ° nose up in conf FULL (progressively reduced to 20 ° at low speed).
- 15 ° nose down (indicated by green symbols “=” on the PFD’s pitch scale).

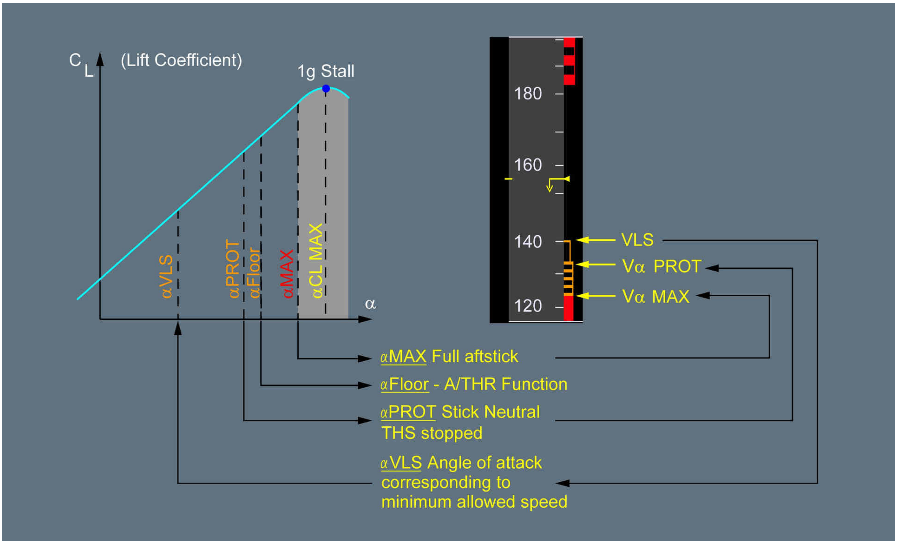
The flight director bars disappear from the PFD when the pitch attitude exceeds 25 ° up or 13 ° down. They return to the display when the pitch angle returns to the region between 22 ° up and 10 ° down.
Pitch attitude protection enhances high speed protection, high load factor protection, and high AOA protection.

Ident.: DSC-27-20-10-20-A-00024137.0001001 / 05 MAY 22
Applicable to: ALL

HIGH ANGLE-OF-ATTACK PROTECTION

In normal law, the aircraft is protected against stall. This protection is also effective in dynamic maneuvers or gusts. When the current AOA becomes greater than αPROT, the high AOA protection activates.
Without flight crew input, the F/CTL computers maintain the AOA equal to αPROT. The AOA can be further increased by flight crew input, up to a maximum value equal to αMAX. When the High AOA protection is activated, the normal law demand is modified and the sidestick input is an AOA demand, instead of a load factor demand.
The flight crew must not deliberately fly the aircraft with a High AOA, except for short periods of time, when maximum High Lift coefficient is required (like during windshear or GPWS maneuvers).

AOA Protection


C L (Lift Coefficient)
1g Stall
αVLS
αPROT
αFloor
αMAX
αCL MAX
α
180
160
140
120
VLS
Vα PROT
Vα MAX
αMAX Full aftstick
αFloor - A/THR Function
αPROT Stick Neutral
THS stopped
αVLS Angle of attack
corresponding to
minimum allowed speed

Vα PROT, Vα Floor, Vα MAX are mainly computed based on the AOA, and therefore they vary with configuration, weight and load factor (*Refer to DSC-22_10-50-20 Characteristic Speeds*).
The AOA will not exceed αMAX, even if the flight crew gently pulls the sidestick all the way back. The flight crew can hold full back sidestick, if it is needed, and the aircraft stabilizes at an AOA close to but less than the 1 g stall. When flying at αMAX, the flight crew can make gentle turns, if necessary. If the flight crew releases the sidestick, the AOA returns to αPROT and stays there.
As the aircraft enters protection at the amber and black strip (αPROT), the system inhibits further nose-up trim beyond the point already reached. The nose-down trim remains available.

Note: *At takeoff, the αPROT is equal to the αMAX for 5 s.*

This High AOA protection has priority over all other protections.
The aircraft can also enter αPROT at a high flight level, where it protects the aircraft from the buffet boundary. Like in low speed or low flight level, if the sidestick is simply released to neutral, the aircraft maintains the alpha for αPROT. Therefore, when leaving a turn after entering αPROT, the aircraft may climb with the sidestick free.
Alpha for αPROT is reduced as a function of Mach.
If the flight crew flies into αPROT, they should leave it as soon as other considerations allow.
This is achieved by easing forward on the sidestick to reduce alpha below the value of αPROT.
The flight crew should also simultaneously add thrust (if the αFloor has not yet been activated, or cancelled).

Between the αPROT and αMAX, αFloor protection may automatically set the go-around thrust. The αFloor will usually be triggered just after entering αPROT, and the go-around thrust will automatically be applied. Therefore, if the sidestick is held aft, either inadvertently or deliberately, the aircraft will start to climb at a relatively constant low airspeed. To recover a normal flight condition, the αPROT should be exited by easing forward on the sidestick, as described above, and the αFloor should be cancelled by using the instinctive disconnect pushbutton on either thrust lever as soon as a safe speed is regained (*Refer to DSC-22_40-30 Alpha-Floor Protection - General and Activation Conditions*).

Ident.: DSC-27-20-10-20-A-00024649.0001001 / 03 MAY 21
Applicable to: ALL

HIGH SPEED PROTECTION

The aircraft automatically recovers, following a high speed upset. Depending on the flight conditions (high acceleration, low pitch attitude), high speed protection is activated at/or above VMO/MMO.

Ident.: DSC-27-20-10-20-A-00024650.0001001 / 03 MAY 21
7 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

When high speed protection is activated, the pitch trim is frozen.

Ident.: DSC-27-20-10-20-A-00024650.0002001 / 03 MAY 21
8 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

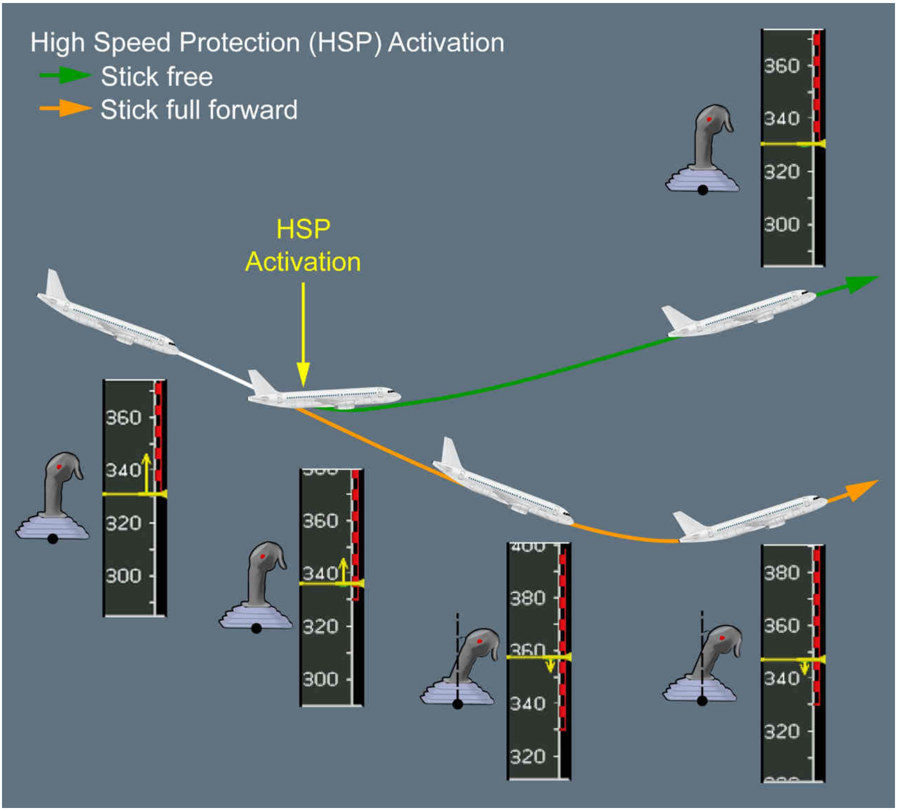
When high speed protection is activated, the THS setting is limited between the setting at the aircraft's entry into this protection and 11 ° nose-up.

Ident.: DSC-27-20-10-20-A-00024651.0001001 / 03 MAY 21
Applicable to: ALL

When high speed protection is activated, positive spiral static stability is introduced to 0 ° bank angle (instead of 33 ° in normal law), so that with the sidestick released, the aircraft always returns to a bank angle of 0 °. The bank angle limit is reduced from 67 ° to 40 °.
As the speed increases above VMO/MMO, the sidestick nose-down authority is progressively reduced, and a permanent nose-up order is applied to aid recovery to normal flight conditions.

Therefore, in a dive situation:

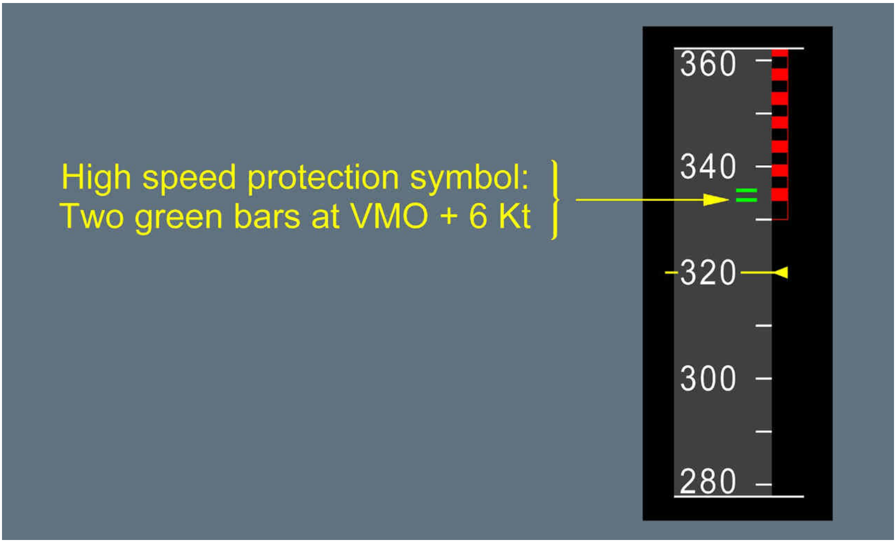
- If there is no sidestick input on the sidestick, the aircraft will slightly overshoot VMO/MMO and fly back towards the envelope
- If the sidestick is maintained full forward, the aircraft will significantly overshoot VMO/MMO. At approximately VMO + 16 kt / MMO + 0.04, the pitch nose-down authority smoothly reduces to zero (which does not mean that the aircraft stabilizes at that speed).


High Speed Protection (HSP) Activation
Stick free
Stick full forward
HSP
Activation
360
340
320
300
400
380
360
340
320

The PF, therefore, has full authority to perform a high speed/steep dive escape maneuver, when required, via a reflex action on the sidestick.

The high speed protection is deactivated, when the aircraft speed decreases below VMO/MMO, where the usual normal control laws are recovered.

The autopilot disconnects at VMO + 15 kt and MMO + 0.04.



Note: *1. The ECAM displays an overspeed warning at VMO + 4 kt and MMO + 0.006.*
2. At high altitude, this may result in activation of the angle of attack protection. Depending on the ELAC standard, the crew may have to push on the stick to get out of this protection law.

Ident.: DSC-27-20-10-20-A-00024652.0001001 / 18 MAY 22
9 **Applicable to: MSN 10949-11597**

In addition, if not armed nor activated before the overspeed situation, the A/THR arms or activate automatically and remains armed or activated while the overspeed conditions are met. However, at anytime during the overspeed situation, the flight crew may disconnect the A/THR if required (*Refer to DSC-22_30-50-30 Arming Conditions* and *Refer to DSC-22_30-50-30 A/THR Engagement In Overspeed*).

Ident.: DSC-27-20-10-20-A-00001077.0001001 / 21 MAR 16
Applicable to: ALL

LOW ENERGY AURAL ALERT (IF INSTALLED)

The low energy aural alert is computed by the FAC (*Refer to DSC-22_40-10 General*).

Lateral Control

NORMAL LAW

Ident.: DSC-27-20-10-30-00001078.0006001 / 04 NOV 20

1 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

When the aircraft is on ground, the sidestick commands the aileron and roll spoiler surfaces deflection. The amount of control surface deflection that results from a given amount of sidestick deflection depends upon aircraft speed. The pedals control rudder deflection through a direct mechanical link. The aircraft smoothly transitions to “in flight” mode shortly after liftoff.
When the aircraft is in “in flight” mode, normal law combines control of the ailerons, spoilers (except spoilers 1) and rudder (for turn coordination). The flight crew does not need to use the rudder for turn coordination purpose. While in manual flight the flight crew controls the roll and heading, the flight control system automatically limits the roll rate and the bank angle, ensures turn coordination and damps the dutch roll.
The roll rate requested by the flight crew during flight is proportional to the sidestick deflection, with a maximum rate of:

- 15 °/s in nominal conditions, when the sidestick is in full deflection
- 7.5 °/s in AOA protection or in pitch angle protection, when the sidestick is in full deflection.

During decrab phase, the aircraft limits induced roll after pedal input, in order to ease flight crew control.
After touchdown, the aircraft smoothly transitions from “in flight” mode to “ground” mode.

ENGINE FAILURE AT TAKEOFF

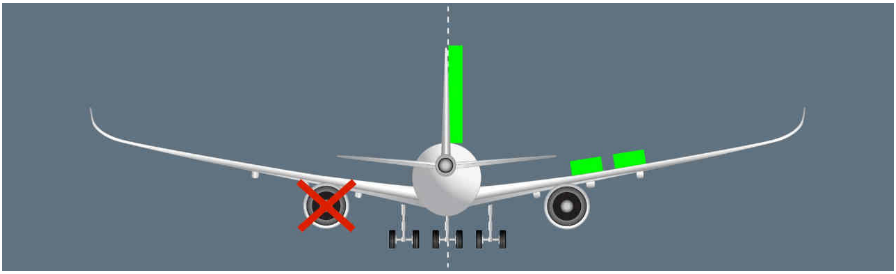
In the case of an engine failure during takeoff, the spoilers 2 and 3 can be deflected on the wing opposite to the failed engine in order to increase yaw efficiency.

Note: *Increasing yaw efficiency in the case of an engine failure on ground, reduces the VMCG, and therefore improves the takeoff performance.*

The spoilers deflection is proportional to the rudder pedal input.

L2 The spoilers will be deflected on the remaining engine side, when:
- The aircraft is on ground
- The pitch attitude is below 2.5 °
- The speed is above 70 kt
- Ground spoilers are not activated
- The rudder pedal order is more than 15 ° of rudder deflection
- AP is not engaged.

Engine failure at takeoff



NORMAL LAW

2 Ident.: DSC-27-20-10-30-00001078.0002001 / 28 MAY 20
Applicable to: MSN 11531

When the aircraft is on the ground (in “on ground” mode), the sidestick commands the aileron and roll spoiler surface deflection. The amount of control surface deflection that results from a given amount of sidestick deflection depends upon aircraft speed. The pedals control rudder deflection through a direct mechanical linkage. The aircraft smoothly transitions to “in flight” mode shortly after liftoff.
When the aircraft is in the “in flight” mode, normal law combines control of the ailerons, spoilers (except N° 1 spoilers), and rudder (for turn coordination). The flight crew does not need to use the rudder for turn coordination. While the system thereby gives the flight crew control of the roll and heading, it also limits the roll rate and bank angle, coordinates the turns, and damps the dutch roll.
The roll rate requested by the flight crew during flight is proportional to the sidestick deflection, with a maximum rate of 15 °/s when the sidestick is at the stop.
During decrab phase, the aircraft will limit induced roll after pedal input, in order to ease flight crew control.
After touchdown, the aircraft smoothly transitions from “in flight” mode to “ground” mode.

NORMAL LAW

Ident.: DSC-27-20-10-30-00001078.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

When the aircraft is on the ground (in “on ground” mode), the sidestick commands the aileron and roll spoiler surface deflection. The amount of control surface deflection that results from a given amount of sidestick deflection depends upon aircraft speed. The pedals control rudder deflection through a direct mechanical linkage. The aircraft smoothly transitions to “in flight” mode shortly after liftoff.
When the aircraft is in the “in flight” mode, normal law combines control of the ailerons, spoilers (except N° 1 spoilers), and rudder (for turn coordination) in the sidestick. The pilot does not need to

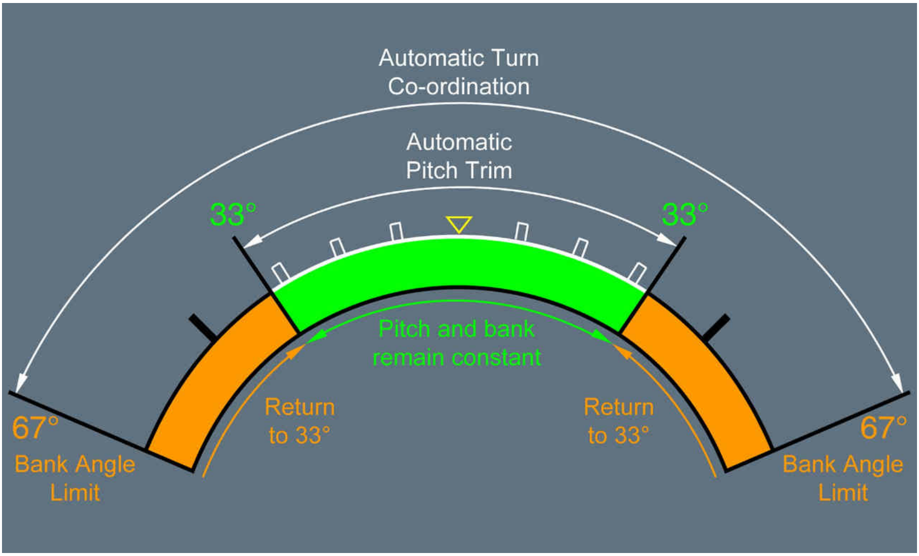
use the rudder for turn coordination. While the system thereby gives the pilot control of the roll and heading, it also limits the roll rate and bank angle, coordinates the turns, and damps the dutch roll.
The roll rate requested by the pilot during flight is proportional to the sidestick deflection, with a maximum rate of 15 °/s when the sidestick is at the stop.
When the aircraft is in “flare” mode, the lateral control is the same as in “in flight” mode.
After touchdown, the aircraft smoothly transitions from “in flight” mode to “ground” mode.

BANK ANGLE PROTECTION

Ident.: DSC-27-20-10-30-00001079.0004001 / 11 MAR 20

3 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

Inside the normal flight envelope, the system maintains positive spiral static stability for bank angles above 33 °. If the flight crew releases the sidestick at a bank angle greater than 33 °, the bank angle automatically reduces to 33 °. Up to 33 °, the system holds the roll attitude constant when the sidestick is at neutral. If the flight crew holds full lateral sidestick deflection, the bank angle goes to 67 ° and no further.
If AOA protection or pitch attitude protection is active, and the flight crew maintains full lateral deflection on the sidestick, the bank angle will not go beyond 45 °. If high speed protection is active, and the flight crew maintains full lateral deflection on the sidestick, the bank angle will not go beyond 40 °. If high speed protection is operative, the system maintains positive spiral static stability from a bank angle of 0 °, so that with the sidestick released, the aircraft always returns to a bank angle of 0 °.
When bank angle protection is active, auto trim is inoperative.
If the bank angle exceeds 45 °, the autopilot disconnects and the FD bars disappear. The FD bars return when the bank angle decreases to less than 40 °.



During a normal turn (bank angle less than 33 °), in level flight:

- The flight crew moves the sidestick laterally (the more the sidestick is moved laterally, the greater the resulting roll rate - e.g. 15 °/s at max deflection)
- It is not necessary to make a pitch correction
- It is not necessary to use the rudder.

In the case of steep turns (bank angle greater than 33 °), the flight crew must apply:

- Lateral pressure on the sidestick to maintain bank
- Aft pressure on the sidestick to maintain level flight.

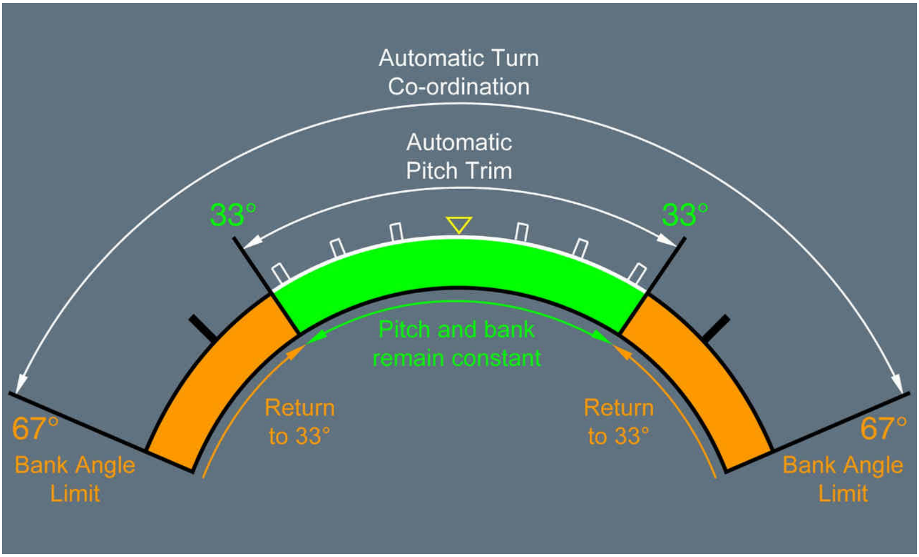
BANK ANGLE PROTECTION

Ident.: DSC-27-20-10-30-00001079.0001001 / 17 MAR 17

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098, 11531**

Inside the normal flight envelope, the system maintains positive spiral static stability for bank angles above 33 °. If the pilot releases the sidestick at a bank angle greater than 33 °, the bank angle automatically reduces to 33 °. Up to 33 °, the system holds the roll attitude constant when the sidestick is at neutral. If the pilot holds full lateral sidestick deflection, the bank angle goes to 67 ° and no further.
If Angle-of-Attack protection is active, and the pilot maintains full lateral deflection on the sidestick, the bank angle will not go beyond 45 °. If High Speed Protection is active, and the pilot maintains full

lateral deflection on the sidestick, the bank angle will not go beyond 40 °. If high speed protection is operative, the system maintains positive spiral static stability from a bank angle of 0 °, so that with the sidestick released, the aircraft always returns to a bank angle of 0 °.
When bank angle protection is active, auto trim is inoperative.
If the bank angle exceeds 45 °, the autopilot disconnects and the FD bars disappear. The FD bars return when the bank angle decreases to less than 40 °.


Automatic Turn
Co-ordination
Automatic
Pitch Trim
33°
33°
Pitch and bank
remain constant
Return
to 33°
Return
to 33°
67°
Bank Angle
Limit
67°
Bank Angle
Limit

During a normal turn (bank angle less than 33 °), in level flight:

- The PF moves the sidestick laterally (the more the sidestick is moved laterally, the greater the resulting roll rate - e.g. 15 °/s at max deflection)
- It is not necessary to make a pitch correction
- It is not necessary to use the rudder.

In the case of steep turns (bank angle greater than 33 °), the PF must apply:

- Lateral pressure on the sidestick to maintain bank
- Aft pressure on the sidestick to maintain level flight.

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Load Alleviation Function

LOAD ALLEVIATION FUNCTION (LAF)

Ident.: DSC-27-20-10-40-00001080.0006001 / 27 NOV 12

1 **Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597**

The load alleviation function permits to alleviate the wing structure loads.

The function is achieved through the upward deflection of:
- The two ailerons only, or
- The two ailerons associated to the spoilers 4 and 5.

The LAF has 2 sub-functions:
- A sub-function activated in case of stable maneuver (ailerons deflections only)
- A sub-function activated in case of gust detection (ailerons and spoilers deflections)

In case of continuous turbulences, the two LAF sub-functions can be activated independently (the highest alleviation is taken into account).
The LAF is available when the aircraft is in clean configuration and in Normal law. The LAF orders are added to those generated by the normal law.

LOAD ALLEVIATION FUNCTION (LAF)

Ident.: DSC-27-20-10-40-00001080.0005001 / 15 FEB 11

Applicable to: MSN 04827-04860

The load alleviation function, which operates through the ailerons, becomes active in turbulence conditions and during maneuvers (pilot control authority is not modified), in order to relieve the wing structure loads.

The LAF becomes active when the vertical load factor exceeds 1.3 g or is below 0.7 g, in this case:
- There is a maximum of 7.5 ° upward deflection (order computed by the ELACs) which is added symmetrically to any aileron deflection.

The load alleviation function is inhibited when:
- Slats or flaps extended, or
- Speed below 210 kt, or
- In direct law, or
- Progressively when the speedbrakes extend.

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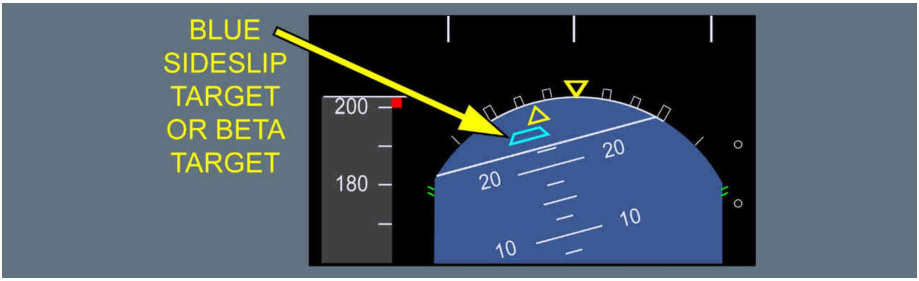
Sideslip Target

SIDESLIP TARGET

Ident.: DSC-27-20-10-50-00001081.0001001 / 17 MAR 17
Applicable to: ALL

If one engine fails, the FAC modifies the sideslip indication slightly to show the pilot how much rudder to use to get the best climb performance (ailerons to neutral and spoilers retracted).
In the case of an engine failure at takeoff, or at go-around, the sideslip index on the PFD changes from yellow to blue (to provide the conditions for the blue display of the sideslip target, *Refer to DSC-31-40 Attitude Data*).



In flight, the lateral normal law commands some rudder surface deflection to minimize the sideslip.
The pilot's response is normal and instinctive: zero the slip indication by applying the right amount of rudder to get the best climb performance.

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Aircraft Trimming

AIRCRAFT TRIMMING

Ident.: DSC-27-20-10-70-00002179.0001001 / 09 DEC 09
Applicable to: ALL

When the aircraft is :

- In normal cruise range (around M .77),
- In straight flight,
- With the autopilot engaged,
- With symmetrical engine thrust, and
- With fuel in the wing tanks distributed symmetrically,

the rudder trim should stay between 1 ° right and 2.3 ° left.

Note: *This indication corresponds to a true rudder deflection within ± 1.5 °, taking into account the permanent offset of rudder trim indication, when the aircraft is in cruise conditions. (average 0.5 ° right, 0.8 ° left).*
An indicated, rudder trim above 1 ° right or 2.3 ° left is acceptable, if maintenance personnel establishes that the corresponding real rudder position is within 1.5 ° left, and 1.5 ° right.

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GENERAL

Ident.: DSC-27-20-20-00001082.0001001 / 17 MAR 17
Applicable to: ALL

Depending on the failures occuring to the flight control system, or on its peripherals, there are 3 levels of reconfiguration :

- Alternate law
  They are two levels of alternate law : with and without reduced protections.
- Direct law
- Mechanical

The ECAM and PFD indicate any control law degradation.

ON THE ECAM

- **In ALTN Law:**
  FLT CTL ALTN LAW (PROT LOST)

MAX SPEED	320 kt (320 kt/M 0.77 on A318)

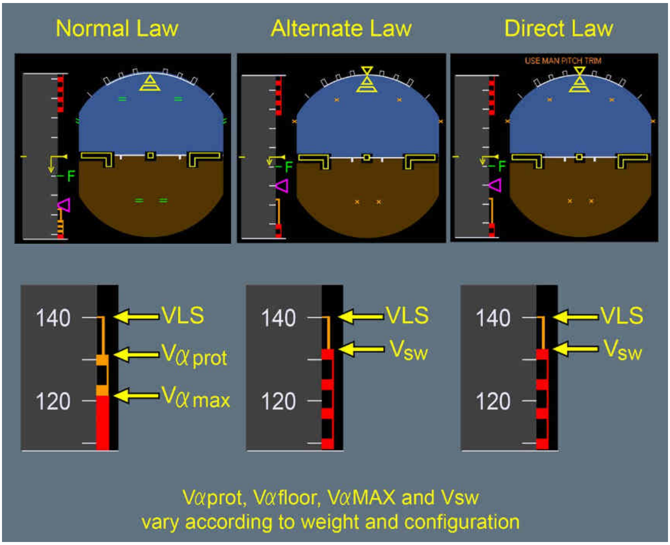
- **In Direct Law:**
  FLT CTL DIRECT LAW (PROT LOST)

MAX SPEED	320 kt/M 0.77
MAN PITCH TRIM USE	

ON THE PFD

The PFD enhances the PF’s awarness of the status of flight controls.
Specific symbols (= in green), and specific formatting of low speed information on the speed scale in normal law, indicate which protections are available.
When protections are lost, amber crosses (X) appear, instead of the green protection symbols (=).
When automatic pitch trim is no longer available, the PFD indicates this with an amber “USE MAN PITCH TRIM” message below the FMA.

Fly-by-Wire Status Awareness via the PFD



Vαprot, Vαfloor, VαMAX and Vsw vary according to weight and configuration

Therefore, by simply looking at this main instrument (PFD), the flight crew is immediately aware of the status of flight controls, and the operational consequences.

FLIGHT CONTROLS LAW RECONFIGURATION

Ident.: DSC-27-20-20-00024057.0001001 / 10 MAY 21
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345

ACTIVE LAW ▸		PITCH		ROLL	YAW
SYS FAILED▾		LAW	PROTEC		
AUTO FLT	2 FAC	ALTN	REDUCED	DIRECT	MECH
	Yaw damper	ALTN	REDUCED	DIRECT	MECH
ELEC	BAT ONLY	ALTN	REDUCED	DIRECT	MECH
	EMER GEN	ALTN	REDUCED	DIRECT	MECH – – – – – ALTN *(1)*

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ACTIVE LAW ▸		PITCH		ROLL	YAW
SYS FAILED▾		**LAW**	**PROTEC**		
F/CTL	ELAC 1 and 2 or both ailerons	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 PITCH and ELAC 2 PITCH	ALTN	REDUCED	DIRECT	ALTN
	3 SEC	ALTN	REDUCED	DIRECT	ALTN
	2 SFCC (slat channel)	ALTN	NO	DIRECT	ALTN
	Slats locked in clean (<17 °) with flaps at or above CONF 2 (>13 °)	ALTN	NO	DIRECT	ALTN
	All spoilers	ALTN	REDUCED	DIRECT	ALTN
	1 Elevator	ALTN	REDUCED	DIRECT	ALTN
	THS (jammed) with the alert F/CTL STABILIZER JAM	ALTN	REDUCED	DIRECT	ALTN
	CAPT or F/O sidestick	ALTN	REDUCED	DIRECT	ALTN
F/CTL and HYD	ELAC 2 + HYD B	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD G	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD Y	ALTN	REDUCED	DIRECT	ALTN
HYD	HYD G + Y	ALTN	REDUCED	DIRECT	MECH
	HYD G + B	ALTN	NO	DIRECT	ALTN
NAV	2 ADR or 2 IR (2nd self detected failed)	ALTN	REDUCED	DIRECT	ALTN
	2 ADR (2nd not self detected failed)	ALTN	NO – – – – – REDUCED (2)	DIRECT	ALTN
	2 IR (2nd not self detected failed)	DIRECT – – – – – ALTN (3)	NO – – – – – REDUCED (3)	DIRECT	MECH – – – – – ALTN (3)
	3 ADR	ALTN	NO	DIRECT	MECH
	3 IR	DIRECT	NO	DIRECT	MECH
	2 Radio Altimeters at L/G EXTN (or CONF 2 if both LGCIU faulty)	DIRECT	NO	DIRECT	ALTN

(1) *After FAC 1 is reset.*

(2) *If AOA disagree.*

(3) *After the faulty IR is set to OFF and ELAC 1 and 2 are reset.*

FLIGHT CONTROLS LAW RECONFIGURATION

Ident.: DSC-27-20-20-00024057.0005001 / 10 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05240

ACTIVE LAW ▸ SYS FAILED▾		PITCH		ROLL	YAW
		LAW	**PROTEC**		
AUTO FLT	2 FAC	ALTN	REDUCED	DIRECT	MECH
	Yaw damper	ALTN	REDUCED	DIRECT	MECH
ELEC	BAT ONLY	ALTN	REDUCED	DIRECT	MECH
	EMER GEN	ALTN	REDUCED	DIRECT	MECH – – – – – ALTN (1)
F/CTL	ELAC 1 and 2 or both ailerons	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 PITCH and ELAC 2 PITCH	ALTN	REDUCED	DIRECT	ALTN
	3 SEC	ALTN	REDUCED	DIRECT	ALTN
	2 SFCC (slat channel)	ALTN	NO	DIRECT	ALTN
	All spoilers	ALTN	REDUCED	DIRECT	ALTN
	1 Elevator	ALTN	REDUCED	DIRECT	ALTN
	THS (jammed) with the alert F/CTL STABILIZER JAM	ALTN	REDUCED	DIRECT	ALTN
	CAPT or F/O sidestick	ALTN	REDUCED	DIRECT	ALTN
F/CTL and HYD	ELAC 2 + HYD B	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD G	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD Y	ALTN	REDUCED	DIRECT	ALTN
HYD	HYD G + Y	ALTN	REDUCED	DIRECT	MECH
	HYD G + B	ALTN	NO	DIRECT	ALTN

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ACTIVE LAW ▸		**PITCH**		**ROLL**	**YAW**
SYS FAILED▾		**LAW**	**PROTEC**		
NAV	2 ADR or 2 IR (2nd self detected failed)	ALTN	REDUCED	DIRECT	ALTN
	2 ADR (2nd not self detected failed)	ALTN	NO – – – – – REDUCED (2)	DIRECT	ALTN
	2 IR (2nd not self detected failed)	DIRECT – – – – – ALTN (3)	NO – – – – – REDUCED (3)	DIRECT	MECH – – – – – ALTN (3)
	3 ADR	ALTN	NO	DIRECT	MECH
	3 IR	DIRECT	NO	DIRECT	MECH
	2 Radio Altimeters at L/G EXTN (or CONF 2 if both LGCIU faulty)	DIRECT	NO	DIRECT	ALTN

(1) *After FAC 1 is reset.*

(2) *If AOA disagree.*

(3) *After the faulty IR is set to OFF and ELAC 1 and 2 are reset.*

FLIGHT CONTROLS LAW RECONFIGURATION

Ident.: DSC-27-20-20-00024057.0047001 / 10 MAY 21

1 **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

ACTIVE LAW ▸		**PITCH**		**ROLL**	**YAW**
SYS FAILED▾		**LAW**	**PROTEC**		
AUTO FLT	2 FAC Note: *ALTN LAW is indicated. No reversion to DIRECT LAW at L/G EXTN.*	NORM	NORM	NORM	MECH
	Yaw damper Note: *ALTN LAW is indicated. No reversion to DIRECT LAW at L/G EXTN.*	NORM	NORM	NORM	MECH
ELEC	BAT ONLY	ALTN	REDUCED	DIRECT	MECH
	EMER GEN	ALTN	REDUCED	DIRECT	MECH – – – – – ALTN (1)

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ACTIVE LAW ▸		**PITCH**		**ROLL**	**YAW**
SYS FAILED▾		**LAW**	**PROTEC**		
F/CTL	ELAC 1 and 2 or both ailerons	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 PITCH and ELAC 2 PITCH	ALTN	REDUCED	DIRECT	ALTN
	3 SEC	ALTN	REDUCED	DIRECT	ALTN
	2 SFCC (slat channel)	ALTN	NO	DIRECT	ALTN
	All spoilers	ALTN	REDUCED	DIRECT	ALTN
	1 Elevator	ALTN	REDUCED	DIRECT	ALTN
	THS (jammed) with the alert F/CTL STABILIZER JAM	ALTN	REDUCED	DIRECT	ALTN
	CAPT or F/O sidestick	ALTN	REDUCED	DIRECT	ALTN
F/CTL and HYD	ELAC 2 + HYD B	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD G	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD Y	ALTN	REDUCED	DIRECT	ALTN
HYD	HYD G + Y	ALTN	REDUCED	DIRECT	MECH
	HYD G + B	ALTN	NO	DIRECT	ALTN
NAV	2 ADR or 2 IR (2nd self detected failed)	ALTN	REDUCED	DIRECT	ALTN
	2 ADR (2nd not self detected failed)	ALTN	NO – – – – – REDUCED (2)	DIRECT	ALTN
	2 IR (2nd not self detected failed)	DIRECT – – – – – ALTN (3)	NO – – – – – REDUCED (3)	DIRECT	MECH – – – – – ALTN (3)
	3 ADR	ALTN	NO	DIRECT	MECH
	3 IR	DIRECT	NO	DIRECT	MECH
	2 Radio Altimeters at L/G EXTN (or CONF 2 if both LGCIU faulty)	DIRECT	NO	DIRECT	ALTN

(1) *After FAC 1 is reset.*

(2) *If AOA disagree.*

(3) *After the faulty IR is set to OFF and ELAC 1 and 2 are reset.*

FLIGHT CONTROLS LAW RECONFIGURATION

Ident.: DSC-27-20-20-00024057.0065001 / 10 MAY 21
Applicable to: MSN 04827-04860

ACTIVE LAW ▸		PITCH		ROLL	YAW	LAF
SYS FAILED▾		LAW	PROTEC			
AUTO FLT	2 FAC	ALTN	REDUCED	DIRECT	MECH	NORM
	Yaw damper	ALTN	REDUCED	DIRECT	MECH	NORM
ELEC	BAT ONLY	ALTN	REDUCED	DIRECT	MECH	NORM
	EMER GEN	ALTN	REDUCED	DIRECT	MECH - - - - - ALTN (1)	NORM
F/CTL	ELAC 1 and 2 or both ailerons	ALTN	REDUCED	DIRECT	ALTN	LOST
	ELAC 1 PITCH and ELAC 2 PITCH	ALTN	REDUCED	DIRECT	ALTN	LOST
	3 SEC	ALTN	REDUCED	DIRECT	ALTN	NORM
	2 SFCC (slat channel)	ALTN	NO	DIRECT	ALTN	INHIB
	All spoilers	ALTN	REDUCED	DIRECT	ALTN	NORM
	1 Aileron	NORM	NORM	NORM	NORM	LOST
	1 Elevator	ALTN	REDUCED	DIRECT	ALTN	LOST
	THS (jammed) with the alert F/CTL STABILIZER JAM	ALTN	REDUCED	DIRECT	ALTN	NORM
	CAPT or F/O sidestick	ALTN	REDUCED	DIRECT	ALTN	LOST
HYD	HYD G + Y	ALTN	REDUCED	DIRECT	MECH	NORM
	HYD G + B	ALTN	NO	DIRECT	ALTN	LOST
	HYD Y + B	NORM	NORM	NORM	NORM	LOST
F/CTL and HYD	ELAC 2 + HYD B	ALTN	REDUCED	DIRECT	ALTN	LOST
	ELAC 1 + HYD G	ALTN	REDUCED	DIRECT	ALTN	LOST
	ELAC 1 + HYD Y	ALTN	REDUCED	DIRECT	ALTN	NORM

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ACTIVE LAW ▸		PITCH		ROLL	YAW	LAF
SYS FAILED▾		**LAW**	**PROTEC**			
NAV	2 ADR or 2 IR (2nd self detected failed)	ALTN	REDUCED	DIRECT	ALTN	NORM
	2 ADR (2nd not self detected failed)	ALTN	NO – – – – – REDUCED (2)	DIRECT	ALTN	NORM
	2 IR (2nd not self detected failed)	DIRECT – – – – – ALTN (3)	NO – – – – – REDUCED (3)	DIRECT	MECH – – – – – ALTN (3)	LOST – – – – – NORM (3)
	3 ADR	ALTN	NO	DIRECT	MECH	LOST
	3 IR	DIRECT	NO	DIRECT	MECH	LOST
	2 Radio Altimeters at L/G EXTN (or CONF 2 if both LGCIU faulty)	DIRECT	NO	DIRECT	ALTN	NORM

(1) *After FAC 1 is reset.*

(2) *If AOA disagree.*

(3) *After the faulty IR is set to OFF and ELAC 1 and 2 are reset.*

FLIGHT CONTROLS LAW RECONFIGURATION

Ident.: DSC-27-20-20-00024057.0061001 / 10 MAY 21

Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

ACTIVE LAW ▸		PITCH		ROLL	YAW
SYS FAILED▾		**LAW**	**PROTEC**		
AUTO FLT	2 FAC *Note:* *ALTN LAW is indicated. No reversion to DIRECT LAW at L/G EXTN.*	NORM	NORM	NORM	MECH
	Yaw damper *Note:* *ALTN LAW is indicated. No reversion to DIRECT LAW at L/G EXTN.*	NORM	NORM	NORM	MECH
ELEC	BAT ONLY	ALTN	REDUCED	DIRECT	MECH
	EMER GEN	ALTN	REDUCED	DIRECT	MECH – – – – – ALTN (1)

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ACTIVE LAW ▸		**PITCH**		**ROLL**	**YAW**
SYS FAILED▾		**LAW**	**PROTEC**		
F/CTL	ELAC 1 and 2 or both ailerons	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 PITCH and ELAC 2 PITCH	ALTN	REDUCED	DIRECT	ALTN
	3 SEC	ALTN	REDUCED	DIRECT	ALTN
	2 SFCC (slat channel)	ALTN	NO	DIRECT	ALTN
	Slats locked in clean (<17 °) with flaps at or above CONF 2 (>13 °)	ALTN	NO	DIRECT	ALTN
	All spoilers	ALTN	REDUCED	DIRECT	ALTN
	1 Elevator	ALTN	REDUCED	DIRECT	ALTN
	THS (jammed) with the alert F/CTL STABILIZER JAM	ALTN	REDUCED	DIRECT	ALTN
	CAPT or F/O sidestick	ALTN	REDUCED	DIRECT	ALTN
F/CTL and HYD	ELAC 2 + HYD B	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD G	ALTN	REDUCED	DIRECT	ALTN
	ELAC 1 + HYD Y	ALTN	REDUCED	DIRECT	ALTN
HYD	HYD G + Y	ALTN	REDUCED	DIRECT	MECH
	HYD G + B	ALTN	NO	DIRECT	ALTN
NAV	2 ADR or 2 IR (2nd self detected failed)	ALTN	REDUCED	DIRECT	ALTN
	2 ADR (2nd not self detected failed)	ALTN	NO ----- REDUCED (2)	DIRECT	ALTN
	2 IR (2nd not self detected failed)	DIRECT ----- ALTN (3)	NO ----- REDUCED (3)	DIRECT	MECH ----- ALTN (3)
	3 ADR	ALTN	NO	DIRECT	MECH
	3 IR	DIRECT	NO	DIRECT	MECH
	2 Radio Altimeters at L/G EXTN (or CONF 2 if both LGCIU faulty)	DIRECT	NO	DIRECT	ALTN

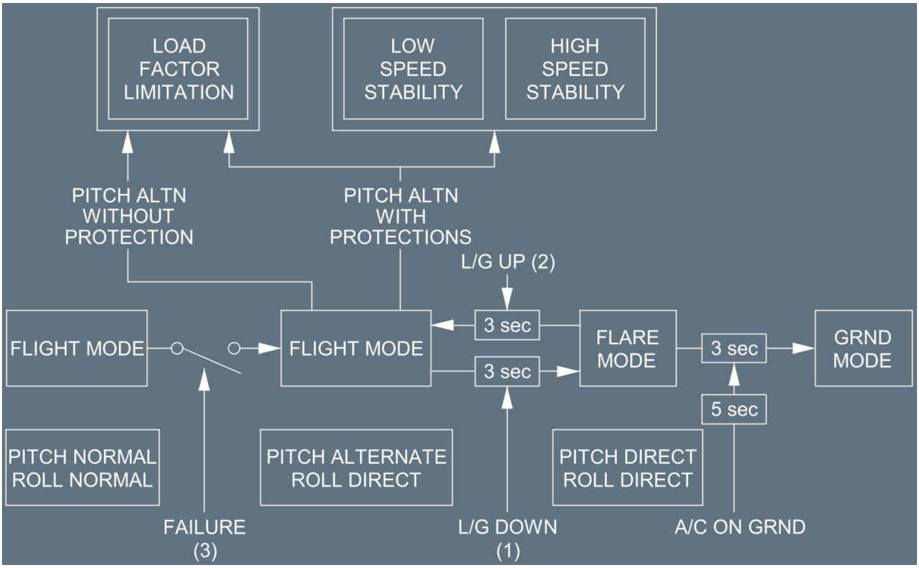
(1) *After FAC 1 is reset.*

(2) *If AOA disagree.*

(3) *After the faulty IR is set to OFF and ELAC 1 and 2 are reset.*

ALTERNATE LAW

Ident.: DSC-27-20-20-00001084.0001001 / 29 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974


LOAD FACTOR LIMITATION
LOW SPEED STABILITY
HIGH SPEED STABILITY
PITCH ALTN WITHOUT PROTECTION
PITCH ALTN WITH PROTECTIONS
L/G UP (2)
FLIGHT MODE
FLIGHT MODE
3 sec
3 sec
FLARE MODE
3 sec
GRND MODE
5 sec
PITCH NORMAL ROLL NORMAL
PITCH ALTERNATE ROLL DIRECT
PITCH DIRECT ROLL DIRECT
FAILURE (3)
L/G DOWN (1)
A/C ON GRND

(1) OR SLATS OR FLAPS ≥ 2 IF L/G INFORMATION NO LONGER AVAILABLE (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(2) OR SLATS OR FLAPS < 2 IF L/G INFORMATION NO LONGER AVAILABLE (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(3) *Refer to DSC-27-20-20 Flight Controls Law Reconfiguration*.

PITCH CONTROL

GROUND MODE

Under alternate law the ground mode becomes active on the ground 5 s after touchdown.
It is identical to the ground mode of the normal law.

FLIGHT MODE

In flight, the alternate law pitch mode follows a load-factor demand law much as the normal law pitch mode does, but it has less built-in protection (reduced protections).

FLARE MODE

In pitch alternate law the flight mode changes to the flare mode when the pilot selects landing gear down. The flare mode is a direct stick-to-elevator relationship. (*Refer to DSC-27-20-20 Direct Law*).

LATERAL CONTROL

When the aircraft flying in pitch alternate law, lateral control follows the roll direct law associated with yaw alternate or mechanical.

ROLL DIRECT LAW

Refer to DSC-27-20-20 Direct Law.

YAW ALTERNATE LAW

Only the yaw damping function is available. Damper authority is limited to ±5 ° of rudder deflection.

REDUCED PROTECTIONS

LOAD FACTOR LIMITATION

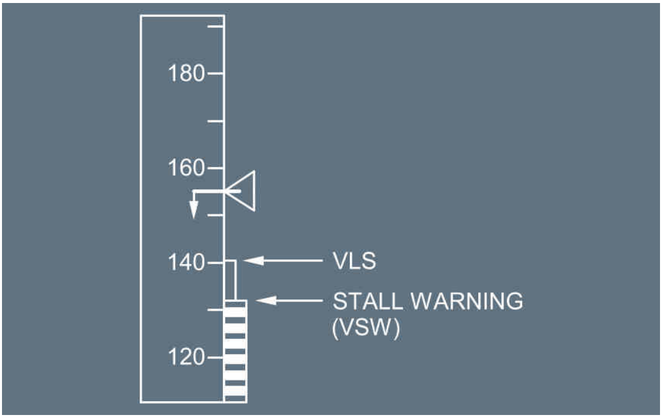
The load factor limitation is similar to that under normal law.

PITCH ATTITUDE PROTECTION

There is no pitch attitude protection. Amber Xs replace the green double bars “=” on the PFD.

LOW SPEED STABILITY

An artificial low speed stability replaces the normal angle-of-attack protection. It is available for all slat/flap configurations, and the low speed stability is active from about 5 kt up to about 10 kt above stall warning speed, depending on the aircraft’s gross weight and slats/flaps configuration.
A gentle progressive nose down signal is introduced, which tends to keep the speed from falling below these values. The pilot can override this demand.
The system also injects bank-angle compensation, so that operation effectively maintains a constant angle of attack.
In addition, audio stall warnings (crickets + “STALL” synthetic voice message) is activated at an appropriate margin from the stall condition.
The PFD speed scale is modified to show a black/red barber pole below the stall warning.
The α floor protection is inoperative.



HIGH SPEED STABILITY

Above VMO or MMO, a nose up demand is introduced to avoid an excessive increase in speed.
The pilot can override this demand.
In addition, the aural overspeed warning (VMO + 4 or MMO + 0.006) remains available.

BANK ANGLE PROTECTION

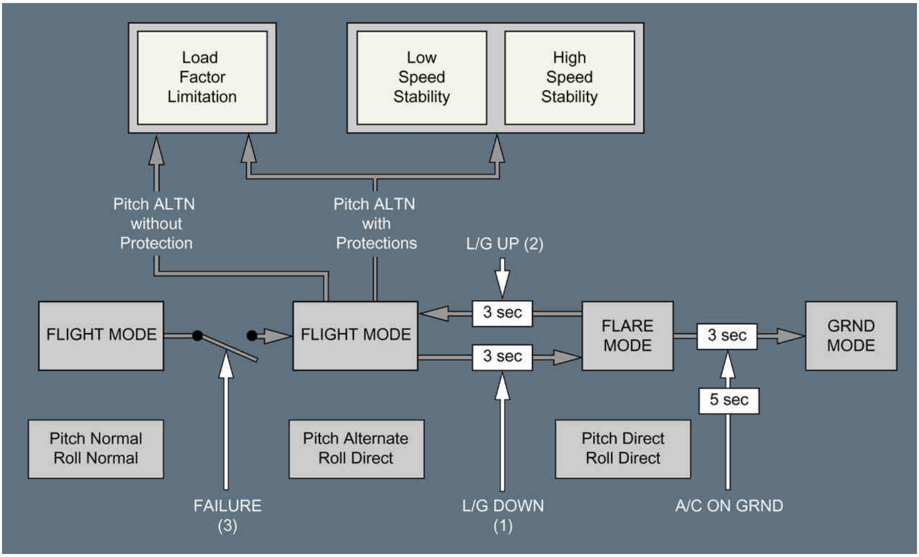
Not provided.

Note: *The AP will disconnect, if speed exceeds VMO/MMO, or if the bank angle exceeds 45 °.*

ALTERNATE LAW

Ident.: DSC-27-20-20-00001084.0005001 / 18 NOV 21

3 **Applicable to: MSN 10949-11597**


Load Factor Limitation
Low Speed Stability
High Speed Stability
Pitch ALTN without Protection
Pitch ALTN with Protections
L/G UP (2)
FLIGHT MODE
FLIGHT MODE
3 sec
3 sec
FLARE MODE
3 sec
GRND MODE
5 sec
Pitch Normal Roll Normal
Pitch Alternate Roll Direct
Pitch Direct Roll Direct
FAILURE (3)
L/G DOWN (1)
A/C ON GRND

(1) Or slats or flaps ≥ 2 if L/G information is no longer available (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(2) Or slats or flaps < 2 if L/G information is no longer available (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(3) *Refer to DSC-27-20-20 Flight Controls Law Reconfiguration*.

PITCH CONTROL

GROUND MODE

Under alternate law, the ground mode becomes active on the ground 5 s after touchdown. It is identical to the ground mode of the normal law.

FLIGHT MODE

In flight, the pith alternate law is similar to the normal law and is based on load factor demand. The flight envelope protections are degraded. The basic high speed protection, pitch attitude protection and angle-of-attack protection are not available.

FLARE MODE

In pitch alternate law, the flight mode changes to the flare mode when the flight crew selects landing gear down. The flare mode is a direct stick-to-elevator relationship (*Refer to DSC-27-20-20 Direct Law*).

LATERAL CONTROL

In alternate law, the lateral control is ensured through a roll direct law and an alternate fly-by-wire or mechanical law.

ROLL DIRECT LAW

Refer to DSC-27-20-20 Direct Law.

YAW ALTERNATE LAW

Only the yaw damping function is available. Damper authority is limited to ±5 ° of rudder deflection.

REDUCED PROTECTIONS

LOAD FACTOR LIMITATION

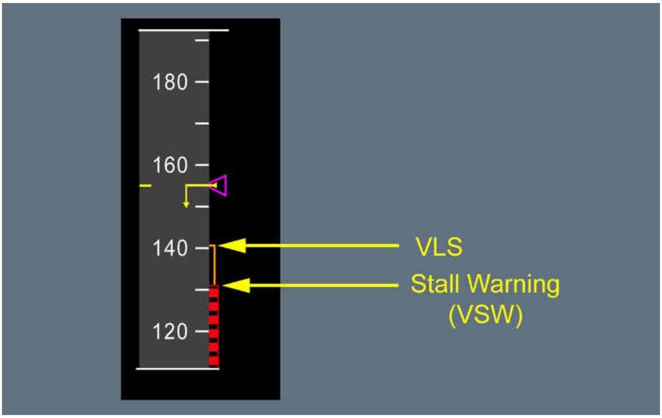
The load factor limitation is similar to the load factor limitation in normal law.

PITCH ATTITUDE PROTECTION

There is no pitch attitude protection. X replaces = on the PFD.

LOW SPEED STABILITY

An artificial low speed stability replaces the normal angle-of-attack protection. It is available for all slat/flap configurations, and the low speed stability is active from about 5 kt up to about 10 kt above stall warning speed, depending on the aircraft's gross weight and slat/flap configuration.
A gentle progressive nose down signal is introduced, that tends to keep the speed from falling below these values. The flight crew can override this demand.
The system also injects bank-angle compensation, so that operation effectively maintains a constant angle of attack.
In addition, stall warnings (crickets + STALL synthetic voice message and STALL STALL message on PFD) are activated at an appropriate margin from the stall condition.
The PFD speed scale is modified to show a black/red barber pole below the stall warning.
The α floor protection is inoperative.



HIGH SPEED STABILITY

Above VMO or MMO, a nose up demand is introduced to avoid an excessive increase in speed.
The flight crew can override this demand.
In addition, the aural overspeed warning (VMO + 4 or MMO + 0.006) remains available.

BANK ANGLE PROTECTION

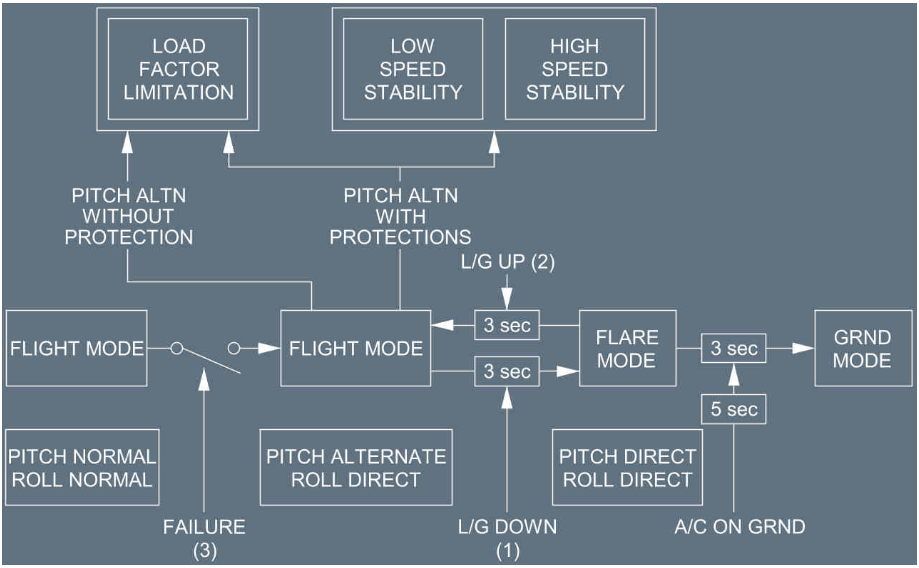
No bank angle protection is provided. However, both PFDs display the message BANK BANK and "BANK BANK" aural alert is triggered, when the bank angle exceeds 45 °.

Note: *The AP will disconnect, if speed exceeds VMO/MMO, or if the bank angle exceeds 45 °.*

ALTERNATE LAW

Ident.: DSC-27-20-20-00001084.0002001 / 29 MAY 20

4 **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08529, 08635-09324**


LOAD FACTOR LIMITATION
LOW SPEED STABILITY
HIGH SPEED STABILITY
PITCH ALTN WITHOUT PROTECTION
PITCH ALTN WITH PROTECTIONS
L/G UP (2)
FLIGHT MODE
FLIGHT MODE
3 sec
3 sec
FLARE MODE
3 sec
GRND MODE
5 sec
PITCH NORMAL ROLL NORMAL
PITCH ALTERNATE ROLL DIRECT
PITCH DIRECT ROLL DIRECT
FAILURE (3)
L/G DOWN (1)
A/C ON GRND

(1) OR SLATS OR FLAPS ≥ 2 IF L/G INFORMATION NO LONGER AVAILABLE (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(2) OR SLATS OR FLAPS < 2 IF L/G INFORMATION NO LONGER AVAILABLE (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(3) *Refer to DSC-27-20-20 Flight Controls Law Reconfiguration*.

PITCH CONTROL

GROUND MODE

Under alternate law the ground mode becomes active on the ground 5 s after touchdown. It is identical to the ground mode of the normal law.

FLIGHT MODE

In flight, the alternate law pitch mode follows a load-factor demand law much as the normal law pitch mode does, but it has less built-in protection (reduced protections).

FLARE MODE

In pitch alternate law the flight mode changes to the flare mode when the pilot selects landing gear down. The flare mode is a direct stick-to-elevator relationship. (*Refer to DSC-27-20-20 Direct Law*).

LATERAL CONTROL

When the aircraft flying in pitch alternate law, lateral control follows the roll direct law associated with yaw alternate or mechanical.

ROLL DIRECT LAW

Refer to DSC-27-20-20 Direct Law.

YAW ALTERNATE LAW

Only the yaw damping function is available. Damper authority is limited to ±5 ° of rudder deflection.

REDUCED PROTECTIONS

LOAD FACTOR LIMITATION

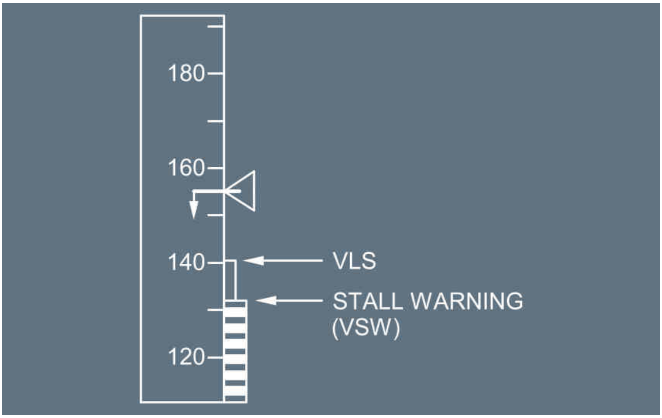
The load factor limitation is similar to that under normal law.

PITCH ATTITUDE PROTECTION

There is no pitch attitude protection. Amber Xs replace the green double bars “=” on the PFD.

LOW SPEED STABILITY

An artificial low speed stability replaces the normal angle-of-attack protection. It is available for all slat/flap configurations, and the low speed stability is active from about 5 kt up to about 10 kt above stall warning speed, depending on the aircraft’s gross weight and slats/flaps configuration.
A gentle progressive nose down signal is introduced, which tends to keep the speed from falling below these values. The pilot can override this demand.
The system also injects bank-angle compensation, so that operation effectively maintains a constant angle of attack.
In addition, stall warnings (crickets + “STALL” synthetic voice message and "STALL STALL" red message on PFD) are activated at an appropriate margin from the stall condition.
The PFD speed scale is modified to show a black/red barber pole below the stall warning.
The α floor protection is inoperative.



HIGH SPEED STABILITY

Above VMO or MMO, a nose up demand is introduced to avoid an excessive increase in speed. The pilot can override this demand.
In addition, the aural overspeed warning (VMO + 4 or MMO + 0.006) remains available.

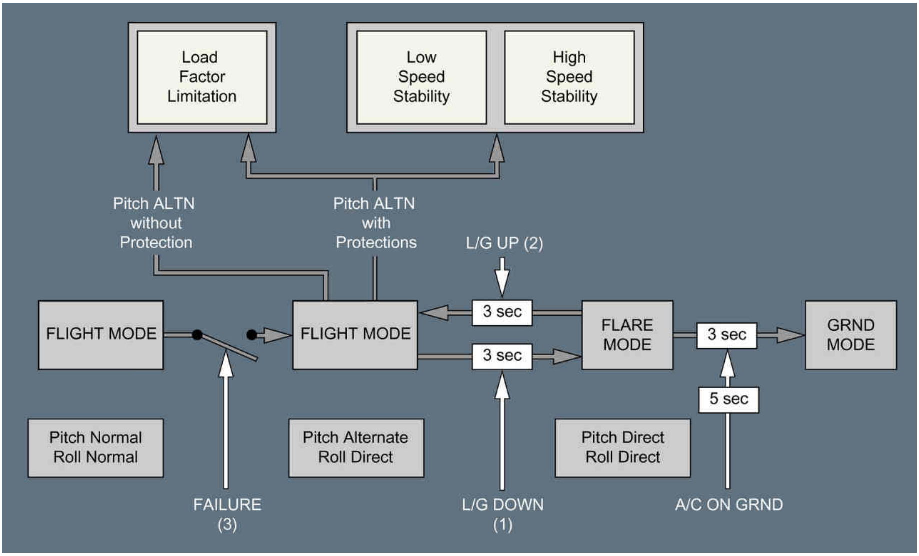
BANK ANGLE PROTECTION

Not provided.

Note: *The AP will disconnect, if speed exceeds VMO/MMO, or if the bank angle exceeds 45 °.*

ALTERNATE LAW

5 Ident.: DSC-27-20-20-00001084.0003001 / 29 MAY 20
Applicable to: MSN 05947-05987, 06634, 06871, 07081-08495, 08596


Load
Factor
Limitation
Low
Speed
Stability
High
Speed
Stability
Pitch ALTN
without
Protection
Pitch ALTN
with
Protections
L/G UP (2)
FLIGHT MODE
3 sec
FLIGHT MODE
3 sec
FLARE
MODE
3 sec
GRND
MODE
5 sec
Pitch Normal
Roll Normal
Pitch Alternate
Roll Direct
Pitch Direct
Roll Direct
FAILURE
(3)
L/G DOWN
(1)
A/C ON GRND

(1) OR SLATS OR FLAPS ≥ 2 IF L/G INFORMATION NO LONGER AVAILABLE (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(2) OR SLATS OR FLAPS < 2 IF L/G INFORMATION NO LONGER AVAILABLE (LGCIU 1+2 FAULT OR SEC 1+2+3 FAULT)

(3) *Refer to DSC-27-20-20 Flight Controls Law Reconfiguration*.

PITCH CONTROL

GROUND MODE

Under alternate law, the ground mode becomes active on the ground 5 s after touchdown.
It is identical to the ground mode of the normal law.

FLIGHT MODE

In flight, the pith alternate law is similar to the normal law and is based on load factor demand. The flight envelope protections are degraded. The basic high speed protection, pitch attitude protection and angle-of-attack protection are not available.

FLARE MODE

In pitch alternate law, the flight mode changes to the flare mode when the flight crew selects landing gear down. The flare mode is a direct stick-to-elevator relationship. (*Refer to DSC-27-20-20 Direct Law*).

LATERAL CONTROL

In alternate law, the lateral control is ensured through a roll direct law and an alternate fly-by-wire or mechanical law.

ROLL DIRECT LAW

Refer to DSC-27-20-20 Direct Law.

YAW ALTERNATE LAW

Only the yaw damping function is available. Damper authority is limited to ±5 ° of rudder deflection.

REDUCED PROTECTIONS

LOAD FACTOR LIMITATION

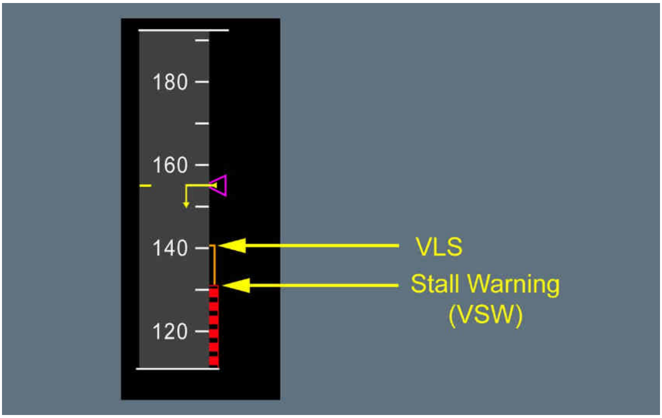
The load factor limitation is similar to the load factor limitation in normal law.

PITCH ATTITUDE PROTECTION

There is no pitch attitude protection. X replaces = on the PFD.

LOW SPEED STABILITY

An artificial low speed stability replaces the normal angle-of-attack protection. It is available for all slat/flap configurations, and the low speed stability is active from about 5 kt up to about 10 kt above stall warning speed, depending on the aircraft’s gross weight and slats/flaps configuration.
A gentle progressive nose down signal is introduced, that tends to keep the speed from falling below these values. The flight crew can override this demand.
The system also injects bank-angle compensation, so that operation effectively maintains a constant angle of attack.
In addition, stall warnings (crickets + STALL synthetic voice message and STALL STALL message on PFD) are activated at an appropriate margin from the stall condition.
The PFD speed scale is modified to show a black/red barber pole below the stall warning.
The α floor protection is inoperative.



HIGH SPEED STABILITY

Above VMO or MMO, a nose up demand is introduced to avoid an excessive increase in speed. The flight crew can override this demand.
In addition, the aural overspeed warning (VMO + 4 or MMO + 0.006) remains available.

BANK ANGLE PROTECTION

No bank angle protection is provided. However, both PFDs display the message BANK BANK when the bank angle exceeds 45 °.

Note: *The AP will disconnect, if speed exceeds VMO/MMO, or if the bank angle exceeds 45 °.*

ALTERNATE LAW WITHOUT REDUCED PROTECTION

Ident.: DSC-27-20-20-00001085.0001001 / 21 MAR 16
Applicable to: ALL

This is identical to alternate law except that it does not include the low-speed stability or the high-speed stability. It includes only the load factor limitation.

DIRECT LAW

Ident.: DSC-27-20-20-00001086.0001001 / 21 MAR 16
Applicable to: ALL

PITCH CONTROL

The pitch direct law is a direct stick-to-elevator relationship (elevator deflection is proportional to stick deflection).

In all configurations the maximum elevator deflection varies as a function of CG.
It is a compromise between adequate controllability with the CG forward, and not-too-sensitive control with the CG aft.
There is no automatic trim : the pilot must trim manually.
The PFD displays in amber the message “USE MAN PITCH TRIM”.
No protections are operative.
The α floor function is inoperative.
Overspeed and stall warnings are available as for alternate law.

LATERAL CONTROL

When flying in “direct law”, the roll direct law associated with mechanical yaw control governs lateral control.

ROLL DIRECT LAW

The roll direct law is a direct stick-to-surface-position relationship. System gains are set automatically to correspond to slat/flap configuration.
With the aircraft in the clean configuration, the maximum roll rate is about 30 °/s.
With slats extended, it is about 25 °/s.
To limit roll rate, the roll direct law uses only ailerons and spoilers N° 4 and 5.
If spoiler N° 4 has failed, spoiler N° 3 replaces it.
If the ailerons have failed, all roll spoilers become active.

YAW MECHANICAL CONTROL

The pilot controls yaw with the rudder pedals.
The yaw damping and turn coordination functions are lost.

ABNORMAL ATTITUDE LAWS

Ident.: DSC-27-20-20-00001087.0004001 / 16 MAY 22
Applicable to: ALL

If for any reason the aircraft goes far outside the normal flight envelope and reaches an extreme attitude, the flight control law will be modified.
The abnormal attitude law will engage and will provide the PF with maximum efficiency to recover normal attitude.

The abnormal attitude law engages when one of the following values is reached:
- Bank angle above 125 °
- Pitch attitude:
  - If at least 2 ADC are valid and consistent: Pitch attitude above 50 ° nose up or below 30 ° nose down
  - In all other cases: Pitch attitude above 40 ° nose up or below 20 ° nose down
- Speed below 70 to 90 kt (depending on the aircraft pitch attitude), or above 440 kt
- Mach above 0.91
- Angle of attack above 40 °.

When the abnormal attitude law engages:
- The pitch alternate law with no protection is active (no load factor limitation)
- The roll direct law is active
- The yaw mechanical law is active
- Autotrim is not available. Therefore, USE MAN PITCH TRIM is displayed on the PFDs
- F/CTL DIRECT LAW is displayed on the ECAM.

When the aircraft returns within the normal flight envelope, the abnormal attitude law disengages and the following conditions remain for the remainder of the flight:
- The pitch alternate law without reduced protection is active, *Refer to DSC-27-20-20 Alternate Law Without Reduced Protection*
- The roll direct law is active
- The yaw alternate law is active
- F/CTL ALTN LAW is displayed on the ECAM.

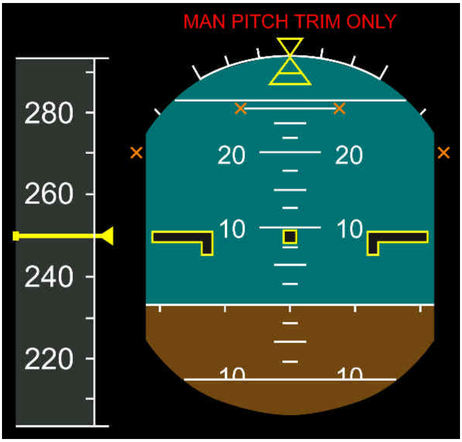
MECHANICAL BACK-UP

Ident.: DSC-27-20-20-00001088.0001001 / 17 MAR 17
Applicable to: ALL

The purpose of the mechanical backup is to achieve all safety objectives in MMEL dispatch condition: to manage a temporary and total electrical loss, the temporary loss of five fly-by-wire computers, the loss of both elevators, or the total loss of ailerons and spoilers.

PITCH

The pilot manually applies trim to the THS to control the aircraft in pitch.
The PFDs display “MAN PITCH TRIM ONLY” in red.

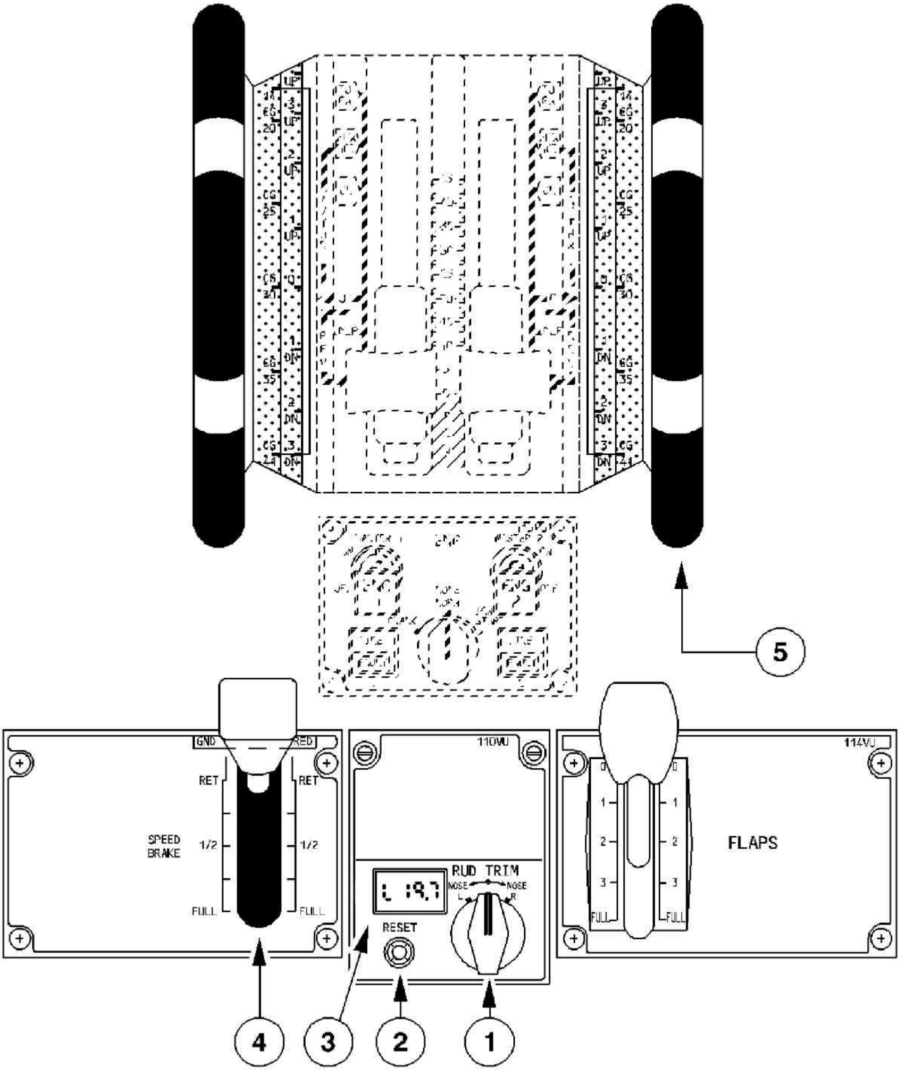

MAN PITCH TRIM ONLY
280
260
240
220
20
20
10
10
10
10

LATERAL

The pilot uses the rudder pedals as the mechanical backup to laterally control the aircraft .

PEDESTAL

Ident.: DSC-27-20-30-00001090.0002001 / 08 JUL 15
Applicable to: ALL


SPEED
BRAKE
GND
RET
1/2
FULL
RET
1/2
FULL
110VU
RUD TRIM
NOSE
L
NOSE
R
L 19.7
RESET
114VU
FLAPS
0
1
2
3
FULL
5
4
3
2
1

(1) RUD TRIM rotary selector
Controls the rudder trim actuator, which moves the neutral point of the artificial feel by the equivalent of one degree of rudder travel per second.

Note: The rudder trim rotary selector has no effect, when the autopilot is engaged.

(2) RESET pb
By pushing the RESET pb, the zero trim position is ordered at 1.5 °/s.
After the reset, an indication of up to 0.3° (L or R) may be observed in the rudder trim position indication.

Note: The RESET pb is not active, when the autopilot is engaged.

(3) Position Indicator
Displays the rudder trim direction (L or R) and value.

(4) SPEEDBRAKE lever

The lever controls:
- The position of the speedbrake surfaces.
  To set speedbrake surfaces to a required position, the lever has to be pushed down and set to the required position. A “hardpoint” is provided at “½” SPEEDBRAKE position.
- The manual preselection of the ground spoilers.
  To arm the ground spoilers, the lever must be pulled up when in the RET position.
  When the lever is armed (or reverse thrust is selected), all spoiler's surfaces will automatically extend at landing, or in case of a rejected takeoff.

(5) PITCH TRIM Wheel
Both pitch trim wheels provide mechanical control of the THS and have priority over electrical control. A pilot action on the pitch trim wheel disconnects the autopilot.

Note: Crew action on the pitch trim wheel does not disconnect the ELACs (micro-switches, actuated by the override mechanism, ensure that the computers remain synchronized with the manually-selected position).

The THS is manually-controlled on ground for the THS setting, before takeoff and in flight, when in direct law.

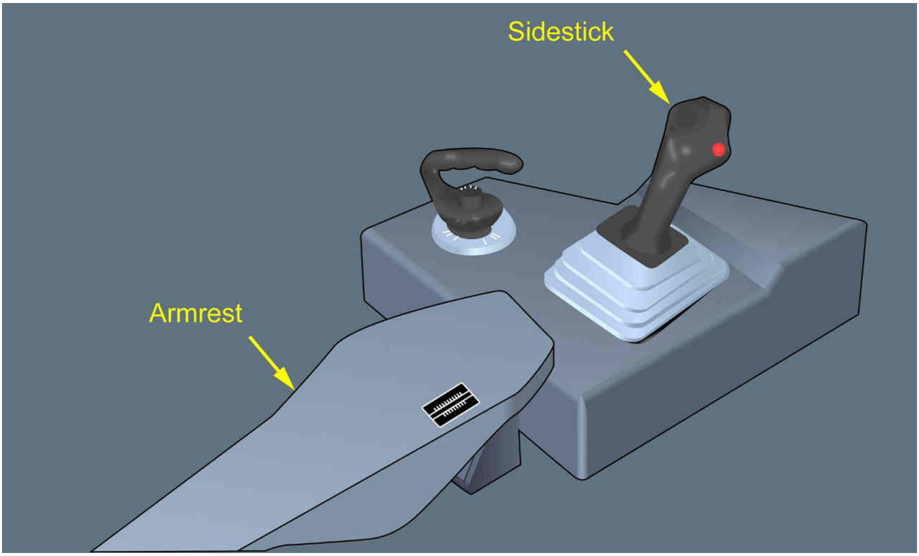
- Before takeoff, the pilot sets the THS to the angular value, determined as a function of the aircraft CG, using the CG scale on the wheel. The relationship between the aircraft CG and the THS setting shown on the trim wheel is only applicable for takeoff. The limits of the THS normal setting range for takeoff are indicated by a green band on the pitch trim wheel.
- In flight, when in direct law, the pilot uses the THS conventionally to fly in trim. In flight, the aircraft pitch trim setting depends on aircraft CG, weight, altitude and speed. Consequently, the relation between the aircraft CG, and the THS setting displayed on the pitch trim wheel, does not apply in flight.

Following nosewheel touchdown, as the pitch attitude becomes less than 2.5 ° for more than 5 s, pitch trim is automatically reset to zero.

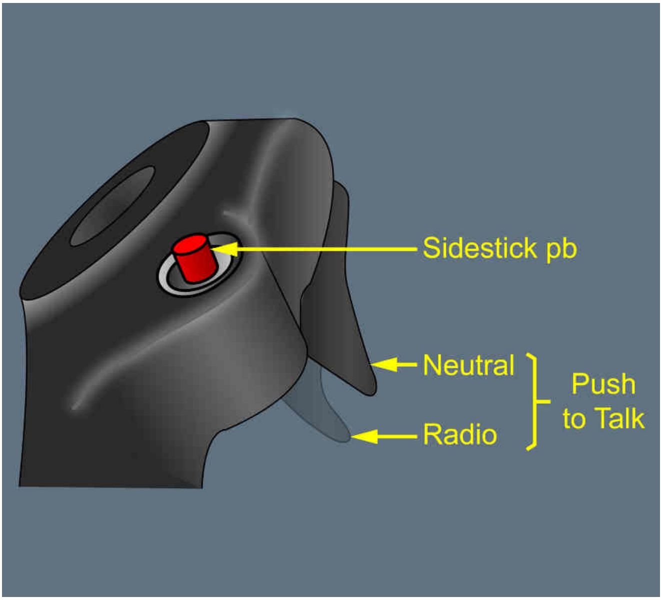
Note: This function is inoperative, when the green or yellow hydraulic system is not pressurized.

LATERAL CONSOLES

Ident.: DSC-27-20-30-00001091.0004001 / 18 MAY 22
Applicable to: ALL



SIDESTICKS



The sidestick are springloaded to neutral. They are not mechanically linked, and do not receive feedback from the flight control surfaces.
When the autopilot is engaged, the sidesticks are locked in the neutral position.

If a flight crewmember applies a force above a given threshold:
- The sidesticks unlock
- The autopilot disengages
- The AUTO FLT AP OFF alert triggers.

L3 The autopilot disengages when a pilot applies a force of more than 5 daN in pitch, or 3.5 daN in roll.

L1 *Note: This is not the recommended method for autopilot disengagement. For more information, Refer to DSC-22_30-30-30 Manual Disengagement 1 and Refer to DSC-22_30-30-30 Automatic Disengagement 1.*

Each sidestick has two controls:
- The Radio Push To Talk switch
- The sidestick pb, for autopilot disengagement, or sidestick priority.

SIDESTICK PRIORITY LOGIC

At all times, only one flight crewmember should fly the aircraft.
However, if both flight crewmembers use their sidesticks simultaneously, their orders are algebraically added.

L2 The flight control laws limit the combined order to the equivalent of the full deflection of one sidestick.

L1 In this case the two green SIDE STICK PRIORITY lights on the glareshield come on and "DUAL INPUT" voice message is activated.
A flight crewmember can deactivate the other sidestick and take full control, by pressing and keeping pressed the sidestick pb.
To deactivate the other sidestick, the flight crewmember must press their sidestick pb for 40s.
The other sidestick is permanently deactivated, until any flight crewmember presses their sidestick pb.
If both flight crew members press their sidestick pb, the last pilot to press gets the priority.

L2 If one sidestick was deactivated on ground, the CONFIG L(R) SIDESTICK FAULT alert is triggered at takeoff power application, or during the TO CONFIG test.

L1 For more information: *Refer to DSC-27-20-30 Glareshield*

ARMREST

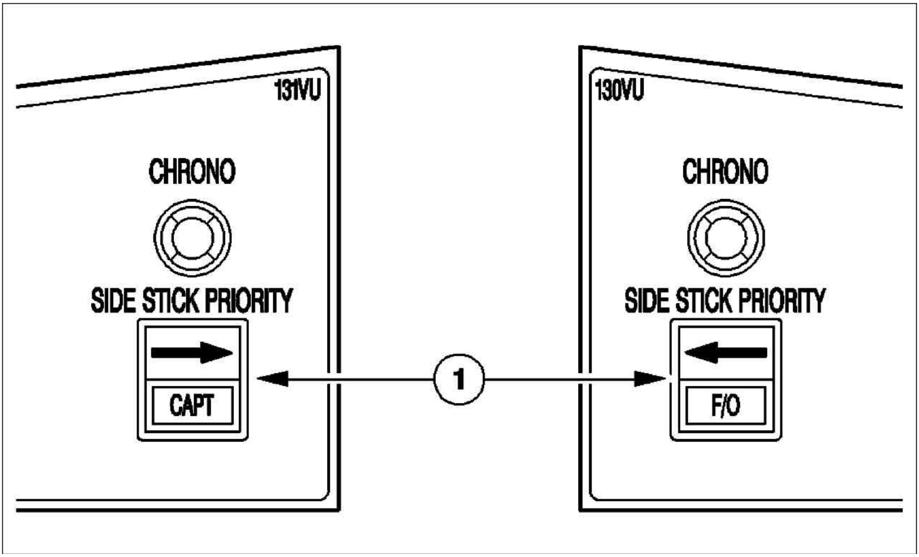
The armrest on the sidestick side of the Captain and F/O seats are adjustable.
Correctly adjusting the seat eases the handling of the sidestick.
For information on how to adjust the armrest: *Refer to DSC-25-10-30 Armrest*

GLARESHIELD

Ident.: DSC-27-20-30-00001092.0002001 / 02 MAY 23

1 **Applicable to: MSN 01143-11293**

2



(1) SIDE STICK PRIORITY lt

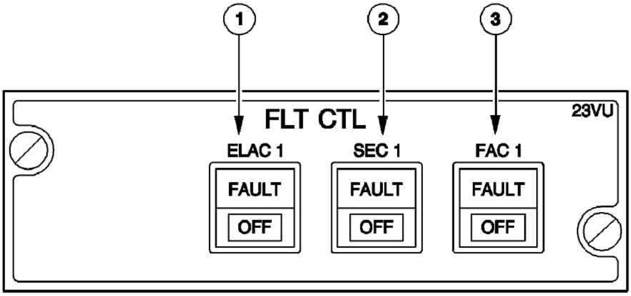
Red arrow light :
- comes on in front of the flight crew losing authority.
- goes out if the flight crew has recovered their authority
  - if the other flight crew releases their TAKEOVER pushbutton prior the priority condition is latched.
    or
  - If the flight crew has used their takeover push button to cancel a latched priority situation.
    Sidestick priority audio : A “PRIORITY LEFT” or “PRIORITY RIGHT” audio voice message is given each time priority is taken.

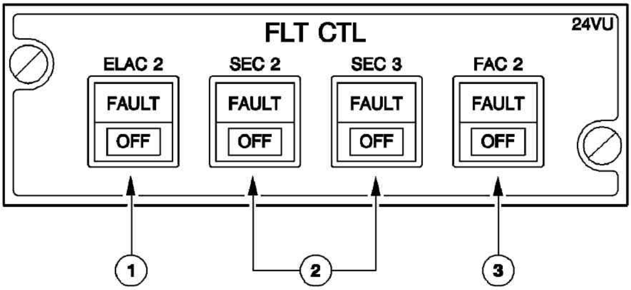
Green CAPT and F/O lights :

- Both lights flash when the flight crew move both sidesticks simultaneously and neither takes priority.
- When the flight crew has taken priority by pressing the takeover pushbutton and the other flight crew's sidestick is not at neutral, the light in front of the flight crew with priority lights up. It goes out when the other flight crew returns their stick to the neutral position.

OVERHEAD PANEL

Ident.: DSC-27-20-30-00017869.0001001 / 19 SEP 16
Applicable to: ALL


1
2
3
FLT CTL
23VU
ELAC 1
SEC 1
FAC 1
FAULT
OFF
FAULT
OFF
FAULT
OFF


FLT CTL
24VU
ELAC 2
SEC 2
SEC 3
FAC 2
FAULT
OFF
FAULT
OFF
FAULT
OFF
FAULT
OFF
1
2
3

(1) ELAC 1(2) pushbutton

Controls the Elevator and Aileron Computer (ELAC) 1(2).

ON : ELAC 1(2) performs the following functions :
- Normal pitch and roll, normal LAF ⊲
- Alternate pitch, alternate LAF ⊲
- Direct pitch and roll
- Abnormal attitude
- Aileron droop
- Acquisition of autopilot orders.

OFF : The corresponding computer is not active. Switching it OFF, then ON, resets the computer.

FAULT : Comes on amber, along with an ECAM caution:
- When a failure is detected
- During ELAC power-up test (eight seconds).

Note: The ELAC power-up test occurs when electrical power is turned on, or after the occurrence of an electrical transient lasting longer than 25 ms.

The FAULT light goes off, when the pilot selects OFF, or at the end of the ELAC power-up test, if its results are satisfactory.

(2) SEC 1(2)(3) pushbutton

Controls the Spoiler and Elevator Computer (SEC) 1(2)(3).

ON : SEC 1(2)(3) performs the following functions:
- Normal roll (by controlling the spoilers)
- Speed brakes and ground spoilers
- Alternate pitch (SEC 1 and SEC 2 only)
- Direct pitch (SEC 1 and SEC 2 only)
- Direct roll
- Alternate LAF ⊲
- Abnormal attitude.

OFF : The corresponding computer is not active. Switching it OFF, then ON, resets the computer.

FAULT : Comes on amber, along with an ECAM caution, when a failure is detected.
The FAULT light goes off, when the pilot selects OFF.

(3) FAC 1(2) pushbutton

Controls the Flight Augmentation Computer (FAC) 1(2).

ON : Both FACs perform the following functions:
- Normal roll (coordinating turns and damping dutch roll)
- Rudder trim
- Rudder travel limit
- Alternate yaw

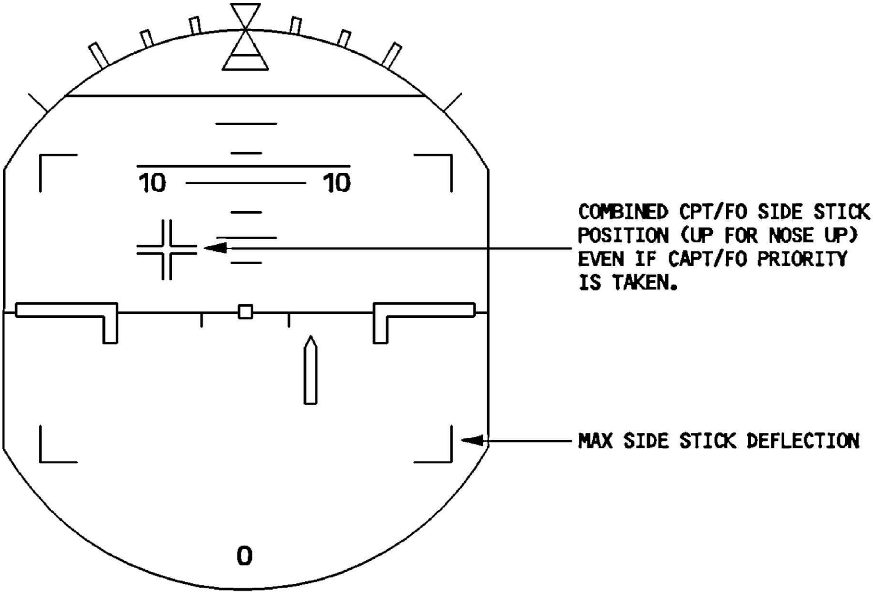
OFF : The corresponding computer is not active. Switching it OFF, and then ON, resets the computer.

FAULT : Comes on amber, along with an ECAM caution, when a failure is detected.
The FAULT light goes off, when the pilot selects OFF.

SIDE STICK INDICATIONS ON PFD

Ident.: DSC-27-20-30-00001094.0001001 / 21 MAR 16
Applicable to: ALL

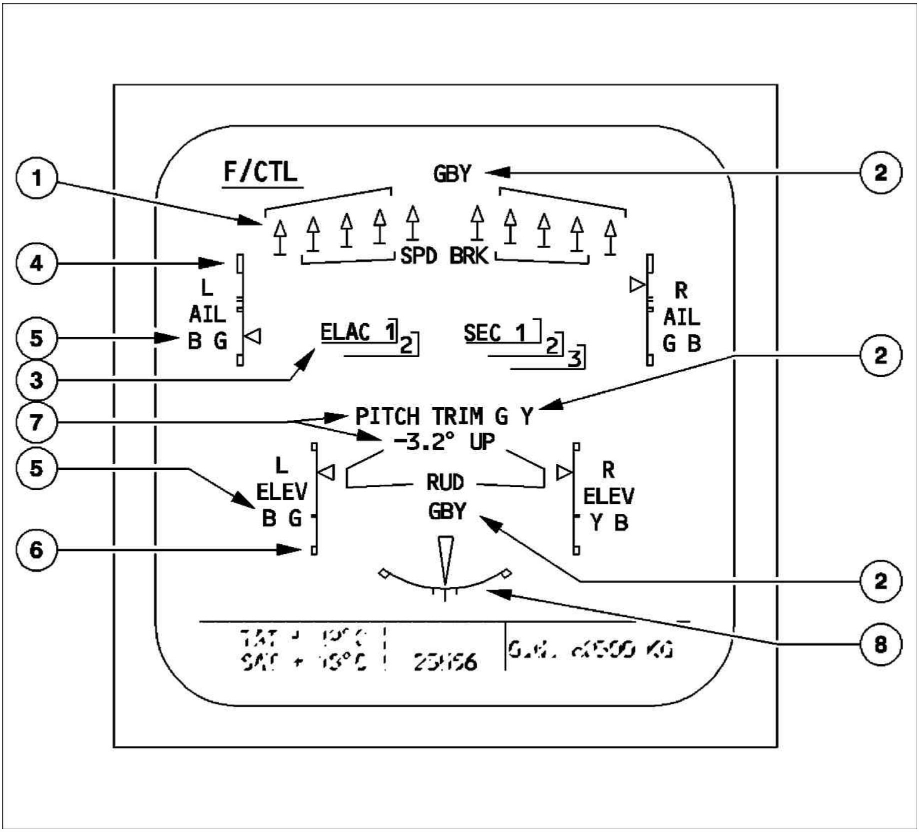
On the ground, after the first engine start, sidestick position indications appear white on both PFDs. The indications disappear when the aircraft goes from the ground into flight.


10
10
0
COMBINED CPT/FO SIDE STICK POSITION (UP FOR NOSE UP) EVEN IF CAPT/FO PRIORITY IS TAKEN.
MAX SIDE STICK DEFLECTION

ECAM F/CTL PAGE

Ident.: DSC-27-20-30-00001095.0002001 / 15 OCT 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


F/CTL
GBY
SPD BRK
L
AIL
B G
R
AIL
G B
ELAC 1 2
SEC 1 2 3
PITCH TRIM G Y
-3.2° UP
L
ELEV
B G
RUD
GBY
R
ELEV
Y B
23H56
1
2
4
5
3
7
5
6
2
2
8

(1) Spoilers/Speed brakes Indication

Δ : Spoiler deflected by more than 2.5 ° (green)

– : Spoiler retracted (green)

Δ : Spoiler fault deflected (amber)

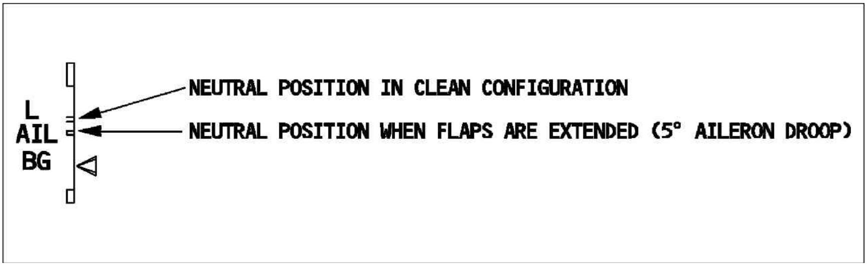
1 : Spoiler fault retracted (amber)

× : Spoiler position not valid (amber)

(2) Hydraulic System Pressure Indication
It is normally green. It becomes amber, if the hydraulic system's pressure decreases.

(3) ELAC/SEC Indication
Normally green. Changes to amber if there is a failure in the ELAC or the SEC, or if ELAC or SEC pushbutton is off, or if both flight control data concentrators (FCDCs) fail.
The surrounding box is normally grey. It changes to amber if the ELAC or SEC indication does.

(4) Aileron position indication
It is indicated with a white scale and green index. It changes to amber, when neither (green nor blue) servojack is available.

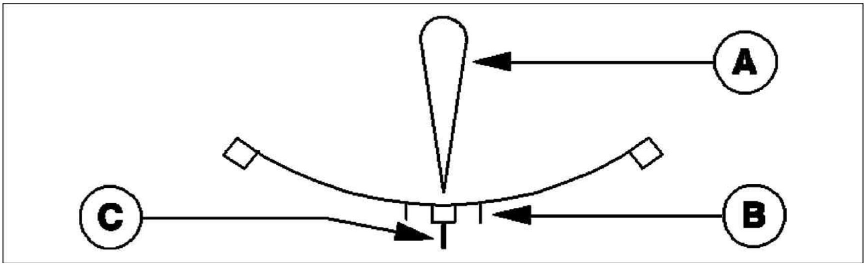

L
AIL
BG
NEUTRAL POSITION IN CLEAN CONFIGURATION
NEUTRAL POSITION WHEN FLAPS ARE EXTENDED (5° AILERON DROOP)

(5) Aileron and elevator actuator indication
"G" and "B" are normally displayed in green.
The color changes to amber, in case of a green or blue hydraulic system low pressure.
The partial box also changes to amber, if the associated computer or actuator fails.

(6) Elevator position indication
It is indicated with a white scale and green index. The index becomes amber, when both associated actuators are not available.

(7) Pitch trim position indication
The pitch trim numbers are in green. They become amber, if green and yellow hydraulic system pressure decreases.
The "PITCH TRIM" legend is in white. It becomes amber, if the pitch trim jams.

(8) Yaw control indications



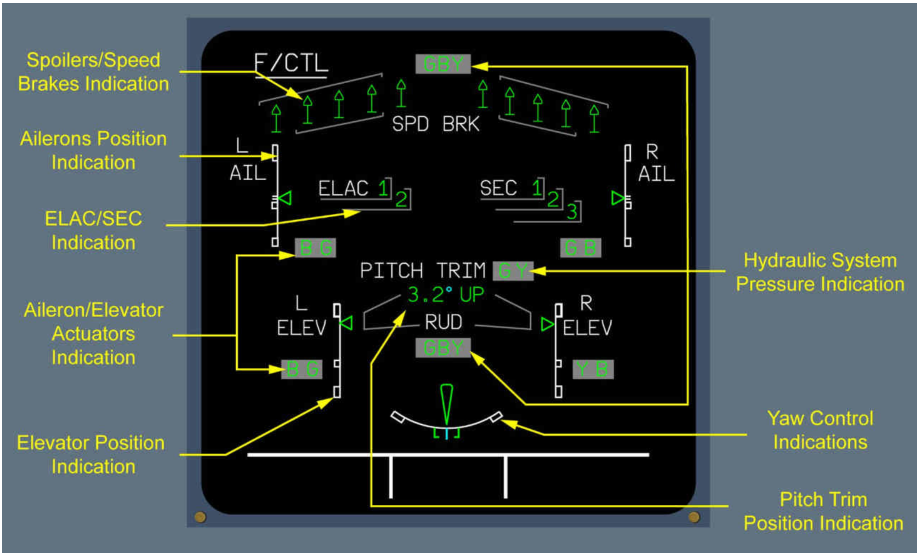
(A) Rudder position indication
It is normally in green. The rudder symbol becomes amber, if the blue, green, and yellow hydraulic pressures are low.

(B) Rudder travel limiter
It is normally in green. It becomes amber when travel limiter 1 and 2 are faulty.

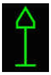
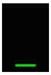
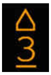
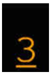
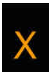
(C) Rudder trim position
It is normally in blue. It becomes amber, if the rudder trim reset fails.

ECAM F/CTL PAGE

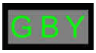
3 Ident.: DSC-27-20-30-00001095.0006001 / 29 NOV 19
Applicable to: MSN 11531

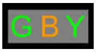

Spoilers/Speed Brakes Indication
Ailerons Position Indication
ELAC/SEC Indication
Aileron/Elevator Actuators Indication
Elevator Position Indication
Hydraulic System Pressure Indication
Yaw Control Indications
Pitch Trim Position Indication
F/CTL
GBY
SPD BRK
L AIL
R AIL
ELAC 1 2
SEC 1 2 3
B G
G B
PITCH TRIM
G Y
3.2° UP
L ELEV
R ELEV
RUD
GBY
B G
Y B

SPOILERS/SPEEDBRAKES INDICATION

	Spoiler deflected by more than 2.5 ° .
	Spoiler retracted.
	Indicates when spoiler displayed in amber deflected and failed.
	Indicates when spoiler displayed in amber retracted and failed.
	Spoiler position is not valid.

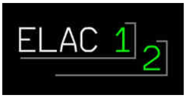
HYDRAULIC SYSTEM PRESSURE INDICATION

	The hydraulic supply of associated actuator is available.

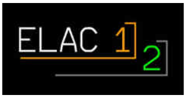


The hydraulic supply displayed in amber is low.

ELAC/SEC INDICATION

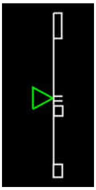


The ELAC or SEC operates normally.

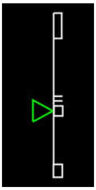


The ELAC or SEC displayed in amber is failed.

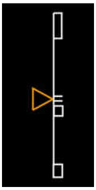
AILERON POSITION INDICATION



Indicates the position of the associated aileron.



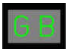
Indicates when flaps are extended.



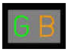
Indicates when neither (green nor blue) servojack is available.

Note: *The ailerons extend to 10 ° down when the flaps are in configuration 1+F or 5 ° down in other configurations (aileron droop).*

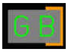
AILERON AND ELEVATOR ACTUATOR INDICATION



The hydraulic supply of associated actuator is available.

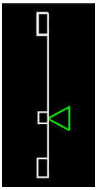


The hydraulic supply displayed in amber is low.

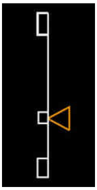


The associated computer or actuator fails.

ELEVATOR POSITION INDICATION

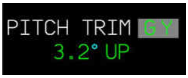


Indicates the position of the associated elevator.

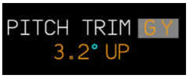


Indicates when associated elevator is not available.

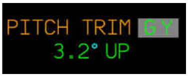
PITCH TRIM POSTION INDICATION


PITCH TRIM GY
3.2° UP

The pitch trim is set to 3.2 °UP.

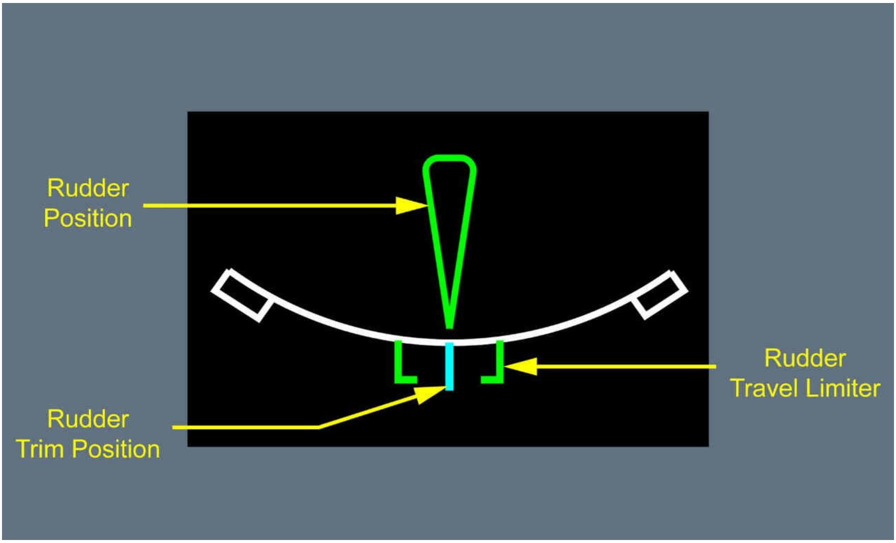

PITCH TRIM GY
3.2° UP

Indicates when green and yellow hydraulic pressures are low.

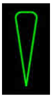

PITCH TRIM GY
3.2° UP

Indicates when pitch trim jams.

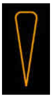
YAW CONTROL INDICATIONS


Rudder Position
Rudder Travel Limiter
Rudder Trim Position

RUDDER POSITION

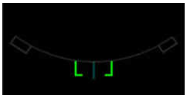


Indicates the position of rudder.

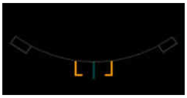


Indicates when blue, green, and yellow hydraulic pressures are low.

RUDDER TRAVEL LIMITER

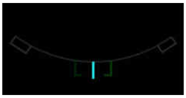


Indicates the rudder travel limiter for pedal deflections.

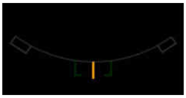


Indicates when travel limiters 1 and 2 fail.

RUDDER TRIM POSITION



Indicates the rudder trim position.

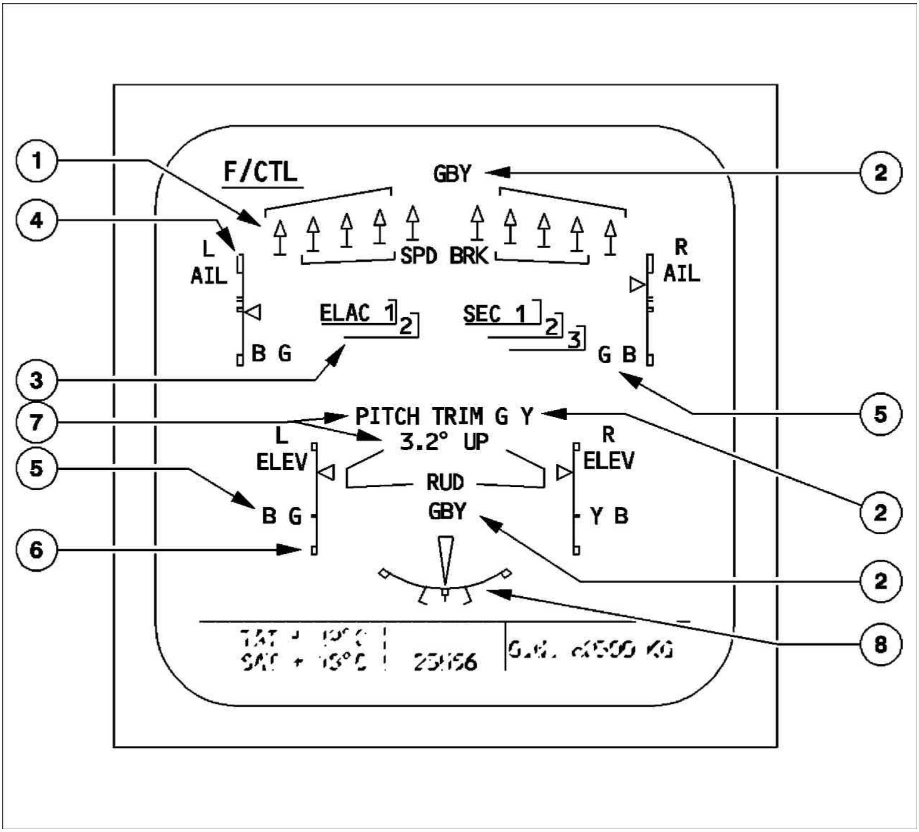


Indicates when rudder trim reset fails.

ECAM F/CTL PAGE

Ident.: DSC-27-20-30-00001095.0004001 / 15 OCT 12

4 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**


1
4
3
7
5
6
2
5
2
2
8
F/CTL
GBY
SPD BRK
L
AIL
R
AIL
ELAC 1
2
SEC 1
2
3
B G
G B
PITCH TRIM G Y
3.2° UP
L
ELEV
R
ELEV
RUD
GBY
B G
Y B
23H56

(1) Spoilers/Speedbrakes’ Indication

Δ : Spoiler deflected by more than 2.5 ° (green)

– : Spoiler retracted (green)

Δ : Spoiler fault deflected (amber)

1 : Spoiler fault retracted (amber)

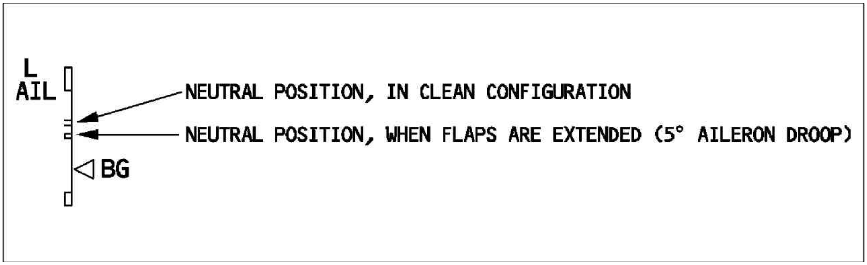
× : Spoiler position not valid (amber)

(2) Hydraulic System Pressure Indication
It is normally green. It becomes amber, if the hydraulic system's pressure decreases.

(3) ELAC/SEC Indication

- ELAC and SEC labels are always displayed in white
- The computer number is normally in green, and boxed in grey.
  The number and box become amber, if the computer fails, or is switched OFF.

(4) Aileron position indication
It is indicated with a white scale and green index. It changes to amber, when neither (green nor blue) servojack is available.

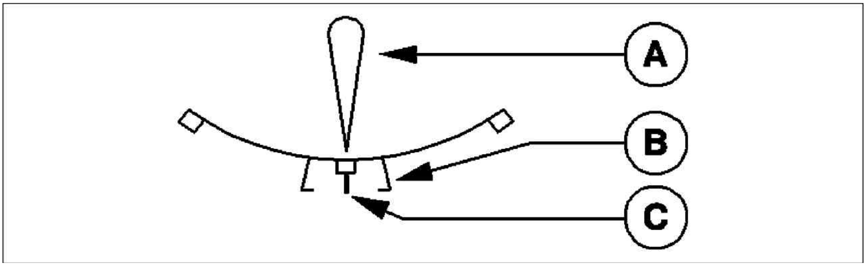

L
AIL
NEUTRAL POSITION, IN CLEAN CONFIGURATION
NEUTRAL POSITION, WHEN FLAPS ARE EXTENDED (5° AILERON DROOP)
BG

(5) Aileron and elevator actuator indication
"G" and "B" are normally displayed in green.
They become amber, in the case of a green or blue hydraulic system low pressure. The partial box also becomes amber, if the associated computer or actuator fails.

(6) Elevator position indication
It is indicated with a white scale and green index. The index becomes amber, when both associated actuators are not available.

(7) Pitch trim position indication
The pitch trim numbers are in green. They become amber, if green and yellow hydraulic system pressure decreases.
The "PITCH TRIM" legend is in white. It becomes amber, if the pitch trim jams.

(8) Yaw control indications



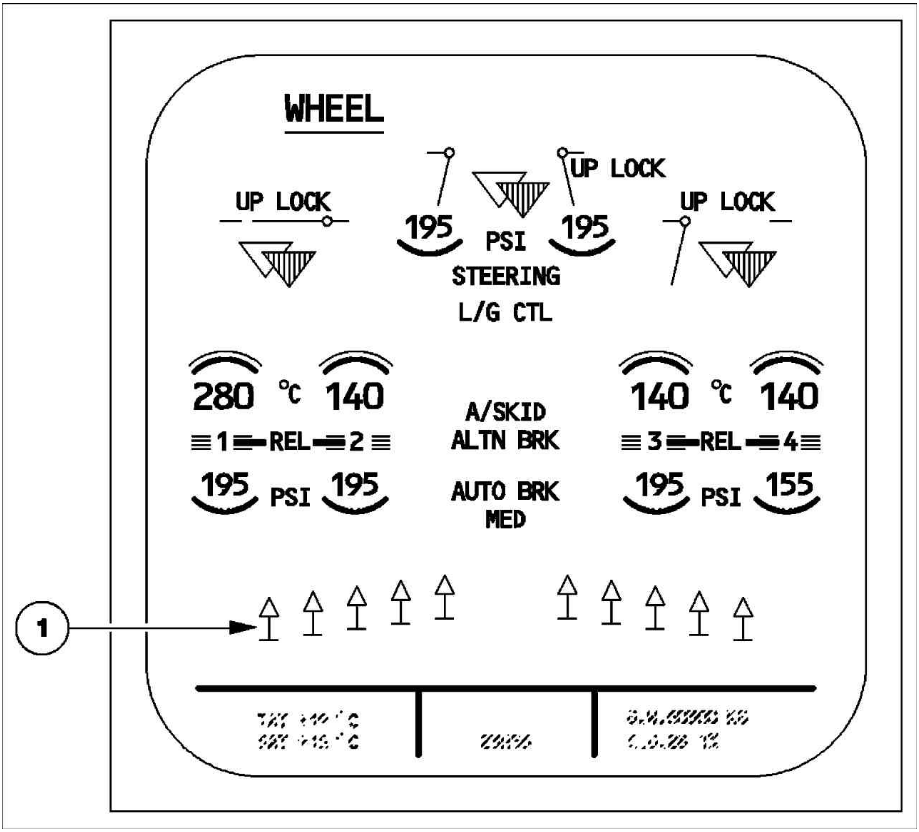
(A) Rudder position indication
It is normally in green. The rudder symbol becomes amber, if the blue, green, and yellow hydraulic pressures are low.

(B) Rudder travel limiter
It is normally in green. It becomes amber when travel limiter 1 and 2 are faulty.
Two TLU messages are displayed in amber when the TLU indexes are suppressed.

(C) Rudder trim position
It is normally in blue. It becomes amber, if the rudder trim reset fails.

ECAM WHEEL PAGE

Ident.: DSC-27-20-30-00001096.0001001 / 15 FEB 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

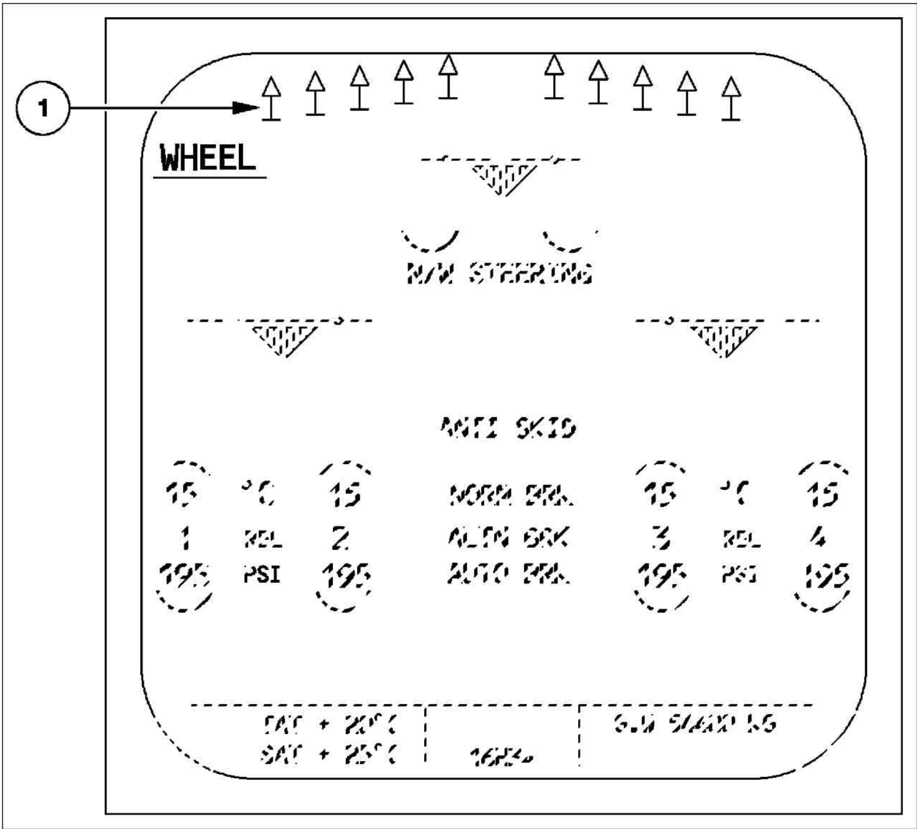

WHEEL
UP LOCK
UP LOCK
UP LOCK
195
PSI
195
STEERING
L/G CTL
280
°C
140
140
°C
140
1
REL
2
3
REL
4
A/SKID
ALTN BRK
195
PSI
195
195
PSI
155
AUTO BRK
MED
1

(1) Spoilers/Speedbrakes' Indication
These indications are identical to those displayed on the FLT CTL page.

ECAM WHEEL PAGE

Ident.: DSC-27-20-30-00001096.0002001 / 15 FEB 11

5 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


1
WHEEL
N/W STEERING
ANTI SKID
15 °C 15
1 REL 2
195 PSI 195
NORM BRK
ALTN BRK
AUTO BRK
15 °C 15
3 REL 4
195 PSI 195
TAT + 20°C
SAT + 25°C
16H24
G.W

(1) Spoilers/Speedbrakes' Indication
These indications are identical to those displayed on the FLT CTL page.

MEMO DISPLAY

Applicable to: ALL

Ident.: DSC-27-20-30-A-00016860.0001001 / 21 MAR 16

GND SPLRS ARMED : This memo appears in green when the ground spoilers are armed.

Ident.: DSC-27-20-30-A-00016859.0001001 / 21 MAR 16

SPEED BRK : This memo appears in green when the speedbrakes are extended.

SPEED BRK : This memo appears in amber when the speedbrakes should be retracted.

Intentionally left blank

GENERAL

Ident.: DSC-27-30-10-A-00024875.0001001 / 26 OCT 22
Applicable to: ALL

The slat and flap system includes all of the following main components:

Ident.: DSC-27-30-10-A-00024876.0002001 / 04 NOV 21
1 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

- Five slat surfaces and two double-slotted flap surfaces per wing. These surfaces are electrically controlled and hydraulically operated. The flight crew extends the slats and flaps by moving the flaps lever on the center pedestal. It has five positions.

Ident.: DSC-27-30-10-A-00024876.0001001 / 04 NOV 21
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

- Five slat surfaces and two flap surfaces per wing. These surfaces are electrically controlled and hydraulically operated. The flight crew extends the slats and flaps by moving the flaps lever on the center pedestal. It has five positions.

Ident.: DSC-27-30-10-A-00024877.0001001 / 04 NOV 21
Applicable to: ALL

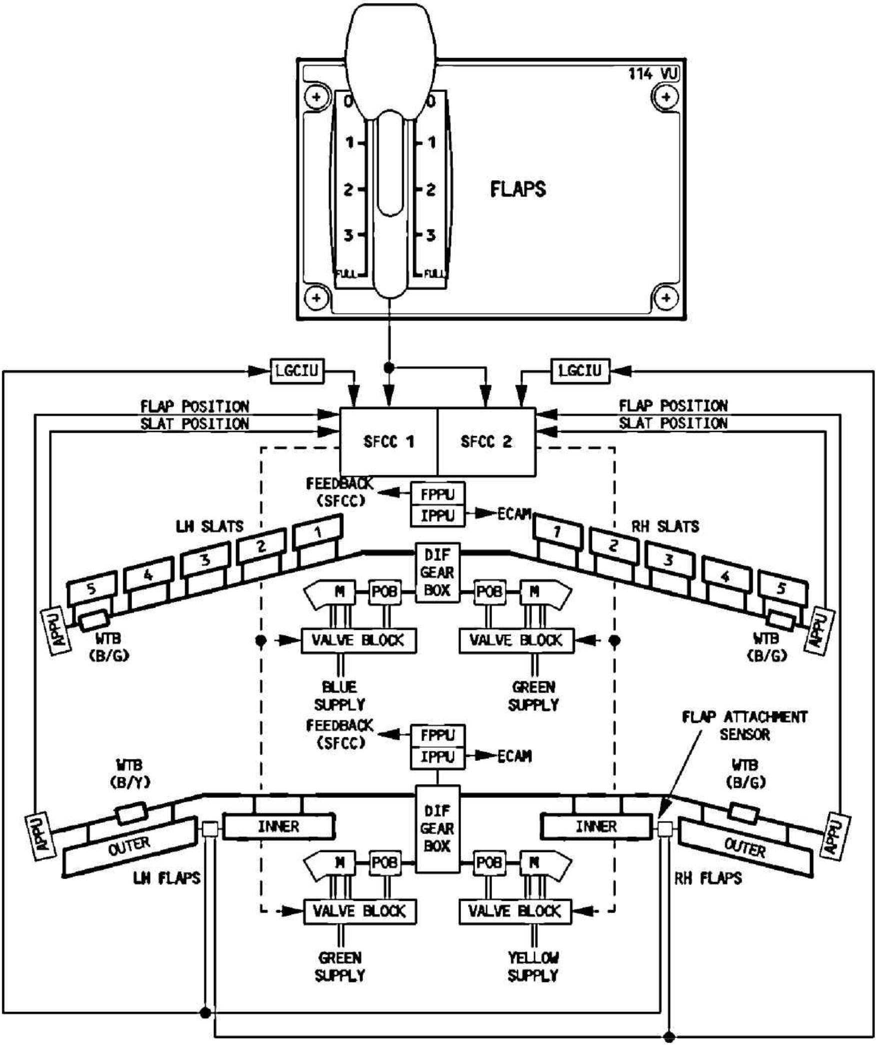
- Two SFCCs, each containing one slat channel and one flap channel
- A PCU which is made of two independent hydraulic motors coupled by a differential gearbox. The motors use green and blue hydraulic power for the slats, and yellow and green power for the flaps. The POB locks the transmission when the slat or flap surfaces have reached the selected position or if hydraulic power fails.
- An APPU that measures the asymmetry between the left and right wings
- A flap disconnect detection system, which detects attachment failure and inhibits the flap operation in order to prevent further damage. A sensor detects the failure by measuring excessive differential movement between the inner and the outer flaps.
- The WTBs which activate in the case of an uncommanded movement of the surfaces, such as runaway, asymmetry or over speed. They cannot be released in flight. They use blue and green hydraulic power for the slats and for the right wing flaps, and blue and yellow hydraulic power for the left wing flaps.
- The FPPUs that feedback position information to the SFCCs
- An IPPU that sends position data to the ECAM.

Note:
- *If the flap WTB is on, the flight crew can still operate the slats, and if the slat WTB is on, the flight crew can still operate the flaps*
- *If one SFCC is inoperative, both slats and flaps operate at half speed*
- *If one hydraulic system is inoperative, the corresponding surfaces (slats or flaps) operate at half speed.*

ARCHITECTURE

Ident.: DSC-27-30-10-00001099.0001001 / 21 MAR 16

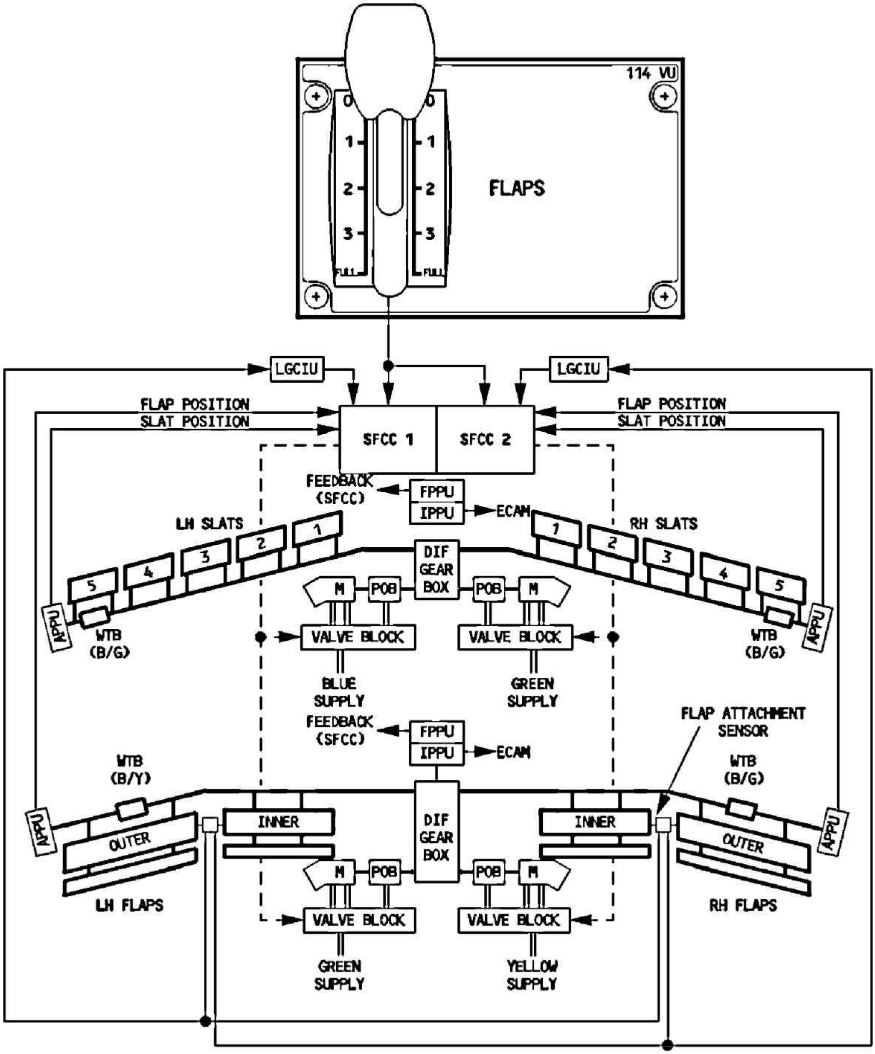
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


114 VU
0
1
2
3
FULL
FLAPS
LGCIU
LGCIU
FLAP POSITION
SLAT POSITION
FLAP POSITION
SLAT POSITION
SFCC 1
SFCC 2
FEEDBACK (SFCC)
FPPU
IPPU
ECAM
LH SLATS
RH SLATS
1
2
3
4
5
DIF GEAR BOX
M
POB
APPU
WTB (B/G)
VALVE BLOCK
BLUE SUPPLY
GREEN SUPPLY
FLAP ATTACHMENT SENSOR
WTB (B/Y)
WTB (B/G)
INNER
OUTER
LH FLAPS
RH FLAPS
YELLOW SUPPLY

ARCHITECTURE

Ident.: DSC-27-30-10-00001099.0002001 / 21 MAR 16

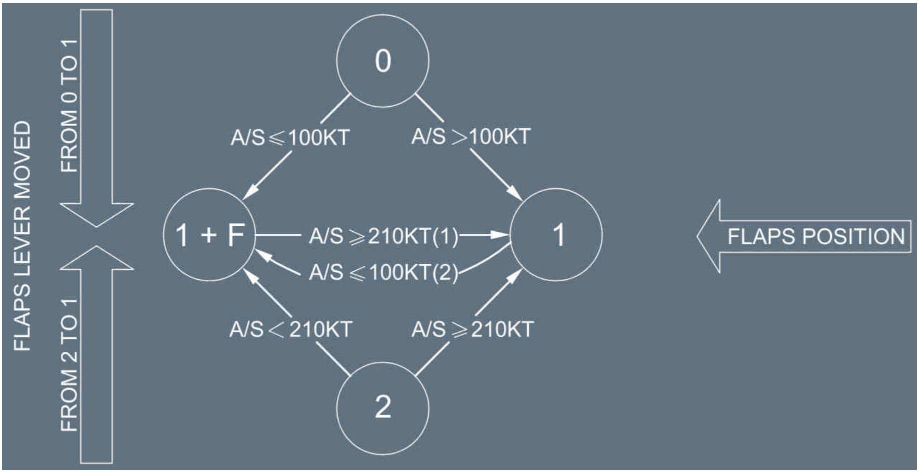
4 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**


114 VU
0
1
2
3
FULL
FLAPS
LGCIU
LGCIU
FLAP POSITION
SLAT POSITION
FLAP POSITION
SLAT POSITION
SFCC 1
SFCC 2
FEEDBACK (SFCC)
FPPU
IPPU
ECAM
LH SLATS
RH SLATS
1
2
3
4
5
DIF GEAR BOX
M
POB
VALVE BLOCK
BLUE SUPPLY
GREEN SUPPLY
APPU
WTB (B/G)
FLAP ATTACHMENT SENSOR
WTB (B/Y)
INNER
OUTER
LH FLAPS
RH FLAPS
GREEN SUPPLY
YELLOW SUPPLY

CONFIGURATIONS

Ident.: DSC-27-30-10-00001100.0001001 / 09 OCT 12
Applicable to: ALL

The FLAPS lever has five positions: 0, 1, 2, 3 and FULL.
Two configurations correspond to position 1: Configuration 1 and Configuration 1 + F.
The pilot selects these as follows:



(1) When in Configuration 1 + F, the flaps retract to 0 ° automatically at 210 kt (before the airspeed reaches VFE).

(2) When in configuration 1, the flaps extend to 10 ° automatically at 100 kt.

ALPHA/SPEED LOCK FUNCTION (SLATS)

Ident.: DSC-27-30-10-00001101.0001001 / 13 SEP 16
5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

This function inhibits slat retraction at high angles-of-attack and low speeds.
The SFCCs use corrected angle-of-attack (alpha) or airspeed information from the ADIRUs to inhibit slat retraction.

When the FLAPS lever is set to 0, the slats alpha/speed lock function activates and inhibits slats retraction, if:

- The AOA is above 8.5 °, or
- The speed is less than 148 kt.

Note: *If the FLAPS lever is already set to 0, when either of the above conditions occurs, the function will not activate therefore the slats will continue to retract or will remain at 0.*

Once the slats alpha/speed lock function is active, the slats retract to 0 when:

- The AOA is less than 7.6 ° and
- The speed is above 154 kt.

Note: *When the aircraft is on ground and its speed is less than 60 kt, then the function will not activate.*

ALPHA/SPEED LOCK FUNCTION (SLATS)

Ident.: DSC-27-30-10-00001101.0002001 / 02 MAY 17

6 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

This function inhibits slat retraction at high angles-of-attack and low speeds.
The SFCCs use corrected angle-of-attack (alpha) or airspeed information from the ADIRUs to inhibit slat retraction.

When the FLAPS lever is set to 0, the slats apha/speed lock function activates and inhibits slats retraction, if:

- The AOA is above 8.0 °, or
- The speed is less than 165 kt.

Note: *If the FLAPS lever is already set to 0, when either of the above conditions occurs, the function will not activate therefore the slats will continue to retract or remain at 0.*

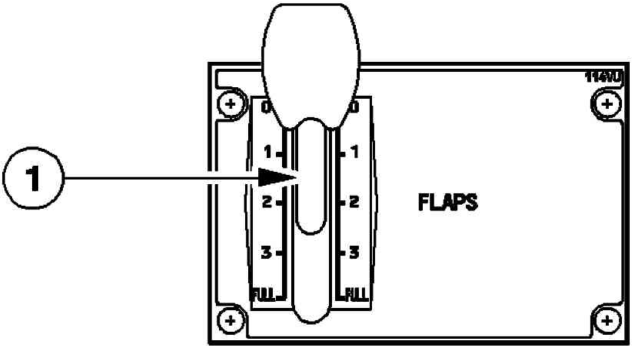
Once the slats alpha/speed lock function is active, the slats retract to 0 when:

- The AOA is less than 7.1 °, or
- The speed is above 171 kt.

Note: *When the aircraft is on ground and its speed is less than 60 kt, then the function will not activate.*

PEDESTAL

1 Ident.: DSC-27-30-20-00001102.0004001 / 03 NOV 21
Applicable to: MSN 11531



(1) FLAPS lever
The FLAPS lever selects simultaneous operation of the slats and flaps.

The five lever positions correspond to the following surface positions :

Position	SLATS	FLAPS	Indications on ECAM			
0	0	0			CRUISE	HOLD
1	18	0	1			
		10	1 + F	TAKEOFF		
2	22	14	2			APPR
3	22	21	3		LDG	
FULL	27	34	FULL			

Before selecting any position, the flight crew must pull the lever out of the detent. Balks at positions 1 and 3 prevent the flight crew from calling for excessive flap/slat travel with a single action.

Note: The flight crew cannot select an intermediate lever position.

TAKEOFF IN CONFIGURATION 1

1 + F (18 °/10 °) is selected. If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

TAKEOFF OR GO-AROUND IN CONFIGURATION 2 OR 3

If the flight crew selects configuration 1, the flight crew gets 1 + F (18 °/10 °) if airspeed is under 210 kt.
If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

CONFIGURATION 0 TO CONFIGURATION 1 IN FLIGHT

Configuration 1 (18 °/0 °) is selected.

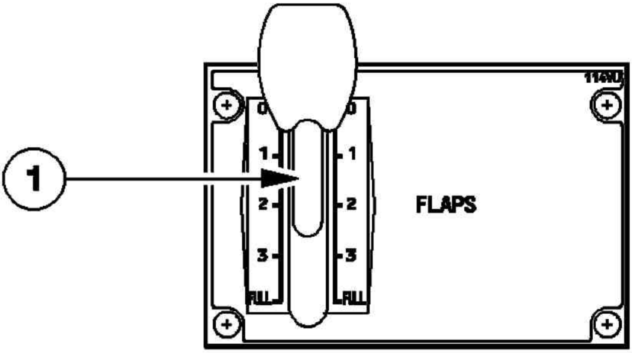
Note: After flap retraction, configuration 1 + F is no longer available until the airspeed is 100 kt or less, unless configuration 2, 3, or FULL has been selected previously.

PEDESTAL

Ident.: DSC-27-30-20-00001102.0001001 / 02 MAY 23

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

2



The five lever positions correspond to the following surface positions :

<table>
<tr><th>Position</th><th>SLATS</th><th>FLAPS</th><th>Indications on ECAM</th><th colspan="3"></th></tr>
<tr><td>0</td><td>0</td><td>0</td><td></td><td rowspan="2"></td><td>CRUISE</td><td rowspan="2">HOLD</td></tr>
<tr><td rowspan="2">1</td><td rowspan="2">18</td><td>0</td><td>1</td><td rowspan="3"></td></tr>
<tr><td>10</td><td>1 + F</td><td rowspan="3">TAKEOFF</td><td></td></tr>
<tr><td>2</td><td>22</td><td>15</td><td>2</td><td rowspan="2">APPR</td></tr>
<tr><td>3</td><td>22</td><td>20</td><td>3</td><td rowspan="2">LDG</td></tr>
<tr><td>FULL</td><td>27</td><td>35</td><td>FULL</td><td></td><td></td></tr>
</table>

Before selecting any position, the flight crew must pull the lever out of the detent. Balks at positions 1 and 3 prevent the flight crew from calling for excessive flap/slat travel with a single action.

Note: *The flight crew cannot select an intermediate lever position.*

3 TAKEOFF IN CONFIGURATION 1

1 + F (18 °/10 °) is selected. If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

4 TAKEOFF OR GO-AROUND IN CONFIGURATION 2 OR 3

If the flight crew selects configuration 1, the flight crew gets 1 + F (18 °/10 °) if airspeed is under 210 kt.
If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

CONFIGURATION 0 TO CONFIGURATION 1 IN FLIGHT

Configuration 1 (18 °/0 °) is selected.

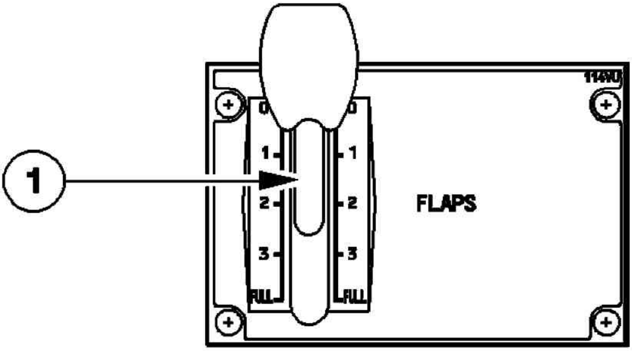
Note: *After flap retraction, configuration 1 + F is no longer available until the airspeed is 100 kt or less, unless configuration 2, 3, or FULL has been selected previously.*

PEDESTAL

Ident.: DSC-27-30-20-00001102.0002001 / 02 MAY 23

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 08495-09324, 10949-11139

5



(1) FLAPS lever
The FLAPS lever selects simultaneous operation of the slats and flaps.

The five lever positions correspond to the following surface positions:

Position	SLATS	FLAPS	Indications on ECAM			
0	0	0			CRUISE	HOLD
1	18	0	1			
		10	1 + F	TAKEOFF		
2	22	15	2			APPR
3	22	20	3		LDG	
FULL	27	40	FULL			

Before selecting any position, the flight crew must pull the lever out of the detent. Balks at positions 1 and 3 prevent the flight crew from calling for excessive flap/slat travel with a single action.

Note: The flight crew cannot select an intermediate lever position.

6 TAKEOFF IN CONFIGURATION 1

1 + F (18 °/10 °) is selected. If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

7 TAKEOFF OR GO-AROUND IN CONFIGURATION 2 OR 3

If the flight crew selects configuration 1, the flight crew gets 1 + F (18 °/10 °) if airspeed is under 210 kt.
If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

CONFIGURATION 0 TO CONFIGURATION 1 IN FLIGHT

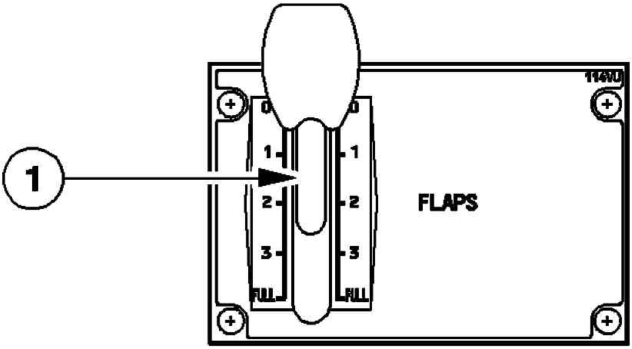
Configuration 1 (18 °/0 °) is selected.

Note: After flap retraction, configuration 1 + F is no longer available until the airspeed is 100 kt or less, unless configuration 2, 3, or FULL has been selected previously.

PEDESTAL

Ident.: DSC-27-30-20-00001102.0003001 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

8



(1) FLAPS lever
The FLAPS lever selects simultaneous operation of the slats and flaps.

The five lever positions correspond to the following surface positions :

<table>
<tr><th>Position</th><th>SLATS</th><th>FLAPS</th><th>Indications on ECAM</th><th colspan="3"></th></tr>
<tr><td>0</td><td>0</td><td>0</td><td></td><td rowspan="2"></td><td>CRUISE</td><td rowspan="2">HOLD</td></tr>
<tr><td rowspan="2">1</td><td rowspan="2">18</td><td>0</td><td>1</td><td rowspan="3"></td></tr>
<tr><td>10</td><td>1 + F</td><td rowspan="3">TAKEOFF</td><td></td></tr>
<tr><td>2</td><td>22</td><td>14</td><td>2</td><td rowspan="2">APPR</td></tr>
<tr><td>3</td><td>22</td><td>21</td><td>3</td><td rowspan="2">LDG</td></tr>
<tr><td>FULL</td><td>27</td><td>25</td><td>FULL</td><td></td><td></td></tr>
</table>

Before selecting any position, the flight crew must pull the lever out of the detent. Balks at positions 1 and 3 prevent the flight crew from calling for excessive flap/slat travel with a single action.

Note: The flight crew cannot select an intermediate lever position.

9

TAKEOFF IN CONFIGURATION 1

1 + F (18 °/10 °) is selected. If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

10

TAKEOFF OR GO-AROUND IN CONFIGURATION 2 OR 3

If the flight crew selects configuration 1, the flight crew gets 1 + F (18 °/10 °) if airspeed is under 210 kt.
If the flight crew does not select configuration 0 after takeoff, the flaps retract automatically at 210 kt.

CONFIGURATION 0 TO CONFIGURATION 1 IN FLIGHT

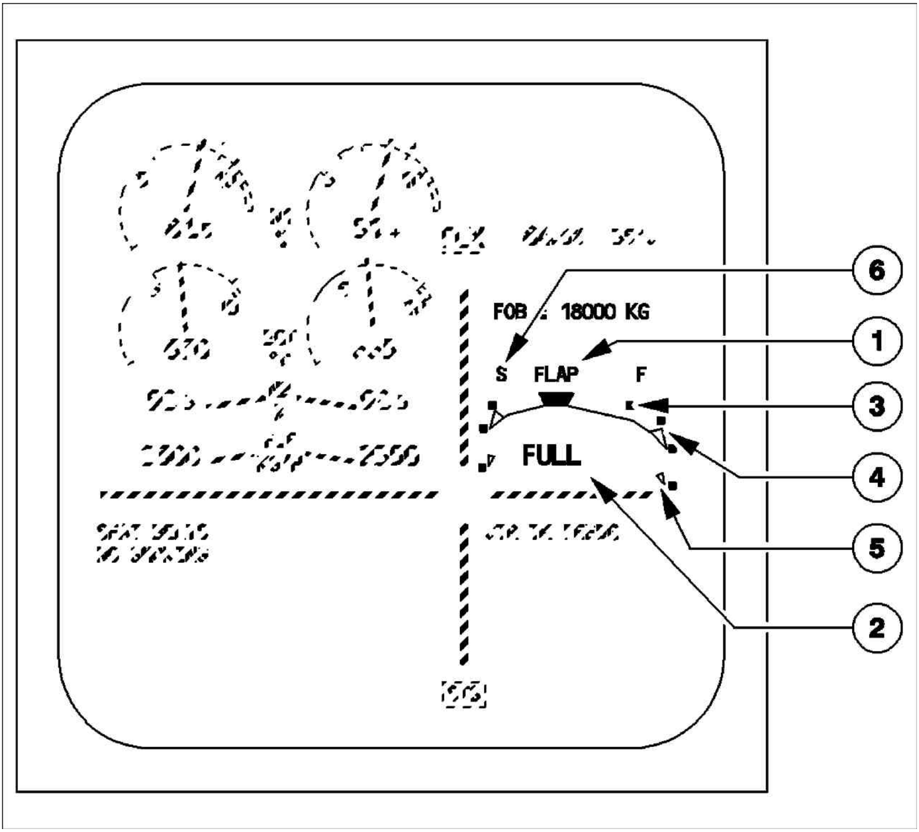
Configuration 1 (18 °/0 °) is selected.

Note: After flap retraction, configuration 1 + F is no longer available until the airspeed is 100 kt or less, unless configuration 2, 3, or FULL has been selected previously.

ECAM UPPER DISPLAY

Ident.: DSC-27-30-20-00001103.0001001 / 18 MAR 11

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



(1) FLAP indication

The “FLAP” legend appears when the slats or the flaps are not fully retracted.

- The legend is white when the slats and flaps are in the selected position.
- The legend is cyan when the slats and flaps are in transit.
- The legend is amber if:
  - Both relevant hydraulic systems go down (except on the ground with engines stopped).
  - The wingtip brakes are on.
  - There is a fault in the slats or flaps.

(2) Flap lever position

The “0”, “1 + F”, “1”, “2”, “3”, or “FULL” appears.

- It is green, when the slats and flaps are in the selected position. “0” is not displayed, when the aircraft attains clean configuration.
- The legend is cyan when the slats and flaps are in transit.
  The legend “S (F) LOCKED” appears in amber, associated with an ECAM caution, when the wingtip brakes are applied or when the system detects a non-alignment between two flaps.
  The legend “A-LOCK” pulses in cyan when the slat alpha/speed-lock function is active.

(3) Position indexes

These white points indicate that the slats and flaps are in a selectable position. They do not appear when the aircraft is in the clean configuration.

(4) Slat and flap position

These green triangles indicate the actual position of the slats and flaps.

They change to amber if:

- Both relevant hydraulic systems go down, unless the aircraft is on the ground with both engines stopped.
- The wingtip brakes are on.
- There is a fault in the slats or flaps.

(5) Selected surface position

These blue triangles indicate the position the pilot has selected.
(With the current standard display management computer, the blue triangles may disappear before the slats and flaps are all completely in the selected position).

(6) S and F indications

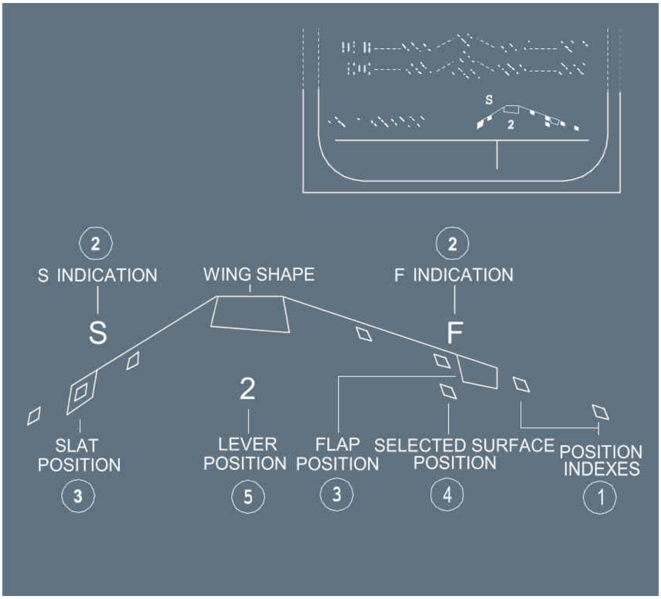
The “S” and “F” normally appear in green. They become amber if:

- Both relevant hydraulic systems go down, unless the aircraft is on the ground with both engines stopped.
- The wingtip brakes are on.
- There is a fault in the slats or flaps.

ECAM UPPER DISPLAY

Ident.: DSC-27-30-20-00001103.0002001 / 14 NOV 11

11 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


S
2
2
S INDICATION
WING SHAPE
F INDICATION
2
F
2
SLAT POSITION
3
LEVER POSITION
5
FLAP POSITION
3
SELECTED SURFACE POSITION
4
POSITION INDEXES
1

(1) Position indexes
These white points indicate that the slats and flaps are in a selectable position. They do not appear, when the aircraft is in clean configuration.

(2) F and S

“F” and “S” normally appear in white. They become amber, if:

- Both relevant hydraulic systems fail, unless the aircraft is on ground with both engines stopped.
- The wingtip brakes are on.
- There is a slats or flaps fault.
  “S (F) LOCKED” legend, appears in amber, in association with an ECAM caution, when the wingtip brakes are applied, or when the system detects a non-alignment between two flaps.
  The “A-LOCK” legend pulses in green, when the slat alpha/speedlock function is active.

(3) Flaps/Slats’ actual position
These green boxes indicate the actual flaps/slats position.

They become amber, if:

- Both relevant hydraulic systems fail, unless the aircraft is on ground with both engines stopped.
- The wingtip brakes are on.
- There is a slats or flaps fault.

(4) Selected position
It is in blue, when the surfaces are in transit.
It disappears, when the selected position is reached.

(5) Flap lever position

The “0”, “1 + F”, “1”, “2”, “3”, or “FULL” legend appears.

- It is green, when the slats and flaps are in the selected position. “0” is not displayed, when the aircraft attains clean configuration.
- It becomes cyan, when the slats and flaps are in transit.

AIRCRAFT SYSTEMS

FUEL

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DSC-28-10 Description

DSC-28-10-10 General

GENERAL..A
General..B

DSC-28-10-20 Tanks

Tanks..A

DSC-28-10-30 Engine Feed

GENERAL..A
Main Components..B
Engine Feed..C
Fuel Feed Sequence..D

DSC-28-10-40 ACT System

General..A
Automatic Transfer..B
Manual Transfer..C

DSC-28-10-50 APU Feed

APU FEED..A

DSC-28-10-60 Fuel Recirculation System

Fuel Recirculation System..A

DSC-28-10-70 Refueling and Defueling

Refueling - Defueling..A

DSC-28-10-80 Fuel Quantity Indication and Level Sensing

Fuel Quantity Indication (FQI) System..A
FUEL QUANTITY INDICATION (FQI) SYSTEM..B
FUEL LEVEL SENSING CONTROL UNIT (FLSCU)..C
Fuel Level Sensing Control Unit (FLSCU)..D
AUXILIARY FUEL MANAGEMENT SYSTEM (AFMS)..E
AUXILIARY LEVEL SENSE CONTROL UNIT (ALSCU)..F
Fuel System Architecture..G

DSC-28-10-90 Fuel Tank Inerting System

Fuel Tank Inerting System..A

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Continued from the previous page

DSC-28-20 Controls and Indicators

Overhead Panel.....A
ACT Control Panel.....B
Refueling Control Panel.....C
Maintenance Panel.....D
ECAM Fuel Page.....E
ECAM Upper Display.....F
Memo Display.....G

PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
DSC-28-10-20 Tanks	A	1	Documentation update: Addition of "Tanks" documentary unit
DSC-28-10-20 Usable Fuel	A	3	Documentation update: Addition of "Usable Fuel" documentary unit
DSC-28-10-30 Engine Feed	C	8	Documentation update: Addition of "Engine Feed" documentary unit
DSC-28-10-30 Fuel Feed Sequence	D	10	Documentation update: Addition of "Fuel Feed Sequence" documentary unit
DSC-28-10-40 General	A	1	Documentation update: Addition of "General" documentary unit
DSC-28-10-40 Automatic Transfer	B	2	Documentation update: Addition of "Automatic Transfer" documentary unit
DSC-28-10-40 Manual Transfer - General	C	3	Documentation update: Addition of "Manual Transfer - General" documentary unit
DSC-28-10-40 Manual Transfer - Ecam Indication	C	4	Documentation update: Addition of "Manual Transfer - Ecam Indication" documentary unit
DSC-28-10-40 Manual Transfer - ACT System Architecture	C	5	Documentation update: Addition of "Manual Transfer - ACT System Architecture" documentary unit
DSC-28-10-70 Refueling - Defueling	A	1	Documentation update: Addition of "Refueling - Defueling" documentary unit
DSC-28-10-80 FUEL QUANTITY INDICATION (FQI) SYSTEM	B	2	Documentation update: Addition of "FUEL QUANTITY INDICATION (FQI) SYSTEM" documentary unit
DSC-28-10-80 AUXILIARY FUEL MANAGEMENT SYSTEM (AFMS)	E	5	Documentation update: Addition of "AUXILIARY FUEL MANAGEMENT SYSTEM (AFMS)" documentary unit
DSC-28-10-80 AUXILIARY LEVEL SENSE CONTROL UNIT (ALSCU)	F	6	Documentation update: Addition of "AUXILIARY LEVEL SENSE CONTROL UNIT (ALSCU)" documentary unit
DSC-28-10-80 Fuel System Architecture	G	8	Documentation update: Addition of "Fuel System Architecture" documentary unit
DSC-28-20 ACT Control Panel	B	7	Documentation update: Addition of "ACT Control Panel" documentary unit
DSC-28-20 ACT XFR MODE SEL pb-sw	B	8	Documentation update: Addition of "ACT XFR MODE SEL pb-sw" documentary unit
DSC-28-20 ACT XFR rotary Selector	B	9	Documentation update: Addition of "ACT XFR rotary Selector" documentary unit
DSC-28-20 ALL ACT pb-sw	B	10	Documentation update: Addition of "ALL ACT pb-sw" documentary unit
DSC-28-20 Refueling Control Panel	C	11	Documentation update: Addition of "Refueling Control Panel" documentary unit

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-28-20 ACT QUANTITY Indicator	C	13	Documentation update: Addition of "ACT QUANTITY Indicator" documentary unit
DSC-28-20 TOTAL ACT Indicator	C	14	Documentation update: Addition of "TOTAL ACT Indicator" documentary unit
DSC-28-20 ACT Selector	C	16	Documentation update: Addition of "ACT Selector" documentary unit
DSC-28-20 ECAM Fuel Page	E	17	Documentation update: Addition of "ECAM Fuel Page" documentary unit
DSC-28-20 ACT ◁ to Center Tank Fuel Transfer Indication	E	36	Documentation update: Addition of "ACT (If Installed) to Center Tank Fuel Transfer Indication" documentary unit
DSC-28-20 FOB BELOW 3T (6600 LBS)	G	42	Documentation update: Addition of "FOB BELOW 3T (6600 LBS)" documentary unit

DSC-28-10-10 GENERAL	A	1	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-10 General	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-20 Tanks	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-20 Usable Fuel	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 GENERAL	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 GENERAL	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-30 MAIN COMPONENTS - TANK PUMPS	B	3	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-30 Main Components - Tank Pumps	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 MAIN COMPONENTS - INTERTANK TRANSFER VALVES	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 MAIN COMPONENTS - SUCTION VALVES	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 MAIN COMPONENTS - SUCTION VALVES	B	7	Effectivity update: The information now also applies to MSN 11531.

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Localization Title	Toc Index	ID	Reason
DSC-28-10-30 Engine Feed	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-30 Fuel Feed Sequence	D	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-60 Fuel Recirculation System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-60 Fuel Recirculation System	A	2	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-60 Fuel Recirculation System - Description	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-60 Fuel Recirculation System - Description	A	4	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-70 Refueling - Defueling	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-80 FUEL QUANTITY INDICATION (FQI) SYSTEM	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-80 FUEL LEVEL SENSING CONTROL UNIT (FLSCU)	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-10-80 Fuel Level Sensing Control Unit (FLSCU)	D	4	Effectivity update: The information now also applies to MSN 11531.
DSC-28-10-80 Fuel System Architecture	G	7	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139,

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Localization Title	Toc Index	ID	Reason
			11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-28-10-90 Fuel Tank Inerting System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 L(R) TK PUMPS 1(2) pb-sw	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 MODE SEL pb-sw	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 MODE SEL pb-sw	A	4	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 CTR TK PUMP 1(2) pb-sw	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 ACT pb-sw	A	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-28-20 Refueling Control Panel	C	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773,

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Localization Title	Toc Index	ID	Reason
			04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-28-20 CKPT Light	C	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 ECAM Fuel Page	E	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 CTR Tanks Valves Indications	E	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 LP Valve (ENG) Indications	E	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 Transfer Valve Indications	E	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Transfer Valve Indications	E	22	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 APU Indications	E	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 Fuel Temperature Indication	E	24	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Fuel Temperature Indication	E	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Fuel Quantity Indication	E	26	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Fuel Quantity Indication	E	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Boxed Indications	E	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Boxed Indications	E	29	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Overflow Indication	E	30	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Overflow Indication	E	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-28-20 Advisory	E	32	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Advisory	E	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Fuel On Board (FOB) Indication	E	34	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 Fuel On Board (FOB) Indication	E	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 ACT ◁ to Center Tank Fuel Transfer Indication	E	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Fuel Flow Indication	E	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 ECAM Upper Display	F	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-28-20 Total Fuel Indication	F	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-28-20 Total Fuel Indication	F	41	Effectivity update: The information now also applies to MSN 11531.
DSC-28-20 OUTR TK FUEL XFRD	G	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

GENERAL

Ident.: DSC-28-10-10-00001107.0001001 / 13 NOV 13

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

The fuel system :
- Stores fuel in the tanks.
- Supplies fuel, in the correct quantities, to the fuel tanks during refueling.
- Supplies fuel to the engines and the Auxiliary Power Unit (APU).
- Circulates fuel to cool the Integrated Drive Generator (IDG).
- Keeps fuel in the outer tanks for wing bending and flutter relief.

GENERAL

Ident.: DSC-28-10-10-00001107.0002001 / 10 DEC 09

1 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

The fuel system :
- Stores fuel in the tanks.
- Supplies fuel, in the correct quantities, to the fuel tanks during refueling.
- Supplies fuel to the engines and the Auxiliary Power Unit (APU).
- Controls the transfer of fuel from the center tank to the wing tanks.
- Circulates fuel to cool the Integrated Drive Generator (IDG).

GENERAL

Ident.: DSC-28-10-10-00001107.0003001 / 13 NOV 13

2 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

The fuel system :
- Stores fuel in the tanks
- Supplies fuel, in the correct quantities, to the fuel tanks during refueling
- Supplies fuel to the engines and the Auxiliary Power Unit (APU)
- Circulates fuel to cool the Integrated Drive Generator (IDG)
- Controls the transfer of fuel from the center tank to the inner tanks
- Keeps fuel in the outer tanks for wing bending and flutter relief.

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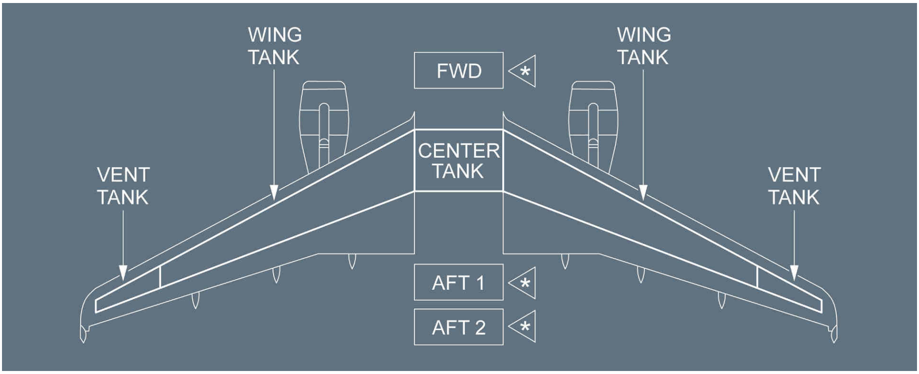
TANKS

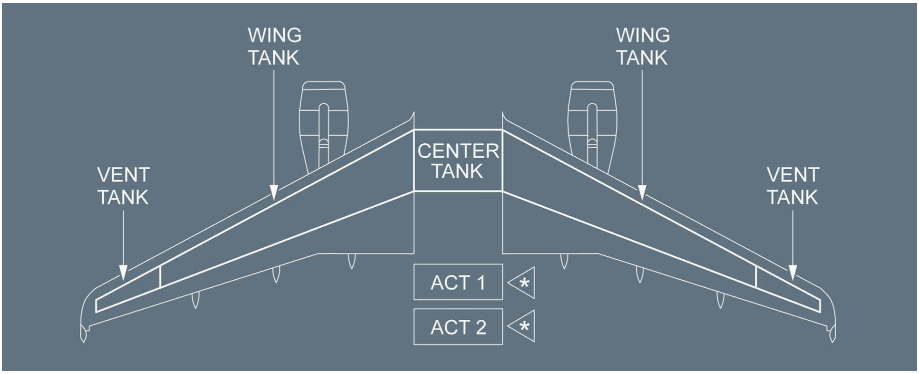
1 Ident.: DSC-28-10-20-A-00020195.0005001 / 05 JUN 18
Applicable to: MSN 11531

The fuel is stored in the wings, in the center tank, and in the Additional Center Tank (ACT ◁*).
There is a vent surge tank outboard of each wing tank.
When the aircraft has been refueled to maximum capacity, the fuel can expand by 2 % (20 °C temperature rise) without spilling.
There is an overpressure protector in each vent and wing tank, and between the center tank and the left wing tank.



Ident.: DSC-28-10-20-A-00020195.0003001 / 17 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

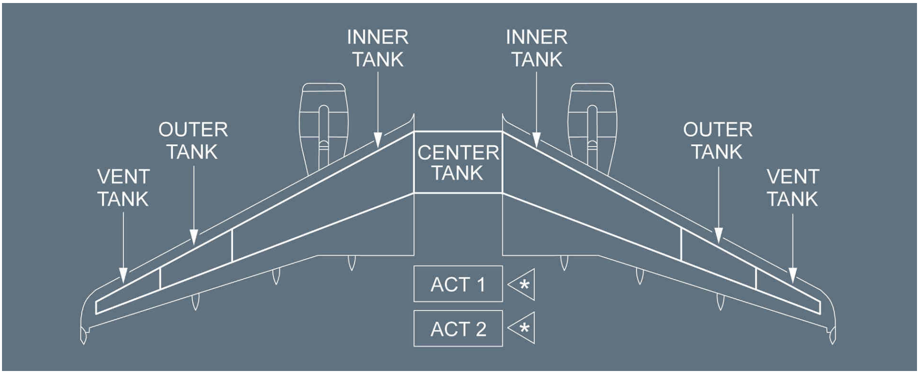
The fuel is stored in the wings, in the center tank, and in the Additional Center Tank (ACT ◁*).
There is a vent surge tank outboard of each wing tank.
When the aircraft has been refueled to maximum capacity, the fuel can expand by 2 % (20 °C temperature rise) without spilling.
There is an overpressure protector in each vent and wing tank, and between the center tank and the left wing tank.


WING
TANK
WING
TANK
VENT
TANK
CENTER
TANK
VENT
TANK
ACT 1
ACT 2

Ident.: DSC-28-10-20-A-00020195.0001001 / 17 MAR 17

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

The fuel is stored in the wings, in the center tank, and in the Additional Center Tank (ACT ◁*).
The wings have inner and outer tanks.
There is a vent surge tank outboard of the outer tank in each wing.
When the aircraft has been refueled to maximum capacity, the fuel can expand by 2 % (20 °C temperature rise) without spilling.
There is an overpressure protector in each vent, outer and inner tank and between the center tank and the left inner tank.


INNER
TANK
INNER
TANK
OUTER
TANK
OUTER
TANK
VENT
TANK
CENTER
TANK
VENT
TANK
ACT 1
ACT 2

3 Ident.: DSC-28-10-20-A-00020196.0017001 / 04 SEP 18
Applicable to: MSN 11531

USABLE FUEL								
		WING TANK	CENTER TANK	ACT	TOTAL WITH			
					NO ACT	1 ACT	2 ACTs	3 ACTs
VOLUME	(liters)	2 x 7 690	8 200	3 121	23 580	26 701	29 822	32 943
	(US gallons)	2 x 2 031	2 166	824	6 229	7 053	7 877	8 701
WEIGHT(1)	(KG)	2 x 6 036	6 437	2 450	18 510	20 960	23 410	25 860
	(LB)	2 x 13 308	14 189	5 398	40 805	46 203	51 601	56 999

(1) *Fuel density : 0.785 kg/l or 6.551 lb/US Gal.*

Ident.: DSC-28-10-20-A-00020196.0015001 / 17 MAR 17

4 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

USABLE FUEL					
		OUTER TANKS	INNER TANKS	CENTER TANK	TOTAL
VOLUME	(liters)	864 x 2	6 874 x 2	8 248	23 724
	(US gallons)	228 x 2	1 816 x 2	2 178	6 267
WEIGHT(1)	(KG)	678 x 2	5 396 x 2	6 474	18 623
	(LB)	1 494 x 2	11 896 x 2	14 274	41 054

(1) *Fuel density : 0.785 kg/l or 6.551 lb/US Gal .*

Ident.: DSC-28-10-20-A-00020196.0009001 / 17 MAR 17

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

USABLE FUEL							
		WING TANKS	CENTER TANK	ACT	TOTAL WITH		
					NO ACT	1 ACT	2 ACTs
VOLUME	(liters)	2 x 7 925	8 200	2 992	24 050	27 042	30 034
	(US gallons)	2 x 2 093	2 166	790	6 352	7 142	7 932
WEIGHT(1)	(KG)	2 x 6 221	6 437	2 349	18 879	21 228	23 577
	(LB)	2 x 13 711	14 191	5 178	41 612	46 791	51 969

(1) *Fuel density : 0.785 kg/l or 6.551 lb/US Gal.*

Ident.: DSC-28-10-20-A-00020196.0008001 / 17 MAR 17
Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

USABLE FUEL								
		OUTER TANKS	INNER TANKS	CENTER TANK	ACT	TOTAL WITH		
						NO ACT	1 ACT	2 ACTs
VOLUME	(liters)	867 x 2	7 092 x 2	8 248	2 992	24 166	27 158	30 150
	(US gallons)	229 x 2	1 873 x 2	2 179	790	6 383	7 173	7 963
WEIGHT(1)	(KG)	680 x 2	5 567 x 2	6 474	2 349	18 968	21 317	23 666
	(LB)	1 500 x 2	12 270 x 2	14 274	5 175	41 814	46 989	52 164

(1) *Fuel density : 0.785 kg/l or 6.551 lb/US Gal.*

Ident.: DSC-28-10-20-A-00020196.0004001 / 17 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

USABLE FUEL							
		WING TANKS	CENTER TANK	ACT	TOTAL WITH		
					NO ACT	1 ACT	2 ACTs
VOLUME	(liters)	2 x 7 750	8 200	2 992	23 700	26 692	29 684
	(US gallons)	2 x 2 047	2 166	790	6 260	7 050	7 840
WEIGHT(1)	(KG)	2 x 6 084	6 437	2 349	18 605	20 953	23 302
	(LB)	2 x 13 412	14 191	5 178	41 015	46 193	51 371

(1) *Fuel density : 0.785 kg/l or 6.551 lb/US Gal.*

Ident.: DSC-28-10-20-A-00020196.0003001 / 17 MAR 17
Applicable to: MSN 03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05240

USABLE FUEL								
		OUTER TANKS	INNER TANKS	CENTER TANK	ACT	TOTAL WITH		
						NO ACT	1 ACT	2 ACTs
VOLUME	(liters)	880 x 2	7 099 x 2	8 250	2 992	24 209	27 201	30 193
	(US gallons)	232 x 2	1 875 x 2	2 179	790	6 395	7 185	7 975
WEIGHT(1)	(KG)	691 x 2	5 573 x 2	6 476	2 349	19 004	21 353	23 702
	(LB)	1 523 x 2	12 286 x 2	14 278	5 175	41 893	47 068	52 243

(1) *Fuel density : 0.785 kg/l or 6.551 lb/US Gal.*

Ident.: DSC-28-10-20-A-00020196.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03180, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

USABLE FUEL								
		OUTER TANKS	INNER TANKS	CENTER TANK	ACT	TOTAL WITH		
						NO ACT	1 ACT	2 ACTs
VOLUME	**(liters)**	880 x 2	6 924 x 2	8 250	2 992	23 859	26 851	29 843
	(US gallons)	232 x 2	1 829 x 2	2 179	790	6 303	7 093	7 883
WEIGHT *(1)*	**(KG)**	691 x 2	5 435 x 2	6 476	2 349	18 729	21 078	23 427
	(LB)	1 523 x 2	11 983 x 2	14 278	5 175	41 289	46 464	51 639

(1) *Fuel density : 0.785 kg/l or 6.551 lb/US Gal.*

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GENERAL

Ident.: DSC-28-10-30-00001109.0001001 / 13 NOV 13

1 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

The main fuel pump system supplies fuel from the inner tanks to the engines. The system has four main fuel pumps.

GENERAL

Ident.: DSC-28-10-30-00001109.0002001 / 10 DEC 09

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

The main fuel pump system supplies fuel from the center tank or the inner wing tanks to the engines. The system has six main fuel pumps.

GENERAL

Ident.: DSC-28-10-30-00001109.0003001 / 10 DEC 09

2 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

The main fuel pump system supplies fuel from the wing tanks to the engines. The system has four main fuel pumps.

MAIN COMPONENTS

Ident.: DSC-28-10-30-A-00001110.0001001 / 10 DEC 09

3 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

TANK PUMPS

In normal operation each engine is supplied from two pumps in its own side wing tank.

Ident.: DSC-28-10-30-A-00001110.0002001 / 01 FEB 13

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

TANK PUMPS

In normal operation each engine is supplied by one pump in the center tank or two pumps in its own side inner tank.
All wing tank pumps remain on throughout the flight. They are fitted with pressure relief sequence valves which ensure that, when all pumps are running, the center tank pumps will deliver fuel preferentially.

Ident.: DSC-28-10-30-A-00001110.0003001 / 13 NOV 13
4 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

TANK PUMPS

In normal operation, each engine is supplied from two pumps in its own side inner tank.

Ident.: DSC-28-10-30-A-00001111.0001001 / 31 JAN 13
5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

INTERTANK TRANSFER VALVES

Two electrical transfer valves are mounted in each wing to permit fuel transfer from outer to inner tank.

Ident.: DSC-28-10-30-A-00001112.0001001 / 10 DEC 09
Applicable to: ALL

CROSS FEED VALVE

A cross feed valve controlled by a double motor allows both engines to be fed from one side or one engine to be fed from both sides.

Ident.: DSC-28-10-30-A-00001113.0001001 / 20 MAR 17
Applicable to: ALL

ENGINE LP VALVES

The engine fuel flow can be stopped by its low pressure (LP) fuel valve. The LP fuel valve is closed by either :

- The engine master switch, or
- The ENG FIRE PUSH pushbutton.

Ident.: DSC-28-10-30-A-00001114.0001001 / 13 NOV 13
6 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

SUCTION VALVES

Closed by pumps pressure in normal operation, they allow engines to be fed by gravity if the inner tank pumps fail.

Ident.: DSC-28-10-30-A-00001114.0002001 / 29 MAR 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

SUCTION VALVES

Closed by pumps pressure in normal operation, they allow engines to be fed by gravity if the inner tank pumps fail.

Note: *Center tank pumps are not fitted with suction valves. Therefore, gravity feeding is not possible from the center tank.*

Ident.: DSC-28-10-30-A-00001114.0003001 / 29 MAR 12

7 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

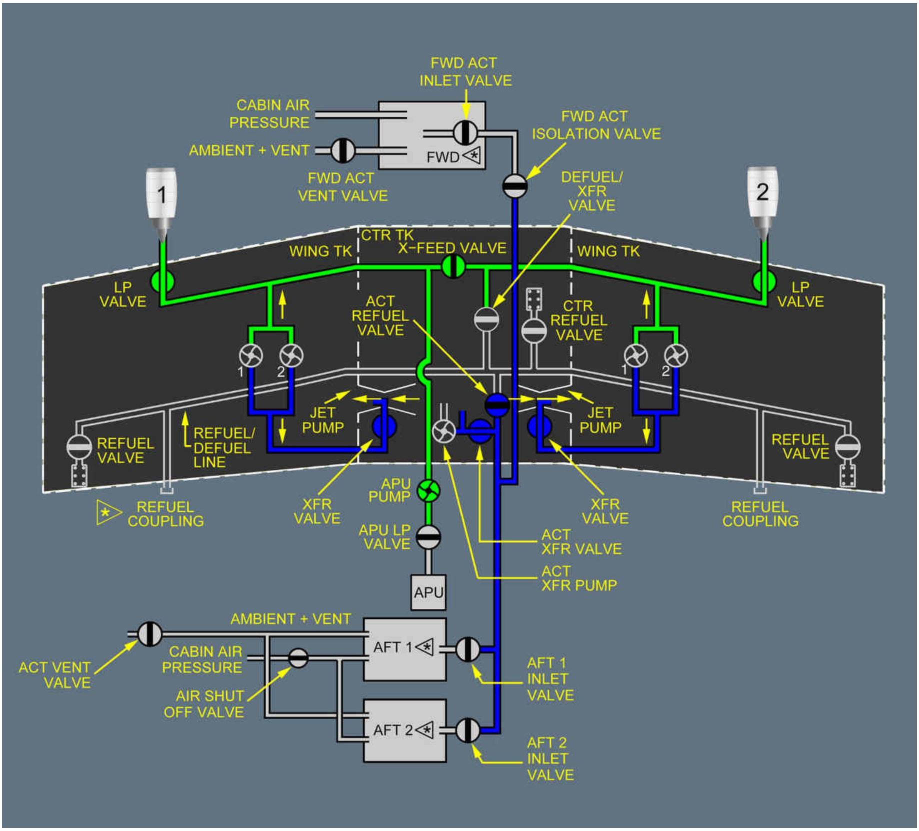
SUCTION VALVES

Closed by pumps pressure in normal operation, they allow engines to be fed by gravity if the wing tank pumps fail.

ENGINE FEED

8 Ident.: DSC-28-10-30-00001115.0017001 / 20 NOV 18

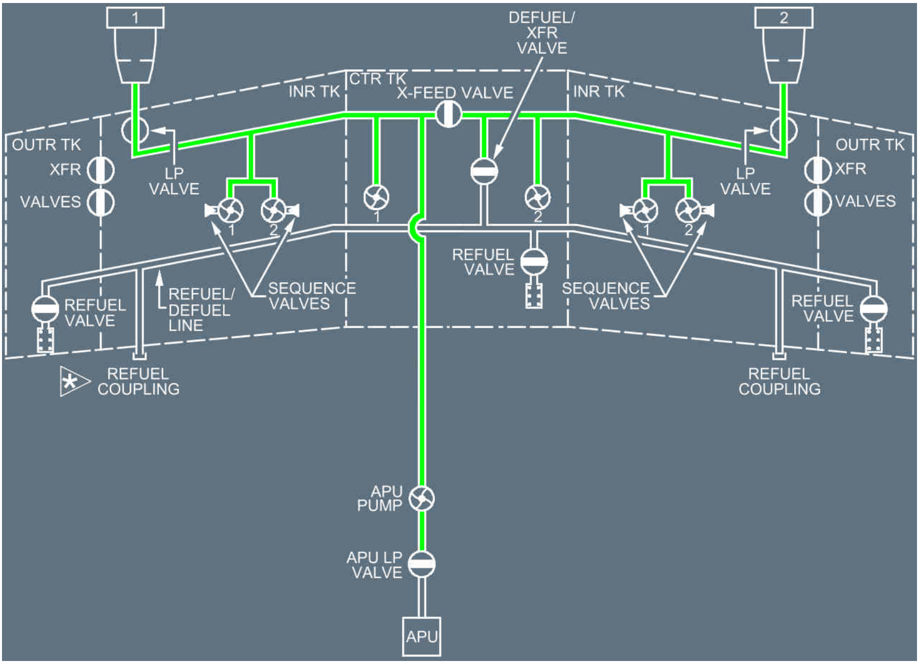
Applicable to: MSN 11531


FWD ACT
INLET VALVE
CABIN AIR
PRESSURE
AMBIENT + VENT
FWD
FWD ACT
ISOLATION VALVE
FWD ACT
VENT VALVE
DEFUEL/
XFR
VALVE
1
2
WING TK
CTR TK
X-FEED VALVE
WING TK
LP
VALVE
LP
VALVE
ACT
REFUEL
VALVE
CTR
REFUEL
VALVE
1
2
1
2
JET
PUMP
JET
PUMP
REFUEL
VALVE
REFUEL/
DEFUEL
LINE
REFUEL
VALVE
REFUEL
COUPLING
XFR
VALVE
APU
PUMP
APU LP
VALVE
XFR
VALVE
REFUEL
COUPLING
ACT
XFR VALVE
ACT
XFR PUMP
APU
AMBIENT + VENT
ACT VENT
VALVE
CABIN AIR
PRESSURE
AFT 1
AFT 1
INLET
VALVE
AIR SHUT
OFF VALVE
AFT 2
AFT 2
INLET
VALVE

ENGINE FEED

Ident.: DSC-28-10-30-00001115.0002001 / 18 MAR 14

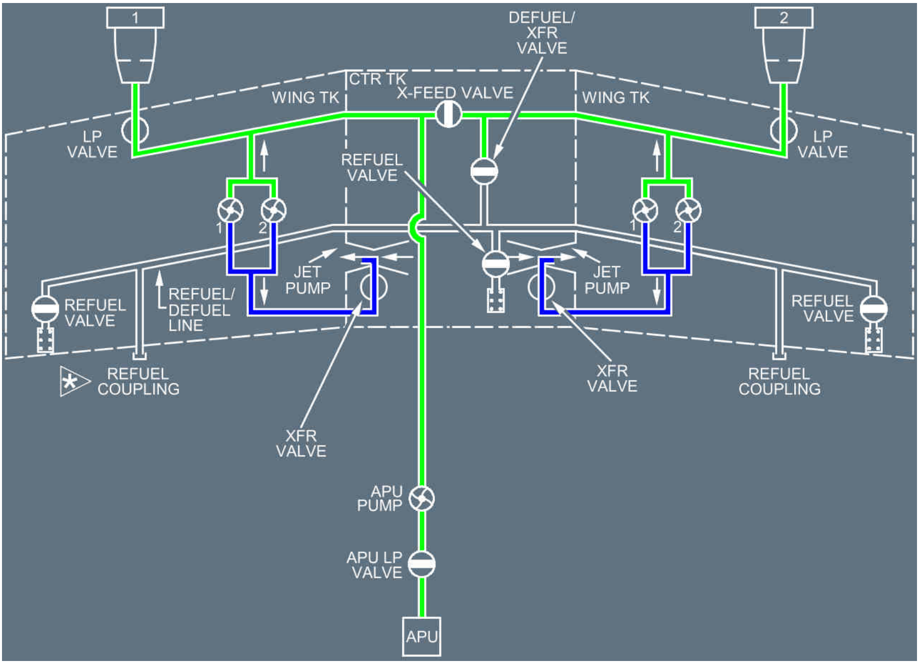
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173


1
2
DEFUEL/
XFR
VALVE
CTR TK
X-FEED VALVE
INR TK
INR TK
OUTR TK
XFR
VALVES
OUTR TK
XFR
VALVES
LP
VALVE
LP
VALVE
1
2
1
2
1
2
REFUEL
VALVE
REFUEL
VALVE
REFUEL
VALVE
REFUEL/
DEFUEL
LINE
SEQUENCE
VALVES
SEQUENCE
VALVES
REFUEL
COUPLING
REFUEL
COUPLING
APU
PUMP
APU LP
VALVE
APU

ENGINE FEED

Ident.: DSC-28-10-30-00001115.0003001 / 18 MAR 14

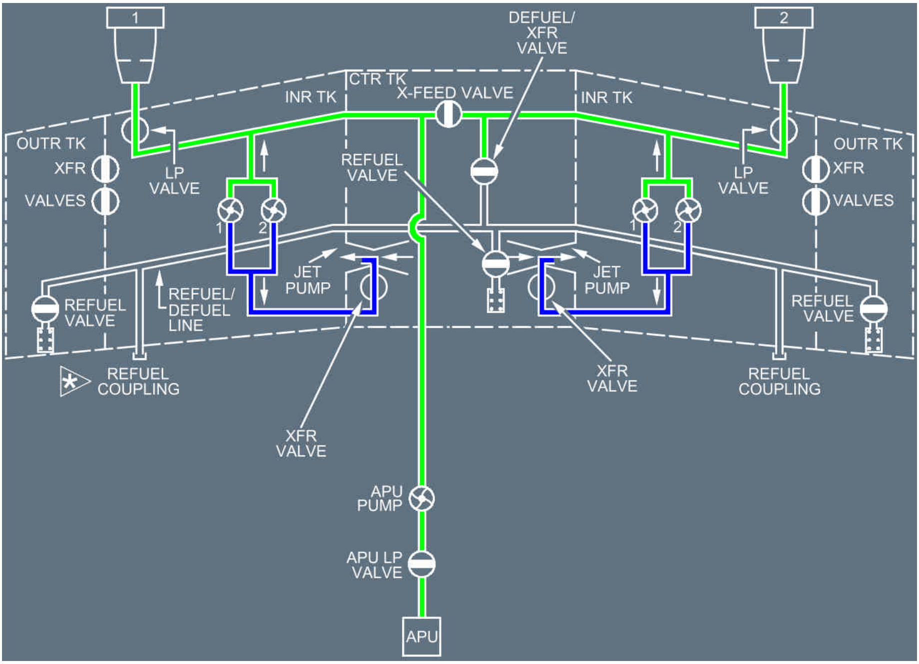
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098


1
2
DEFUEL/ XFR VALVE
CTR TK
X-FEED VALVE
WING TK
WING TK
LP VALVE
LP VALVE
REFUEL VALVE
1
2
1
2
JET PUMP
JET PUMP
REFUEL VALVE
REFUEL/ DEFUEL LINE
REFUEL VALVE
REFUEL COUPLING
XFR VALVE
REFUEL COUPLING
XFR VALVE
APU PUMP
APU LP VALVE
APU

ENGINE FEED

Ident.: DSC-28-10-30-00001115.0013001 / 18 MAR 14

9 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


1
DEFUEL/
XFR
VALVE
2
CTR TK
X-FEED VALVE
INR TK
INR TK
OUTR TK
OUTR TK
XFR
XFR
LP
VALVE
LP
VALVE
VALVES
VALVES
REFUEL
VALVE
1
2
1
2
JET
PUMP
JET
PUMP
REFUEL
VALVE
REFUEL/
DEFUEL
LINE
REFUEL
VALVE
REFUEL
COUPLING
XFR
VALVE
REFUEL
COUPLING
XFR
VALVE
APU
PUMP
APU LP
VALVE
APU

FUEL FEED SEQUENCE

Ident.: DSC-28-10-30-00021263.0001001 / 28 MAY 20

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

The tanks empty in the following sequence :

1. The ACT2 ◁ : Fuel transfers into the center tank.
2. The ACT1 ◁ : Fuel transfers into the center tank.
3. The center tank.
4. The inner tanks: Each inner tank empties down to 750 kg (1 650 lb).
5. The outer tanks: Fuel transfers into the inner tanks.

CENTER TANK FUEL TRANSFER

The center tank feeds fuel to the engines, when the center tank pumps are not stopped by the control logic described below. The inner tanks feed the engines when the center tank pumps are stopped.

CENTER TANK PUMPS CONTROL LOGIC

Each center tank pump stops, until approximately 500 kg (1 100 lb) of the fuel in its associated inner tank fuel has been used (when the fuel level reaches the underfull sensors).
With the MODE SEL in the MAN position, the center tank pumps will run. In manual mode, the CTR TK PUMP pb-sw must be selected OFF, when the center tank is empty.

FUEL TRANSFER FROM OUTER TO INNER TANKS

The transfer valves automatically open, when the inner tank fuel reaches the low level (about 750 kg/1 650 lb), thus enabling the fuel to drain from the outer to inner tanks.
When open, the valves are latched open. They will automatically close at the next refueling operation.

Note: *1. Two level sensors are installed in each inner tank. Each sensor controls two transfer valves, one in each wing, ensuring simultaneous transfer to both wings.*
2. The 750 kg/1 650 lb value is based on a level aircraft attitude, with no acceleration. During steep descent or accelerations/decelerations, the transfer valves may open with more than 750 kg/1 650 lb of fuel in each inner tank, and the low level warning may be triggered.

IF THE AIRCRAFT HAS ONE ACT ◁ : ACT TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
When the ACT is empty, the ACT transfer valve, the air shutoff valve and inlet valve close, and the ACT vent valve opens.

Note: *ACT transfer stops, if the center tank high level becomes wet, by closing the ACTs transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pb-sw to FWD opens the ACT transfer valve, the ACT inlet valve, and starts the ACT transfer pump. It must be returned to AUTO, when the ACT is empty.
Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

IF THE AIRCRAFT HAS TWO ACTS ◁ : ACT 1 + 2 TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
ACT2 transfers first, via the ACT transfer valve and the ACT2 inlet valve.
When ACT2 is empty, the ACT2 inlet valve shuts, and the ACT1 inlet valve opens.
When ACT1 is empty, the ACT transfer valve and ACT1 inlet valve close.
When the aircraft is on ground after landing, the air shutoff valve closes and both ACT vent valves open, depressurizing the ACTs.

Note: *ACT transfer stop, if the center tank high level becomes wet, by closing the ACT transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pb-sw to FWD opens the ACT transfer valve and starts the ACT transfer pump. ACT2 empties first, then ACT1. It must be returned to AUTO, when the ACT is empty.
Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

FUEL FEED SEQUENCE

10 Ident.: DSC-28-10-30-00021263.0013001 / 20 NOV 18
Applicable to: MSN 11531

The wing tanks feed fuel to the engines. The tanks empty in the following sequence:
1. The FWD ACT ◁ : Fuel transfers into the center tank.
2. The AFT2 ACT ◁ : Fuel transfers into the center tank.
3. The AFT1 ACT ◁ : Fuel transfers into the center tank.
4. The center tank: Fuel transfers into the wing tanks.
5. The wing tanks.

CENTER TANK FUEL TRANSFER

The transfer system controls the flow of fuel from the center tank to the wing tanks. The Fuel Level Sensing Control Unit (FLSCU) has automatic control of the transfer valve. When the transfer valve is open, fuel from the wing tank pumps flows through the jet pump and creates a suction in it. This suction moves the fuel from the center tank to the related wing tank.

CENTER TANK TRANSFER VALVE CONTROL LOGIC

The FLSCU automatically closes the associated center tank transfer valve when the wing tank is full. The FLSCU then reopens the center tank transfer valve when the engines have used 250 kg (550 lb) of wing tank fuel (when the fuel level reaches the underfull sensors).

With the MODE SEL in MAN position, the center tank transfer valves will open. Wing tank overflow must be prevented by selecting the CTR TK XFR pb-sw off when the wing tanks are full. They must also be selected off when the center tank is empty.

IF THE AIRCRAFT HAS ONE ACT ◁ : ACT TO CENTER TANK TRANSFER

ACT transfer automatically starts 30 min after landing gear up.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
When the ACT is empty, the ACT transfer valve, the air shutoff valve and inlet valve close, and the ACT vent valve opens.

Note: *ACT transfer stops, if the center tank fuel level exceeds 5 750 kg (12 676 lb), by closing the ACT transfer valve. The transfer valve reopens when the center tank fuel level falls below 5 000 kg (11 023 lb).*

IF THE AIRCRAFT HAS TWO ACTS ◁ : AFT 1 + 2 TO CENTER TANK TRANSFER

ACT transfer automatically starts 30 min after landing gear up.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
AFT2 ACT transfers first, via the ACT transfer valve and the AFT2 ACT inlet valve.
When AFT2 ACT is empty, the AFT2 ACT inlet valve shuts, and the AFT1 ACT inlet valve opens.
When AFT1 ACT is empty, the ACT transfer valve and AFT1 ACT inlet valve close.
When the aircraft is on ground after landing, the air shutoff valve closes and both ACT vent valves open, depressurizing the ACTs.

Note: *ACT transfer stops, if the center tank fuel level exceeds 5 750 kg (12 676 lb), by closing the ACT transfer valve. The transfer valve reopens when the center tank fuel level falls below 5 000 kg (11 023 lb).*

IF THE AIRCRAFT HAS THREE ACTS ◁ : FWD + AFT 2 + AFT 1 TO CENTER TANK TRANSFER

ACT transfer automatically starts 30 min after landing gear up.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
The FWD ACT transfers first, via the ACT transfer valve and the FWD ACT inlet valve.
When FWD ACT is empty, the FWD ACT inlet valve shuts and the AFT2 ACT inlet valve opens.
When AFT2 ACT is empty, the AFT2 ACT inlet valve shuts and the AFT1 ACT inlet valve opens.
When AFT1 ACT is empty, the ACT transfer valve and AFT1 ACT inlet valve close.
When the aircraft is on ground after landing, the air shutoff valve closes and both ACT vent valves open, depressurizing the ACTs.

Note: *ACT transfer stops, if the center tank fuel level exceeds 5 750 kg (12 676 lb), by closing the ACT transfer valve. The transfer valve reopens when the center tank fuel level falls below 5 000 kg (11 023 lb).*

FUEL FEED SEQUENCE

Ident.: DSC-28-10-30-00021263.0010001 / 21 MAR 17

11 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

The inner tanks feed fuel to the engines. The tanks empty in the following sequence :

1. The ACT2 ◁* : Fuel transfers into the center tank.
2. The ACT1 ◁* : Fuel transfers into the center tank.
3. The center tank : Fuel transfers into the inner tanks.
4. The inner tanks : Each inner tank empties down to 750 kg (1 650 lb).
5. The outer tanks : Fuel transfers into the inner tanks.

CENTER TANK FUEL TRANSFER

The transfer system controls the flow of fuel from the center tank to the inner tanks. The Fuel Level Sensing Control Unit (FLSCU) has automatic control of the transfer valve. When the transfer valve is open, fuel from the inner tank pumps flows through the jet pump and creates a suction in it. This suction moves the fuel from the center tank to the related inner tank.

CENTER TANK TRANSFER VALVE CONTROL LOGIC:

The FLSCU automatically closes the associated center tank transfer valve when the inner tank is full. The FLSCU then reopens the center tank transfer valve when the engines have used 500 kg (1 100 lb) of inner tank fuel (when the fuel level reaches the underfull sensors).
With the MODE SEL in MAN position, the center tank transfer valves will open. Inner tank overflow must be prevented by selecting the CTR TK XFR pb-sw OFF when the inner tanks are full. They must also be selected OFF when the center tank is empty.

FUEL TRANSFER FROM OUTER TO INNER TANKS

The transfer valves automatically open, when the inner tank fuel reaches the low level (about 750 kg/1 650 lb), thus enabling the fuel to drain from the outer to inner tanks.
When open, the valves are latched open. They will automatically close at the next refueling operation.

Note:

1. *Two level sensors are installed in each inner tank. Each sensor controls two transfer valves, one in each wing, ensuring simultaneous transfer to both wings.*
2. *The 750 kg/1 650 lb value is based on a level aircraft attitude, with no acceleration. During steep descent or accelerations/decelerations, the transfer valves may open with more than 750 kg/1 650 lb of fuel in each inner tank, and the low level warning may be triggered.*
3. *During takeoff phase with less than 7 000 kg / 15 400 lb FOB, an early outer to inner transfer may occur. This is because one of the wing low-level sensors may become dry due to the move of the fuel in the wing, thus opening the transfer valves.*

IF THE AIRCRAFT HAS ONE ACT ◁ : ACT TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
When the ACT is empty, the ACT transfer valve, the air shutoff valve and inlet valve close, and the ACT vent valve opens.

Note: *ACT transfer stops, if the center tank high level becomes wet, by closing the ACTs transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pb-sw to FWD opens the ACT transfer valve, the ACT inlet valve, and starts the ACT transfer pump. It must be returned to AUTO, when the ACT is empty.
Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

IF THE AIRCRAFT HAS TWO ACTS ◁ : ACT 1 + 2 TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
ACT2 transfers first, via the ACT transfer valve and the ACT2 inlet valve.
When ACT2 is empty, the ACT2 inlet valve shuts, and the ACT1 inlet valve opens.
When ACT1 is empty, the ACT transfer valve and ACT1 inlet valve close.
When the aircraft is on ground after landing, the air shutoff valve closes and both ACT vent valves open, depressurizing the ACTs.

Note: *ACT transfer stop, if the center tank high level becomes wet, by closing the ACT transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pb-sw to FWD opens the ACT transfer valve and starts the ACT transfer pump. ACT2 empties first, then ACT1. It must be returned to AUTO, when the ACT is empty.
Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

FUEL FEED SEQUENCE

Ident.: DSC-28-10-30-00021263.0004001 / 21 MAR 17
Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876

The inner tanks feed fuel to the engines. The tanks empty in the following sequence :
1. The ACT2 ◁✱ : Fuel transfers into the center tank.
2. The ACT1 ◁✱ : Fuel transfers into the center tank.
3. The center tank : Fuel transfers into the inner tanks.
4. The inner tanks : Each inner tank empties down to 750 kg (1 650 lb).
5. The outer tanks : Fuel transfers into the inner tanks.

CENTER TANK FUEL TRANSFER

The transfer system controls the flow of fuel from the center tank to the inner tanks. The Fuel Level Sensing Control Unit (FLSCU) has automatic control of the transfer valve. When the transfer valve is open, fuel from the inner tank pumps flows through the jet pump and creates a suction in it. This suction moves the fuel from the center tank to the related inner tank.

CENTER TANK TRANSFER VALVE CONTROL LOGIC:

The FLSCU automatically closes the associated center tank transfer valve when the inner tank is full. The FLSCU then reopens the center tank transfer valve when the engines have used 500 kg (1 100 lb) of inner tank fuel (when the fuel level reaches the underfull sensors).
With the MODE SEL in MAN position, the center tank transfer valves will open. Inner tank overflow must be prevented by selecting the CTR TK XFR pb-sw OFF when the inner tanks are full. They must also be selected OFF when the center tank is empty.

FUEL TRANSFER FROM OUTER TO INNER TANKS

The transfer valves automatically open, when the inner tank fuel reaches the low level (about 750 kg/1 650 lb), thus enabling the fuel to drain from the outer to inner tanks.
When open, the valves are latched open. They will automatically close at the next refueling operation.

Note: 1. *Two level sensors are installed in each inner tank. Each sensor controls two transfer valves, one in each wing, ensuring simultaneous transfer to both wings.*
2. *The 750 kg/1 650 lb value is based on a level aircraft attitude, with no acceleration. During steep descent or accelerations/decelerations, the transfer valves may open with more than 750 kg/1 650 lb of fuel in each inner tank, and the low level warning may be triggered.*

IF THE AIRCRAFT HAS ONE ACT ◁ : ACT TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
When the ACT is empty, the ACT transfer valve, the air shutoff valve and inlet valve close, and the ACT vent valve opens.

Note: *ACT transfer stops, if the center tank high level becomes wet, by closing the ACTs transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pb-sw to FWD opens the ACT transfer valve, the ACT inlet valve, and starts the ACT transfer pump. It must be returned to AUTO, when the ACT is empty.
Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

IF THE AIRCRAFT HAS TWO ACTS ◁ : ACT 1 + 2 TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
ACT2 transfers first, via the ACT transfer valve and the ACT2 inlet valve.
When ACT2 is empty, the ACT2 inlet valve shuts, and the ACT1 inlet valve opens.
When ACT1 is empty, the ACT transfer valve and ACT1 inlet valve close.
When the aircraft is on ground after landing, the air shutoff valve closes and both ACT vent valves open, depressurizing the ACTs.

Note: *ACT transfer stop, if the center tank high level becomes wet, by closing the ACT transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pb-sw to FWD opens the ACT transfer valve and starts the ACT transfer pump. ACT2 empties first, then ACT1. It must be returned to AUTO, when the ACT is empty.

Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

FUEL FEED SEQUENCE

Ident.: DSC-28-10-30-00021263.0003001 / 21 MAR 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

The wing tanks feed fuel to the engines. The tanks empty in the following sequence:

1. The ACT2 ◁ : Fuel transfers into the center tank.
2. The ACT1 ◁ : Fuel transfers into the center tank.
3. The center tank: Fuel transfers into the wing tanks.
4. The wing tanks.

CENTER TANK FUEL TRANSFER

The transfer system controls the flow of fuel from the center tank to the wing tanks. The Fuel Level Sensing Control Unit (FLSCU) has automatic control of the transfer valve. When the transfer valve is open, fuel from the wing tank pumps flows through the jet pump and creates a suction in it. This suction moves the fuel from the center tank to the related wing tank.

CENTER TANK TRANSFER VALVE CONTROL LOGIC

The FLSCU automatically closes the associated center tank transfer valve when the wing tank is full. The FLSCU then reopens the center tank transfer valve when the engines have used 250 kg (550 lb) of wing tank fuel (when the fuel level reaches the underfull sensors).
With the MODE SEL in MAN position, the center tank transfer valves will open. Wing tank overflow must be prevented by selecting the CTR TK XFR pb-sw off when the wing tanks are full. They must also be selected off when the center tank is empty.

IF THE AIRCRAFT HAS ONE ACT ◁ : ACT TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
When the ACT is empty, the ACT transfer valve, the air shutoff valve and inlet valve close, and the ACT vent valve opens.

Note: *ACT transfer stops, if the center tank high level becomes wet, by closing the ACTs transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pushbutton to FWD opens the ACT transfer valve, the ACT inlet valve, and starts the ACT transfer pump. It must be returned to AUTO, when the ACT is empty.

Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

IF THE AIRCRAFT HAS TWO ACTS ◁ : ACT 1 + 2 TO CENTER TANK TRANSFER

ACT transfer automatically starts after takeoff at slats' retraction, if the center tank high-level sensor has been dry for 10 min, and the ACT is not empty.
Fuel transfers from the ACT to the center tank via pressurization of the tank, by closing the ACT vent valve and opening the air shutoff valve.
ACT2 transfers first, via the ACT transfer valve and the ACT2 inlet valve.
When ACT2 is empty, the ACT2 inlet valve shuts, and the ACT1 inlet valve opens.
When ACT1 is empty, the ACT transfer valve and ACT1 inlet valve close.
When the aircraft is on ground after landing, the air shutoff valve closes and both ACT vent valves open, depressurizing the ACTs.

Note: *ACT transfer stop, if the center tank high level becomes wet, by closing the ACT transfer valve. The transfer valve reopens when the center tank high-level sensor becomes dry for 10 min.*

Selecting the ACT pb-sw to FWD opens the ACT transfer valve and starts the ACT transfer pump. ACT2 empties first, then ACT1. It must be returned to AUTO, when the ACT is empty.
Center tank overflow is prevented, by returning the ACT pb-sw to AUTO, when the center tank is full.

GENERAL

1 Ident.: DSC-28-10-40-00009208.0003001 / 20 NOV 18
Applicable to: MSN 11531

ACT SYSTEM

Up to 3 ACTs can be installed in the cargo holds: 1 FWD, 2 AFT. They transfer to the center tank one at a time, in the following order: FWD then AFT2 and AFT1. Transfer is fully automatic and is achieved by pressurizing the tanks with cabin air.

AUTOMATIC TRANSFER

2 Ident.: DSC-28-10-40-00009209.0007001 / 04 JUN 19
Applicable to: MSN 11531

The transfer starts in flight 30 min after the retraction of the nose landing gear and when the center tank quantity is below 5 000 kg (11 030 lb).
The ACT transfer valve opens and the inlet valve of the first ACT in sequence opens, pressurizing the fuel transfer pipe until that ACT is empty. Each empty ACT is scavenged for around 2 min. Then, its inlet valve closes, and the inlet valve of the next ACT in sequence opens.
When the center tank quantity reaches 5 750 kg (12 700 lb), the ACT transfer stops.
A wire installed on the forward ACT vent pipe detects an ACT damage due to engine rotor burst. Then the forward ACT is automatically isolated.

MANUAL TRANSFER

Applicable to: MSN 11531

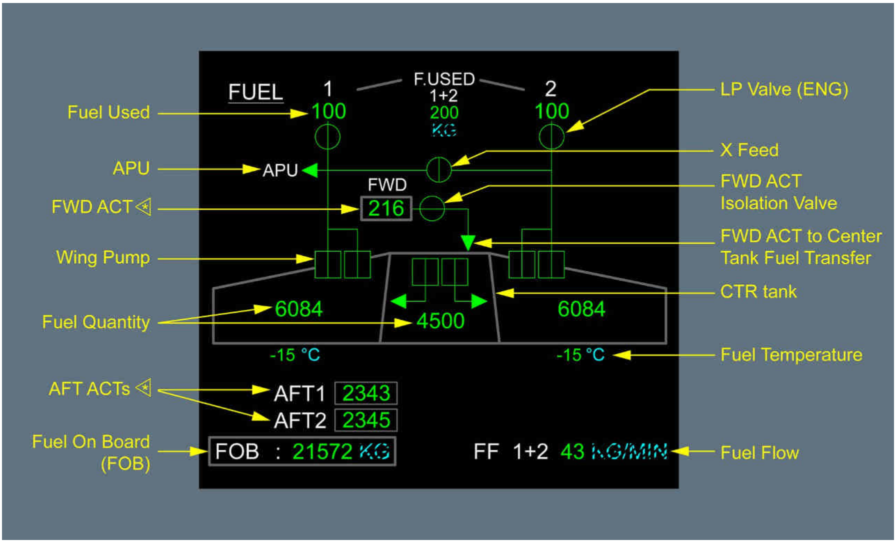
3 Ident.: DSC-28-10-40-A-00009210.0001001 / 05 JUN 18

GENERAL

In case of a transfer failure, a manual transfer is performed by pressing the ACT XFR MODE SEL pb-sw . The crew then selects the ACT to be transferred on the ACT XFR rotary selector . If a center tank overflow occurs, pressing the ALL ACT pb-sw stops the ACT transfer by isolating all the ACTs.

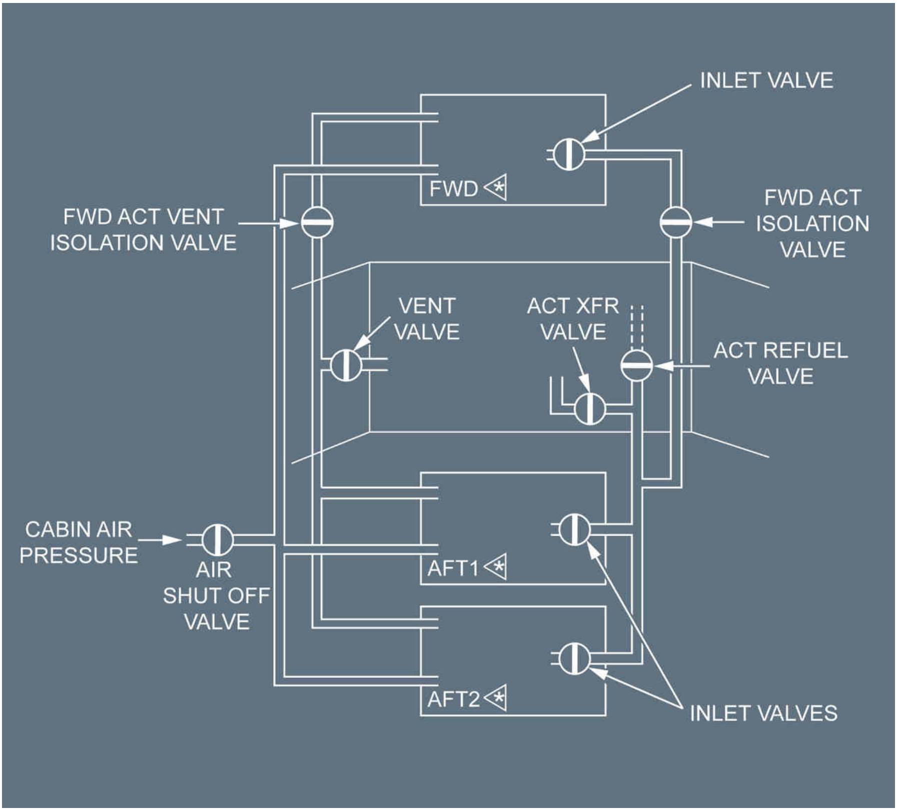
4 Ident.: DSC-28-10-40-A-00009211.0005001 / 05 JUN 18

ECAM INDICATION


FUEL
1
F.USED
1+2
200
KG
2
100
100
APU
FWD
216
6084
4500
6084
-15 °C
-15 °C
AFT1 2343
AFT2 2345
FOB : 21572 KG
FF 1+2 43 KG/MIN
Fuel Used
APU
FWD ACT
Wing Pump
Fuel Quantity
AFT ACTs
Fuel On Board (FOB)
LP Valve (ENG)
X Feed
FWD ACT Isolation Valve
FWD ACT to Center Tank Fuel Transfer
CTR tank
Fuel Temperature
Fuel Flow

5 Ident.: DSC-28-10-40-A-00009212.0002001 / 05 JUN 18

ACT SYSTEM ARCHITECTURE


INLET VALVE
FWD
FWD ACT VENT ISOLATION VALVE
FWD ACT ISOLATION VALVE
VENT VALVE
ACT XFR VALVE
ACT REFUEL VALVE
CABIN AIR PRESSURE
AIR SHUT OFF VALVE
AFT1
AFT2
INLET VALVES

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APU FEED

Ident.: DSC-28-10-50-00001120.0001001 / 10 DEC 09
Applicable to: ALL

A special fuel pump supplies fuel for APU startup when fuel feed pressure is low (due to loss of tank pumps or loss of normal AC electrical supply). This pump normally runs off the AC ESS SHED, but runs off the AC STAT INV BUS if the AC ESS SHED fails.

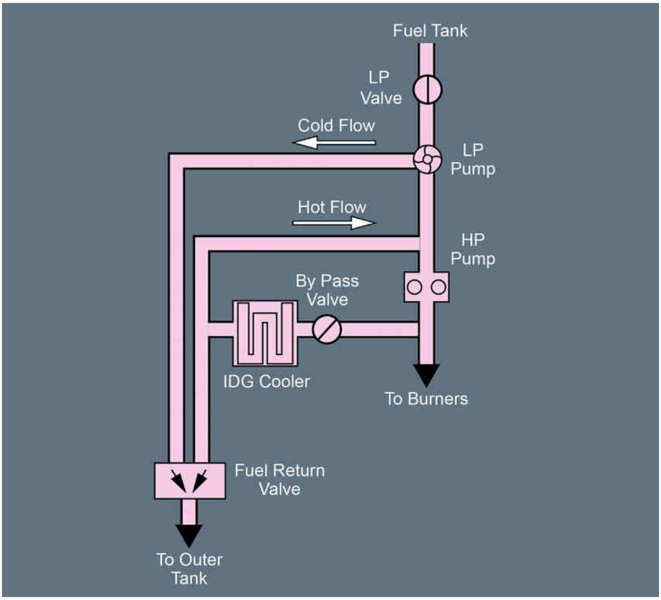
Intentionally left blank

FUEL RECIRCULATION SYSTEM

Ident.: DSC-28-10-60-B-00020316.0002001 / 05 MAY 22

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

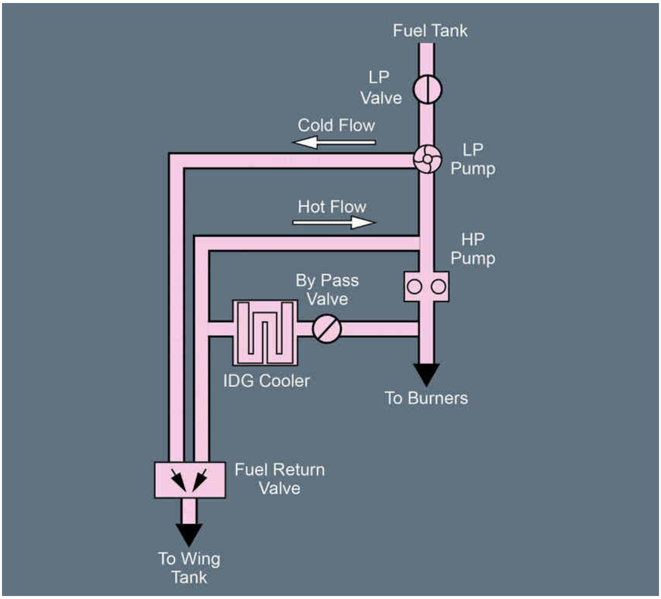
Illustration - For information only


Fuel Tank
LP Valve
Cold Flow
LP Pump
Hot Flow
HP Pump
By Pass Valve
IDG Cooler
To Burners
Fuel Return Valve
To Outer Tank

Ident.: DSC-28-10-60-B-00020316.0001001 / 05 MAY 22

2 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

Illustration - For information only



Ident.: DSC-28-10-60-B-00020317.0010001 / 28 NOV 17

3 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

For PW 6100 engine: Refer to DSC-70-47 IDG Cooling System.
For PW 1100G engine: Refer to DSC-70-48 IDG Cooling Recirculation System.
Some of the fuel supplied to each engine goes from the high-pressure fuel line in that engine, through the integrated drive generator (IDG) heat exchanger (where it absorbs heat), to the fuel return valve and back to the outer fuel tank.
This operation ensures the IDG cooling when the oil temperature is high or when at low engine power.
The FADEC controls the fuel return valve.
If the outer tank is already full, the fuel overflows to the inner tank through a spill pipe.

Ident.: DSC-28-10-60-B-00020317.0004001 / 17 MAR 17

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173

Refer to DSC-70-40 IDG Cooling System.

Some of the fuel supplied to each engine goes from the high-pressure fuel line in that engine, through the integrated drive generator (IDG) heat exchanger (where it absorbs heat), to the fuel return valve and back to the outer fuel tank.
This operation ensures the IDG cooling when the oil temperature is high or when at low engine power.
The FADEC controls the fuel return valve.
If the outer tank is already full, the fuel overflows to the inner tank through a spill pipe. On ground, the fuel recirculation is not inhibited if there is an overflow in the surge tanks (*Refer to DSC-70-40 IDG Cooling System*).

- **If the FUEL MODE SEL pb-sw is in AUTO mode:**
  If center tank is feeding, the wing tank will tend to overfill and the system automatically selects the CTR TK PUMP off when the inner tank is full. The wing tank pumps will feed until the engine have used approximately 500 kg (1 100 lb) of fuel when the fuel level reaches the underfull sensors. The logic circuits then restart the center tank pumps.
- **If the FUEL MODE SEL pb-sw is in MAN mode:**
  If center tank is feeding, the wing tanks will tend to overfill but the system does not automatically select the CTR TK PUMPs OFF when the inner tank is full. Therefore, an overflow of the wing tanks can occur on ground if the CTR TK PUMPs are not switched OFF.

Ident.: DSC-28-10-60-B-00020317.0007001 / 28 NOV 17
Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Refer to DSC-70-40 IDG Cooling System.
Some of the fuel supplied to each engine goes from the high-pressure fuel line in that engine, through the integrated drive generator (IDG) heat exchanger (where it absorbs heat), to the fuel return valve and back to the outer fuel tank.
This operation ensures the IDG cooling when the oil temperature is high or when at low engine power.
The FADEC controls the fuel return valve.
If the outer tank is already full, the fuel overflows to the inner tank through a spill pipe. On ground, the fuel recirculation is not inhibited if there is an overflow in the surge tanks.

Ident.: DSC-28-10-60-B-00020317.0005001 / 31 AUG 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

Refer to DSC-70-45 General.
Some of the fuel supplied to each engine goes from the high-pressure fuel line in that engine, through the integrated drive generator (IDG) heat exchanger (where it absorbs heat), to the fuel return valve and back to the outer fuel tank.
This operation ensures the IDG cooling when the oil temperature is high or when at low engine power.
The FADEC controls the fuel return valve.

If the outer tank is already full, the fuel overflows to the inner tank through a spill pipe.
If center tank is feeding, the wing tank will tend to overfill and the system automatically selects the CTR TK PUMP off when the inner tank is full. The wing tank pumps will feed until the engine have used approximately 500 kg (1 100 lb) of fuel when the fuel level reaches the underfull sensors. The logic circuits then restart the center tank pumps.

Ident.: DSC-28-10-60-B-00020317.0006001 / 28 NOV 17

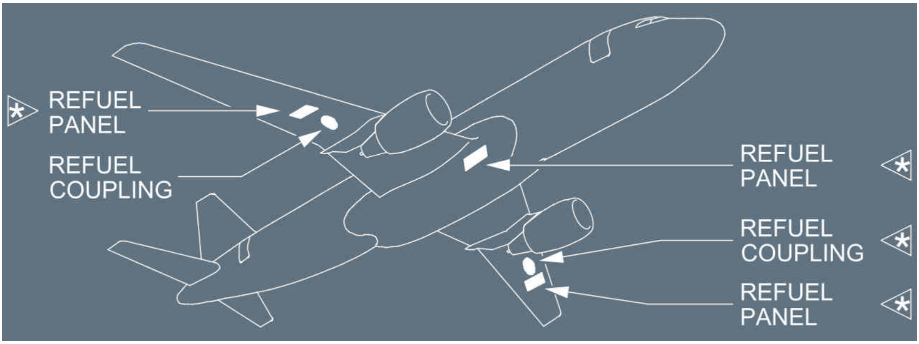
4 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

For IAE engine: Refer to DSC-70-45 General.
For PW engine: Refer to DSC-70-48 IDG Cooling Recirculation System.
For CFM engine: Refer to DSC-70-40 IDG Cooling System.
Some of the fuel supplied to each engine goes from the high-pressure fuel line in that engine, through the integrated drive generator (IDG) heat exchanger (where it absorbs heat), to the fuel return valve and back to the wing tank.
This operation ensures the IDG cooling when the oil temperature is high or when at low engine power.
The FADEC controls the fuel return valve.

REFUELING - DEFUELING

1 Ident.: DSC-28-10-70-00021235.0010001 / 04 SEP 18
Applicable to: MSN 11531

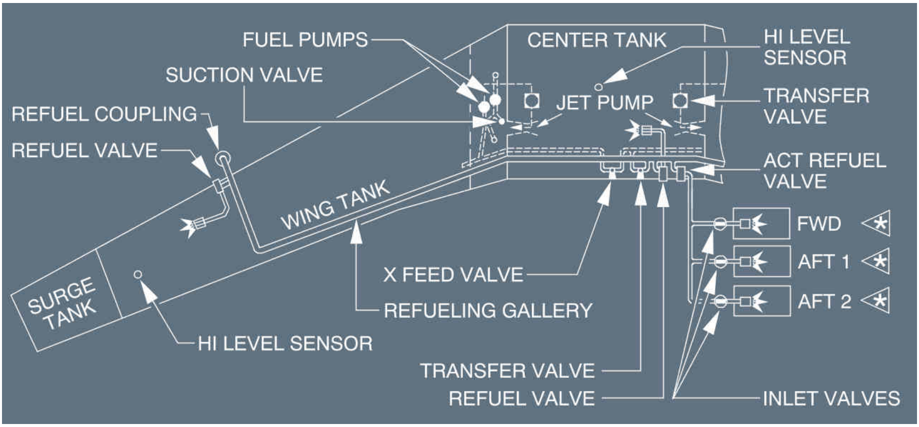
- During automatic refueling, fuel goes into the ACTs ◁ , the center tank and the wing tanks simultaneously.
  During manual refueling, fill the wing tanks first, then the center tank, then the ACTs ◁ .
- Electrical transients (caused by switching among the APU, the external and the engine electrical supply) during automatic refueling may stop the process. If the automatic refueling process is stopped, it is necessary to re-enter the Preselected Fuel Quantity.
- One (two) refueling point(s) is (are) installed under the wings, enabling the aircraft to be refueled from either the right or left (if installed) side.
- A refuel panel is located on the fuselage side beneath the right wing, or under the right or left wing adjacent to the refuel coupling.



A gallery connects the refuel coupling to each tank's refuel valve.
Refueling is normally automatic, the required fuel load being set on the preselector.
Manual control is also available.
Automatic refueling starts with the wing tanks. If the preselected fuel load exceeds the capacity of the wing tanks, the center tank is simultaneously refueled.
Refuel valves close automatically, when the tanks contain the preselected load, or when sensors detect a high fuel level.
The aircraft can be refueled, when only battery power is available.
The wing tanks can be refueled by gravity, through refueling points on top of the wings.

A transfer valve, between the engine feed system and the refueling gallery, allows :
- The tank pumps to transfer fuel from one tank to another
- Defueling through the refuel coupling.

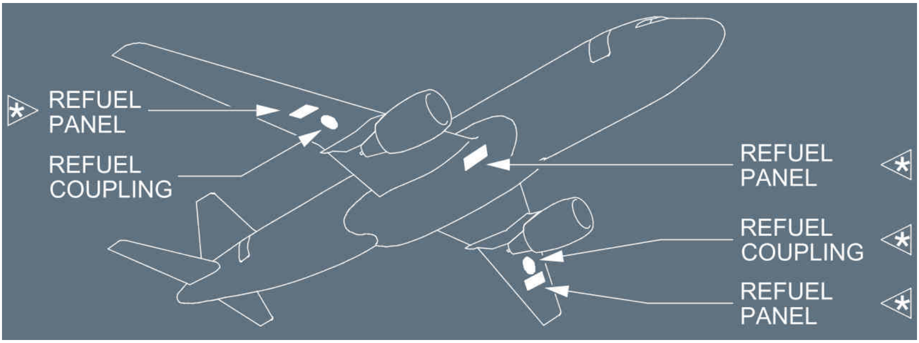
Approximate refueling time at nominal pressure is :
- 17 min for wing tanks
- 20 min for all tanks (without ACT ◁)
- 25 min for all tanks (with one ACT ◁)
- 27 min for all tanks (with two ACTs ◁)
- 39 min for all tanks (with three ACTs ◁).


FUEL PUMPS
CENTER TANK
HI LEVEL SENSOR
SUCTION VALVE
REFUEL COUPLING
JET PUMP
TRANSFER VALVE
REFUEL VALVE
ACT REFUEL VALVE
WING TANK
FWD ◁
AFT 1 ◁
AFT 2 ◁
X FEED VALVE
SURGE TANK
REFUELING GALLERY
HI LEVEL SENSOR
TRANSFER VALVE
REFUEL VALVE
INLET VALVES

REFUELING - DEFUELING

Ident.: DSC-28-10-70-00021235.0007001 / 21 MAR 17
Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876

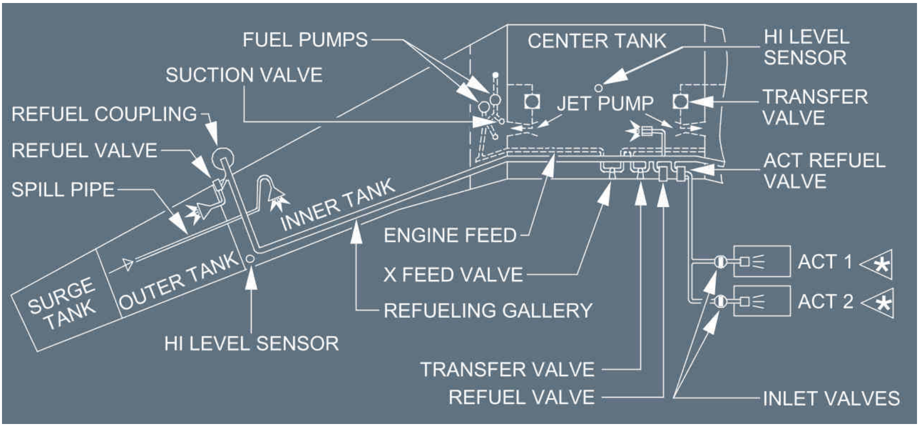
- During automatic refueling, fuel goes into the ACTs ◁ , the center tank and the wing tanks simultaneously.
  During manual refueling, fill the wing tanks first, then the center tank, then the ACTs ◁ .
- Electrical transients (caused by switching among the APU, the external and the engine electrical supply) during automatic refueling may stop the process. If the automatic refueling process is stopped, it is necessary to re-enter the Preselected Fuel Quantity.
- One (two) refueling point(s) is (are) installed under the wings, enabling the aircraft to be refueled from either the right or left (if installed) side.
- A refuel panel is located on the fuselage side beneath the right wing, or under the right or left wing adjacent to the refuel coupling.
- Another refuel panel is located on the cockpit overhead maintenance panel.
- A "READY FOR FUELING" green light is installed adjacent to the refuel coupling.



A gallery connects the refuel coupling to each tank's refuel valve.
Refueling is normally automatic, the required fuel load being set on the preselector.
Manual control is also available.
Automatic refueling starts with the outer tanks. If the selected fuel load exceeds the wing tank capacity, the center tank is simultaneously refueled.
When an outer tank is full, the fuel overflows into the inner tank through a spill pipe.
Refuel valves close automatically, when the tanks contain the preselected load, or when sensors detect a high fuel level.
The aircraft can be refueled, when only battery power is available.
The wing tanks can be refueled by gravity, through refueling points on top of the wings.

A transfer valve, between the engine feed system and the refueling gallery, allows:
- The tank pumps to transfer fuel from one tank to another
- Defueling through the refuel coupling.

Approximate refueling time at nominal pressure is:
- 17 min for wing tanks
- 20 min for all tanks (without ACT ◁)
- 25 min for all tanks (with one ACT ◁)
- 27 min for all tanks (with two ACTs ◁).

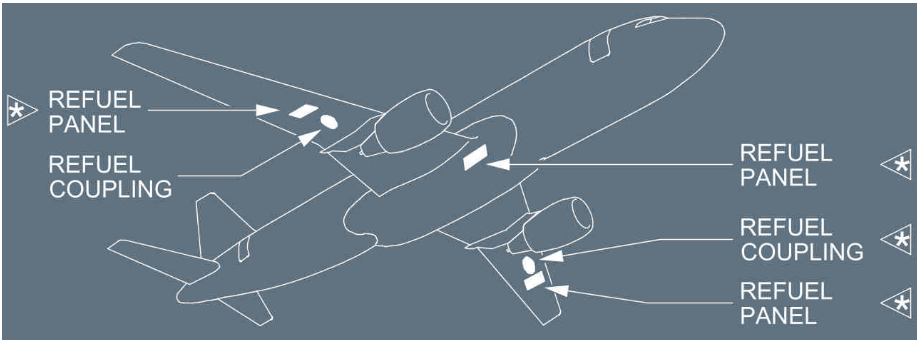

FUEL PUMPS
SUCTION VALVE
REFUEL COUPLING
REFUEL VALVE
SPILL PIPE
SURGE TANK
OUTER TANK
INNER TANK
HI LEVEL SENSOR
CENTER TANK
JET PUMP
HI LEVEL SENSOR
TRANSFER VALVE
ACT REFUEL VALVE
ENGINE FEED
X FEED VALVE
REFUELING GALLERY
ACT 1
ACT 2
TRANSFER VALVE
REFUEL VALVE
INLET VALVES

REFUELING - DEFUELING

Ident.: DSC-28-10-70-00021235.0005001 / 21 MAR 17

2 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

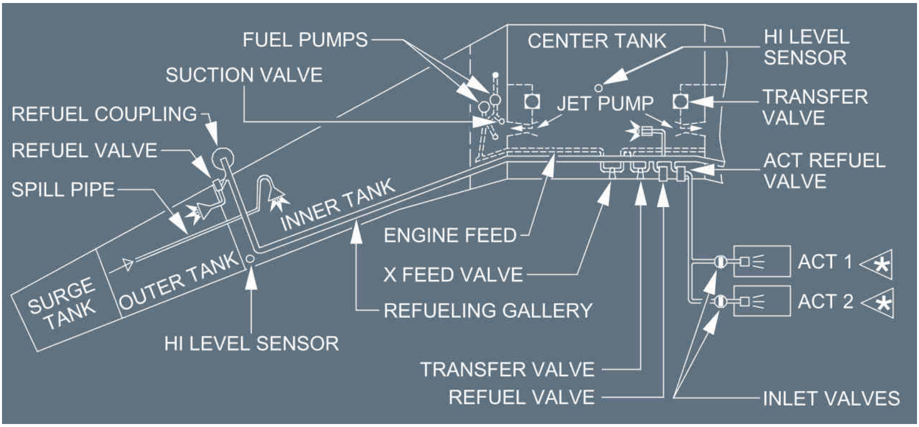
- During automatic refueling, fuel goes into the ACTs ◁ , the center tank and the outer cell of the wing tanks simultaneously. When the outer cell of the wing tank is full, fuel overflows into the inner cell. During manual refueling, fill the wing tanks first, then the center tank, then the ACTs ◁ .
- Electrical transients (caused by switching among the APU, the external and the engine electrical supply) during automatic refueling may stop the process. If the automatic refueling process is stopped, it is necessary to re-enter the Preselected Fuel Quantity.
- One (two) refueling point(s) is (are) installed under the wings, enabling the aircraft to be refueled from either the right or left (if installed) side.
- A refuel panel is located on the fuselage side beneath the right wing, or under the right or left wing adjacent to the refuel coupling.



A gallery connects the refuel coupling to each tank's refuel valve.
Refueling is normally automatic, the required fuel load being set on the preselector.
Manual control is also available.
Automatic refueling starts with the outer tanks. If the selected fuel load exceeds the wing tank capacity, the center tank is simultaneously refueled.
When an outer tank is full, the fuel overflows into the inner tank through a spill pipe.
Refuel valves close automatically, when the tanks contain the preselected load, or when sensors detect a high fuel level.
The aircraft can be refueled, when only battery power is available.
The wing tanks can be refueled by gravity, through refueling points on top of the wings.

A transfer valve, between the engine feed system and the refueling gallery, allows:
- The tank pumps to transfer fuel from one tank to another
- Defueling through the refuel coupling.

Approximate refueling time at nominal pressure is:
- 17 min for wing tanks
- 20 min for all tanks (without ACT ◁)
- 25 min for all tanks (with one ACT ◁)
- 27 min for all tanks (with two ACTs ◁).

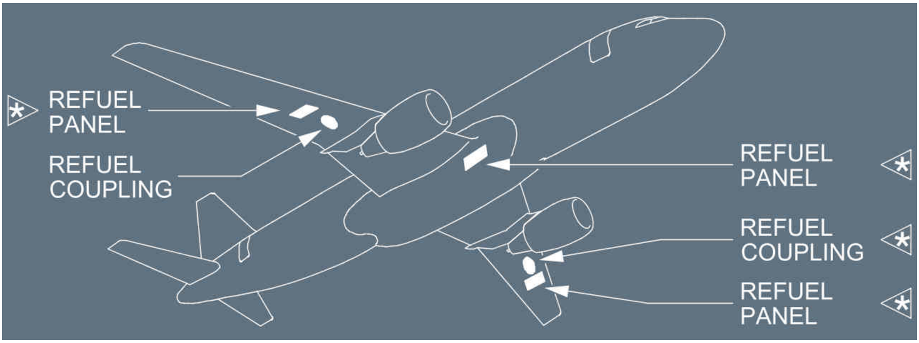

FUEL PUMPS
CENTER TANK
HI LEVEL SENSOR
SUCTION VALVE
REFUEL COUPLING
JET PUMP
TRANSFER VALVE
REFUEL VALVE
ACT REFUEL VALVE
SPILL PIPE
INNER TANK
ENGINE FEED
ACT 1
SURGE TANK
OUTER TANK
X FEED VALVE
ACT 2
REFUELING GALLERY
HI LEVEL SENSOR
TRANSFER VALVE
REFUEL VALVE
INLET VALVES

REFUELING - DEFUELING

Ident.: DSC-28-10-70-00021235.0004001 / 21 MAR 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

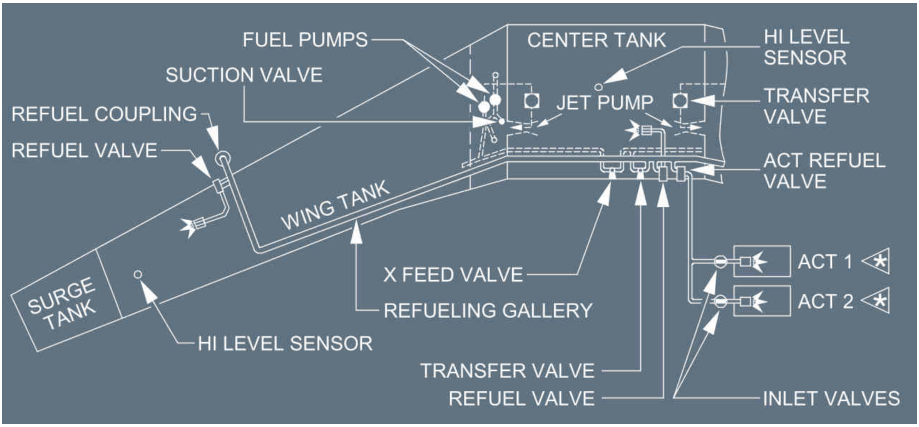
- During automatic refueling, fuel goes into the ACTs ◁ , the center tank and the wing tanks simultaneously.
  During manual refueling, fill the wing tanks first, then the center tank, then the ACTs ◁ .
- Electrical transients (caused by switching among the APU, the external and the engine electrical supply) during automatic refueling may stop the process. If the automatic refueling process is stopped, it is necessary to re-enter the Preselected Fuel Quantity.
- One (two) refueling point(s) is (are) installed under the wings, enabling the aircraft to be refueled from either the right or left (if installed) side.
- A refuel panel is located on the fuselage side beneath the right wing, or under the right or left wing adjacent to the refuel coupling.



A gallery connects the refuel coupling to each tank's refuel valve.
Refueling is normally automatic, the required fuel load being set on the preselector.
Manual control is also available.
Automatic refueling starts with the wing tanks. If the preselected fuel load exceeds the capacity of the wing tanks, the center tank is simultaneously refueled.
Refuel valves close automatically, when the tanks contain the preselected load, or when sensors detect a high fuel level.
The aircraft can be refueled, when only battery power is available.
The wing tanks can be refueled by gravity, through refueling points on top of the wings.

A transfer valve, between the engine feed system and the refueling gallery, allows :
- The tank pumps to transfer fuel from one tank to another
- Defueling through the refuel coupling.

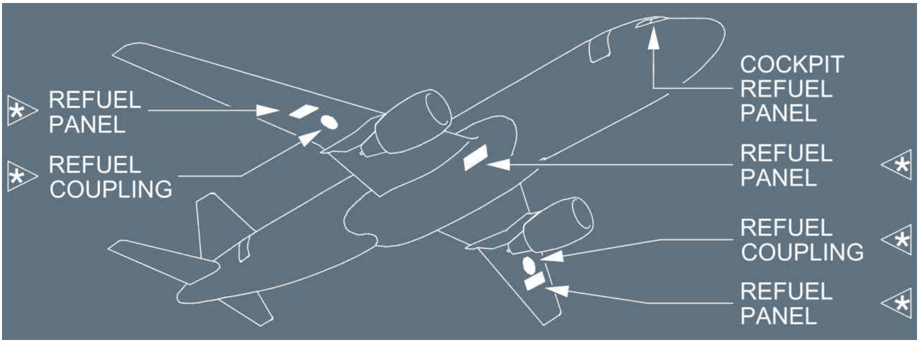
Approximate refueling time at nominal pressure is :
- 17 min for wing tanks
- 20 min for all tanks (without ACT ◁✳)
- 25 min for all tanks (with one ACT ◁✳)
- 27 min for all tanks (with two ACTs ◁✳).


FUEL PUMPS
SUCTION VALVE
REFUEL COUPLING
REFUEL VALVE
CENTER TANK
JET PUMP
HI LEVEL SENSOR
TRANSFER VALVE
ACT REFUEL VALVE
WING TANK
SURGE TANK
ACT 1 ◁
ACT 2 ◁
X FEED VALVE
REFUELING GALLERY
HI LEVEL SENSOR
TRANSFER VALVE
REFUEL VALVE
INLET VALVES

REFUELING - DEFUELING

Ident.: DSC-28-10-70-00021235.0002001 / 21 MAR 17
Applicable to: MSN 03032, 06139, 06173

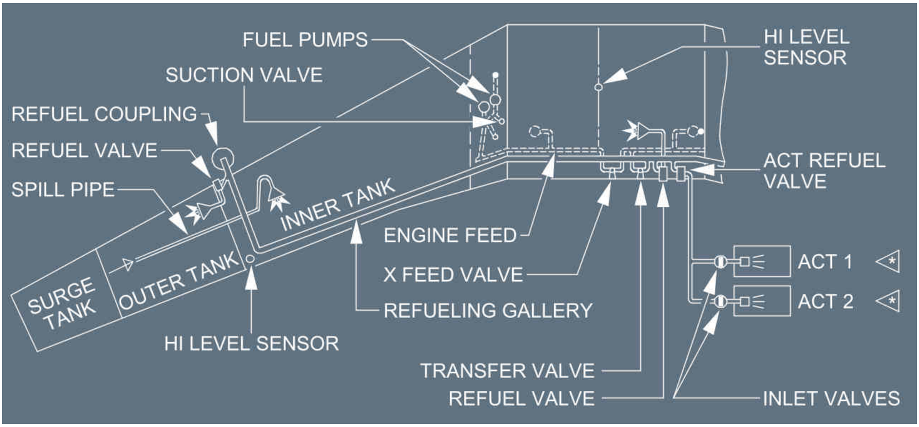
- During automatic refueling, fuel goes into the ACTs ◁ , the center tank and the outer cell of the wing tanks simultaneously. When the outer cell of the wing tank is full, fuel overflows into the inner cell. During manual refueling, fill the wing tanks first, then the center tank, then the ACTs ◁ .
- Electrical transients (caused by switching among the APU, the external and the engine electrical supply) during automatic refueling may stop the process. If the automatic refueling process is stopped, it is necessary to re-enter the Preselected Fuel Quantity.
- One (two) refueling point(s) is (are) installed under the wings, enabling the aircraft to be refueled from either the right or left (if installed) side.
- A refuel panel is located on the fuselage side beneath the right wing, or under the right or left wing adjacent to the refuel coupling.
- Another refuel panel is located on the cockpit overhead maintenance panel.
- A "READY FOR FUELING" green light is installed adjacent to the refuel coupling.



A gallery connects the refuel coupling to each tank's refuel valve.
Refueling is normally automatic, the required fuel load being set on the preselector.
Manual control is also available.
Automatic refueling starts with the outer tanks. If the selected fuel load exceeds the wing tank capacity, the center tank is simultaneously refueled.
When an outer tank is full, the fuel overflows into the inner tank through a spill pipe.
Refuel valves close automatically, when the tanks contain the preselected load, or when sensors detect a high fuel level.
The aircraft can be refueled, when only battery power is available.
The wing tanks can be refueled by gravity, through refueling points on top of the wings.

A transfer valve, between the engine feed system and the refueling gallery, allows :
- The tank pumps to transfer fuel from one tank to another
- Defueling through the refuel coupling.

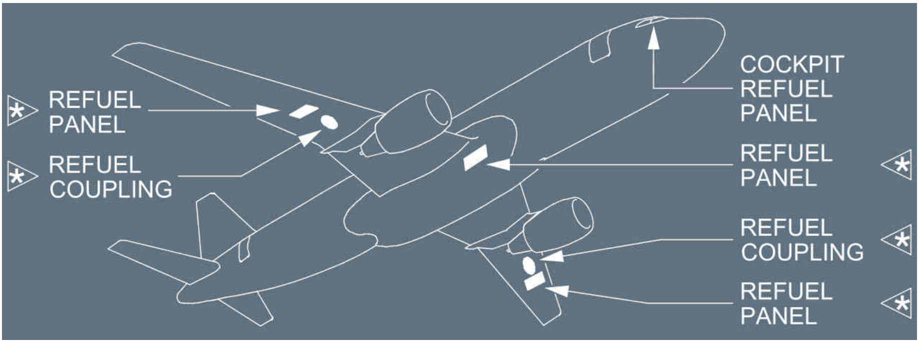
Approximate refueling time at nominal pressure is:
- 17 min for wing tanks
- 20 min for all tanks (without ACT ◁)
- 25 min for all tanks (with one ACT ◁)
- 27 min for all tanks (with two ACTs ◁).


FUEL PUMPS
SUCTION VALVE
REFUEL COUPLING
REFUEL VALVE
SPILL PIPE
HI LEVEL SENSOR
ACT REFUEL VALVE
INNER TANK
ENGINE FEED
X FEED VALVE
REFUELING GALLERY
SURGE TANK
OUTER TANK
HI LEVEL SENSOR
ACT 1 ◁
ACT 2 ◁
TRANSFER VALVE
REFUEL VALVE
INLET VALVES

REFUELING - DEFUELING

Ident.: DSC-28-10-70-00021235.0001001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883

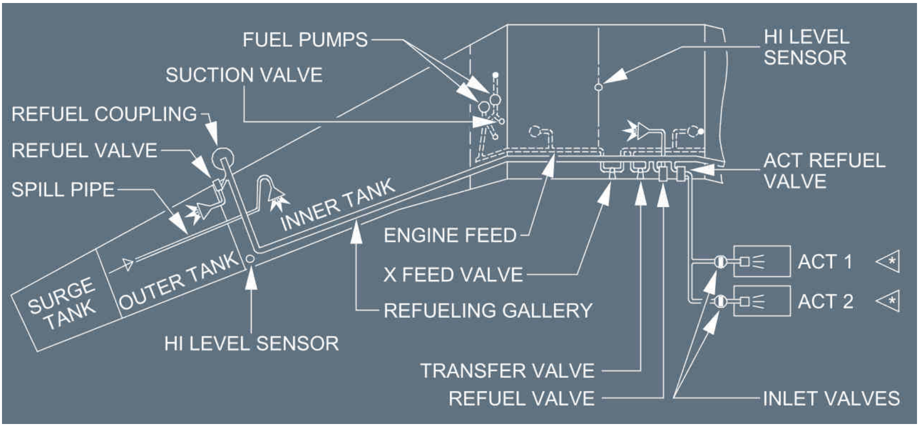
- During automatic refueling, fuel goes into the ACTs ◁ , the center tank and the outer cell of the wing tanks simultaneously. When the outer cell of the wing tank is full, fuel overflows into the inner cell. During manual refueling, fill the wing tanks first, then the center tank, then the ACTs ◁ .
- Electrical transients (caused by switching among the APU, the external and the engine electrical supply) during automatic refueling may stop the process. If the automatic refueling process is stopped, it is necessary to re-enter the Preselected Fuel Quantity.
- One (two) refueling point(s) is (are) installed under the wings, enabling the aircraft to be refueled from either the right or left (if installed) side.
- A refuel panel is located on the fuselage side beneath the right wing, or under the right or left wing adjacent to the refuel coupling.



A gallery connects the refuel coupling to each tank's refuel valve.
Refueling is normally automatic, the required fuel load being set on the preselector.
Manual control is also available.
Automatic refueling starts with the outer tanks. If the selected fuel load exceeds the wing tank capacity, the center tank is simultaneously refueled.
When an outer tank is full, the fuel overflows into the inner tank through a spill pipe.
Refuel valves close automatically, when the tanks contain the preselected load, or when sensors detect a high fuel level.
The aircraft can be refueled, when only battery power is available.
The wing tanks can be refueled by gravity, through refueling points on top of the wings.

A transfer valve, between the engine feed system and the refueling gallery, allows :
- The tank pumps to transfer fuel from one tank to another
- Defueling through the refuel coupling.

Approximate refueling time at nominal pressure is:
- 17 min for wing tanks
- 20 min for all tanks (without ACT ◁✱)
- 25 min for all tanks (with one ACT ◁✱)
- 27 min for all tanks (with two ACTs ◁✱).


FUEL PUMPS
SUCTION VALVE
REFUEL COUPLING
REFUEL VALVE
SPILL PIPE
HI LEVEL SENSOR
ACT REFUEL VALVE
INNER TANK
OUTER TANK
SURGE TANK
ENGINE FEED
X FEED VALVE
REFUELING GALLERY
HI LEVEL SENSOR
ACT 1
ACT 2
TRANSFER VALVE
REFUEL VALVE
INLET VALVES

FUEL QUANTITY INDICATION (FQI) SYSTEM

Ident.: DSC-28-10-80-00001123.0008001 / 14 JAN 16
Applicable to: MSN 06632, 06658-06685, 06718-06798, 06895-07098

The FQI is a computerized system that :
- transmits the actual total fuel mass, as well as the quantity and temperature of fuel in the tanks, to the ECAM.
- controls automatic refueling.

Two channels perform fuel computations : channel 2 activates automatically if channel 1 fails.

The FQI system has :
- an FQI computer.
- a set of capacitance probes in each tank to measure fuel level.
- sensors in each wing tank to measure fuel temperature.
- devices for measuring fuel characteristics such as density
- a multi tank indicator allowing the quantity for each tank to be displayed on the refuel/defuel panel.

Note: *For low fuel quantities, up to 6 tons (13200 lbs), a fluctuation of the wing tank fuel quantity indications occurs after takeoff. Due to acceleration and high pitch angle, the fuel moves in the tank and the FOB indication will reduce for 2 minutes, then increase and come back to accurate values about 6 minutes later during the climb. The maximum fluctuation may reach 400kg (880lbs). The EFOB indication may turn amber on the MCDU during this phase. In case of go-around, the fluctuation will not be more than 300kg (660lbs).For higher fuel loads, a FOB increase up to a maximum of 1 ton (2200lbs) may occur after takeoff. The FOB indication will come back to its accurate value within a maximum of 6 minutes.*

FUEL QUANTITY INDICATION (FQI) SYSTEM

Ident.: DSC-28-10-80-00001123.0007001 / 14 JAN 16
Applicable to: MSN 06689-06712, 06800-06876

The FQI is a computerized system that :
- transmits the actual total fuel mass, as well as the quantity and temperature of fuel in the tanks, to the ECAM.
- controls automatic refueling.

Two channels perform fuel computations : channel 2 activates automatically if channel 1 fails.

The FQI system has :
- an FQI computer.
- a set of capacitance probes in each tank to measure fuel level and temperature.
- one densitometer (cadensicon) sensor in each wing inner tank permitting the calculation of the fuel quantity.

- one Capacitance Index Compensator (CIC) in each inner tank giving the dielectric constant of the fuel in case of cadensicon failure.
- a quantity indicator for each tank installed on the refuel/defuel panel.
- a preselector on the refuel/defuel panel that shows the preselected and actual total fuel quantity.

Note: *For low fuel quantities, up to 7 tons (15400 lbs), a fluctuation of the inner tank fuel quantity indications occurs after takeoff. Due to acceleration and high pitch angle, the fuel moves in the tank and the FOB indication will reduce for 2 minutes, then increase and come back to accurate values about 6 minutes later during the climb. The maximum fluctuation may reach 400kg (880lbs). The EFOB indication may turn amber on the MCDU during this phase. In case of go-around, the fluctuation will not be more than 300kg (660lbs).For higher fuel loads, a FOB increase up to a maximum of 1 ton (2200lbs) may occur after takeoff. The FOB indication will come back to its accurate value within a maximum of 6 minutes.*

FUEL QUANTITY INDICATION (FQI) SYSTEM

Ident.: DSC-28-10-80-00001123.0001001 / 10 DEC 09

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 08495-09324, 10949-11522, 11572-11597**

The FQI is a computerized system that :
- transmits the actual total fuel mass, as well as the quantity and temperature of fuel in the tanks, to the ECAM.
- controls automatic refueling.

Two channels perform fuel computations : channel 2 activates automatically if channel 1 fails.

The FQI system has :
- an FQI computer.
- a set of capacitance probes in each tank to measure fuel level and temperature.
- one densitometer (cadensicon) sensor in each wing inner tank permitting the calculation of the fuel quantity.
- one Capacitance Index Compensator (CIC) in each inner tank giving the dielectric constant of the fuel in case of cadensicon failure.
- a quantity indicator for each tank installed on the refuel/defuel panel.
- a preselector on the refuel/defuel panel that shows the preselected and actual total fuel quantity.

FUEL QUANTITY INDICATION (FQI) SYSTEM

2 Ident.: DSC-28-10-80-00001123.0004001 / 05 JUN 18

Applicable to: MSN 11531

The FQI is a computerized system that:
- Transmits the quantity and temperature of fuel in the wing and center tanks, to the Auxiliary Fuel Management Computer (AFMC)
- Controls automatic refueling.

Two channels perform fuel computations: channel 2 activates automatically if channel 1 fails.

The FQI system has:
- An FQI computer
- A set of capacitance probes in each tank to measure fuel level and temperature
- One densitometer (cadensicon) sensor in each wing inner tank permitting the calculation of the fuel quantity
- One Capacitance Index Compensator (CIC) in each inner tank giving the dielectric constant of the fuel in case of cadensicon failure
- A quantity indicator for each tank installed on the refuel/defuel panel
- A preselector on the refuel/defuel panel that shows the preselected and actual total fuel quantity.

FUEL QUANTITY INDICATION (FQI) SYSTEM

Ident.: DSC-28-10-80-00001123.0003001 / 10 DEC 09
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592

The FQI is a computerized system that :
- transmits the actual total fuel mass, as well as the quantity and temperature of fuel in the tanks, to the ECAM.
- controls automatic refueling.

Two channels perform fuel computations : channel 2 activates automatically if channel 1 fails.

The FQI system has :
- an FQI computer.
- a set of capacitance probes in each tank to measure fuel level.
- sensors in each wing tank to measure fuel temperature.
- devices for measuring fuel characteristics such as density
- a multi tank indicator allowing the quantity for each tank to be displayed on the refuel/defuel panel.

FUEL LEVEL SENSING CONTROL UNIT (FLSCU)

Ident.: DSC-28-10-80-00001124.0001001 / 16 MAR 15

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

The fuel level system generates fuel-level and fuel-temperature signals in order to operate the appropriate switching functions for refueling and defueling and control the IDG cooling recirculation system and the center-tank-to-wing-tank fuel transfer system.

The FLSCU comprises :
- fuel level sensors in the tanks to sense high, low, and overflow levels.
- a fuel temperature sensor to control the IDG cooling recirculation.

When fuel quantity in one wing tank goes below 750 kg (1 650 lb), the low-level sensor triggers the LO LVL warning on ECAM. The LO LVL warning is totally independent from the displayed fuel quantity indication of the tank.

FUEL LEVEL SENSING CONTROL UNIT (FLSCU)

Ident.: DSC-28-10-80-00001124.0002001 / 16 MAR 15

4 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

The fuel level system generates fuel-level and fuel-temperature signals in order to operate the appropriate switching functions for refueling and defueling and control the IDG cooling recirculation system and the center-tank-to-wing-tank fuel transfer system and ACT ◁ to center tank fuel transfer system.

The FLSCU comprises :
- fuel level sensors in the tanks to sense high, low, and overflow levels.
- a fuel temperature sensor to control the IDG cooling recirculation.

When fuel quantity in one wing tank goes below 750 kg (1 650 lb), the low-level sensor triggers the LO LVL warning on ECAM. The LO LVL warning is totally independent from the displayed fuel quantity indication of the tank.

AUXILIARY FUEL MANAGEMENT SYSTEM (AFMS)

5 Ident.: DSC-28-10-80-00009213.0001001 / 05 JUN 18
Applicable to: MSN 11531

The AFMS is a computerized system that:
- Calculates the fuel quantity in the ACTs and transmits the quantities to the ECAM and overhead panel
- Adds the total ACT quantity to the wing and center tank quantity from the FQIC
- Transmits the total fuel quantity to the ECAM
- Controls the transfer of the ACTs to the center tank
- Generates ECAM warnings in case of transfer failure.

The auxiliary fuel management system comprises:
- An AFMC computer
- Two probes in each ACT to measure fuel quantity.

AUXILIARY LEVEL SENSE CONTROL UNIT (ALSCU)

6 Ident.: DSC-28-10-80-00009214.0001001 / 10 DEC 09
Applicable to: MSN 11531

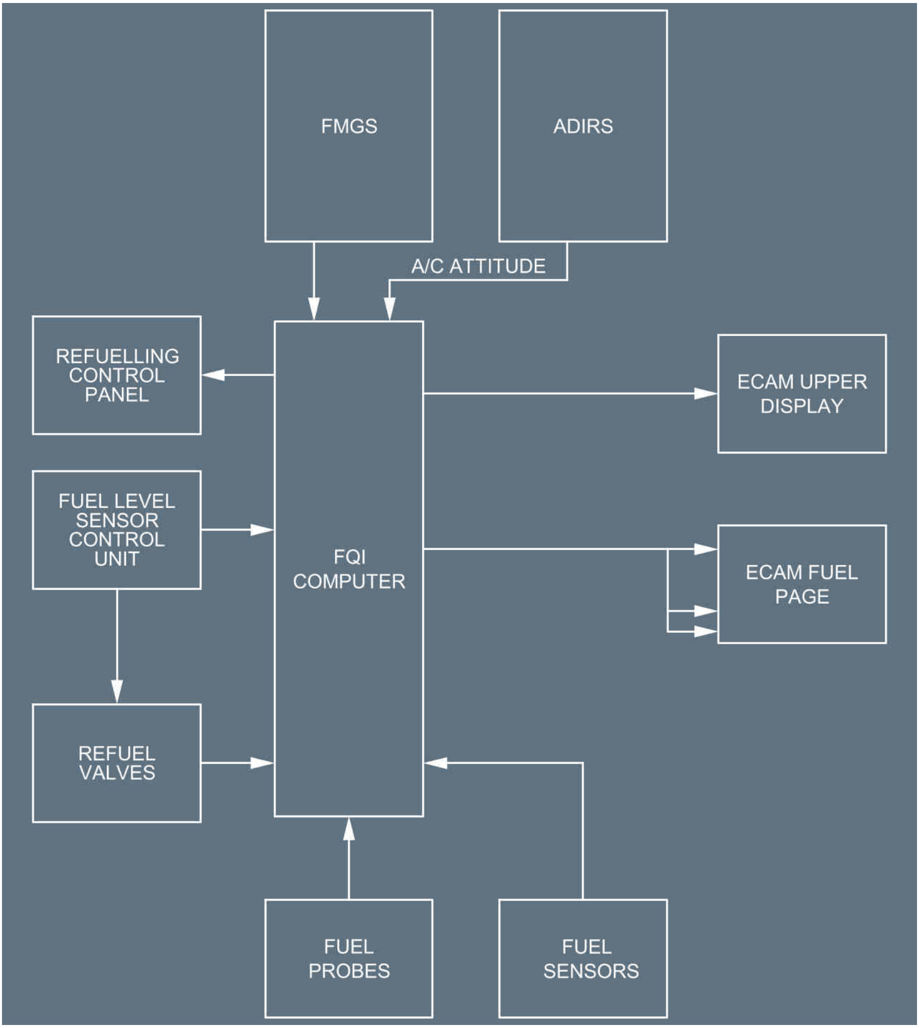
The auxiliary level sense control unit generates ACT low and high fuel level signals in order to control the refuel and transfer of the ACTs. These signals are also used to generate ECAM warnings in case of transfer failure.
The system comprises :

- one ALSCU
- one low level sensor per ACT
- one high level sensor per ACT

FUEL SYSTEM ARCHITECTURE

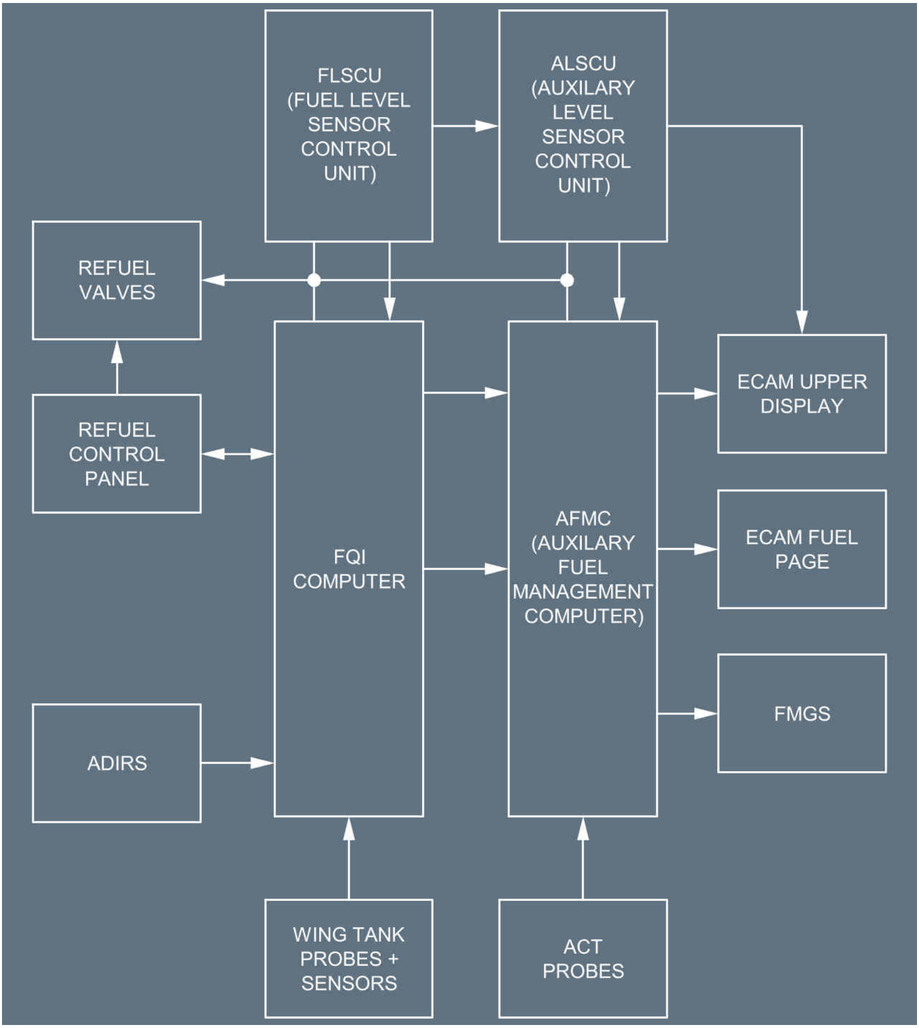
Ident.: DSC-28-10-80-00001125.0001001 / 22 MAY 12

7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**


FMGS
ADIRS
A/C ATTITUDE
REFUELLING CONTROL PANEL
ECAM UPPER DISPLAY
FUEL LEVEL SENSOR CONTROL UNIT
FQI COMPUTER
ECAM FUEL PAGE
REFUEL VALVES
FUEL PROBES
FUEL SENSORS

FUEL SYSTEM ARCHITECTURE

8 Ident.: DSC-28-10-80-00001125.0002001 / 22 MAY 12
Applicable to: MSN 11531


FLSCU
(FUEL LEVEL
SENSOR
CONTROL
UNIT)
ALSCU
(AUXILARY
LEVEL
SENSOR
CONTROL
UNIT)
REFUEL
VALVES
REFUEL
CONTROL
PANEL
FQI
COMPUTER
AFMC
(AUXILARY
FUEL
MANAGEMENT
COMPUTER)
ECAM UPPER
DISPLAY
ECAM FUEL
PAGE
FMGS
ADIRS
WING TANK
PROBES +
SENSORS
ACT
PROBES

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FUEL TANK INERTING SYSTEM

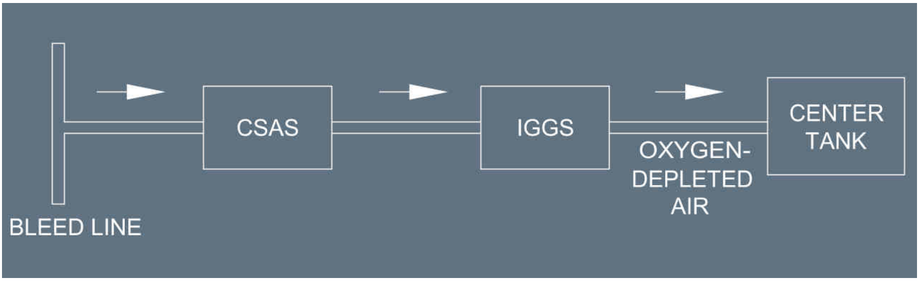
Ident.: DSC-28-10-90-00013692.0001001 / 18 MAR 11

1 **Applicable to: MSN 01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03032, 03058, 03180-03710, 03761-05987, 06097, 06121, 06139-09324, 10949-11597**

The A318, A319, A320 and A321 aircraft are equipped with a Fuel Tank Inerting System.
The aim of this system is to reduce the flammability in the fuel tanks that have a high flammability exposure.
The fuel center tank is the only one that has a high flammability exposure. Therefore, the Fuel Tank Inerting System only needs to be installed for the center tank. All other tanks do not need Fuel Tank Inerting System installation.
To reduce the flammability in the center tank, the Fuel Tank Inerting System produces an oxygen-depleted air that goes in the center tank to replace the ambient air.

The system is installed in the belly fairing of the aircraft, and is composed by:
- A conditioned Service Air System (CSAS)
- An Inert Gas Generation System (IGGS).

The CSAS extracts and conditions some engine bleed air to adequate pressure and temperature. Then, the air goes through the IGGS where an Air Separation Module taps the nitrogen molecules. Therefore, an oxygen-depleted air is produced (with less than 12 % of oxygen) and replaces the ambient air of the center tank.



The Fuel Tank Inerting System does not require any flight crew action. It works independently as soon as the engines start and until they stop.

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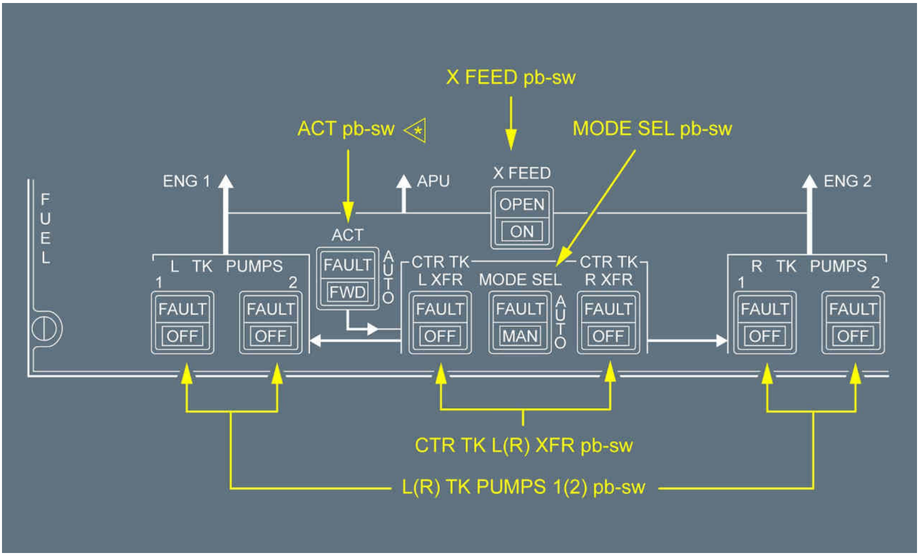
OVERHEAD PANEL

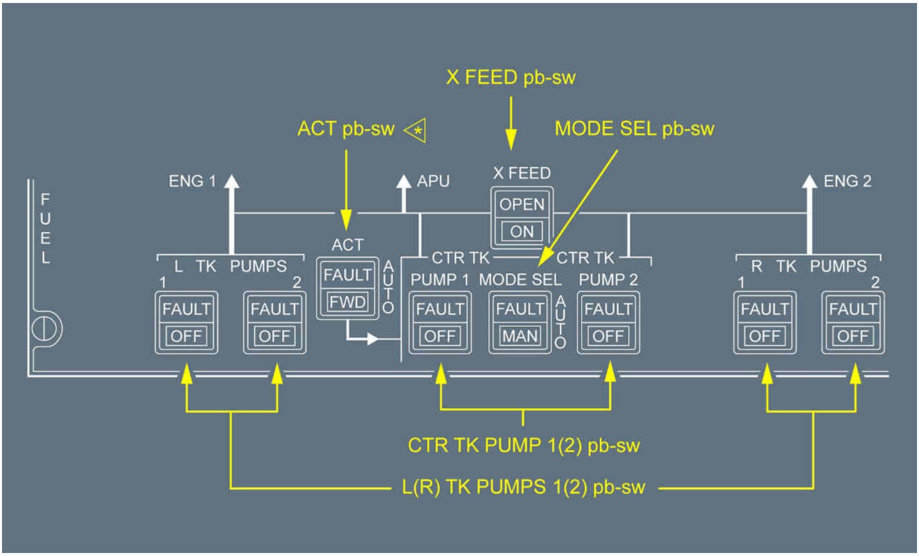
Ident.: DSC-28-20-G-00020183.0002001 / 17 MAR 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597


X FEED pb-sw
ACT pb-sw
MODE SEL pb-sw
ENG 1
APU
X FEED
OPEN
ON
ENG 2
FUEL
ACT
FAULT
FWD
AUTO
L TK PUMPS
1
2
FAULT
OFF
CTR TK
L XFR
MODE SEL
MAN
CTR TK
R XFR
R TK PUMPS
CTR TK L(R) XFR pb-sw
L(R) TK PUMPS 1(2) pb-sw

Ident.: DSC-28-20-G-00020183.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173


X FEED pb-sw
ACT pb-sw
MODE SEL pb-sw
FUEL
ENG 1
APU
X FEED
OPEN
ON
ENG 2
ACT
FAULT
FWD
AUTO
L TK PUMPS
1
2
FAULT
OFF
CTR TK PUMP 1
MODE SEL
CTR TK PUMP 2
MAN
R TK PUMPS
CTR TK PUMP 1(2) pb-sw
L(R) TK PUMPS 1(2) pb-sw

Ident.: DSC-28-20-G-00020239.0002001 / 17 MAR 17

2 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**

L (R) TK PUMPS 1(2) pb-sw

On	:	Pump is on.
OFF	:	Pump is off, and the OFF button comes on white.
FAULT light	:	Amber light and ECAM caution come on, when the delivery pressure drops. It does not come on when OFF is selected.

Ident.: DSC-28-20-G-00020239.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

L(R) TK PUMPS 1(2) pb-sw

On	:	Pump is on (but only fuel feeds) when the delivery pressure of the center tank pumps drops below the threshold.
OFF	:	Pump is off, and the OFF button comes on white.

FAULT light	: Amber light and ECAM caution come on, when the delivery pressure drops. It does not come on when OFF is selected.

Ident.: DSC-28-20-G-00020240.0003001 / 17 MAR 17

3 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

MODE SEL pb-sw

AUTO	: Control of center tank transfer valves is automatic: - They open if the associated inner tank is not full, - They stop automatically 5 min after center tank low level is reached.
MAN	: Flight crew manually controls the center tank transfer valves with the CTR TK XFR pushbutton switches.
FAULT light	: Amber light comes on, and ECAM caution comes on when center tank has more than 250 kg (550 lb) of fuel and the left or right wing tank has less than 5 000 kg (11 000 lb) and the MODE SEL pb-sw is at AUTO.

Ident.: DSC-28-20-G-00020240.0002001 / 17 MAR 17

4 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

MODE SEL pb-sw

AUTO	: Control of center tank transfer valves is automatic: - They open if the associated wing tank is not full, - They stop automatically 5 min after center tank low level is reached.
MAN	: Flight crew manually controls the center tank transfer valves with CTR TK XFR pushbutton switches.
FAULT light	: Amber light comes on, and ECAM caution comes on when center tank has more than 250 kg (550 lb) of fuel and the left or right wing tank has less than 5 000 kg (11 000 lb) and the MODE SEL pb-sw is at AUTO.

Ident.: DSC-28-20-G-00020240.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

MODE SEL pb-sw

AUTO	: Control of center tank pumps is automatic: - They run at engine start for 2 min, - Before or after the engine start sequence, the pumps run if the slats are retracted, - They stop automatically 5 min after center tank low level is reached.
MAN	: Flight crew manually controls the center tank pumps with the center tank pumps' pushbutton.

FAULT light : Amber light comes on, and ECAM caution comes on when center tank has more than 250 kg (550 lb) of fuel and the left or right wing tank has less than 5 000 kg (11 000 lb).

Ident.: DSC-28-20-G-00020256.0002001 / 17 MAR 17
5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**

CTR TK L(R) XFR pb-sw

On : The transfer valve opens, if MAN mode is selected on the MODE SEL pb-sw, The transfer valve is automatically controlled when AUTO mode is selected.

OFF : The transfer valve is closed.

FAULT light : Amber light and associated ECAM caution come on, if the associated wing tank overflows.

Ident.: DSC-28-20-G-00020256.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

CTR TK PUMP 1(2) pb-sw

On : Pump runs, if MAN mode is selected on the MODE SEL pb-sw.
Pump is automatically controlled when AUTO mode is selected.

OFF : Pump is off and OFF button comes on white.

FAULT light : Amber light and associated ECAM caution come on, when the pump is in operation and the delivery pressure drops.

Ident.: DSC-28-20-G-00020257.0001001 / 17 MAR 17
Applicable to: ALL

X FEED pb-sw

ON : The valve opens, and the ON pushbutton comes on in white.

OFF : The valve closes, and the pushbutton does not come on.

OPEN light : This green light comes on, when the valve is fully open.

Ident.: DSC-28-20-G-00020258.0001001 / 17 MAR 17

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

ACT pb-sw

AUTO : Control of the ACT transfer is automatic.

- The automatic forward transfer occurs, if:
  - The aircraft is in flight, and
  - The slats are retracted, and
  - At least one ACT low-level sensor is wet, and
  - The center tank high-level sensor has been dry for at least 10 min.
- The automatic forward transfer stops, as soon as one of the above conditions is not met.

FWD : The manual transfer to the center tank is initiated by opening:

- The ACT transfer valve,
- The ACT 1 or ACT 2 (if available) inlet valve.

The ACT transfer pump is then commanded on.

FAULT light : Amber light and associated ECAM caution come on, when:

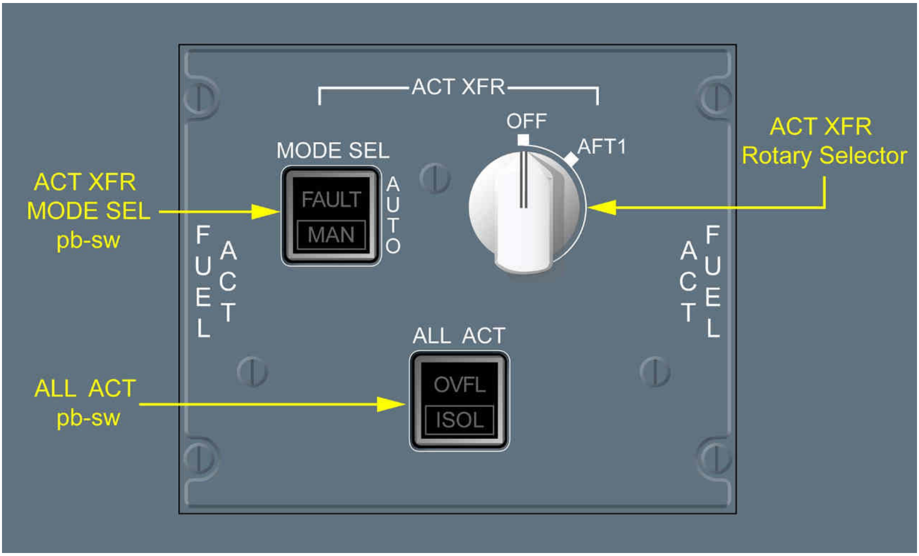
- The center tank has less than 3 000 kg (6 614 lb) of fuel, and 1 ACT has more than 250 kg (550 lb) of fuel, and
- The ACT pb-sw is on AUTO.

Note: *When no ACT is installed, the pushbutton is inoperative.*

ACT CONTROL PANEL

Applicable to: MSN 11531

7 Ident.: DSC-28-20-B-00020184.0008001 / 04 JUN 19


ACT XFR
MODE SEL
OFF
AFT1
FAULT
MAN
AUTO
ACT XFR Rotary Selector
ACT XFR MODE SEL pb-sw
FUEL ACT
ACT FUEL
ALL ACT
OVFL
ISOL
ALL ACT pb-sw

8 Ident.: DSC-28-20-B-00020261.0002001 / 05 JUN 18

ACT XFR MODE SEL pb-sw

AUTO : Control of the ACTs transfer is automatic.

- Automatic transfer occurs, if:
  - The aircraft is in flight, and
  - The landing gear is up for more than 30 min, and
  - At least one ACT is not empty, and
  - The center tank quantity is below 5 000 kg (11 030 lb).
- The automatic forward transfer stops, when all ACTs are empty, or the center tank quantity is above 5 750 kg (12 700 lb).

MAN : Manual transfer to the center tank is initiated. The ACT transfer and air shutoff valves open, the ACT vent valve closes, and the ACT transfer pump begins to operate.
The inlet valve, of the ACT selected on the ACT XFR selector, opens.

FAULT Light	:	Comes on amber, along with an ECAM caution, when: - The ACT MODE SEL is in AUTO, and - Any ACT empties before the previous ACT is empty. Or - The ACT MODE SEL is in MAN, and - Any of the valves are in the incorrect position.

9 Ident.: DSC-28-20-B-00020262.0002001 / 03 NOV 22

ACT XFR rotary selector

OFF	If the ACT XFR MODE SEL pb-sw is in MAN position, all ACT inlet valves close.
AFT1, AFT2 ◁ , FWD ◁	If the ACT XFR MODE SEL pb-sw is in MAN position, the inlet valve of the selected ACT opens. The selected ACT transfers.

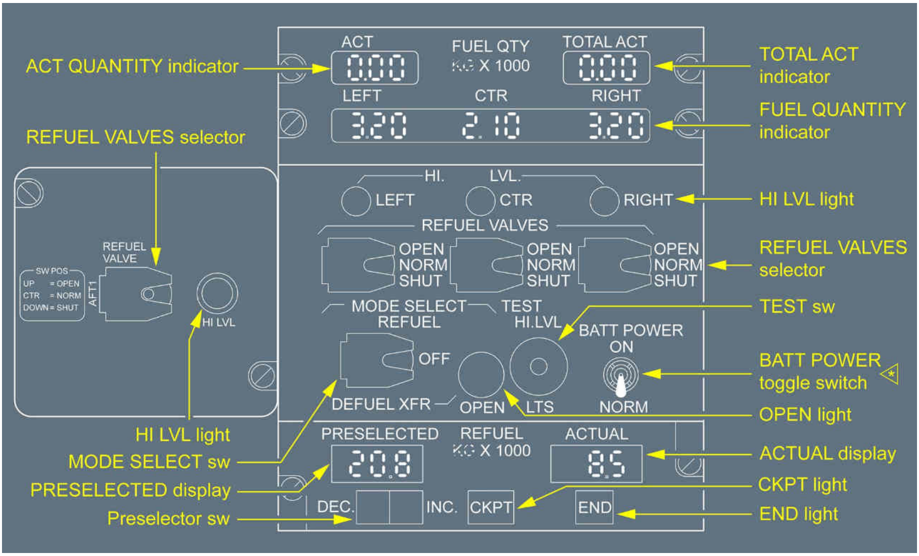
10 Ident.: DSC-28-20-B-00020263.0001001 / 17 MAR 17

ALL ACT pb-sw

Auto	:	The ACT system operates normally.
ISOL	:	The ACT transfer valve closes and the ACT transfer pump stops. ISOL comes on white.
OVFL light	:	Comes on amber when fuel overflows into the left wing surge tank.

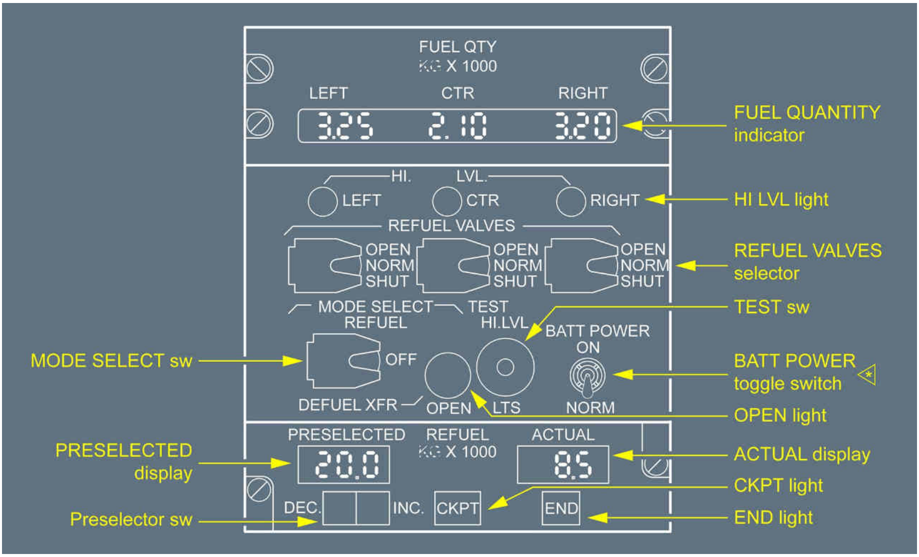
REFUELING CONTROL PANEL

11 Ident.: DSC-28-20-C-00020185.0008001 / 30 MAR 18
Applicable to: MSN 11531


ACT QUANTITY indicator
ACT
FUEL QTY
KG X 1000
TOTAL ACT
0.0.0
0.0.0
LEFT
CTR
RIGHT
3.20
2.10
3.20
TOTAL ACT indicator
FUEL QUANTITY indicator
REFUEL VALVES selector
HI. LVL.
LEFT
CTR
RIGHT
HI LVL light
REFUEL VALVES
OPEN
NORM
SHUT
REFUEL VALVES selector
REFUEL VALVE
SW POS
UP = OPEN
CTR = NORM
DOWN = SHUT
AFT1
HI LVL
MODE SELECT
REFUEL
TEST
HI.LVL
TEST sw
BATT POWER
ON
OFF
BATT POWER toggle switch
DEFUEL XFR
OPEN
LTS
NORM
OPEN light
HI LVL light
MODE SELECT sw
PRESELECTED display
Preselector sw
PRESELECTED
REFUEL
KG X 1000
ACTUAL
20.8
8.5
ACTUAL display
DEC.
INC.
CKPT
END
CKPT light
END light

Ident.: DSC-28-20-C-00020185.0001001 / 17 MAR 17

12 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**


FUEL QTY
KG X 1000
LEFT
CTR
RIGHT
3.25
2.10
3.20
HI. LVL.
LEFT
CTR
RIGHT
REFUEL VALVES
OPEN NORM SHUT
OPEN NORM SHUT
OPEN NORM SHUT
MODE SELECT
REFUEL
OFF
DEFUEL XFR
TEST
HI.LVL
OPEN
LTS
NORM
BATT POWER
ON
NORM
PRESELECTED
REFUEL
KG X 1000
ACTUAL
20.0
8.5
DEC.
INC.
CKPT
END
FUEL QUANTITY indicator
HI LVL light
REFUEL VALVES selector
TEST sw
MODE SELECT sw
BATT POWER toggle switch
OPEN light
PRESELECTED display
ACTUAL display
CKPT light
Preselector sw
END light

Ident.: DSC-28-20-C-00020265.0001001 / 21 MAR 17

Applicable to: ALL

FUEL QUANTITY INDICATOR

The number shows the quantity of fuel in each tank.
Units may either be in kg x 1 000 or lb x 1 000 depending on the aircraft configuration.

13 Ident.: DSC-28-20-C-00020279.0001001 / 21 MAR 17

Applicable to: MSN 11531

ACT QUANTITY

The number shows the quantity of fuel in the ACT selected on the ACT selector knob.

14 Ident.: DSC-28-20-C-00020281.0001001 / 21 MAR 17

Applicable to: MSN 11531

TOTAL ACT INDICATOR

The number shows the total fuel quantity of all ACT installed.

Ident.: DSC-28-20-C-00020266.0001001 / 21 MAR 17
Applicable to: ALL

HI LVL light

This blue light comes on, when the system detects a high fuel level.
The corresponding refuel valve closes automatically.

Ident.: DSC-28-20-C-00020267.0001001 / 21 MAR 17
Applicable to: ALL

REFUEL VALVES selector (GUARDED IN NORM)

NORM : Automatic refueling logic controls the refuel valves.

OPEN : Valves open when the MODE SELECT sw is set to the REFUEL or DEFUEL XFR position. Each refuel valve closes, when the system detects a high level in the associated tank.

SHUT : Valves close.

Ident.: DSC-28-20-C-00020268.0001001 / 17 MAR 17
Applicable to: ALL

MODE SELECT sw (GUARDED AT OFF)

OFF : Refuel system is de-energized. Refuel valves are closed.

REFUEL : Refuel valves operate in automatic or in manual mode depending on the position of REFUEL VALVES sw.

DEFUEL XFR : Refuel/Defuel transfer valve opens.
Refuel valve opens if the associated REFUEL VALVE sw is at OPEN.

Ident.: DSC-28-20-C-00020270.0001001 / 21 MAR 17
Applicable to: ALL

OPEN light

This amber light comes on when the defuel transfer valve is open.

Ident.: DSC-28-20-C-00020271.0001001 / 17 MAR 17
Applicable to: ALL

TEST sw

HI LVL : The HI LVL lights come on if high level sensors and associated circuits are serviceable.

Note: If tanks are full (HI LVL lights on) during this test, the HI LVL lights go out if high level sensors and associated circuits are serviceable.

LTS : Lights on panel and all 8's on FQI and preselector come on.

Ident.: DSC-28-20-C-00020272.0001001 / 21 MAR 17
Applicable to: ALL

PRESELECTED DISPLAY

This display shows the preselected total fuel quantity in kg (lb) x 1 000 (multiply by 1 000 to get actual amount).

Ident.: DSC-28-20-C-00020273.0001001 / 17 MAR 17
Applicable to: ALL

Preselector sw

Pressing the left or right side of the switch decreases or increases the preselected quantity.

Ident.: DSC-28-20-C-00020274.0001001 / 21 MAR 17
Applicable to: ALL

ACTUAL DISPLAY

This display shows the total fuel on board.

Ident.: DSC-28-20-C-00020275.0001001 / 21 MAR 17
Applicable to: ALL

END light

This green light comes on steady when automatic refueling is completed.
It flashes green if refueling is aborted.

Ident.: DSC-28-20-C-00020276.0002001 / 21 MAR 17
Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

CKPT light

Indicates that cockpit refuel panel has priority.
Illuminates when electrical PWR pb-sw on cockpit refuel is pressed.

Ident.: DSC-28-20-C-00020276.0001001 / 21 MAR 17
15 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

CKPT light

Not used.

Ident.: DSC-28-20-C-00020277.0001001 / 21 MAR 17
Applicable to: ALL

BATT POWER TOGGLE SWITCH

ON :	When the flight crew momentarily switches this to ON position and releases it, HOT BUS 1 supplies the FQI. After completion of the FQI tests (about 40 s), the fuel quantity indications appear and refuel operation can be selected. The electrical supply is automatically cut off: - After 10 min, if no refuel operation is selected, or - At the end of refueling.
NORM :	The FQI is not supplied by batteries.

16 Ident.: DSC-28-20-C-00020283.0001001 / 21 MAR 17
Applicable to: MSN 11531

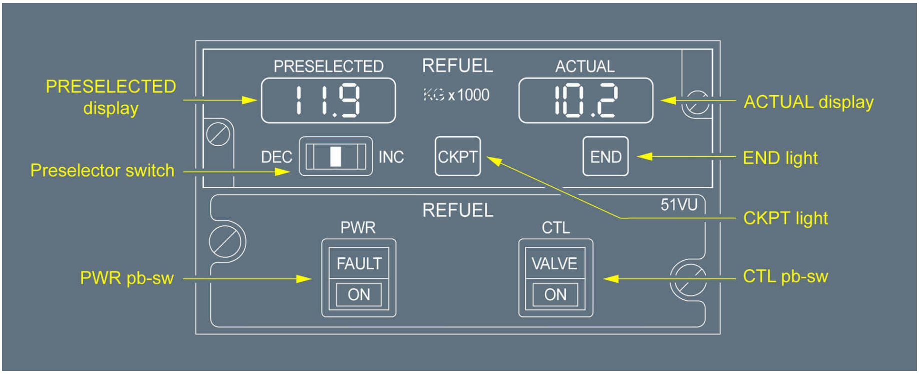
ACT SELECTOR

This selects the ACT quantity to be displayed in the ACT QUANTITY indicator.

MAINTENANCE PANEL

Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: DSC-28-20-D-00020187.0007001 / 17 MAR 17


PRESELECTED display
Preselector switch
PWR pb-sw
PRESELECTED
REFUEL
ACTUAL
KG x1000
11.9
10.2
DEC
INC
CKPT
END
REFUEL
51VU
PWR
FAULT
ON
CTL
VALVE
ON
ACTUAL display
END light
CKPT light
CTL pb-sw

Ident.: DSC-28-20-D-00020286.0001001 / 21 MAR 17

PRESELECTED DISPLAY

This display shows the preselected total fuel quantity in KG (or in LB depending on aircraft configuration) x 1 000 (multiply by 1 000 to get actual amount).

Ident.: DSC-28-20-D-00020287.0001001 / 21 MAR 17

ACTUAL DISPLAY

This display shows the total fuel on board.

Ident.: DSC-28-20-D-00020288.0001001 / 17 MAR 17

Preselector sw

Pressing the left or the right side of the switch decreases or increases the preselected quantity.

Ident.: DSC-28-20-D-00020289.0001001 / 21 MAR 17

END light

This green light comes on steady when automatic refueling is achieved (associated with the green refuel light on wing extinguishing ◁✻).
It flashes green if refueling is aborted.

Ident.: DSC-28-20-D-00020290.0001001 / 17 MAR 17

PWR pb-sw

ON :
- Refuel system is energized
- Cockpit refuel control/preselector panels takes priority (cockpit lights illuminate on cockpit and external refuel control panels)
- Automatic high level test
- REFUEL caption is displayed on ECAM.

OFF :
- Refuel system is deenergized
- ECAM “REFUEL” caption is cleared
- Priority is cleared.

FAULT : This amber light comes on when auto high level test not satisfied.

Ident.: DSC-28-20-D-00020291.0001001 / 17 MAR 17

CTL pb-sw

ON :
- Start of refuel, (associated with refuel green light illumination on wing ◁✻)
- Auto shut off occurs when the selected load is reached or in case of HI level detection
- VALVE light comes amber if REFUEL VALVE CTL switch are not at NORM position (on refueling control panel).

Off : Refuel stops. The selected load can be reset.

Ident.: DSC-28-20-D-00020294.0001001 / 21 MAR 17

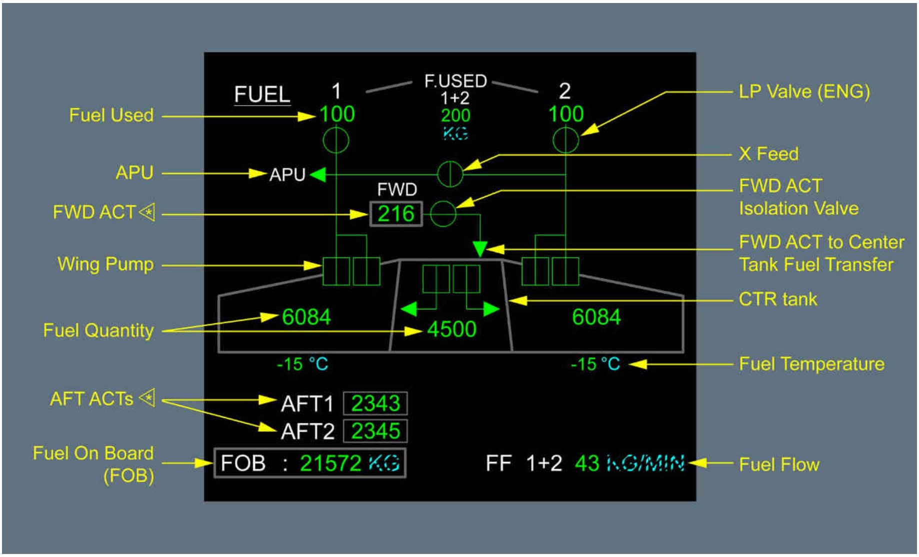
CKPT light

Comes on when PWR pb-sw switch is ON associated with the CKPT light on the external refuel control panel.

ECAM FUEL PAGE

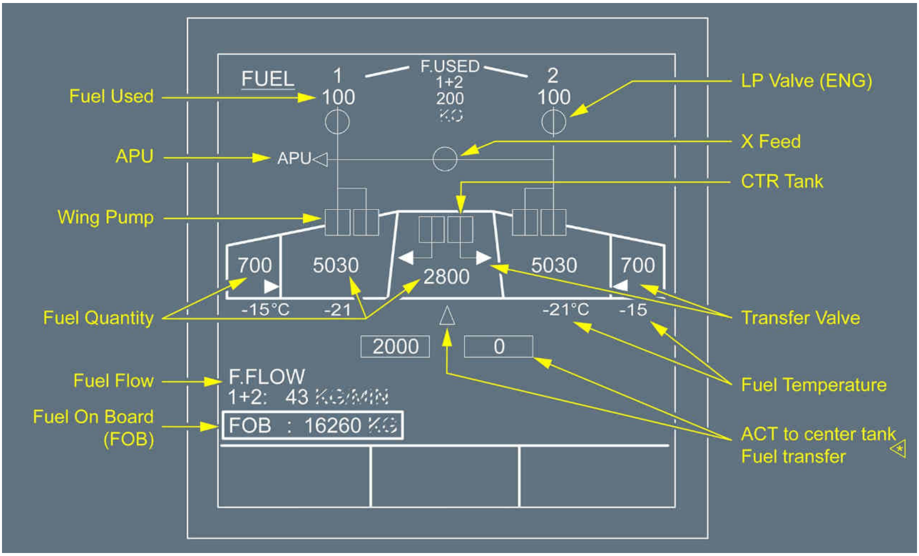
17 Ident.: DSC-28-20-F-00020188.0009001 / 04 MAY 18

Applicable to: MSN 11531


FUEL
1
F.USED
1+2
200
KG
2
100
100
Fuel Used
APU
APU
FWD
216
FWD ACT
Wing Pump
6084
4500
6084
Fuel Quantity
-15 °C
-15 °C
AFT ACTs
AFT1 2343
AFT2 2345
Fuel On Board
(FOB)
FOB : 21572 KG
FF 1+2 43 KG/MIN
LP Valve (ENG)
X Feed
FWD ACT
Isolation Valve
FWD ACT to Center
Tank Fuel Transfer
CTR tank
Fuel Temperature
Fuel Flow

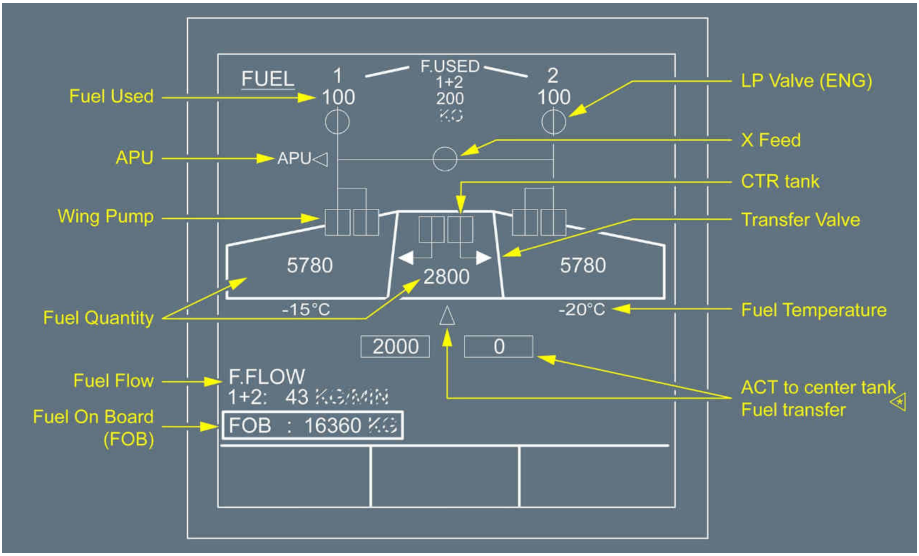
Ident.: DSC-28-20-F-00020188.0008001 / 17 MAR 17

18 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


Fuel Used
APU
Wing Pump
Fuel Quantity
Fuel Flow
Fuel On Board
(FOB)
FUEL
1
100
F.USED
1+2
200
KG
2
100
APU
700
5030
2800
5030
700
-15°C
-21
-21°C
-15
2000
0
F.FLOW
1+2: 43 KG/MIN
FOB : 16260 KG
LP Valve (ENG)
X Feed
CTR Tank
Transfer Valve
Fuel Temperature
ACT to center tank
Fuel transfer

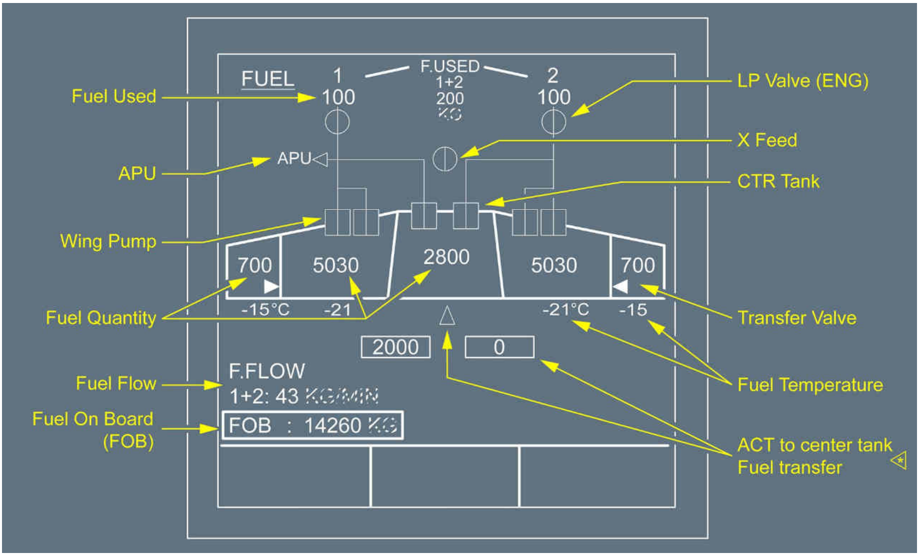
Ident.: DSC-28-20-F-00020188.0007001 / 17 MAR 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

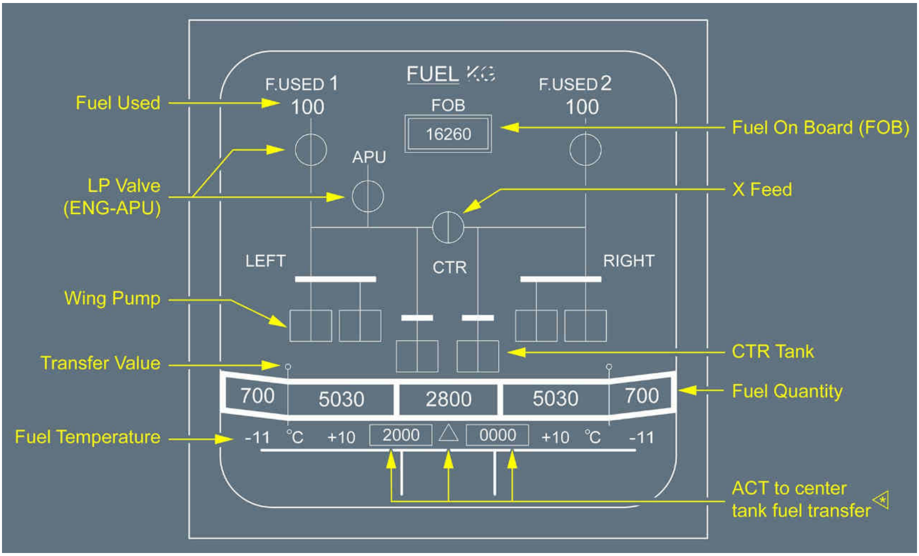

FUEL
1
100
F.USED
1+2
200
KG
2
100
Fuel Used
APU
APU◁
Wing Pump
5780
2800
5780
-15°C
-20°C
Fuel Quantity
2000
0
Fuel Flow
F.FLOW
1+2: 43 KG/MIN
Fuel On Board (FOB)
FOB : 16360 KG
LP Valve (ENG)
X Feed
CTR tank
Transfer Valve
Fuel Temperature
ACT to center tank Fuel transfer

Ident.: DSC-28-20-F-00020188.0004001 / 17 MAR 17

Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173


Fuel Used
APU
Wing Pump
Fuel Quantity
Fuel Flow
Fuel On Board (FOB)
FUEL
1
100
F.USED
1+2
200
KG
2
100
APU
700
5030
2800
5030
700
-15°C
-21
-21°C
-15
2000
0
F.FLOW
1+2: 43 KG/MIN
FOB : 14260 KG
LP Valve (ENG)
X Feed
CTR Tank
Transfer Valve
Fuel Temperature
ACT to center tank Fuel transfer

Ident.: DSC-28-20-F-00020188.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


Fuel Used
LP Valve (ENG-APU)
Wing Pump
Transfer Value
Fuel Temperature
Fuel On Board (FOB)
X Feed
CTR Tank
Fuel Quantity
ACT to center tank fuel transfer
F.USED 1
100
FUEL KG
FOB
16260
F.USED 2
100
APU
LEFT
CTR
RIGHT
700
5030
2800
5030
700
-11
°C
+10
2000
0000
+10
°C
-11

Ident.: DSC-28-20-F-00020213.0001001 / 17 MAR 17
Applicable to: ALL

WING PUMP INDICATIONS

Inline - Green	:	Pump pressure is normal (pump contactor on).
"LO" - Amber	:	Pump pressure is low (pump contactor on).
Crossline - Amber	:	Pump contactor is off.

Ident.: DSC-28-20-F-00020214.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

CTR TANKS PUMPS INDICATIONS

Inline - Green	:	Pump pressure is normal (pump contactor on).
"LO" - Amber	:	Pump pressure is low (pump contactor on).
Crossline - Green	:	Pump contactor is off, and auto shut-off is required.
Crossline - Amber	:	Pump contactor is off, and auto shut-off is not required.

Ident.: DSC-28-20-F-00020214.0001001 / 17 MAR 17

19 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**

CTR TANKS VALVES INDICATIONS

Inline - Green : Transfer valve is open.

Inline - Amber : Transfer valve is open, although commanded closed in automatic or manual mode.

Crossline - Green : Transfer valve is closed.

Crossline - Amber : Transfer valve is closed, although commanded Open in automatic or manual mode.

Ident.: DSC-28-20-F-00020216.0002001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

LP VALVE (ENG-APU) INDICATIONS

Inline - Green : The valve is open.

Inline - Amber : The valve is open, with the ENG (APU) MASTER switch OFF or FIRE pb out.

Crossline - Green : The APU valve is closed.

Crossline - Amber : The ENG valve is fully closed or APU valve is closed with master switch ON.

Transit - Amber : The valve is in transit.

Ident.: DSC-28-20-F-00020216.0001001 / 17 MAR 17

20 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

LP VALVE (ENG) INDICATIONS

Inline - Green : The valve is open.

Inline - Amber : The valve is open, with the ENG MASTER switch OFF.

Crossline - Amber : The ENG valve is fully closed.

Transit - Amber : The valve is in transit.

Ident.: DSC-28-20-F-00020217.0001001 / 17 MAR 17

Applicable to: ALL

X FEED INDICATIONS

Inline - Green : The valve is open.

Inline - Amber : The valve is open, with X Feed pb off.

Crossline - Green : The valve is closed.

Crossline - Amber : The valve is closed with X feed pb ON.

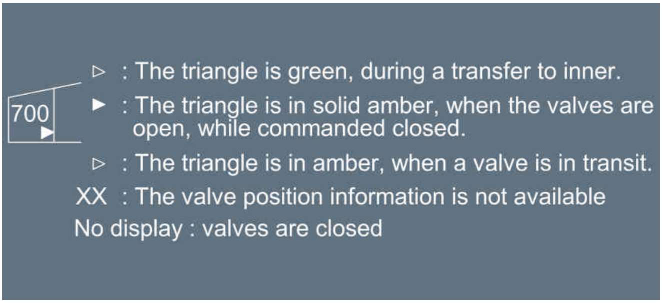
Transit - Amber : The valve is in transit.

Ident.: DSC-28-20-F-00020218.0005001 / 17 MAR 17

21 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

TRANSFER VALVE INDICATIONS

Outer to Inner Transfer



▷ : The triangle is green, during a transfer to inner.

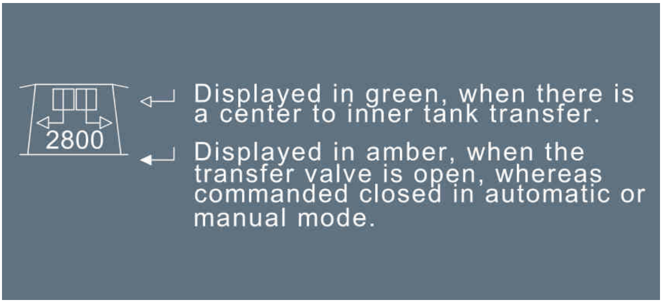
▶ : The triangle is in solid amber, when the valves are open, while commanded closed.

▷ : The triangle is in amber, when a valve is in transit.

XX : The valve position information is not available

No display : valves are closed

Center to Inner Transfer



Displayed in green, when there is a center to inner tank transfer.

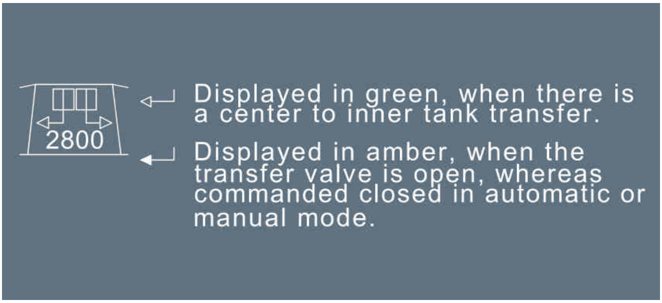
Displayed in amber, when the transfer valve is open, whereas commanded closed in automatic or manual mode.

Ident.: DSC-28-20-F-00020218.0004001 / 17 MAR 17

22 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

TRANSFER VALVE INDICATIONS

Center to Inner Transfer



Displayed in green, when there is a center to inner tank transfer.

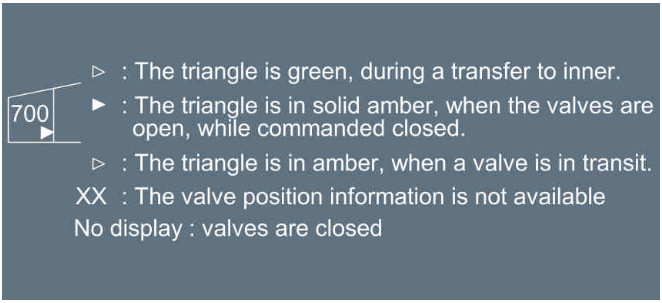
Displayed in amber, when the transfer valve is open, whereas commanded closed in automatic or manual mode.

Ident.: DSC-28-20-F-00020218.0002001 / 17 MAR 17

Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

TRANSFER VALVE INDICATIONS

Outer to Inner Transfer



▷ : The triangle is green, during a transfer to inner.

▶ : The triangle is in solid amber, when the valves are open, while commanded closed.

▷ : The triangle is in amber, when a valve is in transit.

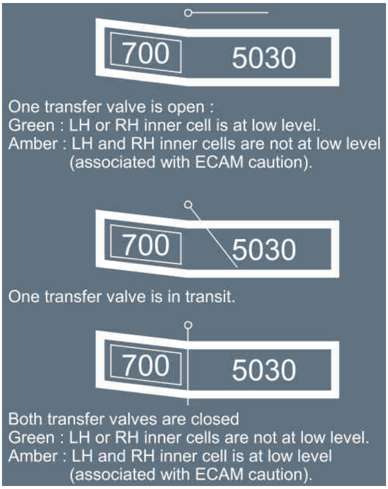
XX : The valve position information is not available

No display : valves are closed

Ident.: DSC-28-20-F-00020218.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

TRANSFER VALVE INDICATIONS



One transfer valve is open :
Green : LH or RH inner cell is at low level.
Amber : LH and RH inner cells are not at low level (associated with ECAM caution).

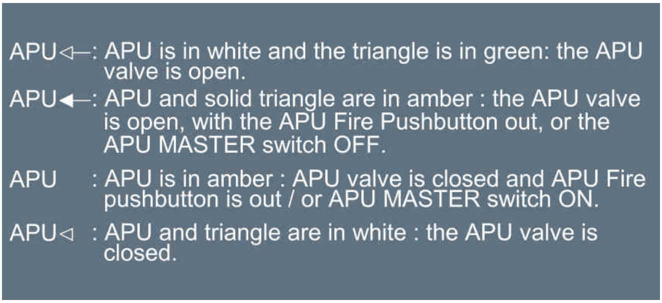
One transfer valve is in transit.

Both transfer valves are closed
Green : LH or RH inner cells are not at low level.
Amber : LH and RH inner cell is at low level (associated with ECAM caution).

Ident.: DSC-28-20-F-00020219.0001001 / 17 MAR 17

23 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

APU INDICATIONS



APU◁—: APU is in white and the triangle is in green: the APU valve is open.

APU◀—: APU and solid triangle are in amber : the APU valve is open, with the APU Fire Pushbutton out, or the APU MASTER switch OFF.

APU : APU is in amber : APU valve is closed and APU Fire pushbutton is out / or APU MASTER switch ON.

APU◁ : APU and triangle are in white : the APU valve is closed.

Ident.: DSC-28-20-F-00020220.0002001 / 17 MAR 17

24 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

FUEL TEMPERATURE INDICATION

This appears, when its associated temperature sensor is wet. It is normally in green.

An advisory only appears in phases 2 and 6, when the fuel temperature is:
- Above 45 °C, or
- Below -40 °C.

It becomes amber, and the ECAM displays a caution, if the temperature goes above the high limit or below the low limit.

Ident.: DSC-28-20-F-00020220.0001001 / 17 MAR 17

25 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

FUEL TEMPERATURE INDICATION

This appears when its associated temperature sensor is wet. It is normally in green.

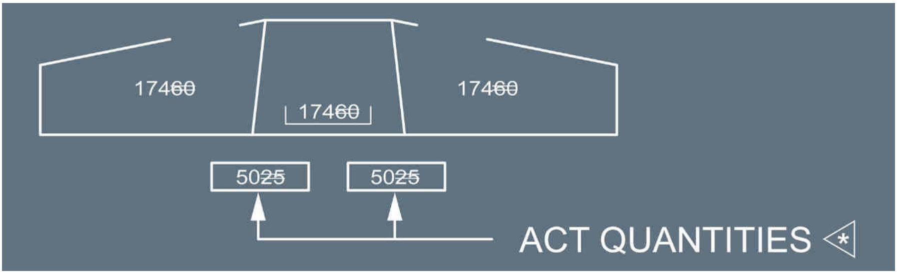
An advisory only appears in phases 2 and 6, when the fuel temperature is:
- Above 45 °C for the inner cell, or 55 °C for the outer cell.
- Below -40 °C.

It becomes amber, and the ECAM displays a caution, if the temperature goes above the high limit or below the low limit.

Ident.: DSC-28-20-F-00020221.0004001 / 17 MAR 17

26 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

FUEL QUANTITY INDICATION

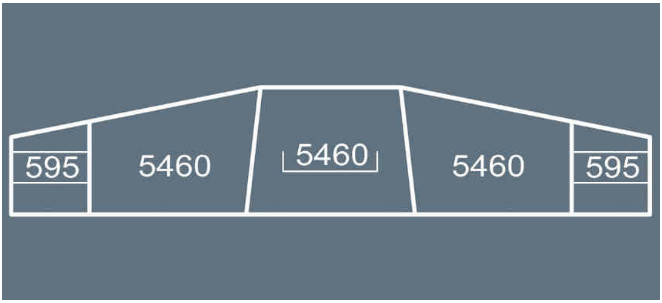


- It is normally in green.
- The units may either be in KG or LB, depending on the DMC pin program.
- Two dashes appear across the last two digits when the FQI is inaccurate (*Refer to DSC-28-20 Total Fuel Indication*).

Ident.: DSC-28-20-F-00020221.0002001 / 17 MAR 17

27 **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

FUEL QUANTITY INDICATION

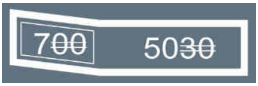


- It is normally in green.
- The units may either be in KG or LB, depending on the DMC pin program.
- Two dashes appear across the last two digits when the FQI is inaccurate (*Refer to DSC-28-20 Total Fuel Indication*).

Ident.: DSC-28-20-F-00020221.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

FUEL QUANTITY INDICATION



- It is normally in green.
- The units may either be in KG or LB, depending on the DMC pin program.
- Two dashes appear across the last two digits when the FQI is inaccurate (*Refer to DSC-28-20 Total Fuel Indication*).

Ident.: DSC-28-20-F-00020340.0003001 / 17 MAR 17

28 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

FUEL QUANTITY - BOXED INDICATIONS

- The outer indication is boxed amber, if both transfer valves fail to open when the inner is at low level.
- The center tank indication is boxed amber, if both center tank transfer valves fail in the closed position.

Ident.: DSC-28-20-F-00020340.0002001 / 17 MAR 17

29 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

FUEL QUANTITY - BOXED INDICATIONS

- The center tank indication is boxed amber, if both transfer valves fail in the closed position.

Ident.: DSC-28-20-F-00020340.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

FUEL QUANTITY - BOXED INDICATIONS

- The outer indication is boxed amber, if both transfer valves fail to open when the inner is at low level.
- The center tank indication is boxed amber, if both center tank pumps are failed, or are switched OFF.

Ident.: DSC-28-20-F-00020341.0001001 / 17 MAR 17

30 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

FUEL QUANTITY - OVERFLOW INDICATION

- The wing tank indication turns amber, if a wing tank overflows.

Ident.: DSC-28-20-F-00020341.0002001 / 17 MAR 17

31 **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

FUEL QUANTITY - OVERFLOW INDICATION

In the case of wing overflow, the associated inner tank quantity indication turns amber.

Ident.: DSC-28-20-F-00020345.0002001 / 17 MAR 17

32 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

FUEL QUANTITY - ADVISORY

- An advisory appears in flight phases 2 and 6, when the difference between the fuel quantities in the two wings is greater than 1 500 kg (3 300 lb). The indication for the wing with the highest fuel level pulses.

Ident.: DSC-28-20-F-00020345.0001001 / 17 MAR 17

33 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

FUEL QUANTITY - ADVISORY

An advisory appears in flight phases 2 and 6, when the difference between the fuel quantities in the two wings is greater than 1 500 kg (3 300 lb). The wing inner and outer tank indications pulse with the highest fuel level.

Ident.: DSC-28-20-F-00020346.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

FUEL ON BOARD (FOB) INDICATION

It is normally in green. It indicates the total of all tanks (Including the ACTs ◁)
Two dashes appear across the last two digits when the FQI is inaccurate (*Refer to DSC-28-20 Total Fuel Indication*).
Units may either be in KG or LB, depending on the DMC pin program.

The indication is boxed in amber, if:
- Center tank pumps fail, or are switched OFF.
- Both transfer valves fail to open, when the inner tank is at low level.
- Any ACT ◁ is not usable.

Ident.: DSC-28-20-F-00020346.0006001 / 17 MAR 17

34 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

FUEL ON BOARD (FOB) INDICATION

It is normally in green. It indicates the total of all tanks (Including the ACTs ◁).
Two dashes appear across the last two digits when the FQI is inaccurate (*Refer to DSC-28-20 Total Fuel Indication*).
Units may either be in KG or LB, depending on the DMC pin program.

The indication is half-boxed in amber, if:
- Both center tank transfer valves fail in close position
- Any ACT ◁ is not usable.

Ident.: DSC-28-20-F-00020346.0003001 / 17 MAR 17

35 **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

FUEL ON BOARD (FOB) INDICATION

It is normally in green. It indicates the total of all tanks (Including the ACTs ◁).
Two dashes appear across the last two digits when the FQI is inaccurate (*Refer to DSC-28-20 Total Fuel Indication*).

Units may either be in KG or LB, depending on the DMC pin program.

The indication is half-boxed in amber, if:
- Center tank pumps fail, or are switched OFF.
- Both transfer valves fail to open, when the inner tank is at low level.
- Any ACT ◁* is not usable.

Ident.: DSC-28-20-F-00020347.0001001 / 17 MAR 17
Applicable to: ALL

FUEL USED INDICATION

- The engine identification number is in amber, when the engine is below idle. It is in white color, when it is at, or above, idle.
- The fuel used indication is green from flight phase 2, until electrical power is cut off at the end of the flight. It is automatically reset, when the engine is started on ground.
- Units may either be in KG or LB, depending on the DMC pin program.

36 Ident.: DSC-28-20-F-00020348.0003001 / 26 SEP 18
Applicable to: MSN 11531

ACT TO CENTER TANK FUEL TRANSFER INDICATION

- The ACTs quantities are each displayed in some grey boxes.
- The box becomes amber in case of a transfer fault.
- The fuel quantity is normally displayed in green.
- The fuel quantity is displayed green pulsing when the crew revert to manual transfer mode and the expected ACT to transfer as per normal sequence is not properly selected on the ACT Control Panel.
- In case of degraded data, the two least significant digits are crossed by an amber line.
- The digital value is replaced by amber XX when the indication is not valid.
- The forward transfer valve is displayed on the transfer line between FWD ACT and CTR TK
  - It is Green (open or closed) when position is in accordance with the command
  - It is Amber (open or closed) when position and command disagree
- A triangle indicates that the fuel transfer to the center tank has started:
  △ : Green, when the automatic transfer begins.
  ▲ : Fully green, when the manual transfer begins.
- The fuel transfer path is displayed in amber in case of failed transfer in AUTO mode.

Ident.: DSC-28-20-F-00020348.0002001 / 17 MAR 17

37 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

ACT TO CENTER TANK FUEL TRANSFER INDICATION

- It is normally in green.
- The ACT quantity is displayed in a grey box.
- This box becomes amber in case of a transfer fault.
- ACT 1 is indicated on the left and ACT 2 is indicated on the right.
- Units may either be in KG or LB, depending on the DMC pin program.
- A triangle indicates that the fuel transfer to the center tank has started:

△	:	Green, when the automatic transfer begins.
▲	:	Fully green, when the manual transfer begins.

Ident.: DSC-28-20-F-00020348.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ACT TO CENTER TANK FUEL TRANSFER INDICATION

It is normally in green.
A triangle indicates that the ACT fuel transfer to the center tank has started.
The ACT quantity is normally green. It shows the total fuel quantity of ACT(s) installed.
Units may either be in KG or LB, depending on the DMC pin program.
ACT1 is indicated on the left and ACT2 is indicated on the right.

Ident.: DSC-28-20-F-00020351.0001001 / 17 MAR 17

38 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

FUEL FLOW INDICATION

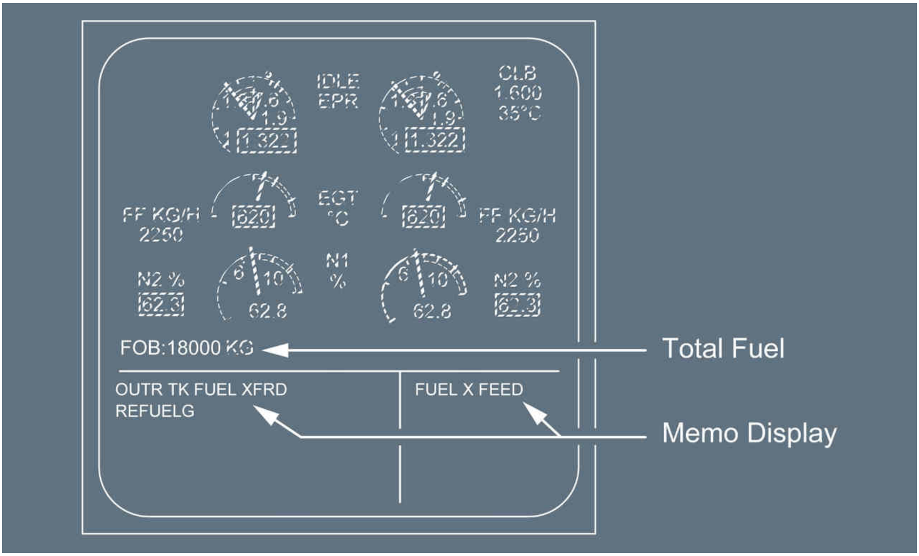
The Total Fuel Flow is displayed in KG/MIN or LB/MIN.
Units may either be in KG or LB, depending on the DMC pin program.

- It is normally in green.
- It is replaced by an amber XX if there is no valid data.

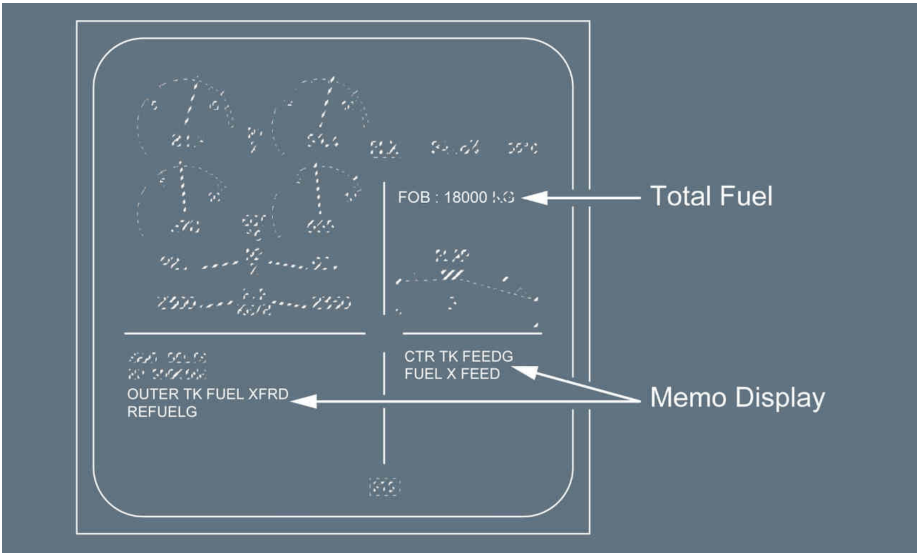
ECAM UPPER DISPLAY

Ident.: DSC-28-20-E-00020189.0002001 / 17 MAR 17

39 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


IDLE
EPR
1.6
1.9
1.322
1.322
CLB
1.600
35°C
FF KG/H
2250
620
EGT
°C
620
FF KG/H
2250
N2 %
62.3
6
10
62.8
N1
%
6
10
62.8
N2 %
62.3
FOB:18000 KG
Total Fuel
OUTR TK FUEL XFRD
REFUELG
FUEL X FEED
Memo Display

Ident.: DSC-28-20-E-00020189.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



Ident.: DSC-28-20-E-00020193.0003001 / 17 MAR 17
40 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

TOTAL FUEL INDICATION

A half amber box appears around FOB, when the displayed quantity is not all usable (intercell transfer valve failure or both center tank transfer valves fail in the closed position).
Units may either be in KG or LB, depending on the DMC pin program.
If the FOB indication is displayed with two dashes across the last two digits, the FQI is in degraded mode. In this case, the ECAM FUEL page can be called on ECAM lower display to determine which tank is affected.

The loss of accuracy resulting from the loss of FQI normal mode is as follows :

Wing outer tank affected	:	+20 kg (+44 lb), –200 kg (–440 lb).
Wing inner tank affected	:	±110 kg (240 lb).
Center tank affected	:	±130 kg (290 lb).
All tanks affected	:	+390 kg (+860 lb), –750 kg (–1660 lb).

Ident.: DSC-28-20-E-00020193.0002001 / 17 MAR 17
41 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

TOTAL FUEL INDICATION

An amber half box appears around FOB, when the displayed quantity is not all usable (both center tank transfer valves fail in the closed position).
Units may either be in KG or LB, depending on the DMC pin program.
If the FOB indication is displayed with two dashes across the last two digits, the FQI is in degraded mode. In this case, the ECAM FUEL page can be called on ECAM lower display to determine which tank is affected.

The loss of accuracy resulting from the loss of FQI normal mode is as follows :

Wing tank affected	:	+130 kg (+290 lb), –310 kg (–690 lb).
Center tank affected	:	±130 kg (290 lb).
All tanks affected	:	+390 kg (+860 lb), –750 kg (–1660 lb).

Ident.: DSC-28-20-E-00020193.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

TOTAL FUEL INDICATION

An amber half box appears around FOB, when the displayed quantity is not all usable (intercell transfer valve failure or loss of center tank pumps).
Units may either be in KG or LB, depending on the DMC pin program.
If the FOB indication is displayed with two dashes across the two least significant digits, the FQI is in degraded mode. In this case, the ECAM FUEL page can be called on ECAM lower display to determine which tank is affected.

The loss of accuracy resulting from the loss of FQI normal mode is as follows :

Wing outer tank affected	:	+20 kg (+44 lb), –200 kg (–440 lb).
Wing inner tank affected	:	±110 kg (240 lb).
Center tank affected	:	±130 kg (290 lb).
All tanks affected	:	+390 kg (+860 lb), –750 kg (–1660 lb).

Ident.: DSC-28-20-E-00020194.0001001 / 17 MAR 17
Applicable to: ALL

MEMO DISPLAY

Memos are normally in green color, but they may be in amber color in abnormal situations.

MEMO DISPLAY

Ident.: DSC-28-20-A-00016777.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

CTR TK FEEDG : This memo appears in green, if at least one center tank pump is energized.

42 Ident.: DSC-28-20-A-00016780.0002001 / 30 MAR 18
Applicable to: MSN 11531

WNG TANKS BELOW 3000 KG (6600 LBS) : This memo appears in green, when the fuel quantity in either wing is below 1 500 kg (3 300 lb).

Ident.: DSC-28-20-A-00016780.0001001 / 21 MAR 16
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

FOB BELOW 3T (6600 LBS) : This memo appears in green, when the fuel quantity in either wing is below 1 500 kg (3 300 lb).

Ident.: DSC-28-20-A-00016778.0001001 / 21 MAR 16
Applicable to: ALL

FUEL X FEED : This memo appears in green, if the fuel X FEED pb-sw is ON, and the X FEED valve is not fully closed. It appears in amber in flight phases 3,4, or 5.

Ident.: DSC-28-20-A-00016776.0001001 / 21 MAR 16
43 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

OUTR TK FUEL XFRD : This memo appears in green, if at least one transfer valve is open in one wing tank.

Ident.: DSC-28-20-A-00016779.0001001 / 21 MAR 16
Applicable to: ALL

REFUELG : This memo appears in green, when :

- The door of the refuel control panel ◁ on the fuselage or on the wing is open, or
- The PWR pb-sw of the refuel control panel ◁ in the cockpit is ON.

AIRCRAFT SYSTEMS

HYDRAULIC

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DSC-29-10 Description

DSC-29-10-10 General

General....A

DSC-29-10-20 Generation

Green System Pump....A
Blue System Pumps....B
Yellow System Pumps....C
Power Transfer Unit (PTU)....D
Ram Air Turbine (RAT)....E
System Accumulators....F
Priority Valves....G
Fire Shutoff Valves....H
Leak Measurement Valves....I
Filters....J
Generation....K
Reservoir Pressurization....L
Indications....M

DSC-29-10-30 Distribution

Distribution....A

DSC-29-20 Controls and Indicators

Overhead Panel....A
Maintenance Panel....B
ECAM HYD Page....C
Memo Display....D

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Localization Title	Toc Index	ID	Reason
DSC-29-10-30 Distribution	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-29-20 ECAM HYD Page	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-29-10-10-00001133.0001001 / 21 MAR 16
Applicable to: ALL

The aircraft has three continuously operating hydraulic systems : blue, green, and yellow. Each system has its own hydraulic reservoir. Normal system operating pressure is 3 000 PSI (2 500 PSI when powered by the RAT). Hydraulic fluid cannot be transferred from one system to another.

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GREEN SYSTEM PUMP

Ident.: DSC-29-10-20-00001134.0001001 / 21 MAR 16
Applicable to: ALL

A pump driven by engine 1 pressurizes the green system.

BLUE SYSTEM PUMPS

Ident.: DSC-29-10-20-00001135.0001001 / 21 MAR 16
Applicable to: ALL

An electric pump pressurizes the blue system. A pump driven by a ram air turbine (RAT) pressurizes this system in an emergency.

YELLOW SYSTEM PUMPS

Ident.: DSC-29-10-20-00001136.0001001 / 21 MAR 16
Applicable to: ALL

A pump driven by engine 2 pressurizes the yellow system.
An electric pump can also pressurize the yellow system, which allows yellow hydraulics to be used on the ground when the engines are stopped.
Crew members can also use a hand pump to pressurize the yellow system in order to operate the cargo doors when no electrical power is available.

POWER TRANSFER UNIT (PTU)

Ident.: DSC-29-10-20-00001137.0001001 / 04 DEC 18
Applicable to: ALL

A bidirectional power transfer unit enables the yellow system to pressurize the green system and vice versa.
The power transfer unit comes into action automatically when the differential pressure between the green and the yellow systems is greater than 500 PSI.
The PTU therefore allows the green system to be pressurized on the ground when the engines are stopped.

RAM AIR TURBINE (RAT)

Ident.: DSC-29-10-20-00001138.0001001 / 21 MAR 16
Applicable to: ALL

A drop-out RAT coupled to a hydraulic pump allows the blue system to function if electrical power is lost or both engines fail. The RAT deploys automatically if AC BUS 1 and AC BUS 2 are both lost. It can be deployed manually from the overhead panel. It can be stowed only when the aircraft is on the ground.

SYSTEM ACCUMULATORS

Ident.: DSC-29-10-20-00001139.0001001 / 21 MAR 16
Applicable to: ALL

An accumulator in each system helps to maintain a constant pressure by covering transient demands during normal operation.

PRIORITY VALVES

Ident.: DSC-29-10-20-00001141.0001001 / 21 MAR 16
Applicable to: ALL

Priority valves cut off hydraulic power to heavy load users if hydraulic pressure in a system gets low.

FIRE SHUTOFF VALVES

Ident.: DSC-29-10-20-00001142.0001001 / 21 MAR 16
Applicable to: ALL

Each of the green and yellow systems has a fire shutoff valve in its line upstream of its engine-driven pump. The flight crew can close it by pushing the ENG 1(2) FIRE pushbutton.

LEAK MEASUREMENT VALVES

Ident.: DSC-29-10-20-00001143.0001001 / 21 MAR 16
Applicable to: ALL

Each system has a leak measurement valve upstream of the primary flight controls.
These valves, which measure the leakage in each circuit, are closed by operation of the LEAK MEASUREMENT VALVES pushbutton switch on the maintenance panel.

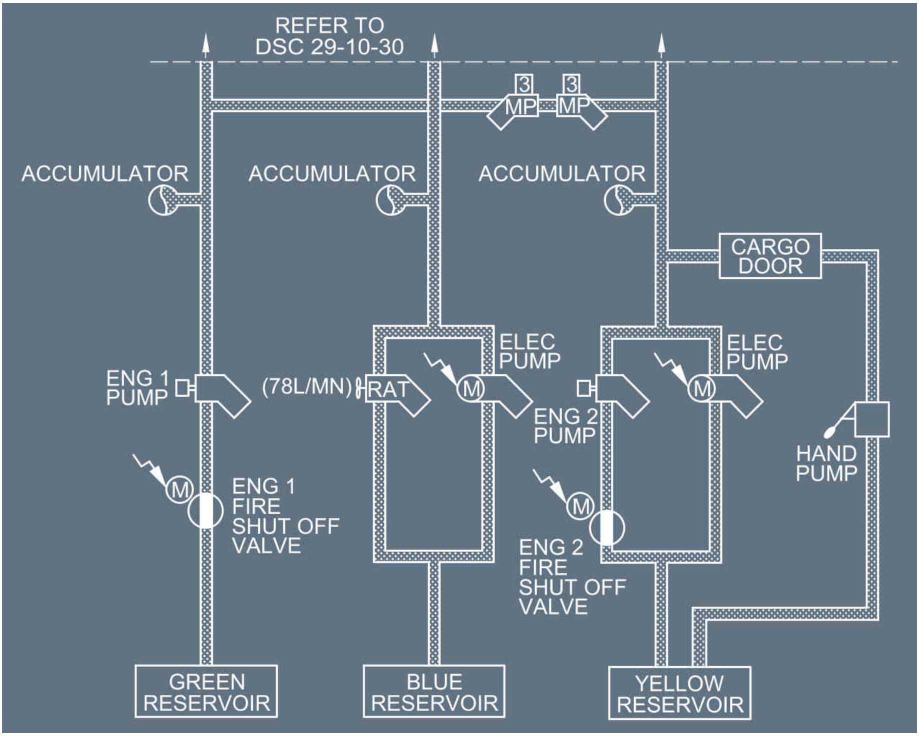
FILTERS

Ident.: DSC-29-10-20-00001144.0001001 / 21 MAR 16
Applicable to: ALL

L3 Filters clean the hydraulic fluid as follows :
- HP filters on each system and on the reservoir filling system and the normal braking system
- return line filters on each line
- case drain filters on engine pumps and the blue electric pump (which permit maintenance crew to monitor pump wear by inspecting the filters for the presence of metallic particles).

GENERATION

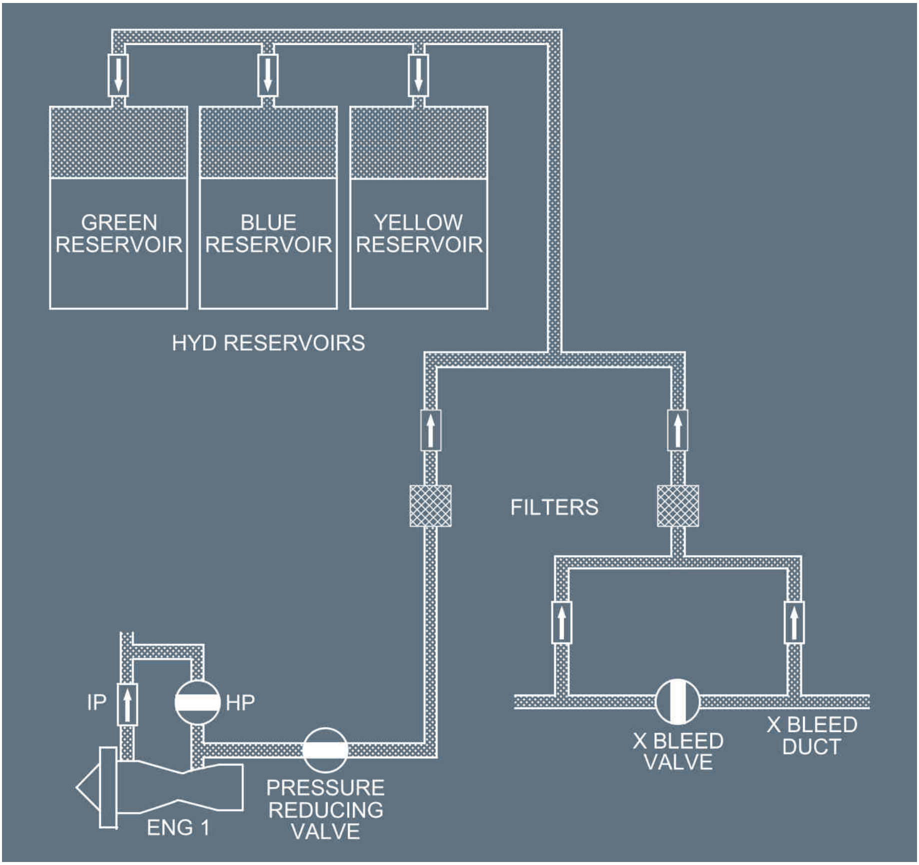
Ident.: DSC-29-10-20-00001145.0001001 / 08 FEB 13
Applicable to: ALL


REFER TO
DSC 29-10-30
3
3
MP
MP
ACCUMULATOR
ACCUMULATOR
ACCUMULATOR
CARGO
DOOR
ELEC
PUMP
ELEC
PUMP
ENG 1
PUMP
(78L/MN)
RAT
M
M
ENG 2
PUMP
HAND
PUMP
M
ENG 1
FIRE
SHUT OFF
VALVE
M
ENG 2
FIRE
SHUT OFF
VALVE
GREEN
RESERVOIR
BLUE
RESERVOIR
YELLOW
RESERVOIR

RESERVOIR PRESSURIZATION

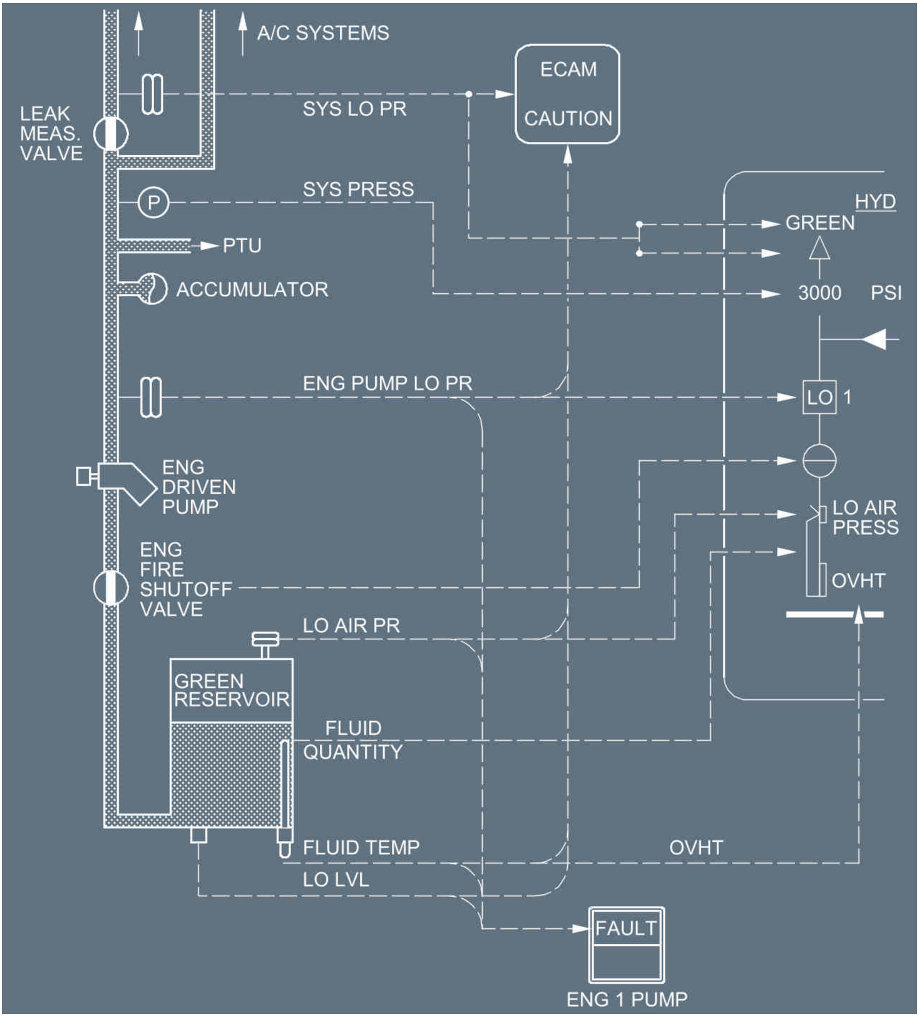
Ident.: DSC-29-10-20-00001146.0001001 / 08 FEB 13
Applicable to: ALL

Normally, HP bleed air from engine 1 pressurizes the hydraulic reservoirs automatically.
If the bleed air pressure is too low, the system takes bleed air pressure from the crossbleed duct.
The systems maintain a high enough pressure to prevent their pumps from cavitating.


GREEN RESERVOIR
BLUE RESERVOIR
YELLOW RESERVOIR
HYD RESERVOIRS
FILTERS
IP
HP
X BLEED VALVE
X BLEED DUCT
PRESSURE REDUCING VALVE
ENG 1

INDICATIONS

Ident.: DSC-29-10-20-00001147.0002001 / 09 OCT 12
Applicable to: ALL

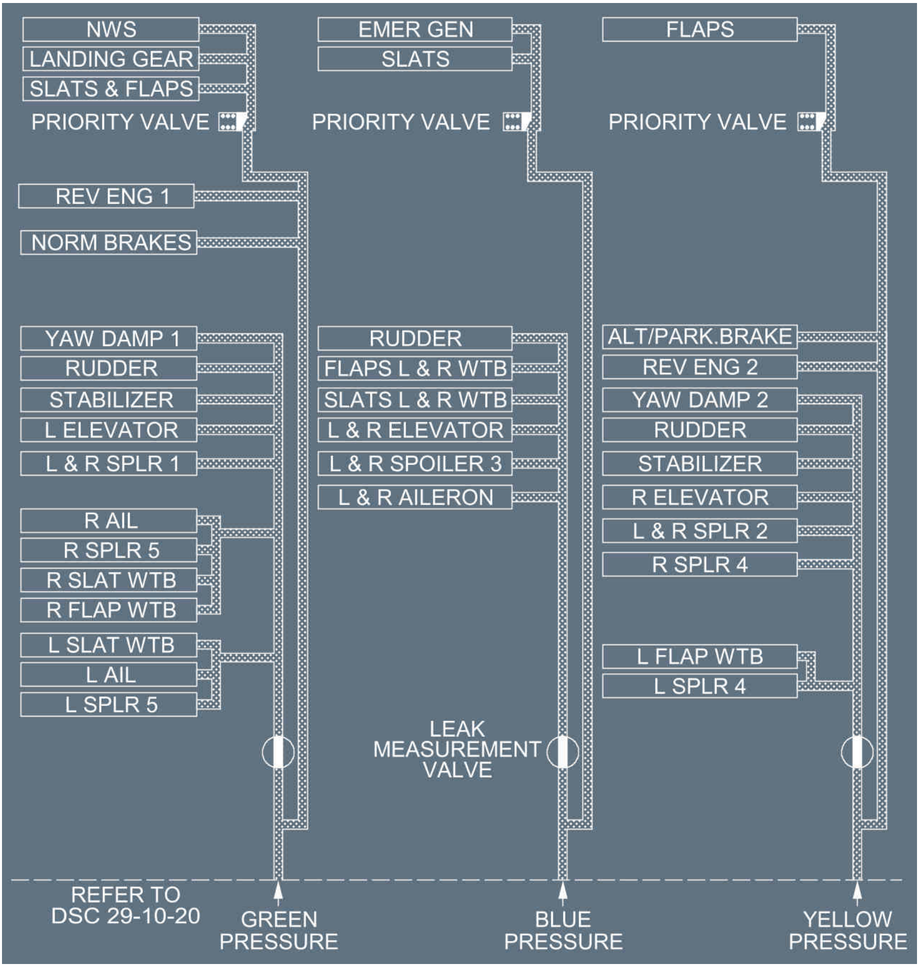

A/C SYSTEMS
LEAK MEAS. VALVE
SYS LO PR
ECAM
CAUTION
SYS PRESS
P
PTU
ACCUMULATOR
HYD
GREEN
3000
PSI
ENG PUMP LO PR
LO
1
ENG DRIVEN PUMP
LO AIR PRESS
ENG FIRE SHUTOFF VALVE
OVHT
LO AIR PR
GREEN RESERVOIR
FLUID QUANTITY
FLUID TEMP
OVHT
LO LVL
FAULT
ENG 1 PUMP

Intentionally left blank

DISTRIBUTION

Ident.: DSC-29-10-30-00001148.0002001 / 08 FEB 13

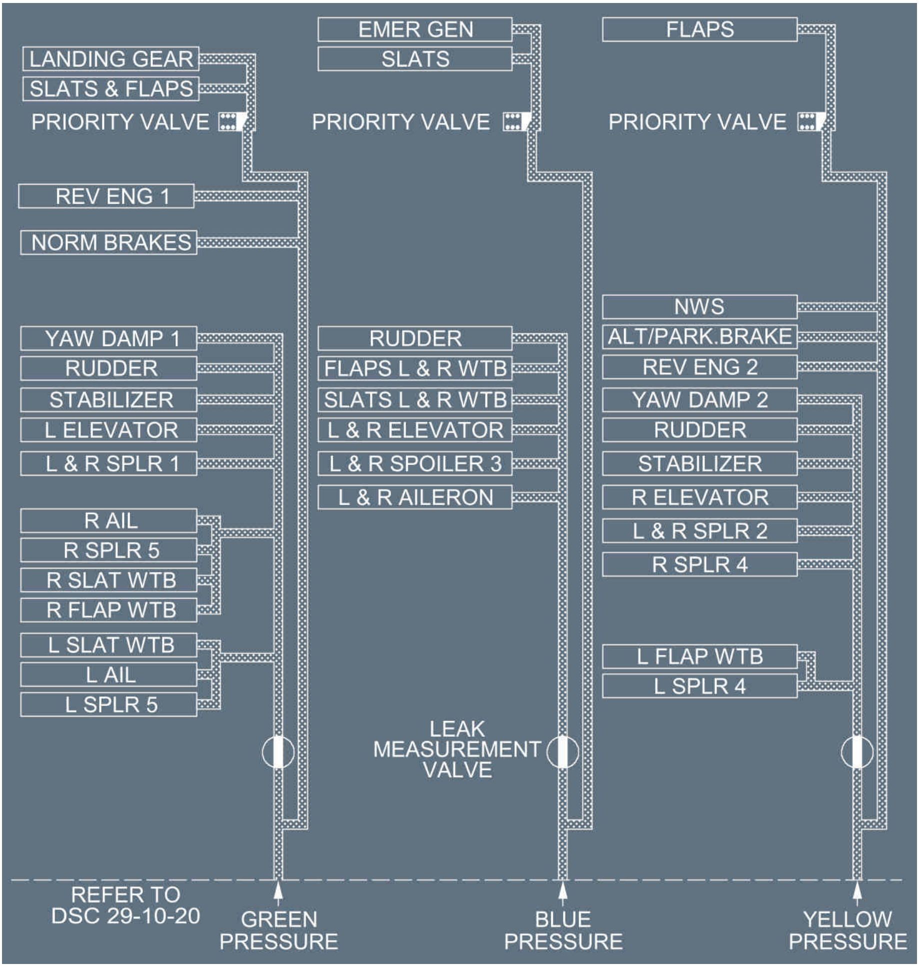
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


NWS
LANDING GEAR
SLATS & FLAPS
PRIORITY VALVE
REV ENG 1
NORM BRAKES
YAW DAMP 1
RUDDER
STABILIZER
L ELEVATOR
L & R SPLR 1
R AIL
R SPLR 5
R SLAT WTB
R FLAP WTB
L SLAT WTB
L AIL
L SPLR 5
EMER GEN
SLATS
PRIORITY VALVE
RUDDER
FLAPS L & R WTB
SLATS L & R WTB
L & R ELEVATOR
L & R SPOILER 3
L & R AILERON
LEAK MEASUREMENT VALVE
FLAPS
PRIORITY VALVE
ALT/PARK.BRAKE
REV ENG 2
YAW DAMP 2
RUDDER
STABILIZER
R ELEVATOR
L & R SPLR 2
R SPLR 4
L FLAP WTB
L SPLR 4
REFER TO DSC 29-10-20
GREEN PRESSURE
BLUE PRESSURE
YELLOW PRESSURE

DISTRIBUTION

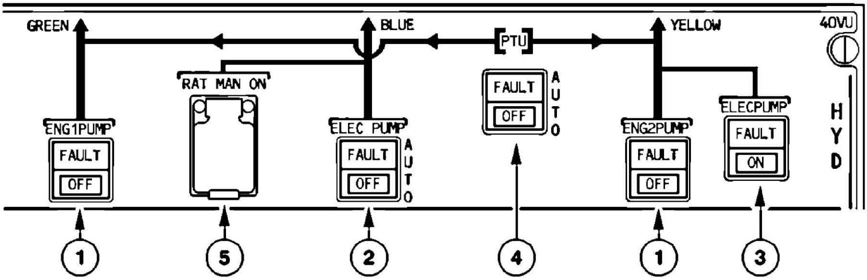
Ident.: DSC-29-10-30-00001148.0003001 / 08 FEB 13

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


EMER GEN
SLATS
FLAPS
LANDING GEAR
SLATS & FLAPS
PRIORITY VALVE
PRIORITY VALVE
PRIORITY VALVE
REV ENG 1
NORM BRAKES
NWS
ALT/PARK.BRAKE
REV ENG 2
YAW DAMP 1
RUDDER
STABILIZER
L ELEVATOR
L & R SPLR 1
R AIL
R SPLR 5
R SLAT WTB
R FLAP WTB
L SLAT WTB
L AIL
L SPLR 5
RUDDER
FLAPS L & R WTB
SLATS L & R WTB
L & R ELEVATOR
L & R SPOILER 3
L & R AILERON
YAW DAMP 2
RUDDER
STABILIZER
R ELEVATOR
L & R SPLR 2
R SPLR 4
L FLAP WTB
L SPLR 4
LEAK
MEASUREMENT
VALVE
REFER TO
DSC 29-10-20
GREEN
PRESSURE
BLUE
PRESSURE
YELLOW
PRESSURE

OVERHEAD PANEL

Ident.: DSC-29-20-00001149.0001001 / 21 MAR 16
Applicable to: ALL


GREEN
BLUE
YELLOW
40VU
PTU
RAT MAN ON
ENG1PUMP
FAULT
OFF
ELEC PUMP
FAULT
OFF
AUTO
FAULT
OFF
AUTO
ENG2PUMP
FAULT
OFF
ELECPUMP
FAULT
ON
HYD
1
5
2
4
1
3

(1) ENG 1 (2) PUMP pb

On	:	The pump pressurizes the system when the engine is running.
OFF	:	The pump is depressurized. The generation of hydraulic power stops.

FAULT lt : This amber light comes on, and the ECAM caution appears, if :
- The reservoir level is low
- The reservoir overheats
- The reservoir air pressure is low
- The pump pressure is low (inhibited on the ground, when the engine is stopped).

This light goes out, when the crew selects OFF, except during an overheat. (The light stays on as long as the overheat lasts).

(2) BLUE ELEC PUMP pb (guarded)

AUTO : If AC power is available, the electric pump operates :
- In flight
- On the ground, if one engine is running or if the crew has pressed the BLUE PUMP OVRD pushbutton on the maintenance panel.

OFF : The pump is de-energized.

FAULT lt : This amber light comes on, and a caution appears on the ECAM, if :
- The reservoir level is low
- The reservoir overheats
- The air pressure in the reservoir is low
- The pump is delivering low pressure (inhibited on the ground, when the engines are stopped)
- The pump overheats.

The light goes out, when the crew selects OFF, except during an overheat. (The light stays on as long as the overheat lasts).

(3) YELLOW ELEC PUMP pb sw (springloaded)

ON : The electric pump is ON.
If the electrical power supply is removed, the pump will remain off when electrical power is applied again.

Off : The pump is off.
It comes on automatically when a crewman sets the lever of the cargo door manual selector valve to OPEN or CLOSE.
This inhibits the operation of other yellow system functions (except alternate braking and engine 2 reverse).

FAULT lt : This amber light, accompanied by an ECAM caution, comes on if :
- the reservoir level is low
- air pressure in the reservoir is low
- the reservoir overheats
- pump pressure is low
- the pump overheats.

The light goes out when the crew selects OFF, except during an overheat. (The light stays on as long as the overheat lasts).

(4) PTU pb sw

AUTO : The bidirectional power transfer unit is armed and both the yellow and the green electrohydraulic valves are open.
The power transfer unit runs automatically when the differential pressure between the green and yellow systems is more than 500 PSI.

Note: *The PTU is inhibited during the first engine start and automatically tested during the second engine start.*

OFF : Both the green and the yellow PTU electrohydraulic valves close. Power transfer stops.

FAULT lt : This amber light comes on, and a caution appears on the ECAM, if :
- the green or the yellow reservoir overheats
- the green or the yellow reservoir has low air pressure
- the green or the yellow reservoir has a low flluid level.

The light goes out when the crew selects OFF, except during an overheat. (The light stays on as long as the overheat lasts).

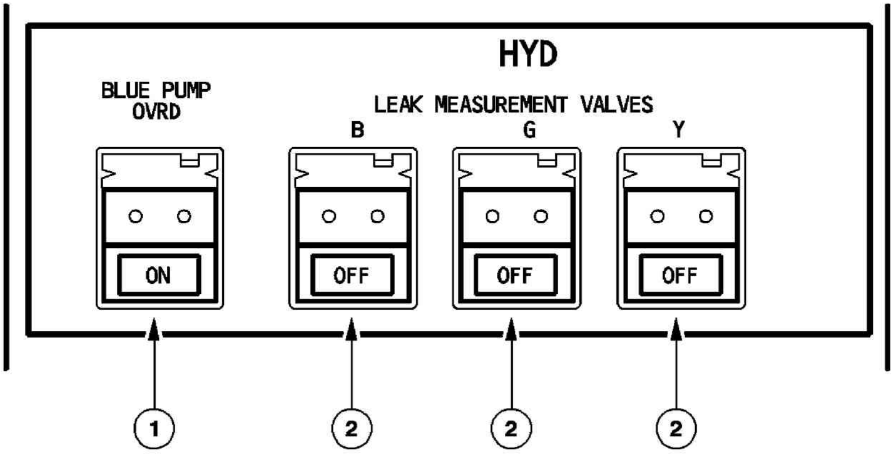
(5) RAT MAN ON pb

The flight crew may extend the RAT at any time by pressing the RAT MAN ON pushbutton.

Note: *The RAT extends automatically if AC BUS 1 and AC BUS 2 are lost. (Refer to DSC-24-20 Overhead Panel (Cont'd)).*

MAINTENANCE PANEL

Ident.: DSC-29-20-00001150.0001001 / 21 MAR 16
Applicable to: ALL



(1) BLUE PUMP OVRD pb sw (guarded)

ON : The blue electric pump is on if the ELEC PUMP pushbutton switch on the HYD panel is at AUTO.

Off : The blue electric pump is off.

(2) LEAK MEASUREMENT VALVES pb sw (guarded)

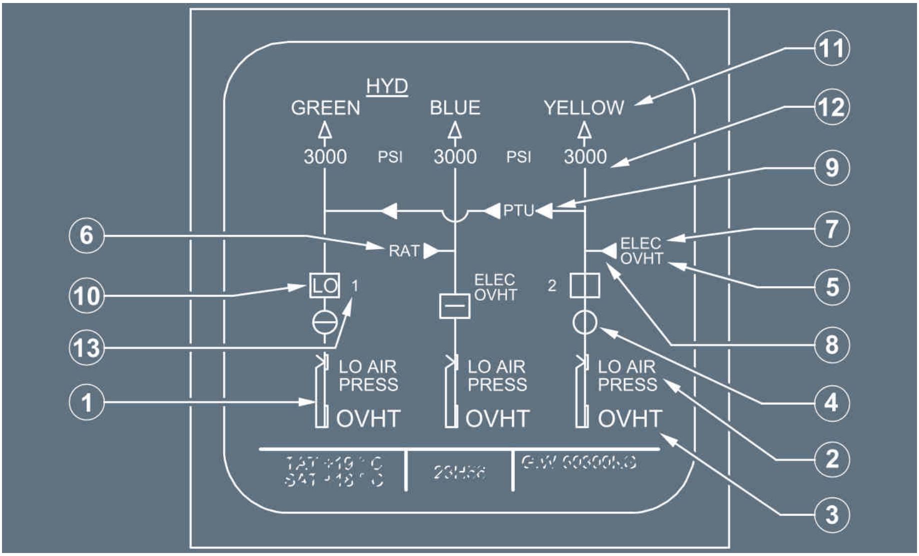
OFF : The corresponding electrohydraulic valve closes and shuts off hydraulic supply to the primary flight controls.

On : The corresponding electrohydraulic valve opens to go back to normal hydraulic supply.

ECAM HYD PAGE

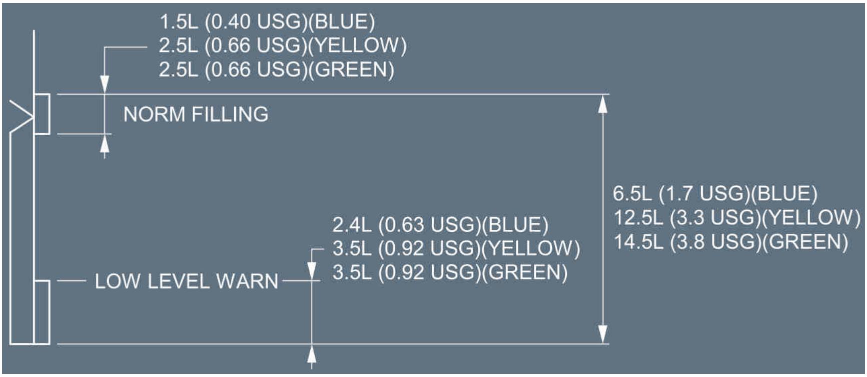
Ident.: DSC-29-20-00001151.0001001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


HYD
GREEN
BLUE
YELLOW
3000
PSI
3000
PSI
3000
PTU
RAT
ELEC
OVHT
LO
1
ELEC
OVHT
2
LO AIR
PRESS
OVHT
LO AIR
PRESS
OVHT
LO AIR
PRESS
OVHT
TAT +19 °C
SAT +18 °C
23H56
G.W 60300KG
11
12
9
7
5
8
4
2
3
6
10
13
1

(1) Reservoir quantity

It is in green, unless the fluid level goes below the warning level, in which case it becomes amber.


1.5L (0.40 USG)(BLUE)
2.5L (0.66 USG)(YELLOW)
2.5L (0.66 USG)(GREEN)
NORM FILLING
6.5L (1.7 USG)(BLUE)
12.5L (3.3 USG)(YELLOW)
14.5L (3.8 USG)(GREEN)
2.4L (0.63 USG)(BLUE)
3.5L (0.92 USG)(YELLOW)
3.5L (0.92 USG)(GREEN)
LOW LEVEL WARN

(2) Reservoir LO AIR PRESS
This appears in amber, and a caution appears on ECAM, if the air pressure for the indicated reservoir drops below normal.

(3) Reservoir OVHT
This appears in amber, and a caution appears on ECAM, if the temperature of returning hydraulic fluid temperature at the inlet to its reservoir is above normal.

(4) FIRE VALVE

Cross line - Amber : The valve is fully closed.

In line - Green : The valve is not fully closed.

(5) OVHT
This appears in amber if the electric pump for that system (blue or yellow) overheats.

(6) RAT

RAT ▷ White : The RAT is stowed.

RAT◼ Green : The RAT is not stowed.

RAT ▶ Amber : Pressure for stowing the RAT has been applied, or the RAT pump is not available.

(7) ELEC
This legend, normally white, becomes amber if the associated power supply fails.

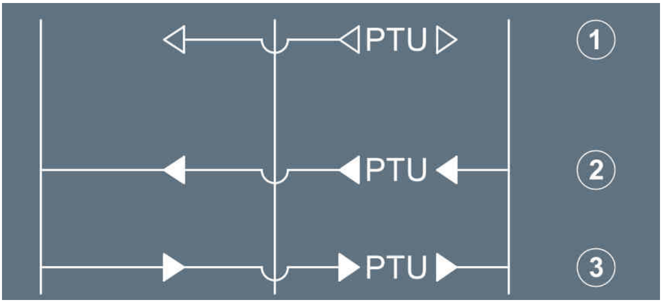
(8) YELLOW ELEC PUMP control

◁ White : The electric pump is off.

◼ Green : The electric pump is ON.

◄ Amber : The electric pump is ON and the yellow system has low pressure.

(9) PTU control



(1)

Green : The power transfer unit (PTU) pushbutton switch is in AUTO and the PTU is not transferring pressure.

Amber : The PTU pb-sw is OFF.

(2)

Green : The PTU is supplying the green hydraulic system.

(3)

Green : The PTU is supplying the yellow hydraulic system.

(10) ENG PUMP control and low pressure indication

In line (Green) : The pushbutton switch for the designated PUMP is on and hydraulic pressure is normal.

Cross line (Amber) : The pushbutton switch for the designated PUMP is OFF.

“LO” (Amber) : The pushbutton switch for the designated PUMP is on and hydraulic pressure is low.

(11) System label

	pressure > 1 450 PSI	**pressure < 1 450 PSI**
YELLOW	white	amber
△	green	amber

(12) System pressure
This legend, normally green, becomes amber when system pressure is below 1 450 PSI.

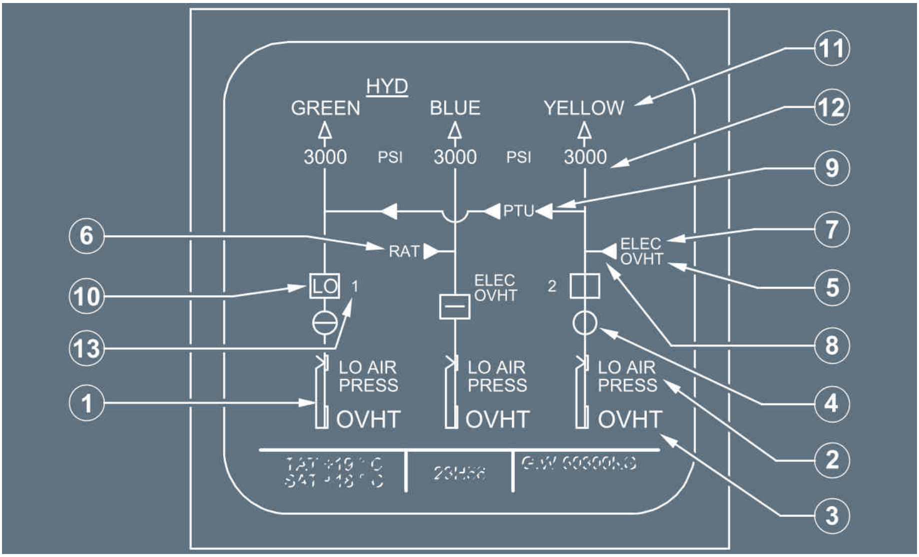
(13) PUMP

This legend, normally white, becomes amber when N2 is below idle.

ECAM HYD PAGE

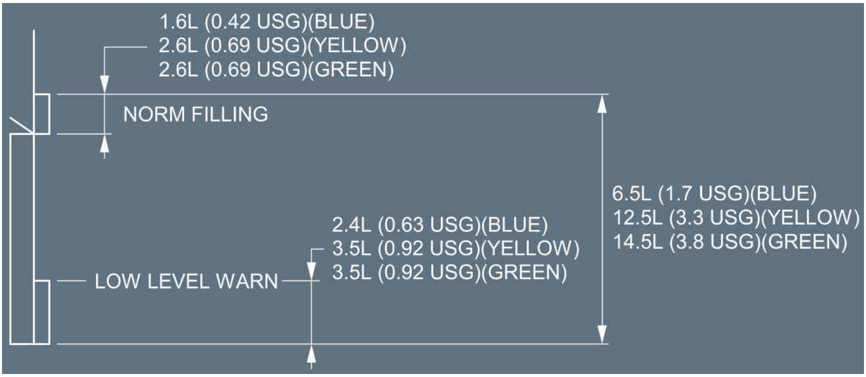
Ident.: DSC-29-20-00001151.0002001 / 23 JUN 15

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


HYD
GREEN
BLUE
YELLOW
3000
PSI
3000
PSI
3000
PTU
RAT
ELEC
OVHT
ELEC
OVHT
LO
1
2
LO AIR
PRESS
OVHT
LO AIR
PRESS
OVHT
LO AIR
PRESS
OVHT
TAT +19 °C
SAT +18 °C
23H56
G.W 60300KG
11
12
9
7
5
8
4
2
3
6
10
13
1

(1) Reservoir quantity

It is in green, unless the fluid level goes below the warning level, in which case it becomes amber.


1.6L (0.42 USG)(BLUE)
2.6L (0.69 USG)(YELLOW)
2.6L (0.69 USG)(GREEN)
NORM FILLING
6.5L (1.7 USG)(BLUE)
12.5L (3.3 USG)(YELLOW)
14.5L (3.8 USG)(GREEN)
2.4L (0.63 USG)(BLUE)
3.5L (0.92 USG)(YELLOW)
3.5L (0.92 USG)(GREEN)
LOW LEVEL WARN

(2) Reservoir LO AIR PRESS

This appears in amber, and a caution appears on ECAM, if the air pressure for the indicated reservoir drops below normal.

(3) Reservoir OVHT

This appears in amber, and a caution appears on ECAM, if the temperature of returning hydraulic fluid temperature at the inlet to its reservoir is above normal.

(4) FIRE VALVE

Cross line - Amber : The valve is fully closed.
In line - Green : The valve is not fully closed.

(5) OVHT

This appears in amber if the electric pump for that system (blue or yellow) overheats.

(6) RAT

RAT ▷ White : The RAT is stowed.
RAT▬ Green : The RAT is not stowed.
RAT ▶ Amber : Pressure for stowing the RAT has been applied, or the RAT pump is not available.

(7) ELEC

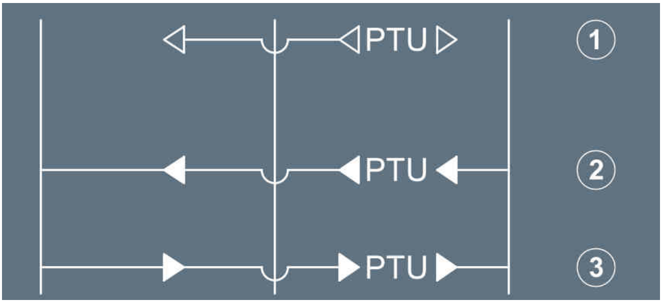
This legend, normally white, becomes amber if the associated power supply fails.

(8) YELLOW ELEC PUMP control

◁ White : The electric pump is off.
▬ Green : The electric pump is ON.

◄ Amber : The electric pump is ON and the yellow system has low pressure.

(9) PTU control



(1)

Green : The power transfer unit (PTU) pushbutton switch is in AUTO and the PTU is not transferring pressure.

Amber : The PTU pb-sw is OFF.

(2)

Green : The PTU is supplying the green hydraulic system.

(3)

Green : The PTU is supplying the yellow hydraulic system.

(10) ENG PUMP control and low pressure indication

In line (Green) :	The pushbutton switch for the designated PUMP is on and hydraulic pressure is normal.
Cross line (Amber) :	The pushbutton switch for the designated PUMP is OFF.
"LO" (Amber) :	The pushbutton switch for the designated PUMP is on and hydraulic pressure is low.

(11) System label

	pressure > 1 450 PSI	pressure < 1 450 PSI
YELLOW	white	amber
△	green	amber

(12) System pressure
This legend, normally green, becomes amber when system pressure is below 1 450 PSI.

(13) PUMP
This legend, normally white, becomes amber when N2 is below idle.

MEMO DISPLAY

Applicable to: ALL

Ident.: DSC-29-20-A-00016787.0001001 / 21 MAR 16

HYD PTU : This memo appears in green, when the power transfer unit is running.

Ident.: DSC-29-20-A-00016786.0001001 / 21 MAR 16

RAT OUT : This memo appears in green, if the Ram Air Turbine is not fully stowed. The color changes to amber during flight phases 1 and 2.

AIRCRAFT SYSTEMS

ICE AND RAIN PROTECTION

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DSC-30-10 General

DSC-30-10-10 Description

General....A
Anti-Ice....B
Rain Removal....C

DSC-30-20 Wing Anti-Ice

DSC-30-20-10 Description

Description....A

DSC-30-20-20 Controls And Indicators

Overhead Panel....A
ECAM BLEED Page....B
Engine Warning Display....C
Memo Display....D

DSC-30-30 Engine Anti-Ice

DSC-30-30-10 Description

Description....A

DSC-30-30-20 Controls and Indicators

Overhead Panel....A
Engine Warning Display....B
Memo Display....C

DSC-30-40 Window Heat

DSC-30-40-10 Description

Description....A

DSC-30-40-20 Controls and Indicators

Overhead Panel....A

DSC-30-50 Probes Heat

DSC-30-50-10 Description

Description....A

DSC-30-50-20 Controls and Indicators

Overhead Panel....A

Continued on the following page

Continued from the previous page

DSC-30-60 Rain Removal

DSC-30-60-10 Description

Wipers.......... A
Rain Repellent ◁ .... B

DSC-30-60-20 Controls and Indicators

Overhead Panel.......... A
Rain Repellent ◁ System Indicators.......... B

DSC-30-70 Ice Detection System

DSC-30-70-10 Description

Visual Ice Indicator.......... A
Ice Detection System.......... B

Localization Title	Toc Index	ID	Reason
DSC-30-20-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-20-20 Engine Warning Display	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-20-20 ICE NOT DET	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-20 Engine Warning Display	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-30-20 ICE NOT DET	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-30-70-10 Ice Detection System	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-30-10-10-00001154.0001001 / 16 MAR 11
Applicable to: ALL

The ice and rain protection system allows unrestricted operation of the aircraft in icing conditions and heavy rain.

ANTI-ICE

Ident.: DSC-30-10-10-00001155.0001001 / 29 MAR 12
Applicable to: ALL

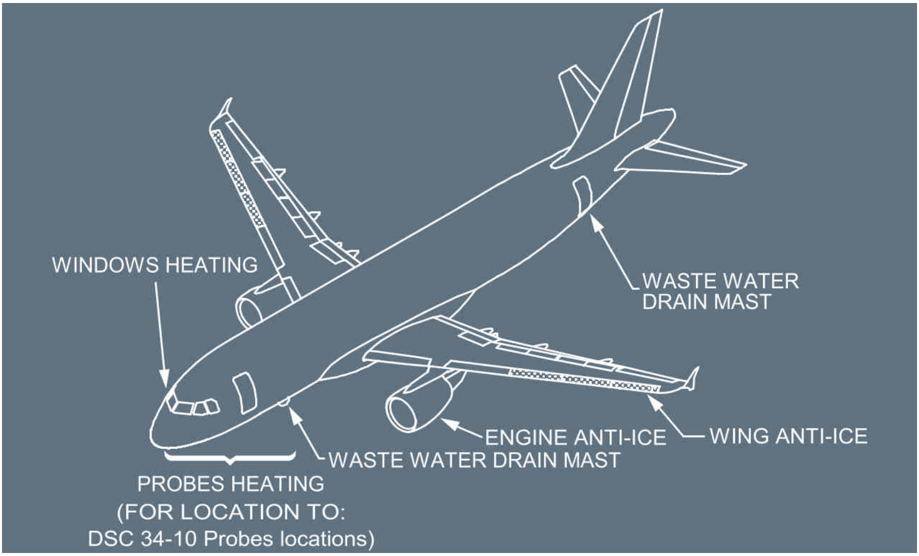
Either hot air or electrical heating protects critical areas of the aircraft as follows:

HOT AIR

- Three outboard leading-edge slats of each wing
- Engine air intakes.

ELECTRICAL HEATING

- Flight compartment windows
- Sensors, pitot probes and static ports
- Waste-water drain mast.


WINDOWS HEATING
WASTE WATER DRAIN MAST
ENGINE ANTI-ICE
WING ANTI-ICE
WASTE WATER DRAIN MAST
PROBES HEATING
(FOR LOCATION TO:
DSC 34-10 Probes locations)

RAIN REMOVAL

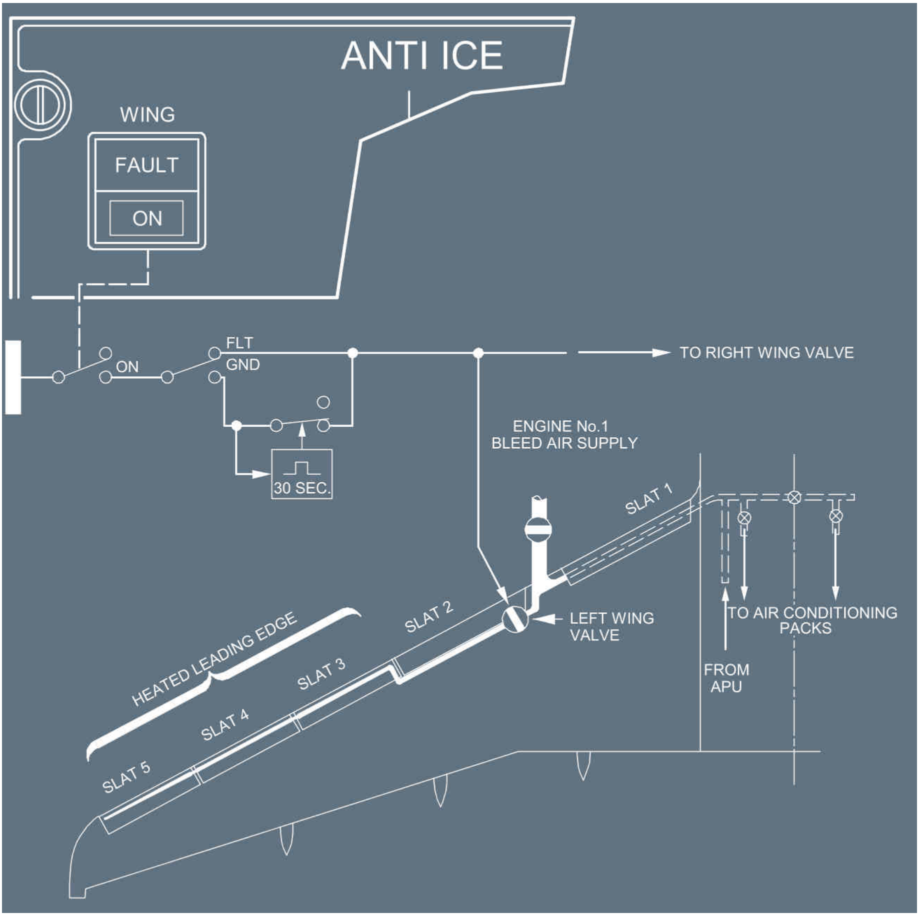
Ident.: DSC-30-10-10-00017416.0001001 / 21 MAR 16
Applicable to: ALL

Wipers and fluid rain repellent ◁ , remove rain from the front windshield panels.

DESCRIPTION

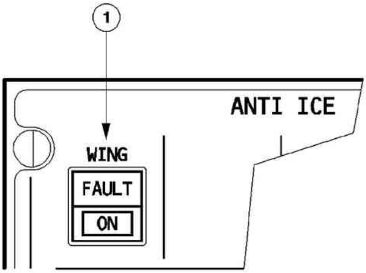
Ident.: DSC-30-20-10-00017417.0001001 / 21 MAR 16
Applicable to: ALL

In flight, hot air from the pneumatic system heats the three outboard slats (3-4-5) of each wing.
Air is supplied through one valve in each wing.
The WING pushbutton on the ANTI ICE panel controls the valves.
When the aircraft is on ground, the flight crew can initiate a 30 s test sequence by turning the system ON.
If the system detects a leak during normal operation, the affected side's wing anti-ice valve automatically closes (*Refer to DSC-36-10-50 Leak Detection*).
When wing anti-ice is selected, the N1 or EPR limit is automatically reduced, and the idle N1 or EPR is automatically increased.
If the electrical power supply fails, the valves close.


ANTI ICE
WING
FAULT
ON
ON
FLT
GND
30 SEC.
TO RIGHT WING VALVE
ENGINE No.1
BLEED AIR SUPPLY
SLAT 1
SLAT 2
SLAT 3
SLAT 4
SLAT 5
HEATED LEADING EDGE
LEFT WING
VALVE
TO AIR CONDITIONING
PACKS
FROM
APU

OVERHEAD PANEL

Ident.: DSC-30-20-20-00017418.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098



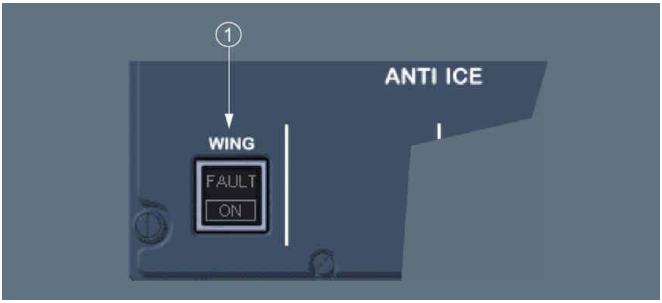
(1) WING ANTI ICE pb sw
This switch controls the wing anti ice system on the left and right sides simultaneously.

Off :	ON light goes off. Wing anti-icing control valves close.
FAULT :	Light comes on amber, and caution appears on ECAM, if: - The position of the anti-icing control valve is not the required position, or - Low pressure is detected. *Note: The amber FAULT light comes on briefly as the valves transit.*
ON :	Light comes on blue. WING A. ICE appears on the ECAM MEMO page. Wing anti ice control valves open if a pneumatic supply is available. On the ground the wing anti-icing control valves open for 30 s only (test sequence).

OVERHEAD PANEL

Ident.: DSC-30-20-20-00017418.0002001 / 21 MAR 16

1 **Applicable to: MSN 08495-09324, 10949-11597**



(1) WING ANTI ICE pb sw

This switch controls the wing anti ice system on the left and right sides simultaneously.

Off : ON light goes off.
Wing anti-icing control valves close.

FAULT : Light comes on amber, and caution appears on ECAM, if:
- The position of the anti-icing control valve is not the required position, or
- Low pressure is detected.

Note: The amber FAULT light comes on briefly as the valves transit.

ON : Light comes on blue.
WING A. ICE appears on the ECAM MEMO page. WAI appears on the Engine Warning Display when the thrust levers are in the TOGA or FLX/MCT detent.
Wing anti ice control valves open if a pneumatic supply is available.
On the ground the wing anti-icing control valves open for 30 s only (test sequence).

ECAM BLEED PAGE

Ident.: DSC-30-20-20-00001159.0001001 / 21 MAR 16

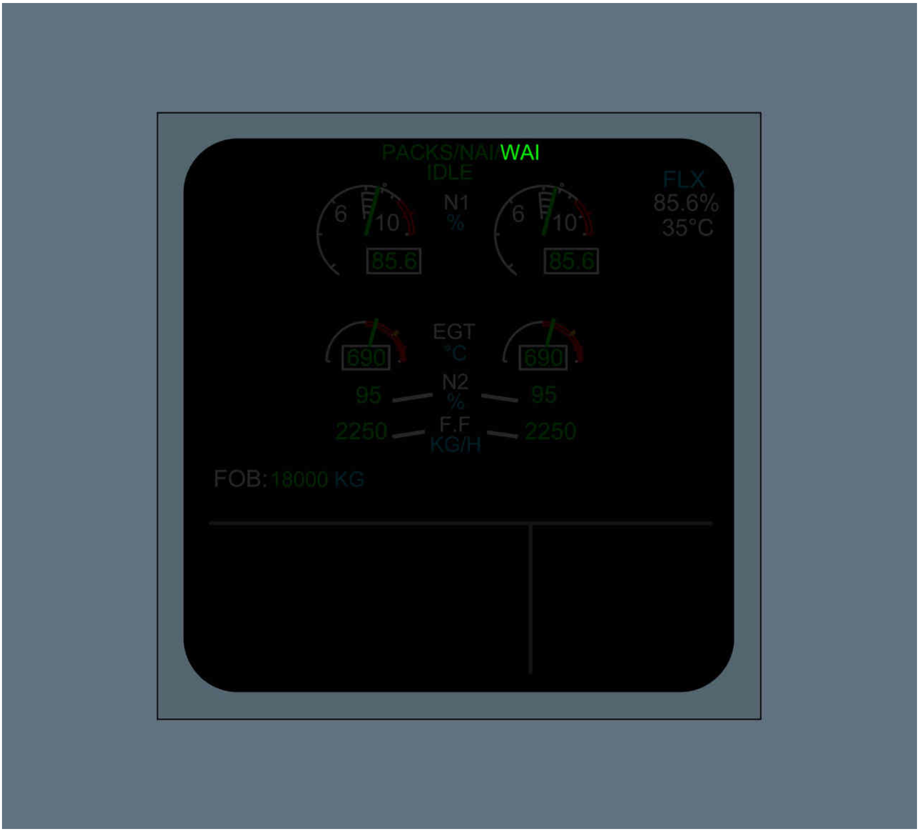
Applicable to: ALL

Refer to DSC-36-20 ECAM Bleed Page

ENGINE WARNING DISPLAY

Ident.: DSC-30-20-20-00017421.0001001 / 06 SEP 16

2 **Applicable to: MSN 08495-09324, 10949-11597**


PACKS/NAI/WAI
IDLE
6
10
85.6
N1
%
6
10
85.6
FLX
85.6%
35°C
690
EGT
°C
690
95
N2
%
95
2250
F.F
KG/H
2250
FOB: 18000 KG

WING ANTI-ICE status
For more information, *Refer to DSC-70-90-40 Bleed Air Configuration*

MEMO DISPLAY

Ident.: DSC-30-20-20-A-00016938.0001001 / 21 MAR 16

3 **Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

ICE NOT DET : This memo appears in green, if ice is no longer detected after 190 s.

Ident.: DSC-30-20-20-A-00016939.0001001 / 21 MAR 16
Applicable to: ALL

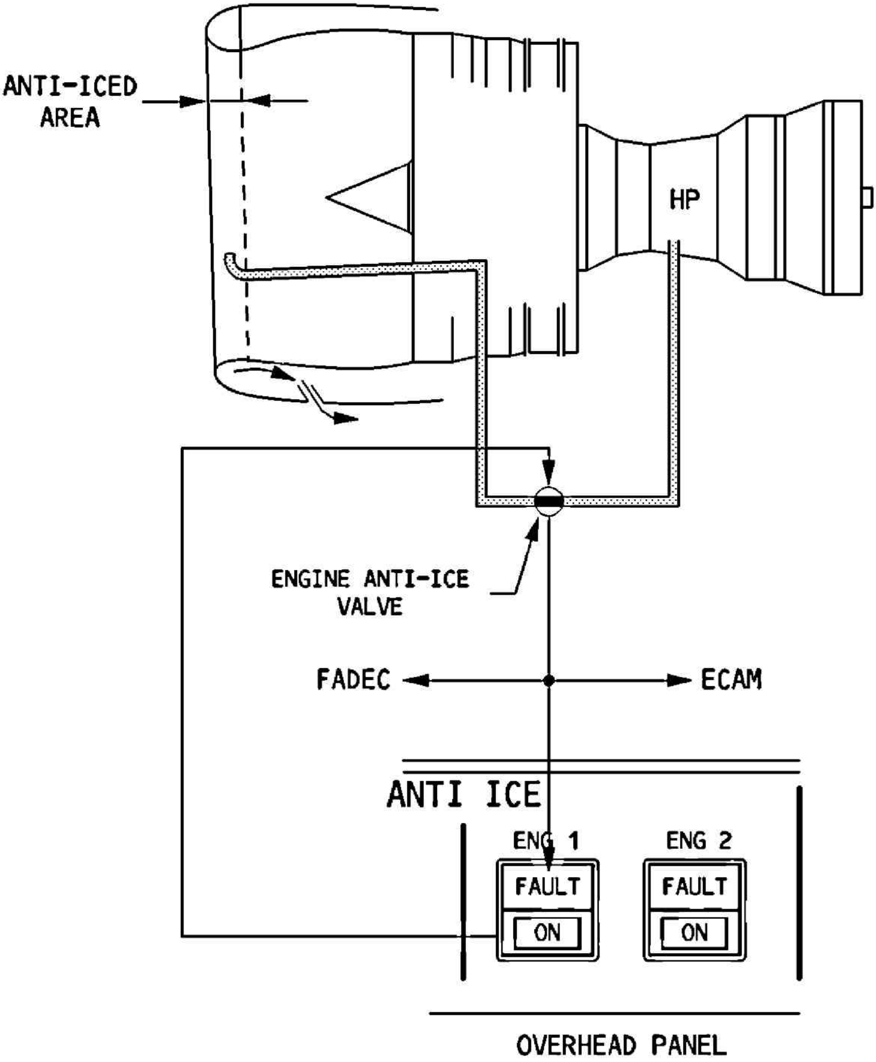
WING A.ICE : This memo appears in green, if the WING ANTI ICE pb-sw is ON.

DESCRIPTION

Ident.: DSC-30-30-10-00017422.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

An independent air bleed from the high pressure compressor protects each engine nacelle from ice.
Air is supplied through a two-position (open and closed) valve that the flight crew controls with two pushbuttons, one for each engine.
The valve automatically closes, if air is unavailable (engine not running).
When an engine anti-ice valve is open, the N1 or EPR limit is automatically reduced and, if necessary, the idle N1 or EPR is automatically increased for both engines in order to provide the required pressure.
If electrical power fails, the valves open.


ANTI-ICED AREA
HP
ENGINE ANTI-ICE VALVE
FADEC
ECAM
ANTI ICE
ENG 1
FAULT
ON
ENG 2
FAULT
ON
OVERHEAD PANEL

DESCRIPTION

Ident.: DSC-30-30-10-00017422.0002001 / 04 JUL 17

1 **Applicable to: MSN 08495-09324, 10949-11597**

Each engine has its own anti-ice system, with an independent hot bleed air source.

L3 The bleed air is extracted from the High Pressure Compressor to anti-ice the engine air inlet.

L1 Two Pressure Regulated & Shut off Valves (PRSOV) enable the flow of bleed air to the engines air intake inlet.

Each valve is electrically controlled and pneumatically actuated.

L2 Both PRSOVs are regulating in cascade when the engine anti-ice is on.

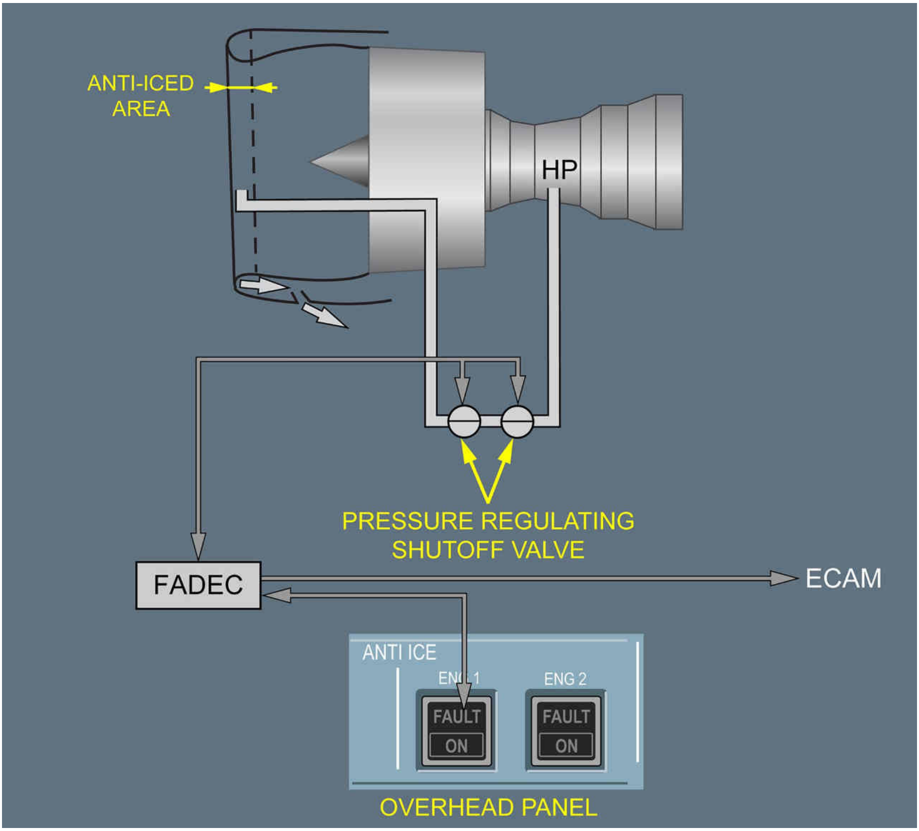
L1 Only one PRSOV is performing the shut off function when the engine anti-ice is off.

A continuous monitoring of the system enables the detection of bleed air duct leak or burst and deactivation of the system.

When the engine anti-ice is on, the N1 limit is automatically reduced and the idle N1 is automatically increased for both engines, if necessary, in order to provide the required pressure.

In the case of a detected burst duct, both valves are commanded closed.

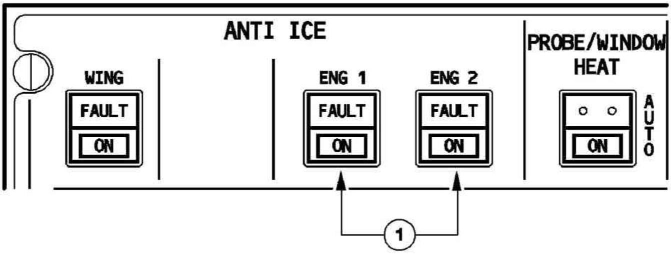
In the case of an electrical failure, both PRSOVs are fail safe opened providing the air inlet with enough pressure for the anti-ice function.


ANTI-ICED
AREA
HP
PRESSURE REGULATING
SHUTOFF VALVE
FADEC
ECAM
ANTI ICE
ENG 1
ENG 2
FAULT
ON
FAULT
ON
OVERHEAD PANEL

OVERHEAD PANEL

Ident.: DSC-30-30-20-00017425.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165



(1) ENG 1 (2) ANTI ICE pb-sw

Off : ON light goes off.
Engine anti-ice valve closes.

FAULT : Light comes on amber, and caution message appears on ECAM, if the position of the anti-ice valve disagrees with the ENG 1 (2) pushbutton selection.

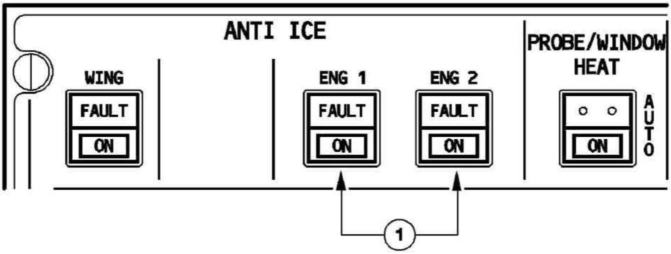
Note: The amber FAULT light comes on briefly as valve transits.

ON : Light comes on blue.
ECAM MEMO displays “ENG A. ICE”.
Engine anti-icing valve opens if bleed air is available from the engine.
Continuous ignition is selected when the valve is opened and the ENG ANTI ICE pb-sw is selected ON. This makes the IGNITION memo appear on the ECAM.

OVERHEAD PANEL

Ident.: DSC-30-30-20-00017425.0003001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098


ANTI ICE
WING
FAULT
ON
ENG 1
FAULT
ON
ENG 2
FAULT
ON
PROBE/WINDOW
HEAT
ON
AUTO
1

(1) ENG 1 (2) ANTI ICE pb-sw

Off : ON light goes off.
Engine anti-ice valve closes.

FAULT : Light comes on amber, and caution message appears on ECAM, if the position of the anti-ice valve disagrees with the ENG 1 (2) pushbutton selection.

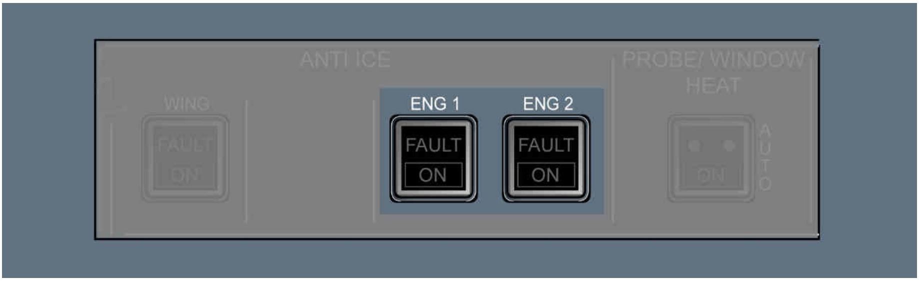
Note: The amber FAULT light comes on briefly as valve transits.

ON : Light comes on blue.
ECAM MEMO displays “ENG A. ICE”.
Engine anti-icing valve opens if bleed air is available from the engine.

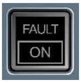
OVERHEAD PANEL

Ident.: DSC-30-30-20-00017425.0004001 / 14 JAN 20

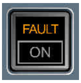
1 **Applicable to: MSN 08495-09324, 10949-11597**


ANTI ICE
WING
FAULT
ON
ENG 1
FAULT
ON
ENG 2
FAULT
ON
PROBE/ WINDOW
HEAT
ON
AUTO

ENG 1 (2) ANTI ICE pb-sw



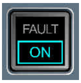
Engine anti-ice valves close.



A caution message appears on ECAM, if the position of the anti-ice valves disagree with the ENG 1 (2) pb selection.

Associated with one of the following ECAM alerts:

- ANTI ICE ENG 1(2) VALVE CLSD (*Refer to PRO-ABN-A-ICE ANTI ICE ENG 1(2) VALVE CLSD*)
- ANTI ICE ENG 1(2) VALVE OPEN (*Refer to PRO-ABN-A-ICE ANTI ICE ENG 1(2) VALVE OPEN*)
- ANTI ICE ENG 1(2) CTL FAULT (*Refer to PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)*)
- ANTI ICE ENG 1(2) OVER PRESS (*Refer to PRO-ABN-A-ICE ANTI ICE ENG 1(2) OVER PRESS*)

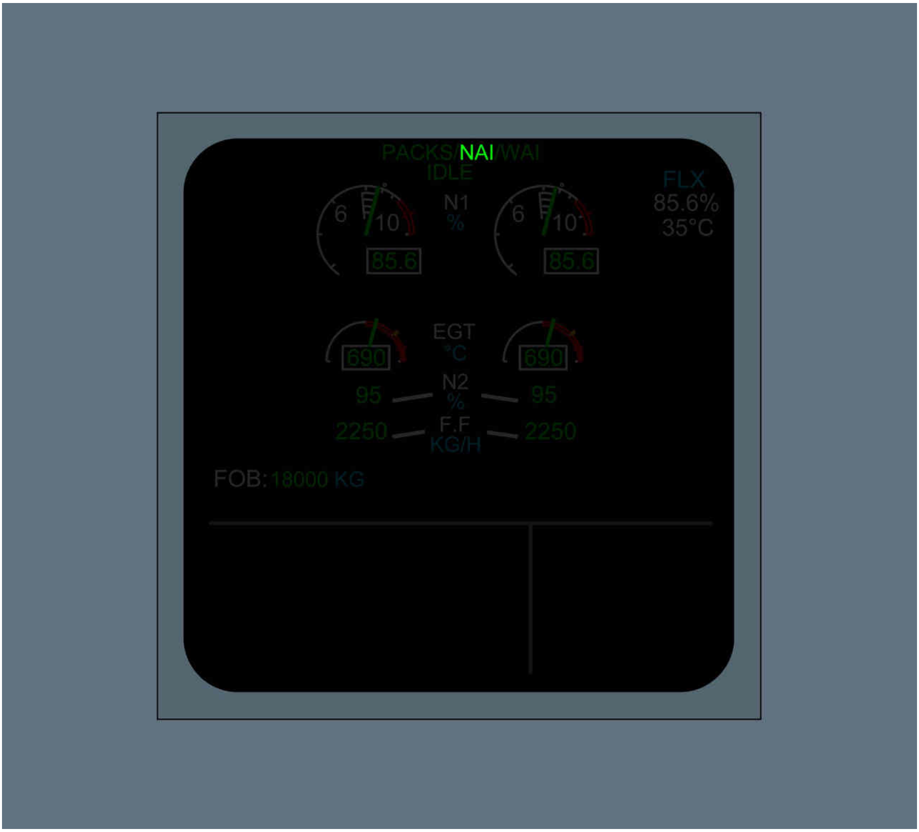


ECAM MEMO displays “ENG A. ICE”. NAI appears on the Engine Warning Display when the thrust levers are in the TOGA or FLX/MCT detent.
Engine anti-ice valves open if bleed air is available from the engine.

ENGINE WARNING DISPLAY

Ident.: DSC-30-30-20-00017457.0001001 / 06 SEP 16

2 **Applicable to: MSN 08495-09324, 10949-11597**


PACKS/NAI/WAI
IDLE
FLX
85.6%
35°C
6
10
N1
%
6
10
85.6
85.6
EGT
°C
690
690
N2
%
95
95
F.F
KG/H
2250
2250
FOB: 18000 KG

ENGINE NACELLE ANTI-ICE status

For more information, *Refer to DSC-70-90-40 Bleed Air Configuration*

MEMO DISPLAY

Ident.: DSC-30-30-20-A-00016945.0001001 / 21 MAR 16

Applicable to: ALL

ENG A.ICE	:	This memo appears in green, if one or both ENG ANTI ICE pb-sw are ON.

Ident.: DSC-30-30-20-A-00016949.0001001 / 21 MAR 16

3 **Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

ICE NOT DET : This memo appears in green, if no ice has been detected 190 s after the flight crew has selected the ENG ANTI ICE pb-sw are ON.

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DESCRIPTION

Ident.: DSC-30-40-10-00017458.0001001 / 15 NOV 22
Applicable to: ALL

The aircraft uses electrical heating to anti-ice each windshield and defog the cockpit side windows. Two independent WHC, one on each side, automatically regulates the system, protects it against overheating, and indicates faults.

Window heating comes ON:
- Automatically when at least one engine is running, or when the aircraft is in flight
- Manually before engine start, when the flight crew switches ON the PROBE/WINDOW HEAT pb-sw.

The windshield heating operates at low power on ground and at normal power in flight. The changeover is automatic.
Only one heating level exists for the windows.

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OVERHEAD PANEL

Ident.: DSC-30-40-20-00001165.0001001 / 21 MAR 16
Applicable to: ALL

Refer to DSC-30-50-20 Overhead Panel

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DESCRIPTION

Ident.: DSC-30-50-10-00017459.0001001 / 21 MAR 16
Applicable to: ALL

Electrical heating protects:
- Pitot probes
- Static ports
- Angle-Of-Attack (AOAs) probes
- Total Air Temperature (TAT) probes.

Three independent Probe Heat Computers (PHCs) automatically control and monitor:
- Captain probes
- F/O probes
- STBY probes.

They protect against overheating and indicate faults.

The probes are heated:
- Automatically when at least one engine is running, or when the aircraft is in flight.
- Manually, when the flight crew switches ON the PROBE/WINDOW HEAT pb.

On the ground, the TAT probes are not heated and pitot heating operates at a low level (the changeover to normal power in flight is automatic).

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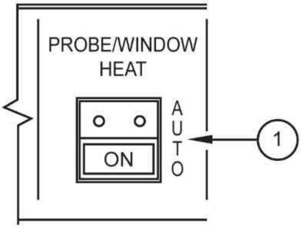
OVERHEAD PANEL

Ident.: DSC-30-50-20-00017460.0001001 / 15 NOV 22
Applicable to: ALL



(1) PROBE/WINDOW HEAT pb

AUTO	Probes/Windows are heated automatically: - In flight, or - On the ground (except TAT probes) provided one engine is running.
ON	Light comes on blue. Probes and windows are heated permanently.

Note: *Ensure that the probe covers are removed before setting the PROBE/WINDOW HEAT pb-sw to ON.*

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WIPERS

Ident.: DSC-30-60-10-00017461.0001001 / 21 MAR 16
Applicable to: ALL

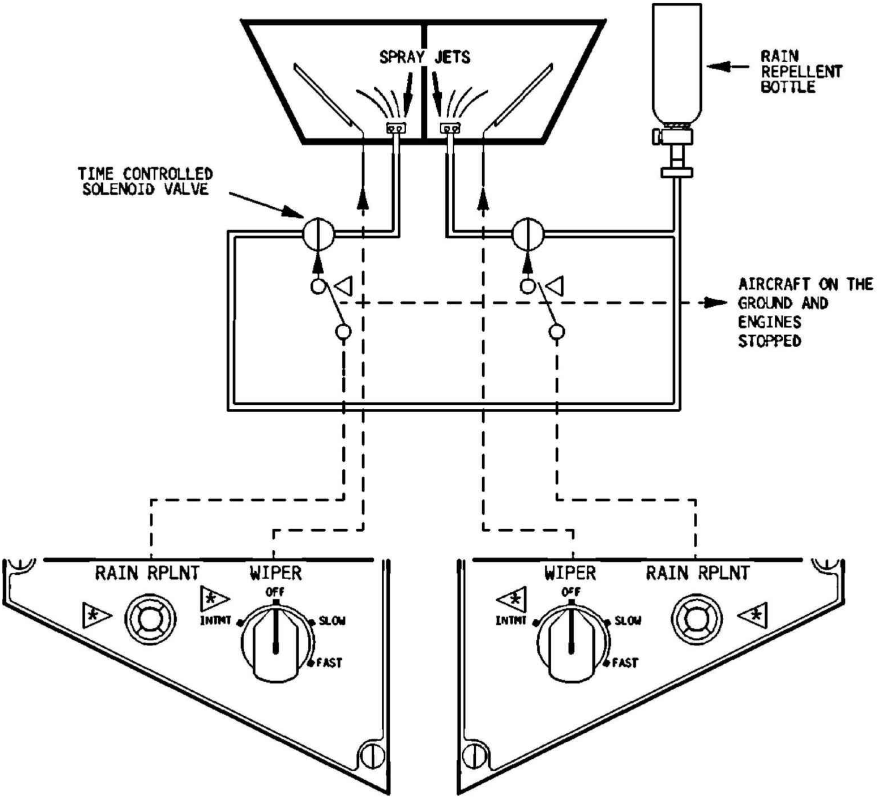
Each front windshield has an electrical wiper with two speeds, and with an intermittent sweep function ◁ . A rotary selector controls each wiper.

RAIN REPELLENT ◁

Ident.: DSC-30-60-10-00017462.0001001 / 01 JUN 17
Applicable to: ALL

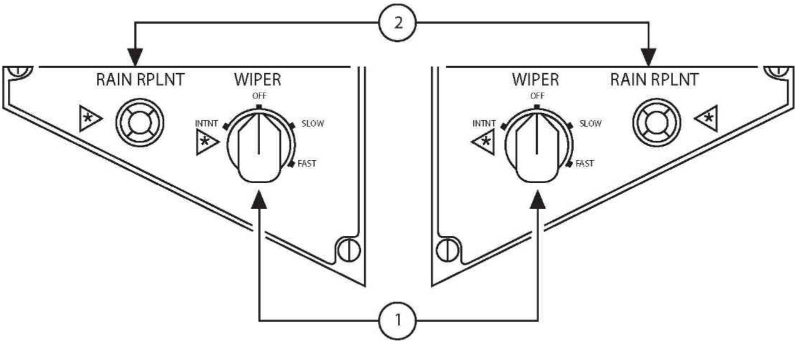
In moderate to heavy rain, the flight crew can spray a rain repellent liquid on the windshield to improve visibility.
After about 30 s, the windows are covered with spray.
Separate pushbuttons control rain repellent application on each side of the windshield.

RAIN REMOVAL - DESCRIPTION


SPRAY JETS
RAIN REPELLENT BOTTLE
TIME CONTROLLED SOLENOID VALVE
AIRCRAFT ON THE GROUND AND ENGINES STOPPED
RAIN RPLNT
WIPER
OFF
INTMT
SLOW
FAST
WIPER
OFF
INTMT
SLOW
FAST
RAIN RPLNT

OVERHEAD PANEL

Ident.: DSC-30-60-20-00017466.0001001 / 21 MAR 16
Applicable to: ALL

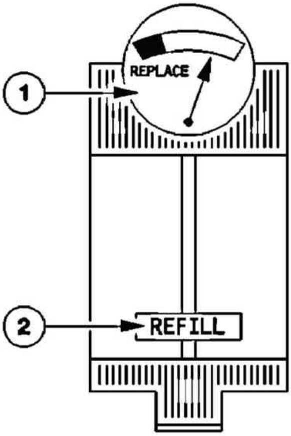


(1) WIPER rotary selector
Each rotary selector controls its wiper at low speed, high speed, or intermittent sweeping ◁ .
When turned off, the wiper stops out of view.

(2) RAIN RPLNT pb-sw ◁
Each of these buttons controls the application of rain repellent fluid to the corresponding side of the front windshield.
When the flight crew pushes the button, the timer applies a measured quantity of rain repellent to the windshield. To repeat the cycle, the flight crew must push the button again.
This function is inhibited when the aircraft is on the ground and the engines are stopped.

RAIN REPELLENT ⋖ SYSTEM INDICATORS

Ident.: DSC-30-60-20-00017587.0001001 / 21 MAR 16
Applicable to: ALL



(1) Rain Repellent pressure indicator
This gauge shows the nitrogen pressure and therefore the remaining fluid in the rain repellent bottle. When the needle is in the yellow sector the bottle should be replaced.

(2) Rain Repellent low level indicator (depending on aircraft configuration)
When the REFILL float is in view the bottle should be replaced.

VISUAL ICE INDICATOR

Ident.: DSC-30-70-10-00017471.0001001 / 21 MAR 16
Applicable to: ALL

An external visual ice indicator is installed between the two windshields.
There can be also an external ice detector light ◁✻

ICE DETECTION SYSTEM

Ident.: DSC-30-70-10-00017472.0001001 / 21 MAR 16
Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597

The ice detection system has two separate ice detector probes on the forward lower section of the fuselage.
The probes detect ice accretion. They also indicate, through the MEMO display, that icing conditions have disappeared. The system logic generates ECAM messages according to ice detector signals and the flight crew's selection of engine or wing anti-icing systems.
The ice detection system does not control the ENG or WING anti-icing systems.

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AIRCRAFT SYSTEMS

INDICATING/RECORDING SYSTEMS

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DSC-31-05 EIS General

DSC-31-05-10 Introduction

Introduction........A

DSC-31-05-20 Cockpit Arrangement

Cockpit Arrangement........A

DSC-31-05-30 Architecture

Display Unit (DU)........A
Display Management Computer (DMC)........B
System Data Acquisition Concentrator (SDAC)........C
Flight Warning Computer (FWC)........D
Attention - Getters........E
Loudspeaker........F
EIS Block Diagram........G

DSC-31-05-40 Controls and Switching

ECAM Control Panel (ECP)........A
EIS DMC Switching Selector........B
ECAM/ND Switching........C
EFIS Switching........D

DSC-31-05-50 Reconfiguring the DMC

Reconfiguring the Display Management Computer (DMC)........A

DSC-31-05-60 Reconfiguring DUs

Failure of Upper ECAM DU (or CTL/Brightness Knob Turned to Off)........A
Failure of Lower ECAM DU (or CTL/Brightness Knob Turned to Off)........B
Failure of both ECAM DUs........C
PFDU/NDU Reconfiguration........D
DU Reconfiguration........E
General........F
Failure of a DU........G
Feedback Messages........H
Side1/Side2 Discrepancy Messages........I
DU Reset........J

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DSC-31-10 ECAM Description

ECAM DU Arrangement.......A
Color Code.......B
Warning/Caution Classification.......C
Priority Rules.......D
Types of Failures.......E
Audio Indicators.......F

DSC-31-15 Indications on E/WD

General.......A
Independent Failure.......B
Primary and Secondary Failure.......C
Flight Phases.......D
Memos.......E
Configuration Warnings.......F

DSC-31-20 Indications on SD

General.......A
System Pages.......B
Status Page.......C
Permanent Data.......D
Amber Crosses "XX" on the SD.......E
Amber dashes on the SD.......F

DSC-31-25 ECAM Sequence

DSC-31-25-10 General

General.......A

DSC-31-25-20 Example

1 - The Ecam Detects No Failure.......A
2 - The Ecam Detects A Failure.......B
2 - The ECAM Detects a Failure.......C
3 - The Flight Crew Follows the Instruction Displayed on the E/WD.......D
4 - One of the Pilots Pushes the CLR Pushbutton on The ECP.......E
4 - One of the Pilots Pushes the CLR Pushbutton on the ECP.......F
5 - One of the Pilots Pushes the CLR Pushbutton a Second Time.......G
6 - One of the Pilots Pushes the CLR Pushbutton a Third Time.......H

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DSC-31-27 OEB Reminder

General........A
Description........B

DSC-31-30 ECAM Controls

ECAM Control Panel........A
Switching Panel........B
Attention Getters........C
Memo Display........D

DSC-31-40 Indications on PFD

General........A
Specific Ground Indications........B
Attitude Data........C
Airspeed........D
Altitude........E
Altitude (CONT'D)........F
Vertical Speed........G
Heading........H
Flight Path Vector........I
Guidance........J
Trajectory Deviation........K
Flight Mode Annunciator........L
Tailstrike Pitch Limit Indicator ✳ ....M
Altitude Alert........N
Flags and Messages Displayed on PFD........O

DSC-31-45 Indications on ND

General........A
ROSE Modes........B
ROSE LS Mode........C
Rose VOR Mode........D
ROSE NAV Mode/ARC Mode........E
Plan Mode........F
Weather Radar indications........G
PWS ✳ indications........H
EGPWS........I
GPWS........J
Flags and Messages Displayed on ND........K

Continued on the following page

Continued from the previous page

DSC-31-50 EFIS Controls

EFIS Control Panel....A
Other EFIS Controls....B
Chronometer....C

DSC-31-55 Clock

DSC-31-55-10 General

General....A

DSC-31-55-20 Controls and Indicators

General....A
Operation in Internal Mode....B
Updating Day, Month and Year....C
Updating of Hour and Minute....D

DSC-31-60 FLT Recorders

DSC-31-60-10 Flight Data Recording System

Description....A

DSC-31-60-20 Controls and Indicators

Overhead Panel....A
Pedestal....B

DSC-31-60-30 Aircraft Integrated Data System

Description....A
Controls On Pedestal....B

Localization Title	Toc Index	ID	Reason
DSC-31-10 Audio Indicators - RETARD RETARD	F	5	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.**
			Layout modification, no technical change.
			Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.
DSC-31-10 Audio Indicators - RETARD RETARD	F	10	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.**
			Layout modification, no technical change.
			Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.
DSC-31-10 Audio Indicators - RETARD RETARD	F	15	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.**
			Layout modification, no technical change.
			Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.
DSC-31-10 Audio Indicators - RETARD RETARD	F	21	**Revision of the MEANING and DURATION columns, in order to clarify the condition of the RETARD-RETARD audio indicator.**
			Layout modification, no technical change.
			Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.
DSC-31-25-20 3 - The Flight Crew Follows the Instruction Displayed on the E/WD	D	4	**Layout modification, no technical change.**
DSC-31-25-20 3 - The Flight Crew Follows the Instruction Displayed on the E/WD	D	5	**Update of the illustration in order to replace "3000 PSI" by "0 PSI" for the Blue hydraulic system pressure in accordance with the SD page.**
DSC-31-30 Switching Panel	B	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-31-30 Switching Panel	B	4	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-31-30 Memo Display	D	6	**Correction of the ECAM memo from "SWITCHING PNL" to "SWITCHG PNL" in order to reflect the actual indication on ECAM.**
DSC-31-40 General	A	1	**Update of DUref link. No technical change.**
DSC-31-40 General	A	3	**Update of DUref link. No technical change.**

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Localization Title	Toc Index	ID	Reason
DSC-31-40 Trajectory Deviation - Non Precision Approach using FLS	K	15	Documentation update: Addition of "Trajectory Deviation - Non Precision Approach using FLS" documentary unit
DSC-31-45 ROSE LS Mode	C	4	Documentation update: Addition of "ROSE LS Mode" documentary unit
DSC-31-45 FLS Beam	E	7	Documentation update: Addition of "FLS Beam" documentary unit
DSC-31-45 Plan Mode	F	8	Documentation update: Addition of "Plan Mode" documentary unit
DSC-31-05-10 Introduction	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-30 Display Unit (DU)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-30 Display Management Computer (DMC)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-30 EIS Block Diagram	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-50 Reconfiguring the Display Management Computer (DMC)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 General	F	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 Failure of a DU	G	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 Feedback Messages	H	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-05-60 DU Reset	J	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 ECAM DU Arrangement	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - WINDSHEAR	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - RETARD RETARD	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-31-10 Audio Indicators - WINDSHEAR	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - RETARD RETARD	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - WINDSHEAR	F	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - RETARD RETARD	F	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - PITCH, PITCH	F	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - TRIPLE CLICK	F	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - WINDSHEAR	F	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - RETARD RETARD	F	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - PITCH, PITCH	F	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - STOP RUDDER INPUT	F	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-10 Audio Indicators - BANK BANK	F	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-15 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-15 Memos - TO and LDG Memos	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-15 Configuration Warnings	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-20 System Pages	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-31-20 Permanent Data	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 1 - The Ecam Detects No Failure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 2 - The ECAM Detects a Failure	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 3 - The Flight Crew Follows the Instruction Displayed on the E/WD	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 4 - One of the Pilots Pushes the CLR Pushbutton on the ECP	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 5 - One of the Pilots Pushes the CLR Pushbutton a Second Time	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-25-20 6 - One of the Pilots Pushes the CLR Pushbutton a Third Time	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-27 Description	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-30 ECAM Control Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-30 Switching Panel	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-30 Memo Display	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 General	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Attitude Data	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Airspeed	D	5	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-31-40 Airspeed	D	6	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Altitude	E	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Altitude	E	8	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098.
DSC-31-40 Altitude	E	9	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.

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Continued from the previous page

Localization Title	Toc Index	ID	Reason
DSC-31-40 Altitude (CONT'D)	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Vertical Speed	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Heading	H	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Trajectory Deviation - ILS Approach (CONT'D)	K	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Trajectory Deviation - RNP-RNAV Non Precision Approach	K	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40 Altitude Alert	N	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40	O	17	Effectivity update: The information now also applies to MSN 05947, 05987, 06634, 06871, 07081, 07098, 08495, 08596, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40	O	18	Effectivity update: The information now also applies to MSN 02321, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-40	O	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 ROSE Modes	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 ROSE LS Mode	C	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098,

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Localization Title	Toc Index	ID	Reason
			08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-31-45 Cross Track Error	E	5	Effectivity update: The information now also applies to MSN 11531.
DSC-31-45 Cross Track Error	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-31-45 Plan Mode	F	9	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
DSC-31-45 EGPWS	I	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45 Flags and Messages Displayed on ND	K	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-31-45 Flags and Messages Displayed on ND	K	12	Effectivity update: The information now also applies to MSN 11531.
DSC-31-45	K	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45	K	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-45	K	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-31-50	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-55-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-55-20 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-55-20 Operation in Internal Mode	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-60-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-31-60-30 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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INTRODUCTION

Ident.: DSC-31-05-10-00001182.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

The Electronic Instrument System (EIS) presents data on six identical Display Units (DUs):

- The Electronic Flight Instrument System (EFIS) displays mostly flight parameters and navigation data on the Primary Flight Displays (PFDs) and Navigation Displays (NDs).
- The Electronic Centralized Aircraft Monitor (ECAM) presents data on the Engine/Warning Display (E/WD) and System Display (SD) :
  - Primary engine indications, fuel quantity, flap and slat position
  - Warning and caution alerts, or memos
  - Synoptic diagrams of aircraft systems, and status messages
  - Permanent flight data

INTRODUCTION

Ident.: DSC-31-05-10-00001182.0002001 / 09 OCT 14
1 **Applicable to: MSN 08495-09324, 10949-11597**

The Electronic Instrument System (EIS) presents data on six identical Display Units (DUs):

- The Electronic Flight Instrument System (EFIS) displays mostly flight parameters and navigation data on the Primary Flight Displays (PFDs) and Navigation Displays (NDs).
- The Electronic Centralized Aircraft Monitor (ECAM) presents data on the Engine/Warning Display (E/WD) and System Display (SD) :
  - Primary engine indications, fuel quantity, flap and slat position, bleed air configuration
  - Warning and caution alerts, or memos
  - Synoptic diagrams of aircraft systems, and status messages
  - Permanent flight data

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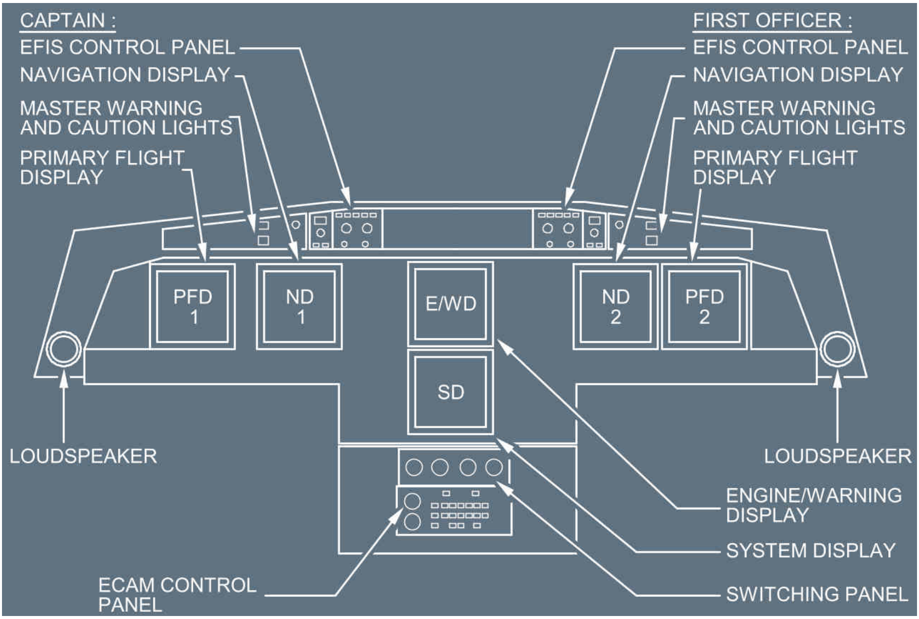
COCKPIT ARRANGEMENT

Ident.: DSC-31-05-20-00001183.0001001 / 09 OCT 12
Applicable to: ALL


CAPTAIN :
EFIS CONTROL PANEL
NAVIGATION DISPLAY
MASTER WARNING AND CAUTION LIGHTS
PRIMARY FLIGHT DISPLAY
FIRST OFFICER :
EFIS CONTROL PANEL
NAVIGATION DISPLAY
MASTER WARNING AND CAUTION LIGHTS
PRIMARY FLIGHT DISPLAY
PFD 1
ND 1
E/WD
ND 2
PFD 2
SD
LOUDSPEAKER
LOUDSPEAKER
ENGINE/WARNING DISPLAY
SYSTEM DISPLAY
SWITCHING PANEL
ECAM CONTROL PANEL

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DISPLAY UNIT (DU)

Ident.: DSC-31-05-30-00001184.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The instrument panels have six identical units.
These DUs are full-color cathode ray tubes.

DISPLAY UNIT (DU)

Ident.: DSC-31-05-30-00001184.0002001 / 21 MAR 16
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The instrument panels have six identical units.
These DUs are full-color Liquid Crystal Displays (LCD).

DISPLAY MANAGEMENT COMPUTER (DMC)

Ident.: DSC-31-05-30-00001185.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Three identical Display Management Computers acquire and process all the signals received from sensors and other computers to generate the images to be displayed on the primary flight displays, navigation displays, engine/warning display, and system display.
Each DMC has two independent channels : An EFIS channel and an ECAM channel. Each DMC is able to simultaneously drive one PFD, one ND, and either one of the ECAMs in its engine warning or system status mode.

DISPLAY MANAGEMENT COMPUTER (DMC)

Ident.: DSC-31-05-30-00001185.0002001 / 20 DEC 10
2 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Three identical Display Management Computers (DMCs) obtain data from the different sensors and computers, and send it to the display units. The display units then generate and display the applicable images. Each DMC has a single DMC channel, and can simultaneously supply one PFD, one ND and both ECAM display units (E/WD and SD).

SYSTEM DATA ACQUISITION CONCENTRATOR (SDAC)

Ident.: DSC-31-05-30-00001186.0001001 / 21 MAR 16
Applicable to: ALL

The two identical SDACs acquire data, then generate signals. Some of these signals go to the three DMCs, which use them to generate displays of system pages and engines parameters. Others go to the flight warning computers, which use them to generate ECAM messages and aural alerts.

FLIGHT WARNING COMPUTER (FWC)

Ident.: DSC-31-05-30-00001187.0001001 / 13 JAN 14
Applicable to: ALL

The two identical FWCs generate alert messages, memos, aural alerts, and synthetic voice messages. For this purpose they acquire data:
- Directly from aircraft sensors, or systems, to generate red warnings
- Through the SDACs to generate amber cautions.

The ECAM display units display the alert messages generated by the FWCs.

The FWCs also generate:
- Radio height callouts
- Decision height callouts
- Landing distance and landing speed increments.

ATTENTION - GETTERS

Ident.: DSC-31-05-30-00001188.0001001 / 21 MAR 16
Applicable to: ALL

The FWCs also drive the attention-getters. Each pilot has a set of these on the panel under the glareshield. They are :
- A master warning light, that flashes “MASTER WARN” in red, for red warnings.
- A master caution light, that illuminates “MASTER CAUT” in amber, for amber cautions.

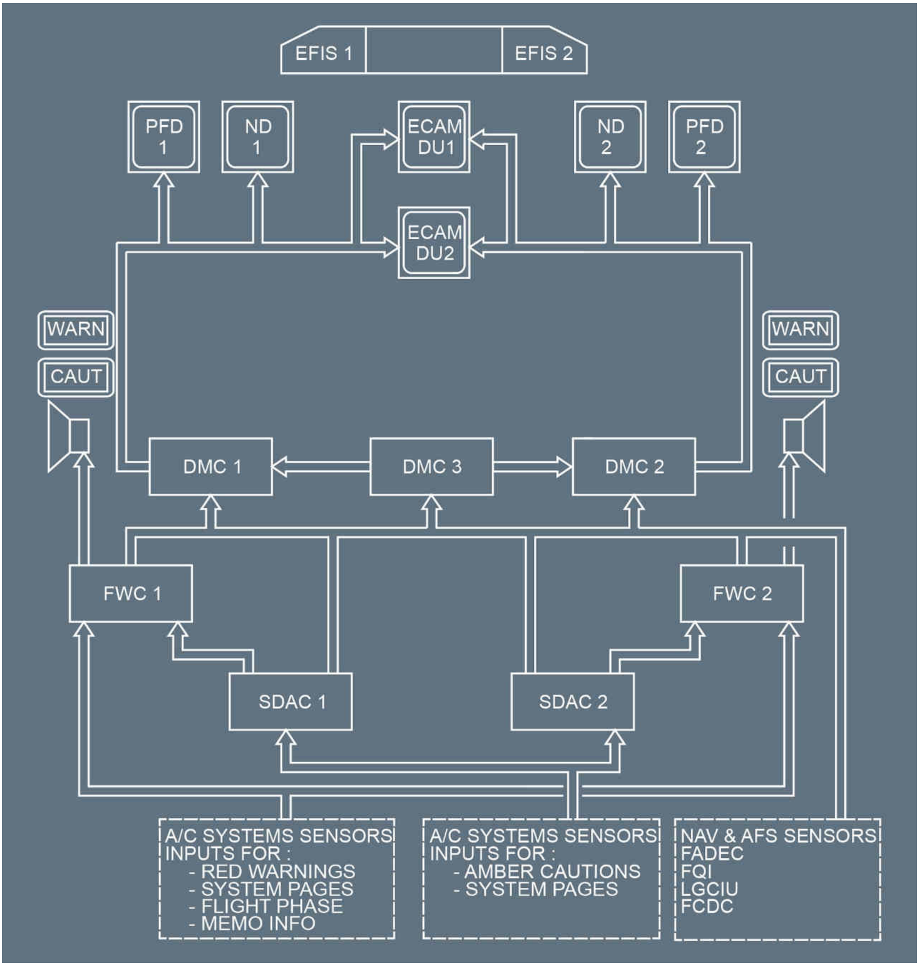
LOUDSPEAKER

Ident.: DSC-31-05-30-00001189.0001001 / 21 MAR 16
Applicable to: ALL

The communications loudspeakers announce aural alerts and voice messages, and do so even when they are turned off.

EIS BLOCK DIAGRAM

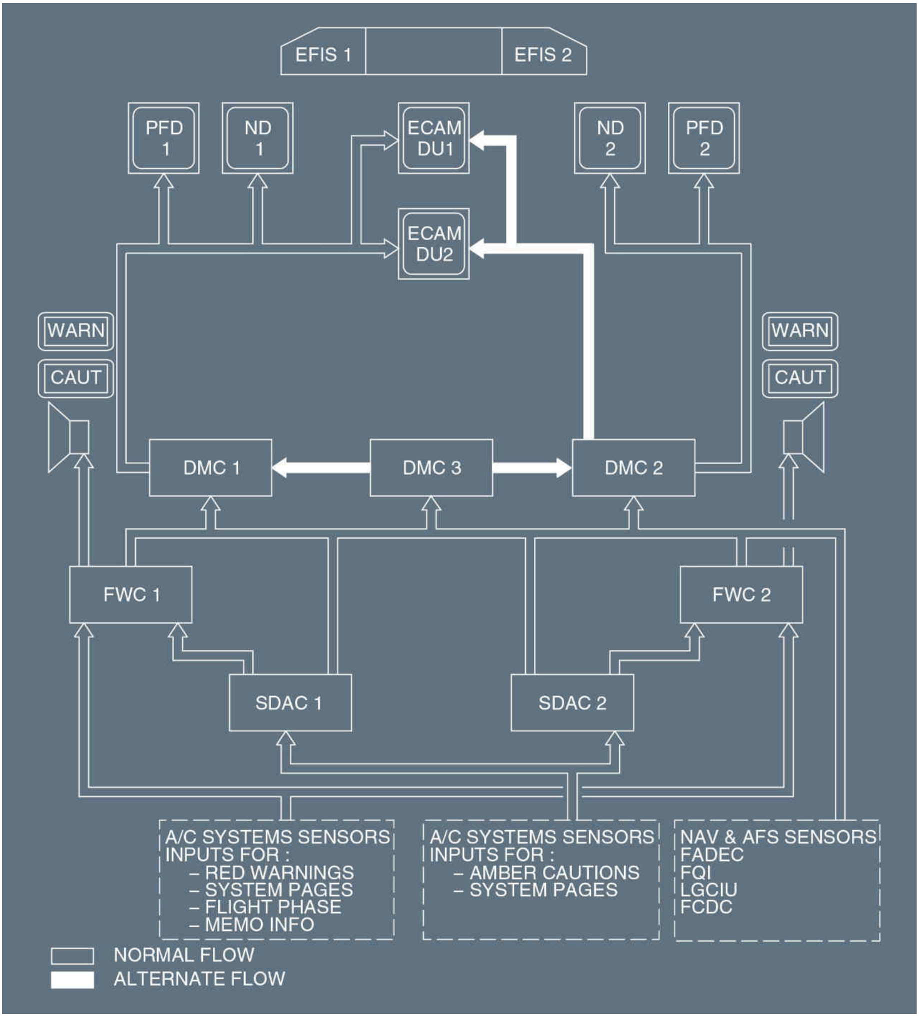
Ident.: DSC-31-05-30-00001190.0001001 / 06 JUL 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


EFIS 1
EFIS 2
PFD 1
ND 1
ECAM DU1
ECAM DU2
ND 2
PFD 2
WARN
CAUT
WARN
CAUT
DMC 1
DMC 3
DMC 2
FWC 1
FWC 2
SDAC 1
SDAC 2
A/C SYSTEMS SENSORS INPUTS FOR :
- RED WARNINGS
- SYSTEM PAGES
- FLIGHT PHASE
- MEMO INFO
A/C SYSTEMS SENSORS INPUTS FOR :
- AMBER CAUTIONS
- SYSTEM PAGES
NAV & AFS SENSORS
FADEC
FQI
LGCIU
FCDC

EIS BLOCK DIAGRAM

Ident.: DSC-31-05-30-00001190.0002001 / 06 JUL 17

3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


EFIS 1
EFIS 2
PFD 1
ND 1
ECAM DU1
ECAM DU2
ND 2
PFD 2
WARN
CAUT
WARN
CAUT
DMC 1
DMC 3
DMC 2
FWC 1
FWC 2
SDAC 1
SDAC 2
A/C SYSTEMS SENSORS INPUTS FOR :
– RED WARNINGS
– SYSTEM PAGES
– FLIGHT PHASE
– MEMO INFO
A/C SYSTEMS SENSORS INPUTS FOR :
– AMBER CAUTIONS
– SYSTEM PAGES
NAV & AFS SENSORS
FADEC
FQI
LGCIU
FCDC
NORMAL FLOW
ALTERNATE FLOW

ECAM CONTROL PANEL (ECP)

Ident.: DSC-31-05-40-00001191.0001001 / 21 MAR 16
Applicable to: ALL

The ECAM Control Panel, located on the pedestal, includes :

- Such E/WD controls, as CLR, STS, and the brightness control knob.
- Such SD controls, as ENG, BLEED, PRESS..., system page selector, and the brightness control knob.

EIS DMC SWITCHING SELECTOR

Ident.: DSC-31-05-40-00001192.0001001 / 22 MAR 16
Applicable to: ALL

A switch near the center of the SWITCHING panel which is located just above the ECAM control panel, enables the flight crew to replace the Captain or First Officer's Display Management Computer (DMC 1, or DMC 2) by DMC 3.

ECAM/ND SWITCHING

Ident.: DSC-31-05-40-00001193.0001001 / 21 MAR 16
Applicable to: ALL

A switch on the right-hand side of the SWITCHING panel enables the flight crew to transfer the ECAM System Display to either the Captain or First Officer's Navigation Display.

EFIS SWITCHING

Ident.: DSC-31-05-40-00001194.0001001 / 21 MAR 16
Applicable to: ALL

A PFD/ND XFR pushbutton on each side console enables the pilot to swap displays to the respective onside DUs.

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RECONFIGURING THE DISPLAY MANAGEMENT COMPUTER (DMC)

Ident.: DSC-31-05-50-00001195.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

In normal operation, each DMC drives the following Display Units :

- DMC 1 drives the CAPT PFD, CAPT ND and the upper ECAM DUs.
- DMC 2 drives the F/O PFD and F/O ND, and the lower ECAM DU.
- DMC 3 is on standby.

If a DMC fails (corresponding DU shows a diagonal line), the flight crew can replace DMC 1 or 2 with DMC 3 by turning the EIS DMC switch on the SWITCHING panel to “CAPT 3” or “F/O 3”.

RECONFIGURING THE DISPLAY MANAGEMENT COMPUTER (DMC)

Ident.: DSC-31-05-50-00001195.0002001 / 21 MAR 16
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

In normal operation, each DMC drives the following Display Units :

- DMC 1 drives the CAPT PFD, CAPT ND and the ECAM DUs.
- DMC 2 drives the F/O PFD and F/O ND.
- DMC 3 is on standby, ready to drive any DU.

If DMC 1 or 2 fails (the “INVALID DATA” message is displayed on the DUs), the crew manually selects the DMC 3 source (“CAPT 3” or “F/O 3”).
If DMC 1 fails (or DMC 3, if “CAPT 3” was selected), DMC 2 automatically drives the ECAM.

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FAILURE OF UPPER ECAM DU (OR CTL/BRIGHTNESS KNOB TURNED TO OFF)

Ident.: DSC-31-05-60-00001196.0001001 / 21 MAR 16
Applicable to: ALL

If the upper ECAM display fails, or is switched off :
- The engine/warning page automatically replaces the system/status page on the lower ECAM DU.

The flight crew can display the system/status page by :
- Using the “ECAM/ND XFR“ switch, on the SWITCHING panel, to move it to a Navigation Display Unit (NDU), or
- Pushing and holding (for a maximum of 3 min) the related system page pushbutton, on the ECAM control panel, to temporarily display it on the lower ECAM DU (instead of the engine/warning page).

FAILURE OF LOWER ECAM DU (OR CTL/BRIGHTNESS KNOB TURNED TO OFF)

Ident.: DSC-31-05-60-00001197.0001001 / 21 MAR 16
Applicable to: ALL

If the lower ECAM display fails, or is switched off, the flight crew can display the system/status page by :
- Using the "ECAM/ND XFR" switch, on the SWITCHING panel, to display it on the NDU, or
- Pushing and holding (for a maximum of 3 min) the related system page pushbutton, on the ECAM control panel, to temporarily display it on the upper ECAM DU (instead of the engine/warning page).

FAILURE OF BOTH ECAM DUs

Ident.: DSC-31-05-60-00001198.0001001 / 21 MAR 16
Applicable to: ALL

If both ECAM displays fail, the flight crew may :
- Use the "ECAM/ND XFR", on the SWITCHING panel, to display the engine/warning page on a navigation display and, if needed,
- Push and hold (for a maximum of 3 min) the related system page pushbutton, on the ECAM control panel, to temporarily display the system/status page on an ND.

PFDU/NDU RECONFIGURATION

Ident.: DSC-31-05-60-00001199.0001001 / 21 MAR 16
Applicable to: ALL

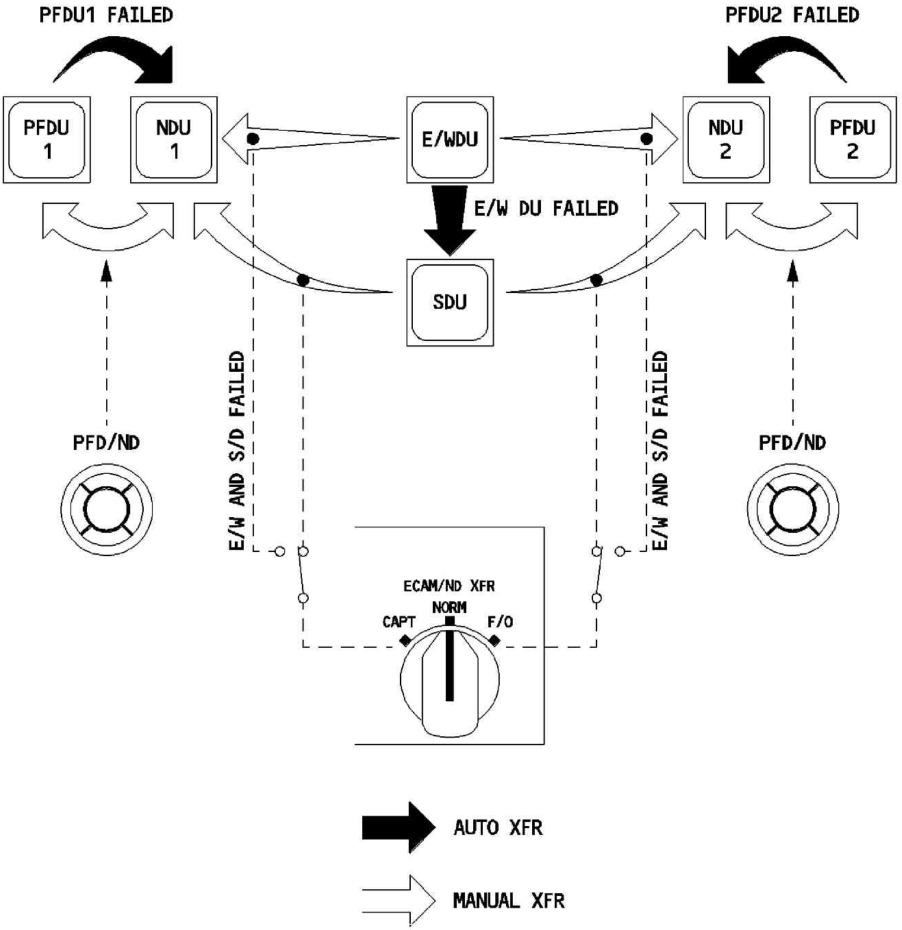
If a PFDU fails, the system automatically transfers the PFD image to the NDU.

The pilot can also make this transfer manually by :
- turning the PFD ON-OFF/brightness control OFF, or
- pressing the PFD/ND/XFR pushbutton, which cross-changes the images between the PFDU and the NDU.

If an NDU fails, the pilot can use the PFD/ND/XFR pushbutton to transfer the ND image to the PFDU.

DU RECONFIGURATION

Ident.: DSC-31-05-60-00001200.0001001 / 21 MAR 16
Applicable to: ALL


PFDU1 FAILED
PFDU2 FAILED
PFDU 1
NDU 1
E/WDU
NDU 2
PFDU 2
E/W DU FAILED
SDU
E/W AND S/D FAILED
E/W AND S/D FAILED
PFD/ND
PFD/ND
ECAM/ND XFR
CAPT
NORM
F/O
AUTO XFR
MANUAL XFR

GENERAL

Ident.: DSC-31-05-60-00012844.0001001 / 20 DEC 10
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

These messages are displayed on either the EFIS or the ECAM Display Unit (DU) depending on the current EFIS or ECAM configuration.

FAILURE OF A DU

Ident.: DSC-31-05-60-00012846.0001001 / 20 DEC 10
2 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

If a DU fails, the flight crew may find one of the following displays:
- A blank screen with an “F” letter in amber, or
- A distorted display, or
- A blank screen with the “INVALID DISPLAY UNIT” message in amber.

FEEDBACK MESSAGES

Ident.: DSC-31-05-60-00012847.0001001 / 20 DEC 10
3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The DU displays the following messages in amber when the Display Management Computer (DMC) detects a discrepancy between the parameters obtained by the DMC and the operational parameters displayed on the DU:
- ”CHECK CAPT PFD” (“CHECK F/O PFD”) if the discrepancy concerns the PFD parameters
- ”CHECK CAPT ND” (“CHECK F/O ND”) if the discrepancy concerns the ND parameters
- ”CHECK EWD” if the discrepancy concerns the E/WD parameters
- ”CHECK SD” if the discrepancy concerns the SD parameters.

In addition, if the aircraft is on ground, the “DU NOT MONITORED” message is displayed in amber when there is only one DMC, instead of two DMCs, that provides the affected DU with feedback information.
This message means that there is either a DMC test in progress or that there is an EIS failure.
In the case of an EIS failure, a maintenance action is necessary.

SIDE1/SIDE2 DISCREPANCY MESSAGES

Ident.: DSC-31-05-60-00012848.0003001 / 04 NOV 21
Applicable to: ALL

The DU displays the following messages along with a caution on the ECAM E/WD.

CHECK ATT	Attitude data displayed on both PFDs differ by more than 5 ° in pitch and/or roll.

CHECK ALT	Altitude data displayed on both PFDs differ by: - More than 250 ft when the flight crew selects a QNH different from STD, or - More than 500 ft when the flight crew selects a QNH STD. *Note:* *The caution and the CHECK ALT message disappear, when the CAPT EFIS and the F/O EFIS barometer references disagree.*
CHECK HDG	Heading data displayed on both PFDs and NDs differ by more than 5 °. *Note:* - *The CHECK HDG message flashes for a few seconds on the NDs, and then remains steady.* - *If the flight crew selects the PLAN mode on the NDs, the message is not displayed.*

DU RESET

Ident.: DSC-31-05-60-00012849.0001001 / 20 DEC 10

4 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

In the case of a DU reset, the message “SELF TEST IN PROGRESS” can be displayed in green and/or the message “WAITING FOR DATA” may be displayed in green during the EIS initialization.

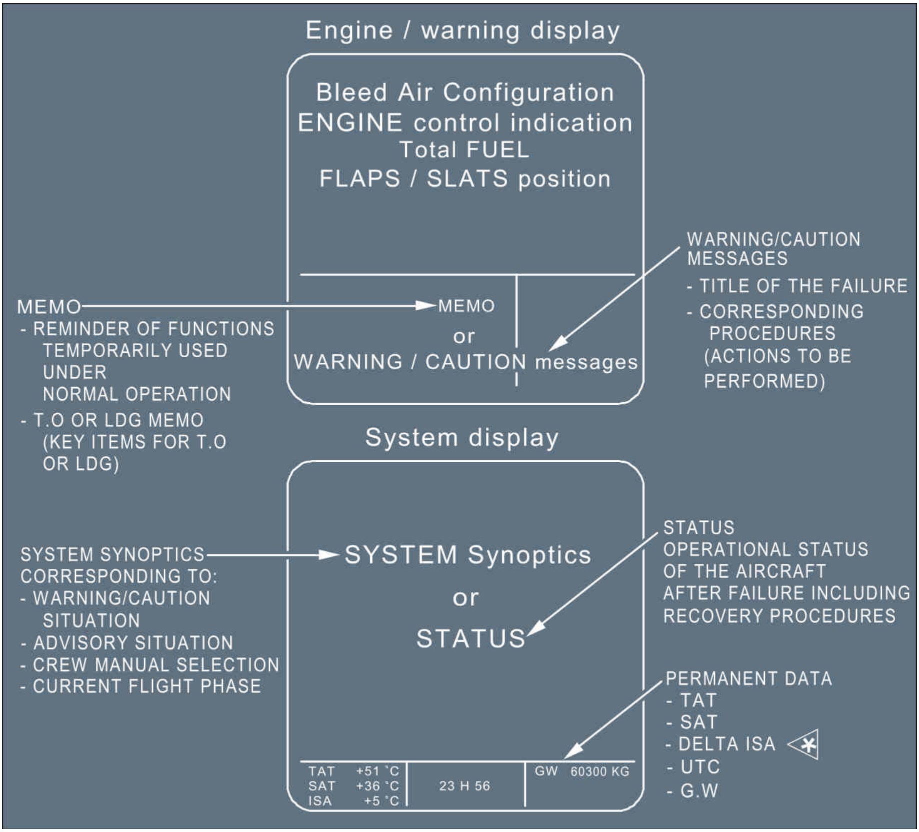
Intentionally left blank

ECAM DU ARRANGEMENT

Ident.: DSC-31-10-00017519.0002001 / 21 MAR 16

1 **Applicable to: MSN 08495-09324, 10949-11597**

The ECAM has two display units:
- One for the engine/warning display (E/WD).
- One for the system/status display (SD).


Engine / warning display
Bleed Air Configuration
ENGINE control indication
Total FUEL
FLAPS / SLATS position
MEMO
or
WARNING / CAUTION messages
MEMO
- REMINDER OF FUNCTIONS TEMPORARILY USED UNDER NORMAL OPERATION
- T.O OR LDG MEMO (KEY ITEMS FOR T.O OR LDG)
WARNING/CAUTION MESSAGES
- TITLE OF THE FAILURE
- CORRESPONDING PROCEDURES (ACTIONS TO BE PERFORMED)
System display
SYSTEM Synoptics
or
STATUS
SYSTEM SYNOPTICS CORRESPONDING TO:
- WARNING/CAUTION SITUATION
- ADVISORY SITUATION
- CREW MANUAL SELECTION
- CURRENT FLIGHT PHASE
STATUS
OPERATIONAL STATUS OF THE AIRCRAFT AFTER FAILURE INCLUDING RECOVERY PROCEDURES
PERMANENT DATA
- TAT
- SAT
- DELTA ISA
- UTC
- G.W
TAT +51 °C
SAT +36 °C
ISA +5 °C
23 H 56
GW 60300 KG

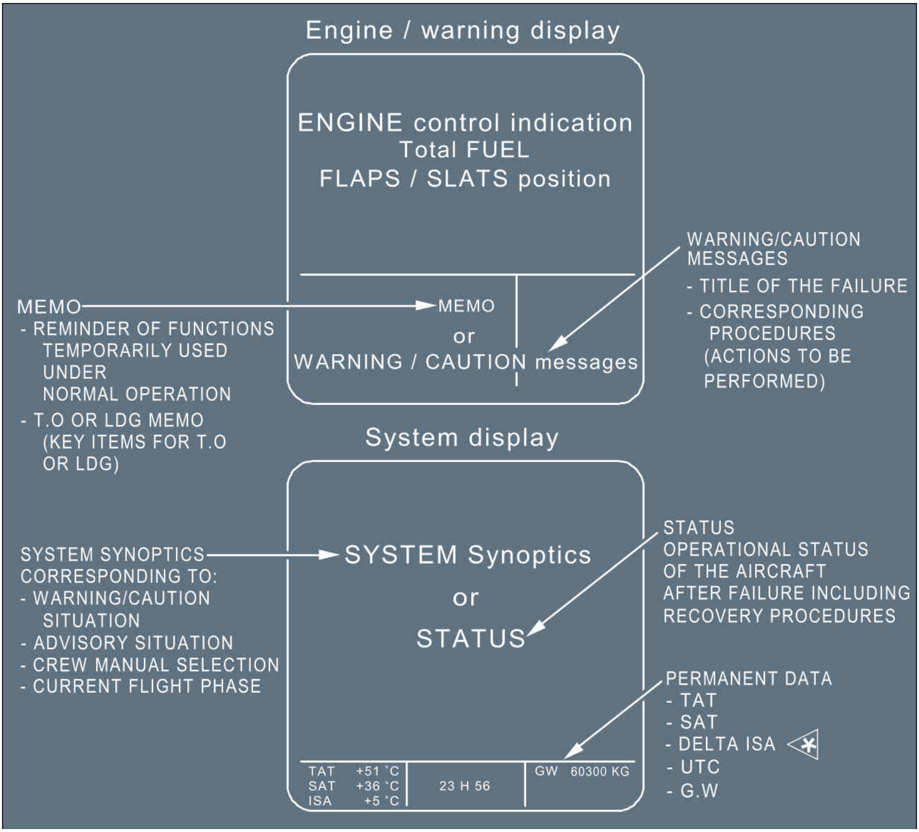
ECAM DU ARRANGEMENT

Ident.: DSC-31-10-00017519.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

The ECAM has two display units:

- One for the engine/warning display (E/WD).
- One for the system/status display (SD).


Engine / warning display
ENGINE control indication
Total FUEL
FLAPS / SLATS position
MEMO
- REMINDER OF FUNCTIONS TEMPORARILY USED UNDER NORMAL OPERATION
- T.O OR LDG MEMO (KEY ITEMS FOR T.O OR LDG)
MEMO
or
WARNING / CAUTION messages
WARNING/CAUTION MESSAGES
- TITLE OF THE FAILURE
- CORRESPONDING PROCEDURES (ACTIONS TO BE PERFORMED)
System display
SYSTEM SYNOPTICS CORRESPONDING TO:
- WARNING/CAUTION SITUATION
- ADVISORY SITUATION
- CREW MANUAL SELECTION
- CURRENT FLIGHT PHASE
SYSTEM Synoptics
or
STATUS
STATUS
OPERATIONAL STATUS OF THE AIRCRAFT AFTER FAILURE INCLUDING RECOVERY PROCEDURES
PERMANENT DATA
- TAT
- SAT
- DELTA ISA
- UTC
- G.W
TAT +51 °C
SAT +36 °C
ISA +5 °C
23 H 56
GW 60300 KG

COLOR CODE

Ident.: DSC-31-10-00001202.0001001 / 21 MAR 16
Applicable to: ALL

The ECAM display uses a color code that indicates the importance of the failure or the indication.

RED	:	The configuration or failure requires immediate action.
AMBER	:	The flight crew should be aware of the configuration or failure, but need not take immediate action.
GREEN	:	The item is operating normally.
WHITE	:	These titles and remarks guide the flight crew, as they execute various procedures.
BLUE	:	These are actions to be carried out, or limitations.
MAGENTA	:	These are particular messages that apply to particular pieces of equipment or situations (inhibition messages, for example).

WARNING/CAUTION CLASSIFICATION

Ident.: DSC-31-10-00001203.0001001 / 21 MAR 16
Applicable to: ALL

	LEVEL	SIGNIFICATION	AURAL	VISUAL
FAILURE MODE	Level 3	Red warning : The configuration, or failure requires immediate action : - Aircraft in dangerous configuration, or limit flight conditions (eg: stall, o/speed) - System failure altering flight safety (eg : Eng fire, excess cab alt)	Continuous Repetitive Chime (CRC) or specific sound or synthetic voice	- MASTER WARN light red flashing or specific red light - Warning message (red) on E/WD - Automatic call of the relevant system page on the S/D [(1)].
	Level 2	Amber caution : The flight crew should be aware of the configuration or failure, but does not need to take any immediate action. However, time and situation permitting, these cautions should be considered without delay to prevent any further degradation of the affected system : - System failure without any direct consequence on the flight safety (eg: HYD G SYS LO PR)	Single Chime (SC)	- MASTER CAUT light amber steady - Caution message (amber) on E/WD - Automatic call of the relevant system page on the S/D [(1)].
	Level 1	Amber caution : Requires crew monitoring : - Failures leading to a loss of redundancy or system degradation (eg : FCDC fault)	NONE	- Caution message (amber) on E/WD generally without procedure.
INFORMATION	ADVISORY	System parameters monitoring	NONE	- Automatic call of the relevant system page on the S/D. The affected parameter pulses green.
	MEMO	Information : Recalls normal or automatic selection of functions which are temporarily used	NONE	- Green, Amber, or Magenta message on E/WD

(1) *except in some cases*

PRIORITY RULES

Ident.: DSC-31-10-00001204.0001001 / 17 MAR 17
Applicable to: ALL

There are three priority levels for warnings and cautions :
- A level 3 warning has priority over a level 2 caution which has priority over a level 1 caution.
The FWC observes these priorities.

INFORMATION PROVIDED WHEN NEEDED

One of the main advantages of the ECAM is that it displays applicable information to the flight crew, on an "as needed" basis. The following outlines the ECAM's operating modes:

- **Normal Mode**:
  Automatically displays systems and memos, in accordance with the flight phase.
- **Failure Mode**:
  Automatically displays the appropriate emergency/abnormal procedures, in addition to their associated system synoptic.
- **Advisory Mode**:
  Automatically displays the appropriate system synoptic, associated with a drifting parameter.
- **Manual Mode**:
  Enables the flight crew to manually select any system synoptic via the ECAM Control Panel (ECP).

Most warnings and cautions are inhibited during critical phases of flight (T/O INHIBIT – LDG INHIBIT), because most system failures will not affect the aircraft's ability to continue a takeoff or landing.

TYPES OF FAILURES

Ident.: DSC-31-10-00001205.0001001 / 21 MAR 16
Applicable to: ALL

Independent	:	a failure that affects an isolated system or item of equipment without degrading the performance of others in the aircraft.
Primary	:	a failure of a system or an item of equipment that costs the aircraft the use of other systems or items of equipment.
Secondary	:	the loss of a system or an item of equipment resulting from a primary failure.

AUDIO INDICATORS

Applicable to: MSN 01143-01246, 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION *(a)*
Ident.: DSC-31-10-A-00015446.0001001 / 22 JUL 16			
CONTINUOUS REPETITIVE CHIME	RED WARNINGS	PERMANENT	Press MASTER WARN lt
Ident.: DSC-31-10-A-00015447.0001001 / 22 JUL 16			
SINGLE CHIME	AMBER CAUTION	0.5 s	
Ident.: DSC-31-10-A-00015448.0001001 / 04 FEB 14			
CAVALRY CHARGE	A/P DISCONNECTION BY TAKE OVER pb	1.5 s	Second push on TAKE OVER pb
	A/P DISCONNECTION DUE TO FAILURE	PERMANENT	Press MASTER WARN lt or TAKE OVER pb
Ident.: DSC-31-10-A-00015449.0006001 / 22 JUL 16			
2 TRIPLE CLICK	Landing capability downgrade or some cases of mode reversion	0.5 s (3 pulses)	
Ident.: DSC-31-10-A-00015450.0001001 / 04 FEB 14			
CRICKET + “STALL” message (synthetic voice)	STALL	PERMANENT	NIL
Ident.: DSC-31-10-A-00015451.0001001 / 23 JUN 15			
BUZZER	CABIN CALL	3 s	NIL
	EMER CABIN CALL	3 s REPEATED 3 TIMES	NIL
	MECH CALL	As long as outside pb pressed	Press MASTER CAUT pb
Ident.: DSC-31-10-A-00015452.0001001 / 23 JUN 15			
CONTINUOUS BUZZER	SELCAL CALL	PERMANENT	Press RESET key on ACP or press MASTER CAUT pb

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AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]

Ident.: DSC-31-10-A-00015453.0002001 / 06 APR 17

3 "WINDSHEAR" (synthetic voice)	WINDSHEAR	REPEATED 3 TIMES	NIL
"GO AROUND WINDSHEAR AHEAD" (synthetic voice)	Windshear ahead detected during the landing phase	PERMANENT	NIL
"WINDSHEAR AHEAD" (twice) (synthetic voice)	Windshear ahead detected during the takeoff phase	PERMANENT	NIL
"MONITOR RADAR DISPLAY" (synthetic voice)	Windshear ahead detected caution message	PERMANENT	NIL

Ident.: DSC-31-10-A-00015454.0001001 / 04 FEB 14

C CHORD	ALTITUDE ALERT (*Refer to DSC-31-40 Altitude Alert*)	1.5 s or PERMANENT	new ALTITUDE selection or press MASTER WARN pb

Ident.: DSC-31-10-A-00015455.0001001 / 21 MAR 16

AUTO CALL OUT (synthetic voice)	HEIGHT ANNOUNCEMENT BELOW 2 500 ft (*Refer to DSC-34-NAV-40-10 Automatic Callout*)	PERMANENT	NIL

Ident.: DSC-31-10-A-00015456.0001001 / 21 MAR 17

GROUND PROXIMITY WARNING (synthetic voice)	(*Refer to DSC-34-SURV-40-10 Overview*)	PERMANENT	NIL

Ident.: DSC-31-10-A-00015457.0001001 / 04 FEB 14

“PRIORITY LEFT” ”PRIORITY RIGHT“ (synthetic voice)	A/P TAKE OVER pb	1 s	NIL

Ident.: DSC-31-10-A-00015458.0001001 / 04 FEB 14

“RETARD" (synthetic voice)	Thrust levers not in IDLE or REVERSE position for landing	ONE TIME at 20 ft (10 ft in autoland with A/THR ON), Then PERMANENT	All Thrust levers are set to IDLE or REVERSE

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AUDIO INDICATORS	**MEANING**	**DURATION**	**AUDIO INDICATOR CANCELLATION** (a)

Ident.: DSC-31-10-A-00015459.0001001 / 02 MAY 23

"RETARD-RETARD" (synthetic voice)	One thrust lever above IDLE after touchdown and the other one in IDLE or REVERSE position	PERMANENT if triggered above 40 kt	All thrust levers are set to IDLE or REVERSE

Ident.: DSC-31-10-A-00015460.0001001 / 04 FEB 14

TCAS (synthetic voice)	(*Refer to DSC-34-SURV-60-20 Aural Messages*)	PERMANENT	NIL

Ident.: DSC-31-10-A-00015461.0001001 / 04 FEB 14

″SPEED, SPEED, SPEED″ (Synthetic voice)	Current thrust is not sufficient to recover a positive flight through pitch control	Every 5 s until thrust is increased	THRUST LEVER(s)

Ident.: DSC-31-10-A-00015463.0001001 / 04 FEB 14

"DUAL INPUT" (synthetic voice)	Both sidesticks are moved simultaneously	Every 5 s	One sidestick deactivated

Ident.: DSC-31-10-A-00015466.0001001 / 04 FEB 14

"STOP RUDDER INPUT" (synthetic voice)	Inappropriate rudder pedal inputs detected in cruise at high speed.	Message repeated at least TWO TIMES	NIL

(a) *The pilot can cancel any audio indicator, by pressing:*
- *The EMER CANC pb on the ECAM control panel, or*
- *The MASTER WARN pushbutton, except for OVERSPEED or L/G NOT DOWN warnings.*

AUDIO INDICATORS

Applicable to: MSN 01251

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]

Ident.: DSC-31-10-A-00015446.0001001 / 22 JUL 16

CONTINUOUS REPETITIVE CHIME	RED WARNINGS	PERMANENT	Press MASTER WARN lt

Ident.: DSC-31-10-A-00015447.0001001 / 22 JUL 16

SINGLE CHIME	AMBER CAUTION	0.5 s	

Ident.: DSC-31-10-A-00015448.0001001 / 04 FEB 14

CAVALRY CHARGE	A/P DISCONNECTION BY TAKE OVER pb	1.5 s	Second push on TAKE OVER pb
	A/P DISCONNECTION DUE TO FAILURE	PERMANENT	Press MASTER WARN lt or TAKE OVER pb

Ident.: DSC-31-10-A-00015449.0011001 / 22 JUL 16

TRIPLE CLICK	Landing capability downgrade or "GPS PRIMARY LOST" in approach, or mode reversion	0.5 s (3 pulses)	

Ident.: DSC-31-10-A-00015450.0001001 / 04 FEB 14

CRICKET + “STALL” message (synthetic voice)	STALL	PERMANENT	NIL

Ident.: DSC-31-10-A-00015451.0001001 / 23 JUN 15

BUZZER	CABIN CALL	3 s	NIL
	EMER CABIN CALL	3 s REPEATED 3 TIMES	NIL
	MECH CALL	As long as outside pb pressed	Press MASTER CAUT pb

Ident.: DSC-31-10-A-00015452.0001001 / 23 JUN 15

CONTINUOUS BUZZER	SELCAL CALL	PERMANENT	Press RESET key on ACP or press MASTER CAUT pb

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AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]
Ident.: DSC-31-10-A-00015453.0002001 / 06 APR 17			
7 "WINDSHEAR" (synthetic voice)	WINDSHEAR	REPEATED 3 TIMES	NIL
"GO AROUND WINDSHEAR AHEAD" (synthetic voice)	Windshear ahead detected during the landing phase	PERMANENT	NIL
"WINDSHEAR AHEAD" (twice) (synthetic voice)	Windshear ahead detected during the takeoff phase	PERMANENT	NIL
"MONITOR RADAR DISPLAY" (synthetic voice)	Windshear ahead detected caution message	PERMANENT	NIL
Ident.: DSC-31-10-A-00015454.0001001 / 04 FEB 14			
C CHORD	ALTITUDE ALERT (*Refer to DSC-31-40 Altitude Alert*)	1.5 s or PERMANENT	new ALTITUDE selection or press MASTER WARN pb
Ident.: DSC-31-10-A-00015455.0001001 / 21 MAR 16			
AUTO CALL OUT (synthetic voice)	HEIGHT ANNOUNCEMENT BELOW 2 500 ft (*Refer to DSC-34-NAV-40-10 Automatic Callout*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015456.0001001 / 21 MAR 17			
GROUND PROXIMITY WARNING (synthetic voice)	(*Refer to DSC-34-SURV-40-10 Overview*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015457.0001001 / 04 FEB 14			
“PRIORITY LEFT” ”PRIORITY RIGHT“ (synthetic voice)	A/P TAKE OVER pb	1 s	NIL
Ident.: DSC-31-10-A-00015458.0001001 / 04 FEB 14			
“RETARD" (synthetic voice)	Thrust levers not in IDLE or REVERSE position for landing	ONE TIME at 20 ft (10 ft in autoland with A/THR ON), Then PERMANENT	All Thrust levers are set to IDLE or REVERSE

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AUDIO INDICATORS	**MEANING**	**DURATION**	**AUDIO INDICATOR CANCELLATION** [a]
Ident.: DSC-31-10-A-00015460.0001001 / 04 FEB 14			
TCAS (synthetic voice)	(*Refer to DSC-34-SURV-60-20 Aural Messages*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015461.0001001 / 04 FEB 14			
″SPEED, SPEED, SPEED″ (Synthetic voice)	Current thrust is not sufficient to recover a positive flight through pitch control	Every 5 s until thrust is increased	THRUST LEVER(s)
Ident.: DSC-31-10-A-00015463.0001001 / 04 FEB 14			
"DUAL INPUT" (synthetic voice)	Both sidesticks are moved simultaneously	Every 5 s	One sidestick deactivated

[a] *The pilot can cancel any audio indicator, by pressing:*
- *The EMER CANC pb on the ECAM control panel, or*
- *The MASTER WARN pushbutton, except for OVERSPEED or L/G NOT DOWN warnings.*

AUDIO INDICATORS

Applicable to: MSN 01459

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]

Ident.: DSC-31-10-A-00015446.0001001 / 22 JUL 16

CONTINUOUS REPETITIVE CHIME	RED WARNINGS	PERMANENT	Press MASTER WARN lt

Ident.: DSC-31-10-A-00015447.0001001 / 22 JUL 16

SINGLE CHIME	AMBER CAUTION	0.5 s	

Ident.: DSC-31-10-A-00015448.0001001 / 04 FEB 14

CAVALRY CHARGE	A/P DISCONNECTION BY TAKE OVER pb	1.5 s	Second push on TAKE OVER pb
	A/P DISCONNECTION DUE TO FAILURE	PERMANENT	Press MASTER WARN lt or TAKE OVER pb

Ident.: DSC-31-10-A-00015449.0006001 / 22 JUL 16

8

TRIPLE CLICK	Landing capability downgrade or some cases of mode reversion	0.5 s (3 pulses)	

Ident.: DSC-31-10-A-00015450.0001001 / 04 FEB 14

CRICKET + “STALL” message (synthetic voice)	STALL	PERMANENT	NIL

Ident.: DSC-31-10-A-00015451.0001001 / 23 JUN 15

BUZZER	CABIN CALL	3 s	NIL
	EMER CABIN CALL	3 s REPEATED 3 TIMES	NIL
	MECH CALL	As long as outside pb pressed	Press MASTER CAUT pb

Ident.: DSC-31-10-A-00015452.0001001 / 23 JUN 15

CONTINUOUS BUZZER	SELCAL CALL	PERMANENT	Press RESET key on ACP or press MASTER CAUT pb

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AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]

Ident.: DSC-31-10-A-00015453.0001001 / 04 FEB 14

"WINDSHEAR" (synthetic voice)	WINDSHEAR	REPEATED 3 TIMES	NIL

Ident.: DSC-31-10-A-00015454.0001001 / 04 FEB 14

C CHORD	ALTITUDE ALERT (*Refer to DSC-31-40 Altitude Alert*)	1.5 s or PERMANENT	new ALTITUDE selection or press MASTER WARN pb

Ident.: DSC-31-10-A-00015455.0001001 / 21 MAR 16

AUTO CALL OUT (synthetic voice)	HEIGHT ANNOUNCEMENT BELOW 2 500 ft (*Refer to DSC-34-NAV-40-10 Automatic Callout*)	PERMANENT	NIL

Ident.: DSC-31-10-A-00015456.0001001 / 21 MAR 17

GROUND PROXIMITY WARNING (synthetic voice)	(*Refer to DSC-34-SURV-40-10 Overview*)	PERMANENT	NIL

Ident.: DSC-31-10-A-00015457.0001001 / 04 FEB 14

“PRIORITY LEFT” ”PRIORITY RIGHT“ (synthetic voice)	A/P TAKE OVER pb	1 s	NIL

Ident.: DSC-31-10-A-00015458.0001001 / 04 FEB 14

“RETARD” (synthetic voice)	Thrust levers not in IDLE or REVERSE position for landing	ONE TIME at 20 ft (10 ft in autoland with A/THR ON), Then PERMANENT	All Thrust levers are set to IDLE or REVERSE

Ident.: DSC-31-10-A-00015459.0001001 / 02 MAY 23

"RETARD-RETARD" (synthetic voice)	One thrust lever above IDLE after touchdown and the other one in IDLE or REVERSE position	PERMANENT if triggered above 40 kt	All thrust levers are set to IDLE or REVERSE

Ident.: DSC-31-10-A-00015460.0001001 / 04 FEB 14

TCAS (synthetic voice)	(*Refer to DSC-34-SURV-60-20 Aural Messages*)	PERMANENT	NIL

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AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION (a)
Ident.: DSC-31-10-A-00015461.0001001 / 04 FEB 14			
″SPEED, SPEED, SPEED″ (Synthetic voice)	Current thrust is not sufficient to recover a positive flight through pitch control	Every 5 s until thrust is increased	THRUST LEVER(s)
Ident.: DSC-31-10-A-00015463.0001001 / 04 FEB 14			
"DUAL INPUT" (synthetic voice)	Both sidesticks are moved simultaneously	Every 5 s	One sidestick deactivated
Ident.: DSC-31-10-A-00015466.0001001 / 04 FEB 14			
11 "STOP RUDDER INPUT" (synthetic voice)	Inappropriate rudder pedal inputs detected in cruise at high speed.	Message repeated at least TWO TIMES	NIL

(a) *The pilot can cancel any audio indicator, by pressing:*
- *The EMER CANC pb on the ECAM control panel, or*
- *The MASTER WARN pushbutton, except for OVERSPEED or L/G NOT DOWN warnings.*

AUDIO INDICATORS

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]
Ident.: DSC-31-10-A-00015446.0001001 / 22 JUL 16			
CONTINUOUS REPETITIVE CHIME	RED WARNINGS	PERMANENT	Press MASTER WARN lt
Ident.: DSC-31-10-A-00015447.0001001 / 22 JUL 16			
SINGLE CHIME	AMBER CAUTION	0.5 s	
Ident.: DSC-31-10-A-00015448.0001001 / 04 FEB 14			
CAVALRY CHARGE	A/P DISCONNECTION BY TAKE OVER pb	1.5 s	Second push on TAKE OVER pb
	A/P DISCONNECTION DUE TO FAILURE	PERMANENT	Press MASTER WARN lt or TAKE OVER pb
Ident.: DSC-31-10-A-00015450.0001001 / 04 FEB 14			
CRICKET + “STALL” message (synthetic voice)	STALL	PERMANENT	NIL
Ident.: DSC-31-10-A-00015451.0001001 / 23 JUN 15			
BUZZER	CABIN CALL	3 s	NIL
	EMER CABIN CALL	3 s REPEATED 3 TIMES	NIL
	MECH CALL	As long as outside pb pressed	Press MASTER CAUT pb
Ident.: DSC-31-10-A-00015452.0001001 / 23 JUN 15			
CONTINUOUS BUZZER	SELCAL CALL	PERMANENT	Press RESET key on ACP or press MASTER CAUT pb
Ident.: DSC-31-10-A-00015454.0001001 / 04 FEB 14			
C CHORD	ALTITUDE ALERT (*Refer to DSC-31-40 Altitude Alert*)	1.5 s or PERMANENT	new ALTITUDE selection or press MASTER WARN pb

Continued on the following page

Continued from the previous page

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [a]
Ident.: DSC-31-10-A-00015455.0001001 / 21 MAR 16			
AUTO CALL OUT (synthetic voice)	HEIGHT ANNOUNCEMENT BELOW 2 500 ft (*Refer to DSC-34-NAV-40-10 Automatic Callout*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015456.0001001 / 21 MAR 17			
GROUND PROXIMITY WARNING (synthetic voice)	(*Refer to DSC-34-SURV-40-10 Overview*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015457.0001001 / 04 FEB 14			
“PRIORITY LEFT” ”PRIORITY RIGHT“ (synthetic voice)	A/P TAKE OVER pb	1 s	NIL
Ident.: DSC-31-10-A-00015458.0001001 / 04 FEB 14			
“RETARD" (synthetic voice)	Thrust levers not in IDLE or REVERSE position for landing	ONE TIME at 20 ft (10 ft in autoland with A/THR ON), Then PERMANENT	All Thrust levers are set to IDLE or REVERSE
Ident.: DSC-31-10-A-00015460.0001001 / 04 FEB 14			
TCAS (synthetic voice)	(*Refer to DSC-34-SURV-60-20 Aural Messages*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015461.0001001 / 04 FEB 14			
″SPEED, SPEED, SPEED″ (Synthetic voice)	Current thrust is not sufficient to recover a positive flight through pitch control	Every 5 s until thrust is increased	THRUST LEVER(s)
Ident.: DSC-31-10-A-00015463.0001001 / 04 FEB 14			
"DUAL INPUT" (synthetic voice)	Both sidesticks are moved simultaneously	Every 5 s	One sidestick deactivated

[a] *The pilot can cancel any audio indicator, by pressing:*
- *The EMER CANC pb on the ECAM control panel, or*
- *The MASTER WARN pushbutton, except for OVERSPEED or L/G NOT DOWN warnings.*

AUDIO INDICATORS

Applicable to: MSN 03222-03229, 03294, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-09324

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]

Ident.: DSC-31-10-A-00015446.0001001 / 22 JUL 16

CONTINUOUS REPETITIVE CHIME	RED WARNINGS	PERMANENT	Press MASTER WARN lt

Ident.: DSC-31-10-A-00015447.0001001 / 22 JUL 16

SINGLE CHIME	AMBER CAUTION	0.5 s	

Ident.: DSC-31-10-A-00015448.0001001 / 04 FEB 14

CAVALRY CHARGE	A/P DISCONNECTION BY TAKE OVER pb	1.5 s	Second push on TAKE OVER pb
	A/P DISCONNECTION DUE TO FAILURE	PERMANENT	Press MASTER WARN lt or TAKE OVER pb

Ident.: DSC-31-10-A-00015449.0006001 / 22 JUL 16

12

TRIPLE CLICK	Landing capability downgrade or some cases of mode reversion	0.5 s (3 pulses)	

Ident.: DSC-31-10-A-00015450.0001001 / 04 FEB 14

CRICKET + “STALL” message (synthetic voice)	STALL	PERMANENT	NIL

Ident.: DSC-31-10-A-00015451.0001001 / 23 JUN 15

BUZZER	CABIN CALL	3 s	NIL
	EMER CABIN CALL	3 s REPEATED 3 TIMES	NIL
	MECH CALL	As long as outside pb pressed	Press MASTER CAUT pb

Ident.: DSC-31-10-A-00015452.0001001 / 23 JUN 15

CONTINUOUS BUZZER	SELCAL CALL	PERMANENT	Press RESET key on ACP or press MASTER CAUT pb

Continued on the following page

Continued from the previous page

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]

Ident.: DSC-31-10-A-00015453.0002001 / 06 APR 17

13 "WINDSHEAR" (synthetic voice)	WINDSHEAR	REPEATED 3 TIMES	NIL
"GO AROUND WINDSHEAR AHEAD" (synthetic voice)	Windshear ahead detected during the landing phase	PERMANENT	NIL
"WINDSHEAR AHEAD" (twice) (synthetic voice)	Windshear ahead detected during the takeoff phase	PERMANENT	NIL
"MONITOR RADAR DISPLAY" (synthetic voice)	Windshear ahead detected caution message	PERMANENT	NIL

Ident.: DSC-31-10-A-00015454.0001001 / 04 FEB 14

C CHORD	ALTITUDE ALERT (*Refer to DSC-31-40 Altitude Alert*)	1.5 s or PERMANENT	new ALTITUDE selection or press MASTER WARN pb

Ident.: DSC-31-10-A-00015455.0001001 / 21 MAR 16

AUTO CALL OUT (synthetic voice)	HEIGHT ANNOUNCEMENT BELOW 2 500 ft (*Refer to DSC-34-NAV-40-10 Automatic Callout*)	PERMANENT	NIL

Ident.: DSC-31-10-A-00015456.0001001 / 21 MAR 17

GROUND PROXIMITY WARNING (synthetic voice)	(*Refer to DSC-34-SURV-40-10 Overview*)	PERMANENT	NIL

Ident.: DSC-31-10-A-00015457.0001001 / 04 FEB 14

“PRIORITY LEFT” ”PRIORITY RIGHT“ (synthetic voice)	A/P TAKE OVER pb	1 s	NIL

Ident.: DSC-31-10-A-00015458.0001001 / 04 FEB 14

“RETARD" (synthetic voice)	Thrust levers not in IDLE or REVERSE position for landing	ONE TIME at 20 ft (10 ft in autoland with A/THR ON), Then PERMANENT	All Thrust levers are set to IDLE or REVERSE

Continued on the following page

Continued from the previous page

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]
Ident.: DSC-31-10-A-00015459.0001001 / 02 MAY 23			
15 "RETARD-RETARD" (synthetic voice)	One thrust lever above IDLE after touchdown and the other one in IDLE or REVERSE position	PERMANENT if triggered above 40 kt	All thrust levers are set to IDLE or REVERSE
Ident.: DSC-31-10-A-00015460.0001001 / 04 FEB 14			
TCAS (synthetic voice)	(*Refer to DSC-34-SURV-60-20 Aural Messages*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015461.0001001 / 04 FEB 14			
″SPEED, SPEED, SPEED″ (Synthetic voice)	Current thrust is not sufficient to recover a positive flight through pitch control	Every 5 s until thrust is increased	THRUST LEVER(s)
Ident.: DSC-31-10-A-00015463.0001001 / 04 FEB 14			
"DUAL INPUT" (synthetic voice)	Both sidesticks are moved simultaneously	Every 5 s	One sidestick deactivated
Ident.: DSC-31-10-A-00015465.0001001 / 04 FEB 14			
16 "PITCH, PITCH" (synthetic voice)	The aircraft pitch attitude is becoming excessive during flare and landing.	one time	NIL
Ident.: DSC-31-10-A-00015466.0001001 / 04 FEB 14			
17 "STOP RUDDER INPUT" (synthetic voice)	Inappropriate rudder pedal inputs detected in cruise at high speed.	Message repeated at least TWO TIMES	NIL

(a) *The pilot can cancel any audio indicator, by pressing:*
- *The EMER CANC pb on the ECAM control panel, or*
- *The MASTER WARN pushbutton, except for OVERSPEED or L/G NOT DOWN warnings.*

AUDIO INDICATORS

Applicable to: MSN 10949-11597

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION (a)

Ident.: DSC-31-10-A-00015446.0001001 / 22 JUL 16

CONTINUOUS REPETITIVE CHIME	RED WARNINGS	PERMANENT	Press MASTER WARN lt

Ident.: DSC-31-10-A-00015447.0001001 / 22 JUL 16

SINGLE CHIME	AMBER CAUTION	0.5 s	

Ident.: DSC-31-10-A-00015448.0001001 / 04 FEB 14

CAVALRY CHARGE	A/P DISCONNECTION BY TAKE OVER pb	1.5 s	Second push on TAKE OVER pb
	A/P DISCONNECTION DUE TO FAILURE	PERMANENT	Press MASTER WARN lt or TAKE OVER pb

Ident.: DSC-31-10-A-00015449.0006001 / 22 JUL 16

TRIPLE CLICK	Landing capability downgrade or some cases of mode reversion	0.5 s (3 pulses)	

Ident.: DSC-31-10-A-00015450.0001001 / 04 FEB 14

CRICKET + “STALL” message (synthetic voice)	STALL	PERMANENT	NIL

Ident.: DSC-31-10-A-00015451.0001001 / 23 JUN 15

BUZZER	CABIN CALL	3 s	NIL
	EMER CABIN CALL	3 s REPEATED 3 TIMES	NIL
	MECH CALL	As long as outside pb pressed	Press MASTER CAUT pb

Ident.: DSC-31-10-A-00015452.0001001 / 23 JUN 15

CONTINUOUS BUZZER	SELCAL CALL	PERMANENT	Press RESET key on ACP or press MASTER CAUT pb

Continued on the following page

Continued from the previous page

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]
Ident.: DSC-31-10-A-00015453.0002001 / 06 APR 17			
19 "WINDSHEAR" (synthetic voice)	WINDSHEAR	REPEATED 3 TIMES	NIL
"GO AROUND WINDSHEAR AHEAD" (synthetic voice)	Windshear ahead detected during the landing phase	PERMANENT	NIL
"WINDSHEAR AHEAD" (twice) (synthetic voice)	Windshear ahead detected during the takeoff phase	PERMANENT	NIL
"MONITOR RADAR DISPLAY" (synthetic voice)	Windshear ahead detected caution message	PERMANENT	NIL
Ident.: DSC-31-10-A-00015454.0001001 / 04 FEB 14			
C CHORD	ALTITUDE ALERT (*Refer to DSC-31-40 Altitude Alert*)	1.5 s or PERMANENT	new ALTITUDE selection or press MASTER WARN pb
Ident.: DSC-31-10-A-00015455.0001001 / 21 MAR 16			
AUTO CALL OUT (synthetic voice)	HEIGHT ANNOUNCEMENT BELOW 2 500 ft (*Refer to DSC-34-NAV-40-10 Automatic Callout*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015456.0001001 / 21 MAR 17			
GROUND PROXIMITY WARNING (synthetic voice)	(*Refer to DSC-34-SURV-40-10 Overview*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015457.0001001 / 04 FEB 14			
“PRIORITY LEFT” ”PRIORITY RIGHT“ (synthetic voice)	A/P TAKE OVER pb	1 s	NIL
Ident.: DSC-31-10-A-00015458.0001001 / 04 FEB 14			
“RETARD" (synthetic voice)	Thrust levers not in IDLE or REVERSE position for landing	ONE TIME at 20 ft (10 ft in autoland with A/THR ON), Then PERMANENT	All Thrust levers are set to IDLE or REVERSE

Continued on the following page

Continued from the previous page

AUDIO INDICATORS	MEANING	DURATION	AUDIO INDICATOR CANCELLATION [(a)]
Ident.: DSC-31-10-A-00015459.0001001 / 02 MAY 23			
21 "RETARD-RETARD" (synthetic voice)	One thrust lever above IDLE after touchdown and the other one in IDLE or REVERSE position	PERMANENT if triggered above 40 kt	All thrust levers are set to IDLE or REVERSE
Ident.: DSC-31-10-A-00015460.0001001 / 04 FEB 14			
TCAS (synthetic voice)	(*Refer to DSC-34-SURV-60-20 Aural Messages*)	PERMANENT	NIL
Ident.: DSC-31-10-A-00015461.0001001 / 04 FEB 14			
″SPEED, SPEED, SPEED″ (Synthetic voice)	Current thrust is not sufficient to recover a positive flight through pitch control	Every 5 s until thrust is increased	THRUST LEVER(s)
Ident.: DSC-31-10-A-00015463.0001001 / 04 FEB 14			
"DUAL INPUT" (synthetic voice)	Both sidesticks are moved simultaneously	Every 5 s	One sidestick deactivated
Ident.: DSC-31-10-A-00015465.0001001 / 04 FEB 14			
22 "PITCH, PITCH" (synthetic voice)	The aircraft pitch attitude is becoming excessive during flare and landing.	one time	NIL
Ident.: DSC-31-10-A-00015466.0001001 / 04 FEB 14			
23 "STOP RUDDER INPUT" (synthetic voice)	Inappropriate rudder pedal inputs detected in cruise at high speed.	Message repeated at least TWO TIMES	NIL
Ident.: DSC-31-10-A-00024814.0002001 / 18 NOV 21			
24 "BANK BANK" (synthetic voice)	The bank angle is more than a predefined value when the aircraft is in degraded law (*Refer to DSC-27-20-20 Alternate Law*).	1.5 s	NIL

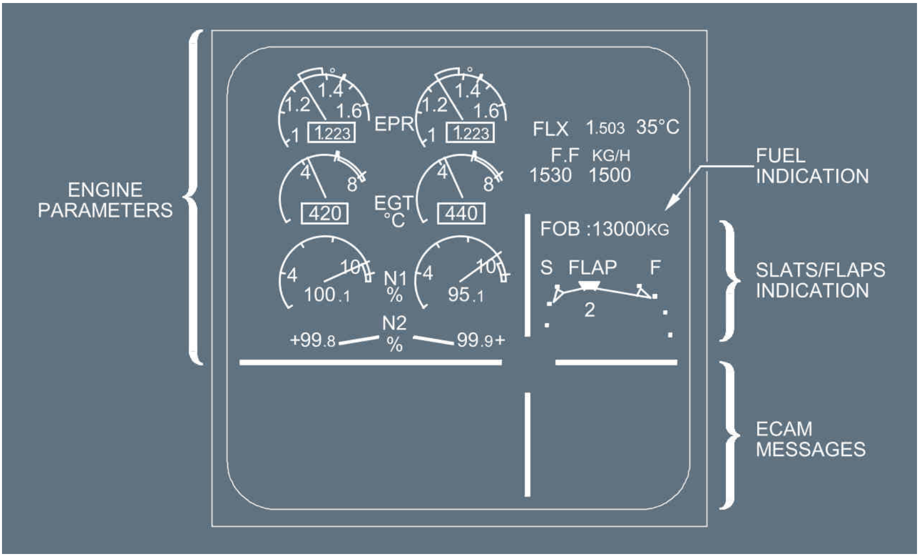
(a) *The pilot can cancel any audio indicator, by pressing:*
- *The EMER CANC pb on the ECAM control panel, or*
- *The MASTER WARN pushbutton, except for OVERSPEED or L/G NOT DOWN warnings.*

GENERAL

Ident.: DSC-31-15-00001207.0002001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The Engine Warning Display (E/WD) appears on the ECAM's upper Display Unit (DU).

- The upper part of this DU displays :
  - Engine parameters (*Refer to DSC-70-90-40 Engine Warning Display*)
  - Fuel On Board (FOB) (*Refer to DSC-28-20 ECAM Upper Display*)
  - Slats/Flaps' position (*Refer to DSC-27-20-30 ECAM F/CTL Page*)
- The lower part of this DU displays messages generated by the FWC :
  - Warning and caution messages, when a failure occurs.
  - Memos, when there is no failure.


ENGINE PARAMETERS
1.2
1.4
1.6
1
1.223
EPR
1.223
FLX 1.503 35°C
F.F KG/H
1530 1500
4
8
420
EGT °C
440
FOB :13000KG
4
10
100.1
N1 %
95.1
S FLAP F
2
+99.8
N2 %
99.9+
FUEL INDICATION
SLATS/FLAPS INDICATION
ECAM MESSAGES

The lower part, dedicated to ECAM messages, is divided into two sections of several lines each.

Bottom left : - Primary or independent warnings and cautions, or
- Memo information.

Bottom right : - Title of the system affected by a primary or independent warning or caution, in case of overflow on the bottom left part, or
- Secondary failure, or
- Memo, or
- Special lines (such as “AP OFF”, “LAND ASAP”).

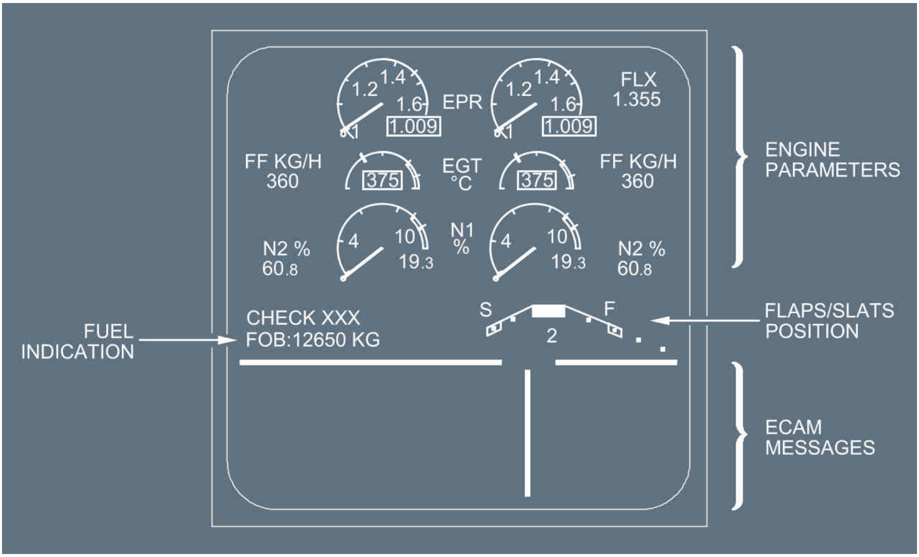
As soon as the FWC detects a failure, and if there is no flight phase inhibition active, the E/WD displays the title of the failure and actions to be taken.
The action line automatically clears, when the flight crew has performed the required action.

Note: *Certain actions lines will not disappear after being done.*

GENERAL

Ident.: DSC-31-15-00001207.0004001 / 21 MAR 17
Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The Engine Warning Display (E/WD) appears on the ECAM's upper Display Unit (DU).
- The upper part of this DU displays:
  - Engine parameters (*Refer to DSC-70-90-40 Engine Warning Display*)
  - Feedback messages (*Refer to DSC-31-05-60 Feedback Messages*)
  - Fuel On Board (FOB) (*Refer to DSC-28-20 ECAM Upper Display*)
  - Slats/Flaps' position (*Refer to DSC-27-20-30 ECAM F/CTL Page*)
- The lower part of this DU displays messages generated by the FWC:
  - Warning and caution messages, when a failure occurs
  - Memos when there is no failure.


1.2
1.4
1.6
1
1.009
EPR
1.2
1.4
1.6
1
1.009
FLX
1.355
FF KG/H
360
375
EGT
°C
375
FF KG/H
360
N2 %
60.8
4
10
19.3
N1
%
4
10
19.3
N2 %
60.8
ENGINE
PARAMETERS
S
F
2
FLAPS/SLATS
POSITION
FUEL
INDICATION
CHECK XXX
FOB:12650 KG
ECAM
MESSAGES

The lower part of the DU, dedicated to ECAM messages, is divided into two sections of several lines each.

Bottom left	:	- Primary or independent warnings and cautions, or - Memo information.
Bottom right	:	- Title of the system affected by a primary or independent warning or caution, in case of overflow on the bottom left part, or - Secondary failure, or - Memo, or - Special lines (such as “AP OFF”, “LAND ASAP”).

As soon as the FWC detects a failure, and if there is no flight phase inhibition active, the E/WD displays the title of the failure and actions that the flight crew must perform.
The action line automatically clears, when the flight crew has performed the necessary action.

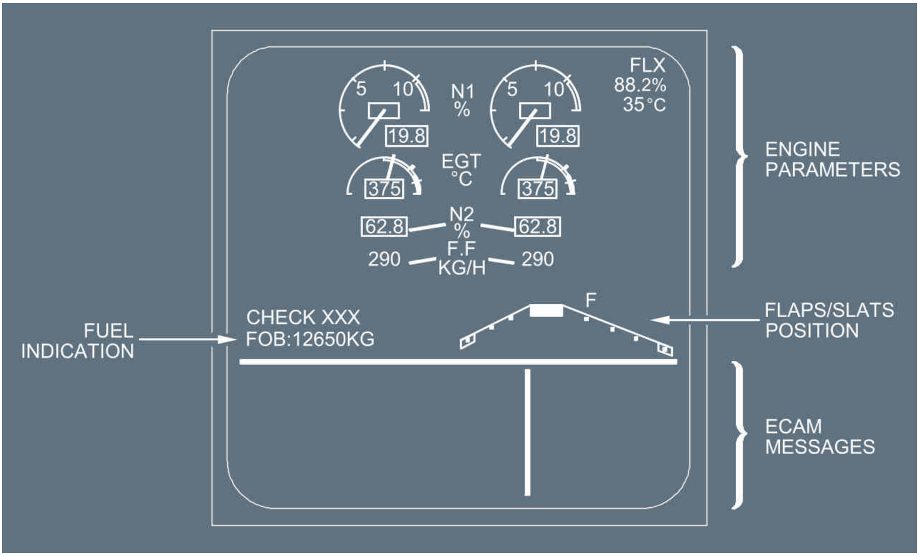
Note: *Some action lines do not disappear from the E/WD even after the flight crew performs the necessary action.*

GENERAL

Ident.: DSC-31-15-00001207.0003001 / 21 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The Engine Warning Display (E/WD) appears on the ECAM's upper Display Unit (DU).

- The upper part of this DU displays:
  - Engine parameters (*Refer to DSC-70-90-40 Engine Warning Display*)
  - Feedback messages (*Refer to DSC-31-05-60 Feedback Messages*)
  - Fuel On Board (FOB) (*Refer to DSC-28-20 ECAM Upper Display*)
  - Slats/Flaps' position (*Refer to DSC-27-20-30 ECAM F/CTL Page*)
- The lower part of this DU displays messages generated by the FWC:
  - Warning and caution messages, when a failure occurs
  - Memos when there is no failure.


5
10
N1
%
19.8
FLX
88.2%
35°C
EGT
°C
375
N2
%
62.8
F.F
KG/H
290
ENGINE PARAMETERS
CHECK XXX
FOB:12650KG
F
FUEL INDICATION
FLAPS/SLATS POSITION
ECAM MESSAGES

The lower part of the DU, dedicated to ECAM messages, is divided into two sections that have several lines each.

Bottom left : - Primary or independent warnings and cautions, or
- Memo information.

Bottom right : - Title of the system affected by a primary or independent warning or caution, in the case of overflow on the bottom left part, or
- Secondary failure, or
- Memo, or
- Special lines (such as “AP OFF”, “LAND ASAP”).

As soon as the FWC detects a failure, and if there is no flight phase inhibition active, the E/WD displays the title of the failure and actions that the flight crew must perform.
The action line automatically clears, when the flight crew has performed the necessary action.

Note: *Some action lines do not disappear from the E/WD even after the flight crew performs the necessary action.*

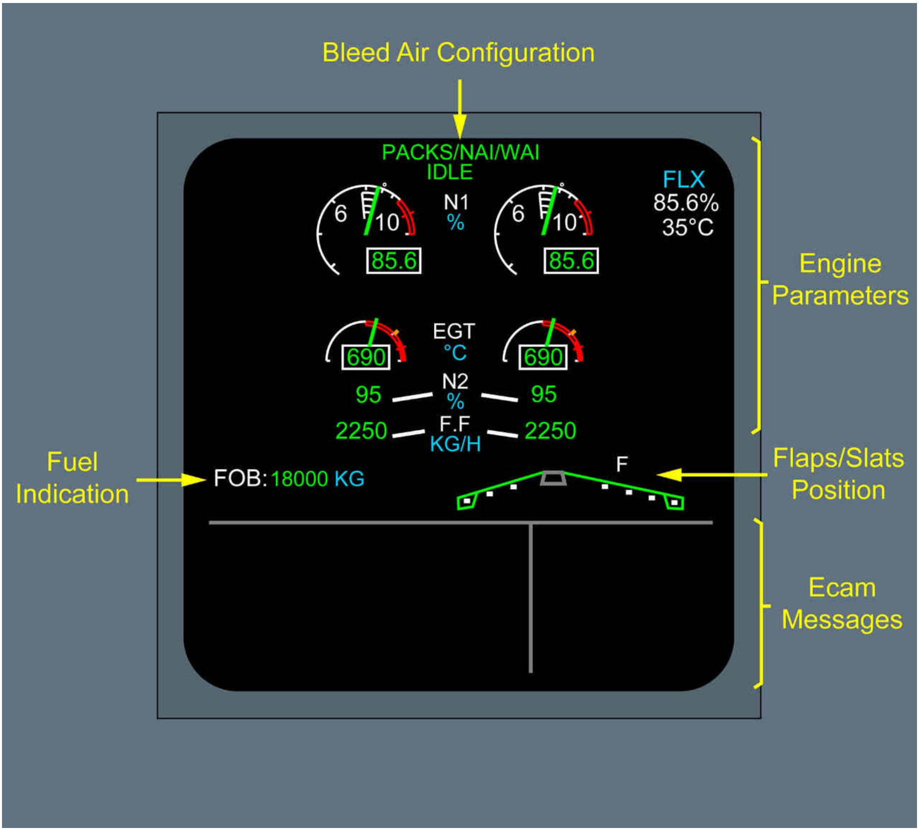
GENERAL

Ident.: DSC-31-15-00001207.0007001 / 21 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**

The Engine Warning Display (E/WD) appears on the ECAM's upper Display Unit (DU).

- The upper part of this DU displays:
  - Engine parameters (*Refer to DSC-70-90-40 Engine Warning Display*)
  - Feedback messages (*Refer to DSC-31-05-60 Feedback Messages*)
  - Fuel On Board (FOB) (*Refer to DSC-28-20 ECAM Upper Display*)
  - Slats/Flaps' position (*Refer to DSC-27-20-30 ECAM F/CTL Page*)
  - Bleed Air Configuration (*Refer to DSC-21-10-50 Engine Warning Display*, *Refer to DSC-30-20-20 Engine Warning Display*, *Refer to DSC-30-30-20 Engine Warning Display*)
- The lower part of this DU displays messages generated by the FWC:
  - Warning and caution messages, when a failure occurs
  - Memos when there is no failure.


Bleed Air Configuration
PACKS/NAI/WAI
IDLE
6
10
N1
%
85.6
FLX
85.6%
35°C
Engine
Parameters
EGT
°C
690
N2
%
95
F.F
KG/H
2250
Fuel
Indication
FOB: 18000 KG
F
Flaps/Slats
Position
Ecam
Messages

The lower part of the DU, dedicated to ECAM messages, is divided into two sections of several lines each.

Bottom left : - Primary or independent warnings and cautions, or
- Memo information.

Bottom right : - Title of the system affected by a primary or independent warning or caution, in case of overflow on the bottom left part, or
- Secondary failure, or
- Memo, or
- Special lines (such as “AP OFF”, “LAND ASAP”).

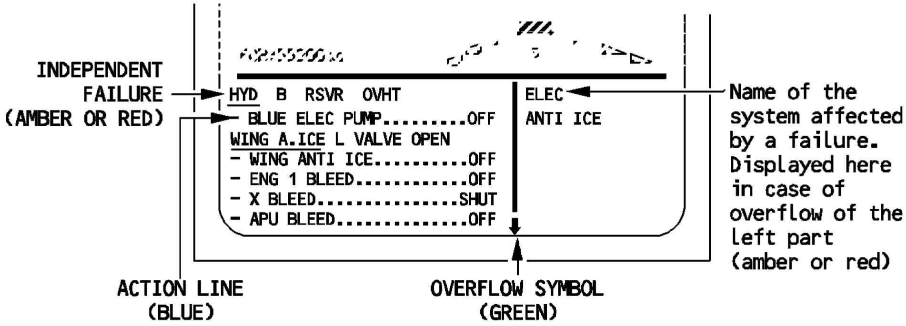
As soon as the FWC detects a failure, and if there is no flight phase inhibition active, the E/WD displays the title of the failure and actions that the flight crew must perform.

The action line automatically clears, when the flight crew has performed the necessary action.

Note: *Some action lines do not disappear from the E/WD even after the flight crew performs the necessary action.*

INDEPENDENT FAILURE

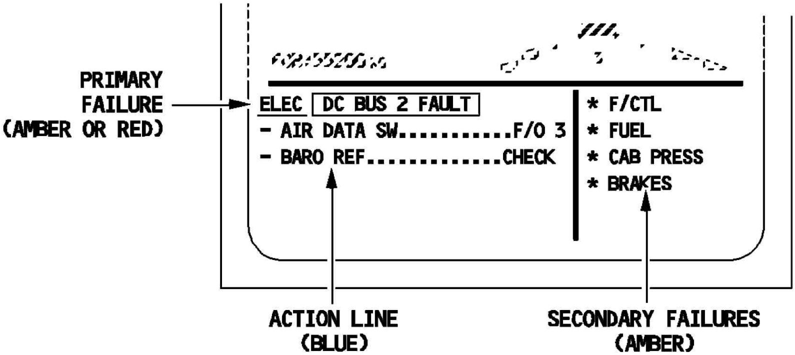
Ident.: DSC-31-15-00001208.0001001 / 03 FEB 11
Applicable to: ALL


INDEPENDENT FAILURE (AMBER OR RED)
HYD B RSVR OVHT
BLUE ELEC PUMP.........OFF
WING A.ICE L VALVE OPEN
- WING ANTI ICE..........OFF
- ENG 1 BLEED............OFF
- X BLEED................SHUT
- APU BLEED..............OFF
ELEC
ANTI ICE
Name of the system affected by a failure. Displayed here in case of overflow of the left part (amber or red)
ACTION LINE (BLUE)
OVERFLOW SYMBOL (GREEN)

If there are too many ECAM messages for the amount of space available in the lower part of the E/WD, a green arrow appears at the bottom of the display, pointing down to show that the information has overflowed off the screen. The pilot can scroll down to view additional messages by pushing the CLR pushbutton on the ECAM control panel (on the pedestal, just below the lower ECAM DU).

PRIMARY AND SECONDARY FAILURE

Ident.: DSC-31-15-00001209.0001001 / 03 FEB 11
Applicable to: ALL


PRIMARY FAILURE (AMBER OR RED)
ELEC DC BUS 2 FAULT
- AIR DATA SW..........F/O 3
- BARO REF............CHECK
* F/CTL
* FUEL
* CAB PRESS
* BRAKES
ACTION LINE (BLUE)
SECONDARY FAILURES (AMBER)

The ECAM DU displays a primary failure as a boxed title.
It identifies a secondary failure by putting a star in front of the title of the affected system.

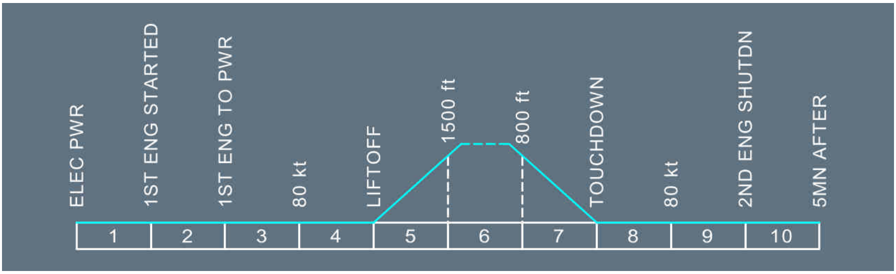
Note: *The DU displays the overflow symbol, if primary or secondary failures overflow. In case of ELEC EMER CONFIG, the secondary failures are inhibited.*

FLIGHT PHASES

Ident.: DSC-31-15-00001210.0001001 / 21 MAR 16
Applicable to: ALL

GENERAL

The FWC divides its functions according to these ten flight phases :

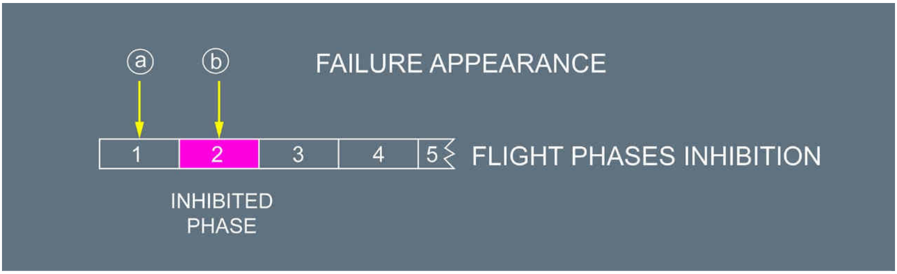

ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

To improve its operational efficacy, the computer inhibits some warnings and cautions for certain flight phases. It does so to avoid alerting the pilots unnecessarily at times when they have high workloads, such as during takeoff or landing. In these two phases, the DU displays magenta memos : “T.O. INHIBIT” (flight phases 3, 4, and 5), and “LDG INHIBIT” (flight phases 7 and 8).

Note: These flight phases are different from and independent of the ones that the FMGC uses.

FLIGHT PHASE INHIBITION

Two cases are possible (for instance) :



Effect on E/WD :

(a) The failure occurs during phase 1. The E/WD displays the warning immediately and continues to display it as long as the failure is present, even in phase 2.

(b) The failure occurs during phase 2. The E/WD displays the warning only when the aircraft has entered phase 3, where it is not inhibited. Then the warning remains displayed as long as the failure is present.

MEMOS

Ident.: DSC-31-15-A-00001211.0001001 / 21 MAR 16
Applicable to: ALL

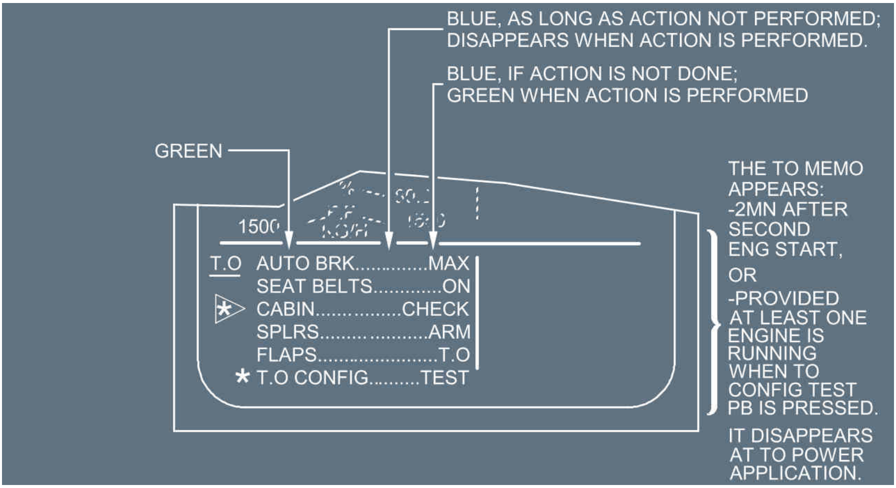
DISPLAY

Memos appear in the lower part of the E/WD. They are normally in green, but may be amber in abnormal situations.
Memos list functions or systems that are temporarily used in normal operations.

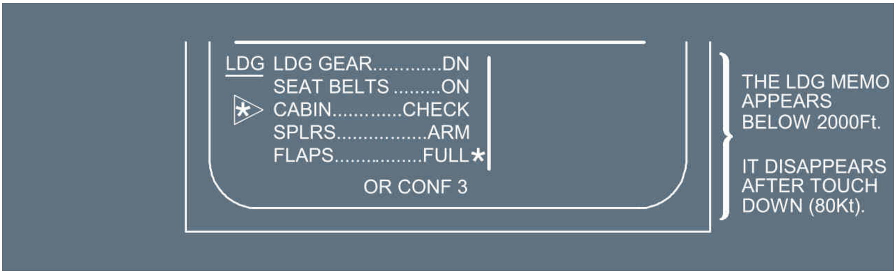
Ident.: DSC-31-15-A-00001212.0010001 / 09 FEB 18
2 **Applicable to: MSN 08635, 10949-11597**

TO AND LDG MEMOS

During the takeoff and landing phases, the right side of the memo area displays specific TO INHIBIT or LDG INHIBIT (magenta) memos.
Takeoff and landing memos are displayed, as follows, during the related flight phases:


BLUE, AS LONG AS ACTION NOT PERFORMED;
DISAPPEARS WHEN ACTION IS PERFORMED.
BLUE, IF ACTION IS NOT DONE;
GREEN WHEN ACTION IS PERFORMED
GREEN
1500
T.O AUTO BRK..............MAX
SEAT BELTS............ON
CABIN................CHECK
SPLRS.....................ARM
FLAPS......................T.O
* T.O CONFIG.........TEST
THE TO MEMO APPEARS:
-2MN AFTER SECOND ENG START,
OR
-PROVIDED AT LEAST ONE ENGINE IS RUNNING WHEN TO CONFIG TEST PB IS PRESSED.
IT DISAPPEARS AT TO POWER APPLICATION.

(*) This line disappears when the test is completed. It is replaced by “TO CONFIG NORMAL”, if aircraft configuration is correct.
The test is requested again, if the configuration becomes abnormal.


LDG LDG GEAR.............DN
SEAT BELTS ....ON
CABIN.............CHECK
SPLRS.................ARM
FLAPS.................FULL*
OR CONF 3
THE LDG MEMO APPEARS BELOW 2000Ft.
IT DISAPPEARS AFTER TOUCH DOWN (80Kt).

(*) “CONF 3” is displayed in alternate or direct law, or if the GPWS LDG FLAP 3 pushbutton is ON.

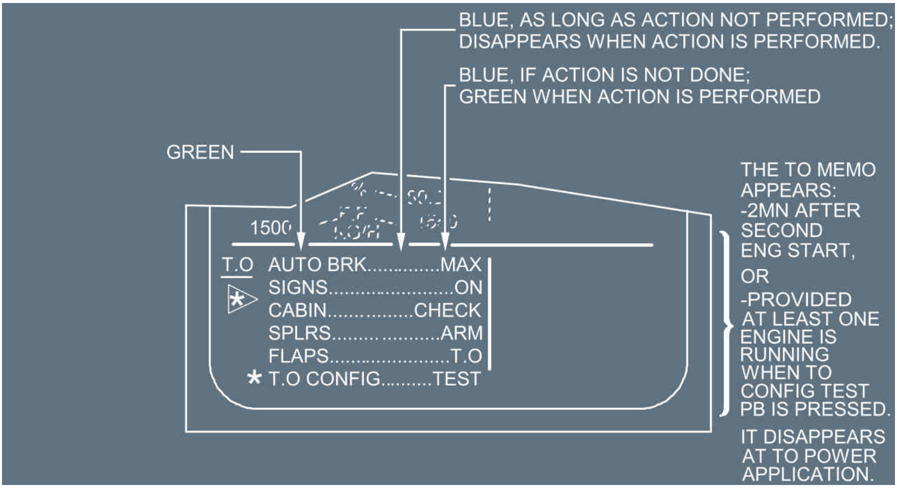
Note: *After a go-around, if the aircraft does not climb above 2 200 ft RA, the landing memo appears only below 800 ft RA during the subsequent approach.*

Ident.: DSC-31-15-A-00001212.0002001 / 22 APR 16

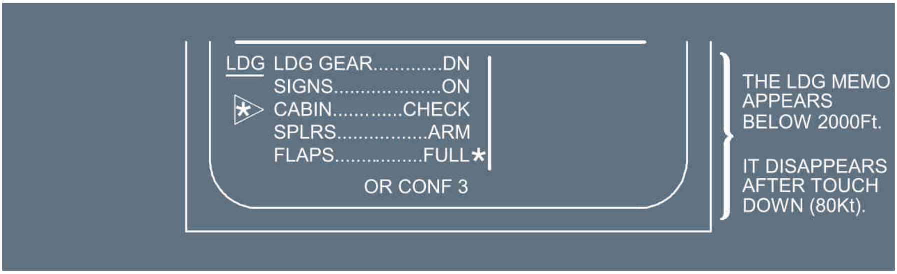
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

TO AND LDG MEMOS

During the takeoff and landing phases, the right side of the memo area displays specific TO INHIBIT or LDG INHIBIT (magenta) memos.
Takeoff and landing memos are displayed, as follows, during the related flight phases:


BLUE, AS LONG AS ACTION NOT PERFORMED; DISAPPEARS WHEN ACTION IS PERFORMED.
BLUE, IF ACTION IS NOT DONE; GREEN WHEN ACTION IS PERFORMED
GREEN
1500
T.O
AUTO BRK..............MAX
SIGNS........................ON
CABIN.................CHECK
SPLRS.......................ARM
FLAPS.......................T.O
* T.O CONFIG..........TEST
THE TO MEMO APPEARS:
-2MN AFTER SECOND ENG START,
OR
-PROVIDED AT LEAST ONE ENGINE IS RUNNING WHEN TO CONFIG TEST PB IS PRESSED.
IT DISAPPEARS AT TO POWER APPLICATION.

(*) This line disappears when the test is completed. It is replaced by “TO CONFIG NORMAL”, if aircraft configuration is correct.
The test is requested again, if the configuration becomes abnormal.


LDG
LDG GEAR.............DN
SIGNS.....................ON
CABIN.............CHECK
SPLRS.................ARM
FLAPS.................FULL*
OR CONF 3
THE LDG MEMO APPEARS BELOW 2000Ft.
IT DISAPPEARS AFTER TOUCH DOWN (80Kt).

(*) “CONF 3” is displayed in alternate or direct law, or if the GPWS LDG FLAP 3 pushbutton is ON.

Note: *After a go-around, if the aircraft does not climb above 2 200 ft RA, the landing memo appears only below 800 ft RA during the subsequent approach.*

CONFIGURATION WARNINGS

Ident.: DSC-31-15-00001214.0019001 / 05 MAR 19

3 **Applicable to: MSN 08635, 10949-11597**

The following warnings and cautions appear in the lower part of the E/WD if the aircraft is not in takeoff configuration when the flight crew presses the TO CONFIG pushbutton on the ECAM control panel or applies takeoff power.

WARNINGS/CAUTIONS	TO CONFIG TEST	TO POWER
CONFIG RUD TRIM NOT IN TO RANGE	TRIGGERED	TRIGGERED
CONFIG PITCH TRIM NOT IN TO RANGE		
F/CTL PITCH TRIM/MCDU/CG DISAGREE		
CONFIG FLAPS NOT IN TO CONFIG		
CONFIG SPD BRK NOT RETRACTED		
CONFIG SLATS NOT IN TO CONFIG		
CONFIG L SIDESTICK FAULT		
CONFIG R SIDESTICK FAULT		
DOOR		
BRAKES HOT		
F/CTL FLAP/MCDU DISAGREE		
T.O SPEEDS TOO LOW		
T.O V1/VR/V2 DISAGREE		
T.O SPEEDS NOT INSERTED		
FUEL R(L) TK PUMP 1+2 LO PR		NOT TRIGGERED
HYD G(Y) ENG 1(2) PUMP LO PR		
HYD G(Y)(B) SYS LO PR		
ELEC IDG 1(2) DISCONNECTED	TRIGGERED if the two GENs are inop.	
ELEC GEN 1(2) FAULT		
ELEC GEN 1(2) OFF		
ENG 1 OIL LO TEMP	TRIGGERED	
ENG 2 OIL LO TEMP		
CONFIG PARK BRK ON	NOT TRIGGERED	TRIGGERED
ENG THR LEVERS NOT SET		

Note: *F/CTL FLAP/MCDU DISAGREE caution is inhibited in case of CONFIG FLAPS NOT IN T.O CONFIG warning.*

CONFIGURATION WARNINGS

Ident.: DSC-31-15-00001214.0058001 / 05 MAR 19
Applicable to: MSN 04827-04860

The following warnings and cautions appear in the lower part of the E/WD if the aircraft is not in takeoff configuration when the flight crew presses the TO CONFIG pushbutton on the ECAM control panel or applies takeoff power.

WARNINGS/CAUTIONS	TO CONFIG TEST	TO POWER
CONFIG RUD TRIM NOT IN TO RANGE	TRIGGERED	TRIGGERED
CONFIG PITCH TRIM NOT IN TO RANGE		
F/CTL PITCH TRIM/MCDU/CG DISAGREE		
CONFIG FLAPS NOT IN TO CONFIG		
CONFIG SPD BRK NOT RETRACTED		
CONFIG SLATS NOT IN TO CONFIG		
CONFIG L SIDESTICK FAULT		
CONFIG R SIDESTICK FAULT		
DOOR		
BRAKES HOT		
F/CTL FLAP/MCDU DISAGREE		
FUEL R(L) TK PUMP 1+2 LO PR		NOT TRIGGERED
HYD G(Y) ENG 1(2) PUMP LO PR		
HYD G(Y)(B) SYS LO PR		
ELEC IDG 1(2) DISCONNECTED	TRIGGERED if the two GENs are inop.	
ELEC GEN 1(2) FAULT		
ELEC GEN 1(2) OFF		
CONFIG PARK BRK ON	NOT TRIGGERED	TRIGGERED
ENG THR LEVERS NOT SET		

Note: *F/CTL FLAP/MCDU DISAGREE caution is inhibited in case of CONFIG FLAPS NOT IN T.O CONFIG warning.*

CONFIGURATION WARNINGS

Ident.: DSC-31-15-00001214.0024001 / 05 MAR 19
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-08596, 09190-09324

The following warnings and cautions appear in the lower part of the E/WD if the aircraft is not in takeoff configuration when the flight crew presses the TO CONFIG pushbutton on the ECAM control panel or applies takeoff power.

WARNINGS/CAUTIONS	TO CONFIG TEST	TO POWER
CONFIG RUD TRIM NOT IN TO RANGE	TRIGGERED	TRIGGERED
CONFIG PITCH TRIM NOT IN TO RANGE		
F/CTL PITCH TRIM/MCDU/CG DISAGREE		
CONFIG FLAPS NOT IN TO CONFIG		
CONFIG SPD BRK NOT RETRACTED		
CONFIG SLATS NOT IN TO CONFIG		
CONFIG L SIDESTICK FAULT		
CONFIG R SIDESTICK FAULT		
DOOR		
BRAKES HOT		
FUEL R(L) TK PUMP 1+2 LO PR		NOT TRIGGERED
HYD G(Y) ENG 1(2) PUMP LO PR		
HYD G(Y)(B) SYS LO PR		
ELEC IDG 1(2) DISCONNECTED	TRIGGERED if the two GENs are inop.	
ELEC GEN 1(2) FAULT		
ELEC GEN 1(2) OFF		
ENG 1 OIL LO TEMP	TRIGGERED	
ENG 2 OIL LO TEMP		
CONFIG PARK BRK ON	NOT TRIGGERED	TRIGGERED
ENG THR LEVERS NOT SET		

CONFIGURATION WARNINGS

Ident.: DSC-31-15-00001214.0025001 / 05 MAR 19
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05883, 06139, 06173-07098

The following warnings and cautions appear in the lower part of the E/WD if the aircraft is not in takeoff configuration when the flight crew presses the TO CONFIG pushbutton on the ECAM control panel or applies takeoff power.

WARNINGS/CAUTIONS	TO CONFIG TEST	TO POWER
CONFIG RUD TRIM NOT IN TO RANGE	TRIGGERED	TRIGGERED
CONFIG PITCH TRIM NOT IN TO RANGE		
F/CTL PITCH TRIM/MCDU/CG DISAGREE		
CONFIG FLAPS NOT IN TO CONFIG		
CONFIG SPD BRK NOT RETRACTED		
CONFIG SLATS NOT IN TO CONFIG		
CONFIG L SIDESTICK FAULT		
CONFIG R SIDESTICK FAULT		
DOOR		
BRAKES HOT		
FUEL R(L) TK PUMP 1+2 LO PR		NOT TRIGGERED
HYD G(Y) ENG 1(2) PUMP LO PR		
HYD G(Y)(B) SYS LO PR		
ELEC IDG 1(2) DISCONNECTED	TRIGGERED if the two GENs are inop.	
ELEC GEN 1(2) FAULT		
ELEC GEN 1(2) OFF		
CONFIG PARK BRK ON	NOT TRIGGERED	TRIGGERED
ENG THR LEVERS NOT SET		

CONFIGURATION WARNINGS

Ident.: DSC-31-15-00001214.0004001 / 03 FEB 11
Applicable to: MSN 01251

The following warnings and cautions appear in the lower part of the E/WD if the aircraft is not in takeoff configuration when the flight crew presses the TO CONFIG pushbutton on the ECAM control panel or applies takeoff power.

WARNINGS/CAUTIONS	TO CONFIG TEST	TO POWER
CONFIG RUD TRIM NOT IN TO RANGE (R)	TRIGGERED	TRIGGERED
CONFIG PITCH TRIM NOT IN TO RANGE (R)		
CONFIG FLAPS NOT IN TO CONFIG (R)		
CONFIG SPD BRK NOT RETRACTED (R)		
CONFIG SLATS NOT IN TO CONFIG (R)		
CONFIG L SIDESTICK FAULT (R)		
CONFIG R SIDESTICK FAULT (R)		
DOOR (A)		
BRAKES HOT (A)		
ENG 1 OIL LO TEMP (A)		NOT TRIGGERED
ENG 2 OIL LO TEMP (A)		
CONFIG PARK BRK ON (R)	NOT TRIGGERED	TRIGGERED
ENG THR LEVERS NOT SET (A)		

(R)	Red warning
(A)	Amber caution

GENERAL

Ident.: DSC-31-20-00001215.0001001 / 21 MAR 16
Applicable to: ALL

The system/status display (SD) uses the lower ECAM DU to display :
- pages showing synoptic diagrams of the aircraft systems, or
- the status page.

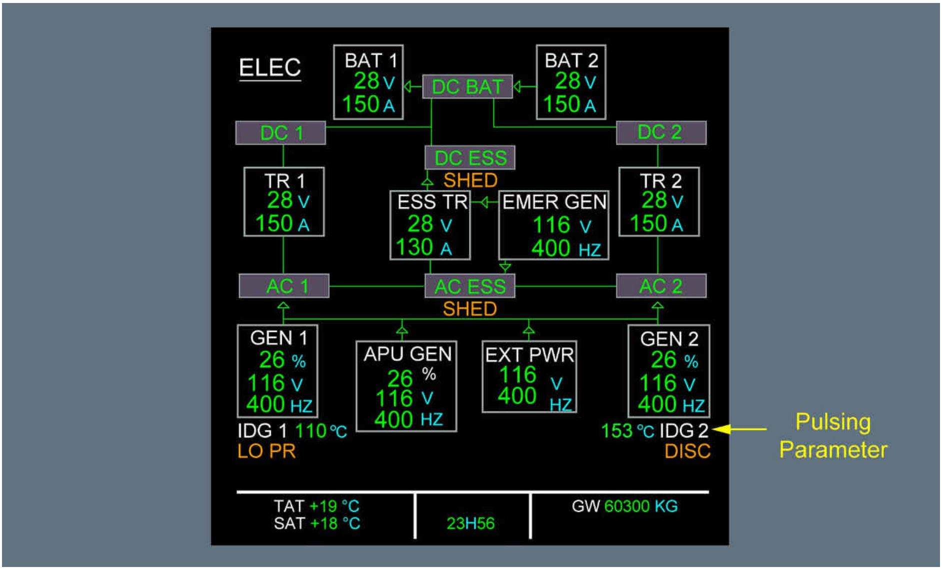
SYSTEM PAGES

Ident.: DSC-31-20-00001216.0001001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

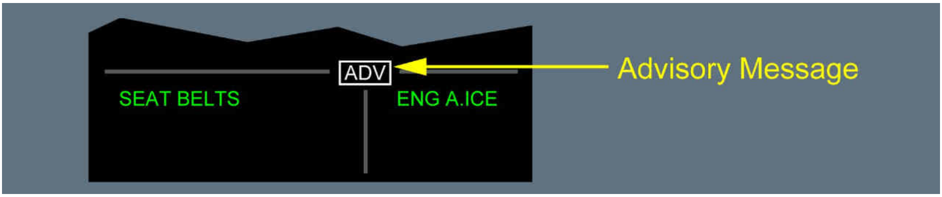
The lower ECAM DU can display 12 system pages (for description see relevant FCOM chapter):
- ENGINE (secondary engine parameters)
- BLEED (air bleed)
- CAB PRESS (cabin pressurization)
- ELEC (electric power)
- HYD (hydraulic)
- FUEL (fuel)
- APU (auxiliary power unit)
- COND (air conditioning)
- DOOR/OXY (doors/oxygen)
- WHEEL (landing gear, braking, ground spoilers, etc.)
- F/CTL (flight controls)
- CRUISE (cruise).

The flight crew may manually call up a system page for display on the lower ECAM DU, or the system may automatically display a page.
- Manually:
  - The flight crew can, at any time, use the pushbutton on the ECAM's control panel to call up and display any system page, except the CRUISE page
  - The corresponding pushbutton on the ECAM control panel lights up
  - A failure-related or advisory display automatically replaces a page the flight crew has manually called up.
- Automatically, related to a failure:
  - The relevant system page automatically appears, as soon as any fault or malfunction triggers a caution or warning message.

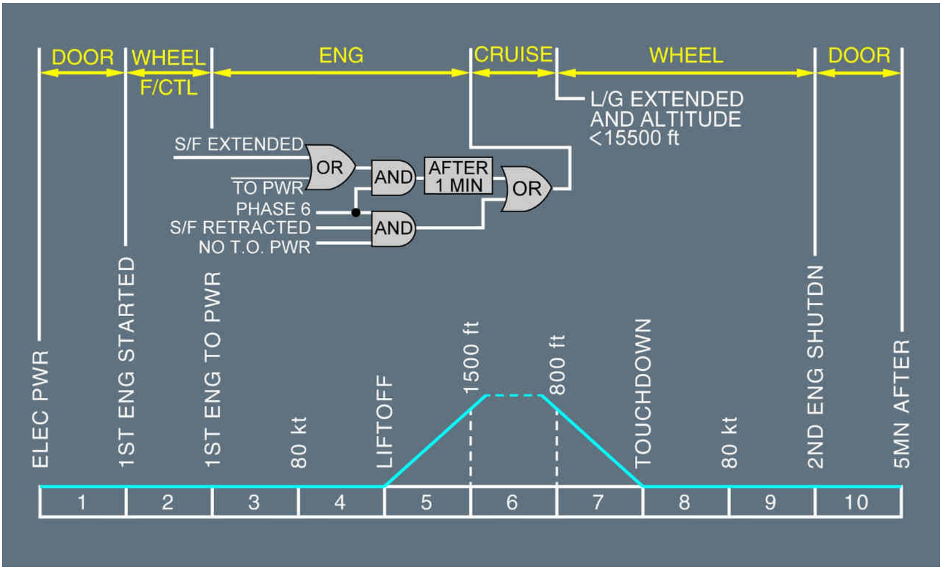
- Automatically, related to an advisory:
  - The relevant system page automatically appears, when a parameter drifts out of its normal range
  - The value (shown in green) pulses, as long as it is outside its limits
  - The advisory mode is inhibited in some flight phases.


ELEC
BAT 1 28 V 150 A
DC BAT
BAT 2 28 V 150 A
DC 1
DC 2
DC ESS
SHED
TR 1 28 V 150 A
ESS TR 28 V 130 A
EMER GEN 116 V 400 HZ
TR 2 28 V 150 A
AC 1
AC ESS
SHED
AC 2
GEN 1 26 % 116 V 400 HZ
APU GEN 26 % 116 V 400 HZ
EXT PWR 116 V 400 HZ
GEN 2 26 % 116 V 400 HZ
IDG 1 110 °C
LO PR
153 °C IDG 2
DISC
Pulsing Parameter
TAT +19 °C
SAT +18 °C
23H56
GW 60300 KG

Note: *If an advisory is triggered, when the ECAM is in the single-display configuration, an advisory message appears on the upper part of the E/WD, and the associated key on the ECAM control panel flashes to identify the appropriate system page.*

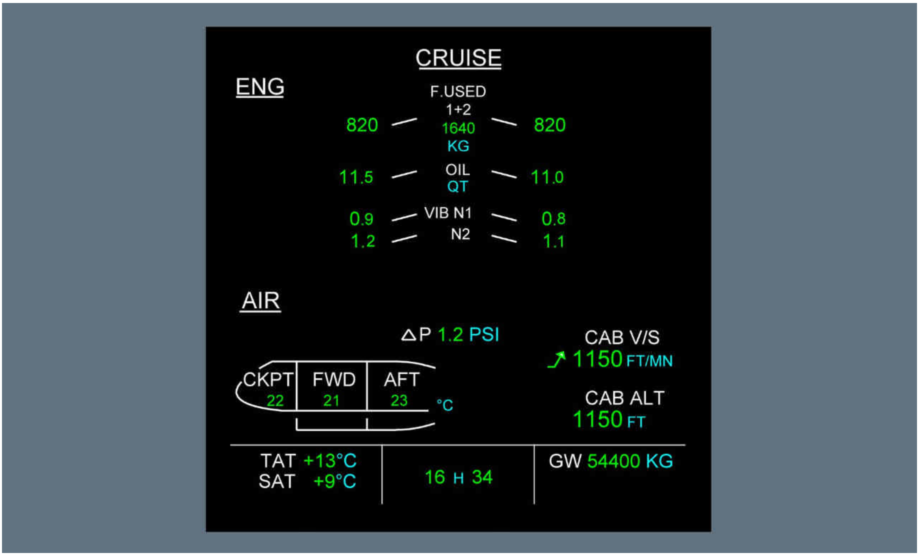

ADV
Advisory Message
SEAT BELTS
ENG A.ICE

- Automatically, related to flight phase mode:
  - If no other mode is engaged, the SD displays the system page related to the present flight phase, as shown in the following diagram


DOOR
WHEEL
F/CTL
ENG
CRUISE
WHEEL
DOOR
L/G EXTENDED
AND ALTITUDE
<15500 ft
S/F EXTENDED
TO PWR
OR
AND
AFTER
1 MIN
OR
PHASE 6
S/F RETRACTED
NO T.O. PWR
AND
ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

- Phase 2: The F/CTL SD page replaces the WHEEL SD page for 20 s when either flight crew moves the sidestick (more than 3 ° in pitch or roll) or when the rudder pedal deflection is more than 22 °
- The APU SD page appears when the APU MASTER SW pb-sw is ON. It disappears when APU RPM has been above 95 % for 10 s, or when the APU MASTER SW pb-sw is switched OFF
- The ENGINE SD page appears at the beginning of start sequence or when a flight crew selects CRANK. It disappears 10 s after the end of the start sequence, when the ENG MODE selector is set to NORM.

For a description of the ENGINE and AIR indications that appear when the SD is displaying the CRUISE page, see the relevant FCOM chapter.


CRUISE
ENG
F.USED
1+2
820
1640
820
KG
11.5
OIL
11.0
QT
0.9
VIB N1
0.8
1.2
N2
1.1
AIR
ΔP 1.2 PSI
CAB V/S
1150 FT/MN
CKPT
FWD
AFT
22
21
23
°C
CAB ALT
1150 FT
TAT +13°C
SAT +9°C
16 H 34
GW 54400 KG

SYSTEM PAGES

Ident.: DSC-31-20-00001216.0002001 / 10 MAY 21

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The lower ECAM DU can display 12 system pages (for description see relevant FCOM chapter):

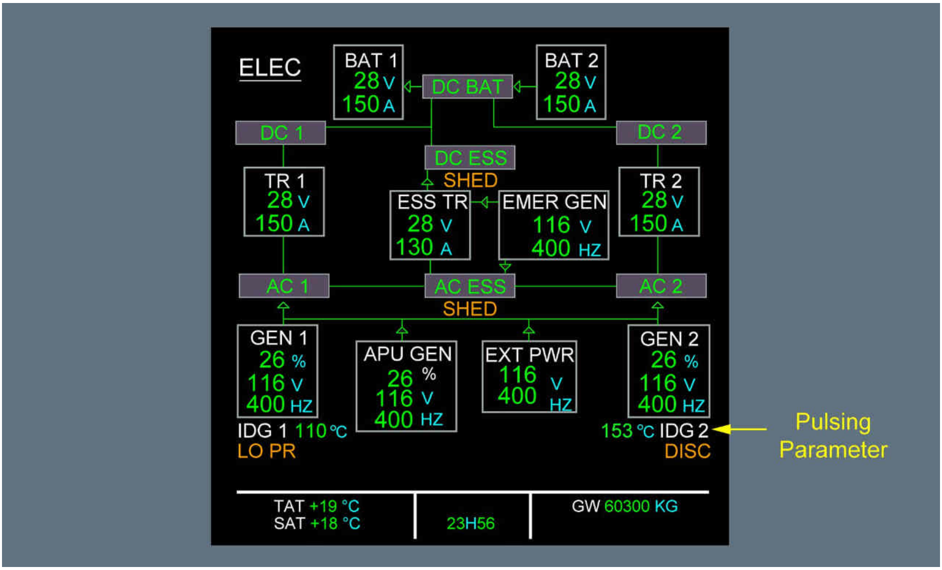
- ENGINE (secondary engine parameters)
- BLEED (air bleed)
- CAB PRESS (cabin pressurization)
- ELEC (electric power)
- HYD (hydraulic)
- FUEL (fuel)
- APU (auxiliary power unit)
- COND (air conditioning)
- DOOR/OXY (doors/oxygen)
- WHEEL (landing gear, braking, ground spoilers, etc.)
- F/CTL (flight controls)
- CRUISE (cruise).

The flight crew may manually call up a system page for display on the lower ECAM DU, or the system may automatically display a page:

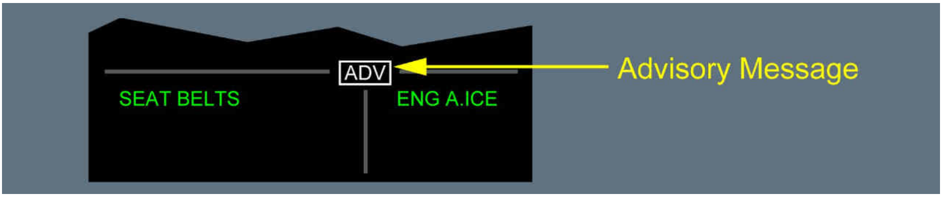
- Manually:
  - The flight crew can, at any time, use the pushbutton on the ECAM's control panel to call up and display any system page, except the CRUISE page
  - The corresponding pushbutton on the ECAM control panel lights up
  - A failure-related or advisory display automatically replaces a page the flight crew has manually called up.
- Automatically, related to a failure:
  - The relevant system page automatically appears, as soon as any fault or malfunction triggers a caution or warning message.

- Automatically, related to an advisory:
  - The relevant system page automatically appears, when a parameter drifts out of its normal range
  - The value (shown in green) pulses, as long as it is outside its limits
  - The advisory mode is inhibited in some flight phases.

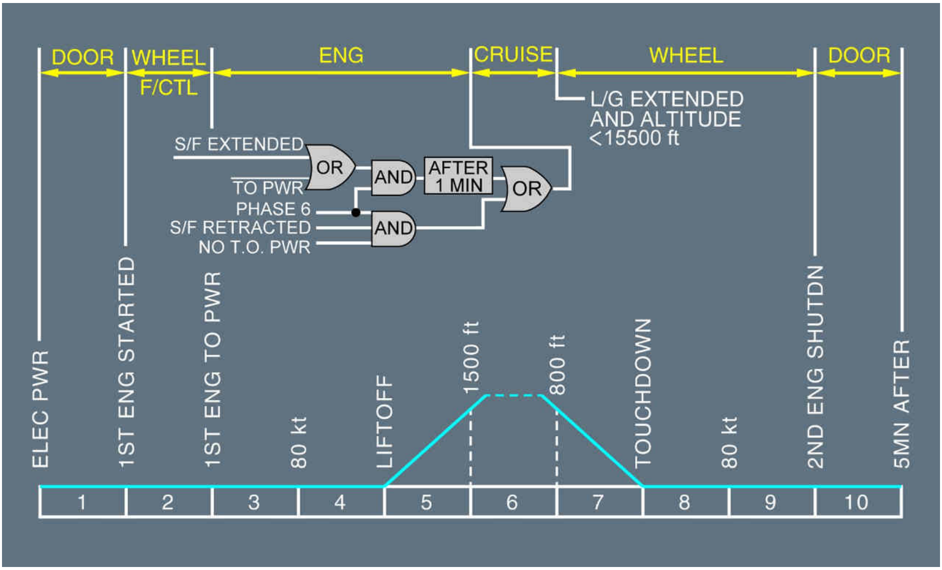
System Page in Advisory Mode


ELEC
BAT 1
28 V
150 A
DC BAT
BAT 2
28 V
150 A
DC 1
DC 2
DC ESS
SHED
TR 1
28 V
150 A
ESS TR
28 V
130 A
EMER GEN
116 V
400 HZ
TR 2
28 V
150 A
AC 1
AC ESS
SHED
AC 2
GEN 1
26 %
116 V
400 HZ
APU GEN
26 %
116 V
400 HZ
EXT PWR
116 V
400 HZ
GEN 2
26 %
116 V
400 HZ
IDG 1 110 °C
LO PR
153 °C IDG 2
DISC
Pulsing Parameter
TAT +19 °C
SAT +18 °C
23H56
GW 60300 KG

Note: *If an advisory is triggered, when the ECAM is in the single-display configuration, an advisory message appears on the upper part of the E/WD, and the associated key on the ECAM control panel flashes to identify the appropriate system page.*

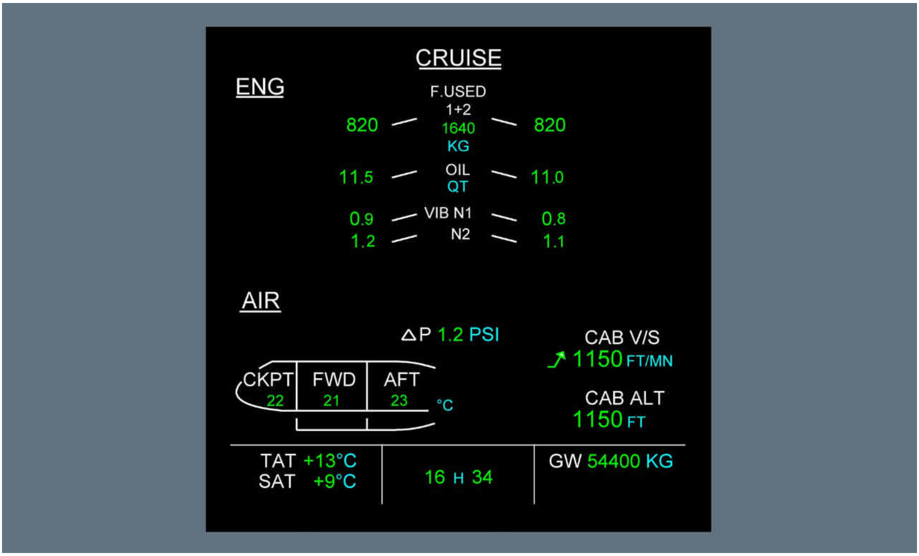

ADV
SEAT BELTS
ENG A.ICE
Advisory Message

- Automatically, related to flight phase mode:
  - If no other mode is engaged, the SD displays the system page related to the present flight phase, as shown in the following diagram


DOOR
WHEEL
F/CTL
ENG
CRUISE
WHEEL
DOOR
L/G EXTENDED AND ALTITUDE <15500 ft
S/F EXTENDED
TO PWR
PHASE 6
S/F RETRACTED
NO T.O. PWR
OR
AND
AFTER 1 MIN
OR
AND
ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

- Phase 2: The F/CTL SD page replaces the WHEEL SD page for 20 s when either flight crew moves the sidestick (more than 3 ° in pitch or roll) or when the rudder pedal deflection is more than 22 °
- The APU SD page appears when the APU MASTER SW pb-sw is ON. It disappears when APU RPM has been above 95 % for 10 s, or when the APU MASTER SW pb-sw is switched OFF
- The ENGINE SD page appears at the beginning of start sequence or when a flight crew selects CRANK. It disappears 10 s after the end of the start sequence, when the ENG MODE selector is set to NORM.

For a description of the ENGINE and AIR indications that appear when the SD is displaying the CRUISE page, see the relevant FCOM chapter.


CRUISE
ENG
F.USED
1+2
820
1640
820
KG
11.5
OIL
11.0
QT
0.9
VIB N1
0.8
1.2
N2
1.1
AIR
ΔP 1.2 PSI
CAB V/S
1150 FT/MN
CKPT
FWD
AFT
22
21
23
°C
CAB ALT
1150 FT
TAT +13°C
SAT +9°C
16 H 34
GW 54400 KG

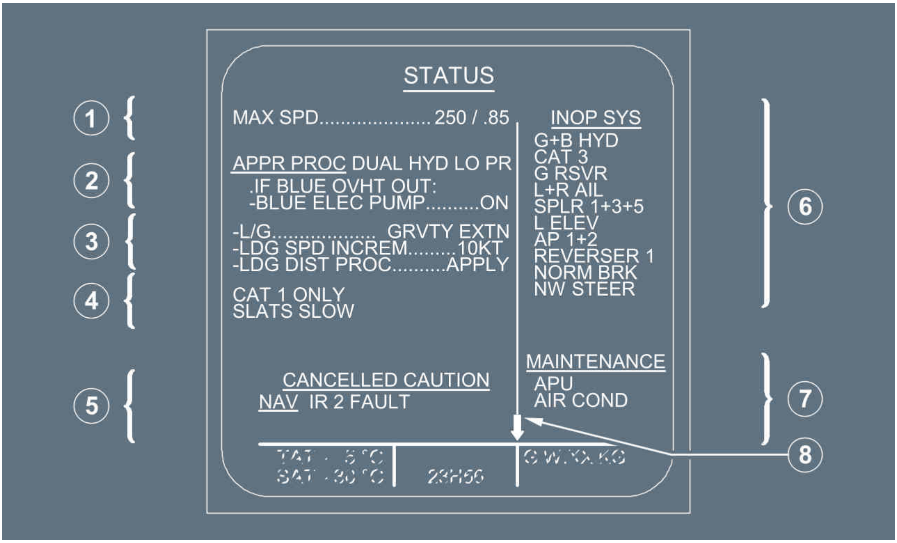
STATUS PAGE

Ident.: DSC-31-20-00001217.0001001 / 12 APR 16

Applicable to: ALL

PURPOSE

The STATUS page provides an operational summary of the state of the aircraft. As illustrated in the following image, this operational summary includes all of the following:



STATUS
MAX SPD.....................250 / .85
APPR PROC DUAL HYD LO PR
.IF BLUE OVHT OUT:
-BLUE ELEC PUMP..........ON
-L/G.................. GRVTY EXTN
-LDG SPD INCREM.........10KT
-LDG DIST PROC..........APPLY
CAT 1 ONLY
SLATS SLOW
CANCELLED CAUTION
NAV IR 2 FAULT
INOP SYS
G+B HYD
CAT 3
G RSVR
L+R AIL
SPLR 1+3+5
L ELEV
AP 1+2
REVERSER 1
NORM BRK
NW STEER
MAINTENANCE
APU
AIR COND
TAT - 5 °C
SAT -30 °C
23H56
G.W.XX.KG

(1) Limitations (speed, flight level): Blue

(2) Approach procedures: White (Red) (Amber)

(3) Procedures (corrections to apply for landing): Blue

(4) Information: Green

(5) Cancelled caution: White

(6) Inoperative system: Amber

(7) Maintenance status: White

(8) The arrow appears if the data on the STATUS page overflows the left or right area of the page.

The flight crew can press the CLR pb, in order to scroll the display to view the overflow.

Note: *The titles of the different parts of the display appear in white and underlined.*

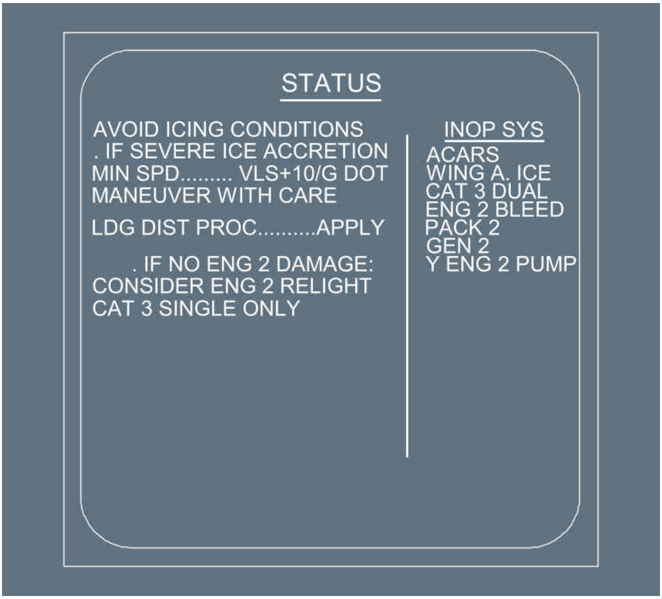
STATUS PAGE DISPLAY

The STATUS page appears when the flight crew presses the STS pb on the ECAM Control Panel (ECP).

The STATUS page automatically appears in abnormal operations if one of the following applies:
- The STATUS page is not empty, and the flight crew clears the last alert on the E/WD, or
- The STATUS page is not empty, and the flight crew selects the CONF1 for approach.

BLANK LINES

Each block that is described above (limitation block (1), approach procedure block (2), etc.) is separated by a blank line.
Therefore, a condition that is included in a limitation block (1) and the associated action line that is included in the procedure block (3) are separated by a blank line.
Example: Illustration with the ECAM alert ENG 1(2) SHUTDOWN.



STATUS

AVOID ICING CONDITIONS
. IF SEVERE ICE ACCRETION
MIN SPD......... VLS+10/G DOT
MANEUVER WITH CARE

LDG DIST PROC..........APPLY

. IF NO ENG 2 DAMAGE:
CONSIDER ENG 2 RELIGHT
CAT 3 SINGLE ONLY

INOP SYS
ACARS
WING A. ICE
CAT 3 DUAL
ENG 2 BLEED
PACK 2
GEN 2
Y ENG 2 PUMP

In this example, the action line “LDG DIST PROC … APPLY” applies only in the case of severe ice accretion.

STS REMINDER

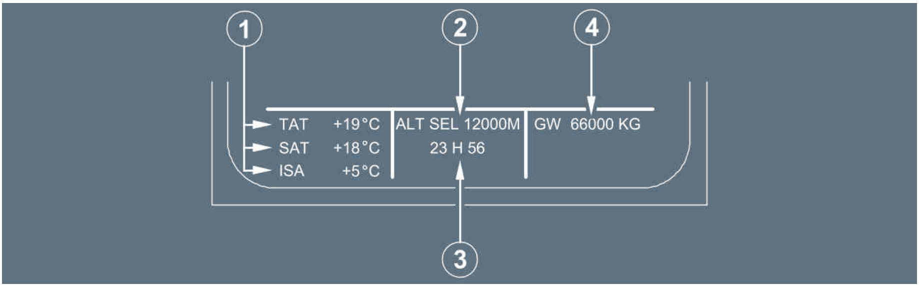
The STS reminder appears on the E/WD if both the following conditions apply:
- The STATUS page is not empty: The STATUS page displays message other than “CANCELLED CAUTION” or MAINTENANCE status.
- There is a MAINTENANCE status at engines shutdown.

The MAINTENANCE status can appear only when the aircraft is on the ground, before engine start or after engine shutdown.

PERMANENT DATA

Ident.: DSC-31-20-00017520.0002001 / 25 JUL 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



(1) Temperature

The screen displays the Total Air Temperature (TAT) and Static Air Temperature (SAT) in green.

The difference between the SAT and the International Standard Atmosphere (ISA) temperature (Delta ISA ◁) is displayed in green, in standard altitude mode and when the SAT is valid.

(2) G LOAD - ALT SEL

The screen displays one of the following items:

- The Load factor (G LOAD) in amber, when the value is above 1.4 g or below 0.7 g for more than 2 s. The G LOAD amber indication remains displayed 5 s after the excessive load occurrence. The display of the load factor is inhibited during flight phases 1, 2 and 3.
- Altitude in green selected via the Flight Control Unit (FCU), if the flight crew selects metric units, and provided the load factor is not displayed.

(3) UTC

The screen displays the Universal Time Coordinated (UTC), synchronized with the cockpit clock, in green.

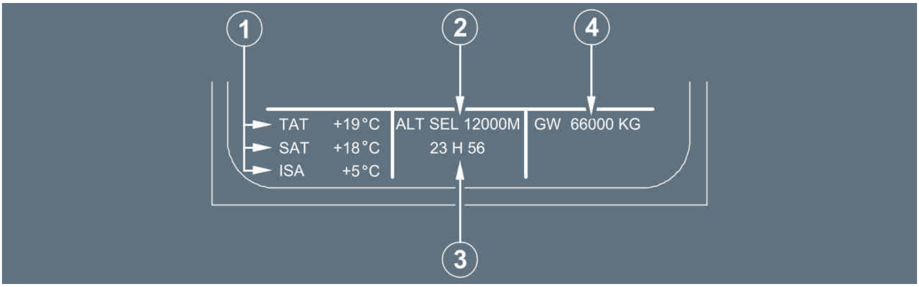
(4) GW

The screen displays the gross weight (GW) in green, as soon as the first engine is started. The last two digits are dashed, if accuracy is degraded. On ground, the indication is replaced by blue dashes, if no computed data is available.

PERMANENT DATA

Ident.: DSC-31-20-00017520.0011001 / 17 MAY 21

2 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**



(1) Temperature
The screen displays the Total Air Temperature (TAT) and Static Air Temperature (SAT) in green.
The difference between the SAT and the International Standard Atmosphere temperature (ISA) temperature (Delta ISA ◁) is displayed in green, in standard altitude mode and when the SAT is valid.

(2) G LOAD - ALT SEL

The screen displays one of the following items:
- Load factor (G LOAD) in amber, when the value is above 1.4 g or below 0.7 g for more than 2 s. The G LOAD amber indication remains displayed 5 s after the excessive load occurrence. The display of the load factor is inhibited during flight phases 1, 2, 3, 9 and 10.
- Altitude in green selected via the Flight Control Unit (FCU), if the flight crew selects metric units, and provided the load factor is not displayed.
- “CHECK CAPT (F/O) PFD”, “CHECK CAPT (F/O) ND” or “CHECK SD” all in amber (*Refer to DSC-31-05-20 Cockpit Arrangement*).

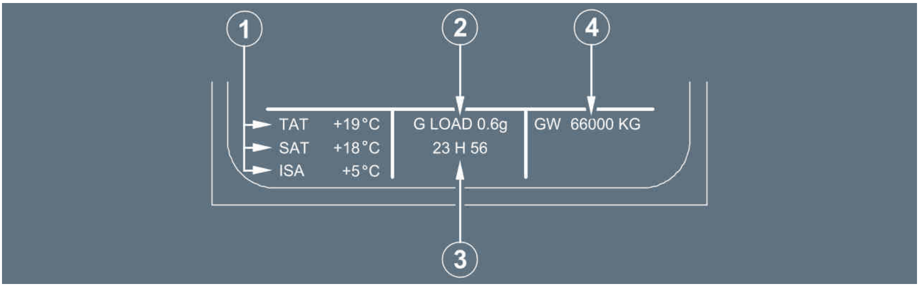
Note: The display of the feedback messages takes priority over the load factor indication.

(3) UTC
The screen displays the Universal Time Coordinated (UTC), synchronized with the cockpit clock, in green.

(4) GW
The screen displays the Gross Weight (GW) in green, as soon as the flight crew starts the first engine. The last two digits are dashed, if accuracy is degraded. On ground, blue dashes are displayed instead of the indication, if no computed data is available.

PERMANENT DATA

Ident.: DSC-31-20-00017520.0025001 / 25 JUL 16
Applicable to: MSN 04827-04860



(1) Temperature
The screen displays the Total Air Temperature (TAT) and Static Air Temperature (SAT) in green.
The difference between the International Standard Atmosphere (ISA) temperature (Delta ISA ◁) is displayed in green, in standard altitude mode and when the SAT is valid.

(2) G LOAD

The screen displays one of the following items:
- Load factor (G LOAD) in amber, when the value is above 1.4 g or below 0.7 g for more than 2 s. The G LOAD amber indication remains displayed 5 s after the excessive load occurrence. The display of the load factor is inhibited during flight phases 1, 2, 3, 9 and 10.
- “CHECK CAPT (F/O) PFD”, “CHECK CAPT (F/O) ND” or “CHECK SD” all in amber (*Refer to DSC-31-05-20 Cockpit Arrangement*).

Note: The display of the feedback messages takes priority over the load factor indication.

(3) UTC
The screen displays the Universal Time Coordinated (UTC), synchronized with the cockpit clock, in green.

(4) GW
The screen displays the Gross Weight (GW) in green, as soon as the flight crew starts the first engine. The last two digits are dashed, if accuracy is degraded. On ground, blue dashes are displayed instead of the indication, if no computed data is available.

AMBER CROSSES "XX" ON THE SD

Ident.: DSC-31-20-00013602.0001001 / 18 MAR 11
Applicable to: ALL

If a parameter value on any SD page is not available for display, amber crosses "XX" appear instead of the value.

AMBER DASHES ON THE SD

Ident.: DSC-31-20-00015526.0001001 / 01 APR 14
Applicable to: ALL

If the accuracy of a parameter value on any SD page is degraded, amber dashes are displayed over the last digits.

GENERAL

Ident.: DSC-31-25-10-00001219.0001001 / 22 MAR 16
Applicable to: ALL

If ECAM detects a failure :
- The E/WD displays warning or caution messages.
- The master warning or master caution lights light up (except in the case of a level 1 caution).
- The system sounds an aural signal (except in the case of a level 1 caution).
- The system display (SD) shows the system page for the affected system.
- The CLR pushbutton on the ECAM control panel lights up.

In addition, a local warning light controlled directly by the affected system can light up.

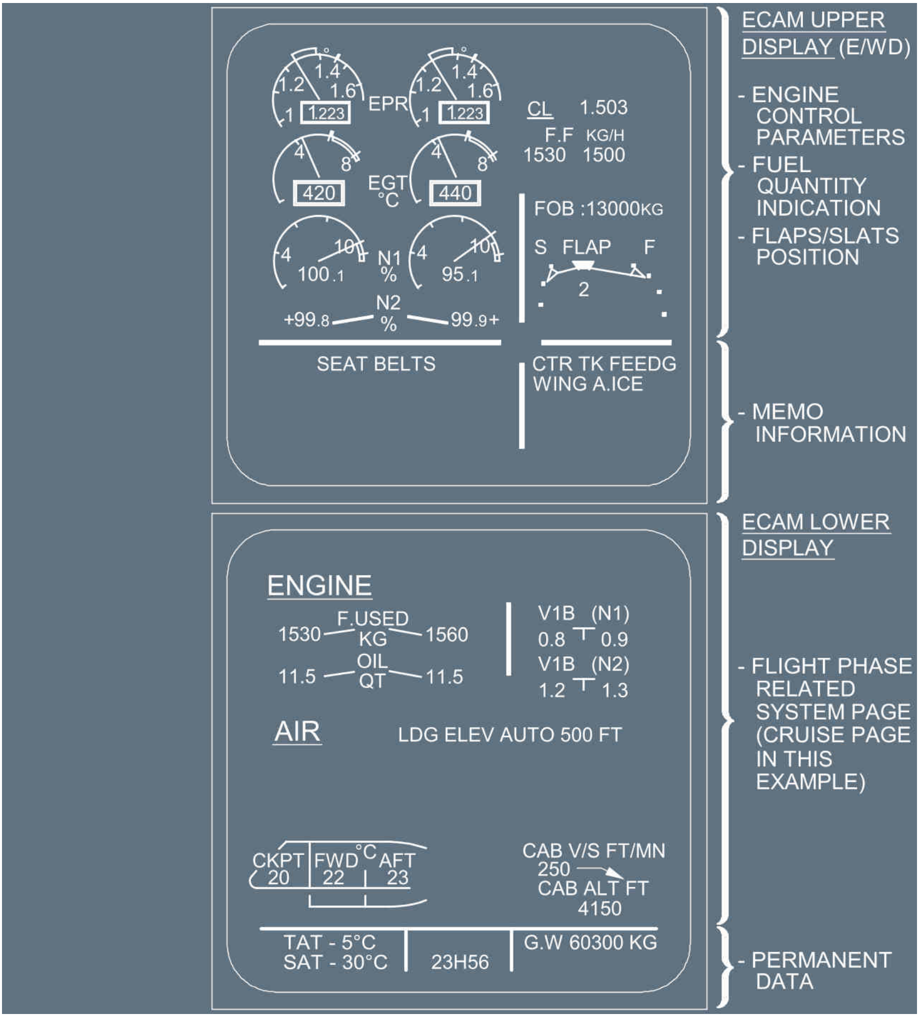
After completing remedial procedures, the flight crew must push the CLR pushbutton repeatedly until the displays return to their normal configurations :
- MEMO messages on the E/WD
- The system page related to the present flight phase on the SD.
- The CLR light on the ECAM control panel turned off.

Intentionally left blank

1 - THE ECAM DETECTS NO FAILURE

Ident.: DSC-31-25-20-00001220.0002001 / 09 OCT 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


1.2
1.4
1.6
1
1.223
EPR
1.2
1.4
1.6
1
1.223
CL 1.503
F.F KG/H
1530 1500
4
8
420
EGT
°C
4
8
440
FOB :13000KG
4
10
100.1
N1
%
4
10
95.1
S FLAP F
2
+99.8
N2
%
99.9+
SEAT BELTS
CTR TK FEEDG
WING A.ICE
ENGINE
F.USED
1530
KG
1560
OIL
11.5
QT
11.5
V1B (N1)
0.8 0.9
V1B (N2)
1.2 1.3
AIR
LDG ELEV AUTO 500 FT
CKPT
20
FWD
22
°C
AFT
23
CAB V/S FT/MN
250
CAB ALT FT
4150
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- ENGINE CONTROL PARAMETERS
- FUEL QUANTITY INDICATION
- FLAPS/SLATS POSITION

- MEMO INFORMATION

ECAM LOWER DISPLAY

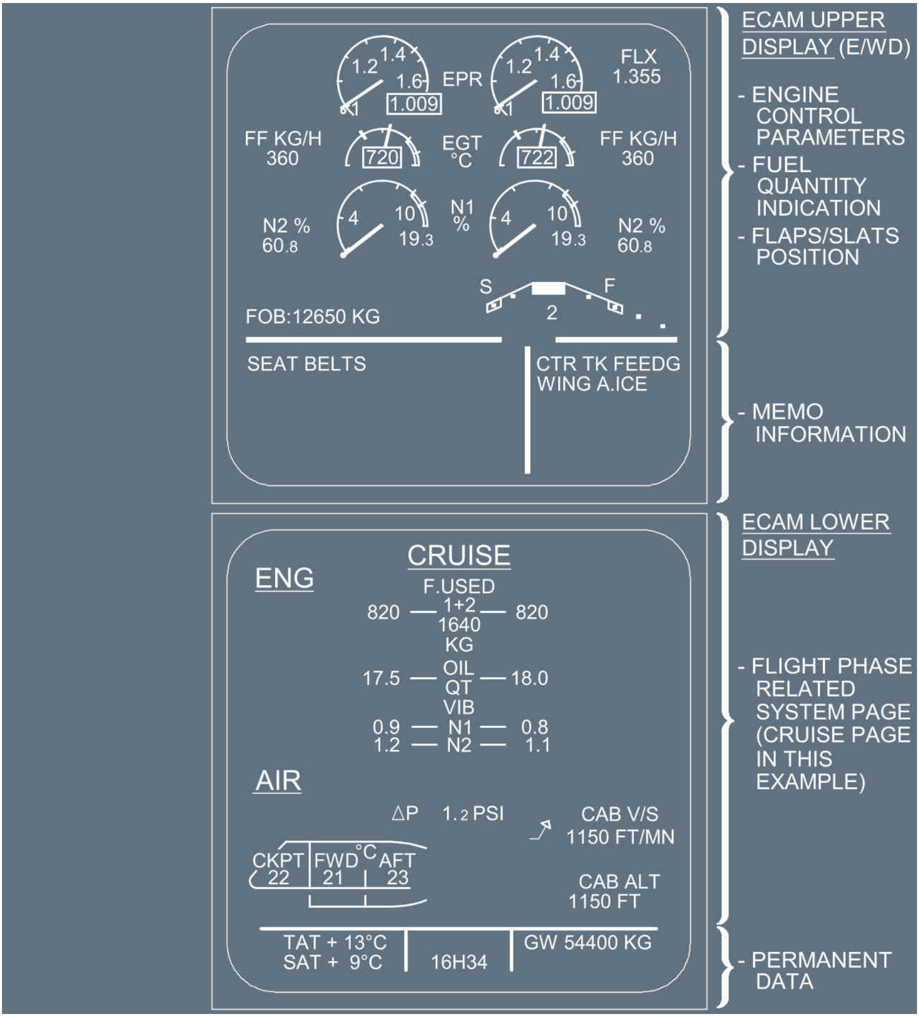
- FLIGHT PHASE RELATED SYSTEM PAGE (CRUISE PAGE IN THIS EXAMPLE)

- PERMANENT DATA

1 - THE ECAM DETECTS NO FAILURE

Ident.: DSC-31-25-20-00001220.0003001 / 09 OCT 12

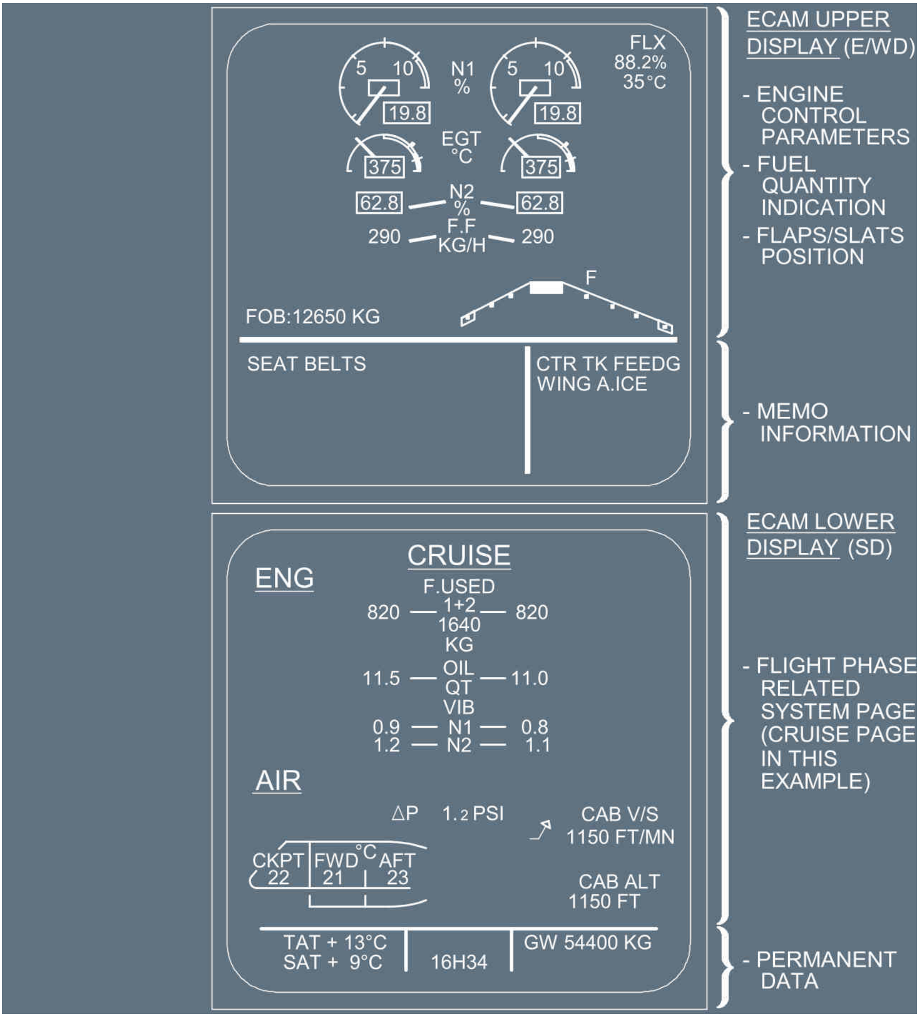
Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165


1.2
1.4
1.6
1
1.009
EPR
1.2
1.4
1.6
1
1.009
FLX
1.355
FF KG/H
360
720
EGT
°C
722
FF KG/H
360
N2 %
60.8
4
10
19.3
N1
%
4
10
19.3
N2 %
60.8
S
F
2
FOB:12650 KG
SEAT BELTS
CTR TK FEEDG
WING A.ICE
ECAM UPPER DISPLAY (E/WD)
- ENGINE CONTROL PARAMETERS
- FUEL QUANTITY INDICATION
- FLAPS/SLATS POSITION
- MEMO INFORMATION
CRUISE
ENG
F.USED
820
1+2
820
1640
KG
17.5
OIL
QT
18.0
VIB
0.9
N1
0.8
1.2
N2
1.1
AIR
ΔP 1.2 PSI
CAB V/S
1150 FT/MN
CKPT
22
FWD
21
°C
AFT
23
CAB ALT
1150 FT
TAT + 13°C
SAT + 9°C
16H34
GW 54400 KG
ECAM LOWER DISPLAY
- FLIGHT PHASE RELATED SYSTEM PAGE (CRUISE PAGE IN THIS EXAMPLE)
- PERMANENT DATA

1 - THE ECAM DETECTS NO FAILURE

Ident.: DSC-31-25-20-00001220.0004001 / 09 OCT 12

1 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**


5
10
N1
%
19.8
FLX
88.2%
35°C
EGT
°C
375
N2
%
62.8
290
F.F
KG/H
F
FOB:12650 KG
SEAT BELTS
CTR TK FEEDG
WING A.ICE
ECAM UPPER DISPLAY (E/WD)
- ENGINE CONTROL PARAMETERS
- FUEL QUANTITY INDICATION
- FLAPS/SLATS POSITION
- MEMO INFORMATION
CRUISE
ENG
F.USED
1+2
820
1640
KG
OIL
QT
11.5
11.0
VIB
0.9
N1
0.8
1.2
N2
1.1
AIR
ΔP 1.2 PSI
CAB V/S
1150 FT/MN
CKPT 22
FWD 21
°C
AFT 23
CAB ALT
1150 FT
TAT + 13°C
SAT + 9°C
16H34
GW 54400 KG
ECAM LOWER DISPLAY (SD)
- FLIGHT PHASE RELATED SYSTEM PAGE (CRUISE PAGE IN THIS EXAMPLE)
- PERMANENT DATA

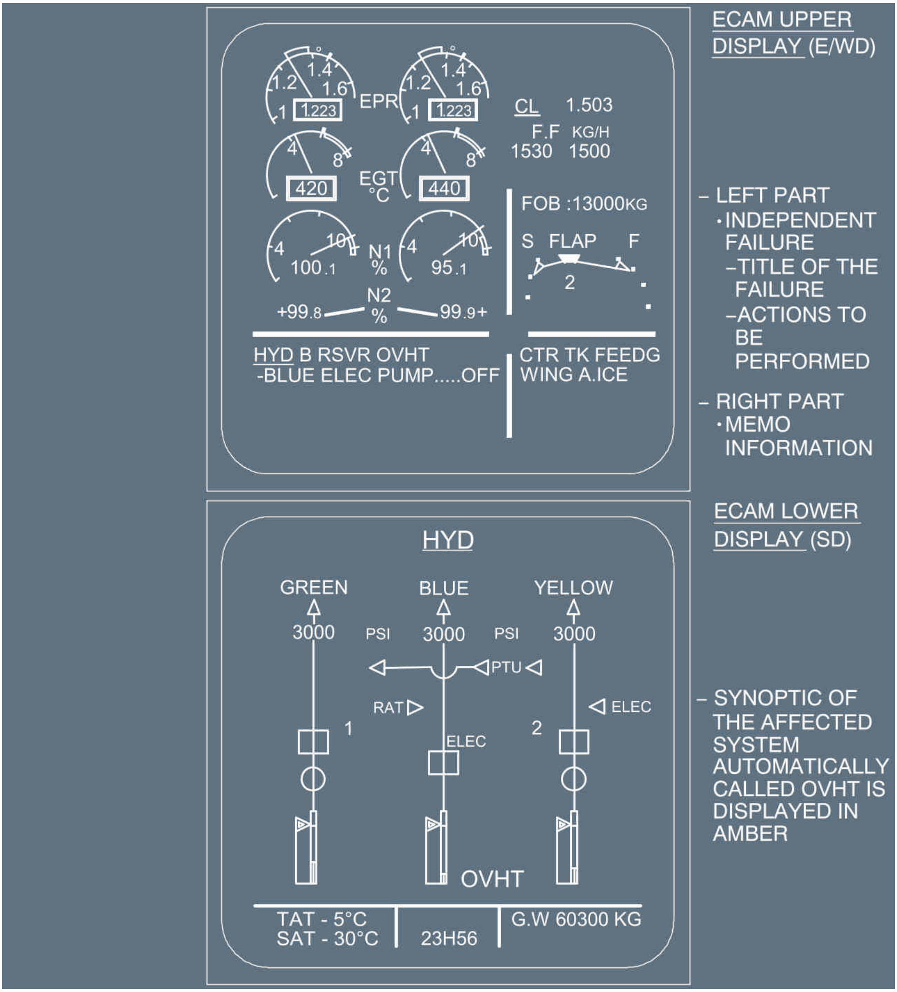
2 - THE ECAM DETECTS A FAILURE

Ident.: DSC-31-25-20-00001221.0002001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

For example, a hydraulic reservoir is overheat.

COCKPIT INDICATIONS

- A single chime sounds
- Both MASTER CAUTION lights come on, and stay on
- A FAULT light, on the overhead HYD panel, comes on
- The memo space on the E/WD displays the “HYD B RSVR OVHT” message, and the “BLUE ELEC PUMP . . . . . OFF” instruction
- The lower ECAM display (SD) automatically calls up the hydraulic system's diagram, and displays “OVHT” in amber next to the blue system
- The ECAM's CLR pushbutton lights up.


1.2
1.4
1.6
1
1.223
EPR
1.2
1.4
1.6
1
1.223
CL 1.503
F.F KG/H
1530 1500
4
8
420
EGT
°C
4
8
440
FOB :13000KG
S FLAP F
2
4
10
100.1
N1
%
4
10
95.1
N2
%
+99.8
99.9+
HYD B RSVR OVHT
-BLUE ELEC PUMP.....OFF
CTR TK FEEDG
WING A.ICE
ECAM UPPER DISPLAY (E/WD)
– LEFT PART
• INDEPENDENT FAILURE
–TITLE OF THE FAILURE
–ACTIONS TO BE PERFORMED
– RIGHT PART
• MEMO INFORMATION
HYD
GREEN
BLUE
YELLOW
3000
PSI
3000
PSI
3000
PTU
RAT
ELEC
1
ELEC
2
OVHT
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG
ECAM LOWER DISPLAY (SD)
– SYNOPTIC OF THE AFFECTED SYSTEM AUTOMATICALLY CALLED OVHT IS DISPLAYED IN AMBER

2 - THE ECAM DETECTS A FAILURE

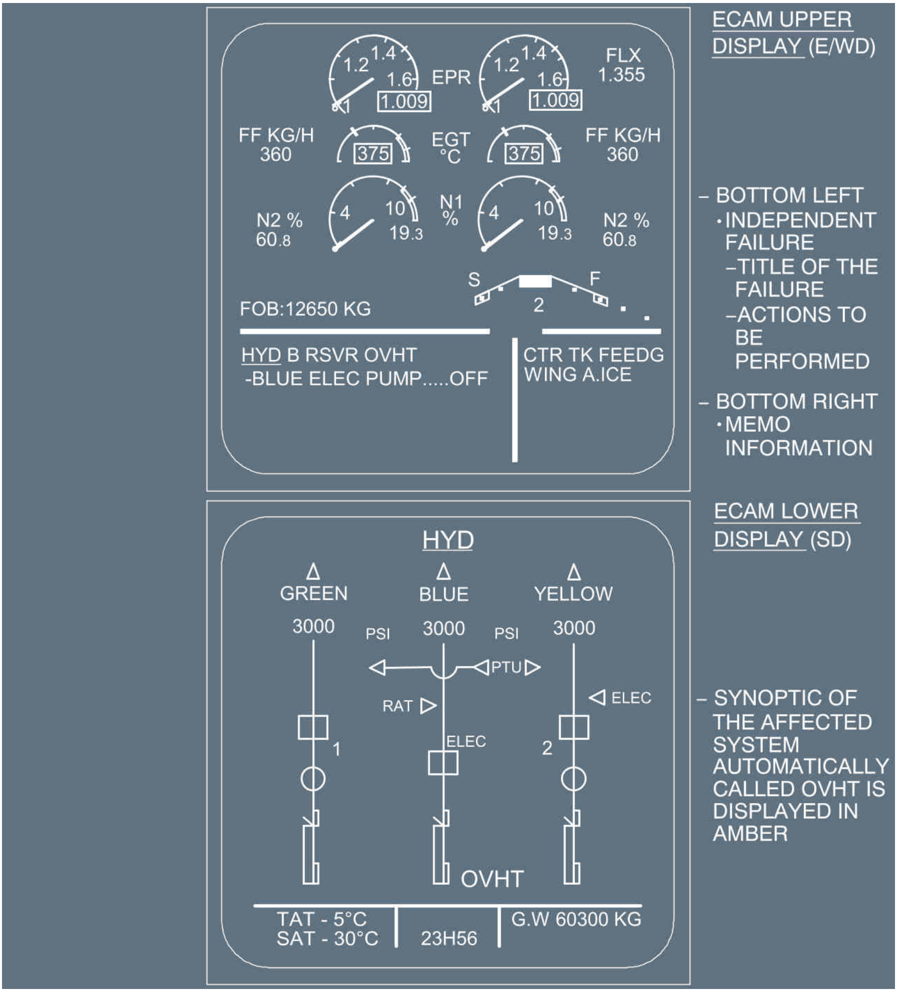
Ident.: DSC-31-25-20-00001221.0003001 / 09 OCT 12

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

For example, a hydraulic reservoir is overheat.

COCKPIT INDICATIONS

- A single chime sounds
- Both MASTER CAUTION lights come on, and stay on
- A FAULT light, on the overhead HYD panel, comes on
- The memo space on the E/WD displays the “HYD B RSVR OVHT” message, and the “BLUE ELEC PUMP . . . . . OFF” instruction
- The lower ECAM display (SD) automatically calls up the hydraulic system's diagram, and displays “OVHT” in amber next to the blue system
- The ECAM's CLR pushbutton lights up.


1.2
1.4
1.6
1.009
EPR
1.2
1.4
1.6
1.009
FLX
1.355
FF KG/H
360
375
EGT
°C
375
FF KG/H
360
N2 %
60.8
4
10
19.3
N1
%
4
10
19.3
N2 %
60.8
S
F
2
FOB:12650 KG
HYD B RSVR OVHT
-BLUE ELEC PUMP.....OFF
CTR TK FEEDG
WING A.ICE
HYD
GREEN
BLUE
YELLOW
3000
PSI
3000
PSI
3000
PTU
RAT
ELEC
ELEC
1
2
OVHT
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- BOTTOM LEFT
  - INDEPENDENT FAILURE
    - TITLE OF THE FAILURE
    - ACTIONS TO BE PERFORMED
- BOTTOM RIGHT
  - MEMO INFORMATION

ECAM LOWER DISPLAY (SD)

- SYNOPTIC OF THE AFFECTED SYSTEM AUTOMATICALLY CALLED OVHT IS DISPLAYED IN AMBER

2 - THE ECAM DETECTS A FAILURE

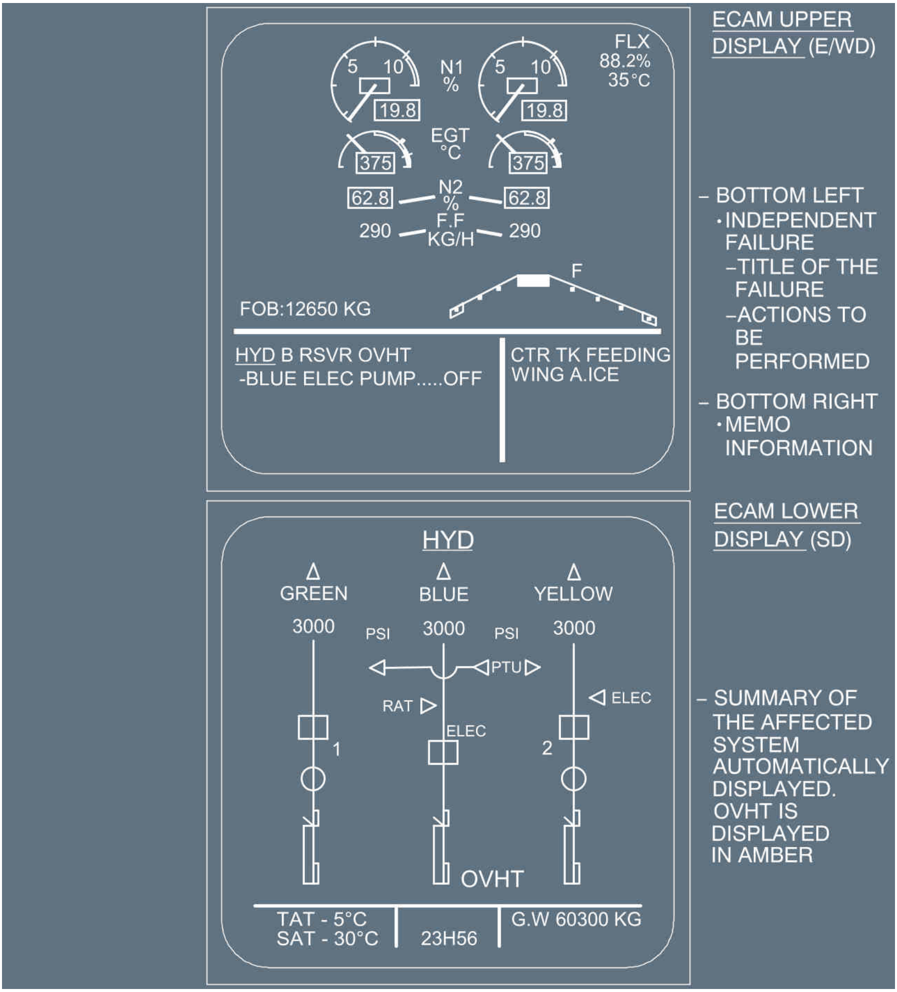
Ident.: DSC-31-25-20-00001221.0004001 / 09 OCT 12

2 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

For example, a hydraulic reservoir is overheat.

COCKPIT INDICATIONS

- A single chime sounds
- Both MASTER CAUTION lights come on, and stay on
- A FAULT light, on the overhead HYD panel, comes on
- The memo space on the E/WD displays the “HYD B RSVR OVHT” message, and the “BLUE ELEC PUMP . . . . . OFF” instruction
- The lower ECAM display (SD) automatically calls up the hydraulic system's diagram, and displays “OVHT” in amber next to the blue system
- The ECAM's CLR pushbutton lights up.


5
10
19.8
N1
%
FLX
88.2%
35°C
375
EGT
°C
62.8
N2
%
290
F.F
KG/H
F
FOB:12650 KG
HYD B RSVR OVHT
-BLUE ELEC PUMP.....OFF
CTR TK FEEDING
WING A.ICE
HYD
GREEN
BLUE
YELLOW
3000
PSI
PTU
RAT
ELEC
1
2
OVHT
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG
ECAM UPPER DISPLAY (E/WD)
– BOTTOM LEFT
• INDEPENDENT FAILURE
– TITLE OF THE FAILURE
– ACTIONS TO BE PERFORMED
– BOTTOM RIGHT
• MEMO INFORMATION
ECAM LOWER DISPLAY (SD)
– SUMMARY OF THE AFFECTED SYSTEM AUTOMATICALLY DISPLAYED. OVHT IS DISPLAYED IN AMBER

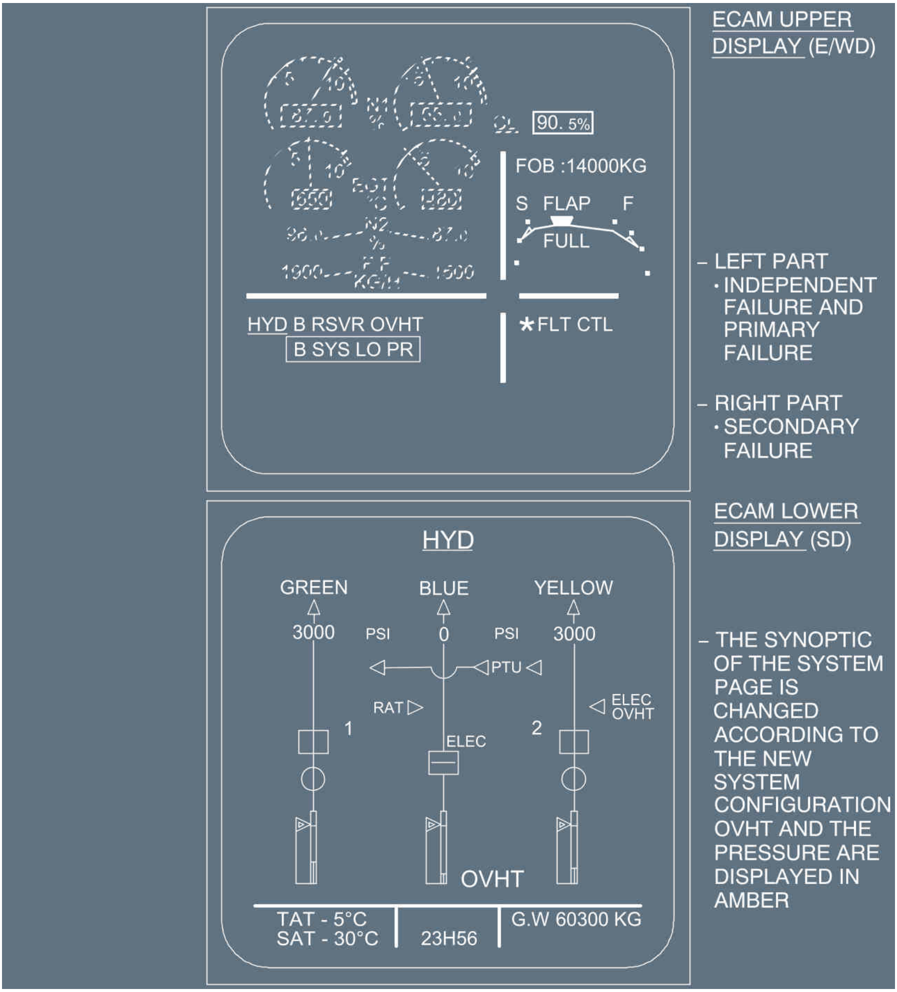
3 - THE FLIGHT CREW FOLLOWS THE INSTRUCTION DISPLAYED ON THE E/WD

Ident.: DSC-31-25-20-00001222.0001001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The flight crew switches off the BLUE ELEC PUMP pushbutton, depressurizing the blue hydraulic circuit.

COCKPIT INDICATIONS

- A single chime sounds.
- Both MASTER CAUTION lights stay on.
- A FAULT/OFF light, on the overhead panel, comes on.
- The second part of the message on the E/WD changes to “B SYS LO PR”.
- The SD's system diagram shows an amber zero for the pressure in the blue system, along with the amber “OVHT”.
- The right side of the memo area indicates a secondary failure in the flight control system.
- The ECAM control panel's CLR pushbutton remains on.


N1 %
90.5%
CL
FOB :14000KG
S FLAP F
FULL
EGT °C
N2 %
FF KG/H
1900
1600
HYD B RSVR OVHT
B SYS LO PR
*FLT CTL
HYD
GREEN
BLUE
YELLOW
3000
PSI
0
PSI
3000
PTU
RAT
ELEC OVHT
1
ELEC
2
OVHT
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- LEFT PART
  - INDEPENDENT FAILURE AND PRIMARY FAILURE
- RIGHT PART
  - SECONDARY FAILURE

ECAM LOWER DISPLAY (SD)

- THE SYNOPTIC OF THE SYSTEM PAGE IS CHANGED ACCORDING TO THE NEW SYSTEM CONFIGURATION OVHT AND THE PRESSURE ARE DISPLAYED IN AMBER

3 - THE FLIGHT CREW FOLLOWS THE INSTRUCTION DISPLAYED ON THE E/WD

Ident.: DSC-31-25-20-00001222.0002001 / 02 MAY 23

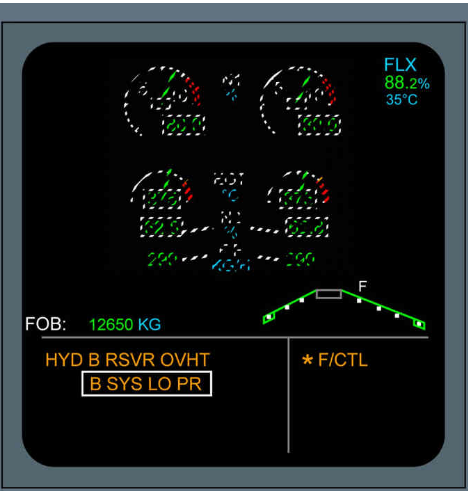
3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

4 The flight crew switches off the BLUE ELEC PUMP pb-sw, depressurizing the blue hydraulic circuit.

5 COCKPIT INDICATIONS

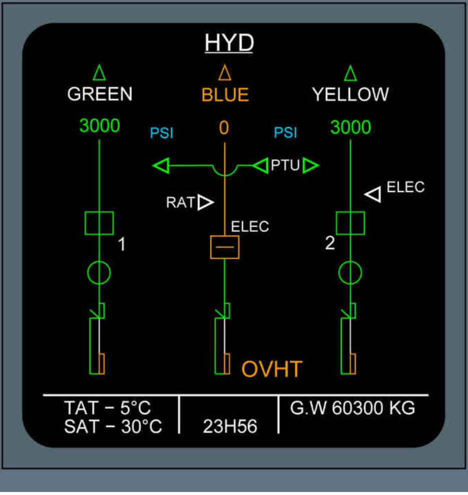
- A single chime sounds
- Both MASTER CAUTION lights stay on
- A FAULT/OFF light, on the overhead panel, comes on
- The second part of the message on the E/WD changes to B SYS LO PR
- The SD's system diagram shows 0 for the pressure in the blue system, along with OVHT
- The right side of the memo area indicates a secondary failure in the flight control system
- The ECAM control panel's CLR pb remains on.

ECAM SEQUENCE - EXAMPLE


FLX
88.2%
35°C
F
FOB: 12650 KG
HYD B RSVR OVHT
B SYS LO PR
* F/CTL

ECAM UPPER DISPLAY (E/WD)

- BOTTOM LEFT
  - INDEPENDENT FAILURE AND PRIMARY FAILURE
- BOTTOM RIGHT
  - SECONDARY FAILURE


HYD
GREEN
BLUE
YELLOW
3000
PSI
0
PSI
3000
PTU
RAT
ELEC
ELEC
1
2
OVHT
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM LOWER DISPLAY (SD)

- THE SYNOPTIC OF THE SYSTEM PAGE IS CHANGED ACCORDING TO THE NEW SYSTEM CONFIGURATION OVHT AND THE PRESSURE ARE DISPLAYED IN AMBER

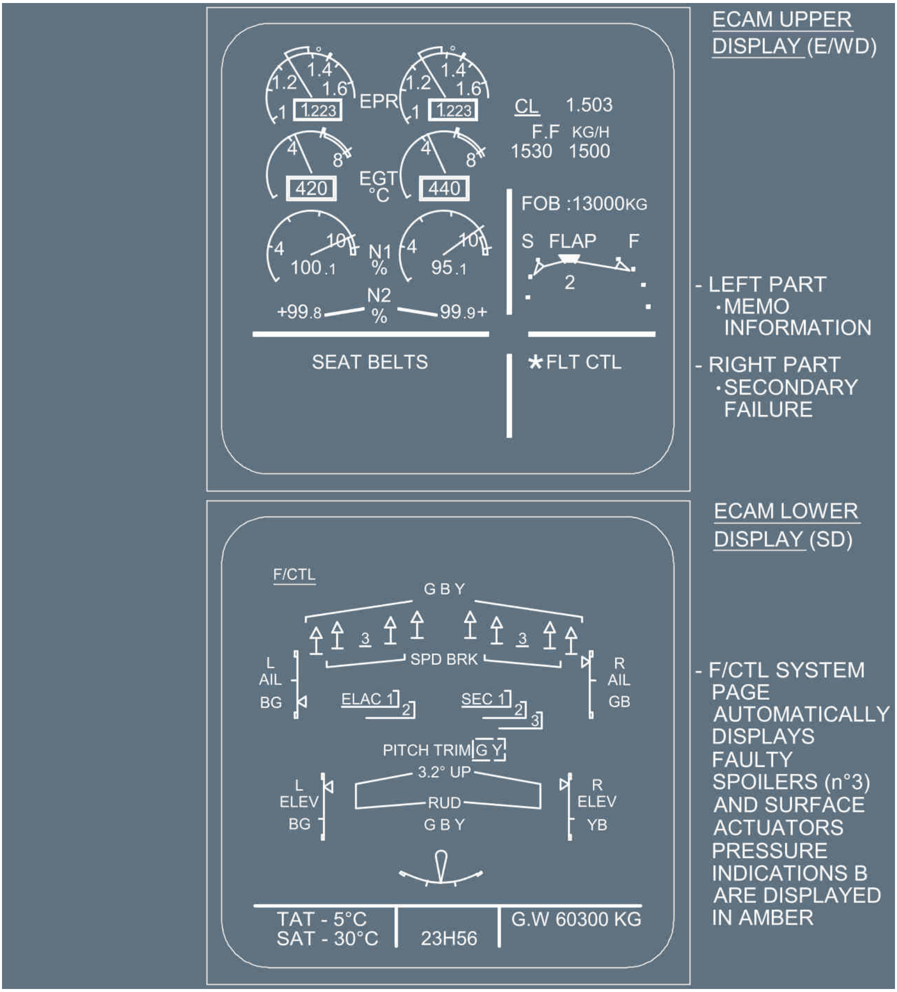
4 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON ON THE ECP

Ident.: DSC-31-25-20-00001223.0002001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

COCKPIT INDICATIONS

- The CLR pushbutton stays on.
- The FAULT/OFF light stays on.
- Hydraulic system messages disappear from the E/WD, and the right side of the memo area indicates a secondary failure in the flight control system.
- The SD automatically calls up the flight control system page, with surface actuator indications (associated with the blue hydraulic system) shown in amber.

ECAM SEQUENCE - EXAMPLE


EPR
1.2
1.4
1.6
1
1.223
1.223
EGT °C
420
440
4
8
N1 %
10
100.1
95.1
N2 %
+99.8
99.9+
CL 1.503
F.F KG/H
1530 1500
FOB :13000KG
S FLAP F
2
SEAT BELTS
*FLT CTL
F/CTL
G B Y
3
SPD BRK
L AIL BG
R AIL GB
ELAC 1 2
SEC 1 2 3
PITCH TRIM G Y
3.2° UP
L ELEV BG
R ELEV YB
RUD
G B Y
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- LEFT PART
  - MEMO INFORMATION
- RIGHT PART
  - SECONDARY FAILURE

ECAM LOWER DISPLAY (SD)

- F/CTL SYSTEM PAGE AUTOMATICALLY DISPLAYS FAULTY SPOILERS (n°3) AND SURFACE ACTUATORS PRESSURE INDICATIONS B ARE DISPLAYED IN AMBER

4 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON ON THE ECP

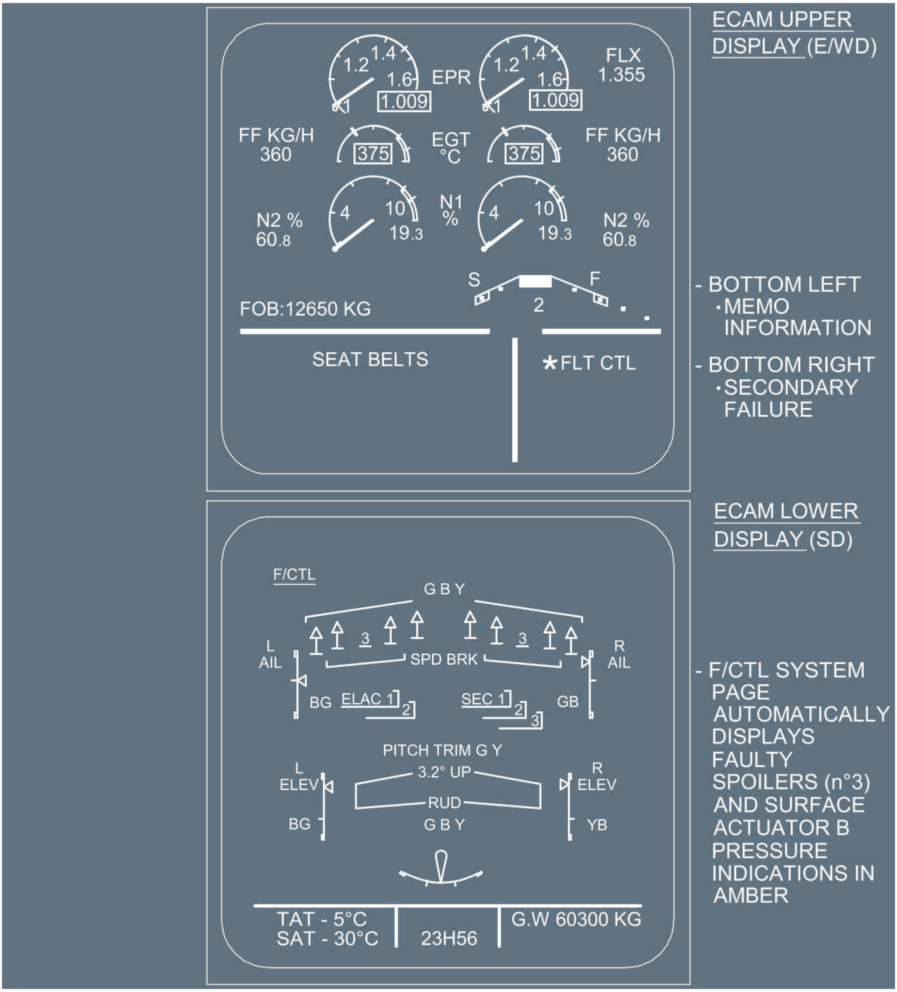
Ident.: DSC-31-25-20-00001223.0004001 / 09 OCT 12

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

COCKPIT INDICATIONS

- The CLR pushbutton stays on.
- The FAULT/OFF light stays on.
- Hydraulic system messages disappear from the E/WD, and the right side of the memo area indicates a secondary failure in the flight control system.
- The SD automatically calls up the flight control system page, with surface actuator indications (associated with the blue hydraulic system) shown in amber.

ECAM SEQUENCE - EXAMPLE


1.2
1.4
1.6
1
1.009
EPR
1.2
1.4
1.6
1
1.009
FLX
1.355
FF KG/H
360
375
EGT
°C
375
FF KG/H
360
N2 %
60.8
4
10
19.3
N1
%
4
10
19.3
N2 %
60.8
S
F
2
FOB:12650 KG
SEAT BELTS
*FLT CTL
F/CTL
G B Y
3
3
SPD BRK
L
AIL
R
AIL
BG
ELAC 1
2
SEC 1
2
3
GB
PITCH TRIM G Y
3.2° UP
L
ELEV
R
ELEV
RUD
BG
G B Y
YB
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- BOTTOM LEFT
  - MEMO INFORMATION
- BOTTOM RIGHT
  - SECONDARY FAILURE

ECAM LOWER DISPLAY (SD)

- F/CTL SYSTEM PAGE AUTOMATICALLY DISPLAYS FAULTY SPOILERS (n°3) AND SURFACE ACTUATOR B PRESSURE INDICATIONS IN AMBER

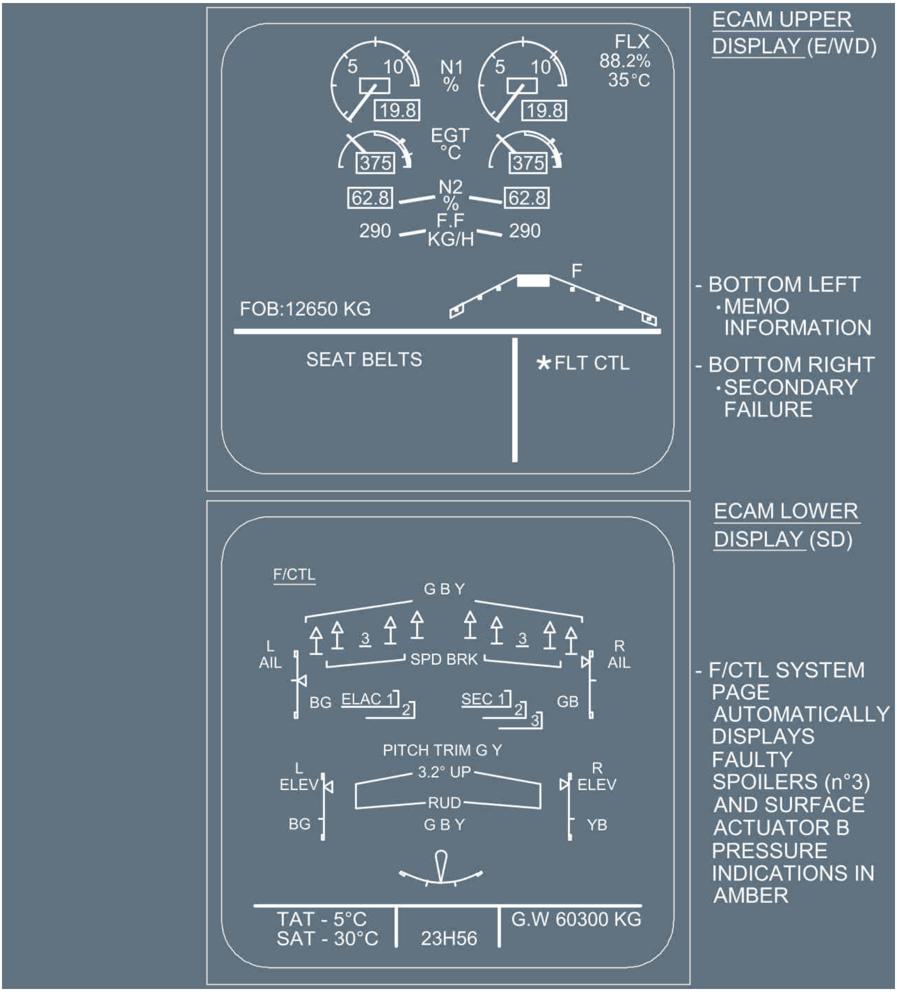
4 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON ON THE ECP

Ident.: DSC-31-25-20-00001223.0003001 / 09 OCT 12

6 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

COCKPIT INDICATIONS

- The CLR pushbutton stays on.
- The FAULT/OFF light stays on.
- Hydraulic system messages disappear from the E/WD, and the right side of the memo area indicates a secondary failure in the flight control system.
- The SD automatically calls up the flight control system page, with surface actuator indications (associated with the blue hydraulic system) shown in amber.


5
10
19.8
N1
%
5
10
19.8
FLX
88.2%
35°C
375
EGT
°C
375
62.8
N2
%
62.8
290
F.F
KG/H
290
F
FOB:12650 KG
SEAT BELTS
*FLT CTL
F/CTL
G B Y
3
3
L
AIL
SPD BRK
R
AIL
BG
ELAC 1
2
SEC 1
2
3
GB
PITCH TRIM G Y
3.2° UP
L
ELEV
RUD
R
ELEV
BG
G B Y
YB
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- BOTTOM LEFT
  - MEMO INFORMATION
- BOTTOM RIGHT
  - SECONDARY FAILURE

ECAM LOWER DISPLAY (SD)

- F/CTL SYSTEM PAGE AUTOMATICALLY DISPLAYS FAULTY SPOILERS (n°3) AND SURFACE ACTUATOR B PRESSURE INDICATIONS IN AMBER

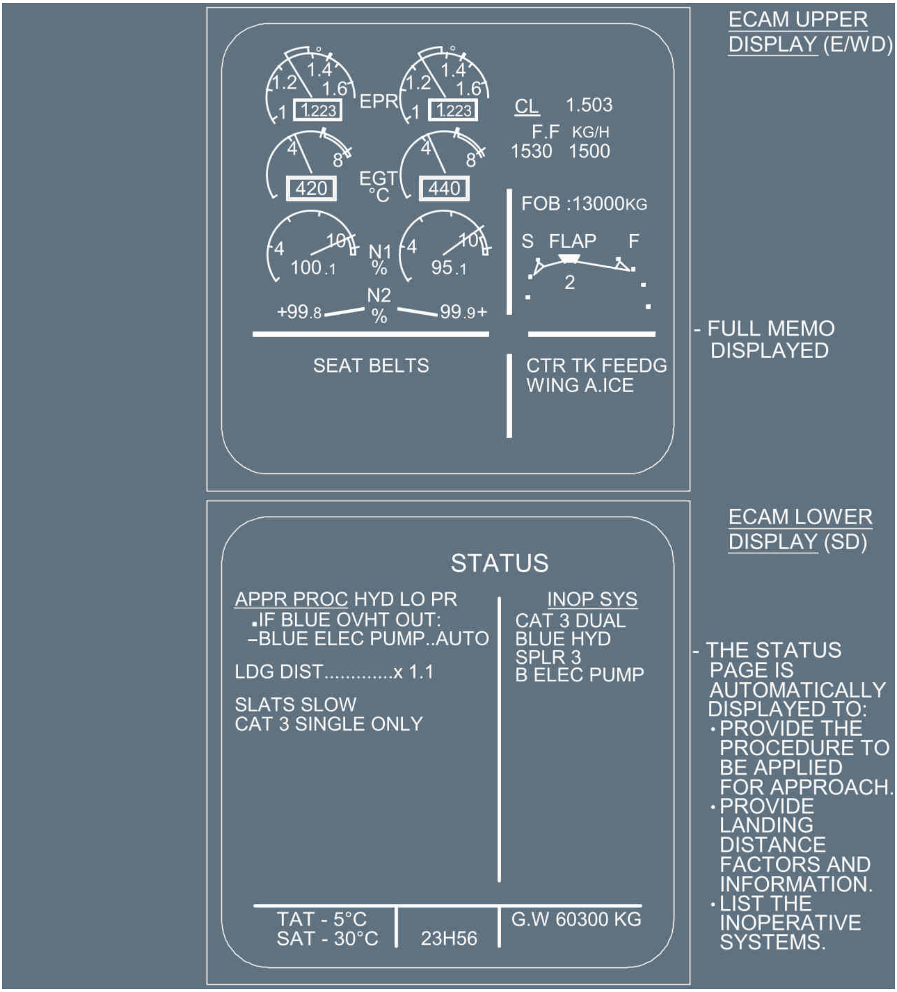
5 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON A SECOND TIME

Ident.: DSC-31-25-20-00001224.0002001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

COCKPIT INDICATIONS

- The ECP's CLR and STS pushbuttons light up.
- The FAULT/OFF lights stay on.
- The E/WD's memo area returns to normal.
- The STATUS page automatically appears on the SD, displaying the procedures for completing the flight with a faulty blue system.

ECAM SEQUENCE - EXAMPLE


1.2
1.4
1.6
1
1.223
EPR
1.2
1.4
1.6
1
1.223
CL 1.503
F.F KG/H
1530 1500
4
8
420
EGT
°C
4
8
440
FOB :13000KG
4
10
100.1
N1
%
4
10
95.1
S FLAP F
2
N2
%
+99.8
99.9+

SEAT BELTS

CTR TK FEEDG
WING A.ICE

STATUS

APPR PROC HYD LO PR
.IF BLUE OVHT OUT:
-BLUE ELEC PUMP..AUTO

LDG DIST.............x 1.1

SLATS SLOW
CAT 3 SINGLE ONLY

INOP SYS
CAT 3 DUAL
BLUE HYD
SPLR 3
B ELEC PUMP

TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- FULL MEMO DISPLAYED

ECAM LOWER DISPLAY (SD)

- THE STATUS PAGE IS AUTOMATICALLY DISPLAYED TO:
  - PROVIDE THE PROCEDURE TO BE APPLIED FOR APPROACH.
  - PROVIDE LANDING DISTANCE FACTORS AND INFORMATION.
  - LIST THE INOPERATIVE SYSTEMS.

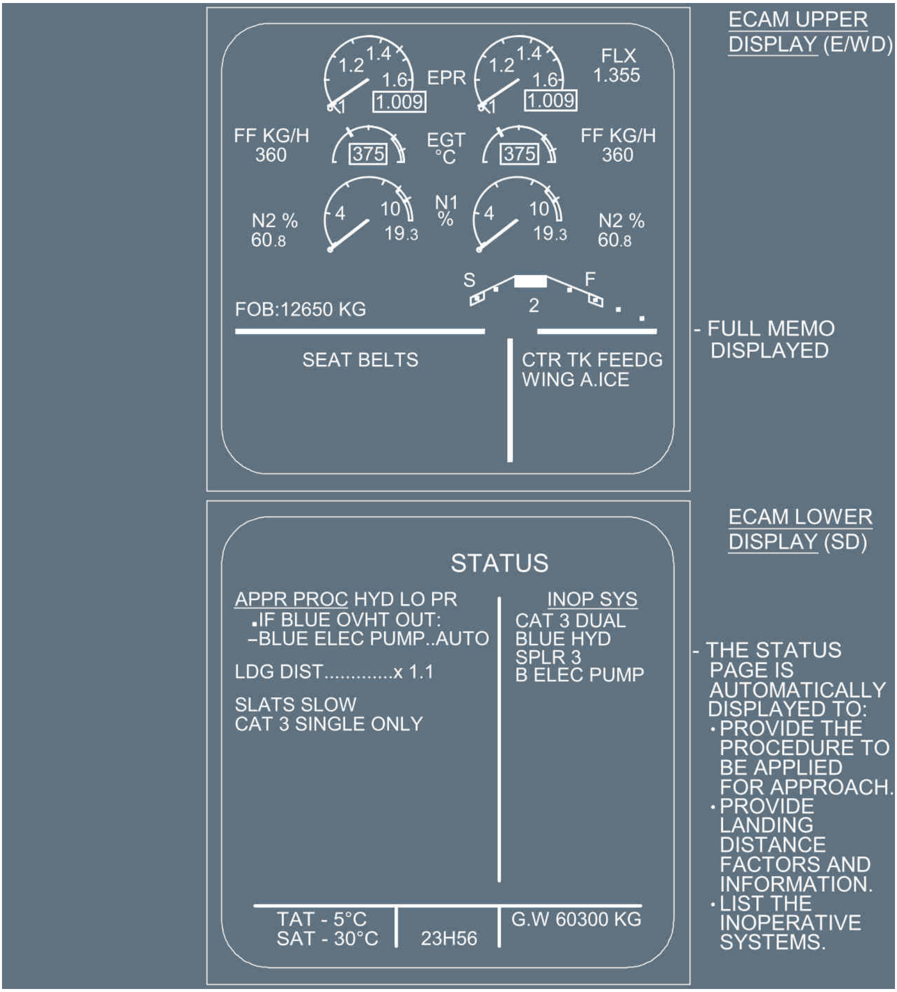
5 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON A SECOND TIME

Ident.: DSC-31-25-20-00001224.0004001 / 09 OCT 12

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

COCKPIT INDICATIONS

- The ECP's CLR and STS pushbuttons light up.
- The FAULT/OFF lights stay on.
- The E/WD's memo area returns to normal.
- The STATUS page automatically appears on the SD, displaying the procedures for completing the flight with a faulty blue system.


1.2
1.4
1.6
1
1.009
EPR
1.2
1.4
1.6
1
1.009
FLX
1.355
FF KG/H
360
375
EGT
°C
375
FF KG/H
360
N2 %
60.8
4
10
19.3
N1
%
4
10
19.3
N2 %
60.8
S
F
2
FOB:12650 KG
STATUS
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

SEAT BELTS

CTR TK FEEDG
WING A.ICE

APPR PROC HYD LO PR
.IF BLUE OVHT OUT:
–BLUE ELEC PUMP..AUTO

LDG DIST.............x 1.1

SLATS SLOW
CAT 3 SINGLE ONLY

INOP SYS
CAT 3 DUAL
BLUE HYD
SPLR 3
B ELEC PUMP

ECAM UPPER DISPLAY (E/WD)

- FULL MEMO DISPLAYED

ECAM LOWER DISPLAY (SD)

- THE STATUS PAGE IS AUTOMATICALLY DISPLAYED TO:
  - PROVIDE THE PROCEDURE TO BE APPLIED FOR APPROACH.
  - PROVIDE LANDING DISTANCE FACTORS AND INFORMATION.
  - LIST THE INOPERATIVE SYSTEMS.

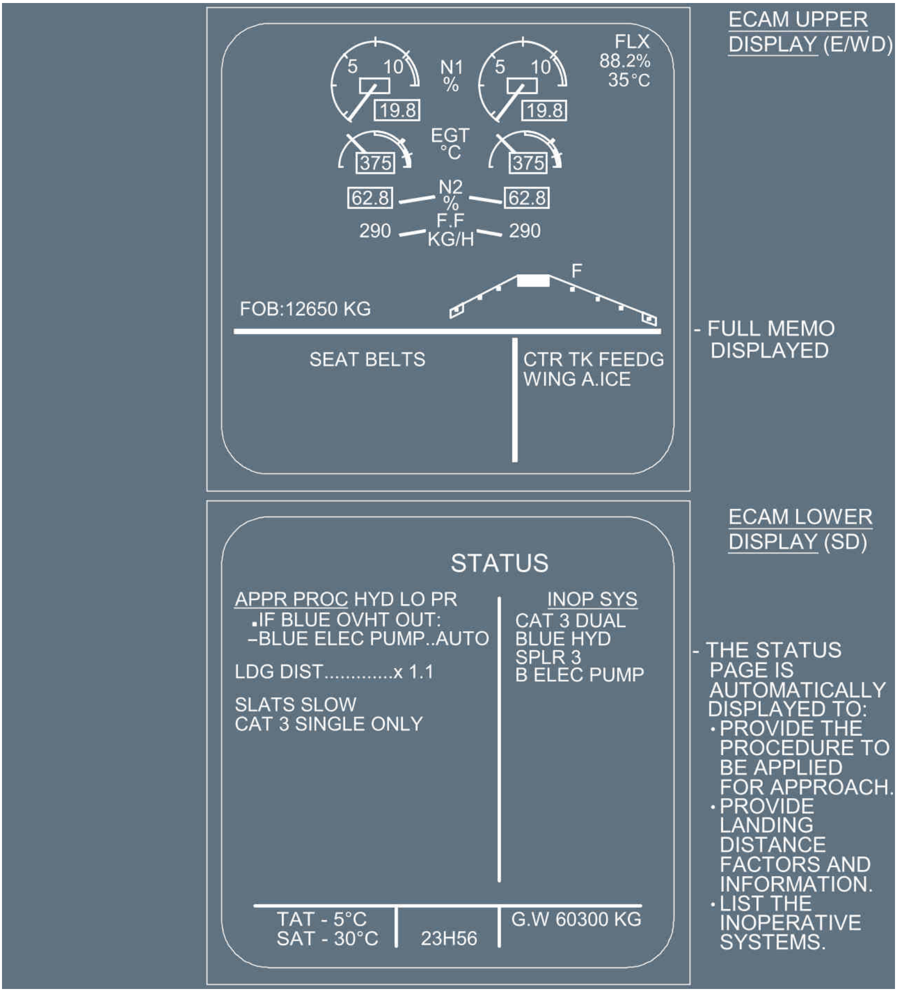
5 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON A SECOND TIME

Ident.: DSC-31-25-20-00001224.0003001 / 09 OCT 12

7 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

COCKPIT INDICATIONS

- The ECP's CLR and STS pushbuttons light up.
- The FAULT/OFF lights stay on.
- The E/WD's memo area returns to normal.
- The STATUS page automatically appears on the SD, displaying the procedures for completing the flight with a faulty blue system.


5
10
N1
%
19.8
19.8
FLX
88.2%
35°C
EGT
°C
375
375
62.8
N2
%
62.8
290
F.F
KG/H
290
F
FOB:12650 KG
SEAT BELTS
CTR TK FEEDG
WING A.ICE
STATUS
APPR PROC HYD LO PR
.IF BLUE OVHT OUT:
-BLUE ELEC PUMP..AUTO
LDG DIST.............x 1.1
SLATS SLOW
CAT 3 SINGLE ONLY
INOP SYS
CAT 3 DUAL
BLUE HYD
SPLR 3
B ELEC PUMP
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- FULL MEMO DISPLAYED

ECAM LOWER DISPLAY (SD)

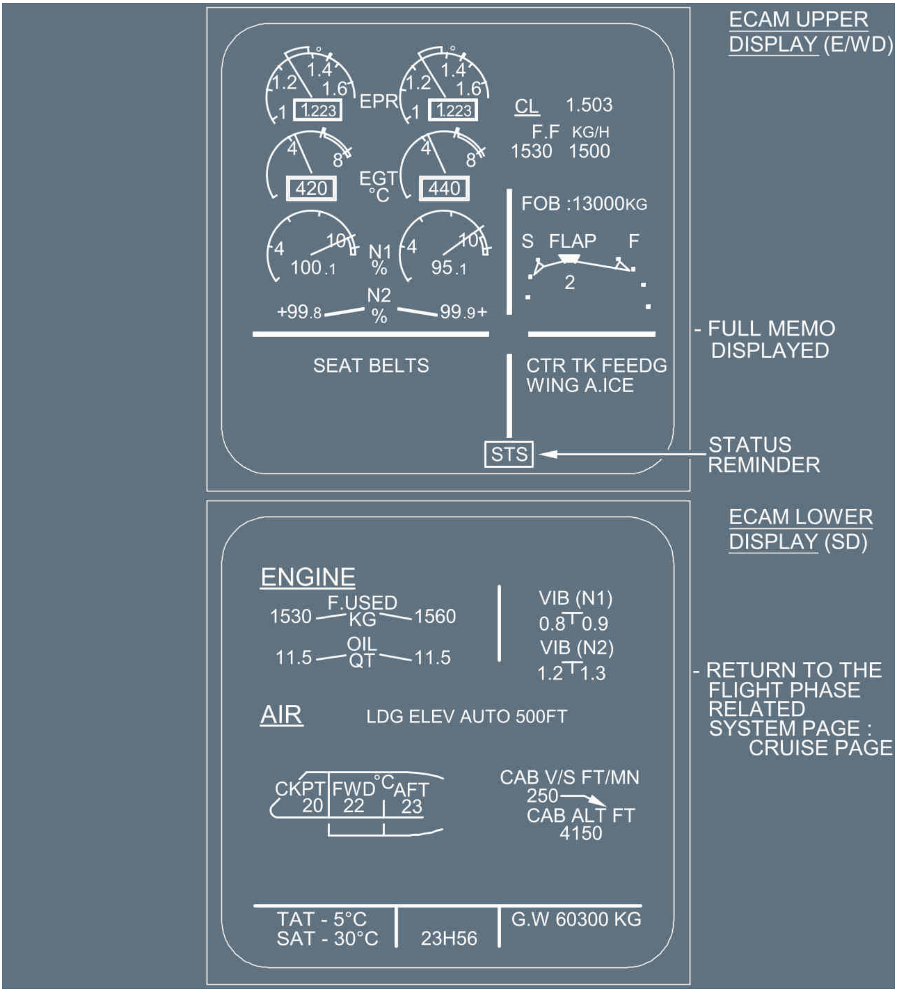
- THE STATUS PAGE IS AUTOMATICALLY DISPLAYED TO:
  - PROVIDE THE PROCEDURE TO BE APPLIED FOR APPROACH.
  - PROVIDE LANDING DISTANCE FACTORS AND INFORMATION.
  - LIST THE INOPERATIVE SYSTEMS.

6 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON A THIRD TIME

Ident.: DSC-31-25-20-00001225.0002001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

COCKPIT INDICATIONS

- The CLR pushbutton light goes off.
- The FAULT/OFF lights stay on.
- A status reminder appears at the bottom of the E/WD.
- The SD automatically displays the system page corresponding to the flight phase.


1.2
1.4
1.6
.1
1.223
EPR
1.2
1.4
1.6
.1
1.223
CL
1.503
F.F KG/H
1530
1500
4
8
420
EGT
°C
4
8
440
FOB :13000KG
4
10
100.1
N1
%
4
10
95.1
S FLAP F
2
+99.8
N2
%
99.9+
SEAT BELTS
CTR TK FEEDG
WING A.ICE
STS
ENGINE
F.USED
KG
1530
1560
OIL
QT
11.5
11.5
VIB (N1)
0.8
0.9
VIB (N2)
1.2
1.3
AIR
LDG ELEV AUTO 500FT
CKPT
FWD
°C
AFT
20
22
23
CAB V/S FT/MN
250
CAB ALT FT
4150
TAT - 5°C
SAT - 30°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- FULL MEMO DISPLAYED

STATUS REMINDER

ECAM LOWER DISPLAY (SD)

- RETURN TO THE FLIGHT PHASE RELATED SYSTEM PAGE : CRUISE PAGE

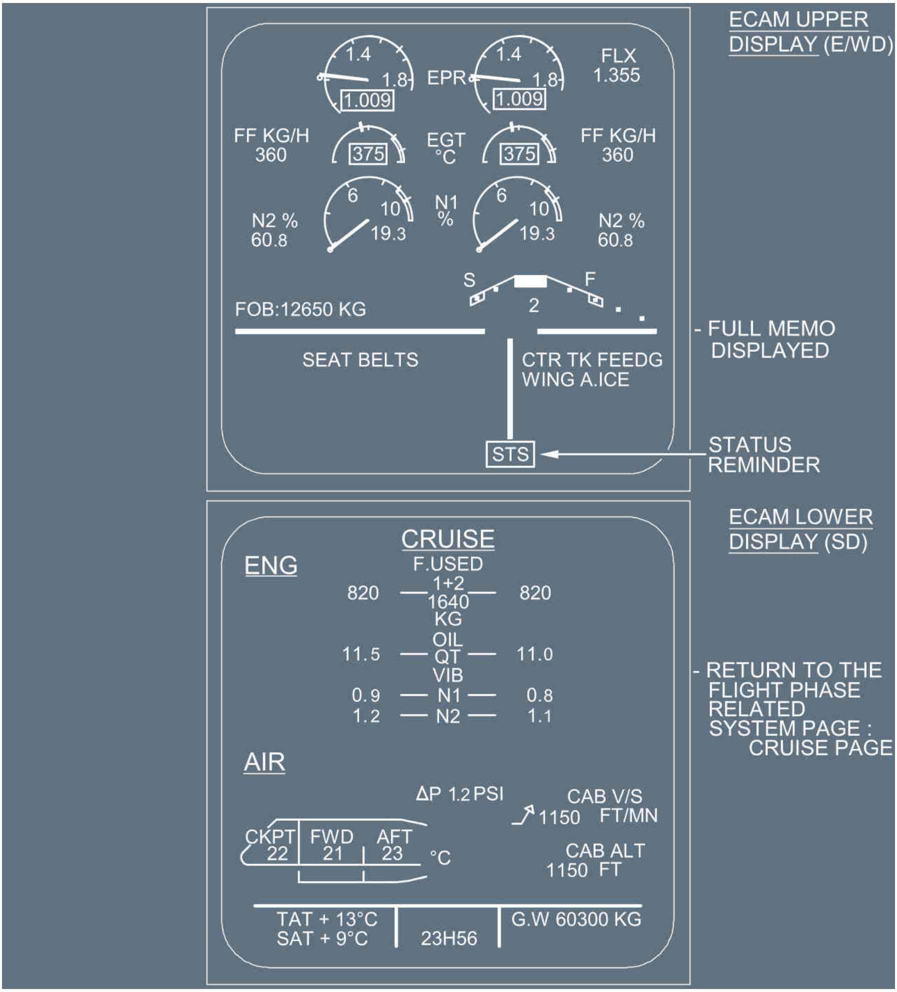
6 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON A THIRD TIME

Ident.: DSC-31-25-20-00001225.0004001 / 09 OCT 12

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

COCKPIT INDICATIONS

- The CLR pushbutton light goes off.
- The FAULT/OFF lights stay on.
- A status reminder appears at the bottom of the E/WD.
- The SD automatically displays the system page corresponding to the flight phase.


1.4
1.8
1.009
EPR
1.4
1.8
1.009
FLX
1.355
FF KG/H
360
375
EGT
°C
375
FF KG/H
360
6
10
19.3
N1
%
6
10
19.3
N2 %
60.8
N2 %
60.8
S
F
2
FOB:12650 KG
SEAT BELTS
CTR TK FEEDG
WING A.ICE
STS
CRUISE
ENG
F.USED
1+2
820
1640
820
KG
OIL
11.5
QT
11.0
VIB
0.9
N1
0.8
1.2
N2
1.1
AIR
ΔP 1.2 PSI
CAB V/S
1150 FT/MN
CKPT
22
FWD
21
AFT
23
°C
CAB ALT
1150 FT
TAT + 13°C
SAT + 9°C
23H56
G.W 60300 KG

ECAM UPPER DISPLAY (E/WD)

- FULL MEMO DISPLAYED

STATUS REMINDER

ECAM LOWER DISPLAY (SD)

- RETURN TO THE FLIGHT PHASE RELATED SYSTEM PAGE : CRUISE PAGE

6 - ONE OF THE PILOTS PUSHES THE CLR PUSHBUTTON A THIRD TIME

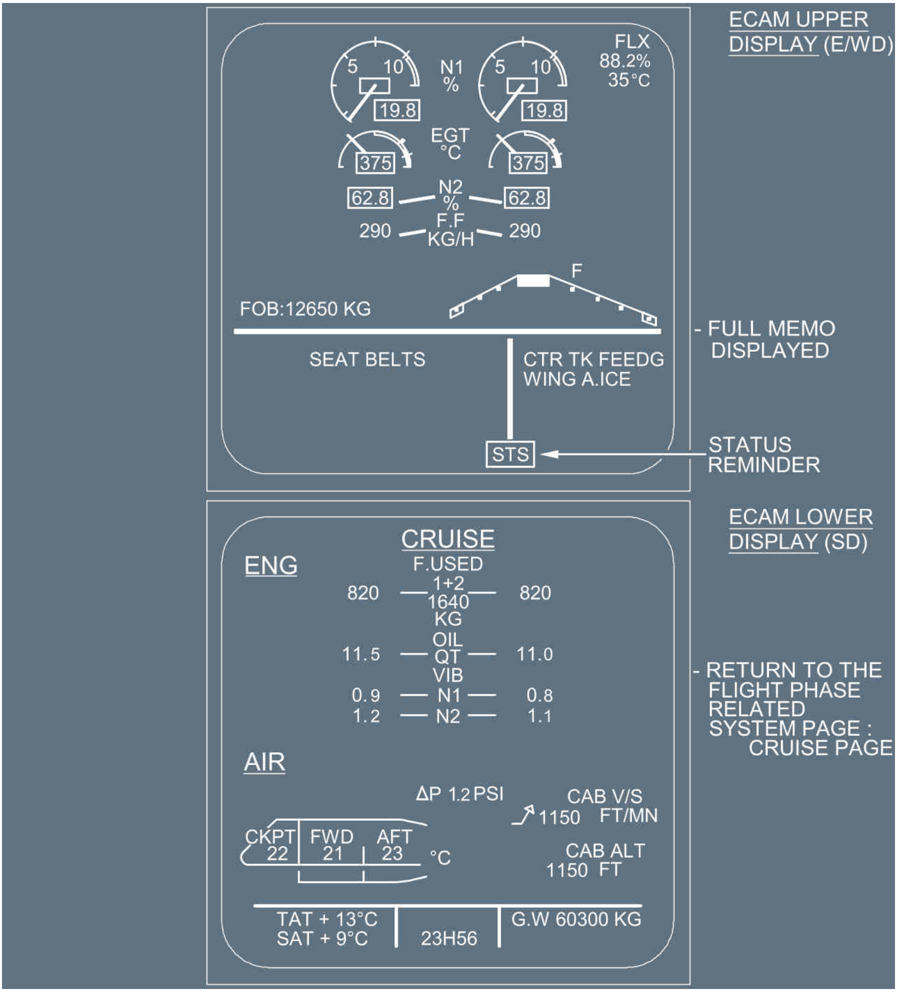
Ident.: DSC-31-25-20-00001225.0003001 / 09 OCT 12

8 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

COCKPIT INDICATIONS

- The CLR pushbutton light goes off.
- The FAULT/OFF lights stay on.
- A status reminder appears at the bottom of the E/WD.
- The SD automatically displays the system page corresponding to the flight phase.

ECAM SEQUENCE - EXAMPLE


ECAM UPPER DISPLAY (E/WD)
5
10
N1
%
19.8
FLX
88.2%
35°C
EGT
°C
375
N2
%
62.8
F.F
KG/H
290
F
FOB:12650 KG
SEAT BELTS
CTR TK FEEDG
WING A.ICE
STS
- FULL MEMO DISPLAYED
STATUS REMINDER
ECAM LOWER DISPLAY (SD)
CRUISE
ENG
F.USED
1+2
1640
KG
820
OIL
QT
11.5
11.0
VIB
N1
N2
0.9
0.8
1.2
1.1
AIR
ΔP 1.2 PSI
CAB V/S
1150 FT/MN
CKPT 22
FWD 21
AFT 23
°C
CAB ALT
1150 FT
TAT + 13°C
SAT + 9°C
23H56
G.W 60300 KG
- RETURN TO THE FLIGHT PHASE RELATED SYSTEM PAGE : CRUISE PAGE

Intentionally left blank

GENERAL

Ident.: DSC-31-27-00001226.0001001 / 09 NOV 20
Applicable to: ALL

The OEB reminder function provides operational help to the flight crew. This function enables the flight crew to clearly identify on the ECAM any procedure and STATUS message superseded by an OEB procedure.
When a situation causes an ECAM alert to trigger, a message informs the flight crew in real time if there is an OEB for the displayed ECAM alert and/or STATUS messages. As a result, the ECAM procedure and/or STATUS message is changed. In this case, a specific ECAM message informs the flight crew to refer to the QRH.

DESCRIPTION

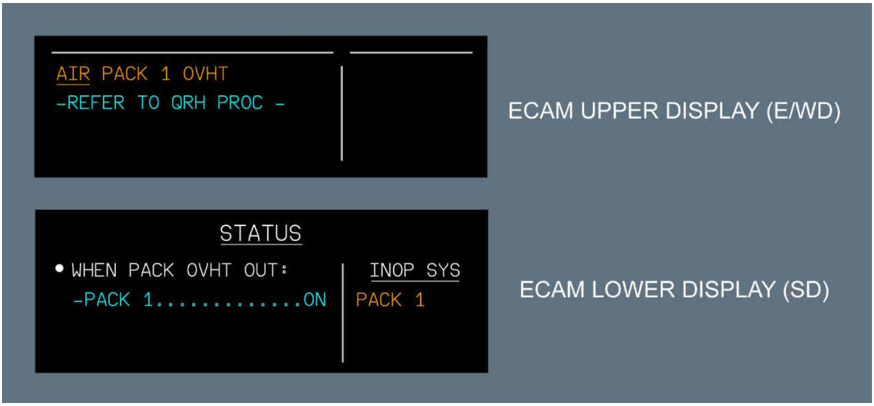
Ident.: DSC-31-27-00001227.0001001 / 09 NOV 20
Applicable to: MSN 01251

The OEB reminder flag may apply to one of the following:
- ECAM procedure only
- ECAM procedure and corresponding status messages
- Status message only.

ONLY PROCEDURE AFFECTED

- The ECAM warning title remains the same
- All corresponding actions are deleted. Instead, the “REFER TO QRH PROC” message appears
- The associated status messages on the ECAM system display remain the same.

COCKPIT INDICATION



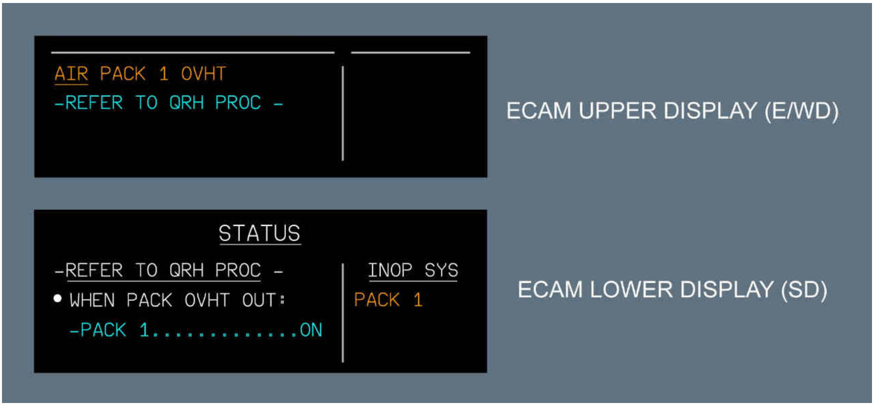
```
AIR PACK 1 OVHT
-REFER TO QRH PROC -
```

```
STATUS
• WHEN PACK OVHT OUT:          INOP SYS
  -PACK 1.............ON       PACK 1
```

PROCEDURE AND STATUS AFFECTED

- The ECAM warning title remains the same
- All corresponding actions are deleted. Instead, the “REFER TO QRH PROC” message appears
- The associated status messages on the ECAM system display remain the same, except for the additional “REFER TO QRH PROC” title.

COCKPIT INDICATION



AIR PACK 1 OVHT
-REFER TO QRH PROC -

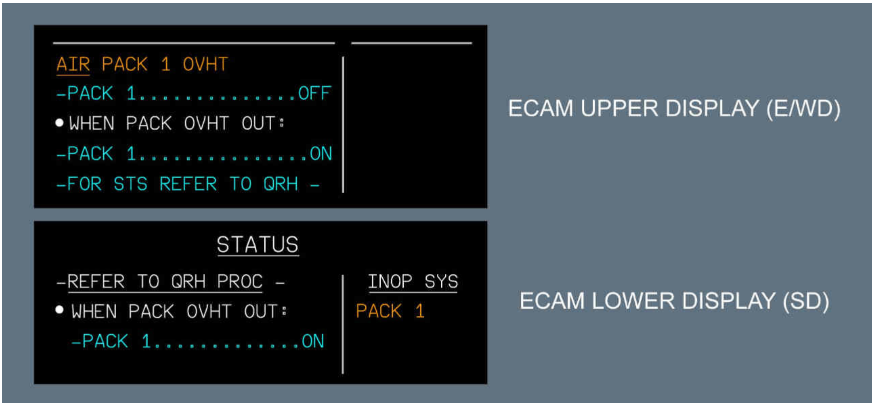
STATUS
-REFER TO QRH PROC -
• WHEN PACK OVHT OUT:
-PACK 1.............ON

INOP SYS
PACK 1

ONLY STATUS MESSAGE AFFECTED

- The ECAM warning title remains the same
- The corresponding procedure remains the same, except for the additional “FOR STS REFER TO QRH” line
- The associated status messages on the ECAM system display remain the same, except for the additional “REFER TO QRH PROC” title.

COCKPIT INDICATION



```
AIR PACK 1 OVHT
-PACK 1..............OFF
• WHEN PACK OVHT OUT:
-PACK 1...............ON
-FOR STS REFER TO QRH -
```

```
                STATUS
-REFER TO QRH PROC -        INOP SYS
• WHEN PACK OVHT OUT:       PACK 1
  -PACK 1.............ON
```

DESCRIPTION

Ident.: DSC-31-27-00001227.0003001 / 09 NOV 20

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

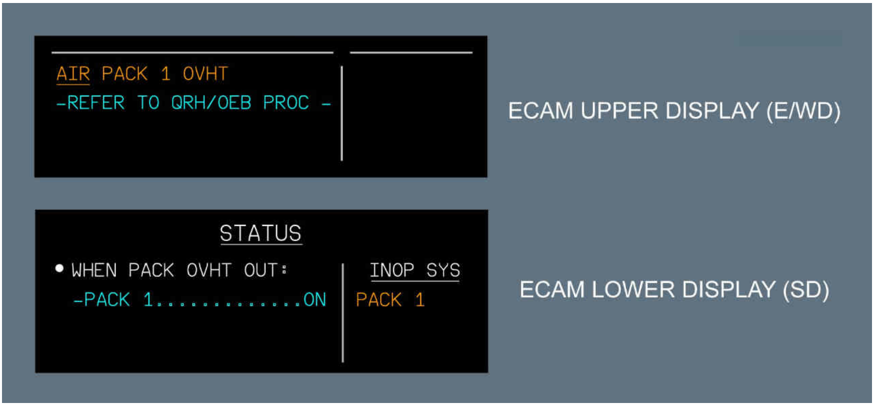
The OEB reminder flag may apply to one of the following:

- ECAM procedure only
- ECAM procedure and corresponding status messages
- Status message only.

ONLY PROCEDURE AFFECTED

- The ECAM warning title remains the same
- All corresponding actions are deleted. Instead, the “REFER TO QRH/OEB PROC” message appears.
- The associated status messages on the ECAM system display remain the same.

COCKPIT INDICATION



```
AIR PACK 1 OVHT
-REFER TO QRH/OEB PROC -
```

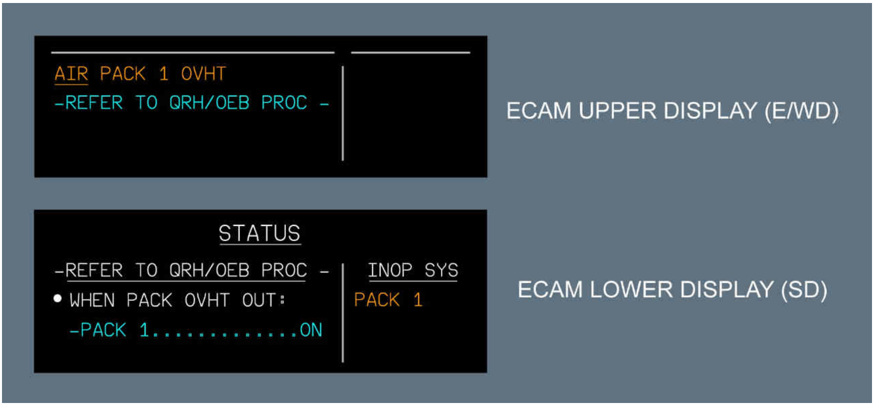
```
STATUS
• WHEN PACK OVHT OUT:          INOP SYS
  -PACK 1.............ON       PACK 1
```

ECAM UPPER DISPLAY (E/WD)
ECAM LOWER DISPLAY (SD)

PROCEDURE AND STATUS AFFECTED

- The ECAM warning title remains the same
- All corresponding actions are deleted. Instead, the “REFER TO QRH/OEB PROC” message appears.
- The associated status messages on the ECAM system display remain the same, except for the additional “REFER TO QRH/OEB PROC” title.

COCKPIT INDICATION



```
AIR PACK 1 OVHT
-REFER TO QRH/OEB PROC -
```

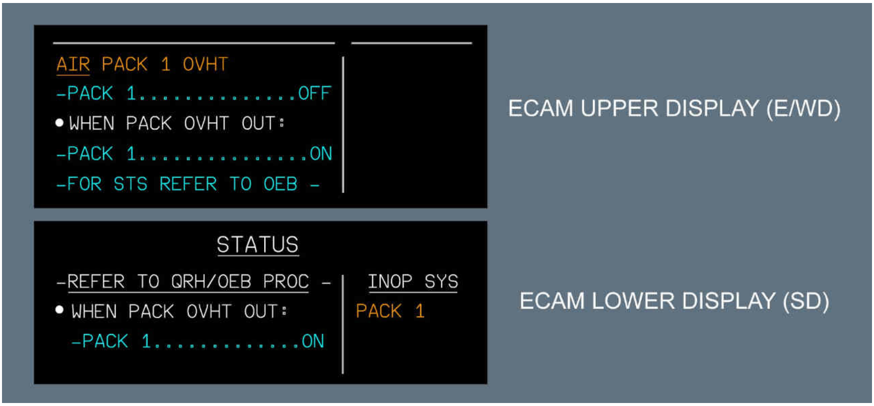
```
STATUS
-REFER TO QRH/OEB PROC -       INOP SYS
• WHEN PACK OVHT OUT:          PACK 1
  -PACK 1.............ON
```

ECAM UPPER DISPLAY (E/WD)
ECAM LOWER DISPLAY (SD)

ONLY STATUS MESSAGE AFFECTED

- The ECAM warning title remains the same
- The corresponding procedure remains the same, except for the additional “FOR STS REFER TO OEB" line
- The associated status messages on the ECAM system display remain the same, except for the additional " REFER TO QRH/OEB PROC" title.

COCKPIT INDICATION



```
AIR PACK 1 OVHT
-PACK 1..............OFF
• WHEN PACK OVHT OUT:
-PACK 1...............ON
-FOR STS REFER TO OEB -
```

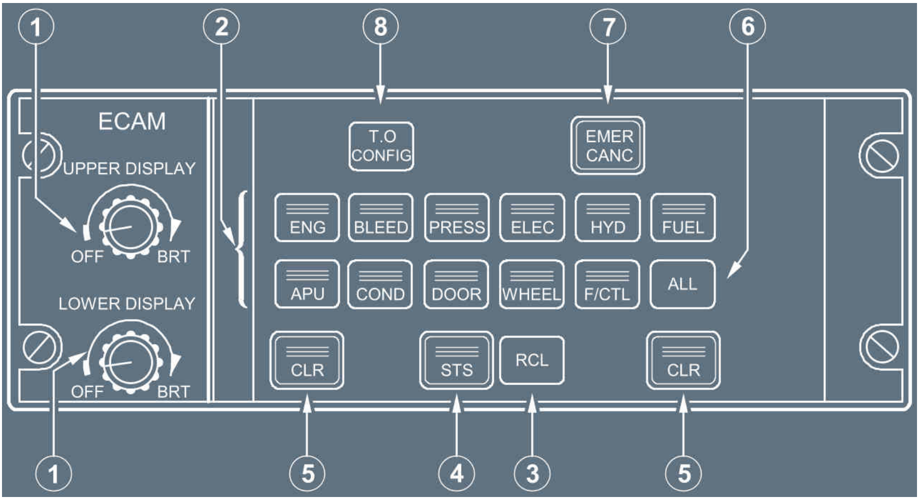
```
                STATUS
-REFER TO QRH/OEB PROC -  |  INOP SYS
• WHEN PACK OVHT OUT:     |  PACK 1
  -PACK 1.............ON  |
```

Intentionally left blank

ECAM CONTROL PANEL

Ident.: DSC-31-30-00001229.0002001 / 03 NOV 21

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


1
2
8
7
6
ECAM
UPPER DISPLAY
OFF
BRT
LOWER DISPLAY
OFF
BRT
T.O CONFIG
EMER CANC
ENG
BLEED
PRESS
ELEC
HYD
FUEL
APU
COND
DOOR
WHEEL
F/CTL
ALL
CLR
STS
RCL
CLR
1
5
4
3
5

(1) OFF / BRT knobs

Used to turn the ECAM DUs on and off, and to control their brightness (automatic adjustment of brightness for ambient light conditions is superimposed on this manual control).

Note: *When the flight crew turns the UPPER DISPLAY knob to OFF, the engine/warning (E/W) display appears on the lower display unit (automatic transfer).*

(2) System page pushbuttons

- Call up the corresponding system pages on the SD
- Light up, when pushed for manual selection, or when an advisory is detected
- Call up the aircraft system page corresponding to the present flight phase or the current warning when pushed a second time.

When only one ECAM display is on, the flight crew can display a system page for up to 3 min by pushing and holding the system page pushbutton.

- If an advisory condition arises, the relevant system page is not automatically displayed, but the pushbutton light pulses
- If an ECAM warning is triggered, the relevant system page is not automatically displayed, and the system page pushbutton does not light up.

(3) RCL pb

- When pressed, the E/WD displays all alerts previously cleared via the CLR pb that are still active.
- When pressed for more than 3 s, the E/WD displays:
  - All alerts previously cleared via the CLR pb that are still active
  - All alerts previously cancelled via the EMER CANC pb.

Note: *1. If there is no alert to recall, the "NORMAL" message appears for 3 s on the E/WD.*
2. This action on the RCL pb also suppresses the flight phase inhibition function until the next flight phase. As a consequence, all new alerts that should normally be inhibited will be displayed.

(4) STS pb
The flight crew pushes this pushbutton to display the STATUS page on the lower SD. The pushbutton remains lit, as long as the SD displays the STS page. If the system has no status messages, the status page displays "NORMAL" for 3 s.
The flight crew can clear the STATUS page by pushing the CLR pb, or by pushing the STS pb a second time.

When only one ECAM display is on :
- It displays the STATUS page only when the flight crew pushes the STATUS pushbutton and holds it. The flight crew can display the next STATUS page, if any, by releasing the pushbutton and pushing it again (before 2 s have elapsed). The new page then appears after a short delay.
- The flight crew can keep the STS pb pressed to display the STATUS page for a maximum of 3 min, after which the ECAM automatically displays the engine/warning page.

(5) CLR pb
This pushbutton remains lit as long as the E/WD is displaying a warning or caution message, or a status message on the SD.
If it is lit, pressing it changes the ECAM display.

(6) ALL pb
When this pushbutton is pressed and held down, the SD successively displays all the system pages at 3 s intervals.
If the ECAM control panel fails, the flight crew can use this pushbutton to page through the system pages until it reaches the desired page. The flight crew then releases the pushbutton to select that page.

(7) EMER CANC pb

This pushbutton affects the following :

- Warnings :
  - Cancels (stops) an aural warning for as long as the failure condition continues
  - Extinguishes the MASTER WARNINGS lights
  - Does not affect the ECAM message display.
- Cautions :
  - Cancels any present caution (single chime, MASTER CAUTION lights, ECAM message) for the rest of the flight.

The flight crew can press the RCL pb for more than 3 s in order to restore all the alerts previously canceled via the EMER CANC pb.
All the alerts previously canceled via the EMER CANC pb automatically reappear on the E/WD in flight phase 1 or 2, immediately after the alignment of IRs 1 and 2.

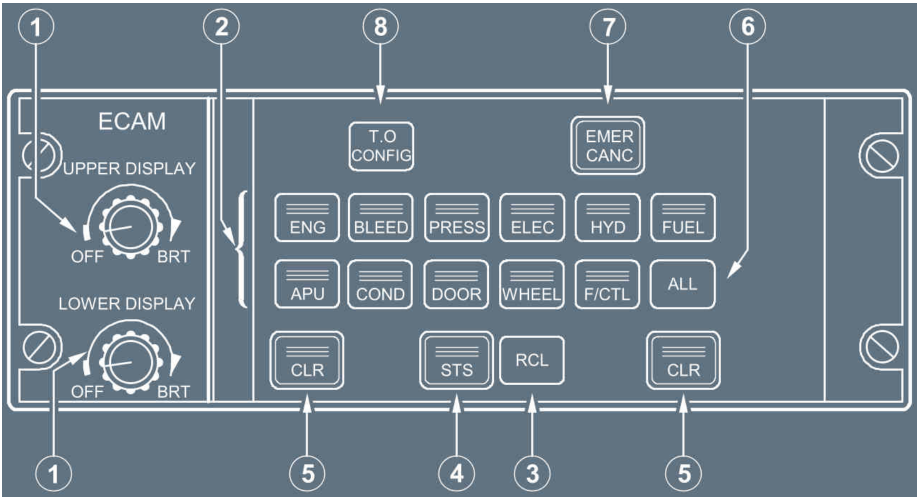
Note: This pushbutton should only be used to suppress spurious MASTER CAUTIONS.

(8) T.O CONFIG pb
This pushbutton simulates the application of takeoff power. This is a test that triggers a warning, if the aircraft is not in takeoff configuration. (*Refer to DSC-31-15 Configuration Warnings*).
If the configuration is correct, the E/WD displays the “TO CONFIG NORMAL” message in the TO MEMO section.

Note: If the ECAM control panel fails, the CLR, RCL, STS, EMER CANC, and ALL pushbuttons remain operative, because their contacts are directly wired to the flight warning and display management computers.

ECAM CONTROL PANEL

Ident.: DSC-31-30-00001229.0001001 / 03 NOV 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


1
2
8
7
6
ECAM
UPPER DISPLAY
OFF
BRT
LOWER DISPLAY
OFF
BRT
T.O CONFIG
EMER CANC
ENG
BLEED
PRESS
ELEC
HYD
FUEL
APU
COND
DOOR
WHEEL
F/CTL
ALL
CLR
STS
RCL
CLR
1
5
4
3
5

(1) OFF / BRT knobs

Used to turn the ECAM DUs on and off, and to control their brightness (automatic adjustment of brightness for ambient light conditions is superimposed on this manual control).

Note: When the flight crew turns the UPPER DISPLAY knob to OFF, the engine/warning (E/W) display appears on the lower display unit (automatic transfer).

(2) System page pushbuttons

- Call up the corresponding system pages on the SD
- Light up, when pushed for manual selection, or when an advisory is detected
- Call up the aircraft system page corresponding to the present flight phase or the current warning when pushed a second time.

When only one ECAM display is on, the flight crew can display a system page for up to 3 min by pushing and holding the system page pushbutton.

- If an advisory condition arises, the relevant system page is not automatically displayed, but the pushbutton light pulses
- If an ECAM warning is triggered, the relevant system page is not automatically displayed, and the system page pushbutton does not light up.

(3) RCL pb

- When pressed, the E/WD displays all alerts previously cleared via the CLR pb that are still active.
- When pressed for more than 3 s, the E/WD displays:
  - All alerts previously cleared via the CLR pb that are still active
  - All alerts previously cancelled via the EMER CANC pb.

Note: *1. If there is no alert to recall, the "NORMAL" message appears for 3 s on the E/WD.*
2. This action on the RCL pb also suppresses the flight phase inhibition function until the next flight phase. As a consequence, all new alerts that should normally be inhibited will be displayed.

(4) STS pb

The flight crew pushes this pushbutton to display the STATUS page on the lower SD. The pushbutton remains lit, as long as the SD displays the STS page. If the system has no status messages, the status page displays "NORMAL" for 3 s.
The flight crew can clear the STATUS page by pushing the CLR pb, or by pushing the STS pb a second time.

When only one ECAM display is on :

- It displays the STATUS page only when the flight crew pushes the STATUS pushbutton and holds it. The flight crew can display the next STATUS page, if any, by releasing the pushbutton and pushing it again (before 2 s have elapsed). The new page then appears after a short delay.
- The flight crew can keep the STS pb pressed to display the STATUS page for a maximum of 3 min, after which the ECAM automatically displays the engine/warning page.

(5) CLR pb

This pushbutton remains lit as long as the E/WD is displaying a warning or caution message, or a status message on the SD.
If it is lit, pressing it changes the ECAM display.

(6) ALL pb

When this pushbutton is pressed and held down, the SD successively displays all the system pages at one-second intervals.
If the ECAM control panel fails, the flight crew can use this pushbutton to page through the system pages until it reaches the desired page. The flight crew then releases the pushbutton to select that page.

(7) EMER CANC pb

This pushbutton affects the following :

- Warnings :
  - Cancels (stops) an aural warning for as long as the failure condition continues
  - Extinguishes the MASTER WARNINGS lights
  - Does not affect the ECAM message display.
- Cautions :
  - Cancels any present caution (single chime, MASTER CAUTION lights, ECAM message) for the rest of the flight.

The flight crew can press the RCL pb for more than 3 s in order to restore all the alerts previously canceled via the EMER CANC pb.
All the alerts previously canceled via the EMER CANC pb automatically reappear on the E/WD in flight phase 1 or 2, immediately after the alignment of IRs 1 and 2.

Note: This pushbutton should only be used to suppress spurious MASTER CAUTIONS.

(8) T.O CONFIG pb

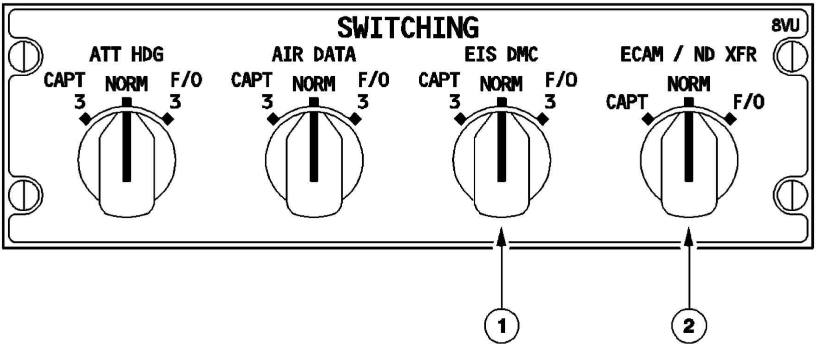
This pushbutton simulates the application of takeoff power. This is a test that triggers a warning, if the aircraft is not in takeoff configuration. (*Refer to DSC-31-15 Configuration Warnings*).
If the configuration is correct, the E/WD displays the “TO CONFIG NORMAL” message in the TO MEMO section.

Note: If the ECAM control panel fails, the CLR, RCL, STS, EMER CANC, and ALL pushbuttons remain operative, because their contacts are directly wired to the flight warning and display management computers.

SWITCHING PANEL

Ident.: DSC-31-30-00001230.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

2 **ON PEDESTAL**


SWITCHING
8VU
ATT HDG
CAPT 3
NORM
F/O 3
AIR DATA
CAPT 3
NORM
F/O 3
EIS DMC
CAPT 3
NORM
F/O 3
ECAM / ND XFR
CAPT
NORM
F/O
1
2

(1) EIS DMC rotsel

NORM : DMC 1 drives the CAPT's PFD, the CAPT's ND, and the upper ECAM DU. DMC 2 drives the F/O's PFD and the F/O's ND, .and the lower ECAM DU

CAPT 3 : DMC 3 replaces DMC 1.

F/O 3 : DMC 3 replaces DMC 2.

Note: *If a DMC fails, each of its associated DUs displays a diagonal line.*

(2) ECAM/ND XFR rostel
Transfers the system/status display to either the Captain's or the First Officer's ND.

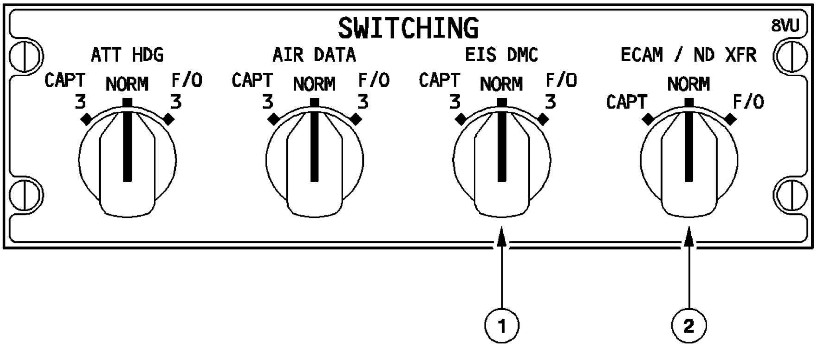
Note: *If both ECAM DUs (E/WD and SD) fail, the flight crew can use this switch to transfer the E/WD display to either navigation display.*

SWITCHING PANEL

Ident.: DSC-31-30-00001230.0002001 / 02 MAY 23

3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

4 ON PEDESTAL


SWITCHING
8VU
ATT HDG
CAPT 3
NORM
F/O 3
AIR DATA
CAPT 3
NORM
F/O 3
EIS DMC
CAPT 3
NORM
F/O 3
ECAM / ND XFR
CAPT
NORM
F/O
1
2

(1) EIS DMC rotary selector

NORM : DMC 1 supplies the CAPT's PFD, the CAPT's ND, and the ECAM's DUs.
DMC 2 supplies the F/O's PFD and the F/O's ND.

CAPT 3 : DMC 3 replaces DMC 1.

F/O 3 : DMC 3 replaces DMC 2.

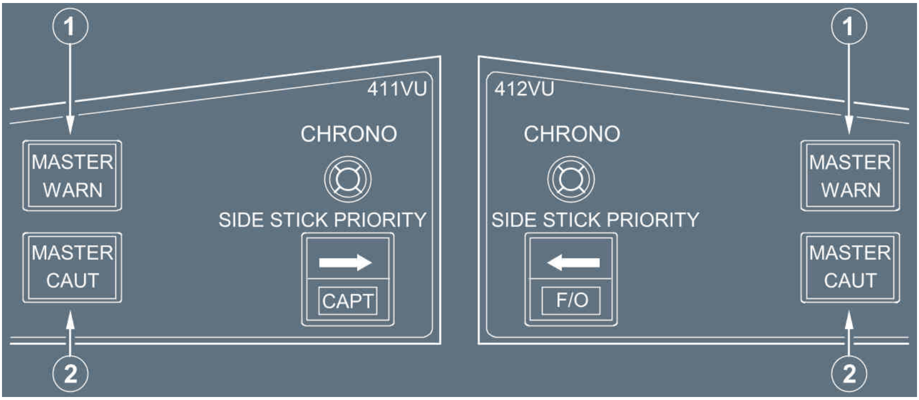
Note: If a DMC fails, each of its associated DUs displays an “INVALID DATA” message.

(2) ECAM/ND XFR rotary selector
Transfers the system/status display to either the Captain's or the First Officer's ND.
The “ECAM ON ND” message is displayed on the lower ECAM display.

Note: If both ECAM DUs (E/WD and SD) fail, the flight crew may use this switch to transfer the E/WD display to either navigation display. In this case, the “ECAM ON ND” message is not displayed.

ATTENTION GETTERS

Ident.: DSC-31-30-00001231.0001001 / 09 OCT 12
Applicable to: ALL


1
411VU
CHRONO
MASTER WARN
MASTER CAUT
SIDE STICK PRIORITY
CAPT
2
412VU
CHRONO
SIDE STICK PRIORITY
F/O
MASTER WARN
MASTER CAUT
1
2

(1) MASTER WARN lights

- Flash red for level 3 warning
- Accompanied by an aural warning (continuous repetitive chime, specific sounds or synthetic voice).

(2) MASTER CAUT lights

- Light up steady amber for a level 2 caution
- Accompanied by a single chime.

These lights go out when :
- One pilot presses the light (except for some red warnings, such as the overspeed and stall warnings)
- The warning/caution situation is over
- The pilot presses the CLR pb on the ECAM control panel (except for some red warnings, such as the overspeed and stall warnings).
- The pilot presses the EMER CANC pb on the ECAM control panel.

The aural warnings cease when :
- One pilot presses the MASTER WARN light (except for some red warnings, such as the overspeed and stall warnings)
- The warning situation is over
- The pilot presses the EMER CANC pb on the ECAM control panel.

MEMO DISPLAY

Ident.: DSC-31-30-00018053.0004001 / 18 NOV 21

5 **Applicable to: MSN 10949-11597**

SWITCHG PNL	:	This memo appears when one of the following is applicable: - PFD/ND XFR pb is pressed and ECAM/ND XFR rotary selector is selected at CAPT or F/O simultaneously, or - EIS DMC rotary selector is selected at CAPT 3 or F/O 3.

MEMO DISPLAY

Ident.: DSC-31-30-00018053.0001001 / 02 MAY 23

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

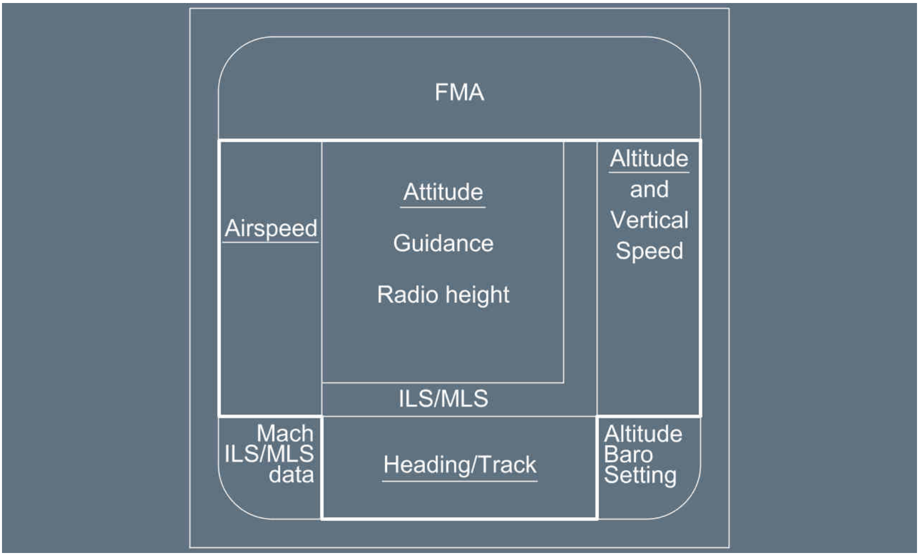
6

SWITCHG PNL	:	This memo appears when one of the following is applicable: - PFD/ND XFR pb is pressed and ECAM/ND XFR rotary selector is selected at CAPT or F/O simultaneously, or - ATT HDG rotary selector is selected at CAPT 3 or F/O 3, or - AIR DATA rotary selector is selected at CAPT 3 or F/O 3, or - EIS DMC rotary selector is selected at CAPT 3 or F/O 3.

GENERAL

Ident.: DSC-31-40-00017531.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

1 The Primary Flight Display (PFD) provides the following information to the flight crew:
- Attitude and guidance
- Airspeed
- Altitude (BARO and radio) and vertical speed
- Heading and track
- FMGS modes (Flight Mode Annunciator)
- Vertical and lateral deviations
- Radio navigation information (ILS, MLS ◁ , DME).


FMA
Airspeed
Attitude
Guidance
Radio height
Altitude and Vertical Speed
ILS/MLS
Mach ILS/MLS data
Heading/Track
Altitude Baro Setting

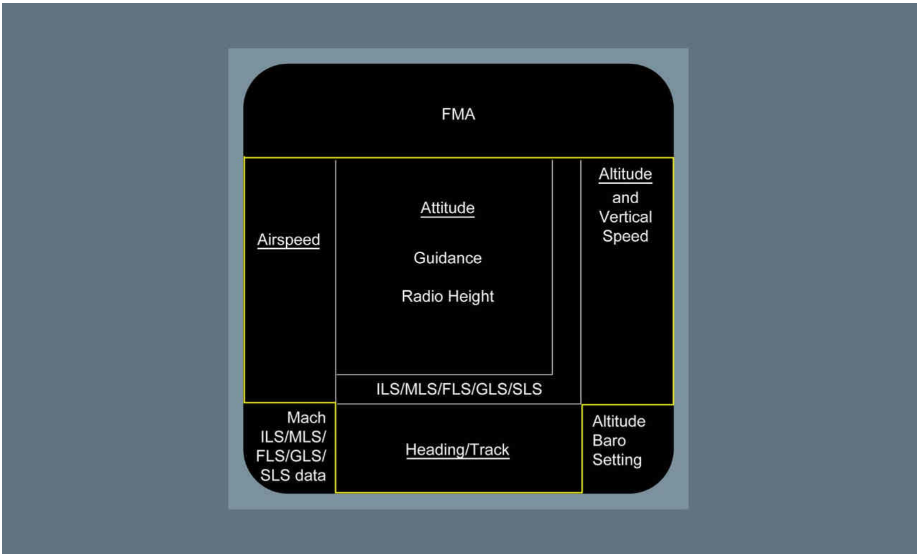
The FWC monitors main parameters such as attitude, heading, and altitude. For more information, *Refer to DSC-31-40 Flags and Messages Displayed on PFD - Schematic*.

Note: *A grey background appears on the speed, the heading vertical speed, and the altitude speed scales of the PFD. If the Primary Flight Display (PFD) Unit temperature exceeds a defined threshold, the grey background disappears, in order to limit power consumption and prevent a DU overheat. Any additional increase in temperature will lead to a complete cut off of the power supply to this display unit.*

GENERAL

Ident.: DSC-31-40-00017531.0003001 / 12 MAY 22
Applicable to: MSN 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

The PFD provides the following information to the flight crew:
- Attitude and guidance
- Airspeed
- Altitude (BARO and radio) and vertical speed
- Heading and track
- FMGS modes (FMA)
- Vertical and lateral deviations
- Radio navigation information (ILS, MLS ◁ , FLS ◁ , GLS ◁ , SLS ◁ , and DME).


FMA
Airspeed
Attitude
Guidance
Radio Height
Altitude
and
Vertical
Speed
ILS/MLS/FLS/GLS/SLS
Mach
ILS/MLS/
FLS/GLS/
SLS data
Heading/Track
Altitude
Baro
Setting

The FWC monitors main parameters such as attitude, heading, and altitude. For more information, *Refer to DSC-31-40 Flags and Messages Displayed on PFD - Schematic*.

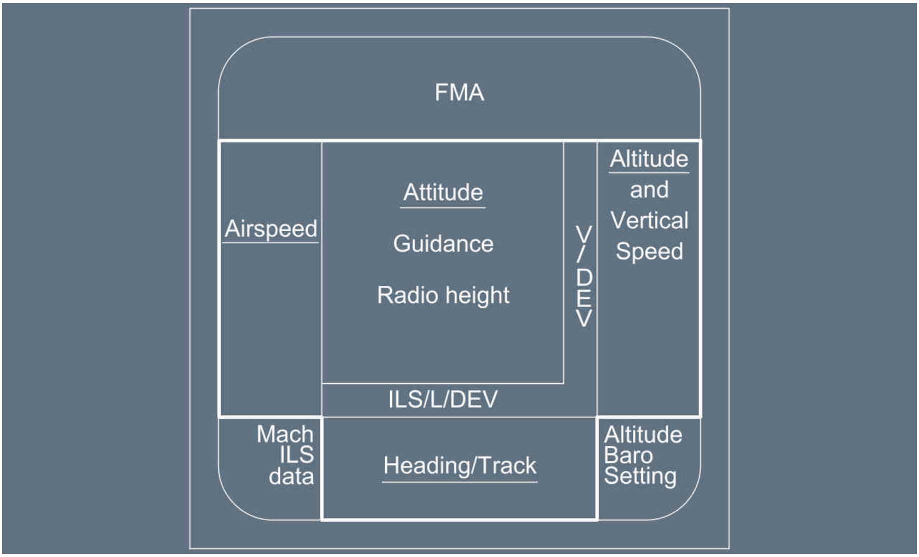
GENERAL

Ident.: DSC-31-40-00017531.0005001 / 02 MAY 23

2 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**

3

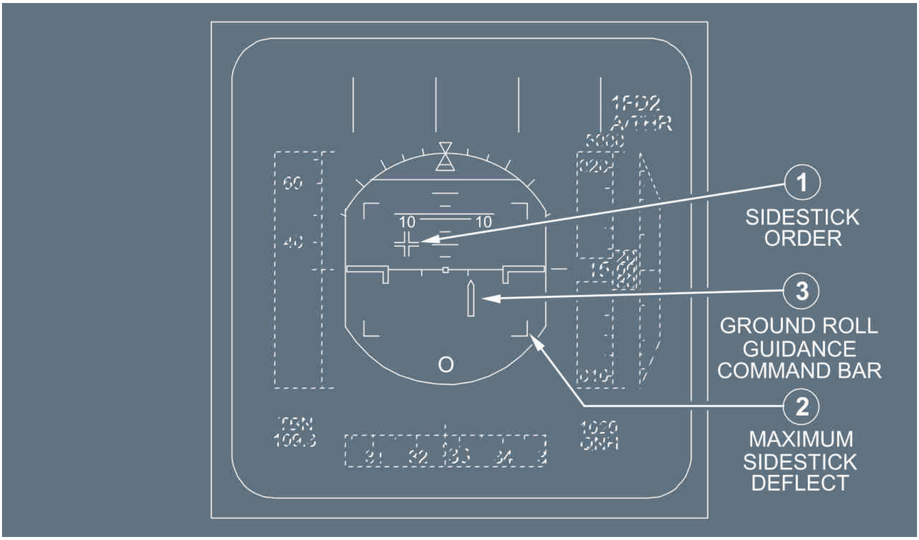
The Primary Flight Display (PFD) provides the following information to the flight crew:
- Attitude and guidance
- Airspeed
- Altitude (BARO and radio) and vertical speed
- Heading and track
- FMGS modes (Flight Mode Annunciator)
- Vertical and lateral deviations
- Radio navigation information (ILS, DME).


FMA
Airspeed
Attitude
Guidance
Radio height
V/DEV
Altitude and Vertical Speed
ILS/L/DEV
Mach ILS data
Heading/Track
Altitude Baro Setting

The FWC monitors main parameters such as attitude, heading, and altitude. For more information, *Refer to DSC-31-40 Flags and Messages Displayed on PFD - Schematic*.

SPECIFIC GROUND INDICATIONS

Ident.: DSC-31-40-00001233.0001001 / 13 JAN 14
Applicable to: ALL


1FD2
A/THR
5000
60
40
10
10
TSN
109.3
1020
QNH
31
32
33
34
1
SIDESTICK ORDER
3
GROUND ROLL GUIDANCE COMMAND BAR
2
MAXIMUM SIDESTICK DEFLECT

(1) Sidestick order indication
This symbol is in white, and appears as soon as one engine is started.
It indicates the total of the Captain’s and First Officer’s sidestick orders (shown here as left wing down, pitch up).

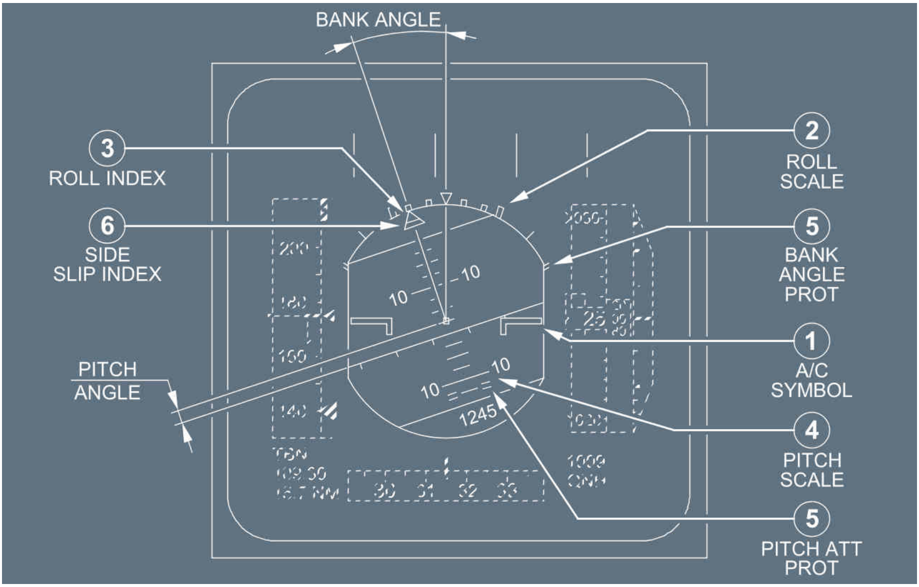
(2) Max Sidestick Deflection
This symbol is in white, and appears as soon as one engine is started.

(3) Ground Roll Guidance Command Bar
This symbol is in green, and appears when the aircraft is on ground, or below 30 ft radio height, provided that a localizer signal is available. It indicates the Flight Director yaw orders, to maintain the aircraft on the runway centerline.

ATTITUDE DATA

Ident.: DSC-31-40-00001234.0004001 / 09 OCT 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165



(1) Fixed Aircraft Symbol
This symbol is in black, and outlined in yellow. The yellow outline is dimmed if the flight crew selects TRK-FPA, unless the FMA is in TOGA or FLX mode.

(2) Roll Scale
This scale is in white, and has markers at 0, 10, 20, 30, and 45 ° of bank.

(3) Roll Index (yellow)
This pointer indicates the bank angle. When the bank angle exceeds 45 °, all the PFD symbols except those for attitude, speed, heading, altitude, and vertical speed, disappear. The display returns to normal when the bank angle decreases below 40 °.

(4) Pitch Scale (white)
This scale has markers every 10 ° between 80 ° nose up and 80 ° nose down (every 2.5 ° between 10 ° nose down and 30 ° nose up). When pitch angle exceeds 25 ° nose up or 13 ° nose down, all the PFD displays except attitude, speed, speed trend, heading, altitude, and vertical speed disappear. Beyond 30 °, large red arrowheads indicate that the attitude has

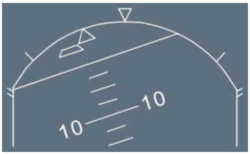
become excessive and show the direction to move the nose in order to reduce it. The display returns to normal when pitch angle becomes less than 22 ° nose up or 10 ° nose down.

(5) Flight Control Protection Symbols

The display shows these symbols (=) in green:
- On the roll scale to mark the bank angle protection availability.
- On the pitch scale at 15 ° nose down or 30 ° nose up to mark the pitch limits.

An amber x replaces these symbols if the corresponding protection is lost.
(*Refer to DSC-27-20-10-20 Protections - General*)

(6) Sideslip Index (yellow)
This trapezoidal index moves beneath the roll index. On ground, it represents the lateral acceleration of the aircraft. In flight, it shows sideslip (as computed by the FAC). One centimeter of displacement indicates 0.2 g. The sideslip index is against its stop at 0.3 g.



In case of engine failure at takeoff or go around, the sideslip index changes from yellow to blue.

Note: *The sideslip target is blue, if:*
- *CONF 1, 2, or 3 is selected, and*
- *Any ENG EPR > 1.25 or one Thrust Lever > MCT (≥ FLX if FLX or DERATED TO), and*
- *The difference between the ENG EPR's exceeds 0.25.*

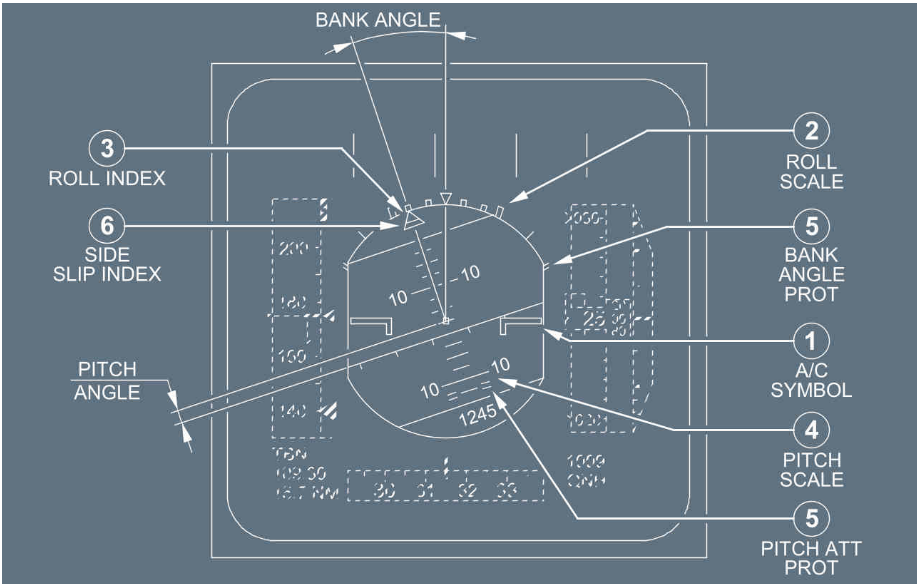
In this case, the sideslip index is called β target.

When this index is centered with the roll index, the sideslip equals the sideslip target for optimum aircraft performance.

ATTITUDE DATA

Ident.: DSC-31-40-00001234.0003001 / 09 OCT 12

4 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**


BANK ANGLE
3 ROLL INDEX
6 SIDE SLIP INDEX
PITCH ANGLE
2 ROLL SCALE
5 BANK ANGLE PROT
1 A/C SYMBOL
4 PITCH SCALE
5 PITCH ATT PROT
10
10
10
10
1245
200
180
160
140
25

(1) Fixed Aircraft Symbol
This symbol is in black, and outlined in yellow. The yellow outline is dimmed if the crew selects TRK-FPA, unless the FMA is in the TOGA or FLX mode.

(2) Roll Scale
This scale is in white, and has markers at 0, 10, 20, 30, and 45 ° of bank.

(3) Roll Index (yellow)
This pointer indicates the bank angle. When the bank angle exceeds 45 °, all the PFD symbols, except those for attitude, speed, heading, altitude, and vertical speed, disappear. The display returns to normal when the bank angle decreases below 40 °.

(4) Pitch Scale (white)
This scale has markers every 10 ° between 80 ° nose up and 80 ° nose down (every 2.5 ° between 10 ° nose down and 30 ° nose up). When pitch angle exceeds 25 ° nose up or 13 ° nose down, all the PFD displays except attitude, speed, speed trend, heading, altitude, and vertical speed disappear. Beyond 30 °, large red arrowheads indicate that the attitude has

become excessive and show the direction to move the nose in order to reduce it. The display returns to normal when pitch angle becomes less than 22 ° nose up or 10 ° nose down.

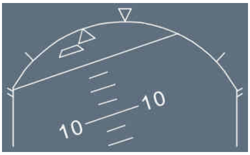
(5) Flight Control Protection Symbols

The display shows these symbols (=) in green:

- On the roll scale to mark the bank angle protection availability.
- On the pitch scale at 15 ° nose down or 30 ° nose up to mark the pitch limits.

An amber x replaces these symbols if the corresponding protection is lost.
(*Refer to DSC-27-20-10-20 Protections - General*)

(6) Sideslip Index (yellow)
This trapezoidal index moves beneath the roll index. On ground, it represents the lateral acceleration of the aircraft. In flight, it shows sideslip (as computed by the FAC). One centimeter of displacement indicates 0.2 g. The sideslip index is against its stop at 0.3 g.



In case of engine failure at takeoff or go around, the sideslip index changes from yellow to blue.

Note: *The sideslip target is blue, if:*
- *CONF 1, 2, or 3 is selected, and*
- *Any ENG N1 > 80 %or one Thrust Lever > MCT (≥ FLX if FLX or DERATED TO), and*
- *The difference between the ENG N1’s exceeds 35 %.*

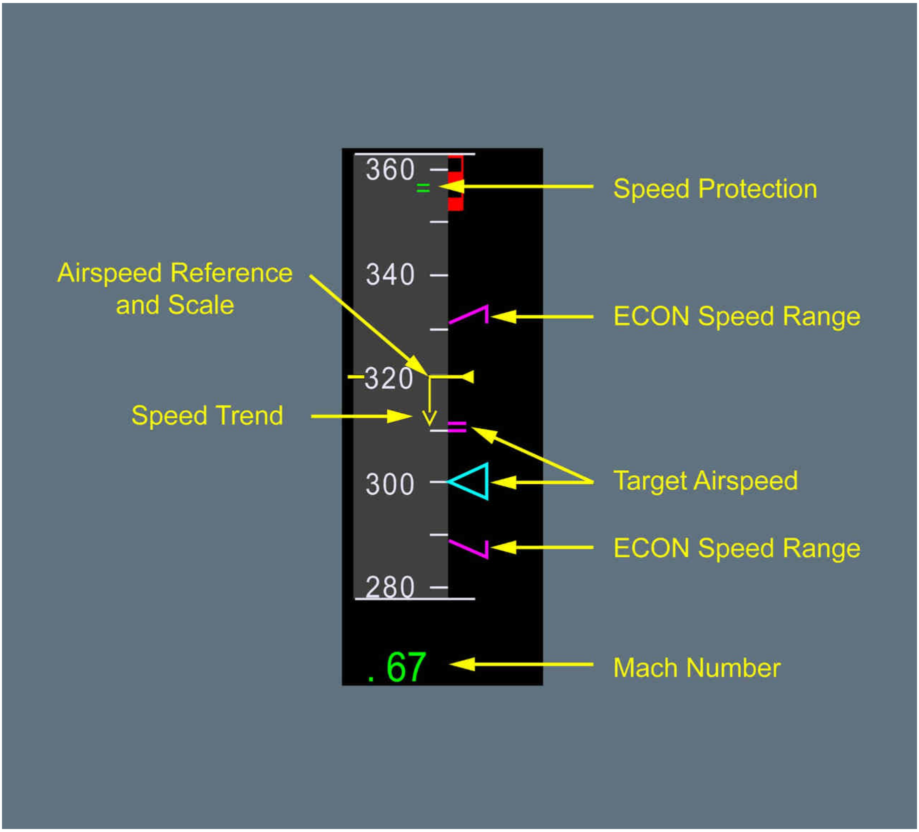
In this case, the sideslip index is called β target.

When this index is centered with the roll index, the sideslip equals the sideslip target for optimum aircraft performance.

AIRSPEED

Ident.: DSC-31-40-00001235.0002001 / 03 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


360
340
320
300
280
. 67
Speed Protection
Airspeed Reference and Scale
ECON Speed Range
Speed Trend
Target Airspeed
ECON Speed Range
Mach Number

ACTUAL AIRSPEED REFERENCE LINE AND SCALE

A white scale on a grey background moves in front of a fixed yellow reference line (next to a yellow triangle) to indicate airspeed. The minimum airspeed indication is 30 kt.

SPEED TREND

This pointer starts at the speed symbol. The tip indicates the speed that the aircraft will reach in 10 s if its acceleration remains constant. The pointer only appears when it is greater than 2 kt and disappears when it is less than 1 kt.

It also disappears, if the FACs fail.

TARGET AIRSPEED

These symbols give the target airspeed or the airspeed corresponding to the target Mach number.
The target airspeed is either computed by the FMGC in managed speed mode (magenta triangle) or manually entered on the FCU in selected speed mode (blue triangle). The target speed is a magenta double bar (=) when associated with the ECON speed range.
When the target speed is off the speed scale, its value is displayed as numbers, either above or below the speed scale.

MACH NUMBER

It is displayed when it is greater than M 0.5.

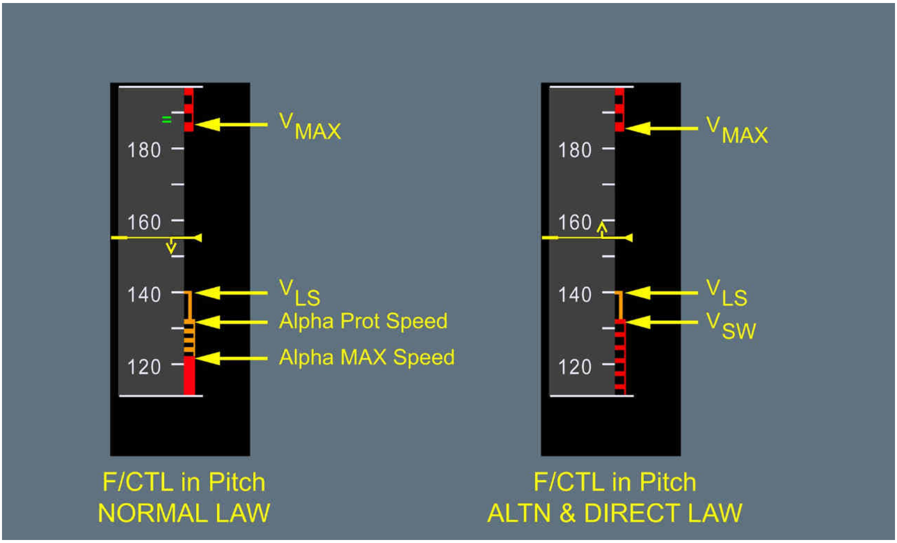
SPEED PROTECTION

This symbol indicates the speed (VMO +6 kt or MMO +0.01) at which overspeed protection becomes active (*Refer to DSC-27-20-10-20 Protections - General*).

ECON SPEED RANGE

In descent mode with the ECON/AUTO SPD mode active, these two half triangles replace the selected speed symbol. It shows the upper and lower limits calculated by the FMGC.

- The upper speed is the target speed +20 kt limited to VMAX or VMO -3 kt or MMO -0.006, whichever is the lowest.
  If a speed limit or a speed constraint applies, the upper margin is limited to ECON SPD +5 kt.
- The lower speed margin is the target speed -20 kt limited to green dot, F, S, or VLS, whichever is the highest.


180
160
140
120
VMAX
VLS
Alpha Prot Speed
Alpha MAX Speed
F/CTL in Pitch
NORMAL LAW
180
160
140
120
VMAX
VLS
VSW
F/CTL in Pitch
ALTN & DIRECT LAW

MINIMUM SELECTABLE SPEED (VLS)

The top of the amber strip along the speed scale indicates this speed. It represents the lowest selectable speed providing an appropriate margin to the stall speed.
VLS information is inhibited from touchdown until 10 s after liftoff.

ALPHA PROTECTION SPEED

The top of a black and amber strip along the speed scale indicates this speed.
It represents the speed corresponding to the angle of attack at which alpha protection becomes active (*Refer to DSC-27-20-10-20 Protections - General*).
It is displayed when in pitch normal law.

ALPHA MAX SPEED

The top of a red strip along the speed scale indicates this speed. It represents the speed corresponding to the maximum angle of attack that the aircraft can attain in pitch normal law (*Refer to DSC-27-20-10-20 Protections - General*).
It is displayed when in pitch normal law.

VMAX

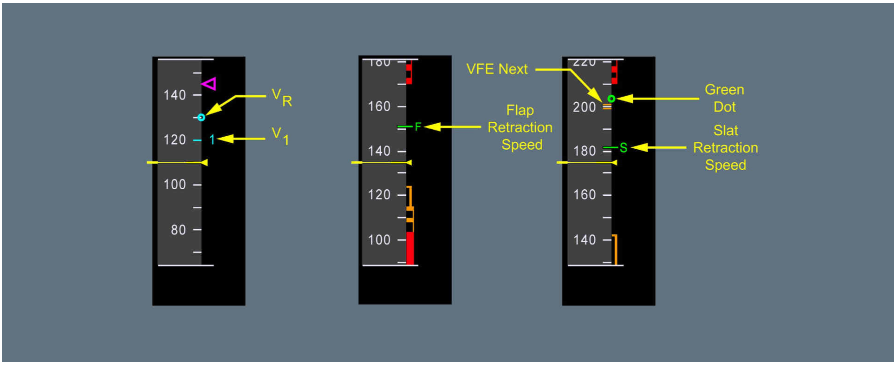
The lower end of a red and black strip along the speed scale defines this speed.

It is the lowest of the following:

- VMO or the speed corresponding to MMO
- VLE
- VFE

STALL WARNING SPEED (VSW)

The top of a red and black strip along the speed scale defines this speed.
It is the speed corresponding to the stall warning (*Refer to DSC-27-20-10-20 Protections - General*).
VSW information is inhibited from touchdown until 5 s after lift-off.
It is displayed when operating in pitch alternate or pitch direct law.



DECISION SPEED (V1)

This speed represented by the number (1) is manually inserted by the flight crew in the MCDU.
When it is off the scale, the upper part of the scale shows it in numbers.
It disappears after lift-off (*Refer to DSC-22_10-50-50 Other Speeds*).

MINIMUM FLAP RETRACTION SPEED

This is represented by a F. It appears when the flap selector is in position 3 or 2.

MINIMUM SLAT RETRACTION SPEED

This is represented by a S. It appears when the flap selector is in position 1.

VFE NEXT

The VFE next symbol is an amber equal sign (=) showing the VFE corresponding to the next flap lever position.
It appears when the aircraft altitude is below 15 000 ft or 20 000 ft depending upon the FAC standard (*Refer to DSC-22_10-50-30 Limit Speeds*).

GREEN DOT (ENGINE-OUT OPERATING SPEED IN CLEAN CONFIGURATION)

This green dot appears when the aircraft is flying in clean configuration.
It shows the speed corresponding to the best lift-to-drag ratio.

ROTATION SPEED (VR)

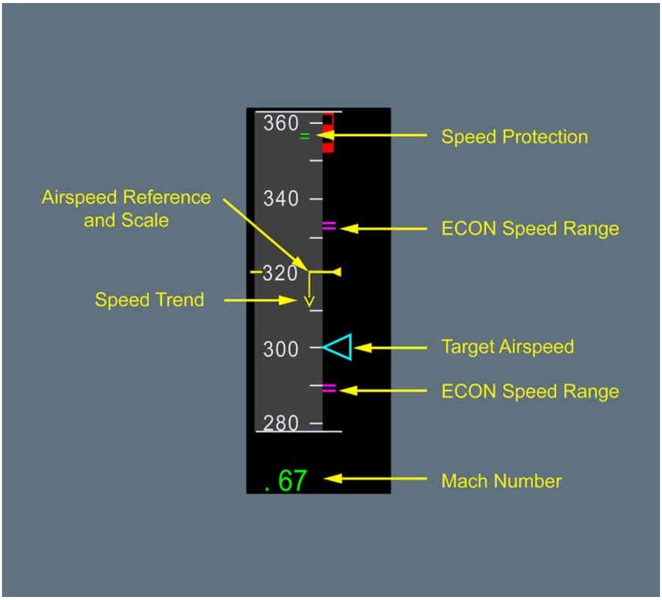
VR is entered on the PERF takeoff page of the MCDU and is indicated by a cyan circle (o).
This cyan circle is visible during takeoff.

Note: 1. *V2 is represented by the target speed index during takeoff.*
2. *V2 is manually inserted by the flight crew via the MCDU.*

AIRSPEED

Ident.: DSC-31-40-00001235.0004001 / 03 MAY 21

5 **Applicable to: MSN 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**


360
340
320
300
280
.67
Speed Protection
Airspeed Reference and Scale
ECON Speed Range
Speed Trend
Target Airspeed
ECON Speed Range
Mach Number

ACTUAL AIRSPEED REFERENCE LINE AND SCALE

A white scale on a grey background moves in front of a fixed yellow reference line (next to a yellow triangle) to indicate airspeed. The minimum airspeed indication is 30 kt.

SPEED TREND

This pointer starts at the speed symbol. The tip indicates the speed that the aircraft will reach in 10 s if its acceleration remains constant. The pointer only appears when it is greater than 2 kt and disappears when it is less than 1 kt.
It also disappears if the FACs fail.

TARGET AIRSPEED

These symbols give the target airspeed or the airspeed corresponding to the target Mach number. The target airspeed is either computed by the FMGC in managed speed mode (magenta triangle) or manually entered on the FCU in selected speed mode (blue triangle).The target speed is a magenta double bar (=) when associated with the ECON speed range.
When the target speed is off the speed scale, its value is displayed as numbers either above or below the speed scale.

MACH NUMBER

It is displayed when it is greater than M 0.5.

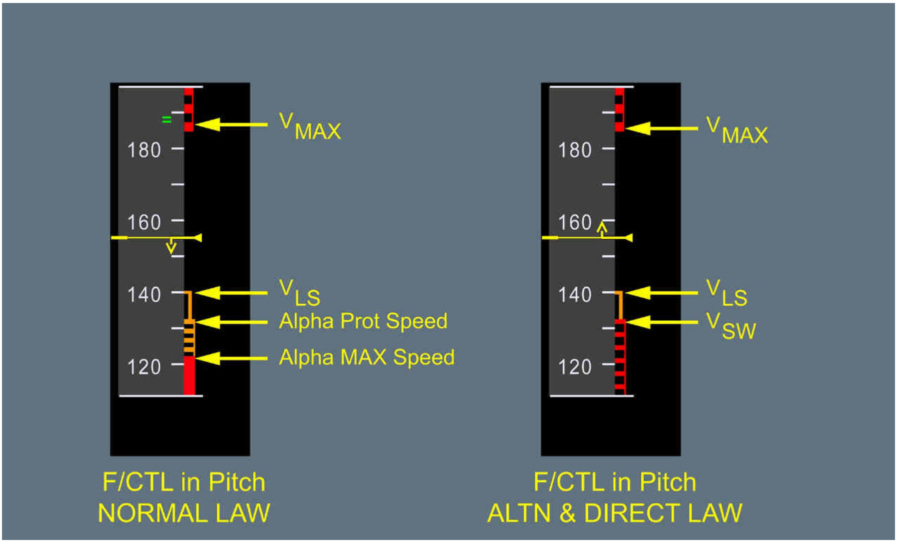
SPEED PROTECTION

This symbol indicates the speed (VMO +6 kt or MMO +0.01) at which overspeed protection becomes active (*Refer to DSC-27-20-10-20 Protections - General*).

ECON SPEED RANGE

In descent mode with the ECON/AUTO SPD mode active, these two thick lines replace the selected speed symbol. It shows the upper and lower limits calculated by the FMGC.

- The upper speed is the target speed +20 kt limited to VMAX or VMO -3 kt or MMO -0.006, whichever is the lowest.
  If a speed limit or a speed constraint applies, the upper margin is limited to ECON SPD +5 kt.
- The lower speed margin is the target speed -20 kt limited to green dot, F, S, or VLS, whichever is the highest.


180
160
140
120
VMAX
VLS
Alpha Prot Speed
Alpha MAX Speed
F/CTL in Pitch
NORMAL LAW
180
160
140
120
VMAX
VLS
VSW
F/CTL in Pitch
ALTN & DIRECT LAW

MINIMUM SELECTABLE SPEED (VLS)

The top of the amber strip along the speed scale indicates this speed. It represents the lowest selectable speed providing an appropriate margin to the stall speed.
VLS information is inhibited from touchdown until 10 s after liftoff.

ALPHA PROTECTION SPEED

The top of a black and amber strip along the speed scale indicates this speed.
It represents the speed corresponding to the angle of attack at which alpha protection becomes active (*Refer to DSC-27-20-10-20 Protections - General*).
It is displayed when in pitch normal law.

ALPHA MAX SPEED

The top of a red strip along the speed scale indicates this speed. It represents the speed corresponding to the maximum angle of attack that the aircraft can attain in pitch normal law (*Refer to DSC-27-20-10-20 Protections - General*).
It is displayed when in pitch normal law.

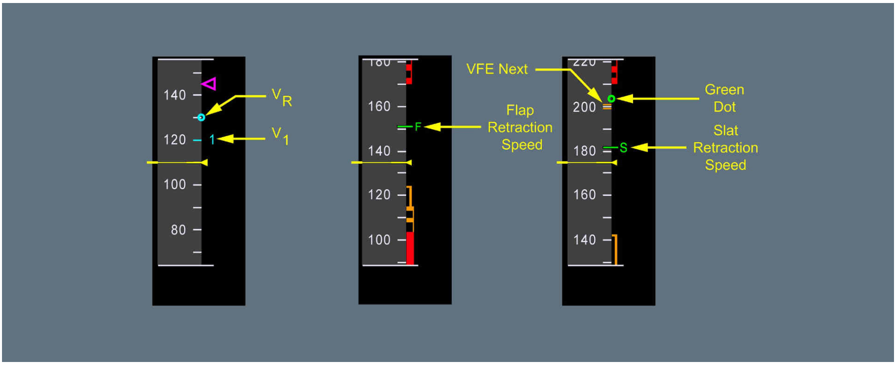
VMAX

The lower end of a red and black strip along the speed scale defines this speed.

It is the lowest of the following:
- VMO or the speed corresponding to MMO
- VLE
- VFE

STALL WARNING SPEED (VSW)

The top of a red and black strip along the speed scale defines this speed.
It is the speed corresponding to the stall warning (*Refer to DSC-27-20-10-20 Protections - General*).
VSW information is inhibited from touchdown until 5 s after lift-off.
It is displayed when operating in pitch alternate or pitch direct law.



DECISION SPEED (V1)

This speed represented by the number (1) is manually inserted by the flight crew in the MCDU.
When it is off the scale, the upper part of the scale shows it in numbers.
It disappears after lift-off (*Refer to DSC-22_10-50-50 Other Speeds*).

MINIMUM FLAP RETRACTION SPEED

This is represented by a F. It appears when the flap selector is in position 3 or 2.

MINIMUM SLAT RETRACTION SPEED

This is represented by a S. It appears when the flap selector is in position 1.

VFE NEXT

The VFE next symbol is an amber equal sign (=) showing the VFE corresponding to the next flap lever position.
It appears when the aircraft altitude is below 15 000 ft or 20 000 ft depending upon the FAC standard (*Refer to DSC-22_10-50-30 Limit Speeds*).

GREEN DOT (ENGINE-OUT OPERATING SPEED IN CLEAN CONFIGURATION)

This green dot appears when the aircraft is flying in clean configuration.
It shows the speed corresponding to the best lift-to-drag ratio.

ROTATION SPEED (VR)

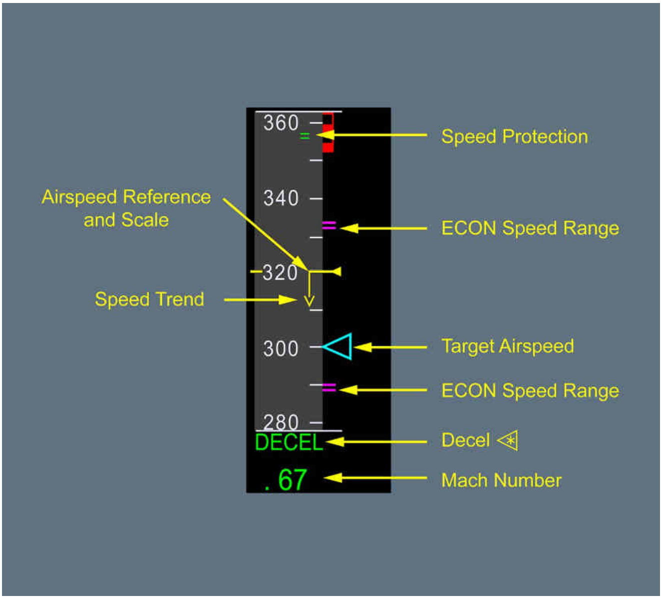
VR is entered on the PERF takeoff page of the MCDU and is indicated by a cyan circle.
This cyan circle is visible during takeoff.

Note: 1. *V2 is represented by the target speed index during takeoff.*
2. *V2 is manually inserted by the flight crew via the MCDU.*

AIRSPEED

Ident.: DSC-31-40-00001235.0009001 / 03 MAY 21

6 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597**


360
340
320
300
280
DECEL
. 67
Speed Protection
Airspeed Reference and Scale
ECON Speed Range
Speed Trend
Target Airspeed
ECON Speed Range
Decel
Mach Number

ACTUAL AIRSPEED REFERENCE LINE AND SCALE

A white scale on a grey background moves in front of a fixed yellow reference line (next to a yellow triangle) to indicate airspeed. The minimum airspeed indication is 30 kt.

SPEED TREND

This pointer starts at the speed symbol. The tip indicates the speed that the aircraft will reach in 10 s if its acceleration remains constant. The pointer only appears when it is greater than 2 kt and disappears when it is less than 1 kt.
It also disappears if the FACs fail.

TARGET AIRSPEED

These symbols give the target airspeed or the airspeed corresponding to the target Mach number. The target airspeed is either computed by the FMGC in managed speed mode (magenta triangle) or I manually entered on the FCU in selected speed mode (blue triangle).The target speed is a magenta double bar (=) when associated with the ECON speed range.
When the target speed is off the speed scale, its value is displayed as numbers either above or below the speed scale.

MACH NUMBER

It is displayed when it is greater than M 0.5.

SPEED PROTECTION

This symbol indicates the speed (VMO +6 kt or MMO +0.01) at which overspeed protection becomes active (*Refer to DSC-27-20-10-20 Protections - General*).

ECON SPEED RANGE

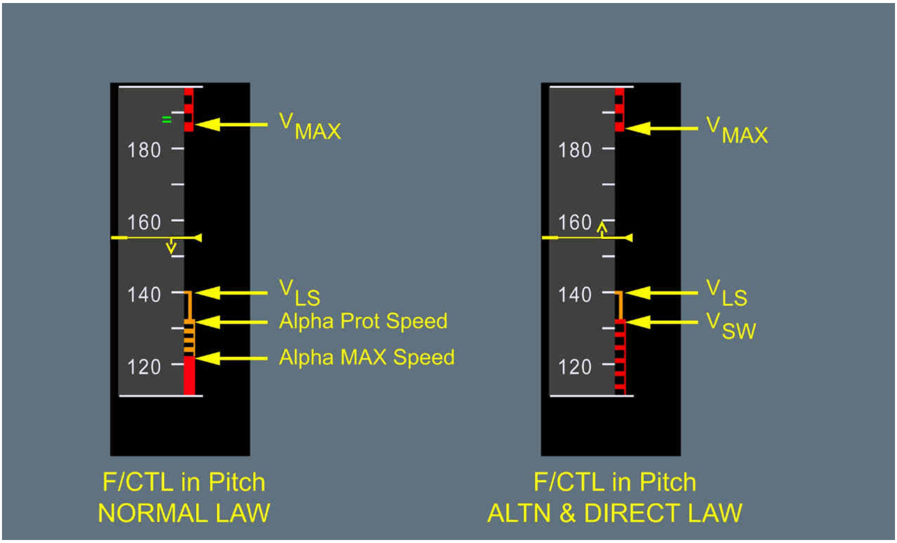
In descent mode with the ECON/AUTO SPD mode active, these two thick lines replace the selected speed symbol. It shows the upper and lower limits calculated by the FMGC.

- The upper speed is the target speed +20 kt limited to VMAX or VMO -3 kt or MMO -0.006, whichever is the lowest.
  If a speed limit or a speed constraint applies, the upper margin is limited to ECON SPD +5 kt.
- The lower speed margin is the target speed -20 kt limited to green dot, F, S, or VLS, whichever is the highest.

DECEL

When the autobrake is active, the aircraft decelerates as selected via the AUTO BRK mode selector.
The DECEL message is displayed when the aircraft deceleration is at least 80 % of the selected deceleration. When the aircraft deceleration is less than 70 % of the selected deceleration, it disappears. The BSCU provides the DECEL information.

Note: *On a slippery runway, the A/SKID may be activated before the aircraft reaches 80 % of the deceleration. Therefore, the DECEL indication may not appear even if the autobrake is active.*


180
160
140
120
VMAX
VLS
Alpha Prot Speed
Alpha MAX Speed
F/CTL in Pitch
NORMAL LAW
180
160
140
120
VMAX
VLS
VSW
F/CTL in Pitch
ALTN & DIRECT LAW

MINIMUM SELECTABLE SPEED (VLS)

The top of the amber strip along the speed scale indicates this speed. It represents the lowest selectable speed providing an appropriate margin to the stall speed.
VLS information is inhibited from touchdown until 10 s after liftoff.

ALPHA PROTECTION SPEED

The top of a black and amber strip along the speed scale indicates this speed.
It represents the speed corresponding to the angle of attack at which alpha protection becomes active (*Refer to DSC-27-20-10-20 Protections - General*).
It is displayed when in pitch normal law.

ALPHA MAX SPEED

The top of a red strip along the speed scale indicates this speed. It represents the speed corresponding to the maximum angle of attack that the aircraft can attain in pitch normal law (*Refer to DSC-27-20-10-20 Protections - General*).
It is displayed when in pitch normal law.

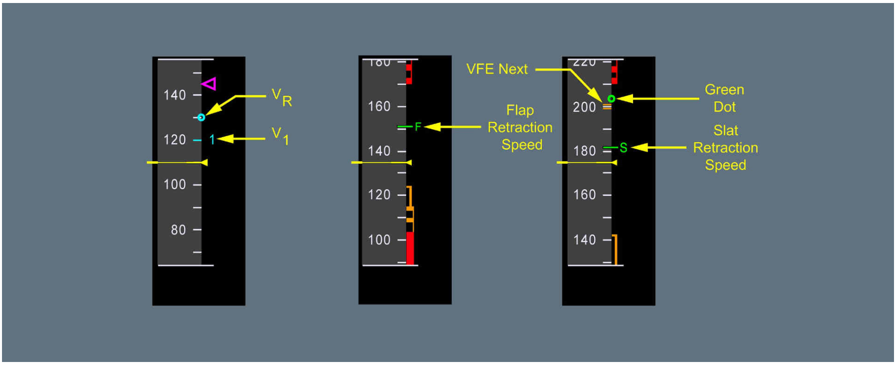
VMAX

The lower end of a red and black strip along the speed scale defines this speed.

It is the lowest of the following:
- VMO or the speed corresponding to MMO
- VLE
- VFE

STALL WARNING SPEED (VSW)

The top of a red and black strip along the speed scale defines this speed.
It is the speed corresponding to the stall warning (*Refer to DSC-27-20-10-20 Protections - General*).
VSW information is inhibited from touchdown until 5 s after lift-off.
It is displayed when operating in pitch alternate or pitch direct law.



DECISION SPEED (V1)

This speed represented by the number (1) is manually inserted by the flight crew in the MCDU.
When it is off the scale, the upper part of the scale shows it in numbers.
It disappears after lift-off (*Refer to DSC-22_10-50-50 Other Speeds*).

MINIMUM FLAP RETRACTION SPEED

This is represented by a F. It appears when the flap selector is in position 3 or 2.

MINIMUM SLAT RETRACTION SPEED

This is represented by a S. It appears when the flap selector is in position 1.

VFE NEXT

The VFE next symbol is an amber equal sign (=) showing the VFE corresponding to the next flap lever position.
It appears when the aircraft altitude is below 15 000 ft or 20 000 ft depending upon the FAC standard (*Refer to DSC-22_10-50-30 Limit Speeds*).

GREEN DOT (ENGINE-OUT OPERATING SPEED IN CLEAN CONFIGURATION)

This green dot appears when the aircraft is flying in clean configuration.
It shows the speed corresponding to the best lift-to-drag ratio.

ROTATION SPEED (VR)

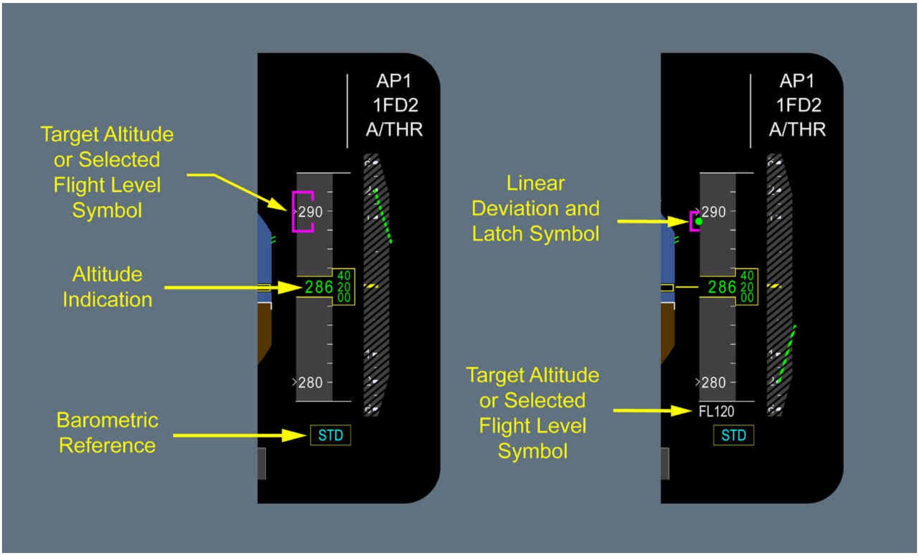
VR is entered on the PERF takeoff page of the MCDU and is indicated by a cyan circle (o).
This cyan circle is visible during takeoff.

Note: *1. V2 is represented by the target speed index during takeoff.*
2. V2 is manually inserted by the flight crew via the MCDU.

ALTITUDE

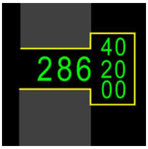
Ident.: DSC-31-40-00001237.0065001 / 10 MAY 22

7 **Applicable to: MSN 10949-11597**

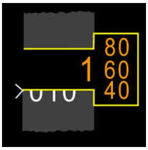

Target Altitude or Selected Flight Level Symbol
Altitude Indication
Barometric Reference
AP1
1FD2
A/THR
290
286
40
20
00
280
STD
Linear Deviation and Latch Symbol
Target Altitude or Selected Flight Level Symbol
FL120

ALTITUDE INDICATION

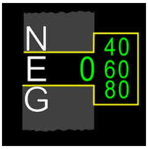
The altitude indication appears both as a white moving scale and as a green digital readout on grey background. Small white marks are positioned on the scale against the round values (e.g. 280, 290,...).



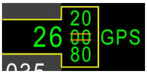
The altitude window is displayed in yellow when the difference between the current altitude and the selected altitude is less than 250 ft.
The altitude window pulses in yellow when the difference between the current altitude and the selected altitude exceeds 250 ft but decreases.
The altitude window flashes in amber when the difference between the current altitude and the selected altitude exceeds 250 ft and increases.
Refer to DSC-31-40 Altitude Alert.



The current altitude is below the MDA (or the MDH) entered in the FMS.



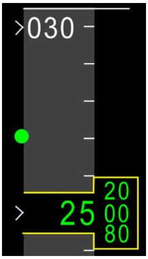
The current altitude is negative.



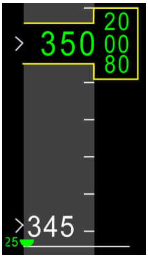
The current altitude is provided by the GPS and no longer by the ADR.

LINEAR DEVIATION AND LATCH SYMBOL

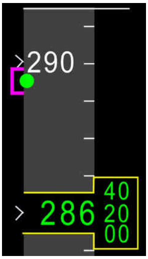
The linear deviation is the difference between the current altitude of the aircraft and the theoretical vertical profile of the FMS.
The linear deviation appears from the top of descent down to the MAP altitude.



When the linear deviation is less than 540 ft, the linear deviation symbol is a green filled circle, located at the theoretical FMS altitude.



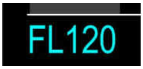
When the linear deviation exceeds 540 ft, the vertical deviation symbol is a green half filled circle, located at the altitude scale limits. In this case, it is associated with the numerical value displayed on two digits, in hundreds of feet. The MCDU PROG page displays the exact value.



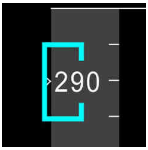
When the aircraft is near to the vertical profile and the FMS provides priority to the vertical profile, the aircraft is “latched on the profile”. This is represented by the Latch symbol (magenta half square). The Latch symbol appears only if the linear deviation is less than 540 ft.

TARGET ALTITUDE OR SELECTED FLIGHT LEVEL SYMBOL

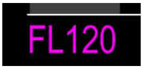
This symbol shows the FCU selected altitude (if QNH BARO reference is selected) or the selected flight level (if STD BARO reference is selected).



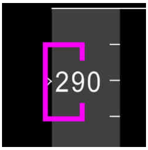
Indicates the selected altitude when the vertical guidance is either selected or managed.
The altitude target is outside the altitude scale.



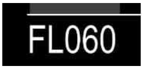
Indicates the selected altitude when the vertical guidance is either selected or managed.
The altitude target is within the altitude scale.



Indicates an altitude constraint when the vertical guidance is managed.
The altitude constraint is outside the altitude scale.



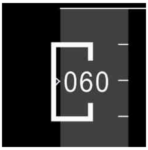
Indicates an altitude constraint when the vertical guidance is managed.
The altitude constraint is within the altitude scale.



Indicates the selected altitude when a vertical approach mode is engaged.

Note: *The aircraft disregards this altitude target when a vertical approach mode is engaged.*

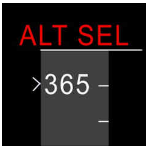
The altitude target is outside the altitude scale.



Indicates the selected altitude when a vertical approach mode is engaged.

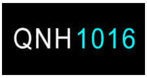
Note: *The aircraft disregards this altitude target when a vertical approach mode is engaged.*

The altitude target is within the altitude scale.

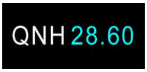


Temporarily flashes then remains steady on the top of the altitude scale when the selected altitude from FCU or the altitude constraint from FMS is not valid.

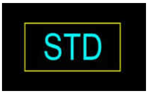
BAROMETRIC REFERENCE



The flight crew selects the QNH pressure reference in hectoPascals on the barometric reference knob of the EFIS CP.



The flight crew selects the QNH pressure reference in inches of mercury on the barometric reference knob of the EFIS CP.



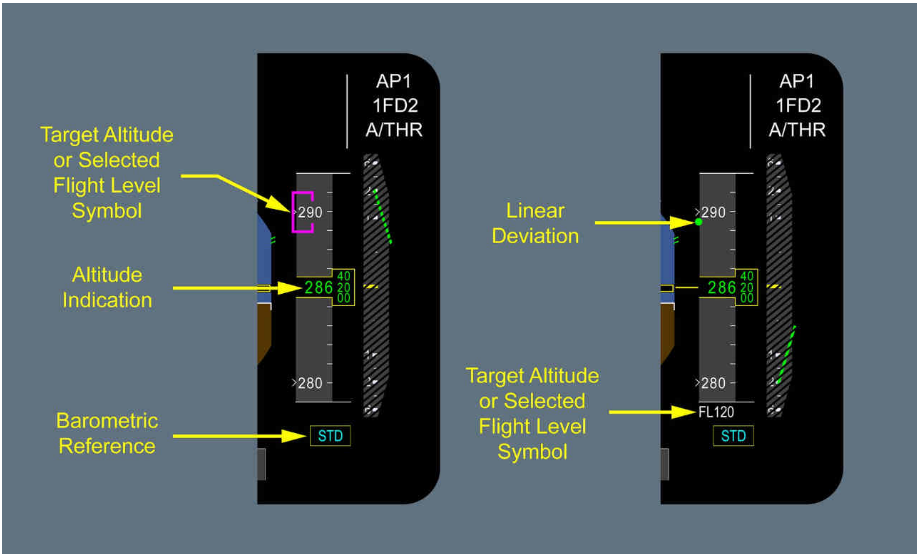
The flight crew selects the standard pressure reference on the barometric reference knob of the EFIS CP.

This indication pulses when the selection made by the flight crew is not correct (STD not selected above transition altitude in climb or STD still selected in approach below transition level).

ALTITUDE

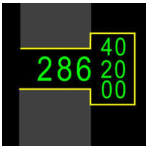
Ident.: DSC-31-40-00001237.0064001 / 10 MAY 22

8 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098**

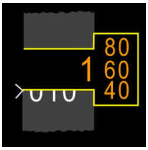

Target Altitude or Selected Flight Level Symbol
Altitude Indication
Barometric Reference
AP1
1FD2
A/THR
290
286
40
20
00
280
STD
Linear Deviation
Target Altitude or Selected Flight Level Symbol
AP1
1FD2
A/THR
290
286
40
20
00
280
FL120
STD

ALTITUDE INDICATION

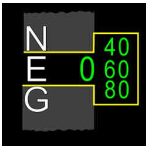
The altitude indication appears both as a white moving scale and as a green digital readout on grey background. Small white marks are positioned on the scale against the round values (e.g. 280, 290,...).



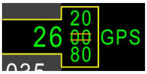
The altitude window is displayed in yellow when the difference between the current altitude and the selected altitude is less than 250 ft.
The altitude window pulses in yellow when the difference between the current altitude and the selected altitude exceeds 250 ft but decreases.
The altitude window flashes in amber when the difference between the current altitude and the selected altitude exceeds 250 ft and increases.
Refer to DSC-31-40 Altitude Alert.


1
80
60
40
010

The current altitude is below the MDA (or the MDH) entered in the FMS.



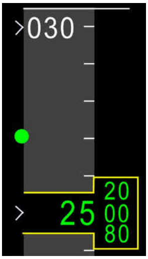
The current altitude is negative.



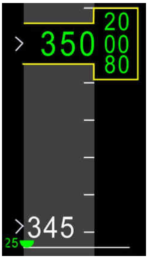
The current altitude is provided by the GPS and no longer by the ADR.

LINEAR DEVIATION

The linear deviation is the difference between the current altitude of the aircraft and the theoretical vertical profile of the FMS.
The linear deviation appears from the top of descent down to the MAP altitude.



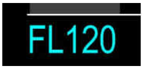
When the linear deviation is less than 540 ft, the linear deviation symbol is a green filled circle, located at the theoretical FMS altitude.



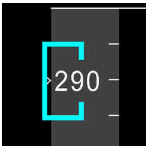
When the linear deviation exceeds 540 ft, the vertical deviation symbol is a green half filled circle, located at the altitude scale limits. In this case, it is associated with the numerical value displayed on two digits, in hundreds of feet. The MCDU PROG page displays the exact value.

TARGET ALTITUDE OR SELECTED FLIGHT LEVEL SYMBOL

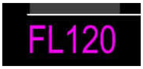
This symbol shows the FCU selected altitude (if QNH BARO reference is selected) or the selected flight level (if STD BARO reference is selected).



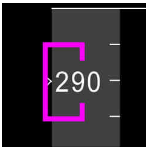
Indicates the selected altitude when the vertical guidance is either selected or managed.
The altitude target is outside the altitude scale.



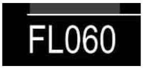
Indicates the selected altitude when the vertical guidance is either selected or managed.
The altitude target is within the altitude scale.



Indicates an altitude constraint when the vertical guidance is managed.
The altitude constraint is outside the altitude scale.



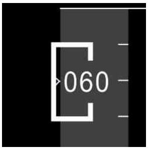
Indicates an altitude constraint when the vertical guidance is managed.
The altitude constraint is within the altitude scale.



Indicates the selected altitude when a vertical approach mode is engaged.

Note: *The aircraft disregards this altitude target when a vertical approach mode is engaged.*

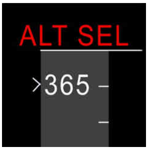
The altitude target is outside the altitude scale.



Indicates the selected altitude when a vertical approach mode is engaged.

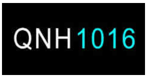
Note: *The aircraft disregards this altitude target when a vertical approach mode is engaged.*

The altitude target is within the altitude scale.

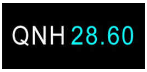


Temporarily flashes then remains steady on the top of the altitude scale when the selected altitude from FCU or the altitude constraint from FMS is not valid.

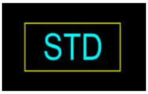
BAROMETRIC REFERENCE



The flight crew selects the QNH pressure reference in hectoPascals on the barometric reference knob of the EFIS CP.



The flight crew selects the QNH pressure reference in inches of mercury on the barometric reference knob of the EFIS CP.



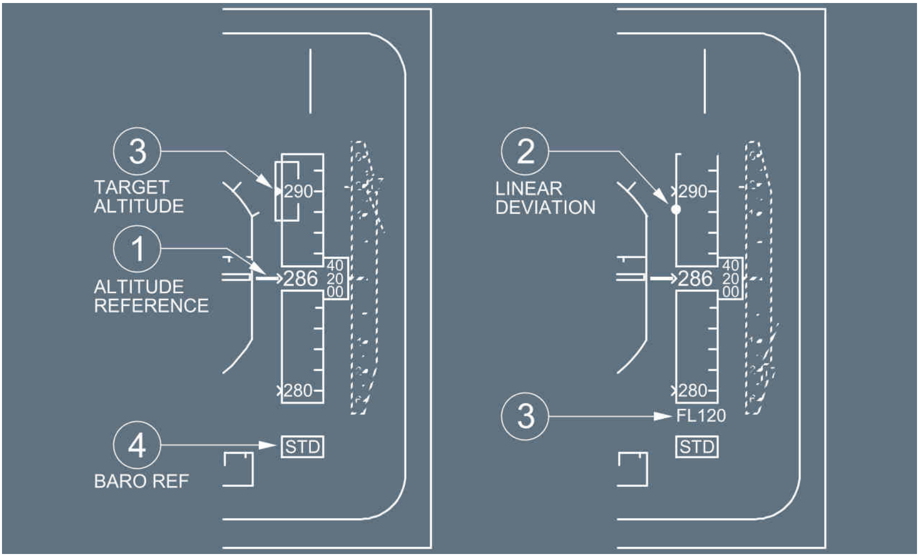
The flight crew selects the standard pressure reference on the barometric reference knob of the EFIS CP.

This indication pulses when the selection made by the flight crew is not correct (STD not selected above transition altitude in climb or STD still selected in approach below transition level).

ALTITUDE

Ident.: DSC-31-40-00001237.0049001 / 29 OCT 13

9 **Applicable to: MSN 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**



(1) Altitude Indication
This appears both as a white moving scale, and as a green digital readout on a grey background. Small white marks are positioned on the scale against the round values (e.g. 280, 290...). “NEG” appears in the window in white for negative values. The altitude window changes from yellow to amber, if the aircraft deviates from the FCU-selected altitude or flight level.
On any approach for which an minimum is entered in the FMGC, the altitude numbers change from green to amber, when the aircraft goes below the minimum.

(2) Linear Deviation (green filled circle)
This symbol appears next to the altitude corresponding to the theoretical vertical profile computed by the FMGC. It is displayed from the top of descent down to the MAP altitude.

The flight crew can read the linear deviation directly from the altitude scale. The range is ±500 ft. When the linear deviation value exceeds ±500 ft, the symbol stays at the range limit but changes to a half filled circle and the PROG page displays the exact value.

(3) Target Altitude or Selected Flight Level Symbol (blue)
This symbol shows the FCU selected altitude (if QNH BARO reference is selected) or the selected flight level (if STD BARO reference is selected.)
When the FMGC operates in the vertical managed mode, this symbol is magenta if it represents a flight plan altitude constraint that the FMGC will follow. If the target altitude or flight level is on the scale, the symbol is displayed and the numerical value appears inside the symbol.
If it is off the scale, the symbol is not displayed, and the numerical value appears above or underneath the scale.

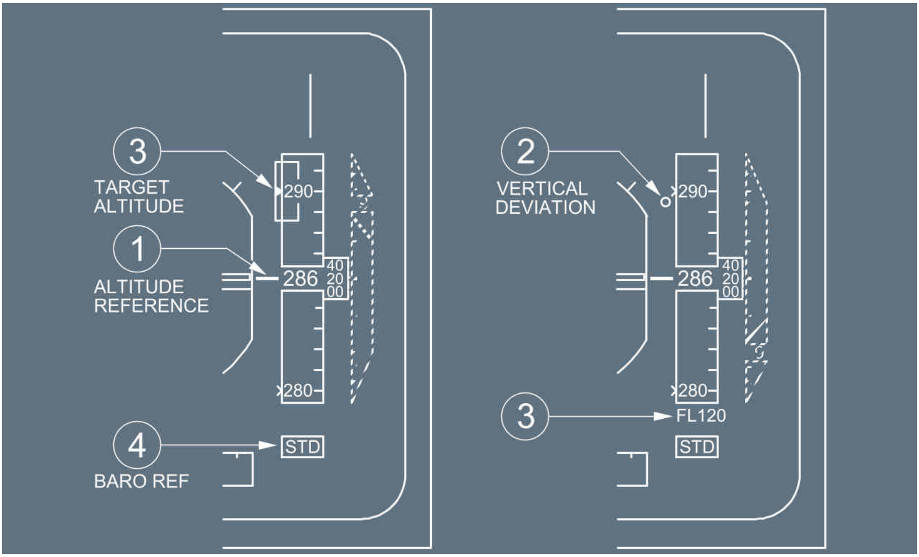
(4) Barometric Reference
The display shows “STD” or it shows “QNH” and the numerical setting in hectoPascals or inches of mercury.
It pulses when the selection made by the flight crew is not correct (STD not selected above transition altitude in climb or STD still selected in approach below transition level).

APPROACH MINIMUM INDICATION

Approach minimum is displayed on the altitude scale by an amber indication.

ALTITUDE

Ident.: DSC-31-40-00001237.0001001 / 27 JUN 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



(1) Altitude Indication
This appears both as a white moving scale, and as a green digital readout on a grey background. Small white marks are positioned on the scale against the round values (e.g. 280, 290...). “NEG” appears in the window in white for negative values. The altitude window changes from yellow to amber, if the aircraft deviates from the FCU-selected altitude or flight level.
On any approach for which an MDA (MDH) is entered in the FMGS, the altitude numbers change from green to amber, when the aircraft goes below the MDA (MDH).

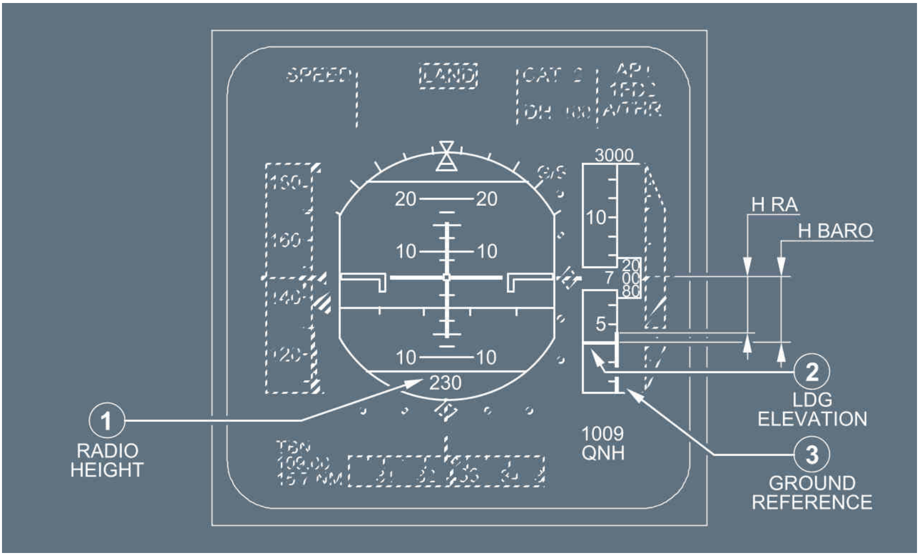
(2) Vertical Deviation (magenta)
This symbol appears next to the altitude corresponding to the theoretical vertical profile computed by the FMGC. It is displayed from the top of descent down to the MAP altitude. The pilot can read the VDEV directly from the altitude scale. The range is ±500 ft. When the VDEV value exceeds ±500 ft, the symbol stays at the range limit and the PROG page displays the exact value.

(3) Target Altitude or Selected Flight Level Symbol (blue)
This symbol shows the FCU selected altitude (if QNH BARO reference is selected) or the selected flight level (if STD BARO reference is selected.)
When the FMGC operates in the vertical managed mode, this symbol is magenta if it represents a flight plan altitude constraint that the FMGC will follow. If the target altitude or flight level is on the scale, the symbol is displayed and the numerical value appears inside the symbol.
If it is off the scale, the symbol is not displayed, and the numerical value appears above or underneath the scale.

(4) Barometric Reference
The display shows “STD” or it shows “QNH” and the numerical setting in hectoPascals or inches of mercury.
It pulses when the selection made by the pilot is not correct (STD not selected above transition altitude in climb or STD still selected in approach below transition level).

ALTITUDE (CONT'D)

Ident.: DSC-31-40-00006121.0001001 / 13 JAN 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



(1) Radio Height

This quantity appears when it is less than 2 500 ft.

- If a DH has been entered, the radio height appears:
  - In green, when DH +100 ft < RA < 2 500 ft
  - In amber, when RA < DH +100 ft

  If “NO” is entered as the DH on the MCDU APPROACH page, 0 ft becomes a default value. When the aircraft reaches the decision height selected on the MCDU, DH letters flash amber for 3 s, then remain amber above the radio height indication.
- If no DH has been entered, or if both FMGCs fail, the radio height appears:
  - In green, when 400 ft < RA < 2 500 ft
  - In amber, when RA ≤ 400 ft

The radio height indication changes every 10 ft down to 50 ft, then every 5 ft down to 10 ft, then every foot.

(2) Landing Elevation (blue)

The horizontal bar on the altitude scale shows the landing elevation at the flight-planned destination.

It is displayed:

- during flight phases 7 and 8 and
- if the QNH reference mode is selected.

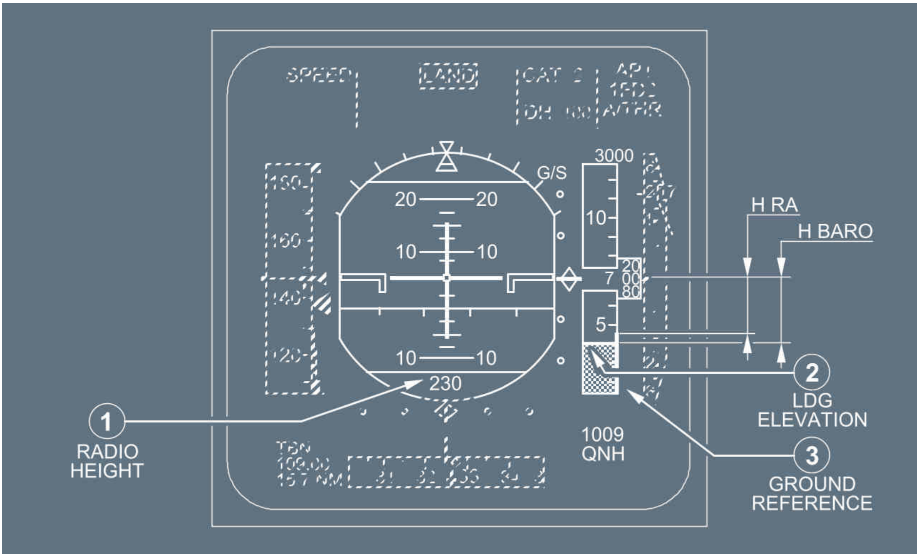
(3) Ground reference

A red ribbon on the right of the altitude scale represents the field elevation. This ribbon, which is driven by the radio altimeter signal, is displayed below 570 ft.
It moves up, as does the lower line of the attitude sphere, with the altitude scale as the aircraft descends. When the aircraft has touched down, the top of this ribbon is at the middle of the altitude window.

ALTITUDE (CONT'D)

Ident.: DSC-31-40-00006121.0002001 / 13 JAN 14

10 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


SPEED
LAND
CAT 2
DH 100
AP1
1FD2
A/THR
G/S
3000
20
10
230
7
1009
QNH
H RA
H BARO
1
RADIO HEIGHT
2
LDG ELEVATION
3
GROUND REFERENCE
TBN
109.00
15.7 NM

(1) Radio Height

A value appears, when the aircraft is lower than 2 500 ft.

- If a DH has been entered, the radio height appears:
  - In green, when DH +100 ft < RA < 2 500 ft
  - In amber, when RA < DH +100 ft

  If “NO” is entered as the DH on the MCDU APPROACH page, 0 ft becomes a default value. When the aircraft reaches the decision height selected on the MCDU, DH letters flash amber for 9 s, then remain amber above the radio height indication.
- If no DH has been entered, or if both FMGCs fail, the radio height appears:
  - In green, when 400 ft < RA < 2 500 ft
  - In amber, when RA ≤ 400 ft

The radio height indication changes every 10 ft down to 50 ft, then every 5 ft down to 10 ft, then every foot.

(2) Landing Elevation (brown)

The top of the brown surface on the altitude scale represents the landing elevation at the flight-planned destination.

It is displayed:
- during flight phases 7 and 8 and
- if the STD reference mode is not selected.

(3) Ground reference

A red ribbon on the right of the altitude scale represents the field elevation. This ribbon, which is driven by the radio altimeter signal, is displayed below 570 ft.

It moves up, as does the lower line of the attitude sphere, with the altitude scale as the aircraft descends. When the aircraft has touched down, the top of this ribbon is at the middle of the altitude window.

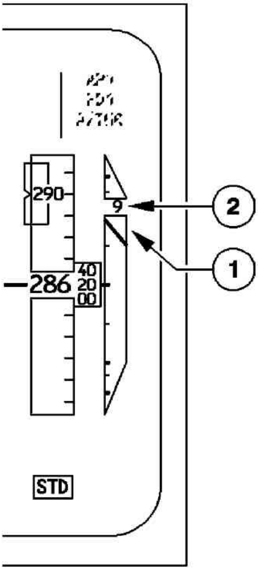
VERTICAL SPEED

Ident.: DSC-31-40-00001239.0001001 / 21 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The displayed vertical speed information is normally based on both inertial and barometric data. If inertial data is not available, it is automatically replaced by barometric information.

In this case, the window around the numerical value becomes amber.



(1) Analog pointer

This pointer, which is normally in green, points to a white vertical speed scale, displayed on a grey background and graduated at intervals of 500 ft/min.
If the V/S is greater than 6 000 ft/min, the pointer stays at the end of the scale.

(2) Digital indication

This number, normally in green, is the vertical speed in hundreds of feet per minute.
It disappears, if the vertical speed is less than 200 ft/min.

The analog pointer and the digital indication become amber, if:
- V/S is greater than 6 000 ft/min, (climb or descent)
- V/S is greater than 2 000 ft/min, during descent when 1 000 ft < RA < 2 500 ft, or
- V/S is greater than 1 200 ft/min, during descent and RA < 1 000 ft.

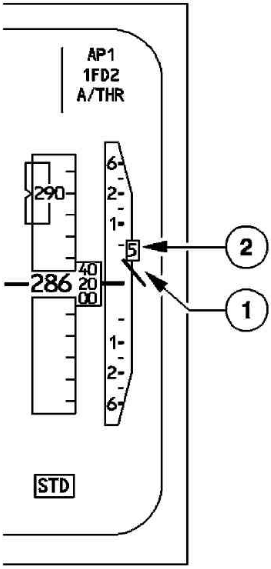
Note: *For TCAS, Refer to DSC-34-SURV-60-20 TCAS Messages.*

VERTICAL SPEED

Ident.: DSC-31-40-00001239.0002001 / 21 MAR 17

11 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The displayed vertical speed information is normally based on both inertial and barometric data. If inertial data is not available, it is automatically replaced by barometric information.
In this case, the window around the numerical value becomes amber.



(1) Analog pointer
This pointer, which is normally in green, points to a white vertical speed scale, displayed on a grey background and graduated at intervals of 500 ft/min.
If the V/S is greater than 6 000 ft/min, the pointer stays at the end of the scale.

(2) Digital indication
This number, normally in green, is the vertical speed in hundreds of feet per minute.
It disappears, if the vertical speed is less than 200 ft/min.

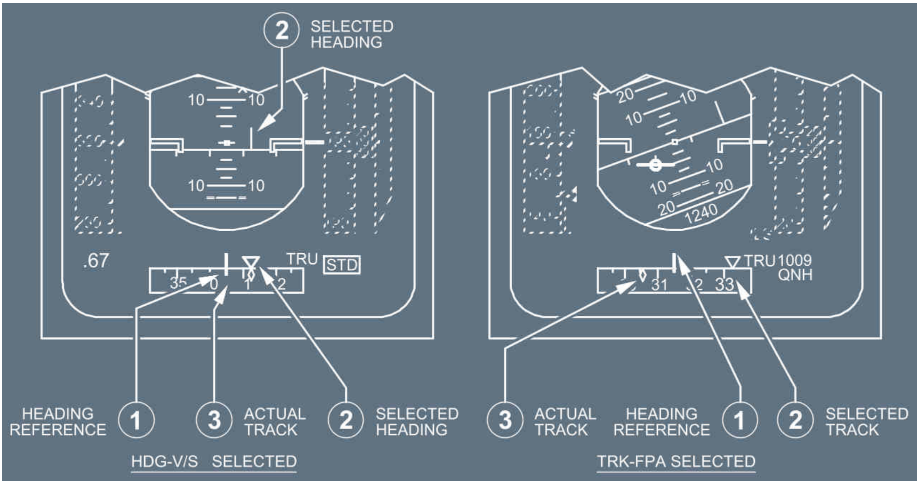
The analog pointer and the digital indication become amber, if:

- V/S is greater than 6 000 ft/min, (climb or descent)
- V/S is greater than 2 000 ft/min, during descent when 1 000 ft < RA < 2 500 ft, or
- V/S is greater than 1 200 ft/min, during descent and RA < 1 000 ft.

Note: For TCAS, Refer to DSC-34-SURV-60-20 TCAS Messages.

HEADING

Ident.: DSC-31-40-00001240.0001001 / 22 MAY 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


2 SELECTED HEADING
.67
TRU
STD
HEADING REFERENCE 1
3 ACTUAL TRACK
2 SELECTED HEADING
HDG-V/S SELECTED
TRU 1009
QNH
1240
3 ACTUAL TRACK
HEADING REFERENCE 1
2 SELECTED TRACK
TRK-FPA SELECTED

(1) Heading Reference Line and Scale
A white scale on a grey background moves in front of a fixed yellow reference line to indicate the actual magnetic heading.
“TRU” appears, when the display indicates the true heading, rather than the magnetic heading (latitude above 73 ° North or below 60 ° South).

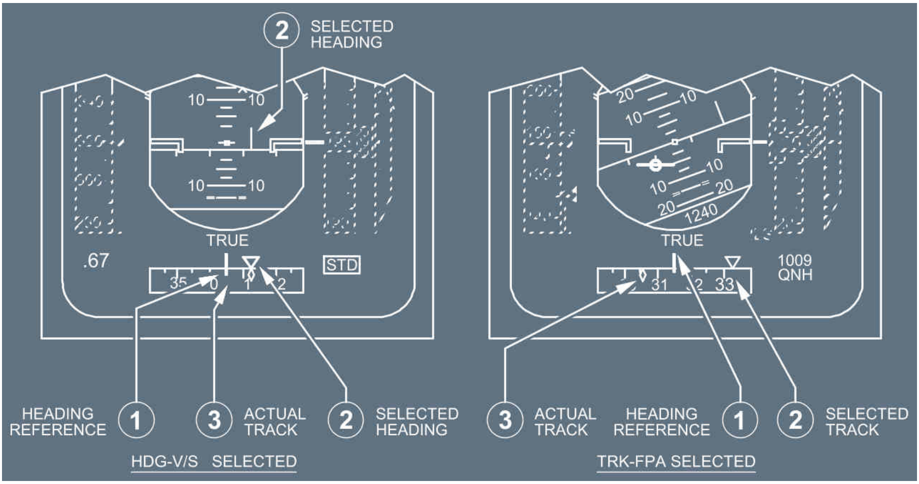
(2) Selected Heading or Track Index (blue)
The pointer indicates the heading or track displayed on the FCU HDG-TRK window.
The index is replaced by digits on the right or left side of the scale, when the selected value is off the scale.
If the FD pushbutton is OFF, a second heading/track symbol appears on the horizon line, and markers are displayed every 10 °.

(3) Actual Track Symbol
This symbol is a small green diamond.

HEADING

Ident.: DSC-31-40-00001240.0002001 / 07 MAY 13

12 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


2 SELECTED HEADING
10
10
10
10
TRUE
.67
35
0
1
2
STD
HEADING REFERENCE 1
3 ACTUAL TRACK
2 SELECTED HEADING
HDG-V/S SELECTED
20
10
10
10
10
20
20
1240
TRUE
31
2
33
1009 QNH
3 ACTUAL TRACK
HEADING REFERENCE 1
2 SELECTED TRACK
TRK-FPA SELECTED

(1) Heading Reference Line and Scale
A white scale on a grey background moves in front of a fixed yellow reference line to indicate the actual magnetic heading.
"TRUE" appears, when the display indicates the true heading, rather than the magnetic heading (latitude above 73 ° North or below 60 ° South).

(2) Selected Heading or Track Index (blue)
This pointer is in blue, and indicates the heading or track displayed on the FCU HDG-TRK window.
The index is replaced by digits on the right or left side of the scale, when the selected value is off the scale.
If the FD pushbutton is OFF, a second heading/track symbol appears on the horizon line, and markers are displayed every 10 °.

(3) Actual Track Symbol
This symbol is a small green diamond.

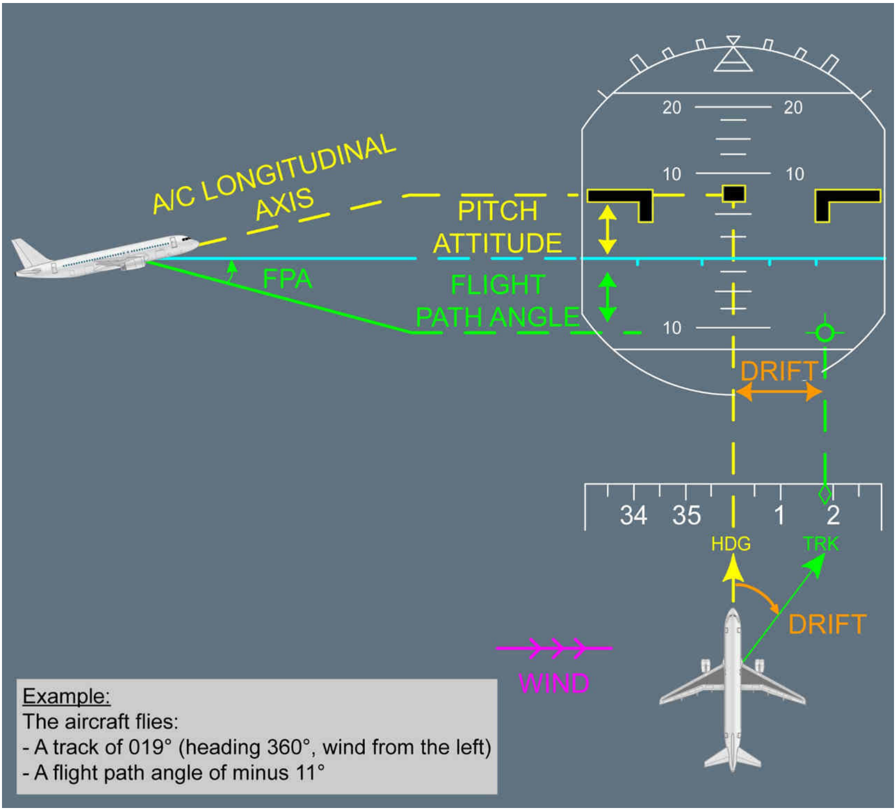
FLIGHT PATH VECTOR

Ident.: DSC-31-40-00001241.0001001 / 17 MAY 21
Applicable to: ALL

The Flight Path Vector (FPV) is the flight reference with the TRK and FPA as basic guidance parameters. When the TRK/FPA is selected on the FCU, the FPV appears on the PFD.

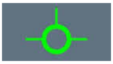
INFORMATION PRESENTATION

The FPV appears on the PFD as a symbol, known as the "bird". The bird indicates the track and flight path angle in relation to the ground.
The track is indicated on the PFD by a green diamond on the compass, in addition to the lateral movement of the bird in relation to the fixed aircraft symbol. On the ND, the track is indicated by a green diamond on the compass scale. The difference in angle between track and heading indicates the drift.
The flight path angle is indicated on the PFD by the vertical movement of the bird in relation to the pitch scale.
With the flight directors (FD) ON, the Flight Path Director (FPD) replaces the HDG-VS Flight Director (FD). With both FD pb set to OFF, the blue track index appears on the PFD horizon.


A/C LONGITUDINAL AXIS
PITCH ATTITUDE
FPA
FLIGHT PATH ANGLE
20
20
10
10
10
DRIFT
34
35
1
2
HDG
TRK
DRIFT
WIND

Example:
The aircraft flies:
- A track of 019° (heading 360°, wind from the left)
- A flight path angle of minus 11°

FLIGHT PATH VECTOR (FPV)



The FPV appears, when the pilot selects TRK/FPA on the FCU.

The flight path vector represents the lateral and vertical trajectory of the aircraft with respect to the ground.
- On the lateral scale, it indicates the aircraft's track.
- On the vertical scale, it indicates the aircraft's flight path angle.

USE OF FPV

The bird is the flying reference that should be used when flying a stabilized segment of trajectory, e.g.: non-precision approach when the FLS function ⩤ is not used or visual circuit.

In dynamic manoeuvres, the bird is directly affected by the aircraft inertia and has a delayed reaction. As a result, the bird should not be used as a flight reference in dynamic manoeuvres. *Refer to FCTM/AS-BIRD Introduction* for more information.

GUIDANCE

Ident.: DSC-31-40-00001242.0001001 / 13 JAN 14
Applicable to: ALL

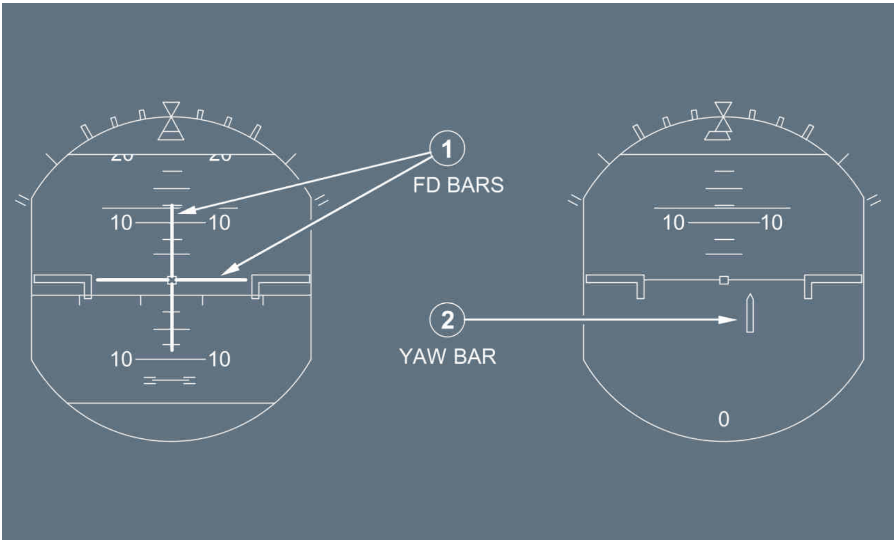
Two completely different flight director modes are available, each with its own characteristic symbols. The symbol displayed corresponds to the basic operating reference the pilot has selected – either HDG V/S or TRK FPA.
In normal operation, PFD1 displays FD1 orders.
If FD1 fails, PFD1 automatically displays FD2 orders on PFD1, the FD2 indication in the right column of the FMA flashes for a few seconds.
This is also applicable to FD2 orders, that are displayed on PFD2.

IF THE CREW HAS SELECTED HDG V/S TO BE THE BASIC REFERENCE:

The PFD displays FD bars in green. They automatically move out of view at touchdown in ROLL OUT mode.

They flash for 10 s, and then remain steady, if the following occur:
- A reversion to the HDG V/S basic mode (manual or automatic), or
- The selected flight level is changed, when ALT CAPTURE mode is engaged, or
- The loss of LOC or G/S in LAND mode or loss of LAND mode, or
- At the first AP or FD engagement.

The PFD displays a yaw bar in green below 30 ft radio height, if a localizer signal is available:
- During takeoff (in RWY mode)
- Upon landing (in FLARE and ROLL OUT mode).

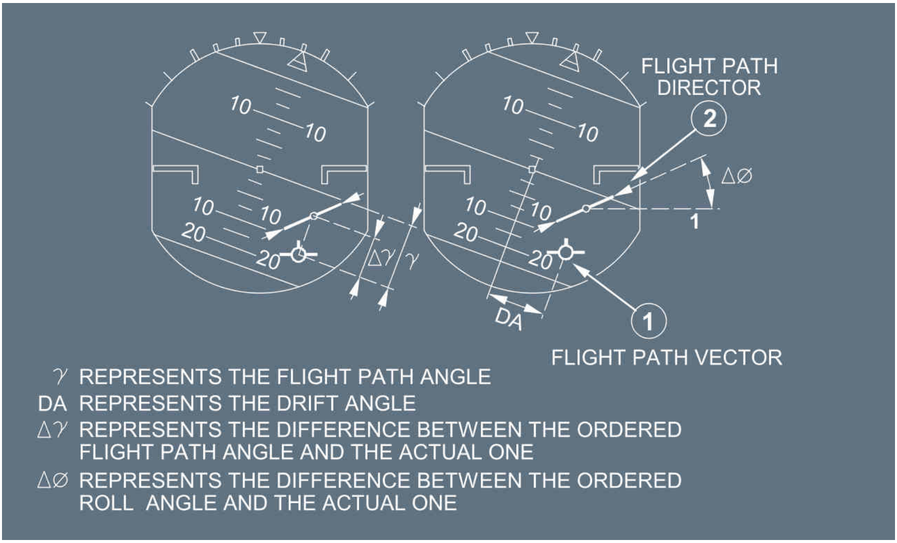


(1) FD Crossed Bars (green)

(2) Yaw Bar (green)

THE CREW HAS SELECTED TRK FPA AS THE BASIC REFERENCE:

An inertial flight path vector defines the aircraft's horizontal and vertical track, taking wind effect into account.
An associated flight path director symbol guides the flight crew onto the vertical and horizontal flight path targets.


10
10
10
10
20
20
Δγ
γ
10
10
10
10
20
20
DA
FLIGHT PATH
DIRECTOR
2
ΔØ
1
1
FLIGHT PATH VECTOR

γ REPRESENTS THE FLIGHT PATH ANGLE

DA REPRESENTS THE DRIFT ANGLE

Δγ REPRESENTS THE DIFFERENCE BETWEEN THE ORDERED FLIGHT PATH ANGLE AND THE ACTUAL ONE

ΔØ REPRESENTS THE DIFFERENCE BETWEEN THE ORDERED ROLL ANGLE AND THE ACTUAL ONE

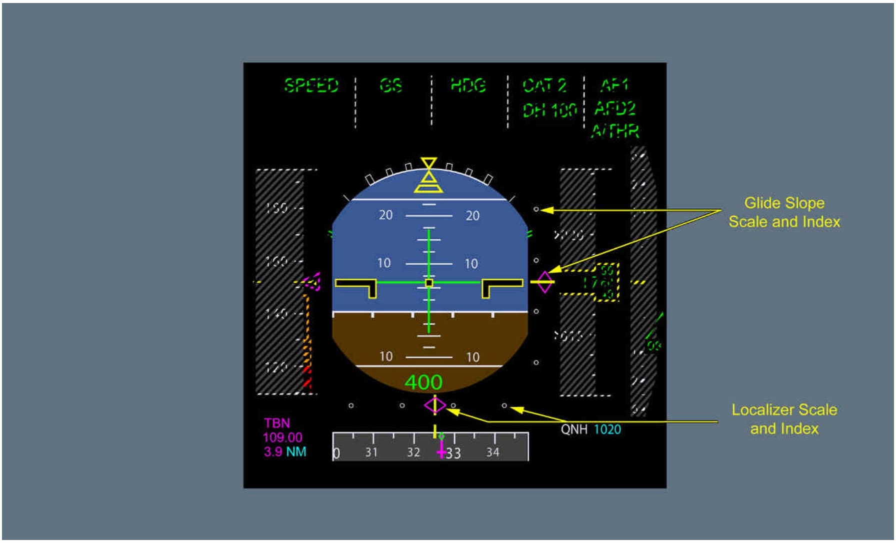
(1) Flight Path Vector (green)

(2) Flight Path Director (green)

TRAJECTORY DEVIATION

Ident.: DSC-31-40-A-00017532.0001001 / 12 MAY 22
Applicable to: ALL

ILS / GLS ◁ / MLS ◁ / SLS ◁ GUIDANCE MODE



LOCALIZER DEVIATION SCALE AND INDEX

Localizer Deviation Scale and Index

GLIDE SLOPE DEVIATION SCALE AND INDEX

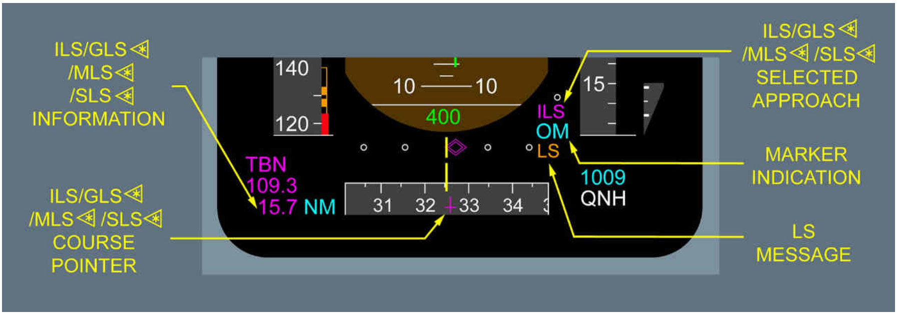
Deviation scales appear as soon as the flight crew presses an LS/ILS pb on the EFIS control panel. Deviation indexes appear when the glide slope and localizer signals of the ILS / GLS ◁ / SLS ◁ (or the elevation and azimuth signals of the MLS ◁) are valid, if deviation scales are displayed.
When a deviation index is out of the displayed range, only half a symbol appears at the end of the scale.
The LOC scale flashes and continues to flash if the deviation exceeds 1/4 dot for two seconds while the aircraft is between 15 ft and 1 000 ft , and CAT2 or CAT3 capability displayed on the FMA, and either LOC, LAND, or FLARE is engaged. The glideslope scale flashes and continues to flash if the deviation exceeds one dot for two seconds (above 100 ft RA).
LOC and the glideslope scale half index symbol flash, and continue to flash, when the deviation exceeds two dots for two seconds.

One dot represents a deviation of ± 0.8 ° on the localizer scale, and ± 0.4 ° on the glideslope scale.

Ident.: DSC-31-40-A-00017533.0004001 / 12 MAY 22

13 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ILS / GLS ◁ / MLS ◁ / SLS ◁ APPROACH (CONT'D)


ILS/GLS◁ /MLS◁ /SLS◁ INFORMATION
ILS/GLS◁ /MLS◁ /SLS◁ COURSE POINTER
ILS/GLS◁ /MLS◁ /SLS◁ SELECTED APPROACH
MARKER INDICATION
LS MESSAGE
140
120
10
10
400
15
ILS
OM
LS
TBN
109.3
15.7 NM
31
32
33
34
1009
QNH

ILS / GLS ◁ / MLS ◁ / SLS ◁ INFORMATION

The following information appears on the PFD, when the flight crew has selected an ILS frequency / GLS channel / MLS channel / SLS channel and course, and pressed the the LS pb
- ILS / GLS / MLS / SLS identification, as decoded by the MMR
- ILS frequency / GLS channel / MLS channel / SLS channel
- For ILS / MLS: DME distance, if the ILS / MLS has a DME
- For GLS / SLS: distance to runway threshold computed by the MMR.

ILS / GLS ◁ / MLS ◁ / SLS ◁ COURSE POINTER

The pointer appears on the PFD, when the flight crew has selected an ILS frequency / GLS channel / MLS channel / SLS channel and course, and pressed the LS pb.
It is a dagger-shaped symbol on the heading scale.
The ILS / GLS / MLS / SLS course pointer is replaced by digits on the right or left hand of the heading scale, when the ILS / GLS / MLS / SLS course value is outside the displayed portion of the heading scale.

MARKER INDICATIONS

OM appears, when the aircraft flies over the outer marker.
MM appears, when the aircraft flies over the middle marker.
IM appears, when the aircraft flies over an airways marker beacon on the ILS / GLS ◁ inner marker.

LS MESSAGE

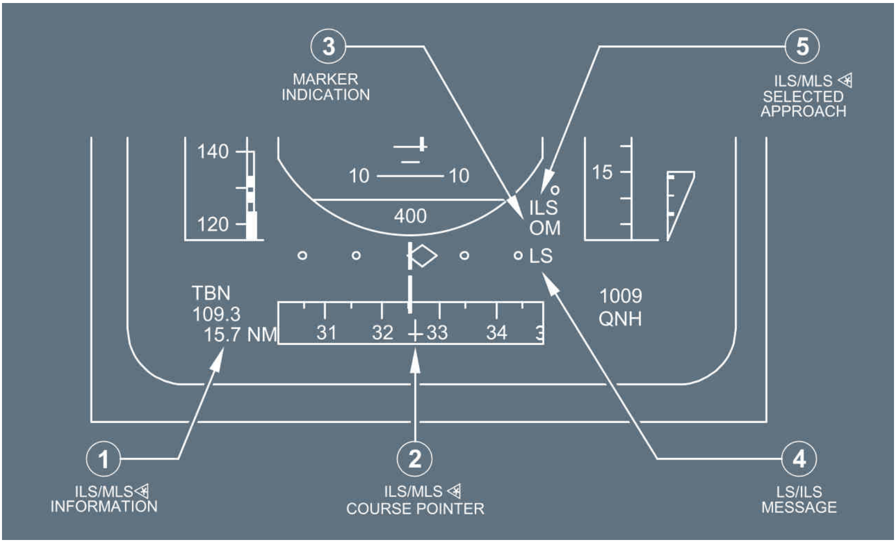
LS flashes, when the APPR mode is armed, but the LS pb is not selected.

SELECTED APPROACH

The ILS / GLS ◁ / MLS ◁ / SLS ◁ indication is displayed according to the approach selected by the flight crew.

Ident.: DSC-31-40-A-00017533.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ILS/MLS ◁ APPROACH (CONT'D)


3
MARKER INDICATION
5
ILS/MLS ◁ SELECTED APPROACH
140
120
10
10
400
15
ILS
OM
LS
TBN
109.3
15.7 NM
31
32
33
34
1009
QNH
1
ILS/MLS◁ INFORMATION
2
ILS/MLS ◁ COURSE POINTER
4
LS/ILS MESSAGE

(1) ILS/MLS ◁ information (magenta)

The following information appears on the PFD, when the crew has selected an ILS frequency/MLS channel and course, and pressed the LS pb:
- ILS/MLS identification, as decoded by the ILS/MLS receiver;
- ILS frequency/MLS channel;
- DME distance, if the ILS/MLS has a DME

(2) ILS/MLS ◁ course Pointer (magenta)

This pointer appears on the PFD, when the crew has selected an ILS frequency/MLS channel and course, and pressed the LS pb.
It is a dagger-shaped symbol on the heading scale.

The ILS/MLS course pointer is replaced by digits on the right or left hand of the heading scale (in a white box) when the ILS/MLS course value is outside the displayed portion of the heading scale.

(3) Marker Indications
OM appears in blue, when the aircraft flies over the outer marker.
MM appears in amber, when it flies over the middle marker.
AWY appears in white, when it flies over an airways marker beacon or the ILS/MLS inner marker.

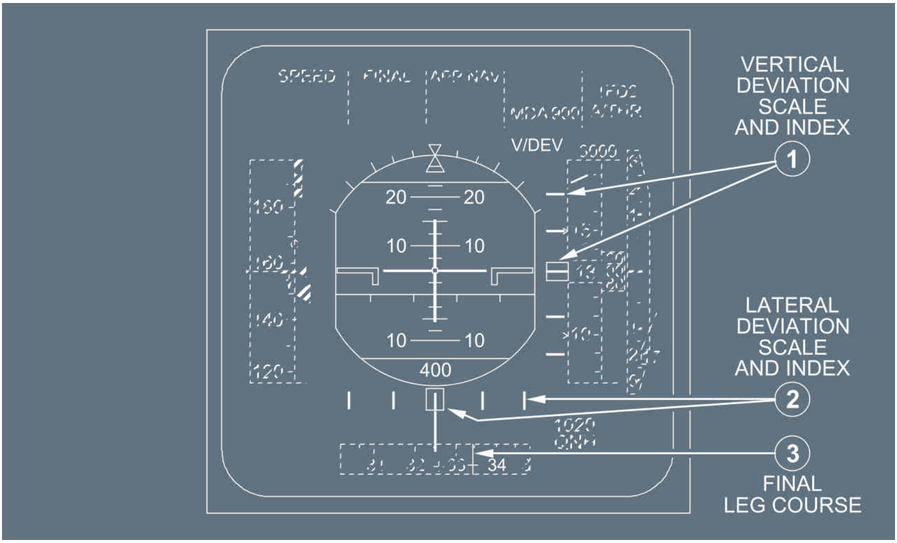
(4) LS/ILS Message
This flashes amber, when the APPR mode is armed, but the LS pb has not been selected.

(5) Selected approach
The ILS or MLS ◁ indication is displayed in magenta according to the approach selected by the crew.

Ident.: DSC-31-40-A-00001245.0040001 / 23 JUN 15

14 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**

RNP-RNAV NON PRECISION APPROACH


SPEED
FINAL
APP NAV
FD2
MDA 900
A/THR
V/DEV
3000
180
160
140
120
20
20
10
10
10
10
400
1020
QNH
31
32
33
34
VERTICAL DEVIATION SCALE AND INDEX
1
LATERAL DEVIATION SCALE AND INDEX
2
3
FINAL LEG COURSE

(1) Vertical Deviation Scale and Index

The vertical deviation is displayed if:
1. A non precision approach is entered in the Flight Plan
2. LS pb is not pressed
3. FINAL descent mode is armed or engaged
4. Approach phase is active or aircraft is in the FMS approach area (5 NM to the first approach waypoint).

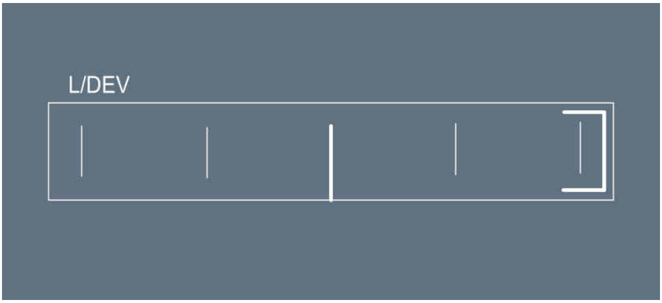
Each vertical deviation scale graduation represents 100 ft, the range being ± 200 ft. Vertical deviation index is displayed until MDA has been reached or MAP or RWY has sequenced.

(2) Lateral Deviation Scale and Index
The lateral deviation is displayed if:

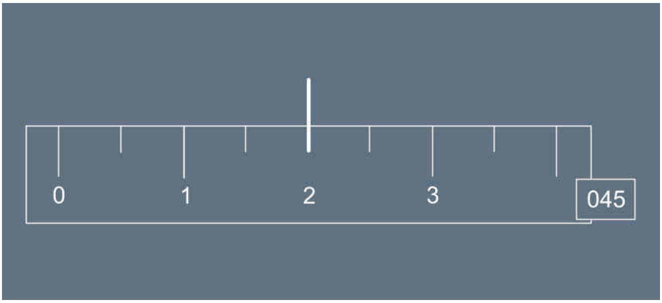
1. LS pb is not pressed
2. GPS primary is installed
3. RNP is equal or less than 0.3
4. LDEV suits to RNP AR operations.

Each lateral deviation scale graduation represents 0.1 NM, the range being + or – 0.2 NM on each side. An index represents the lateral deviation, when the value is less than 0.2 NM. When out of range, the index is replaced by a half index at the scale limit.

Note: *The lateral deviation scale and index can also be displayed on takeoff and missed approach if the same conditions as above are met.*



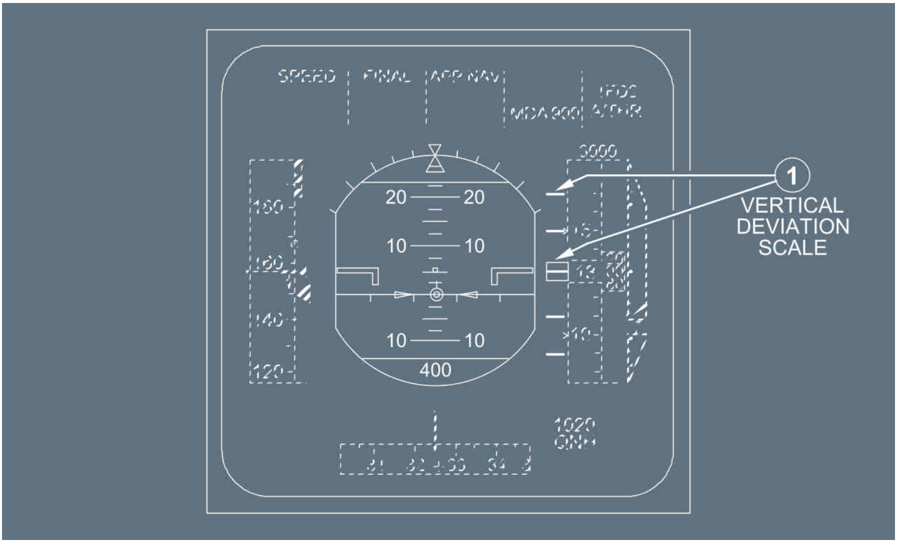
(3) FINAL Leg Course
The inbound course of the last approach leg is displayed on the heading scale in magenta. When outside the range, the symbol is replaced by a digital value in magenta, and located at the limit of the heading area.



Note: *If the LS pb is pressed, glide and LOC deviation has priority over vertical and lateral deviation information. As long as VDEV and L/DEV display conditions are met, and the LS pb is selected, an amber VDEV and L/DEV message flashes above the glide scale.*

Ident.: DSC-31-40-A-00001245.0021001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

NON PRECISION APPROACH


SPEED
FINAL
APP NAV
FD2
MDA 900
A/THR
3000
20
20
10
10
10
10
400
180
160
140
120
1020
QNH
31
32
33
34
1
VERTICAL DEVIATION SCALE

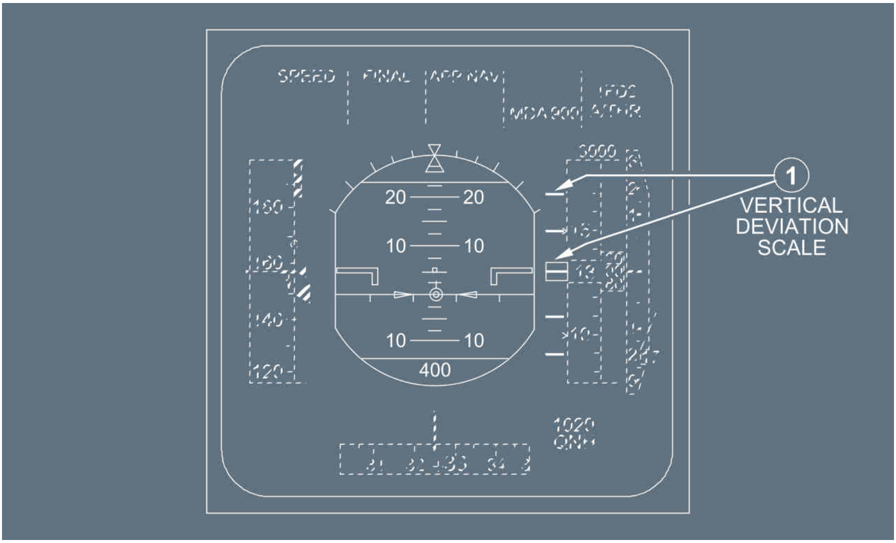
(1) Vertical Deviation Scale and Index
These symbols appear when in the approach phase and, when either FINAL is armed/engaged or a non-LS approach has been entered. They are displayed in the

approach or go-around phase, until the MDA has been reached, or the MAP or the runway has been sequenced. They give the vertical deviation from the trajectory defined by the FMGC. Each index scale graduation represents 100 ft. The range is ± 200 ft.

Note: If the LS pb is pressed, glide deviation has priority over vertical deviation information. As long as VDEV display conditions are met, and the LS pb is selected, an amber VDEV message flashes above the glide scale.

Ident.: DSC-31-40-A-00001245.0022001 / 09 OCT 12
Applicable to: MSN 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

NON PRECISION APPROACH

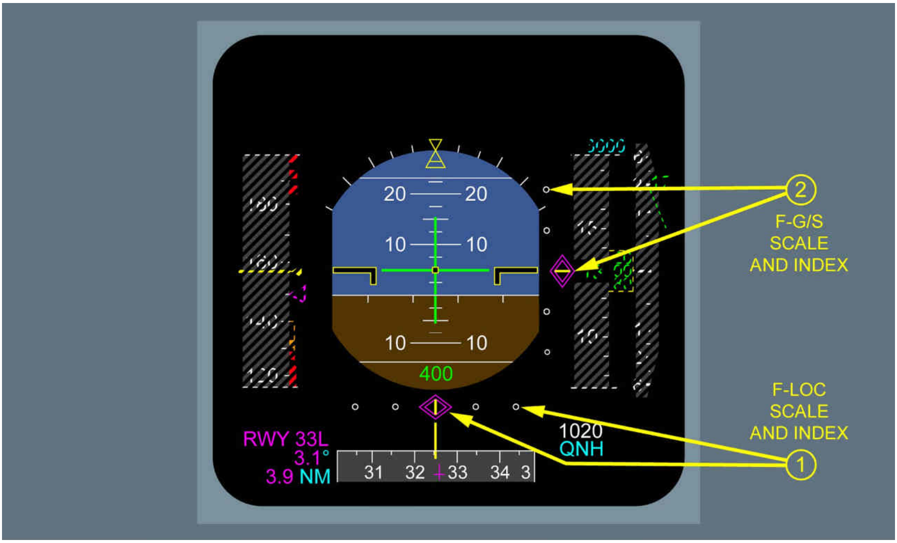


(1) Vertical Deviation Scale and Index
These symbols appear when in the approach phase and, when either FINAL is armed/engaged or a non-LS approach has been entered. They are displayed in the approach or go-around phase, until the MDA has been reached, or the MAP or the runway has been sequenced. They give the vertical deviation from the trajectory defined by the FMGC. Each index scale graduation represents 100 ft. The range is ± 200 ft.

Note: If the LS pb is pressed, glide deviation has priority over vertical deviation information. As long as VDEV display conditions are met, and the LS pb is selected, an amber VDEV message flashes above the glide scale.

15 Ident.: DSC-31-40-A-00022369.0001001 / 04 SEP 18
Applicable to: MSN 11531

NON PRECISION APPROACHES USING FLS FUNCTION

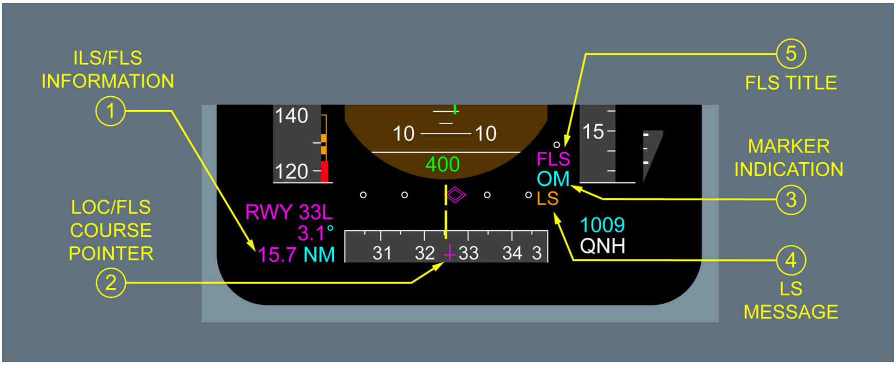


(1) F-LOC or LOC Deviation scale and Index

(2) F-G/S deviation scale and index

Deviation scales appear as soon as the flight crew pushes an LS pb on the EFIS control panel.
Deviation indexes (double diamond) appear, when the deviations are valid, if deviation scales are displayed. When a deviation index is out of the displayed range, only half a symbol appears at the end of the scale.
The LOC scale flashes and continues to flash if the deviation exceeds 1/4 dot for two seconds (above 15 ft RA). The glide scale flashes and continues to flash, if the deviation exceeds one dot for two seconds (above 100 ft RA).
“LOC” and the glide scale half index symbols flash and continue to flash, when the deviation exceeds two dots for two seconds. One dot represents a deviation of ± 0.8 ° on the localizer scale and ± 0.4 ° on the glideslope scale.

When a LOC only approach is selected:
- ″LOC″ and ″F-G/S″ (magenta) are displayed above the deviation scales
- The LOC deviation index is a single diamond.


ILS/FLS
INFORMATION
①
LOC/FLS
COURSE
POINTER
②
140
120
10
10
400
FLS
OM
LS
15
RWY 33L
3.1°
15.7 NM
31
32
33
34
3
1009
QNH
⑤
FLS TITLE
MARKER
INDICATION
③
④
LS
MESSAGE

(1) Selected Landing Systems information (magenta)

The following information appears on the PFD, when the crew has selected a Non Precision approach using FLS and pushed the LS pb

- For VOR, VOR/DME, NDB, NDB/DME on RNAV approach:
  - The FLS anchor point ident:
    - RWYXXX if anchor point is on the runway
    - EPXXX if anchor point is not on the runway
    - The FLS beam slope
    - The distance to anchor point.
- For LOC only or ILS G/S OUT approach:
  - ILS LOC identification
  - LOC frequency
  - DME Distance.

(2) Course Pointer (magenta)

This pointer appears on the PFD, when the crew has selected an NPA approach using FLS function, and pushed the LS pb. It is a dagger-shaped symbol on the heading scale (with double line for FLS course). The LS course pointer is replaced by digits on the right or left of the heading scale (in white box), when the LS course value is outside the displayed portion of the heading scale.

(3) Marker Indications

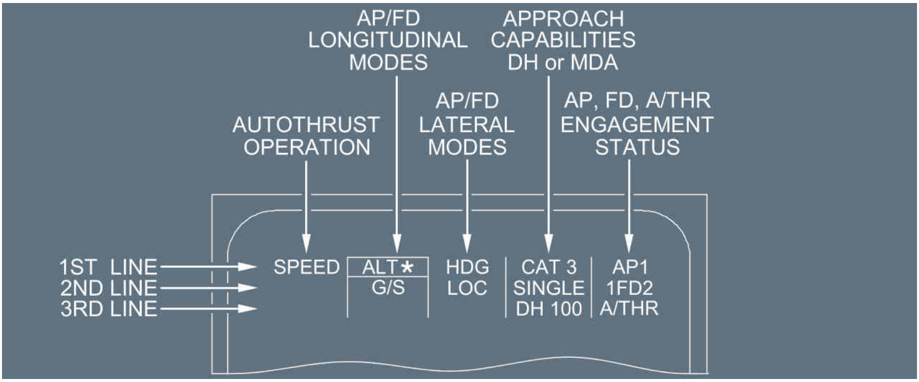
OM appears in blue, when the aircraft flies over the outer marker. MM appears in amber, when it flies over the middle marker. IM appears in white, when it flies over an airways marker beacon or the ILS/GLS ◁ /MLS ◁ inner marker.

(4) LS Message
This flashes amber, if the APPR mode is armed, but the LS pb has not been selected.

(5) Selected approach reminder
The FLS indication is displayed in magenta if a non precision approach using FLS for vertical navigation is selected.

FLIGHT MODE ANNUNCIATOR

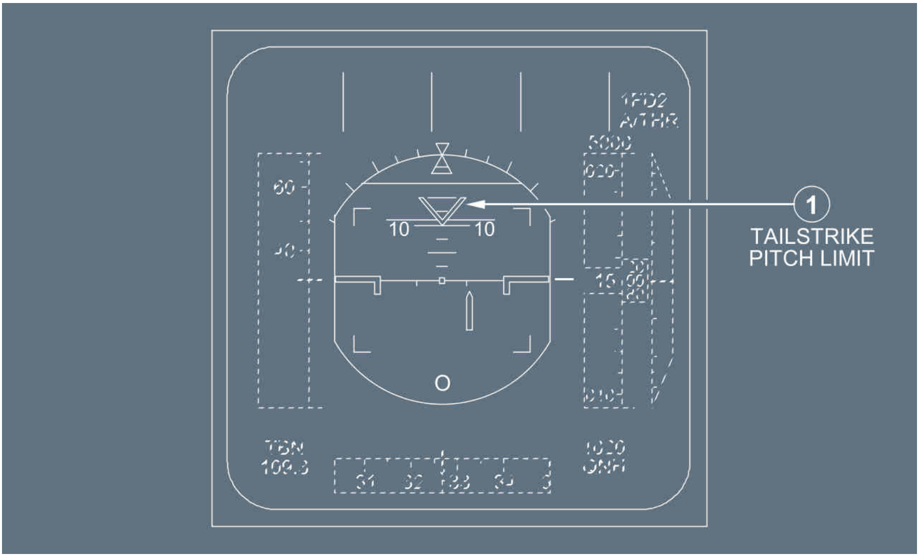
Ident.: DSC-31-40-00001246.0002001 / 18 MAY 22
Applicable to: ALL


AP/FD LONGITUDINAL MODES
APPROACH CAPABILITIES DH or MDA
AUTOTHRUST OPERATION
AP/FD LATERAL MODES
AP, FD, A/THR ENGAGEMENT STATUS
1ST LINE
2ND LINE
3RD LINE
SPEED
ALT★
G/S
HDG
LOC
CAT 3
SINGLE
DH 100
AP1
1FD2
A/THR

For a detailed discussion of legends and messages that may appear during FMGS operations, see FLIGHT GUIDANCE chapter (*Refer to DSC-22_30-80-20 FMA Display*).

TAILSTRIKE PITCH LIMIT INDICATOR ⊲

Ident.: DSC-31-40-00017534.0003001 / 21 MAR 16
Applicable to: ALL

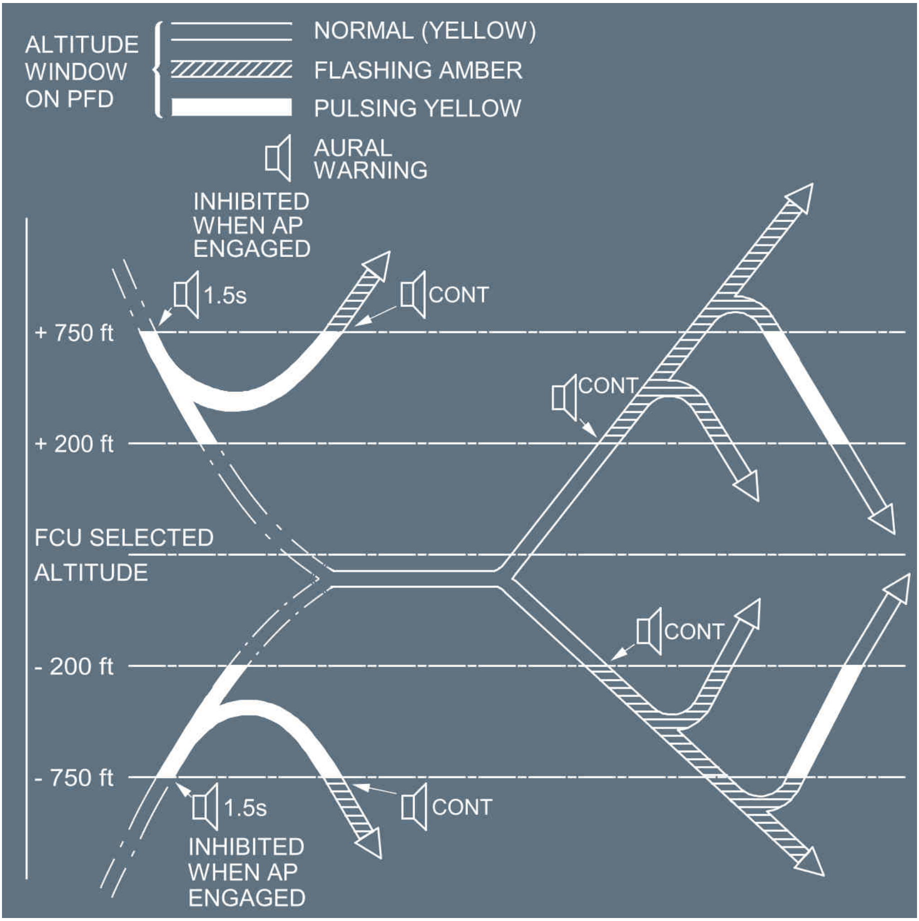


(1) Tailstrike Pitch Limit
The pitch limit indicates the maximum pitch attitude to avoid the tailstrike risk at landing. The indication is a fixed value corresponding to the main landing gear compressed. The indication appears at 400 ft radio height. The indication disappears, when there is no longer a risk of tailstrike.

ALTITUDE ALERT

Ident.: DSC-31-40-00001247.0002001 / 22 MAY 12
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

The FWC generates an altitude warning (C chord sound and PFD’s altitude window pulses in yellow or flashes in amber), when the aircraft approaches a preselected altitude or flight level, or when it deviates from its selected altitude or flight level.
This warning results from a comparison between the altitude (ADIRS) and the preselected altitude displayed on FCU.


ALTITUDE WINDOW ON PFD
NORMAL (YELLOW)
FLASHING AMBER
PULSING YELLOW
AURAL WARNING
INHIBITED WHEN AP ENGAGED
1.5s
CONT
+ 750 ft
+ 200 ft
CONT
FCU SELECTED ALTITUDE
- 200 ft
CONT
- 750 ft
1.5s
CONT
INHIBITED WHEN AP ENGAGED

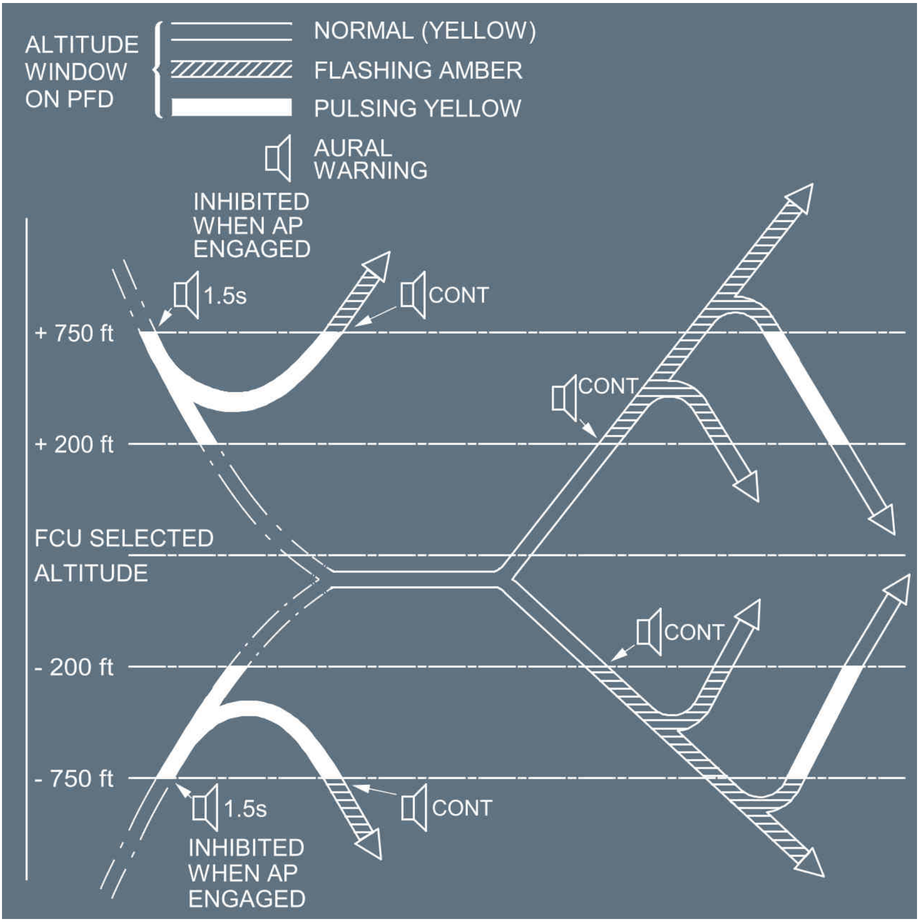
- Selecting a new altitude, or pushing the ECAM's EMER CANC pushbutton, or pressing either MASTER WARN pushbutton, cancels the continuous C chord.
- Selecting a new altitude stops the flashing of the altitude window.
- The altitude alert is inhibited:
  - When the slats are out, with the landing gear is selected down, or
  - In approach after the aircraft captures the glideslope, or
  - When the landing gear is locked down.

ALTITUDE ALERT

Ident.: DSC-31-40-00001247.0003001 / 22 MAY 12

16 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

The FWC generates an altitude warning (C chord sound and PFD's altitude window pulses in yellow or flashes in amber), when the aircraft approaches a preselected altitude or flight level, or when it deviates from its selected altitude or flight level.
This warning results from a comparison between the altitude (ADIRS) and the preselected altitude displayed on FCU.

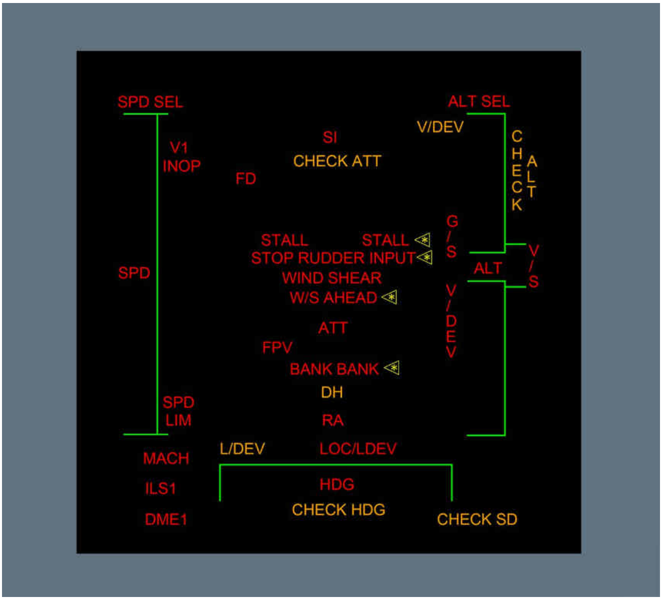

ALTITUDE WINDOW ON PFD
NORMAL (YELLOW)
FLASHING AMBER
PULSING YELLOW
AURAL WARNING
INHIBITED WHEN AP ENGAGED
1.5s
CONT
+ 750 ft
+ 200 ft
CONT
FCU SELECTED ALTITUDE
- 200 ft
CONT
- 750 ft
1.5s
CONT
INHIBITED WHEN AP ENGAGED

- Selecting a new altitude, or pushing the ECAM's EMER CANC pb, or pressing either MASTER WARN pb, cancels the continuous C chord
- Selecting a new altitude stops the flashing of the altitude window
- The altitude alert is inhibited:
  - When the slats are out, with the landing gear is selected down, or
  - In approach after the aircraft captures the glideslope, or
  - When the landing gear is locked down, or
  - In the case of a TCAS RA.

FLAGS AND MESSAGES DISPLAYED ON PFD

Ident.: DSC-31-40-D-00020521.0001001 / 04 NOV 21
Applicable to: ALL

FLAGS AND MESSAGES DISPLAYED ON PFD - SCHEMATIC


SPD SEL
ALT SEL
V/DEV
SI
V1
INOP
CHECK ATT
FD
CHECK ALT
G/S
STALL
STALL
STOP RUDDER INPUT
V/S
SPD
ALT
WIND SHEAR
W/S AHEAD
V/DEV
ATT
FPV
BANK BANK
DH
SPD
LIM
RA
MACH
L/DEV
LOC/LDEV
ILS1
HDG
CHECK HDG
DME1
CHECK SD

Note: 1. *All flags flash for 9 s, then remain steady, except V1 INOP which is steady.*
2. *For information on the TCAS flag, Refer to DSC-34-SURV-60-20 PFD Indications.*

Ident.: DSC-31-40-D-00020531.0001001 / 04 NOV 21
Applicable to: ALL

ALT

Appears if the altitude information fails.

Ident.: DSC-31-40-D-00020533.0001001 / 04 NOV 21
Applicable to: ALL

ALT SEL

Appears if the selected altitude information fails.

Ident.: DSC-31-40-D-00020522.0001001 / 04 NOV 21
Applicable to: ALL

ATT

Appears when the PFD loses all attitude data, its entire sphere is cleared to display the ATT flag.

Ident.: DSC-31-40-D-00024338.0004001 / 04 NOV 21
17 **Applicable to: MSN 05947-05987, 06634, 06871, 07081-08495, 08596, 10949-11597**

BANK BANK WARNING

Appears when the bank angle exceeds 45 ° in alternate or direct law.

Ident.: DSC-31-40-D-00020523.0001001 / 04 NOV 21
Applicable to: ALL

CHECK ATT, CHECK ALT, CHECK HDG

Refer to DSC-31-05-60 Side1/Side2 Discrepancy Messages.

Ident.: DSC-31-40-D-00020547.0002001 / 04 NOV 21
Applicable to: MSN 01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

CHECK SD, CHECK CAPT (F/O) PFD, CHECK CAPT (F/O) ND,CHECK EWD,CHECK DU NOT MONITORED

Refer to DSC-31-05-60 Feedback Messages.

Ident.: DSC-31-40-D-00020538.0001001 / 04 NOV 21
Applicable to: ALL

DH

Appears when the aircraft reaches the selected DH.

Ident.: DSC-31-40-D-00020543.0001001 / 04 NOV 21
Applicable to: ALL

DME 1(2)

Appears when the DME distance is not valid, a DME 1 (on PFD1) or DME 2 (on PFD2) flag replaces the DME distance indication.

Ident.: DSC-31-40-D-00020526.0001001 / 04 NOV 21
Applicable to: ALL

FD

Appears if both FMGCs fail, or if both FDs are disengaged and the FD pb is ON and the attitude is valid.

Ident.: DSC-31-40-D-00020525.0001001 / 04 NOV 21
Applicable to: ALL

FPV

Appears when the drift angle or flight path angle is not valid in the TRK FPA mode.

Ident.: DSC-31-40-D-00020539.0001001 / 04 NOV 21
Applicable to: ALL

HDG

Appears if the heading information fails.

Ident.: DSC-31-40-D-00020544.0001001 / 12 MAY 22
Applicable to: ALL

ILS 1(2) OR FLS ◁ 1(2) OR GLS ◁ 1(2) OR MLS ◁ 1(2) OR SLS ◁ 1(2)

Appears if an ILS / FLS ◁ / GLS ◁ / MLS ◁ / SLS ◁ frequency/channel fails, or if either the LOC /F-LOC ◁ or G/S /F-G/S ◁ signals fail. An ILS / FLS ◁ / GLS ◁ / MLS ◁ / SLS ◁ 1 (on PFD1) or ILS / FLS ◁ / GLS ◁ / MLS ◁ / SLS ◁ 2 (on PFD2) flag replaces the ILS / FLS ◁ / GLS ◁ / MLS ◁ / SLS ◁ frequency/channel indication.

Ident.: DSC-31-40-D-00020550.0001001 / 04 NOV 21
Applicable to: ALL

L/DEV

Appears at the top left of the LOC scale. This message flashes when the FINAL mode is armed/engaged, and the ILS/LS pb is selected.

Ident.: DSC-31-40-D-00020549.0001001 / 04 NOV 21
Applicable to: ALL

L/DEV

Appears when the crosstrack error is not valid.

Ident.: DSC-31-40-D-00020535.0001001 / 04 NOV 21
Applicable to: ALL

LOC OR G/S OR F-LOC ◁ OR F-G/S ◁

If the localizer or glideslope receiver fails, a LOC or G/S flag appears on the deviation scale.
If the pseudo localizer or pseudo glideslope deviation is invalid, an F-G/S ◁ or F-LOC ◁ flag appears on the deviation scale.

If there is an inconsistency in the approach mode selection within one MMR, LOC and F-LOC ◁ flags and G/S and F-G/S ◁ flags appear.

Ident.: DSC-31-40-D-00020541.0001001 / 04 NOV 21
Applicable to: ALL

MACH

Appears if the MACH data fails.

Ident.: DSC-31-40-D-00020537.0001001 / 04 NOV 21
Applicable to: ALL

RA

Appears if both radio altimeters fails.

Ident.: DSC-31-40-D-00020524.0001001 / 04 NOV 21
Applicable to: ALL

SI

Appears if the sideslip information is lost or any reverse is deployed in flight.

Ident.: DSC-31-40-D-00020527.0001001 / 04 NOV 21
Applicable to: ALL

SPD

Appears if the speed information fails.

Ident.: DSC-31-40-D-00020529.0001001 / 04 NOV 21
Applicable to: ALL

SPD LIM

Appears when both FACs are inoperative, or in case of dual flap/slat channel failure.
In this case, the following PFD information are lost: VLS, S, F, Green Dot, Vtrend, VMAX, VFE next, VSW.

Ident.: DSC-31-40-D-00020528.0001001 / 04 NOV 21
Applicable to: ALL

SPD SEL

Appears if the selected speed information fails.

Ident.: DSC-31-40-D-00020548.0002001 / 04 NOV 21
18 **Applicable to: MSN 02321, 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

STALL STALL WARNING

Appears when PFD displays this message when the AOA is greater than a predetermined angle.
WINDSHEAR message inhibits this message in normal law.

Ident.: DSC-31-40-D-00024316.0004001 / 04 NOV 21
19 **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

STOP RUDDER INPUT

Appears when excessive rudder pedals inputs are detected during cruise.

Ident.: DSC-31-40-D-00020542.0001001 / 04 NOV 21
Applicable to: ALL

V/DEV

Appears at the top of the glide scale.
This message flashes in the following conditions:

- In approach phase, and
- The ILS/LS pb is selected, and
- When either the FINAL mode is armed/engaged, or a non-LS approach has been selected.

Ident.: DSC-31-40-D-00020536.0001001 / 04 NOV 21
Applicable to: ALL

V/DEV

Appears if the vertical deviation information fails, and the ILS/LS pb is not pressed.

Ident.: DSC-31-40-D-00020534.0001001 / 04 NOV 21
Applicable to: ALL

V/S

Appears if the vertical speed information fails.

Ident.: DSC-31-40-D-00020530.0001001 / 04 NOV 21
Applicable to: ALL

V1 INOP

Appears if the V1 signal is not valid.

Ident.: DSC-31-40-D-00020545.0001001 / 04 NOV 21
Applicable to: ALL

WINDSHEAR WARNING

Appears when windshear is detected (reactive windshear warning) by the FAC. *Refer to DSC-22_40-40 Windshear Detection Function*.

Ident.: DSC-31-40-D-00020546.0001001 / 04 NOV 21
Applicable to: ALL

W/S AHEAD OR W/S AHEAD (PWS ⧏) WARNING

Appears when the predictive windshear system has detected windshear ahead of the aircraft. The message is in amber or red, depending on the alert level.

Intentionally left blank

GENERAL

Ident.: DSC-31-45-00001249.0002001 / 03 NOV 22

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

There are five different displays (five modes to display navigation information):
- ROSE LS
- ROSE VOR
- ROSE NAV
- ARC
- PLAN.

The ND can provide a weather radar image in all modes, except PLAN.

Note: *In order to limit power consumption and prevent a DU overheat, the ND will not display the weather radar image and the terrain display in the following cases:*
- *The avionics ventilation is not sufficient (e.g. due to a blower and extract fan failure)*
- *The ND unit temperature exceeds a defined threshold.*

Any additional increase in temperature will lead to a complete cut off of the power supply to this DU.

GENERAL

Ident.: DSC-31-45-00001249.0003001 / 21 MAR 16

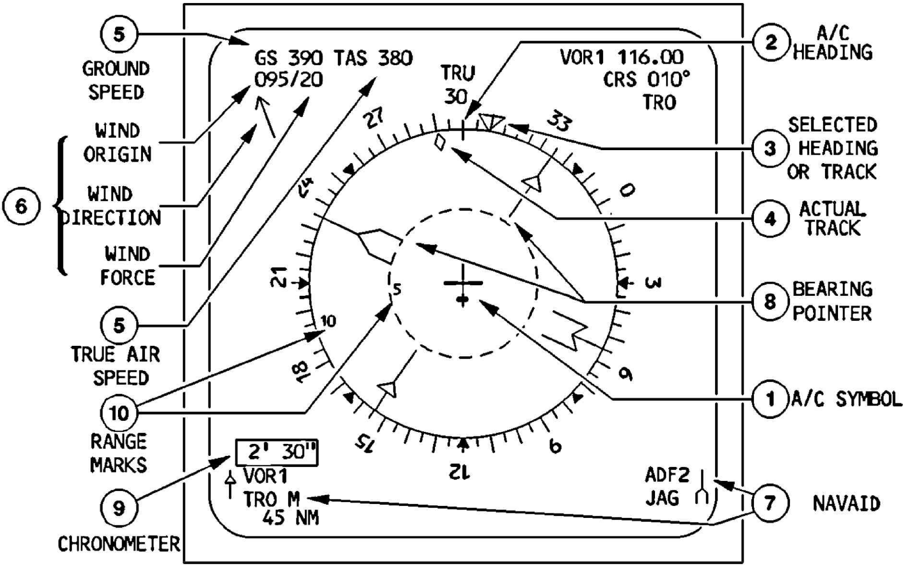
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

There are five different displays (five modes to display navigation information) :
- ROSE LS
- ROSE VOR
- ROSE NAV
- ARC
- PLAN

The Navigation Display (ND) can provide a weather radar image in all modes, except PLAN.

ROSE MODES

Ident.: DSC-31-45-00001250.0001001 / 19 MAY 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


5
GROUND SPEED
WIND ORIGIN
6
WIND DIRECTION
WIND FORCE
5
TRUE AIR SPEED
10
RANGE MARKS
9
CHRONOMETER
GS 390 TAS 380
095/20
TRU
30
VOR1 116.00
CRS 010°
TRO
27
33
24
0
21
3
5
10
18
6
15
12
9
2' 30"
VOR1
TRO M
45 NM
ADF2
JAG
2
A/C HEADING
3
SELECTED HEADING OR TRACK
4
ACTUAL TRACK
8
BEARING POINTER
1
A/C SYMBOL
7
NAVAID

(1) Aircraft symbol (yellow)
Fixed and centered in the display, this symbol points to the yellow lubber line.

(2) Aircraft heading
The fixed yellow lubber line points to the aircraft magnetic heading on the moving white compass rose. Small white triangles are fixed at 45 ° intervals on the circumference of the compass rose.
“TRU” appears at the top of the compass rose, when it is displaying true heading instead of magnetic heading (latitude above 73 ° North or 60 ° South).

(3) Selected heading or track (blue)
This pointer shows the heading or track indicated on the FCU's HDG TRK counter.

(4) Actual aircraft track (green)
This symbol is a small green diamond.

(5) Ground speed and true air speed (green)
ADIRS furnishes these speeds.

(6) Wind direction and speed

ADIRS provides the wind direction and speed. The digital direction reflects the true north reference, and the analog direction (indicated by the green arrow) reflects the magnetic north reference. The green arrow only appears, if the wind speed is above two knots.
If the display does not receive either wind speed or direction, dashes replace the numbers on the display.

(7) NAVAIDs

When the ADF-OFF-VOR selector switch on either the pilot's or copilot's EFIS control panel is set to ADF or VOR, the onside ND displays the following characteristics of the corresponding NAVAID in white for VOR or in green for ADF (left side for receiver 1 and right side for receiver 2):

- Type of NAVAID (ADF or VOR)
- Shape and color of the associated bearing pointer (if the bearing pointer is in view).
- NAVAID identification (or frequency by default)
- DME distance if a DME is collocated with the selected VOR. ADF and DME distance are never displayed at the same time.
- Mode of tuning
  - M for a NAVAID tuned manually by the pilot through the MCDU (underlined and dimmed),
  - R for a NAVAID tuned from an RMP (Radio Management Panel) (underlined and dimmed),
  - Nothing for a NAVAID tuned automatically by the FMGC.

If reception fails, the ND stops displaying the associated data (except for the identification or frequency).

(8) Bearing pointer (green for ADF, white for VOR)

This pointer appears when bearing data is available.
If the aircraft is not receiving the beacon or if a receiver fails, the associated bearing pointer disappears.

(9) Chronometer Indication (white)

These numbers appear when the onside chronometer is started.
They display the elapsed time.
The indication is in minutes and seconds from 0 to 59 min 59 s, and in hours and minutes from 1 h to 99 h 59 min (Seconds are not displayed beyond 59 min 59 s.).

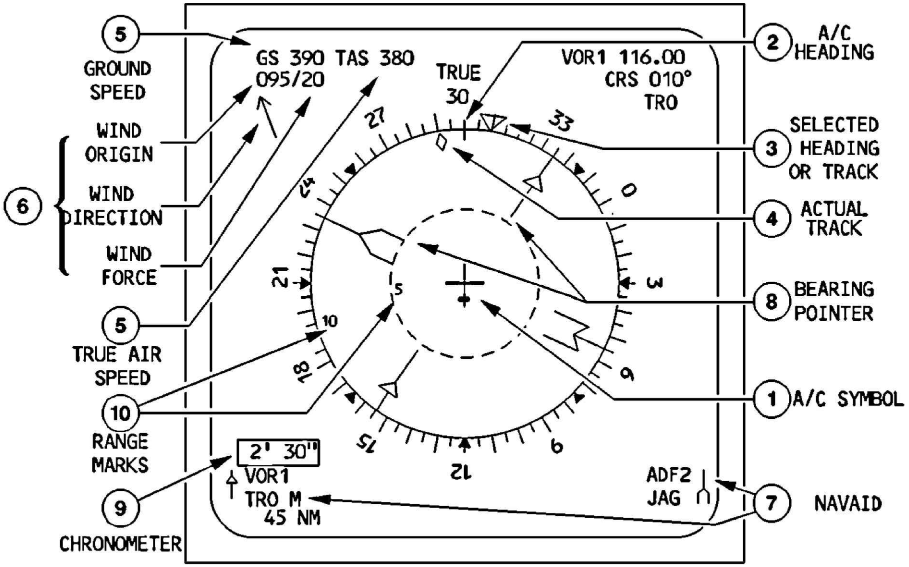
(10) Range marks

The range scale value selected on the EFIS control panel (10 to 320 NM) governs the scale of the ND.

ROSE MODES

Ident.: DSC-31-45-00001250.0002001 / 19 MAY 14

2 **Applicable to: MSN 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


5
GROUND SPEED
WIND ORIGIN
6
WIND DIRECTION
WIND FORCE
5
TRUE AIR SPEED
10
RANGE MARKS
9
CHRONOMETER
GS 390 TAS 380
095/20
TRUE
30
VOR1 116.00
CRS 010°
TRO
27
33
24
0
21
5
3
10
18
6
15
9
12
2' 30"
VOR1
TRO M
45 NM
ADF2
JAG
2 A/C HEADING
3 SELECTED HEADING OR TRACK
4 ACTUAL TRACK
8 BEARING POINTER
1 A/C SYMBOL
7 NAVAID

(1) Aircraft symbol (yellow)
Fixed and centered in the display, this symbol points to the yellow lubber line.

(2) Aircraft heading
The fixed yellow lubber line points to the aircraft magnetic heading on the moving white compass rose. Small white triangles are fixed at 45 ° intervals on the circumference of the compass rose.
“TRUE” appears at the top of the compass rose, when it is displaying true heading instead of magnetic heading (latitude above 73 ° North or 60 ° South).

(3) Selected heading or track (blue)
This pointer shows the heading or track indicated on the FCU's HDG TRK counter.

(4) Actual aircraft track (green)
This symbol is a small green diamond.

(5) Ground speed and true air speed (green)
ADIRS furnishes these speeds.

(6) Wind direction and speed
ADIRS provides the wind direction and speed. The digital direction and the analog direction (indicated by the green arrow) both reflect the true north reference. The green arrow only appears, if the wind speed is above two knots.
If the display does not receive either wind speed or direction, dashes replace the numbers on the display.

(7) NAVAIDs

When the ADF-OFF-VOR selector switch on either the pilot's or copilot's EFIS control panel is set to ADF or VOR, the onside ND displays the following characteristics of the corresponding NAVAID in white for VOR or in green for ADF (left side for receiver 1 and right side for receiver 2):
- Type of NAVAID (ADF or VOR)
- Shape and color of the associated bearing pointer (if the bearing pointer is in view).
- NAVAID identification (or frequency by default)
- DME distance if a DME is collocated with the selected VOR. ADF and DME distance are never displayed at the same time.
- Mode of tuning
  - M for a NAVAID tuned manually by the pilot through the MCDU (underlined and dimmed),
  - R for a NAVAID tuned from an RMP (Radio Management Panel) (underlined and dimmed),
  - Nothing for a NAVAID tuned automatically by the FMGC.

If reception fails, the ND stops displaying the associated data (except for the identification or frequency).

(8) Bearing pointer (green for ADF, white for VOR)
This pointer appears when bearing data is available.
If the aircraft is not receiving the beacon or if a receiver fails, the associated bearing pointer disappears.

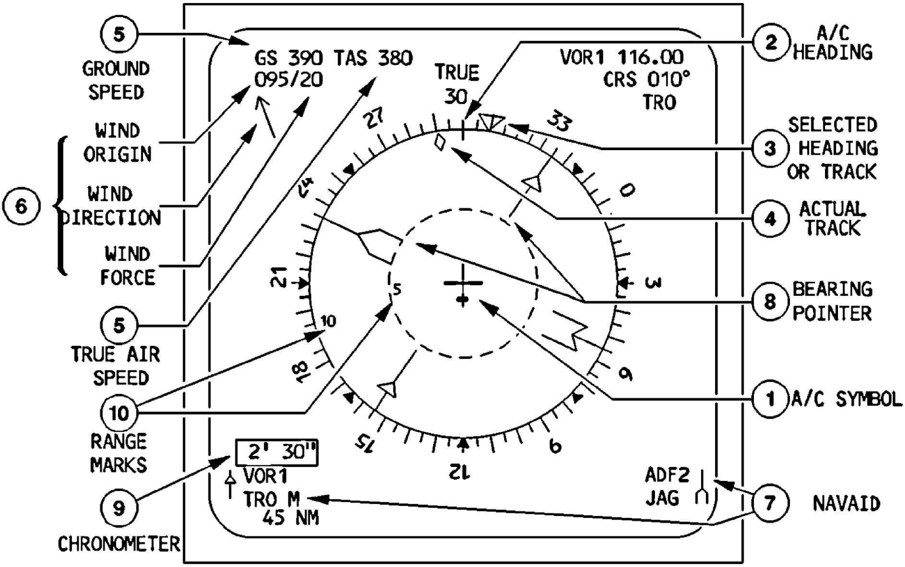
(9) Chronometer Indication (white)
These numbers appear when the onside chronometer is started.
They display the elapsed time.
The indication is in minutes and seconds from 0 to 59 min 59 s, and in hours and minutes from 1 h to 99 h 59 min (Seconds are not displayed beyond 59 min 59 s).

(10) Range marks
The range scale value selected on the EFIS control panel (10 to 320 NM) governs the scale of the ND.

ROSE MODES

Ident.: DSC-31-45-00001250.0004001 / 19 MAY 14

Applicable to: MSN 02887


5
GROUND SPEED
WIND ORIGIN
6
WIND DIRECTION
WIND FORCE
5
TRUE AIR SPEED
10
RANGE MARKS
9
CHRONOMETER
GS 390 TAS 380
095/20
TRUE
30
VOR1 116.00
CRS 010°
TRO
27
33
24
0
21
3
10
5
18
6
15
9
12
2' 30"
VOR1
TRO M
45 NM
ADF2
JAG
2
A/C HEADING
3
SELECTED HEADING OR TRACK
4
ACTUAL TRACK
8
BEARING POINTER
1
A/C SYMBOL
7
NAVAID

(1) Aircraft symbol (yellow)
Fixed and centered in the display, this symbol points to the yellow lubber line.

(2) Aircraft heading
The fixed yellow lubber line points to the aircraft magnetic heading on the moving white compass rose. Small white triangles are fixed at 45 ° intervals on the circumference of the compass rose.
“TRU” appears at the top of the compass rose, when it is displaying true heading instead of magnetic heading (latitude above 73 ° North or 60 ° South).

(3) Selected heading or track (blue)
This pointer shows the heading or track indicated on the FCU's HDG TRK counter.

(4) Actual aircraft track (green)
This symbol is a small green diamond.

(5) Ground speed and true air speed (green)
ADIRS furnishes these speeds.

(6) Wind direction and speed

ADIRS provides the wind direction and speed. The digital direction reflects the true north reference, and the analog direction (indicated by the green arrow) reflects the north reference that is in use. The green arrow only appears, if the wind speed is above two knots.
If the display does not receive either wind speed or direction, dashes replace the numbers on the display.

(7) NAVAIDs

When the ADF-OFF-VOR selector switch on either the pilot's or copilot's EFIS control panel is set to ADF or VOR, the onside ND displays the following characteristics of the corresponding NAVAID in white for VOR or in green for ADF (left side for receiver 1 and right side for receiver 2):

- Type of NAVAID (ADF or VOR)
- Shape and color of the associated bearing pointer (if the bearing pointer is in view).
- NAVAID identification (or frequency by default)
- DME distance if a DME is collocated with the selected VOR. ADF and DME distance are never displayed at the same time.
- Mode of tuning
  - M for a NAVAID tuned manually by the pilot through the MCDU (underlined and dimmed),
  - R for a NAVAID tuned from an RMP (Radio Management Panel) (underlined and dimmed),
  - Nothing for a NAVAID tuned automatically by the FMGC.

If reception fails, the ND stops displaying the associated data (except for the identification or frequency).

(8) Bearing pointer (green for ADF, white for VOR)

This pointer appears when bearing data is available.
If the aircraft is not receiving the beacon or if a receiver fails, the associated bearing pointer disappears.

(9) Chronometer Indication (white)

These numbers appear when the onside chronometer is started.
They display the elapsed time.
The indication is in minutes and seconds from 0 to 59 min 59 s, and in hours and minutes from 1 h to 99 h 59 min (Seconds are not displayed beyond 59 min 59 s.).

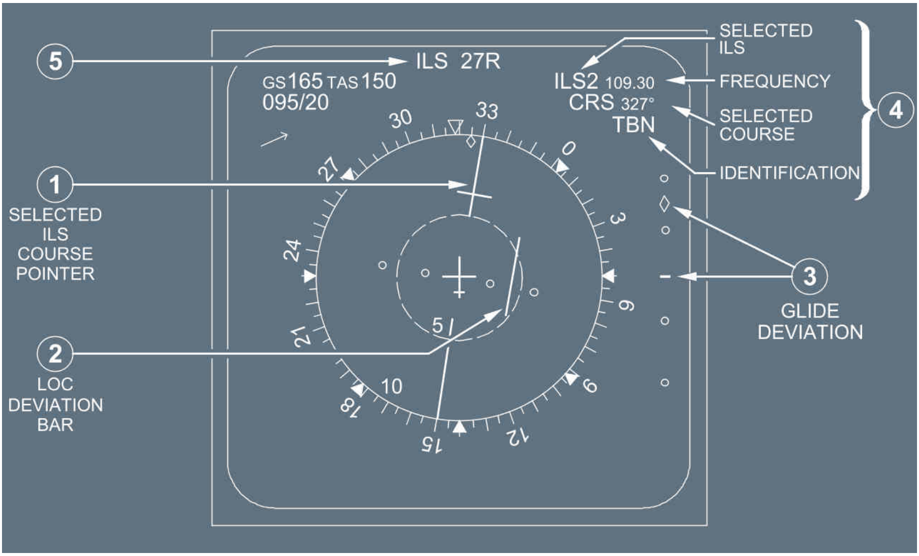
(10) Range marks

The range scale value selected on the EFIS control panel (10 to 320 NM) governs the scale of the ND.

ROSE LS MODE

Ident.: DSC-31-45-00009584.0065001 / 24 NOV 15

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**


5
ILS 27R
GS165 TAS150
095/20
ILS2 109.30
CRS 327°
TBN
SELECTED ILS
FREQUENCY
SELECTED COURSE
IDENTIFICATION
4
1
SELECTED ILS COURSE POINTER
2
LOC DEVIATION BAR
3
GLIDE DEVIATION
30
33
0
3
6
9
12
15
18
21
24
27
5
10

(1) ILS Course Pointer (Magenta)
This symbol points at the selected ILS course.
The ILS is either selected by the FMGC (autotuned or manually) or manually selected by the flight crew via the RMP backup mode. If no course has been entered, the default value is 360 °.

(2) Localizer Deviation Bar (Magenta)
This bar moves laterally with respect to the course pointer. Its scale has two white dots on each side of the zero deviation. Each dot corresponds to a deviation of approximately ±0.8 °.
If the lateral deviation exceeds 1/4 dot (0.2 °) above 15 ft RA, both the bar and the scale flash.

(3) Glide Deviation (Magenta)
This diamond moves on a vertical scale that has two white dots on each side of the yellow reference line. Each dot corresponds to a deviation of approximately ±0.4 °.
If the deviation exceeds one dot above 100 ft RA, both the scale and the diamond flash.

(4) Selected ILS Information
This area displays the ILS frequency (magenta), selected course (magenta), and identification (magenta).

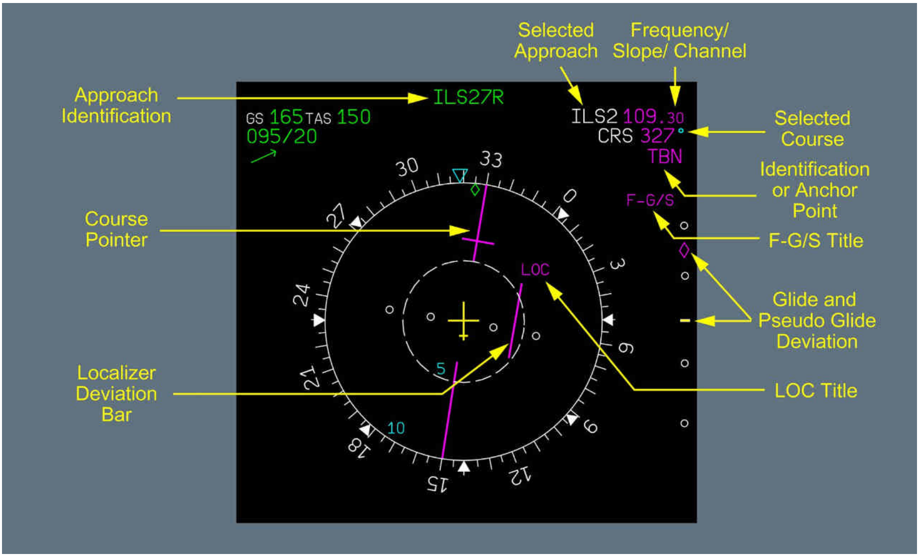
(5) ILS Message (Green)

This message indicates the full runway name of the selected approach. This message appears:
- The flight crew selects an ILS approach on the MCDU, and
- The FMS flight phase is DES, APP or GA, or the FMS phase is CRZ and the along track distance to destination is less than 250 NM.

Note: *ILS 1 information appears on PFD 1 and ND 2.*
ILS 2 information appears on PFD 2 and ND 1.

ROSE LS MODE

4 Ident.: DSC-31-45-00009584.0104001 / 12 MAY 22
Applicable to: MSN 11531


Selected Approach
Frequency/ Slope/ Channel
Approach Identification
ILS27R
GS 165 TAS 150
095/20
ILS2 109.30
CRS 327°
TBN
Selected Course
Identification or Anchor Point
F-G/S
F-G/S Title
Course Pointer
LOC
Glide and Pseudo Glide Deviation
LOC Title
Localizer Deviation Bar
30
33
0
27
3
24
6
21
9
18
12
15
5
10

COURSE POINTER

This symbol points at the selected LS course.
The ILS/GLS/SLS ◁ is either selected by the FMGC (autotuned or manually) or manually selected by the flight crew via the RMP backup mode (ILS/GLS only). If no course has been entered, the default value is 360 °.
During an NPA flown with the FLS function for lateral guidance, the course pointer is a magenta dagger with double lines.

LOCALIZER DEVIATION BAR

This bar moves laterally with respect to the course pointer. Its scale has two white dots on each side of the zero deviation. Each dot corresponds to a deviation of approximately ±0.8 °.
If the lateral deviation exceeds 1/4 dot (0.2 °) above 15 ft RA, both the bar and the scale flash.
During an NPA flown with the FLS function for lateral guidance, a double deviation bar appears.

GLIDE AND PSEUDO GLIDE DEVIATION

This diamond (double diamonds for FLS) moves on a vertical scale that has two white dots on each side of the yellow reference line. Each dot corresponds to a deviation of approximately ±0.4 °.
If the deviation exceeds one dot above 100 ft RA, both the scale and the diamond flash.

SELECTED LS INFORMATION

This area displays:

1st line	:	The selected LS approach (ILS, GLS, SLS ◁ , FLS or LOC/FLS), followed by the FLS slope (2 digits, magenta) or the ILS frequency (3 digits) or the SLS ◁ / GLS channel
2nd line	:	The selected course (magenta)
3rd line	:	The anchor point identification (for FLS) or the ILS / SLS ◁ / GLS identification (for ILS / GLS / SLS ◁ or LOC only approach).

APPROACH IDENTIFICATION

This message indicates the full runway name of the selected approach. This message appears when:

- The flight crew selects an LS approach on the MCDU, and
- The FMS flight phase is DES, APP or GA, or the FMS phase is CRZ and the along track distance to destination is less than 250 NM.

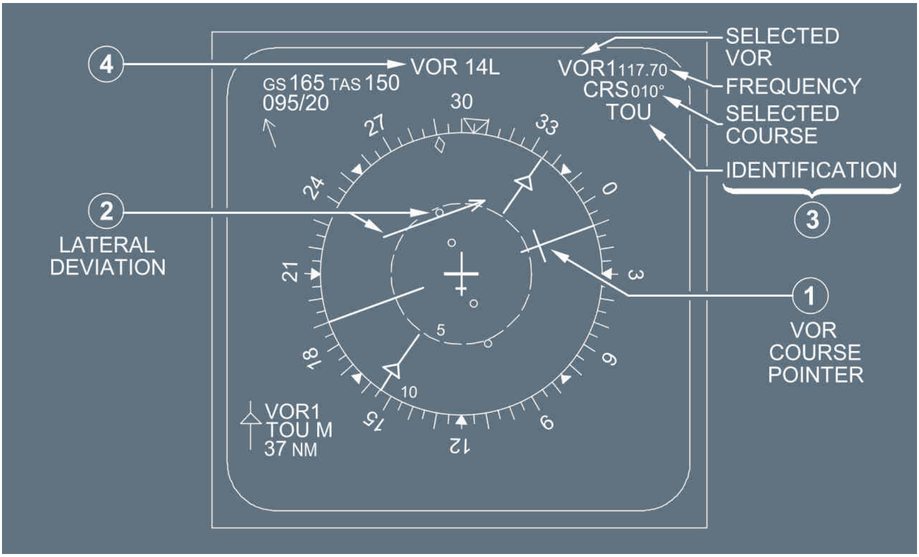
Note: *MMR 1 information appears on PFD 1 and ND 2.*
MMR 2 information appears on PFD 2 and ND 1.

LOC AND F-G/S TITLE

When the flight crew selects a LOC only approach, both LOC and F-G/S appear above the deviation scales.

ROSE VOR MODE

Ident.: DSC-31-45-00001252.0029001 / 05 NOV 15
Applicable to: ALL


4
VOR 14L
GS 165 TAS 150
095/20
VOR1 117.70
CRS 010°
TOU
SELECTED
VOR
FREQUENCY
SELECTED
COURSE
IDENTIFICATION
3
30
27
33
24
0
2
LATERAL
DEVIATION
21
3
1
VOR
COURSE
POINTER
18
5
6
10
VOR1
TOU M
37 NM
15
12
9

(1) VOR Course Pointer (Cyan)
This symbol points at the selected VOR course.
The VOR course is either automatically selected by the FMGC or manually selected by the flight crew via the MCDU pages or the RMP backup mode.

(2) Lateral Deviation Bar (Cyan)
This bar indicates the VOR deviation on a lateral scale.
Each dot corresponds to 5 ° of lateral deviation. When the lateral deviation exceeds 10 °, the bar remains displayed on the outer dot.
The arrow on the bar provides the TO/FROM indication.

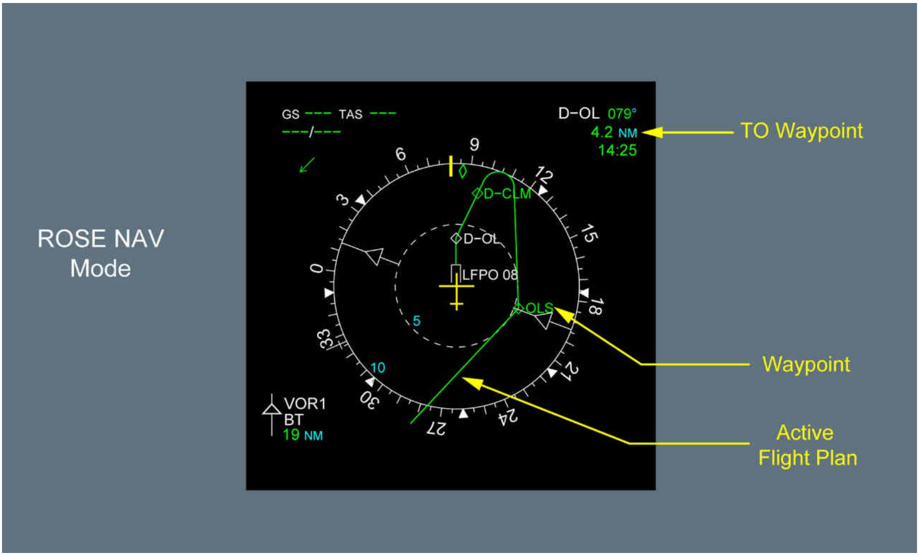
(3) VOR Information (White and cyan)
This area displays the frequency and identification (if decoded by the receiver) of the selected VOR in white, the selected course in cyan, and the tuning mode in white.

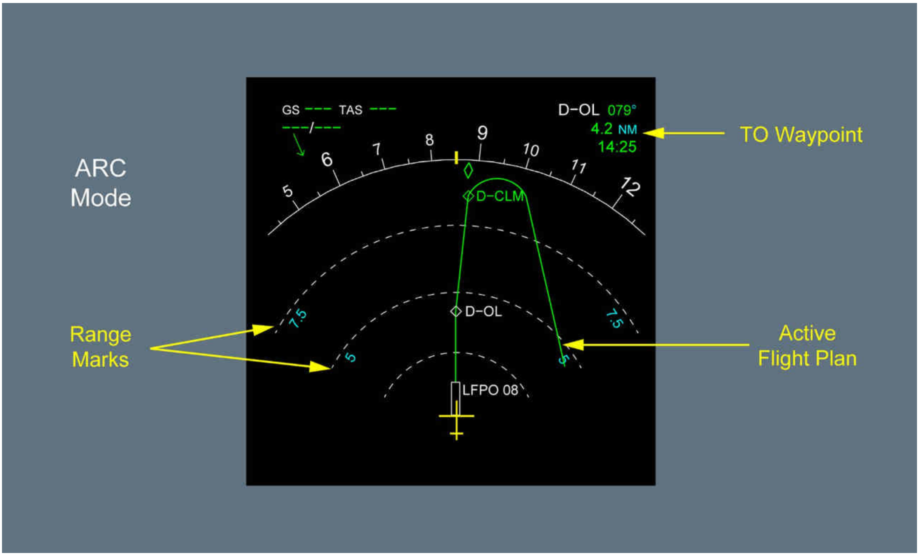
(4) VOR or GPS Message (Green)
VOR 14L appears when the flight crew selects a VOR approach on the MCDU.
GPS 14L appears when the flight crew selects a GPS approach.

ROSE NAV MODE/ARC MODE

Ident.: DSC-31-45-A-00023604.0001001 / 26 NOV 19
Applicable to: ALL

ROSE NAV and ARC modes provide the same information to the flight crew, but ARC mode limits it to the forward 90 ° sector.


ROSE NAV
Mode
GS --- TAS ---
---/---
D-OL 079°
4.2 NM
14:25
TO Waypoint
9
6
3
0
33
30
27
24
21
18
15
12
D-CLM
D-OL
LFPO 08
OLS
5
10
Waypoint
Active
Flight Plan
VOR1
BT
19 NM


ARC
Mode
Range
Marks
GS --- TAS ---
---/---
5
6
7
8
9
10
11
12
D-OL 079°
4.2 NM
14:25
TO Waypoint
D-CLM
7.5
7.5
5
5
D-OL
LFPO 08
Active
Flight Plan

Ident.: DSC-31-45-A-00023605.0001001 / 26 NOV 19
Applicable to: ALL

RANGE MARKS AND VALUES

The values displayed on the ND are:

In ROSE NAV mode	1/4 of the selected range for the inner circle.
	1/2 of the selected range for the heading scale circle.
In ARC mode	1/4 of the selected range for the first inner arc.
	1/2 of the selected range for the second inner arc.
	3/4 of the selected range for the third inner arc.

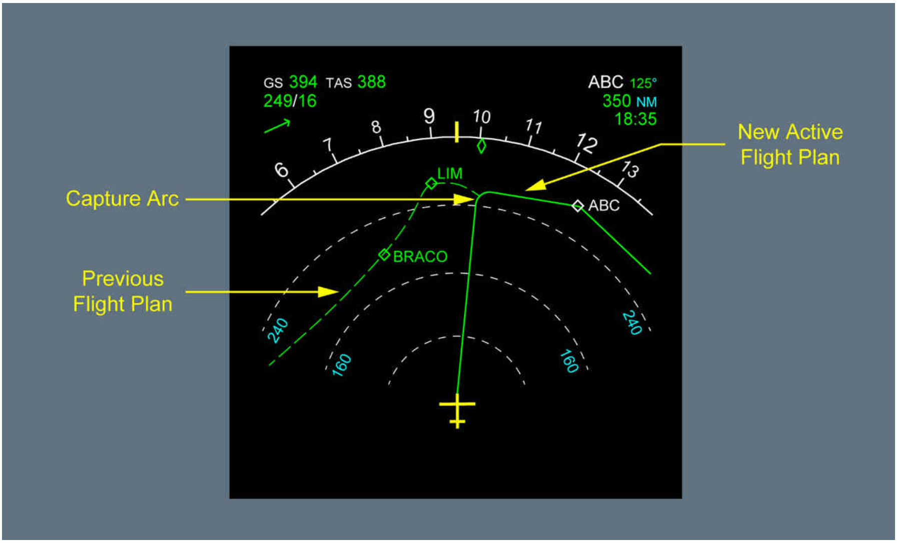
Ident.: DSC-31-45-A-00023606.0001001 / 26 NOV 19
Applicable to: ALL

FLIGHT PLAN

The flight crew can use the MCDU to select all of the following types of flight plan:

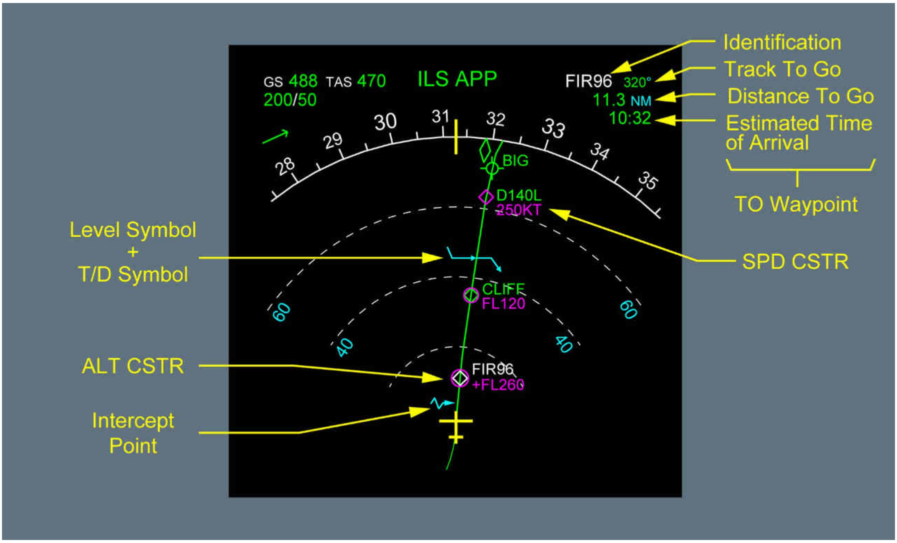
- The active flight plan (the flight plan the aircraft follows when the NAV mode is engaged) is indicated by a continuous green line. The ND indicates only the part of the flight plan that is ahead of the aircraft. In addition, the ND indicates the waypoints that are still to be overflown and the waypoint that the aircraft left from.
  The ND does not indicate a SID or a STAR, except for the last waypoint of the SID and the first waypoint of the STAR, when the selected range is 160 or 320 NM.
  If the primary flight plan is not active, it is indicated by a dotted green line.
- Missed approach procedure
  The missed approach procedure is indicated by a continuous blue line.
- Alternate
  The flight plan to the alternate is indicated by a dashed blue line.

  The missed approach and the alternate flight plan appear when:
  - In ARC or ROSE NAV mode, a missed approach waypoint or an alternate flight plan waypoint is displayed on the onside MCDU
  - In PLAN mode, a missed approach or alternate waypoint is displayed in the 2L field of the onside MCDU.
- The secondary flight plan
  The ND continues to display the active flight plan. The secondary flight plan is indicated by a continuous white line.
- Temporary flight plan
  The revised portion of the flight plan is indicated by a dotted yellow line.
- Flight plan capture
  When the aircraft is off the primary flight plan and flies toward it in HDG mode with the NAV mode armed, the ND indicates the new active flight plan as a continuous green line, if the FMGC computed the intercept path.
  The part of the flight plan before the interception point is indicated as a dotted green line.


GS 394 TAS 388
249/16
ABC 125°
350 NM
18:35
6
7
8
9
10
11
12
13
LIM
ABC
BRACO
240
160
160
240
New Active Flight Plan
Capture Arc
Previous Flight Plan

Ident.: DSC-31-45-A-00023608.0001001 / 26 NOV 19
Applicable to: ALL

WAYPOINT


GS 488 TAS 470
200/50
ILS APP
FIR96 320°
11.3 NM
10:32
28
29
30
31
32
33
34
35
BIG
D140L
250KT
CLIFF
FL120
FIR96
+FL260
60
40
40
60
Identification
Track To Go
Distance To Go
Estimated Time of Arrival
TO Waypoint
SPD CSTR
Level Symbol + T/D Symbol
ALT CSTR
Intercept Point

The ND can display all of the following types of waypoints:

- Flight plan waypoints
  The ND displays these as green diamonds (white, for TO waypoints). When the flight crew selects the WPT option on his EFIS control panel, all waypoints other than flight plan waypoints are displayed in magenta.
- Pseudo waypoint
  Point of the flight path where the aircraft is predicted to reach a selected altitude or speed. *Refer to DSC-22_20-40-30 Predictions Displayed on the Navigation Display (ND)*.
- Constraint values
  When the flight crew presses the CSTR pb on the EFIS CP, the ND displays the constraints values below the waypoint ident.

  If there are several constraints for the same waypoint, the ND displays the constraints in the following order of priority:
  - The altitude constraint

    The ND displays the altitude constraint value:
    - In FL, when the altitude is above the transition altitude or the barometric setting is set to STD
    - In feet in all other cases.
  - The speed constraint
    The ND displays the speed constraint value in knots or as a Mach number.
  - The time constraint.

  Note: *1. For ILS approaches, the ND only displays speed and time constraints at the FAF waypoint up to destination.*
  2. The ND is limited to the display of 3 lines of constraints for each waypoint. Therefore immediately after the fourth constraint is applied on the FMS:
  - *With FMS Thales, the fourth constraint is not displayed on ND*
  - *With FMS Honeywell, the waypoint ID and all associated constraints disappear from the ND.*

  In both cases, all constraints are correctly managed by the FMS. The flight crew can refer to the MCDU F-PLN page to check all constraints associated with a waypoint.

  The constraint value and the constraint symbol have identical color coding.

  Note: *In PLAN mode, and at the MRP waypoint, the ND also displays the track and the distance to the next waypoint.*

Ident.: DSC-31-45-A-00023609.0001001 / 26 NOV 19
Applicable to: ALL

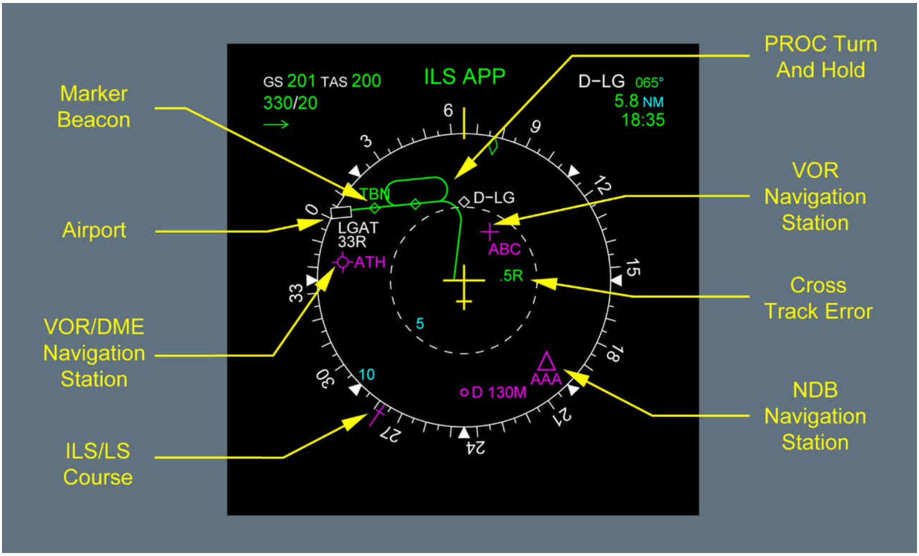
TO WAYPOINT

This is the next waypoint that the aircraft will overfly.

L2 With the FMS standard Release 1A, when a DIR TO with ABEAM PTS is performed, the DIR TO waypoint appears on the top of the screen, instead of the NEXT ABEAM waypoint.

L1 This area of the screen also indicates all of the following:
- Waypoint identification
- Track to go
- Distance to go
- Estimated time of arrival, with the assumption that the aircraft will directly fly from its present position to the TO waypoint at the current ground speed.

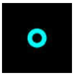
Ident.: DSC-31-45-A-00023629.0001001 / 26 NOV 19
Applicable to: ALL

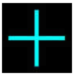

Marker Beacon
Airport
VOR/DME Navigation Station
ILS/LS Course
PROC Turn And Hold
VOR Navigation Station
Cross Track Error
NDB Navigation Station
GS 201 TAS 200
330/20
ILS APP
D-LG 065°
5.8 NM
18:35
6
3
9
0
12
15
33
18
30
21
27
24
TBN
D-LG
LGAT
33R
ATH
ABC
.5R
5
10
D 130M
AAA

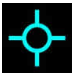
Ident.: DSC-31-45-A-00023610.0001001 / 26 NOV 19
Applicable to: ALL

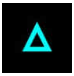
NAVAIDS

The display uses all of the following specific symbols for NAVAIDs:


DME or TACAN


VOR


VOR/DME


NDB

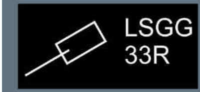
The symbol can appear in all of the four following colors:
- In green if the NAVAID is a current waypoint of the flight plan
- In white if it is the TO waypoint
- In blue when the NAVAID is tuned for display, either automatically by the FMGC, or manually via the MCDU
- In magenta when the NAVAID is not part of the flight plan and is displayed as an option (corresponding option pushbutton pressed on the FCU EFIS control panel).

Ident.: DSC-31-45-A-00023611.0001001 / 26 NOV 19
Applicable to: ALL

AIRPORT

Airport included in the flight plan:

- If the runway is not specified, the airport is indicated by a star and the identification is displayed in white
- If the runway is specified, it is indicated by an oriented runway symbol in white.



The runway is drawn to scale (paved length) if the selected range is 10, 20 or 40 NM.

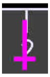
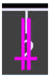
Optional airport information

The airports that are not displayed as part of the flight plan may be displayed (ARPT pb on the EFIS control panel).
They are indicated by a star and the identification in magenta.

Ident.: DSC-31-45-A-00023612.0001001 / 26 NOV 19
Applicable to: ALL

ILS/LS COURSE

When the pilot pushes the ILS/LS pb on the EFIS control panel, and if an ILS/GLS ◁ /FLS ◁ /MLS ◁ approach is selected, the display shows an ILS/LS course symbol:

	If an ILS/GLS ◁ /MLS ◁ or LOC approach is selected
	If an NPA approach with the FLS ◁ for lateral guidance is selected.

Ident.: DSC-31-45-A-00023614.0001001 / 26 NOV 19
Applicable to: ALL

ILS/GLS ◁ MARKER BEACONS

The screen indicates these as waypoints (diamonds).

When the aircraft overflies a marker beacon, the corresponding symbol flashes::

OM	The aircraft is over the outer marker
MM	The aircraft is over the middle marker
IM	The aircraft is over the inner marker.

Ident.: DSC-31-45-A-00023615.0002001 / 26 NOV 19
5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222, 11531**

CROSS-TRACK ERROR

This is the lateral deviation of the aircraft from the active leg of the flight plan (related to the great circle route). It is indicated in nautical miles (NM), with the letter R (right) or L (left), according to the position of the aircraft compared to the flight plan.

Ident.: DSC-31-45-A-00023615.0001001 / 03 NOV 22
6 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

CROSS TRACK ERROR

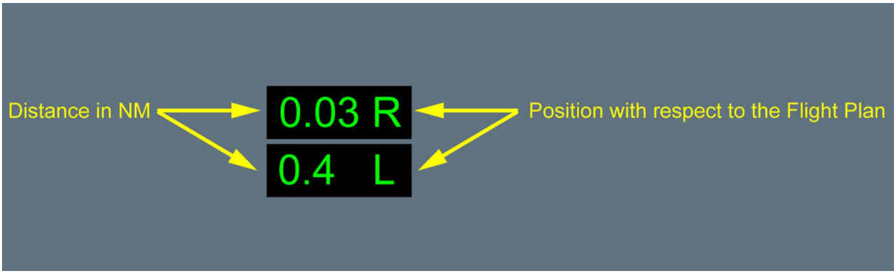
This is the lateral deviation of the aircraft from the active leg of the flight plan (related to the great circle route). It is indicated in nautical miles (NM), with the letter R (right) or L (left), according to the position of the aircraft compared to the flight plan.

The following are the conditions of display:

1. The cross-track error is displayed with a precision of one digit (0.1 NM), when the cross-track error is strictly more than 0.29 NM
2. The cross-track error is displayed with a precision of two digits (0.01 NM), from 0.02 NM to 0.29 NM
3. When displayed, the cross-track error is removed when it becomes less than 0.01 NM.

When the current RNP is strictly above 0.3 NM:

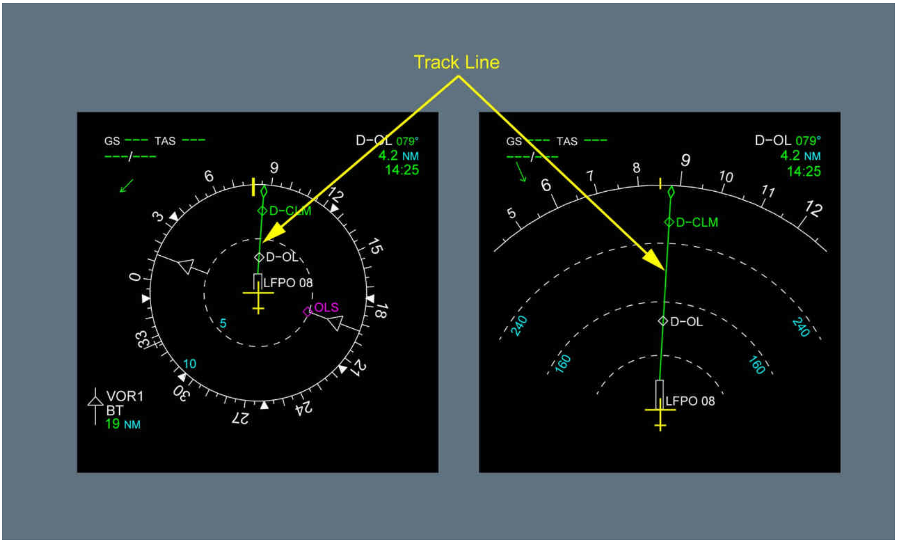
1. The cross-track error is displayed with a precision of one digit (0.1 NM)
2. When displayed, the cross-track error is removed when it becomes less than 0.01 NM.



Ident.: DSC-31-45-A-00023616.0001001 / 26 NOV 19
Applicable to: ALL

TRACK LINE

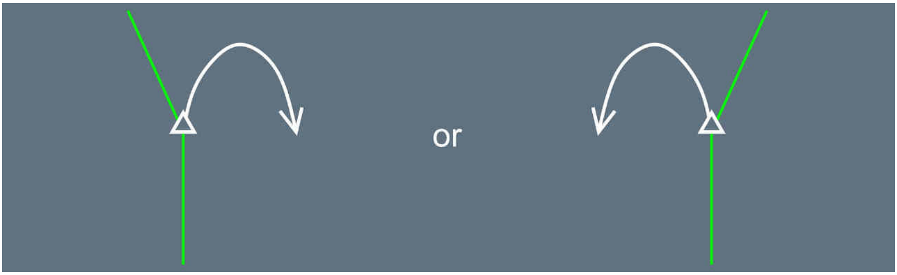
This line appears in green only in the ROSE NAV or ARC mode when HDG or TRK is selected on the FCU.


Track Line
GS --- TAS ---
---/---
D-OL 079°
4.2 NM
14:25
D-CLM
D-OL
LFPO 08
OLS
5
10
VOR1
BT
19 NM
240
160

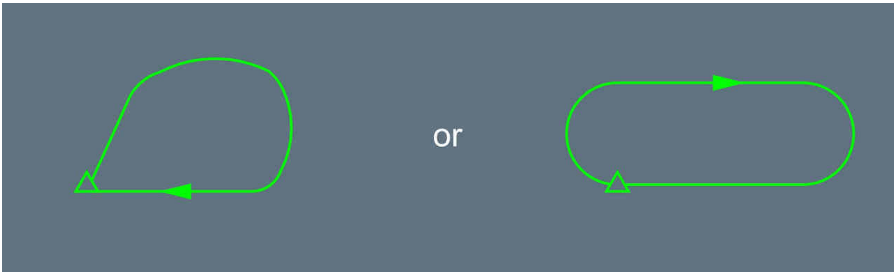
Ident.: DSC-31-45-A-00023617.0001001 / 26 NOV 19
Applicable to: ALL

PROCEDURE TURNS AND HOLDING PATTERNS

These only appear when they are part of the flight plan. For the 160 and 320 NM range scales, each one is indicated by a white arrow that originates at the associated fix and indicates the direction of the turn.



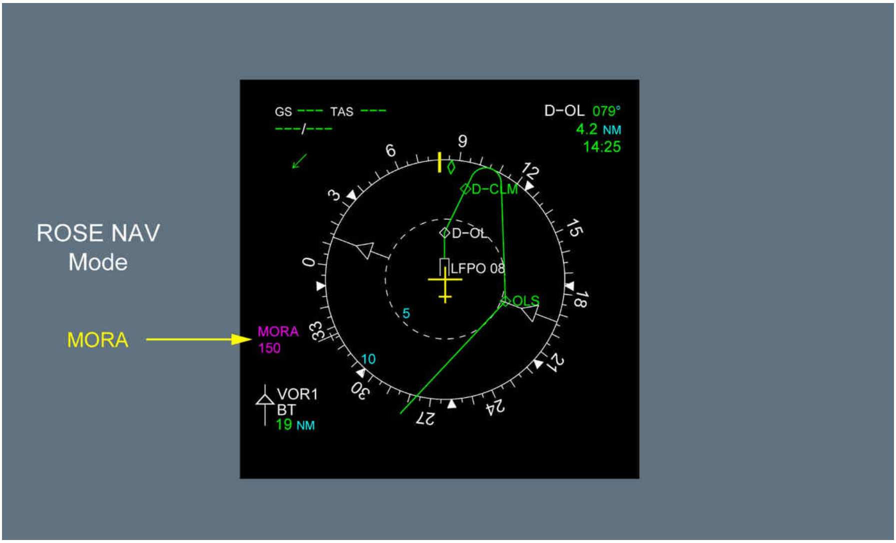
For shorter range scales, and if the procedure turn or the holding pattern is in the next or the active leg, the display indicates the full circuit or pattern.

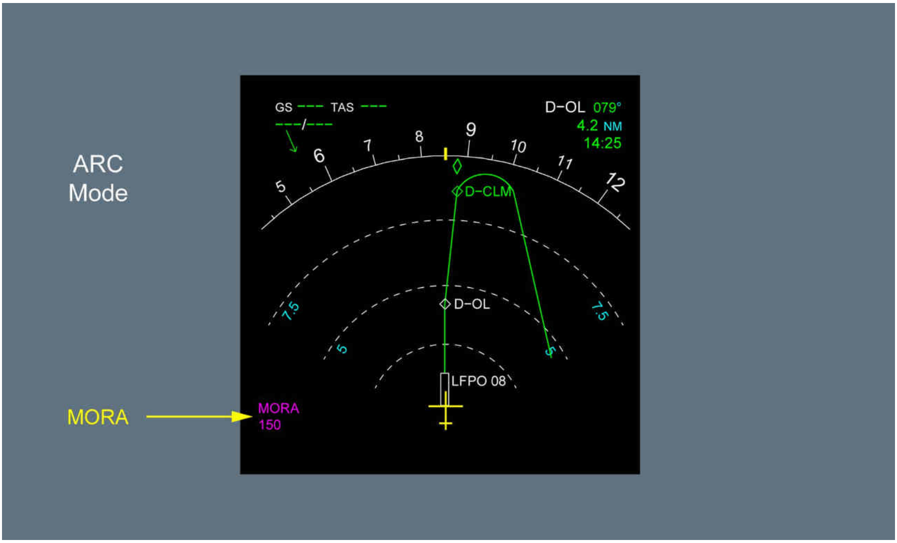


Ident.: DSC-31-45-A-00023618.0002001 / 26 NOV 19
Applicable to: MSN 04827-04860

MINIMUM OFF ROUTE ALTITUDE (MORA)

Provided that CSTR is selected and range is selected equal to or above 40 NM, a digital readout (Flight Level) is displayed. This Flight Level indicates the Minimum Off Route Altitude (MORA) permitted, within a circular area centered on the present aircraft position and bounded by 40 NM of radius limit. If the MORA is not available in the FMGS database for the chosen flight route, nothing is displayed.


ROSE NAV
Mode
MORA
GS --- TAS ---
---/---
D-OL 079°
4.2 NM
14:25
9
6
3
0
33
30
27
24
21
18
15
12
D-CLM
D-OL
LFPO 08
OLS
5
10
MORA
150
VOR1
BT
19 NM


ARC
Mode
MORA
GS --- TAS ---
---/---
D-OL 079°
4.2 NM
14:25
5
6
7
8
9
10
11
12
D-CLM
D-OL
7.5
5
LFPO 08
MORA
150

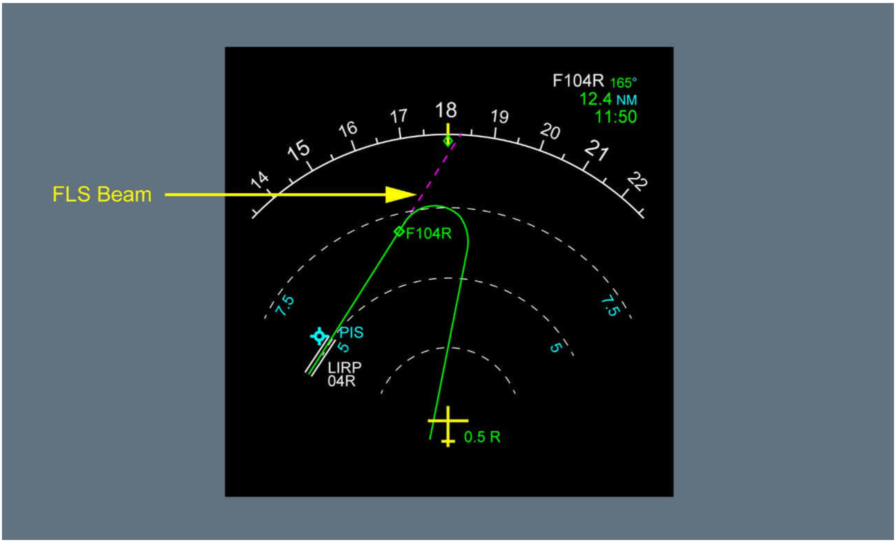
7 Ident.: DSC-31-45-A-00023619.0002001 / 26 NOV 19
Applicable to: MSN 11531

FLS BEAM

The FLS beam of the Non-Precision Approaches (NPA) is indicated with a magenta dotted line. This FLS beam appears when the flight crew has performed all of the following:

- Selected an NPA, in the active flight plan
- Pressed the LS pb on the EFIS CP
- Selected an ND range that is less than or equal to:
  - 80 NM in ARC, or
  - 160 NM in ROSE-NAV mode.

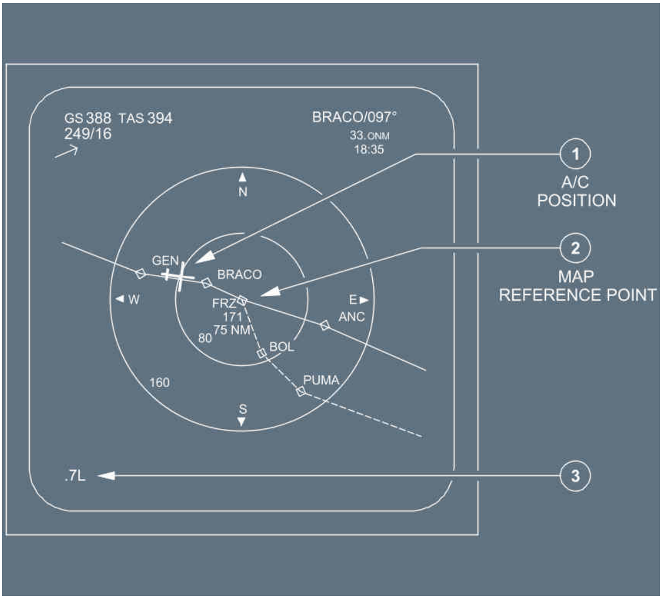
If the anchor point of the FLS beam is not defined at the runway threshold, the anchor point ident (EPXXX) is displayed.



PLAN MODE

8 Ident.: DSC-31-45-00001254.0003001 / 29 NOV 19
Applicable to: MSN 11531

This mode statically displays the flight plan legs on a map oriented to true north. The map is centered on a map reference point, that the pilot selects by scrolling to it on his MCDU.
The map reference point is the waypoint displayed on the second line of the MCDU's F-PLN page. It can either be the active waypoint (next waypoint to be overflown), or any other waypoint of the flight plan.
The pilot can scroll through the overall flight plan, and display it in PLAN mode.
The pilot chooses the scale of the map with the range selector (the diameter of the outer circle corresponds to the selected range).
Data on NAVAIDs and on their characteristics and associated bearing pointers are not available in this mode.


GS 388 TAS 394
249/16
BRACO/097°
33.0NM
18:35
N
W
E
S
GEN
BRACO
FRZ
171
75 NM
80
BOL
ANC
PUMA
160
.7L
1
A/C POSITION
2
MAP REFERENCE POINT
3

(1) Aircraft Position and True Track
The orientation of the yellow aircraft symbol always indicates the true track of the aircraft. Its position represents the aircraft position given by the FMGS.

(2) Map Reference Point
If the CSTR option is not selected, the track and distance from the map reference point to the next F-PLN waypoint is displayed in magenta.

(3) Cross Track Error
Refer to DSC-31-45 Cross Track Error.

(4) FLS BEAM (not represented in the illustration)
The FLS beam of the Non Precision Approach (NPA) is indicated with a magenta dotted line. This FLS beam appears when the flight crew has:

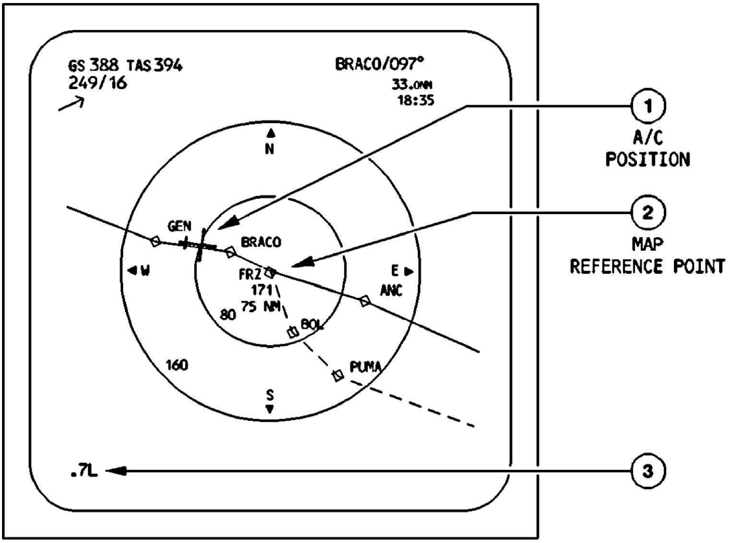
- Selected an NPA, in the active flight plan
- Pressed the LS pb on the EFIS CP
- Selected an ND range that is less than or equal to 80 NM.

PLAN MODE

Ident.: DSC-31-45-00001254.0002001 / 29 NOV 19

9 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

This mode statically displays the flight plan legs on a map oriented to true north. The map is centered on a map reference point, that the pilot selects by scrolling to it on his MCDU.
The map reference point is the waypoint displayed on the second line of the MCDU's F-PLN page. It can either be the active waypoint (next waypoint to be overflown), or any other waypoint of the flight plan.
The pilot can scroll through the overall flight plan, and display it in PLAN mode.
The pilot chooses the scale of the map with the range selector (the diameter of the outer circle corresponds to the selected range).
Data on NAVAIDs and on their characteristics and associated bearing pointers are not available in this mode.



(1) Aircraft Position and True Track
The orientation of the yellow aircraft symbol always indicates the true track of the aircraft. Its position represents the aircraft position given by the FMGS.

(2) Map Reference Point
If the CSTR option is not selected, the track and distance from the map reference point to the next F-PLN waypoint is displayed in magenta.

(3) Cross Track Error

Refer to DSC-31-45 Cross Track Error.

WEATHER RADAR INDICATIONS

Ident.: DSC-31-45-00015503.0001001 / 21 MAR 17
Applicable to: ALL

Refer to DSC-34-SURV-30-30 Weather Radar indication on ND.

PWS ◁ INDICATIONS

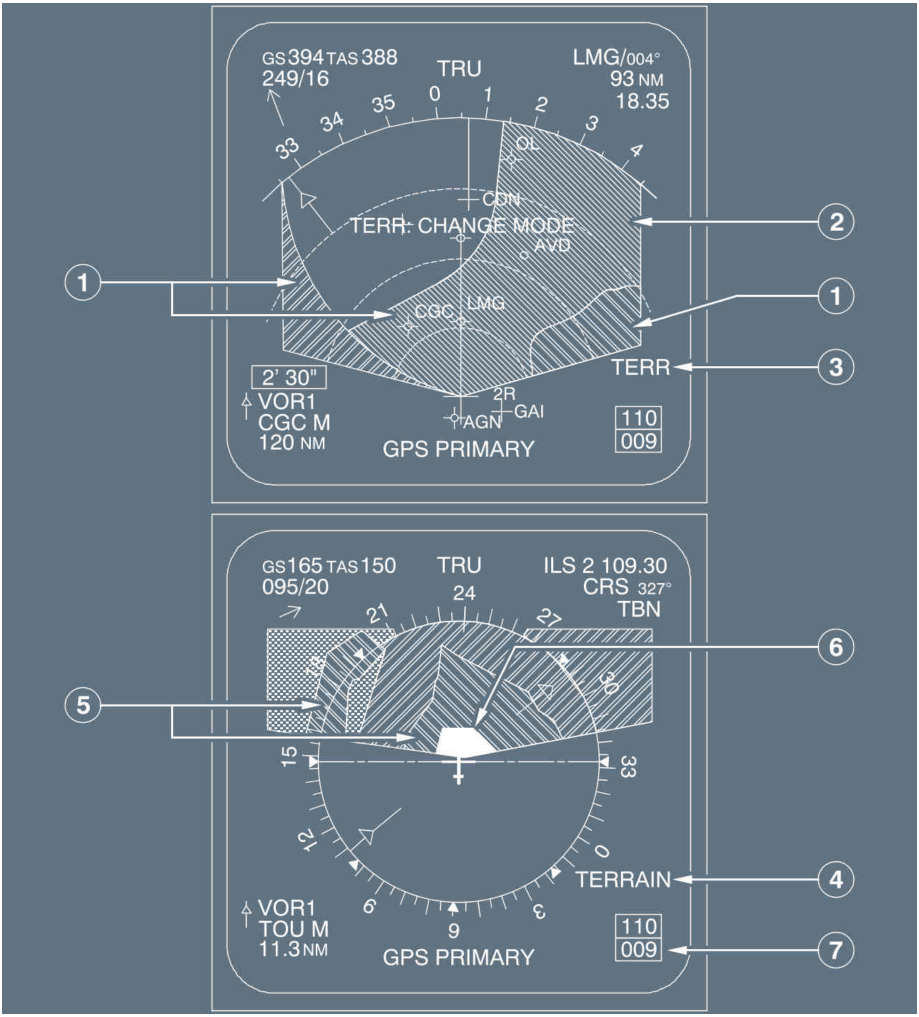
Ident.: DSC-31-45-00015504.0001001 / 21 MAR 17
Applicable to: ALL

Refer to DSC-34-SURV-30-30 PWS (if installed) indication on PFD and ND

EGPWS

Ident.: DSC-31-45-00009586.0056001 / 08 AUG 13

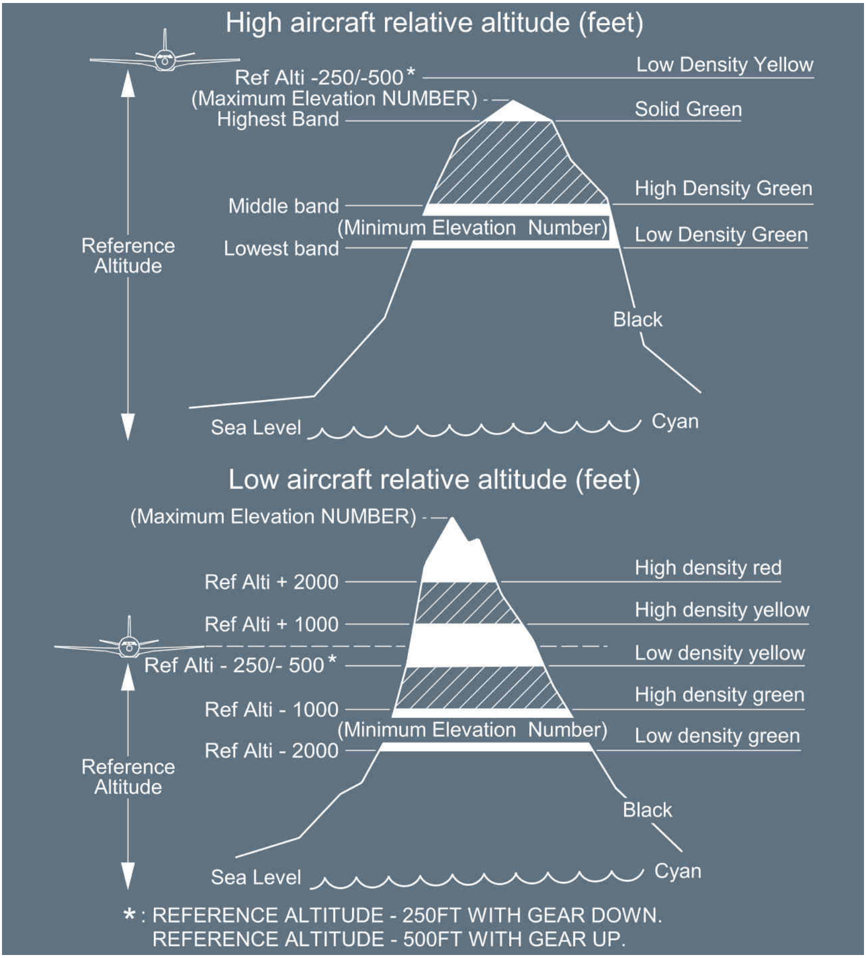
Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876


GS394 TAS388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
TERR
110
009
GPS PRIMARY
GS165 TAS150
095/20
TRU
ILS 2 109.30
CRS 327°
TBN
24
21
27
30
15
33
12
0
6
9
3
VOR1
TOU M
11.3NM
TERRAIN
110
009
GPS PRIMARY
1
2
1
3
5
6
4
7

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. Terrain data is displayed independently of the aircraft relative altitude.

The terrain appears in different colors and densities, in accordance with its relative height:


High aircraft relative altitude (feet)
Ref Alti -250/-500*
(Maximum Elevation NUMBER)
Highest Band
Low Density Yellow
Solid Green
Middle band
High Density Green
(Minimum Elevation Number)
Reference Altitude
Lowest band
Low Density Green
Black
Sea Level
Cyan
Low aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Ref Alti + 2000
High density red
Ref Alti + 1000
High density yellow
Low density yellow
Ref Alti - 250/- 500*
High density green
Ref Alti - 1000
(Minimum Elevation Number)
Low density green
Ref Alti - 2000
Reference Altitude
Black
Sea Level
Cyan
*: REFERENCE ALTITUDE - 250FT WITH GEAR DOWN.
REFERENCE ALTITUDE - 500FT WITH GEAR UP.

Note:
- *Areas without available terrain data in the EGPWS database appear in magenta*
- *The reference altitude is computed based on the current aircraft altitude or, if descending more than 1 000 ft/min, the altitude expected in 30 s*
- *In case of flight above the maximum elevation number, the relief between the minimum and maximum displayed elevations is displayed by using three different green levels.*

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication
To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERRAIN or OBST (amber) : For a caution.

TERRAIN or OBST (red) : For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red) : For a RANGE error warning.

TERR TST (amber) : Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

(5) Terrain or obstacle caution alert
Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and database-stored terrain/obstacles. The conflict area is shown in solid yellow.

(6) Terrain or obstacle warning alert
Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and terrain/obstacles data stored in the database. The conflict area is shown in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND’s pushbutton ON light comes on.*

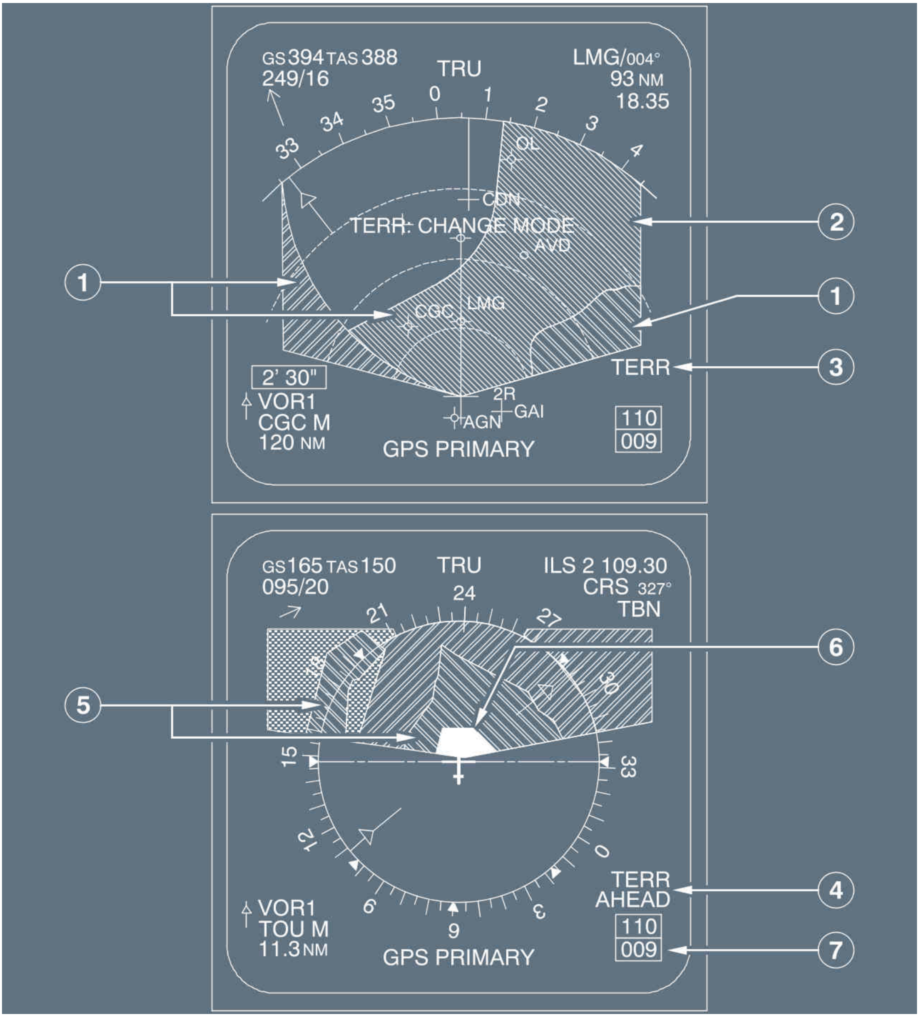
(7) Lowest and highest elevations

Minimum and maximum elevations encountered ahead of the aircraft, within the selected ND range. The color code of the elevation figures is the same as for the EGPWS terrain picture.

EGPWS

Ident.: DSC-31-45-00009586.0055001 / 08 AUG 13

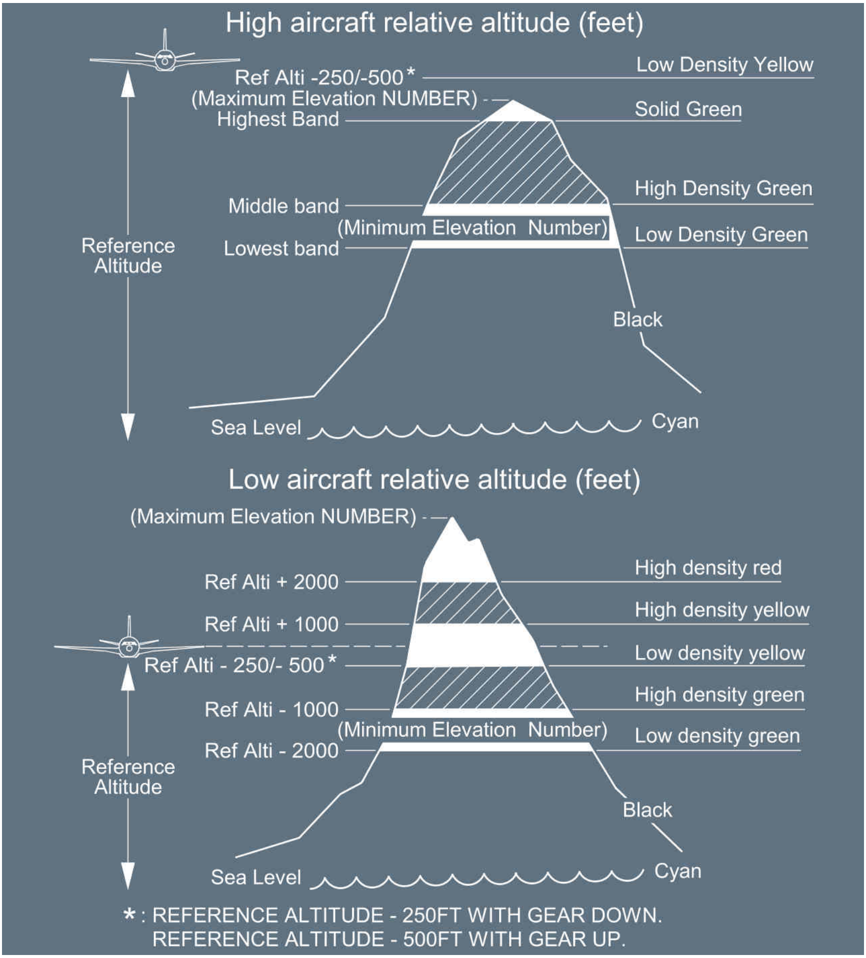
10 **Applicable to: MSN 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**


GS394 TAS388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
TERR
110
009
GPS PRIMARY
1
2
1
3
GS165 TAS150
095/20
TRU
ILS 2 109.30
CRS 327°
TBN
24
21
27
18
30
15
33
12
0
6
3
9
VOR1
TOU M
11.3NM
GPS PRIMARY
TERR
AHEAD
110
009
5
6
4
7

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. Terrain data is displayed independently of the aircraft relative altitude.

The terrain appears in different colors and densities, in accordance with its relative height:


High aircraft relative altitude (feet)
Ref Alti -250/-500*
(Maximum Elevation NUMBER)
Highest Band
Low Density Yellow
Solid Green
Middle band
High Density Green
(Minimum Elevation Number)
Lowest band
Low Density Green
Reference Altitude
Black
Sea Level
Cyan
Low aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Ref Alti + 2000
High density red
Ref Alti + 1000
High density yellow
Ref Alti - 250/- 500*
Low density yellow
Ref Alti - 1000
High density green
(Minimum Elevation Number)
Ref Alti - 2000
Low density green
Reference Altitude
Black
Sea Level
Cyan
*: REFERENCE ALTITUDE - 250FT WITH GEAR DOWN.
REFERENCE ALTITUDE - 500FT WITH GEAR UP.

Note:
- *Areas without available terrain data in the EGPWS database appear in magenta*
- *The reference altitude is computed based on the current aircraft altitude or, if descending more than 1 000 ft/min, the altitude expected in 30 s*
- *In case of flight above the maximum elevation number, the relief between the minimum and maximum displayed elevations is displayed by using three different green levels.*

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication
To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERR AHEAD or OBST AHEAD (amber) : For a caution.

TERR AHEAD or OBST AHEAD (red) : For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red) : For a RANGE error warning.

TERR TST (amber) : Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

(5) Terrain or obstacle caution alert
Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and database-stored terrain/obstacles. The conflict area is shown in solid yellow.

(6) Terrain or obstacle warning alert
Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and terrain/obstacles data stored in the database. The conflict area is shown in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND’s pushbutton ON light comes on.*

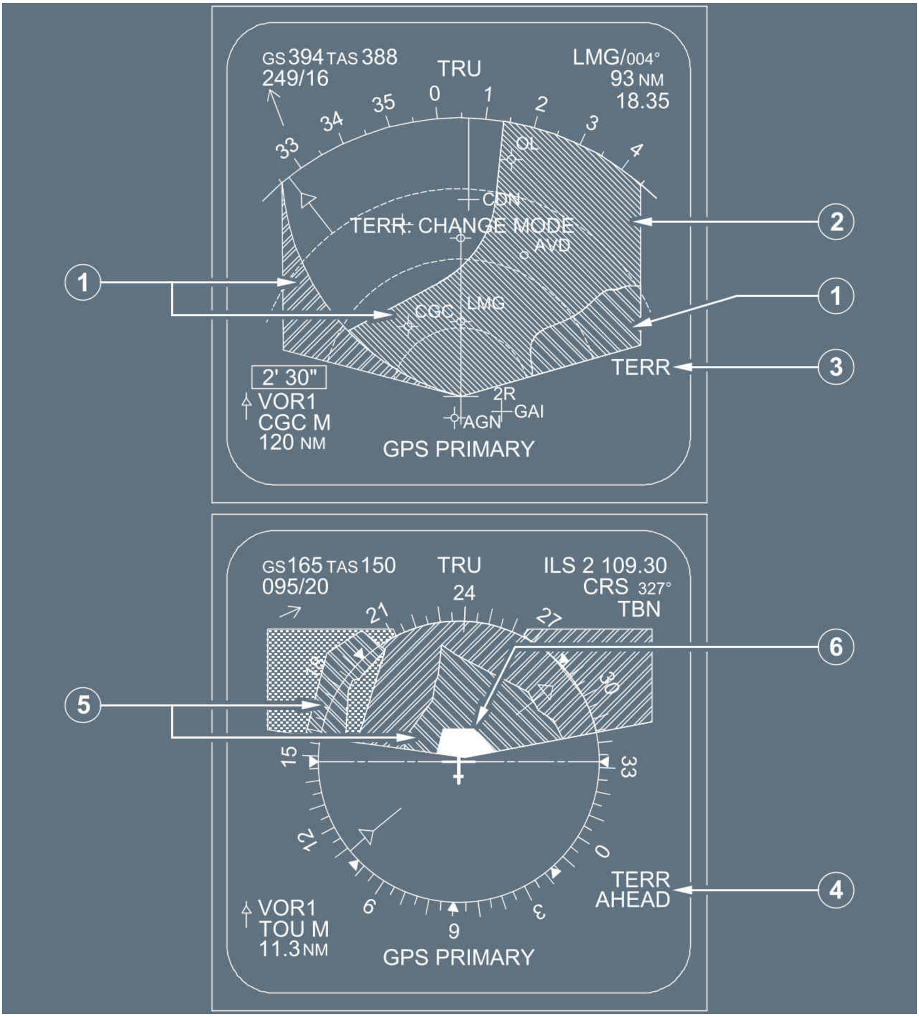
(7) Lowest and highest elevations

Minimum and maximum elevations encountered ahead of the aircraft, within the selected ND range. The color code of the elevation figures is the same as for the EGPWS terrain picture.

EGPWS

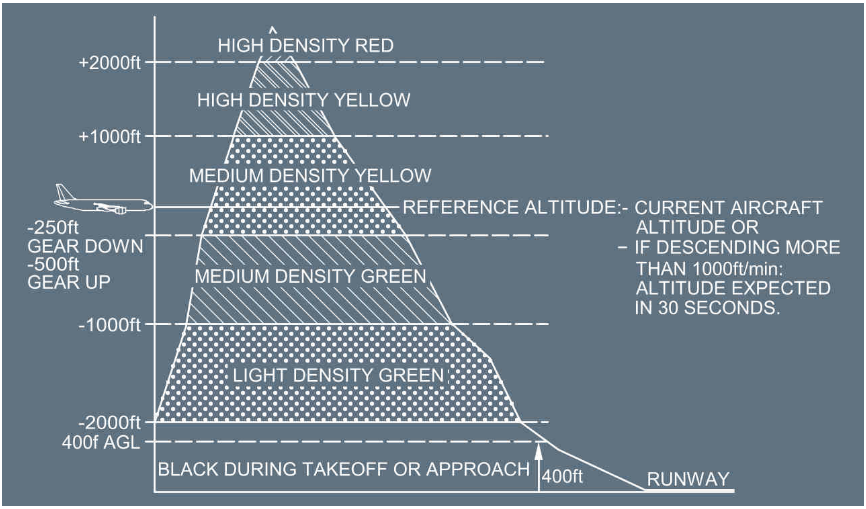
Ident.: DSC-31-45-00009586.0001001 / 22 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855


GS 394 TAS 388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
TERR
GPS PRIMARY
1
2
1
3
GS 165 TAS 150
095/20
TRU
24
ILS 2 109.30
CRS 327°
TBN
21
27
18
30
15
33
12
0
6
9
3
VOR1
TOU M
11.3 NM
TERR
AHEAD
GPS PRIMARY
5
6
4

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. The terrain appears in different colors and densities, in accordance with its relative height:


HIGH DENSITY RED
+2000ft
HIGH DENSITY YELLOW
+1000ft
MEDIUM DENSITY YELLOW
REFERENCE ALTITUDE:- CURRENT AIRCRAFT ALTITUDE OR
– IF DESCENDING MORE THAN 1000ft/min: ALTITUDE EXPECTED IN 30 SECONDS.
-250ft GEAR DOWN
-500ft GEAR UP
MEDIUM DENSITY GREEN
-1000ft
LIGHT DENSITY GREEN
-2000ft
400f AGL
BLACK DURING TAKEOFF OR APPROACH
400ft
RUNWAY

Note: Areas without available terrain data in the EGPWS database appear in magenta.

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication

To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERR AHEAD (amber) : For a caution.

TERR AHEAD (red) : For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red)	:	For a RANGE error warning.
TERR TST (amber)	:	Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

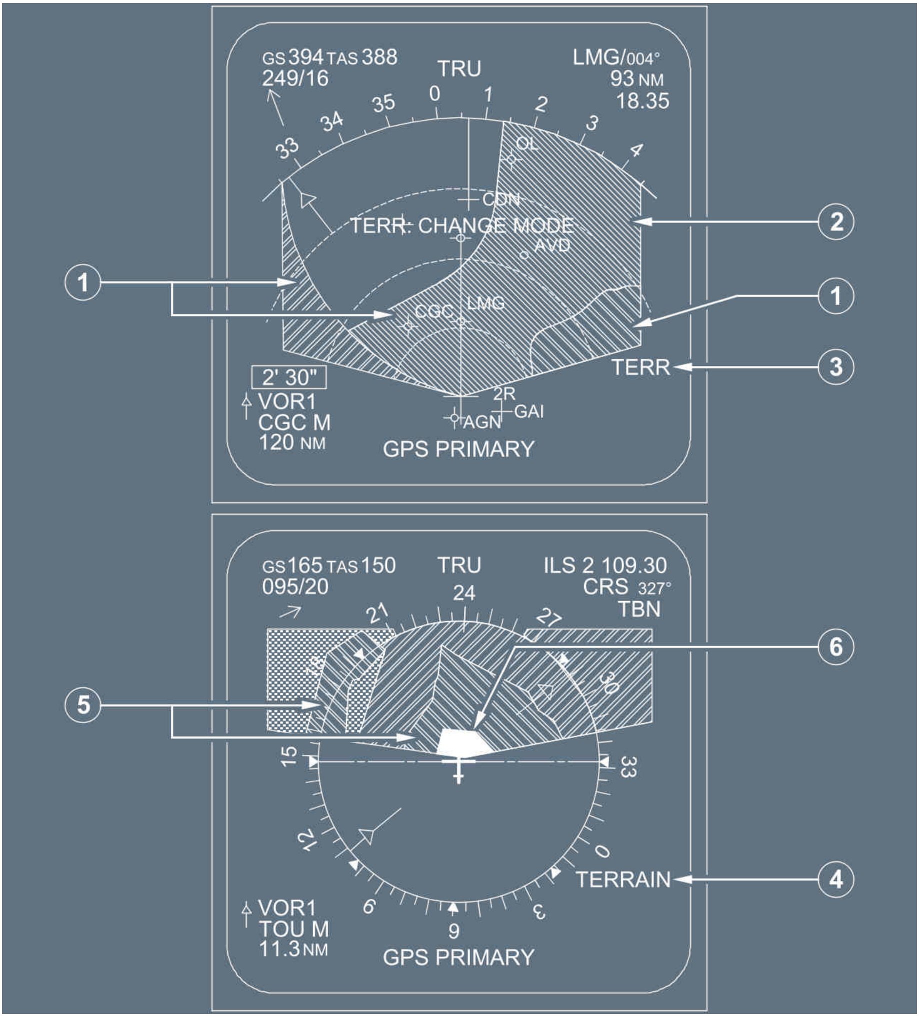
(5) Terrain caution alert
Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and the terrain data stored in the database. The conflict area is shown in solid yellow.

(6) Terrain warning alert
Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and the terrain data stored in the database. The conflict area is shown in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND's pushbutton ON light comes on.*

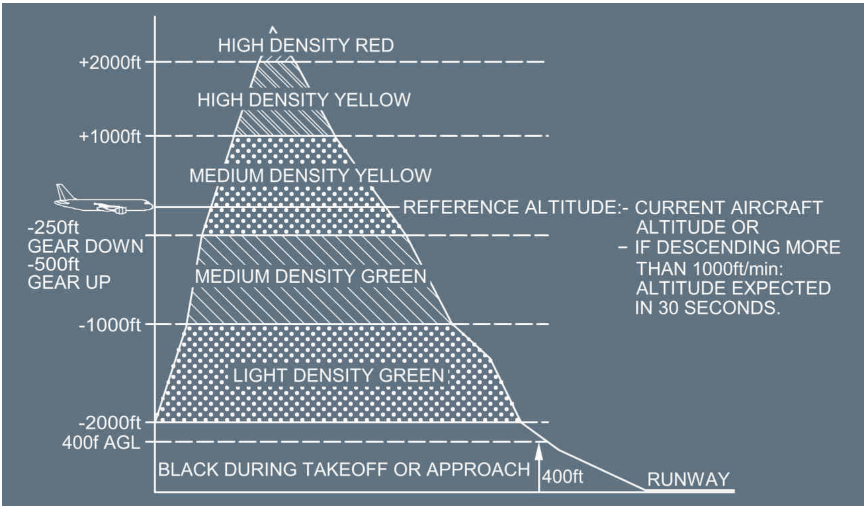
EGPWS

Ident.: DSC-31-45-00009586.0010001 / 22 MAY 12
Applicable to: MSN 02014


GS 394 TAS 388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
TERR
GPS PRIMARY
1
2
1
3
GS 165 TAS 150
095/20
TRU
24
ILS 2 109.30
CRS 327°
TBN
21
27
18
30
15
33
12
0
6
9
3
TERRAIN
VOR1
TOU M
11.3 NM
GPS PRIMARY
5
6
4

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image.
The terrain appears in different colors and densities, in accordance with its relative height:


HIGH DENSITY RED
+2000ft
HIGH DENSITY YELLOW
+1000ft
MEDIUM DENSITY YELLOW
REFERENCE ALTITUDE:- CURRENT AIRCRAFT ALTITUDE OR
- IF DESCENDING MORE THAN 1000ft/min: ALTITUDE EXPECTED IN 30 SECONDS.
-250ft
GEAR DOWN
-500ft
GEAR UP
MEDIUM DENSITY GREEN
-1000ft
LIGHT DENSITY GREEN
-2000ft
400f AGL
BLACK DURING TAKEOFF OR APPROACH
400ft
RUNWAY

Note: *Areas without available terrain data in the EGPWS database appear in magenta.*

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication

To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERRAIN (amber) : For a caution.

TERRAIN (red) : For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red)	:	For a RANGE error warning.
TERR TST (amber)	:	Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

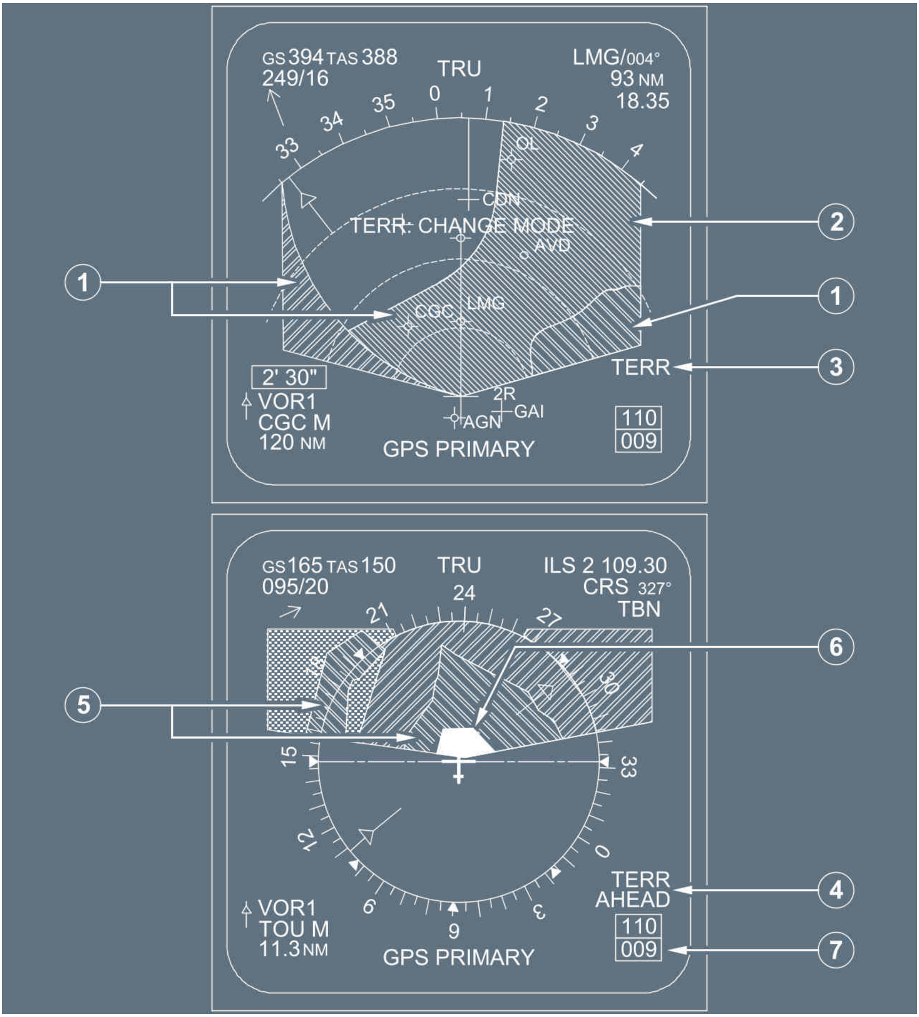
(5) Terrain caution alert
Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and the terrain data stored in the database. The conflict area is shown in solid yellow.

(6) Terrain warning alert
Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and the terrain data stored in the database. The conflict area is shown in solid red.

Note: When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND's pushbutton ON light comes on.

EGPWS

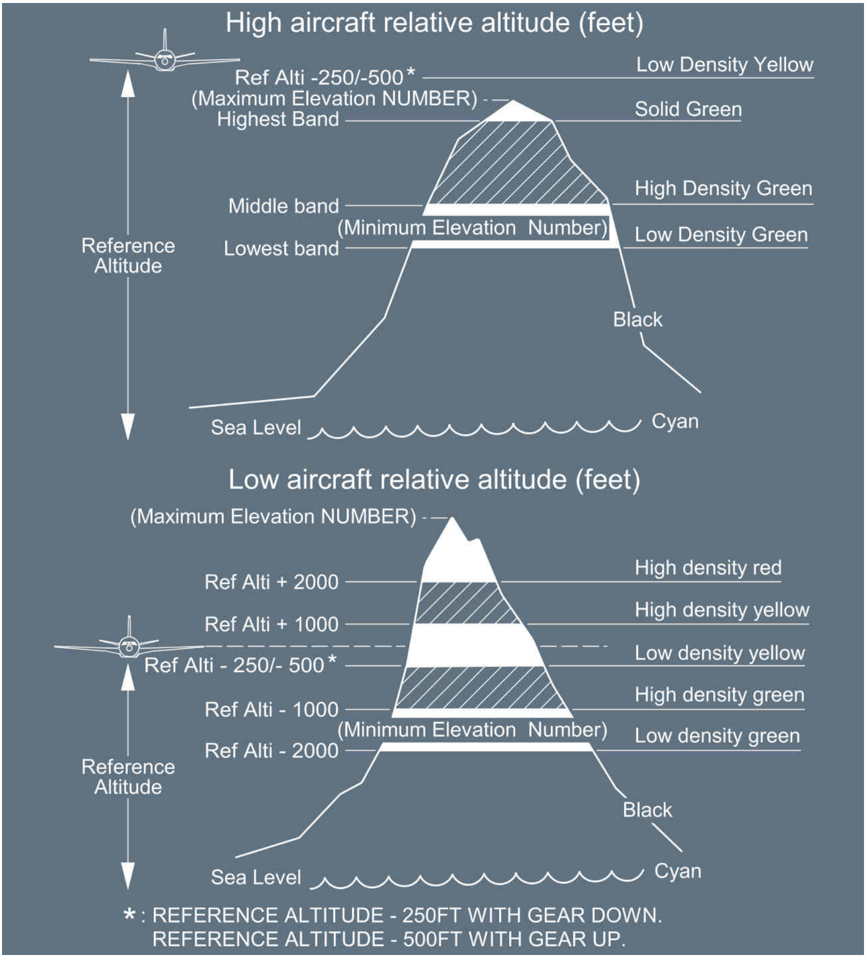
Ident.: DSC-31-45-00009586.0011001 / 08 AUG 13
Applicable to: MSN 02734


GS 394 TAS 388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
GPS PRIMARY
TERR
110
009
GS 165 TAS 150
095/20
TRU
24
ILS 2 109.30
CRS 327°
TBN
21
27
30
15
33
12
0
6
9
3
VOR1
TOU M
11.3 NM
GPS PRIMARY
TERR
AHEAD
110
009
1
2
1
3
5
6
4
7

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. Terrain data is displayed independently of the aircraft relative altitude.

The terrain appears in different colors and densities, in accordance with its relative height:


High aircraft relative altitude (feet)
Ref Alti -250/-500*
(Maximum Elevation NUMBER)
Highest Band
Low Density Yellow
Solid Green
Middle band
High Density Green
(Minimum Elevation Number)
Lowest band
Low Density Green
Reference Altitude
Black
Sea Level
Cyan
Low aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Ref Alti + 2000
High density red
Ref Alti + 1000
High density yellow
Ref Alti - 250/- 500*
Low density yellow
Ref Alti - 1000
High density green
(Minimum Elevation Number)
Ref Alti - 2000
Low density green
Reference Altitude
Black
Sea Level
Cyan
*: REFERENCE ALTITUDE - 250FT WITH GEAR DOWN.
REFERENCE ALTITUDE - 500FT WITH GEAR UP.

Note:
- *Areas without available terrain data in the EGPWS database appear in magenta*
- *The reference altitude is computed based on the current aircraft altitude or, if descending more than 1 000 ft/min, the altitude expected in 30 s*
- *In case of flight above the maximum elevation number, the relief between the minimum and maximum displayed elevations is displayed by using three different green levels.*

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication

To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERR AHEAD (amber) : For a caution.

TERR AHEAD (red) : For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red) : For a RANGE error warning.

TERR TST (amber) : Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

(5) Terrain caution alert

Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and the terrain data stored in the database. The conflict area is shown in solid yellow.

(6) Terrain warning alert

Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and the terrain data stored in the database. The conflict area is shown in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND’s pushbutton ON light comes on.*

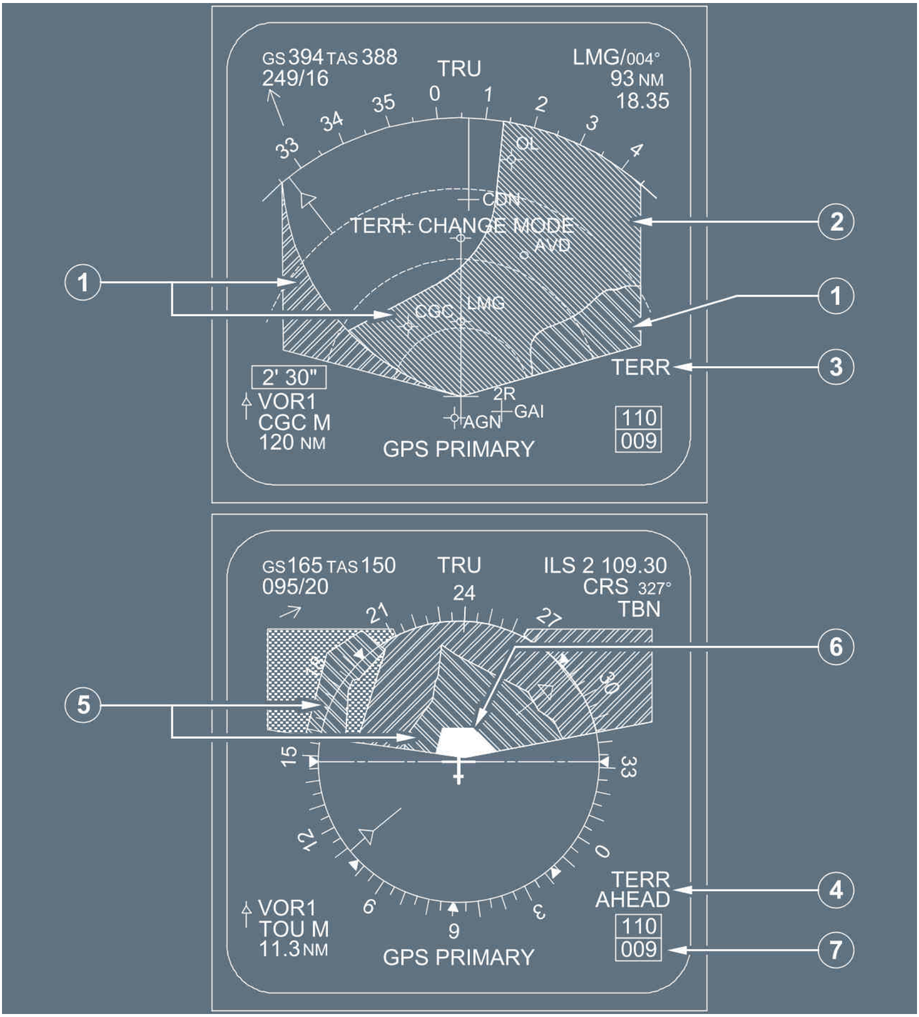
(7) Lowest and highest elevations

Minimum and maximum elevations encountered ahead of the aircraft, within the selected ND range. The color code of the elevation figures is the same as for the EGPWS terrain picture.

Note: *The elevations shown on the ND correspond to the terrain included in the selected ND range, ahead of the aircraft. In ARC mode, the elevations are linked with the terrain displayed on the ND. In ROSE mode, the elevations may not represent the lowest and highest terrain currently displayed on the ND.*

EGPWS

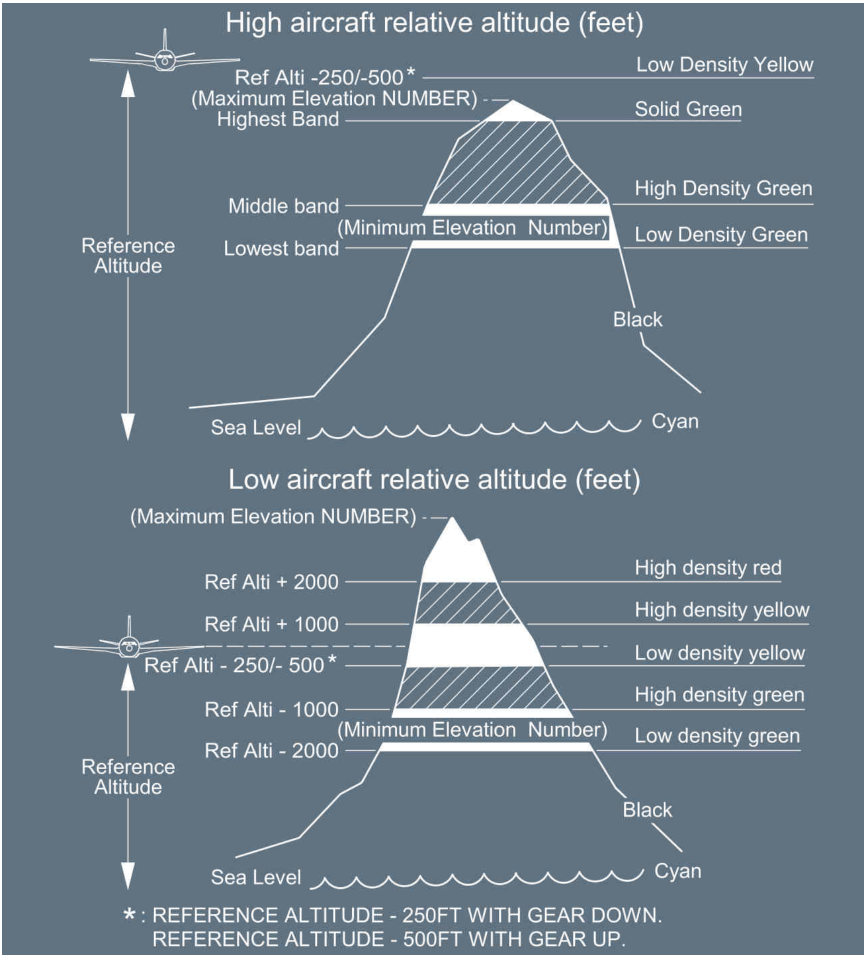
Ident.: DSC-31-45-00009586.0012001 / 08 AUG 13
Applicable to: MSN 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414


GS 394 TAS 388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
GPS PRIMARY
TERR
110
009
1
2
1
3
GS 165 TAS 150
095/20
TRU
24
ILS 2 109.30
CRS 327°
TBN
21
27
30
15
33
12
0
6
9
3
VOR1
TOU M
11.3 NM
GPS PRIMARY
TERR
AHEAD
110
009
5
6
4
7

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. Terrain data is displayed independently of the aircraft relative altitude.

The terrain appears in different colors and densities, in accordance with its relative height:


High aircraft relative altitude (feet)
Ref Alti -250/-500*
(Maximum Elevation NUMBER)
Highest Band
Middle band
(Minimum Elevation Number)
Lowest band
Reference Altitude
Low Density Yellow
Solid Green
High Density Green
Low Density Green
Black
Sea Level
Cyan
Low aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Ref Alti + 2000
Ref Alti + 1000
Ref Alti - 250/- 500*
Ref Alti - 1000
(Minimum Elevation Number)
Ref Alti - 2000
Reference Altitude
High density red
High density yellow
Low density yellow
High density green
Low density green
Black
Sea Level
Cyan
*: REFERENCE ALTITUDE - 250FT WITH GEAR DOWN.
REFERENCE ALTITUDE - 500FT WITH GEAR UP.

Note:
- *Areas without available terrain data in the EGPWS database appear in magenta*
- *The reference altitude is computed based on the current aircraft altitude or, if descending more than 1 000 ft/min, the altitude expected in 30 s*
- *In case of flight above the maximum elevation number, the relief between the minimum and maximum displayed elevations is displayed by using three different green levels.*

(2) Center Part Messages

- The "TERR CHANGE MODE" indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The "TERR REDUCE RANGE" indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication
To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERR AHEAD or OBST AHEAD (amber) : For a caution.

TERR AHEAD or OBST AHEAD (red) : For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red) : For a RANGE error warning.

TERR TST (amber) : Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

(5) Terrain or obstacle caution alert
Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and database-stored terrain/obstacles. The conflict area is shown in solid yellow.

(6) Terrain or obstacle warning alert
Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and terrain/obstacles data stored in the database. The conflict area is shown in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND's pushbutton ON light comes on.*

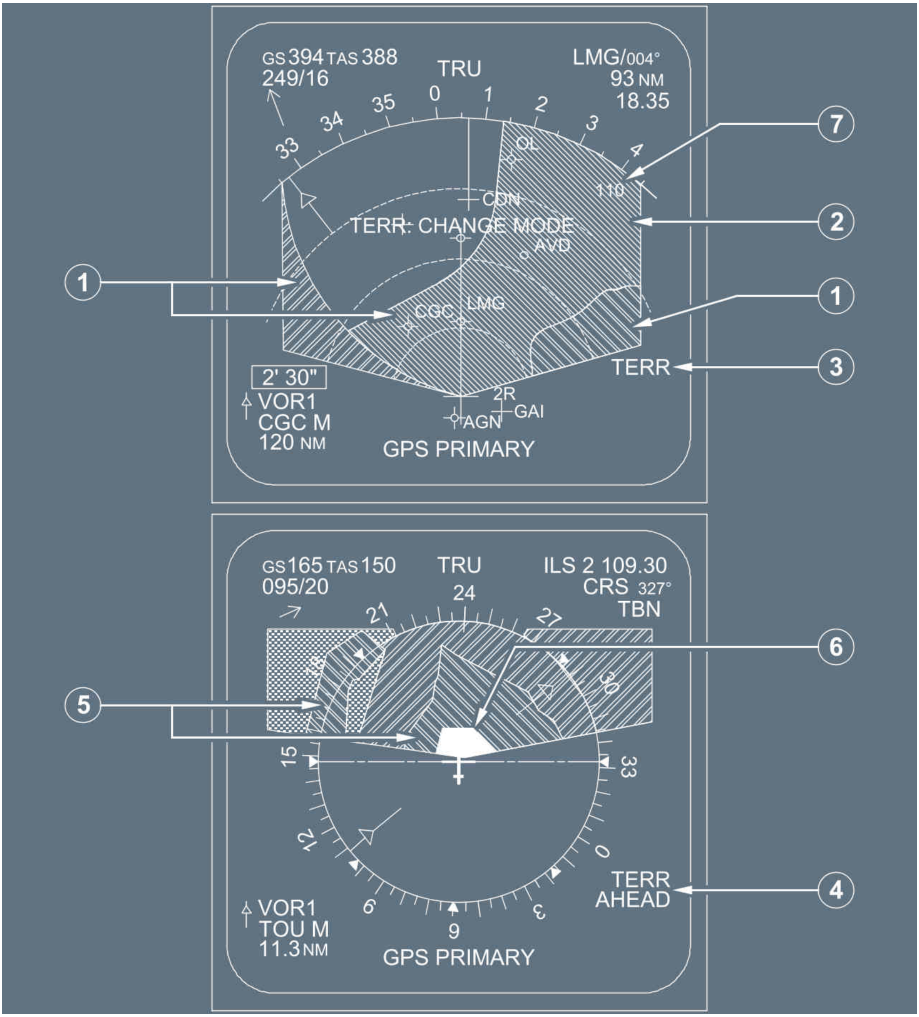
(7) Lowest and highest elevations

Minimum and maximum elevations encountered ahead of the aircraft, within the selected ND range. The color code of the elevation figures is the same as for the EGPWS terrain picture.

Note: *The elevations shown on the ND correspond to the terrain included in the selected ND range, ahead of the aircraft. In ARC mode, the elevations are linked with the terrain displayed on the ND. In ROSE mode, the elevations may not represent the lowest and highest terrain currently displayed on the ND.*

EGPWS

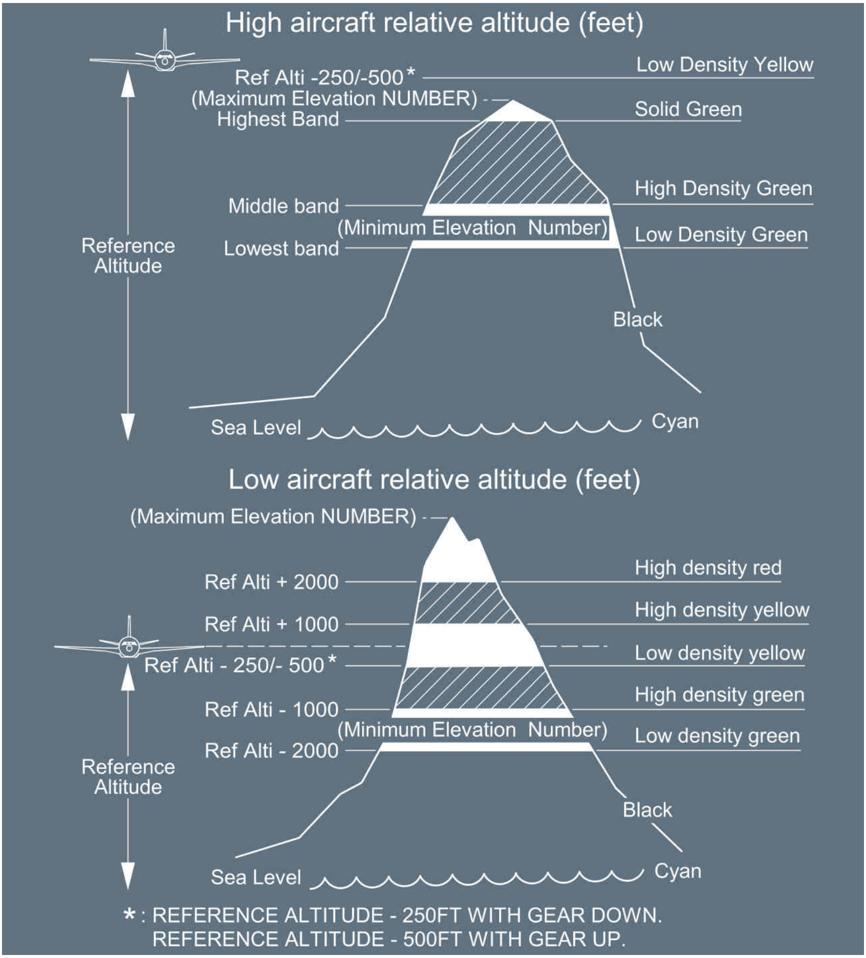
Ident.: DSC-31-45-00009586.0008001 / 08 AUG 13
Applicable to: MSN 02321


GS 394 TAS 388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
110
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
TERR
GPS PRIMARY
1
2
1
3
7
GS 165 TAS 150
095/20
TRU
24
ILS 2 109.30
CRS 327°
TBN
21
27
18
30
15
33
12
0
6
9
3
VOR1
TOU M
11.3 NM
TERR
AHEAD
GPS PRIMARY
5
6
4

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. Terrain data is displayed independently of the aircraft relative altitude.

The terrain appears in different colors and densities, accordance with its relative height:


High aircraft relative altitude (feet)
Ref Alti -250/-500*
(Maximum Elevation NUMBER)
Highest Band
Middle band
(Minimum Elevation Number)
Lowest band
Reference Altitude
Low Density Yellow
Solid Green
High Density Green
Low Density Green
Black
Sea Level
Cyan
Low aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Ref Alti + 2000
Ref Alti + 1000
Ref Alti - 250/- 500*
Ref Alti - 1000
(Minimum Elevation Number)
Ref Alti - 2000
Reference Altitude
High density red
High density yellow
Low density yellow
High density green
Low density green
Black
Sea Level
Cyan
*: REFERENCE ALTITUDE - 250FT WITH GEAR DOWN.
REFERENCE ALTITUDE - 500FT WITH GEAR UP.

Note:
- *Areas without available terrain data in the EGPWS database appear in magenta*
- *The reference altitude is computed based on the current aircraft altitude or, if descending more than 1 000 ft/min, the altitude expected in 30 s*
- *In case of flight above the maximum elevation number, the relief between the minimum and maximum displayed elevations is displayed by using three different green levels.*

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication
To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERR AHEAD or OBST AHEAD (amber)	:	For a caution.
TERR AHEAD or OBST AHEAD (red)	:	For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red)	:	For a RANGE error warning.
TERR TST (amber)	:	Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

(5) Terrain or obstacle caution alert
Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and database-stored terrain/obstacles. The conflict area is shown in solid yellow.

(6) Terrain or obstacle warning alert
Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and terrain/obstacles data stored in the database. The conflict area is shown in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND pushbutton ON light comes on.*

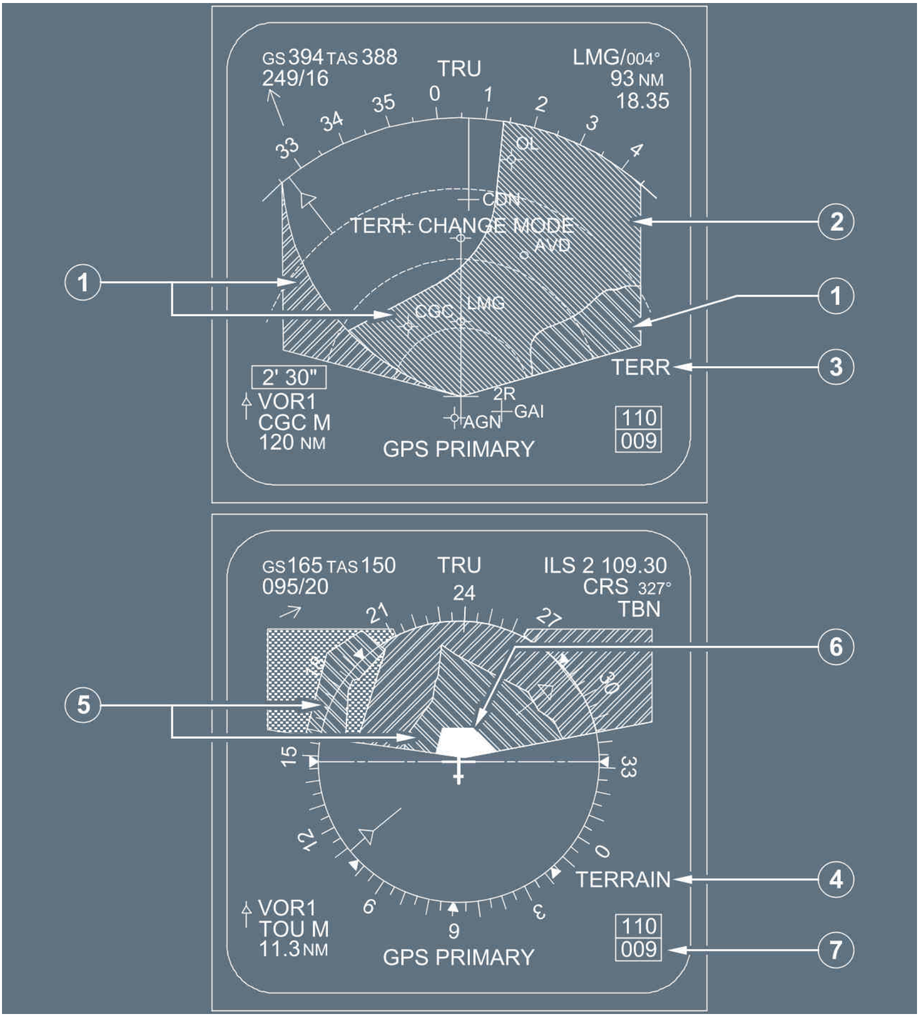
(7) Highest Elevation

Maximum elevations encountered ahead of the aircraft, within the selected ND range in ARC mode. The color code of the elevation figures is the same as for the EGPWS terrain picture.

EGPWS

Ident.: DSC-31-45-00009586.0013001 / 08 AUG 13

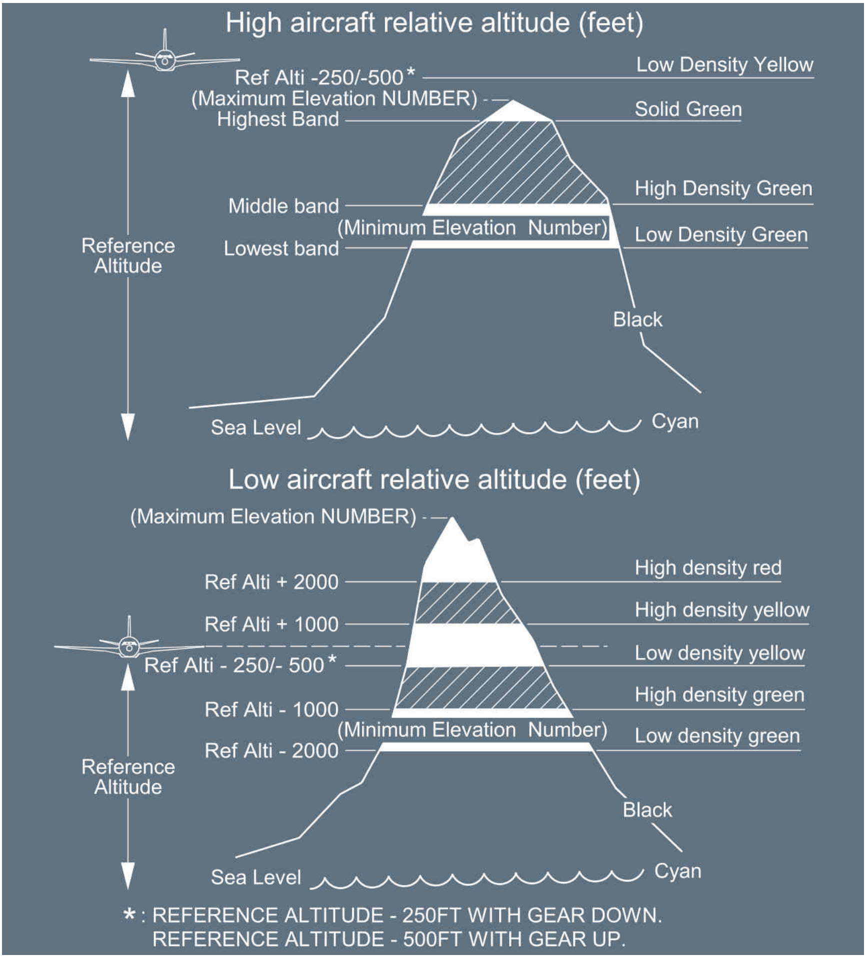
Applicable to: MSN 06139, 06173


GS 394 TAS 388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
GPS PRIMARY
TERR
110
009
1
2
1
3
GS 165 TAS 150
095/20
TRU
24
ILS 2 109.30
CRS 327°
TBN
21
27
30
15
33
12
0
6
9
3
TERRAIN
VOR1
TOU M
11.3 NM
GPS PRIMARY
110
009
5
6
4
7

(1) EGPWS terrain picture

The ND displays the EGPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. Terrain data is displayed independently of the aircraft relative altitude.

The terrain appears in different colors and densities, in accordance with its relative height:


High aircraft relative altitude (feet)
Low Density Yellow
Ref Alti -250/-500*
(Maximum Elevation NUMBER)
Highest Band
Solid Green
Middle band
High Density Green
(Minimum Elevation Number)
Low Density Green
Reference Altitude
Lowest band
Black
Sea Level
Cyan
Low aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Ref Alti + 2000
High density red
Ref Alti + 1000
High density yellow
Ref Alti - 250/- 500*
Low density yellow
Ref Alti - 1000
High density green
(Minimum Elevation Number)
Low density green
Ref Alti - 2000
Reference Altitude
Black
Sea Level
Cyan
*: REFERENCE ALTITUDE - 250FT WITH GEAR DOWN.
REFERENCE ALTITUDE - 500FT WITH GEAR UP.

Note:
- *Areas without available terrain data in the EGPWS database appear in magenta*
- *The reference altitude is computed based on the current aircraft altitude or, if descending more than 1 000 ft/min, the altitude expected in 30 s*
- *In case of flight above the maximum elevation number, the relief between the minimum and maximum displayed elevations is displayed by using three different green levels.*

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a Terrain Awareness Display (TAD) warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication
To differentiate between the terrain and the weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERRAIN or OBST (amber) : For a caution.

TERRAIN or OBST (red) : For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red) : For a RANGE error warning.

TERR TST (amber) : Appears during the EGPWS test, when the terrain pattern is displayed, and there is no failure.

(5) Terrain or obstacle caution alert
Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and database-stored terrain/obstacles. The conflict area is shown in solid yellow.

(6) Terrain or obstacle warning alert
Generated when a conflict exists between the terrain warning envelope, ahead of the aircraft, and terrain/obstacles data stored in the database. The conflict area is shown in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND’s pushbutton ON light comes on.*

(7) Lowest and highest elevations

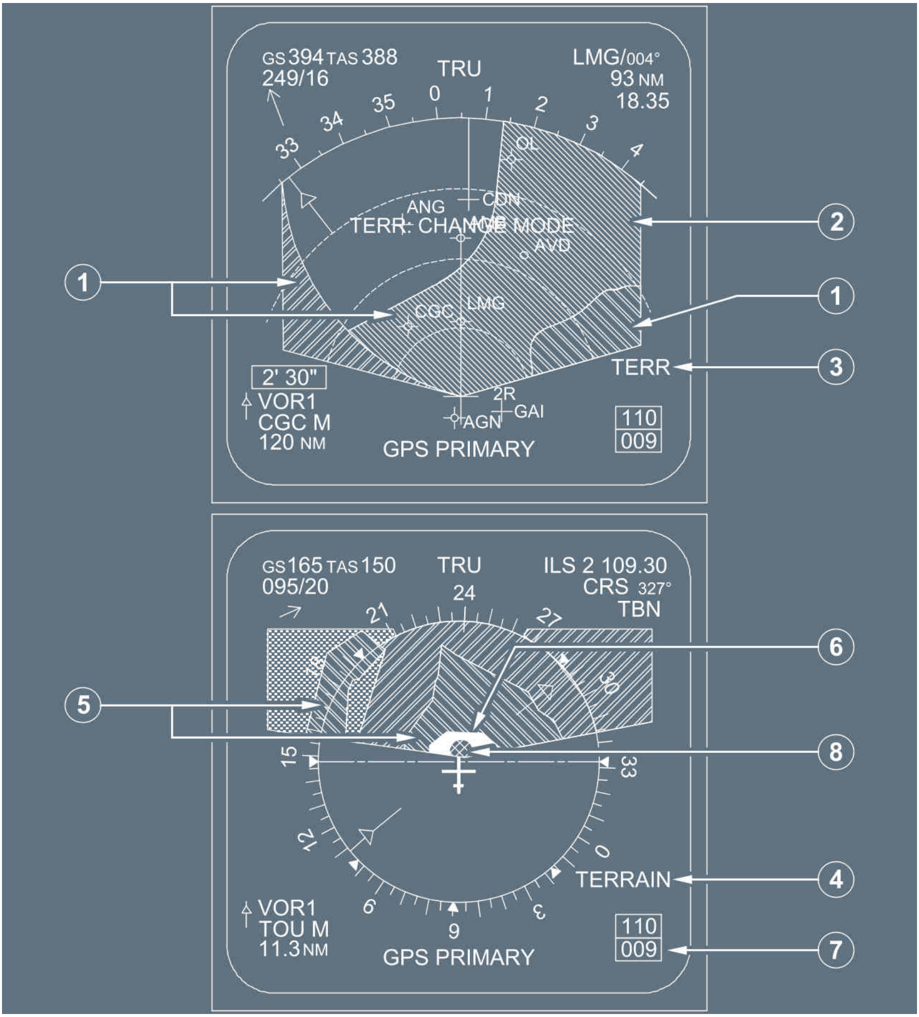
Minimum and maximum elevations encountered ahead of the aircraft, within the selected ND range. The color code of the elevation figures is the same as for the EGPWS terrain picture.

Note: *The elevations shown on the ND correspond to the terrain included in the selected ND range, ahead of the aircraft. In ARC mode, the elevations are linked with the terrain displayed on the ND. In ROSE mode, the elevations may not represent the lowest and highest terrain currently displayed on the ND.*

GPWS

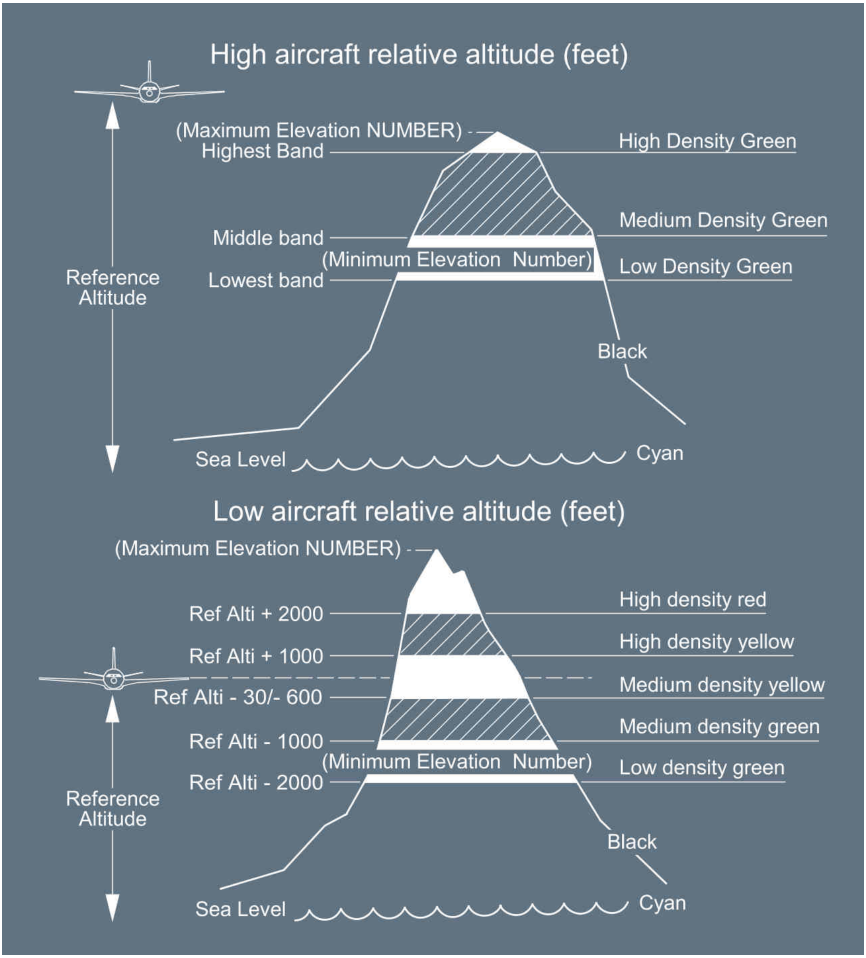
Ident.: DSC-31-45-00009586.0044001 / 08 AUG 13

Applicable to: MSN 04827-04860


GS 394 TAS 388
249/16
TRU
LMG/004°
93 NM
18.35
33
34
35
0
1
2
3
4
OL
ANG
CDN
TERR: CHANGE MODE
AVD
CGC
LMG
2' 30"
VOR1
CGC M
120 NM
2R
AGN
GAI
TERR
110
009
GPS PRIMARY
1
2
1
3
GS 165 TAS 150
095/20
TRU
24
ILS 2 109.30
CRS 327°
TBN
21
27
18
30
15
33
12
0
6
9
3
TERRAIN
VOR1
TOU M
11.3 NM
110
009
GPS PRIMARY
5
6
8
4
7

(1) GPWS terrain picture

The ND displays the GPWS terrain picture, when the TERR ON ND switch is selected ON, and the ND is not in PLAN mode. The terrain picture replaces the weather radar image. Terrain data is displayed independently of the aircraft relative altitude. The terrain appears in different colors and densities, according to its relative and absolute height :


High aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Highest Band
High Density Green
Middle band
Medium Density Green
(Minimum Elevation Number)
Reference Altitude
Lowest band
Low Density Green
Black
Sea Level
Cyan
Low aircraft relative altitude (feet)
(Maximum Elevation NUMBER)
Ref Alti + 2000
High density red
Ref Alti + 1000
High density yellow
Medium density yellow
Ref Alti - 30/- 600
Medium density green
Ref Alti - 1000
(Minimum Elevation Number)
Low density green
Ref Alti - 2000
Reference Altitude
Black
Sea Level
Cyan

Note:
- *Areas without available terrain data in the GPWS database appear in magenta*
- *The reference altitude is computed based on the current aircraft altitude or, if descending more than 1 000 ft/min, the altitude expected in 30 s*
- *In case of flight above the maximum elevation number, the relief between the minimum and maximum displayed elevations is displayed by using three different green levels.*

(2) Center Part Messages

- The “TERR CHANGE MODE” indication is displayed in red (or amber), in the case of a predictive mode warning (or caution) alert, if the current selected display mode is PLAN
- The “TERR REDUCE RANGE” indication is displayed in red (or amber), in the case of a predictive mode warning (or caution) alert, if the selected range is 160 NM or 320 NM.

(3) TERR indication

To differentiate between the terrain and weather display, the weather radar TILT is replaced by a blue TERR, and the terrain display sweeps from the center outward to both ND sides.

(4) Warning and caution messages

TERR AHEAD or OBST AHEAD (amber)	:	For a caution.
TERR AHEAD or OBST AHEAD (red)	:	For a warning.

When triggered, these messages flash for 9 s, then remain steady until the caution or warning alert condition disappears.

TERR RNG (red)	:	For a RANGE error warning.
TERR TST (amber)	:	Appears during the GPWS test, when the terrain pattern is displayed, and there is no failure.

(5) Terrain or obstacle caution alert

Generated when a conflict exists between the terrain caution envelope, ahead of the aircraft, and database-stored terrain/obstacles. The conflict area is displayed in solid yellow.

(6) Terrain or obstacle warning alert

Generated when :
- A conflict exists between the terrain/obstacle warning envelope, ahead of the aircraft, and the terrain/obstacle data stored in the database
- The aircraft is able to climb over the terrain/obstacle.

The conflict area is displayed in solid red.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the TERR ON ND pushbutton ON light comes on.*

(7) Lowest and highest elevations
Minimum and maximum elevations encountered ahead of the aircraft, within the selected ND range. The color code of the elevation figures is the same as for the GPWS terrain picture.

Note: *The elevations shown on the ND (ROSE or ARC mode) correspond to the terrain (obstacles ◁) included in the selected ND range, ahead of the aircraft.*

(8) Avoid Terrain warning
The conflict area is indicated by a red and black crosshatched pattern.

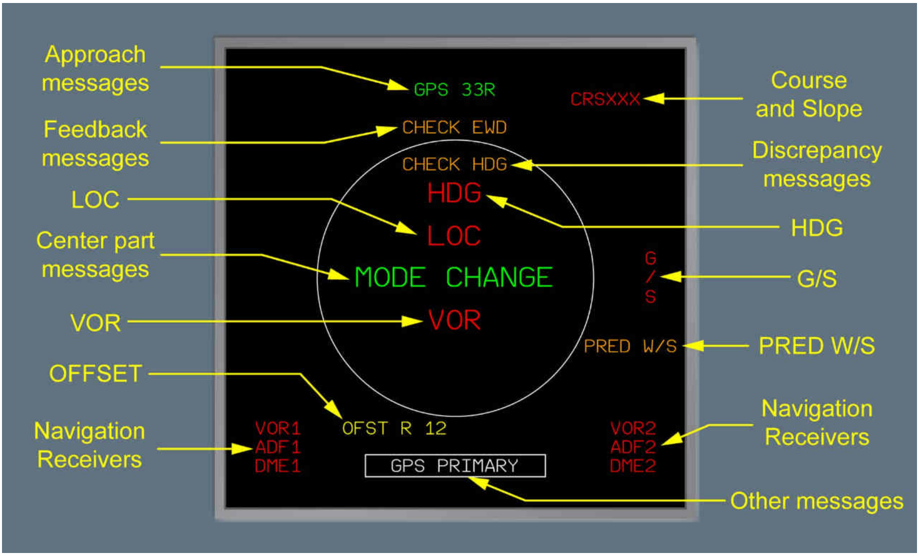
Generated when :
- There is a conflict between the terrain warning envelope, ahead of the aircraft, and the terrain data stored in the database
- The aircraft is not able to climb over the terrain with sufficient safety margin.

Note: *When an alert is generated (either caution or warning) and TERR ON ND is not selected, the terrain is automatically displayed and the ON light on the TERR ON ND pushbutton comes on.*

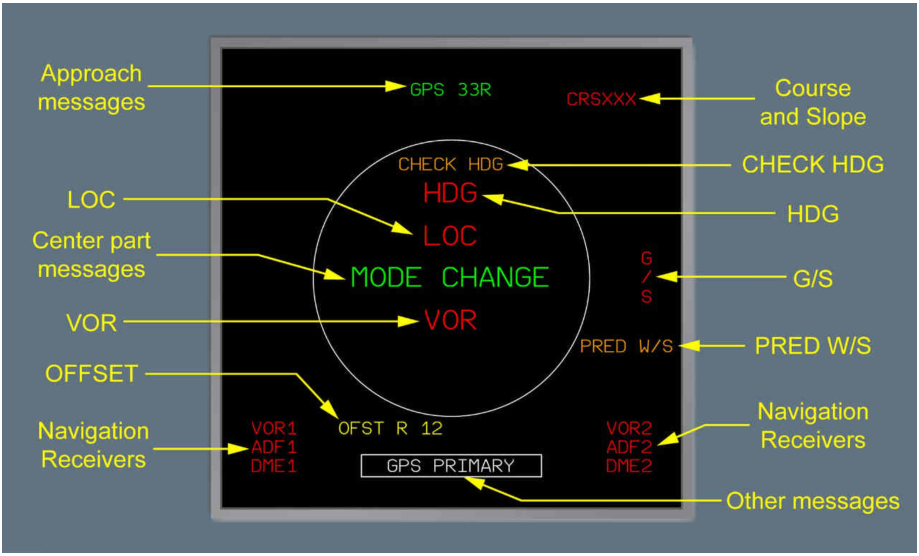
FLAGS AND MESSAGES DISPLAYED ON ND

Ident.: DSC-31-45-B-00023766.0002001 / 28 MAY 20

11 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**


Approach messages
GPS 33R
CRSXXX
Course and Slope
Feedback messages
CHECK EWD
CHECK HDG
Discrepancy messages
HDG
LOC
HDG
LOC
Center part messages
MODE CHANGE
G / S
G/S
VOR
VOR
PRED W/S
PRED W/S
OFFSET
OFST R 12
Navigation Receivers
VOR1
ADF1
DME1
VOR2
ADF2
DME2
Navigation Receivers
GPS PRIMARY
Other messages

Ident.: DSC-31-45-B-00023766.0001001 / 28 MAY 20
12 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 11531**


Approach messages
GPS 33R
CRSXXX
Course and Slope
CHECK HDG
CHECK HDG
HDG
HDG
LOC
LOC
Center part messages
MODE CHANGE
G/S
G / S
VOR
VOR
PRED W/S
PRED W/S
OFFSET
OFST R 12
Navigation Receivers
VOR1
ADF1
DME1
VOR2
ADF2
DME2
Navigation Receivers
GPS PRIMARY
Other messages

Ident.: DSC-31-45-B-00023991.0001001 / 28 MAY 20
Applicable to: ALL

APPROACH MESSAGES

This message shows the full runway name of the selected approach.

Ident.: DSC-31-45-B-00023992.0002001 / 28 MAY 20
13 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

FEEDBACK MESSAGES

Refer to DSC-31-05-60 Feedback Messages.

Ident.: DSC-31-45-B-00023981.0001001 / 28 MAY 20
Applicable to: ALL

LOC OR F-LOC (FLS ⩤)

If LOC or F-LOC (FLS ⩤) data fails, this flag flashes for 9 s, then remains steady.
If there is an inconsistency in the approach mode selection within one MMR, both LOC and F-LOC (FLS ⩤) flags flash for 9 s, then remain steady.

Ident.: DSC-31-45-B-00023979.0001001 / 28 MAY 20
Applicable to: ALL

CENTER PART MESSAGES

MODE CHANGE	Appears if there is a discrepancy between the selected mode on the EFIS control panel and the mode sent from the onside FMGC, or while the DMC is preparing a new page for display.
RANGE CHANGE	Appears if there is a discrepancy between the range selected on the EFIS control panel and the range sent from the onside FMGC. A MODE CHANGE message has priority over a RANGE CHANGE message.
MAP NOT AVAIL	Appears when one of the following occurs: • The MODE CHANGE or RANGE CHANGE message appears for more than 6 s, or • The FMGC has failed, or • The FMGC has delivered an invalid aircraft position.
W/S SET RNG 10 NM (PWS ◁)	Appears if a predictive windshear warning alert is triggered and the range is above 10 NM.
W/S SET RNG 10 NM (PWS ◁)	Appears if a predictive windshear caution alert is triggered and the range is above 10 NM.
W/S CHANGE MODE (PWS ◁)	Appears if a predictive windshear warning alert is triggered and the ND is not in ARC or ROSE mode.
W/S CHANGE MODE (PWS ◁)	Appears if a predictive windshear caution alert is triggered and the ND is not in ARC or ROSE mode.
TCAS ◁ Message	*Refer to DSC-34-SURV-60-20 TCAS Messages*

Ident.: DSC-31-45-B-00023984.0001001 / 28 MAY 20
Applicable to: ALL

VOR

In ROSE VOR mode, when the VOR bearing is not valid, this flag flashes for 9 s, then remains steady.

Ident.: DSC-31-45-B-00023989.0001001 / 28 MAY 20
Applicable to: ALL

OFFSET MESSAGE

OFST R(L) XX	Appears when the flight crew prepares an offset or if an offset is selected. The offset value is provided in NM.

Ident.: DSC-31-45-B-00023985.0001001 / 28 MAY 20
Applicable to: ALL

NAVIGATION RECEIVERS

VOR 1	Appears if the VOR 1(2) fails. The associated flag flashes for 9 s, then remains steady.
ADF 1	Appears if the ADF 1(2) fails. The associated flag flashes for 9 s, then remains steady.
DME 1	Appears if the DME 1(2) fails. The associated flag flashes for 9 s, then remains steady.

Ident.: DSC-31-45-B-00023987.0001001 / 28 MAY 20
Applicable to: ALL

COURSE AND SLOPE INDICATION

CRSXXX	Appears if the VOR/FLS /ILS course fails.
CRS---	Appears if there is non-computed data for the VOR/FLS /ILS course.
XX	Appears if the FLS slope is invalid.
--	Appears if there is non-computed data for the FLS slope.

Ident.: DSC-31-45-B-00023966.0002001 / 28 MAY 20
14 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

DISCREPANCY MESSAGES

Refer to DSC-31-05-60 Side1/Side2 Discrepancy Messages.

Ident.: DSC-31-45-B-00023966.0001001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

CHECK HDG

Both NDs display the CHECK HDG message if there is a discrepancy of at least 5 ° between the heading values.

Note: The CHECK HDG message flashes for a few seconds on the NDs, and then it remains steady. If the flight crew selects the PLAN mode on the NDs the CHECK HDG message does not appear.

Ident.: DSC-31-45-B-00023842.0001001 / 28 MAY 20
Applicable to: ALL

HDG

If the heading data fails, the ROSE, ARC and associated symbols disappear.
A HDG flag flashes for 9 s, then remains steady.

Ident.: DSC-31-45-B-00023983.0001001 / 28 MAY 20
Applicable to: ALL

G/S OR F-G/S (FLS ◁)

If G/S or F-G/S (FLS ◁) data fails, this flag flashes for 9 s, then remains steady.
If there is an inconsistency in the approach mode selection within one MMR, both G/S and F-G/S (FLS ◁) flags flash for 9 s, then remain steady.

Ident.: DSC-31-45-B-00023990.0001001 / 28 MAY 20
Applicable to: ALL

PRED W/S (PWS ◁)

Appears if the WINDSHEAR sw (PWS ◁) on the weather radar panel is set to AUTO, and a PWS ◁ fault is detected. This message appears on ground, or when flaps and slats are extended.
It is associated with a single chime. The radar image remains available, provided that the fault does not affect the radar mode.

Ident.: DSC-31-45-B-00023988.0002001 / 04 NOV 20
Applicable to: MSN 02887

OTHER MESSAGES

↓	Overflow arrow, displayed when more than one of the other messages are present at the same time.
BACK UP NAV ◁	Appears when the MCDU backup navigation mode is activated (*Refer to DSC-22_10-30 Back Up Navigation Mode*).
CHECK NORTH REF	Appears when the NORTH REF pb selection does not match the airport MAG/TRUE bearing reference (as stored in the FMGC navigation database), either at the departure airport (during preflight), or at the destination airport (when entering the ARRIVAL area).
GPS PRIMARY ◁	Appears when GPS PRIMARY mode is available, or has been recovered. The flight crew can clear this message by pressing the CLR key on the MCDU.
GPS PRIMARY LOST ◁	Appears when GPS PRIMARY is not available, and not clearable by flight crew action.
MAP PARTLY DISPLAYED	Appears when there is an incomplete data transmission between the FMGC and the DMC, or if the DMC cannot draw the complete MAP.

NAV ACCUR UPGRAD or NAV ACCUR DOWNGRAD	Appears when there is a change in navigation accuracy.
OFFSIDE FM CONTROL	Appears when the offside FMGC supplies the onside ND.
RTA MISSED ◁	Appears when a time constraint is defined in the active flight plan and this time constraint is predicted as "missed" by the FMGC.
SELECT TRUE REF	Appears when entering the polar area, if the TRUE North reference is not selected by the flight crew (MAG/TRUE pb).
SET OFFSIDE RNG/MODE	Appears in case of an FMGC 1(2) failure when the two ND ranges or modes selected on the EFIS control panels are different
SPECIFIC VOR/D UNAVAIL	Appears when the NAVAID, that is tuned for the selected approach or departure, is not available.
TCAS ◁ Operating Messages	*Refer to DSC-34-SURV-60-20 TCAS Messages*

Ident.: DSC-31-45-B-00023988.0001001 / 04 NOV 20

15 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

OTHER MESSAGES

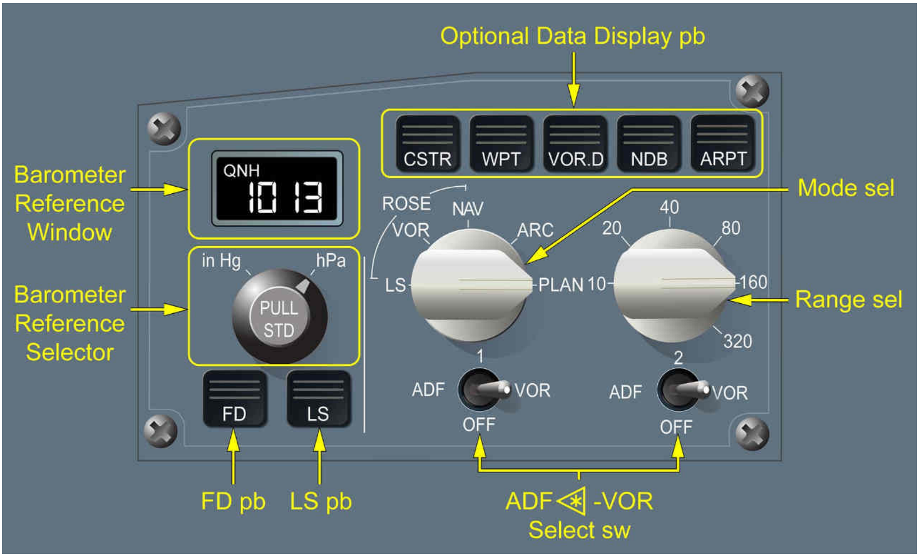
↓	Overflow arrow, displayed when more than one of the other messages are present at the same time.
BACK UP NAV ◁	Appears when the MCDU backup navigation mode is activated (*Refer to DSC-22_10-30 Back Up Navigation Mode*).
GPS PRIMARY ◁	Appears when GPS PRIMARY mode is available, or has been recovered. The flight crew can clear this message by pressing the CLR key on the MCDU.
GPS PRIMARY LOST ◁	Appears when GPS PRIMARY is not available, and not clearable by flight crew action.
MAP PARTLY DISPLAYED	Appears when there is an incomplete data transmission between the FMGC and the DMC, or if the DMC cannot draw the complete MAP.
NAV ACCUR UPGRAD or NAV ACCUR DOWNGRAD	Appears when there is a change in navigation accuracy.

OFFSIDE FM CONTROL	Appears when the offside FMGC supplies the onside ND.
RTA MISSED ◁	Appears when a time constraint is defined in the active flight plan and this time constraint is predicted as "missed" by the FMGC.
SET OFFSIDE RNG/MODE	Appears in case of an FMGC 1(2) failure when the two ND ranges or modes selected on the EFIS control panels are different
SPECIFIC VOR/D UNAVAIL	Appears when the NAVAID, that is tuned for the selected approach or departure, is not available.
TCAS ◁ Operating Messages	*Refer to DSC-34-SURV-60-20 TCAS Messages*

Intentionally left blank

EFIS CONTROL PANEL

Ident.: DSC-31-50-A-00024124.0001001 / 03 JUN 20
Applicable to: ALL


Optional Data Display pb
Barometer Reference Window
Barometer Reference Selector
QNH 1013
in Hg
hPa
PULL STD
FD
LS
CSTR
WPT
VOR.D
NDB
ARPT
Mode sel
ROSE
NAV
VOR
ARC
LS
PLAN
10
20
40
80
160
320
Range sel
1
2
ADF
VOR
OFF
ADF
VOR
OFF
FD pb
LS pb
ADF ⊲ -VOR Select sw

Ident.: DSC-31-50-A-00024125.0001001 / 10 MAY 21
1 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

BAROMETER REFERENCE WINDOW

L12

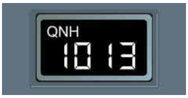
The barometric reference is set to QNH and the QNH value is 1 013 hPa. The minimum QNH value that can be selected is 745 hPa (22.00 inHg) and the maximum is 1 100 hPa (32.48 inHg).

The barometric reference is set to STD.

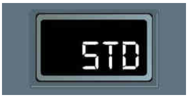
Ident.: DSC-31-50-A-00024125.0002001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

BAROMETER REFERENCE WINDOW

L12



The barometric reference is set to QNH and the QNH value is 1 013 hPa. The minimum QNH value that can be selected is 745 hPa (22.00 inHg) and the maximum is 1 050 hPa (31.00 inHg).

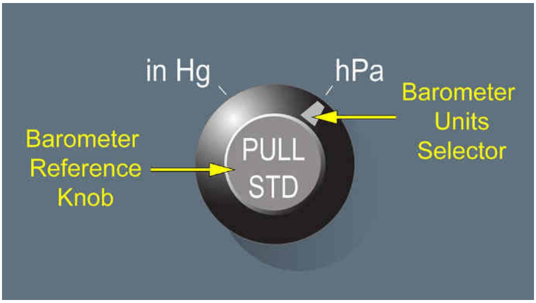


The barometric reference is set to STD.

Ident.: DSC-31-50-A-00024126.0001001 / 03 JUN 20
Applicable to: ALL

BAROMETER REFERENCE SELECTOR SCHEMATIC

The barometric reference controls have an outer selector, and an inner knob.



The flight crew uses the barometric reference selector to select the barometric unit hectoPascals (hPa) or inches of mercury (inHg).

L2 *Note: The PFDs do not display the selected barometric unit.*

Ident.: DSC-31-50-A-00024127.0002001 / 10 MAY 21
Applicable to: ALL

BAROMETER REFERENCE SELECTOR

The flight crew turns the barometric reference knob to select the QNH value.
The flight crew pulls or pushes the barometric reference knob to select the barometric reference (QNH or STD).
When the flight crew pulls the barometric reference knob, the barometric reference value is set to STD.

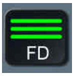
When the flight crew pushes the barometric reference knob, the barometric reference is set to QNH.

L2 The selected QNH value appears in the barometric reference window, and under the altitude scale on the PFD.

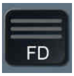
L1 At the EFIS CP power-up, the barometric reference is QNH and the QNH value is set to 1 013 hPa or 29.92 inHg, depending on the selected barometric unit.

Ident.: DSC-31-50-A-00024128.0001001 / 03 JUN 20
Applicable to: ALL

FD PB



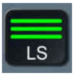
The CAPT(F/O) PFD displays the FD bars (or the FPD symbol if the TRK FPA reference is selected).



The CAPT(F/O) PFD does not display the FD bars (or the FPD symbol if the TRK FPA reference is selected).

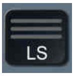
Ident.: DSC-31-50-A-00024143.0001001 / 12 MAY 22
Applicable to: ALL

LS PB



The CAPT(F/O) PFD displays the following landing system data in accordance with the approach selected on the ARRIVAL page (LS / GLS ◁ / FLS ◁ / SLS ◁): Deviation scales, deviation signals, course pointer, information.
For more information about the landing system data "*Refer to DSC-31-40 Trajectory Deviation - ILS Approach*".
If the flight crew selected an approach compatible with the FLS ◁ , the FMA displays the FLS ◁ capability, if the flight phase is descent or approach.
The FLS ◁ capability does not appear, if the NO FLS FOR THIS APPR message appeared on the MCDU.

Note: If the direct distance to the destination airport is more than 300 NM only the deviation scales appear.

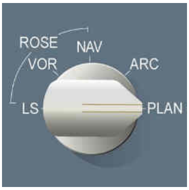


The CAPT(F/O) PFD does not display the landing system data.

Ident.: DSC-31-50-A-00024141.0001001 / 03 JUN 20
Applicable to: ALL

MODE SELECT SWITCH

L12

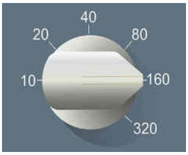


For navigation purposes, the flight crew can select one of the following display modes:

- PLAN mode, *Refer to DSC-31-45 Plan Mode*
  If the flight crew selects the PLAN mode, the ND does not display terrain, weather, or traffic information.
- ARC mode
  For more information, *Refer to DSC-31-45 ROSE NAV Mode/ARC Mode*
- ROSE-NAV mode
  For more information, *Refer to DSC-31-45 ROSE NAV Mode/ARC Mode*
- ROSE-VOR mode
  For more information, *Refer to DSC-31-45 ROSE VOR Mode*
- ROSE-LS mode
  For more information, *Refer to DSC-31-45 ROSE LS Mode*.

Ident.: DSC-31-50-A-00024131.0001001 / 03 JUN 20
Applicable to: ALL

RANGE SELECT SWITCH



The range selector enables the flight crew to select the range of the ND.

Note: *If the mode or the range data fails, the default selection is the ROSE NAV mode and 80 NM range.*

Ident.: DSC-31-50-A-00024132.0001001 / 03 JUN 20
Applicable to: ALL

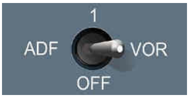
ADF1(2) ◁ - VOR1(2) SELECT SWITCHES

1
ADF
VOR
OFF

The ND does not display the ADF1(2) ◁ or VOR1(2) bearing pointers and DME distance.

1
ADF
VOR
OFF

Enables the flight crew to select ADF1(2) ◁ on the onside ND, as well as the corresponding navaid data characteristics in any mode except PLAN mode.

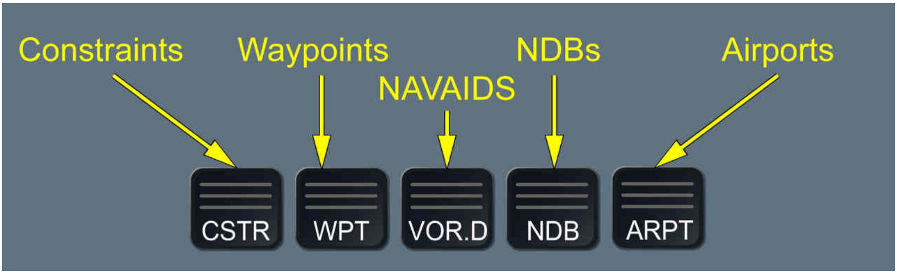


Enables the flight crew to select VOR1(2) bearing pointers and DME distance on the onside ND, as well as the corresponding navaid data characteristics in any mode except PLAN mode.

Ident.: DSC-31-50-A-00024133.0001001 / 03 JUN 20
Applicable to: ALL

OPTIONAL DATA DISPLAY PUSHBUTTON SCHEMATICS

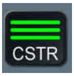
The flight crew can use the following pushbuttons to display the associated optional data in addition to the data permanently displayed in PLAN, ARC, or ROSE NAV modes. Only one option can be activated at a time.



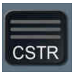
Ident.: DSC-31-50-A-00024134.0001001 / 03 JUN 20
Applicable to: ALL

OPTIONAL DATA DISPLAY PUSHBUTTON

CONSTRAINTS

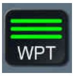


The ND displays constraints related to the waypoints.

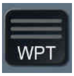


The ND does not display constraints.

WAYPOINTS

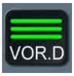


The ND displays the waypoints stored in the navigation database and the pilot stored navaids.
The flight crew can only select one display at a time (WPT, VOR-D, or NBD (ADF1(2) ⊲✳).

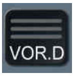


The ND does not display waypoints.

NAVAIDS

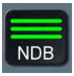


The ND displays the VORs and DMEs stored in the navigation database and the pilot stored navaids.
The flight crew can only select one display at a time (WPT, VOR-D, or NBD (ADF1(2) ◁✳).

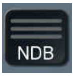


The ND does not display VORs and DMEs.

NDBS

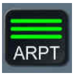


The ND displays the NDBs stored in the navigation database.
The flight crew can only select one display at a time (WPT, VOR-D, or NBD (ADF1(2) ◁✳).

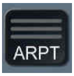


The ND does not display NDBs.

AIRPORTS



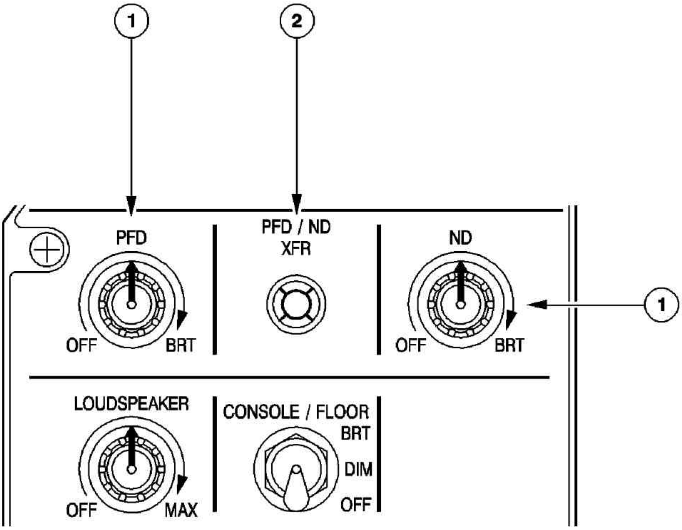
The ND displays the airports stored in the navigation database, other than the origin or destination airports.



The ND does not display airports.

OTHER EFIS CONTROLS

Ident.: DSC-31-50-00001258.0002001 / 15 FEB 11
Applicable to: ALL



(1) OFF/BRT knobs

- These knobs turn the PFD and ND display units on and off, and control their brightness.
- The display brightness adjusts automatically for changing light conditions, and is also adjusted manually.

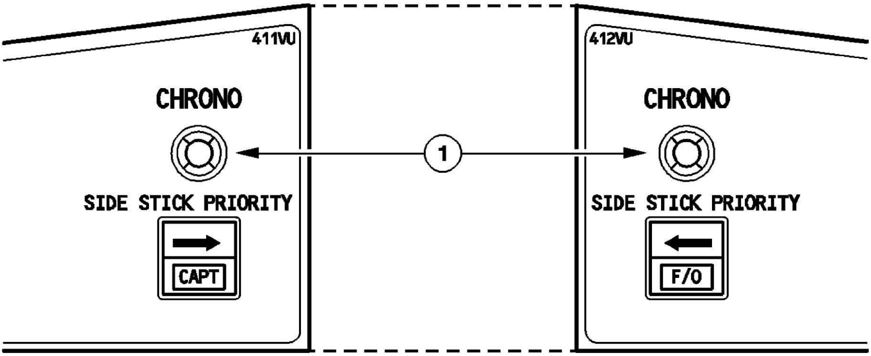
PFD Brightness Control Knob
Rotating this knob all the way counterclockwise switches off the PFD. In this case, the PFD image is automatically displayed on the NDU, but the pilot may recover the ND by means of the PFD-ND XFR pushbutton .
ND Brightness Control Knob
The outer knob controls the brightness of both the weather radar image and EGPWS terrain display.
The inner knob controls the general brightness of the ND symbols.
Rotating this knob all the way counterclockwise switches off the NDU.

(2) PFD/ND Pushbutton
Pushing this button interchanges the PFD and the ND.

If the PFDU fails, the PFD automatically transfers to the NDU.

CHRONOMETER

Ident.: DSC-31-50-00001259.0001001 / 15 FEB 11
Applicable to: ALL


411VU
CHRONO
SIDE STICK PRIORITY
CAPT
1
412VU
CHRONO
SIDE STICK PRIORITY
F/O

(1) CHRONO Pushbutton
Pushing this button displays chronometer time on the onside ND.
Pushing it again freezes the displayed value.
Pushing it a third time resets the chronometer, and the chronometer time disappears from the display.

GENERAL

Ident.: DSC-31-55-10-00001260.0001001 / 21 MAR 16
Applicable to: MSN 01459

A fully independent clock is on the right side of the control panel.
It sends time to the centralized fault data interface unit, the flight data interface unit, and the flight management and guidance computer.
The clock has two electrical supplies, one of which is a direct connection to the aircraft battery hot bus.
The clock also has an internal battery that allows it to memorize time (for up to 50 h) if the aircraft battery is removed.

The clock performs four functions :
- It displays “UTC” (GMT) time in hours and minutes on the center counter.
- It displays elapsed time (ET) (from engine startup) in hours and minutes on the lower counter.
- It drives the chronometer (CHR), which measures a time interval (from the pushing of the CHRONO button) in minutes and seconds and displays it with a needle and in numbers on the upper counter.
- It can replace the UTC with the date.

GENERAL

Ident.: DSC-31-55-10-00001260.0002001 / 21 MAR 16
1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

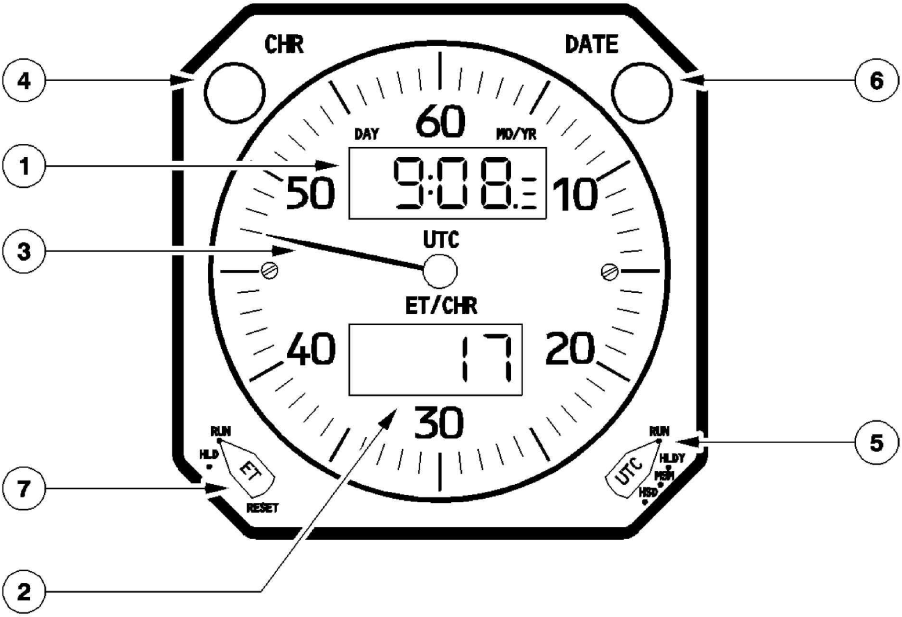
A fully independent clock is on the right side of the control panel.
It sends time to the centralized fault data interface unit, the flight data interface unit, and the flight management and guidance computer.
The clock has two electrical supplies, one of which is a direct connection to the aircraft battery hot bus.

The clock performs four functions :
- It displays “UTC” (GMT) time in hours, minutes and seconds on the center counter.
- It displays elapsed time (ET) (from engine startup) in hours and minutes on the lower counter.
- It drives the chronometer (CHR), which measures a time interval (from the pushing of the CHRONO button) in minutes and seconds.
- It can replace the UTC with the date.

Intentionally left blank

GENERAL

Ident.: DSC-31-55-20-00001261.0002001 / 21 MAR 16
Applicable to: MSN 01459


CHR
DATE
4
6
1
3
7
2
5
DAY
60
MO/YR
50
9:08.
10
UTC
ET/CHR
40
17
20
30
RUN
HLD
ET
RESET
RUN
HLDY
MSM
HSD
UTC

(1) UTC (GMT) counter
This counter displays the present time in 24 h format.

A trend indicator, which divides a minute into four 15 s periods, uses three horizontal marks :

From 0 to 14 s	No mark is lighted.
From 15 to 29 s	The highest mark is lighted.
From 30 to 44 s	The two highest marks are lighted.
From 45 to 59 s	All the three marks are lighted.

(2) Elapsed Time (ET) and chrono counter (CHR)
This counter registers the elapsed time up to 99 h and 59 min.

(3) CHR needle
This needle ticks off chronograph seconds.
It is controlled by the CHR pushbutton.

(4) CHR pushbutton

First push : starts the second needle and the ET/CHR minute display.

Second push : stops the second needle and sums up the minutes in the ET/CHR display.

Third push : resets the second needle to zero and erases the ET/CHR display.

(5) UTC (GMT) selector

«RUN»	**STARTS THE UTCCOUNTER**	
	TIME MODE	**DATE MODE**[(1)]
«HLDY»	STOPS UTC COUNTER	TO ADVANCE YEARS FOR SETTING
«MSM»	TO ADVANCE MINUTES FOR SETTING	TO ADVANCE MONTHS FOR SETTING
«HSD»	TO ADVANCE HOURS FOR SETTING	TO ADVANCE DAYS FOR SETTING

(1) *Press the date pushbutton to switch the clock to date mode.*

(6) DATE pushbutton

First push : sets the clock to date mode. The date (day, month, year) replaces the UTC time display.

Second push : sets the clock to time mode. The date display disappears.

Note: in order to select the date mode, the UTC selector must be set to RUN.

(7) ET (elapsed time) selector

"RUN" position : starts the ET counter.

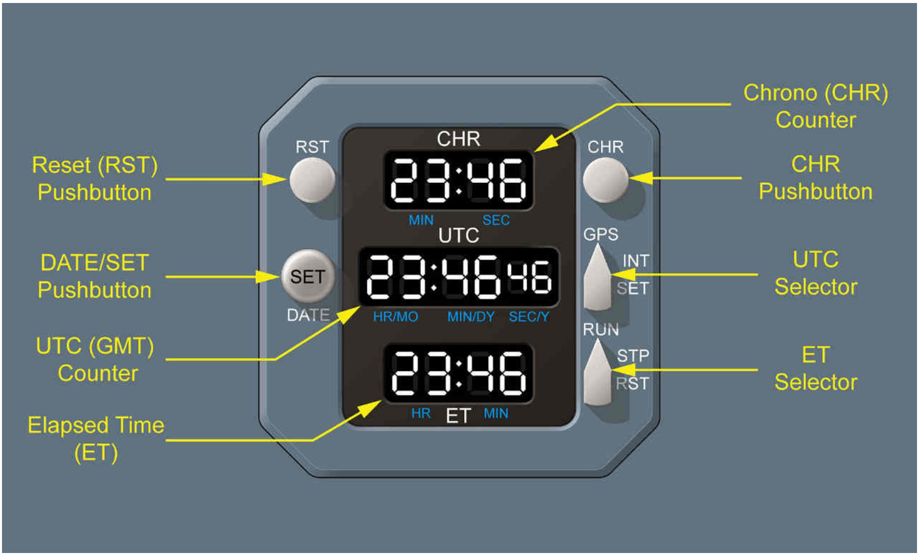
"HLD" position : stops the counter, keeps the display at its last indication.

"RESET" position : resets counter to zero (transient position).

GENERAL

Ident.: DSC-31-55-20-00001261.0003001 / 04 JUN 19

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597


Reset (RST) Pushbutton
DATE/SET Pushbutton
UTC (GMT) Counter
Elapsed Time (ET)
Chrono (CHR) Counter
CHR Pushbutton
UTC Selector
ET Selector
RST
CHR
23:46
MIN
SEC
CHR
UTC
GPS
SET
DATE
23:46 46
INT
SET
HR/MO
MIN/DY
SEC/Y
RUN
STP
RST
23:46
HR
ET
MIN

UTC (GMT) COUNTER

This counter displays the present time in 24 h format from 0 to 23 h 59 min 59 s.

ELAPSED TIME (ET)

This counter registers the elapsed time up to 99 h and 59 min.

CHRONO (CHR) COUNTER

This counter registers elapsed time from 0 to 99 min 59 s. It is controlled by the CHR pushbutton.

CHR PUSHBUTTON

First push	:	starts the CHR counter
Second push	:	stops the CHR counter, keeps the display at its last indication.

RESET (RST) PUSHBUTTON

When pressed, the CHR counter restarts from 0 provided that the chrono has been first stopped with the CHR pushbutton.

ET SELECTOR

"RUN"	:	the ET counter starts
"STP"	:	the ET counter stops counting
spring loaded "RST"	:	the ET counter is blanked. The selector returns to its STP position when the selector is released.

Note: *A cumulative elapsed time can be realized by alternatively setting this switch in "RUN" and "STP" position.*

DATE/SET PUSHBUTTON

First push	:	sets the clock to date mode. The UTC time display is replaced by the date (day month year).
Second push	:	sets the clock to time mode. The date display disappears.

Note: *in order to select the date mode, the UTC selector must be set on "GPS" or "INT" position.*

UTC SELECTOR

"GPS" : Time (or date, if selected) is displayed, and this data is synchronized on GPS information.

Note:
- *If the signal between the GPS and the clock is not detected, dashes are displayed. Only the "INT" and "SET" positions are then available.*
- *If the signal is detected, but GPS data is invalid, the clock automatically runs on its internal time.*
- *The clock will automatically resynchronize on the GPS information, as soon as the GPS data becomes available.*

"INT" : Internal time (or date, if selected) is displayed.

Note:
- *The clock's internal time is initialized with the latest valid GPS information.*
- *If there is no valid GPS information at power up, the internal time will be 00:00:00, until the clock is initialized.*

"SET" : Allows the internal time and date to be initialized.

OPERATION IN INTERNAL MODE

Ident.: DSC-31-55-20-00007126.0001001 / 21 MAR 17

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

DATE INITIALIZATION

Set the UTC selector on “SET”. The minute digits flash, and the seconds’ digits are blank.
To increase data, turn the DATE/SET button clockwise.
To decrease data, turn the DATE/SET button counterclockwise.

- First, push on DATE/SET : To set the hour.
- Second, push on DATE/SET : To set the year.
- Third, push on DATE/SET : To set the month.
- Fourth, push on DATE/SET : To set the day.

Switch the UTC selector to the “INT” position, and the clock starts with the seconds’ digits at 00.

Note: *This process must be completed in less than one minute. Otherwise, it will be necessary to reset the CFDS in order to synchronize the lower ECAM time display with the cockpit clock display. Resetting the CFDS is a maintenance operation.*

PRECAUTION IN CASE OF ATC DATALINK COMMUNICATION

If the clock is set to internal (INT) mode and the flight crew manually sets the time and date, the clock does not comply with the time precision required for ATC datalink communication (+/-1 s UTC). This may lead to the rejection of messages, or to the acceptance of obsolete messages:

- The CPDLC function will send CPDLC messages with an erroneous date/time
- The CPDLC function will accept obsolete uplink messages and may reject uplink messages with a correct date/time
- The uplink messages for oceanic and departure clearance will be displayed in the Datalink Control and Display Unit (DCDU) with an erroneous time
- The ADS-C function will continue to operate, but in a degraded mode.

To comply with the time precision requirement for ATC datalink communication, the flight crew must either:

- Use the clock in GPS mode, or
- Use the clock in INT mode and synchronize the clock with the GPS at least one time per day. This synchronization ensures that the UTC time drift is below +/- 1 s UTC.

GPS SYNCHRONIZATION IN INTERNAL MODE

When the clock is set to INT mode, the UTC time is only based on the internal clock and is not synchronized with the GPS. To reset the drift that results from the UTC internal time, the flight crew must perform the following actions:

- Set the UTC selector of the clock to the GPS mode and keep this setting during at least 10 seconds
- Then reset the UTC selector of the clock to INT mode.

These actions result in a resynchronization of the internal clock with the GPS.

UPDATING DAY, MONTH AND YEAR

Ident.: DSC-31-55-20-00007135.0001001 / 21 MAR 16
Applicable to: MSN 01459

Press the DATE pushbutton to set the date mode. The day, month and year appear.

- To advance the day, turn and maintain the UTC selector at the MSD position until the proper day appears.
- For month and year proceed in the same way, using MSM to advance month or HLDY to advance years.

Note: *To return to normal functioning, switch the UTCselector to RUN position.*

UPDATING OF HOUR AND MINUTE

Ident.: DSC-31-55-20-00007136.0001001 / 21 MAR 16
Applicable to: MSN 01459

Use the same procedure in time mode for changing hour and minute. To advance the minute turn the UTC selector to MSM and to HSD for the hour.

Note: *To return to normal functioning, switch the UTC selector to RUN position.*

DESCRIPTION

Ident.: DSC-31-60-10-00001262.0003001 / 05 NOV 20

Applicable to: MSN 10949-11597

The FDR function, which records the mandatory parameters, is integrated in two identical CVDR units.

The two CVDRs are combined CVR-FDR crashproof equipment gathering the following functions:
- Cockpit Voice Recorder function
- Flight Data Recorder function
- Data Link Recorder function
- Underwater Locator Beacon.

The CVDRs can store the last 25 h data.

The CVDRs are connected to the FDIMU, installed in the avionic bay, which provides the recorders with:
- Flight parameters
- Data from the accelerometers (acceleration of the aircraft along each of the three axes)
- Time information.

The recording system is automatically active:
- On ground during the first 5 min after the aircraft electrical network is energized
- On ground with one engine running
- In flight.

The recording system stops automatically 5 min after the last engine shutdown.
On ground, personnel can start the recording system manually by pressing the GND CTL pb-sw.
The QAR ◁ is an operational recorder that stores the same data as the FDR function with an easier access for maintenance.

DESCRIPTION

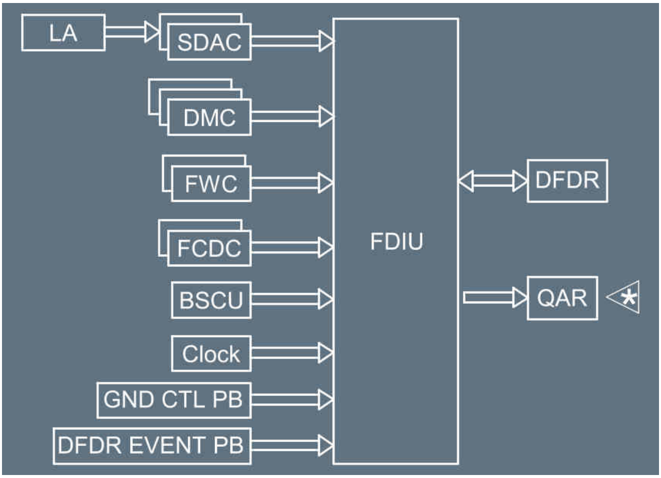
Ident.: DSC-31-60-10-00001262.0001001 / 09 OCT 12

Applicable to: MSN 01143-01518, 01593-01628

The Flight Data Recording System, which records the mandatory parameters, consists of the following components:
- A Flight Data Interface Unit (FDIU)
- A Digital Flight Data Recorder (DFDR)
- A three-axis Linear Accelerometer (LA)

The FDIU collects and processes parameters from the SDACs, DMCs, FWCs, FCDCs, BSCU, the DFDR event pushbutton, the GND CTL pushbutton and the Clock.
It stores the mandatory flight parameters in the DFDR.

The DFDR can store the last 25 h data, at least. It stores this data on a fireproof and shockproof device. An underwater locator beacon is attached to the DFDR.
The linear accelerometer measures the acceleration of the aircraft along each of the three axes.
The QAR is an operational recorder that stores the same data as the DFDR. However the QAR is more accessible for the maintenance crew.



The recording system is automatically active:
- On the ground, during the first five minutes after the aircraft electric network is energized.
- On the ground, after the first engine start.
- In flight (whether the engines are running or not).

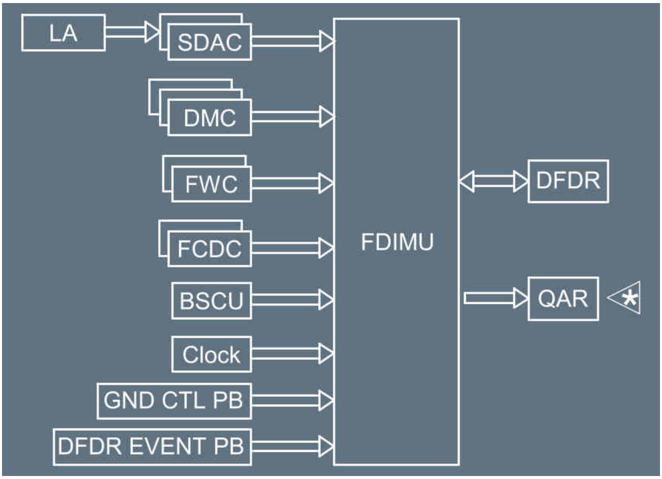
On the ground, the recording system stops automatically five minutes after the second engine shuts down.
On the ground, the crew can start the recording system manually by pressing the GND CTL pushbutton.

DESCRIPTION

Ident.: DSC-31-60-10-00001262.0002001 / 09 OCT 12
Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

The Flight Data Recording System, which records the mandatory parameters, consists of the following components:
- A Flight Data Interface and Management Unit (FDIMU)
- A Digital Flight Data Recorder (DFDR)
- A three-axis Linear Accelerometer (LA)

The FDIMU collects and processes parameters from the SDACs, DMCs, FWCs, FCDCs, BSCU, the DFDR event pushbutton, the GND CTL pushbutton and the Clock.
It stores the mandatory flight parameters in the DFDR.
The DFDR can store the last 25 h data, at least. It stores this data on a fireproof and shockproof device. An underwater locator beacon is attached to the DFDR.
The linear accelerometer measures the acceleration of the aircraft along each of the three axes.
The QAR is an operational recorder that stores the same data as the DFDR. However the QAR is more accessible for the maintenance crew.



The recording system is automatically active:
- On the ground, during the first five minutes after the aircraft electric network is energized.
- On the ground, after the first engine start.
- In flight (whether the engines are running or not).

On the ground, the recording system stops automatically five minutes after the second engine shuts down.
On the ground, the crew can start the recording system manually by pressing the GND CTL pushbutton.

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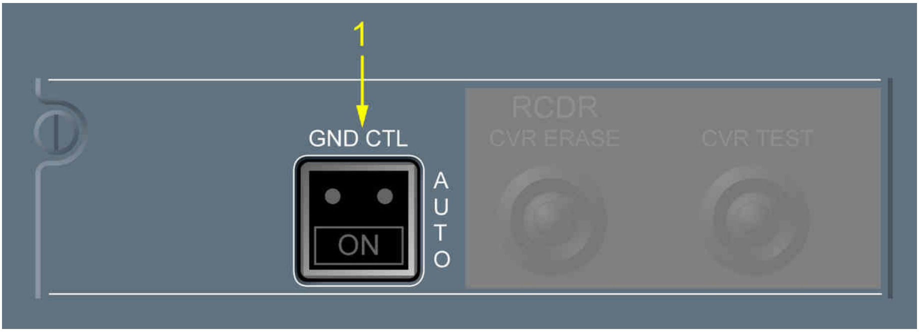
OVERHEAD PANEL

Ident.: DSC-31-60-20-00001263.0001001 / 04 SEP 18
Applicable to: ALL



(1) GND CTL pb-sw

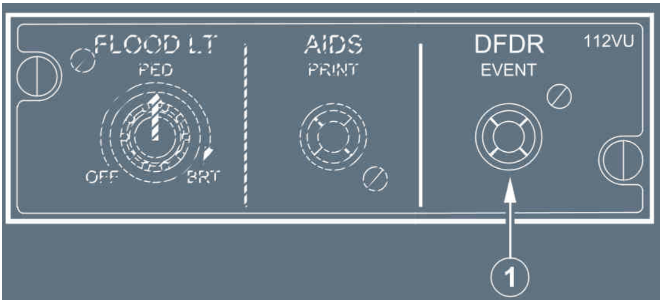
The CVR, DFDR and QAR ◁ automatically operate (AUTO), according to the logic (*Refer to DSC-31-60-10 Description*).

The flight crew manually starts the CVR, DFDR, and QAR ◁ .
After engine start, the ON light goes off and the recorders automatically operate.

Note: *The GND CTL pb-sw may revert to AUTO (active or inactive, according to the logic) during an electrical transient.*

PEDESTAL

Ident.: DSC-31-60-20-00001264.0001001 / 22 MAY 12
Applicable to: ALL

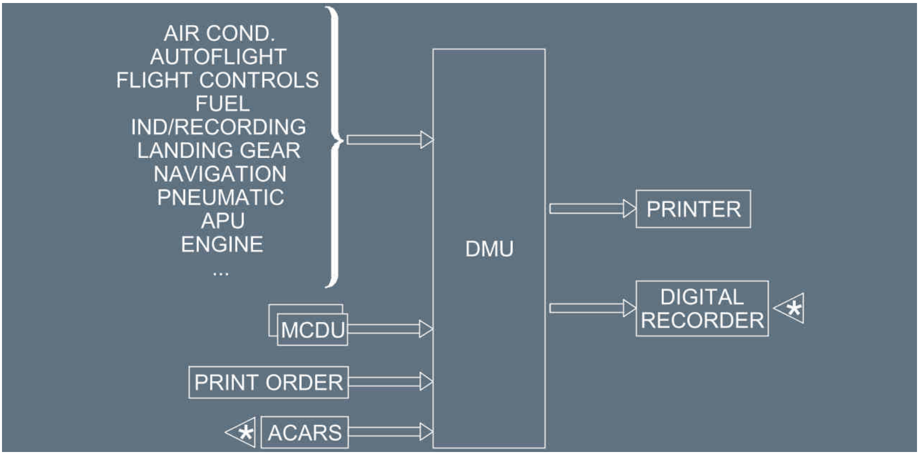

FLOOD LT
PED
OFF
BRT
AIDS
PRINT
DFDR
EVENT
112VU
1

(1) DFDR EVENT pushbutton
Pressing this button (briefly) sets an event mark on the Flight Data records.

DESCRIPTION

Ident.: DSC-31-60-30-00005369.0001001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628

The AIDS is used to monitor various aircraft system parameters in order to make maintenance easier and to allow formulating operational recommendations.
The AIDS can generate system reports. The Airbus Standard Reports are preprogrammed reports available at aircraft delivery. The operator can create its own reports.
The AIDS consists of a Data Managements Unit (DMU) connected as shown below.
The system may be programmed using the MCDUs. The crew can select any report to be displayed on the MCDUs.
The Printer prints the flight phase programmed reports or any report selected on the MCDU.
This printing may be automatic or in response to the AIDS PRINT pushbutton.
The AIDS may send automatic reports via ACARS ◁ .
An optional Digital Recorder may be installed to extend the recording capacity.

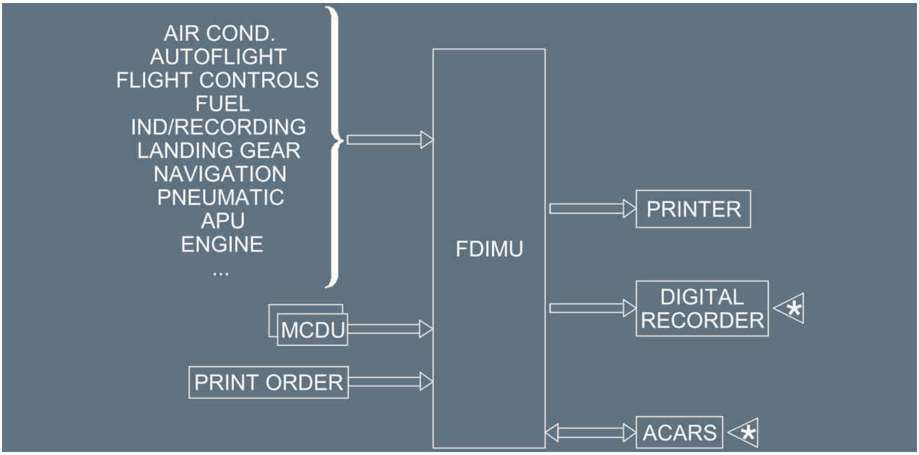


DESCRIPTION

Ident.: DSC-31-60-30-00005369.0002001 / 09 OCT 12
1 **Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

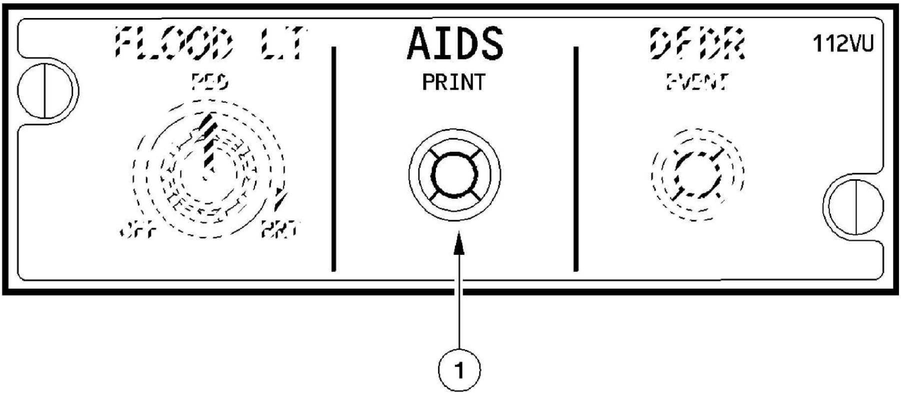
The AIDS is used to monitor various aircraft system parameters in order to make maintenance easier and to allow formulating operational recommendations.
The AIDS can generate system reports. The Airbus Standard Reports are preprogrammed reports available at aircraft delivery. The operator can create its own reports.

The AIDS uses the Flight Data Interface and Management Unit (FDIMU) to acquire the relevant aircraft system parameters. The FDIMU is connected to the rest of the AIDS as shown below.
The system may be programmed using the MCDUs. The crew can select any report to be displayed on the MCDUs.
The Printer prints the flight phase programmed reports or any report selected on the MCDU.
This printing may be automatic or in response to the AIDS PRINT pushbutton.
The AIDS may send automatic reports via ACARS ◁✱ .
An optional Digital Recorder may be installed to extend the recording capacity.


AIR COND.
AUTOFLIGHT
FLIGHT CONTROLS
FUEL
IND/RECORDING
LANDING GEAR
NAVIGATION
PNEUMATIC
APU
ENGINE
...
MCDU
PRINT ORDER
FDIMU
PRINTER
DIGITAL RECORDER ◁✱
ACARS ◁✱

CONTROLS ON PEDESTAL

Ident.: DSC-31-60-30-00005370.0001001 / 20 DEC 10
Applicable to: ALL



(1) AIDS PRINT pushbutton
Pushing this pushbutton causes the immediate printing of a specific report, depending on the flight phase. The crew may then use the MCDU to select another report for immediate printing.

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AIRCRAFT SYSTEMS

LANDING GEAR

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DSC-32-10 Gears and Doors

DSC-32-10-10 Description

General....A
Main Landing Gear (MLG)....B
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Localization Title	Toc Index	ID	Reason
DSC-32-10-30 Proximity Detectors on Shock Absorbers	B	2	**Enhancement of the wording. No technical change.**
			Adding of the abbreviation tag.
			Layout modification. No technical change.
			Update of the skin temperature in order to be in line with the system logic.
DSC-32-10-30 Proximity Detectors on Shock Absorbers	B	3	**Adding of the abbreviation tag.**
			Enhancement of the wording. No technical change.
			Layout modification. No technical change.
			Update of the skin temperature in order to be in line with the system logic.
DSC-32-10-30 Proximity Detectors on Shock Absorbers	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-10-40 WHEEL SD Page	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-10-40 Memo Display	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-20-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-20-10 Architecture	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-20-20 WHEEL SD Page	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Auto Brake - System Arming	C	2	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Auto Brake - System Arming	C	3	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-32-30-10 Auto Brake - System Activation	C	4	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Auto Brake - System Activation	C	5	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
DSC-32-30-10 Braking Modes - Alternate Braking with Anti-Skid	D	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Braking Modes - Alternate Braking without Anti-Skid	D	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-32-30-10 Braking Modes - Parking Brake	D	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-10 Braking Schematic	E	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 Center Instrument Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 Auto BRK Panel	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 WHEEL SD Page	E	3	Effectivity update: The information now also applies to MSN 02321.
DSC-32-30-20 WHEEL SD Page	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 WHEEL SD Page	E	5	Effectivity update: The information no longer applies to MSN 02321.
DSC-32-30-20 Audio Indicators	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-32-30-20 AUTO BRK OFF	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

GENERAL

Ident.: DSC-32-10-10-00018598.0001001 / 21 MAR 16
Applicable to: ALL

The landing gear consists of :
- Two main landing gears that retract inboard
- One nose landing gear that retracts forward.

Doors enclose the landing gear bays. Gear and doors are electrically controlled and hydraulically operated.
The doors, which are fitted to the landing gear struts, are operated mechanically by the gear and close at the end of gear retraction.
All gear doors open while the gear is retracting or extending.
Two Landing Gear Control and Interface Units (LGCIUs) control the extension and retraction of the gear and the operation of the doors. They also supply information about the landing gear to ECAM for display, and send signals indicating whether the aircraft is in flight or on the ground to other aircraft systems.
A hand crank on the center pedestal allows the flight crew to extend the landing gear if the aircraft loses hydraulic systems or electrical power.

MAIN LANDING GEAR (MLG)

Ident.: DSC-32-10-10-00018599.0001001 / 21 MAR 16
Applicable to: ALL

Each main gear has twin wheels and an oleopneumatic shock absorber.
Each main wheel has an antiskid brake.

NOSE LANDING GEAR (NLG)

Ident.: DSC-32-10-10-00018600.0001001 / 21 MAR 16
Applicable to: ALL

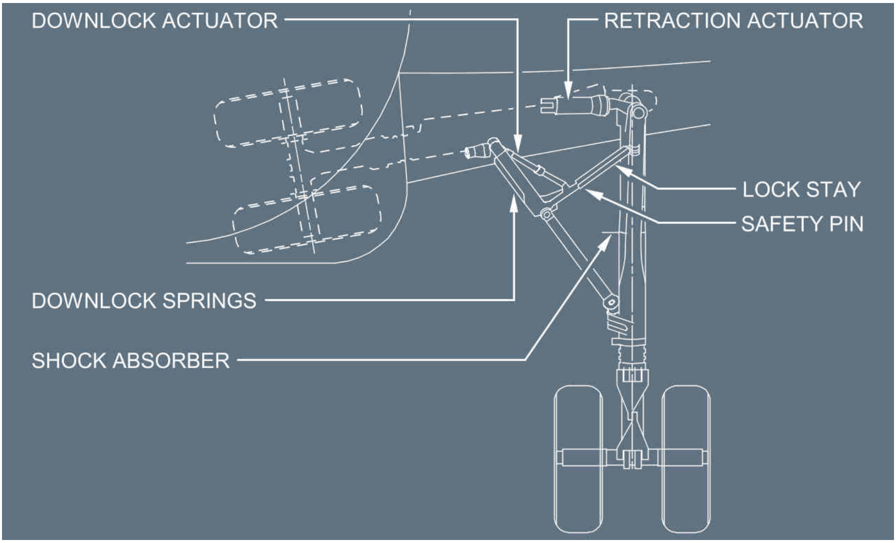
The two-wheeled nose gear has an oleopneumatic shock strut and a nose wheel steering system.

LANDING GEAR EXTENSION AND RETRACTION EQUIPMENT

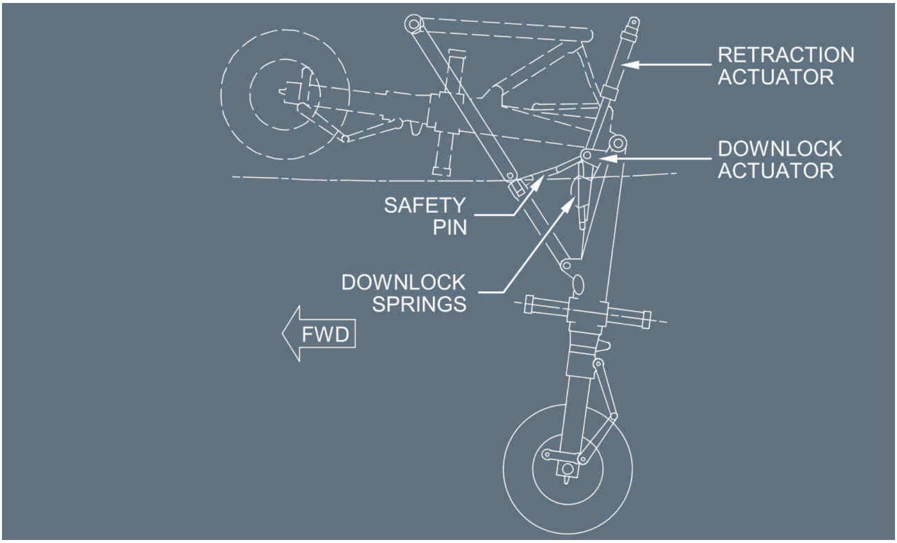
Ident.: DSC-32-10-10-00018601.0001001 / 21 MAR 16

Applicable to: ALL

MAIN LANDING GEAR


DOWNLOCK ACTUATOR
RETRACTION ACTUATOR
LOCK STAY
SAFETY PIN
DOWNLOCK SPRINGS
SHOCK ABSORBER

NOSE LANDING GEAR



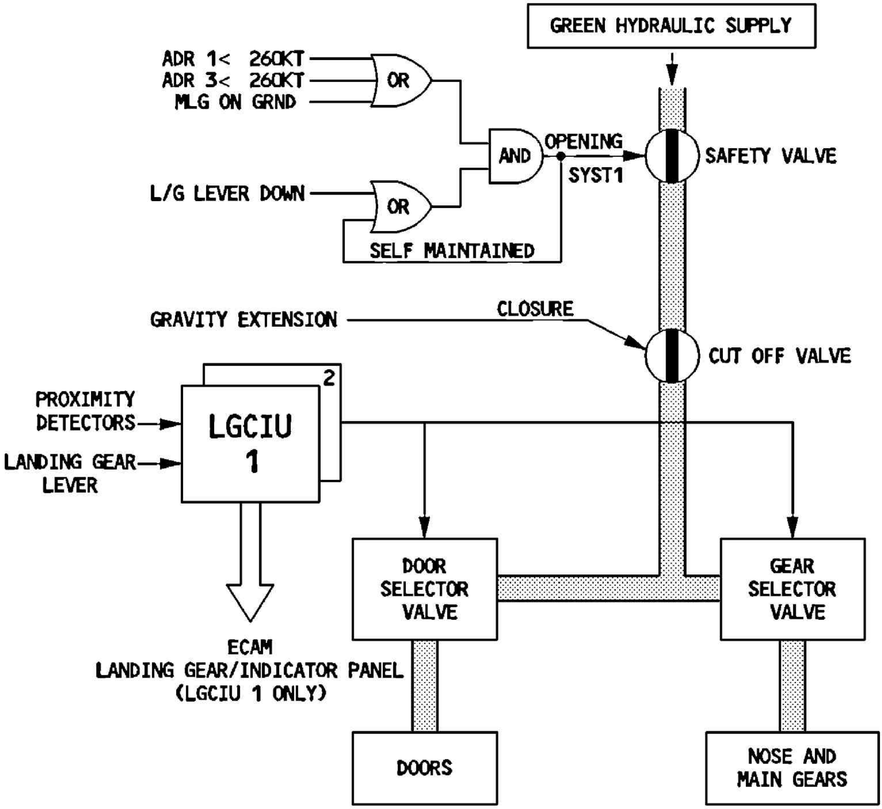
LANDING GEARS AND DOORS OPERATION

Applicable to: ALL

Ident.: DSC-32-10-10-A-00018602.0001001 / 21 MAR 16

NORMAL OPERATION

The flight crew normally operates the landing gear by means of the lever on the center instrument panel.
The LGCIUs control the sequencing of gear and doors electrically. One LGCIU controls one complete gear cycle, then switches over automatically to the other LGCIU at the completion of the retraction cycle. It also switches over in case of failure.
The green hydraulic system actuates all gear and doors. When the aircraft is flying faster than 260 kt, a safety valve automatically cuts off hydraulic supply to the landing gear system. Below 260 kt, the hydraulic supply remains cut off as long as the landing gear lever is up.


GREEN HYDRAULIC SUPPLY
ADR 1< 260KT
ADR 3< 260KT
MLG ON GRND
OR
AND
OPENING
SYST1
SAFETY VALVE
L/G LEVER DOWN
OR
SELF MAINTAINED
GRAVITY EXTENSION
CLOSURE
CUT OFF VALVE
PROXIMITY DETECTORS
LANDING GEAR LEVER
LGCIU 1
2
DOOR SELECTOR VALVE
GEAR SELECTOR VALVE
ECAM
LANDING GEAR/INDICATOR PANEL
(LGCIU 1 ONLY)
DOORS
NOSE AND MAIN GEARS

Ident.: DSC-32-10-10-A-00018603.0001001 / 21 MAR 16

LANDING GEAR GRAVITY EXTENSION

If the normal system fails to extend the landing gear hydraulically, the flight crew can use a crank to extend it mechanically.

When a crew member turns the crank, it :
- Isolates the landing gear hydraulics from the green hydraulic system
- Unlocks the landing gear doors and the main and nose main gear
- Allows gravity to drop the gear into the extended position.

Locking springs help the crew to crank the main gear into the locked condition, and aerodynamic forces assist in the locking of the nose gear.

The gear doors remain open.
The flight crew can reset the emergency extension system in flight after using it for training (if green hydraulic pressure is available).

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LANDING GEAR CONTROL INTERFACE UNIT (LGCIU)

Applicable to: ALL

Ident.: DSC-32-10-20-A-00018604.0001001 / 21 MAR 16

GENERAL

The LGCIUs receive position information from the landing gear, cargo door, and landing flap systems.

Ident.: DSC-32-10-20-A-00018605.0001001 / 21 MAR 16

LANDING GEAR INFORMATION

The LGCIUs receive landing gear position information from proximity detectors when:
- The landing gears are locked down or up, or
- The shock absorbers are compressed or extended, or
- The landing gear doors are open, or closed, or
- The bogie are aligned or not.

The LGCIUs send the landing gear position data to other aircraft systems.
In case of a LGCIU failure, the landing gear is controlled by the remaining healthy LGCIU.

Ident.: DSC-32-10-20-A-00018606.0001001 / 17 MAY 21

CARGO DOORS INFORMATION

Sensors send to the LGCIUs the position of the following components :
- Manual selector valves
- Locking shaft
- Locking handle
- Safety shaft
- Door sills ⊲ .

The LGCIUs detect electrical failures only in certain proximity switches in the cargo door system :
- Locking shaft
- Locking handle
- Safety shaft.

When an LGCIU makes such a detection, it indicates the NON LOCKED condition for that component.

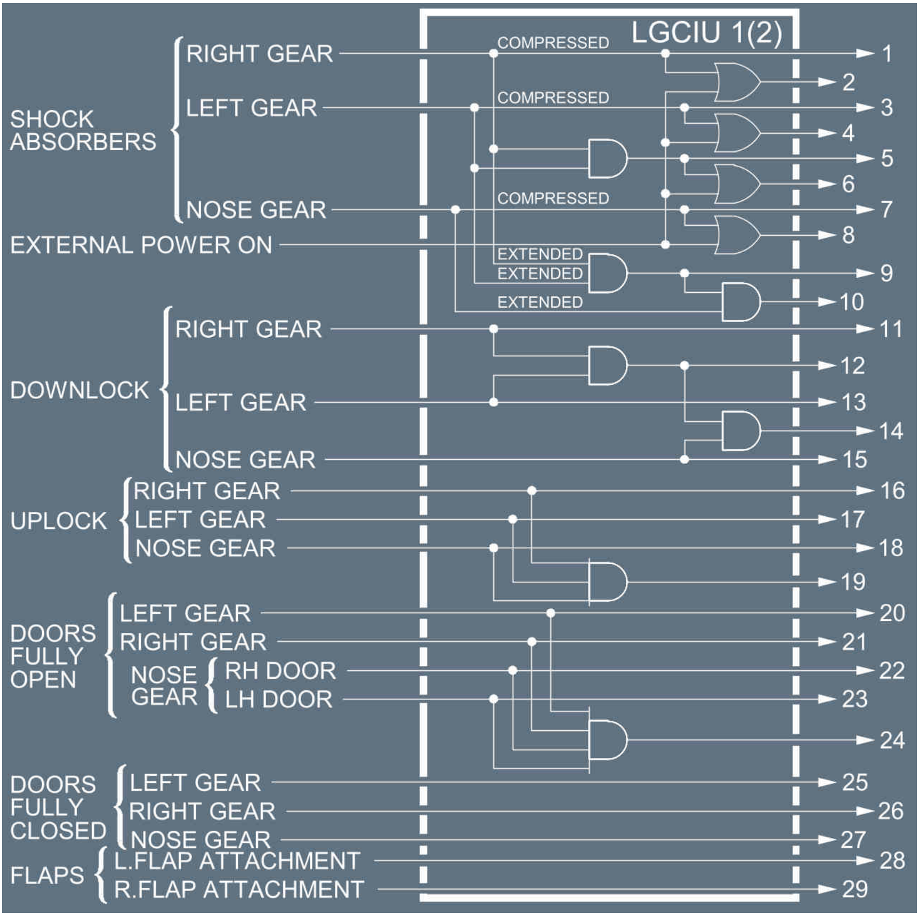
Ident.: DSC-32-10-20-A-00018607.0001001 / 21 MAR 16

LANDING FLAPS INFORMATION

The LGCIUs process the signals from four flap disconnect proximity switches, then send them to the Slat/Flap Control Computers (SFCCs).
The LGCIUs do not monitor failures in the SFCC system.

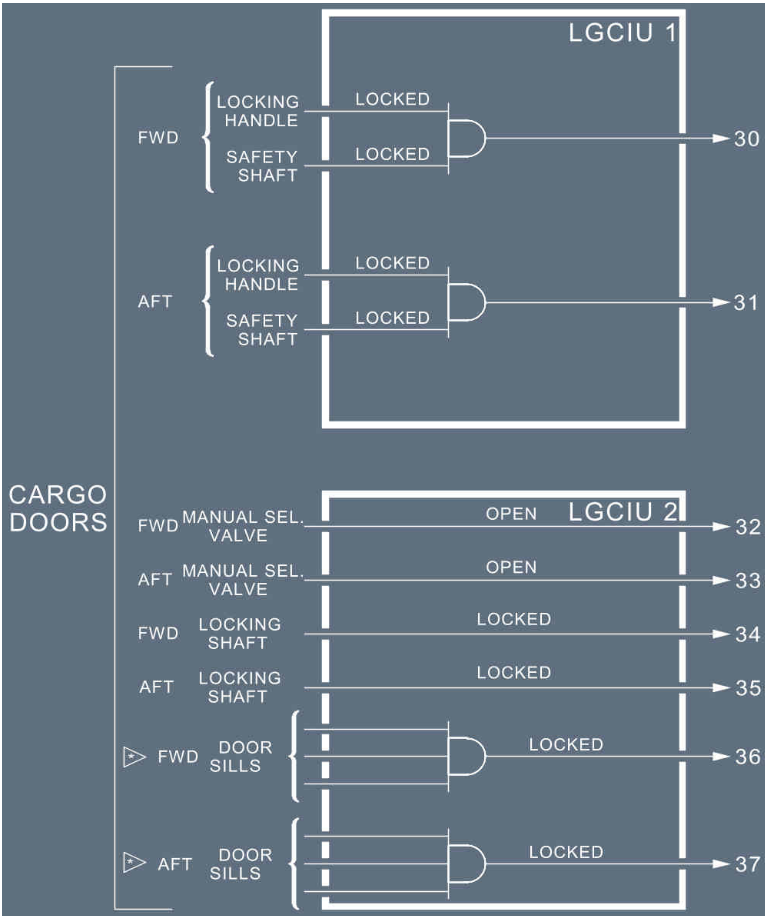
PROXIMITY DETECTOR OUTPUT SIGNALS

Ident.: DSC-32-10-20-00001278.0001001 / 22 MAY 12
Applicable to: ALL


LGCIU 1(2)
SHOCK ABSORBERS
RIGHT GEAR
LEFT GEAR
NOSE GEAR
COMPRESSED
COMPRESSED
COMPRESSED
EXTERNAL POWER ON
EXTENDED
EXTENDED
EXTENDED
DOWNLOCK
RIGHT GEAR
LEFT GEAR
NOSE GEAR
UPLOCK
RIGHT GEAR
LEFT GEAR
NOSE GEAR
DOORS FULLY OPEN
LEFT GEAR
RIGHT GEAR
NOSE GEAR
RH DOOR
LH DOOR
DOORS FULLY CLOSED
LEFT GEAR
RIGHT GEAR
NOSE GEAR
FLAPS
L.FLAP ATTACHMENT
R.FLAP ATTACHMENT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

PROXIMITY DETECTOR OUTPUT SIGNALS (CONT'D)

Ident.: DSC-32-10-20-00001279.0001001 / 21 MAR 16
Applicable to: ALL


LGCIU 1
CARGO DOORS
FWD
LOCKING HANDLE
LOCKED
SAFETY SHAFT
LOCKED
30
AFT
LOCKING HANDLE
LOCKED
SAFETY SHAFT
LOCKED
31
LGCIU 2
FWD
MANUAL SEL. VALVE
OPEN
32
AFT
MANUAL SEL. VALVE
OPEN
33
FWD
LOCKING SHAFT
LOCKED
34
AFT
LOCKING SHAFT
LOCKED
35
*
FWD
DOOR SILLS
LOCKED
36
*
AFT
DOOR SILLS
LOCKED
37

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GENERAL

Ident.: DSC-32-10-30-00001285.0001001 / 10 DEC 09
Applicable to: ALL

The following tables present the operational effects of the proximity detectors on aircraft systems.
How to read the tables :

SYSTEM	LGCIU 1	LGCIU 2	A/C IN FLT	A/C ON GROUND
SERVICE INTERPHONE	**6**	**6**	....	....
SFCC 1(2)	**5**	**(5)**	....	....

The above lines mean that the service interphone receives the output n° 6 from both LGCIUs, while SFCC 1 receive the output 5 from LGCIU 1 and SFCC 2 the output 5 from LGCIU 2.
The two additional columns give the system functioning when the aircraft is in flight and on the ground.

PROXIMITY DETECTORS ON SHOCK ABSORBERS

Ident.: DSC-32-10-30-00018608.0001001 / 02 MAY 23
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-06685, 06712-06813, 06895-09324, 10949-11597**

2

	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
GENERAL	STROBE lights		**5**	On when AUTO selected	Off when AUTO selected
	LOGO lights		**5**	Off when flaps retracted	On
	AIRSTAIRS ◁✻	**3**	**1**	Control inhibited*(1)*	Control not inhibited*(2)*
	CARGO DOOR*(5)*		**5**	Normal control not available	Normal control available
	WATER FILLING		**5**	Preselect water servicing inhibited	Preselect water servicing available

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
AIR COND	AVNCS COOLING	**5**	**5**	• Skin temperature < 32 °C : The system is in closed configuration(1) • Skin temperature > 35 °C : The system is in intermediate configuration(1)	• Skin temperature < 9 °C : The system is in closed configuration(2) • Skin temperature > 12 °C : The system is in open configuration(2)
	GRND COOLING	**1** **3**	**1** **3**	Inhibited(1)	Not inhibited(2)
	FWD CARGO VENT		**5**	Extract fan stopped when ΔP > 1 PSI	Extract fan on
	CAB PRESS	**5**	**5**	Climb mode active(4)	- Prepressurization active before TO (3) - Depressurization active after LDG (3)
	PACK 1(2) TEMP CONTROL		**3** **(1)**	Pack air inlet flaps opened.	Pack air inlet flap fully closed at TO and LDG
APU	APU AUTO SHUTDOWN	**5**		In case of oil low pressure, automatic shutdown is delayed by 15.5 s	In case of oil low pressure, the automatic shutdown is delayed by: • 15.5 s if the oil temperature < -4 °C • 0.05 s if oil temperature > -4 °C
	APU SPEED CONTROL			Speed is controlled at 100 %	Speed is controlled at 99 % (100 % for ENG start or when ambient temperature is below -18 °C or above 35 °C)

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
COMMUNICATIONS	SERVICE INTERPHONE	**6**	**6**	Inhibited[(6)]	Available[(7)]
	PUBLIC ADDRESS (PA)	**1** **3**	**1** **3**	PA increased level[(6)]	PA low level[(7)]
	ADIRU and AVIONICS ground warning	**1** **3**	**1** **3**	External horn and light inhibited[(6)]	External horn and light not inhibited[(7)]
	FLT INTERPHONE	**9**		Communication with ground mechanic inhibited	Communication with ground mechanic available
	COCKPIT CALL LIGHT	**9**		Inhibited	Not inhibited
	ACARS (ACARS MU or ATSU)	**7**		Available	Available
	CVR	**1** **3** **7**	**1** **3**	Runs[(6)]	Runs : [(7)] - During the first 5 min following energization - With at least one engine running Stops : [(7)] 5 min after second engine shutdown
	CVR		**5**	• ERASE function inhibited • No low frequency signal in the loudspeakers if test performed	• ERASE function not inhibited • Low frequency signal in the loudspeakers if test performed
ELEC	DC generation	**5**		APU start on batteries only, is delayed by 45 s	No APU start delay when on batteries only
	GALLEY supply		**5**	Main galley not supplied when APU GEN only is supplying	Main galley supplied when APU GEN only is supplying
EIS	EIS	**5**		Display test inhibited when ANN LT TEST is selected	Display test not inhibited
FIRE	APU	**5**		No APU fire automatic extinguishing	Automatic extinguishing not inhibited

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
FLT CTL	SFCC 1(2)	**5**	**(5)**	• For SFCC 1(2): Slats alpha/speed lock function active • For SFCC (2): No flaps movement inhibition if the cargo door is opened	• For SFCC 1(2): Slats alpha/speed lock function active if speed > 60 kt • For SFCC (2): Flaps movement inhibition if cargo door is opened
FLT INST	• DFDR • QAR	**1** **3** **7**	**1** **3**	Runs(6)	Runs: (7) • During the first 5 min following energization • With one engine running Stops: (7) 5 min after second engine shut down
FUEL	FQI	**5**		FQI uses flight attitude correction due to wing bending	FQI uses ground attitude correction

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
HYD	BLUE and GREEN pumps	**1** **3**		Blue or green pump "FAULT" light not inhibited when related pump is stopped*(6)*	Blue or green pump "FAULT" light inhibited when related pump is stopped*(7)*
	BLUE pump	**7**		Runs when electrical power is available	Runs when at least one engine is running
	BLUE and YELLOW pumps		**1** **3**	Blue or yellow pump "FAULT" light not inhibited when related pump is stopped*(6)*	Blue or yellow pump "FAULT" light inhibited when related pump is stopped*(8)*
	PTU		**7**	PTU runs if green/yellow different pressure > 500 PSI	PTU runs if green/yellow different pressure > 500 PSI and • Both MASTER LEVERS are at OFF or • Both MASTER LEVERS are at ON or • Nose wheel steering is not in towing position with parking brake released. PTU is inhibited during the use of the cargo door hand pump and for 40 s after its use.
ICE RAIN PROT	CAPT, (F/O), ((STBY)) probes and CAPT, (F/O) windows heating	**4,** **(2)** **((8))**	**4,** **(2)** **((8))**	• CAPT, (F/O), ((STBY)) pitots and CAPT, (F/O) windows : high heating level applied • All other probes and windows are heated*(6)*	• With engines stopped: no heating*(8)* • With at least one engine running: CAPT, (F/O), ((STBY)) pitots and CAPT, (F/O) windows are heated at low level*(8)*
	WING ANTI ICE	**3**	**1**	Wing anti ice valves open when the WING ANTI ICE pb is at ON*(6)*	Wing anti ice valves open for 30 s when the WING ANTI ICE pb is at ON*(8)*
	RAIN REPELLENT	**1** **3**	**1** **3**	Not inhibited*(6)*	Inhibited if engines are stopped*(7)*
	DRAIN MAST*(10)*		**9**	High heating level is applied	Low heating level is applied

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
LANDING GEAR	L/G SAFETY VALVE	**6**		Safety valve closes if aircraft speed > 260 kt	Safety valve opened
	L/G control	**10**	**10**	Retraction not inhibited(9)	Retraction inhibited(9)
	TIRE PRESS ◁		**5**	WHEEL TYRE LO PR threshold set to its flight level	WHEEL TYRE LO PR threshold set to its ground level
NAVIGATION	STANDBY ALTIMETER	**5**		VIBRATION function active	VIBRATION function inhibited
	ATC 1(2)	**3**	**(1)**	ATC 1(2) available in AUTO mode	ATC 1(2) inhibited in AUTO mode
	ADIRU 1(10)	**7**		No external horn when ADIRU supplied from batteries only	External horn not inhibited

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
POWER PLANT	FADEC 1(2)	**1** **3** **8**	**(1)** **(3)** **(8)**	On ENG 1(2): *(6)* • Reverse inhibited • No automatic start abort • FADEC always supplied • FLEX not available • If installed, BUMP not selectable	On ENG 1(2): *(8)* • Reverse available • Automatic start abort available • 5 min after eng-shut down FADEC 1(2) no more supplied • FLEX available • If installed, BUMP selectable
		1 **3** **8**	**(1)** **(3)** **(8)**	Modulated idle and approach idle are available*(6)*	Modulated idle only available*(7)*

(1) *When either LGCIU indicates flight.*

(2) *When both LGCIU indicate ground.*

(3) *When either LGCIU indicates ground.*

(4) *When both LGCIU indicate flight.*

(5) *Valid from MSN 44.*

(6) *When either output indicates flight.*

(7) *When all outputs indicate ground.*

(8) *When both outputs indicate ground.*

(9) *One valid output is sufficient.*

(10) *Valid from MSN 22.*

PROXIMITY DETECTORS ON SHOCK ABSORBERS

Ident.: DSC-32-10-30-00018608.0003001 / 02 MAY 23
Applicable to: MSN 02321, 06689, 06871-06876

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
GENERAL	STROBE lights		**5**	On when AUTO selected	Off when AUTO selected
	LOGO lights		**5**	Off when flaps retracted	On
	AIRSTAIRS ◁	**3**	**1**	Control inhibited(1)	Control not inhibited(2)
	CARGO DOOR(5)		**5**	Normal control not available	Normal control available
	WATER FILLING		**5**	Preselect water servicing inhibited	Preselect water servicing available
AIR COND	AVNCS COOLING	**5**	**5**	• Skin temperature < 32 °C : The system is in closed configuration(1) • Skin temperature > 35 °C : The system is in intermediate configuration (1)	• Skin temperature < 9 °C : The system is in closed configuration(2) • Skin temperature > 12 °C : The system is in open configuration(2)
	GRND COOLING ◁	**1** **3**	**1** **3**	Inhibited(1)	Not inhibited(2)
	FWD CARGO VENT		**5**	Extract fan stopped when ΔP > 1 PSI	Extract fan on
	CAB PRESS	**5**	**5**	Climb mode active(4)	- Prepressurization active before TO (3) - Depressurization active after LDG (3)
	PACK 1(2) TEMP CONTROL		**3** **(1)**	Pack air inlet flaps opened	Pack air inlet flap fully closed at TO and LDG

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
APU	APU AUTO SHUTDOWN	**5**		In case of oil low press, automatic shutdown is delayed by 15.5 s	- In case of oil low pressure, the automatic shutdown is delayed by : • 15.5 s if the oil temperature < -4 °C • 0.05 s if oil temperature > -4 °C
COMMUNICATIONS	SERVICE INTERPHONE	**6**	**6**	Inhibited*(6)*	Available*(7)*
	PUBLIC ADDRESS (PA)	**1** **3**	**1** **3**	PA increased level*(6)*	PA low level*(7)*
	ADIRU and AVIONICS ground warning	**1** **3**	**1** **3**	External horn and light inhibited*(6)*	External horn and light not inhibited*(7)*
	FLT INTERPHONE	**9**		Communication with ground mechanic inhibited	Communication with ground mechanic available
	COCKPIT CALL LIGHT	**9**		Inhibited	Not inhibited
	ACARS (ACARS MU or ATSU)	**7**		Available	Available
	CVR	**1** **3** **7**	**1** **3**	Runs*(6)*	Runs: *(7)* - during the first 5 min following energization - with one engine running Stops: *(7)* 5 min after second engine shutdown
	CVR		**5**	• ERASE function inhibited • No low frequency signal in the loudspeakers if test performed	• ERASE function not inhibited • Low frequency signal in the loudspeakers if test performed

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
ELEC	DC generation	**5**		APU start on batteries only, is delayed by 45 s	No APU start delay when on batteries only
	GALLEY supply		**5**	Main galley not supplied when APU GEN only is supplying	Main galley supplied when APU GEN only is supplying
EIS	EIS	**5**		Display test inhibited when ANN LT TEST is selected	Display test not inhibited
FIRE	APU	**5**		No APU fire automatic extinguishing	Automatic extinguishing not inhibited
FLT CTL	SFCC 1(2)	**5**	**(5)**	- For SFCC 1(2): Slats alpha/speed lock function active - For SFCC (2): No flaps movement inhibition if the cargo door is opened	- For SFCC 1(2): Slats alpha/speed lock function active if speed > 60 kt - For SFCC (2): Flaps movement inhibition if cargo door is opened
FLT INST	- DFDR - QAR ◁	**1** **3** **7**	**1** **3**	Runs*(6)*	Runs: *(7)* - During the first 5 min following energization - With one engine running Stops: *(7)* 5 min after second engine shut down
FUEL	FQI	**5**		FQI uses flight attitude correction due to wing bending	FQI uses ground attitude correction

Continued on the following page

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
HYD	BLUE and GREEN pumps	**1** **3**		Blue or green pump "FAULT" light not inhibited when related pump is stopped*(6)*	Blue or green pump "FAULT" light inhibited when related pump is stopped*(7)*
	BLUE pump	**7**		Runs when electrical power is available	Runs when at least one engine is running
	BLUE and YELLOW pumps		**1** **3**	Blue or yellow pump "FAULT" light not inhibited when related pump is stopped*(6)*	Blue or yellow pump "FAULT" light inhibited when related pump is stopped*(8)*
	PTU		**7**	PTU runs if green/yellow different pressure > 500 PSI	PTU runs if green/yellow different pressure > 500 PSI and • both MASTER LEVERS are at OFF or • Both MASTER LEVERS are at ON or • Nose wheel steering is not in towing position with parking brake released. PTU is inhibited during the use of the cargo door hand pump and for 40 s after its use.
ICE RAIN PROT	CAPT, (F/O), ((STBY)) probes and CAPT, (F/O) windows heating	**4,** **(2)** **((8))**	**4,** **(2)** **((8))**	• CAPT, (F/O), ((STBY)) pitots and CAPT, (F/O) windows : high heating level applied • All other probes and windows are heated*(6)*	• With engines stopped: no heating*(8)* • With at least one engine running: • CAPT, (F/O), ((STBY)) pitots and CAPT, (F/O) windows are heated at low level*(8)*
	WING ANTI ICE	**3**	**1**	Wing anti ice valves open when the WING ANTI ICE pb is at ON*(6)*	Wing anti ice valves open for 30 s when the WING ANTI ICE pb is at ON*(8)*
	RAIN REPELLENT	**1** **3**	**1** **3**	Not inhibited*(6)*	Inhibited if engines are stopped*(7)*
	DRAIN MAST*(10)*		**9**	High heating level is applied	Low heating level is applied

Continued on the following page

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
LANDING GEAR	L/G SAFETY VALVE	**6**		Safety valve closes if aircraft speed > 260 kt	Safety valve opened
	L/G control	**10**	**10**	Retraction not inhibited(9)	Retraction inhibited(9)
	TIRE PRESS ◁		**5**	WHEEL TYRE LO PR threshold set to its flight level	WHEEL TYRE LO PR threshold set to its ground level
NAVIGATION	STANDBY ALTIMETER	**5**		VIBRATION function active	VIBRATION function inhibited
	ATC 1(2)	**3**	**(1)**	ATC 1(2) available in AUTO mode	ATC 1(2) inhibited in AUTO mode
	ADIRU 1(10)	**7**		No external horn when ADIRU supplied from batteries only	External horn not inhibited

Continued on the following page

Continued from the previous page

	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	A/C IN FLT	A/C ON GRND
POWER PLANT	FADEC 1(2)	**1** **3** **8**	**(1)** **(3)** **(8)**	On ENG 1(2): *(6)* • Reverse inhibited • No automatic start abort • FADEC always supplied • FLEX not available • If installed, BUMP not selectable	On ENG 1(2): *(8)* • Reverse available • Automatic start abort available • 5 min after eng-shut down FADEC 1(2) no more supplied • FLEX available • If installed, BUMP selectable
		1 **3** **8**	**(1)** **(3)** **(8)**	Modulated idle and approach idle are available*(6)*	Modulated idle only available *(7)*

(1) *When either LGCIU indicates flight.*

(2) *When both LGCIU indicate ground.*

(3) *When either LGCIU indicates ground.*

(4) *When both LGCIU indicate flight.*

(5) *Valid from MSN 44.*

(6) *When either output indicates flight.*

(7) *When all outputs indicate ground.*

(8) *When both outputs indicate ground.*

(9) *One valid output is sufficient.*

(10) *Valid from MSN 22.*

PROXIMITY DETECTORS ON UPLOCKS

Ident.: DSC-32-10-30-00018610.0002001 / 21 MAR 16
Applicable to: ALL

	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	L/G UPLOCKED	L/G NOT UPLOCKED
LANDING GEAR	L/G control	**19**	**19**	If UP selected :(1) L/G doors will close	If UP selected :(1) L/G doors will not close
	ECAM WHEEL page	**16** **17** **18**	**16** **17** **18**	If UP selected :(2) L/G uplocked indications	If UP selected :(2) L/G in transit indications
	L/G indicator panel	**16** **17** **18**		If UP selected :(2) no indication	If UP selected :(2) "UNLK" red indications

(1) *One valid output is sufficient.*

(2) *When all outputs indicate the same position.*

PROXIMITY DETECTORS ON DOORS

Ident.: DSC-32-10-30-00018611.0001001 / 21 MAR 16
Applicable to: ALL

	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	DOORS FULLY OPENED	DOORS CLOSED
LANDING GEAR	L/G control	**24**	**24**	L/G extension or retraction possible (1)	L/G extension or retraction inhibited (1)
	ECAM WHEEL page	**20** **21** **22** **23**	**20** **21** **22** **23**	Doors fully opened indication	Doors closed indication

(1) *One valid output is sufficient.*

PROXIMITY DETECTORS ON DOWNLOCKS

Ident.: DSC-32-10-30-00018613.0001001 / 21 MAR 16
Applicable to: ALL

	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	L/G DOWNLOCKED	L/G NOT DOWNLOCKED
GEN	TAXI/T.O lights		**15**	Lights not inhibited	Lights inhibited
COMM	SIGNS	**12**	**12**	"NO SMOKING" (1)and "EXIT" signs on when AUTO selected(2)	"NO SMOKING" (1)and EXIT" signs inhibited when AUTO selected(3)

Continued on the following page

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	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	L/G DOWNLOCKED	L/G NOT DOWNLOCKED
FLT INST	WBS ◁	**15**	**15**	Active (4)	Inhibited (5)
FMGS	FAC 1(2)	**12**	**12**	VLE indication displayed on PFD 1(2)	No VLE indication
LANDING GEAR	L/G control	**14**	**14**	If DOWN selected : (6) L/G doors will close	If DOWN selected : (6) L/G doors will not close
	ECAM WHEEL page	**11** **13** **15**	**11** **13** **15**	If DOWN selected : (7) L/G down indications	If DOWN selected : (7) L/G in transit indications
	L/G INDIC panel	**11** **13** **15**		If DOWN selected :(7) L/G down indications	If DOWN selected : (7) L/G in transit indications
	BRAKING STEERING	**15**	**15**	BSCU test operative(2)	BSCU test inhibited(3)
	BRAKE COOLING FANS ◁		**13**	Cooling available when ON selected	Cooling inhibited when ON selected
NAV	GPWS	**13**		"TOO LOW-FLAPS" or "TOO LOW TERRAIN" warning operative	"TOO LOW-GEAR" or "TOO LOW TERRAIN" warning operative

(1) *For cabin not configured for non smoking flight*

(2) *When either output indicates DOWNLOCK.*

(3) *When both outputs indicate NOT DOWNLOCK.*

(4) *When both outputs indicate DOWNLOCK.*

(5) *When either output indicates NOT DOWNLOCK.*

(6) *One valid output is sufficient.*

(7) *When all outputs indicate the same position.*

PROXIMITY DETECTORS ON CARGO DOORS

Ident.: DSC-32-10-30-00018614.0001001 / 10 MAY 22
Applicable to: ALL

LOCKING HANDLE OR SHAFT, DOOR SILLS

	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	LOCKED	UNLOCKED
CRG DOORS	ECAM DOOR PAGE	**30 (31)**		Forward (aft) door symbol appears green	Forward (aft) door symbol appears amber, associated with "CARGO" amber
	CARGO DOOR OPERATION		**34 (35)**	Forward (aft) door normal opening inhibition	Forward (aft) door normal opening possible
			36 ◁* **(37)** ◁*	Forward (aft) door normal operation possible	Forward (aft) door normal operation inhibited

MANUAL SELECTOR VALVE

	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	CLOSE	OPEN
CRG DOORS	CARGO DOOR OPERATION		**32 (33)**	Forward (aft) door normal opening inhibition	Forward (aft) door normal opening possible

PROXIMITY DETECTORS ON FLAPS ATTACHMENTS

Ident.: DSC-32-10-30-00001291.0001001 / 22 MAR 16
Applicable to: ALL

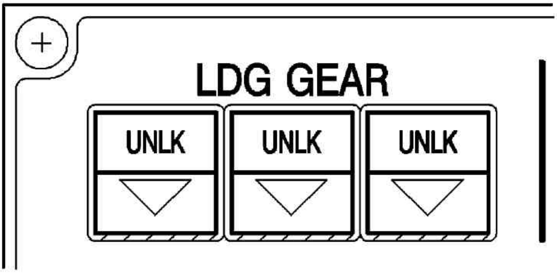
	SYSTEM	LGCIU 1 OUTPUT	LGCIU 2 OUTPUT	FLAP ATTACHMENT	FLAP ATTACHMENT FAILURE
FLT CTL	SFCC	**28 (29)**	**28 (29)**	L(R) FLAPS normal operation (1)	"FLAPS LOCKED" warning (2)

(1) *When at least one SFCC detects normal operation*

(2) *When both SFCCs detect attachment failure*

LANDING GEAR INDICATOR PANEL

Ident.: DSC-32-10-40-00018615.0001001 / 21 MAR 16
Applicable to: ALL



This panel is connected to LGCIU1, which receives signals from proximity detectors.

▿ light:	comes on green if the gear is locked down.
UNLK: light	comes on red if the gear is not locked in the selected position.

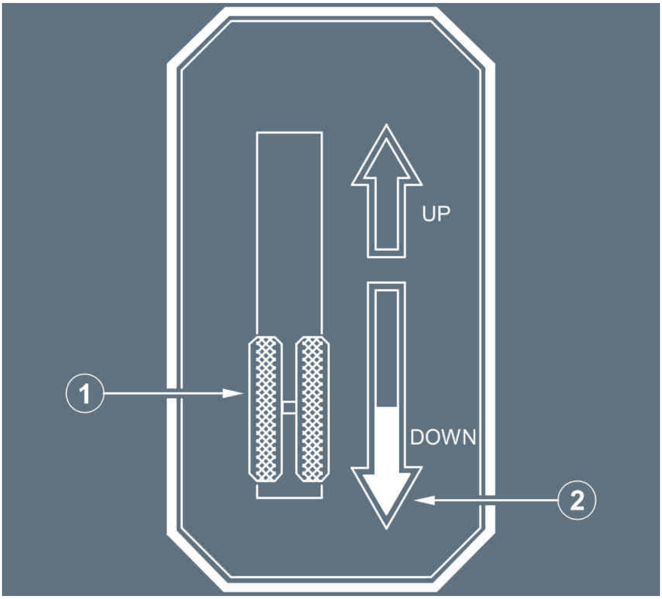
Note: *This panel is connected to the LGCIU1 only, therefore, the lights on the LDG GEAR indicator panel come on as long as the LGCIU1 is electrically supplied.*
If one UNLK indication remains on, the landing gear position can be confirmed using the WHEEL SD page (information from LGCIU 1 & 2). Only one green triangle on each landing gear is sufficient to confirm that the landing gear is downlocked.

LANDING GEAR SELECTOR LEVER

Ident.: DSC-32-10-40-00018616.0001001 / 20 MAY 16
Applicable to: ALL

A two-position selector lever sends electrical signals to the two LGCIUs. These control the green hydraulic supply to the landing gear system by means of selector valves.
The flight crew must always move the L/G lever in one continuous movement (i.e. with no stop between both positions).

When the flight crew selects UP or DOWN (and if the airspeed is below 260 kt):
- All landing gear doors open
- Each landing gear moves to the selected position
- All landing gear doors close.



(1) L/G LEVER

UP : This position selects landing gear retraction.
While the landing gear doors are opening, the normal brake system brakes the wheels of the main landing gear automatically.
A brake band in the nose landing gear well brakes the nose landing gear wheels as the doors close (for aircraft equipped with nose landing gear rubbing strips).

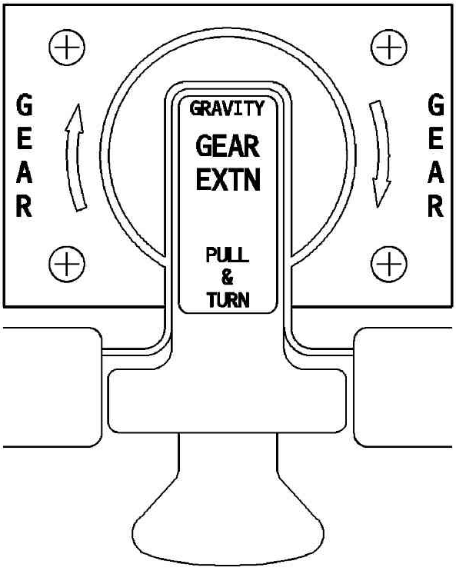
DOWN : This position selects landing gear extension.
An interlock mechanism prevents anyone from accidentally retracting the gear while the aircraft is on the ground. It does so by locking the lever in DOWN position when the shock absorber on either main gear is compressed (aircraft on ground) or the nose wheel steering is not centered.
The landing gear hydraulic system remains pressurized as long as the landing gear is extended (if green hydraulic pressure is available).

(2) RED ARROW

This red arrow lights up if the landing gear is not locked down when the aircraft is in the landing configuration, and a red warning appears on ECAM.

LANDING GEAR GRAVITY EXTENSION

Ident.: DSC-32-10-40-00018617.0001001 / 21 MAR 16
Applicable to: ALL

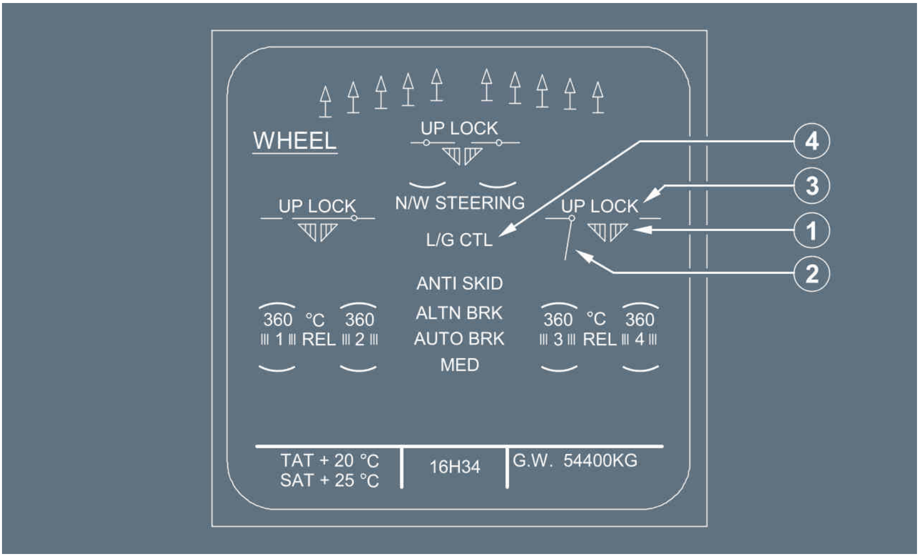


To put the landing gear down by gravity, the flight crew must pull the gear crank out, then turn it clockwise for 3 turns.
When the flight crew operates the crank handle, the cutout valve shuts off hydraulic pressure to the landing gear system and depressurizes it.

WHEEL SD PAGE

Ident.: DSC-32-10-40-00018618.0007001 / 21 MAR 16

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597


WHEEL
UP LOCK
UP LOCK
N/W STEERING
UP LOCK
L/G CTL
ANTI SKID
ALTN BRK
AUTO BRK
MED
360 °C 360
1 REL 2
360 °C 360
3 REL 4
TAT + 20 °C
SAT + 25 °C
16H34
G.W. 54400KG
4
3
1
2

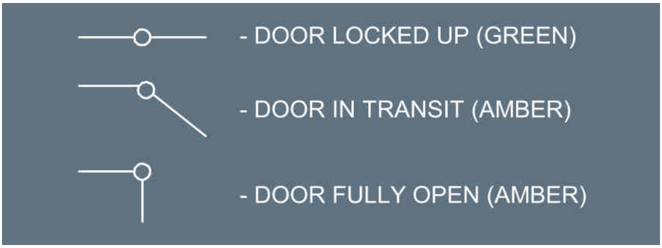
(1) Landing gear position indication

The landing gear positions are indicated by 2 triangles for each gear. The indications are as follow:

- Green triangle indicates that one LGCIU detects a landing gear downlocked
- Red triangle indicates that one LGCIU detects a landing gear in transit
- No triangle indicates that one LGCIU detects a landing gear uplocked
- Amber crosses will replace the right triangle to indicate that LGCIU 1 or LGCIU 2 has failed.

Note: *Only one green triangle on each landing gear strut is sufficient to confirm that the landing gear is downlocked.*

(2) Landing gear door position indication


- DOOR LOCKED UP (GREEN)
- DOOR IN TRANSIT (AMBER)
- DOOR FULLY OPEN (AMBER)

(3) UP LOCK

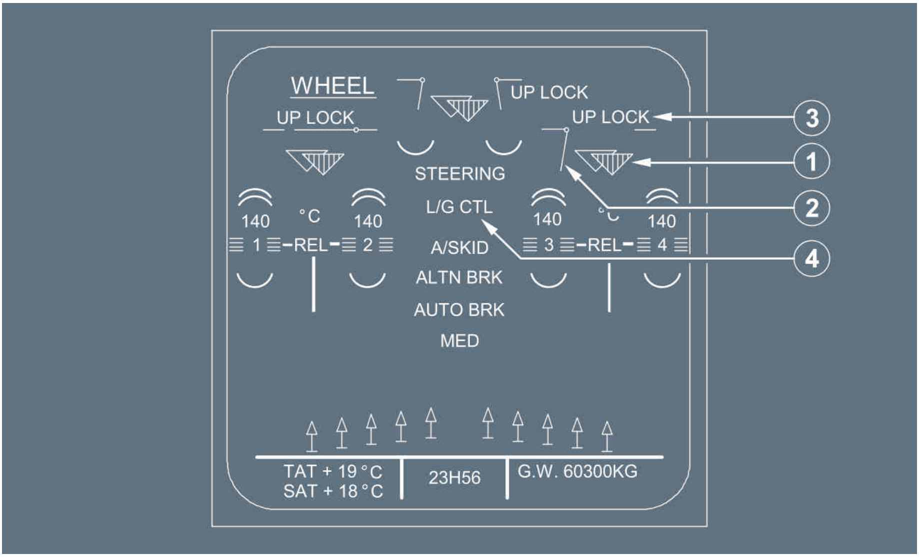
This legend appears amber along with a caution on the ECAM if the landing gear uplock is engaged when the landing gear is down locked.

(4) L/G CTL

This legend appears amber along with an ECAM caution if the landing gear lever and the landing gear position do not agree. This legend only appears when the landing gear is moving to the selected position.

WHEEL SD PAGE

Ident.: DSC-32-10-40-00018618.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

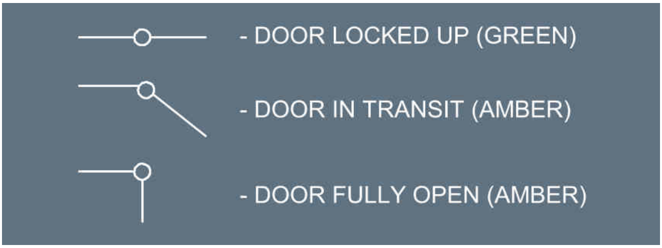

WHEEL
UP LOCK
UP LOCK
UP LOCK
STEERING
L/G CTL
A/SKID
ALTN BRK
AUTO BRK
MED
140
°C
140
140
°C
140
1 -REL- 2
3 -REL- 4
TAT + 19 °C
SAT + 18 °C
23H56
G.W. 60300KG
3
1
2
4

(1) Landing gear position indication
The landing gear positions are indicated by 2 triangles for each gear. The indications are as follow:

- Green triangle indicates that one LGCIU detects a landing gear downlocked
- Red triangle indicates that one LGCIU detects a landing gear in transit
- No triangle indicates that one LGCIU detects a landing gear uplocked
- Amber crosses indicate that one LGCIU is failed.

Note: Only one green triangle on each landing gear strut is sufficient to confirm that the landing gear is downlocked.

(2) Landing gear door position indication



(3) UP LOCK
This legend appears amber along with a caution on the ECAM if the landing gear uplock is engaged when the landing gear is down locked.

(4) L/G CTL
This legend appears amber along with an ECAM caution if the landing gear lever and the landing gear position do not agree. This legend only appears when the landing gear is moving to the selected position.

MEMO DISPLAY

Ident.: DSC-32-10-40-00018778.0001001 / 05 MAY 22

2 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

FLT L/G DOWN : This memo appears in green if the aircraft is operated in "flight with landing gear down" configuration.

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DESCRIPTION

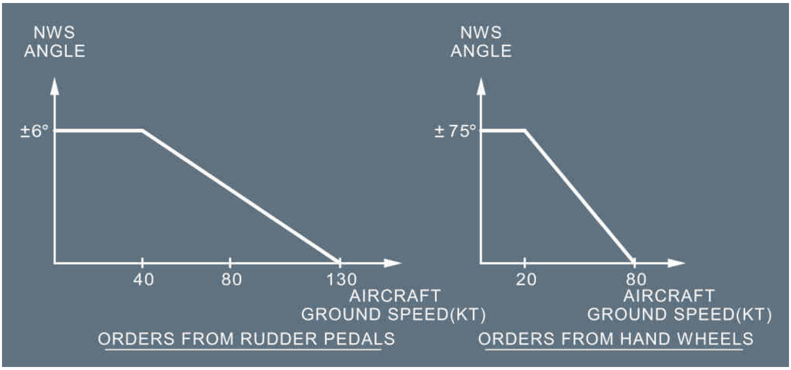
Ident.: DSC-32-20-10-00018619.0007001 / 28 FEB 18

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

A hydraulic actuating cylinder steers the nose wheel. The yellow hydraulic system supplies pressure to the cylinder, and electric signals from the Brake and Steering Control Unit (BSCU) control it.

The BSCU receives orders from:
- Captain's, and the First Officer’s steering hand wheels (orders added algebraically), or
- Rudder pedals, or
- Autopilot.

The BSCU transforms these orders into nose wheel steering angle. That angle has the following limits, which depend on ground speed and the origin of the orders.



The steering system receives actuating hydraulic pressure when:
- A/SKID & N/W STRG switch is ON
- Towing control lever is in normal position
- At least one engine is running
- Aircraft is on ground.

The handwheel can turn the nosewheel up to 75 ° in either direction. A lever, on the towing electrical box (on nose landing gear), enables ground crew to deactivate the steering system for towing. Then the wheel can be turned 95 ° in either direction.
To prevent rudder pedal orders, or autopilot orders, from going to the BSCU, the pilots can use the pushbutton on either steering handwheel.
An internal cam mechanism returns the nose wheel to the centered position after takeoff.

DESCRIPTION

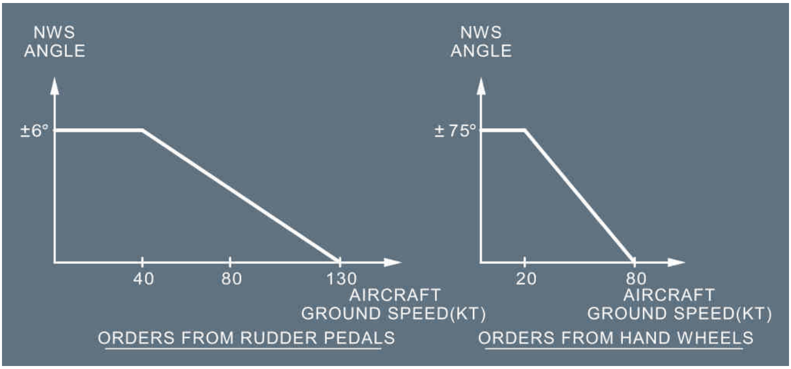
Ident.: DSC-32-20-10-00018619.0002001 / 21 MAR 16

Applicable to: MSN 02321

A hydraulic actuating cylinder steers the nose wheel. The green hydraulic system supplies pressure to the cylinder, and electric signals from the Brake and Steering Control Unit (BSCU) control it.

The BSCU receives orders from:
- Captain's, and the First Officer’s steering hand wheels (orders added algebraically), or
- Rudder pedals, or
- Autopilot.

The BSCU transforms these orders into nose wheel steering angle. That angle has the following limits, which depend on ground speed and the origin of the orders.



The steering system receives actuating hydraulic pressure when:
- A/SKID & N/W STRG switch is ON
- Towing control lever is in normal position
- At least one engine is running
- Aircraft is on ground.

The nose landing gear doors must be closed in order for the green hydraulic system to apply pressure to the actuating cylinder.
The handwheel can turn the nose wheel up to 75 ° in either direction. A lever on the towing electrical box (on nose landing gear) allows ground crew to deactivate the steering system for towing. This then allows the wheel to be turned 95 ° in either direction.
The pilots can use a pushbutton on either steering handwheel to prevent rudder pedal orders or autopilot orders from going to the BSCU.
An internal cam mechanism returns the nose wheel to the centered position after takeoff.

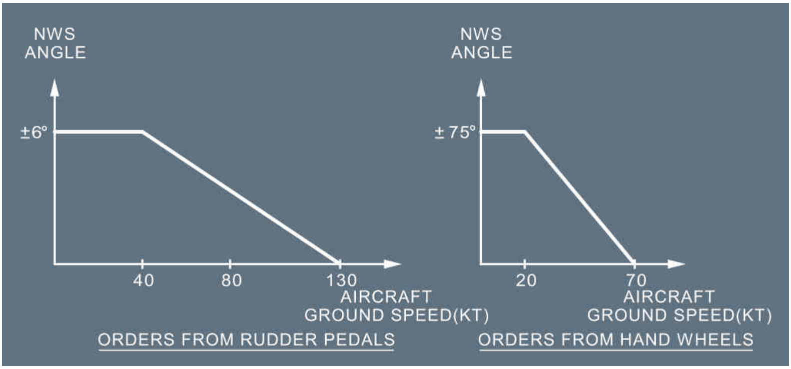
DESCRIPTION

Ident.: DSC-32-20-10-00018619.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014

A hydraulic actuating cylinder steers the nose wheel. The green hydraulic system supplies pressure to the cylinder, and electric signals from the Brake and Steering Control Unit (BSCU) control it.

The BSCU receives orders from:
- Captain's, and the First Officer’s steering hand wheels (orders added algebraically), or
- Rudder pedals, or
- Autopilot.

The BSCU transforms these orders into nose wheel steering angle. That angle has the following limits, which depend on ground speed and the origin of the orders.



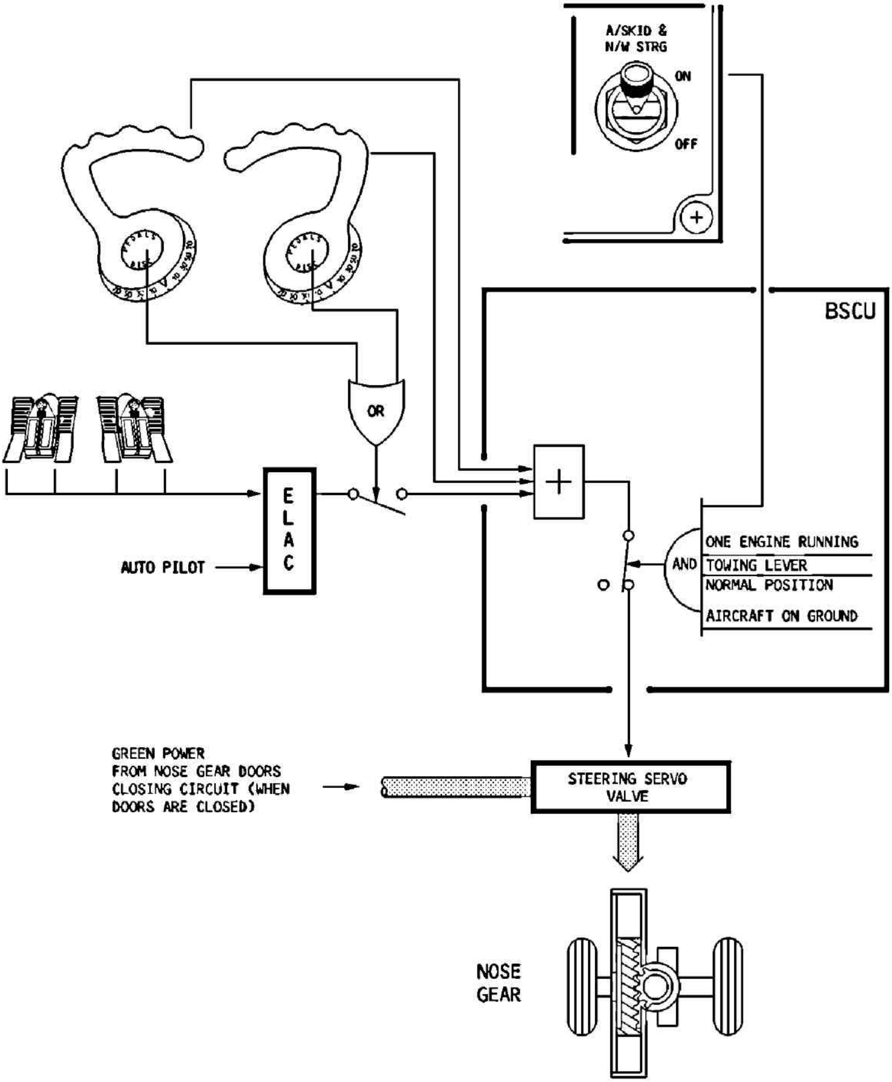
The steering system receives actuating hydraulic pressure when:
- A/SKID & N/W STRG switch is ON
- Towing control lever is in normal position
- At least one engine is running
- Aircraft is on ground.

The nose landing gear doors must be closed in order for the green hydraulic system to apply pressure to the actuating cylinder.
The handwheel can turn the nose wheel up to 75 ° in either direction. A lever on the towing electrical box (on nose landing gear) allows ground crew to deactivate the steering system for towing. This then allows the wheel to be turned 95 ° in either direction.
The pilots can use a pushbutton on either steering handwheel to prevent rudder pedal orders or autopilot orders from going to the BSCU.
An internal cam mechanism returns the nose wheel to the centered position after takeoff.

ARCHITECTURE

Ident.: DSC-32-20-10-00001298.0001001 / 21 MAR 16

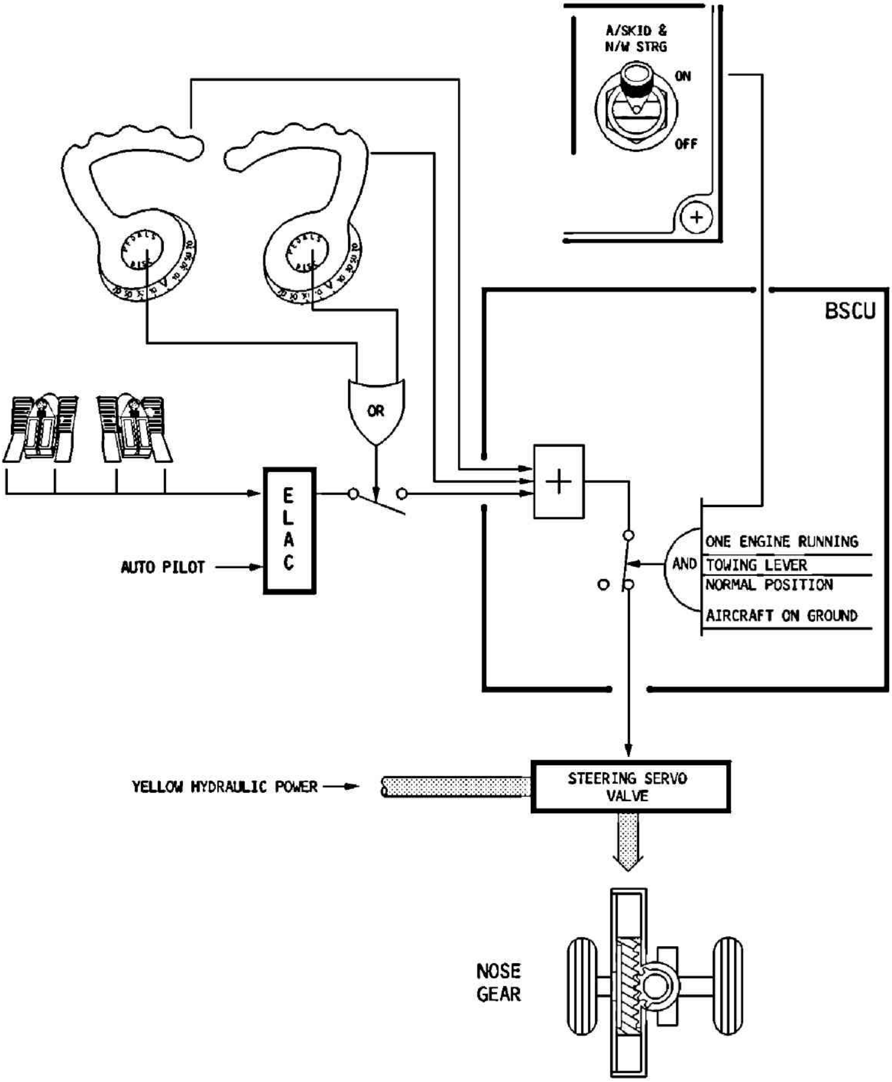
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


A/SKID &
N/W STRG
ON
OFF
BSCU
OR
E
L
A
C
AUTO PILOT
ONE ENGINE RUNNING
AND
TOWING LEVER
NORMAL POSITION
AIRCRAFT ON GROUND
GREEN POWER
FROM NOSE GEAR DOORS
CLOSING CIRCUIT (WHEN
DOORS ARE CLOSED)
STEERING SERVO
VALVE
NOSE
GEAR

ARCHITECTURE

Ident.: DSC-32-20-10-00001298.0002001 / 21 MAR 16

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597


A/SKID &
N/W STRG
ON
OFF
BSCU
OR
E
L
A
C
AUTO PILOT
AND
ONE ENGINE RUNNING
TOWING LEVER
NORMAL POSITION
AIRCRAFT ON GROUND
YELLOW HYDRAULIC POWER
STEERING SERVO
VALVE
NOSE
GEAR

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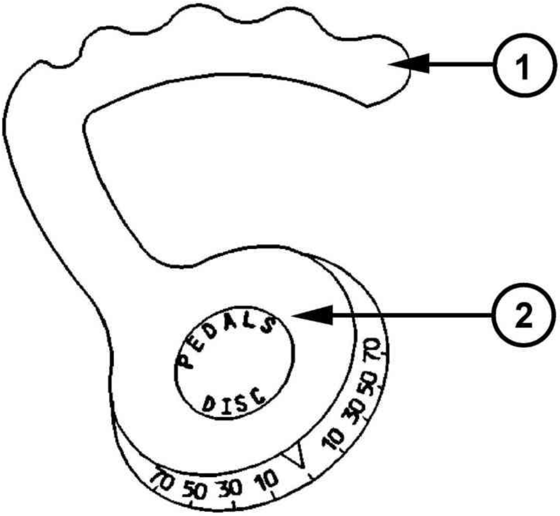
SIDE CONSOLES

Ident.: DSC-32-20-20-00018620.0001001 / 21 MAR 16
Applicable to: ALL



(1) Steering handwheels
The steering handwheels, which are interconnected, can steer the nose wheel up to 75 ° in either direction.

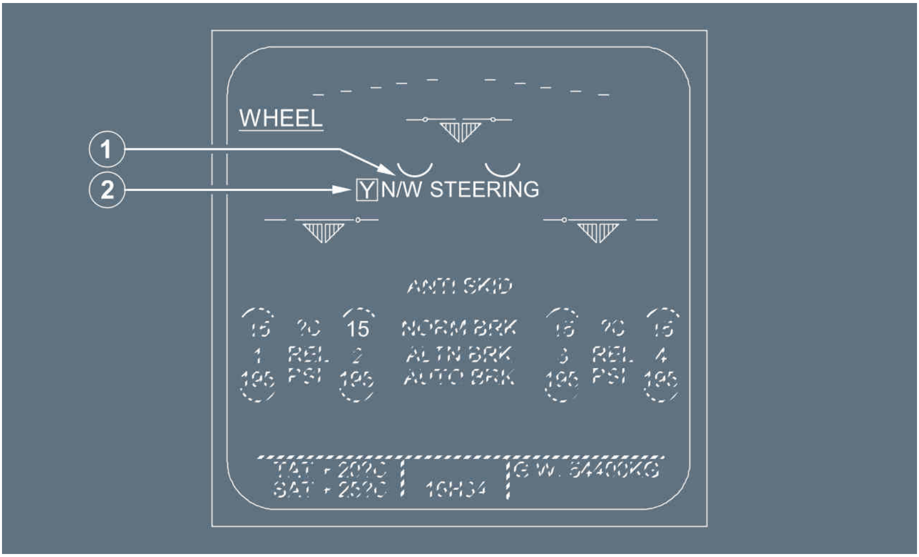
Note: The steering system centers the nose wheel automatically after liftoff.

(2) Rudder PEDALS DISC pb
Pressing this button on either handwheel removes control of nose wheel steering from the rudder pedals until the button is released.

WHEEL SD PAGE

Ident.: DSC-32-20-20-00018622.0004001 / 21 MAR 16

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


WHEEL
1
2
Y
N/W STEERING
ANTI SKID
15
°C
15
1
REL
2
195
PSI
195
NORM BRK
ALTN BRK
AUTO BRK
15
°C
15
3
REL
4
195
PSI
195
TAT +20°C
SAT +25°C
16H34
G.W. 64400KG

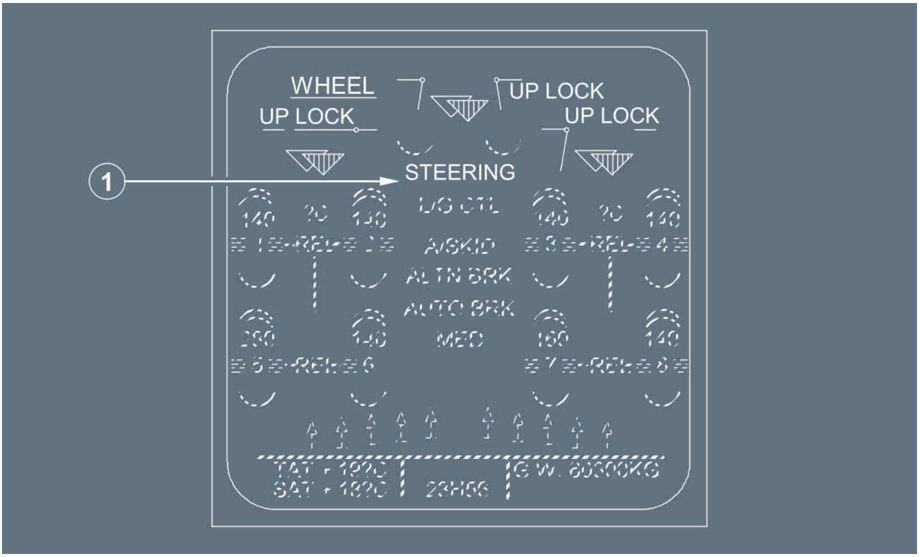
(1) N/W STEERING indication
It appears in amber, when nosewheel steering is lost, due to failure of the nosewheel steering system, or of both BSCU channels, or in case of a yellow hydraulic system low pressure, or if the A/SKID & N/W STRG switch is OFF.

(2) N/W STEERING hydraulic supply indication:

Only when the N/W STEERING indication is displayed, Y is displayed:
- In green when the yellow hydraulic system is not failed, or
- In amber when the yellow hydraulic system low pressure.

WHEEL SD PAGE

Ident.: DSC-32-20-20-00018622.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


1
WHEEL
UP LOCK
UP LOCK
UP LOCK
STEERING
L/G CTL
A/SKID
ALTN BRK
AUTO BRK
MED
140
140
140
140
140
280
140
160
140
1 REL 2
3 REL 4
5 REL 6
7 REL 8
TAT +19°C
SAT +18°C
23H56
G.W. 60300KG

(1) STEERING indication
It appears along with an ECAM caution if either the nose wheel steering or the anti-skid feature fails.

MEMO DISPLAY

Ident.: DSC-32-20-20-00016853.0001001 / 04 JUN 19
Applicable to: ALL

NW STRG DISC : This memo appears, when the nose wheel steering selector is in the towing position and with engines not running.

NW STRG DISC : This memo appears, when the nose wheel steering selector is in the towing position and if at least one engine is running.

Intentionally left blank

GENERAL

Ident.: DSC-32-30-10-00018623.0002001 / 21 MAR 16
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

The main wheels are equipped with carbon multidisc brakes, which can be actuated by either of two independent brake systems.
The normal system uses green hydraulic pressure, whereas the alternate system uses the yellow hydraulic system backed up by the hydraulic accumulator.
An anti-skid and autobrake system is also provided.
Braking commands come from either the brake pedals (pilot action), or the autobrake system (deceleration rate selected by the crew).
In normal operation, a dual channel Brake and Steering Control Unit (BSCU) controls normal braking and antiskid.

Depending on the failure, braking may revert to:
- Alternate braking with antiskid. This braking mode is controlled by the Alternate Braking Control Unit (ABCU), and the antiskid is controlled by the BSCU
- Alternate braking without antiskid. This braking mode is fully-controlled by the ABCU
- Alternate braking without antiskid on accumulator. This braking mode is fully-controlled by the ABCU.

All the normal and alternate braking components are fully-monitored. Any detected failure is signaled to the crew via ECAM warnings.

The BSCU performs the following secondary functions:
- Checks the residual pressure in the brakes
- Monitors the brake temperature
- Provides discrete wheel speed information to other aircraft systems.

A changeover between the two BSCU channels takes place at each DOWN landing gear lever selection, or in case one channel fails.
The main gear wheels are fitted with fusible plugs which protect against tire burst, in the event of overheat.
Main gear wheels are also equipped with brake cooling fans ◁ , which permit a high speed cooling of brakes.

GENERAL

Ident.: DSC-32-30-10-00018623.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

The main wheels are equipped with carbon multidisc brakes, which can be actuated by either of two independent brake systems.

The normal system uses green hydraulic pressure, whereas the alternate system uses the yellow hydraulic system backed up by the hydraulic accumulator.
An anti-skid and autobrake system is also provided.
Braking commands come from either the brake pedals (pilot action), or the autobrake system (deceleration rate selected by the crew).
Two units on each main gear monitor the temperature of the brakes.
All braking functions (normal and alternate braking control, anti-skid control, autobraking, brake temperature indication) are controlled by a two-channel Brake and Steering Control Unit (BSCU).
The main gear wheels are fitted with fusible plugs which protect against tire burst, in the event of overheat.
Main gear wheels are also equipped with brake cooling fans ◁ , which permit a high speed cooling of brakes.

ANTI-SKID SYSTEM

Ident.: DSC-32-30-10-00018624.0001001 / 21 MAR 16
Applicable to: ALL

The antiskid system provides maximum braking efficiency by maintaining the wheels at the limit of an impending skid.
At skid onset, brake release orders are sent to the normal and alternate servovalves, as well as to the ECAM system which displays the released brakes.
Without using autobrake, full braking performance is achieved only with brake pedals at full deflection.
The antiskid system is deactivated below 20 kt (ground speed).
An ON/OFF switch activates, or deactivates, the antiskid and nosewheel steering systems.

PRINCIPLE

The speed of each main gear wheel (given by a tachometer) is compared to the aircraft speed (reference speed). When the speed of a wheel decreases below approximately 0.87 times (depending on conditions) reference speed, brake release orders are given to maintain the wheel slip at that value (best braking efficiency).
In normal operation, the reference speed is determined by the BSCU from the horizontal acceleration of ADIRU 1, or ADIRU 2, or ADIRU 3.
In case all ADIRUs fail, reference speed equals the maximum of either main landing gear wheel speeds.

AUTO BRAKE

Ident.: DSC-32-30-10-A-00018625.0001001 / 21 MAR 16
Applicable to: ALL

GENERAL

The purposes of the autobrake system are the following:
- Reduce the braking distance in case of an aborted takeoff
- Establish and maintain a selected deceleration rate during landing, thereby improving passenger comfort and reducing crew workload.

Ident.: DSC-32-30-10-A-00018626.0003001 / 09 NOV 17
2 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597**

SYSTEM ARMING

The crew may arm the system by pressing the LO, MED, or MAX pushbutton provided all the following arming conditions are met:
- Green pressure available
- Anti-skid electrically-powered
- No failure in the braking system
- At least one ADIRU is available.

Note: *1. Auto brake may be armed with the parking brake on.*
2. MAX autobrake mode cannot be armed in flight.

The armed AUTO BRK mode is displayed in blue on the Flight Mode Annunciator (FMA).

Ident.: DSC-32-30-10-A-00018626.0002001 / 21 MAR 16
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**

SYSTEM ARMING

The crew may arm the system by pressing the LO, MED, or MAX pushbutton provided all the following arming conditions are met :
- Green pressure available
- Anti-skid electrically-powered
- No failure in the braking system
- At least one ADIRU is available.

Note: *1. Auto brake may be armed with the parking brake on.*
2. MAX autobrake mode cannot be armed in flight.

Ident.: DSC-32-30-10-A-00018627.0003001 / 09 NOV 17

4 **Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597**

SYSTEM ACTIVATION

Automatic braking is activated when:

- The command for ground spoilers extension is detected (*Refer to DSC-27-10-20 Speed Brakes and Ground Spoilers - Speed Brake Control*), for LO and MED mode, or
- The command for ground spoilers extension is detected, and the wheel speed is above 40 kt, for MAX mode.

Therefore, if the aircraft makes an acceleration stop and begins to decelerate when the wheel speed is under 72 kt, the automatic braking will not activate because the ground spoilers will not extend.
For autobrake to activate, at least two SEC's must be operative.
The active AUTO BRK mode is displayed in green on the Flight Mode Annunciator (FMA).

Ident.: DSC-32-30-10-A-00018627.0002001 / 17 OCT 17

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324**

SYSTEM ACTIVATION

Automatic braking is activated when:

- The command for ground spoilers extension is detected (*Refer to DSC-27-10-20 Speed Brakes and Ground Spoilers - Speed Brake Control*), for LO and MED mode, or
- The command for ground spoilers extension is detected, and the wheel speed is above 40 kt, for MAX mode.

Therefore, if the aircraft makes an acceleration stop and begins to decelerate when the wheel speed is under 72 kt, the automatic braking will not activate because the ground spoilers will not extend.
For autobrake to activate, at least two SEC's must be operative.

Ident.: DSC-32-30-10-A-00018628.0001001 / 21 MAR 16

Applicable to: ALL

SYSTEM DEACTIVATION

The system deactivates when:

- The system disarmed (*Refer to DSC-32-30-10 Auto Brake - System Disarming*), or
- The ground spoilers retract. In this case it remains armed.

Ident.: DSC-32-30-10-A-00018629.0002001 / 09 NOV 17
Applicable to: ALL

SYSTEM DISARMING

The system disarms when:
- Flight crew presses the pushbutton switch, or
- One or more arming conditions is lost, or
- After take-off/touch and go, or
- Flight crew applies enough deflection to at least one brake pedal when autobrake is active in MAX, MED or LO mode.

BRAKING MODES

Ident.: DSC-32-30-10-B-00018630.0001001 / 21 MAR 16
Applicable to: ALL

GENERAL

There are four modes of operation:
- Normal braking
- Alternate braking with antiskid
- Alternate braking without antiskid
- Parking brake.

Ident.: DSC-32-30-10-B-00018631.0001001 / 21 MAR 16
Applicable to: ALL

NORMAL BRAKING

Normal braking is operative when:
- Green hydraulic pressure is available
- A/SKID & N/W STRG switch is ON.

During normal braking, antiskid is operative and autobrake is available.

Braking is electrically-controlled through the BSCU from:
- Pilot's pedals, or
- Automatically activates when:
  - On ground by the autobrake system, or
  - In flight when the landing gear lever is up.

The antiskid system is controlled by the BSCU via the normal servo valves.
There is no brake pressure indication in the cockpit.

Ident.: DSC-32-30-10-B-00018632.0002001 / 17 MAR 17

6 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ALTERNATE BRAKING WITH ANTI-SKID

Autobrake is inoperative.

Braking uses this mode when green hydraulic pressure is insufficient, and :
- Yellow hydraulic pressure is available
- A/SKID & N/W STRG switch is ON
- Parking brake is not ON.

Braking inputs are made by the brake pedals and sent to the ABCU. Then, taking into account the brake pedal input, the ABCU:
- Energizes the alternate brake selector valve to pressurize the yellow hydraulic circuit
- Electrically controls the Alternate Servo Valve to obtain the correct pressure for the related brakes.

Antiskid is controlled by the BSCU.
A triple indicator on the center instrument panel indicates the pressure delivered to the left and right brakes, as well as the accumulator pressure.

Note: *Initial pedal force or displacement produces more braking action in alternate mode than in normal mode.*

Ident.: DSC-32-30-10-B-00018632.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ALTERNATE BRAKING WITH ANTI-SKID

Autobrake is inoperative.

Braking uses this mode when green hydraulic pressure is insufficient, and :
- Yellow hydraulic pressure is available
- A/SKID & N/W STRG switch is ON
- Parking brake is not ON.

An automatic hydraulic selector changes from the green to the yellow system.
The pedals brake through the auxiliary low-pressure hydraulic distribution line acting on the dual valves. The BSCU controls the anti-skid system via the alternate servo valves.
A triple indicator on the center instrument panel indicates the pressure delivered to the left and right brakes, as well as the accumulator pressure.

Note: *Initial pedal force or displacement produces more braking action in alternate mode than in normal mode.*

Ident.: DSC-32-30-10-B-00018633.0002001 / 17 MAR 17

7 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ALTERNATE BRAKING WITHOUT ANTI-SKID

Autobrake and antiskid are inoperative.

The antiskid system is either deactivated:
- Electrically (A/SKID & N/W STRG sw OFF, or power supply failure, or BSCU failure), or
- Hydraulically (Y + G system low pressure, the brakes are supplied by the brake accumulator only).

Depending on the brake pedals' demand, the ABCU controls the alternate brake selector and the alternate servovalves.
Brake pressure and accumulator pressure are indicated on a triple indicator, located on the center instrument panel. To avoid wheel locking and limit the risk of tire burst, brake pressure is automatically limited to 1 000 PSI.
The accumulator can supply at least 7 full brake applications.

Note: *Initial pedal force or displacement produces more braking action in alternate mode than in normal mode.*

Ident.: DSC-32-30-10-B-00018633.0001001 / 28 SEP 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ALTERNATE BRAKING WITHOUT ANTI-SKID

Autobrake is inoperative.

The anti-skid system can be deactivated:
- Electrically (A/SKID & N/W STRG sw OFF, or power failure or BSCU failure), or
- Hydraulically (low pressure in both green and yellow systems, brakes being supplied by the brake accumulator only).

The pilot controls the braking with the pedals (acting on the dual valves).
Alternate servo valves are fully open.
Brake pressure and accumulator pressure are indicated on a triple indicator, located on the center instrument panel. The pilot must modulate brake pressure at, or below, 1 000 PSI in order to avoid wheel locking.
The accumulator can supply at least 7 full brake applications.

Note: *Initial pedal force or displacement produces more braking action in alternate mode than in normal mode.*

Ident.: DSC-32-30-10-B-00018634.0002001 / 21 MAR 16

8 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

PARKING BRAKE

Brakes are supplied by the yellow hydraulic system, or by accumulator pressure via the parking brake control valve, which opens allowing full pressure application on the main gear wheel brakes.
The accumulator maintains the parking pressure for at least 12 h.
If the parking brake is activated and no yellow hydraulic or accumulator brake pressure is available, then the normal braking system can be applied via the brake pedals.
Yellow accumulators can be pressurized by pressing the yellow electrical pump switch.
A triple indicator on the center instrument panel indicates the pressure delivered to the left and right brakes, as well as the accumulator pressure.

Ident.: DSC-32-30-10-B-00018634.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

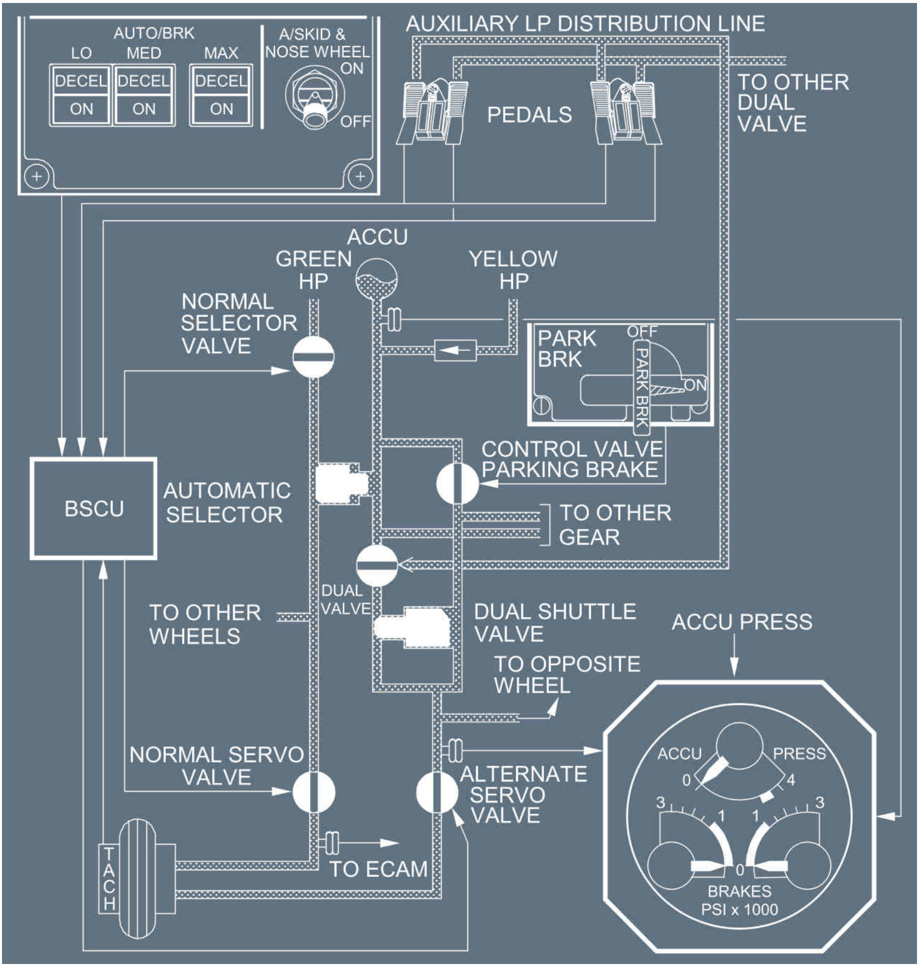
PARKING BRAKE

Brakes are supplied by the yellow hydraulic system, or by accumulator via the dual shuttle valves.
Alternate servo valves open allowing full pressure application.
The accumulator maintains the parking pressure for at least 12 h.
If the parking brake is activated and no yellow hydraulic or accumulator brake pressure is available, then the normal braking system can be applied via the brake pedals.
Yellow accumulators can be pressurized by pressing the yellow electrical pump switch.
A triple indicator on the center instrument panel indicates the pressure delivered to the left and right brakes, as well as the accumulator pressure.

BRAKING SCHEMATIC

Ident.: DSC-32-30-10-00001316.0004001 / 09 OCT 12

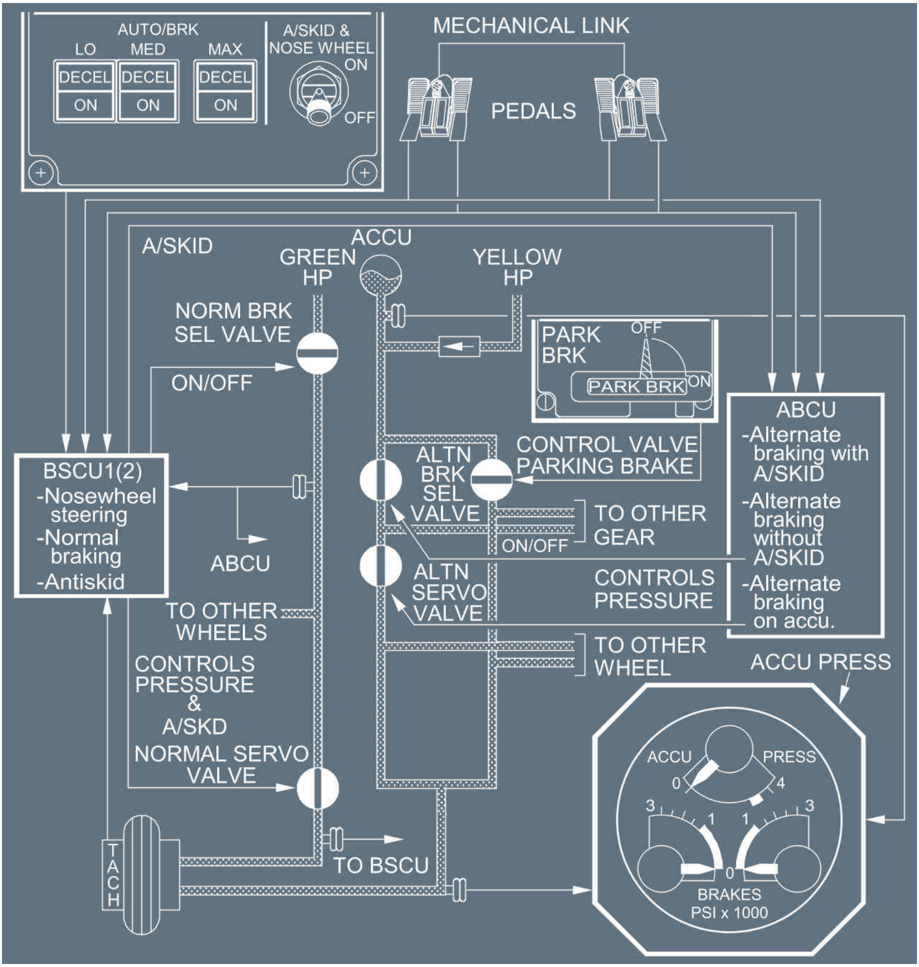
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


AUTO/BRK
LO
MED
MAX
DECEL
ON
DECEL
ON
DECEL
ON
A/SKID &
NOSE WHEEL
ON
OFF
AUXILIARY LP DISTRIBUTION LINE
PEDALS
TO OTHER DUAL VALVE
ACCU
GREEN HP
YELLOW HP
NORMAL SELECTOR VALVE
PARK BRK
OFF
PARK BRK
ON
CONTROL VALVE PARKING BRAKE
BSCU
AUTOMATIC SELECTOR
TO OTHER GEAR
DUAL VALVE
TO OTHER WHEELS
DUAL SHUTTLE VALVE
ACCU PRESS
TO OPPOSITE WHEEL
NORMAL SERVO VALVE
ALTERNATE SERVO VALVE
TO ECAM
TACH
ACCU
PRESS
0
4
3
1
1
3
0
BRAKES
PSI x 1000

BRAKING SCHEMATIC

Ident.: DSC-32-30-10-00001316.0003001 / 09 OCT 12

9 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

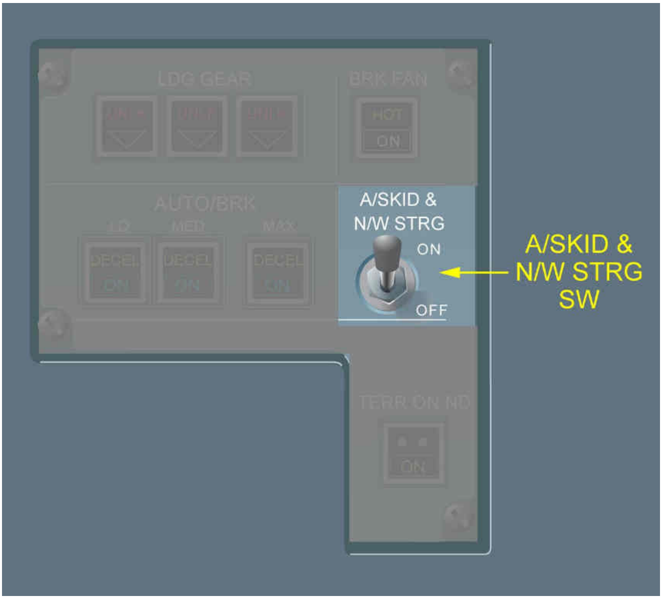

AUTO/BRK
LO
MED
MAX
DECEL
ON
DECEL
ON
DECEL
ON
A/SKID &
NOSE WHEEL
ON
OFF
MECHANICAL LINK
PEDALS
A/SKID
ACCU
GREEN
HP
YELLOW
HP
NORM BRK
SEL VALVE
ON/OFF
PARK
BRK
OFF
PARK BRK
ON
BSCU1(2)
-Nosewheel
steering
-Normal
braking
-Antiskid
ABCU
ALTN
BRK
SEL
VALVE
CONTROL VALVE
PARKING BRAKE
TO OTHER
GEAR
ON/OFF
ABCU
-Alternate
braking with
A/SKID
-Alternate
braking
without
A/SKID
-Alternate
braking
on accu.
ALTN
SERVO
VALVE
CONTROLS
PRESSURE
TO OTHER
WHEELS
CONTROLS
PRESSURE
&
A/SKD
NORMAL SERVO
VALVE
TO OTHER
WHEEL
ACCU PRESS
ACCU
PRESS
0
4
3
1
1
3
0
BRAKES
PSI x 1000
T
A
C
H
TO BSCU

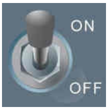
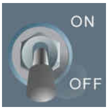
CENTER INSTRUMENT PANEL

Ident.: DSC-32-30-20-00018635.0002001 / 04 NOV 20

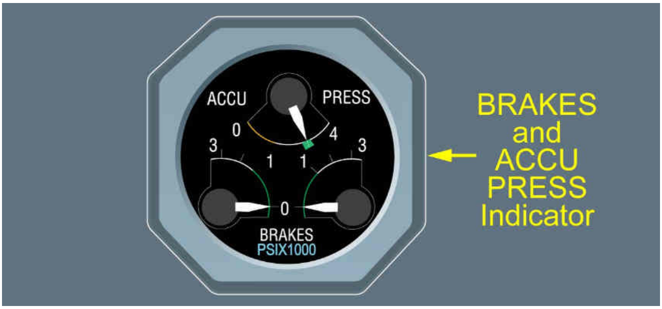
1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

A/SKID & N/W STRG sw

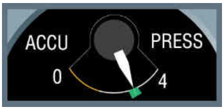

LDG GEAR
UNLK
UNLK
UNLK
BRK FAN
HOT
ON
AUTO/BRK
LO
MED
MAX
DECEL
ON
DECEL
ON
DECEL
ON
A/SKID &
N/W STRG
ON
OFF
TERR ON ND
ON
A/SKID &
N/W STRG
SW

	If green hydraulic pressure is available, then antiskid is available. If green hydraulic pressure is lost, then: - Yellow hydraulic pressure automatically takes over to supply the brakes - Antiskid and nosewheel steering remain available - Triple indicator shows yellow system brake pressure.
	The yellow hydraulic system supplies pressure to the brakes. - Antiskid is deactivated. To avoid wheel locking and limiting the risk of tire burst, brake pressure is automatically limited to 1 000 PSI - Nosewheel steering is lost - Differential braking remains available through the pedals - Triple indicator displays yellow system brake pressure.

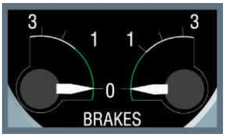
BRAKES and ACCU PRESS indicator


ACCU
PRESS
0
4
3
1
1
3
0
BRAKES
PSIX1000
BRAKES and ACCU PRESS Indicator

Brake pressure is only indicated when the yellow hydraulic system controls the brake pressure. This is when the:
- Alternate braking system is activated, or
- Parking brake is applied.


ACCU
PRESS
0
4

Indicates the pressure in the yellow brake accumulator.

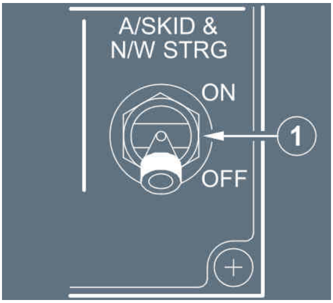

3
1
1
3
0
BRAKES

Indicates the yellow pressure delivered to the left and right brakes, as measured upstream of the alternate servovalves.

CENTER INSTRUMENT PANEL

Ident.: DSC-32-30-20-00018635.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

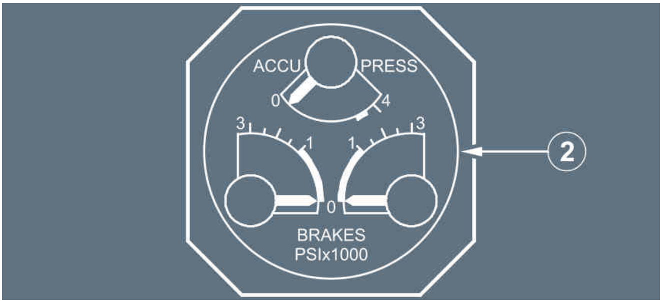

A/SKID &
N/W STRG
ON
OFF
1

(1) A/SKID & N/W STRG sw

ON : If green hydraulic pressure is available:
- Antiskid is available
- Nosewheel steering is available.

If green hydraulic pressure is lost, then:
- Yellow hydraulic pressure automatically takes over to supply the brakes
- Antiskid remains available
- Nosewheel steering is lost
- Triple indicator displays yellow system brake pressure.

OFF : The yellow hydraulic system supplies pressure to the brakes.
- Antiskid is deactivated. The pilot must refer to the triple indicator to limit brake pressure and avoid locking a wheel
- Nosewheel steering is lost
- Differential braking remains available through the pedals
- Triple indicator displays yellow system brake pressure.



(2) BRAKES and ACCU PRESS indicator

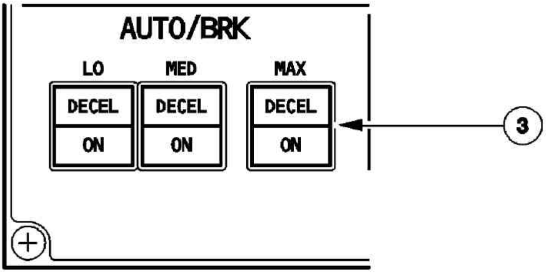
ACCU PRESS : Indicates the pressure in the yellow brake accumulator.

BRAKES : Indicates the yellow pressure delivered to the left and right brakes, as measured upstream of the alternate servovalves.

AUTO BRK PANEL

Ident.: DSC-32-30-20-00018636.0004001 / 21 MAR 16

2 **Applicable to: MSN 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-06876, 06949-09324, 10949-11597**



(3) AUTO/BRK panel

The springloaded MAX, MED, and LO pushbutton switches arm the appropriate deceleration rate. The usage for each mode are as follow:

- MAX mode is normally selected for takeoff.
  In the case of an aborted takeoff, maximum pressure goes to the brakes, as soon as the system generates the ground spoiler deployment order
- MED or LO mode is normally selected for landing:
  - MED mode sends progressive pressure to the brakes 2 s after the ground spoilers deploy in order to decelerate the aircraft at 3 m/s^2 (9.8 ft/s^2)
  - LO mode sends progressive pressure to the brakes 2 s after the ground spoilers deploy, in order to decelerate the aircraft at 2 m/s^2 (6.6 ft/s^2).

The lighting on the pushbutton switches are as follow:

ON light : comes on blue to indicate positive arming

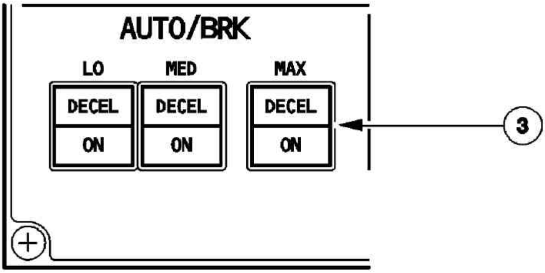
DECEL light : comes on green when the actual deceleration is 80 % of the selected rate

Note: *On slippery runways, the predetermined deceleration may not be reached, due to antiskid operation. In this case, the DECEL light will not come on. This does not mean that autobrake is not working.*

Off : The corresponding autobrake mode is not armed

AUTO BRK PANEL

Ident.: DSC-32-30-20-00018636.0002001 / 21 MAR 16
Applicable to: MSN 01143-01158, 01251, 04827-04974, 06895



(3) AUTO/BRK panel

The springloaded MAX, MED, and LO pushbutton switches arm the appropriate deceleration rate. The usage for each mode are as follow:

- MAX mode is normally selected for takeoff.
  In the case of an aborted takeoff, maximum pressure goes to the brakes, as soon as the system generates the ground spoiler deployment order
- MED or LO mode is normally selected for landing:
  - MED mode sends progressive pressure to the brakes 2 s after the ground spoilers deploy in order to decelerate the aircraft at 3 m/s^2 (9.8 ft/s^2)
  - LO mode sends progressive pressure to the brakes 4 s after the ground spoilers deploy, in order to decelerate the aircraft at 1.7 m/s^2 (5.6 ft/s^2).

The lighting on the pushbutton switches are as follow:

ON light : comes on blue to indicate positive arming

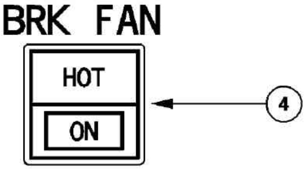
DECEL light : comes on green when the actual deceleration is 80 % of the selected rate

Note: On slippery runways, the predetermined deceleration may not be reached, due to antiskid operation. In this case, the DECEL light will not come on. This does not mean that autobrake is not working.

Off : The corresponding autobrake mode is not armed

BRAKE FAN ⩤

Ident.: DSC-32-30-20-00018637.0001001 / 21 MAR 16
Applicable to: ALL

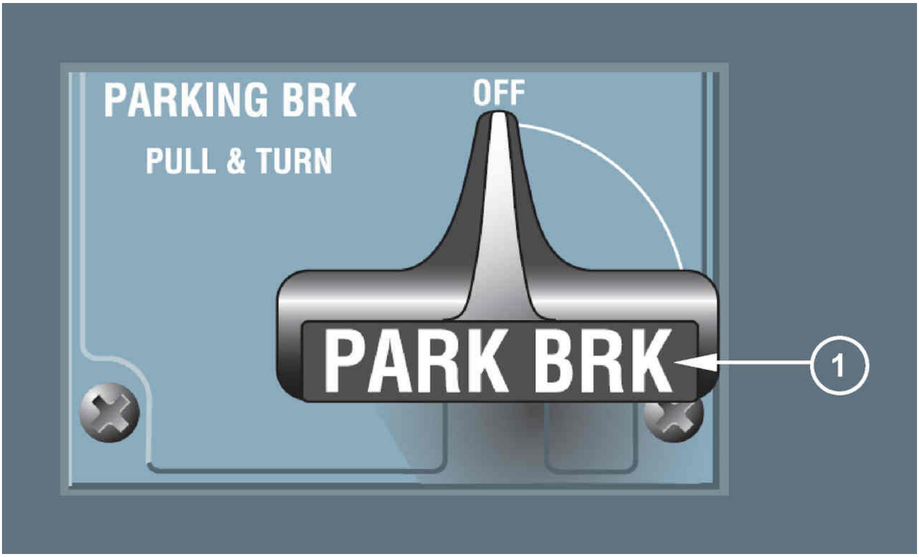


(4) BRK FAN pb-sw ⩤

ON light	:	The brake fans run if the lefthand main landing gear is down and locked
Off	:	The brake fans stop
HOT light	:	This amber light comes on when the brakes get too hot (A caution appears on ECAM, also)

PEDESTAL

Ident.: DSC-32-30-20-00018638.0001001 / 21 MAR 16
Applicable to: ALL



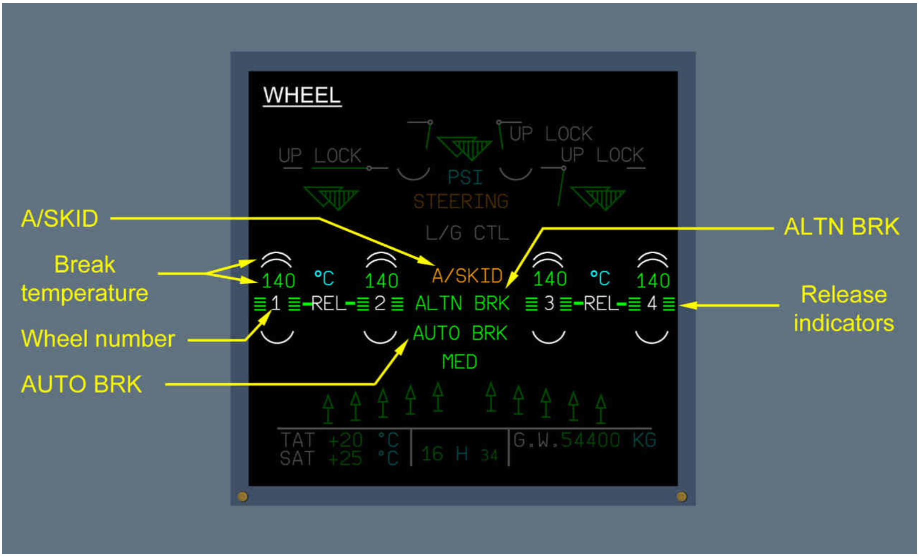
(1) PARKING BRK handle
Flight crew pulls this handle, then turns it clockwise, to apply the parking brake.
The ECAM memo page displays “PARK BRK”.

CAUTION	If the pointer is not at ON, the parking brake is not on.

WHEEL SD PAGE

Ident.: DSC-32-30-20-00018639.0015001 / 04 NOV 20

3 **Applicable to: MSN 01459, 02321**


WHEEL
UP LOCK
UP LOCK
UP LOCK
PSI
STEERING
L/G CTL
A/SKID
Break temperature
Wheel number
AUTO BRK
ALTN BRK
Release indicators
140 °C 140
A/SKID
140 °C 140
≡1≡-REL-≡2≡
ALTN BRK
≡3≡-REL-≡4≡
AUTO BRK
MED
TAT +20 °C
SAT +25 °C
16 H 34
G.W. 54400 KG

RELEASE INDICATOR

≡	Appears temporarily after the landing gear has been lowered to indicate that the anti-skid function is ready.
≡1 ≡-REL-≡2≡	Reappears after touchdown, along with REL, when the anti-skid is active.
≡	Appears in case of brake released fault.

A/SKID

A/SKID	Appears along with an ECAM alert in case of total BSCU failure, or when the A/SKID & N/W STRG sw is OFF, or if the BSCU detects an ANTI-SKID failure.

AUTO BRK

AUTO BRK	Appears when auto brake is armed, and flashes for 10 s after autobrake disengagement.
AUTO BRK	Appears along with an ECAM alert, to indicate a system failure.

AUTO BRK
MED

MED, LO, or MAX appears underneath to show which rate has been selected.

WHEEL NUMBER

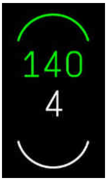
1

This number identifies individual wheels of the main landing gear.

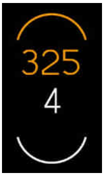
BRAKE TEMPERATURE

140

The brake temperature is normal.



Green arc appears on the hottest wheel when one brake temperature exceeds 100 °C.



Green arc becomes amber, and an ECAM alert is triggered, when the corresponding brake temperature exceeds 300 °C.

ALTN BRK

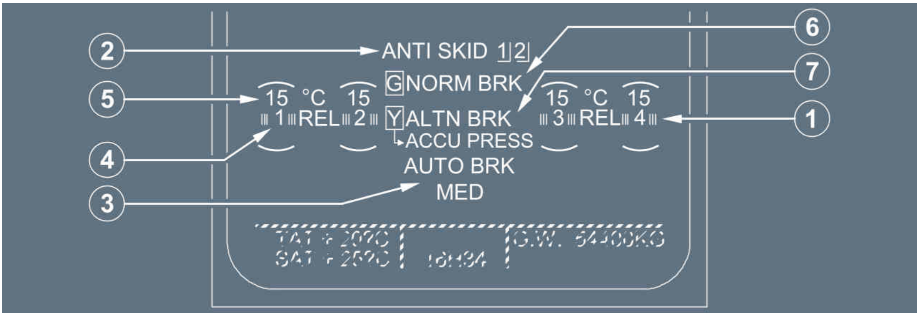
ALTN BRK

Appears if the braking system is in alternate mode.

WHEEL SD PAGE

Ident.: DSC-32-30-20-00018639.0008001 / 21 MAR 16

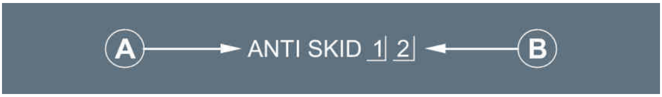
4 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


2
5
4
3
6
7
1
ANTI SKID 1|2|
G NORM BRK
Y ALTN BRK
ACCU PRESS
15 °C 15
1 REL 2
15 °C 15
3 REL 4
AUTO BRK
MED
TAT + 20°C
SAT + 25°C
16H34
G.W. 54400KG

(1) Release indicators

🟩 It appears in amber in case of brake released fault.

(2) ANTI SKID indication


A
ANTI SKID 1 2
B

(A) ANTISKID label

It appears in amber, a long with an ECAM caution, in case of a total BSCU failure, or when the A/SKID & N/W STRG sw is OFF, or if the BSCU detects an ANTI-SKID failure, or in case of normal braking and yellow hydraulic system low pressure.

It appears in green in case of autobrake, normal braking, or alternate braking failure, and antiskid is still available.

(B) BSCU channel indication

When ANTISKID label is displayed, the number of the failed system(s) is (are) displayed in amber, if any.

(3) AUTO BRK

This legend appears:
- In green when auto brake is armed, or
- Flashing green for 10 s after autobrake disengagement, or
- In amber, along with an ECAM caution, to indicate a system failure.

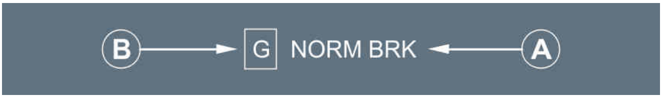
MED, LO, or MAX appears underneath in green to show which rate has been selected.

(4) Wheel number
This white number identifies individual wheels of the main landing gear.

(5) Brake temperature

- Temperature normally appears in green.
- Green arc appears on the hottest wheel when one brake temperature exceeds 100 °C.
- Green arc becomes amber, and an ECAM caution appears, when the corresponding brake temperature exceeds 300 °C.

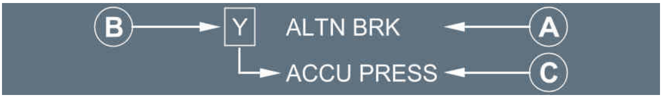
(6) NORM BRK indication



(A) NORM BRK label
This indication appears in green when autobrake or alternate braking is failed, and normal braking is still available.
The legend appears in amber when normal braking is failed due to total BSCU failure, or to the loss of the green hydraulic pressure, or to the loss of antiskid.

(B) NORM BRK hydraulic supply indication
G is displayed when the NORM BRK label is displayed. It is green when green hydraulic pressure is available and amber, in case of green hydraulic low pressure.

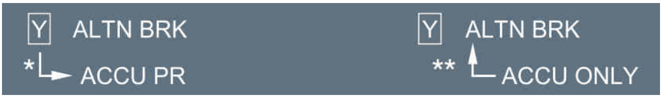
(7)



(A) ALTN BRK label
This indication appears in green, if the braking system is in alternate mode and not failed, or in case autobrake or normal braking is failed and alternate braking is still available.
This indication appears in amber when alternate braking is failed.

(B) ALTN BRK hydraulic supply indication
Y is displayed when the ALTN BRK label is displayed. It is green when yellow hydraulic pressure is available and amber, in case of yellow hydraulic low pressure.

(C) ACCU indications


Y
ALTN BRK
*
ACCU PR
Y
ALTN BRK
**
ACCU ONLY

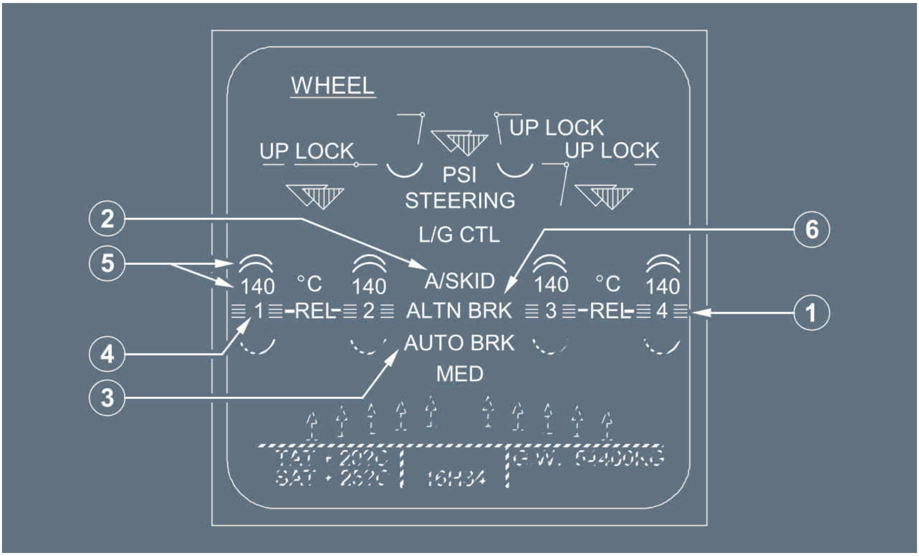
(*) Appears in green, when the ALTN BRK label is displayed, and the yellow hydraulic pressure is available.
Appears in amber, with no arrow, when the yellow hydraulic system and the accumulator are in low pressure.

(**) Appears in green when the alternate braking is pressurized by the yellow accumulator.

WHEEL SD PAGE

Ident.: DSC-32-30-20-00018639.0001001 / 21 MAR 16

5 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014**


WHEEL
UP LOCK
UP LOCK
UP LOCK
PSI
STEERING
L/G CTL
2
5
6
140
°C
140
A/SKID
140
°C
140
1
-REL-
2
ALTN BRK
3
-REL-
4
1
4
AUTO BRK
3
MED
TAT +20°C
SAT +25°C
16H34
G.W. 64400KG

(1) Release indicators

🟩These green lines appear temporarily after the landing gear has been lowered to indicate that the anti-skid function is ready.
They reappear after touchdown, along with REL (blue), when the anti-skid is active.

(2) A/SKID
This legend appears in amber, along with an ECAM caution, in case of total BSCU failure, or when the A/SKID & N/W STRG sw is OFF, or if the BSCU detects an ANTI-SKID failure.

(3) AUTO BRK

This legend appears:
- In green when auto brake is armed, or
- Flashing green for 10 s after autobrake disengagement, or
- In amber, along with an ECAM caution, to indicate a system failure.

MED, LO, or MAX appears underneath in green to show which rate has been selected.

(4) Wheel number
This white number identifies individual wheels of the main landing gear.

(5) Brake temperature

- Temperature normally appears in green.
- Green arc appears on the hottest wheel when one brake temperature exceeds 100 °C.
- Green arc becomes amber, and an ECAM caution appears, when the corresponding brake temperature exceeds 300 °C.

(6) ALTN BRK
This legend appears in green if the braking system is in alternate mode.

AUDIO INDICATORS

Ident.: DSC-32-30-20-00025022.0001001 / 09 NOV 21
6 **Applicable to: MSN 10949-11597**

Audio Indicator	Condition or Cause	Duration
Auto Brake Off (Synthetic Voice)	After touchdown, the flight crew disconnects the autobrake. Associated with the AUTO BRK OFF memo.	Sounds one time
Auto Brake Off, Auto Brake Off (Synthetic Voice)	After touchdown, the autobrake fails. Associated with the AUTO BRK OFF memo.	Sounds one time

MEMO DISPLAY

Ident.: DSC-32-30-20-A-00016854.0001001 / 22 MAR 16
Applicable to: ALL

AUTO BRK LO/MED/MAX : This memo appears in green, depending on the selection of the AUTO BRK pb.

Ident.: DSC-32-30-20-A-00016855.0002001 / 09 NOV 21

7 **Applicable to: MSN 10949-11597**

AUTO BRK OFF

Appears if:
- The flight crew disconnects the autobrake, or
- The autobrake fails.

Ident.: DSC-32-30-20-A-00016855.0001001 / 22 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

AUTO BRK OFF : This memo appears in green if the auto brake is failed.

Ident.: DSC-32-30-20-A-00016856.0001001 / 22 MAR 16

Applicable to: ALL

BRK FAN : This memo appears in green if the BRK FAN pb is ON.

Ident.: DSC-32-30-20-A-00016857.0001001 / 22 MAR 16

Applicable to: ALL

PARK BRK : This memo appears in green, if the parking brake is ON, during flight phases 1, 2, 9 and 10.

AIRCRAFT SYSTEMS

LIGHTS

Intentionally left blank

DSC-33-10 Cockpit Lighting

DSC-33-10-10 General

General....A

DSC-33-10-20 Description

Description.... A
Schematic....B

DSC-33-10-30 Controls and Indicators

Overhead Panel....A
Maintenance Panel.... B
Lateral Window....C
Pedestal.... D
Glareshield.... E
Main Inst Panel.... F

DSC-33-20 Exterior Lighting

DSC-33-20-10 General

General....A

DSC-33-20-20 Controls and Indicators

Schematic....A
Overhead Panel....B
Memo Display.... C

DSC-33-30 Emergency Lighting

DSC-33-30-10 Description

General....A
Proximity Emergency Escape Path Marking System/Exit Signs.... B

DSC-33-30-20 Controls and Indicators

Controls and Indicators....A

DSC-33-40 Signs

DSC-33-40-10 Controls and Indicators

Overhead Panel.... A
Memo Display.... B

Intentionally left blank

Localization Title	Toc Index	ID	Reason
DSC-33-30-10 Proximity Emergency Escape Path Marking System/Exit Signs	B	1	Documentation update: Addition of "Proximity Emergency Escape Path Marking System/Exit Signs" documentary unit

Localization Title	Toc Index	ID	Reason
DSC-33-20-20 Overhead Panel	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-33-30-10 Proximity Emergency Escape Path Marking System/Exit Signs	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-33-30-20 Controls and Indicators	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-33-10-10-00017615.0001001 / 21 MAR 16
Applicable to: ALL

The instrument panel has both integral instrument lighting and flood lighting.
The brightness of all panel lighting is adjustable.
Spot lights and flood lights provide lighting for all work surfaces and the side consoles.
Two dimmable dome lights provide lighting for the overall cockpit. When the batteries are supplying electrical power, only the right-hand dome light is on line.

Intentionally left blank

DESCRIPTION

Ident.: DSC-33-10-20-00017616.0001001 / 11 SEP 18
Applicable to: ALL

INTEGRATED LIGHTING FOR INSTRUMENTS AND PANELS

All instruments and panels in the cockpit (other than display units) have integral lighting.
The flight crew can adjust the brightness of all integral lighting.

ANNUNCIATOR LIGHTS

The ANN LT sw on the overhead panel controls the brightness of all the annunciator lights in the cockpit.
The ANN LT sw sets the brightness of all annunciator lights at the same level.
The flight crew can test the annunciator lights with the following procedure: Set the ANN LT sw to the TEST position, and check to see that all the annunciator lights come on.

DOME LIGHTS

Two dome lights provide the cockpit with shadow-free lighting.

MAP HOLDER LIGHTING

Each flight crewmember has a map holder that can be lighted.

CONSOLE AND BRIEFCASE LIGHTING

Each flight crewmember has lighting for briefcase stowage, the side console, and the floor.

CENTER INSTRUMENT PANEL

Lights under the glareshield provide lighting for the center instrument panel.

STANDBY COMPASS

The standby compass has integral lighting.

READING LIGHTS

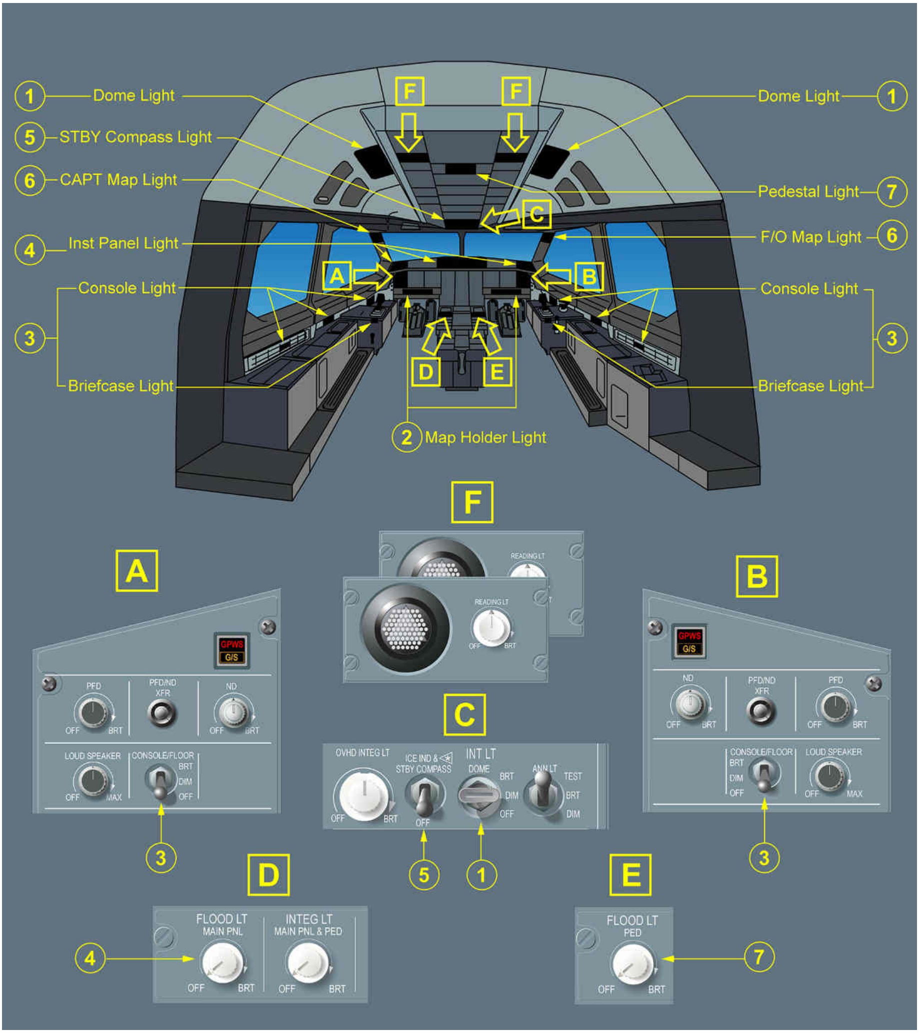
Each flight crewmember has a reading light.

PEDESTAL LIGHTING

A flood light in the middle of the overhead panel provides lighting for the center pedestal.

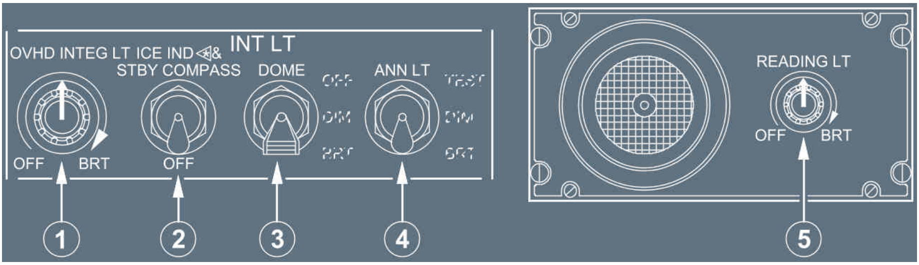
SCHEMATIC

Ident.: DSC-33-10-20-00001336.0002001 / 11 SEP 18
Applicable to: ALL


① Dome Light
⑤ STBY Compass Light
⑥ CAPT Map Light
④ Inst Panel Light
Console Light
③
Briefcase Light
F
F
C
A
B
D
E
② Map Holder Light
Dome Light ①
Pedestal Light ⑦
F/O Map Light ⑥
Console Light
③
Briefcase Light
F
READING LT
READING LT
OFF
BRT
A
GPWS
G/S
PFD
OFF
BRT
PFD/ND
XFR
ND
OFF
BRT
LOUD SPEAKER
OFF
MAX
CONSOLE/FLOOR
BRT
DIM
OFF
③
B
GPWS
G/S
ND
OFF
BRT
PFD/ND
XFR
PFD
OFF
BRT
CONSOLE/FLOOR
BRT
DIM
OFF
LOUD SPEAKER
OFF
MAX
③
C
OVHD INTEG LT
OFF
BRT
ICE IND &
STBY COMPASS
OFF
INT LT
DOME
BRT
DIM
OFF
ANN LT
TEST
BRT
DIM
⑤
①
D
FLOOD LT
MAIN PNL
OFF
BRT
INTEG LT
MAIN PNL & PED
OFF
BRT
④
E
FLOOD LT
PED
OFF
BRT
⑦

OVERHEAD PANEL

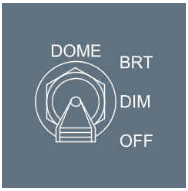
Ident.: DSC-33-10-30-00017617.0001001 / 21 MAR 16
Applicable to: ALL


INT LT
OVHD INTEG LT
ICE IND ◁✳&
STBY COMPASS
OFF
BRT
OFF
DOME
OFF
DIM
BRT
ANN LT
TEST
DIM
BRT
1
2
3
4
READING LT
OFF
BRT
5

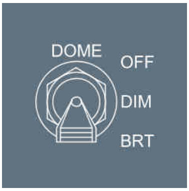
(1) OVHD INTEG LT knob
This knob turns the overhead panel's integral lighting on and off, and adjusts its brightness.

(2) ICE IND ◁✳ & STBY COMPASS sw
This switch turns the standby compass light and the external ice detector light ◁✳ on and off.

(3) DOME sw
The DOME sw controls both dome lights.
The DOME sw can have one of the two following configurations:

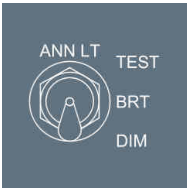

DOME
BRT
DIM
OFF

or

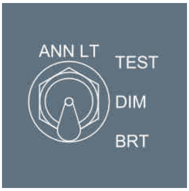

DOME
OFF
DIM
BRT

BRT : Both dome lights are on and bright.
DIM : Both dome lights are on and dim.
OFF : Both dome lights are off.

(4) ANN LT sw
The ANN LT sw controls all the flight deck annunciator lights.
The ANN LT sw can have one of the two following configurations:



or



TEST	:	All flight deck annunciator lights turn On. The figure '8' is displayed on all Liquid Crystal Display (LCD) of the FCU.
DIM	:	Reduces the brightness of all flight deck annunciator lights.
BRT	:	All flight deck annunciator lights operate normally.

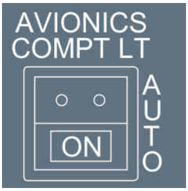
Note: When the ANN LT sw is set to TEST, do not reconfigure the DU (ECAM/ND transfer) or the DMC (DMC switching).

(5) READING LT knob

The reading light on each side of the overhead panel has its own control knob that turns it on and off and adjusts its brightness.

MAINTENANCE PANEL

Ident.: DSC-33-10-30-00001338.0001001 / 22 MAY 12
Applicable to: ALL

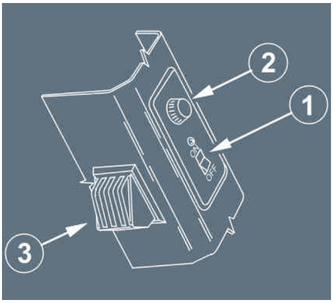


(1) AVIONICS COMPT LT pushbutton switch

AUTO	:	avionic compartment lighting is automatically controlled by door opening.
ON	:	avionic compartment lighting is on.

LATERAL WINDOW

Ident.: DSC-33-10-30-00001339.0002001 / 05 FEB 14
Applicable to: ALL



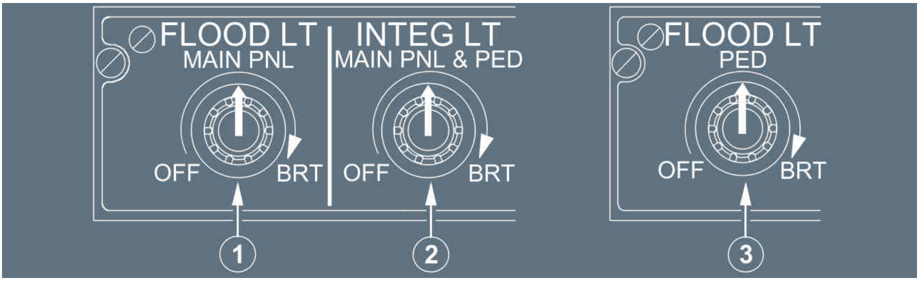
(1) Map light sw (Captain and F/O) ◁*

(2) Brightness adjustment knob

(3) Light

PEDESTAL

Ident.: DSC-33-10-30-00017619.0001001 / 21 MAR 16
Applicable to: ALL


FLOOD LT
MAIN PNL
OFF
BRT
INTEG LT
MAIN PNL & PED
OFF
BRT
FLOOD LT
PED
OFF
BRT
1
2
3

(1) FLOOD LT MAIN PNL knob
Turns on or off, and adjusts the brightness of the main instrument panel.

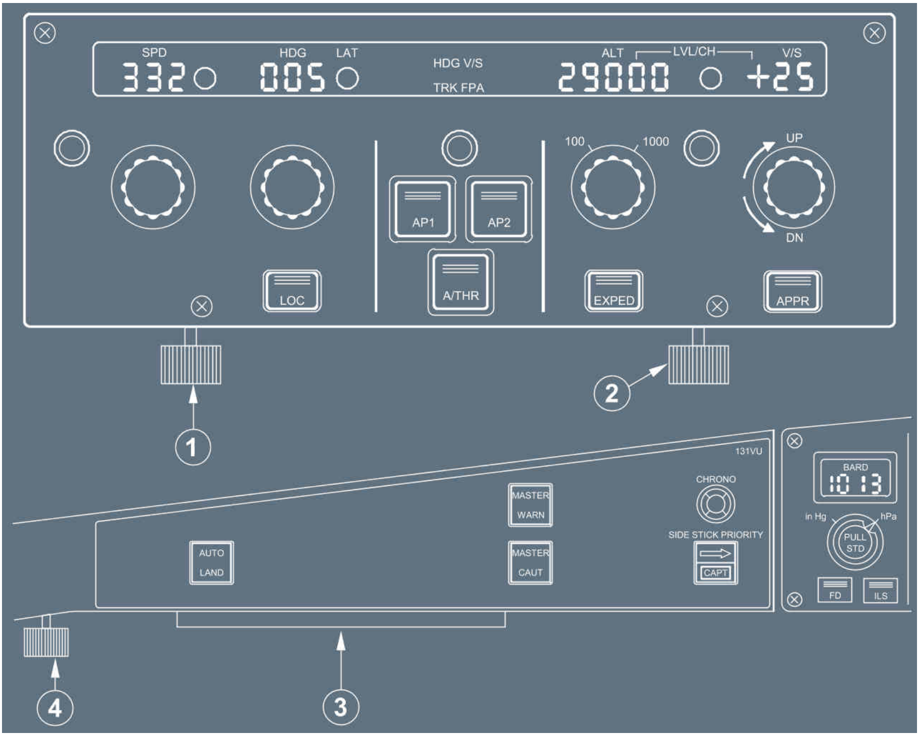
(2) INTEG LT MAIN PNL & PED knob
Turns on or off, and adjusts the brightness of the integral lights of:

- The main instrument panel
- The center pedestal.

(3) FLOOD LT PED knob
Turns on or off, and adjusts the brightness of the pedestal lights.

GLARESHIELD

Ident.: DSC-33-10-30-00001341.0002001 / 21 JAN 14
Applicable to: ALL


SPD
332
HDG
005
LAT
HDG V/S
TRK FPA
ALT
LVL/CH
29000
V/S
+25
100
1000
UP
DN
AP1
AP2
A/THR
LOC
EXPED
APPR
1
2
131VU
CHRONO
MASTER WARN
MASTER CAUT
AUTO LAND
SIDE STICK PRIORITY
CAPT
BARO
1013
in Hg
hPa
PULL STD
FD
ILS
4
3

(1) This knob adjusts the brightness of the integral lighting on the glareshield.

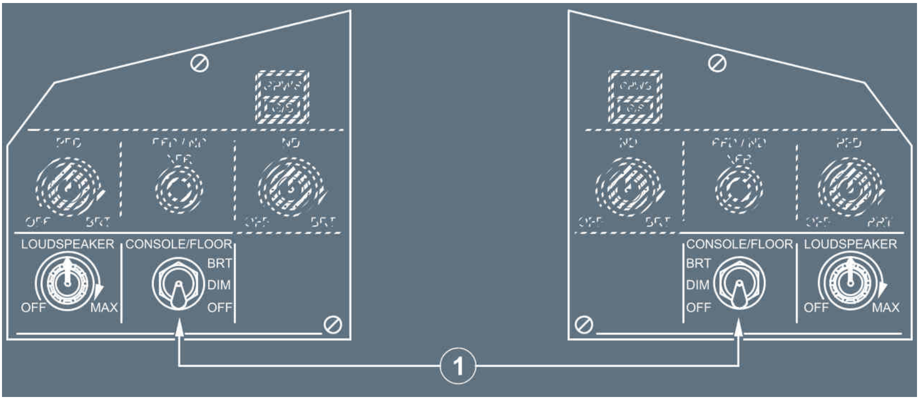
(2) This knob adjusts the brightness of the FCU displays.

(3) This lighting ◁ illuminates the sliding table and map holder.

(4) This knob ◁ adjusts the brightness of the sliding table and map holder lighting.

MAIN INST PANEL

Ident.: DSC-33-10-30-00017620.0001001 / 21 MAR 16
Applicable to: ALL


GPWS
G/S
PFD
PFD / ND
XFR
ND
OFF
BRT
LOUDSPEAKER
CONSOLE/FLOOR
BRT
DIM
OFF
MAX
1

(1) CONSOLE/FLOOR sw
Each switch controls the lights of the side console and of the briefcase on each side of the cockpit. In addition, each switch controls the lighting of the floor around each flight crew member's seat. The lights can either be bright, dim, or off.

Intentionally left blank

GENERAL

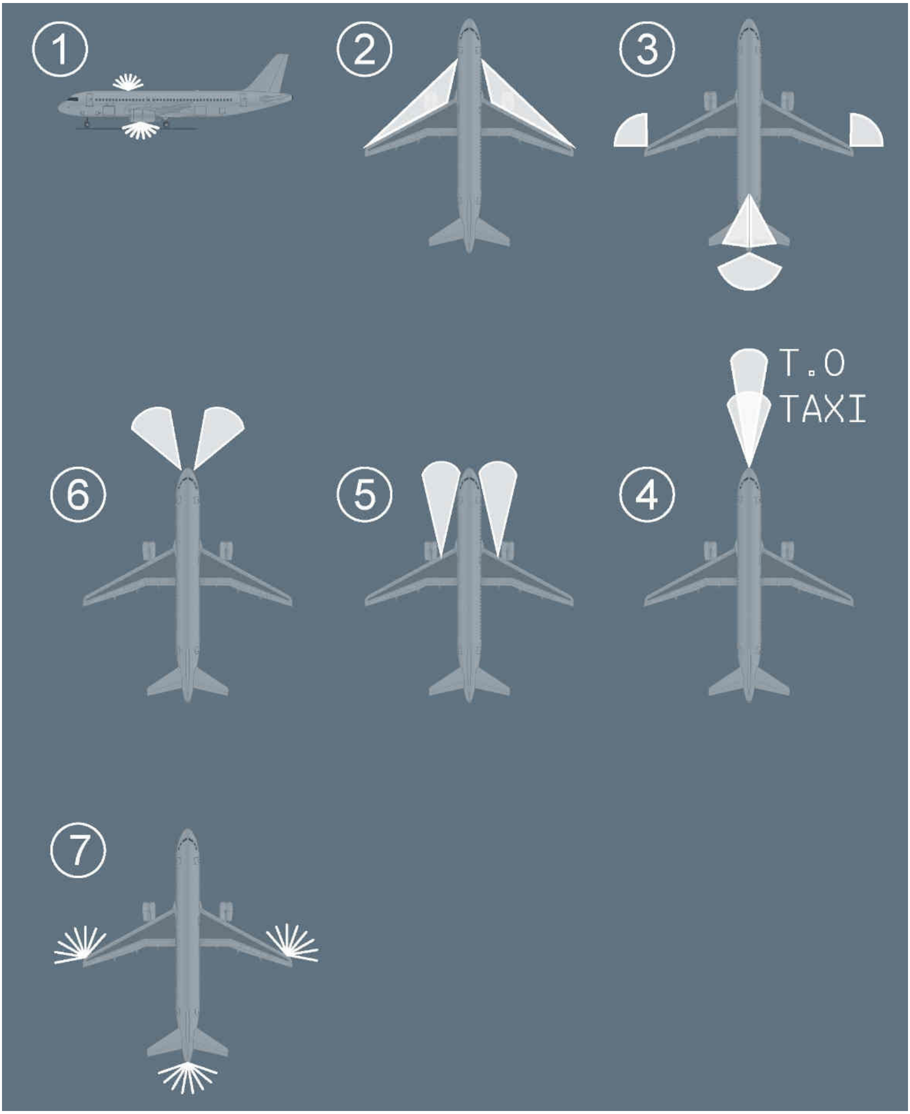
Ident.: DSC-33-20-10-00017621.0001001 / 21 MAR 16
Applicable to: ALL

Exterior lighting includes the following lights:
- The navigation lights
- The landing lights
- The runway turn off lights
- The TO and TAXI lights
- The logo lights ◁
- The anticollision lights
- The wing and engine scan lights.

Intentionally left blank

SCHEMATIC

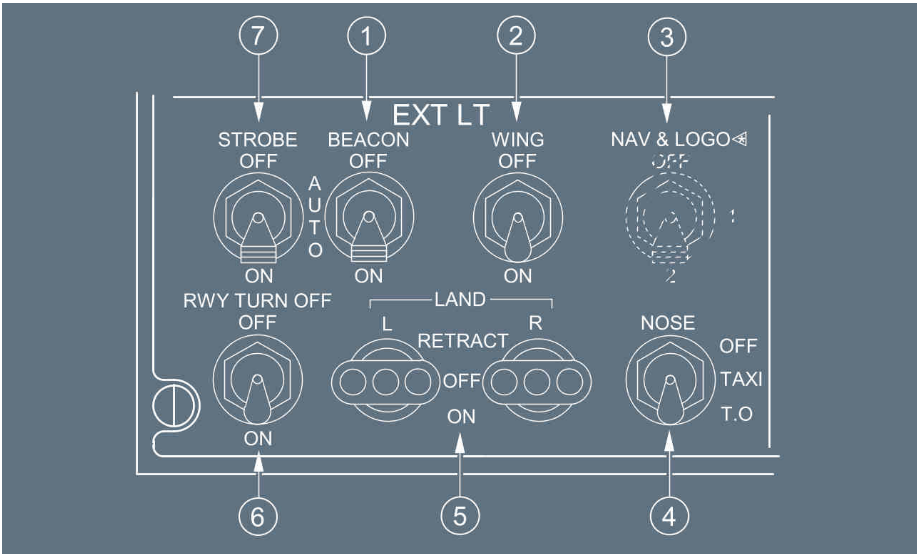
Ident.: DSC-33-20-20-00017622.0001001 / 21 MAR 16


①
②
③
T.O
TAXI
⑥
⑤
④
⑦

OVERHEAD PANEL

Ident.: DSC-33-20-20-00017623.0004001 / 21 MAR 16

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876



(1) BEACON sw

This switch turns on and off the two flashing red lights, one on top and one on the bottom of the fuselage.

(2) WING sw

This switch turns on and off two beam lights on each side of the fuselage. These lights provide lighting on the wing leading edge and on the engine air intake to detect ice accretion.

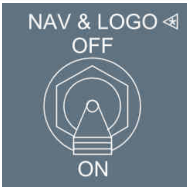
(3) NAV & LOGO ◁ sw

There are single navigation light, or dual navigation lights ◁ on each wing and in the APU tail cone.

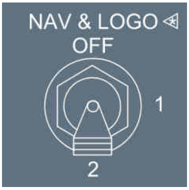
A blue light ◁ below each navigation light allows to monitor the navigation light wear (LED technology). When the NAV & LOGO ◁ sw is ON, this light ◁ flashes in blue if the navigation light replacement should be planned.

There are logo lights ◁ in the upper surface of each horizontal stabilizer. These light provide lighting for the company logo on the vertical stabilizer provided the main landing gears are compressed, or depending on the aircraft configuration, when flaps are extended (at least 15 ° on some aircraft) or slats are extended.

The NAV & LOGO ◁ sw can have one of the following configuration:

	ON : Turns on the NAV and the LOGO lights ◁ . OFF : The NAV and the LOGO lights ◁ are off.

or

	2 : Turns on NAV 2 and the LOGO lights ◁ . 1 : Turns on NAV 1 and the LOGO lights ◁ . OFF : The NAV and the LOGO lights ◁ are off.

(4) NOSE sw

This switch turns the taxi and takeoff lights on and off.

TO : Turns on both taxi and takeoff lights.

TAXI : Turns on only taxi light.

OFF : Taxi and takeoff lights off.

Note: These two lights, attached to the nose gear strut, go off automatically when landing gear is retracted.

(5) L and R LAND sel

These selectors control the landing lights.

ON : Extends the (left or right) landing lights which come on automatically when fully extended.

OFF : Shuts off the landing lights which remain extended.

RETRACT : Shuts off and retracts the landing lights.

(6) RWY TURN OFF sw

This switch turns the runway turn-off lights on and off.

Note: These lights go off automatically when landing gear is retracted.

(7) STROBE sw

This switch turns on and off the three synchronized strobe lights, one on each wing and one below the tail cone.

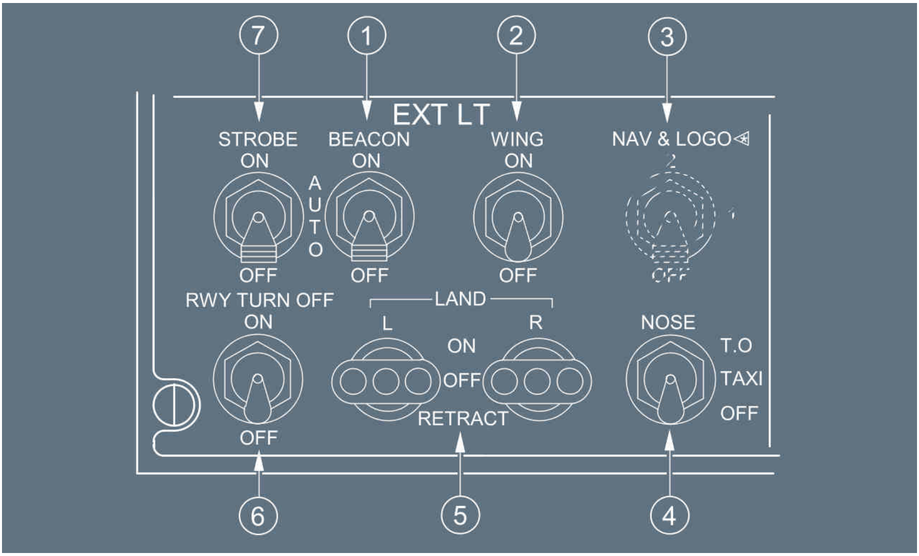
A blue light ◁ below each strobe light allows to monitor the strobe light wear (LED technology). When STROBE sw is OFF or BEACON sw is ON, this light ◁ flashes in blue if the strobe light replacement should be planned.

ON	:	The strobe lights flash white.
AUTO	:	The strobe lights come on automatically when the main landing gear is not compressed.
OFF	:	The strobe lights are off.

OVERHEAD PANEL

Ident.: DSC-33-20-20-00017623.0001001 / 21 MAR 16

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**


7
1
2
3
EXT LT
STROBE
ON
AUTO
OFF
BEACON
ON
OFF
WING
ON
OFF
NAV & LOGO
2
1
OFF
RWY TURN OFF
ON
OFF
LAND
L
R
ON
OFF
RETRACT
NOSE
T.O
TAXI
OFF
6
5
4

(1) BEACON sw
This switch turns on and off the two flashing red lights, one on top and one on the bottom of the fuselage.

(2) WING sw
This switch turns on and off two beam lights on each side of the fuselage. These lights provide lighting on the wing leading edge and on the engine air intake to detect ice accretion.

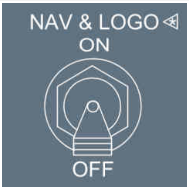
(3) NAV & LOGO sw

There are single navigation light, or dual navigation lights on each wing and in the APU tail cone.

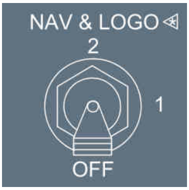
A blue light below each navigation light allows to monitor the navigation light wear (LED technology). When NAV & LOGO sw is ON, this light flashes in blue if the navigation light replacement should be planned.

There are logo lights in the upper surface of each horizontal stabilizer. These lights provide lighting for the company logo on the vertical stabilizer provided the main landing gear is compressed, or depending on the aircraft configuration, when flaps are extended (at least 15 ° on some aircraft) or slats are extended.

The NAV & LOGO sw can have one of the following configuration:

	ON : Turns on the NAV and the LOGO lights . OFF : The NAV and the LOGO lights are off.

or

	2 : Turns on NAV 2 and the LOGO lights . 1 : Turns on NAV 1 and the LOGO lights . OFF : The NAV and the LOGO lights are off.

(4) NOSE sw

This switch turns the taxi and takeoff lights on and off.

TO : Turns on both taxi and takeoff lights.
TAXI : Turns on only taxi light.
OFF : Taxi and takeoff lights off.

Note: These two lights, attached to the nose gear strut, go off automatically when landing gear is retracted.

(5) L and R LAND sel

These selectors control the landing lights.

ON : Extends the (left or right) landing lights which come on automatically when fully extended.

OFF : Shuts off the landing lights which remain extended.
RETRACT : Shuts off and retracts the landing lights.

(6) RWY TURN OFF sw

This switch turns the runway turn-off lights on and off.

Note: These lights go off automatically when landing gear is retracted.

(7) STROBE sw

This switch turns on and off the three synchronized strobe lights, one on each wing and one below the tail cone.

A blue light ◁✳ below each strobe light allows to monitor the strobe light wear (LED technology). When STROBE sw is OFF or BEACON sw is ON, this light ◁✳ flashes in blue if the strobe light replacement should be planned.

ON : The strobe lights flash white.
AUTO : The strobe lights come on automatically when the main landing gear is not compressed.
OFF : The strobe lights are off.

MEMO DISPLAY

Applicable to: ALL

Ident.: DSC-33-20-20-M-00016785.0001001 / 21 MAR 16

LDG LT : The message is displayed in green, if one landing light is extended.

Ident.: DSC-33-20-20-M-00016784.0001001 / 21 MAR 16

STROBE LT OFF : The message is displayed in green, if the STROBE sw is OFF in flight.

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GENERAL

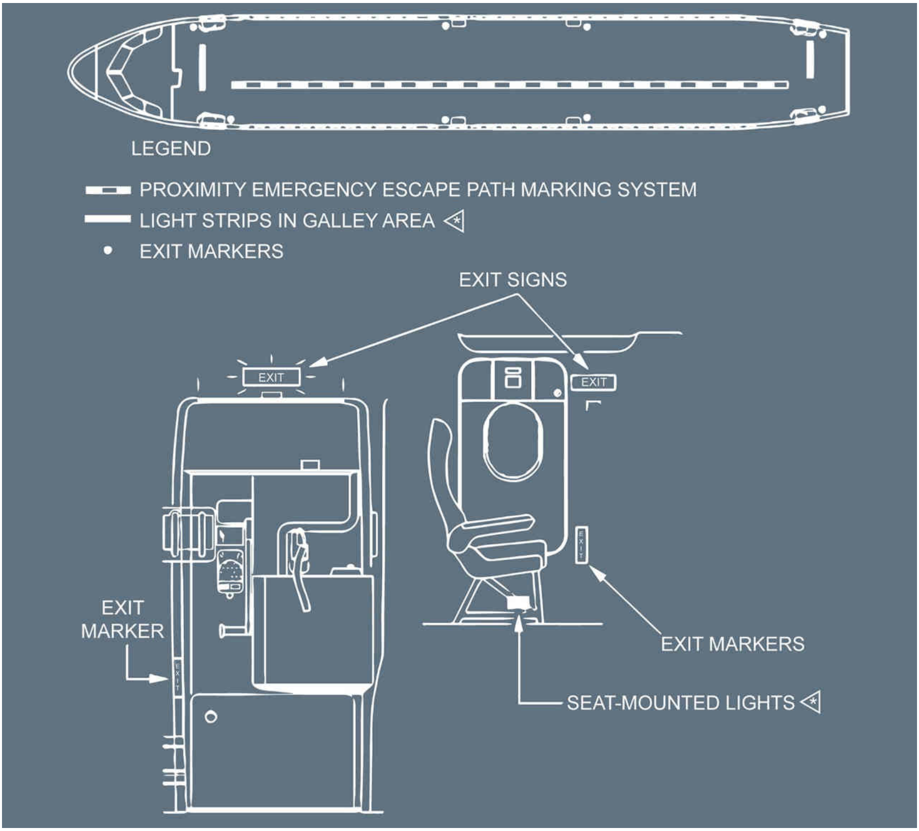
Ident.: DSC-33-30-10-00017632.0001001 / 27 FEB 18
Applicable to: ALL

The emergency lighting system consists of the following:
- Proximity emergency escape path marking systems (escape path and exit markers)
- Overhead emergency lights
- EXIT signs
- Lavatory auxiliary lights
- Overwing escape route ◁ lighting
- Escape slide lighting.

For aircraft equipped with electrical escape paths or electrical exit markers, internal batteries supply electrical power for at least 12 min.
Lavatory auxiliary lights are always on.
The escape slides have an integral lighting system. The escape slide lights and overwing escape route ◁ lights come on automatically when the slide is armed and the door or emergency exit is open. They are supplied by internal batteries.

PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM/EXIT SIGNS

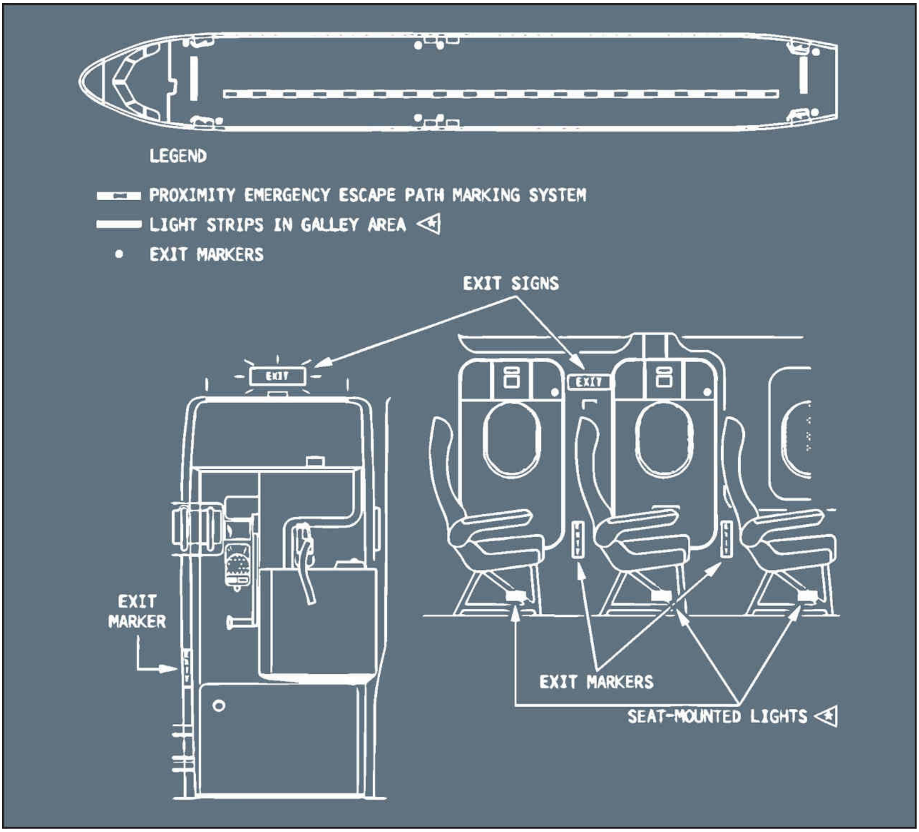
1 Ident.: DSC-33-30-10-00017646.0017001 / 09 MAR 18
Applicable to: MSN 11531


LEGEND
PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM
LIGHT STRIPS IN GALLEY AREA
EXIT MARKERS
EXIT SIGNS
EXIT
EXIT
EXIT MARKER
EXIT
EXIT
EXIT MARKERS
SEAT-MOUNTED LIGHTS

PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM/EXIT SIGNS

Ident.: DSC-33-30-10-00017646.0013001 / 21 MAR 16

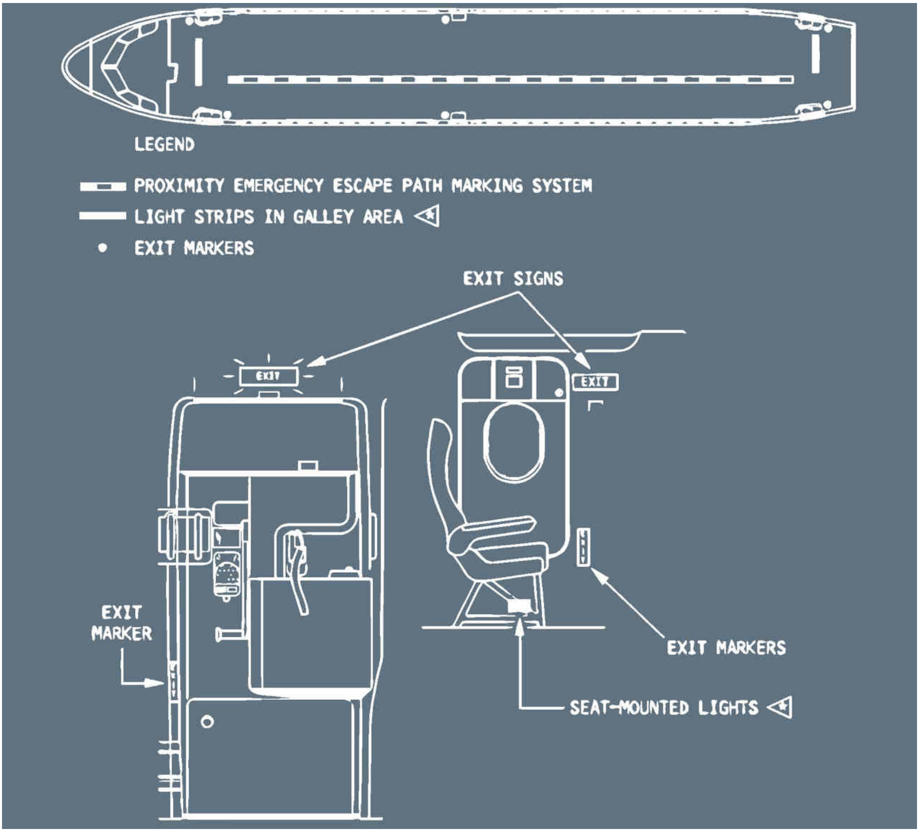
2 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


LEGEND
PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM
LIGHT STRIPS IN GALLEY AREA
EXIT MARKERS
EXIT SIGNS
EXIT
EXIT
EXIT MARKER
EXIT MARKERS
SEAT-MOUNTED LIGHTS

PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM/EXIT SIGNS

Ident.: DSC-33-30-10-00017646.0012001 / 21 MAR 16

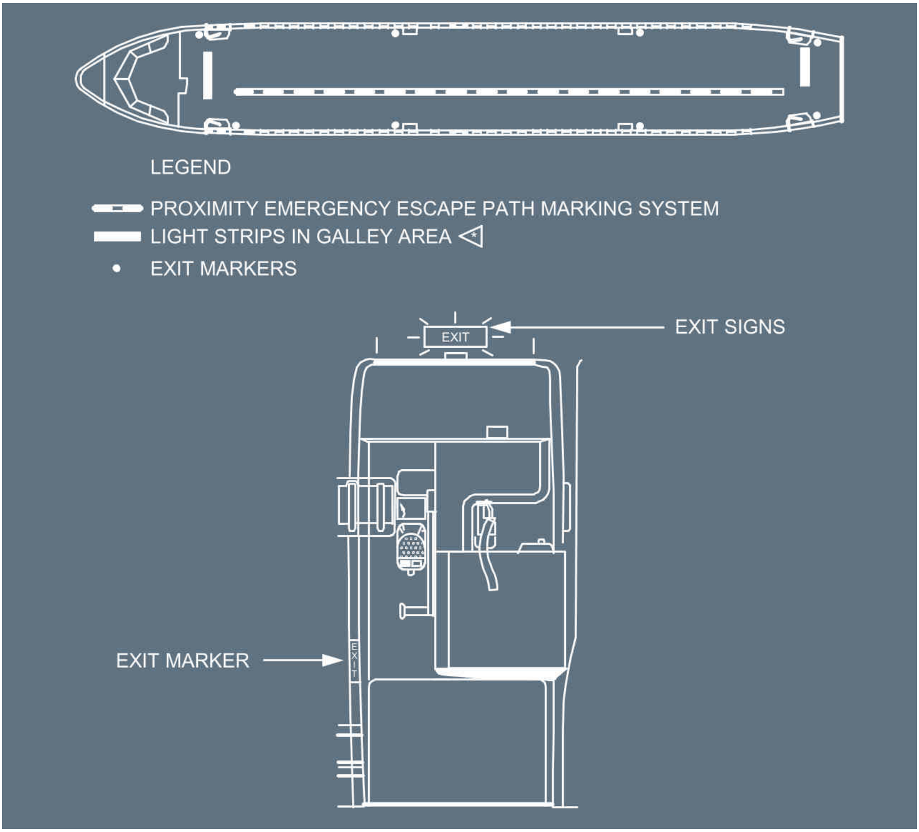
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345


LEGEND
PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM
LIGHT STRIPS IN GALLEY AREA
EXIT MARKERS
EXIT SIGNS
EXIT
EXIT
EXIT MARKER
EXIT MARKERS
SEAT-MOUNTED LIGHTS

PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM/EXIT SIGNS

Ident.: DSC-33-30-10-00017646.0009001 / 21 MAR 16

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098


LEGEND
PROXIMITY EMERGENCY ESCAPE PATH MARKING SYSTEM
LIGHT STRIPS IN GALLEY AREA
EXIT MARKERS
EXIT
EXIT SIGNS
EXIT MARKER
EXIT

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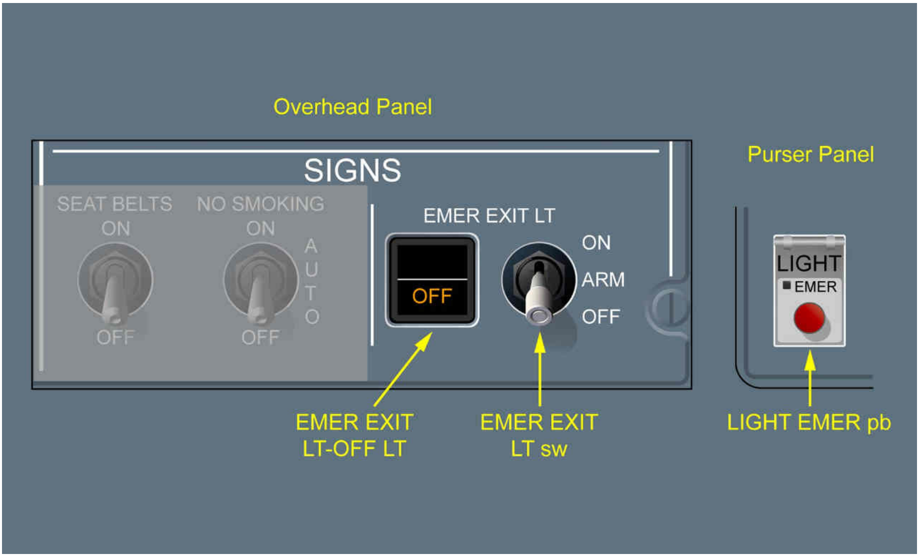
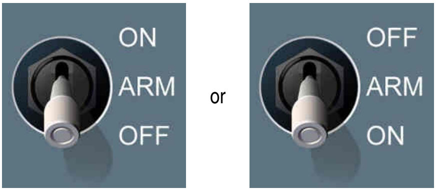
CONTROLS AND INDICATORS

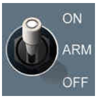
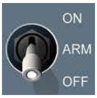
Ident.: DSC-33-30-20-00017708.0003001 / 26 NOV 19
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02896-03002


Overhead Panel
SIGNS
SEAT BELTS
ON
OFF
NO SMOKING
ON
AUTO
OFF
EMER EXIT LT
OFF
ON
ARM
OFF
Purser Panel
LIGHT
EMER
EMER EXIT LT-OFF LT
EMER EXIT LT sw
LIGHT EMER pb

EMER EXIT LT sw

The EMER EXIT LT sw can have one of the following configuration:


ON
ARM
OFF
or
OFF
ARM
ON

	Overhead emergency lights, EXIT signs and proximity marking system come on.
	Above lights are off.

- The proximity emergency escape path marking system comes on when the normal aircraft electrical power or DC SHED ESS BUS is lost
- The overhead emergency lights come on if:
  - Normal aircraft electrical power system fails, or
  - DC SHED ESS BUS fails, or
  - AC BUS 1 fails.
- Exit signs come on if:
  - Normal aircraft electrical power system fails, or
  - DC SHED ESS BUS fails.

Note: *The LIGHT EMER pb on the Purser panel can turn on the emergency lighting regardless of the position of the EMER EXIT LT sw.*

EMER EXIT LT-OFF LT

The amber EMER EXIT LT-OFF lt comes on when the EMER EXIT LT sw is set to OFF.

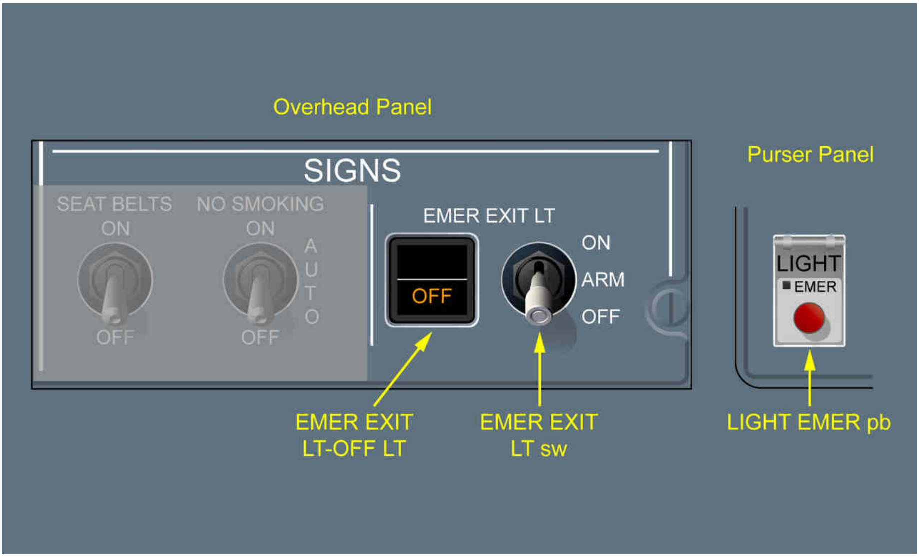
LIGHT EMER pb

When pressed, this button performs the same function as the EMER EXIT LT sw when it is set to ON.

CONTROLS AND INDICATORS

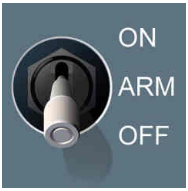
Ident.: DSC-33-30-20-00017708.0027001 / 26 NOV 19

1 **Applicable to: MSN 02321, 02734-02887, 03032-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

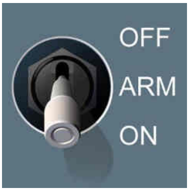

Overhead Panel
SIGNS
SEAT BELTS
ON
OFF
NO SMOKING
ON
AUTO
OFF
EMER EXIT LT
OFF
ON
ARM
OFF
Purser Panel
LIGHT
EMER
EMER EXIT LT-OFF LT
EMER EXIT LT sw
LIGHT EMER pb

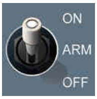
EMER EXIT LT sw

The EMER EXIT LT sw can have one of the following configuration:

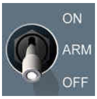


or





Overhead emergency lights, EXIT signs and proximity marking system come on.



Above lights are off.

- Exit markers come on when the normal aircraft electrical power or DC SHED ESS BUS is lost.
- The overhead emergency lights come on if:
  - Normal aircraft electrical power system fails, or
  - DC SHED ESS BUS fails, or
  - AC BUS 1 fails.
- Exit signs come on if:
  - Normal aircraft electrical power system fails, or
  - DC SHED ESS BUS fails.

Note: *The LIGHT EMER pb on the Purser panel can turn on the emergency lighting regardless of the position of the EMER EXIT LT sw.*

EMER EXIT LT-OFF LT

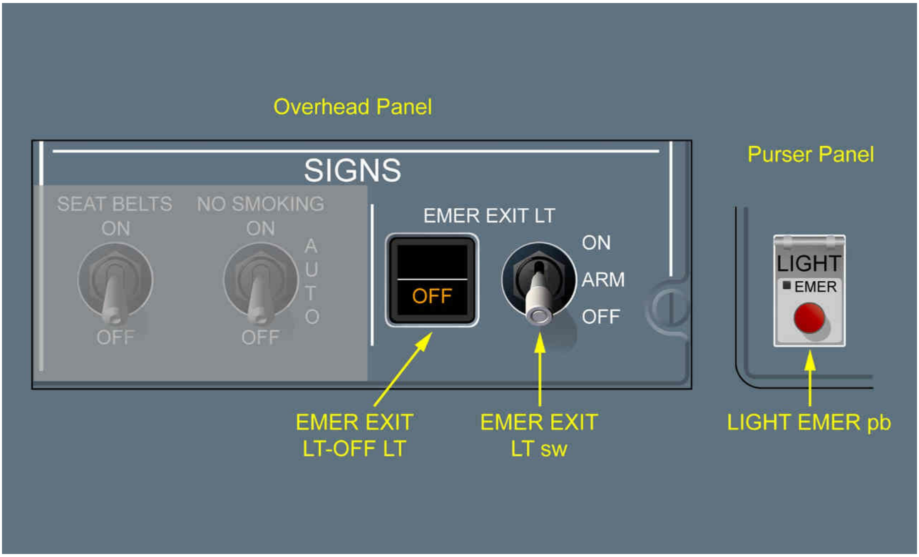
The amber EMER EXIT LT-OFF lt comes on when the EMER EXIT LT sw is set to OFF.

LIGHT EMER pb

When pressed, this button performs the same function as the EMER EXIT LT sw when it is set to ON.

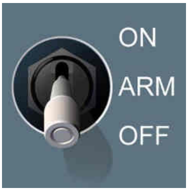
CONTROLS AND INDICATORS

Ident.: DSC-33-30-20-00017708.0063001 / 26 NOV 19
Applicable to: MSN 04827-04860

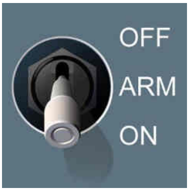

Overhead Panel
SIGNS
SEAT BELTS
ON
OFF
NO SMOKING
ON
AUTO
OFF
EMER EXIT LT
OFF
ON
ARM
OFF
Purser Panel
LIGHT
EMER
EMER EXIT
LT-OFF LT
EMER EXIT
LT sw
LIGHT EMER pb

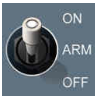
EMER EXIT LT sw

The EMER EXIT LT sw can have one of the following configuration:

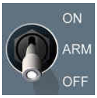


or





Overhead emergency lights, EXIT signs and proximity marking system come on.



Above lights are off.

- Exit markers come on when the normal aircraft electrical power or DC SHED ESS BUS is lost
- The overhead emergency lights come on if:
  - Normal aircraft electrical power system fails, or
  - DC SHED ESS BUS fails, or
  - AC BUS 1 fails.
- Exit signs come on if:
  - Normal aircraft electrical power system fails, or
  - DC SHED ESS BUS fails.

Note: - *With EMER EXIT LT sw set to ON or ARM, the Passenger Address system is supplied by the HOT BUS*
- *The LIGHT EMER pb on the Purser panel can turn on the emergency lighting regardless of the position of the EMER EXIT LT sw.*

EMER EXIT LT-OFF LT

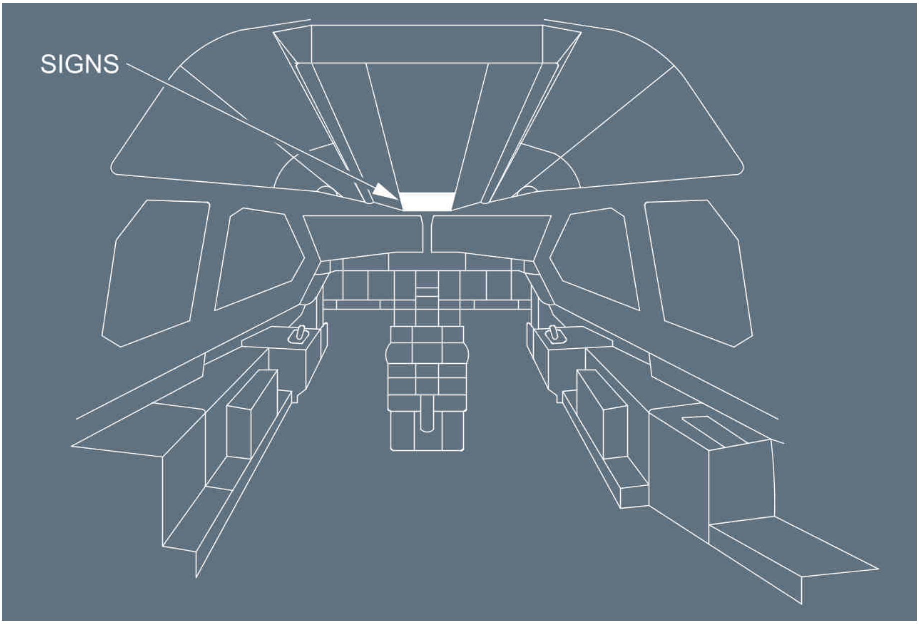
The amber EMER EXIT LT-OFF lt comes on when the EMER EXIT LT sw is set to OFF.

LIGHT EMER pb

When pressed, this button performs the same function as the EMER EXIT LT sw when it is set to ON.

OVERHEAD PANEL

Ident.: DSC-33-40-10-00017709.0001001 / 21 MAR 16
Applicable to: ALL



The switches described below are installed on the SIGNS panel on the overhead panel.

The cabin signs consist of the following:
- A SEAT BELTS sw, and
- A NO SMOKING sw ◁✳ , or
- An EXIT sw ◁✳ , or
- A NO PORTABLE ELEC DEVICE sw ◁✳ .

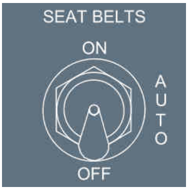
The SEAT BELTS sw activates the FASTEN SEAT BELT and RETURN TO YOUR SEAT signs.
The NO SMOKING sw ◁✳ or EXIT sw ◁✳ activate the EXIT and NO SMOKING signs.
The NO PORTABLE ELEC DEVICE sw ◁✳ activates the EXIT and NO MOBILE signs.
A low tone chime sounds (depending on CIDS/CAM programming) each time a sign goes on or off.
Each switch has 3 positions:

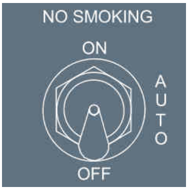
ON : Signs are on in the cabin

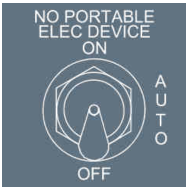
AUTO : ◁✳ Signs are on in the cabin when either landing gear is extended or flaps/slats are extended (position 1, 2, 3, or FULL)

OFF : Signs are off in the cabin

Example of switches layout:


SEAT BELTS
ON
AUTO
OFF


NO SMOKING
ON
AUTO
OFF


NO PORTABLE
ELEC DEVICE
ON
AUTO
OFF

Note: 1. *If the cabin altitude goes above 11 300 ft (± 350 ft), the cabin lights (depending on CIDS/CAM programming) and all the cabin signs, except the NO PORTABLE ELEC DEVICE signs ◁ come on regardless of switches position.*

2. *For NON SMOKER ◁ , the NO SMOKING signs are always on.*

MEMO DISPLAY

Ident.: DSC-33-40-10-00016783.0001001 / 05 MAY 22

Applicable to: ALL

When the corresponding signs are on, the ECAM displays SEAT BELTS, NO SMOKING or NO PED or NO MOBILEmessages, depending on aircraft customization.

AIRCRAFT SYSTEMS

NAVIGATION

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DSC-34-NAV-10 ADIRS

DSC-34-NAV-10-10 Description

General.......A
Probes Location.......B
Probes Schematic.......C
ADIRS Schematic.......D

DSC-34-NAV-10-20 Controls and Indicators

Overhead Panel.......A
Pedestal.......B
Memo Display.......C
Maximum Differences Between Speed/Mach Indications.......D
ADIRS Operations - Status Messages.......E

DSC-34-NAV-10-30 Abnormal Operations

DSC-34-NAV-10-30-10 Backup Speed/Altitude Scale

Backup Speed/Altitude Scale - General.......A
Backup Speed/Altitude Scale - Backup Speed Scale.......B

DSC-34-NAV-10-30-20 Digital Backup Speed/Altitude

Speed Monitoring Function.......A
Associated Alerts and Status.......B
Digital Backup Speed/Altitude.......C

DSC-34-NAV-10-40 Temporary Abnormal Behaviors

Undue inhibition of NAV BKUP SPD/ALT ON CAPT (F/O) PFD.......A

DSC-34-NAV-15 GPS

DSC-34-NAV-15-10 Description

Description.......A

DSC-34-NAV-20 Standby Instruments

Compass.......A
Description of the ISIS.......B
Attitude.......C
Airspeed.......D
Altimeter.......E
Landing System Function.......F
Bugs Function.......G
Flags.......H

Continued on the following page

Continued from the previous page

DSC-34-NAV-30 Radio Nav

DSC-34-NAV-30-10 Tuning

General....A
Architecture....B

DSC-34-NAV-30-20 Navaids

VOR....A
ILS/GLS ◁ /MLS ◁ ....B
ADF ◁ C
DME....D
Marker Beacon....E

DSC-34-NAV-30-30 Controls and Indicators

ADF ◁ Page....A
LS Page....B
NAV Page....C
VOR Page....D
Digital Distance and Radio Magnetic Indicator ◁ (DDRMI)....E
Radio Management Panel (RMP)....F

DSC-34-NAV-40 Radio Altimeter

DSC-34-NAV-40-10 Description

General....A
Automatic Callout....B

Localization Title	Toc Index	ID	Reason
DSC-34-NAV-30-20 VOR	A	1	Documentation update: Addition of "VOR" documentary unit
DSC-34-NAV-30-20 Marker Beacon	E	3	Documentation update: Addition of "Marker Beacon" documentary unit
DSC-34-NAV-30-30 ADF ◁ Page	A	1	Documentation update: Addition of "ADF (If Installed) Page" documentary unit
DSC-34-NAV-30-30 LS Page	B	2	Documentation update: Addition of "LS Page" documentary unit
DSC-34-NAV-30-30 NAV Page	C	3	Documentation update: Addition of "NAV Page" documentary unit
DSC-34-NAV-30-30 VOR Page	D	4	Documentation update: Addition of "VOR Page" documentary unit

DSC-34-NAV-10-20 Overhead Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 ADIRS SWTG	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 IR IN ATT ALIGN	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 IRS IN ALIGN X MN	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-20 Maximum Differences Between Speed/Mach Indications	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Speed Monitoring Function	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Asscociated Alerts and Messages	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Speed Monitoring Status	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Digital Backup Speed/Altitude - General	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-10-30-20 Digital Backup Speed/Altitude - Digital Backup Speed	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Description of the ISIS	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Attitude	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Airspeed	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

Continued on the following page

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Localization Title	Toc Index	ID	Reason
DSC-34-NAV-20 Altimeter	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Landing System Function	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Bugs Function	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-20 Flags	H	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-NAV-30-10 Architecture	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-34-NAV-30-20 VOR	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098,

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Continued from the previous page

Localization Title	Toc Index	ID	Reason
			08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482. The information no longer applies to all MSN.
DSC-34-NAV-30-20 Marker Beacon	E	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482. The information no longer applies to all MSN.
DSC-34-NAV-30-30 Radio Management Panel (RMP)	F	5	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.

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GENERAL

Ident.: DSC-34-NAV-10-10-00018524.0001001 / 21 MAR 16
Applicable to: ALL

The Air Data and Inertial Reference System (ADIRS) supplies temperature, anemometric, barometric and inertial parameters to the EFIS system (PFD and ND) and to other user systems (FMGC, FADEC, ELAC, SEC, FAC, FWC, SFCC, ATC, GPWS, CFDIU, CPC).

The system includes:

- Three identical ADIRUs (Air Data and Inertial Reference Units).

  Each ADIRU is divided in two parts, either of which can work separately in case of failure in the other:
  - The ADR part (Air Data Reference) which supplies barometric altitude, airspeed, Mach, angle of attack, temperature and overspeed warnings.
  - The IR part (Inertial Reference) which supplies attitude, flight path vector, track, heading, accelerations, angular rates, ground speed and aircraft position.

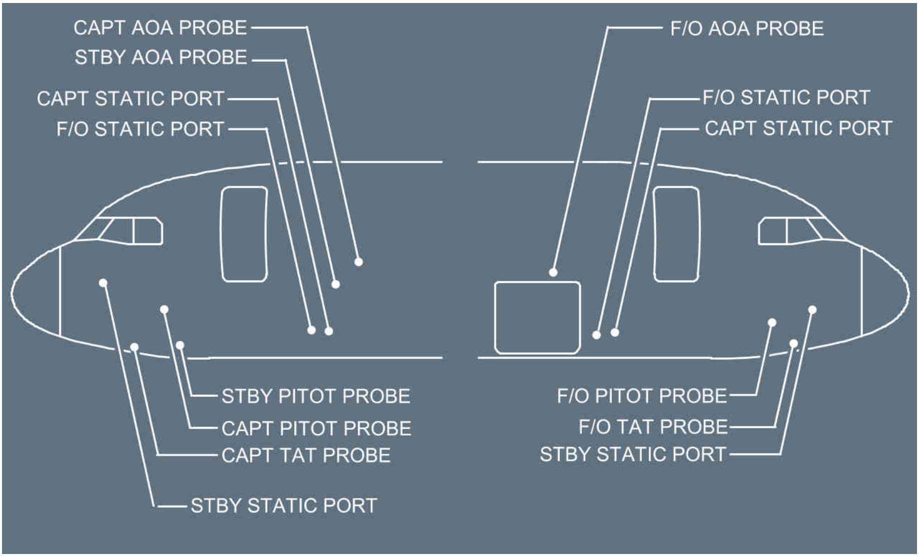
- One ADIRS control panel on the overhead panel for selection of modes (NAV, ATT, OFF) and indications of failures.
- Four types of sensors:
  - Pitot probes (3)
  - Static pressure probes (STAT) (6)
  - Angle of attack sensors (AOA) (3)
  - Total air temperature probes (TAT) (2)

  These sensors are electrically heated to prevent from icing up.
- Eight ADMs (Air Data Modules) which convert pneumatic data from PITOT and STAT probes into numerical data for the ADIRUs.
- A switching facility for selecting ADR3 or IR3 for instrument displays in case of ADIRU1 or 2 failure.

PROBES LOCATION

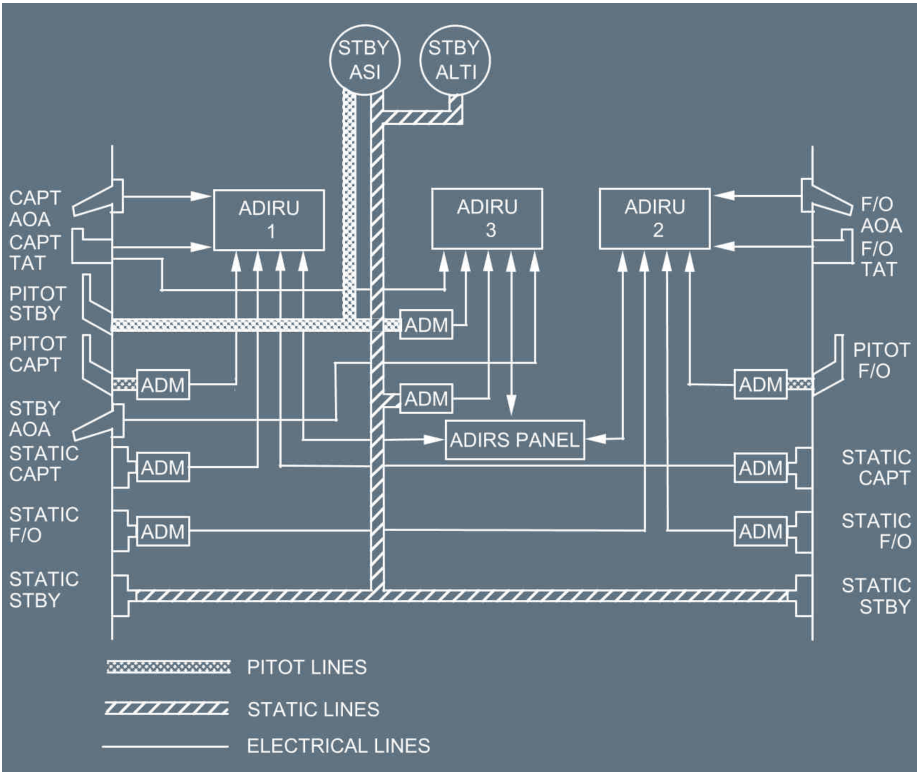
Ident.: DSC-34-NAV-10-10-00018525.0001001 / 21 MAR 16

Applicable to: ALL


CAPT AOA PROBE
STBY AOA PROBE
CAPT STATIC PORT
F/O STATIC PORT
F/O AOA PROBE
F/O STATIC PORT
CAPT STATIC PORT
STBY PITOT PROBE
CAPT PITOT PROBE
CAPT TAT PROBE
STBY STATIC PORT
F/O PITOT PROBE
F/O TAT PROBE
STBY STATIC PORT

PROBES SCHEMATIC

Ident.: DSC-34-NAV-10-10-00018526.0001001 / 21 MAR 16
Applicable to: ALL

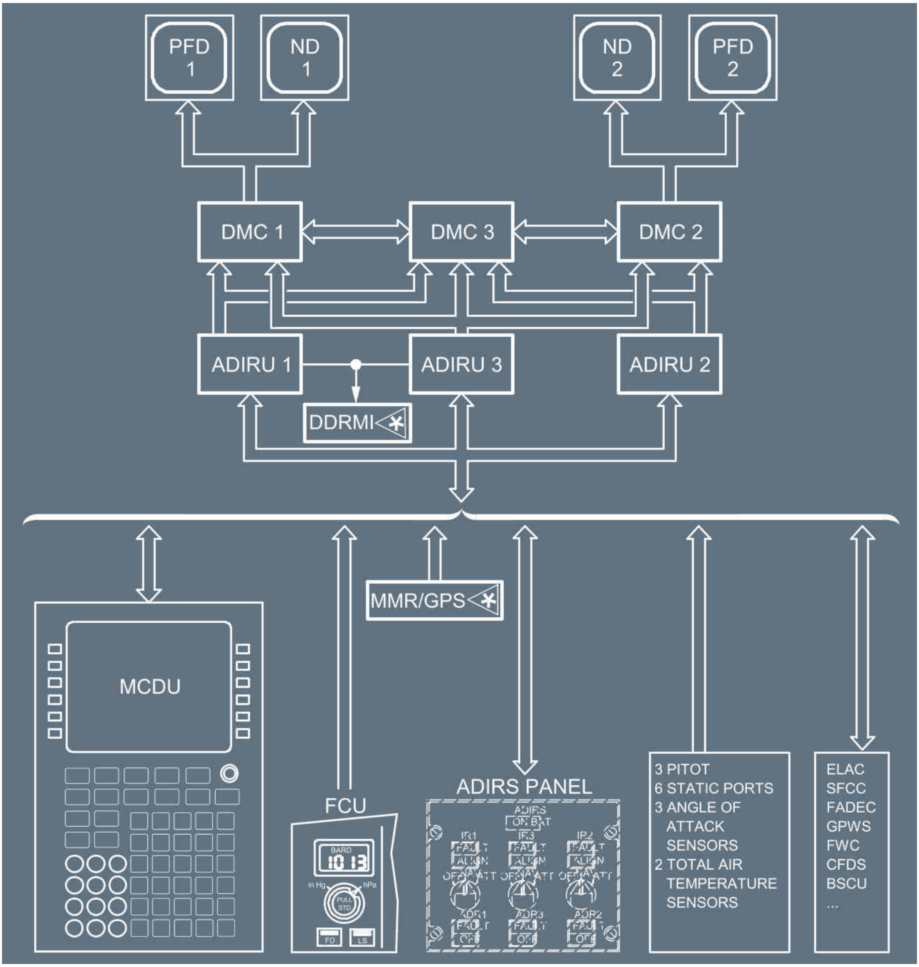

STBY ASI
STBY ALTI
CAPT AOA
CAPT TAT
PITOT STBY
PITOT CAPT
STBY AOA
STATIC CAPT
STATIC F/O
STATIC STBY
ADIRU 1
ADIRU 3
ADIRU 2
ADM
ADM
ADM
ADM
ADM
ADIRS PANEL
F/O AOA
F/O TAT
PITOT F/O
ADM
STATIC CAPT
ADM
STATIC F/O
ADM
STATIC STBY
PITOT LINES
STATIC LINES
ELECTRICAL LINES

Note: *ADIRU (1) is supplied by CAPT probes,*
ADIRU (2) is supplied by F/O probes,
ADIRU (3) is supplied by STBY probes and CAPT TAT.

ADIRS SCHEMATIC

Ident.: DSC-34-NAV-10-10-00018527.0001001 / 21 MAR 16

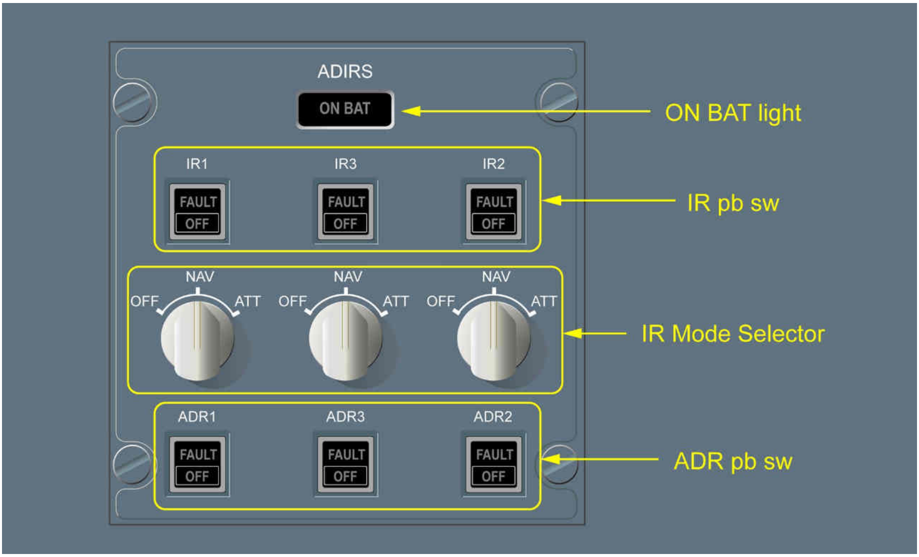
Applicable to: ALL


PFD 1
ND 1
ND 2
PFD 2
DMC 1
DMC 3
DMC 2
ADIRU 1
ADIRU 3
ADIRU 2
DDRMI
MMR/GPS
MCDU
FCU
BARO
10 13
in Hg
hPa
PULL STD
FD
LS
ADIRS PANEL
ADIRS
ON BAT
IR1
FAULT
ALIGN
IR3
FAULT
ALIGN
IR2
FAULT
ALIGN
OFF NAV ATT
OFF NAV ATT
OFF NAV ATT
ADR1
FAULT
OFF
ADR3
FAULT
OFF
ADR2
FAULT
OFF
3 PITOT
6 STATIC PORTS
3 ANGLE OF ATTACK SENSORS
2 TOTAL AIR TEMPERATURE SENSORS
ELAC
SFCC
FADEC
GPWS
FWC
CFDS
BSCU
...

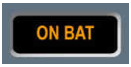
OVERHEAD PANEL

Ident.: DSC-34-NAV-10-20-00018528.0002001 / 04 NOV 20

1 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

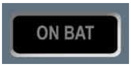

ADIRS
ON BAT
ON BAT light
IR1
IR3
IR2
FAULT
OFF
IR pb sw
NAV
OFF
ATT
IR Mode Selector
ADR1
ADR3
ADR2
FAULT
OFF
ADR pb sw

ON BAT LIGHT



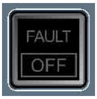
Batteries supply at least one ADIRU. The ON BAT light also comes on for a few seconds at the beginning of a complete IRS alignment.
The ON BAT light does not come on in the case of a fast alignment.

Note: *When the aircraft is on ground and if at least one ADIRU is supplied by aircraft batteries:*
- *An external horn sounds*
- *The ADIRU and AVNCS lights come on amber on the EXTERNAL POWER panel.*

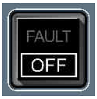


One of the following applies:
- All three ADIRUs are on, and not supplied by batteries, or
- All three ADIRUs are off.

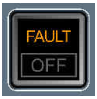
IR1(2)(3) PB SW



IR 1(2)(3) is on.
When pressed, turns off the IR 1(2)(3).

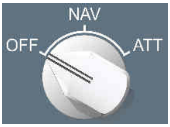


IR 1(2)(3) is off.
When pressed, turns on the IR 1(2)(3).

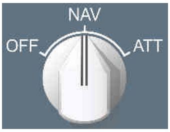


IR 1(2)(3) is failed.
Associated with the following ECAM alert: NAV IR 1(2)(3) FAULT(*Refer to procedure*).
When IR 1(2)(3) FAULT light flashes, the attitude and heading information may be recovered in ATT mode.
When IR 1(2)(3) FAULT light is steady, the IR 1(2)(3) is lost.
When pressed, turns off the IR 1(2)(3). The FAULT light goes off.

IR1(2)(3) MODE SELECTOR

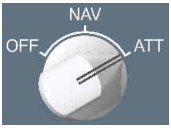


ADIRU 1(2)(3) is not energized.
Both the IR 1(2)(3) data and the ADR 1(2)(3) data are not available.



IR 1(2)(3) operates in NAV mode
IR 1(2)(3) provides full inertial data to the aircraft systems.

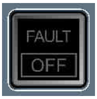
Note: *ADR 1(2)(3) provides full air data to the aircraft systems.*



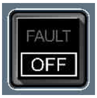
IR 1(2)(3) operates in ATT mode.
IR 1(2)(3) only provides attitude and heading data (if entered by the flight crew). The navigation data are not available.
The heading must be entered through the MCDU and has to be reset frequently (about every 10 min).

During the flight, if the IR mode selector is set from NAV to ATT or NAV to OFF, the NAV mode is lost for the remainder of the flight.

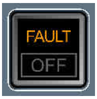
ADR 1(2)(3) PB SW



ADR 1(2)(3) is on.
When pressed, turns off the ADR 1(2)(3).



ADR 1(2)(3) is off.
When pressed, turns on the ADR 1(2)(3).



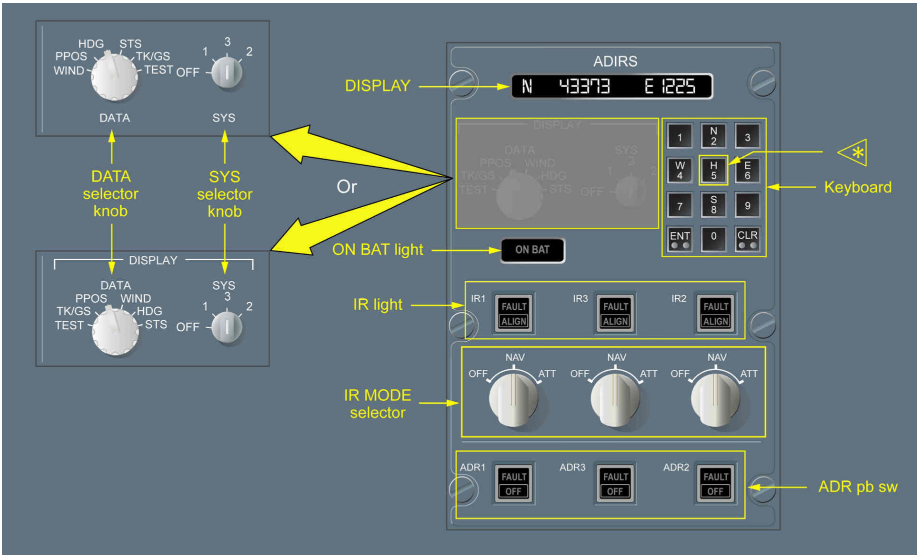
ADR 1(2)(3) is failed.
Associated with the following ECAM alert: NAV ADR 1(2)(3) FAULT(*Refer to procedure*).
When pressed, turns off the ADR 1(2)(3). The FAULT light goes off.

OVERHEAD PANEL

Ident.: DSC-34-NAV-10-20-00018528.0001001 / 17 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

The ADIRS CDU on the overhead panel provides the controls and indicators to permit:
- Selection of power supplies to the ADR and IRS systems
- Selection and display of navigation data
- Status and fault indication of IRS or ADRs.
- Manual initialization of IRS

Note: *IRS are normally initialized with the FMGC, but IRS may be initialized with the ADIRS CDU as a backup.*


HDG
STS
PPOS
TK/GS
WIND
TEST
OFF
1
3
2
DATA
SYS
DATA selector knob
SYS selector knob
DISPLAY
DATA
PPOS
WIND
TK/GS
HDG
TEST
STS
SYS
3
1
2
OFF
Or
DISPLAY
ADIRS
N 43373 E 1225
1
N 2
3
W 4
H 5
E 6
7
S 8
9
ENT
0
CLR
Keyboard
ON BAT light
ON BAT
IR light
IR1
IR3
IR2
FAULT
ALIGN
IR MODE selector
NAV
OFF
ATT
ADR1
ADR3
ADR2
FAULT
OFF
ADR pb sw

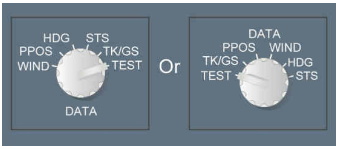
DISPLAY

ADIRS
N 43373 E 1225

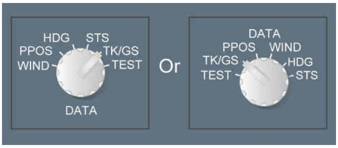
The display window presents the data selected by the DATA selector knob.

DATA SELECTOR KNOB

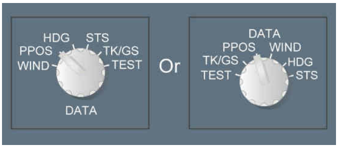
This knob selects the information to be displayed in the ADIRS display window.


HDG
STS
PPOS
TK/GS
WIND
TEST
DATA
Or
DATA
PPOS
WIND
TK/GS
HDG
TEST
STS

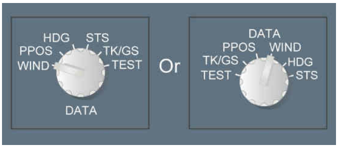
The ENT and CLR buttons on the keyboard come on, and the display windows shows all 8's.


HDG
STS
PPOS
TK/GS
WIND
TEST
DATA
Or
DATA
PPOS
WIND
TK/GS
HDG
TEST
STS

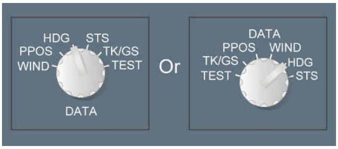
The display window shows true track and ground speed.


HDG
STS
PPOS
TK/GS
WIND
TEST
DATA
Or
DATA
PPOS
WIND
TK/GS
HDG
TEST
STS

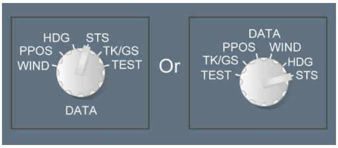
The display window shows present latitude and longitude.


HDG
STS
PPOS
TK/GS
WIND
TEST
DATA
Or
DATA
PPOS
WIND
TK/GS
HDG
TEST
STS

The display window shows true wind direction and speed.

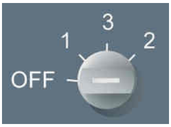

HDG
STS
PPOS
TK/GS
WIND
TEST
DATA
Or
DATA
PPOS
WIND
TK/GS
HDG
TEST
STS

The display window shows true heading and the minutes remaining until alignment is completed.

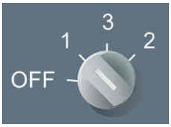

HDG
STS
PPOS
TK/GS
WIND
TEST
DATA
Or
DATA
PPOS
WIND
TK/GS
HDG
TEST
STS

The display window shows an action code.

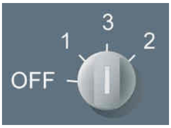
SYS SELECTOR KNOB



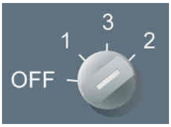
The CDU display is not energized. ADIRS are still energized if the associated IR mode rotary selectors are not at OFF.



ADIRS 1 is selected for the data display.



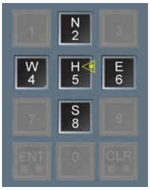
ADIRS 3 is selected for the data display.



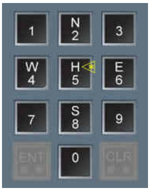
ADIRS 2 is selected for the data display.

KEYBOARD

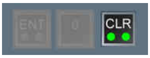
The flight crew can use the keyboard to enter the present position, or the heading in ATT mode, into the selected system.


1
N 2
3
W 4
H 5
E 6
7
S 8
9
ENT
0
CLR

Used to enter N, S, E, or W for position, or entering H ◁ for heading (ATT mode).


1
N 2
3
W 4
H 5
E 6
7
S 8
9
ENT
0
CLR

Used to enter the present position (or the present magnetic heading in ATT mode).



The integral cue light comes on after an entry operation if the data has an unreasonable value.

When pressed, clears the data display that has been keyed in but not yet entered.

The integral cue light comes on when a flight crew has keyed in a number for N, S, W, E or H ◁✳ .

When pressed, enters the data that has been keyed into the ADIRS.

ON BAT LIGHT

Batteries supply at least one ADIRU. The ON BAT light also comes on for a few seconds at the beginning of a complete IRS alignment.
The ON BAT light does not come on in the case of a fast alignment.

Note: *When the aircraft is on ground and if at least one ADIRU is supplied by aircraft batteries:*
- *An external horn sounds*
- *The ADIRU and AVNCS lights come on amber on the EXTERNAL POWER panel.*

One of the following applies:
- All three ADIRUs are on, and not supplied by batteries, or
- All three ADIRUs are off.

IR 1(2)(3) LIGHT

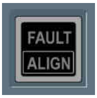
FAULT
ALIGN

IR 1(2)(3) is failed.
Associated with the following ECAM alert: NAV IR 1(2)(3) FAULT(*Refer to procedure*).
When IR 1(2)(3) FAULT light flashes, the attitude and heading information may be recovered in ATT mode.
When IR 1(2)(3) FAULT light is steady, the IR 1(2)(3) is lost.

FAULT
ALIGN

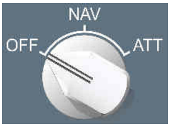
When IR 1(2)(3) ALIGN light is steady, IR 1(2)(3) is operating normally in align mode.

IR 1(2)(3) ALIGN light flashes when:
- The IR alignment fault, or
- No present position entry after 10 min, or
- There is a difference between the position at shutdown and the entered position exceeds 1 ° of latitude or longitude.

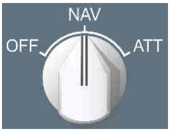


The alignment of IR 1(2)(3) has been completed.

IR MODE SELECTOR

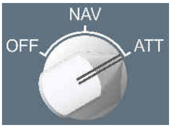


ADIRU 1(2)(3) is not energized.
Both the IR 1(2)(3) data and the ADR 1(2)(3) data are not available.



IR 1(2)(3) operates in NAV mode
IR 1(2)(3) provides full inertial data to the aircraft systems.

Note: *ADR 1(2)(3) provides full air data to the aircraft systems.*



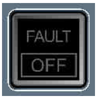
IR 1(2)(3) operates in ATT mode.
IR 1(2)(3) only provides attitude and heading data (if entered by the flight crew). The navigation data are not available.

The heading must be entered using:
- The CDU keyboard, or
- The MCDU (if the entry field is available).

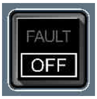
The heading has to be reset frequently (about every 10 min).

During the flight, if the IR mode selector is set from NAV to ATT or NAV to OFF, the NAV mode is lost for the remainder of the flight.

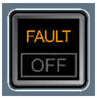
ADR 1(2)(3) PB SW



ADR 1(2)(3) is on.
When pressed, turns off the ADR 1(2)(3).



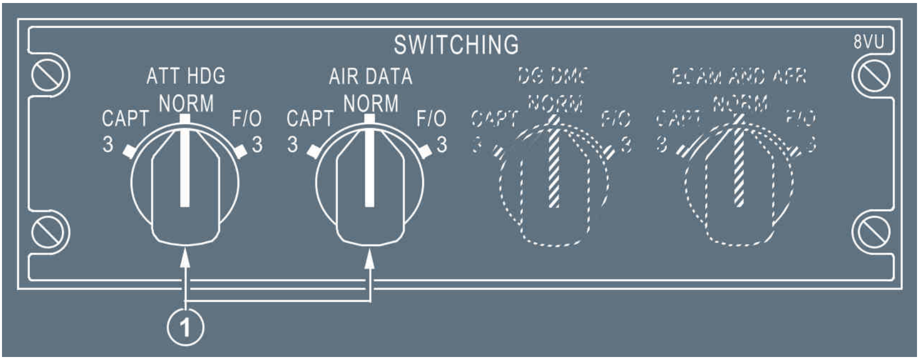
ADR 1(2)(3) is off.
When pressed, turns on the ADR 1(2)(3).



ADR 1(2)(3) is failed.
Associated with the following ECAM alert: NAV ADR 1(2)(3) FAULT(*Refer to procedure*).
When pressed, turns off the ADR 1(2)(3). The FAULT light goes off.

PEDESTAL

Ident.: DSC-34-NAV-10-20-00018529.0001001 / 21 MAR 16
Applicable to: ALL



(1) ATT HDG and AIR DATA sel

NORM : ADIRU1 supplies data to PFD1, ND1, DDRMI ⊲ and VOR/DME.
ADIRU 2 supplies data to PFD 2, and ND2.

CAPT 3 : ADR3 or IR3 replaces ADR1 or IR1.

F/O 3 : ADR 3 or IR3 replaces ADR 2 or IR2.

MEMO DISPLAY

Ident.: DSC-34-NAV-10-20-A-00025044.0001001 / 18 NOV 21
2 **Applicable to: MSN 08495-09324, 10949-11597**

ADIRS SWTG : This memo appears when one of the following is applicable:
- AIR DATA rotary selector is selected at CAPT 3 or F/O 3 without the activation of BKUP SPD/ALT pb on the same side, or
- ATT HDG rotary selector is selected at CAPT 3 or F/O 3.

Ident.: DSC-34-NAV-10-20-A-00017043.0002001 / 21 MAR 16
3 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

IR IN ATT ALIGN : This memo appears in green during the IR alignment in Attitude mode.

Ident.: DSC-34-NAV-10-20-A-00017042.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

IRS IN ALIGN : This memo appears in green if one of the 3 IRS is still in alignment and both engines are stopped.

IRS IN ALIGN	:	This memo appears in amber if one of the 3 IRS is still in alignment and one engine is running.

Ident.: DSC-34-NAV-10-20-A-00017041.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

IRS IN ALIGN X MN : This memo appears in green, if both engines are stopped. The memo "IRS IN ALIGN X MN" appears during flight phase 1 or 2, if:

- At least one active IRS is in ALIGN submode
- The remaining time until NAV mode is obtained in X minutes (1 < X < 10).

IRS IN ALIGN X MN : This memo appears in amber, if one engine is running. The memo "IRS IN ALIGN X MN" appears during flight phase 1 or 2, if:

- At least one active IRS is in ALIGN submode
- The remaining time until NAV mode is obtained in X minutes (1 < X<10).

Ident.: DSC-34-NAV-10-20-A-00017041.0002001 / 21 MAR 16
4 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The memo "IRS IN ALIGN X MN" appears during IRS alignment in flight phase 1 or 2. X MN indicates the number of remaining minutes (1 < X < 10), until NAV mode is reached.
Before any engine is started:

IRS IN ALIGN X MN : This memo appears in green when at least one active IRS is being aligned.

IRS IN ALIGN X MN : This memo pulses in green, if the alignment of one IRS is faulty.

When one engine is started:

IRS IN ALIGN X MN : This memo appears in amber during IRS alignment. If the alignment of one IRS is faulty, this memo is replaced by the “IR NOT ALIGNED” ECAM caution.

MAXIMUM DIFFERENCES BETWEEN SPEED/MACH INDICATIONS

Ident.: DSC-34-NAV-10-20-00021130.0001001 / 10 MAY 21
Applicable to: MSN 01143-01251, 01459

The following table details the TSM values used to determine if a maintenance task is due when a difference between Speed/Mach indications is observed.
They are provided in order for flight crews to determine if indeed maintenance actions should be requested.

FL	SPEED	SPEED/MACH COMPARISON BETWEEN					
		ADR1 and ADR2 (on PFD)		ADR3 and ADR1, or ADR3 and ADR2 (on PFD)		Standby Airspeed Indicator and any ADR 1, or 2, or 3	
		kt	Mach	kt	Mach	kt	Mach on ISIS (1)
GND CHECK	-	6 kt	M 0.008	6 kt	M 0.008	6 kt	-
FL 50	250 kt	4 kt	M 0.005	5 kt	M 0.011	7 kt	-
FL 100	250 kt	4 kt	M 0.005	4 kt	M 0.011	8 kt	M 0.032
FL 200	300 kt	3 kt	M 0.007	4 kt	M 0.008	9 kt	M 0.033
FL 300	M 0.78	3 kt	M 0.010	7 kt	M 0.017	9 kt	M 0.025
FL 390	M 0.78	3 kt	M 0.010	6 kt	M 0.019	8 kt	M 0.025

(1) *Mach values lower than M 0.50 in climb, and M 0.45 in descent, are not displayed on ISIS .*

MAXIMUM DIFFERENCES BETWEEN SPEED/MACH INDICATIONS

Ident.: DSC-34-NAV-10-20-00021130.0002001 / 10 MAY 21

5 **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The following table details the TSM values used to determine if a maintenance task is due when a difference between Speed/Mach indications is observed.
They are provided in order for flight crews to determine if indeed maintenance actions should be requested.

FL	SPEED	SPEED/MACH COMPARISON BETWEEN					
		ADR1 and ADR2 (on PFD)		ADR3 and ADR1, or ADR3 and ADR2 (on PFD)		Standby Airspeed Indicator and any ADR 1, or 2, or 3	
		kt	Mach	kt	Mach	kt	Mach on ISIS (1)
GND CHECK	-	6 kt	M 0.008	6 kt	M 0.008	6 kt	-
FL 50	250 kt	4 kt	M 0.005	4 kt	M 0.007	7 kt	-
FL 100	250 kt	4 kt	M 0.005	5 kt	M 0.008	8 kt	M 0.032
FL 200	300 kt	3 kt	M 0.007	5 kt	M 0.011	9 kt	M 0.033
FL 300	M 0.78	3 kt	M 0.010	5 kt	M 0.014	9 kt	M 0.025
FL 390	M 0.78	3 kt	M 0.010	4 kt	M 0.014	8 kt	M 0.025

(1) *Mach values lower than M 0.50 in climb, and M 0.45 in descent, are not displayed on ISIS .*

ADIRS OPERATIONS - STATUS MESSAGES

Ident.: DSC-34-NAV-10-20-00021988.0001001 / 09 NOV 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

STATUS MESSAGES

Status messages appear, when the DISPLAY DATA switch is set to STS. If there is more than one condition calling for a message, the display scrolls to the next message every 2 s.

MESSAGE	DESCRIPTION
STS IR FAULT	Hard failure. Select ATT (if corresponding message is displayed) or refer to MMEL or remove ADIRU for maintenance.
STS-DELAY MAINT	Failure not affecting IR functioning. Service ADIRU when convenient.
STS-ENTER PPOS	Enter present position or check entered position is correct. Note: *The confirmation of an erroneous longitude at the present position entry will create a wrong position of the aircraft symbol on the NDs.*
STS-SELECT ATT	Hard IRU failure, select ATT mode.
STS-EXCESS MOTION	Excess motion detected during alignment. ADIRU will automatically restart alignment. Ensure aircraft is not moving.
STS-SWITCH ADR	ADR invalid.
STS-CHECK CK/BK	Check circuit breakers(1)
STS-CDU FAULT	Remove CDU for maintenance.
STS-ENT MAG HDG	Enter magnetic heading.

(1) *If a corresponding FAULT light comes on, check BAT 1 load.*

- If the prompt REALIGN IRS is displayed on the MCDU INIT page:
  Check and confirm the position initialization coordinates on the MCDU, then validate the REALIGN IRS prompt.

  Note: *The IRS records the last known position from the last time it was in NAV mode. The IRS is also able to estimate the present latitude during a complete alignment. The IRS uses both information sources to detect any significant position initialization error.*

Intentionally left blank

Backup Speed/Altitude Scale

BACKUP SPEED/ALTITUDE SCALE - GENERAL

Ident.: DSC-34-NAV-10-30-10-00019127.0002001 / 20 MAR 17
Applicable to: MSN 08495-09324

GENERAL

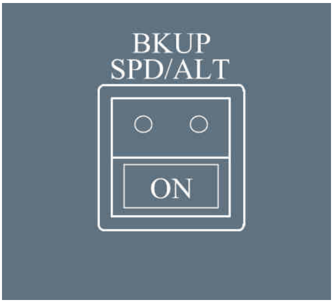
The BackUp Speed Scale (BUSS) enables to fly the aircraft when airspeed indications are unreliable.

When the BUSS is activated:
- The BUSS replaces the normal speed
- The GPS altitude replaces the barometric altitude scale.

The use of the BUSS is reversible.

The reversible BUSS is activated and deactivated with two BKUP SPD/ALT pb available on the main instrument panel:
- One on the left of the Captain PFD
- One on the right of the F/O PFD.

Each BKUP SPD/ALT pb independently commands the display of the BUSS on its associated side.



The BUSS information is based on the angle of attack (AOA), and depends on the slat/flap configuration.

ECAM ALERT AND MEMO

The ECAM displays a memo when the flight crew activates the BKUP SPD/ALT on one side: BKUP SPD/ALT.

The ECAM displays an alert when the flight crew activates the BKUP SPD/ALT:
- On one side with the AP and/or FD engaged on the same side,
  Refer to PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT(F/O) PFD, or
- On both sides,
  Refer to PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD.

BACKUP SPEED/ALTITUDE SCALE - GENERAL

Ident.: DSC-34-NAV-10-30-10-00019127.0001001 / 16 MAY 17
Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-07098

GENERAL

The BackUp Speed Scale (BUSS) enables to fly the aircraft when airspeed indications are unreliable.

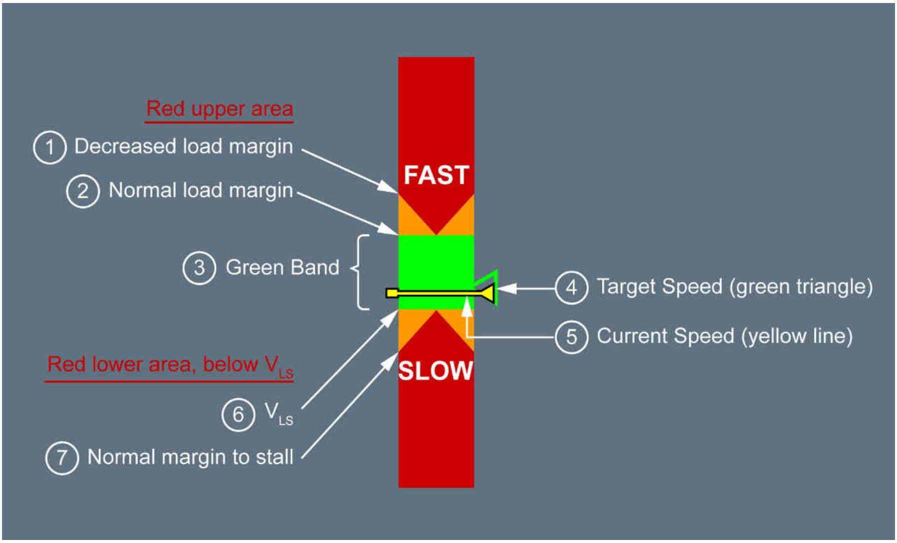
When the BUSS is activated:
- The BUSS replaces the normal speed,
- The GPS altitude replaces the barometric altitude scales.

The BUSS is displayed on both PFDs when the flight crew turn off all ADRs.
The activation of this BUSS is not reversible.
The BUSS information is based on the angle of attack (AOA), and depends on the slat/flap configuration.

BACKUP SPEED/ALTITUDE SCALE - BACKUP SPEED SCALE

Ident.: DSC-34-NAV-10-30-10-00019128.0001001 / 21 MAR 16
Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-09324

BACKUP SPEED SCALE


Red upper area
1 Decreased load margin
2 Normal load margin
3 Green Band
Red lower area, below V_{LS}
6 V_{LS}
7 Normal margin to stall
FAST
SLOW
4 Target Speed (green triangle)
5 Current Speed (yellow line)

(1) Red FAST area
This area indicates the excessive speed range while decreasing the margin to the maximum structural speed.

(2) Amber FAST area
This area indicates the excessive speed range while keeping an appropriate margin to the maximum structural speed.

(3) Green area
The green area indicates the safe speed range.

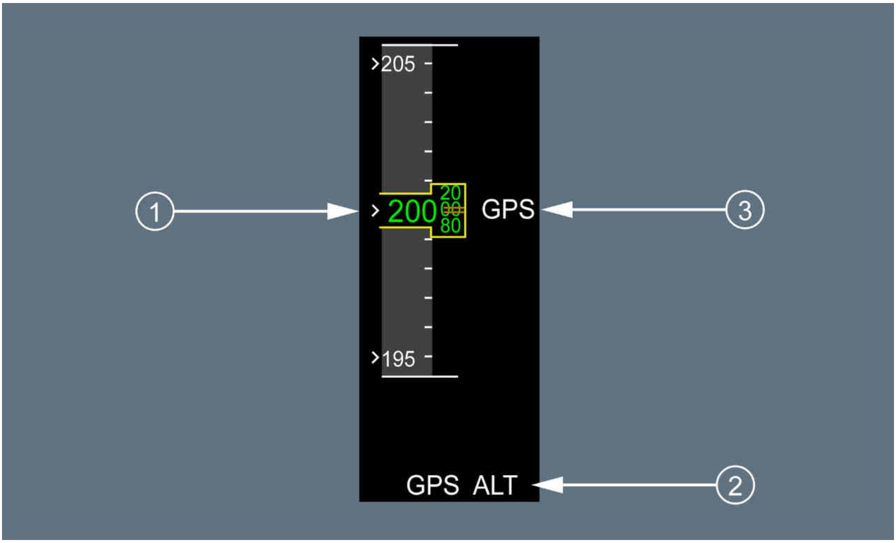
(4) Target speed (green triangle)
This symbol indicates the optimum target speed.
During the approach, it indicates the target speed for the approach.

(5) Actual speed reference (yellow line)
This line indicates the current speed of the aircraft.

(6) Amber SLOW area
This area indicates the too low speed range while keeping an appropriate margin to the stall speed.

(7) Red SLOW area
This area indicates the too low speed range while reducing the margin to the stall speed.

BACKUP ALTITUDE SCALE



(1) Current GPS altitude
Two amber dashes cover the last two digits.

(2) GPS ALT flag
This flag indicates that the barometric altitude is replaced by the GPS altitude.

(3) GPS flag (displayed depending of the aircraft configuration)
This flag indicates that the barometric altitude is replaced by the GPS altitude.

Note: The vertical speed indication is no longer displayed.

Digital Backup Speed/Altitude

SPEED MONITORING FUNCTION

Ident.: DSC-34-NAV-10-30-20-00023357.0001001 / 03 NOV 21

1 **Applicable to: MSN 10949-11597**

The Speed Monitoring Function is provided by FACs. This function uses four different speed sources:
- Three ADR speeds
- One Backup Speed.

Backup Speed is computed from AOA, load factor, aircraft weight, GPS altitude and aircraft configuration (ailerons, spoilers, THS, and slat/flap positions). Backup Speed has an accuracy of +/-15 kt with a flight domain restricted to 280 kt / M 0.78 in stable flight conditions with speed brakes retracted. Lower accuracy could be noticed during dynamic manoeuvres, aerodynamic modifications of the aircraft (Slats/Flaps transitions) or with speed brakes extended. Backup Speed is not available on ground until takeoff.

The Speed Monitoring Function consists in:
- The comparison between those four speed sources
- The individual monitoring of each ADR speed in order to detect icing conditions.

The speed monitoring function assigns a validity status to each speed source. This validity status can be: RELIABLE, FAULT or UNCERTAIN.
These validity status are displayed through ECAM and/or PFD/HUD ◁✻ to enhance crew awareness in the event of an unreliable speed situation.

ASSOCIATED ALERTS AND STATUS

Applicable to: MSN 10949-11597

Ident.: DSC-34-NAV-10-30-20-A-00023358.0001001 / 03 NOV 21

2

ASSOCIATED ALERTS

As soon as the speed monitoring function detects a change in the speed validity status, the following ECAM alert can be triggered:

- NAV AIR SPD STS CHANGED
  The NAV AIR SPD STS CHANGED alert appears as soon as the validity status of one speed source (ADR 1(2)(3) or backup speed) has changed.
  The validity status (RELIABLE, UNCERTAIN or FAULT) of all speed sources appears below the ECAM alert (*Refer to PRO-ABN-NAV NAV AIR SPD STS CHANGED - ANNUNCIATION*).
  The same information can also be retrieved via the ECAM STATUS page.
- NAV ALL SPD UNCERTAIN
  The NAV ALL SPD UNCERTAIN alert appears when all speed sources are declared UNCERTAIN or FAULT.
  The associated procedure of NAV ALL SPD UNCERTAIN requests the flight crew to apply the Unreliable Speed Indication procedure (*Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items*).

The following ECAM alerts are also introduced with the speed monitoring function:

- NAV BKUP SPD FAULT
  L2 *Refer to PRO-ABN-NAV NAV BKUP SPD FAULT - ANNUNCIATION*
- L1 NAV BKUP SPD UNCERTAIN
  L2 *Refer to PRO-ABN-NAV NAV BKUP SPD UNCERTAIN - ANNUNCIATION*
- L1 NAV ADR ALT DISAGREE.
  L2 *Refer to PRO-ABN-NAV NAV ADR ALT DISAGREE - ANNUNCIATION*

Ident.: DSC-34-NAV-10-30-20-A-00023359.0001001 / 03 NOV 21

3

NAV AIR SPD STS CHANGED and NAV ALL SPD UNCERTAIN appear with one or several of the below messages:

ADR 1(2)(3) SPD RELIABLE	Appears when ADR 1(2)(3) airspeed is valid and consistent with other reliable speed sources.
BKUP SPD RELIABLE	Appears when Backup Speed is consistent with other reliable speed sources (if any), or is the only reliable speed source.

ADR 1(2)(3) SPD FAULT	: Appears when: - ADR 1(2)(3) speed is not consistent with other reliable speed sources and when backup speed is reliable, or - Icing conditions are detected on associated pitot probe and backup speed is reliable. *Note: If the backup speed is considered not reliable, the ADR speed is declared UNCERTAIN instead of FAULT.*
ADR 1(2)(3) SPD UNCERTAIN	Appears when ADR 1(2)(3) speed is not consistent with other reliable speed sources and backup speed is fault or uncertain (BKUP SPD UNCERTAIN or BKUP SPD FAULT).
BKUP SPD FAULT	Appears when the backup speed is lost (*Refer to PRO-ABN-NAV NAV BKUP SPD FAULT - ANNUNCIATION*).
BKUP SPD UNCERTAIN	Appears when the backup speed is not consistent with reliable airspeed sources.
STBY SPD UNCERTAIN	Appears when ADR 3 speed is declared FAULT. *Note: The STBY SPD UNCERTAIN status is displayed only when ADR 3 airspeed is faulty for flight crew to be aware that the same pitot probe is used to compute ADR 3 airspeed and standby airspeed. Standby airspeed will not appear as RELIABLE or FAULT.*

When all speeds are recovered as reliable, the NAV AIR SPD STS CHANGED is recalled.
When a speed is declared FAULT, it is flagged on the PFDs/ HUDs ◁ (SPD flag, *Refer to DSC-31-40 Flags and Messages Displayed on PFD - Schematic*).
When a speed is declared UNCERTAIN, it is not flagged on the PFDs/ HUDs ◁ .

DIGITAL BACKUP SPEED/ALTITUDE

Applicable to: MSN 10949-11597

Ident.: DSC-34-NAV-10-30-20-B-00023371.0001001 / 21 JAN 21

4

GENERAL

The DBUS enables the flight crew to fly the aircraft with the backup speed and backup altitude displayed on PFD.

The following ECAM alerts request that the flight crew to activate the DBUS when it is reliable and when at least two ADRs are confirmed unreliable:

- NAV ADR SPD STS CHANGED
- NAV ADR 1(2)(3) FAULT
- NAV ADR 1+2(1+3)(2+3) FAULT
- NAV ADR 1+2+3 FAULT.

When the DBUS is activated:

- The backup speed appears on the PFD/ HUD ◁ instead of the normal airspeed.
- The GPS altitude appears on the PFD/ HUD ◁ instead of the barometric altitude.

The use of the DBUS is reversible.

The flight crew can activate and deactivate the DBUS with two BKUP SPD/ALT pushbuttons available on the main instrument panel:

- One on the left of the Captain PFD
- One on the right of the F/O PFD.

Each BKUP SPD/ALT pb independently commands the display of the DBUS on its associated side on the PFD and HUD ◁ .

BKUP SPD/ALT PB

BKUP
SPD/ALT
ON

DBUS does not appear on the associated PFD and HUD ◁ .
When pressed, the DBUS appears on the associated PFD and HUD ◁ .

BKUP
SPD/ALT
ON

DBUS appears on the associated PFD and HUD ◁ .
When pressed, the DBUS no longer appears on the associated PFD and HUD ◁ .

ASSOCIATED ECAM ALERT

The ECAM displays an alert when the flight crew presses the BKUP SPD/ALT pb to activate the DBUS:

- On the CAPT(F/O) side with the AP 1(2) and/or FD 1(2) engaged, or
  L2 *Refer to PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT(F/O) PFD*
- L1 On both sides with at least one reliable ADR speed available.
  L2 *Refer to PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD*.

L1 The ECAM displays NAV BKUP SPD FAULT when the DBUS is failed. *Refer to PRO-ABN-NAV NAV BKUP SPD FAULT - ANNUNCIATION*.

ASSOCIATED MEMO

BKUP SPD/ALT : This memo appears when the flight crew activates the DBUS on at least one side.

BKUP SPD/ALT : This memo appears in the case of a configuration that is not correct:
- The DBUS is FAULT or UNCERTAIN, or
- The DBUS is selected on the side where the AP is engaged, or
- The DBUS is selected on both PFDs while at least one ADR is reliable

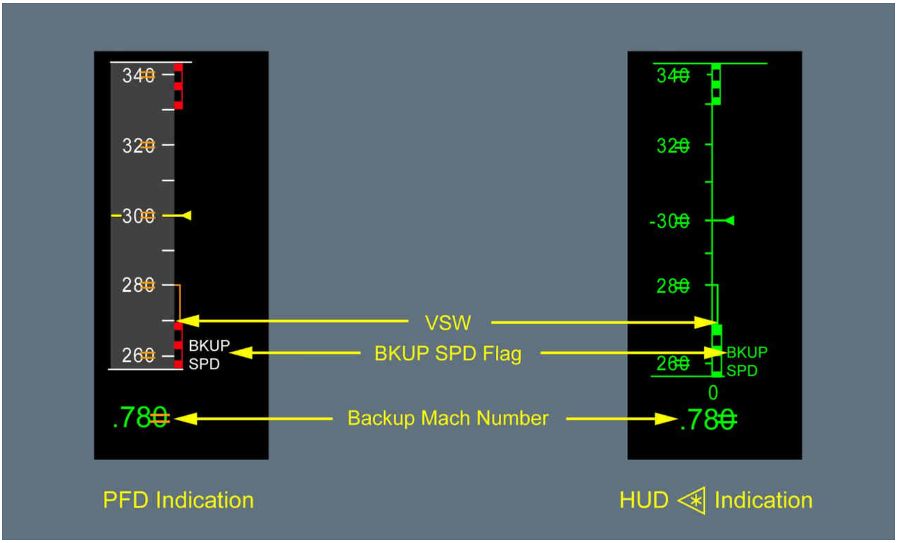
Ident.: DSC-34-NAV-10-30-20-B-00023373.0001001 / 21 JAN 21

5

DIGITAL BACKUP SPEED

DBUS activation on the PFD is indicated by:
- BKUP SPD and GPS ALT labels
- Amber double dash over the last digit of speed and mach
- Amber double dash over the last two digits of altitude.

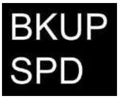
When at least one ADR is valid, the computation of the characteristic speeds is based on this valid ADR source.
When all ADR becomes invalid, the characteristic speeds are computed based on the backup speed / mach and GPIRS altitude.


340
320
300
280
260
BKUP SPD
.780
VSW
BKUP SPD Flag
Backup Mach Number
340
320
-300
280
260
BKUP SPD
0
.780
PFD Indication
HUD Indication

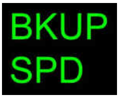
STALL WARNING SPEED (VSW)

The VSW (top of a red and black strip along the speed scale) corresponds to the stall warning speed (*Refer to DSC-22_10-50-40 Protection Speeds*).
When NAV ALL SPD UNCERTAIN is triggered, the red and black strip does not appear as the VSW cannot be computed, however STALL WARNING alert remains fully functional (*Refer to PRO-ABN-NAV STALL WARNING*).

BKUP SPD FLAG

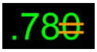


This flag appears on the PFD when the DBUS is activated.

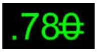


This flag appears on the HUD when the DBUS is activated.

BKUP MACH NUMBER

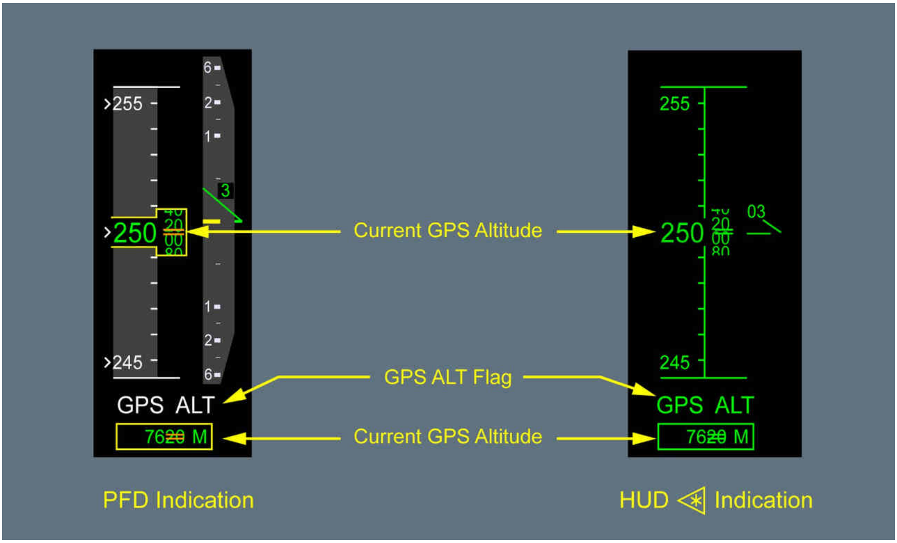


This parameter appears on the PFD when it is above M 0.5. Two dashes cover the last digit.

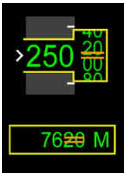


This parameter appears on the HUD when it is above M 0.5. Two dashes cover the last digit.

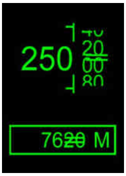
BACKUP ALTITUDE SCALE AND VERTICAL SPEED SCALE


›255
›250
›245
6
2
1
3
1
2
6
GPS ALT
7620 M
Current GPS Altitude
GPS ALT Flag
Current GPS Altitude
255
250
03
245
GPS ALT
7620 M
PFD Indication
HUD ◁ Indication

CURRENT GPS ALTITUDE



Two dashes cover the last two digits of the altitude value and the metric altitude value on the PFD.



Two dashes cover the last two digits of the altitude value and the metric altitude value on the HUD ◁ .

GPS ALT FLAG

GPS ALT

This flag appears on the PFD when the displayed altitude is GPS altitude instead of the barometric altitude.

GPS ALT

This flag appears on the HUD ◁ when the displayed altitude is GPS altitude instead of the barometric altitude.

Intentionally left blank

UNDUE INHIBITION OF NAV BKUP SPD/ALT ON CAPT (F/O) PFD

Ident.: DSC-34-NAV-10-40-00024631.0003001 / 10 DEC 20
Applicable to: MSN 08635

DESCRIPTION

The following alerts with their associated procedures are unduly inhibited when the BUSS is activated on only one side (CAPT or F/O), while AP and/or FD are engaged on the same side:

- NAV BKUP SPD/ALT ON CAPT PFD
- NAV BKUP SPD/ALT ON F/O PFD

The procedures associated with these alerts request to switch AP and FD on the other side. In addition, a BKUP SPD/ALT memo is displayed on EWD. This memo is not affected by this abnormal behavior and will still appear on EWD.

OPERATIONAL RECOMMENDATIONS

If the flight crew activates the BUSS on one PFD, do not use AP or FD on the side the BUSS is activated.

Intentionally left blank

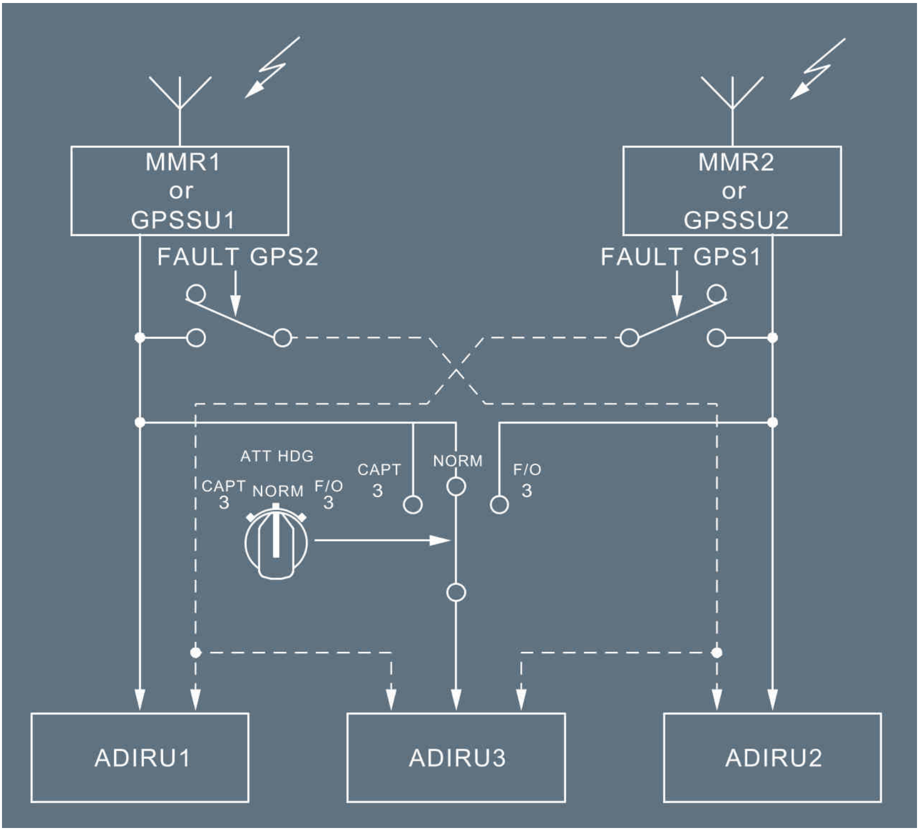
DESCRIPTION

Ident.: DSC-34-NAV-15-10-00018530.0001001 / 21 MAR 16
Applicable to: ALL

The Global Positioning System (GPS) is a satellite-based radio navigation aid.
Worldwide, 24 satellites broadcast accurate navigation data that the aircraft use for precise determination of its position.

The aircraft has two independent GPS receivers. Depending of the aircraft configuration, each receiver consists:
- Of a GPS Sensor Unit (GPSSU), or
- Is integrated in the Multi Mode Receiver (MMR). The GPS1 receiver in MMR1, and the GPS2 receiver in MMR2.

The GPSSU or the MMR processes the received data, and transfers them to the ADIRUs. Then each ADIRU performs the GP-IRS hybrid position calculation. FMGCs use this hybrid position.


MMR1
or
GPSSU1
MMR2
or
GPSSU2
FAULT GPS2
FAULT GPS1
ATT HDG
CAPT
3
NORM
F/O
3
CAPT
3
NORM
F/O
3
ADIRU1
ADIRU3
ADIRU2

OPERATIONS

GPS information are available on the FMS – GPS Monitor Page. *Refer to DSC-22_20-50-10 Pages descriptions*.

- During normal operations
  The GPS receiver 1 supplies the ADIRU 1 and the ADIRU 3, and the GPS receiver 2 supplies the ADIRU 2.
- In case of failure of one GPS receiver
  All ADIRUs use the operative GPS receiver.
- In case of failure of ADIRUs
  - If the ADIRU 1 fails, ADIRU 3 is supplied by the GPS receiver 1, and ADIRU 2 is supplied by the GPS receiver 2.
  - If the ADIRU 2 fails, the ATT HDG selector has to be set to F/O 3 in order to maintain Side 1 and Side 2 segregation. In this case, the ADIRU 3 will be supplied with GPS receiver 2.
  - If two ADIRUs fail, the remaining ADIRU is supplied by its own side GPS receiver.

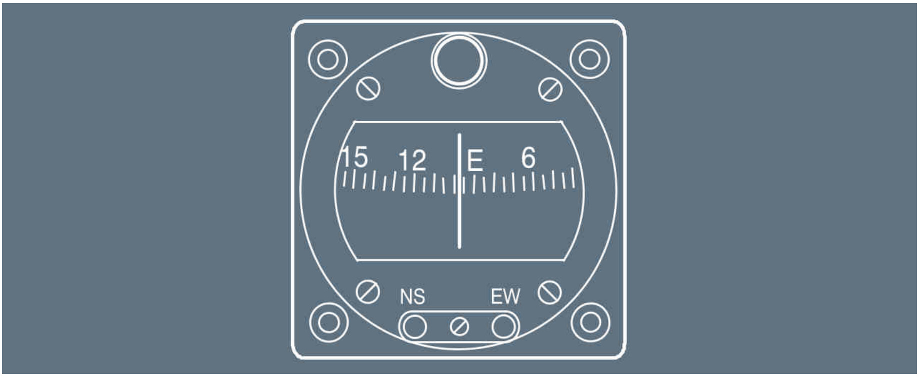
Intentionally left blank

COMPASS

Ident.: DSC-34-NAV-20-00001367.0001001 / 19 DEC 12
Applicable to: ALL

There is a compass located on top of the windshield center post.
The deviation card is located above the compass.

Note: *Because of the location of the APU power on contactor in the cockpit, the APU start sequence may disturb the compass reading.*

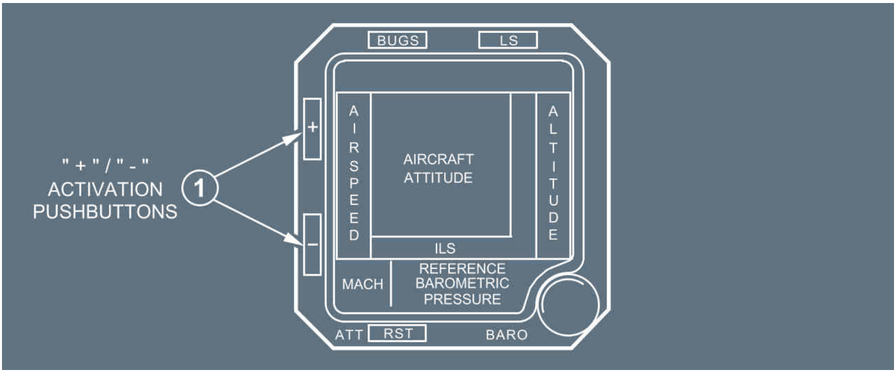


DESCRIPTION OF THE ISIS

Ident.: DSC-34-NAV-20-00018543.0002001 / 21 MAR 16
1 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

GENERAL

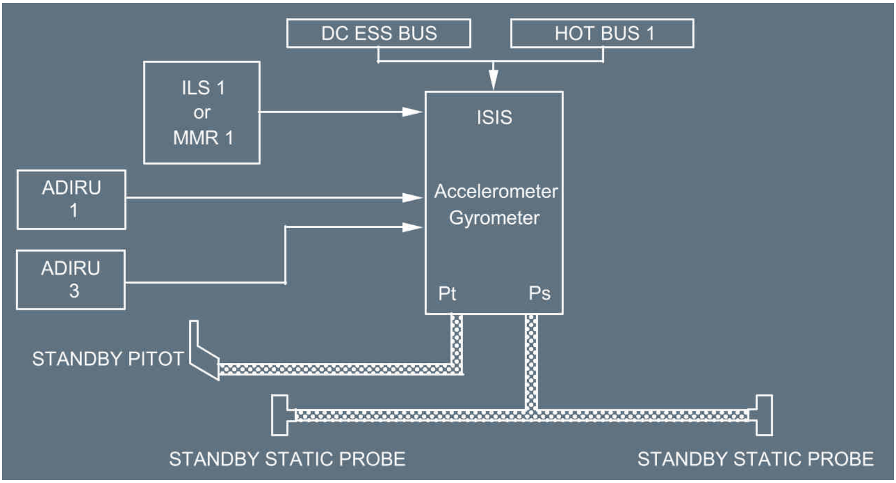
The ISIS system displays the following information:
- Attitude
- Airspeed and mach
- Altitude
- Barometric pressure
- LS function
- Bugs


"+"/"-"
ACTIVATION PUSHBUTTONS
1
BUGS
LS
+
–
AIRSPEED
AIRCRAFT ATTITUDE
ALTITUDE
ILS
MACH
REFERENCE BAROMETRIC PRESSURE
ATT
RST
BARO

(1) "+"/ "-" activation pushbuttons
Two pushbuttons labelled "+" and "–" are used to adjust the level of brightness.
The brightness of the screen automatically adjusts after power-up tests.
This is because of the photosensitive cell located on the surface of the ISIS system display.
The "+" and "–" pushbuttons then allow this initial brightness to be manually adjusted and changed.

Note: *The system must be reset after 350 h of continuous electrical supply using the « ATT RST » pushbutton.*

ARCHITECTURE

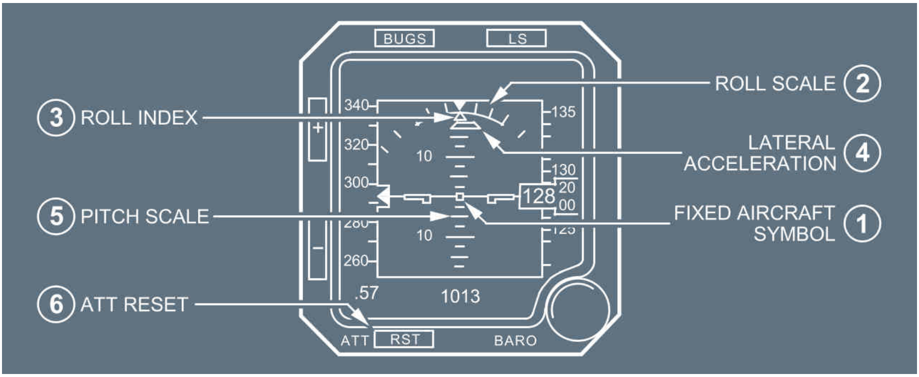

DC ESS BUS
HOT BUS 1
ILS 1 or MMR 1
ISIS
Accelerometer
Gyrometer
Pt
Ps
ADIRU 1
ADIRU 3
STANDBY PITOT
STANDBY STATIC PROBE
STANDBY STATIC PROBE

ATTITUDE

Ident.: DSC-34-NAV-20-00018575.0002001 / 21 MAR 16

2 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Note: *When leveling the wings after performing a small turn of a small bank angle, the displayed roll attitude may temporarily be incorrect by a few degrees.*


BUGS
LS
③ ROLL INDEX
ROLL SCALE ②
LATERAL ACCELERATION ④
⑤ PITCH SCALE
FIXED AIRCRAFT SYMBOL ①
⑥ ATT RESET
340
320
300
280
260
10
10
135
130
128
20
00
125
.57
1013
ATT
RST
BARO

(1) Fixed aircraft symbol
The fixed aircraft symbol is in black, and outlined in yellow.
Depending of the aircraft configuration, the center of the fixed aircraft symbol is a point (like on the illustration above) or “V-bars”.

(2) Roll scale
The roll scale is in white.
The markers are at 0 (small yellow triangle), 10, 20, 30, 45, 60 ° of bank.

(3) Roll index
The roll index is in black, and outlined in white. It indicates the bank angle.

(4) Lateral acceleration index
The trapezoidal index moves beneath the roll index. It represents the aircraft’s lateral acceleration.

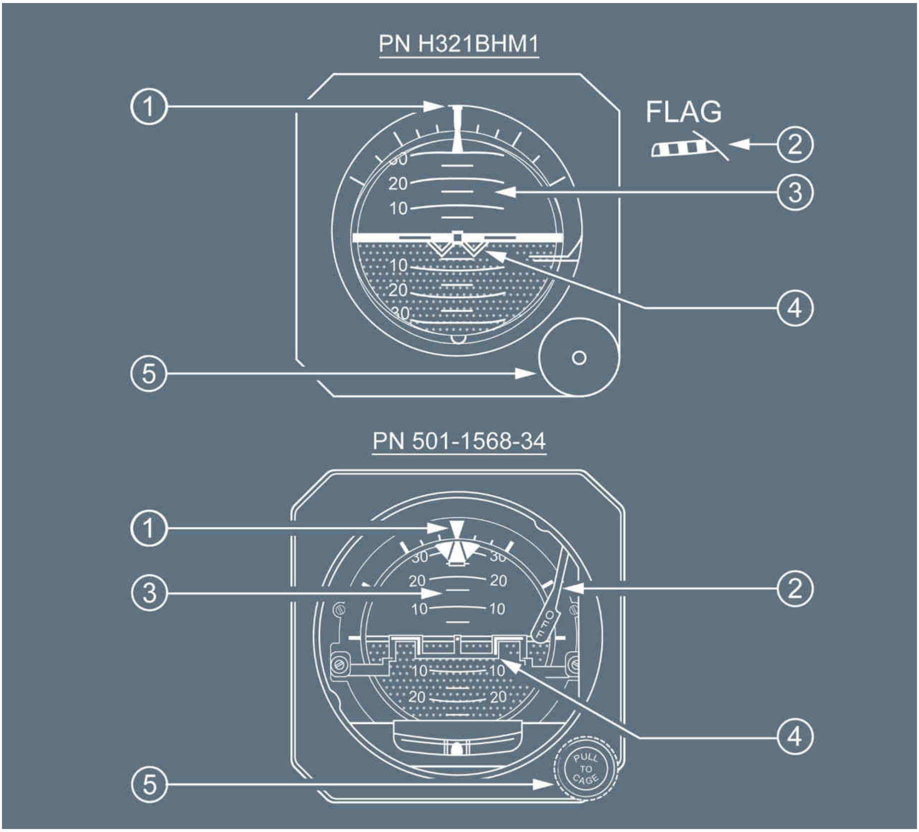
(5) Pitch scale
The pitch scale is in white. The scale shows markers every 2.5 ° between 30 ° nose up and 30 ° nose down. Beyond 30 °, large red arrowheads (V-shaped) indicate that the attitude has become excessive, and show the direction to follow in order to reduce it. The minimum pitch scale displayed is -17.5 ° +15 ° at 0 ° pitch.

(6) ATT RST
The attitude indication can be reset by pressing this pushbutton for at least 2 s. The aircraft must be level during this procedure. During the reset time (approximately 10 s), the “ATT 10 s” message is displayed on the screen. This pushbutton is also used to realign the system, if excessive aircraft movement is detected during the alignment phase.

ATTITUDE

Ident.: DSC-34-NAV-20-00018575.0001001 / 19 SEP 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

Note: *When leveling the wings, after performing a small turn of a small bank angle, the displayed roll attitude may temporarily be incorrect by a few degrees.*



(1) Roll scale
The roll scale indicates the bank angle. It has bank angle graduations up to 60 °. There is no rotation limit.

(2) Flag
The flag appears if the instrument fails or if power supply fails.

(3) Pitch scale
The pitch scale indicates the pitch attitude. The Standby Horizon PN H321BHM1 can show pitch angle up to ± 85 °. The Standby Horizon PN 501-1568-34 can show pitch angle up to ± 90 °.

(4) Aircraft reference
Fixed symbol.

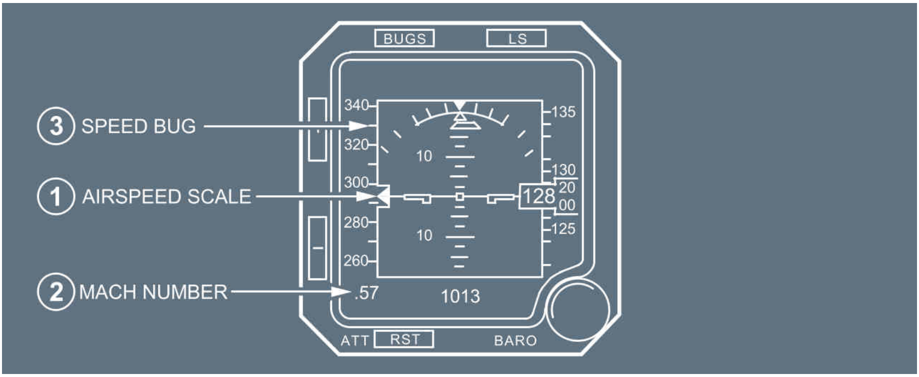
(5) Caging knob
The flight crew pulls it out to reinitialize the gyro, and to level and center the horizon. (The airplane should be level during this procedure).

Note: *After low-rate turns, the standby horizon may not give accurate indications. To correct this behavior, use the caging knob when the aircraft is level.*

AIRSPEED

Ident.: DSC-34-NAV-20-00018576.0002001 / 21 MAR 16

3 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**



(1) Airspeed scale
A white scale moves in front of a yellow triangle indicating the airspeed. The scale ranges from 5 to 250 kt, with a mark every 5 kt, and from 250 to 520 kt, with a mark every 10 kt.

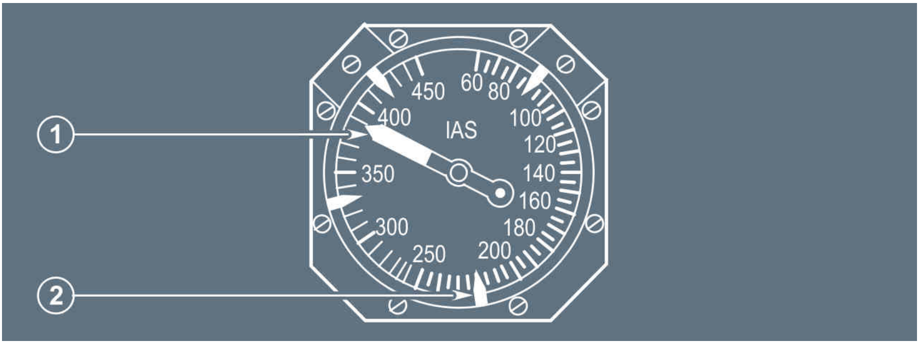
(2) Mach Number
The Mach number is displayed in green it goes greater than 0.5. And it disappears only when it goes below 0.45.

(3) Speed bug
When a speed bug is entered via the BUGS function, the corresponding speed mark is indicated by a cyan dash.

AIRSPEED

Ident.: DSC-34-NAV-20-00018576.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321



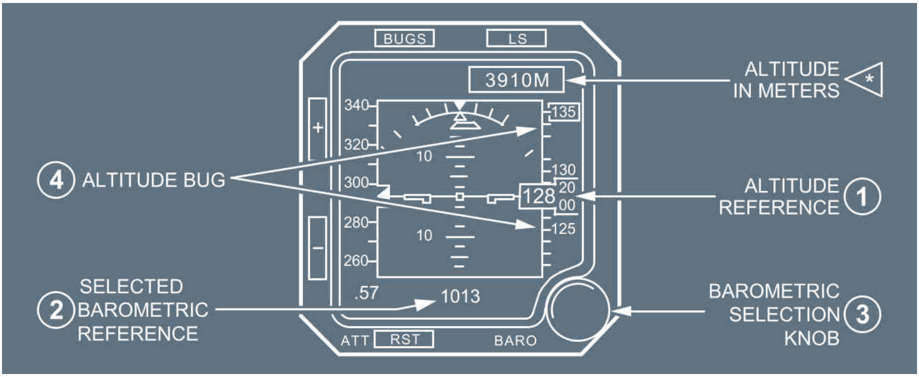
(1) Airspeed pointer

(2) Airspeed bugs (4)
For marking airspeed references.

ALTIMETER

Ident.: DSC-34-NAV-20-00018577.0002001 / 21 MAR 16

4 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


BUGS
LS
3910M
ALTITUDE IN METERS
340
320
300
280
260
10
10
135
130
128
20
00
125
4 ALTITUDE BUG
ALTITUDE REFERENCE 1
.57
1013
2 SELECTED BAROMETRIC REFERENCE
BAROMETRIC SELECTION KNOB 3
ATT
RST
BARO

(1) Altitude indication

The altitude indication is given as a white moving scale, and a green digital readout on a gray background.
The altitude scale ranges from -2 000 to 50 000 ft every 100 ft, with altitude digital indications every 500 ft.
For negative altitudes, "NEG" appears in the window in white.
The altitude box changes to cyan, when it also corresponds to a bug value.
Depending of the aircraft configuration, the altitude in meters is displayed above the altitude scale.

(2) Barometric reference

The barometric reference pressure is displayed in cyan.

The displayed barometric reference is:
- The standard barometric reference "STD", or
- Depending of the aircraft configuration, the barometric pressure is "hPa" or "hPa/ inHg".

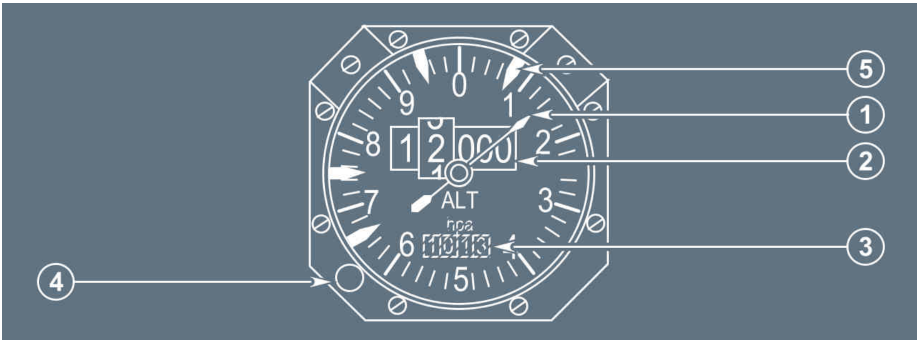
(3) Barometric selection knob

This knob enables the selection of a barometric pressure, setting a variation of 10 hPa per knob rotation.
The standard barometric pressure can be selected by pressing the barometric knob. “STD” is then displayed, in place of the pressure value.
Pressing the knob again will display the selected barometric pressure.

(4) Altitude bug
When an altitude bug is entered through the bugs function, the corresponding altitude mark is indicated by a cyan dash, or by a cyan box when the dash covers the digital indication on the scale.

ALTIMETER

Ident.: DSC-34-NAV-20-00018577.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321



(1) Altitude pointer

(2) Altitude counter
Depending of the aircraft configuration, the unit is "feet" or "meter".

(3) Altimeter setting
Depending of the aircraft configuration, the unit is "hPa" or "inHg".

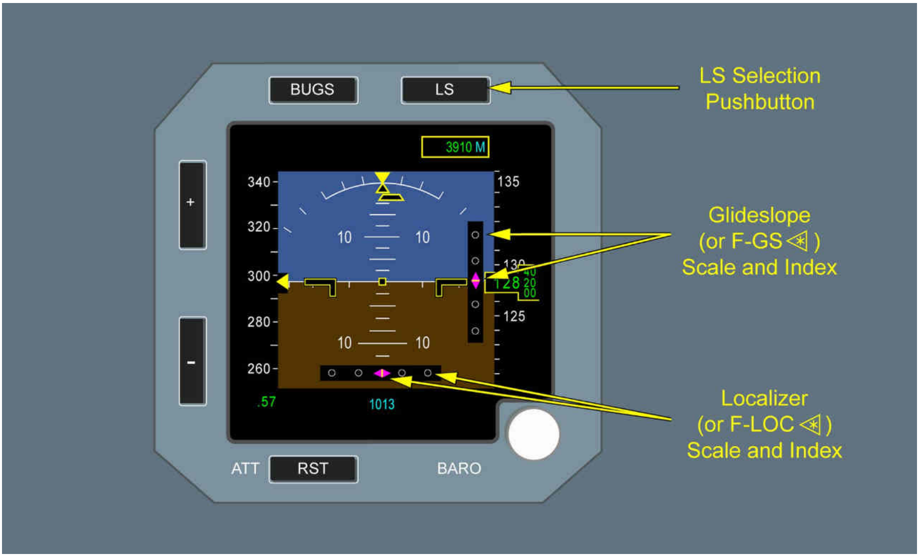
(4) Altimeter setting knob

(5) Altitude bugs (4)
For marking of altitude references.

LANDING SYSTEM FUNCTION

Ident.: DSC-34-NAV-20-00001377.0005001 / 12 MAY 22

5 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


BUGS
LS
3910 M
340
320
300
280
260
.57
1013
135
130
128
125
10
10
+
-
ATT
RST
BARO
LS Selection Pushbutton
Glideslope (or F-GS ◁)
Scale and Index
Localizer (or F-LOC ◁)
Scale and Index

LOCALIZER / SCALE AND INDEX

Localizer / scale and index.

GLIDESLOPE / SCALE AND INDEX

When the LS pb is pressed, the deviation scales are displayed.
When deviation scales are displayed and the LS deviations are valid, the indexes appear.

The LS deviations that are displayed correspond to the LS approach:
- Selected on the MCDU, or
- Tuned on the RMP.

Note: *The LS approach corresponds to approach using either ILS, MLS ◁ , GLS ◁ , SLS ◁ , or non precision approach using FLS ◁ .*

LS SELECTION PUSHBUTTON

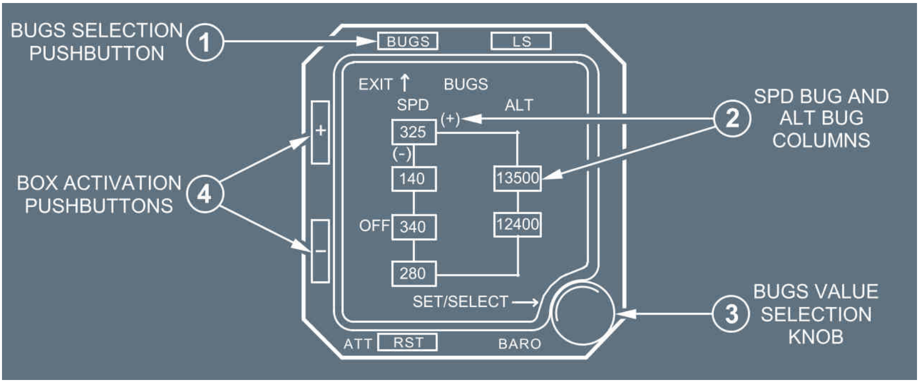
Pressing the LS pb will display the LS scales. Pressing the LS pb again will remove the LS scales.

CAUTION Do not use the ISIS LS for takeoff using the localizer of the opposite runway, or for a back-course localizer approach. The LOC deviations are given in the wrong sense.

BUGS FUNCTION

Ident.: DSC-34-NAV-20-00018578.0001001 / 21 MAR 16

6 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


BUGS SELECTION PUSHBUTTON
1
BUGS
LS
EXIT ↑
BUGS
SPD
ALT
(+)
325
(-)
140
13500
OFF
340
12400
280
SET/SELECT
ATT
RST
BARO
+
–
2
SPD BUG AND ALT BUG COLUMNS
BOX ACTIVATION PUSHBUTTONS
4
3
BUGS VALUE SELECTION KNOB

(1) BUGS function selection pushbutton
Pressing the BUGS pushbutton will activate the BUGS function and display the bug values to be selected.

(2) SPD BUG and ALT BUG columns
The SPD BUG column gives four speed values (in knots) that can be selected by the crew.
The ALT BUG column gives two altitude values (feet) to be selected by the crew.

(3) BUGS value selection knob
It allows the bug value to be set by rotating the BARO knob. This value cannot be lower than 30 kt for a speed bug, or a negative value for an altitude bug.
Pressing the BARO setting knob, once a bug value box is activated, will deselect the bug value. The “OFF” label comes on close to the activated box.
The entered values are memorized by the system, when exiting the screen, by pressing the BUGS pushbutton (1), or after 15 s without any pilot action.

(4) “+”/”-” box activation buttons
Access from one box to another is obtained by pressing the “+” or “–” pushbutton.
When a bug value is entered, access to the next box is obtained by pressing the “–” pushbutton. The box becomes active and flashes.

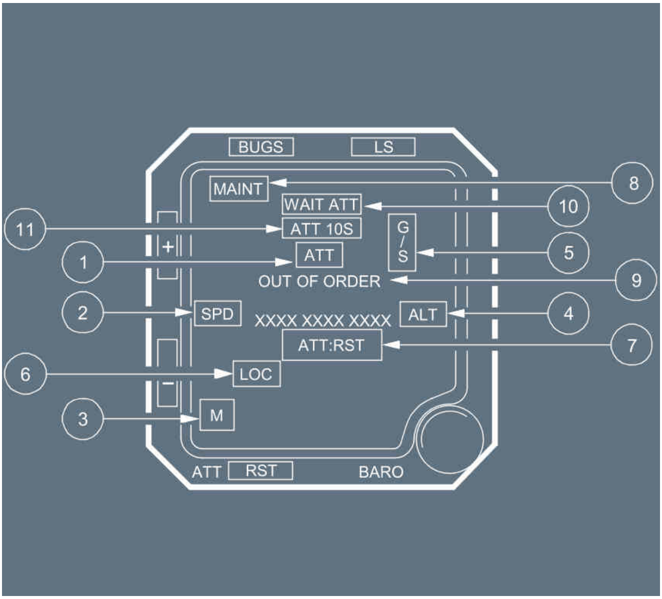
The “+” pushbutton can be used to return to a previous box.

Note: *Use of the ISIS bugs function is not recommended because, in the event that both PFDs are lost in flight, when the ISIS bugs were previously set for takeoff, then for the approach, the bugs would remain at the takeoff characteristic speed settings.*

FLAGS

Ident.: DSC-34-NAV-20-00018580.0002001 / 21 MAR 16

7 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


BUGS
LS
MAINT
WAIT ATT
ATT 10S
G/S
ATT
OUT OF ORDER
SPD
XXXX XXXX XXXX
ALT
ATT:RST
LOC
M
+
ATT
RST
BARO
1
2
3
4
5
6
7
8
9
10
11

(1) ATT flag (red)
When attitude data is lost, the red ATT flag appears.

(2) SPD flag (red)
When airspeed data is lost, the red SPD flag appears.

(3) M flag (red)
When mach number is lost, the red M flag appears.

(4) ALT flag (red)
When altitude data is lost, the red ALT flag appears.

(5) G/S flag (red)
When glideslope information is lost, the red G/S flag appears.

(6) LOC flag (red)
When localizer data is lost, the red LOC flag appears.

(7) ATT: RST (yellow)

The "ATT: RST" flag appears:
- When excessive aircraft movement is detected during the alignment phase, or
- After 350 h of continuous electrical supply, or
- When the "WAIT ATT" flag is displayed during more than 10 s.

In both cases, press the ATT RST pb to reset/realign and recover the attitude indication.

(8) MAINT flag (white)
Maintenance required. This "MAINT flag" does not affect ISIS operation.
Displayed only on ground phase (speed < 60 kt).

(9) OUT OF ORDER (white)
When an internal failure of the ISIS indicator occurs, the "OUT OF ORDER" message appears, accompanied by a fault code.

(10) WAIT ATT flag (yellow)

If the ISIS looses attitude data, its entire sphere is cleared to display the: "WAIT ATT" flag.
- If the "WAIT ATT" flag is displayed during less than 10 s, a normal operation is recovered.
- If attitude data are lost for more than 10 s, the "WAIT ATT" flag is then replaced by the "ATT: RST" flag.

(11) ATT 10 s flag (yellow)
This count down flag appears, when the flight crew press the ATT RST pb, in order to indicate that the attitude reset function is in progress.

GENERAL

Ident.: DSC-34-NAV-30-10-00018581.0001001 / 21 MAR 16
Applicable to: ALL

Three modes of tuning are available.

1. **Automatic Tuning**

   This is the basic means for tuning navaids.
   In normal operation, the FMGC tunes navaids automatically, with each FMGC controlling its own receivers.
   If one FMGC fails, the remaining FMGC controls both sides receivers.

2. **Manual Tuning**

   The flight crew can use the MCDU to override the automatic tuning of navaids by FMGC in order to select a specific navaid for visual display.
   This does not affect the automatic function of the FMGC.
   Any entry on one MCDU is sent to both FMGC in dual mode, or the remaining FMGC in single mode.

3. **Back Up Tuning**

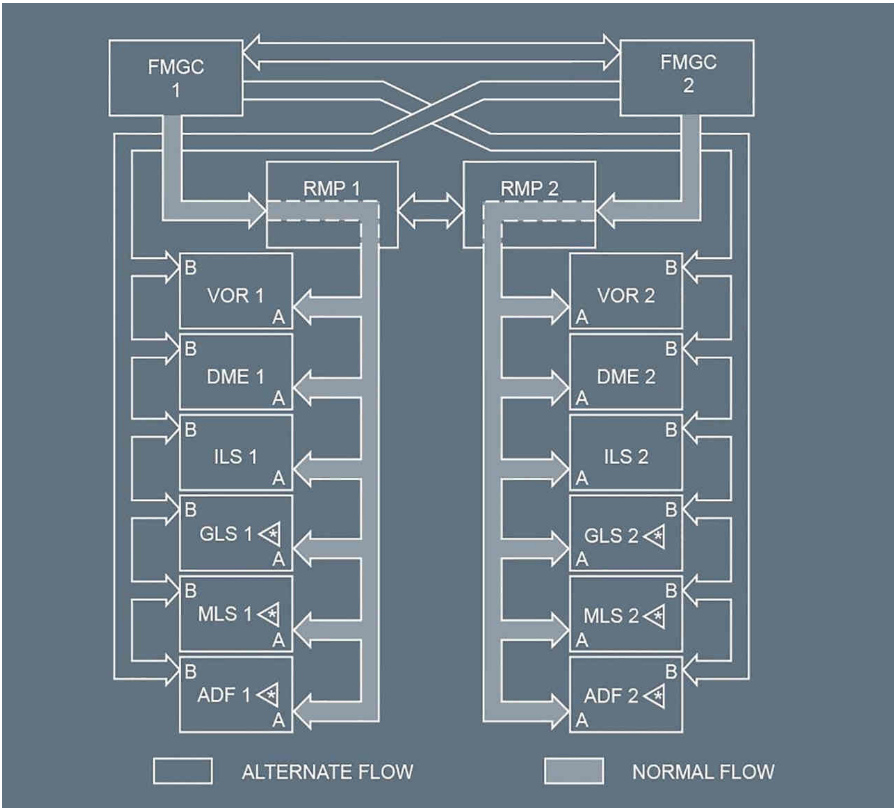
   If both FMGCs fail, the flight crew can use the RMPs (Radio Management Panels 1 and 2) on the pedestal for back up tuning.
   The CAPT RMP controls VOR1 and ADF 1 ◁ .
   The F/O RMP controls VOR2 and ADF 2 ◁ .
   Either RMP controls ILS/GLS ◁ / MLS ◁ , provided “STBY NAV” is selected on RMP1 and RMP2. RMP3 ◁ is not used for navaids tuning.

ARCHITECTURE

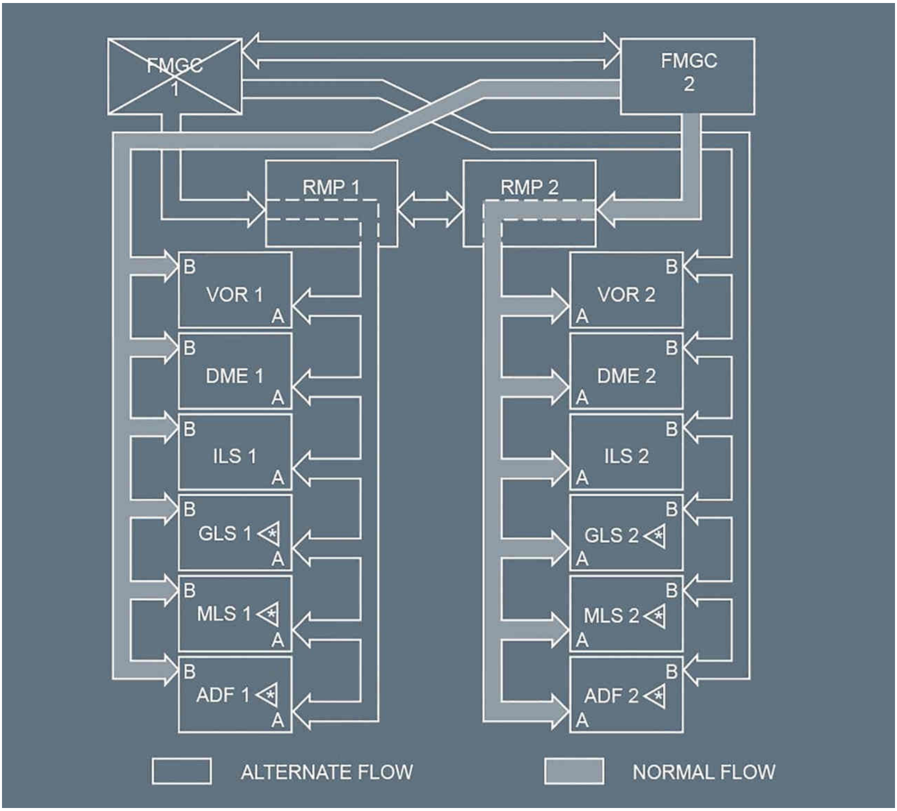
Ident.: DSC-34-NAV-30-10-00018582.0001001 / 21 MAR 16

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

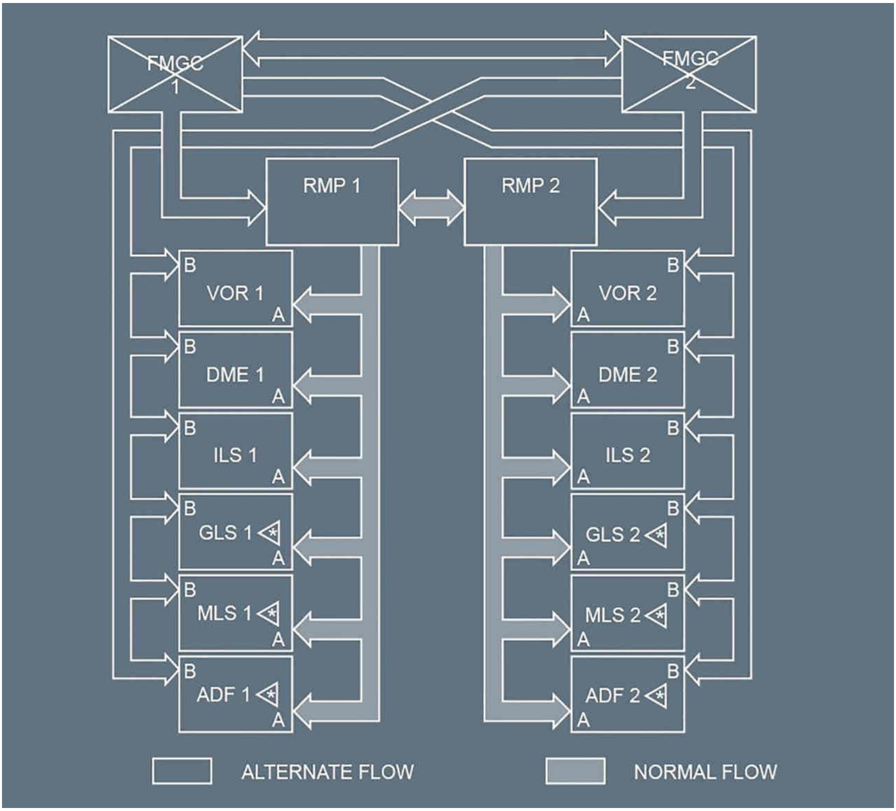
NORMAL OPERATION


FMGC 1
FMGC 2
RMP 1
RMP 2
B
VOR 1
A
B
DME 1
A
B
ILS 1
A
B
GLS 1
A
B
MLS 1
A
B
ADF 1
A
B
VOR 2
A
B
DME 2
A
B
ILS 2
A
B
GLS 2
A
B
MLS 2
A
B
ADF 2
A
ALTERNATE FLOW
NORMAL FLOW

FMGC 1 FAILURE


FMGC 1
FMGC 2
RMP 1
RMP 2
B
VOR 1
A
B
DME 1
A
B
ILS 1
A
B
GLS 1
A
B
MLS 1
A
B
ADF 1
A
B
VOR 2
A
B
DME 2
A
B
ILS 2
A
B
GLS 2
A
B
MLS 2
A
B
ADF 2
A
ALTERNATE FLOW
NORMAL FLOW

BACK UP TUNING


FMGC 1
FMGC 2
RMP 1
RMP 2
VOR 1
DME 1
ILS 1
GLS 1
MLS 1
ADF 1
VOR 2
DME 2
ILS 2
GLS 2
MLS 2
ADF 2
A
B
ALTERNATE FLOW
NORMAL FLOW

VOR

1 Ident.: DSC-34-NAV-30-20-00018657.0002001 / 28 SEP 18
Applicable to: MSN 11522-11597

The aircraft has two Multi Mode Receivers (MMRs) with VOR capability.

- The Navigation Displays (NDs) display VOR 1 and VOR 2 information, in accordance with the position of the ADF ◁ / VOR selectors on the EFIS control panel (*Refer to DSC-31-45 ROSE Modes*).
- The DDRMI ◁ also displays VOR 1 and VOR 2 bearings, if the heading signal is valid.

VOR

Ident.: DSC-34-NAV-30-20-00018657.0001001 / 21 MAR 16
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11482**

The aircraft has two VOR receivers.

- The Navigation Displays (NDs) display VOR1 and VOR2 information, in accordance with the position of the ADF ◁ /VOR selectors on the EFIS control panel (*Refer to DSC-31-45 ROSE Modes*).
- The DDRMI ◁ also displays VOR1 and VOR2 bearings, if the heading signal is valid.

ILS/GLS ◁ /MLS ◁

Ident.: DSC-34-NAV-30-20-00018658.0001001 / 29 MAY 20
Applicable to: ALL

The aircraft has two ILS/ GLS ◁ /MLS ◁ receivers.

Note: *When the aircraft is equipped with MMRs, ILS and GLS ◁ and MLS ◁ receivers are in the MMRs (ILS1/ GLS1 ◁ / MLS1 ◁ in the MMR1 and the ILS2/ GLS2 ◁ / MLS2 ◁ in the MMR2)*

- PFD1 and ND2 display ILS1/ GLS1 ◁ / MLS1 ◁ information.
- PFD2 and ND1 display ILS2/ GLS2 ◁ / MLS2 ◁ information.
- The PFD display the ILS/GLS ◁ / MLS ◁ information if the flight crew press the LS pb or ILS pb (depending of the aircraft configuration) on the EFIS control panel (*Refer to DSC-31-50 EFIS Control Panel*).
- The NDs display the ILS/GLS ◁ /MLS ◁ information if the flight crew selects the ROSE LS mode or the ROSE ILS mode (depending of the aircraft configuration) on the EFIS control panel (*Refer to DSC-31-50 EFIS Control Panel*).

ADF ⊲

Ident.: DSC-34-NAV-30-20-00018659.0001001 / 21 MAR 16
Applicable to: ALL

The aircraft may be fitted with 1 ADF ⊲ or 2 ADF ⊲ .
The NDs display ADF ⊲ information, depending on the position of the ADF/VOR selectors on the EFIS control panel (*Refer to DSC-31-45 ROSE Modes*).
The DDRMI ⊲ also displays ADF 1 ⊲ and ADF 2 ⊲ bearings, depending on the position of the ADF/VOR selector on the DDRMI ⊲ .

DME

Ident.: DSC-34-NAV-30-20-00018660.0001001 / 21 MAR 16
Applicable to: ALL

The aircraft has two DMEs.
The frequency that is automatically set on the DME corresponds to the frequency/channel that is set on the VOR, or ILS, or GLS ⊲ , or MLS ⊲ .
The NDs and the DDRMI ⊲ can display DME information associated with VOR.
The PFDs can display DME information associated with ILS/ GLS ⊲ / MLS ⊲ (*Refer to DSC-31-40 Trajectory Deviation - ILS Approach*).

MARKER BEACON

3 Ident.: DSC-34-NAV-30-20-00001389.0002001 / 28 SEP 18
Applicable to: MSN 11522-11597

One marker beacon system is included in MMR 1.
The PFD displays the outer, middle, and inner marker signals (*Refer to DSC-31-40 Trajectory Deviation - ILS Approach*).

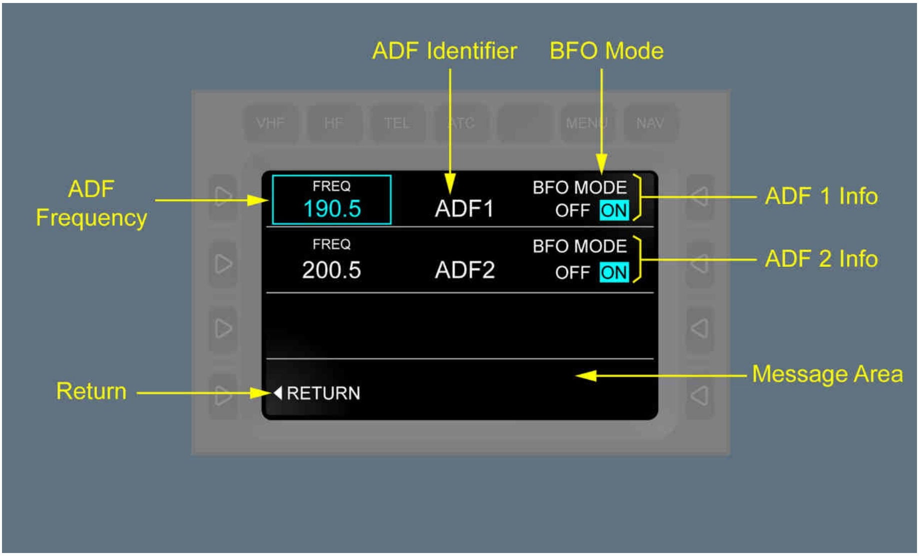
MARKER BEACON

Ident.: DSC-34-NAV-30-20-00001389.0001001 / 21 MAR 16
4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11482**

One marker beacon system is included in VOR receiver 1.
The PFD displays the outer, middle, and inner marker signals (*Refer to DSC-31-40 Trajectory Deviation - ILS Approach*).

ADF ◁ PAGE

1 Ident.: DSC-34-NAV-30-30-00022694.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597

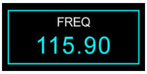

ADF Identifier
BFO Mode
VHF
HF
TEL
ATC
MENU
NAV
ADF
Frequency
ADF 1 Info
ADF 2 Info
Return
Message Area

FREQ 190.5 ADF1 BFO MODE OFF ON

FREQ 200.5 ADF2 BFO MODE OFF ON

◂RETURN

ADF FREQUENCY



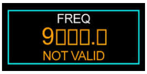
The flight crew presses the RMP L1 (L2) key and selects the ADF frequency for modification.

The current ADF frequency is validated and deselected when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew selects another ADF frequency, or
- Automatically when the frequency is complete and valid.

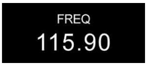
When the ADF frequency is validated and deselected, the associated BFO Mode is then set to off.
When the flight crew enters a frequency, the system does not complete the frequency. Amber boxes are displayed in place of not yet entered digits.

If at validation, the ADF frequency is not complete, all of the following occur:
- The current ADF frequency remains selected
- The ADF1(2) FREQ NOT COMPLETE RMP message is also displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

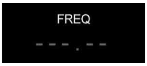
The flight crew can clear a digit, via the CLR key.
The flight crew can press and maintain the CLR key, in order to remove all the entered digits and display the previous valid ADF frequency.



The modified ADF frequency is not a standard ADF frequency. The flight crew can clear the erroneous digits, via the CLR key, until the ADF frequency displays in cyan again.

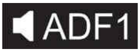


The ADF frequency is not selected for modification. The flight crew can press the related RMP (L1 or L2) key to select it.

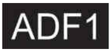


The RMPs are not synchronized, or an internal failure has occurred.

ADF IDENTIFIER



The ADF 1(2) receiver is in reception mode.



The ADF 1(2) receiver is not in reception mode.

BFO MODE

The flight crew uses the RMP L1 or L2 key to modify the BFO Mode, whatever the current selected BFO.

	When there is no display, indicates that no NAV receiver is selected for reception.
BFO MODE OFF **ON**	The BFO Mode is on.
BFO MODE **OFF** ON	The BFO Mode is off.
BFO MODE OFF ON	The RMPs are not synchronized, or an internal failure has occurred.

MESSAGE AREA

Refer to DSC-23-45-20 RMP Messages on the RMP Message Area.

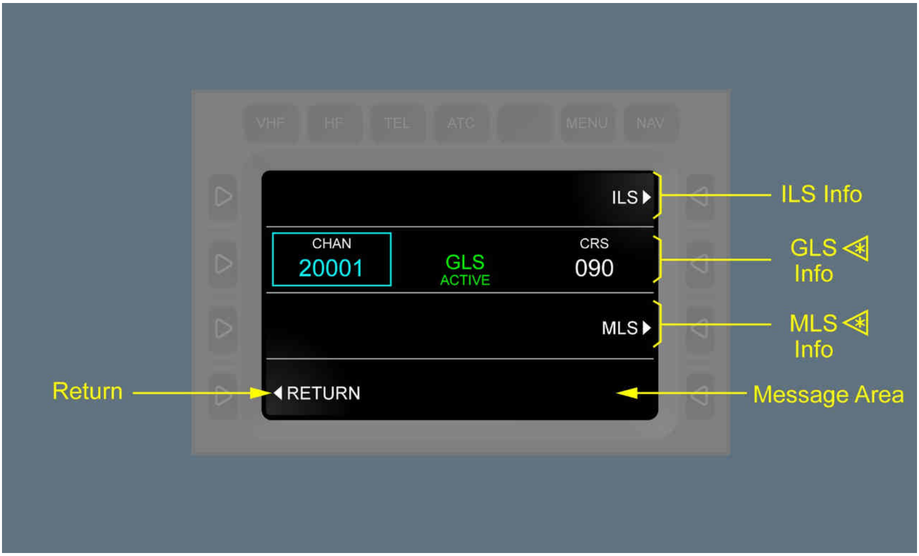
RETURN

RETURN	Displays the NAV page (*Refer to DSC-34-NAV-30-30 NAV Page*).

LS PAGE

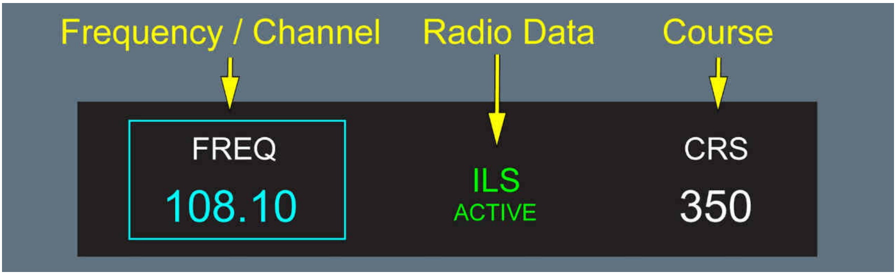
2 Ident.: DSC-34-NAV-30-30-00022693.0001001 / 25 MAY 20

Applicable to: MSN 11482-11597

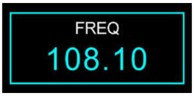

VHF
HF
TEL
ATC
MENU
NAV
ILS
CHAN
20001
GLS
ACTIVE
CRS
090
MLS
RETURN
ILS Info
GLS Info
MLS Info
Return
Message Area

ILS ▶	No ILS frequency (GLS ◁ channel / MLS ◁ channel) is active. To select ILS (GLS ◁ or MLS ◁) info, the flight crew can press the related RMP R1 (R2 or R3) key.
ILS ▶	The ILS (GLS ◁ / MLS ◁) is active. The frequency (channel) and course associated to the ILS (GLS ◁ / MLS ◁) are valid. To select GLS ◁ / MLS ◁ (ILS) info, the flight crew can press the related RMP R2 or R3 (R1) key. Only one xLS info is displayed at the same time.

ILS (GLS ◁ OR MLS ◁) INFO


Frequency / Channel
Radio Data
Course
FREQ
108.10
ILS
ACTIVE
CRS
350

FREQUENCY / CHANNEL



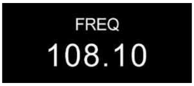
The flight crew presses the RMP L1 (L2 or L3) key and selects the ILS frequency (GLS channel or MLS channel) for modification.

The current ILS frequency (GLS channel or MLS channel) is validated and deselected when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew selects the related CRS through RMP R1 (R2 or R3) key, or
- The flight crew selects the GLS or MLS (or ILS) info through RMP R2 or R3 (or R1) key, or
- Automatically, when the frequency (channel) is complete and valid.

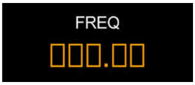
When the flight crew enters a frequency (channel), the system does not complete the frequency (channel). Amber boxes are displayed in place of not yet entered digits.

If at validation, the ILS frequency (GLS channel or MLS channel) is not complete, all of the following occur:
- The current ILS frequency (GLS channel or MLS channel) remains selected
- The ILS FREQ NOT COMPLETE RMP message (GLS FREQ NOT COMPLETE (GLS) or MLS FREQ NOT COMPLETE (MLS)) is also displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

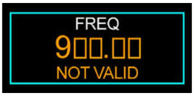
The flight crew can clear a digit, via the CLR key.
The flight crew can press and maintain the CLR key, in order to remove all the entered digits and display the previous valid ILS frequency (GLS channel / MLS channel).



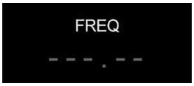
The ILS frequency (GLS channel / MLS channel) is not selected for modification. The flight crew can press the related RMP L1 (L2 or L3) key to select it for modification.



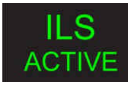
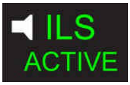
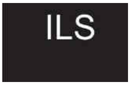
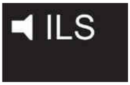
No ILS frequency (GLS channel / MLS channel) is active.



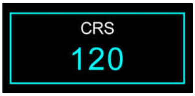
The modified ILS frequency (GLS channel / MLS channel) is not a standard ILS frequency (GLS channel / MLS). The flight crew can clear the erroneous digits, via the CLR key, until the ILS frequency (GLS channel / MLS channel) displays in cyan again.

	The RMPs are not synchronized, or an internal failure has occurred.

RADIO DATA

	The ILS frequency (GLS ◁ channel / MLS ◁ channel) is active.
	The ILS frequency (GLS ◁ / MLS ◁) is active, and the ILS receiver is in reception mode.
	No ILS frequency (GLS ◁ channel / MLS ◁ channel) is active.
	No ILS frequency (GLS ◁ channel / MLS ◁ channel) is active, and the ILS (GLS ◁ / MLS ◁) receiver is in reception mode.

COURSE



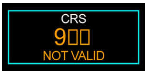
The flight crew pressed the RMP R1 (R2 or R3) key and selects the ILS (GLS ◁ / MLS ◁) course for modification.
The course value range varies from 0 (displayed as "000") to 360 degrees. If the flight crew enters the value "360", the ILS (GLS ◁ / MLS ◁) course displays the value "000" after validation.

The current ILS (GLS ◁ / MLS ◁) course is validated and deselected, when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew selects the related ILS frequency (GLS ◁ channel / MLS ◁ channel) through RMP L1 (L2 or L3) key, or
- The flight crew selects the GLS ◁ or MLS ◁ (or ILS) info through the RMP R2 or R3 (or R1) key,or
- Automatically when the course is complete and valid.

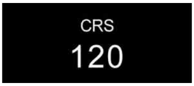
When the flight crew enters a course, the system does not complete the course. Amber boxes are displayed in place of not yet entered digits.

If at validation, the course is not complete, all of the following occur:
- The current ILS (GLS ◁ or MLS ◁) course remains selected
- The ILS CRS NOT COMPLETE RMP message (GLS CRS NOT COMPLETE (GLS ◁) or MLS CRS NOT COMPLETE (MLS ◁)) is also displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

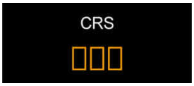
The flight crew can clear a digit, via the CLR key.
The flight crew can press and maintain the CLR key, in order to remove all the entered digits and display the previous valid ILS (GLS ◁ / MLS ◁) course.



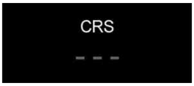
The modified ILS (GLS ◁ / MLS ◁) course is not a standard ILS (GLS ◁ / MLS ◁) course. The flight crew can clear the erroneous digits, via the CLR key, until the ILS (GLS ◁ / MLS ◁) course displays in cyan again.



The ILS (GLS ◁ / MLS ◁) course is not selected for modification. The flight crew can press the related RMP key to select it.



No ILS frequency (GLS ◁ / MLS ◁) is active.



The RMPs are not synchronized, or an internal failure has occurred.

MESSAGE AREA

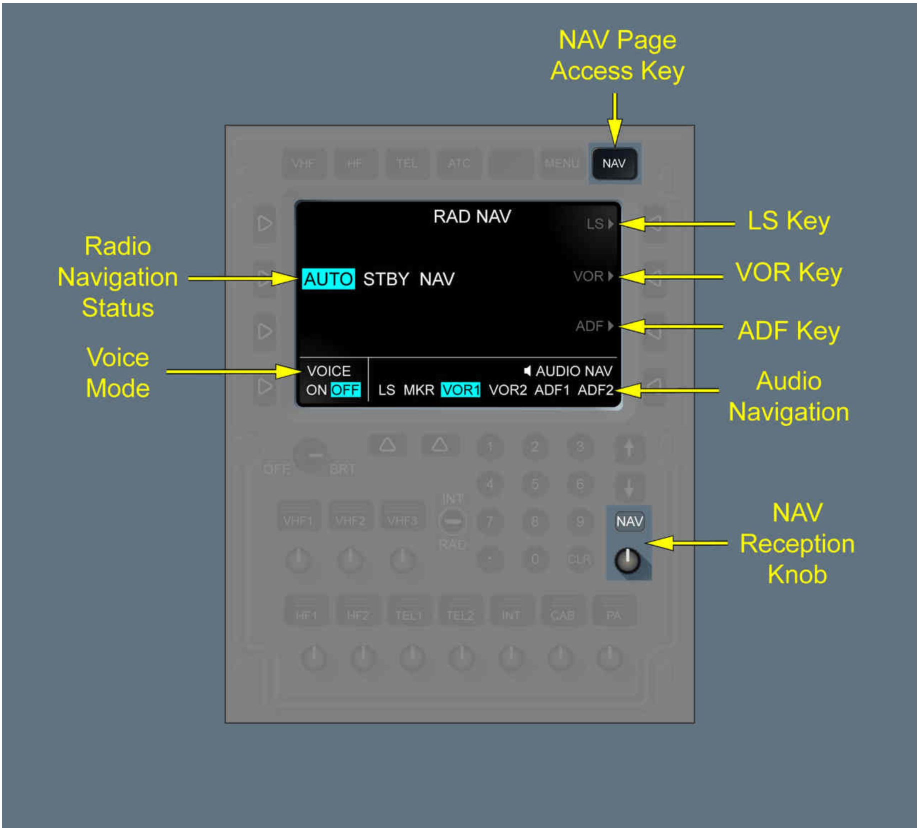
Refer to DSC-23-45-20 RMP Messages on the RMP Message Area.

RETURN

Displays the NAV page (*Refer to DSC-34-NAV-30-30 NAV Page*).

NAV PAGE

3 Ident.: DSC-34-NAV-30-30-00022709.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597


NAV Page Access Key
VHF
HF
TEL
ATC
MENU
NAV
RAD NAV
LS
LS Key
Radio Navigation Status
AUTO STBY NAV
VOR
VOR Key
ADF
ADF Key
Voice Mode
VOICE
ON OFF
AUDIO NAV
LS MKR VOR1 VOR2 ADF1 ADF2
Audio Navigation
OFF
BRT
1 2 3
4 5 6
7 8 9
. 0 CLR
INT
RAD
VHF1 VHF2 VHF3
NAV
NAV Reception Knob
HF1 HF2 TEL1 TEL2 INT CAB PA

NAV PAGE ACCESS KEY

The flight crew can display this page by pressing the NAV access key on the RMP (*Refer to DSC-23-45-10 RMP External Communication*).

RADIO NAVIGATION STATUS

AUTO STBY NAV	The FMS tunes the navaids. The RMP is only used to control the communication. The flight crew can press the RMP L2 key to change the navaid manual selection from the FMS to the RMP.

AUTO STBY NAV	The RMP tunes the navaids. The RMP operates in STBY NAV mode, and still controls the communication. The flight crew can press the RMP L2 key to change the navaid manual selection from the RMP to the FMS.

Note:
- *The flight crew must select this backup tuning mode on both RMP 1 and RMP 2, if both FMGCs or both MCDUs fail. In the emergency electrical configuration, RMP 1 and RMP 2 receive power.*
- *On RMP 3, the tuning of LS, VOR, ADF ◁ is not available.*
- *In the STBY NAV mode, the flight crew can select radio communication systems as it would in the normal mode.*

VOICE MODE

	When there is no display, indicates that no NAV receiver is selected for reception.
VOICE ON OFF	The reception of the audio identification signal is inhibited. When the RMP L4 key is pressed, the flight crew turns on the VOICE mode of the selected NAV receiver, and enables the reception of the audio identification signal.
VOICE ON OFF	The reception of the audio identification signal is active. When the RMP L4 key is pressed, the flight crew turns off the VOICE mode of the selected NAV receiver, and inhibits the reception of the audio identification signal.

LS KEY

Displays the LS page when the RMP R1 key is pressed (*Refer to DSC-34-NAV-30-30 LS Page*).

VOR KEY

Displays the VOR page when the RMP R2 key is pressed (*Refer to DSC-34-NAV-30-30 VOR Page*).

ADF ◁ KEY

Displays the ADF page (ADF ◁) when the RMP R3 key is pressed (*Refer to DSC-34-NAV-30-30 ADF (If Installed) Page*).

AUDIO NAVIGATION

The flight crew can press the RMP R4 key to select a NAV receiver. Each time the RMP R4 key is pressed, this activates the next NAV receiver from the list.
The list of NAV receiver is updated according to the installed systems on A/C.

🔈 AUDIO NAV	The selected NAV receiver is activated in reception mode.

LS	The LS (MKR , VOR1, VOR2, ADF1 ◁ , ADF2 ◁) NAV receiver is not selected.
LS	The LS (MKR, VOR1, VOR2, ADF1 ◁ , ADF2 ◁) NAV receiver is selected. The flight crew presses the NAV reception knob in order to receive the audio of the NAV receiver.

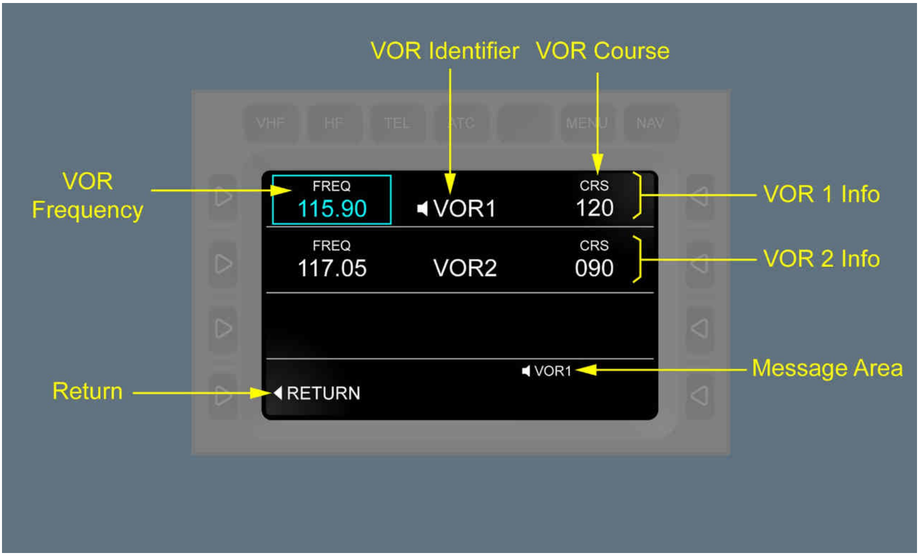
NAV RECEPTION KNOB

The flight crew uses the NAV reception knob to:
- Enable the audio reception of the NAV receiver
- Adjust the volume of the NAV reception.

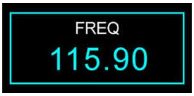
	The associated NAV receiver is not in audio reception mode. When pressed and released in the out position, the reception knob turns on the audio reception mode.
	The associated NAV receiver is in audio reception mode. When turned, the reception knob adjusts the volume of the headsets and the loudspeakers. When pressed and released in the in position, the reception knob turns off the audio reception mode.

VOR PAGE

4 Ident.: DSC-34-NAV-30-30-00022710.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597


VOR Identifier
VOR Course
VHF
HF
TEL
ATC
MENU
NAV
VOR Frequency
FREQ
115.90
VOR1
CRS
120
VOR 1 Info
FREQ
117.05
VOR2
CRS
090
VOR 2 Info
VOR1
Message Area
Return
RETURN

VOR FREQUENCY



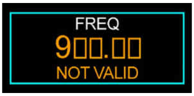
The flight crew presses the RMP L1(L2) key and selects the VOR frequency for modification.

The current VOR frequency is validated and deselected when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew selects another VOR frequency / VOR course, or
- Automatically when the frequency is complete and valid.

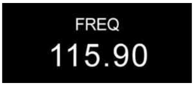
When the flight crew enters a frequency, the system does not complete the frequency. Amber boxes are displayed in place of not yet entered digits.

If at validation, the VOR frequency is not complete, all of the following occur:
- The current VOR frequency remains selected
- The VOR 1(2) FREQ NOT COMPLETE RMP message is also displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

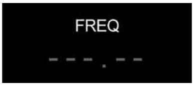
The flight crew can clear a digit, via the CLR key.
The flight crew can press and maintain the CLR key , in order to remove all the entered digits and display the previous valid VOR Frequency.



The modified VOR frequency is not a standard VOR frequency. The flight crew can clear the erroneous digits, via the CLR key, until the VOR frequency displays in cyan again.

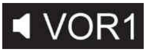


The VOR frequency is not selected for modification. The flight crew can press the related RMP (L1 or L2) key to select it

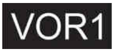


The RMPs are not synchronized, or an internal failure has occurred.

VOR IDENTIFIER

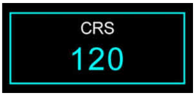


The VOR 1(2) receiver is in reception mode.



The VOR 1(2) receiver is not in reception mode.

VOR COURSE


CRS
120

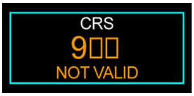
The flight crew pressed the RMP R1(R2) key and selects the VOR ccourse for modification.
The course value range varies from 0 (displays as "000") to 360 degrees.
If the flight crew enters the value "360", the VOR course displays the value "000" after validation.

The current VOR course is validated and deselected when one of the following occurs:
- The flight crew presses again on the related RMP key, or
- The flight crew selects another VOR frequency / VOR course, or
- Automatically when the frequency is complete and valid.

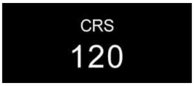
When the flight crew enters a course, the system does not complete the course. Amber boxes are displayed in place of not yet entered digits.

If at validation, the VOR course is not complete, all of the following occur:
- The current VOR course remains selected
- The VOR 1(2) CRS NOT COMPLETE RMP message is also displayed (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).

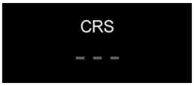
The flight crew can clear a digit, via the CLR key.
The flight crew can press and maintain the CLR key, in order to remove all the entered digits and display the previous valid VOR course.


CRS
9☐☐
NOT VALID

The modified VOR course is not a standard VOR course. The flight crew can clear the erroneous digits, via the CLR key, until the VOR course displays in cyan again.


CRS
120

The VOR course is not selected for modification. The flight crew can press the related RMP (R1 or R2) key to select it.


CRS
- - -

The RMPs are not synchronized, or an internal failure has occurred.

MESSAGE AREA

Refer to DSC-23-45-20 RMP Messages on the RMP Message Area.

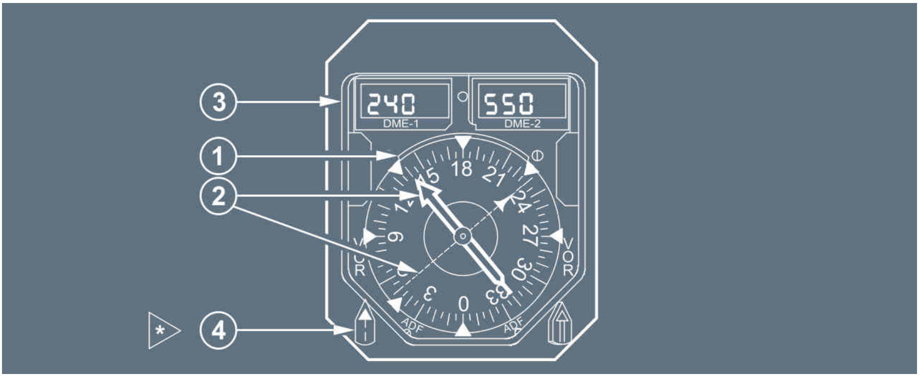
RETURN

RETURN

Displays the NAV page (*Refer to DSC-34-NAV-30-30 NAV Page*).

DIGITAL DISTANCE AND RADIO MAGNETIC INDICATOR ◁ (DDRMI)

Ident.: DSC-34-NAV-30-30-00018583.0001001 / 21 MAR 16
Applicable to: ALL



(1) Compass card
ADIRU1 normally supplies the signal that positions the compass card.
ADIRU3 supplies this signal when selected by the ATT HDG SWITCHING selector.

(2) Bearings pointers
Indicate the magnetic bearing to the station received by VOR1 or ADF 1 ◁ (dashed pointer) and VOR2 or ADF 2 ◁ (double pointer).

Note: Depending on the quality of the VOR beacon's signal, and mainly at distances greater than 25 NM from the station, the processing of the signal, on aircraft equipped with COLLINS or BENDIX VOR may lead to bearing pointer oscillations.

(3) DME1(2) counters
Indicates distance in nautical miles to/from DME station.

The counters indicate distances:
- in NM when the station is at more than 20 NM
- 1/10th of NM when the station is at less than 20 NM.

When the station is at less than 1 NM, 0 is shown.
The DME1 and DME2 display are blanked or dashed when a fault is detected or data invalid.

(4) VOR/ADF selector

- VOR1 or ADF 1 on the dashed pointer.
- VOR2 or ADF 2 on the double pointer (if ADF2 is not installed, then ADF1 may be selected).

The DDRMI has also VOR/ADF flags and HDG flags when the associated information is not available.

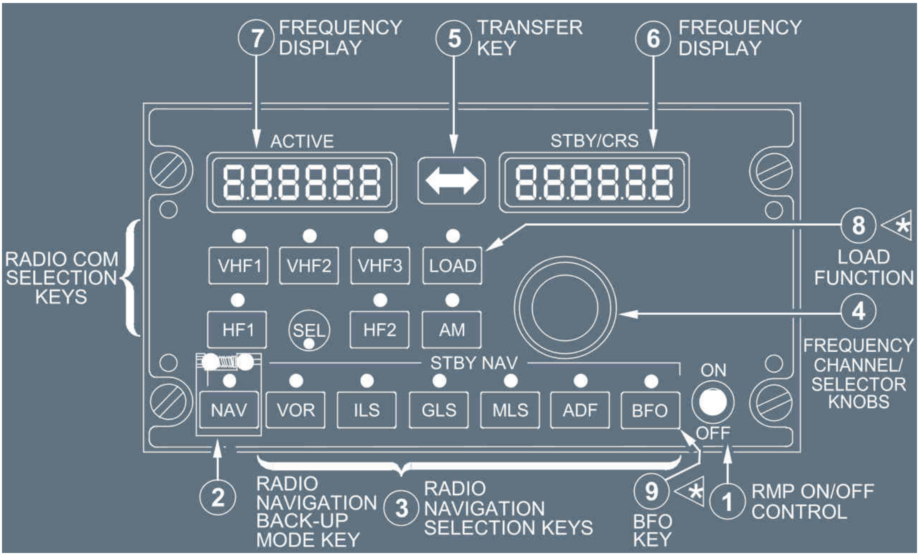
The indicators display these flags if:
- The VOR or ADF receiver fails (associated to the VOR/ADF flag only)
- The DDRMI has an internal failure
- The heading signal from ADIRS is not valid
- The power supply fails.

As long as the VOR/ADF flag is shown, and depending of the aircraft configuration, the associated bearing pointer remains:
- At the last valid position, or
- Into the horizontal line.

RADIO MANAGEMENT PANEL (RMP)

Ident.: DSC-34-NAV-30-30-00018584.0001001 / 17 MAY 21

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**


7 FREQUENCY DISPLAY
5 TRANSFER KEY
6 FREQUENCY DISPLAY
ACTIVE
STBY/CRS
888888
888888
RADIO COM SELECTION KEYS
VHF1
VHF2
VHF3
LOAD
8 * LOAD FUNCTION
HF1
SEL
HF2
AM
4 FREQUENCY CHANNEL/ SELECTOR KNOBS
STBY NAV
ON
NAV
VOR
ILS
GLS
MLS
ADF
BFO
OFF
2 RADIO NAVIGATION BACK-UP MODE KEY
3 RADIO NAVIGATION SELECTION KEYS
9 * BFO KEY
1 RMP ON/OFF CONTROL

(1) ON/OFF sw
This switch controls the power supply to the panel.

(2) NAV key (transparent switchguard)

- Pressing this key engages the radio navigation backup mode. It takes control of the VOR, ILS, GLS ◁ , MLS ◁ and ADF ◁ receivers away from the FMGC and gives it to the RMP.
- The green monitor light comes on.
- Pressing the NAV key a second time returns control of the navigation radios to the FMGC.

Note:
- *The flight crew must select this backup tuning mode on both RMP1 and RMP2 if both FMGCs or both MCDUs fail. In the emergency electrical configuration, only RMP1 receives power*
- *Pressing the NAV key on RMP3 ◁ has no effect*
- *In the NAV backup mode, the flight crew can select radio communication systems as it would in the normal mode.*
  Setting one RMP to NAV backup mode removes navaids tuning from both FMGCs.
- *When the flight crew uses an RMP to tune an ILS/DME or GLS ◁ /DME or MLS ◁ /DME, the PFDs do not display the DME distance.*

(3) STBY NAV keys

When the NAV key is on and the flight crew presses one of these STBY NAV keys, the ACTIVE window displays the frequency/channel to which that receiver is tuned. The green monitor light on the selected key comes on, and the one on the previously selected STBY NAV or COM key goes out.

(4) Frequency/channel selector knob

Two concentric knobs allow the flight crew to preselect frequencies/channels for communication radios and stand-by navigation systems and select courses for VOR, ILS, GLS ◁ and MLS ◁ .
The desired frequency, channel or course is set in the STBY/CRS window.
The outer and the inner knobs set a frequency/channel: the outer knob controls the most significant digits, the inner knob controls the least significant digits. A rate multiplier speeds up the tuning when the knob is rotated quickly.
The inner knob only sets a course.

(5) Transfer key

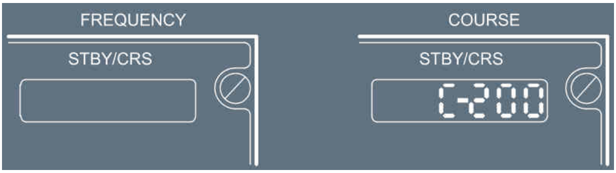
The flight crew presses this key to interchange ACTIVE and STBY frequencies/channels. This action tunes the selected receiver to the new ACTIVE frequency/channel.

(6) STBY/CRS window

The flight crew can make the displayed frequency /channel by rotating the tuning knob.

The frequency/channel displayed in the window becomes the active frequency/channel when the flight crew presses the Transfer Key.
If this window displays a course, then the ACTIVE window displays the associated frequency/channel.

Note: *If the STBY/CRS window is displaying a course, then pressing the transfer key displays the active frequency/channel in both windows.*



(7) ACTIVE window
This window displays the frequency/channel of the selected navaid, which is identified by a green monitor light on the selection key.

(8) LOAD FUNCTION ◁
The flight crew can load the VHF frequency from the CPDLC CONTACT/MONITOR messages to the STBY/CRS window.

(9) BFO key ◁
If the ADF ◁ is selected, pressing this key activates the BFO (Beat Frequency Oscillator). For most ADF, with BFO activated, the audio identification is heard. However there are some ADF where the BFO must be deactivated in order to hear the audio identification.

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GENERAL

Ident.: DSC-34-NAV-40-10-00018585.0001001 / 21 MAR 16
Applicable to: ALL

The aircraft has two radio altimeters (RA).
CAPT PFD displays the RA1 height, and the F/Os PFD displays the RA2 height.
If one RA fails, both PFDs display the height from the remaining RA.
For indication on the PFD, *Refer to DSC-31-40 Altitude (CONT'D)*.

AUTOMATIC CALLOUT

Ident.: DSC-34-NAV-40-10-00018656.0001001 / 21 MAR 16
Applicable to: ALL

GENERAL

The FWC generates a synthetic voice for radio height announcement below 2 500 ft. These announcements come through the cockpit loudspeakers, even if the speakers are turned off.

PREDETERMINED CALL OUT

The altitude call out uses the following predetermined threshold:

Height (feet)	Call out
2 500	TWO THOUSAND FIVE HUNDRED OR TWENTY FIVE HUNDRED
2 000	TWO THOUSAND
1 000	ONE THOUSAND
500	FIVE HUNDRED
400	FOUR HUNDRED
300	THREE HUNDRED
200	TWO HUNDRED
115	STANDBY (1)
100	ONE HUNDRED
90	STANDBY (1)
65	FLARE (1)
50	FIFTY
40	FORTY
30	THIRTY
20	TWENTY
10	TEN
5	FIVE
DH (or MDA/MDH) + 100	HUNDRED ABOVE
DH (or MDA/MDH)	MINIMUM

(1) *These callouts are triggered only if the Steep Approach and Landing function ◁ is active. In this case, the “ONE HUNDRED” callout is inhibited.*

Note: *The reference altitude for callouts is the radio height for precision approaches (DH), and baro altitude (MDA/MDH) for non precision approaches.*

Pin programming enables Operators to select the required callouts. If the aircraft remains at a height that is in the detection zone for a height callout, the corresponding message is repeated at regular intervals.

INTERMEDIATE CALL OUT

If time between two consecutive predetermined call outs exceeds a certain threshold, the present height is repeated at regular intervals.

The threshold is:
- 11 s above 50 ft
- 4 s below 50 ft

The repeating interval is 4 s.

RETARD ANNOUNCEMENT

The loudspeaker announces RETARD at:

- 20 ft, or
- at 10 ft if autothrust is active and one autopilot is in LAND mode.

AIRCRAFT SYSTEMS

SURVEILLANCE

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DSC-34-SURV-10 ATC

DSC-34-SURV-10-10 Description

Principle....A
ADS-B OUT....B

DSC-34-SURV-10-20 Controls and Indicators

ATC Page....A
Control Panels....B

DSC-34-SURV-30 Weather Radar

DSC-34-SURV-30-10 Description

Description....A

DSC-34-SURV-30-20 Predictive Windshear System

General....A
Windshear Alerts During Takeoff Roll, Up to 100 knots....B
Windshear Alerts Above 50 feet....C
Windshear Alerts Inhibition....D

DSC-34-SURV-30-30 Controls and Indicators

Control Panel....A
Control Panel....B
Weather Radar indication on ND....C
PWS indication on PFD and ND....D
Weather Hazard Prediction Function Indication on ND....E
Memo Display....F

DSC-34-SURV-40 GPWS

DSC-34-SURV-40-10 Description

Overview....A
Principle....B

DSC-34-SURV-40-20 GPWS Basics Modes

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Mode 2 : Excessive Terrain Closure Rate....B
Mode 3 : Altitude Loss After Takeoff....C
Mode 4 : Unsafe Terrain Clearance when Not in Landing Configuration....D
Mode 5 : Descent Below Glideslope....E

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Terrain Caution and Warning Envelope........B
Terrain Clearance Floor........C
Runway Field Clearance Floor........D
Runway Awareness and Advisory System........E
General........F
Alerts........G
Alerts Envelopes........H
Inhibition Logic of the GPWS Predictive Functions in Approach........I

[1] DSC-34-SURV-40-40 Controls and Indicators

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Instrument Panels........B
Memo Display........C

DSC-34-SURV-50 ROW/ROP

DSC-34-SURV-50-10 General

General........A

DSC-34-SURV-50-20 Description

Description........A

DSC-34-SURV-50-30 Controls and Indicators

Controls and Indicators........A

DSC-34-SURV-60 TCAS

DSC-34-SURV-60-10 Description

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Principle........B
Main Components........C
Intruder Detection Categories........D
TCAS Modes........E
AP/FD TCAS........F
Advisory Inhibition........G
TCAS INTRUDER WITH NO REPORTED ALTITUDE........H

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DSC-34-SURV-60-20 Controls and Indicators

ATC/TCAS Panel.......... A
ATC Page.......... B
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Aural Messages.......... F
Memo Display.......... G

DSC-34-SURV-60-30 Temporary Abnormal Behaviors

Undue NAV TCAS FAULT.......... A

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Localization Title	Toc Index	ID	Reason
DSC-34-SURV-PLP-TOC Controls and Indicators		1	Documentation update: Deletion of the "00001418.0008001 Overhead Panel" documentary unit.
			Documentation update: Deletion of the "00001418.0002001 Overhead Panel" documentary unit.
DSC-34-SURV-10-10 Principle	A	2	Documentation update: Addition of "Principle" documentary unit
DSC-34-SURV-10-10 Principle	A	3	Documentation update: Addition of "Principle" documentary unit
DSC-34-SURV-10-20 ATC Page	A	1	Documentation update: Addition of "ATC Page" documentary unit
DSC-34-SURV-30-30 Weather Hazard Prediction Function Indication on ND	E	4	Documentation update: Addition of "Weather Hazard Prediction Function Indication on ND" documentary unit
DSC-34-SURV-40-40 Overhead Panel	A	1	Documentation update: Addition of "Overhead Panel" documentary unit
DSC-34-SURV-60-10 Main Components	C	2	Documentation update: Addition of "Main Components" documentary unit
DSC-34-SURV-60-10 TCAS Modes	E	4	Documentation update: Addition of "TCAS Modes" documentary unit
DSC-34-SURV-60-20 ATC Page	B	2	Documentation update: Addition of "ATC Page" documentary unit
DSC-34-SURV-10-10 Principle	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-34-SURV-10-10 ADS-B OUT	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-10-20 Control Panels	B	2	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-34-SURV-30-10 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 Windshear Alerts During Takeoff Roll, Up to 100 knots	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 Windshear Alerts Above 50 feet	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-20 Windshear Alerts Inhibition	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-30 Control Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-34-SURV-30-30 Weather Radar indication on ND	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-30 PWS ◁ indication on PFD and ND	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-30-30 Memo Display	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 1 : Excessive Rate of Descent	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 2 : Excessive Terrain Closure Rate	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 3 : Altitude Loss After Takeoff	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 4 : Unsafe Terrain Clearance when Not in Landing Configuration	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-20 Mode 5 : Descent Below Glideslope	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Terrain Awareness and Display	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Terrain Caution and Warning Envelope	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Terrain Clearance Floor	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Runway Field Clearance Floor	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-35 Runway Awareness and Advisory System	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-40 Overhead Panel	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591,

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
			05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098.
DSC-34-SURV-40-40 Instrument Panels	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-40-40 TERR STBY	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-50-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-50-20 Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-50-30 Controls and Indicators	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-10 Main Components	C	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-34-SURV-60-10 TCAS Modes	E	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101,

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
			05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-34-SURV-60-10 AP/FD TCAS	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-20 ATC/TCAS Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293.
DSC-34-SURV-60-20 PFD Indications	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-20 Aural Messages	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-34-SURV-60-20 Memo Display	G	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

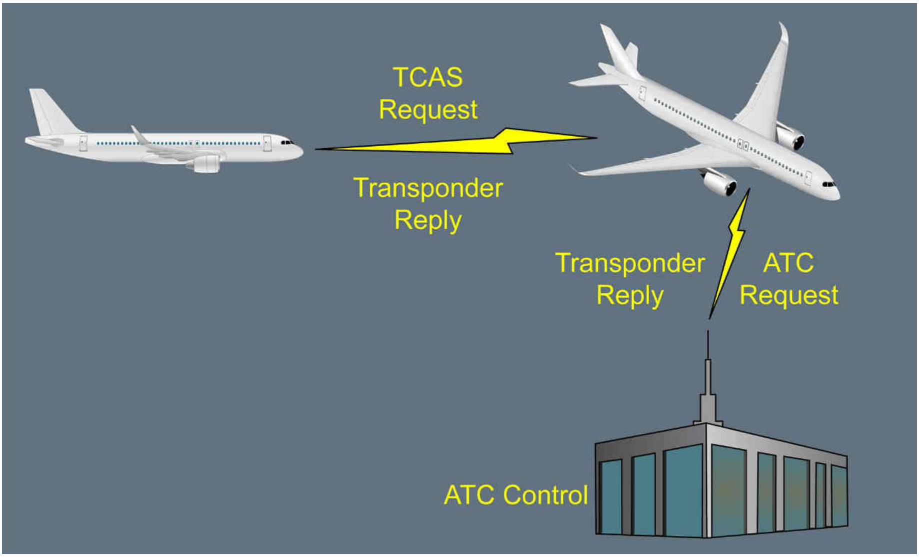
PRINCIPLE

Ident.: DSC-34-SURV-10-10-00020602.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03058, 04563, 05005, 05097

The aircraft has two ATC transponders (XPDR) which are controlled by a control panel (ATC/TCAS) on the center pedestal.
Only the selected XPDR operates.

The XPDR automatically responds to requests:
- From the ATC, to ensure effective air traffic surveillance
- From other aircraft that have a TCAS, to ensure that traffic alerts are triggered.



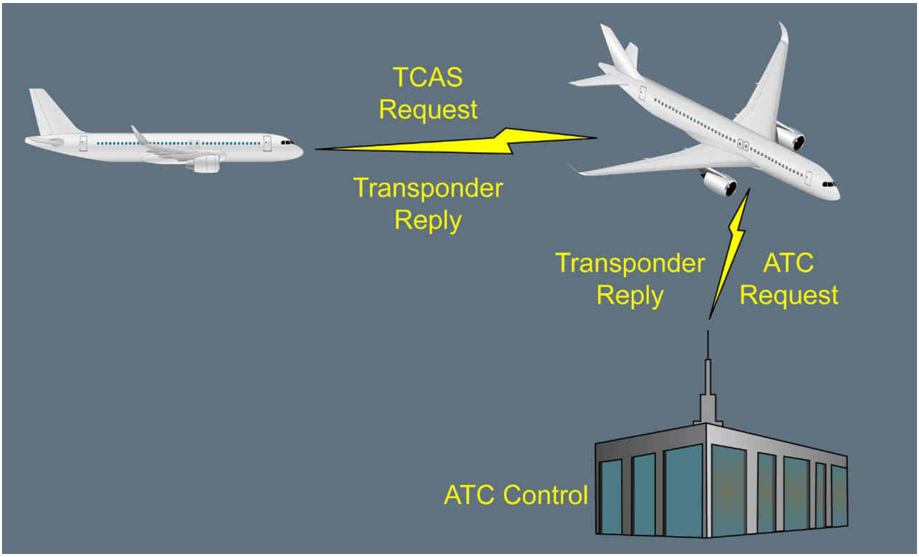
PRINCIPLE

Ident.: DSC-34-SURV-10-10-00020602.0002001 / 17 MAR 17

1 **Applicable to: MSN 03032, 03111-03710, 03733-04544, 04570-04974, 05066, 05101-05987, 06097, 06121, 06139-09324, 10949-11293**

The aircraft has two ATC transponders (XPDR) which are controlled by a control panel (ATC/TCAS) on the center pedestal.
Only the selected XPDR operates.

The XPDR automatically responds to requests:
- From the ATC, to ensure effective air traffic surveillance
- From other aircraft that have a TCAS, to ensure that traffic alerts are triggered.



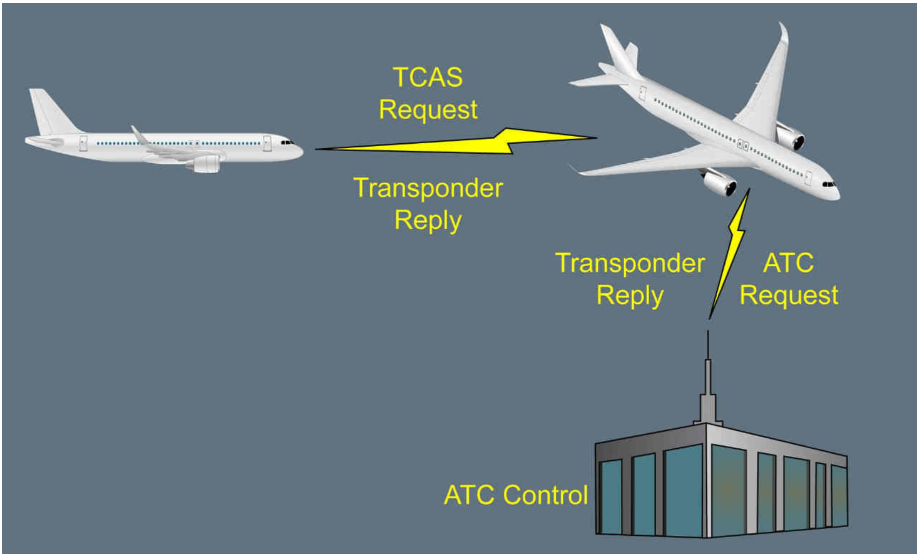
The XPDR is capable of elementary surveillance (ELS) and enhanced surveillance (EHS). It transmits the following data to the ATC center:
- The aircraft 24 bit address, the aircraft altitude, the flight number, the RA report
- The indicated airspeed, the Mach number, and the barometric vertical speed that are all supplied by the ADRs
- The magnetic heading, the roll angle, the ground speed, the track angle, the track angle rate, and the inertial vertical speed, that are all supplied by the IRs
- The selected altitude and barometric reference settings supplied by the FCUs.

PRINCIPLE

2 Ident.: DSC-34-SURV-10-10-00020602.0003001 / 25 MAY 20
Applicable to: MSN 11531

The aircraft has two ATC transponders (XPDR) that are controlled by each of the two RMPs of the center pedestal (and by the third RMP ✳).
Only the selected XPDR operates.

The XPDR automatically responds to requests:
- From the ATC, to ensure effective air traffic surveillance
- From other aircraft that have a TCAS, to ensure that traffic alerts are triggered.

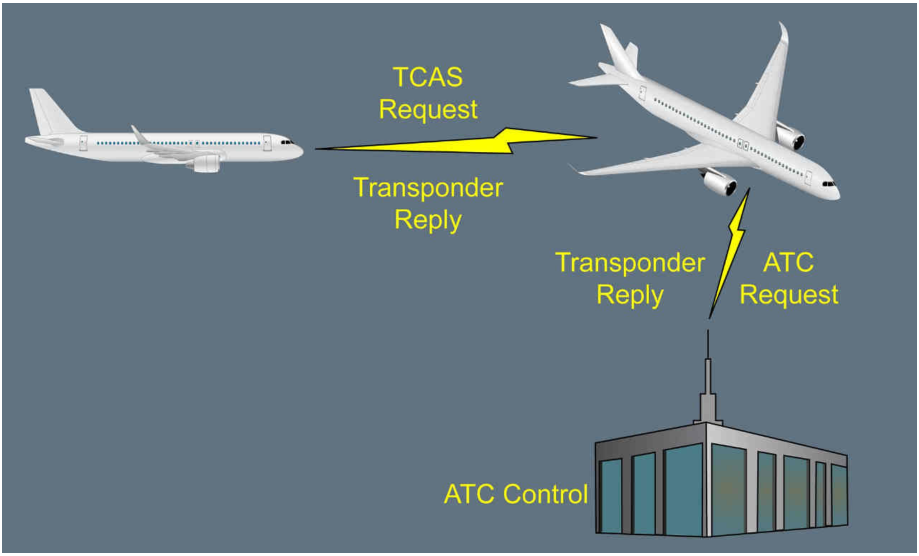


PRINCIPLE

3 Ident.: DSC-34-SURV-10-10-00020602.0004001 / 25 MAY 20
Applicable to: MSN 11482-11522, 11572-11597

The aircraft has two ATC transponders (XPDR) that are controlled by each of the two RMPs of the center pedestal (and by the third RMP ◁).
Only the selected XPDR operates.

The XPDR automatically responds to requests:
- From the ATC, to ensure effective air traffic surveillance
- From other aircraft that have a TCAS, to ensure that traffic alerts are triggered.



The XPDR is capable of elementary surveillance (ELS) and enhanced surveillance (EHS). It transmits the following data to the ATC center:

- The aircraft 24 bit address, the aircraft altitude, the flight number, the RA report
- The indicated airspeed, the Mach number, and the barometric vertical speed that are all supplied by the ADRs
- The magnetic heading, the roll angle, the ground speed, the track angle, the track angle rate, and the inertial vertical speed, that are all supplied by the IRs
- The selected altitude and barometric reference settings supplied by the FCUs.

ADS-B OUT

Ident.: DSC-34-SURV-10-10-00020606.0002001 / 17 MAR 17

4 **Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11597**

With the ADS-B OUT capability, the Mode S transponders automatically and continuously transmit surveillance data, without preliminary interrogation, to:

- The ATC ground station
- Aircraft capable of ADS-B IN function.

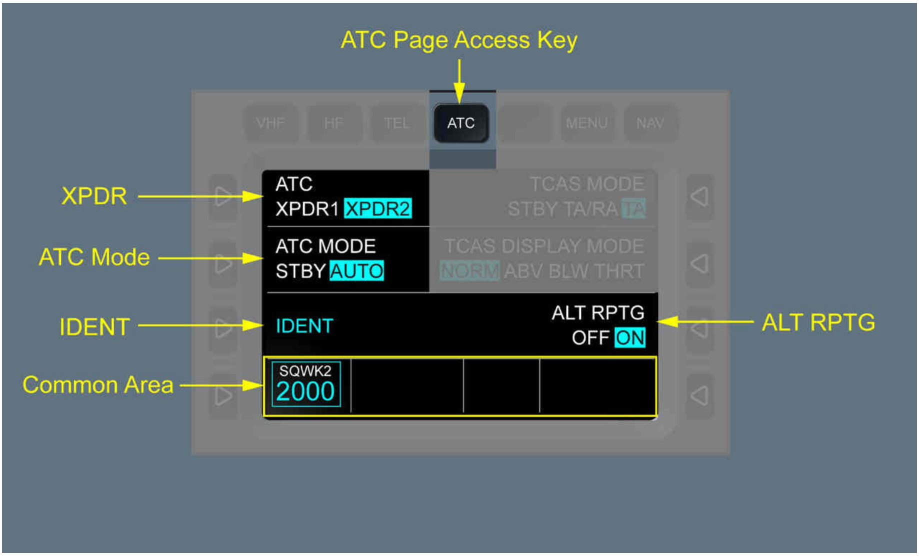
The ADS-B OUT surveillance data that are automatically and continuously transmitted, include the following:

- The latitude and longitude, the Horizontal Integrity Limit (HIL), the difference between barometric altitude and geometric altitude, the ground speed, all supplied by GPS
- The barometric altitude supplied by ADIRS
- The track, the vertical speed, all supplied by the IRs
- The flight number (registered on the ATC flight plan and entered in the FMS during cockpit preparation) supplied by the FMS
- The emergency situation indicator
- The selected altitude and heading, the barometric pressure setting (QNH/QFE) from FCU.

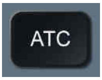
Intentionally left blank

ATC PAGE

1 Ident.: DSC-34-SURV-10-20-00024211.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597

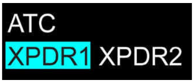

ATC Page Access Key
VHF
HF
TEL
ATC
MENU
NAV
XPDR
ATC Mode
IDENT
Common Area
ALT RPTG
ATC
XPDR1 XPDR2
TCAS MODE
STBY TA/RA TA
ATC MODE
STBY AUTO
TCAS DISPLAY MODE
NORM ABV BLW THRT
IDENT
ALT RPTG
OFF ON
SQWK2
2000

ATC PAGE ACCESS KEY

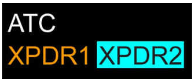


Displays the ATC Page (which controls the XPDR system) from the RMP (*Refer to DSC-23-45-10 RMP External Communication*).

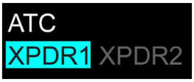
XPDR


ATC
XPDR1 XPDR2

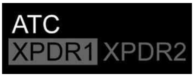
XPDR1(2) is selected. The flight crew can press the RMP L1 key to change the XPDR selection.


ATC
XPDR1 XPDR2

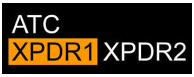
XPDR1(2) is failed.


ATC
XPDR1 XPDR2

The link between RMP1 and AMU is failed. The XPDR1 is selected by default. The flight crew cannot select XPDR2.
If the flight crew switches off the RMP1, then RMP2 and RMP3 display the ATC page with the last valid data known before the failure.
Or an internal failure has occurred.

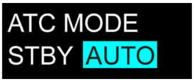

ATC
XPDR1 XPDR2

The link between RMP1 and AMU is failed.
If the flight crew switches off the RMP1, then RMP2 and RMP3 display the ATC page with the last valid data known before the failure.
Or an internal failure has occurred.

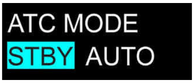

ATC
XPDR1 XPDR2

The selected XPDR is failed.

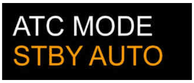
ATC MODE


ATC MODE
STBY AUTO

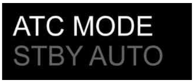
The selected XPDR is in AUTO mode.
In flight, mode S continuously transmits information to other aircraft and replies to requests from aircraft and ground stations.
On ground, modes A and C are inhibited. Mode S (selective calling) and mode ADS-B (data broadcast) are operative.


ATC MODE
STBY AUTO

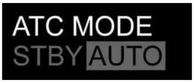
The selected XPDR is in STBY mode.
It does not transmit either reply to ground stations nor to other aircraft.
The TCAS is also in STBY mode.


ATC MODE
STBY AUTO

The selected XPDR is failed.


ATC MODE
STBY AUTO

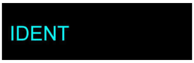
The link between RMP1 and AMU is failed. The flight crew cannot change the ATC Mode.
If the flight crew switches off the RMP1, then RMP2 and RMP3 display the ATC page with the last valid data know before the failure.
Or an internal failure has occurred.


ATC MODE
STBY AUTO

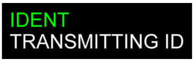
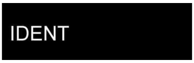
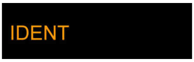
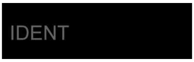
An internal failure has occurred.

IDENT

The flight crew can activate the IDENT function.


IDENT

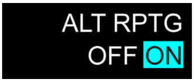
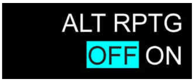
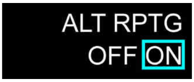
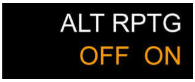
When the selected XPDR is in AUTO mode, the flight crew can press the RMP L3 key to transmit the aircraft identification signal.

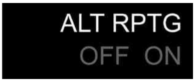
 IDENT TRANSMITTING ID	The selected XPDR is in AUTO mode. If the current squawk code is valid, the aircraft identification signal is transmitted. If the current displayed code is not valid, then all the following occur: - the squawk code reverts to the previous valid code - the SQWK REVERTED TO PREV ENTRY RMP message appears (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*) - the aircraft identification signal is transmitted.
 IDENT	When the selected XPDR is in STBY mode, no aircraft identification signal can be transmitted. If the flight crew presses the RMP L3 key, the DATAFIELD NOT MODIFIABLE RMP message appears (*Refer to DSC-23-45-20 RMP Messages on the RMP Message Area*).
 IDENT	The selected XPDR is failed. No aircraft identification signal can be transmitted.
 IDENT	The link between RMP1 and AMU is failed, or an internal failure has occurred. No aircraft identification signal can be transmitted.

COMMON AREA

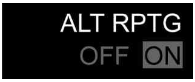
Refer to DSC-23-45-10 RMP External Communication.

ALT RPTG

 ALT RPTG OFF ON	When the selected XPDR is in AUTO mode, the altitude data transmission is activated. The flight crew can press the RMP R3 key to de-activate the altitude data transmission.
 ALT RPTG OFF ON	When the selected XPDR is in AUTO mode, the altitude data transmission is de-activated. The XPDR does not send any altitude data. The flight crew can press the RMP R3 key to activate the altitude data transmission.
 ALT RPTG OFF ON	When the selected XPDR is in STBY mode, the altitude data transmission is activated. The XPDR does not send any altitude data. The flight crew can press the RMP R3 key to de-activate the altitude data transmission.
 ALT RPTG OFF ON	The selected XPDR is failed. The altitude data transmission cannot be activated.


ALT RPTG
OFF ON

The link between RMP1 and AMU is failed. The altitude data transmission cannot be activated.
If the flight crew switches off the RMP1, then RMP2 and RMP3 display the ATC page with the last valid data know before the failure.

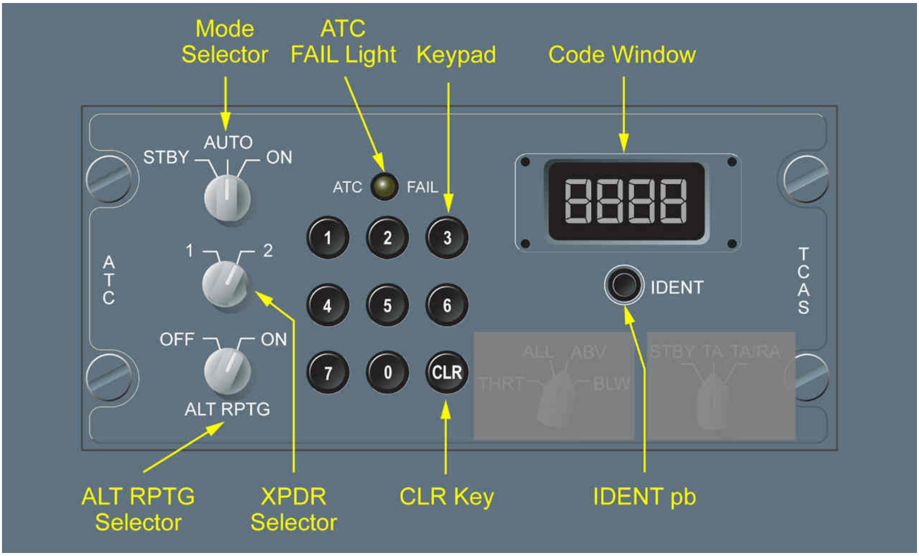

ALT RPTG
OFF ON

An internal failure has occurred.

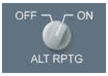
CONTROL PANELS

Ident.: DSC-34-SURV-10-20-00020607.0027001 / 04 NOV 20

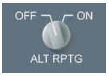
2 **Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266-03284, 04827-04860, 08495-09324, 10949-11293**


Mode Selector
ATC FAIL Light
Keypad
Code Window
STBY
AUTO
ON
ATC
FAIL
1
2
3
8888
A T C
1
2
4
5
6
IDENT
T C A S
OFF
ON
7
0
CLR
ALL ABV
THRT BLW
STBY TA TA/RA
ALT RPTG
ALT RPTG Selector
XPDR Selector
CLR Key
IDENT pb

ALT RPTG SELECTOR

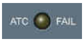

OFF ON
ALT RPTG

The XPDR sends barometric standard altitude data.

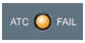

OFF ON
ALT RPTG

No altitude data transmission. With TCAS ◁ , the upper ECAM displays TCAS STBY during flight phases other than 6, or TCAS STBY during flight phase 6.

ATC FAIL LIGHT

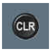


The selected XPDR is normal.



The selected XPDR fails.

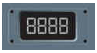
CLR KEY



The flight crew uses this key to clear the code window.

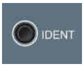
Note: *As long as the four figures of the new code are not entirely written, the previous code remains.*

CODE WINDOW



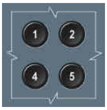
The code window displays the selected code.

IDENT PB



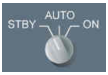
The flight crew presses this button to send the aircraft identification signal.

KEYPAD

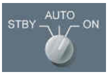


The flight crew uses the keypad to set the code assigned by ATC.

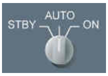
MODE SELECTOR



Both XPDRs are electrically supplied but do not operate.

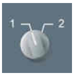


In flight: The selected XPDR operates.
On ground: The selected XPDR only operates in mode S (Selective aircraft interrogation mode).



In flight: The selected XPDR operates.
On ground: The selected XPDR only operates in mode S (Selective aircraft interrogation mode).

XPDR SELECTOR

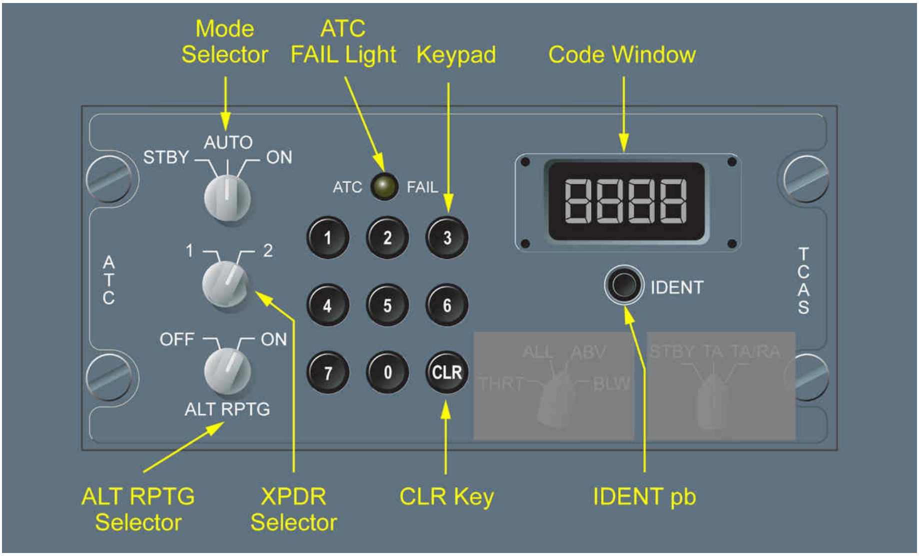


The XPDR 1 is selected.

The XPDR 2 is selected.

CONTROL PANELS

Ident.: DSC-34-SURV-10-20-00020607.0009001 / 04 NOV 20
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02887-02904, 03032-03047, 03111, 03222-03229, 03294-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-07098


Mode Selector
ATC FAIL Light
Keypad
Code Window
STBY
AUTO
ON
ATC
FAIL
8888
1
2
3
4
5
6
7
0
CLR
IDENT
ATC
TCAS
1
2
OFF
ON
ALT RPTG
ALL
ABV
THRT
BLW
STBY
TA
TA/RA
ALT RPTG Selector
XPDR Selector
CLR Key
IDENT pb

ALT RPTG SELECTOR

OFF
ON
ALT RPTG

The XPDR sends barometric standard altitude data.

OFF
ON
ALT RPTG

No altitude data transmission. With TCAS ◁ , the upper ECAM displays TCAS STBY during flight phases other than 6, or TCAS STBY during flight phase 6.

ATC FAIL LIGHT

The selected XPDR is normal.

The selected XPDR fails.

CLR KEY

The flight crew uses this key to clear the code window.

Note: *As long as the four figures of the new code are not entirely written, the previous code remains.*

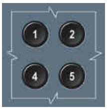
CODE WINDOW

The code window displays the selected code.

IDENT PB

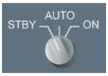
The flight crew presses this button to send the aircraft identification signal.

KEYPAD

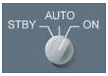


The flight crew uses the keypad to set the code assigned by ATC.

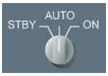
MODE SELECTOR



Both XPDRs are electrically supplied but do not operate.



The selected XPDR operates.



In flight: The selected XPDR operates.
On ground: The selected XPDR only operates in mode S (Selective aircraft interrogation mode).

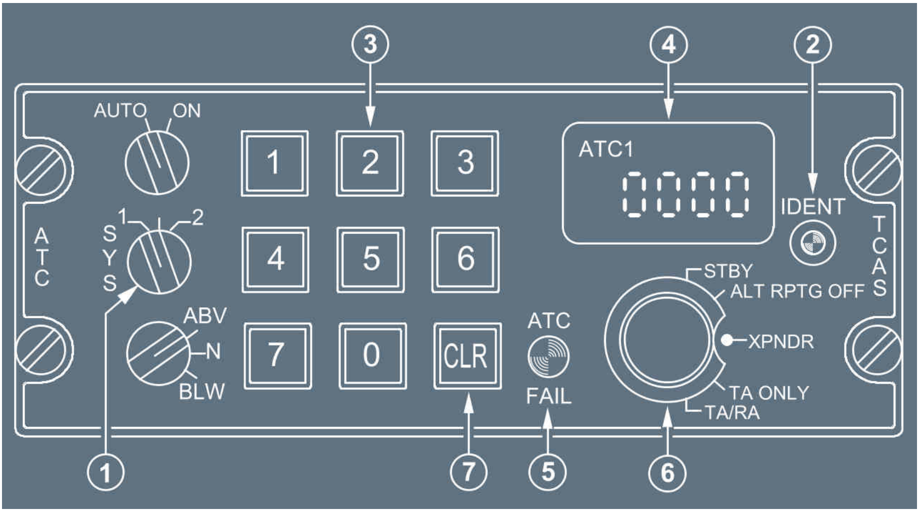
XPDR SELECTOR

The XPDR 1 is selected.

The XPDR 2 is selected.

CONTROL PANELS

Ident.: DSC-34-SURV-10-20-00020607.0012001 / 17 MAR 17
Applicable to: MSN 01459


3
4
2
AUTO
ON
1
2
3
ATC1
0000
IDENT
A T C
S Y S
1
2
4
5
6
T C A S
STBY
ALT RPTG OFF
ABV
N
BLW
7
0
CLR
ATC
FAIL
XPNDR
TA ONLY
TA/RA
1
7
5
6

(1) XPDR Selector
Selects XPDR 1 or 2.

(2) IDENT Switch
The flight crew presses this button to send the aircraft identification signal.

(3) Keypad
The flight crew uses these key to set the code assigned by ATC.

(4) Code Display
The window displays the selected code.

(5) ATC FAIL Light
This light comes on if the selected XPDR fails.

(6) Mode Selector

STBY	:	Both XPDR and TCAS are electrically-supplied, but are on standby.
ALT RPTG OFF	:	No altitude data is transmitted.

XPNDR	:	In flight : Selected XPDR operates in all modes. Baro altitude data is transmitted. ATC 1 uses ADR 1 or ADR 3. ATC 2 uses ADR 2 or ADR 3. The TCAS is on standby.
XPNDR	:	On ground : Selected XPDR only operates in mode S (Selective aircraft interrogation mode).
TA-RA/TA	:	*Refer to DSC-34-SURV-60-20 ATC/TCAS Panel*.

(7) CLR Key

The flight crew uses this key to clear the code display.

Note: *As long as the four figures of the new code are not entirely written, the previous code remains.*

Intentionally left blank

DESCRIPTION

Ident.: DSC-34-SURV-30-10-00014867.0001001 / 17 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563

The aircraft is fitted with one (or two ◁) weather radar system(s) with a Predictive WindShear (PWS ◁) function.
If two weather radar systems are installed, only one system is active at a time. The flight crew can display weather data on the CAPT and/or F/O NDs in either ARC or ROSE mode.
The flight crew can adjust the brightness of the weather image on the ND by rotating the outer knob of the ND Brightness Control knob (*Refer to DSC-31-50 Other EFIS Controls*).

Note: *A low brightness setting of the weather display may reduce the visibility of weather data, and therefore reduce crew awareness of the weather situation.*

The flight crew can adjust manually the antenna tilt settings, and can adjust gain either automatically or manually using knobs located on the radar control panel.

DESCRIPTION

Ident.: DSC-34-SURV-30-10-00014867.0002001 / 17 MAY 21
Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11597

The aircraft is fitted with one or two ◁ Multiscan weather radar systems with a Predictive WindShear (PWS ◁) function and a weather hazard prediction function ◁ .
The flight crew can display weather data on the CAPT and/or F/O NDs in either ARC or ROSE mode.
The flight crew can adjust the brightness of the weather image on the ND by rotating the outer knob of the ND Brightness Control knob (*Refer to DSC-31-50 Other EFIS Controls*).

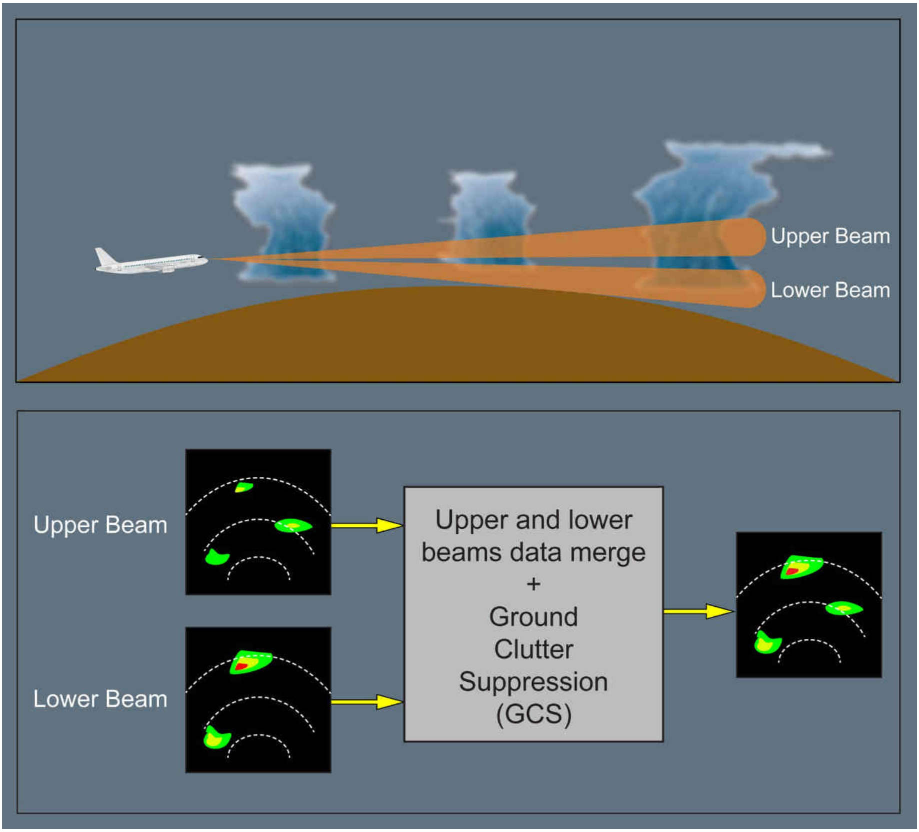
Note: *A low brightness setting of the weather display may reduce the visibility of weather data, and therefore reduce crew awareness of the weather situation.*

The flight crew can use the radar in the following modes:
- Multiscan Automatic mode: MULTISCAN sw set to AUTO (recommended), or
- Manual mode: MULTISCAN sw set to MAN.

When in Multiscan Automatic mode:
- The radar alternatively scans at two antenna tilt settings. The weather radar image that is displayed is the result of the stored and combined information from each beam.
- When the gain selector is set to the Calibrated position (CAL), the radar automatically adjusts the gain based on various parameters (aircraft altitude, geographical area, season, time of the day) to obtain the best weather display.

- To prevent unnecessary clutter display, the “Quiet and Dark cockpit” philosophy removes the weather that:
  - is not on the aircraft flight path
  - is not a threat to the aircraft (post convective cell).
- The Ground Clutter Suppression (GCS) function removes the ground returns from the ND.

Multiscan Principle


Upper Beam
Lower Beam
Upper Beam
Lower Beam
Upper and lower beams data merge
+
Ground Clutter Suppression (GCS)

When in Manual mode:

- The flight crew can adjust manually the antenna tilt settings, and can adjust gain either automatically or manually using knobs located on the radar control panel
- The GCS function is not available
- When the gain selector is set to CAL, there is no automatic gain adjustment based on altitude, geographical area, season and time of the day.

As a consequence, when the flight crew switches from the Multiscan Automatic mode with CAL gain to the Manual mode with CAL gain, the weather displayed on the ND may be significantly different.

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GENERAL

Ident.: DSC-34-SURV-30-20-00020942.0004001 / 17 MAR 17

1 **Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11597**

The weather radar has a Predictive WindShear system (PWS) that operates when the PWS switch is in the AUTO position , and the aircraft radio height is below 2 300 ft, and

- Weather radar is ON (Radar sw on position 1 or 2), or
- Weather radar is OFF, and
  - At least one engine is running, and
  - Aircraft ground speed is greater than 30 kt, or
  - Aircraft longitudinal acceleration is above a given threshold during at least 0.5 s.

Note: *If two weather radars are installed, when the selected weather radar fails, the flight crew can recover the PWS function by selecting the operative system on the Radar sw of the radar control panel.*

The system scans the airspace for windshear within a range of 5 NM ahead of the aircraft. When the system detects windshear, a windshear symbol appears on the ND (*Refer to DSC-34-SURV-30-30 PWS (if installed) indication on PFD and ND*).
Predictive windshear warnings and cautions are associated to an aural alert and to a red (warning) or amber (caution) "W/S AHEAD" message on the PFD, whereas windshear advisories are only displayed on the ND (*Refer to DSC-34-SURV-30-30 PWS (if installed) indication on PFD and ND*) without message on the PFD.

Alert Level	**Aural Warning**	**PFD**	**ND (*Refer to DSC-34-SURV-30-30 PWS (if installed) indication on PFD and ND*)**
Warning (Approach)	«GO AROUND WINDSHEAR AHEAD»	W/S AHEAD (red)	Windshear icon
Warning (Takeoff)	«WINDSHEAR AHEAD» (twice)	W/S AHEAD (red)	Windshear icon
Caution	«MONITOR RADAR DISPLAY»	W/S AHEAD (amber)	Windshear icon
Advisory	Nil	Nil	Windshear icon

GENERAL

Ident.: DSC-34-SURV-30-20-00020942.0001001 / 17 MAR 17

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563

The weather radars have a Predictive Windshear System (PWS) that operates when:

- The PWS switch is in the AUTO position (Even if the weather radar is OFF), and
- The aircraft is below 2 300 ft AGL, and

- The ATC is switched to the ON, or AUTO, or XPDR, or XPNDR, position (depending on the ATC panel), and
- Either engine is running.

Note: *When two weather radars are installed, if the selected weather radar fails, the PWS function is recovered by selecting the non-failed weather radar on the control panel.*

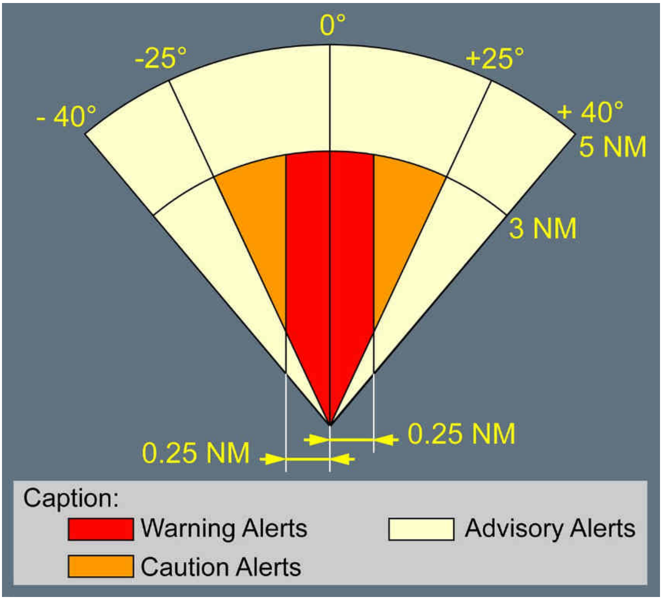
The system scans the airspace, within a range of 5 NM ahead of the aircraft, for windshears. When the system detects windshear, depending on the range selected on the ND, a warning, caution, or advisory message appears on the ND. Predictive windshear warnings and cautions are associated with an aural warning.
Predictive windshear warnings and cautions are associated to an aural alert and to a red (warning) or amber (caution) "W/S AHEAD" message on the PFD, whereas windshear advisories are only displayed on the ND (*Refer to DSC-34-SURV-30-30 PWS (if installed) indication on PFD and ND*) without message on the PFD.

Alert Level	**Aural Warning**	**PFD**	**ND (*Refer to DSC-34-SURV-30-30 PWS (if installed) indication on PFD and ND*)**
Warning (Approach)	«GO AROUND WINDSHEAR AHEAD»	W/S AHEAD (red)	Windshear icon
Warning (Takeoff)	«WINDSHEAR AHEAD» (twice)	W/S AHEAD (red)	Windshear icon
Caution	«MONITOR RADAR DISPLAY»	W/S AHEAD (amber)	Windshear icon
Advisory	Nil	Nil	Windshear icon

WINDSHEAR ALERTS DURING TAKEOFF ROLL, UP TO 100 KNOTS

Ident.: DSC-34-SURV-30-20-00020944.0003001 / 17 MAR 17
Applicable to: MSN 02014

WINDSHEAR ALERTS during takeoff roll, up to 100 knots


0°
-25°
+25°
- 40°
+ 40°
5 NM
3 NM
0.25 NM
0.25 NM
Caption:
Warning Alerts
Advisory Alerts
Caution Alerts

During the takeoff roll, up to 100 kt, both warnings and cautions are available within a range of 3 NM.

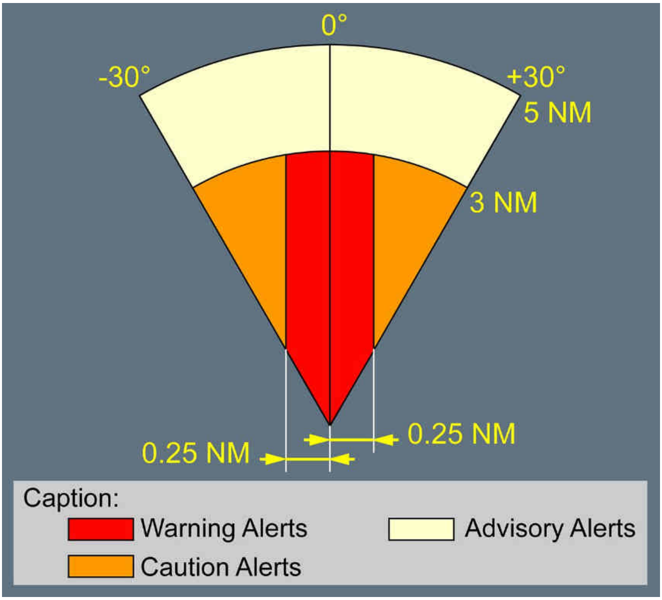
Note: *This is also applicable during taxi when CAPT or F/O display mode is different from OFF.*

WINDSHEAR ALERTS DURING TAKEOFF ROLL, UP TO 100 KNOTS

Ident.: DSC-34-SURV-30-20-00020944.0001001 / 17 MAR 17

2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Windshear Alerts During Takeoff Roll, Up to 100 knots


0°
-30°
+30°
5 NM
3 NM
0.25 NM
0.25 NM
Caption:
Warning Alerts
Advisory Alerts
Caution Alerts

During the takeoff roll, up to 100 kt, both warnings and cautions are available within a range of 3 NM.

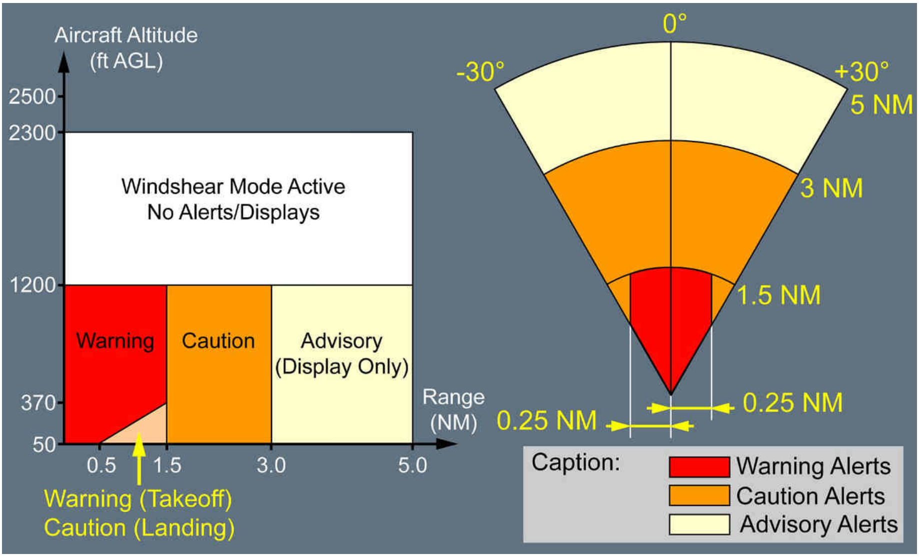
Note: *This is also applicable during taxi when weather radar is set to ON.*

WINDSHEAR ALERTS ABOVE 50 FEET

Ident.: DSC-34-SURV-30-20-00006422.0001001 / 28 MAY 20

3 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Windshear Alerts Above 50 feet

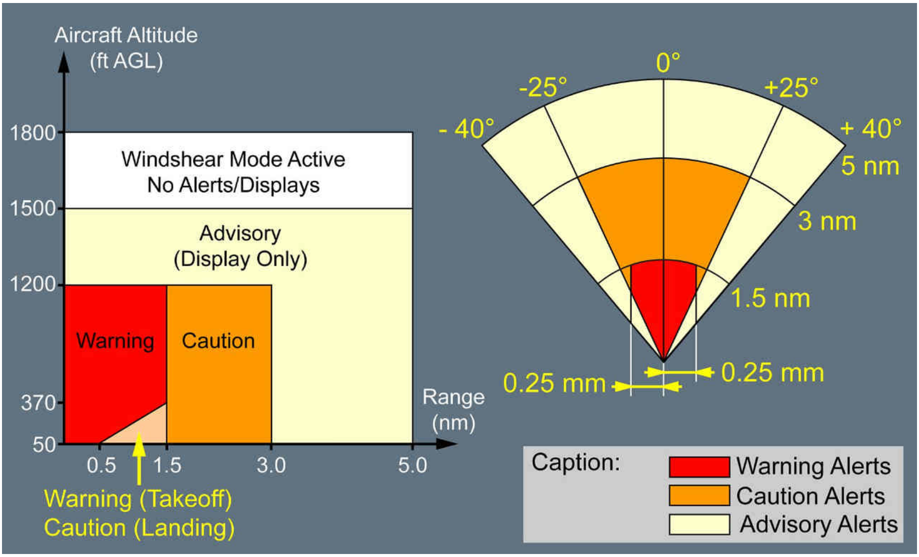

Aircraft Altitude
(ft AGL)
2500
2300
Windshear Mode Active
No Alerts/Displays
1200
Warning
Caution
Advisory
(Display Only)
370
50
Range
(NM)
0.5
1.5
3.0
5.0
Warning (Takeoff)
Caution (Landing)
0°
-30°
+30°
5 NM
3 NM
1.5 NM
0.25 NM
0.25 NM
Caption:
Warning Alerts
Caution Alerts
Advisory Alerts

During final approach, the visual and aural warning alerts are downgraded to caution alerts between 370 ft AGL and 50 ft AGL, and range between 1.5 NM and 0.5 NM.

WINDSHEAR ALERTS ABOVE 50 FEET

Ident.: DSC-34-SURV-30-20-00006422.0003001 / 28 MAY 20
Applicable to: MSN 02014

Windshear Alerts above 50 feet


Aircraft Altitude
(ft AGL)
1800
1500
1200
370
50
Windshear Mode Active
No Alerts/Displays
Advisory
(Display Only)
Warning
Caution
Range
(nm)
0.5
1.5
3.0
5.0
Warning (Takeoff)
Caution (Landing)
0°
-25°
+25°
- 40°
+ 40°
5 nm
3 nm
1.5 nm
0.25 mm
0.25 mm
Caption:
Warning Alerts
Caution Alerts
Advisory Alerts

During final approach, the visual and aural warning alerts are downgraded to caution alerts between 370 ft AGL and 50 ft AGL, and range between 1.5 NM and 0.5 NM.

WINDSHEAR ALERTS INHIBITION

Ident.: DSC-34-SURV-30-20-00006426.0002001 / 20 JUL 15
4 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

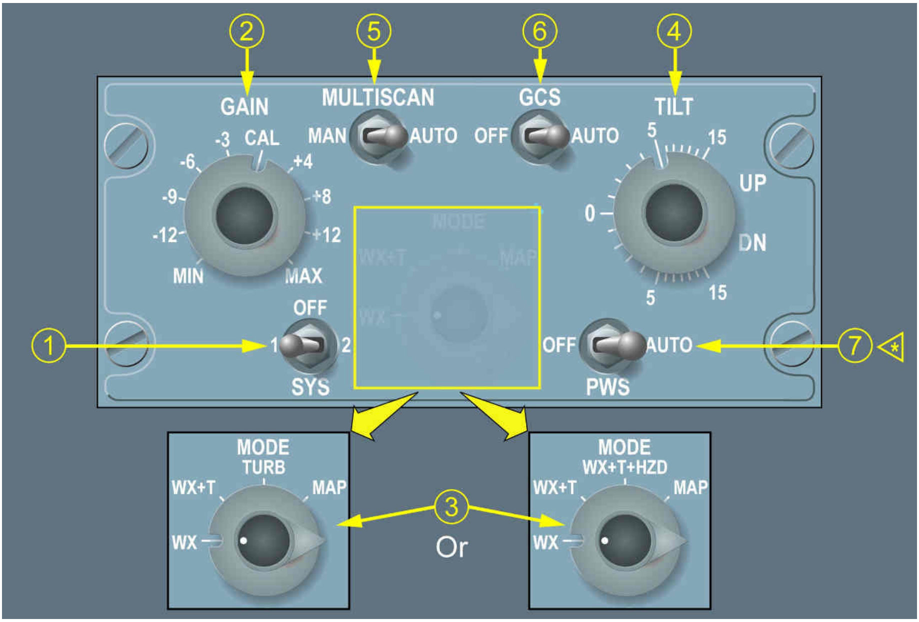
At takeoff, alerts are inhibited above 100 kt and up to 50 ft.
During landing, alerts are inhibited below 50 ft.

The aural alerts of the Predictive WindShear system (PWS):
- Have priority over TCAS, GPWS, and other FWC aural warnings
- Are inhibited by reactive windshear detection and aural messages of stall warnings.

CONTROL PANEL

Ident.: DSC-34-SURV-30-30-00014841.0012001 / 28 NOV 17

1 **Applicable to: MSN 05066-05987, 06097, 06121, 06139-09324, 10949-11597**


2
5
6
4
GAIN
MULTISCAN
GCS
TILT
-3
CAL
MAN
AUTO
OFF
AUTO
5
15
-6
+4
UP
-9
+8
0
-12
+12
DN
MIN
MAX
5
15
OFF
1
1
2
SYS
OFF
AUTO
PWS
7
*
MODE
TURB
WX+T
MAP
WX
3
Or
MODE
WX+T+HZD
WX+T
MAP
WX

(1) Radar sw
This switch sets one radar to ON or turns both radars to OFF.

Note: *If only one radar is installed on the aircraft, either:*
- *a "INOP" or "DEACT" sticker replaces the "2", or*
- *a "ON/OFF" Radar sw replaces the "1/OFF/2" Radar sw.*

Note: *If only one radar is installed on the aircraft, no weather image is displayed on the Navigation Display (ND) when the "1/OFF/2" SYS sw is set to "2".*

(2) GAIN knob
This knob adjusts the sensitivity of the radar.

CAL is the normal position of the knob :

- When in Multiscan Automatic mode and gain set to CAL, the radar automatically adjusts the gain according to various parameters (aircraft altitude, geographical area, season, time of the day) to obtain the best weather display
- When in Manual mode and gain set to CAL, the radar adjusts the gain to a calibrated setting.

(3) Display mode selector

WX : Weather mode :
Colors indicate the intensity of precipitation (black for the lowest intensity, green, amber and red indicate progressively higher intensity).

WX+T : Weather and Turbulence mode :
The ND indicates precipitation and turbulence areas. Turbulence areas are displayed in magenta (within 40 NM).

TURB ◁✳ : Turbulence mode :
The ND only displays turbulence areas in magenta (within 40 NM).

WX+T+HZD: ◁✳ Weather, Turbulence and Hazard mode (recommended position) :
The ND indicates precipitation, turbulence areas in magenta (within 40 NM) and hazard prediction risk areas.
Hazard prediction function is only available when the MULTISCAN sw is set to AUTO.

Note: *When MULTISCAN sw is set to MAN, WX+T+HZD mode is equivalent to WX+T mode.*

MAP : Map mode :
The radar operates in ground mapping mode: black indicates water, green indicates the ground, and amber indicates cities and mountains.

(4) TILT knob

This knob adjusts the antenna tilt when MULTISCAN sw is set to MAN.
Zero indicates the horizon reference provided by the IRS.

(5) MULTISCAN sw

AUTO : Activates Multiscan mode
Multiscan controls the tilt automatically and combines two scans done at different tilt angles to optimize weather detection and minimize ground clutter.

MAN : When set to MAN, the crew can manually adjust the tilt by using the TILT knob.

(6) GCS sw

The Ground Clutter Suppression (GCS) switch is spring-loaded to the AUTO position.

AUTO : - If MULTISCAN sw is set to AUTO, the radar is in normal use. Ground clutter is not displayed on the screen
- If MUTLISCAN sw is set to MAN, the GCS sw has no utility. Ground clutter is displayed on the screen.

OFF : Ground clutter is displayed on the screen.

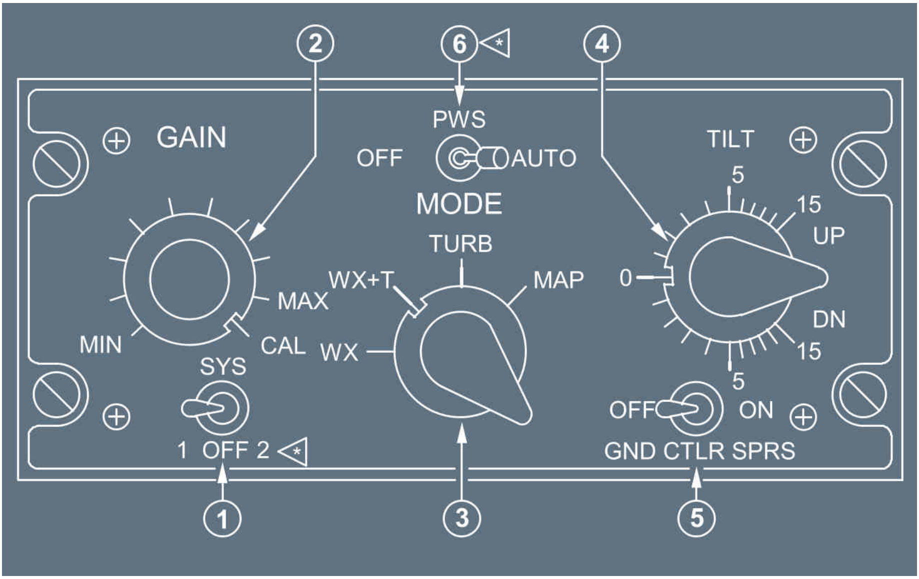
(7) PWS sw ◁*

AUTO : Activates the Predictive WindShear function in accordance with activation conditions (*Refer to DSC-34-SURV-30-20 Windshear Alerts Above 50 feet*).

OFF : The Predictive WindShear function is off.

CONTROL PANEL

Ident.: DSC-34-SURV-30-30-00001402.0010001 / 01 MAR 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02887, 04563



(1) Radar sw

Note: *If only one radar is installed on the aircraft, either:*
- *a "INOP" or "DEACT" sticker replaces the "2", or*
- *a "ON/OFF" Radar sw replaces the "1/OFF/2" Radar sw.*

This switch sets:
- the radar to ON or OFF (if only one radar is installed on the aircraft), or
- one radar to ON or turns off both radars (if two radars are installed on the aircraft).

Note: *If only one radar is installed on the aircraft, no weather image is displayed on the Navigation Dislplay (ND) when the "1/OFF/2" Radar sw is set to "2".*

(2) GAIN knob
This knob adjusts the sensitivity of the radar.
“CAL” is the normal position; it adjusts the gain to a calibrated setting.

(3) Display mode selector

WX : Weather mode :
Colors indicate the intensity of precipitation (black for the lowest intensity, green, amber and red indicate progressively higher intensity).

WX+T : Weather and Turbulence mode :
The ND indicates precipitation and turbulence areas. Turbulence areas are displayed in magenta (within 40 NM).

TURB ◁✳ : Turbulence mode :
The ND only displays turbulence areas in magenta (within 40 NM).

MAP : Map mode :
The radar operates in ground mapping mode: black indicates water, green indicates the ground, and amber indicates cities and mountains.

(4) TILT knob
This knob adjusts antenna tilt above and below the horizon.
Zero indicates the horizon reference, as provided by the ADIRS.

(5) GND CLTR SPRS sw

ON : Suppresses the ground echo on the screen.

OFF : Normal use of the radar.

(6) PWS sw ◁✳

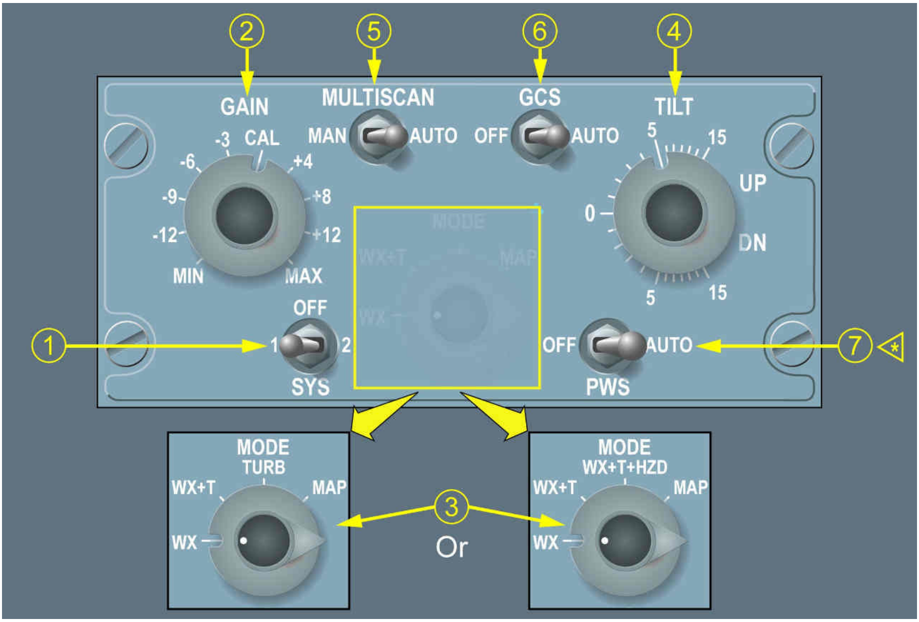
Note: *If the PWS function is not installed on the aircraft, a "INOP" sticker can replace the PWS sw.*

AUTO : Activates the Predictive WindShear function in accordance with activation conditions.

OFF : Turns off the predictive windshear function.

CONTROL PANEL

Ident.: DSC-34-SURV-30-30-00001402.0002001 / 28 NOV 17
Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05005


2
5
6
4
GAIN
MULTISCAN
GCS
TILT
MAN
AUTO
OFF
AUTO
-3
CAL
-6
+4
-9
+8
-12
+12
MIN
MAX
5
15
UP
0
DN
5
15
MODE
WX+T
MAP
WX
OFF
1
1
2
SYS
OFF
AUTO
PWS
7
MODE
TURB
WX+T
MAP
WX
3
Or
MODE
WX+T+HZD
WX+T
MAP
WX

(1) Radar sw
This switch sets one radar to ON or turns both radars to OFF.

Note: *If only one radar is installed on the aircraft, either:*
- *a "INOP" or "DEACT" sticker replaces the "2", or*
- *a "ON/OFF" Radar sw replaces the "1/OFF/2" Radar sw.*

Note: *If only one radar is installed on the aircraft, no weather image is displayed on the Navigation Display (ND) when the "1/OFF/2" SYS sw is set to "2".*

(2) GAIN knob
This knob adjusts the sensitivity of the radar.

CAL is the normal position of the knob :

- When in Multiscan Automatic mode and gain set to CAL, the radar automatically adjusts the gain according to various parameters (aircraft altitude, geographical area, season, time of the day) to obtain the best weather display
- When in Manual mode and gain set to CAL, the radar adjusts the gain to a calibrated setting.

(3) Display mode selector

WX : Weather mode :
Colors indicate the intensity of precipitation (black for the lowest intensity, green, amber and red indicate progressively higher intensity).

WX+T : Weather and Turbulence mode :
The ND indicates precipitation and turbulence areas. Turbulence areas are displayed in magenta (within 40 NM).

TURB ◁✳ : Turbulence mode :
The ND only displays turbulence areas in magenta (within 40 NM).

WX+T+HZD: ◁✳ Weather, Turbulence and Hazard mode (recommended position) :
The ND indicates precipitation, turbulence areas in magenta (within 40 NM) and hazard prediction risk areas.
Hazard prediction function is only available when the MULTISCAN sw is set to AUTO.

Note: When MULTISCAN sw is set to MAN, WX+T+HZD mode is equivalent to WX+T mode.

MAP : Map mode :
The radar operates in ground mapping mode: black indicates water, green indicates the ground, and amber indicates cities and mountains.

(4) TILT knob

This knob adjusts the antenna tilt when MULTISCAN sw is set to MAN.
Zero indicates the horizon reference provided by the IRS.

(5) MULTISCAN sw

AUTO : Activates Multiscan mode
Multiscan controls the tilt automatically and combines two scans done at different tilt angles to optimize weather detection and minimize ground clutter.

MAN : When set to MAN, the crew can manually adjust the tilt by using the TILT knob.

(6) GCS sw

The Ground Clutter Suppression (GCS) switch is spring-loaded to the AUTO position.

AUTO :
- If MULTISCAN sw is set to AUTO, the radar is in normal use. Ground clutter is not displayed on the screen
- If MUTLISCAN sw is set to MAN, the GCS sw has no utility. Ground clutter is displayed on the screen.

OFF : Ground clutter is displayed on the screen.

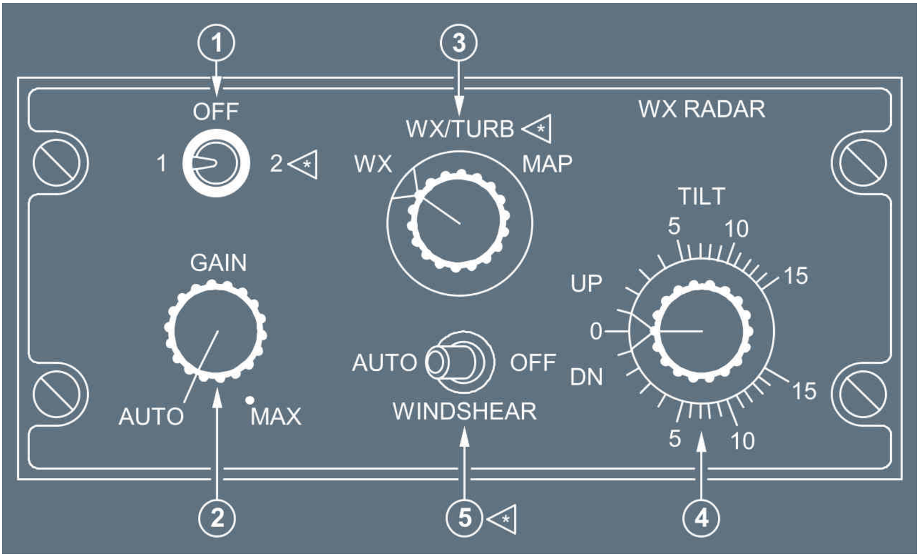
(7) PWS sw ◁

AUTO : Activates the Predictive WindShear function in accordance with activation conditions (*Refer to DSC-34-SURV-30-20 Windshear Alerts Above 50 feet*).

OFF : The Predictive WindShear function is off.

CONTROL PANEL

Ident.: DSC-34-SURV-30-30-00001402.0096001 / 01 MAR 18
Applicable to: MSN 02014



(1) Radar sw

Note: *If only one radar is installed on the aircraft, either:*
- *a "INOP" or "DEACT" sticker replaces the "2", or*
- *a "ON/OFF" Radar sw replaces the "1/OFF/2" Radar sw.*

This switch sets:

- the radar to ON or OFF (if only one radar is installed on the aircraft), or
- one radar to ON or turns off both radars (if two radars are installed on the aircraft).

Note: If only one radar is installed on the aircraft, no weather image is displayed on the Navigation Dislplay (ND) when the "1/OFF/2" Radar sw is set to "2".

(2) GAIN knob

This knob adjusts the sensitivity of the radar.

AUTO : The radar automatically adjusts the gain to the optimum setting.

(3) Display Mode selector

WX : Weather mode :
Colors indicate the intensity of precipitation (black for the lowest intensity, green, amber and red indicate progressively higher intensity).

WX/TURB ◁ : Weather and Turbulence mode :
The ND indicates precipitation and turbulence areas. Turbulence areas are displayed in magenta (within 40 NM).

MAP : Map mode :
The radar operates in ground mapping mode: black indicates water, green indicates the ground, and amber indicates cities and mountains.

(4) TILT knob

This knob adjusts antenna tilt above and below the horizon.
Zero indicates the horizon reference, as provided by the ADIRS.

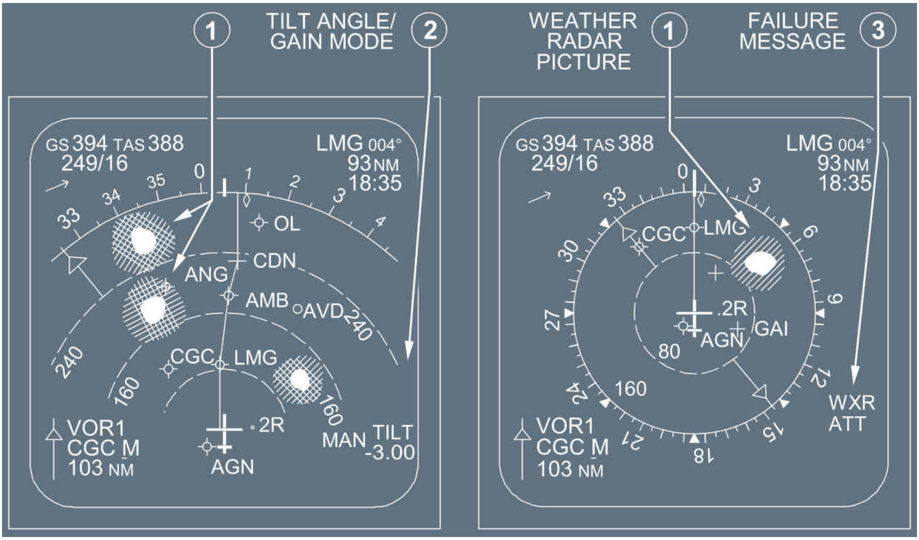
(5) WINDSHEAR sw ◁

AUTO : Activates the Predictive WindShear function in accordance with activation conditions.

OFF : Turns off the predictive windshear function.

WEATHER RADAR INDICATION ON ND

Ident.: DSC-34-SURV-30-30-00001255.0001001 / 28 FEB 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


①
TILT ANGLE/ GAIN MODE
②
WEATHER RADAR PICTURE
①
FAILURE MESSAGE
③
GS 394 TAS 388
249/16
LMG 004°
93 NM
18:35
OL
CDN
ANG
AMB
AVD
240
CGC
LMG
160
VOR1
CGC M
103 NM
.2R
AGN
MAN
TILT
-3.00
CGC
LMG
.2R
AGN
GAI
80
160
WXR
ATT

(1) Weather Radar Picture

- When the radar is operating, and when the ND is not in PLAN mode, the ND displays the weather radar picture.
- The echoes appear in different colors, depending on the precipitation rates (black, green, yellow, red or magenta).
- The selected ND range will determine how often the image is refreshed.

(2) Tilt Angle and Gain Mode

- The value of the tilt angle is in degrees, and quarters of a degree. It appears in blue in the lower right-hand corner of the screen. This angle is the angle between the horizon and the radar beam axis.
- "MAN" appears in white, when the manual gain mode is selected.

(3) Failure Messages

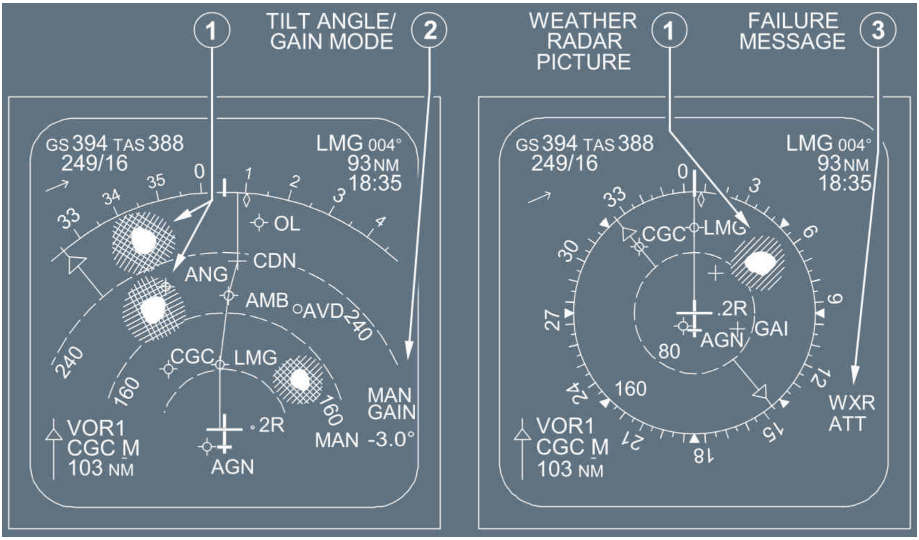
The ND lists the detected failures.
If the message is in "red", the ND does not display a radar image.
If the message is in "amber", the image is not affected.

WXR RT (red)	: Radar transceiver failure.

WXR ANT (red) : Radar antenna failure.
WXR CTL (red) : Radar control unit failure.
WXR RNG (red) : Range error.
WXR WEAK (amber) : Calibration failure.
WXR ATT (amber) : Attitude control failure.
WXR STAB (amber) : Antenna stabilization failure.

WEATHER RADAR INDICATION ON ND

Ident.: DSC-34-SURV-30-30-00001255.0002001 / 28 FEB 14
Applicable to: MSN 02887, 04563


1
TILT ANGLE/
GAIN MODE
2
WEATHER
RADAR
PICTURE
1
FAILURE
MESSAGE
3
GS 394 TAS 388
249/16
LMG 004°
93 NM
18:35
OL
CDN
ANG
AMB
AVD
240
CGC
LMG
160
2R
AGN
MAN
GAIN
MAN -3.0°
VOR1
CGC M
103 NM
80
GAI
WXR
ATT

(1) Weather Radar Picture

- When the radar is operating, and when the ND is not in PLAN mode, the ND displays the weather radar picture.
- The echoes appear in different colors, depending on the precipitation rates (black, green, yellow, red or magenta).
- The selected ND range will determine how often the image is refreshed.

(2) Tilt Angle and Gain Mode

- The value of the tilt angle is in degrees, and quarters of a degree. It appears in blue in the lower right-hand corner of the screen along with MAN indication. This angle is the angle between the horizon and the radar beam axis.
- ”MAN GAIN” appears in white, when the manual gain mode is selected.

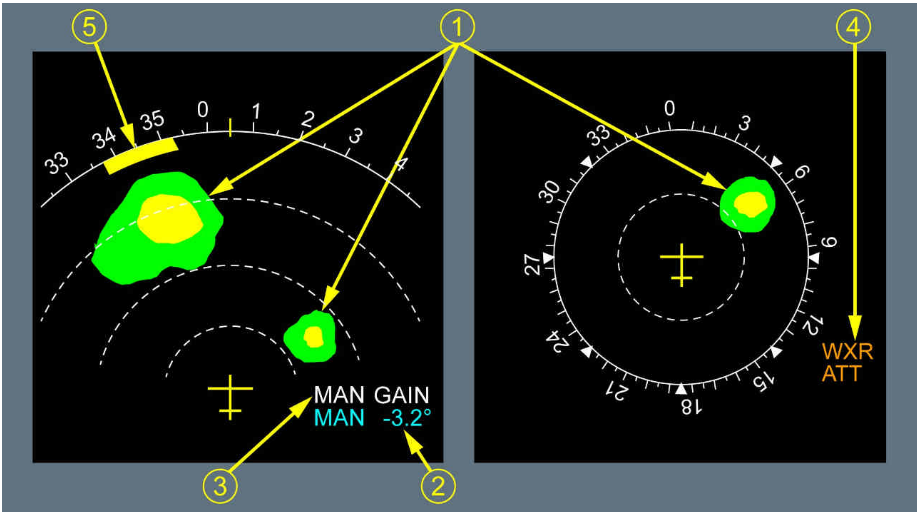
(3) Failure Messages

The ND lists the detected failures.
If the message is in “red”, the ND does not display a radar image.
If the message is in “amber”, the image is not affected.

WXR RT (red) : Radar transceiver failure.
WXR ANT (red) : Radar antenna failure.
WXR CTL (red) : Radar control unit failure.
WXR RNG (red) : Range error.
WXR WEAK (amber) : Calibration failure.
WXR ATT (amber) : Attitude control failure.
WXR STAB (amber) : Antenna stabilization failure.

WEATHER RADAR INDICATION ON ND

Ident.: DSC-34-SURV-30-30-00001255.0007001 / 21 MAR 16
Applicable to: MSN 03035-03047, 03111, 04953-04974



(1) Weather Radar Picture

- When the radar is operating, and when the ND is not in PLAN mode, the ND displays the weather radar picture.
- The weather echoes appear in different colors, depending on the precipitation rates (black, green, yellow, red or magenta for turbulence).
- The selected ND range will determine how often the image is refreshed.

(2) Tilt Angle

- The multiscan function of the weather radar alternatively scans at low and high beam, and automatically sets the tilt of these beams to optimize the weather radar detection. The displayed weather radar picture is the result of the storing and merging of the information from each beam.
- The tilt angle is the angle between the horizon and the radar beam axis. The value of the tilt angle is in degrees, and quarters of a degree. It appears in the lower right corner of the screen:
  - In green, when the MULTISCAN sw is set to AUTO. This value represents the average of the lower and the upper beam tilts.
  - In blue, next to the blue “MAN” indication, when the flight crew sets the MULTISCAN sw to MAN.
  - When the multiscan function is lost, the tilt value is dashed and the “NO AUTO TILT” message appears in amber on the ND, until the flight crew sets the MULTISCAN sw to MAN.

(3) Gain Mode

- ”MAN GAIN” appears in white, when the flight crew selects the manual gain mode.

(4) Failure Messages
The ND lists the detected failures.
If the message is in “red”, the ND does not display a radar image.
If the message is in “amber”, the image is not affected.

NO WXR (red)	:	Radar System failure.
WXR RT (red)	:	Radar transceiver failure.
WXR ANT (red)	:	Radar antenna failure.
WXR CTL (red)	:	Radar control unit failure.
WXR RNG (red)	:	Range error.
WXR WEAK (amber)	:	Calibration failure.
WXR ATT (amber)	:	Attitude control failure.

WXR STAB (amber) : Antenna stabilization failure.

PRED W/S (amber) : PWS ◁ function failure.

NO AUTO TILT (amber) : Automatic tilt adjustment failure.

WXR TEST (amber) : Radar System test.

(5) PAC alert

When the flight crew sets the display mode selector to WX or WX+T, or WX+T+HZD ◁ and sets the gain to CAL, and when the aircraft is within 80 NM of a storm cell, the Path Attenuation Compensation (PAC) alert is available.

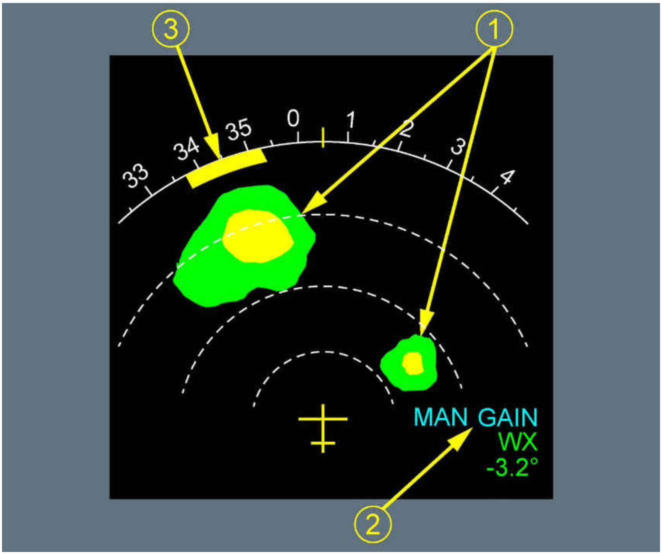
The PAC alert displays a yellow arc on the outermost scale of the ND, when an intervening rainfall creates an attenuated area behind a storm cell (also called a radar shadow or attenuation effect).

Note: *The PAC alert is only available when the MULTISCAN sw is in the AUTO position.*

WEATHER RADAR INDICATION ON ND

Ident.: DSC-34-SURV-30-30-00001255.0014001 / 21 MAR 17

2 **Applicable to: MSN 02734, 02896-03032, 03058, 03180-03710, 03733-04544, 04570-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**



(1) Weather Radar Picture

- When the radar is operating, and when the ND is not in PLAN mode, the ND displays the weather radar picture.
- The weather echoes appear in different colors, depending on the precipitation rates (black, green, yellow, red or magenta for turbulence).
- The selected ND range will determine how often the image is refreshed.

(2) Weather Radar Indication

- 1st row: Gain Mode
  MAN GAIN appears in cyan when the flight crew selects the manual gain mode.
- 2nd row: Active Detection Mode
  - WX
  - WX+T
  - TURB ◁
  - MAP
  - WX+T+H ◁
  - PWS SCAN ◁ (only in green when the PWS function is active)
  - WXR OFF (only in white)

Note: *Except for PWS SCAN and WXR OFF, the active detection modes are displayed:*

- *In cyan if the manual mode is selected*
- *In green if the automatic mode is selected*

- 3rd row: Tilt Angle
  The multiscan function of the weather radar alternatively scans at low and high beam, and automatically sets the tilt of these beams to optimize the weather radar detection. The displayed weather radar picture is the result of the storing and merging of the information from each beam.

  The tilt angle is the angle between the horizon and the radar beam axis. The value of the tilt angle is in degrees, and quarters of a degree. It is displayed:
  - In green, when the MULTISCAN sw is set to AUTO. This value represents the average of the lower and the upper beam tilts.
  - In cyan, next to the "MAN" indication, when the flight crew sets the MULTISCAN sw to MAN.

  When the multiscan function is lost, the tilt value is dashed and the “NO AUTO TILT” message appears in amber on the ND, until the flight crew sets the MULTISCAN sw to MAN.
- 4th row: Failure Messages
  The ND lists the detected failures.
  If the message is in "red", the ND does not display any radar image.
  If the message is in “amber”, the image is not affected.

NO WXR (red)	:	Radar display failure.
WXR RT (red)	:	Radar transceiver failure.
WXR ANT (red)	:	Radar antenna failure.
WXR CTL (red)	:	Radar control unit failure.
WXR RNG (red)	:	Range error.
WXR DU (red)	:	Overheating of the display unit
WXR WEAK (amber)	:	Calibration failure.
WXR ATT (amber)	:	Attitude control failure.
WXR STAB (amber)	:	Antenna stabilization failure.
PRED W/S (amber)	:	PWS ◁ function failure.
NO AUTO TILT (amber)	:	Automatic tilt adjustment failure.
WXR TEST (amber)	:	Radar system test.

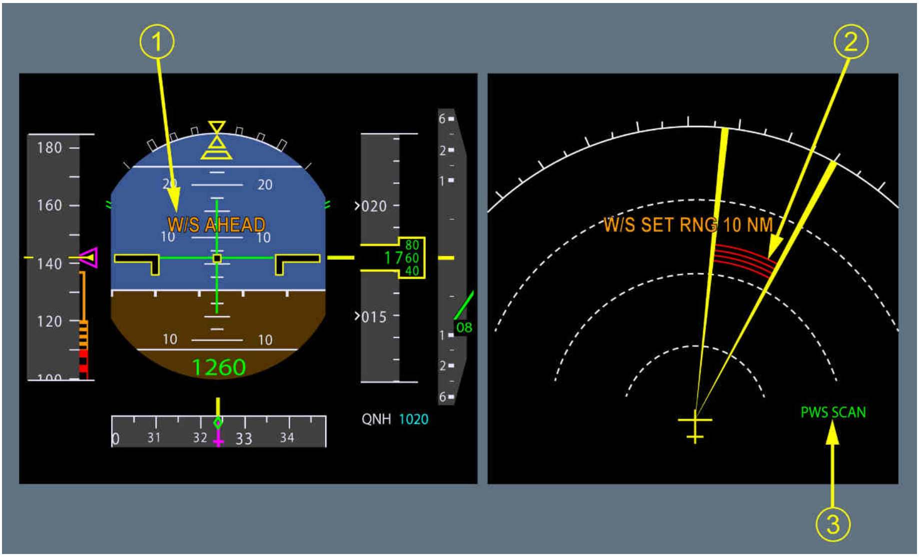
(3) Path Attenuation Compensation (PAC) Alert
When the flight crew sets the display mode selector to WX or WX+T, or WX+T+HZD ◁ and sets the gain to CAL, and when the aircraft is within 80 NM of a storm cell, the PAC alert is available.
The PAC alert displays a yellow arc on the outermost scale of the ND, when an intervening rainfall creates an attenuated area behind a storm cell (also called a radar shadow or attenuation effect).

Note: *The PAC alert is only available when the MULTISCAN sw is in the AUTO position.*

PWS ⊲ INDICATION ON PFD AND ND

Ident.: DSC-34-SURV-30-30-00020941.0002001 / 01 MAR 18

3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


①
②
③
180
160
140
120
100
20
20
10
10
W/S AHEAD
10
10
1260
>020
>015
80
1760
40
6
2
1
1
2
6
08
QNH 1020
31
32
33
34
W/S SET RNG 10 NM
PWS SCAN

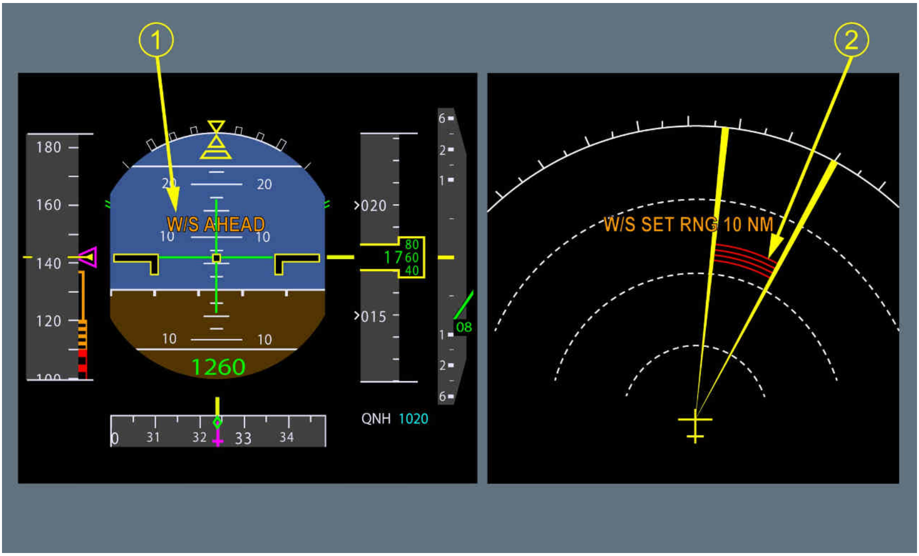
(1) W/S AHEAD message on the PFD
This message is displayed, when the Predictive WindShear system detects windshear ahead of the aircraft.
The message is in amber or red, depending on the level of the alert.

(2) Predictive WindShear area indication
A red and black symbol and two yellow radial lines indicate the predicted windshear area.
Windshear indication is available in ARC and ROSE ND modes.
When the radar detects a windshear event and the ND range is set above 10 NM, a W/S SET RNG 10 NM (Windshear, set range to 10 NM) message appears. This message requests the flight crew to adjust the range on the corresponding ND.
Depending on the windshear alert level, ND indication may be associated with an aural message and a PFD message.

(3) PWS SCAN message on the ND
If only the PWS detection is active, the ND displays a PWS SCAN message when the PWS is active. In this mode, when the radar detects a windshear event, a windshear symbol and the weather returns appear automatically on the ND.

PWS INDICATION ON PFD AND ND

Ident.: DSC-34-SURV-30-30-00020941.0001001 / 01 MAR 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321



(1) W/S AHEAD message on the PFD
This message is displayed, when the Predictive WindShear system detects windshear ahead of the aircraft.
The message is in amber or red, depending on the level of the alert.

(2) Predictive WindShear area indication
A red and black symbol and two yellow radial lines indicate the predicted windshear area.
Windshear indication is available in ARC and ROSE ND modes.
When the radar detects a windshear event and the ND range is set above 10 NM, a W/S SET RNG 10 NM (Windshear, set range to 10 NM) message appears. This message requests the flight crew to adjust the range on the corresponding ND.

Depending on the windshear alert level, ND indication may be associated with an aural message and a PFD message.

WEATHER HAZARD PREDICTION FUNCTION INDICATION ON ND

4 Ident.: DSC-34-SURV-30-30-00016149.0001001 / 17 MAY 21
Applicable to: MSN 11531

The Weather, Turbulence and Hazard mode (WX+T+HZD) enables the flight crew to have the following information displayed on the ND:

- The weather returns that appear in different colors, depending on the precipitation rates (black, green, yellow or red)
- The turbulence areas in magenta (within 40 NM)
- The weather hazard predictions computed by the weather radar.

For the weather hazard predictions:

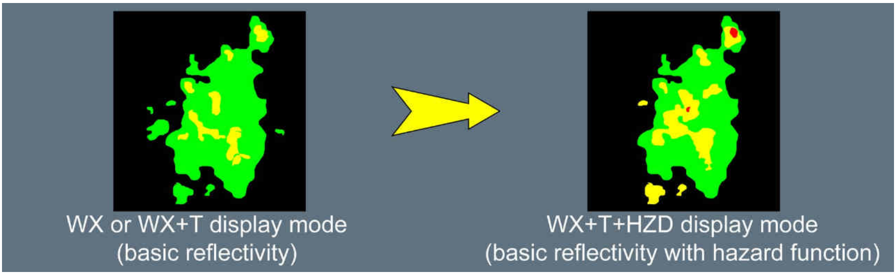
- The weather radar computes an automatic threat assessment of the lightning, hail and convective activity in a storm cell and in the area near the storm cell (Core Threat Assessment and Associated Threat Assessment)
- The weather radar is also able to alert the flight crew of storm cells that may rapidly build below the aircraft flight path (Predictive Overflight).

Note: *The hazard predictions are only available when the Multiscan mode is in AUTO.*

CORE THREAT ASSESSMENT

The Core Threat Assessment function operates until 320 NM. In case the weather radar determines that lightning, hail or turbulence may occur in a given cell, native reflectivity color of the weather is increased in order to better reflect the threat associated with a cell core.
The adjustment can go up to a color level (green cells may become yellow, yellow cells may become red).

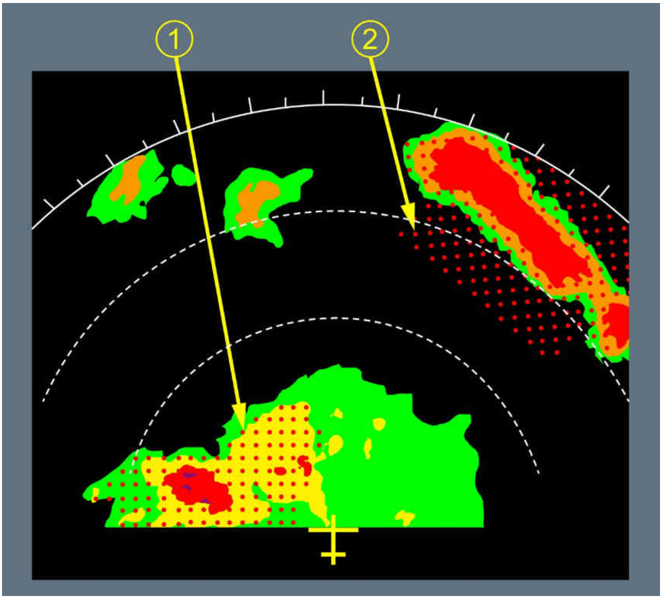
Core Threat Assessment



ASSOCIATED THREAT ASSESSMENT

Associated threat assessment enables to indicate an area of possible hail, lightning, and convection on the ND. This permits to identify potential threats even if there is no reflective activity in the area.

Associated Threat Assessment



Associated threats are represented by red dots on the ND and can be within the cell boundary or outside. Two types of indications can be displayed:

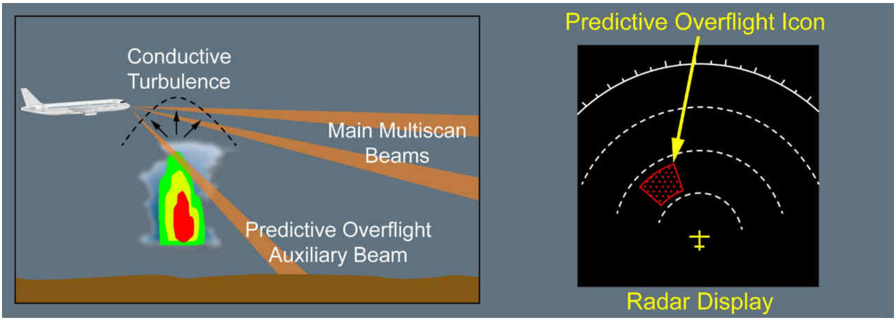
(1) The first type of indication is represented by red dots in the area of potential lightning and icing found in precipitation around the freezing level. This information is available only when the aircraft is below the freezing level or up to 6 000 ft above the freezing level.

(2) The second type of indication is represented by red dots in a rectangular shape on top of a storm cell displayed on the ND. The doted rectangle above a storm cell indicates a potential of icing, hail and/or lightning. This information is available at all altitudes. The rectangle may extend beyond the storm cell to indicate potential threats that can not be seen by the basic reflectivity function of the weather radar.

PREDICTIVE OVERFLIGHT FUNCTION

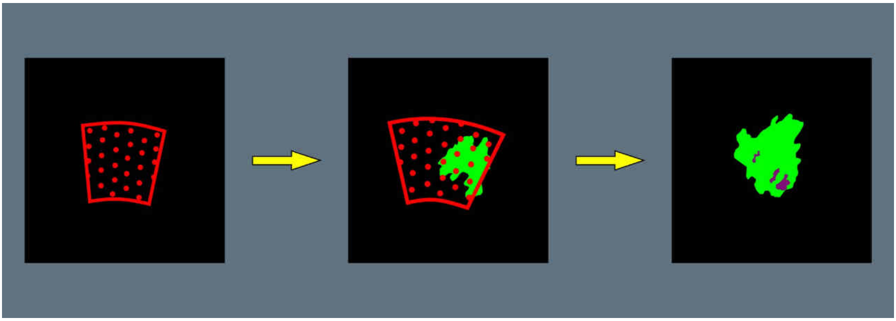
The predictive overflight function is active above 25 000 ft and operates up to 40 NM. Its aim is to indicate risk constituted by cells growing rapidly underneath main radar beams. For this purpose, an auxiliary beam with very low tilt searches for growing cells. When a conflict between a fast growing cell and the aircraft flight path is detected, a Predictive Overflight icon is displayed.
The Predictive Overflight icon is represented by an area of red dots with red boundaries.
As it is based on actual convection measurement, the flight crew should avoid predictive overflight areas.

Predictive Overflight Function


Conductive Turbulence
Main Multiscan Beams
Predictive Overflight Auxiliary Beam
Predictive Overflight Icon
Radar Display

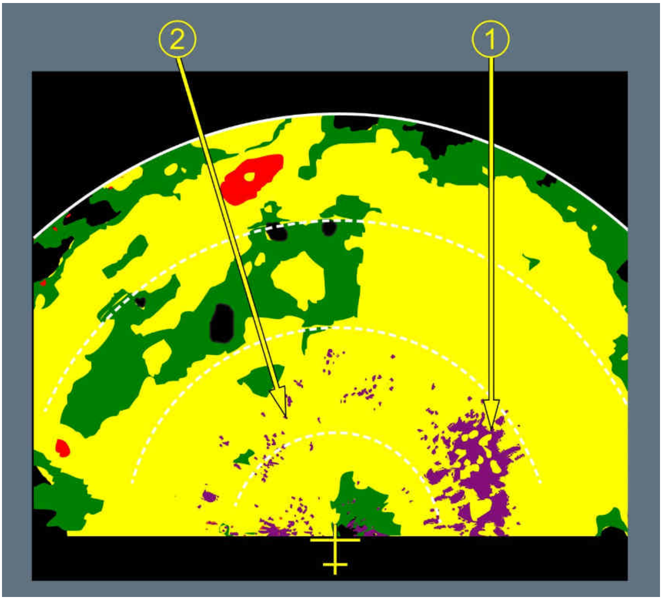
First, the icon is displayed “alone” over black when the concerned cell can not be displayed (the cell is much lower than aircraft flight level). Then, when cell reach aircraft flight level, the icon and the reflectivity are displayed together. Finally, the icon is removed 1 min after cell ceases to be considered as a threat by the weather radar or when the relevant depiction (i.e. at least red core) for the cell is displayed on ND.

Predictive Overflight Icon Evolution



SEVERE AND MODERATE TURBULENCE DISPLAY

Example of Severe and Moderate Turbulence Display



The weather hazard prediction function provides two levels of turbulence:

(1) Basic plain magenta:
It indicates potential severe turbulences (available in WX+T or WX+T+HZD display mode).

(2) Speckle magenta:
It indicates potential moderate turbulences that could decrease passenger comfort (available only in WX+T+HZD display mode).

MEMO DISPLAY

Ident.: DSC-34-SURV-30-30-00017051.0001001 / 21 MAR 16

5 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The "PRED W/S OFF" message appears when windshear is set to OFF on the weather radar panel.

PRED W/S OFF : This memo appears in green during flight phases 2 and 6.

PRED W/S OFF : This memo appears in amber when:

- The aircraft is in flight phases 3, 4, 5, 7, 8, and 9.
- The T.O. CONFIG pb is pressed during flight phase 2.

OVERVIEW

Ident.: DSC-34-SURV-40-10-00021292.0001001 / 17 MAR 17
Applicable to: ALL

The purpose of the Ground Proximity Warning System (GPWS) is to warn the flight crew of potentially hazardous situations, such as a collision with terrain. It detects terrain collision threats and triggers applicable aural and visual indications.

The GPWS includes:

- Five basic modes active up to radio height of 2 500 ft.
  - Excessive rate of descent (Mode 1)
  - Excessive terrain closure rate (Mode 2)
  - Altitude loss after takeoff or go-around (Mode 3)
  - Terrain clearance not sufficient, if not in landing configuration (Mode 4)
  - Excessive descent below the glide slope (Mode 5).
- A predictive GPWS ◁ function, based on a GPWS database, to display terrain information. It can be provided:
  - By Honeywell through Enhanced GPWS (EGPWS)
  - By ACSS as Ground Collision Avoidance System (GCAS), through T2CAS or T3CAS.

  The predictive GPWS is composed of:
  - Mandatory functions such as the Forward Looking Terrain Alerting function
  - Optional functions such as the obstacle database.

Note: *The terrain data are displayed on the ND and the brightness is controlled via the weather radar brightness control knob. If the weather radar brightness was set to low (due to bad weather) and a terrain alert occurs, then the brightness of the terrain display will also be low.*

PRINCIPLE

Ident.: DSC-34-SURV-40-10-00021293.0001001 / 17 MAR 17
Applicable to: ALL

The GPWS computes the geometric altitude of the aircraft by using:

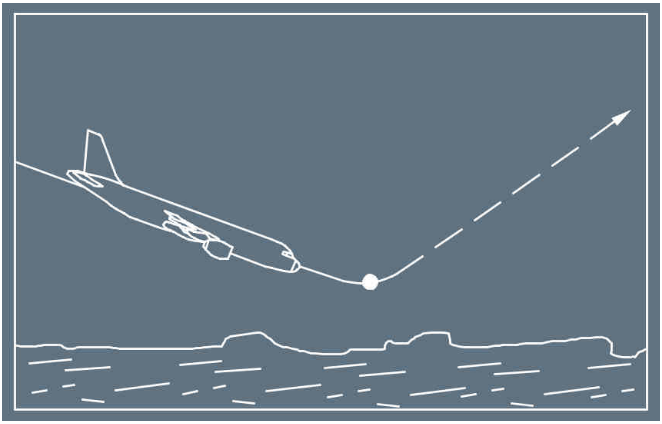
- Pressure altitude
- Radio altitude
- Temperature
- Barometric references

- GPS altitude for predictive GPWS ◁
- Data from the GPWS database for predictive GPWS ◁ .

MODE 1 : EXCESSIVE RATE OF DESCENT

Ident.: DSC-34-SURV-40-20-00015115.0001001 / 13 JAN 14

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321



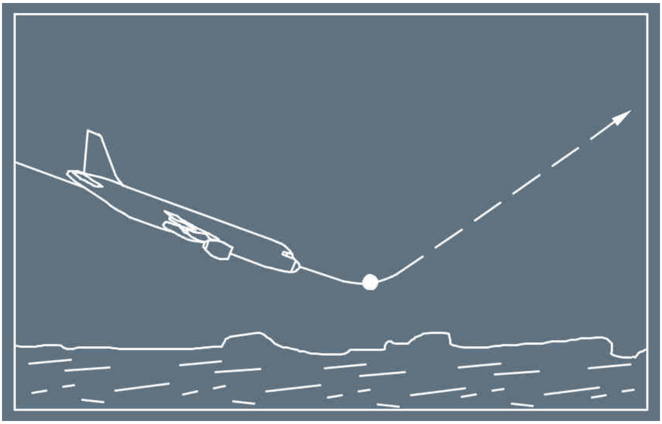
Mode 1 triggers aural and visual alerts about excessive rates of descent, based on the radio height, and the rate of descent of the aircraft.
Mode 1 is active for all phases of the flight.

	CAUTION		WARNING	
AURAL ALERT	"SINK RATE, SINK RATE"		"PULL UP" (repeated as long as MODE 1 is triggered)	
VISUAL ALERT	GPWS	The GPWS red lights come on	GPWS	The GPWS red lights come on

MODE 1 : EXCESSIVE RATE OF DESCENT

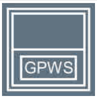
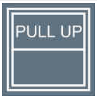
Ident.: DSC-34-SURV-40-20-00015115.0004001 / 13 JAN 14

Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597



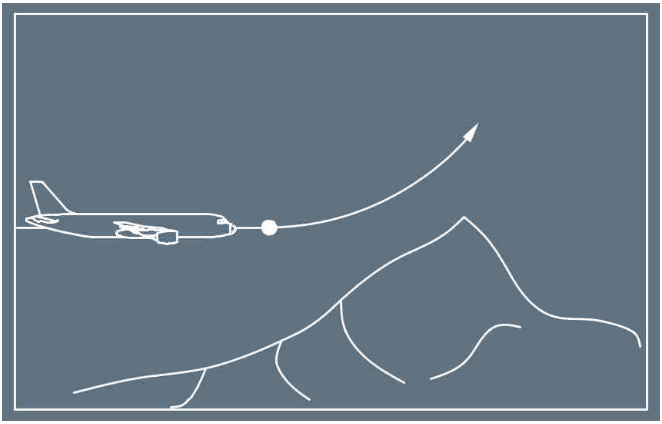
Mode 1 triggers aural and visual alerts about excessive rates of descent, based on the radio height, and the rate of descent of the aircraft.

Mode 1 is active for all phases of the flight.

	CAUTION		WARNING	
AURAL ALERT	"SINK RATE, SINK RATE"		"PULL UP" (repeated as long as MODE 1 is triggered)	
VISUAL ALERT		The GPWS amber lights come on		The PULL UP red lights come on

MODE 2 : EXCESSIVE TERRAIN CLOSURE RATE

Ident.: DSC-34-SURV-40-20-00015116.0001001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321



Mode 2 triggers two types of aural and visual alerts, based on the landing gear/flaps configuration of the aircraft, the radio height, and the RA rate of change.
There are two types of Mode 2 alerts, Mode 2A (active during climb, cruise, and initial approach), and Mode 2B (active during approach and 60 s after takeoff).

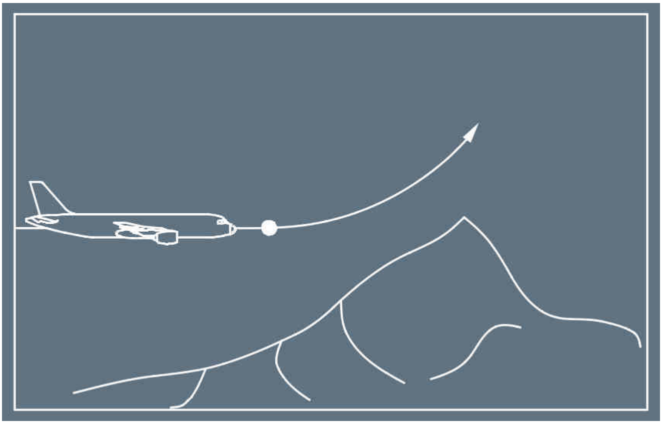
CONFIGURATION	Flaps not in Landing Position + Landing Gear Up (Mode 2A) Flaps Down + Landing Gear Up (Mode 2B)		
	CAUTION	WARNING	
AURAL ALERT	"TERRAIN, TERRAIN"	"PULL UP" (repeated as long as MODE 2 is triggered in the warning conditions)	"TERRAIN" (repeated as long as MODE 2 is triggered after leaving the warning conditions)
VISUAL ALERT	GPWS The GPWS red lights come on	GPWS The GPWS red lights come on	GPWS The GPWS red lights come on

CONFIGURATION	Flaps Down + Landing Gear Down (Mode 2B)
AURAL ALERT	**CAUTION** "TERRAIN" (repeated as long as MODE 2 is triggered)
VISUAL ALERT	GPWS The GPWS red lights come on

MODE 2 : EXCESSIVE TERRAIN CLOSURE RATE

Ident.: DSC-34-SURV-40-20-00015116.0004001 / 03 AUG 17

2 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**



Mode 2 triggers aural and visual alerts, based on the landing gear/flaps configuration of the aircraft, the radio height, and the RA rate of change.

There are two types of Mode 2 alerts, Mode 2A (active during climb, cruise, and initial approach), and Mode 2B (active during approach and 60 s after takeoff).

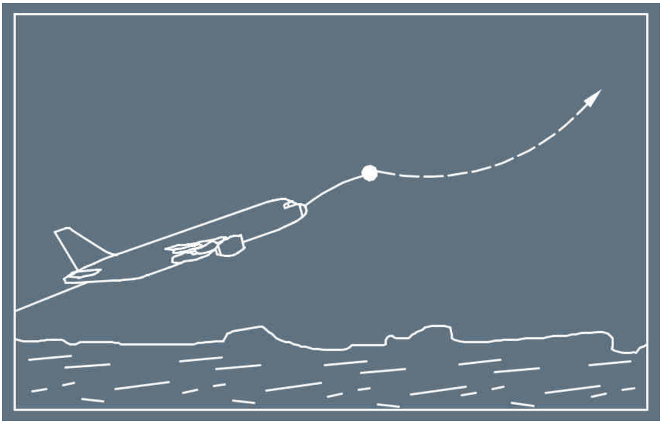
CONFIGURATION	Flaps not in Landing Position + Landing Gear Up (Mode 2A) Flaps in landing position + Landing Gear Up (Mode 2B)		
	CAUTION	WARNING	
AURAL ALERT	"TERRAIN, TERRAIN"	"PULL UP" (repeated as long as MODE 2 is triggered in the warning conditions)	"TERRAIN" (repeated as long as MODE 2 is triggered after leaving the warning conditions)
VISUAL ALERT	GPWS The GPWS amber lights come on	PULL UP The PULL UP red lights come on	PULL UP The PULL UP red lights stay on

CONFIGURATION	Flaps in landing position + Landing Gear Down (Mode 2B)
	CAUTION
AURAL ALERT	"TERRAIN" (repeated as long as MODE 2 is triggered)
VISUAL ALERT	GPWS The GPWS amber lights come on

MODE 3 : ALTITUDE LOSS AFTER TAKEOFF

Ident.: DSC-34-SURV-40-20-00015117.0004001 / 19 SEP 13

3 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

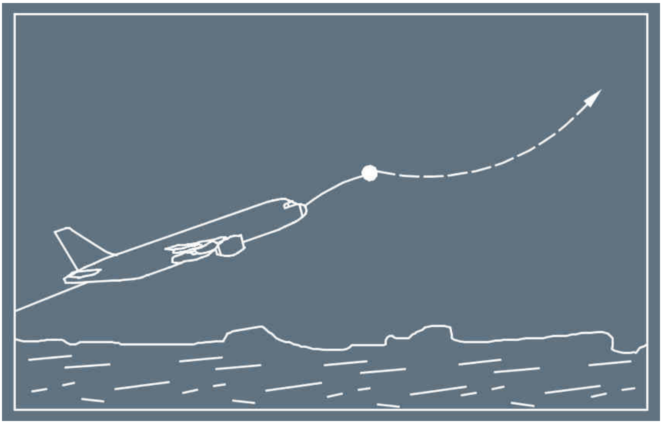


Mode 3 triggers aural and visual alerts when the altitude significantly decreases after takeoff, and go-arounds with landing gear or flaps not in landing configuration.

	CAUTION
AURAL ALERT	"DON'T SINK, DON'T SINK" (repeated as long as MODE 3 is triggered)
VISUAL ALERT	GPWS The GPWS amber lights come on

MODE 3 : ALTITUDE LOSS AFTER TAKEOFF

Ident.: DSC-34-SURV-40-20-00015117.0001001 / 19 SEP 13
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

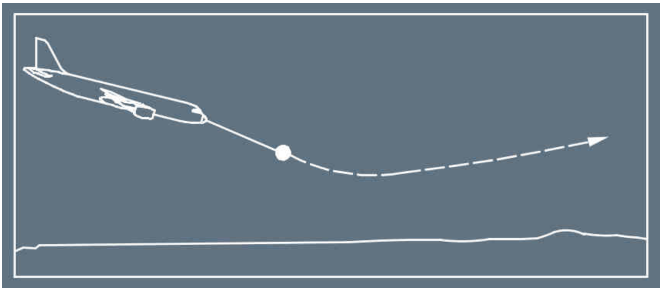


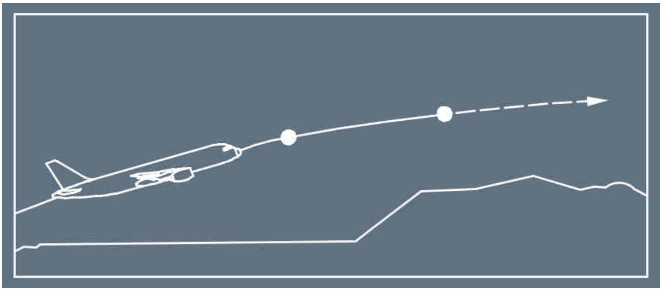
Mode 3 triggers aural and visual alerts when the altitude significantly decreases after takeoff, and go-arounds with landing gear or flaps not in landing configuration.

	CAUTION
AURAL ALERT	"DON'T SINK, DON'T SINK" (repeated as long as MODE 3 is triggered)
VISUAL ALERT	GPWS The GPWS red lights come on

MODE 4 : UNSAFE TERRAIN CLEARANCE WHEN NOT IN LANDING CONFIGURATION

Ident.: DSC-34-SURV-40-20-00015118.0003001 / 13 JAN 14
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321



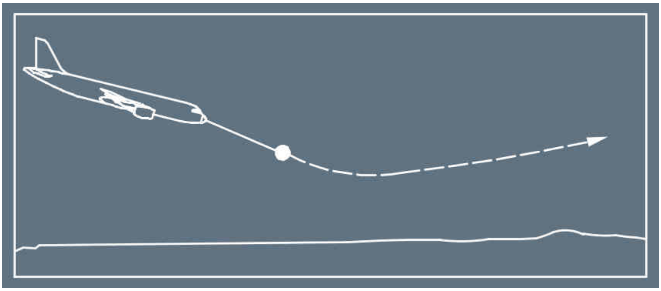


There are three types of Mode 4 alerts, Mode 4A and Mode 4B (both active during cruise and approach), and Mode 4C (active during takeoff).
Mode 4A and Mode 4B trigger aural and visual alerts when terrain clearance is not sufficient based on the phase of flight, the configuration of the landing gear and the flaps, and the speed. Mode 4C triggers aural and visual alerts based on the minimum terrain clearance and the radio height of the aircraft.

CONFIGURATION	Landing gear Up (Mode 4A)		Flaps not in landing position + Landing gear down (Mode 4B)		Flaps not in landing position OR Landing Gear Up (Mode 4C)
AURAL ALERT	CAUTION				
	"TOO LOW TERRAIN"	"TOO LOW GEAR"	"TOO LOW TERRAIN"	"TOO LOW FLAPS"	"TOO LOW TERRAIN"
VISUAL ALERT	GPWS The GPWS red lights come on				

MODE 4 : UNSAFE TERRAIN CLEARANCE WHEN NOT IN LANDING CONFIGURATION

Ident.: DSC-34-SURV-40-20-00015118.0004001 / 19 SEP 13
Applicable to: MSN 04827-04860



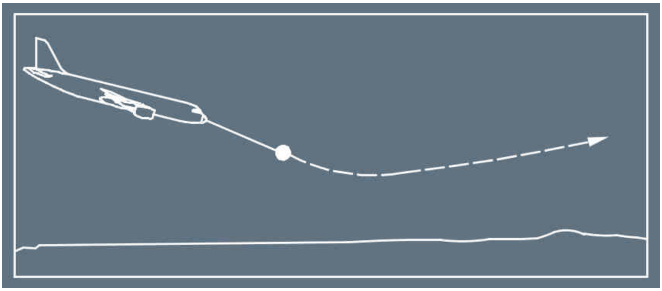
There are two types of Mode 4 alerts, Mode 4A and Mode 4B (both active during cruise and approach).
Mode 4A and Mode 4B trigger aural and visual alerts when terrain clearance is not sufficient based on the phase of flight, the configuration of the landing gear and the flaps, and the speed.

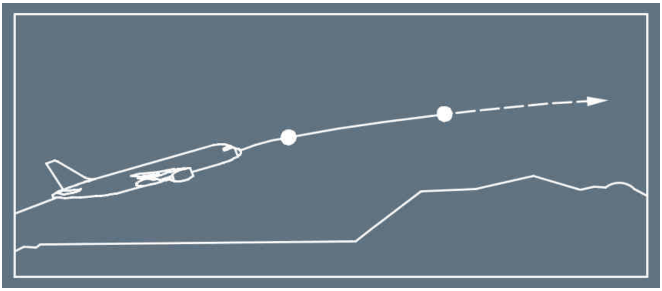
CONFIGURATION	Landing gear Up (Mode 4A)		Flaps not in landing position + Landing gear down (Mode 4B)	
AURAL ALERT	CAUTION			
	"TOO LOW TERRAIN"	"TOO LOW GEAR"	"TOO LOW TERRAIN"	"TOO LOW FLAPS"
VISUAL ALERT	GPWS The GPWS amber lights come on			

MODE 4 : UNSAFE TERRAIN CLEARANCE WHEN NOT IN LANDING CONFIGURATION

Ident.: DSC-34-SURV-40-20-00015118.0005001 / 13 JAN 14

4 **Applicable to: MSN 02014, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**





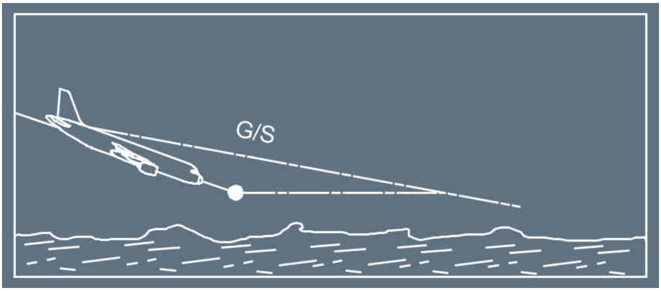
There are three types of Mode 4 alerts, Mode 4A and Mode 4B (both active during cruise and approach), and Mode 4C (active during takeoff*).
Mode 4A and Mode 4B trigger aural and visual alerts when terrain clearance is not sufficient based on the phase of flight, the configuration of the landing gear and the flaps, and the speed. Mode 4C triggers aural and visual alerts based on the minimum terrain clearance and the radio height of the aircraft. *(Only EGPWS not T2CAS)

<table>
<tr><th>CONFIGURATION</th><th colspan="2">Landing gear Up (Mode 4A)</th><th colspan="2">Flaps not in landing position + Landing gear down (Mode 4B)</th><th>Flaps not in landing position OR Landing Gear Up (Mode 4C)</th></tr>
<tr><td rowspan="2">AURAL ALERT</td><td colspan="5">CAUTION</td></tr>
<tr><td>"TOO LOW TERRAIN"</td><td>"TOO LOW GEAR"</td><td>"TOO LOW TERRAIN"</td><td>"TOO LOW FLAPS"</td><td>"TOO LOW TERRAIN"</td></tr>
<tr><td>VISUAL ALERT</td><td colspan="5">GPWS
The GPWS amber lights come on</td></tr>
</table>

MODE 5 : DESCENT BELOW GLIDESLOPE

Ident.: DSC-34-SURV-40-20-00015119.0004001 / 19 SEP 13

5 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

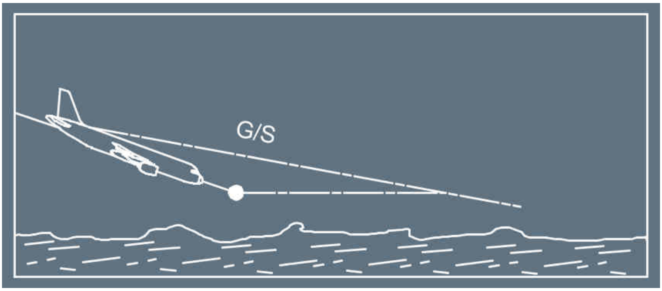


Mode 5 triggers aural and visual alerts, when the aircraft descends below the glide slope.

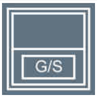
	CAUTION
AURAL ALERT	"GLIDESLOPE'" (repeated as long as MODE 5 is triggered)
VISUAL ALERT	GPWS The GPWS amber lights come on

MODE 5 : DESCENT BELOW GLIDESLOPE

Ident.: DSC-34-SURV-40-20-00015119.0001001 / 19 SEP 13
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321



Mode 5 triggers aural and visual alerts, when the aircraft descends below the glide slope.

	CAUTION
AURAL ALERT	"GLIDESLOPE"' (repeated as long as MODE 5 is triggered)
VISUAL ALERT	 The G/S amber lights come on

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TERRAIN AWARENESS AND DISPLAY

Ident.: DSC-34-SURV-40-35-00001417.0277001 / 16 NOV 20
Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876

The TAD function computes a caution and a warning envelope in front of the aircraft, depending on all of the following:

- The aircraft altitude
- The nearest runway altitude
- The distance to the nearest runway threshold
- The ground speed
- The turn rate.

When the boundary of these envelopes conflicts with the terrain, or with an obstacle memorized in the database, the system generates the related alert:

Alert Level	Aural Warning	ND (*Refer to DSC-31-45 Flags and Messages Displayed on ND*)	Local Warning
Warning	**TERRAIN TERRAIN PULL UP**	- Automatic terrain display(1) - Solid red areas - TERRAIN	On each pilot’s instrument panel, the pushbutton light comes on.
	OBSTACLE OBSTACLE, PULL UP	- Automatic terrain display(1) - Solid red areas - OBST	
Caution	**CAUTION TERRAIN**	- Automatic terrain display(1) - Solid yellow areas - TERRAIN	
	CAUTION OBSTACLE	- Automatic terrain display(1) - Solid yellow areas - OBST	

(1) *Depending on the aircraft position, when the TERR ON ND pb is set to ON, and the ARC or ROSE mode is selected, the ND displays both of the following:*
- *The terrain*
- *The obstacles memorized in the database.*

The terrain appears in various densities of green, yellow, red, or magenta, depending on the threat (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). If an alert is generated (caution or warning), and TERR ON ND pb is not selected by the flight crew, the terrain and the obstacles automatically appear, and the ON light of the TERR ON ND pb comes on.

Note: 1. *When TERR ON ND pb is selected by the flight crew, the weather radar image does not appear*
2. *The Geometric Altitude function can protect against some BARO setting errors, provided the components used to compute the Geometric Altitude are valid and sufficiently accurate*
3. *The TAD and TCF functions operate with the use of the pure lateral GPS position. The FMS1 position provides the backup.*

If the FMGC detects low-navigation accuracy, then the enhanced modes of the EGPWS are automatically deactivated. The 5 GPWS modes remain active.

TERRAIN AWARENESS AND DISPLAY

Ident.: DSC-34-SURV-40-35-00001417.0275001 / 16 NOV 20

1 **Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

The TAD function computes a caution and a warning envelope in front of the aircraft, depending on all of the following:
- The aircraft altitude
- The nearest runway altitude
- The distance to the nearest runway threshold
- The ground speed
- The turn rate.

When the boundary of these envelopes conflicts with the terrain, or with an obstacle memorized in the database, the system generates the related alert:

Alert Level	Aural Warning	ND (*Refer to DSC-31-45 Flags and Messages Displayed on ND*)	Local Warning
Warning	**TERRAIN AHEAD, PULL UP**	- Automatic terrain display(1) - Solid red areas - TERR AHEAD	On each pilot's instrument panel, the pushbutton light comes on.
	OBSTACLE AHEAD, PULL UP	- Automatic terrain display(1) - Solid red areas - OBST AHEAD	
Caution	**TERRAIN AHEAD**	- Automatic terrain display(1) - Solid yellow areas - TERR AHEAD	
	OBSTACLE AHEAD	- Automatic terrain display(1) - Solid yellow areas - OBST AHEAD	

(1) *Depending on the aircraft position, when the TERR ON ND pb is set to ON, and the ARC or ROSE mode is selected, the ND displays both of the following:*
- *The terrain*
- *The obstacles memorized in the database.*

The terrain appears in various densities of green, yellow, red, or magenta, depending on the threat (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). If an alert is generated (caution or warning), and TERR ON ND pb is not selected by the flight crew, the terrain and the obstacles automatically appear, and the ON light of the TERR ON ND pb comes on.

Note: 1. *When TERR ON ND pb is selected by the flight crew, the weather radar image does not appear*
2. *The Geometric Altitude function can protect against some BARO setting errors, provided the components used to compute the Geometric Altitude are valid and sufficiently accurate*
3. *The TAD and TCF functions operate with the use of the pure lateral GPS position. The FMS1 position provides the backup.*

If the FMGC detects low-navigation accuracy, then the enhanced modes of the EGPWS are automatically deactivated. The 5 GPWS modes remain active.

TERRAIN AWARENESS AND DISPLAY

Ident.: DSC-34-SURV-40-35-00001417.0002001 / 30 JUN 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855

The Terrain Awareness and Display (TAD) function computes a caution and a warning envelope in front of the aircraft, which varies according to aircraft altitude, nearest runway altitude, distance to the nearest runway threshold, ground speed, and turn rate. When the boundary of these envelopes conflicts with the terrain, memorized in the database, the system generates the relevant alert:

Alert Level	Aural Warning	ND (*Refer to DSC-31-45 Flags and Messages Displayed on ND*)	Local Warning
Warning	**TERRAIN AHEAD, PULL UP**	- Automatic terrain display See * - Solid red areas - TERR AHEAD (red)	The pb light comes on, on each pilot's instrument panel.
Caution	**TERRAIN AHEAD**	- Automatic terrain display pop up See * - Solid yellow areas - TERR AHEAD (amber)	

* When the TERR pb-sw ON, ND is selected ON, and ARC or ROSE mode is selected, the terrain is displayed on the ND. The terrain is displayed in various densities of green, yellow, red, or magenta, depending on the threat, (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). If an alert is generated (caution or warning) when TERR pb-sw ON ND is not selected, the terrain will be automatically displayed and the ON light of the TERR pb-sw ON ND will come on.

Note:
1. *When TERR pb-sw ON ND is selected, the weather radar image is not displayed*
2. *The relative height of the aircraft is computed using the Captain's BARO setting. Thus, the Terrain Awareness Display (TAD) does not protect against BARO setting errors.*
3. *The TAD and Terrain Clearance Floor (TCF) functions operate using the FMS 1 position. Thus, the system does not protect against FMS 1 position error.*

If the crew identifies that navigation accuracy is low, it must set the enhanced modes to off, via the TERR pb-sw. The 5 GPWS modes remain active.

TERRAIN AWARENESS AND DISPLAY

Ident.: DSC-34-SURV-40-35-00001417.0108001 / 30 JUN 20
Applicable to: MSN 02014

The Terrain Awareness and Display (TAD) function computes a caution and a warning envelope in front of the aircraft, which varies according to aircraft altitude, nearest runway altitude, distance to the nearest runway threshold, ground speed, and turn rate. When the boundary of these envelopes conflicts with the terrain, memorized in the database, the system generates the relevant alert:

Alert Level	Aural Warning	ND (*Refer to DSC-31-45 Flags and Messages Displayed on ND*)	Local Warning
Warning	**TERRAIN TERRAIN, PULL UP**	- Automatic terrain display See * - Solid red areas - TERRAIN (red)	The pb light comes on, on each pilot's instrument panel.
Caution	**CAUTION TERRAIN**	- Automatic terrain display *See - Solid yellow areas - TERRAIN (amber)	

* When the TERR pb-sw ON, ND is selected ON, and ARC or ROSE mode is selected, the terrain is displayed on the ND. The terrain is displayed in various densities of green, yellow, red, or magenta, depending on the threat, (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). If an alert is generated (caution or warning) when TERR pb-sw ON ND is not selected, the terrain will be automatically displayed and the ON light of the TERR pb-sw ON ND will come on.

Note:
1. *When TERR pb-sw ON ND is selected, the weather radar image is not displayed.*
2. *The Terrain Awareness Display (TAD) function computes the aircraft's relative altitude by using the Captain's BARO setting information. Therefore, if the BARO setting information is incorrect, the TAD function will also provide erroneous information and/or warnings*
3. *The TAD and Terrain Clearance Floor (TCF) functions use FMS 1 position information to perform their calculations. Therefore, in case of an FMS1 position error, the TAD and TCF will also provide erroneous information and/or warnings*

If the crew identifies that navigation accuracy is low, it must set the enhanced modes to off, via the TERR pb-sw. The 5 GPWS modes remain active.

TERRAIN AWARENESS AND DISPLAY

Ident.: DSC-34-SURV-40-35-00001417.0109001 / 30 JUN 20
Applicable to: MSN 02734

The Terrain Awareness and Display (TAD) function computes a caution and a warning envelope in front of the aircraft, which varies according to aircraft altitude, nearest runway altitude, distance to the nearest runway threshold, ground speed, and turn rate. When the boundary of these envelopes conflicts with the terrain, memorized in the database, the system generates the relevant alert:

Alert Level	Aural Warning	ND (*Refer to DSC-31-45 Flags and Messages Displayed on ND*)	Local Warning
Warning	**TERRAIN AHEAD, PULL UP**	- Automatic terrain display See * - Solid red areas - TERR AHEAD (red)	The pb light comes on, on each pilot's instrument panel.
Caution	**TERRAIN AHEAD**	- Automatic terrain display pop up See * - Solid yellow areas - TERR AHEAD (amber)	

* When the TERR pb-sw ON, ND is selected ON, and ARC or ROSE mode is selected, the terrain is displayed on the ND. The terrain is displayed in various densities of green, yellow, red, or magenta, depending on the threat, (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). If an alert is generated (caution or warning) when TERR pb-sw ON ND is not selected, the terrain will be automatically displayed and the ON light of the TERR pb-sw ON ND will come on.

Note: 1. *When TERR pb-sw ON ND is selected, the weather radar image is not displayed.*
2. *The Geometric Altitude function can protect against certain BARO setting errors, provided the components used to compute the Geometric Altitude are sufficiently valid and accurate.*
3. *The TAD and Terrain Clearance Floor (TCF) functions use FMS 1 position information to perform their calculations. Therefore, in case of an FMS 1 position error, the TAD and TCF will also provide erroneous information and/or warnings.*

If the crew identifies that navigation accuracy is low, it must set the enhanced modes to off, via the TERR pb-sw. The 5 GPWS modes remain active.

TERRAIN AWARENESS AND DISPLAY

Ident.: DSC-34-SURV-40-35-00001417.0114001 / 30 JUN 20
Applicable to: MSN 06139, 06173

The Terrain Awareness and Display (TAD) function computes a caution and a warning envelope in front of the aircraft, depending on the aircraft altitude, the nearest runway altitude, the distance to the nearest runway threshold, the ground speed, and the turn rate. When the boundary of these envelopes conflicts with the terrain, or with an obstacle memorized in the database, the system generates the relevant alert:

Alert Level	Aural Warning	ND (*Refer to DSC-31-45 Flags and Messages Displayed on ND*)	Local Warning
Warning	**TERRAIN TERRAIN PULL UP**	- Automatic terrain display See * - Solid red areas - TERRAIN (red)	On each pilot's instrument panel, The pushbutton light comes on.
	OBSTACLE OBSTACLE, PULL UP	- Automatic terrain display See * - Solid red areas - OBST (red)	
Caution	**CAUTION TERRAIN**	- Automatic terrain displaySee * - Solid yellow areas - TERRAIN (amber)	
	CAUTION OBSTACLE	- Automatic terrain display See * - Solid yellow areas - OBST (amber)	

* When the TERR pb-sw ON ND is set to ON, and ARC or ROSE mode is selected, the ND displays the terrain and the obstacles memorized in the database, depending on the aircraft's position. The terrain is displayed in various densities of green, yellow, red, or magenta, depending on the threat, (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). If an alert is generated (caution or warning), and TERR pb-sw ON ND is not selected, the terrain and the obstacles are automatically displayed, and the ON light of the TERR pb-sw ON ND comes on.

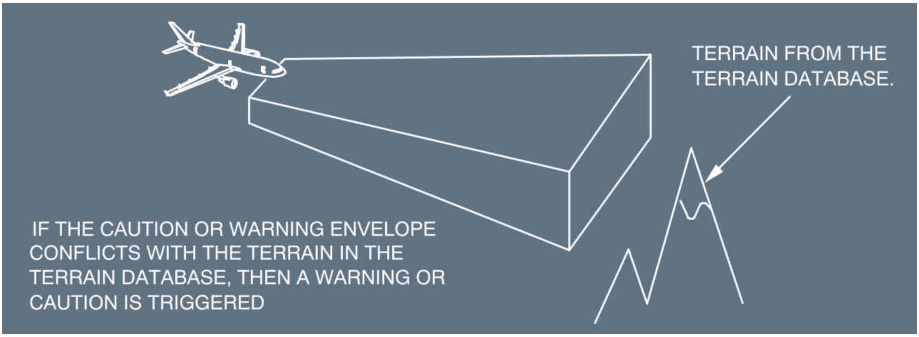
Note:
1. *When TERR pb-sw ON ND is selected, the weather radar image is not displayed.*
2. *The Geometric Altitude function can protect against certain BARO setting errors, provided the components used to compute the Geometric Altitude are valid and accurate enough.*
3. *The TAD and Terrain Clearance Floor (TCF) functions operate using the pure lateral GPS position and, the FMS1 position as backup.*

If the crew identifies that navigation accuracy is low, it must set the enhanced modes to off, via the TERR pb-sw. The 5 GPWS modes remain active.

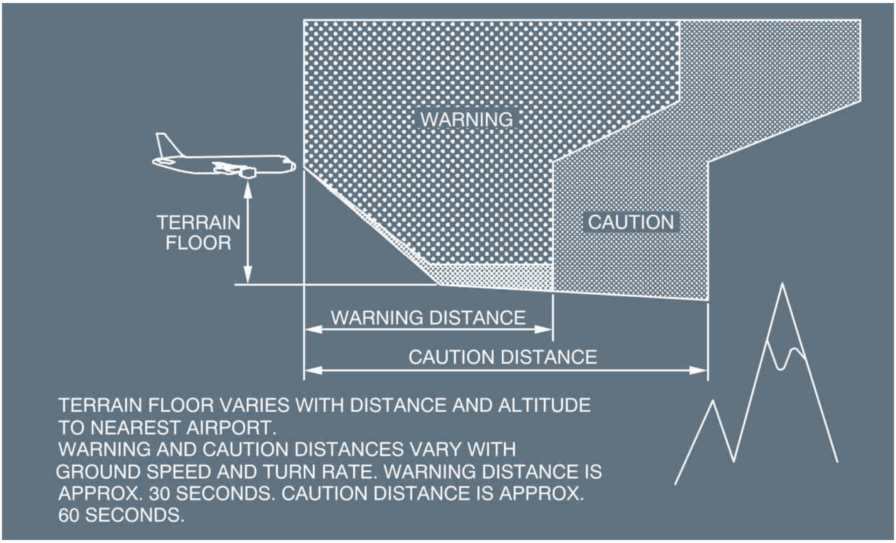
TERRAIN CAUTION AND WARNING ENVELOPE

Ident.: DSC-34-SURV-40-35-00006161.0002001 / 19 DEC 12

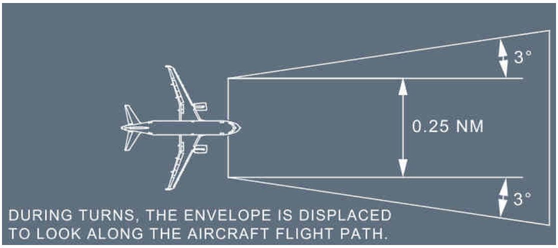
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**


TERRAIN FROM THE TERRAIN DATABASE.
IF THE CAUTION OR WARNING ENVELOPE CONFLICTS WITH THE TERRAIN IN THE TERRAIN DATABASE, THEN A WARNING OR CAUTION IS TRIGGERED

VERTICAL ENVELOPE


WARNING
CAUTION
TERRAIN FLOOR
WARNING DISTANCE
CAUTION DISTANCE
TERRAIN FLOOR VARIES WITH DISTANCE AND ALTITUDE TO NEAREST AIRPORT.
WARNING AND CAUTION DISTANCES VARY WITH GROUND SPEED AND TURN RATE. WARNING DISTANCE IS APPROX. 30 SECONDS. CAUTION DISTANCE IS APPROX. 60 SECONDS.

HORIZONTAL ENVELOPE


3°
0.25 NM
3°
DURING TURNS, THE ENVELOPE IS DISPLACED
TO LOOK ALONG THE AIRCRAFT FLIGHT PATH.

TERRAIN CLEARANCE FLOOR

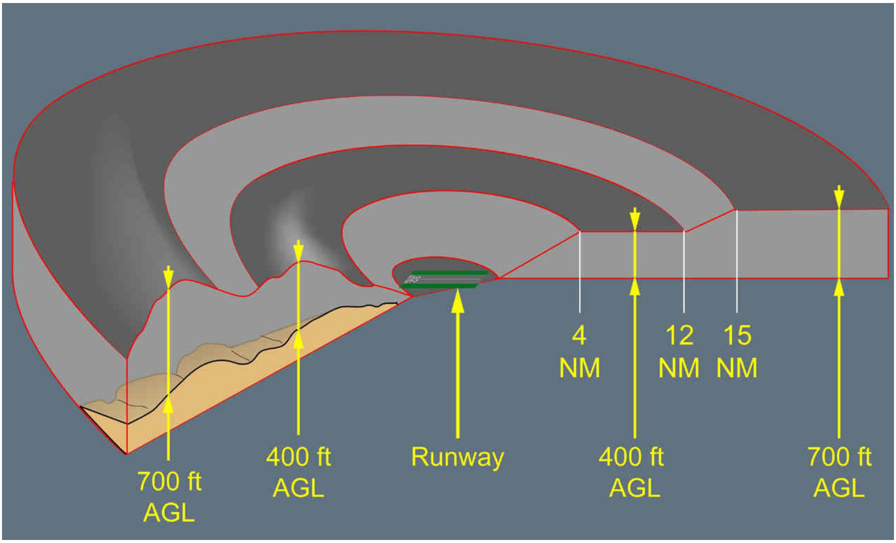
Ident.: DSC-34-SURV-40-35-00006162.0002001 / 28 MAY 20

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

TERRAIN CLEARANCE FLOOR (TCF)

The TCF function computes a terrain clearance envelope around the airport runway. This function triggers an alert if the terrain clearance is not sufficient (even when the aircraft is in landing configuration). This function provides an enhanced GPWS mode 4.
The TCF function also protects against an attempt to land where there is no airfield.
The TAWS database includes the applicable TCF envelope for each airport runway that has terrain data, and that is longer than 3 500 ft.
The TCF function is active during all the following flight phases: Takeoff, cruise and approach.

TCF Envelope



If the aircraft descends below the protection envelope, both of the following alerts are triggered:

- The “TOO LOW TERRAIN” aural alert, if the aircraft enters the envelope
  L2 If the aircraft continues to descend below the envelope, the alert is triggered one time for every 20 % degradation in radio altitude
- L1 The TOO LOW TERRAIN visual alert on the PFD.

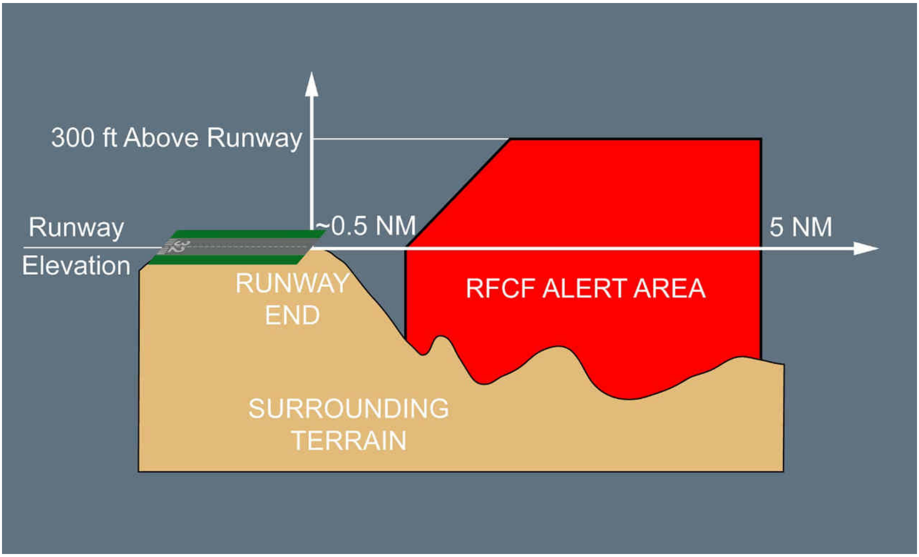
RUNWAY FIELD CLEARANCE FLOOR

Ident.: DSC-34-SURV-40-35-00006163.0002001 / 28 MAY 20

4 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The Runway Field Clearance Floor (RFCF) provides an additional protection envelope for runways that are at an elevation that is significantly more than the surrounding terrain.
The envelope is a circular band that starts within a specific distance of the runway. The width of this circular band depends on the runway. The envelope is based on both the geometric altitude and the runway elevation.
If the aircraft descends below this protection envelope, the "TOO LOW TERRAIN" aural and visual alerts are triggered.

RFCF



RUNWAY AWARENESS AND ADVISORY SYSTEM

Ident.: DSC-34-SURV-40-35-00013214.0001001 / 17 MAR 11

5 **Applicable to: MSN 08495-09324, 10949-11597**

The Runway Awareness and Advisory System (RAAS) enhances the flight crew’s awareness of the aircraft position on ground. The RAAS uses the EGPWS to trigger aural alerts in the three following cases:

- Approaching the runway: When the aircraft is within a specific distance from the runway, e.g. “Approaching three four left”.
  If the aircraft is within a specific distance from more than one runway, the “Approaching runways” aural alert is triggered
- On the runway: When the aircraft enters a runway and the aircraft heading aligns with the runway direction, e.g. “On runway three four left”
- Takeoff from the taxiway: When the aircraft speed exceeds 40 kt, while the aircraft is not on a runway, the “On taxiway! On taxiway!” aural alert is triggered.

GENERAL

Ident.: DSC-34-SURV-40-35-00006159.0003001 / 13 JAN 14
Applicable to: MSN 04827-04860

The GPWS system :
- Correlates the current aircraft position to terrain (and obstacle ◁) and airport database.
- Computes a caution and a warning envelope ahead of the aircraft. This includes the determination of the climb prediction envelope for terrain (and obstacle ◁) avoidance, using the modelized climb capability of the aircraft.
- Displays the terrain (and obstacle ◁) hazards along the projected flight path ahead of the aircraft.
- Generates alerts described below.

While the predictive GPWS functions are operative, the basic GPWS Mode 2 is inhibited.
If the predictive GPWS functions fail or if there is significant difference between the radio height and the altitude computed by the T3CAS, the basic GPWS Mode 2 is reactivated.

ALERTS

Ident.: DSC-34-SURV-40-35-00006160.0014001 / 30 JUN 20
Applicable to: MSN 04827-04860

THE FOLLOWING TABLE PROVIDES THE RELEVANT WARNING AND CAUTION ALERTS

Alert Level	Aural alert	ND (*Refer to DSC-31-45 GPWS (EGPWS)*)	Local alert
Warning	**TERRAIN AHEAD, PULL UP**	- Automatic terrain display ⁽¹⁾ - Solid red areas - TERR AHEAD (red)	The GPWS/PULL UP pb light comes on, on each pilot's instrument panel.
	OBSTACLE AHEAD, PULL UP	- Automatic obstacle display ⁽¹⁾ - Solid red areas - OBST AHEAD (red)	
	AVOID TERRAIN	- Automatic terrain display ⁽¹⁾ - Red/black crosshatched areas - TERR AHEAD (red)	
	AVOID OBSTACLE	- Automatic obstacle display ⁽¹⁾ - Red/black crosshatched areas - OBST AHEAD (red)	

Continued on the following page

Continued from the previous page

Alert Level	Aural alert	ND (*Refer to DSC-31-45 GPWS (EGPWS)*)	Local alert
Caution	**TERRAIN AHEAD**	- Automatic terrain display *(1)* - Solid yellow areas - TERR AHEAD (Amber)	The GPWS light of the GPWS/PULL UP pb comes on, on each pilot's instrument panel.
	OBSTACLE AHEAD ◁	- Automatic obstacle display *(1)* - Solid yellow areas - OBST AHEAD (Amber) ◁	
	TOO LOW TERRAIN	NIL	

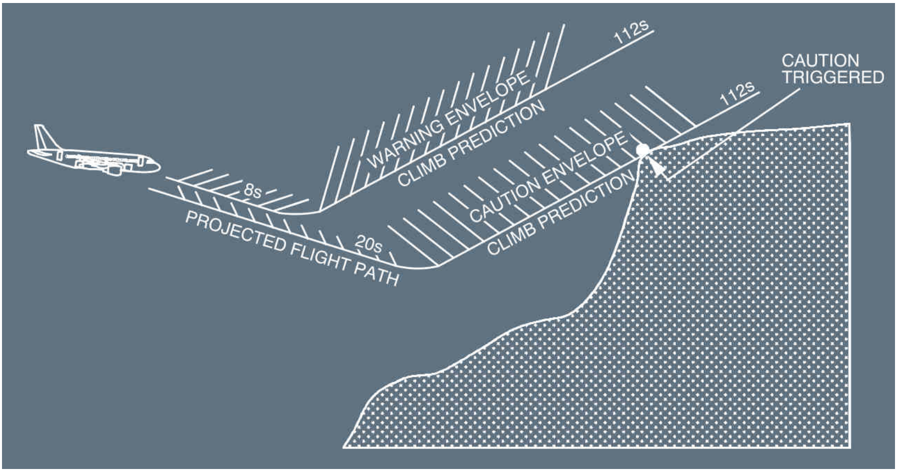
*(1) When the TERR ON ND pb is set to ON, and ARC or ROSE mode is selected, the ND displays the terrain (and obstacle ◁) memorized in the database, depending on the aircraft's position. The terrain (and obstacle ◁) are displayed in various densities of green, yellow, red, or magenta, depending on the threat, (*Refer to DSC-31-45 Flags and Messages Displayed on ND*). If an alert is generated (caution or warning), and TERR ON ND is not selected, the terrain (and obstacle ◁) are automatically displayed, and the ON light of the TERR ON ND pb comes on.*

In case of low accuracy of the aircraft position computed by the FMGC, the predictive functions of the GPWS are automatically deactivated. The 5 GPWS basic modes remain active.

ALERTS ENVELOPES

Ident.: DSC-34-SURV-40-35-00006166.0007001 / 14 MAY 12
Applicable to: MSN 04827-04860

VERTICAL ENVELOPE



CAUTION ENVELOPE

The caution envelope extends along the flight path, from a distance of 20 s in front of the aircraft, to a constructed climb path, at a distance of 132 s in front of the aircraft.

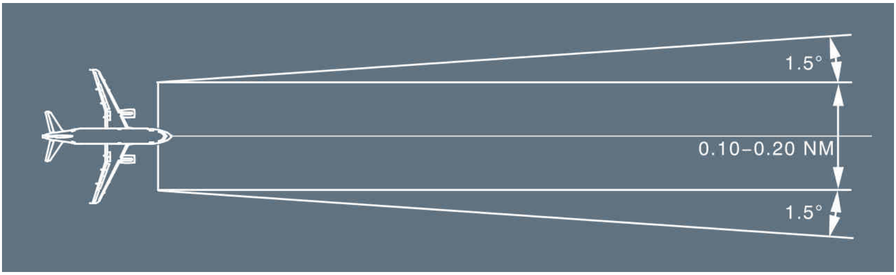
If there is a conflict between the terrain caution envelope and the terrain data stored in the database, one of the following cautions is triggered:
- A “TERRAIN AHEAD” caution, if the terrain conflict is ahead of the aircraft.
- A “TOO LOW TERRAIN” caution, if the terrain conflict is below the aircraft, instead of ahead of the aircraft.

WARNING ENVELOPE

The warning envelope extends along the flight path, from a distance of 8 s in front of the aircraft, to a constructed climb path, at a distance of 120 s in front of the aircraft.
In a Mountainous Approach Area (MAA: Existence of terrain more than 2 000 ft above the runway and within 6 NM of this runway), this distance is linearly reduced to 30 s, to prevent nuisance alerts during low altitude maneuvers.

If there is a conflict between the terrain warning envelope ahead of the aircraft, and the terrain data stored in the database, one of the following warnings is triggered:
- A “TERRAIN AHEAD-PULL UP” warning, if the aircraft can climb over the terrain.
- An “AVOID TERRAIN” warning, if the aircraft cannot climb over the terrain with sufficient safety margin.

HORIZONTAL ENVELOPE



During turns, the sensor opens up into turns to determine if there are possible terrain conflicts (up to 90 °).

RUNWAY CONVERGENCE CRITERIA

When the aircraft enters the approach sector (approximately 2.7 NM or 5 km from the runway threshold), the system computes runway convergence criteria in order to inhibit the Terrain Awareness and Warning System (TAWS) predictive alerts. For more information on the inhibition logic of the T3CAS. *Refer to DSC-34-SURV-40-35 Inhibition Logic of the GPWS Predictive Functions in Approach*

INHIBITION LOGIC OF THE GPWS PREDICTIVE FUNCTIONS IN APPROACH

Ident.: DSC-34-SURV-40-35-00013669.0002001 / 17 MAR 17
Applicable to: MSN 04827-04860

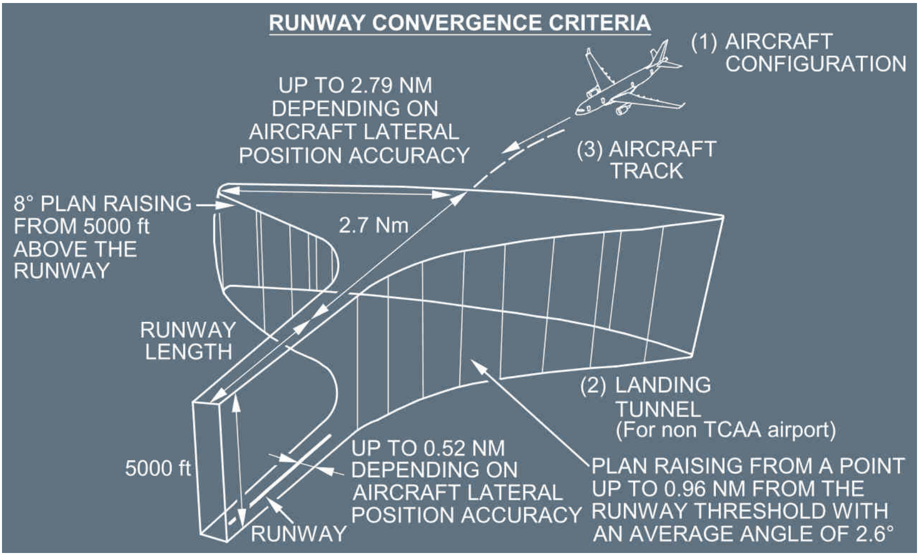
In approach, as the aircraft is flying towards the ground, the runway convergence criteria will inhibit the Ground Proximity Warning System (GPWS) predictive functions. Therefore, depending on the convergence criterion, GPWS alert may not be triggered in the landing tunnel described below, even close to terrain.

The main runway convergence criteria are the following:
- (1) Aircraft flaps/landing gear configuration,
- (2) Aircraft horizontal and vertical position from the runway threshold (landing tunnel criterion),
- (3) Aircraft track (convergence criterion).

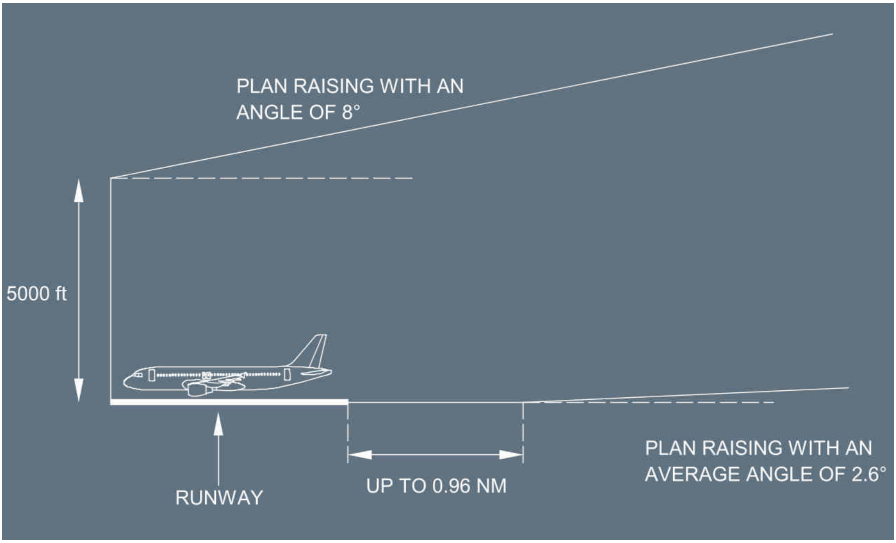
The airports stored in the terrain database are split into two categories:

- Airport flagged as Terrain Challenging Airport Area (TCAA),
- Airport not TCAA flagged.

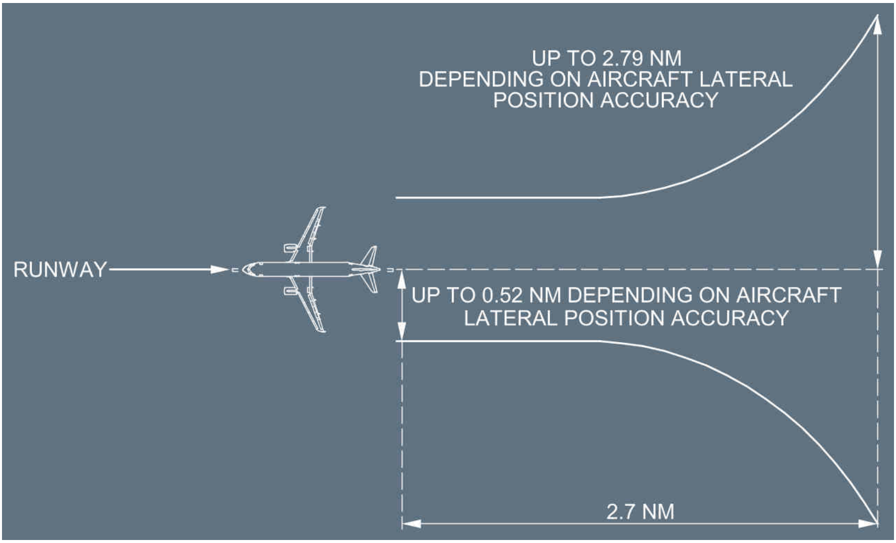
For TCAA flagged airports, the shape and dimensions of the landing tunnel are tailored to each TCAA airport while for non TCAA airports the landing tunnel shape and dimensions are described below.


RUNWAY CONVERGENCE CRITERIA
(1) AIRCRAFT CONFIGURATION
UP TO 2.79 NM DEPENDING ON AIRCRAFT LATERAL POSITION ACCURACY
(3) AIRCRAFT TRACK
8° PLAN RAISING FROM 5000 ft ABOVE THE RUNWAY
2.7 Nm
RUNWAY LENGTH
(2) LANDING TUNNEL (For non TCAA airport)
5000 ft
UP TO 0.52 NM DEPENDING ON AIRCRAFT LATERAL POSITION ACCURACY
PLAN RAISING FROM A POINT UP TO 0.96 NM FROM THE RUNWAY THRESHOLD WITH AN AVERAGE ANGLE OF 2.6°
RUNWAY

LANDING TUNNEL - LATERAL VIEW (FOR NON TCAA AIRPORT)

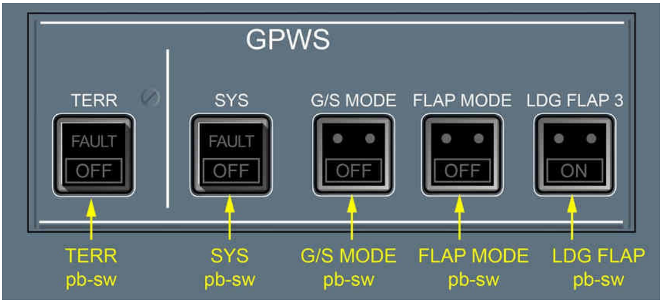

PLAN RAISING WITH AN
ANGLE OF 8°
5000 ft
RUNWAY
UP TO 0.96 NM
PLAN RAISING WITH AN
AVERAGE ANGLE OF 2.6°

LANDING TUNNEL - VIEW FROM ABOVE (FOR NON TCAA AIRPORT)

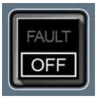

UP TO 2.79 NM
DEPENDING ON AIRCRAFT LATERAL
POSITION ACCURACY
RUNWAY
UP TO 0.52 NM DEPENDING ON AIRCRAFT
LATERAL POSITION ACCURACY
2.7 NM

OVERHEAD PANEL

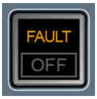
1 Ident.: DSC-34-SURV-40-40-00001418.0009001 / 03 NOV 22
Applicable to: MSN 08495-09324, 10949-11597


GPWS
TERR
SYS
G/S MODE
FLAP MODE
LDG FLAP 3
FAULT
OFF
FAULT
OFF
OFF
OFF
ON
TERR pb-sw
SYS pb-sw
G/S MODE pb-sw
FLAP MODE pb-sw
LDG FLAP pb-sw

SYS pb-sw



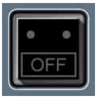
All basic GPWS alerts (Mode 1 to 5) are inhibited.



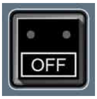
Basic GPWS modes 1 to 5 are failed. The NAV GPWS FAULT alert is triggered.

Note: *If ILS 1 fails, only GPWS mode 5 is lost. The NAV GPWS FAULT alert does not trigger.*
On ground, the GPWS FAULT light turns on.
In flight, the GPWS FAULT light does not turn on, while GPWS modes 1 to 4 are operative.

G/S MODE pb-sw

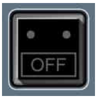


Glideslope mode (mode 5) is active.

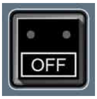


Glideslope mode (mode 5) is inhibited.

FLAP MODE pb-sw

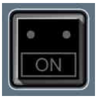


Flap mode ("TOO LOW FLAPS" mode 4) is active.

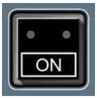


Flap mode ("TOO LOW FLAPS" mode 4) is inhibited (to avoid nuisance warning in the case of landing with flaps setting reduced).

LDG FLAP 3 pb-sw

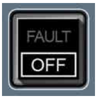


Flap mode is not inhibited when CONF 3 is selected.

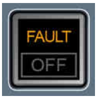


Flap mode is inhibited when CONF 3 is selected (to avoid nuisance warning in the case of landing in CONF 3).
LDG MEMO displays FLAPS...3 instead of FLAPS...FULL.

TERR pb-sw



Predictive GPWS modes are inhibited. Basic GPWS modes 1 to 5 are operative. The NAV GPWS TERR DET FAULT alert is triggered.
The ROW/ROP function is inhibited.



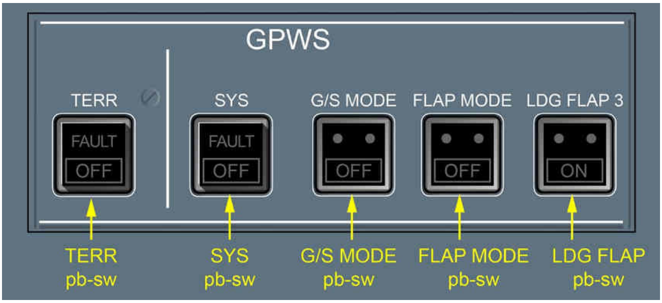
Predictive GPWS modes are failed. The NAV GPWS TERR DET FAULT alert is triggered. The terrain is not shown on the ND.

Note: The basic GPWS modes 1 to 5 are still operative when the SYS pb-sw OFF light or the SYS pb-sw FAULT light are not illuminated.

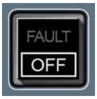
OVERHEAD PANEL

Ident.: DSC-34-SURV-40-40-00001418.0007001 / 03 NOV 22

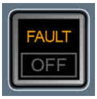
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**


GPWS
TERR
FAULT
OFF
SYS
FAULT
OFF
G/S MODE
OFF
FLAP MODE
OFF
LDG FLAP 3
ON
TERR pb-sw
SYS pb-sw
G/S MODE pb-sw
FLAP MODE pb-sw
LDG FLAP pb-sw

SYS pb-sw



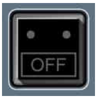
All basic GPWS alerts (Mode 1 to 5) are inhibited.



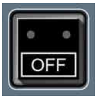
Basic GPWS mode 1 to 5 are failed. The NAV GPWS FAULT alert is triggered.

Note: *If ILS 1 fails, only GPWS mode 5 is lost. The NAV GPWS FAULT alert does not trigger.*
On ground, the GPWS FAULT light turns on.
In flight, the GPWS FAULT light does not turn on, while GPWS modes 1 to 4 are operative.

G/S MODE pb-sw

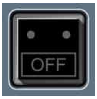


Glideslope mode (mode 5) is active.

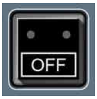


Glideslope mode (mode 5) is inhibited.

FLAP MODE pb-sw

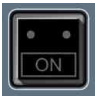


Flap mode ("TOO LOW FLAPS" mode 4) is active.

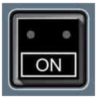


Flap mode ("TOO LOW FLAPS" mode 4) is inhibited (to avoid nuisance warning in the case of landing with flaps setting reduced).

LDG FLAP 3 pb-sw

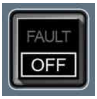


Flap mode is not inhibited when CONF 3 is selected.

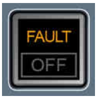


Flap mode is inhibited when CONF 3 is selected (to avoid nuisance warning in the case of landing in CONF 3).
LDG MEMO displays FLAPS...3 instead of FLAPS...FULL.

TERR pb-sw



Predictive GPWS modes are inhibited. Basic GPWS modes 1 to 5 are operative. The NAV GPWS TERR DET FAULT alert is triggered.



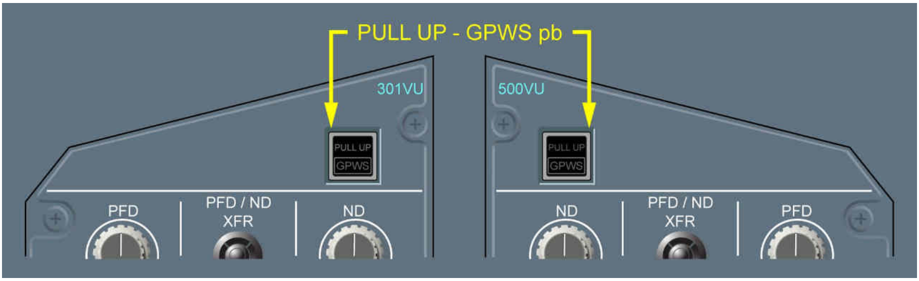
Predictive GPWS modes are failed. The NAV GPWS TERR DET FAULT alert is triggered. The terrain is not shown on the ND.

Note: *The basic GPWS modes 1 to 5 are still operative when the SYS pb-sw OFF light or the SYS pb-sw FAULT light are not illuminated.*

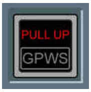
INSTRUMENT PANELS

Ident.: DSC-34-SURV-40-40-00001419.0029001 / 28 MAY 20

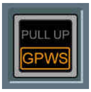
3 **Applicable to: MSN 04827-04860, 06409-09324, 10949-11597**



PULL UP – GPWS pb

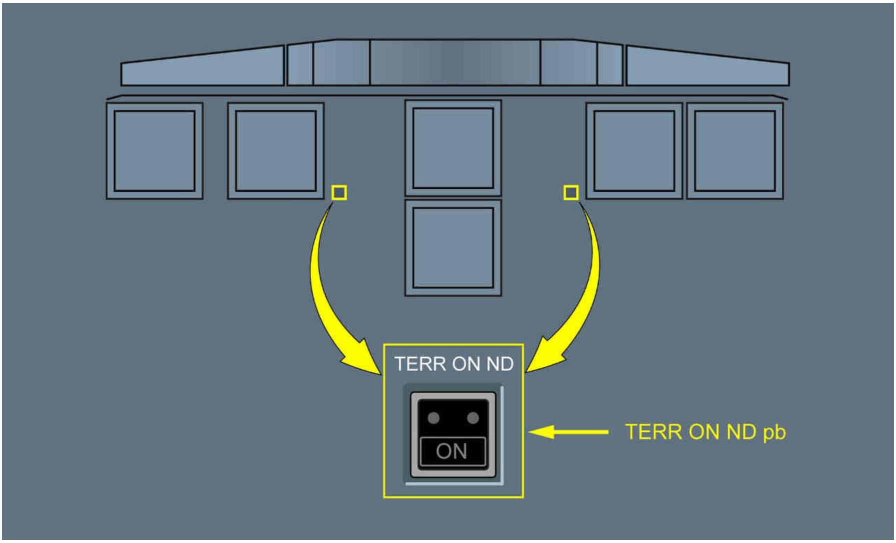


Comes on when the second boundary of mode 1 is penetrated or when the mode 2 is activated.
A “PULL UP” or “TERRAIN - TERRAIN PULL UP” aural alert is associated.



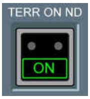
Comes on when any other mode is activated. It is associated with a corresponding aural alert.

Note:
1. *If the flight crew briefly presses the PULL UP – GPWS pb when mode 5 alert is heard, the GPWS light goes off and the aural alert stops.*
2. *On the ground only, the flight crew presses this pb to test the GPWS.*



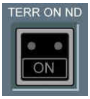
TERR ON ND pb

These pbs are on both sides of the ECAM. Each pb controls the onside terrain display.



The terrain appears on the ND if all of the following apply:
- TERR ON ND pb-sw is set to ON
- TERR FAULT light is not on
- TERR STBY ECAM memo does not appear
- The FMGS navigation accuracy is high.

The ON light comes on.



The terrain data does not appear on the ND.

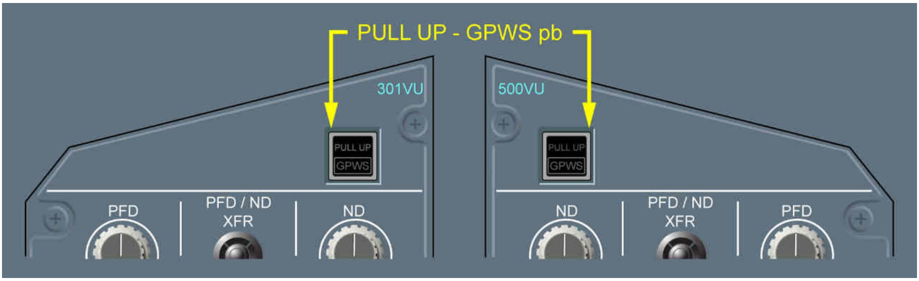
Note: 1. *If the predictive functions of the GPWS generate a caution or a warning, while the TERR ON ND pb is off, the terrain automatically appears on the NDs and the ON light of the TERR ON ND pb comes on.*
2. *To be able to identify the difference between the terrain and the weather display, the terrain display goes from the center outward to both sides of the ND.*
3. *The terrain and obstacles image appears on the ND if:*
   - *The aircraft is within 2 000 ft above the terrain, and*
   - *The TERR ON ND pb is passed, or automatically, in case of terrain caution(warning) alerts*

   Depending on the capacity of the TAWS system installed (e.g. with Eleview or Peaks functions), the terrain can display the highest and lowest geographic terrain elevations for the selected ND range. The terrain can also increase situation awareness, regardless of the aircraft altitude.

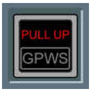
   If the terrain(obstacle) image is being automatically displayed on the ND, if the flight crew presses the TERR ON ND pb, the terrain(obstacle) image no longer appears.

INSTRUMENT PANELS

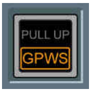
Ident.: DSC-34-SURV-40-40-00001419.0009001 / 28 MAY 20
Applicable to: MSN 02014, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06173



PULL UP – GPWS pb

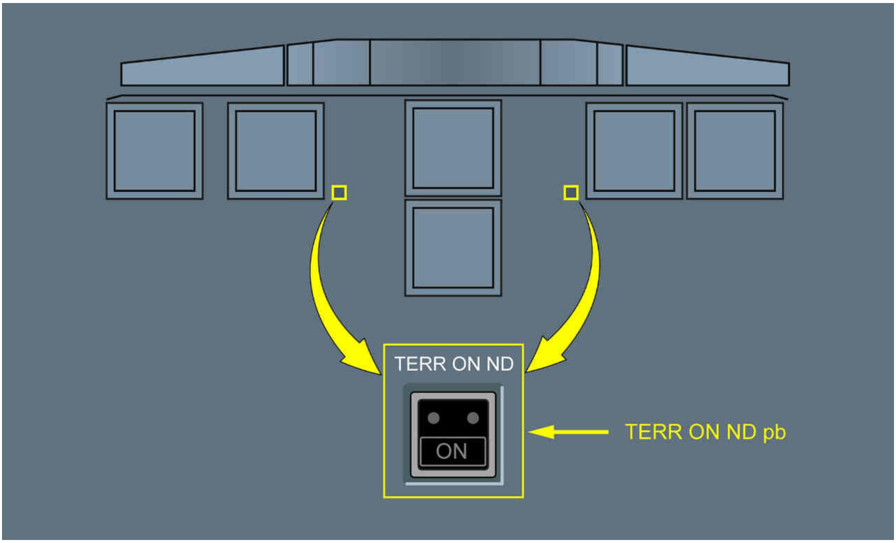


Comes on to give a visual indication, when a PULL UP warning is triggered in modes 1, 2, and TAD. The corresponding aural alert sounds.



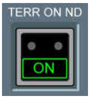
Comes on when any other mode is activated.
The corresponding aural alert sounds.

Note: *1. If the flight crew briefly presses this button when one of these modes is activated, the GPWS light goes off and the aural alert stops.*
2. On the ground, the flight crew presses this pb to test the GPWS. If the flight crew briefly presses this pb, some of the aural alerts sound and the pb captions, associated with the GPWS come on. If the flight crew continuously presses this pb, all the aural alerts sound.



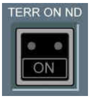
TERR ON ND pb

These pb are on both sides of the ECAM. Each pb controls the onside terrain display.



The terrain appears on the ND if both of the following apply:
- TERR ON ND pb-sw is set to ON
- TERR FAULT light is not on.

The ON light comes on.



The terrain data does not appear on the ND.

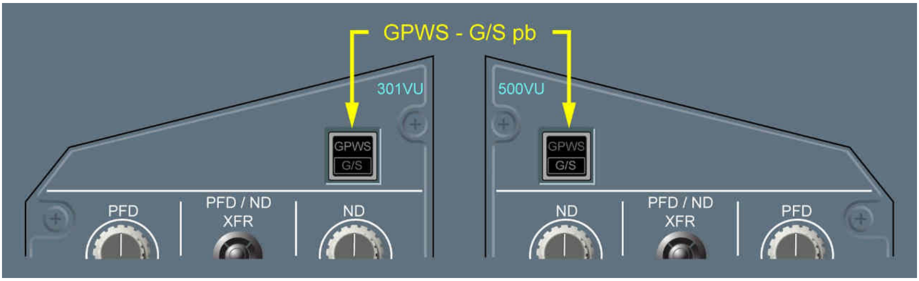
Note: *1. If the TAD mode generates a caution or a warning while the TERR ON ND pb is off, the terrain automatically appears on the NDs. In addition, the ON light of the TERR ON ND pb will come on.*
2. To be able to identify the difference between the terrain and the weather display, the terrain display goes from the center outward to both sides of the ND.
3. The terrain and obstacles image appears on the ND if:
- *The aircraft is within 2 000 ft above the terrain, and*
- *The TERR ON ND pb is passed, or automatically, in case of terrain caution(warning) alerts*

Depending on the capacity of the TAWS system installed (e.g. with Eleview or Peaks functions), the terrain can display the highest and lowest geographic terrain elevations for the selected ND range. The terrain can also increase situation awareness, regardless of the aircraft altitude.

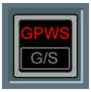
If the terrain(obstacle) image is being automatically displayed on the ND, if the flight crew presses the TERR ON ND pb, the terrain(obstacle) image no longer appears.

INSTRUMENT PANELS

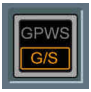
Ident.: DSC-34-SURV-40-40-00001419.0003001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321



GPWS – G/S pb

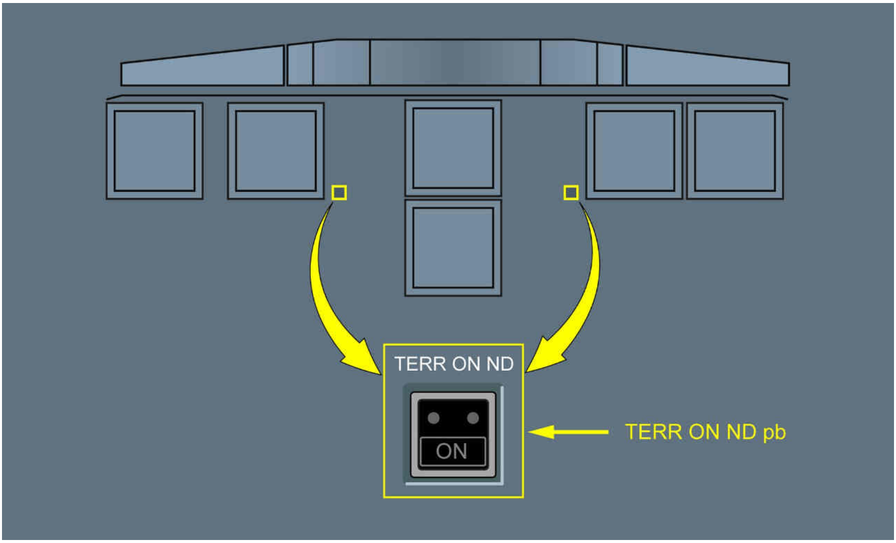


Comes on when any mode from 1 to 4, or any TAD, or TCF alert is activated. A specific aural alert is associated.



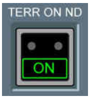
Comes on when mode 5 is activated. It is associated with the aural “GLIDE SLOPE” alert.

Note:
1. *If the flight crew briefly presses the GPWS – G/S pb when a GLIDE SLOPE warning is triggered, the G/S light goes off and the "GLIDE SLOPE" aural alert stops.*
2. *On the ground, the flight crew presses this pb to test the GPWS. If the flight crew briefly presses this pb, some of the aural alerts sound and the pb captions, associated with the GPWS come on. If the flight crew continuously presses this pb, all the aural alerts sound.*



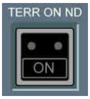
TERR ON ND pb

These pbs are on both sides of the ECAM. Each pb controls the onside terrain display.



The terrain appears on the ND if both of the following apply:
- TERR ON ND pb is set to ON
- TERR FAULT light is not on.

The ON light comes on.



The terrain data does not appear on the ND.

Note: 1. *If the TAD mode generates a caution or a warning while the TERR ON ND pb is off, the terrain automatically appears on the NDs. In addition, the ON light of the TERR ON ND pb will come on.*
2. *To be able to identify the difference between the terrain and the weather display, the terrain display goes from the center outward to both sides of the ND.*
3. *The terrain and obstacles image appears on the ND if:*
   - *The aircraft is within 2 000 ft above the terrain, and*
   - *The TERR ON ND pb is passed, or automatically, in case of terrain caution(warning) alerts*

Depending on the capacity of the TAWS system installed (e.g. with Eleview or Peaks functions), the terrain can display the highest and lowest geographic terrain elevations for the selected ND range. The terrain can also increase situation awareness, regardless of the aircraft altitude.

If the terrain(obstacle) image is being automatically displayed on the ND, if the flight crew presses the TERR ON ND pb, the terrain(obstacle) image no longer appears.

MEMO DISPLAY

Ident.: DSC-34-SURV-40-40-A-00017057.0001001 / 21 MAR 16
Applicable to: ALL

GPWS FLAP 3 : This memo appears in green when GPWS LDG FLAP 3 pb-sw is ON.

Ident.: DSC-34-SURV-40-40-A-00017058.0001001 / 21 MAR 16
Applicable to: ALL

GPWS FLAP MODE OFF : This memo appears in green when GPWS FLAP MODE pb-sw is OFF.

Ident.: DSC-34-SURV-40-40-A-00017060.0004001 / 21 MAR 16
Applicable to: ALL

The TERR OFF memo appears when the TERR pb-sw is OFF.

TERR OFF : This memo appears in green when:
- The aircraft is in flight phase 2, before the Take Off Configuration test is launched.
- The aircraft is in flight phase 6.

TERR OFF : This memo appears in amber when:
- The aircraft is in flight phase 2, after the Take Off Configuration test.
- The aircraft is in flight phases 3, 4, 5, 7, 8 and 9.

Ident.: DSC-34-SURV-40-40-A-00017059.0007001 / 21 MAR 16

Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06173

TERR STBY : Airborne TERR STBY memo appears in green when the aircraft position accuracy (computed by the EGPWS) is not sufficient to allow the enhanced TCF and TAD modes to operate. These modes are not available until the TERR STBY memo disappears. If selected, the terrain data display on ND is automatically deselected when the TERR STBY memo is triggered.

Ident.: DSC-34-SURV-40-40-A-00017059.0004001 / 21 MAR 16

4 **Applicable to: MSN 04827-04860, 06409-09324, 10949-11597**

TERR STBY : This memo appears in green when any required predictive function input is missing or considered invalid. The predictive functions are not available, until the TERR STBY memo disappears. If selected, the terrain data display on the ND is automatically deselected when the TERR STBY memo is triggered.

Ident.: DSC-34-SURV-40-40-A-00017059.0003001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734

TERR STBY : Airborne TERR STBY memo appears in green when the aircraft position accuracy (provided by the FMS) is not sufficient to allow the enhanced TCF and TAD modes to operate. These modes are not available until the TERR STBY memo disappears. If selected, the terrain data display on ND is automatically deselected when the TERR STBY memo is triggered.

GENERAL

Ident.: DSC-34-SURV-50-10-00015123.0001001 / 28 MAY 20

1 **Applicable to: MSN 08495-09324, 10949-11597**

The ROPS is designed to alert the flight crew in the case of potential runway overrun situation for dry and wet runway. The ROPS is composed of two functions:

- The ROW function. It automatically arms at 400 ft AGL and works until start of braking,
- The ROP function. It works from start of braking until the aircraft stops.

Intentionally left blank

DESCRIPTION

Ident.: DSC-34-SURV-50-20-00015124.0008001 / 03 NOV 22

1 **Applicable to: MSN 10949-11597**

The ROW/ROP functions compute both the wet and dry landing distances for the current conditions. The system then compares these values with the LDA of the landing runway. To detect the landing runway, the ROW/ROP functions use the TAWS runway database and the current aircraft position and track. During final approach:

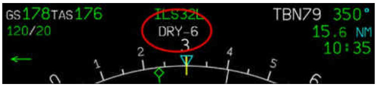
- The detection starts from 2 000 ft, then
- The ROW function arms at 400 ft.

L2 The landing runway detection is continuously updated several times per second, including below 400 ft when the ROW function is armed.

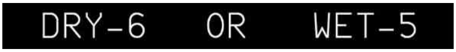
L1 The computation occurs in real time, the ROW and ROP functions consider:

- All landing weight and CG ranges (this includes overweight landing)
- Both landing configurations (CONF 3 and CONF FULL)
- LDA
- All wind conditions
- Dry and wet runway conditions
- No failure that affects landing performance
- 15 % safety margin.

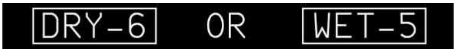
The flight crew uses the runway condition selector to set the runway condition to WET or DRY (*Refer to DSC-34-SURV-50-30 Controls and Indicators*).
The ND indicates the runway condition selected:



- Nominal display:



- A box appears for 3 s after selection change:



If a risk of overrun is detected (computed landing distances are more than the LDA) the ROW/ROP triggers:

- Visual alert messages displayed on the PFDs
- Aural alert messages provided through loudspeakers.

ROW FUNCTION

The ROW function provides enhanced flight crew awareness about the approach stabilization and the capability to land on available landing distance.

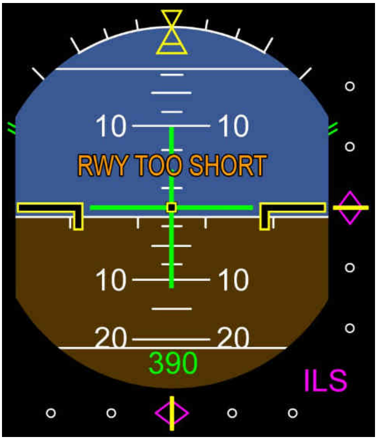
ROW ARMING

During the approach, the ROW function detects the landing runway according to the aircraft position, and the TAWS runway database.
At 400 ft AGL, the ROW function automatically arms, and starts to compute both the wet and dry landing distances, depending on flight crew selection.

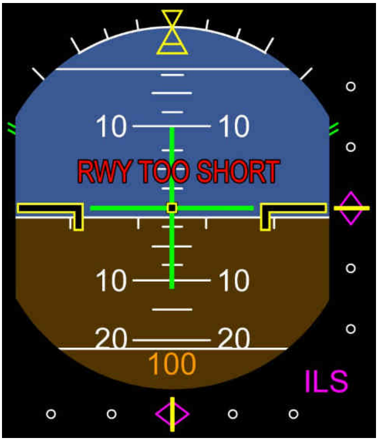
The ROW function computes the landing distance with the following assumptions:
- Maximum manual brake pressure
- Idle reverser thrust for the computation for dry runway
- Maximum reverser thrust for the computation for wet runway.

ROW ACTIVATION

Below 400 ft, if the computation for landing distance is more than the LDA:
- The RWY TOO SHORT message is displayed on both PFDs. This message flashes for 9 s and then remains steady. This message is not associated with an aural alert.



Below 200 ft, if the computation for landing distance is more than the LDA:
- The RWY TOO SHORT message is displayed on both PFDs. This message flashes for 9 s and then remains steady. In addition, a repetitive aural alert “RUNWAY TOO SHORT” triggers.



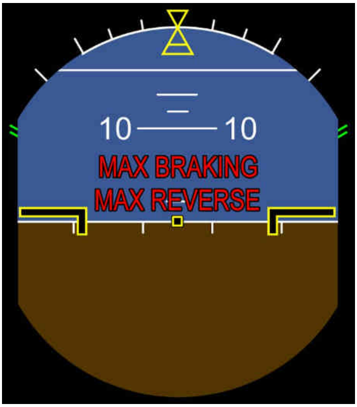
When the landing distance computation is less than the LDA, the alerts stop.

ROP FUNCTION

The ROP function provides enhanced flight crew awareness about the deceleration and capability to stop before the end of the runway.

ROP ACTIVATION

On ground, the ROP function computes the braking distance for the current aircraft and runway conditions. If current braking performance is not sufficient to stop on LDA, it triggers visual and aural alerts.
As soon as an overrun situation is detected MAX BRAKING and MAX REVERSE messages are displayed on both PFDs. They flash for 9 s and then remain steady.



At the same time, the aural alert “BRAKE, MAX BRAKING, MAX BRAKING’’ is triggered and continues until the system detects maximum manual brake pressure.
When the flight crew applies maximum manual brake pressure, the aural alert “SET MAX REVERSE” is triggered and continues until the system detects maximum reverse thrust.

Note: *The aural alert “BRAKE, MAX BRAKING, MAX BRAKING” has priority over “SET MAX REVERSE”.*

Below 80 kt, the aural alert “KEEP MAX REVERSE” is triggered, if the system still detects overrun situation with maximum manual brake pressure and maximum reverse thrust.
If the overrun situation is no longer detected, alerts are no longer triggered.

ROW/ROP INHIBITION

The flight crew can use the ROW/ROP pb-sw to inhibit the ROW/ROP function (*Refer to DSC-34-SURV-50-30 Controls and Indicators*).
In this case, the ROW and ROP functions are fully inhibited:

- No message displayed on the PFD
- No audio alert
- No runway condition displayed on the ND
- ROW/ROP runway condition selector inhibited.

In any case, the ROP function is inhibited when the ground speed decreases below 30 kt.

OPERATING PROCEDURES

For operating procedure related to ROW/ROP (*Refer to FCTM/ROW/ROP*).

DESCRIPTION

Ident.: DSC-34-SURV-50-20-00015124.0005001 / 03 NOV 22
Applicable to: MSN 08495-09324

The ROW/ROP functions compute both the wet and dry landing distances for the current conditions. The system then compares these values with the LDA of the landing runway. To detect the landing runway, the ROW/ROP functions use the TAWS runway database and the current aircraft position and track. During final approach:

- The detection starts from 2 000 ft, then
- The ROW function arms at 400 ft.

L2 The landing runway detection is continuously updated several times per second, including below 400 ft when the ROW function is armed.

L1 The computation occurs in real time, the ROW and ROP functions consider:
- All landing weight and CG ranges (this includes overweight landing)
- Both landing configurations (CONF 3 and CONF FULL)
- LDA
- All wind conditions
- Dry and wet runway conditions
- No failure that affects landing performance
- 15 % safety margin.

If a risk of overrun is detected (computed landing distances are more than the LDA) the ROW/ROP triggers:
- Visual alert messages displayed on the PFDs
- Aural alert messages provided through loudspeakers.

ROW FUNCTION

The ROW function provides enhanced flight crew awareness about the approach stabilization and the capacity to land on available landing distance.

ROW ARMING

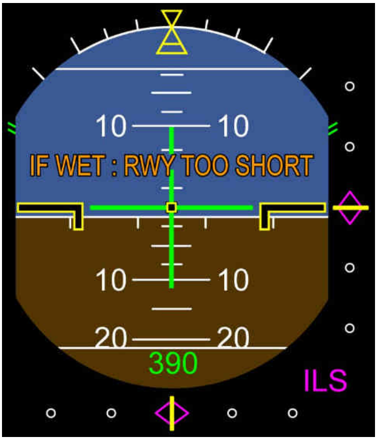
During the approach, the ROW function detects the landing runway according to the aircraft position, and the TAWS runway database.
At 400 ft AGL, the ROW function automatically arms, and starts to compute both the wet and dry landing distances for current aircraft and environmental conditions.

The ROW function computes the landing distance with the following assumptions:
- Maximum manual brake pressure
- Idle reverser thrust for the computation for dry runway
- Maximum reverser thrust for the computation for wet runway.

ROW ACTIVATION

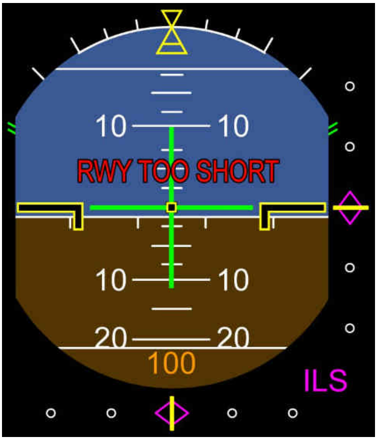
Below 400 ft, if the computation for wet landing distance is more than the LDA:

- The IF WET: RWY TOO SHORT message is displayed on both PFDs. This message flashes for 9 s and then remains steady. This message is not associated with an aural alert.



Below 200 ft, if the computation of the dry landing distance is more than the LDA:

- The RWY TOO SHORT message is displayed on both PFDs. This message flashes for 9 s and then remains steady. In addition, a repetitive aural alert “RUNWAY TOO SHORT” triggers.



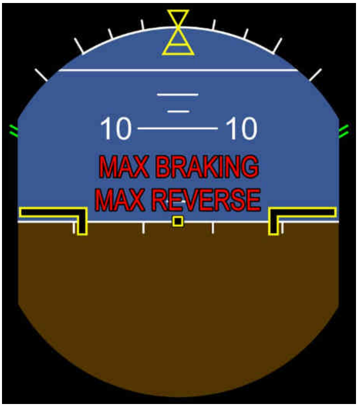
When the landing distance computation is less than the LDA, the alerts stop.

ROP FUNCTION

The ROP function provides enhanced flight crew awareness about the deceleration and capability to stop before the end of the runway.

ROP ACTIVATION

On ground, the ROP function computes the braking distance for the current aircraft and runway conditions. If current braking performance is not sufficient to stop on LDA, it triggers visual and aural alerts.
As soon as an overrun situation is detected MAX BRAKING and MAX REVERSE messages are displayed on both PFDs. They flash for 9 s and then remain steady.



At the same time, the aural alert “BRAKE, MAX BRAKING, MAX BRAKING” is triggered and continues until the system detects maximum manual brake pressure.
When the flight crew applies maximum manual brake pressure, the aural alert “SET MAX REVERSE” is triggered and continues until the system detects maximum reverse thrust.

Note: *The aural alert “BRAKE, MAX BRAKING, MAX BRAKING” has priority over “SET MAX REVERSE”.*

Below 80 kt, the aural alert “KEEP MAX REVERSE” is triggered, if the system still detects overrun situation with maximum manual brake pressure and maximum reverse thrust.
If the overrun situation is no longer detected, alerts are no longer triggered.

ROP INHIBITION

The ROP function is inhibited when the ground speed decreases below 30 kt.

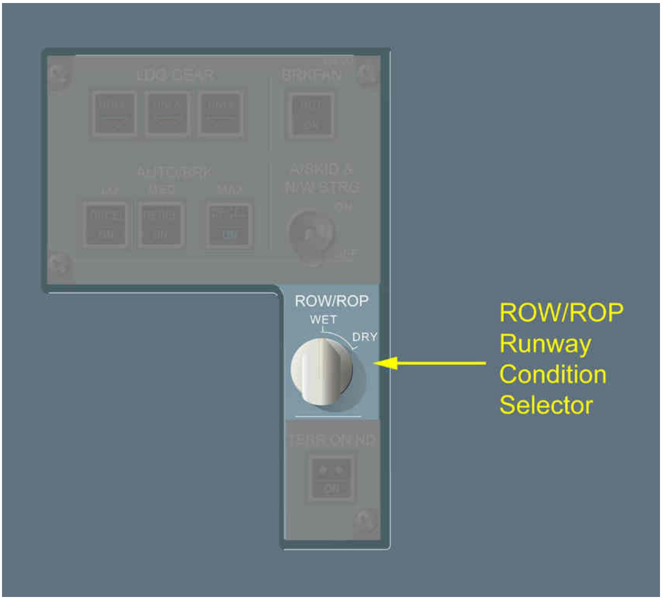
OPERATING PROCEDURES

For operating procedure related to ROW/ROP (*Refer to FCTM/ROW/ROP*).

CONTROLS AND INDICATORS

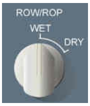
Ident.: DSC-34-SURV-50-30-00015132.0005001 / 28 MAY 20

1 **Applicable to: MSN 10949-11597**


LDG GEAR
BRK FAN
AUTO/BRK
LO
MED
MAX
A/SKID &
N/W STRG
ON
OFF
ROW/ROP
WET
DRY
TERR ON ND
ON
ROW/ROP
Runway
Condition
Selector

ROW/ROP RUNWAY CONDITION SELECTOR

L12

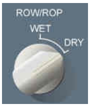

ROW/ROP
WET
DRY

The runway condition selected is WET.

Note:

The message WET-5 *is displayed at the top of the ND.*

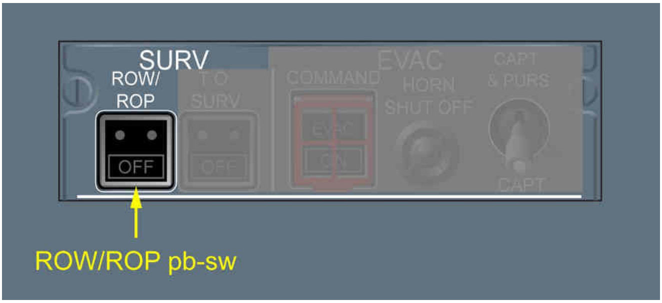
L12


ROW/ROP
WET
DRY

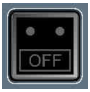
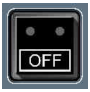
The runway condition selected is DRY.

Note:

The message DRY-6 *is displayed at the top of the ND.*


SURV
ROW/
ROP
OFF
T O
SURV
OFF
EVAC
COMMAND
EVAC
ON
HORN
SHUT OFF
CAPT
& PURS
CAPT
ROW/ROP pb-sw

ROW/ROP pb-sw

	The ROW/ROP function is available.
	The ROW/ROP function is inhibited. The E/WD displays the following ECAM memo: "ROW/ROP OFF ". The ND does not display the runway condition.

CONTROLS AND INDICATORS

Ident.: DSC-34-SURV-50-30-00015132.0001001 / 29 JUL 13
Applicable to: MSN 08495-09324

For ROW/ROP control *Refer to DSC-34-SURV-40-40 Overhead Panel*.

OVERVIEW

Ident.: DSC-34-SURV-60-10-00020407.0001001 / 21 MAR 17
Applicable to: ALL

The Traffic alert and Collision Avoidance System (TCAS):

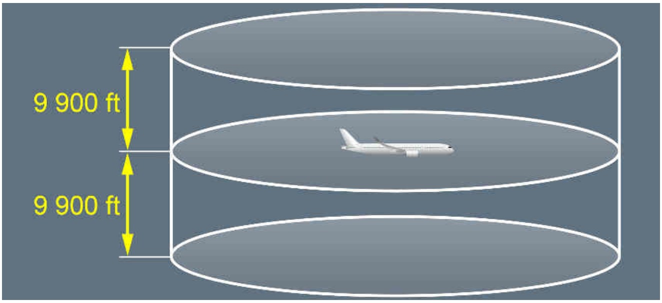
- Detects and displays surrounding aircraft that have a transponder
- Calculates and display possible collision threats
- Triggers vertical speed orders, in order to avoid collisions.

PRINCIPLE

Ident.: DSC-34-SURV-60-10-00020408.0001001 / 05 JUN 18
Applicable to: ALL

The TCAS detection capability is limited to intruders flying within a maximum range of 30 NM on either sides and approximately 30 NM to 80 NM longitudinally (depending on aircraft configuration and external conditions), and within a maximum altitude range of 9 900 ft above and below the aircraft.

TCAS Range

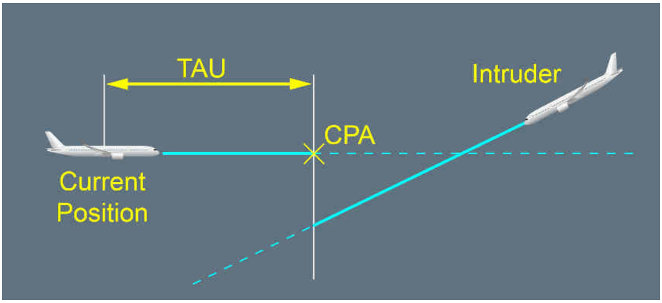


The TCAS obtains data transmitted by the transponders of nearby aircraft, and uses this data to evaluate possible collision threats.

The TCAS determines:
- The bearing of intruders, in relation to the bearing of the aircraft.
- The distance between the aircraft and intruders, and the rate of separation or closure.
- The relative altitude of intruders, if intruders report their altitude via a Mode-C or Mode-S transponder.

The TCAS then calculates the intruder trajectory, the Closest Point of Approach (CPA), and the estimated time (TAU) before reaching the CPA.
The TAU is the ratio between the distance that separates both aircraft, and the sum of their speed.

TAU Definition



If the TCAS detects that the trajectory of an intruder may be a collision threat, it triggers:
- Audio and visual indicators
- Vertical speed orders, to ensure a sufficient trajectory separation and a minimal vertical speed variation considering all intruders.

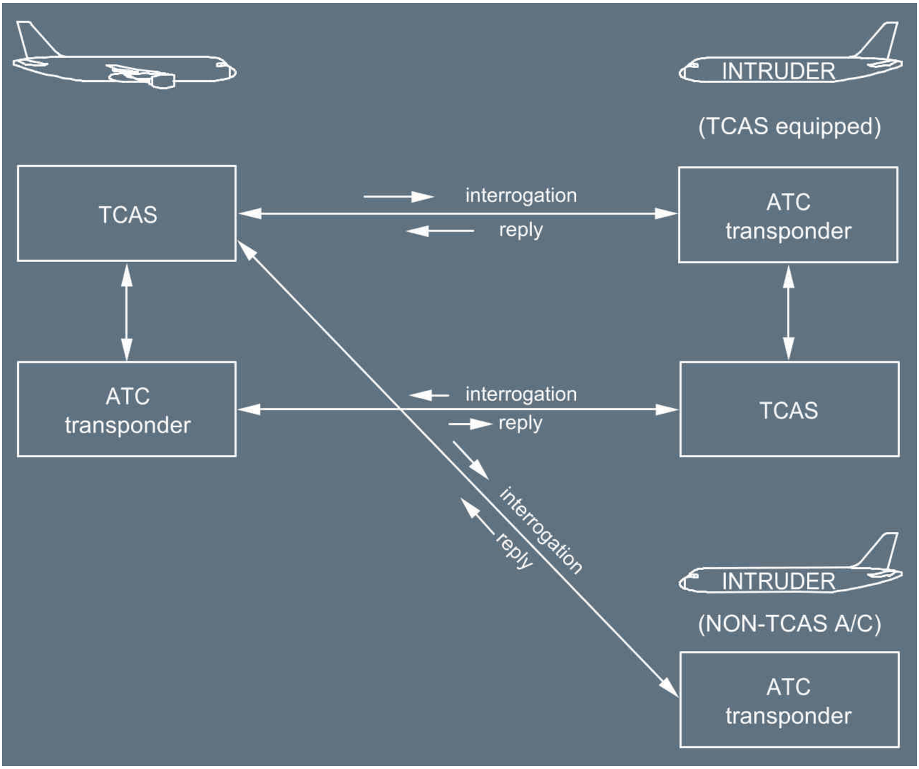
MAIN COMPONENTS

Ident.: DSC-34-SURV-60-10-00020409.0001001 / 21 MAR 17

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

The system includes:
- A single channel TCAS computer
- Two TCAS antennas
- Two mode S ATC transponders, one active the other in standby

  These transponders allow:
  - Interface between the ATC/TCAS control panel and the TCAS computer
  - Communication between the aircraft and intruders equipped with a TCAS system.
- An ATC/TCAS control panel.

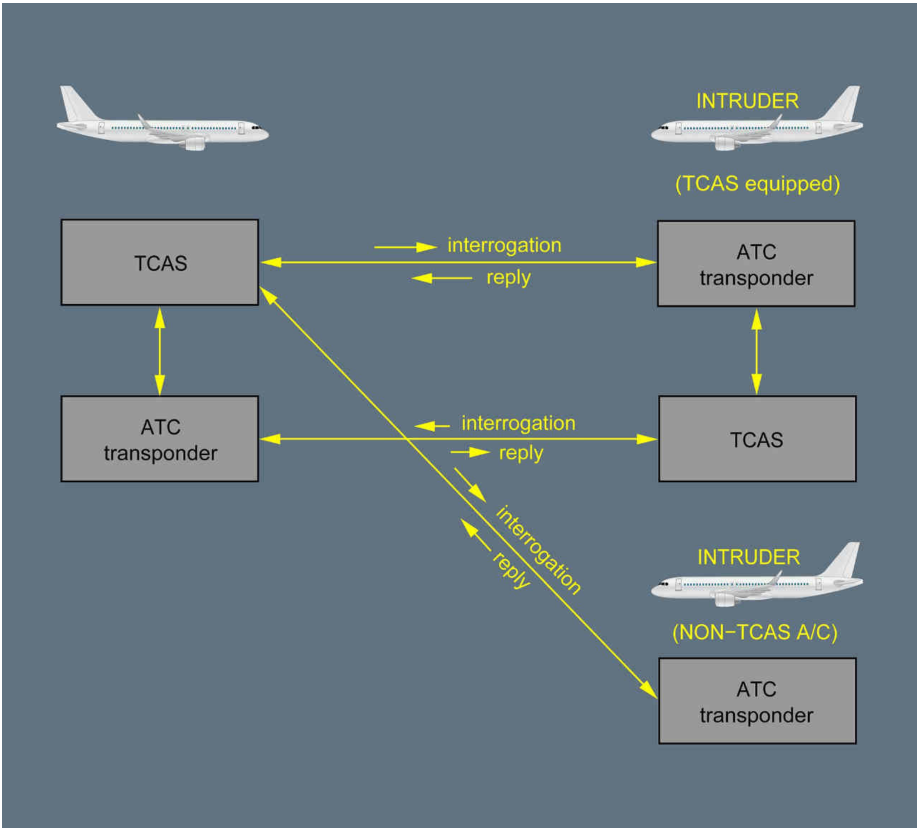

INTRUDER
(TCAS equipped)
TCAS
interrogation
reply
ATC
transponder
ATC
transponder
interrogation
reply
TCAS
interrogation
reply
INTRUDER
(NON-TCAS A/C)
ATC
transponder

MAIN COMPONENTS

2 Ident.: DSC-34-SURV-60-10-00020409.0002001 / 25 MAY 20
Applicable to: MSN 11482-11597

The system includes:
- A single channel TCAS computer
- Two TCAS antennas
- An ATC page on each RMP, that enables to manage the TCAS system
- Two mode S ATC transponders, one active the other in standby

  These transponders allow:
  - Interface between the ATC page of each RMP and the TCAS computer
  - Communication between the aircraft and intruders equipped with a TCAS system.

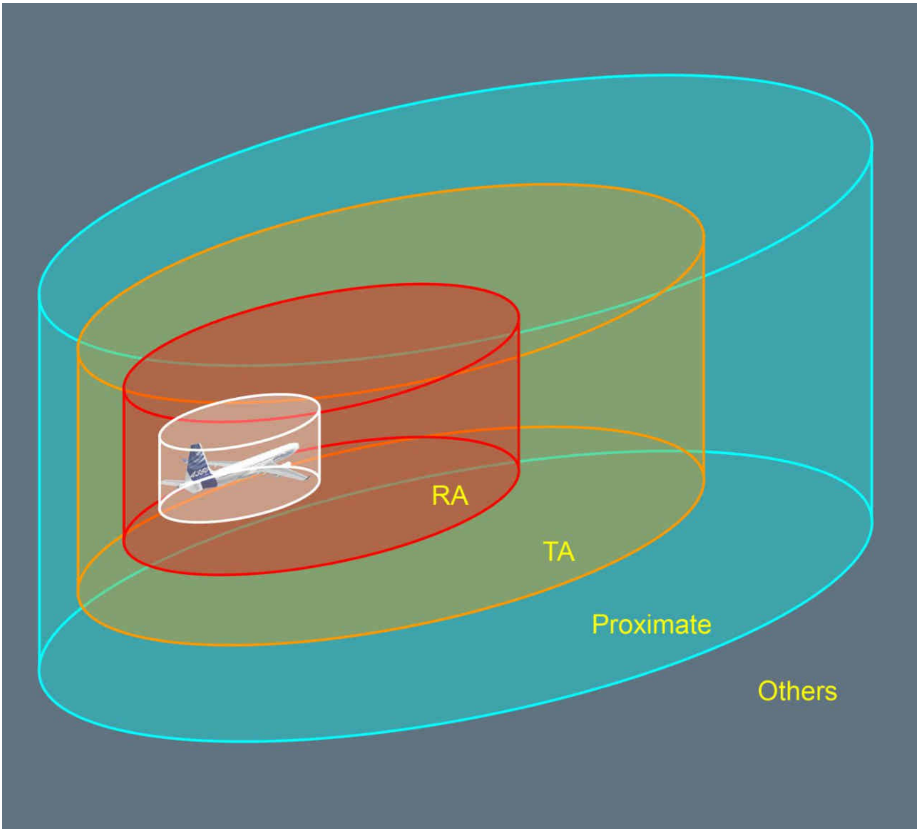

INTRUDER
(TCAS equipped)
TCAS
interrogation
reply
ATC transponder
ATC transponder
interrogation
reply
TCAS
interrogation
reply
INTRUDER
(NON–TCAS A/C)
ATC transponder

INTRUDER DETECTION CATEGORIES

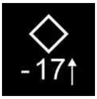
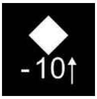
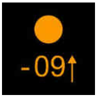
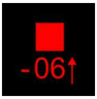
Ident.: DSC-34-SURV-60-10-00020410.0001001 / 28 NOV 19
Applicable to: ALL

The TCAS divides the space surrounding the aircraft into the following four zones, in order to evaluate and categorize possible collision threats:
- Resolution Advisory (RA)
- Traffic Advisory (TA)
- Proximate intruders
- Other intruders.

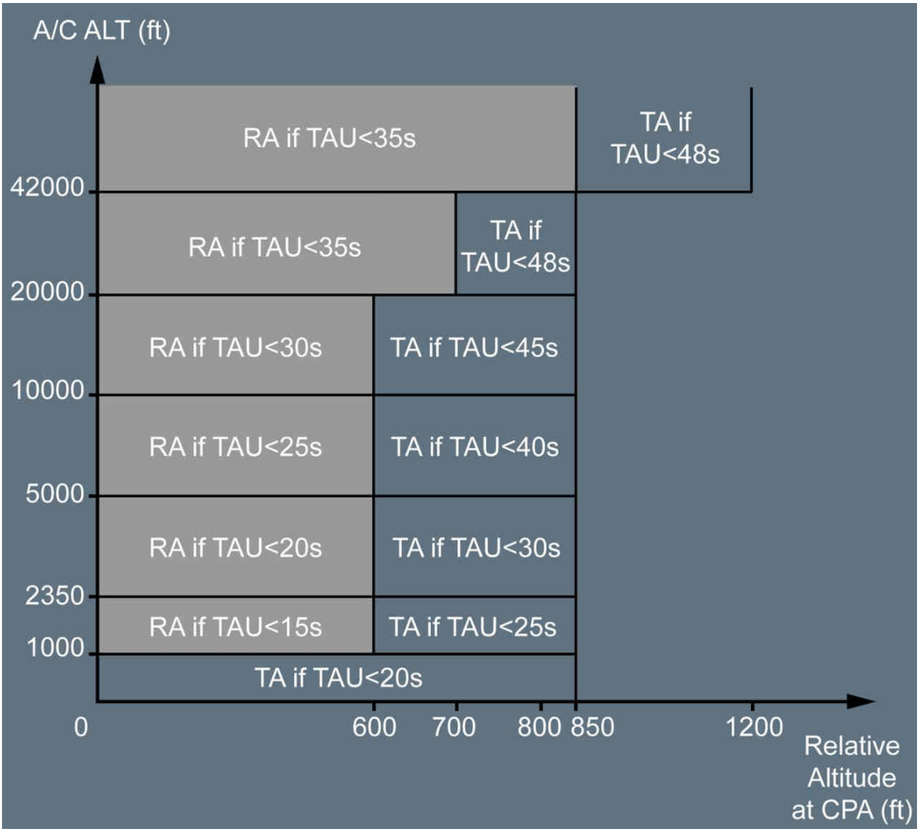
TCAS Envelopes



Depending on the level of the collision threat, the TCAS triggers audio and visual indicators::

LEVEL	INTRUDER POSITION	DISPLAYED INFORMATION AND MESSAGE	
Other intruders	- No collision threat - Any non proximate, TA, RA within the surveillance envelope (lateral range: Closer than 30 NM)	- ND: Intruder position	
Proximate	- No collision threat - Intruder in the vicinity of the A/C (closer than 6 NM laterally and ±1200 ft vertically)	- ND: Intruder position	
Traffic Advisory (TA)	- Potential collision threat - TAU is about 40 s	- ND: Intruder position - Aural messages	
Resolution Advisory (RA)	- Real collision threat - TAU is about 25 s	- ND: Intruder position - Aural messages - PFD: Vertical orders • Maintain actual V/S (Preventive Advisory) or • Modify V/S (Corrective Advisory)	

TA/RA thresholds



TCAS MODES

Ident.: DSC-34-SURV-60-10-10-00020411.0001001 / 21 MAR 17

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

TCAS MODES

The TCAS has three different modes of operations that can be selected on the ATC / TCAS control panel:

- The Traffic Advisory/Resolution Advisory (TA/RA) mode
- The Traffic Advisory Only (TA ONLY) mode
- The standby (STBY) mode.

4 Ident.: DSC-34-SURV-60-10-10-00020411.0002001 / 25 MAY 20

Applicable to: MSN 11482-11597

TCAS MODES

The TCAS has three different modes of operations that can be selected on each of the two RMPs of the center pedestal (and on the third RMP ◁).

- The Traffic Advisory/Resolution Advisory (TA/RA) mode
- The Traffic Advisory Only (TA ONLY) mode
- The standby (STBY) mode.

Ident.: DSC-34-SURV-60-10-10-00020412.0001001 / 21 MAR 17

Applicable to: ALL

TRAFFIC ADVISORY/RESOLUTION ADVISORY (TA/RA) MODE

The TA/RA mode is the normal TCAS operating mode that enables:

- The ND to display all intruders
- The PFD to display the vertical speed orders that indicate the vertical direction that the aircraft should take, in order to avoid a collision.

Ident.: DSC-34-SURV-60-10-10-00020413.0001001 / 21 MAR 17
Applicable to: ALL

TRAFFIC ADVISORY ONLY (TA ONLY) MODE

The TA ONLY mode can be selected:

- Manually in case of aircraft degraded performance (engine failure, landing gear extended), or in specific airports, and for specific procedures (identified by operators) that may provide RA that are neither wanted nor appropriate (e.g. closely-spaced parallel or converging runways)
- Automatically, if TA/RA mode is previously selected and:
  - The windshear alert is triggered
  - The stall warning is triggered
  - GPWS alerts are triggered
  - Aircraft is below 1 000 ft AGL.

When the TCAS is operating in TA ONLY mode:

- All RAs are inhibited and converted into TAs
- TA threshold is set to TAU ≤20 s, irrespective of the aircraft altitude
- No vertical speed advisories are indicated on the PFDs
- “TA ONLY” is displayed on the NDs

Ident.: DSC-34-SURV-60-10-10-00020414.0001001 / 21 MAR 17
Applicable to: ALL

STANDBY MODE

In the standby mode, the advisory generation and surveillance functions are not active. The TCAS does not trigger any alert. No TCAS information can be displayed on the PFDs and NDs.

AP/FD TCAS

Ident.: DSC-34-SURV-60-10-00020415.0002001 / 18 MAY 22
5 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

MODE

The AP/FD TCAS mode is a vertical guidance mode of the AP/FD. In the case the TCAS generates a Resolution Advisory (RA) alert, this mode automatically engages to assist the flight crew to follow the RA orders, and to revert toward initial trajectory:

- Automatically if the AP is engaged, or
- Manually with the guidance of the Flight Director (FD), if the AP is not engaged.

The AP/FD TCAS mode optimizes the vertical speed for a rapid and appropriate response to an RA, and minimizes the deviations from the latest ATC clearance.
When the TCAS is operating in TA ONLY mode, the AP/FD TCAS mode is inhibited.

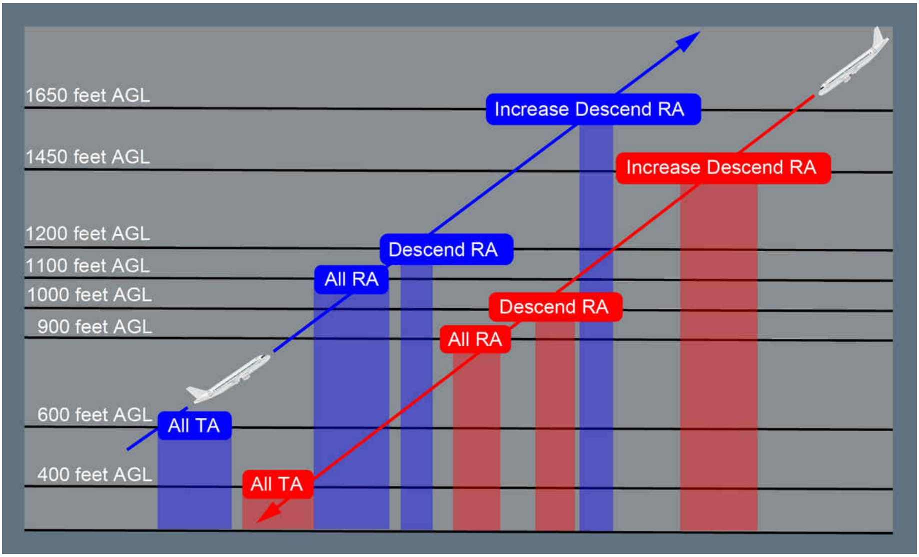
INTRUDER DETECTION

Based on the received information from the intruders, the TCAS may generate the following sequence of alerts:

- **If the TCAS considers the intruder to be a possible collision threat**
  - It generates a visual and aural Traffic Advisory (TA).
  - In that case, the AP/FD TCAS mode automatically arms: TCAS appears on the FMA to inform the flight crew that the AP/FD TCAS mode will be available in the case a Resolution Advisory (RA) is subsequently triggered.
- **If the TCAS considers the intruder to be a real collision threat:**
  - It generates a visual and aural Resolution Advisory (RA).
  - The AP/FD TCAS mode automatically engages: TCAS appears on the FMA. The flight crew has vertical guidance to fly the RA orders, automatically with the AP/FD, or manually with the FDs only (if AP was not engaged).
  - If the A/THR is disconnected, it automatically becomes armed or active, depending on the thrust lever position. When active, the speed/Mach mode engages, and the speed/Mach control becomes selected. For more information, *Refer to DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on A/THR and Speed/Mach Control*.
  - The vertical speed scale on the PFD indicates the vertical speed range within which the aircraft should fly.
- **When the TCAS considers that there is no more collision threat:**
  - It triggers the "CLEAR OF CONFLICT" aural alert.
  - In most of the cases, the AP/FD TCAS mode automatically reverts to V/S mode: The vertical speed target leads the aircraft toward the FCU selected altitude.
    If the altitude capture conditions are met at the clear of conflict, the AP/FD TCAS mode can revert to an altitude acquire, or an altitude hold mode. *Refer to DSC-22_30-40-100 Normal Operations - When a RA is triggered - Consequence on AP/FD Vertical Mode*.

ADVISORY INHIBITION

Ident.: DSC-34-SURV-60-10-00020416.0007001 / 05 MAY 22
Applicable to: ALL

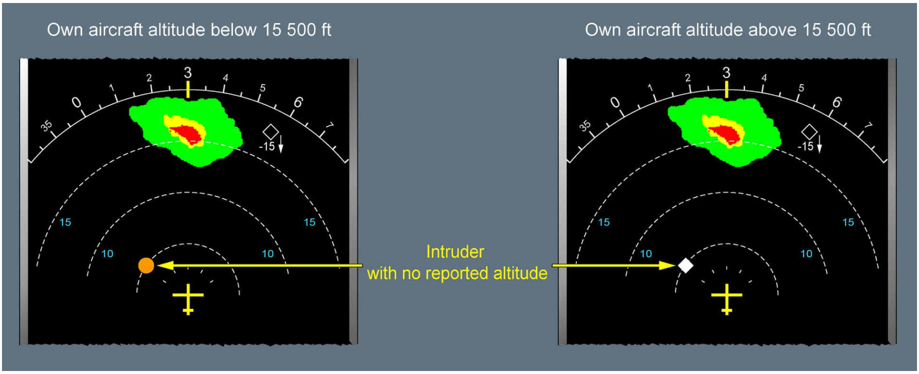

1650 feet AGL
1450 feet AGL
1200 feet AGL
1100 feet AGL
1000 feet AGL
900 feet AGL
600 feet AGL
400 feet AGL
Increase Descend RA
Increase Descend RA
Descend RA
All RA
Descend RA
All RA
All TA
All TA

Some advisories are inhibited depending on the aircraft altitude:
- All intruders flying below 380 ft AGL when the own aircraft altitude is below 1 750 ft AGL in climb or 1 650 ft AGL in descent
- All TA aural messages below 600 ft AGL in climb or below 400 ft AGL in descent
- All RA aural messages below 1 100 ft AGL in climb or 900 ft AGL in descent. In this case, the RA are converted into TA
- “Descend” RA below 1 200 ft AGL in climb or 1 000 ft AGL in descent
- “Increase Descent” RA below 1 650 ft AGL in climb or 1 450 ft AGL in descent
- The AP/FD TCAS ◁ flight guidance mode is inhibited below 900 ft.

TCAS INTRUDER WITH NO REPORTED ALTITUDE

Ident.: DSC-34-SURV-60-10-00022303.0001001 / 05 JUN 18
Applicable to: ALL

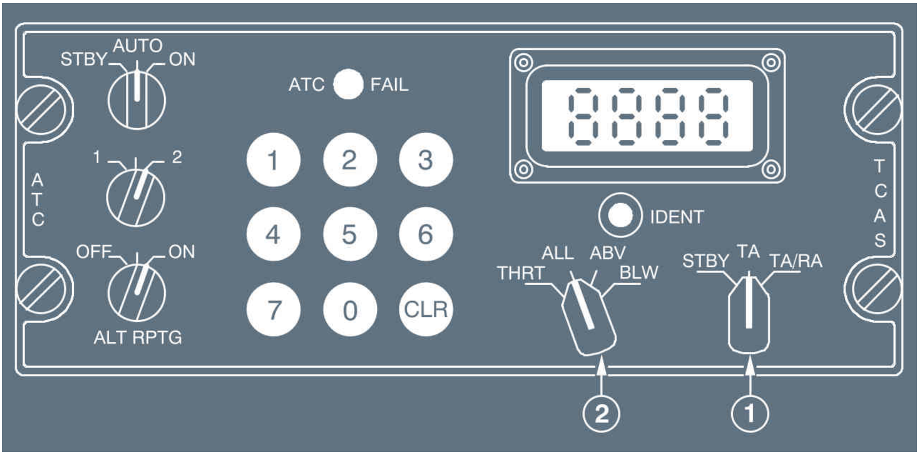
For intruders that do not report their altitude:
- The relative altitude does not appear on ND
- The TCAS never triggers any RA
- The TCAS inhibits the TA when own aircraft altitude is above 15500 ft.


Own aircraft altitude below 15 500 ft
Own aircraft altitude above 15 500 ft
Intruder
with no reported altitude
-15
35
0
1
2
3
4
5
6
7
15
10

ATC/TCAS PANEL

Ident.: DSC-34-SURV-60-20-00001429.0004001 / 01 OCT 12

1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**



(1) Mode sel

TA/RA	:	Normal position. The RAs, TAs and proximate intruders are displayed if the ALT RPTG switch is ON and the transponder is not on STBY.
TA	:	The TCAS does not generate any vertical orders. This mode should be used, in case of degraded aircraft performance (engine failure, landing gear extended, or approach on parallel runways). All RAs are converted into TAs. TAs, proximate and intruders are displayed if the ALT RPTG switch is ON and the transponder is not on STBY The "TA ONLY" white memo is displayed on the NDs.
STBY	:	The TCAS is on standby.

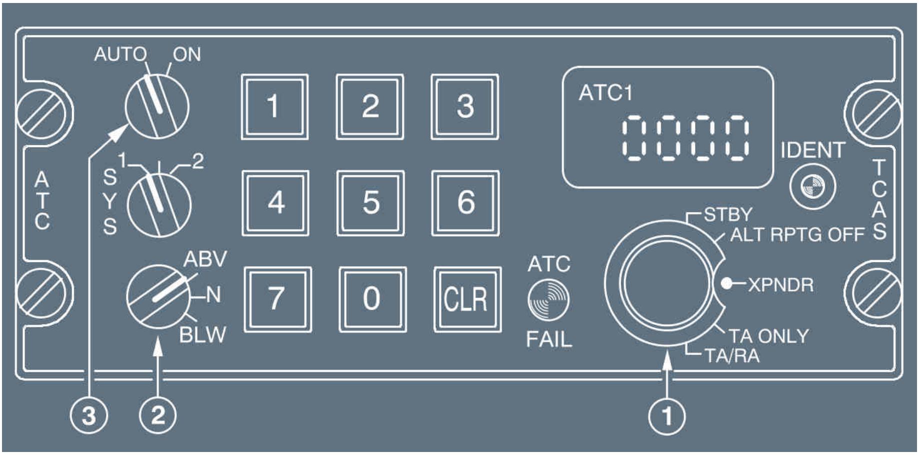
(2) TRAFFIC sel

THRT	:	Proximate and other intruders are displayed only if a TA or RA is present, and they are within 2 700 ft above and 2 700 ft below the aircraft.
ALL	:	Proximate and other intruders are displayed even if no TA or RA is present (full time function). The altitude range is –2700 ft to +2 700 ft.
ABV	:	The same as ALL, except that the other intruders are displayed if within 9 900 ft above the aircraft and 2 700 ft below.

BLW : The same as ALL, except that the other intruders are displayed if within 9 900 ft below the aircraft and 2 700 ft above.

ATC/TCAS PANEL

Ident.: DSC-34-SURV-60-20-00001429.0064001 / 01 OCT 12
Applicable to: MSN 01459



(1) Mode selector

TA/RA : Normal position.
TAs, RAs, proximate and other intruders are displayed.

TA ONLY : This mode should be used, in case of degraded aircraft performance (engine failure, landing gear extended, or approach on parallel runways).
All RAs are converted into TAs. TAs, proximate and other intruders are displayed.

STBY : The TCAS and ATC are on standby.

XPNDR :
- The TCAS is on standby
- On ground : The selected ATC Transponder only operates in the selective aircraft interrogation mode of Mode S
- In flight : The selected ATC Transponder operates.

(2) TRAFFIC selector

ABV : The altitude range is set to +7 000 ft above the aircraft, and -2 700 ft below the aircraft.

N : The altitude range is set to -2 700 ft below the aircraft, and +2 700 ft above the aircraft.

BLW : The altitude range is set to -7 000 ft below the aircraft, and +2 700 ft above the aircraft.

(3) AUTO/ON selector or THRT/ALL selector

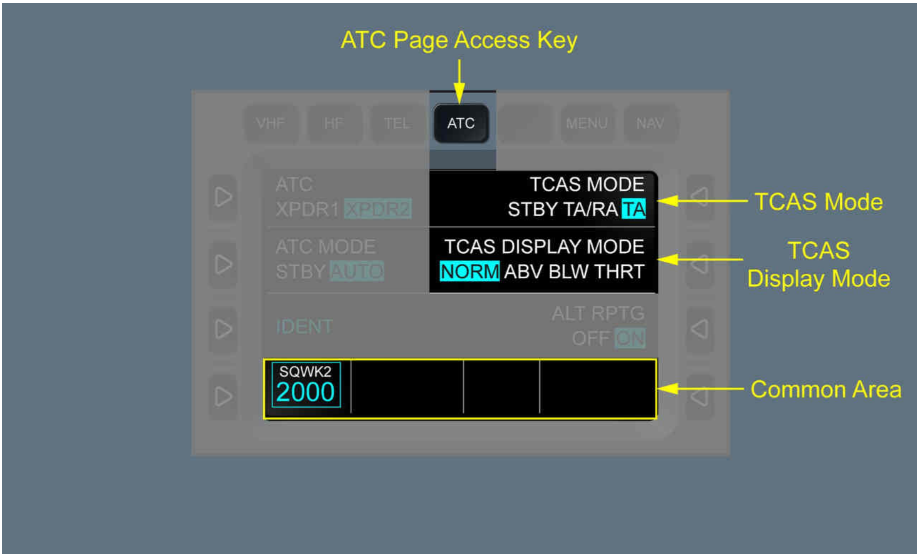
ON (or ALL) : All intruders are displayed.

AUTO (or THRT) : Proximate and other intruders are only displayed, if a TA or RA is already presented.

Note: *Some TCAS control panels are equipped with a THRT/ALL selector, instead of the AUTO/ON selector. The associated functions remain unchanged.*

ATC PAGE

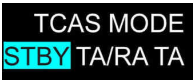
2 Ident.: DSC-34-SURV-60-20-00024212.0001001 / 25 MAY 20
Applicable to: MSN 11482-11597


ATC Page Access Key
VHF
HF
TEL
ATC
MENU
NAV
ATC
XPDR1 XPDR2
TCAS MODE
STBY TA/RA TA
TCAS Mode
ATC MODE
STBY AUTO
TCAS DISPLAY MODE
NORM ABV BLW THRT
TCAS
Display Mode
IDENT
ALT RPTG
OFF ON
SQWK2
2000
Common Area

ATC PAGE ACCESS KEY

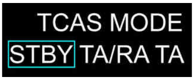
Displays the ATC Page (which controls the TCAS system) from the RMP (*Refer to DSC-23-45-10 RMP External Communication*).

TCAS MODE



The STBY (TA/RA, TA) TCAS mode is selected with the selected XPDR in AUTO mode.
The TA/RA or TA (STBY) mode are not selected. The flight crew can press the RMP R1 key to change the mode selection.
For more information upon TCAS mode, *Refer to DSC-34-SURV-60-10 TCAS Modes*.

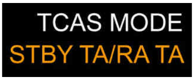
Note: *The flight crew can select the STBY mode on the ATC page whatever the A/C condition (in flight or on ground).*



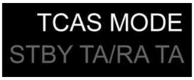
The STBY (TA/RA, TA) TCAS mode is selected with one of the following conditions :
- The selected XPDR is in STBY mode, or
- The altitude data transmission (ALT RPTG) is not activated.

The TA/RA or TA (STBY) mode are not selected. The flight crew can press the RMP R1 key to change the mode selection.
For more information upon TCAS mode, *Refer to DSC-34-SURV-60-10 TCAS Modes*.

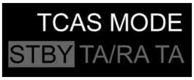
Note: *The flight crew can select the STBY mode on the ATC page whatever the A/C condition (in flight or on ground).*



The selected XPDR is failed. The flight crew cannot modify the TCAS mode.

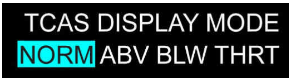


The link between RMP1 and AMU is failed. The flight crew cannot change the TCAS Mode.
If the flight crew switches off the RMP1, then RMP2 and RMP3 display the ATC page with the last valid data know before the failure.



An internal failure has occurred.

TCAS DISPLAY MODE


TCAS DISPLAY MODE
NORM ABV BLW THRT

The NORM (ABV, BLW, THRT) TCAS display mode is selected with all the following conditions:
- The selected XPDR is in AUTO mode, and
- The TCAS is in TA/RA or TA mode.

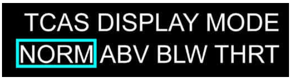
The ABV, BLW or THRT (NORM) TCAS display modes are not selected. The flight crew can press the RMP R2 key to change the mode selection.

NORM : Proximate and other intruders are displayed even if no TA or RA is present (full time function). The altitude range is within 2 700 ft above and 2 700 ft below the aircraft.

ABV : same behavior as NORM TCAS display mode, except that the other intruders are displayed if within 9 900 ft above and 2 700 ft below the aircraft.

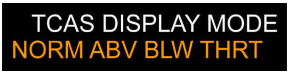
BLW : same behavior as NORM TCAS display mode, except that the other intruders are displayed if within 2 700 ft above and 9 900 ft below the aircraft.

THRT : Proximate and other intruders are displayed only if a TA or RA is present, and they are within 2 700 ft above and 2 700 ft below the aircraft.

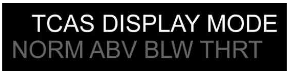

TCAS DISPLAY MODE
NORM ABV BLW THRT

The NORM (ABV, BLW, THRT) TCAS display mode is selected with one of the following conditions:
- The selected XPDR is in STBY mode, and
- The TCAS is in STBY mode.
- The altitude data transmission (ALT RPTG) is not activated.

The ABV, BLW or THRT (NORM) TCAS display modes are not selected. The flight crew can press the RMP R2 key to change the mode selection.

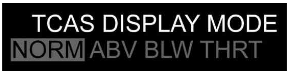

TCAS DISPLAY MODE
NORM ABV BLW THRT

The selected XPDR is failed. The flight crew cannot modify the TCAS display mode.


TCAS DISPLAY MODE
NORM ABV BLW THRT

The link between RMP1 and AMU is failed. The flight crew cannot change the TCAS display Mode.

If the flight crew switches off the RMP1, then RMP2 and RMP3 display the ATC page with the last valid data know before the failure.


TCAS DISPLAY MODE
NORM ABV BLW THRT

An internal failure has occurred.

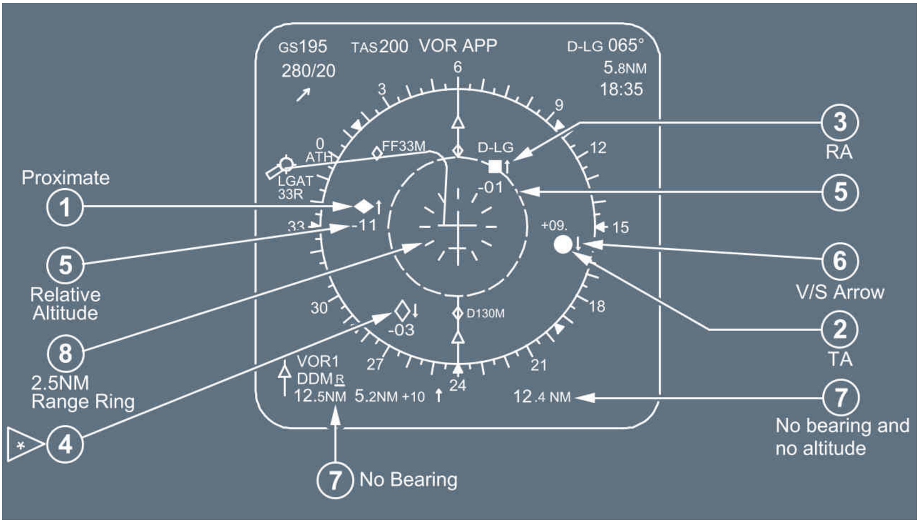
COMMON AREA

Refer to DSC-23-45-10 RMP External Communication.

ND INDICATIONS

Ident.: DSC-34-SURV-60-20-00020418.0002001 / 05 JUN 18
Applicable to: ALL

The traffic is displayed in all ROSE modes and ARC mode when 10, 20 or 40 NM range is selected. Only the 8 most threatening intruders are displayed.


GS195
TAS200
VOR APP
280/20
D-LG 065°
5.8NM
18:35
6
3
9
12
0
ATH
FF33M
D-LG
LGAT
33R
-01
33
-11
+09.
15
30
-03
D130M
18
VOR1
DDMR
12.5NM
5.2NM +10
27
24
21
12.4 NM
Proximate
1
5
Relative Altitude
8
2.5NM Range Ring
4
3
RA
5
6
V/S Arrow
2
TA
7
No bearing and no altitude
7
No Bearing

(1) Proximate intruder
Indicated by a white filled diamond.

(2) TA intruder
Indicated by an amber circle.
Associated with the TRAFFIC-TRAFFIC aural message.

(3) RA intruder
Indicated by a red square.
Associated with vertical orders displayed on the PFD and aural messages.

(4) Other intruders ◁
Indicated by a white empty diamond.

Note: *If the range of an intruder is not available, the intruder is not displayed. An intruder may be partially displayed when its range is out of scale.*

(5) Relative altitude
Indicated in hundred of feet above or below the symbol depending on the intruder position.

(6) Vertical speed arrow
Displayed only if the intruder V/S > 500 ft/min.
The relative altitude and vertical speed arrow are displayed in the same color as the associated intruder symbol.
When an intruder does not report its altitude, the relative altitude and the vertical movement are not displayed.

(7) No bearing intruder

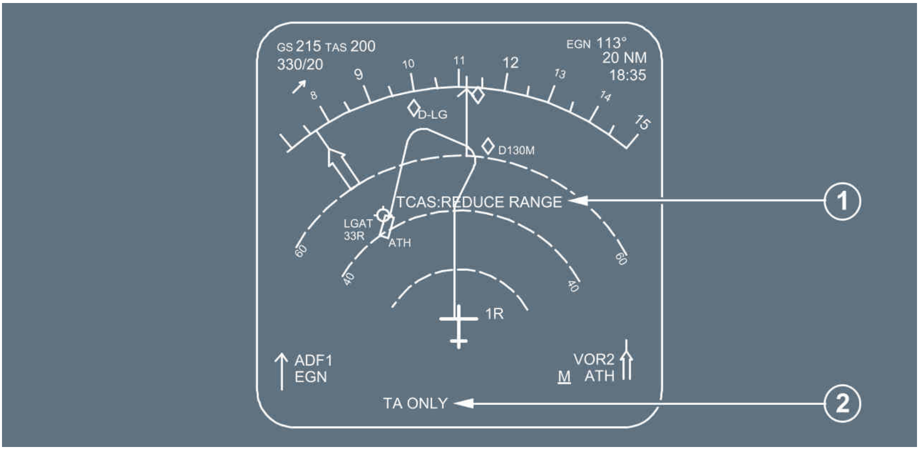
If the bearing of TA or RA intruder is not available the following data is presented in digital form at the bottom of the ND:
- range
- relative altitude and vertical speed arrow if available.

Displayed amber or red according to threat level.

(8) Range ring
A 2.5 NM white range ring is displayed when a 10 NM or 20 NM range is selected.

TCAS MESSAGES

Ident.: DSC-34-SURV-60-20-00020419.0001001 / 17 MAR 17
Applicable to: ALL


GS 215 TAS 200
330/20
EGN 113°
20 NM
18:35
8
9
10
11
12
13
14
15
D-LG
D130M
TCAS:REDUCE RANGE
LGAT
33R
ATH
60
40
40
60
1R
ADF1
EGN
VOR2
M ATH
TA ONLY
1
2

(1) Mode and range messages

Following messages can be displayed to draw pilot’s attention:

TCAS : REDUCE RANGE	:	Displayed when a TA or RA is detected and ND range above 40 NM.
TCAS : CHANGE MODE	:	Displayed when a TA or RA is detected and ND mode is PLAN.

Displayed amber or red depending on the advisory level (TA or RA).

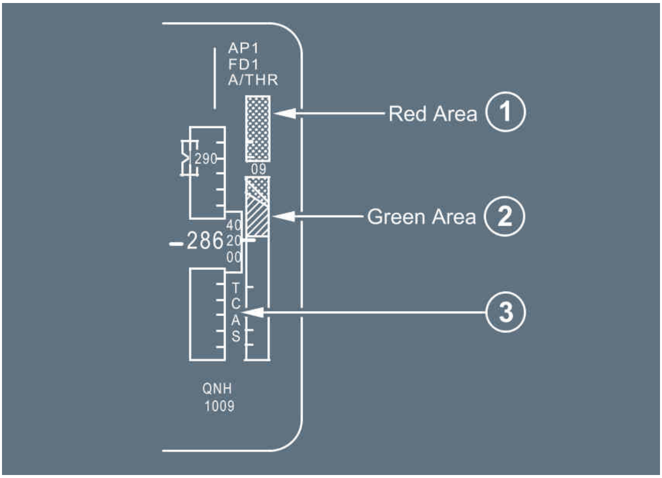
(2) TCAS operation messages

TCAS	:	Displayed in case of TCAS internal failure.
TA ONLY	:	Displayed white when the TA mode is selected automatically, or manually by the flight crew.

PFD INDICATIONS

Ident.: DSC-34-SURV-60-20-00020420.0003001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

In case of RA detection, the PFD presents vertical orders on the vertical speed scale. The vertical speed scale background is normally grey, but may be partially replaced by green and/or red areas.



(1) Red area
Indicates the vertical speed range, when there is a high risk of conflict.

(2) Green area
Indicates the recommended vertical speed range. It is wider than the red area.

Note:
- *The aircraft can also fly in the grey vertical speed range, without the risk of conflict (preventive RA).*
- *The color of the digits corresponds to the appropriate area.*
- *In case of RA detection, the vertical speed needle that is normally green, becomes white.*

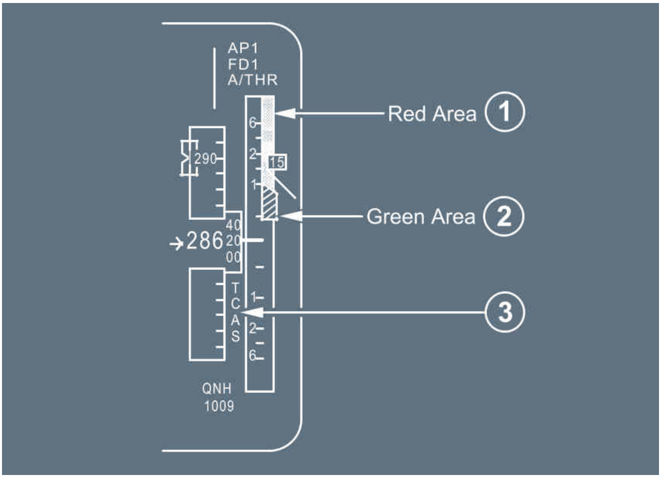
(3) TCAS message
It is displayed when the TCAS cannot deliver RA data, or in case of an internal TCAS failure, provided that the TCAS is not in standby.

PFD INDICATIONS

Ident.: DSC-34-SURV-60-20-00020420.0005001 / 17 MAR 17

3 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

In case of RA detection, the vertical speed scale becomes rectangular and the PFD presents vertical orders on the vertical speed scale. The vertical speed scale background is normally grey, but may be partially replaced by green and/or red areas.



(1) Red area
Indicates the vertical speed range, when there is a high risk of conflict.

(2) Green area
Indicates the recommended vertical speed range. It is wider than the red area.

Note:
- *The aircraft can also fly in the grey vertical speed range, without the risk of conflict (preventive RA).*
- *The color of the digits corresponds to the appropriate area.*
- *In case of RA detection, the vertical speed needle that is normally green, becomes white.*

(3) TCAS message
Appears in amber provided that the TCAS is not in standby, when the TCAS cannot deliver RA data, or in case of an internal TCAS failure.

AURAL MESSAGES

Ident.: DSC-34-SURV-60-20-00001433.0018001 / 08 FEB 13

4 **Applicable to: MSN 01158-01246, 01376, 01518, 01593-01628, 01801, 01826, 01837-01855, 02321, 02734, 02896-02904, 03002-03047, 03111, 03391, 04441, 04827-04860, 05184-05987, 06097, 06121, 06139-09324, 10949-11597**

TA/RA detection is associated with the following messages:

"TRAFFIC TRAFFIC" : Only in case of TA detection.
"CLIMB CLIMB" : Climb at the vertical speed indicated by the green area on the PFD.

"CLIMB, CROSSING CLIMB" (twice) : Same as above. Indicates that you will cross through the intruder altitude.
"INCREASE CLIMB" (twice) : Triggered after the CLIMB message, if vertical speed is insufficient to achieve safe vertical separation.
"DESCEND DESCEND" : Descend at the vertical speed indicated by the green area on the PFD.
"DESCEND, CROSSING DESCEND" (twice) : Same as above. Indicates that you will cross through the intruder altitude.
"INCREASE DESCEND" (twice) : Triggered after the DESCEND message, if the vertical speed is insufficient to achieve safe vertical separation.
"LEVEL OFF, LEVEL OFF" : Set the Vertical Speed to 0.
"CLIMB CLIMB NOW" (twice) : Triggered after the DESCEND message, if the intruder trajectory has changed.
"DESCEND DESCEND NOW" (twice) : Triggered after the CLIMB message, if the intruder trajectory has changed.
"MONITOR VERTICAL SPEED" : Ensure that the vertical speed remains outside the red area.
Triggered only once, in case of preventive RA.
"MAINTAIN VERTICAL SPEED, MAINTAIN" : Maintain the vertical speed indicated on the green area of the PFD.
"MAINTAIN VERTICAL SPEED, CROSSING MAINTAIN" : Maintain the vertical speed indicated on the green area of the PFD.
Indicates that you will cross through the intruder altitude.
"CLEAR OF CONFLICT" : The range increases and separation is adequate. Return to assigned clearance.

AURAL MESSAGES

Ident.: DSC-34-SURV-60-20-00001433.0002001 / 15 FEB 11
Applicable to: MSN 01143, 01251, 01459, 01825, 01832, 02014, 02887, 02924, 03058, 03180-03313, 03565-03710, 03733-04389, 04446-04773, 04953-05107

TA/RA detection is associated with the following messages:

"TRAFFIC TRAFFIC" : Only in case of TA detection.
"CLIMB CLIMB" : Climb at the vertical speed indicated by the green area on the PFD.
"CLIMB, CROSSING CLIMB" (twice) : Same as above. Indicates that you will cross through the intruder altitude.
"INCREASE CLIMB" (twice) : Triggered after the CLIMB message, if vertical speed is insufficient to achieve safe vertical separation.

"DESCEND DESCEND"	Descend at the vertical speed indicated by the green area on the PFD.
"DESCEND, CROSSING DESCEND" (twice)	Same as above. Indicates that you will cross through the intruder altitude.
"INCREASE DESCEND" (twice)	Triggered after the DESCEND message, if the vertical speed is insufficient to achieve safe vertical separation.
"ADJUST VERTICAL SPEED, ADJUST"	Adjust the vertical speed to that indicated on the green area of the PFD, reducing climb vertical speed or descent vertical speed, as appropriate.
"CLIMB CLIMB NOW" (twice)	Triggered after the DESCEND message, if the intruder trajectory has changed.
"DESCEND DESCEND NOW" (twice)	Triggered after the CLIMB message, if the intruder trajectory has changed.
"MONITOR VERTICAL SPEED"	Ensure that the vertical speed remains outside the red area. Triggered only once, in case of preventive RA.
"MAINTAIN VERTICAL SPEED, MAINTAIN"	Maintain the vertical speed indicated on the green area of the PFD.
"MAINTAIN VERTICAL SPEED, CROSSING MAINTAIN"	Maintain the vertical speed indicated on the green area of the PFD. Indicates that you will cross through the intruder altitude.
"CLEAR OF CONFLICT"	The range increases and separation is adequate. Return to assigned clearance.

MEMO DISPLAY

Ident.: DSC-34-SURV-60-20-00020422.0002001 / 04 NOV 20

5 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

TCAS STBY : This memo appears during flight phases other than 6 when:
- ATC STBY is selected by the flight crew, or
- TCAS STBY is selected by the flight crew, or
- ALT RPTG sw is OFF, or
- The selected ATC is failed, or
- Both RAs are failed, or
- A failure of the ADR in use on the selected ATC/XPDR.

TCAS STBY : This memo appears during flight phase 6 when:
- ATC STBY is selected by the flight crew, or
- TCAS STBY is selected by the flight crew, or
- ALT RPTG sw is OFF, or
- The selected ATC is failed, or
- Both RAs are failed, or
- A failure of the ADR in use on the selected ATC/XPDR.

MEMO DISPLAY

Ident.: DSC-34-SURV-60-20-00020422.0001001 / 17 MAR 17
Applicable to: MSN 01251

TCAS STBY : This memo appears in green when:

- ATC STBY or TCAS STBY is selected by the crew, or
- ALT RPTG sw is OFF, or
- both ATCs or both RAs are failed.

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UNDUE NAV TCAS FAULT

Ident.: DSC-34-SURV-60-30-00024314.0003001 / 10 MAY 21
Applicable to: MSN 02014, 06561

DESCRIPTION

On ground, an undue NAV TCAS FAULT alert is triggered when:
- The ADIRUs are off, or
- IR1 is not yet aligned.

The alert automatically disappears when the ADIRUs are powered and IR1 is aligned.

OPERATIONAL RECOMMENDATIONS

On ground, if the NAV TCAS FAULT alert is triggered in the above configurations, the flight crew can disregard it.

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AIRCRAFT SYSTEMS

OXYGEN

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DSC-35-10 General

Description.. A

DSC-35-20 Fixed Oxygen System for Cockpit

DSC-35-20-10 Description

General.. A
Operation.. B
Schematic.. C
Mask Setting.. D
Mask Stowage.. E

DSC-35-20-20 Controls and Indicators

Overhead Panel.. A
Stowage Box.. B
Crew Oxygen Mask.. C
Pressure Regulator.. D
ECAM DOOR/OXY Page.. E

DSC-35-20-30 How to

How to Test the Mask.. A

DSC-35-30 Fixed Oxygen System for Cabin

DSC-35-30-10 Description

General.. A
Operation.. B
Schematic.. C

DSC-35-30-20 Controls and Indicators

Overhead Panel.. A
Overhead Maintenance Panel.. B
Memo Display.. C

DSC-35-40 Portable Oxygen System

DSC-35-40-10 Description

Flight Crews Portable Oxygen System.. A
Using the Hood.. B

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Localization Title	Toc Index	ID	Reason
DSC-35-20-30 How to Test the Mask	A	1	Documentation update: Addition of "How to Test the Mask" documentary unit

DSC-35-20-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-20-10 Schematic	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-20-20 ECAM DOOR/OXY Page	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-20-30 How to Test the Mask	A	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
DSC-35-30-20 HI ALT SET	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-30-20 OXY PAX ON	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-40-10 Flight Crews Portable Oxygen System	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-35-40-10 Using the Hood	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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DESCRIPTION

Ident.: DSC-35-10-00001448.0001001 / 20 DEC 10
Applicable to: ALL

The oxygen system consists of:

- A cockpit-fixed oxygen system, which supplies adequate breathing oxygen to the cockpit occupants in case of depressurization, or emission of smoke and noxious gases.
- A cabin-fixed oxygen system, which supplies oxygen for cabin occupants (passengers and cabin crew) in case of depressurization.
- A portable oxygen system, which is provided in both the cockpit and cabin and is to be used:
  - As PROTECTION for the crew during on board emergencies.
  - For FIRST AID purposes.

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GENERAL

Ident.: DSC-35-20-10-00017801.0002001 / 21 MAR 16
1 **Applicable to: MSN 08495-09324, 10949-11597**

The cockpit's fixed oxygen system is separated into two sub-systems:
- One sub-system supplies oxygen to the Captain and the 3rd Occupant,
- One sub-system supplies oxygen to the First Officer and the 4th Occupant ◁ .

The cockpit's fixed oxygen system consists of:
- Two high-pressure cylinders.
- Two pressure regulators, connected directly to the cylinders that deliver oxygen, at a pressure suitable for users.
- Four overpressure safety systems to vent oxygen overboard, through an overboard discharge indicator, if the pressure becomes too high.
- Two supply solenoid valves that allow the crew to shut off the distribution system.
- Three (or four ◁) full-face quick-donning masks, stowed in readily-accessible boxes adjacent to the crewmembers' seats (one at each seat).

GENERAL

Ident.: DSC-35-20-10-00017801.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

The cockpit's fixed oxygen system consists of :
- A high-pressure cylinder, located in the left-hand lower fuselage.
- A pressure regulator, connected directly to the cylinder that delivers oxygen, at a pressure suitable for users.
- Two overpressure safety systems to vent oxygen overboard, through a safety port, if the pressure becomes too high.
- A supply solenoid valve that allows the crew to shut off the distribution system.
- Three (or four ◁) full-face quick-donning masks, stowed in readily-accessible boxes adjacent to the crewmembers' seats (one at each seat).

OPERATION

Ident.: DSC-35-20-10-00001450.0001001 / 21 MAR 16
Applicable to: ALL

The crewmember squeezes the red grips to pull the mask out of its box, and this action causes the mask harness to inflate.
A mask-mounted regulator supplies a mixture of air and oxygen or pure oxygen, or performs emergency pressure control. With the regulator set to NORMAL, the user breathes a mixture of cabin

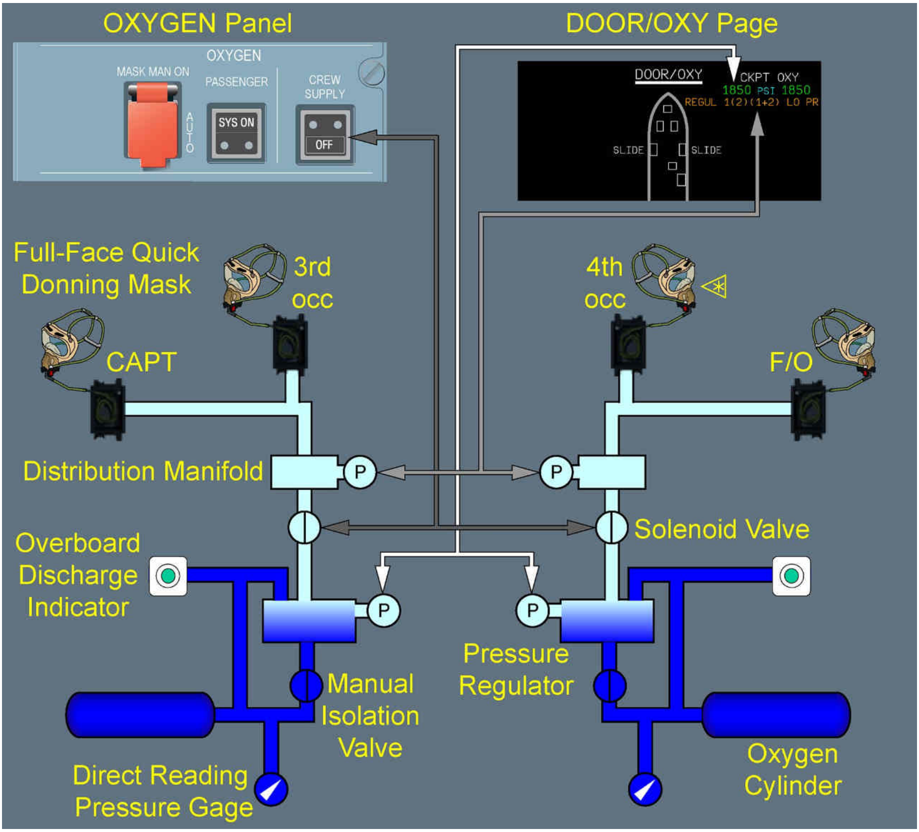
air and oxygen up to the cabin altitude at which the regulator supplies 100 % oxygen. The user can select 100 %, in which case the regulator supplies pure oxygen at all cabin altitudes.
If the situation calls for it, the user can use the emergency overpressure rotating knob and receive pure oxygen at positive pressure.
The storage box contains a microphone lead, with a quick-disconnect, for connection to the appropriate mask microphone cable.

Note: *Each mask may have a removable film that protects the visor against scratches. This strip is optional and may be removed from the mask at any time.*

SCHEMATIC

Ident.: DSC-35-20-10-00017802.0002001 / 21 MAR 16

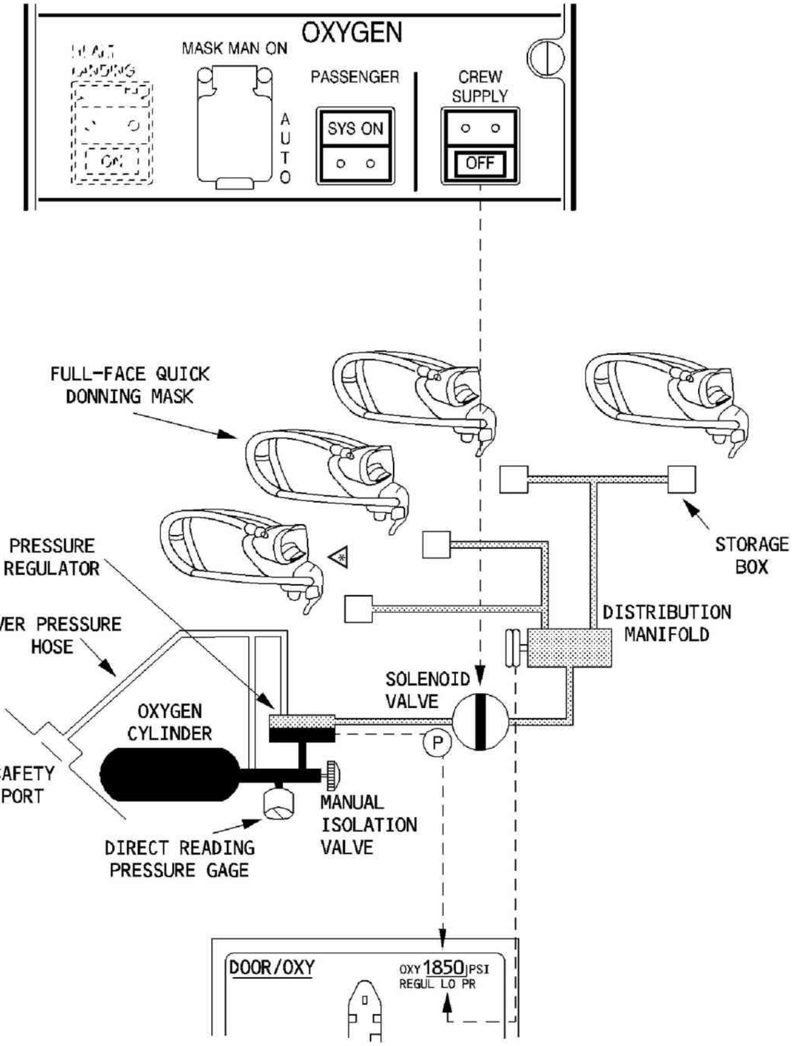
2 **Applicable to: MSN 08495-09324, 10949-11597**


OXYGEN Panel
OXYGEN
MASK MAN ON
PASSENGER
CREW SUPPLY
SYS ON
OFF
AUTO
DOOR/OXY Page
DOOR/OXY
CKPT OXY
1850 PSI 1850
REGUL 1(2)(1+2) LO PR
SLIDE
SLIDE
Full-Face Quick Donning Mask
3rd occ
4th occ
CAPT
F/O
Distribution Manifold
P
P
Solenoid Valve
Overboard Discharge Indicator
P
P
Pressure Regulator
Manual Isolation Valve
Direct Reading Pressure Gage
Oxygen Cylinder

SCHEMATIC

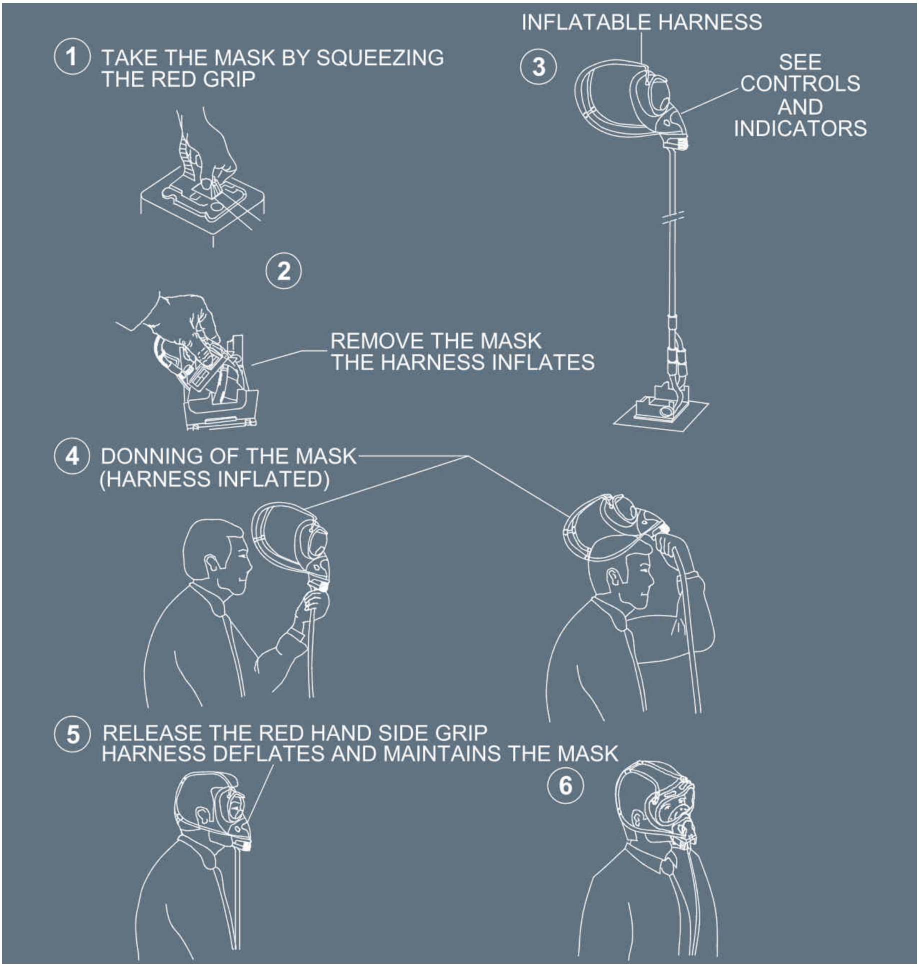
Ident.: DSC-35-20-10-00017802.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098


HI ALT
LANDING
ON
MASK MAN ON
AUTO
OXYGEN
PASSENGER
SYS ON
CREW
SUPPLY
OFF
FULL-FACE QUICK
DONNING MASK
STORAGE
BOX
PRESSURE
REGULATOR
OVER PRESSURE
HOSE
DISTRIBUTION
MANIFOLD
SOLENOID
VALVE
OXYGEN
CYLINDER
P
SAFETY
PORT
MANUAL
ISOLATION
VALVE
DIRECT READING
PRESSURE GAGE
DOOR/OXY
OXY 1850 PSI
REGUL LO PR

MASK SETTING

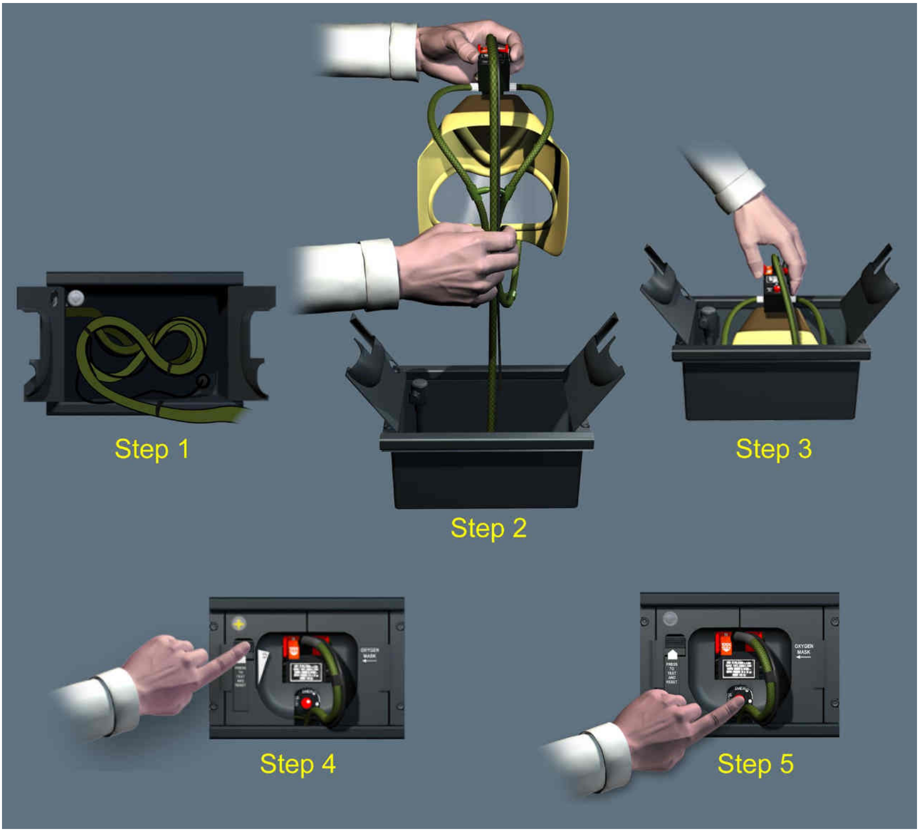
Ident.: DSC-35-20-10-00016919.0001001 / 21 MAR 16
Applicable to: ALL


① TAKE THE MASK BY SQUEEZING THE RED GRIP
INFLATABLE HARNESS
③
SEE CONTROLS AND INDICATORS
②
REMOVE THE MASK
THE HARNESS INFLATES
④ DONNING OF THE MASK
(HARNESS INFLATED)
⑤ RELEASE THE RED HAND SIDE GRIP
HARNESS DEFLATES AND MAINTAINS THE MASK
⑥

Note: *The captain (first officer) must exercise caution and turn the head to the right (left) in the direction of the first officer (captain) in order to ensure fast donning of the mask when the HUD ◁ on the captain (first officer) side is deployed.*

MASK STOWAGE

Ident.: DSC-35-20-10-00001453.0001001 / 03 NOV 22
Applicable to: ALL



STEP 1

Coil the supply hose that is connected to the crew oxygen mask in an "eight (8)" symbol and place it in the bottom of the stowage box.

STEP 2

Position the remaining hose in the middle of the mask.
Fold the two harness portions together.

STEP 3

Put the mask in the stowage box.
Make sure that the mask touches the bottom of the stowage box.

STEP 4

Close the doors of the mask stowage box.
Firmly press the PRESS TO TEST AND RESET pb.
When released, check that the OXY ON flag disappears.

STEP 5

Press the EMERGENCY selector, and check that the blinker remains black.
Return the N/100% selector to the 100% position.

CAUTION	Maintaining the EMERGENCY selector in the EMERGENCY position can deplete the crew oxygen cylinder.

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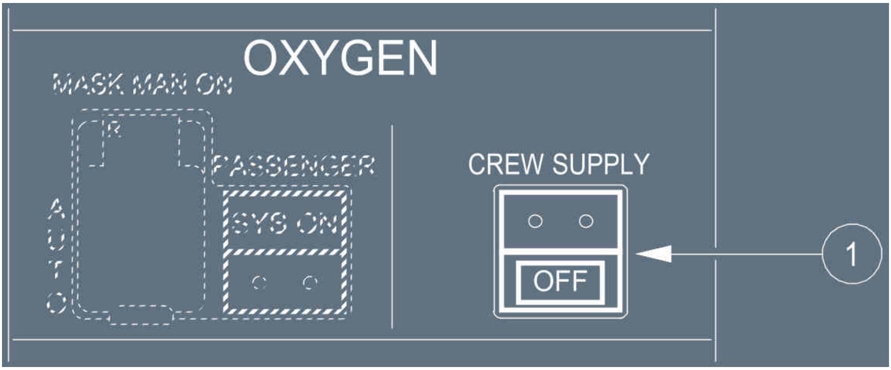
OVERHEAD PANEL

Ident.: DSC-35-20-20-00017803.0001001 / 21 MAR 16
Applicable to: ALL


OXYGEN
MASK MAN ON
AUTO
R
PASSENGER
SYS ON
CREW SUPPLY
OFF
1

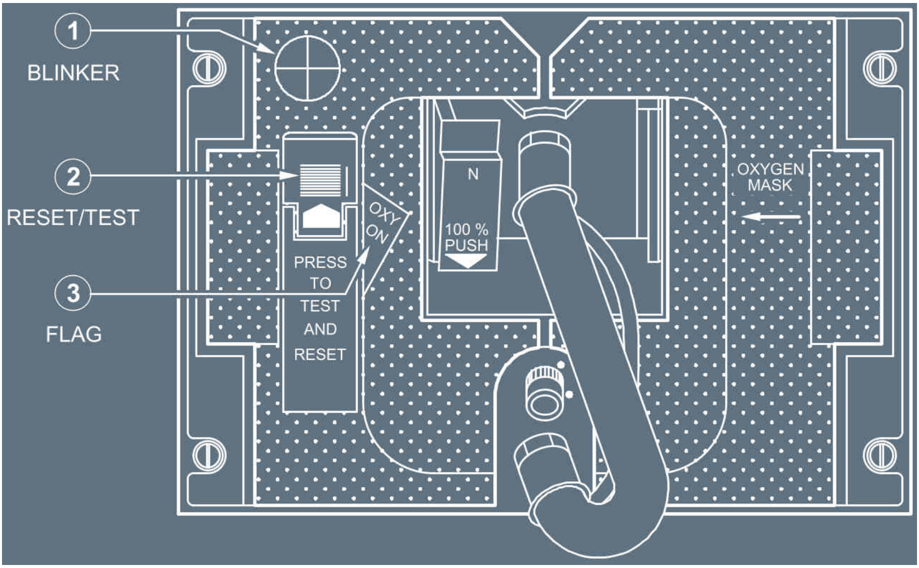
(1) CREW SUPPLY pb
This pushbutton controls the solenoid valve.

On : The valve is open, and supplies low pressure oxygen to the masks (normal position in flight).

OFF: The valve is closed, and the white light comes on.

STOWAGE BOX

Ident.: DSC-35-20-20-00001455.0001001 / 22 MAY 12
Applicable to: ALL



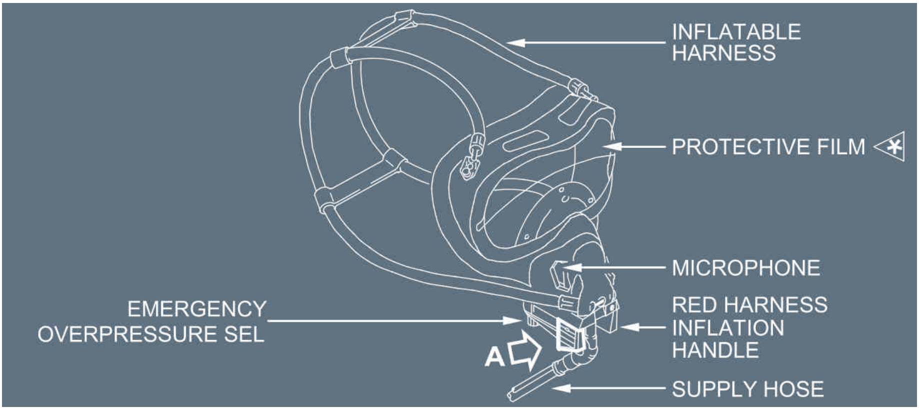
(1) Blinker flowmeter (yellow)
This indicator flashes when oxygen is flowing.

(2) RESET/TEST control slide
The crewmember presses the slide, and pushes it in the direction of the arrow to test: the operation of the blinker; the regulator supply; system sealing downstream of the valve; and the regulator sealing and system operation. Pressing the RESET control slide, after the oxygen mask has been used, cuts off the oxygen, and the mask microphone.

(3) OXY ON flag
As soon as the left flap door opens, the mask is supplied with oxygen and, once it closes (mask still supplied with oxygen), the “OXY ON” flag appears.

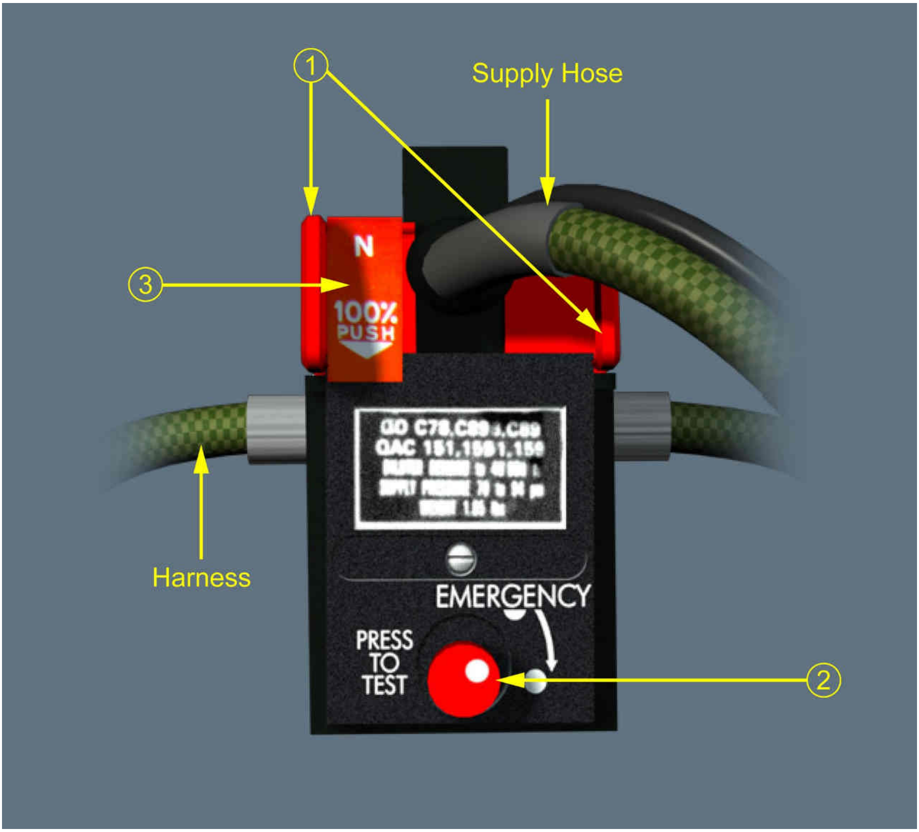
CREW OXYGEN MASK

Ident.: DSC-35-20-20-00001456.0001001 / 21 MAR 16
Applicable to: ALL


INFLATABLE HARNESS
PROTECTIVE FILM
MICROPHONE
RED HARNESS INFLATION HANDLE
SUPPLY HOSE
EMERGENCY OVERPRESSURE SEL
A

PRESSURE REGULATOR

Ident.: DSC-35-20-20-00001457.0001001 / 24 NOV 15
Applicable to: ALL


①
Supply Hose
③
N
100%
PUSH
Harness
EMERGENCY
PRESS
TO
TEST
②

(1) Red grips
Squeezing the right-hand side grip unlocks the two-flap door, and permits the harness to inflate.

(2) EMERGENCY pressure selector

Use of this selector creates on overpressure which eliminates condensation or fogging of the mask, and prevents smoke, smell or ashes from entering the mask.

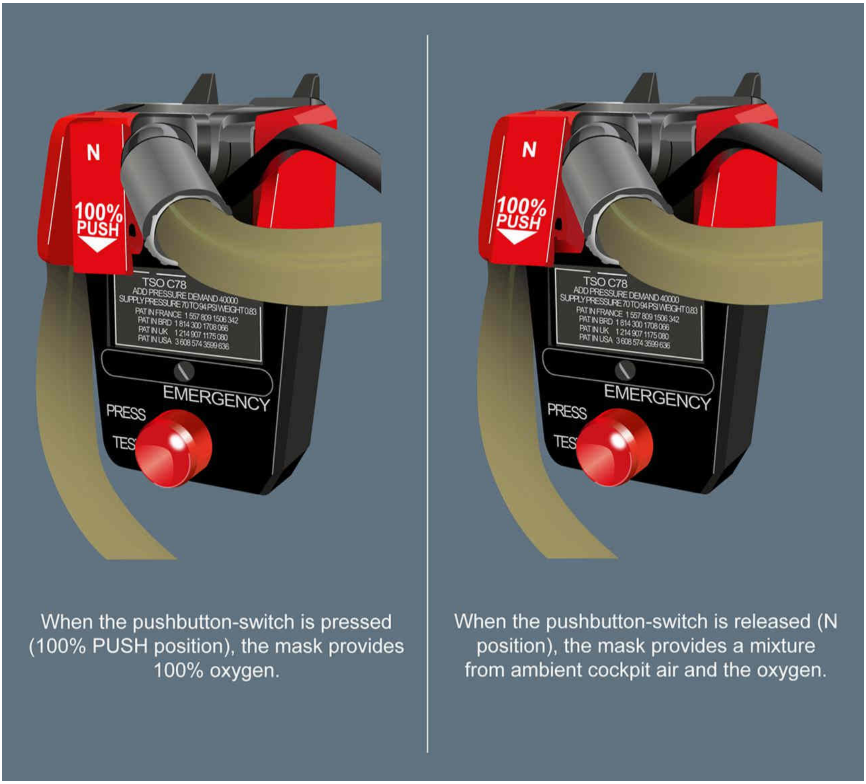
- Pressing this knob generates an overpressure for a few seconds.
- Turning the knob, in the direction of the arrow, generates a permanent overpressure.

Note: *1. Overpressure supply is automatically started, when cabin altitude exceeds 30 000 ft.*
2. Overpressure supply is available only when the N/100% selector is set on the on the 100 % position.

(3) N/100 % selector

This two-position button is locked down (100% position) when the crewmember pulls the mask out of the stowage.Pushing the button up from underneath releases it, and it pops up to the N (normal) position. Pressing it again returns it to 100 %.

100 %	:	The mask delivers 100 % oxygen.
N	:	The mask provides the flight crew with a mixture of air and oxygen. This mixture changes with cabin altitude. The higher the cabin altitude, the more oxygen the mask provides, until the mask supplies 100 % oxygen.


N
100% PUSH
TSO C78
EMERGENCY
PRESS
TEST
N
100% PUSH
TSO C78
EMERGENCY
PRESS
TEST

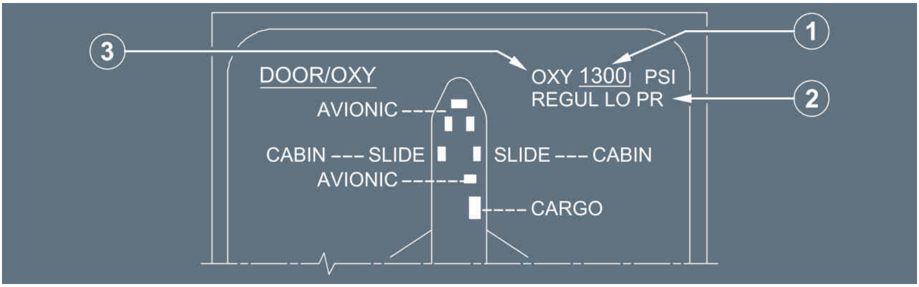
When the pushbutton-switch is pressed (100% PUSH position), the mask provides 100% oxygen.

When the pushbutton-switch is released (N position), the mask provides a mixture from ambient cockpit air and the oxygen.

ECAM DOOR/OXY PAGE

Ident.: DSC-35-20-20-00001458.0001001 / 21 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


③
①
②
DOOR/OXY
OXY 1300 PSI
REGUL LO PR
AVIONIC
CABIN
SLIDE
SLIDE
CABIN
AVIONIC
CARGO

(1) OXY pressure indication
It is in green, when the pressure is ≥ 400 PSI.
It is in amber, when the pressure is < 400 PSI.
On ground, an amber half frame appears when oxygen pressure is < 1 500 PSI.
In this case, the flight crew must check that the remaining quantity is not below the minimum (*Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure*).

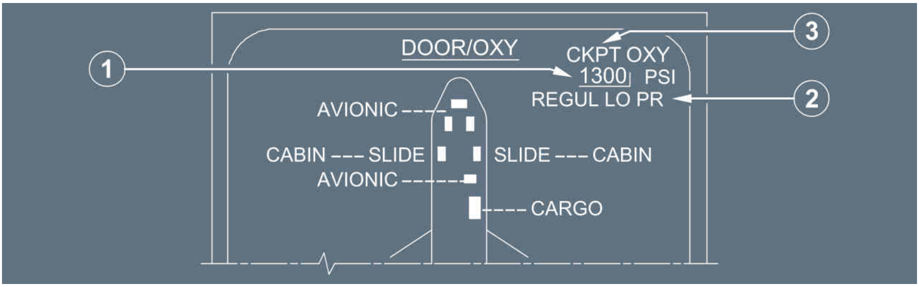
(2) REGUL LO PR indication
It is in amber, if oxygen pressure on the low-pressure circuit is low (50 PSI).

(3) OXY indication
It is normally in green.

It becomes amber, when:
- Pressure goes below 400 PSI
- Low oxygen pressure is detected
- The OXYGEN CREW SUPPLY pushbutton switch on the overhead panel is OFF.

ECAM DOOR/OXY PAGE

Ident.: DSC-35-20-20-00001458.0004001 / 21 MAR 17
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876



(1) OXY pressure indication
It is in green, when the pressure is ≥ 800 PSI.
It pulses in green, when the pressure is < 800 PSI (the DOOR/OXY SD page is automatically displayed).
It is in amber, when the pressure is < 400 PSI.
On ground, an amber half frame appears when oxygen pressure is < 1 500 PSI.
In this case, the flight crew must check that the remaining quantity is not below the minimum (*Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure*).

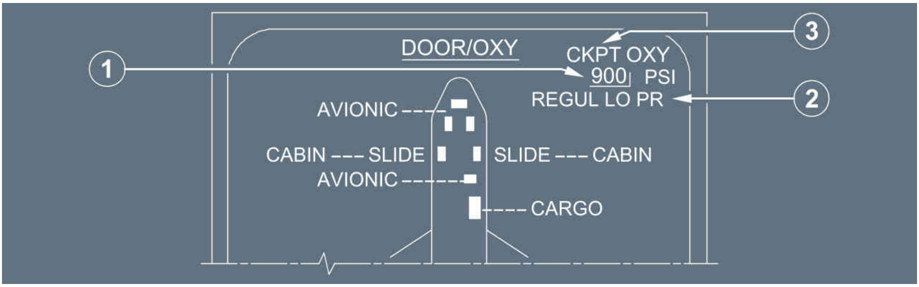
(2) REGUL LO PR indication
It is in amber, if oxygen pressure on the low-pressure circuit is low (50 PSI).

(3) CKPT OXY indication
It is normally in white.

It becomes amber, when:
- Pressure goes below 400 PSI
- Low oxygen pressure is detected
- The overhead panel's OXYGEN CREW SUPPLY pb is OFF.

ECAM DOOR/OXY PAGE

Ident.: DSC-35-20-20-00001458.0005001 / 21 MAR 17
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098



(1) OXY pressure indication
It is in green, when the pressure is ≥ 600 PSI.
It pulses in green, when the pressure is < 600 PSI (the DOOR/OXY SD page is automatically displayed).
It is in amber, when the pressure is < 300 PSI.
On ground, an amber half frame appears when oxygen pressure is < 1 000 PSI.
In this case, the flight crew must check that the remaining quantity is not below the minimum (*Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure*).

(2) REGUL LO PR indication
It is in amber, if oxygen pressure on the low-pressure circuit is low (50 PSI).

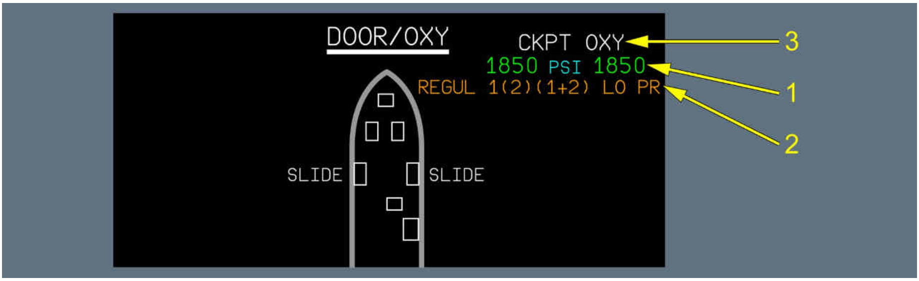
(3) CKPT OXY indication
It is normally in white.

It becomes amber, when:
- Pressure goes below 300 PSI
- Low oxygen pressure is detected
- The OXYGEN CREW SUPPLY pb on the overhead panel is OFF.

ECAM DOOR/OXY PAGE

Ident.: DSC-35-20-20-00001458.0006001 / 21 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**



(1) OXY pressure indication
CAPT OXY pressure indication appears on the left side and F/O OXY pressure indication on the right side.
It is in green, when the pressure is ≥ 500 PSI.
It pulses in green, when the pressure is < 500 PSI (the DOOR/OXY SD page is automatically displayed).
It is in amber, when the pressure is < 200 PSI.
On ground, an amber half frame appears when oxygen pressure is < 800 PSI.
In this case, the flight crew must check that the remaining quantity is not below the minimum (*Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure*).

(2) REGUL 1(2)(1+2) LO PR indication
It is in amber, if oxygen pressure on the low-pressure circuit is low (50 PSI).

(3) CKPT OXY indication
It is normally in white.

It becomes amber, when:
- At least one of the bottle pressure is below 200 PSI
- Low oxygen pressure is detected on at least on of the bottle
- On the OXYGEN overhead panel, the CREW SUPPLY pb is set to OFF.

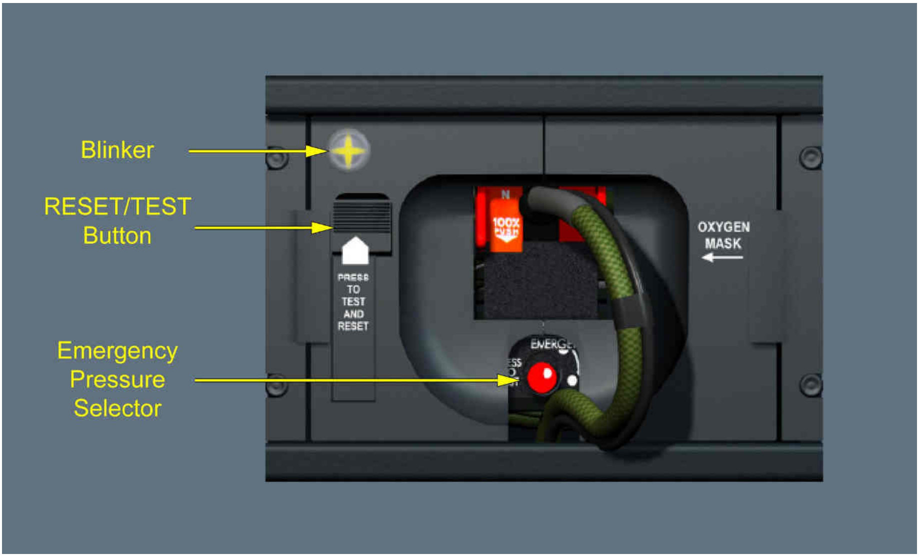
Intentionally left blank

HOW TO TEST THE MASK

1 Ident.: DSC-35-20-30-00024268.0003001 / 04 NOV 20
Applicable to: MSN 11482-11597

WARNING	To prevent hearing damage to the ground crew connected to the intercom system, inform them that a loud noise may be heard in the headset when performing the oxygen mask test.

Mask Stowage Box


Blinker
RESET/TEST Button
Emergency Pressure Selector
PRESS TO TEST AND RESET
N
100% PUSH
OXYGEN MASK
EMERG

- **On the OXYGEN panel:**
  CREW SUPPLY pb....................CHECK ON
- **On the glareshield:**
  LOUDSPEAKERS....................ON
- **On the RMP:**
  INT reception knob....................PRESS OUT - ADJUST
  INT/RAD sw....................INT

- **On the mask stowage box:**
  - Press and hold the RESET/TEST button in the direction of the arrow.
    - Check that the blinker turns yellow for a short time, and then goes black.
  - Hold the RESET/TEST button down, and press the Emergency Pressure selector.
    - Check that the blinker turns yellow and remains yellow, as long as the Emergency Pressure selector is pressed.
    - Listen for oxygen flow through the loudspeakers.
  - Check that the RESET/TEST button returns to the up position and the N/100% selector is in the 100 % position.
  - Press the Emergency Pressure selector again, and check that the blinker does not turn yellow. This ensures that the mask is not supplied.
  - Check that the Emergency Pressure selector is NOT turned right in the direction of the arrow (permanent overpressure). This ensures that the oxygen permanent overpressure is not supplied.

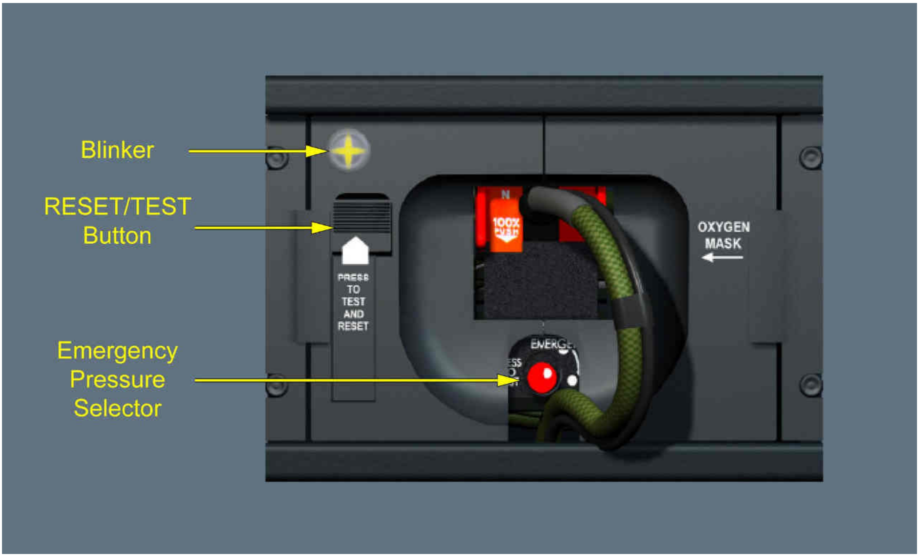
HOW TO TEST THE MASK

Ident.: DSC-35-20-30-00024268.0001001 / 04 NOV 20

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11293**

WARNING	To prevent hearing damage to the ground crew connected to the intercom system, inform them that a loud noise may be heard in the headset when performing the oxygen mask test.

Mask Stowage Box


Blinker
RESET/TEST Button
Emergency Pressure Selector
N
100%
PUSH
PRESS TO TEST AND RESET
EMERGE
OXYGEN MASK

- **On the OXYGEN panel:**
  CREW SUPPLY pb.......CHECK ON
- **On the glareshield:**
  LOUDSPEAKERS.......ON
- **On the ACP:**
  INT reception knob.......PRESS OUT - ADJUST
  INT/RAD sw.......INT
- **On the mask stowage box:**
  - Press and hold the RESET/TEST button in the direction of the arrow.
    - Check that the blinker turns yellow for a short time, and then goes black.
  - Hold the RESET/TEST button down, and press the Emergency Pressure selector.
    - Check that the blinker turns yellow and remains yellow, as long as the Emergency Pressure selector is pressed.
    - Listen for oxygen flow through the loudspeakers.
  - Check that the RESET/TEST button returns to the up position and the N/100% selector is in the 100 % position.

- Press the Emergency Pressure selector again, and check that the blinker does not turn yellow. This ensures that the mask is not supplied.
- Check that the Emergency Pressure selector is NOT turned right in the direction of the arrow (permanent overpressure). This ensures that the oxygen permanent overpressure is not supplied.

GENERAL

Ident.: DSC-35-30-10-00017804.0001001 / 13 MAY 16
Applicable to: ALL

In the case of depressurization, the fixed oxygen system in the cabin supplies oxygen to the cabin occupants.
Chemical generators produce the oxygen. Each generator feeds a group of 2, 3, or 4 masks.
Oxygen masks are located in containers above the passenger seats, in the lavatories, in each galley ◁ , and at each cabin crew station.

Note: Gaseous generators ◁ replace chemical generators in the lavatories.

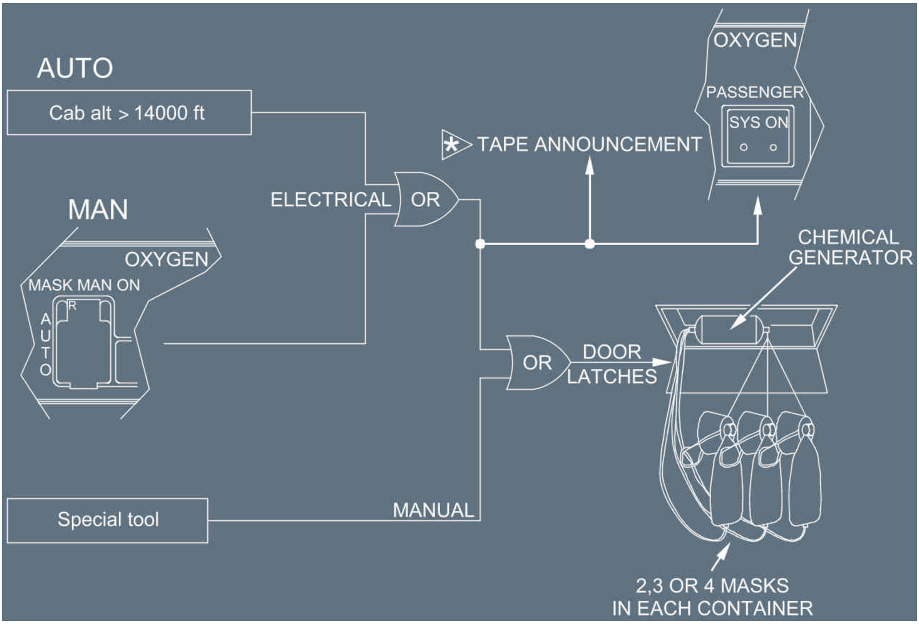
OPERATION

Ident.: DSC-35-30-10-00016920.0001001 / 21 MAR 16
Applicable to: ALL

Each container has an electrical latching mechanism that opens automatically to allow the masks to drop, if the cabin pressure altitude exceeds 14 000 ft (+250, -750 ft), or 16 000 ft (+250, -750 ft) for the operation on high altitude airfields ◁ .
Members of the flight crew can override the automatic control.
When the masks are released, the passenger address system automatically broadcasts prerecorded instructions ◁ .
The generation of oxygen begins when the passenger pulls the mask towards the passenger seat.
The chemical reaction used for oxygen generation creates heat. Therefore, the smell of burning, smokes and cabin temperature increase may be associated with the normal operation of the oxygen generators. The mask receives pure oxygen under positive pressure for about 13 min ◁ , 15 min ◁ , or up to 22 min ◁ , until the generator is exhausted.
A reset is available for the rearming of the system after the masks are restowed. A manual release tool allows crew members to open the doors manually in case of electrical failure.

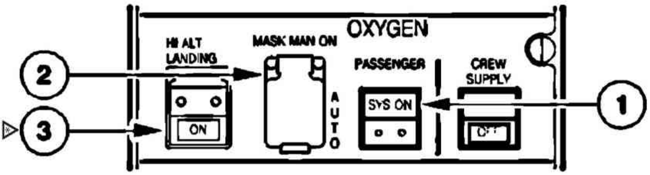
SCHEMATIC

Ident.: DSC-35-30-10-00001461.0001001 / 16 MAY 12
Applicable to: ALL


AUTO
Cab alt > 14000 ft
MAN
OXYGEN
MASK MAN ON
R
AUTO
ELECTRICAL
OR
TAPE ANNOUNCEMENT
OXYGEN
PASSENGER
SYS ON
CHEMICAL
GENERATOR
OR
DOOR
LATCHES
Special tool
MANUAL
2,3 OR 4 MASKS
IN EACH CONTAINER

OVERHEAD PANEL

Ident.: DSC-35-30-20-00017805.0001001 / 21 MAR 16
Applicable to: ALL



(1) PASSENGER SYS ON light
This light comes on in white, when the control for the oxygen mask doors is activated, and it remains on until the TMR RESET pb is pressed (*Refer to DSC-35-30-20 Overhead Maintenance Panel*).

(2) MASK MAN ON pb
The guard keeps this button in the AUTO position.

AUTO : The mask doors open automatically, when the cabin altitude exceeds 14 000 ft, or 16 000 ft if the HI ALT LANDING pb-sw ◁ is set to ON.

Pressed : The mask doors open.

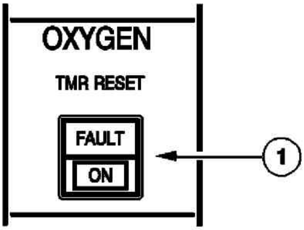
(3) HI ALT LANDING pb-sw ◁
This pushbutton-switch changes the altitude threshold for the deployment of the passenger oxygen masks.

OFF : The masks drop, if the cabin pressure exceeds 14 000 ft (+250, -750 ft).

ON : The masks drop, if the cabin pressure exceeds 16 000 ft (+250, -750 ft).

OVERHEAD MAINTENANCE PANEL

Ident.: DSC-35-30-20-00001463.0001001 / 11 FEB 11
Applicable to: ALL



(1) TMR RESET pushbutton
The maintenance crew uses this pushbutton to reset the control circuit, after the system has operated.

ON : The PASSENGER SYS ON light goes off.

FAULT : This light comes on in white, when the door latch solenoids are energized for more than 30 s.

MEMO DISPLAY

Ident.: DSC-35-30-20-A-00016865.0001001 / 21 MAR 16
1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02924, 03035-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

HI ALT SET : This memo appears in green if the crew sets the HI ALT LANDING pb-sw to ON. In this case, the passenger mask release altitude is 16 000 ft (+250 ft, -750 ft).

Ident.: DSC-35-30-20-A-00016866.0006001 / 21 MAR 16
2 **Applicable to: MSN 05987, 06097, 06121, 06139-09324, 10949-11597**

The OXY PAX ON memo displays as soon as cabin oxygen masks fall down in the cabin, either automatically, or manually.

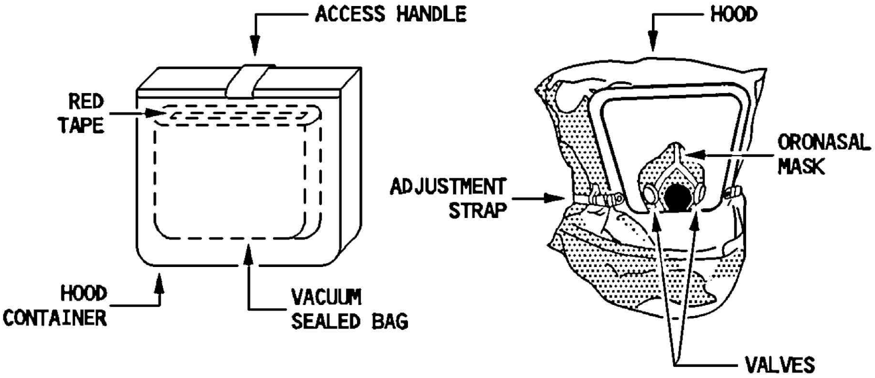
OXY PAX ON : This memo appears in green when both CPC detect excessive cabin altitude.

OXY PAX ON : This memo appears in amber when one CPC or both CPC do not detect excessive cabin altitude.

FLIGHT CREWS PORTABLE OXYGEN SYSTEM

Ident.: DSC-35-40-10-00001465.0003001 / 17 MAR 11
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03710, 03733-04544

The flight crew smoke hood located on the right back side of the cockpit, ensures the eyes and respiratory system protection of one flight crew member when fighting a fire and in case of smoke or noxious gas emissions or cabin depressurization.
The smoke hood is based on a chemical air regeneration system, located at the back of the hood. An oronasal mask allows the inhalation of regenerated air via the inhalation valves and returns the exhaled breath to the regenerator system.



The effective time of use is between 15 and 30 min, depending on the workrate.

FLIGHT CREWS PORTABLE OXYGEN SYSTEM

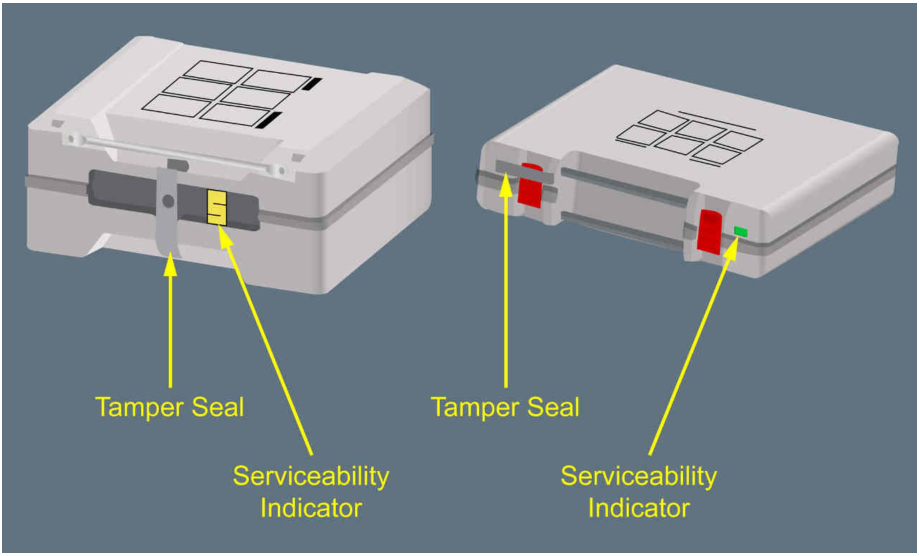
Ident.: DSC-35-40-10-00001465.0005001 / 20 DEC 16
Applicable to: MSN 01459, 02014-02321, 02887, 04563, 05005, 05097

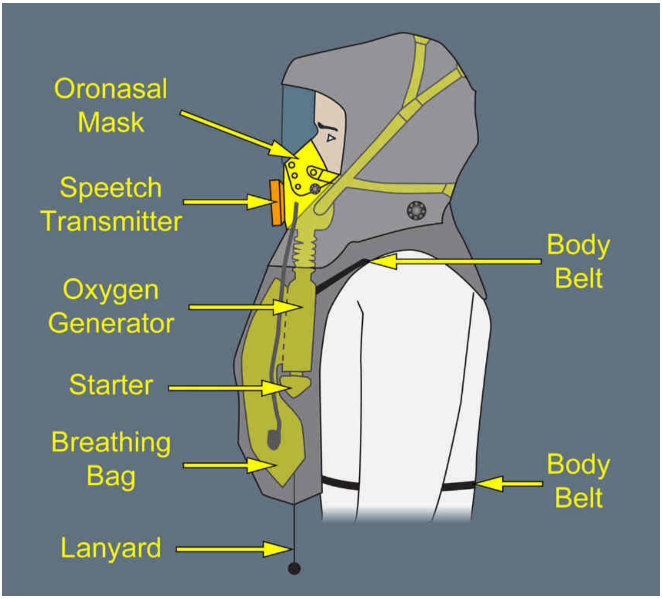
There is one Portable Breathing Equipment (PBE) in the cockpit. The PBE is a hood, located in a container. The PBE is stored on the right aft side of the cockpit. It ensures the eyes and respiratory system protection of one flight crew member when fighting a fire and in case of smoke or noxious gas emissions or cabin depressurization.
The PBE uses a chemical air regeneration system, which is in the breathing key. An oronasal mask allows the user to inhale regenerated air, and it returns the exhaled breath to the regeneration system.

If the container is equipped with a yellow serviceability indicator:
- When the indicator is cracked, the breathing protection can be insufficient and therefore the PBE cannot be used.

If the container is equipped with a red/green serviceability indicator:
- When the indicator is green, the hood can be used.
- When the indicator is red, the breathing protection can be insufficient and therefore the PBE cannot be used.

The hood operates for at least 15 min.


Tamper Seal
Serviceability Indicator
Tamper Seal
Serviceability Indicator


Oronasal Mask
Speetch Transmitter
Oxygen Generator
Starter
Breathing Bag
Lanyard
Body Belt
Body Belt

FLIGHT CREWS PORTABLE OXYGEN SYSTEM

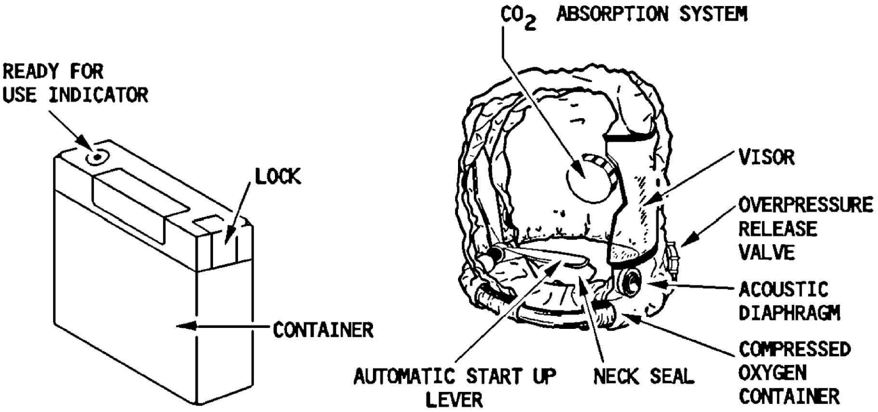
Ident.: DSC-35-40-10-00001465.0007001 / 17 MAR 11

1 **Applicable to: MSN 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

The flight crew smoke hood located on the right back side of the cockpit, ensures the eyes and respiratory system protection of one flight crew member when fighting a fire and in case of smoke or noxious gas emissions or cabin depressurization.

The smoke hood is equipped with one oxygen cylinder and one CO2 absorption system which furnish an effective time of use of 15 min.

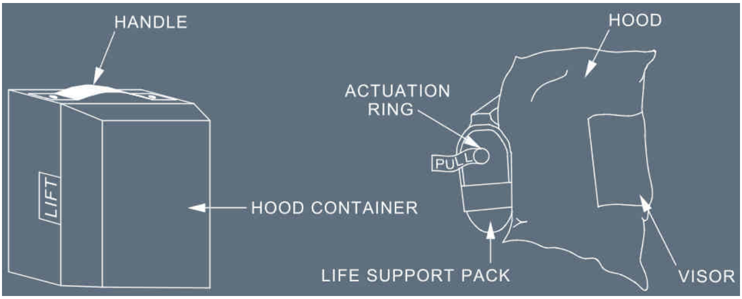
A « ready for use » status of the hood is ensured by checking that the indicator mounted on the hood container is not red.


READY FOR USE INDICATOR
LOCK
CONTAINER
CO2 ABSORPTION SYSTEM
VISOR
OVERPRESSURE RELEASE VALVE
ACOUSTIC DIAPHRAGM
COMPRESSED OXYGEN CONTAINER
AUTOMATIC START UP LEVER
NECK SEAL

FLIGHT CREWS PORTABLE OXYGEN SYSTEM

Ident.: DSC-35-40-10-00001465.0004001 / 17 MAR 11
Applicable to: MSN 04570-04974, 05066, 05101-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

The flight crew smoke hood located on the right back side of the cockpit, ensures the eyes and respiratory system protection of one flight crew member when fighting a fire and in case of smoke or noxious gas emissions or cabin depressurization.
The smoke hood is equipped with one solid state oxygen supply source and one CO2 absorption system, contained in a life support pack which furnish an effective time of use of 15 min.

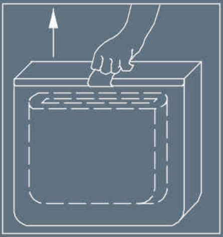

HANDLE
LIFT
HOOD
ACTUATION RING
PULL
HOOD CONTAINER
LIFE SUPPORT PACK
VISOR

USING THE HOOD

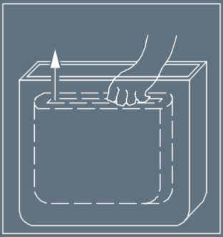
Ident.: DSC-35-40-10-00006226.0003001 / 22 MAY 12

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03710, 03733-04544

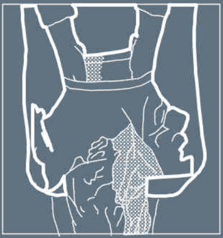
1 GRASP THE ACCESS HANDLE AND PULL STRONGLY TO DISENGAGE THE COVER



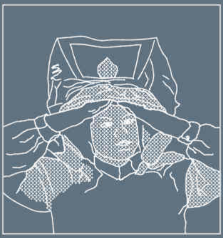
2 PULL SHARPLY THE RED TAPE TO TEAR OPEN THE VACUUM SEALED BAG THEN FIRMLY GRASP THE HOOD AND PULL IT OUT OF THE BAG



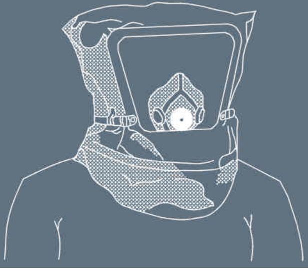
3 OPEN THE NECK SEAL AS FAR AS POSSIBLE, WITH YOUR PALMS FACING EACH OTHER



4 PUT THE HOOD OVER YOUR HEAD, ASSUMING THAT ALL HAIR IS INSIDE THE HOOD, TO AVOID LOSS OF OXYGEN

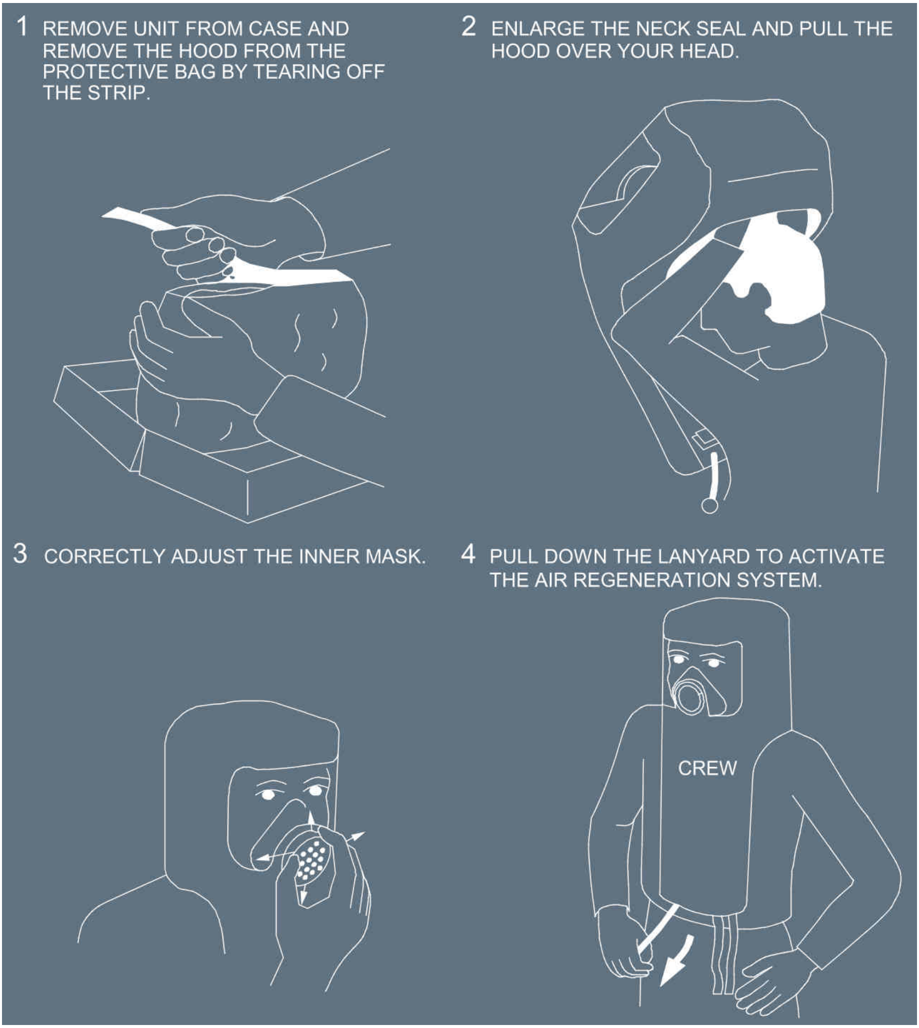


5 ADJUST THE HOOD WITH THE STRAPS
THIS ACTIVATES THE AIR REGENERATION SYSTEM



USING THE HOOD

Ident.: DSC-35-40-10-00006226.0005001 / 03 MAR 17
Applicable to: MSN 01459, 02014-02321, 02887, 04563, 05005, 05097



1 REMOVE UNIT FROM CASE AND REMOVE THE HOOD FROM THE PROTECTIVE BAG BY TEARING OFF THE STRIP.

2 ENLARGE THE NECK SEAL AND PULL THE HOOD OVER YOUR HEAD.

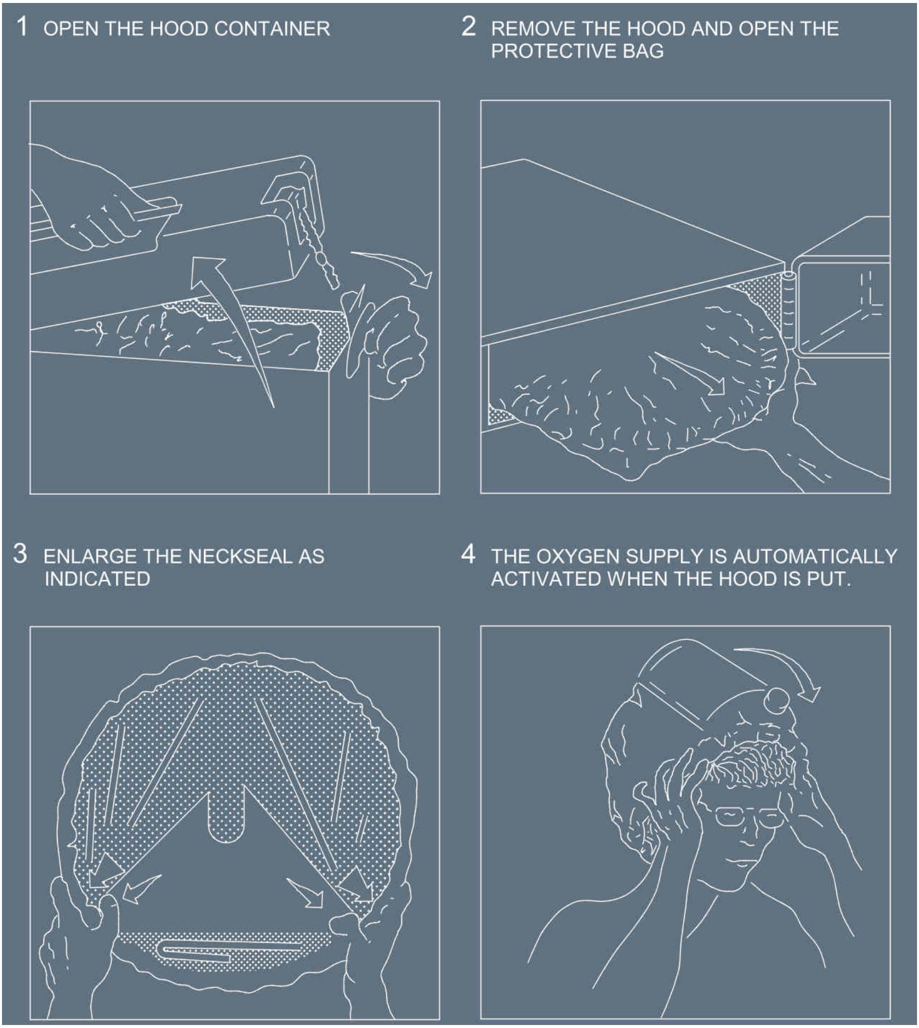
3 CORRECTLY ADJUST THE INNER MASK.

4 PULL DOWN THE LANYARD TO ACTIVATE THE AIR REGENERATION SYSTEM.

USING THE HOOD

Ident.: DSC-35-40-10-00006226.0012001 / 22 MAY 12

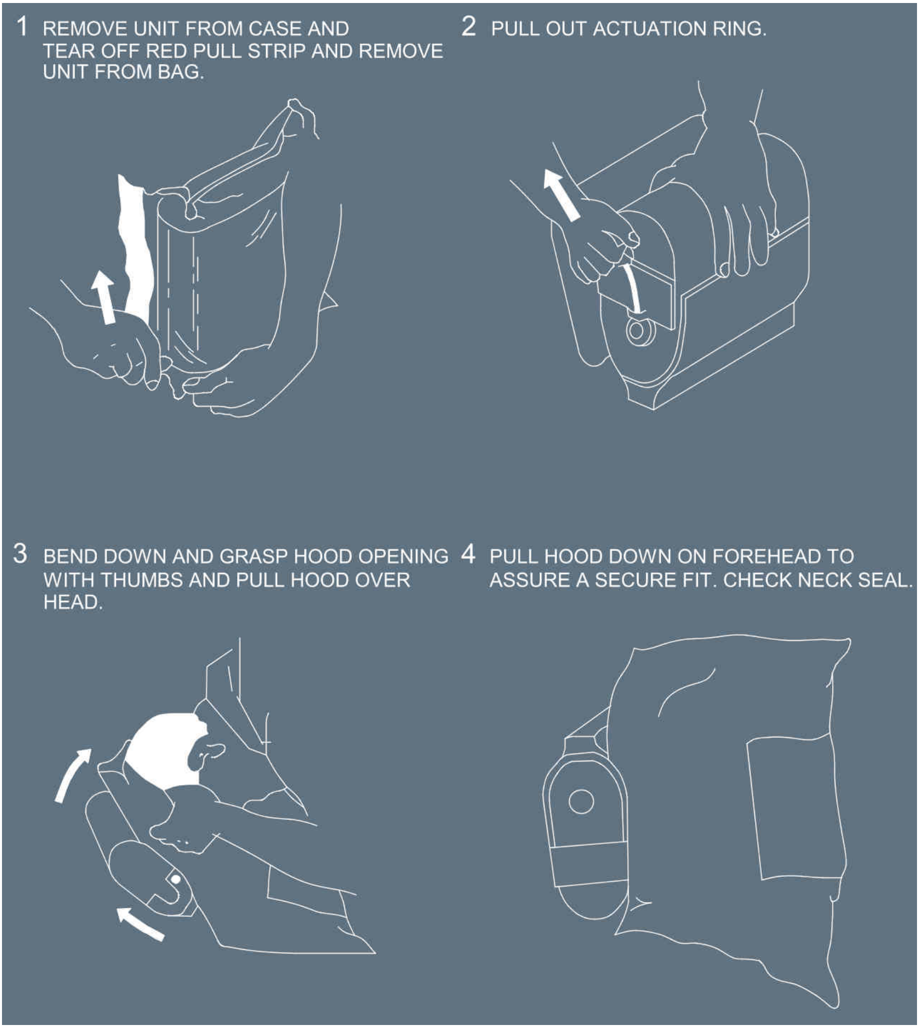
2 **Applicable to: MSN 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**


1 OPEN THE HOOD CONTAINER
2 REMOVE THE HOOD AND OPEN THE PROTECTIVE BAG
3 ENLARGE THE NECKSEAL AS INDICATED
4 THE OXYGEN SUPPLY IS AUTOMATICALLY ACTIVATED WHEN THE HOOD IS PUT.

USING THE HOOD

Ident.: DSC-35-40-10-00006226.0004001 / 22 MAY 12

Applicable to: MSN 04570-04974, 05066, 05101-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876



1 REMOVE UNIT FROM CASE AND TEAR OFF RED PULL STRIP AND REMOVE UNIT FROM BAG.

2 PULL OUT ACTUATION RING.

3 BEND DOWN AND GRASP HOOD OPENING WITH THUMBS AND PULL HOOD OVER HEAD.

4 PULL HOOD DOWN ON FOREHEAD TO ASSURE A SECURE FIT. CHECK NECK SEAL.

AIRCRAFT SYSTEMS

PNEUMATIC

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DSC-36-10 Description

DSC-36-10-10 General

General....A

DSC-36-10-20 Engine Bleed System

General....A
Architecture....B
Air Bleed Selection....C
Pressure Regulation and Limitation....D
Temperature Regulation and Limitation....E

DSC-36-10-30 APU Bleed Air Supply

General....A

DSC-36-10-40 Crossbleed

General....A
ECAM Indication....B

DSC-36-10-50 Leak Detection

Leak Detection....A

DSC-36-10-60 Operation Following Failures

BMC Failure....A

DSC-36-20 Controls and Indicators

Overhead Panel....A
ECAM Bleed Page....B
Memo Display....C

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Localization Title	Toc Index	ID	Reason
DSC-36-10-20 Architecture	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-20 Air Bleed Selection	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-20 Pressure Regulation and Limitation	D	3	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
DSC-36-10-20 Pressure Regulation and Limitation	D	4	Effectivity update: The information now also applies to MSN 03229, 03565, 07081.
DSC-36-10-20 Pressure Regulation and Limitation	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-20 Temperature Regulation and Limitation	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-40 ECAM Indication	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-50 Leak Detection	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-10-60 BMC Failure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-20 Overhead Panel	A	1	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
DSC-36-20 Overhead Panel	A	2	Effectivity update: The information now also applies to MSN 03229, 03565, 07081.
DSC-36-20 Overhead Panel	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-36-20 ECAM Bleed Page	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-36-10-10-00020804.0001001 / 17 MAR 17
Applicable to: ALL

The pneumatic system supplies high-pressure air for :
- Air conditioning
- Engine starting
- Wing anti-icing
- Water pressurization
- Hydraulic reservoir pressurization
- FWD cargo heating ◁
- AFT cargo heating ◁
- Fuel Tank Inerting System (FTIS) ◁ .

High-pressure air has three sources :
- Engine bleed systems
- APU load compressor
- HP ground connection

Note: *An external HP source may be used for air conditioning.*

A crossbleed duct interconnects the engine bleed systems and receives air from the APU and ground sources when appropriate.
A valve mounted on the crossbleed duct allows the left side (engine 1) and right side (engine 2) to be interconnected.
Two Bleed Monitoring Computers (BMC1 and BMC2), the overhead control panel, and the ECAM control and monitor the operation of the pneumatic system.
A leak detection system detects any overheating in the vicinity of hot air ducts.

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GENERAL

Ident.: DSC-36-10-20-00001469.0001001 / 21 MAR 16
Applicable to: ALL

The aircraft has two similar engine bleed air systems.

Each system is designed to :
- select the compressor stage to use as a source of air
- regulate the bleed air temperature
- regulate the bleed air pressure.

A Bleed Monitoring Computer (BMC) controls and monitors each system.
Each BMC receives information about bleed pressure and temperature and valve position.

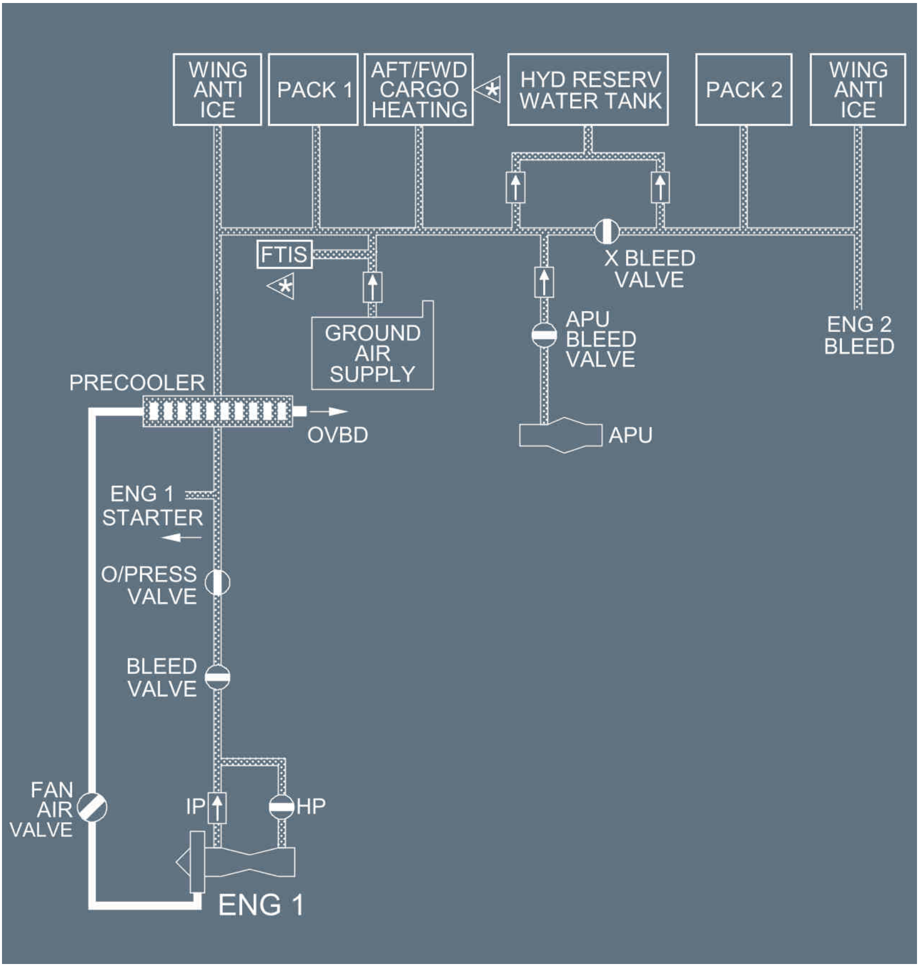
Each is connected with :
- other systems using air or information from the bleed system
- the other BMC.

Each supplies indications and warnings to the ECAM and CFDS.
If one BMC fails, the other one takes over most of the monitoring functions.
Each bleed valve is pneumatically operated and controlled electrically by its associated BMC.

ARCHITECTURE

Ident.: DSC-36-10-20-00001470.0005001 / 15 MAR 17

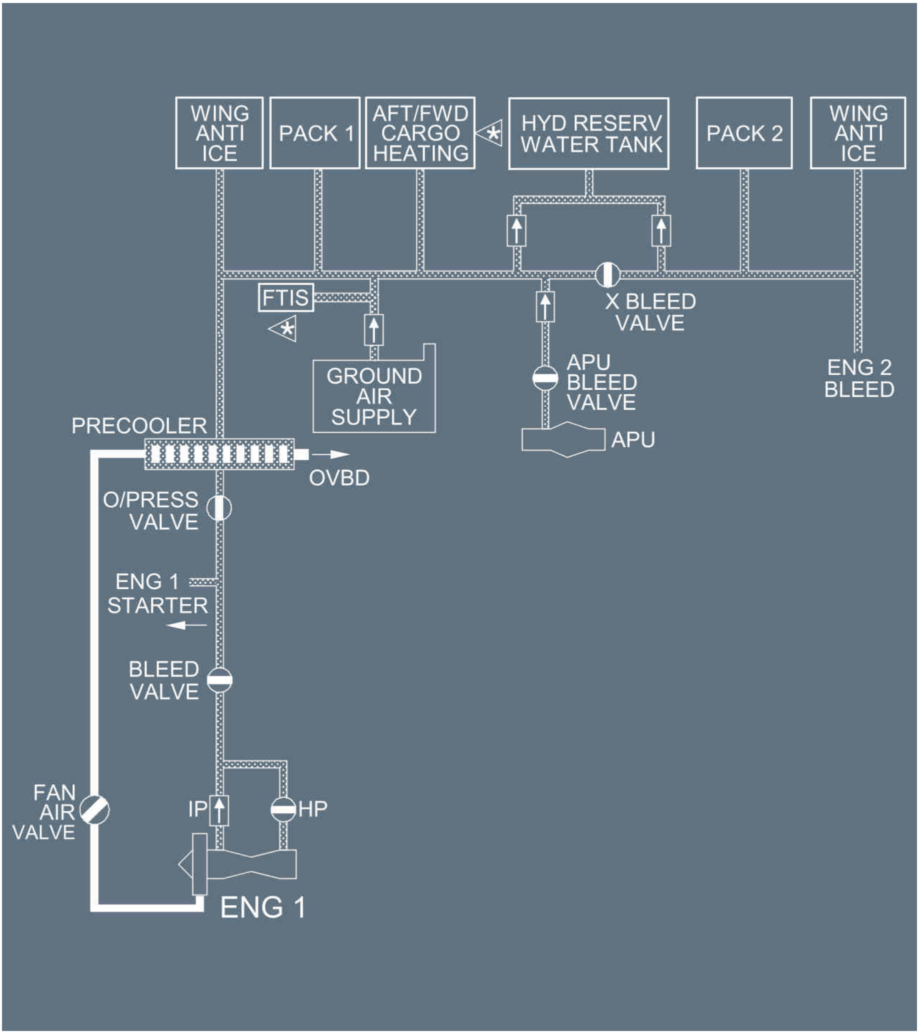
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098


WING ANTI ICE
PACK 1
AFT/FWD CARGO HEATING
*
HYD RESERV WATER TANK
PACK 2
WING ANTI ICE
FTIS
*
X BLEED VALVE
GROUND AIR SUPPLY
APU BLEED VALVE
ENG 2 BLEED
PRECOOLER
OVBD
APU
ENG 1 STARTER
O/PRESS VALVE
BLEED VALVE
FAN AIR VALVE
IP
HP
ENG 1

ARCHITECTURE

Ident.: DSC-36-10-20-00001470.0006001 / 15 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**


WING ANTI ICE
PACK 1
AFT/FWD CARGO HEATING
HYD RESERV WATER TANK
PACK 2
WING ANTI ICE
FTIS
X BLEED VALVE
GROUND AIR SUPPLY
APU BLEED VALVE
ENG 2 BLEED
APU
PRECOOLER
OVBD
O/PRESS VALVE
ENG 1 STARTER
BLEED VALVE
FAN AIR VALVE
IP
HP
ENG 1

AIR BLEED SELECTION

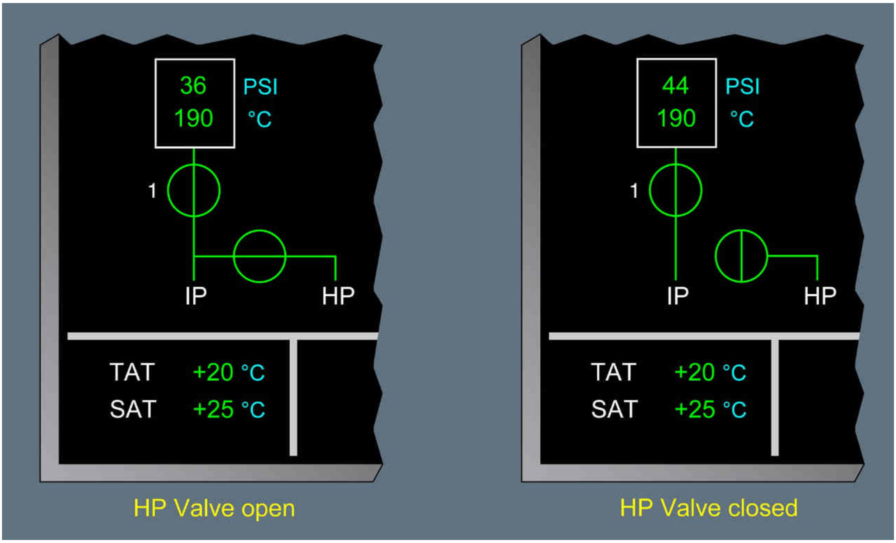
Ident.: DSC-36-10-20-00001471.0003001 / 05 MAR 19

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173-07098

Air is normally bled from the intermediate pressure stage (IP) of engine's high-pressure (HP) compressor to minimize fuel penalty.
At low engine speed, when the pressure and temperature of the IP air are too low, the system bleeds air from the HP stage and maintains it at 36 ± 4 PSI.
An intermediate pressure check valve downstream of the IP port closes to prevent air from the HP stage from being circulated to the IP stage.

L3 The HP valve closes automatically:
- Pneumatically:
  - In case of low upstream pressure
  - In case of excessive upstream pressure
- Electrically when the bleed valve is closed electrically.

ECAM INDICATION



AIR BLEED SELECTION

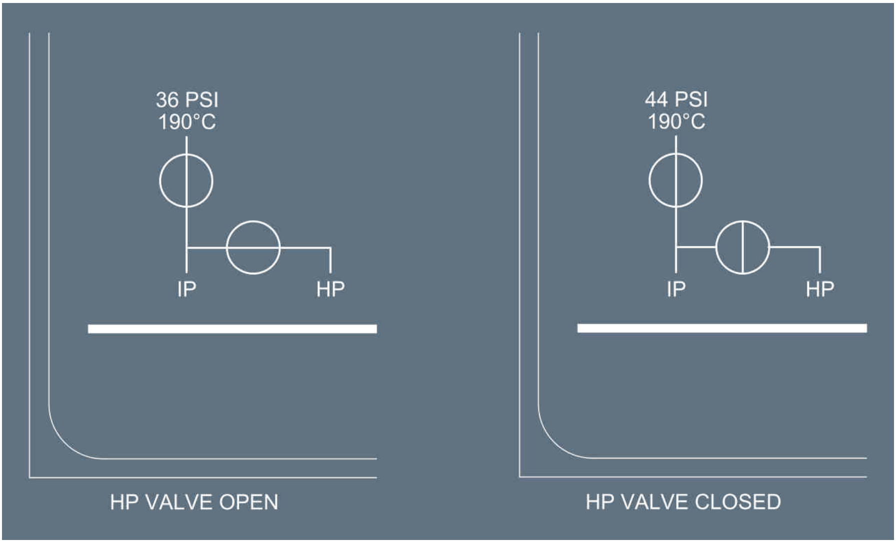
Ident.: DSC-36-10-20-00001471.0002001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Air is normally bled from the intermediate pressure stage (IP) of engine’s high-pressure (HP) compressor to minimize fuel penalty.
At low engine speed, when the pressure and temperature of the IP air are too low, the system bleeds air from the HP stage and maintains it at 36 ± 4 PSI.
An intermediate pressure check valve downstream of the IP port closes to prevent air from the HP stage from being circulated to the IP stage.

L3 The HP valve closes automatically:

- Pneumatically:
  - In case of low upstream pressure
  - in case of excessive upstream pressure
- Electrically:
  - When the bleed valve is closed electrically
  - In case of overpressure upstream of the HP valve with wing anti-ice off, two packs on and aircraft altitude above 15 000 ft.

ECAM INDICATION



AIR BLEED SELECTION

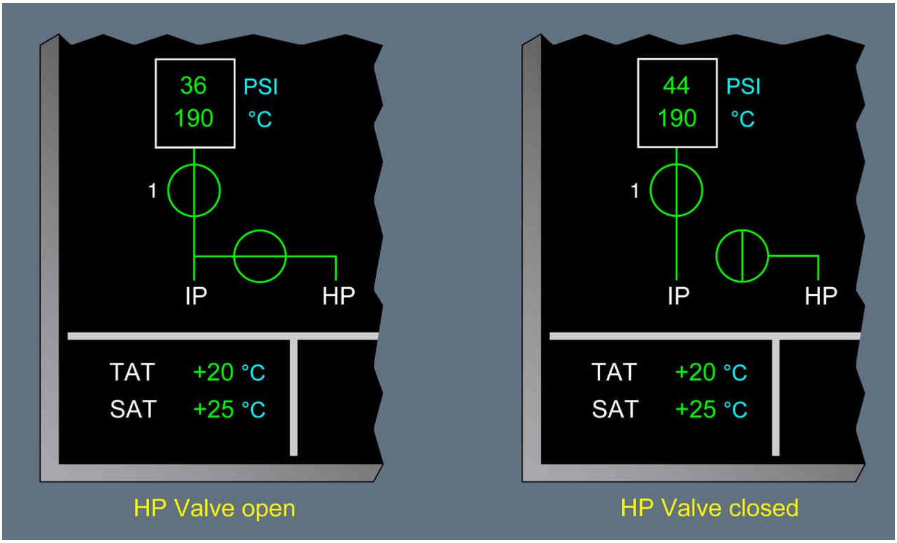
Ident.: DSC-36-10-20-00001471.0004001 / 05 MAR 19

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Air is normally bled from the intermediate pressure stage (IP) of engine's high-pressure (HP) compressor to minimize fuel penalty.
At low engine speed, when the pressure and temperature of the IP air are too low, the system bleeds air from the HP stage and maintains it at 36 ± 4 PSI.
An intermediate pressure check valve downstream of the IP port closes to prevent air from the HP stage from being circulated to the IP stage.

L3 The HP valve closes automatically:
- Pneumatically:
  - In case of low upstream pressure
  - In case of excessive upstream pressure
- Electrically :
  - When the bleed valve is closed electrically
  - In case of overpressure upstream of the HP valve with wing anti-ice off, two packs ON and aircraft altitude above 15 000 ft.

ECAM INDICATION



AIR BLEED SELECTION

Ident.: DSC-36-10-20-00001471.0011001 / 05 MAR 19

2 **Applicable to: MSN 08495-09324, 10949-11597**

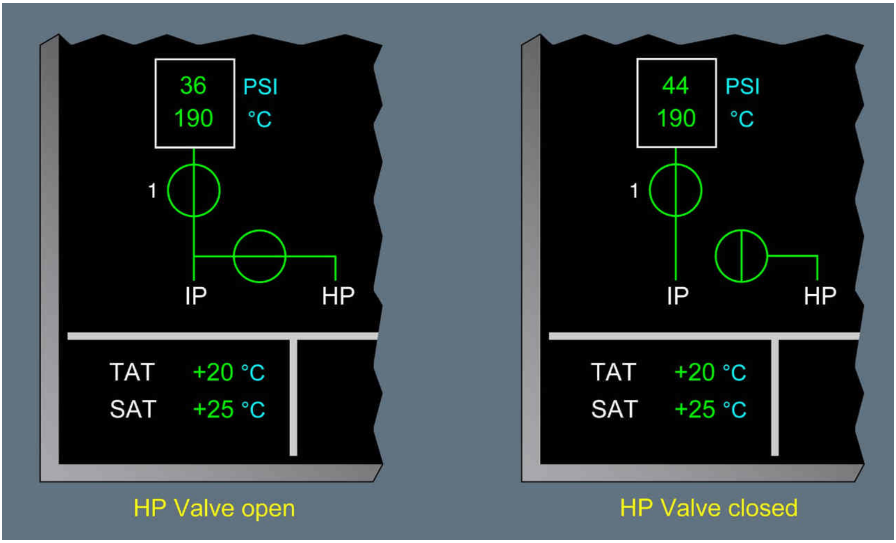
Air is normally bled from the intermediate pressure stage (IP) of engine's high-pressure (HP) compressor to minimize fuel penalty.
At low engine speed, when the pressure and temperature of the IP air are too low, the system bleeds air from the HP stage and maintains it at 65 ± 15 PSI.
An intermediate pressure check valve downstream of the IP port closes to prevent air from the HP stage from being circulated to the IP stage.

L3 The HP valve closes automatically:

- Pneumatically:
  - In case of low upstream pressure
  - In case of excessive upstream pressure
- Electrically when the bleed valve is closed electrically.

Note: *If the bleed valves are closed due to APU bleed set to ON, the HP valves close 30 s after the closure of the bleed valves.*

ECAM INDICATION


36
PSI
190
°C
1
IP
HP
TAT
+20 °C
SAT
+25 °C
HP Valve open
44
PSI
190
°C
1
IP
HP
TAT
+20 °C
SAT
+25 °C
HP Valve closed

PRESSURE REGULATION AND LIMITATION

Ident.: DSC-36-10-20-00001472.0001001 / 09 NOV 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02896, 03032-03180

The bleed valve, which is downstream of the junction of HP and IP ducting, acts as a shut-off and pressure regulating valve.
It maintains delivery pressure at 45 ± 5 PSI.

Note: *Bleed pressure may fluctuate between 38 and 56 PSI (with a maximum peak to peak pressure of 16 PSI) particularly at high engine power (takeoff or climb) up to FL 100.*

The bleed valve is fully closed:

- Pneumatically:
  - If upstream pressure goes below 8 PSI
  - If there is return flow
- Electrically by means of:
  - The BLEED pushbutton switch (switched OFF)
  - The ENG FIRE pushbutton (pushed)
  - The Bleed air Monitoring Computer (BMC) in the following cases:
    - Overtemperature
    - Overpressure
    - Leak
    - Open starter valve
    - APU bleed being ON.

If pressure regulation fails, the overpressure valve closes when the pressure goes over 75 PSI.

Note: *If APU Bleed is ON and the crossbleed valve is SHUT, the Engine bleed valve 2, remains open.*

PRESSURE REGULATION AND LIMITATION

Ident.: DSC-36-10-20-00001472.0004001 / 09 NOV 17

3 **Applicable to: MSN 03211-03222, 03266-03391, 03588-03710, 03733, 03816-04192, 04358-04446, 04544-05987, 06097, 06121, 06163-06409, 06528, 06561-06658, 06685-07005, 07098**

The bleed valve, which is downstream of the junction of HP and IP ducting, acts as a shut-off and pressure regulating valve.
It maintains delivery pressure at 45 ± 5 PSI.

Note: *Bleed pressure may fluctuate between 38 and 56 PSI (with a maximum peak to peak pressure of 16 PSI) particularly at high engine power (takeoff or climb) up to FL 100.*

The bleed valve is fully closed:

- Pneumatically:
  - If upstream pressure goes below 8 PSI
  - If there is return flow
- Electrically by means of:
  - The BLEED pushbutton switch (switched OFF)
  - The ENG FIRE pushbutton (pushed)
  - The Bleed air Monitoring Computer (BMC) in the following cases:
    - Overtemperature
    - Overpressure
    - Leak
    - Open starter valve
    - Engine shutdown
    - APU bleed being ON.

If pressure regulation fails, the overpressure valve closes when the pressure goes over 75 PSI.

Note: *If APU Bleed is ON and the crossbleed valve is SHUT, the Engine bleed valve 2, remains open.*

PRESSURE REGULATION AND LIMITATION

Ident.: DSC-36-10-20-00001472.0007001 / 12 NOV 20

4 **Applicable to: MSN 02734, 02904-03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081**

The bleed valve, which is downstream of the junction of HP and IP ducting, acts as a shut-off and pressure regulating valve.
It maintains delivery pressure at 45 ± 5 PSI.

Note: *Bleed pressure may fluctuate between 38 and 56 PSI (with a maximum peak to peak pressure of 16 PSI) particularly at high engine power (takeoff or climb) up to FL 100.*

The bleed valve is fully closed:
- Pneumatically:
  - If upstream pressure goes below 8 PSI
  - If there is return flow.
- Electrically by means of:
  - The ENG 1(2) BLEED pb-sw if switched OFF
  - The ENG 1(2) FIRE pb if pushed
  - The BMC in the following cases:
    - Overtemperature
    - Overpressure
    - Leak
    - Open starter valve
    - Engine shutdown
    - APU bleed being ON
    - Bleed temperature lost.

If pressure regulation fails, the overpressure valve closes when the pressure goes over 75 PSI.

Note: *If APU Bleed is ON and the crossbleed valve is SHUT, the Engine bleed valve 2 remains open.*

PRESSURE REGULATION AND LIMITATION

Ident.: DSC-36-10-20-00001472.0003001 / 10 MAY 21

5 **Applicable to: MSN 08495-09324, 10949-11597**

The bleed valve, which is downstream of the junction of HP and IP ducting, acts as a shut-off and pressure regulating valve.
It maintains delivery pressure at 42 ± 3 PSI in dual bleed configuration and at 50 ± 3 PSI in single bleed configuration.

Note: *Bleed pressure may fluctuate between ± 8 PSI when bleeding from IP port at high engine power, or when bleeding from HP port in holding or approach phases.*

The bleed valve is fully closed:

- Pneumatically:
  - If upstream pressure goes below 15 PSI
  - If there is return flow.
- Electrically by means of:
  - The ENG 1(2) BLEED pb-sw if switched OFF
  - The ENG 1(2) FIRE pb if pushed
  - The BMC in the following cases:
    - Overtemperature
    - Overpressure
    - Leak
    - Open starter valve
    - Engine shutdown
    - APU bleed being ON
    - No bleed consumers
    - HPV failed open
    - Bleed temperature lost.

If pressure regulation fails, the overpressure valve closes when the pressure goes over 75 PSI.

Note: *If APU Bleed is ON and the crossbleed valve is SHUT, the Engine bleed valve 2 remains open.*

TEMPERATURE REGULATION AND LIMITATION

Ident.: DSC-36-10-20-00001473.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

A precooler downstream of the bleed valve regulates the temperature of the bleed air.
The precooler is an air-to-air heat exchanger that uses cooling air bleed from the engine fan to regulate the temperature to approximately 200 °C.
The fan air valve controls fan air flow.
A spring keeps the fan air valve closed in the absence of pressure.

TEMPERATURE REGULATION AND LIMITATION

Ident.: DSC-36-10-20-00001473.0002001 / 28 NOV 17
6 **Applicable to: MSN 08495-09324, 10949-11597**

A precooler downstream of the bleed valve regulates the temperature of the bleed air.

The precooler is an air-to-air heat exchanger that uses cooling air bleed from the engine fan to regulate the temperature to approximately 200 °C (or 160 °C during climb or hold with the two engine bleeds but without the wing anti-ice).
The fan air valve controls fan air flow.
A spring keeps the fan air valve closed in the absence of pressure.

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GENERAL

Ident.: DSC-36-10-30-00001474.0001001 / 09 NOV 17
Applicable to: ALL

Air from the APU load compressor is available on ground and in flight.
The APU bleed valve operates as a shut-off valve to control APU bleed air.
The APU BLEED pb-sw, on the AIR COND panel, controls the APU bleed valve. When the flight crew selects ON with the pushbutton, APU bleed air supplies the pneumatic system, if the APU speed is above 95 %. This opens the crossbleed valve and closes the engine bleed automatically.
If the APU bleed valve is opened, it automatically closes in the case of APU leak, left wing leak, or pylon 1 leak (except during engine start). *Refer to DSC-36-10-50 Leak Detection*.
A check valve near the crossbleed duct protects the APU, when bleed air comes from another source.

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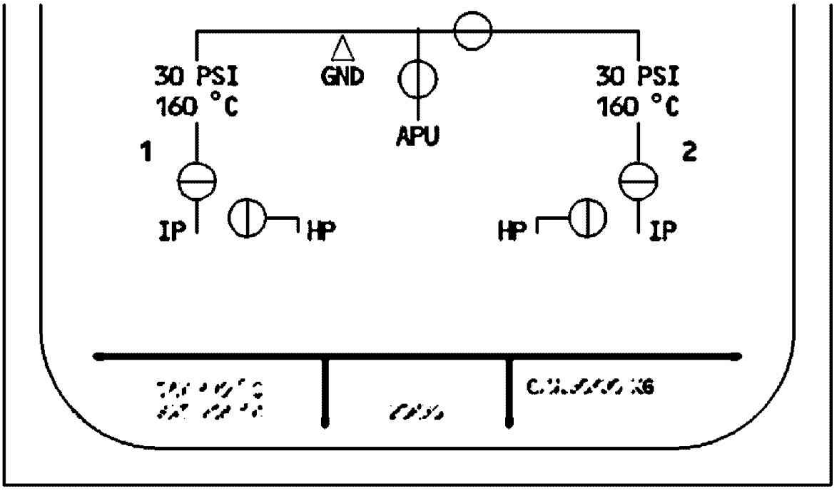
GENERAL

Ident.: DSC-36-10-40-00001476.0001001 / 21 MAR 16
Applicable to: ALL

A crossbleed valve on the crossbleed duct allows the air supply systems of the two engines to be isolated or interconnected.
On the AIR COND panel, a rotary selector controls the crossbleed valve electrically.
Two electric motors, one for automatic mode and one for manual mode, control the valve.
In automatic mode, the crossbleed valve opens when the system uses APU bleed air. It closes, if the system detects an air leak (except during engine start).

ECAM INDICATION

Ident.: DSC-36-10-40-00001478.0001001 / 17 MAR 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

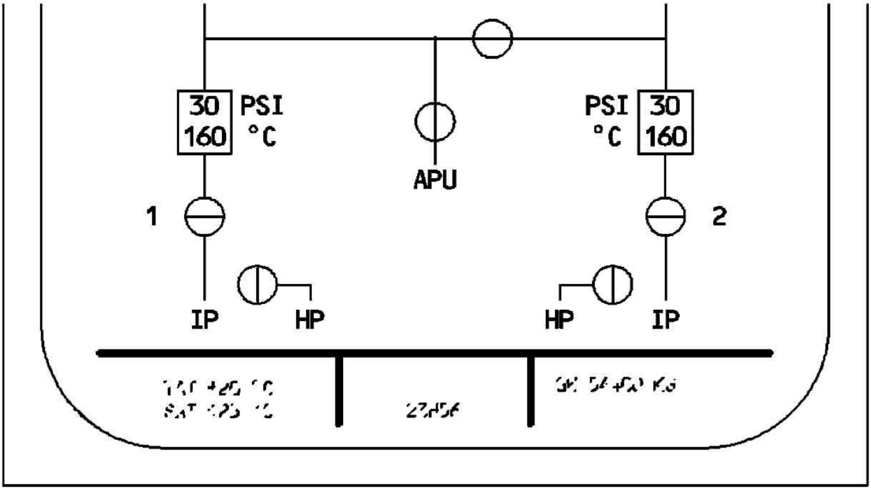


X-BLEED VALVE OPEN-AIR SUPPLIED FROM APU

ECAM INDICATION

Ident.: DSC-36-10-40-00001478.0002001 / 21 MAR 16

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


30
160
PSI
°C
APU
PSI
°C
30
160
1
2
IP
HP
HP
IP
23H56

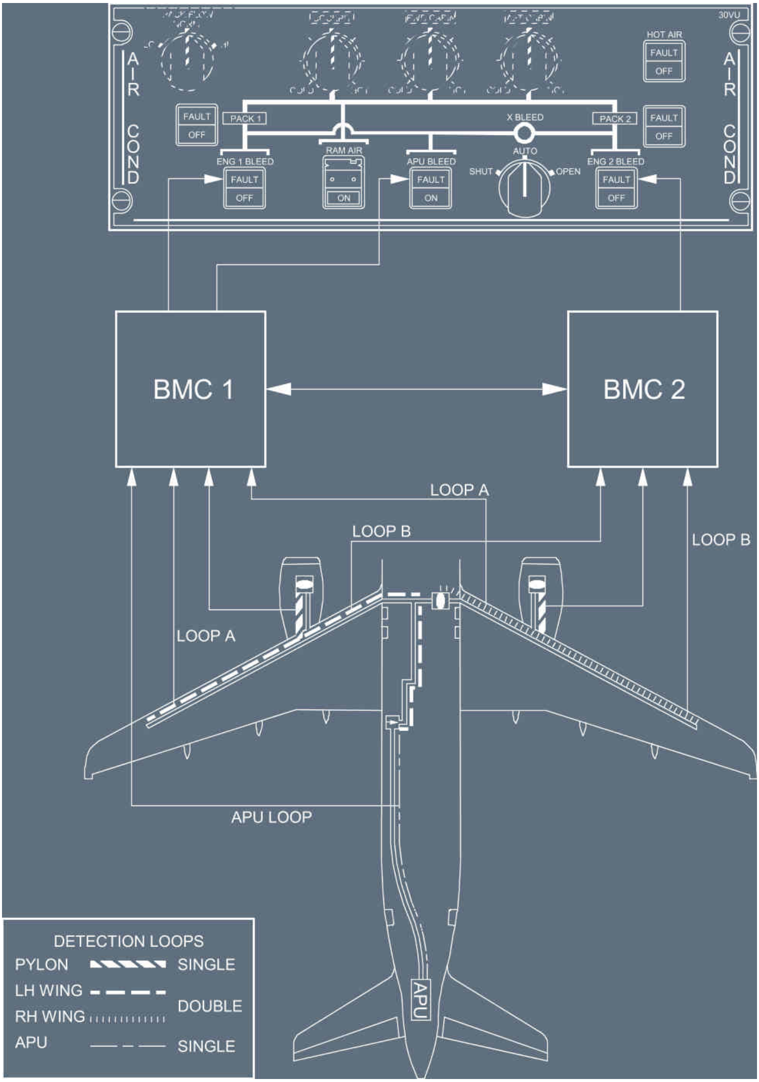
X-BLEED VALVE OPEN.AIR SUPPLIED FROM APU

LEAK DETECTION

Ident.: DSC-36-10-50-00001479.0001001 / 15 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Leak detection loops detect any overheating near the hot air ducts in the fuselage, pylons, and wings.
For the pylon and APU, the sensing elements are tied to form a single loop and for the wing, a double loop.
When the two wing loops detect a leak, or when one loop detects the leak and the other one is inoperative, they activate a wing leak signal.
BMC1 and BMC2 each contain identical control logic for the system.

- A wing leak signal causes :
  - the bleed valve on the related side to close automatically
  - the associated FAULT light on the AIR COND panel to come on
  - the x-bleed valve to close automatically (except during an engine start)
  - the APU bleed valve to close automatically if the APU bleed valve is open and if the leak concerns the left wing (except during engine start).
- A pylon leak signal causes :
  - the bleed valve on the related side to close automatically
  - the FAULT light for the related engine on the AIR COND panel to come on
  - the x-bleed valve to close automatically (except during an engine start).
  - the APU bleed valve to close automatically if the APU bleed valve is open and if the leak concerns the pylon 1 (except during engine start).
- An APU leak signal causes :
  - the APU bleed valve to close automatically (except during engine start).
  - the FAULT light the APU BLEED pushbutton switch on the AIR COND panel to come on
  - the x-bleed valve to close automatically (except during an engine start).


30VU
AIR COND
HOT AIR
FAULT
OFF
FAULT
OFF
PACK 1
X BLEED
PACK 2
FAULT
OFF
RAM AIR
ENG 1 BLEED
FAULT
OFF
ON
APU BLEED
FAULT
ON
AUTO
SHUT
OPEN
ENG 2 BLEED
FAULT
OFF
AIR COND
BMC 1
BMC 2
LOOP A
LOOP B
LOOP B
LOOP A
APU LOOP
APU
DETECTION LOOPS
PYLON
SINGLE
LH WING
RH WING
DOUBLE
APU
SINGLE

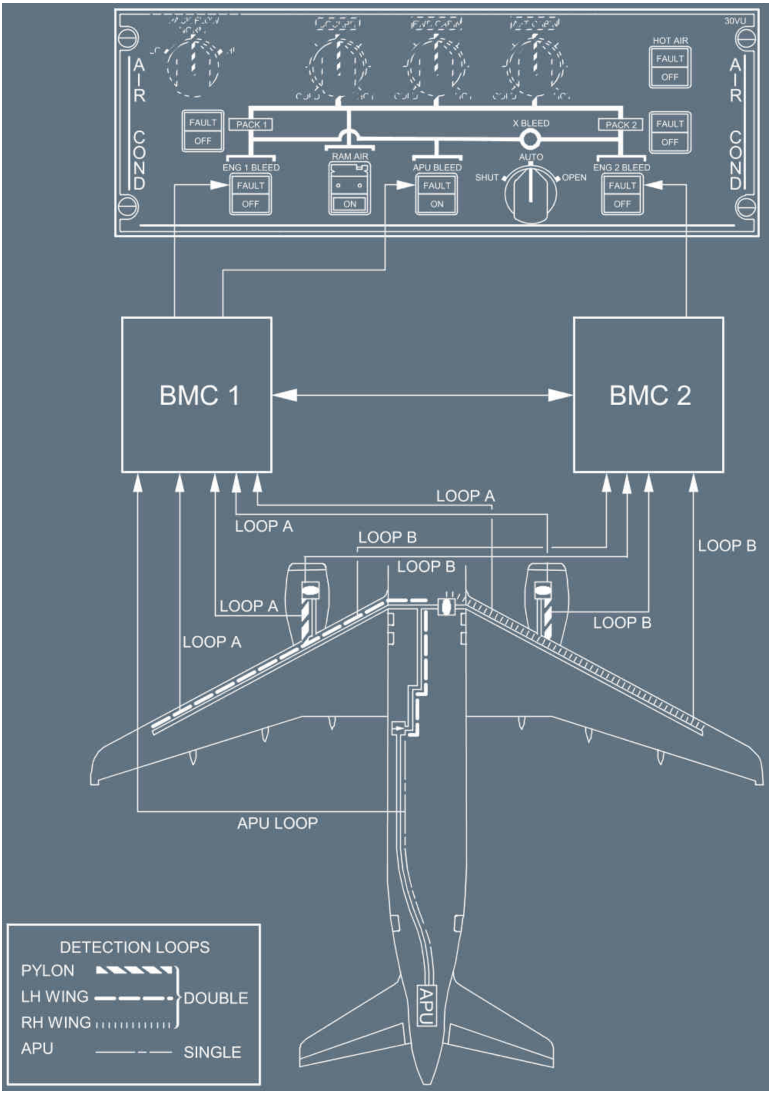
LEAK DETECTION

Ident.: DSC-36-10-50-00001479.0002001 / 15 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**

Leak detection loops detect any overheating near the hot air ducts in the fuselage, pylons, and wings.
For the pylon and the wing, the sensing elements are tied to form a double loop and for the APU, a single loop.
When the two wing/pylon loops detect a leak, or when one loop detects the leak and the other one is inoperative, they activate a wing/pylon leak signal.
BMC1 and BMC2 each contain identical control logic for the system.

- A wing leak signal causes :
  - the bleed valve on the related side to close automatically
  - the associated FAULT light on the AIR COND panel to come on
  - the x-bleed valve to close automatically (except during an engine start)
  - the APU bleed valve to close automatically if the APU bleed valve is open and if the leak concerns the left wing (except during engine start).
- A pylon leak signal causes :
  - the bleed valve on the related side to close automatically
  - the FAULT light for the related engine on the AIR COND panel to come on
  - the x-bleed valve to close automatically (except during an engine start).
  - the APU bleed valve to close automatically if the APU bleed valve is open and if the leak concerns the pylon 1 (except during engine start).
- An APU leak signal causes :
  - the APU bleed valve to close automatically (except during engine start).
  - the FAULT light the APU BLEED pushbutton switch on the AIR COND panel to come on
  - the x-bleed valve to close automatically (except during an engine start).


30VU
AIR COND
HOT AIR
FAULT
OFF
PACK 1
PACK 2
X BLEED
ENG 1 BLEED
RAM AIR
ON
APU BLEED
AUTO
SHUT
OPEN
ENG 2 BLEED
BMC 1
BMC 2
LOOP A
LOOP B
APU LOOP
APU
DETECTION LOOPS
PYLON
LH WING
RH WING
DOUBLE
SINGLE

BMC FAILURE

Ident.: DSC-36-10-60-00001480.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

If one BMC fails, the adjacent BMC takes over the monitoring of the bleed system to issue the following ECAM warnings if necessary :
- overpressure
- overtemperature
- wing leak.

Nevertheless, the associated FAULT light on the AIR COND panel is lost, and the associated bleed valve does not close automatically.
ENG BLEED LEAK warning is lost for the associated engine, as is also the APU BLEED LEAK warning if BMC1 has failed.

BMC FAILURE

Ident.: DSC-36-10-60-00001480.0002001 / 21 MAR 16

1 **Applicable to: MSN 08495-09324, 10949-11597**

If one BMC fails, the adjacent BMC takes over the control and the monitoring of the bleed system to issue the following ECAM warnings if necessary :
- overpressure
- wing leak.

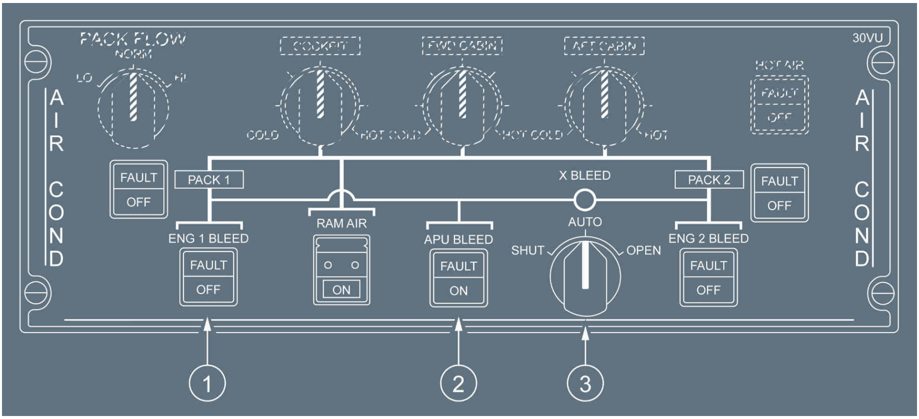
Nevertheless, the associated overtemperature protection is lost, and the associated bleed valve does not close automatically.
The APU BLEED LEAK warning is also lost if BMC1 has failed.

Intentionally left blank

OVERHEAD PANEL

Ident.: DSC-36-20-00001481.0001001 / 09 NOV 17

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02896, 03032-03222, 03266-03391, 03588-03710, 03733, 03816-04192, 04358-04446, 04544-05987, 06097, 06121, 06163-06409, 06528, 06561-06658, 06685-07005, 07098**


PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
COLD
HOT
30VU
HOT AIR
FAULT
OFF
AIR COND
FAULT
OFF
PACK 1
X BLEED
PACK 2
RAM AIR
ENG 1 BLEED
FAULT
OFF
ON
APU BLEED
FAULT
ON
AUTO
SHUT
OPEN
ENG 2 BLEED
FAULT
OFF
1
2
3

(1) ENG 1 and ENG 2 BLEED pb sw

On	:	Bleed valve opens if : - Upstream pressure is above 8 PSI. - APU BLEED pushbutton switch is off or APU bleed valve is closed. - There is no onside wing or pylon leak, and no overpressure or overtemperature has been detected. - The ENG FIRE pushbutton has not been popped out. - The engine start valve is closed.
FAULT lt	:	This amber light comes on, and an ECAM caution appears, if : - There is an overpressure downstream of the bleed valve. - There is a bleed air overheat. - There is a wing or pylon leak on the related side. - The bleed valve is not closed during engine start. - The bleed valve is not closed with APU bleed ON. It goes out when the ENG BLEED pushbutton switch is OFF if the fault has disappeared.
OFF	:	The bleed valve and HP valve close. The white OFF light comes on.

(2) APU BLEED pb sw

ON	:	The APU valve opens if N > 95 % and there is no leak in the APU or in the left side bleed. (If there is a leak on the right side, the x-bleed valve closes.) The blue ON light comes on.
Off	:	The APU valve closes.
FAULT light	:	This amber light comes on, and an ECAM caution appears, when the system detects an APU leak.

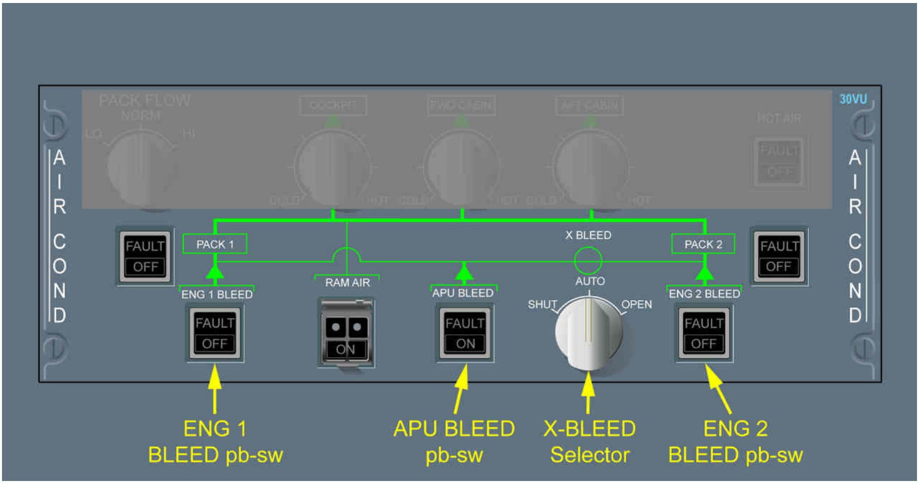
(3) X-BLEED selector sw

AUTO	:	The crossbleed valve is open if the APU bleed valve is open. The crossbleed valve is closed if the APU bleed valve is closed or, in case of a wing, pylon, or APU leak (except during engine start).
OPEN	:	The crossbleed valve is open.
SHUT	:	The crossbleed valve is closed.

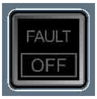
OVERHEAD PANEL

Ident.: DSC-36-20-00001481.0004001 / 12 NOV 20

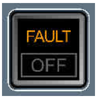
2 **Applicable to: MSN 02734, 02904-03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081**


30VU
AIR COND
PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
HOT AIR
FAULT
OFF
PACK 1
PACK 2
X BLEED
ENG 1 BLEED
RAM AIR
APU BLEED
AUTO
SHUT
OPEN
ENG 2 BLEED
FAULT
OFF
ON
FAULT
ON
FAULT
OFF
ENG 1 BLEED pb-sw
APU BLEED pb-sw
X-BLEED Selector
ENG 2 BLEED pb-sw

ENG 1(2) BLEED PB-SW

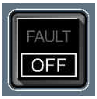


Bleed valve opens if:
- Upstream pressure is above 8 PSI
- APU BLEED pb-sw is off or APU bleed valve is closed
- There is no onside wing or pylon leak, and no overpressure or overtemperature has been detected
- The ENG FIRE pb has not been popped out
- The engine start valve is closed.



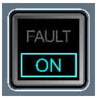
The FAULT light comes on, and an ECAM alert appears, if:
- There is an overpressure downstream of the bleed valve
- There is a bleed air overheat
- There is a wing or pylon leak on the related side
- The bleed valve is not closed during engine start
- The bleed valve is not closed with APU bleed ON
- Dual BTS failure.

The FAULT light goes off when the associated ENG 1(2) BLEED pb-sw is set to OFF, and the applicable failure disappears.

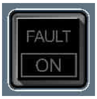


The bleed valve and HP valve close. The OFF light comes on.

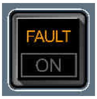
APU BLEED PB-SW



The APU valve opens if N is more than 95 % and there is no leak in the APU or in the left side bleed (if there is a leak on the right side, the x-bleed valve closes).
The ON light comes on.

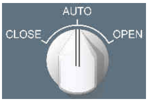


The APU valve closes.

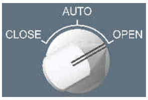


The FAULT light comes on, and an ECAM alert appears, when the system detects an APU leak.

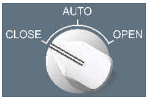
X-BLEED SELECTOR



The crossbleed valve is open if the APU bleed valve is open.
The crossbleed valve is closed if the APU bleed valve is closed or, in the case of a wing, pylon, or APU leak (except during engine start).


AUTO
CLOSE
OPEN

The crossbleed valve is open.

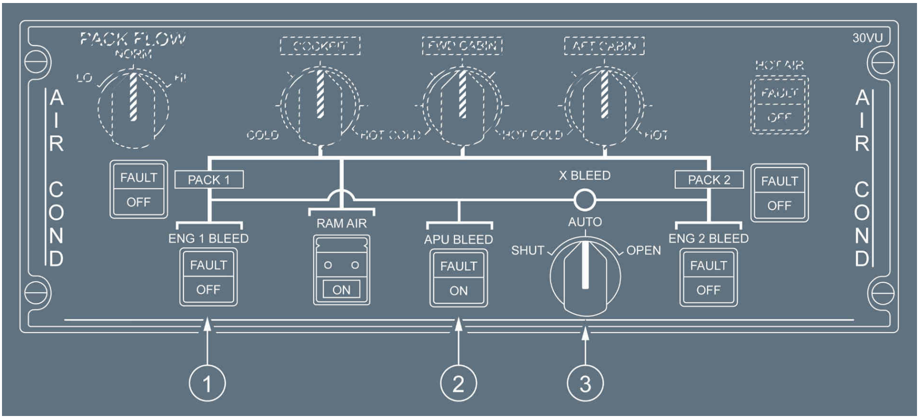

AUTO
CLOSE
OPEN

The crossbleed valve is closed.

OVERHEAD PANEL

Ident.: DSC-36-20-00001481.0002001 / 09 NOV 17

Applicable to: MSN 08495-09324, 10949-11597


PACK FLOW
NORM
LO
HI
COCKPIT
FWD CABIN
AFT CABIN
COLD
HOT
COLD
HOT
COLD
HOT
30VU
HOT AIR
FAULT
OFF
AIR COND
AIR COND
FAULT
OFF
PACK 1
X BLEED
PACK 2
FAULT
OFF
RAM AIR
ON
APU BLEED
FAULT
ON
AUTO
SHUT
OPEN
ENG 1 BLEED
FAULT
OFF
ENG 2 BLEED
FAULT
OFF
1
2
3

(1) ENG 1 and ENG 2 BLEED pb sw

On : Bleed valve opens if :
- Upstream pressure is above 15 PSI.
- APU BLEED pb-sw is off or APU bleed valve is closed.
- There is no onside wing or pylon leak, and no overpressure or overtemperature has been detected.
- The ENG FIRE pb has not been popped out.
- The engine start valve is closed.
- At least one bleed consumer (Pack or WAI) is ON on the same side or at least one bleed consumer is ON on the opposite side with the crossbleed valve is open.

FAULT lt : This amber light comes on, and an ECAM caution appears, if :

- There is an overpressure downstream of the bleed valve.
- There is a bleed air overheat.
- There is a wing or pylon leak on the related side.
- The bleed valve is not closed during engine start.
- The bleed valve is not closed with APU bleed ON.
- HP valve failed open on ground.
- Single BTS failure on ground or BTS disagree on ground.
- Dual BTS failure in flight or on ground.
- Fan Duct burst detected by the FADEC (LEAP-1A engines only).

It goes out when the ENG BLEED pb-sw is OFF if the fault has disappeared.

OFF : The bleed valve, fan air valve and HP valve close. The white OFF light comes on.

(2) APU BLEED pb sw

ON : The APU valve opens if N > 95 % and there is no leak in the APU or in the left side bleed. (If there is a leak on the right side, the x-bleed valve closes.)
The blue ON light comes on.

Off : The APU valve closes.

FAULT light : This amber light comes on, and an ECAM caution appears, when the system detects an APU leak.

(3) X-BLEED selector sw

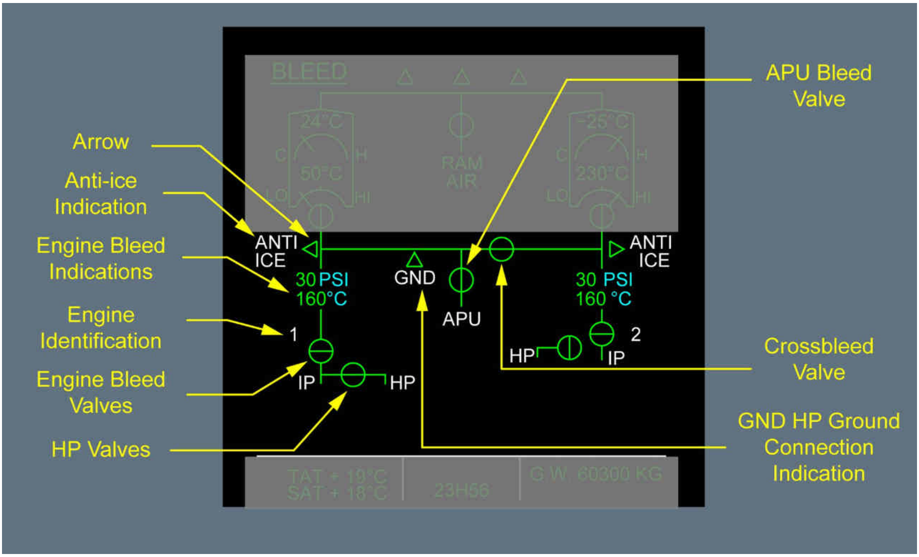
AUTO : The crossbleed valve is open if the APU bleed valve is open.
The crossbleed valve is closed if the APU bleed valve is closed or, in case of a wing, pylon, or APU leak (except during engine start).

OPEN : The crossbleed valve is open.

SHUT : The crossbleed valve is closed.

ECAM BLEED PAGE

Ident.: DSC-36-20-00001482.0003001 / 04 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


BLEED
24°C
50°C
C
H
LO
HI
RAM
AIR
-25°C
230°C
ANTI
ICE
30 PSI
160°C
GND
APU
ANTI
ICE
30 PSI
160 °C
1
IP
HP
HP
2
IP
TAT + 19°C
SAT + 18°C
23H56
G.W. 60300 KG
Arrow
Anti-ice Indication
Engine Bleed Indications
Engine Identification
Engine Bleed Valves
HP Valves
APU Bleed Valve
Crossbleed Valve
GND HP Ground Connection Indication

HP VALVE INDICATIONS

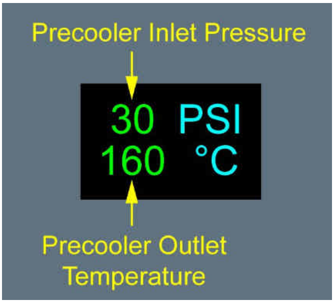
⦶	HP valve normally fully closed.
⊖	HP valve not fully closed.
⦶	HP valve not in commanded (closed) position.

ENGINE BLEED VALVE INDICATIONS

⦶	BLEED valve normally open.
⊖	BLEED valve normally fully closed.

⦶	BLEED valve not in commanded (open) position.
⊖	BLEED valve not in commanded (closed) position.

ENGINE BLEED INDICATIONS



Precooler inlet pressure

It is normally in green.
It becomes amber, if under 4 PSI, or if overpressure is detected by the BMC (threshold between 57 and 60 PSI).

Precooler outlet temperature

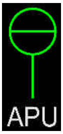
It is normally in green.
It becomes amber, if the BMC detects an overheat or low temperature.

Overheat: Temperature exceeds:
- 290 °C for more than 5 s, or
- 270 °C for more than 15 s, or
- 257 °C for more than 55 s.

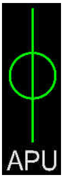
Low temperature is detected (only in-flight), if the bleed temperature drops below 150 °C, the wing anti-ice is on, and the pressure regulating valve is in the open position. Low temperature may, however, only be due to low outside air temperature.

Note: *When the engines are at idle, and depending on the ambient temperature, the precooler outlet temperature may be below 150 °C (displayed amber).*

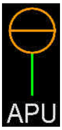
APU BLEED VALVE INDICATIONS



The APU valve is not fully open, and the APU master switch is ON.

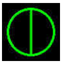


The APU valve is fully open, and the APU master switch is ON.

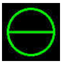


The APU valve is fully closed, the APU master switch is ON, and the APU bleed switch is ON for more than 10 s.

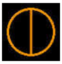
CROSSBLEED VALVE INDICATIONS



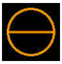
The crossbleed valve is normally closed.



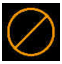
The crossbleed valve is normally open.



The crossbleed valve is not in the commanded (closed) position.

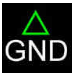


The crossbleed valve is not in the commanded (open) position.



The crossbleed valve is in transit.

GND HP GROUND CONNECTION INDICATION



Indicates that it is possible to connect the HP ground air supply.
It appears on ground only.

ANTI ICE INDICATION

ANTI ICE	When the WING pb on the ANTI-ICE panel is ON.

ARROW

◁

- It is normally not displayed, when the corresponding valve is closed.
- It is normally displayed in green, when the corresponding valve is open.
- It becomes amber, when the
  - Valve is open and air pressure is low or high, or
  - Valve is open on ground for more than 10 s.

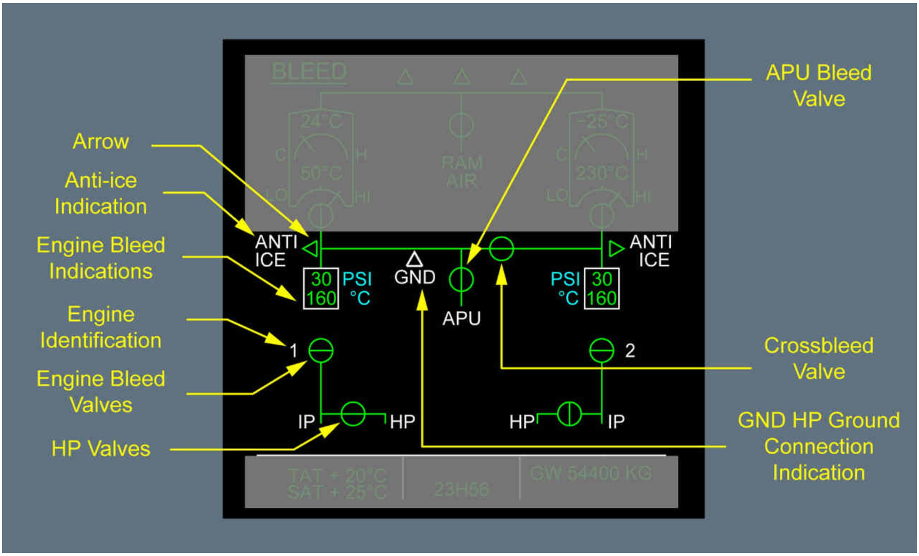
ENGINE IDENTIFICATION (1-2)

1	The engine is running.
1	The engine N2 is below idle.

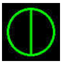
ECAM BLEED PAGE

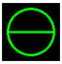
Ident.: DSC-36-20-00001482.0004001 / 04 NOV 20

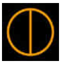
4 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


BLEED
24°C
C
H
50°C
LO
HI
RAM
AIR
-25°C
C
H
230°C
LO
HI
ANTI
ICE
30
160
PSI
°C
GND
APU
PSI
°C
30
160
ANTI
ICE
1
2
IP
HP
HP
IP
TAT + 20°C
SAT + 25°C
23H56
GW 54400 KG
Arrow
Anti-ice Indication
Engine Bleed Indications
Engine Identification
Engine Bleed Valves
HP Valves
APU Bleed Valve
Crossbleed Valve
GND HP Ground Connection Indication

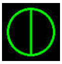
HP VALVE INDICATIONS

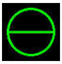

HP valve normally fully closed.

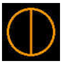

HP valve not fully closed.

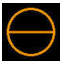

HP valve not in commanded (closed) position.

ENGINE BLEED VALVE INDICATIONS

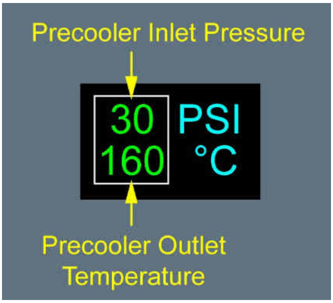

BLEED valve normally open.


BLEED valve normally fully closed.


BLEED valve not in commanded (open) position.


BLEED valve not in commanded (closed) position.

ENGINE BLEED INDICATIONS



Precooler inlet pressure

- It is normally in green.
  It becomes amber, if under 4 PSI, or if overpressure is detected by the BMC (threshold between 57 and 60 PSI).

Precooler outlet temperature

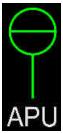
- It is normally in green.
  It becomes amber, if the BMC detects an overheat or low temperature.

  Overheat: Temperature exceeds:
  - 290 °C for more than 5 s, or
  - 270 °C for more than 15 s, or
  - 257 °C for more than 55 s.

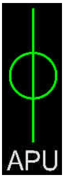
  Low temperature is detected (only in-flight), if the bleed temperature drops below 150 °C, the wing anti-ice is on, and the pressure regulating valve is in the open position. Low temperature may, however, only be due to low outside air temperature.

  Note: *When the engines are at idle, and depending on the ambient temperature, the precooler outlet temperature may be below 150 °C (displayed amber).*

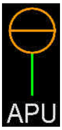
APU BLEED VALVE INDICATIONS



The APU valve is not fully open, and the APU master switch is ON.

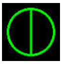


The APU valve is fully open, and the APU master switch is ON.

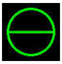


The APU valve is fully closed, the APU master switch is ON, and the APU bleed switch is ON for more than 10 s.

CROSSBLEED VALVE INDICATIONS



The crossbleed valve is normally closed.



The crossbleed valve is normally open.

⦶	The crossbleed valve is not in the commanded (closed) position.
⊖	The crossbleed valve is not in the commanded (open) position.
⊘	The crossbleed valve is in transit.

GND HP GROUND CONNECTION INDICATION

△ GND	Indicates that it is possible to connect the HP ground air supply. It appears on ground only.

ANTI ICE INDICATION

ANTI ICE	When the WING pb on the ANTI-ICE panel is ON.

ARROW

◁

- It is normally not displayed, when the corresponding valve is closed.
- It is normally displayed in green, when the corresponding valve is open.
- It becomes amber, when the
  - Valve is open and air pressure is low or high, or
  - Valve is open on ground for more than 10 s.

ENGINE IDENTIFICATION (1-2)

1	The engine is running.
1	The engine N2 is below idle.

MEMO DISPLAY

Ident.: DSC-36-20-00016746.0001001 / 21 MAR 16
Applicable to: ALL

APU BLEED : This memo appears in green, if the APU is available and the APU BLEED pb-sw is ON.

AIRCRAFT SYSTEMS

WATER / WASTE

Intentionally left blank

DSC-38-10 Description

General....A
Potable Water....B
Wastewater System....C
Toilet System....D

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Localization Title	Toc Index	ID	Reason
DSC-38-10 Potable Water	B	1	Effectivity update: The information now also applies to MSN 11531.
DSC-38-10 Potable Water	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

Intentionally left blank

GENERAL

Ident.: DSC-38-10-00017274.0001001 / 21 MAR 16
Applicable to: ALL

The water and waste systems :
- Distribute potable water to the toilets and the galleys
- Dispose waste water
- Store toilet wastes.

The systems are insulated to prevent water leaks and ice build up.
Controls of the water and waste systems are located on the Forward Attendant Panel (FAP).

POTABLE WATER

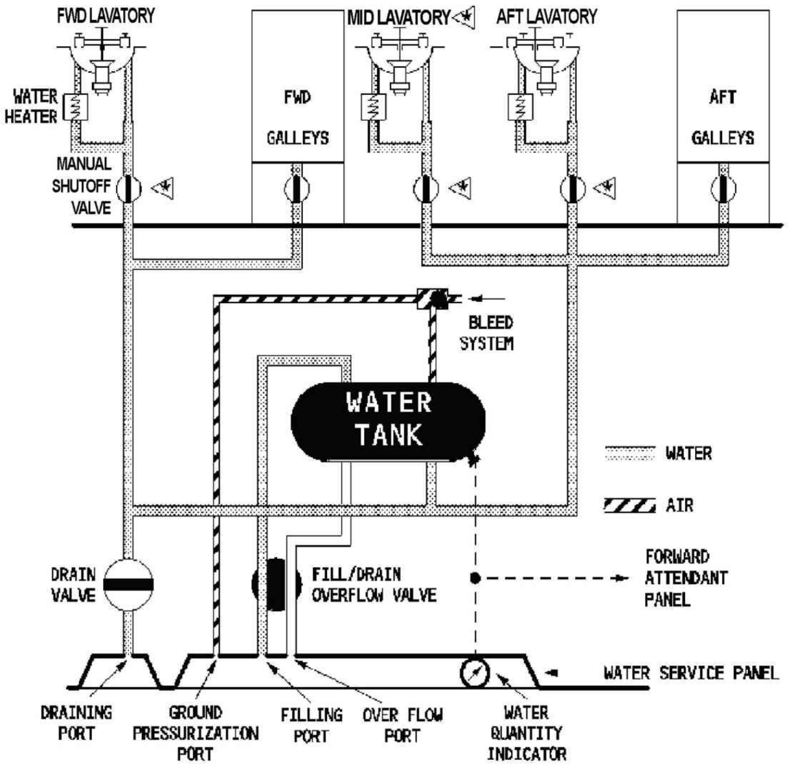
Ident.: DSC-38-10-A-00017286.0001001 / 28 MAY 20
1 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

Potable water is stored in a 200 l water tank (or 135 l water tank) located in the aft cargo compartment, in the wall on the left side.
On ground, the water system is pressurized by the air from the service panel pressure port (or the air-supply boost system). In flight, the water system is pressurized by the bleed air.
Potable water is piped to the galleys and lavatories. Manual shutoff valves ❄ isolate wet galleys, the FWD lavatory (or the MID lavatory) and the aft lavatory from the water system. Manual shutoff valves are located under the washbasins or toilet bowls. The position of each valve is indicated by OPEN and SHUT legend.
The system can be filled or drained from the service panel at the bottom of the fuselage. The indication of the water quantity in the water tank is displayed on the FAP and the aft service panel.

Ident.: DSC-38-10-A-00017286.0002001 / 28 MAY 20
2 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

Potable water is stored in a 200 l water tank located in front of the wing box, behind the FWD cargo compartment.
On ground, the water system is pressurized by the air from the service panel pressure port (or the air-supply boost system). In flight, the water system is pressurized by the bleed air.
Potable water is piped to the galleys and lavatories. Manual shutoff valves ❄ isolate wet galleys, the FWD lavatory (or the MID lavatory) and the aft lavatory from the water system. Manual shutoff valves are located under the washbasins or toilet bowls. The position of each valve is indicated by OPEN and SHUT legend.
The system can be filled or drained from the service panel under the fuselage. The indication of the water quantity in the water tank is displayed on the FAP and the aft service panel.

Ident.: DSC-38-10-A-00017435.0001001 / 21 MAR 16
Applicable to: ALL

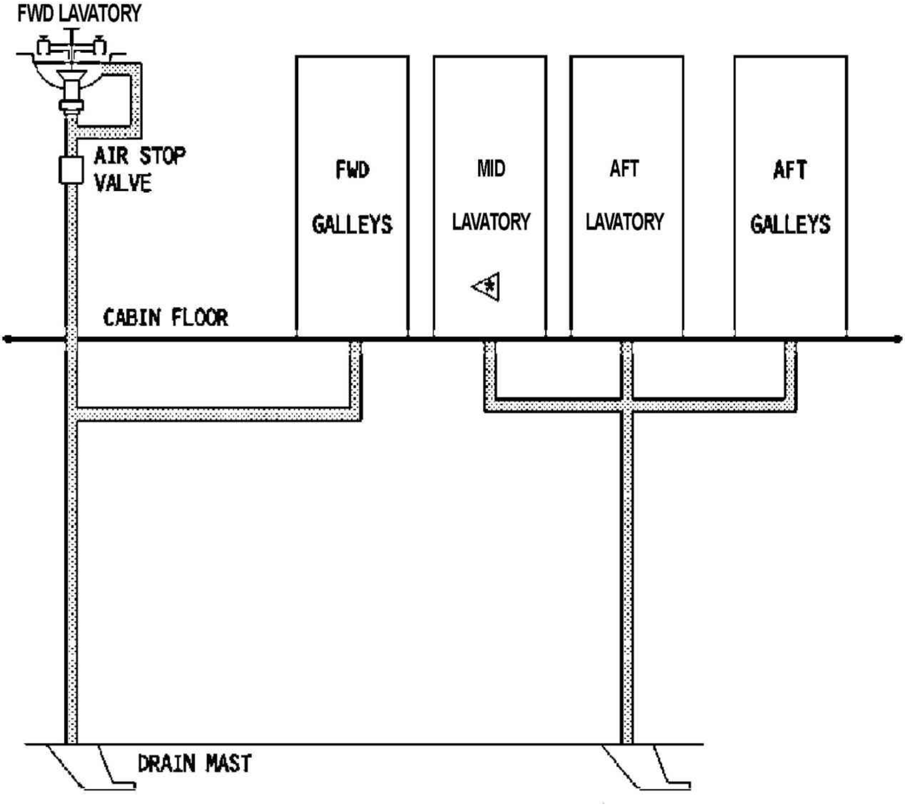

FWD LAVATORY
FWD GALLEYS
MID LAVATORY
AFT LAVATORY
AFT GALLEYS
WATER HEATER
MANUAL SHUTOFF VALVE
BLEED SYSTEM
WATER TANK
WATER
AIR
DRAIN VALVE
FILL/DRAIN OVERFLOW VALVE
FORWARD ATTENDANT PANEL
WATER SERVICE PANEL
DRAINING PORT
GROUND PRESSURIZATION PORT
FILLING PORT
OVER FLOW PORT
WATER QUANTITY INDICATOR

WASTEWATER SYSTEM

Ident.: DSC-38-10-00017287.0001001 / 21 MAR 16
Applicable to: ALL

The waste/water (from galleys and lavatories) drains overboard through two heated drain masts. The forward mast drains the waste/water from the forward cabin. The aft mast drains the waste/water from the aft cabin.

The waste and water are discharged by:
- Gravity, on ground
- Differential pressure, in flight.


FWD LAVATORY
AIR STOP VALVE
FWD GALLEYS
MID LAVATORY
AFT LAVATORY
AFT GALLEYS
CABIN FLOOR
DRAIN MAST

TOILET SYSTEM

Ident.: DSC-38-10-00017288.0002001 / 21 MAR 16
Applicable to: ALL

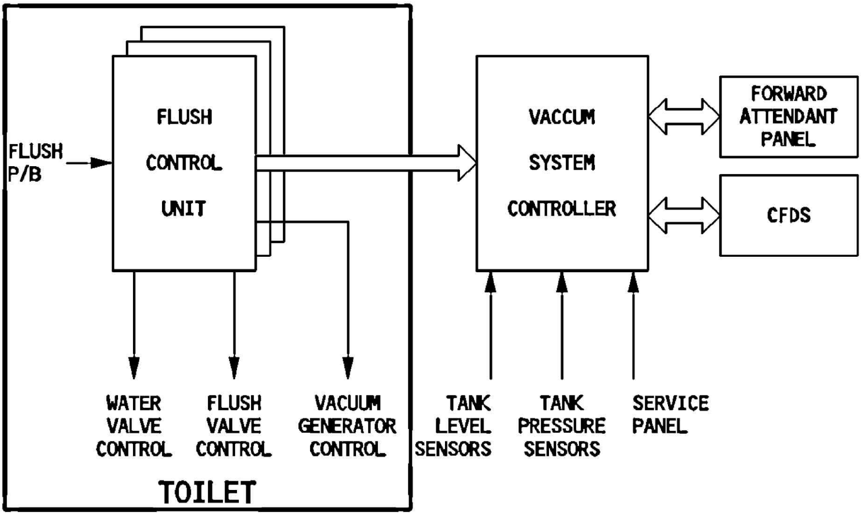
Differential pressure forces the waste from the toilet bowls into the waste tank. The waste tank has a usable capacity of 170 l. On ground, and in flight below 16 000 ft , the differential pressure is generated by the vacuum generator.
Clean water from the potable water system flushes toilets.

A flush control unit controls the flush sequence in each toilet.
The Vacuum System Controller (VSC) ensures system control, monitoring and fault reporting.

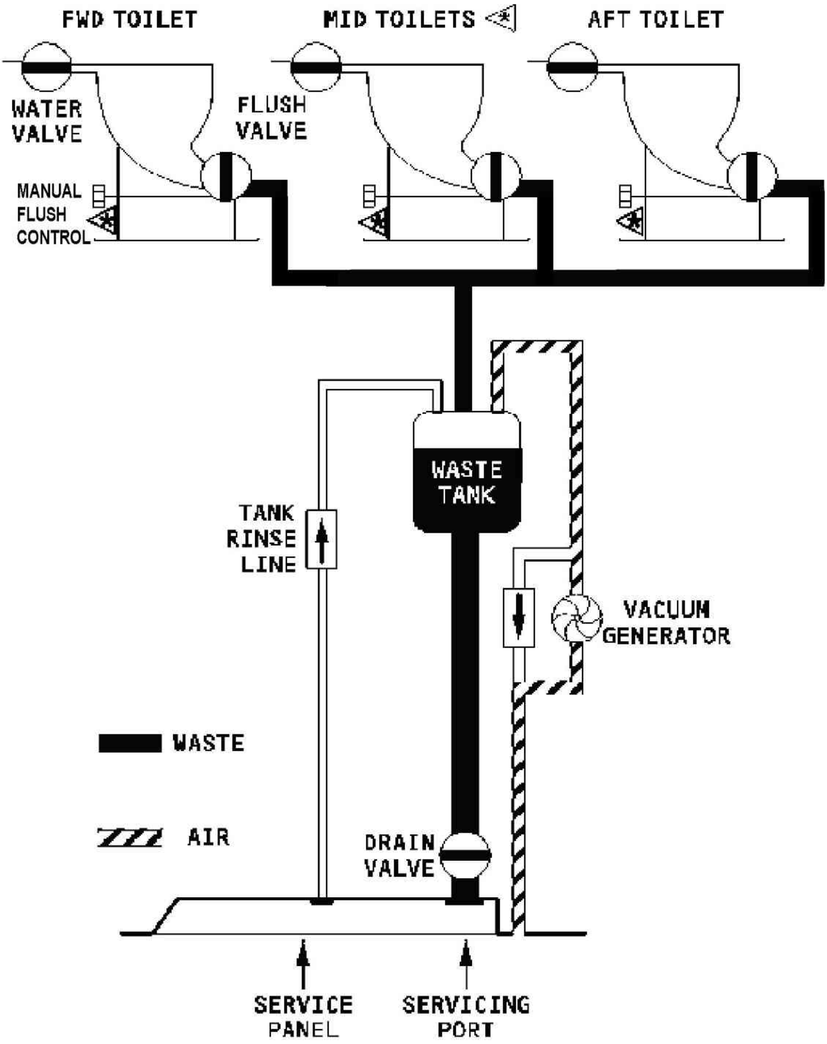
The VSC transmits information to:
- Flight attendant panel to indicate the waste tank levels and report system defects
- Centralized Fault Display System (CFDS) to signal the system defects to the maintenance.

Ground personnel services the waste tank via a service panel, located under the fuselage.
A manual shutoff valve isolates an inoperative toilet. In the case of an electrical failure of flush valve, the manual flush control ◁✻ can be used. The manual flush control is located under each toilet bowl.

ARCHITECTURE


FLUSH P/B
FLUSH CONTROL UNIT
VACCUM SYSTEM CONTROLLER
FORWARD ATTENDANT PANEL
CFDS
WATER VALVE CONTROL
FLUSH VALVE CONTROL
VACUUM GENERATOR CONTROL
TANK LEVEL SENSORS
TANK PRESSURE SENSORS
SERVICE PANEL
TOILET

SCHEMATIC


FWD TOILET
MID TOILETS
AFT TOILET
WATER VALVE
FLUSH VALVE
MANUAL FLUSH CONTROL
WASTE TANK
TANK RINSE LINE
VACUUM GENERATOR
WASTE
AIR
DRAIN VALVE
SERVICE PANEL
SERVICING PORT

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AIRCRAFT SYSTEMS

MAINTENANCE SYSTEM

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DSC-45-10 Description

General....A
Components....B
Modes of Operation....C
Architecture....D
Failure/Fault Classification....E
Functions of the Centralized Fault Display System (CFDS)....F
Cockpit/CFDS Interface....G

DSC-45-20 System Operation

Maintenance Menu....A
Last (or Current) Leg Report....B
Last (or Current) Leg ECAM Report....C
Previous Leg Report....D
Avionics Status....E
System Report/Test....F
GMT/Date Initialization....G
Backup Mode....H
ACARS Print Program....I

DSC-45-25 Data Loading

General....A
Data Loading Selector on the Overhead Panel....B

DSC-45-30 Printer

General....A
System Description....B

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PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
DSC-45-10 Architecture	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-10 Functions of the Centralized Fault Display System (CFDS)	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-20 Maintenance Menu	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-20 Last (or Current) Leg ECAM Report - Post Flight Report Print	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-45-25 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-45-10-00001490.0001001 / 21 MAR 16
Applicable to: ALL

The purpose of the Centralized Fault Display System (CFDS) is to make the maintenance task easier by displaying fault messages in the cockpit and permitting the flight crew to make some specific tests.

There are two levels of maintenance :

at the line stop	:	removal and replacement of equipment
at the main base	:	troubleshooting

COMPONENTS

Ident.: DSC-45-10-00001491.0001001 / 21 MAR 16
Applicable to: ALL

The CFDS includes :
- the BITE (Built-In Test Equipment) for each electronic system
- a central computer, the Centralized Fault Display Interface Unit (CFDIU)
- two MCDUs (Multipurpose Control and Display Units), used also for FMGS (Flight Management and Guidance System), AIDS (Aircraft Integrated Data System), and ACARS (Aircraft Communication And Reporting System, if installed), which work with the CFDIU to display information or initiate tests
- one printer.

If a main channel of the CFDIU fails, the backup channel takes over.

MODES OF OPERATION

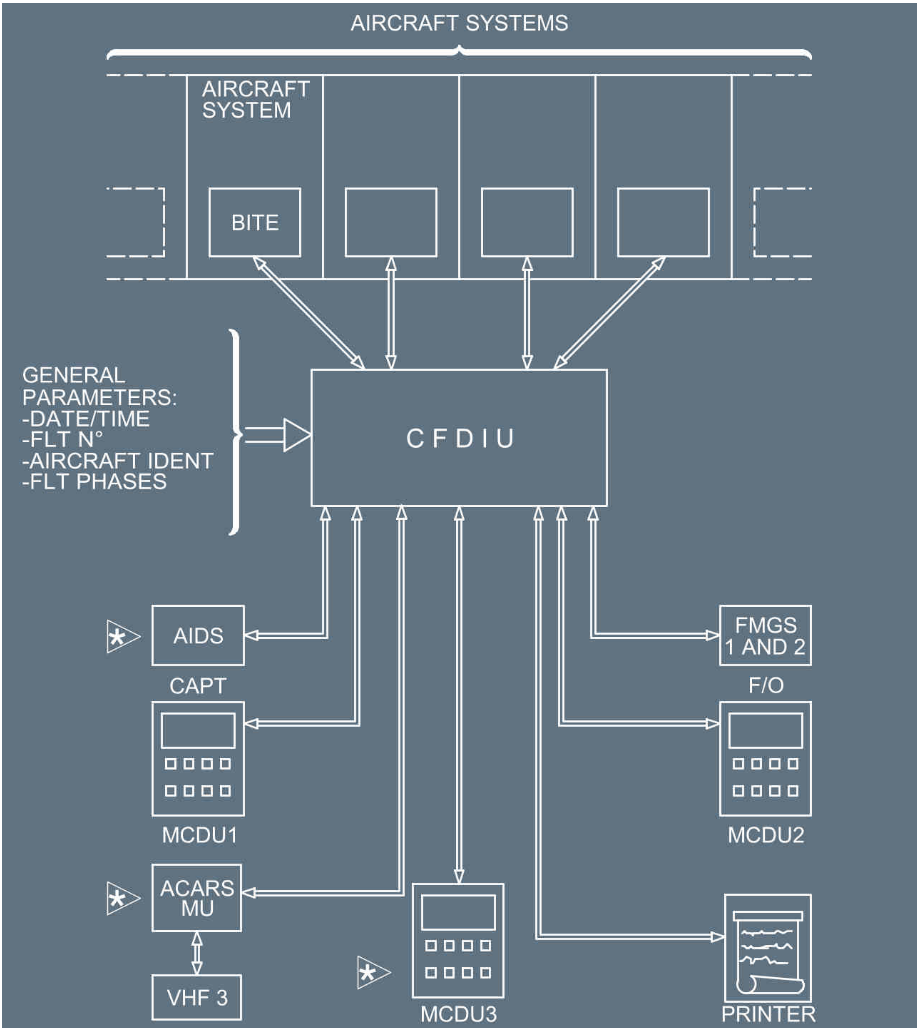
Ident.: DSC-45-10-00001492.0001001 / 22 MAR 16
Applicable to: ALL

The CFDS operates in two main modes :
- the NORMAL mode or REPORTING mode (in flight)
- the INTERACTIVE mode or MENU mode (on ground).

In NORMAL mode, the CFDS records and displays the failure messages transmitted by each system BITE.
In INTERACTIVE mode, the CFDS allows any BITE to be connected with the MCDU in order to display the maintenance data stored and formatted by the BITE or to initiate a test.

ARCHITECTURE

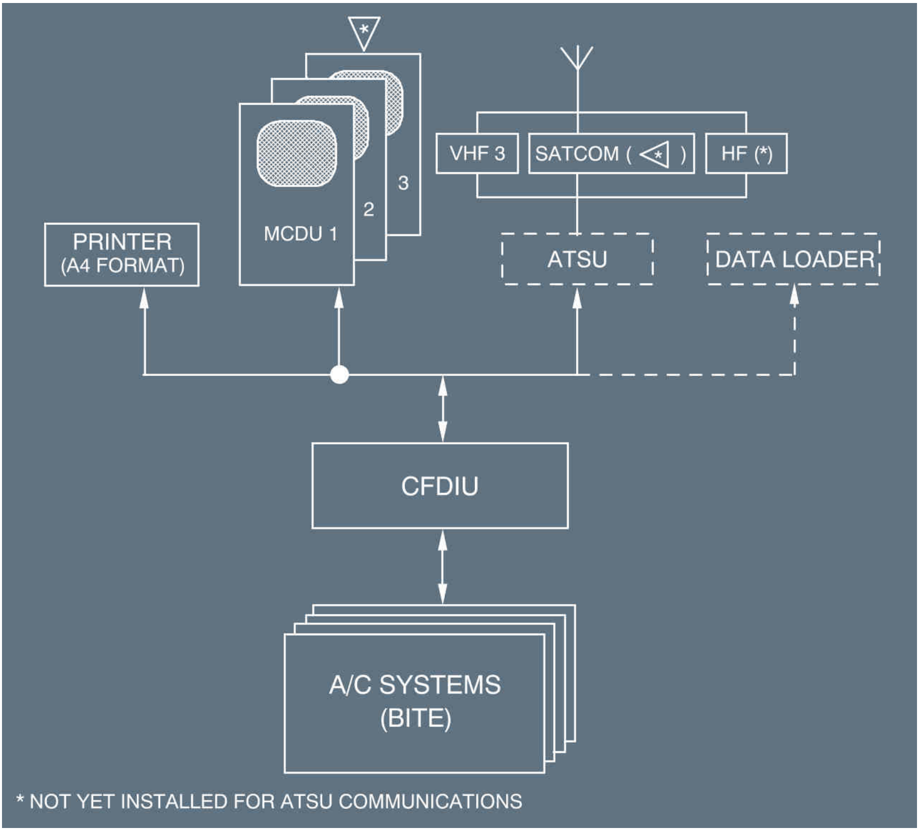
Ident.: DSC-45-10-00001493.0001001 / 24 APR 12
Applicable to: MSN 01459


AIRCRAFT SYSTEMS
AIRCRAFT SYSTEM
BITE
GENERAL PARAMETERS:
-DATE/TIME
-FLT N°
-AIRCRAFT IDENT
-FLT PHASES
CFDIU
*
AIDS
FMGS 1 AND 2
CAPT
F/O
MCDU1
MCDU2
*
ACARS MU
VHF 3
*
MCDU3
PRINTER

ARCHITECTURE

Ident.: DSC-45-10-00001493.0002001 / 19 DEC 12

1 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**


*
3
2
MCDU 1
VHF 3
SATCOM (*)
HF (*)
PRINTER
(A4 FORMAT)
ATSU
DATA LOADER
CFDIU
A/C SYSTEMS
(BITE)

* NOT YET INSTALLED FOR ATSU COMMUNICATIONS

FAILURE/FAULT CLASSIFICATION

Ident.: DSC-45-10-00017082.0001001 / 21 MAR 16
Applicable to: ALL

The Centralized Fault Display System (CFDS) identifies the faulty system and puts any failures or faults into one of three classes :

Class 1 : Failures indicated to the flight crew by means of the ECAM, or other flight deck effect. They must be repaired or entered in the MEL (Minimum Equipment List) before the aircraft can depart.

Class 2 : Faults indicated to maintenance personnel by the CFDS and which trigger a MAINT status entry on the maintenance part of the ECAM status page. The aircraft can operate with these faults, but they must be rectified within the timescale defined in the Trouble Shooting Manual (TSM).

Class 3 : Faults indicated to maintenance personnel by the CFDS, but which do not trigger a MAINT status. The operator may have these faults corrected at his convenience.

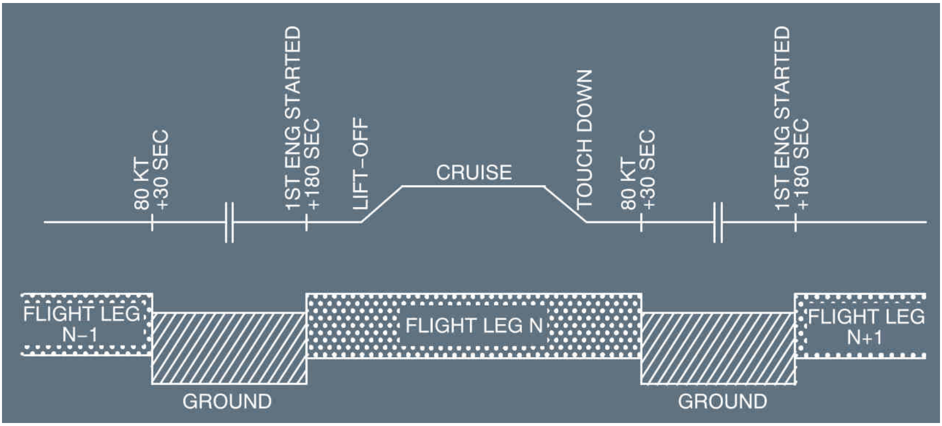
Failure/fault classes	Class 1	Class 2	Class 3
Operational consequences	YES	NO	NO
Indication to the flight crew	YES Automatically displayed - Warning or caution messages on Engine Warning Display - Flag or indication in the flight deck.	YES Available on ECAM status page.	NO
Dispatch consequences	Refer to MEL may be : "GO" "GO IF" "NO GO"	*Refer to MMEL/MI-00-08 ECAM and MAINTENANCE STATUS*	MEL not applicable
Indication to the maintenance team	YES Automatically print out at the end of each flight : Fault messages on the CFDS Post Flight Report.		YES Available on request through system report/Test

FUNCTIONS OF THE CENTRALIZED FAULT DISPLAY SYSTEM (CFDS)

Ident.: DSC-45-10-00001495.0001001 / 21 MAR 16
Applicable to: MSN 01251-01459

The main functions of the CFDS are :

- obtaining and storing messages transmitted by the connected system BITEs, or by the Flight Warning Computer (Warning and Caution titles)
- Detailing the maintenance phases.


80 KT
+30 SEC
1ST ENG STARTED
+180 SEC
LIFT–OFF
CRUISE
TOUCH DOWN
80 KT
+30 SEC
1ST ENG STARTED
+180 SEC
FLIGHT LEG
N–1
FLIGHT LEG N
FLIGHT LEG
N+1
GROUND
GROUND

- Presenting maintenance reports :
  - Last leg report
  - Last leg ECAM report
  - Previous leg report
  - Avionics status
  - System report test
  - Post-flight report.

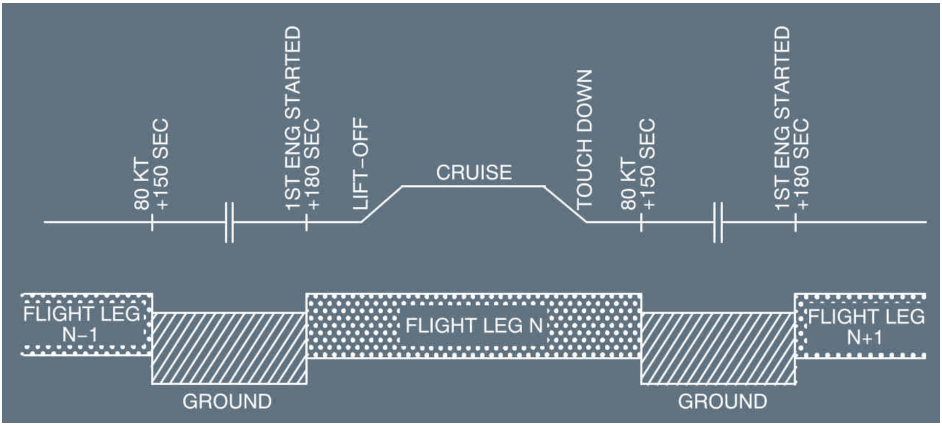
FUNCTIONS OF THE CENTRALIZED FAULT DISPLAY SYSTEM (CFDS)

Ident.: DSC-45-10-00001495.0002001 / 21 MAR 16

2 **Applicable to: MSN 01143-01246, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The main functions of the CFDS are :

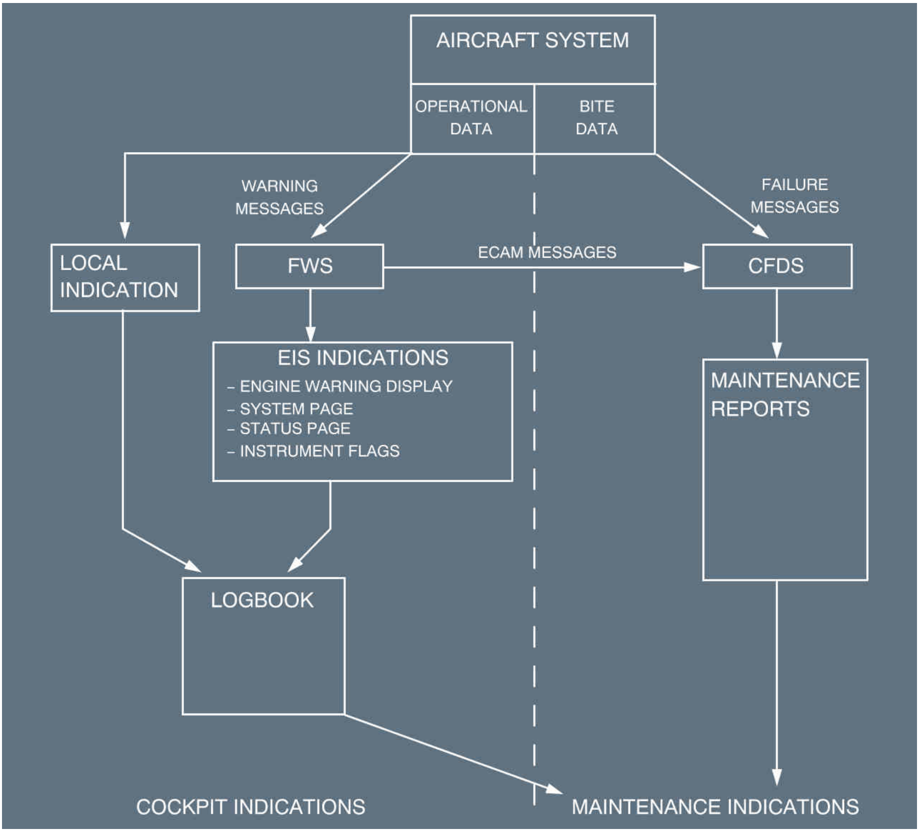
- obtaining and storing messages transmitted by the connected system BITEs, or by the Flight Warning Computer (Warning and Caution titles)
- Detailing the maintenance phases.


80 KT
+150 SEC
1ST ENG STARTED
+180 SEC
LIFT–OFF
CRUISE
TOUCH DOWN
80 KT
+150 SEC
1ST ENG STARTED
+180 SEC
FLIGHT LEG
N–1
FLIGHT LEG N
FLIGHT LEG
N+1
GROUND
GROUND

- Presenting maintenance reports :
  - Last leg report
  - Last leg ECAM report
  - Previous leg report
  - Avionics status
  - System report test
  - Post-flight report.

COCKPIT/CFDS INTERFACE

Ident.: DSC-45-10-00001496.0001001 / 22 MAR 16
Applicable to: ALL


AIRCRAFT SYSTEM
OPERATIONAL DATA
BITE DATA
WARNING MESSAGES
FAILURE MESSAGES
LOCAL INDICATION
FWS
ECAM MESSAGES
CFDS
EIS INDICATIONS
- ENGINE WARNING DISPLAY
- SYSTEM PAGE
- STATUS PAGE
- INSTRUMENT FLAGS
MAINTENANCE REPORTS
LOGBOOK
COCKPIT INDICATIONS
MAINTENANCE INDICATIONS

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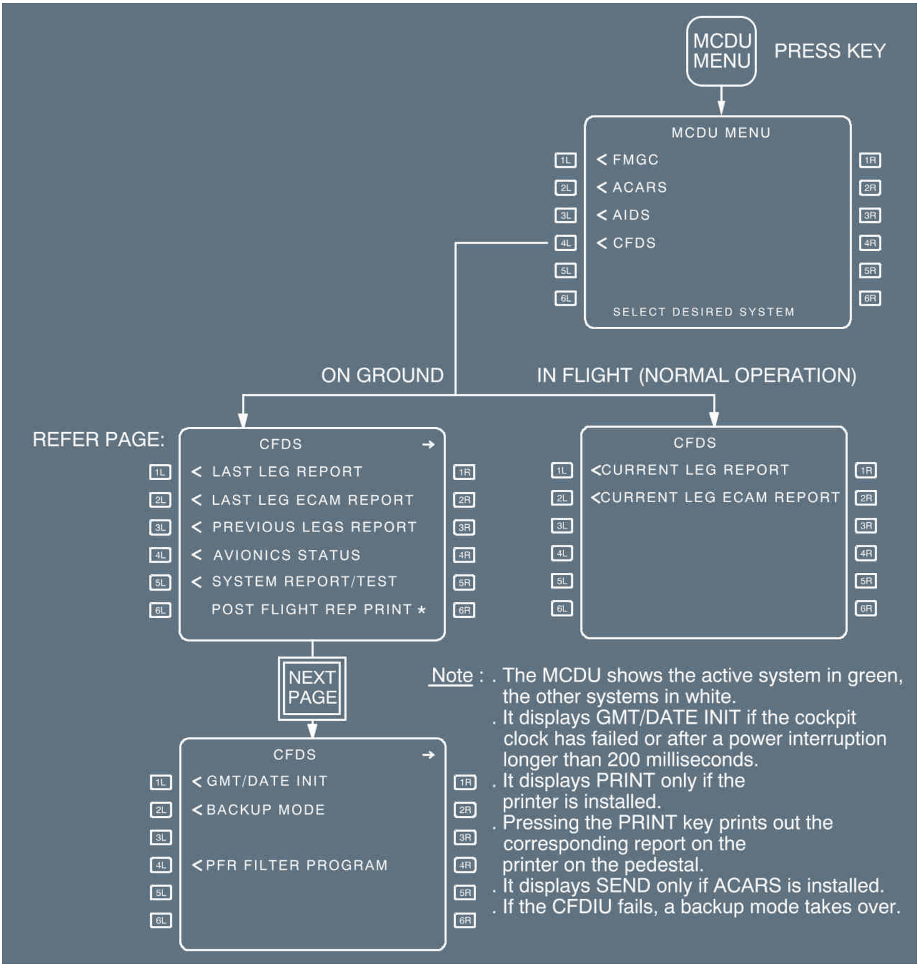
MAINTENANCE MENU

Ident.: DSC-45-20-00001497.0001001 / 14 MAY 12
Applicable to: MSN 01459

The CFDS uses menus displayed on the MCDU. The operator selects functions or reports from these menus.
Pressing the MCDU MENU key and then selecting CFDS brings up the MAINTENANCE MENU page (different pages for the aircraft in flight and the aircraft on the ground).


MCDU MENU
PRESS KEY
MCDU MENU
< FMGC
< ACARS
< AIDS
< CFDS
SELECT DESIRED SYSTEM
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
ON GROUND
IN FLIGHT (NORMAL OPERATION)
REFER PAGE:
CFDS →
< LAST LEG REPORT
< LAST LEG ECAM REPORT
< PREVIOUS LEGS REPORT
< AVIONICS STATUS
< SYSTEM REPORT/TEST
POST FLIGHT REP PRINT *
CFDS
<CURRENT LEG REPORT
<CURRENT LEG ECAM REPORT
NEXT PAGE
CFDS →
<GMT/DATE INIT
<BACKUP MODE
<PFR FILTER PROGRAM

Note :
- The MCDU shows the active system in green, the other systems in white.
- It displays GMT/DATE INIT if the cockpit clock has failed or after a power interruption longer than 200 milliseconds.
- It displays PRINT only if the printer is installed.
- Pressing the PRINT key prints out the corresponding report on the printer on the pedestal.
- It displays SEND only if ACARS is installed.
- If the CFDIU fails, a backup mode takes over.

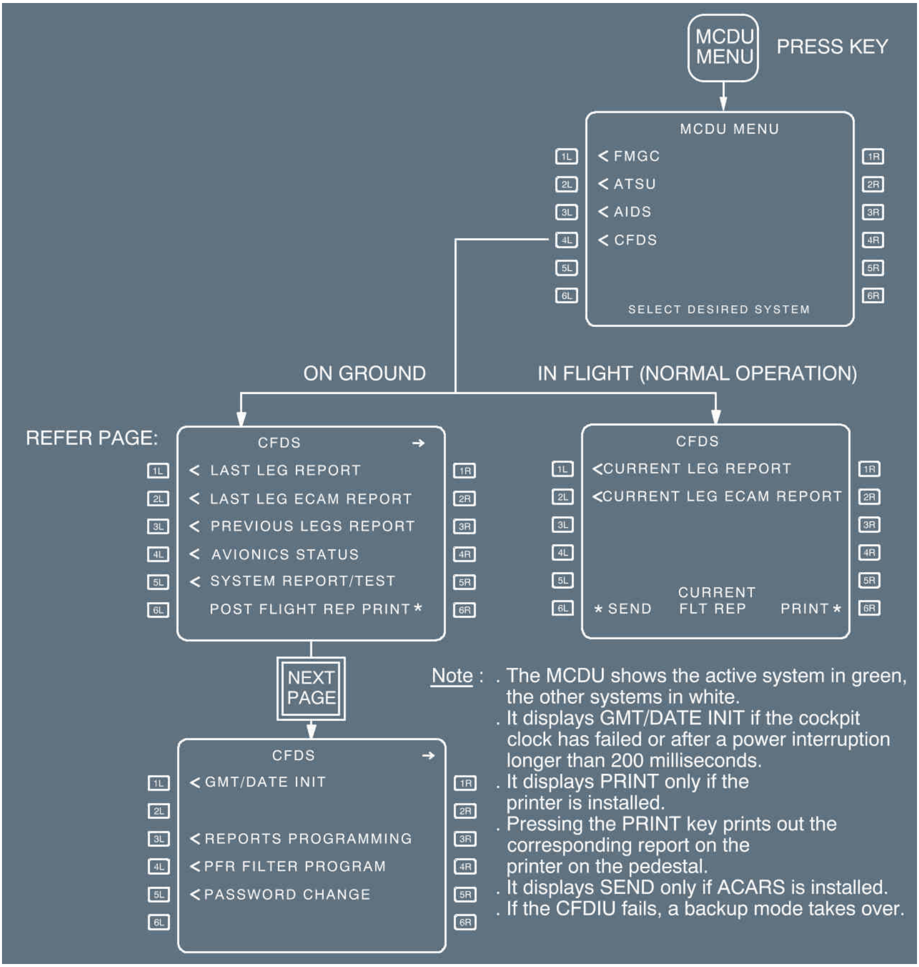
MAINTENANCE MENU

Ident.: DSC-45-20-00001497.0002001 / 14 MAY 12

[1] **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The CFDS uses menus displayed on the MCDU. The operator selects functions or reports from these menus.

Pressing the MCDU MENU key and then selecting CFDS brings up the MAINTENANCE MENU page (different pages for the aircraft in flight and the aircraft on the ground).

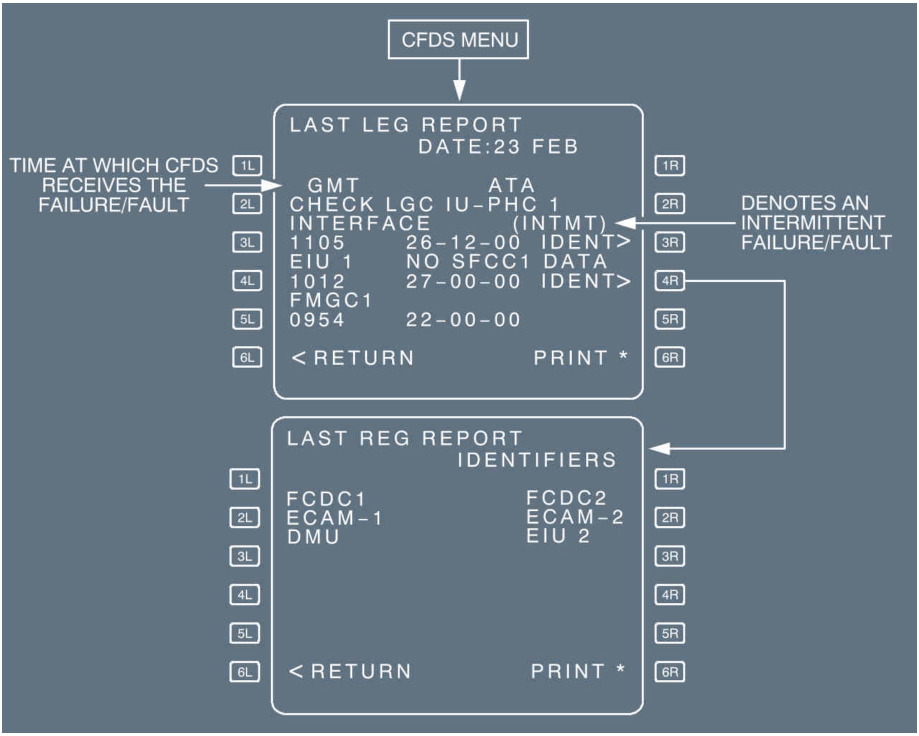

MCDU MENU
PRESS KEY
MCDU MENU
< FMGC
< ATSU
< AIDS
< CFDS
SELECT DESIRED SYSTEM
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
ON GROUND
IN FLIGHT (NORMAL OPERATION)
REFER PAGE:
CFDS →
< LAST LEG REPORT
< LAST LEG ECAM REPORT
< PREVIOUS LEGS REPORT
< AVIONICS STATUS
< SYSTEM REPORT/TEST
POST FLIGHT REP PRINT *
CFDS
<CURRENT LEG REPORT
<CURRENT LEG ECAM REPORT
* SEND
CURRENT FLT REP
PRINT *
NEXT PAGE
CFDS →
< GMT/DATE INIT
< REPORTS PROGRAMMING
< PFR FILTER PROGRAM
< PASSWORD CHANGE

Note :
. The MCDU shows the active system in green, the other systems in white.
. It displays GMT/DATE INIT if the cockpit clock has failed or after a power interruption longer than 200 milliseconds.
. It displays PRINT only if the printer is installed.
. Pressing the PRINT key prints out the corresponding report on the printer on the pedestal.
. It displays SEND only if ACARS is installed.
. If the CFDIU fails, a backup mode takes over.

LAST (OR CURRENT) LEG REPORT

Ident.: DSC-45-20-00001498.0001001 / 21 MAR 16
Applicable to: ALL

The LAST LEG REPORT (on the ground) or the CURRENT LEG REPORT (in flight), list all class 1 failures and class 2 faults and all system failure and system fault messages received by the CFDS during the last flight leg or the current flight leg. Pressing the IDENT key displays a list of the systems (called identifiers) affected by the failure or fault, which helps the pilot or maintenance person to identify the failure or fault.



TIME AT WHICH CFDS RECEIVES THE FAILURE/FAULT

DENOTES AN INTERMITTENT FAILURE/FAULT

```
LAST LEG REPORT
           DATE:23 FEB

  GMT           ATA
CHECK LGC IU-PHC 1
INTERFACE      (INTMT)
1105     26-12-00  IDENT>
EIU 1    NO SFCC1 DATA
1012     27-00-00  IDENT>
FMGC1
0954     22-00-00

<RETURN          PRINT *
```

```
LAST REG REPORT
             IDENTIFIERS

FCDC1             FCDC2
ECAM-1            ECAM-2
DMU               EIU 2

<RETURN          PRINT *
```

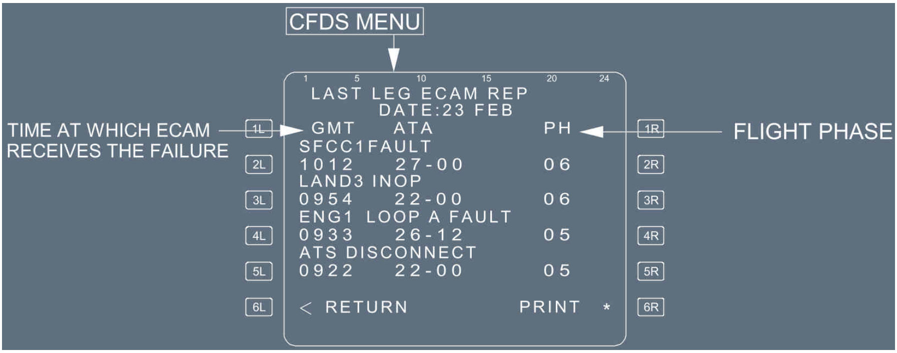
LAST (OR CURRENT) LEG ECAM REPORT

Ident.: DSC-45-20-A-00001499.0001001 / 21 MAR 16
Applicable to: ALL

GENERAL

In flight : The CURRENT LEG ECAM REPORT displays the primary and independent warning (class I) messages and MAINTENANCE STATUS (class II) messages of the current flight leg.

On the ground : The LAST LEG ECAM REPORT displays the primary and independent warning (class I) messages plus MAINTENANCE STATUS (class II) messages of the last flight leg.



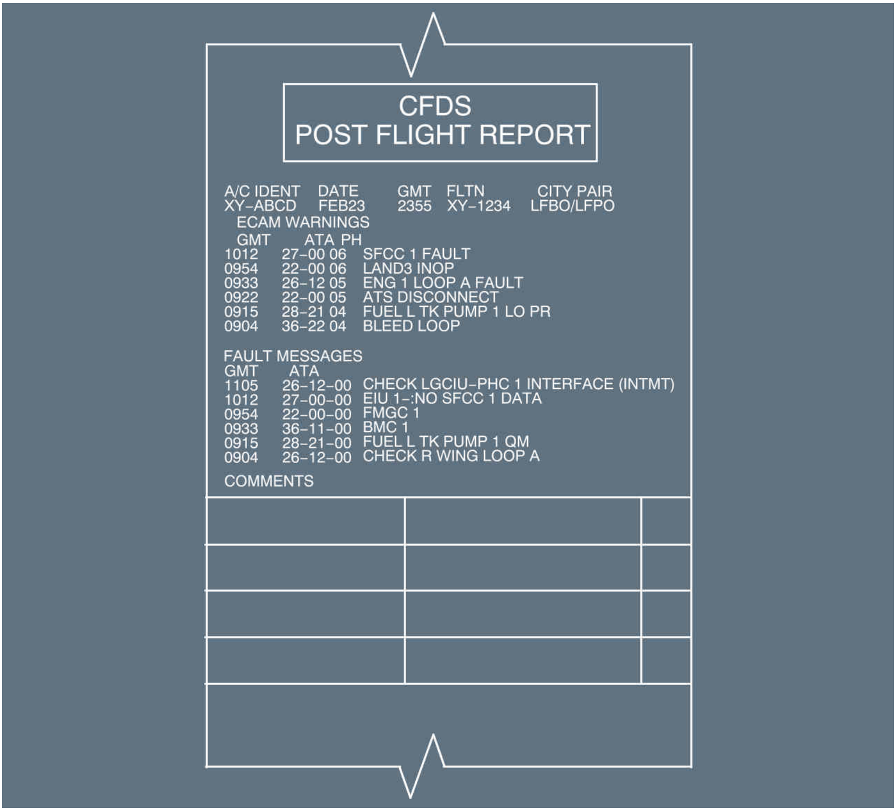
```
 LAST LEG ECAM REP
      DATE:23 FEB
 GMT    ATA         PH
SFCC1FAULT
1012    27-00       06
LAND3 INOP
0954    22-00       06
ENG1 LOOP A FAULT
0933    26-12       05
ATS DISCONNECT
0922    22-00       05

< RETURN         PRINT *
```

Note: This screen displays PRINT only if the printer is installed.

Ident.: DSC-45-20-A-00001500.0001001 / 14 MAY 12
2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

POST FLIGHT REPORT PRINT

At the end of a flight, LAST LEG and LAST LEG ECAM REPORTS are printed out automatically after the last engine shutdown. The flight or ground crew can also print them out by selecting POST FLIGHT REP PRINT.
The report first lists the ECAM warnings, then the FAULT messages.

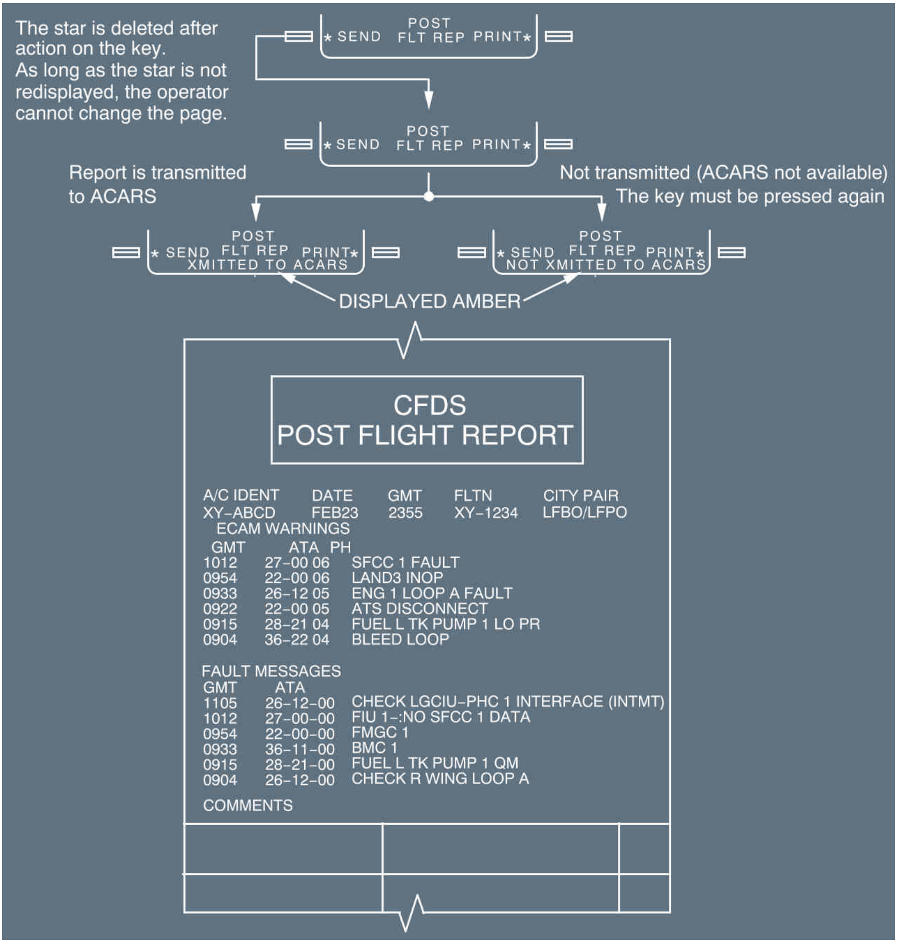


```
CFDS
POST FLIGHT REPORT

A/C IDENT   DATE     GMT   FLTN       CITY PAIR
XY-ABCD     FEB23    2355  XY-1234    LFBO/LFPO
  ECAM WARNINGS
  GMT        ATA PH
1012      27-00 06   SFCC 1 FAULT
0954      22-00 06   LAND3 INOP
0933      26-12 05   ENG 1 LOOP A FAULT
0922      22-00 05   ATS DISCONNECT
0915      28-21 04   FUEL L TK PUMP 1 LO PR
0904      36-22 04   BLEED LOOP

FAULT MESSAGES
GMT        ATA
1105      26-12-00   CHECK LGCIU-PHC 1 INTERFACE (INTMT)
1012      27-00-00   EIU 1-:NO SFCC 1 DATA
0954      22-00-00   FMGC 1
0933      36-11-00   BMC 1
0915      28-21-00   FUEL L TK PUMP 1 QM
0904      26-12-00   CHECK R WING LOOP A
COMMENTS
```

Ident.: DSC-45-20-A-00001500.0002001 / 21 MAR 16
Applicable to: MSN 01459

POST FLIGHT REPORT

At the end of a flight, LAST LEG and LAST LEG ECAM REPORTS are printed out automatically after landing (30 s after reaching 80 kt). The flight or ground crew can also print them out by selecting POST FLIGHT REP PRINT.
It is also automatically sent to the ground, using ACARS system after the last engine shutdown, or manually by selecting the SEND key.

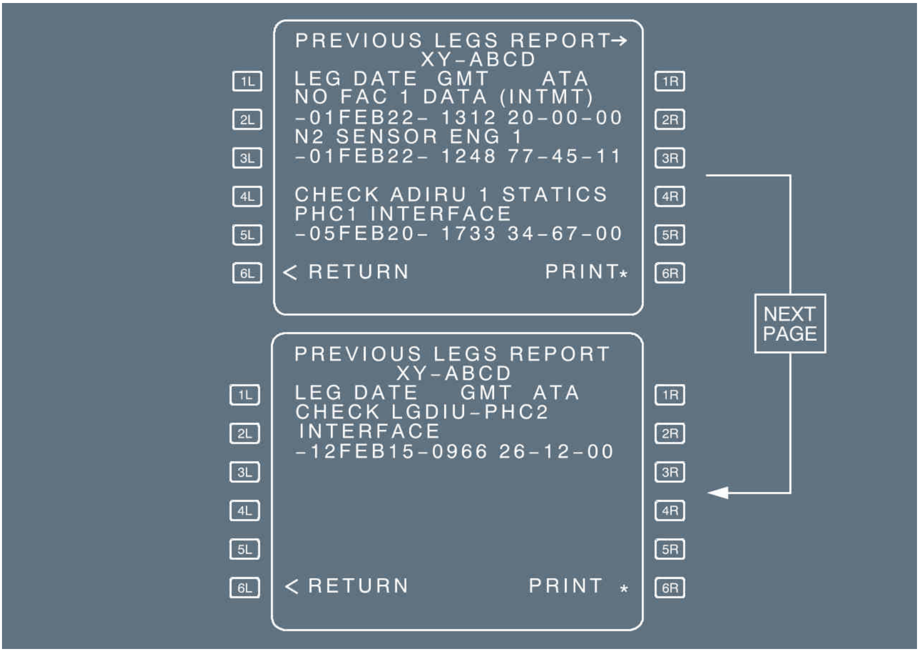

The star is deleted after action on the key.
As long as the star is not redisplayed, the operator cannot change the page.
* SEND
POST FLT REP
PRINT*
* SEND
POST FLT REP
PRINT*
Report is transmitted to ACARS
Not transmitted (ACARS not available)
The key must be pressed again
* SEND
POST FLT REP
PRINT*
XMITTED TO ACARS
* SEND
POST FLT REP
PRINT*
NOT XMITTED TO ACARS
DISPLAYED AMBER

```
CFDS
POST FLIGHT REPORT

A/C IDENT    DATE    GMT    FLTN       CITY PAIR
XY-ABCD      FEB23   2355   XY-1234    LFBO/LFPO
  ECAM WARNINGS
 GMT         ATA  PH
1012      27-00 06    SFCC 1 FAULT
0954      22-00 06    LAND3 INOP
0933      26-12 05    ENG 1 LOOP A FAULT
0922      22-00 05    ATS DISCONNECT
0915      28-21 04    FUEL L TK PUMP 1 LO PR
0904      36-22 04    BLEED LOOP

FAULT MESSAGES
GMT        ATA
1105      26-12-00    CHECK LGCIU-PHC 1 INTERFACE (INTMT)
1012      27-00-00    FIU 1-:NO SFCC 1 DATA
0954      22-00-00    FMGC 1
0933      36-11-00    BMC 1
0915      28-21-00    FUEL L TK PUMP 1 QM
0904      26-12-00    CHECK R WING LOOP A

COMMENTS
```

PREVIOUS LEG REPORT

Ident.: DSC-45-20-00001501.0001001 / 21 MAR 16
Applicable to: ALL

This report gives access to the POST FLIGHT REPORTS of the previous 63 flight legs.



```
PREVIOUS LEGS REPORT→
        XY-ABCD
LEG DATE  GMT    ATA
NO FAC 1 DATA (INTMT)
-01FEB22- 1312 20-00-00
N2 SENSOR ENG 1
-01FEB22- 1248 77-45-11

CHECK ADIRU 1 STATICS
PHC1 INTERFACE
-05FEB20- 1733 34-67-00
< RETURN          PRINT*
```

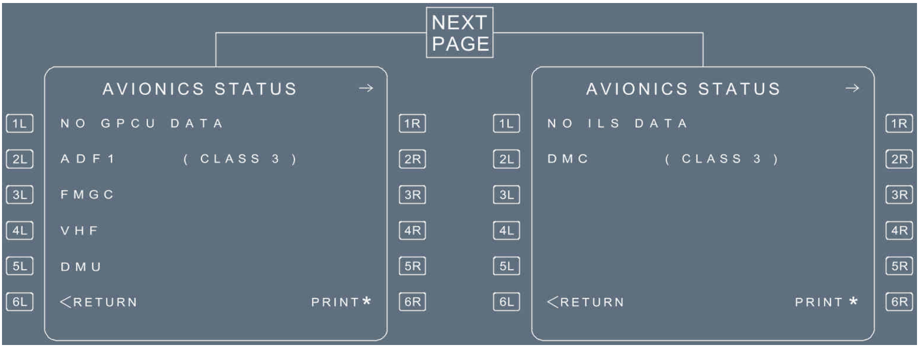
```
PREVIOUS LEGS REPORT
      XY-ABCD
LEG DATE    GMT  ATA
CHECK LGDIU-PHC2
 INTERFACE
-12FEB15-0966 26-12-00





< RETURN          PRINT *
```

On ground, the Operator can print copies of the screen. If ACARS is installed, the Operator can send the flight report (*Refer to DSC-45-20 Last (or Current) Leg ECAM Report - Post Flight Report Print*).

AVIONICS STATUS

Ident.: DSC-45-20-00001502.0001001 / 21 MAR 16
Applicable to: ALL

This screen displays the list of systems affected by a failure or fault. If a system is affected by at least a Class 3 fault, CLASS 3 appears beside it. The display is continuously updated.



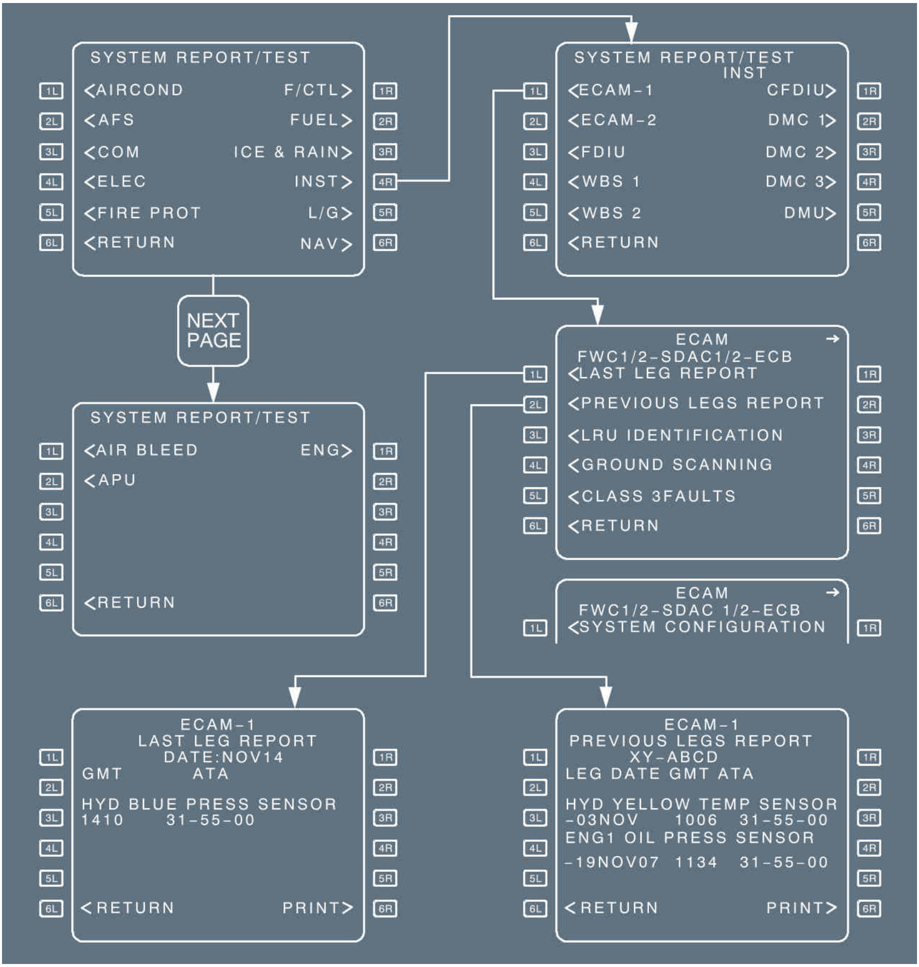
```
AVIONICS STATUS          →
NO GPCU DATA
ADF1          ( CLASS 3 )
FMGC
VHF
DMU
<RETURN            PRINT*
```

```
AVIONICS STATUS          →
NO ILS DATA
DMC           ( CLASS 3 )




<RETURN            PRINT*
```

SYSTEM REPORT/TEST

Ident.: DSC-45-20-00001503.0001001 / 21 MAR 16
Applicable to: ALL

This screen gives the operator access to all electronic systems. The CFDIU enters into interactive dialogue with the selected system.


SYSTEM REPORT/TEST
<AIRCOND
F/CTL>
<AFS
FUEL>
<COM
ICE & RAIN>
<ELEC
INST>
<FIRE PROT
L/G>
<RETURN
NAV>
NEXT PAGE
SYSTEM REPORT/TEST
<AIR BLEED
ENG>
<APU
<RETURN
SYSTEM REPORT/TEST
INST
<ECAM-1
CFDIU>
<ECAM-2
DMC 1>
<FDIU
DMC 2>
<WBS 1
DMC 3>
<WBS 2
DMU>
<RETURN
ECAM
FWC1/2-SDAC1/2-ECB
<LAST LEG REPORT
<PREVIOUS LEGS REPORT
<LRU IDENTIFICATION
<GROUND SCANNING
<CLASS 3FAULTS
<RETURN
ECAM
FWC1/2-SDAC 1/2-ECB
<SYSTEM CONFIGURATION
ECAM-1
LAST LEG REPORT
DATE:NOV14
GMT ATA
HYD BLUE PRESS SENSOR
1410 31-55-00
<RETURN
PRINT>
ECAM-1
PREVIOUS LEGS REPORT
XY-ABCD
LEG DATE GMT ATA
HYD YELLOW TEMP SENSOR
-03NOV 1006 31-55-00
ENG1 OIL PRESS SENSOR
-19NOV07 1134 31-55-00
<RETURN
PRINT>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

In the above example, the operator has called up menus of the selected systems :

- LAST or PREVIOUS LEG REPORT presents the list of Line-Replaceable Units (LRUs) affected by a failure.
- LRU IDENTIFICATION contains the part numbers of all LRUs in the system.
- GND SCANNING runs the flight monitoring on the ground and indicates the faulty LRU.
- CLASS 3 FAULTS lists class 3 faults detected by the system during the last flight leg.
- SYSTEM CONFIGURATION presents the system configuration in a digital form.

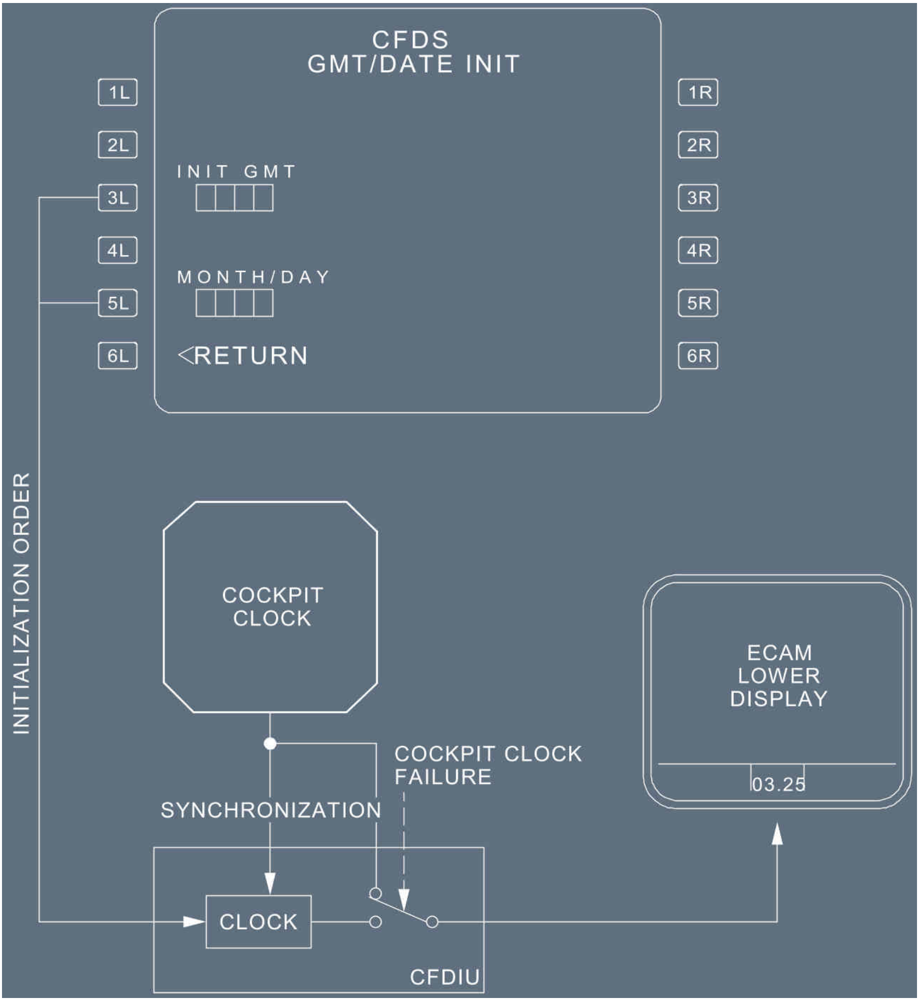
Note: *These screens (except LAST or PREVIOUS LEG REPORT) are not shown above.*

GMT/DATE INITIALIZATION

Ident.: DSC-45-20-00001504.0001001 / 21 MAR 16
Applicable to: ALL

A CFDIU clock is synchronized with the cockpit clock in order to keep GMT (UTC) displayed on the ECAM lower display (except in flight Phases 1 and 2, if the weight and balance system is installed). If the cockpit clock fails, the CFDIU clock continues to display GMT (UTC) on the ECAM lower display.

If electrical power is interrupted for more than 200 ms, the crew initializes GMT (UTC) and the DATE via the MCDU :
- Write GMT (UTC) in the scratchpad, then press the “INIT GMT” key.
- Do the same for the month and day.


CFDS
GMT/DATE INIT
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
INIT GMT
MONTH/DAY
<RETURN
INITIALIZATION ORDER
COCKPIT CLOCK
ECAM LOWER DISPLAY
03.25
COCKPIT CLOCK FAILURE
SYNCHRONIZATION
CLOCK
CFDIU

BACKUP MODE

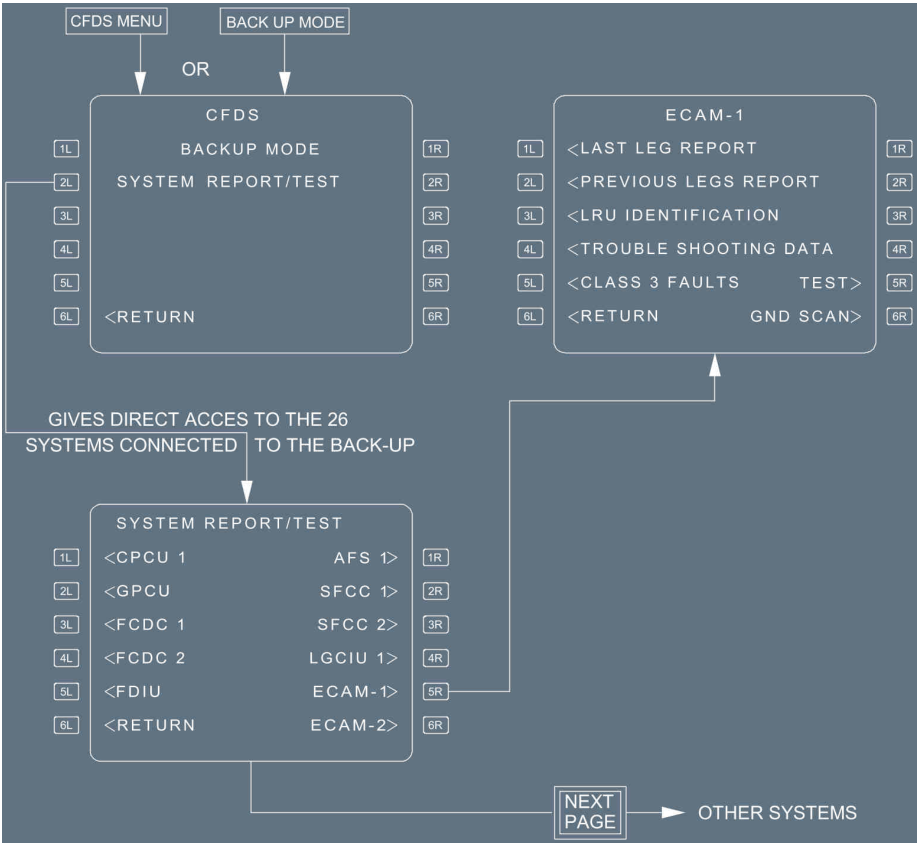
Ident.: DSC-45-20-00017066.0001001 / 21 MAR 16
Applicable to: ALL

If the main channel of the CFDIU fails, the backup channel allows the CFDS to operate in backup mode :

- On the ground only
- Through MCDU1 or MCDU3 ◁
- In one mode of operation only : SYSTEM REPORT/TEST
- Without the PRINTER or ACARS.

The system changes over from main channel to backup channel :

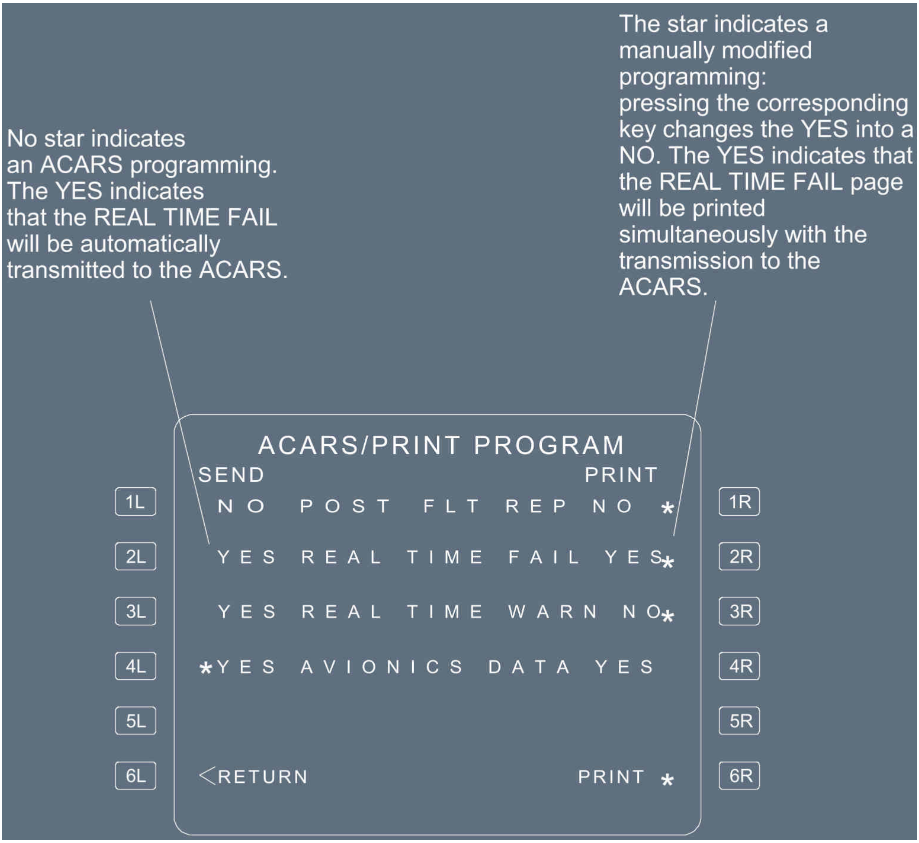
- Automatically in case of an important failure (power supply, for example). In this case, when the operator selects CFDS on the MCDU MENU, it displays the BACKUP MODE page.
- Manually if the operator selects BACKUP MODE on the CFDS menu after a minor failure.


CFDS MENU
BACK UP MODE
OR
CFDS
BACKUP MODE
SYSTEM REPORT/TEST
<RETURN
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
ECAM-1
<LAST LEG REPORT
<PREVIOUS LEGS REPORT
<LRU IDENTIFICATION
<TROUBLE SHOOTING DATA
<CLASS 3 FAULTS
TEST>
<RETURN
GND SCAN>
GIVES DIRECT ACCES TO THE 26
SYSTEMS CONNECTED TO THE BACK-UP
SYSTEM REPORT/TEST
<CPCU 1
AFS 1>
<GPCU
SFCC 1>
<FCDC 1
SFCC 2>
<FCDC 2
LGCIU 1>
<FDIU
ECAM-1>
<RETURN
ECAM-2>
NEXT PAGE
OTHER SYSTEMS

ACARS PRINT PROGRAM

Ident.: DSC-45-20-00005361.0001001 / 14 FEB 11
Applicable to: ALL

This function gives access to reprogramming page.
The programming is provided by the ACARS or manually (on the ground or in flight) :



No star indicates an ACARS programming. The YES indicates that the REAL TIME FAIL will be automatically transmitted to the ACARS.

The star indicates a manually modified programming: pressing the corresponding key changes the YES into a NO. The YES indicates that the REAL TIME FAIL page will be printed simultaneously with the transmission to the ACARS.

```
        ACARS/PRINT PROGRAM
SEND                            PRINT
 NO   POST  FLT  REP    NO          *
 YES  REAL  TIME  FAIL  YES         *
 YES  REAL  TIME  WARN  NO          *
*YES  AVIONICS  DATA    YES


<RETURN                        PRINT *
```

<u>Note:</u> The CFDIU memorizes all manual programming so that at initialisation the last configuration will be retained.

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GENERAL

Ident.: DSC-45-25-00001506.0001001 / 10 JAN 11
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

With the data loading system, it is possible to upload databases and operational software, or to download system reports from various onboard computers.
The data transfer is performed via 3.5 in disks and a portable data loader, or the aircraft fixed Multipurpose Disk Drive Unit (MDDU).

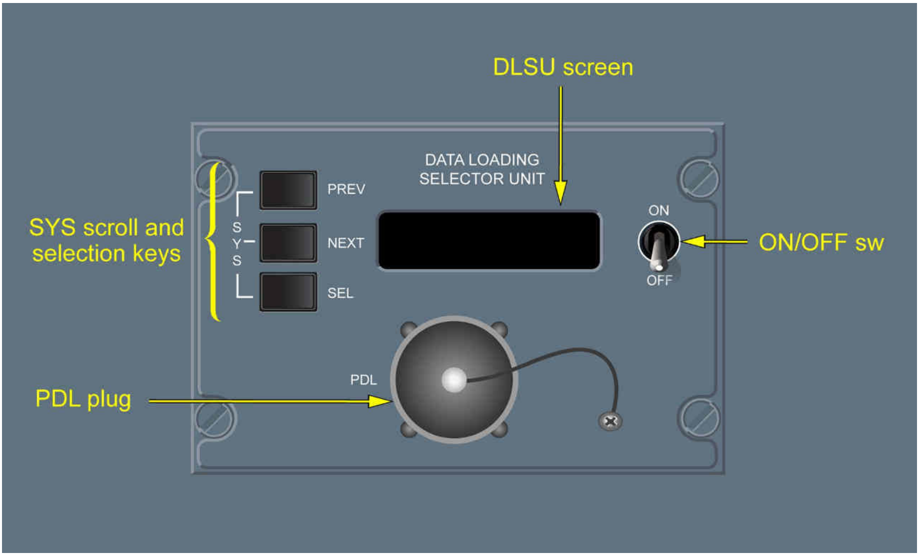
GENERAL

Ident.: DSC-45-25-00001506.0003001 / 09 NOV 21
1 **Applicable to: MSN 10949-11597**

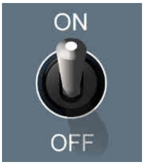
The data loading system is an interface between aircraft systems and ground-based data processing stations.

The data loading system enables:
- To upload database or to modify operational software in aircraft systems
- To download system reports from various aircraft systems.

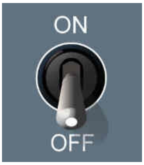
The connection between the data loading system and the ground-based data processing is performed via the DLSU on the center pedestal. The DLSU enables to guide data to and from selected aircraft systems.


DLSU screen
DATA LOADING
SELECTOR UNIT
SYS scroll and
selection keys
PREV
NEXT
SEL
S
Y
S
ON
OFF
ON/OFF sw
PDL
PDL plug

ON/OFF sw



The DLSU is on.



The DLSU is off.

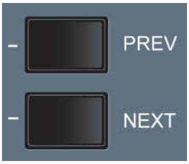
DLSU SCREEN

The DLSU screen displays the selected system.

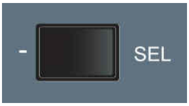
PDL PLUG

Plug to connect a Portable Data Loader.

SYS SCROLL AND SELECTION KEYS



The PREV and NEXT keys enable to scroll the list of applicable aircraft systems which are displayed on the DLSU screen.

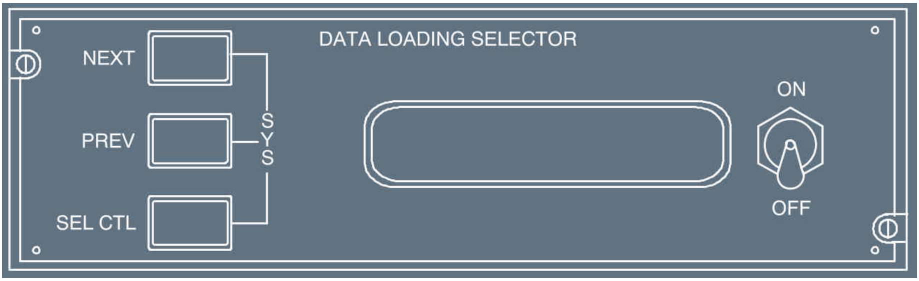


The SEL key enables to select or deselect the displayed aircraft system on the DLSU screen.

DATA LOADING SELECTOR ON THE OVERHEAD PANEL

Ident.: DSC-45-25-00001507.0001001 / 19 DEC 12

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324



When the data loading selector is ON, the 3 keys (NEXT, PREV, SEL CTRL) enable the display and selection of various applicable aircraft systems (FMGC, TCAS ◁ etc...).

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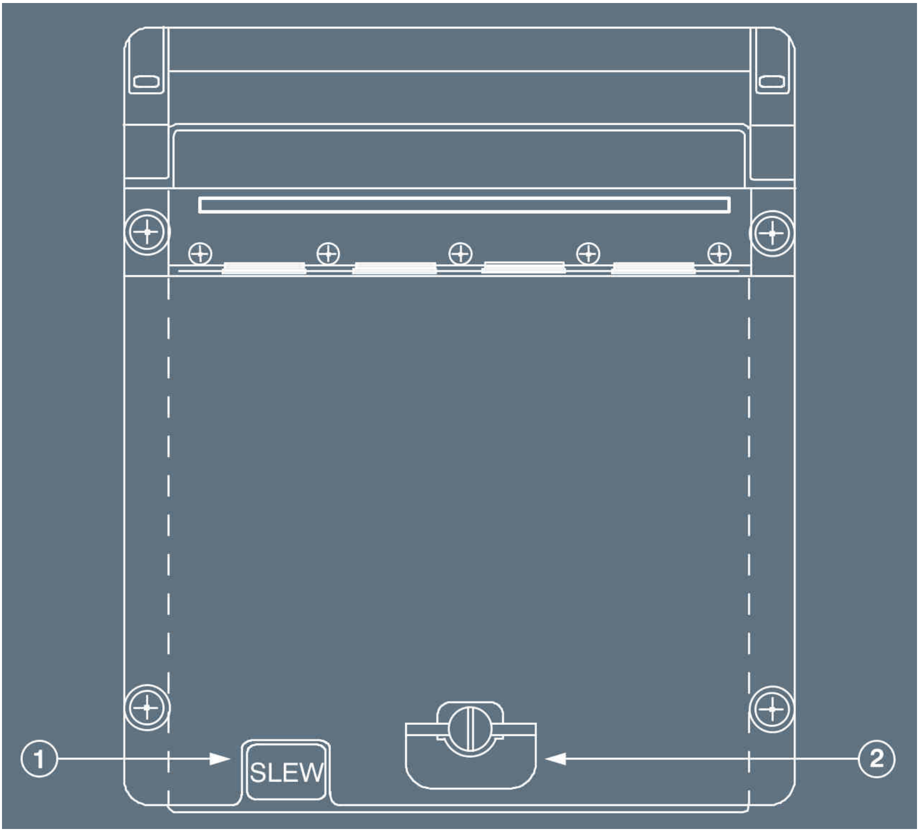
GENERAL

Ident.: DSC-45-30-00001508.0001001 / 21 MAR 16
Applicable to: ALL

The printer prints reports from the following systems (if installed) : ACARS, AIDS, FMGC, CFDIU and EVMU. It prints these on paper, and does so either on the ground or in flight.
The printer is installed at the rear of the pedestal on the right side.

SYSTEM DESCRIPTION

Ident.: DSC-45-30-00001509.0001001 / 21 MAR 16
Applicable to: ALL



(1) SLEW sw :
The SLEW switch is used to feed paper after having loaded a new roll.

(2) PRINTER DOOR LATCH :
The printer door latch locks the door used for loading paper.

AIRCRAFT SYSTEMS

INFORMATION SYSTEMS

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DSC-46-10 Datalink

DSC-46-10-10 General System Description

Overview.......A
Architecture.......B
Cockpit Interface.......C
Datalink Message.......D

DSC-46-10-20 AOC Applications

DSC-46-10-20-10 General

General.......A

DSC-46-10-30 ATC Applications

DSC-46-10-30-10 Notifications

Notification.......A

DSC-46-10-30-20 Controller/Pilot Datalink Communication (CPDLC)

General.......A
Connect.......B
Request.......C
Edit.......D
Message Timer.......E

DSC-46-10-30-70 Message Record

Message Record.......A

DSC-46-10-40 Controls and Indicators

DSC-46-10-40-10 ATC Message Pushbutton (ATC MSG PB)

ATC MSG Pb.......A

DSC-46-10-40-20 Datalink Control and Display Unit (DCDU)

DCDU.......A

DSC-46-10-40-30 MCDU Datalink Pages

Introduction.......A
ATC MENU.......B
ATSU DATALINK.......C
COMM CONFIG.......D
COMM MENU.......E
CONNECTION.......F
CONNECTION STATUS.......G
DATALINK STATUS.......H
EDIT.......I

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FREQUENCY REPORTING....J
MSG RECORD....K
NOTIFICATION....L
REQUEST....M
TEXT....N
VHF3 DATA MODE....O
VHF3 SCAN SELECT....P

DSC-46-10-40-40 MCDU Scratchpad Messages

MCDU Scratchpad Messages....A

DSC-46-10-40-50 MCDU Data Entry Format

MCDU Data Entry Format....A

DSC-46-10-40-60 ECAM

Memo Display....A

DSC-46-10-50 How To

Introduction....A
How to Initialize....B
How to Notify....C
How to Connect....D
How to Send Request to ATC....E
How to Answer....F
How to Modify FLT Plan....G

DSC-46-10-60 Temporary Abnormal Behaviors

ATC MSG RECORD NOT RELIABLE - Displayed at ATSU Power-up....A

DSC-46-20 Electronic Flight Bag (EFB)

DSC-46-20-20 Applications

Introduction....A
General....B
Landing Application....C
Takeoff Application....D
In-flight Application....E
Loadsheet Application....F
OPS Library Application....G
Electronic QRH Application....H
Manager Application....I

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DSC-46-40 Pax Entertainment & Connectivity Systems (If Installed)

DSC-46-40-10 General

General....................A

DSC-46-40-20 In Seat Power Supply System

IN SEAT POWER SUPPLY SYSTEM ◁ ....A

DSC-46-40-30 Controls and Indicators

MOBILE COM PB-SW ◁ ....A
DISC IN PROG Light ◁ ....B
CINS RESET PB ◁ C
PAX COM PB-SW ◁ ....D
PAX SYS PB-SW ◁ ....E
PAX PERSONAL ELEC SPLY PB-SW ◁ ....F
MEMO DISPLAY....................G

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Localization Title	Toc Index	ID	Reason
DSC-46-10-10 Overview	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-10 HF	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-10 VHF	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-30 ATSU DATALINK	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-30 COMM MENU	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-40 Scratchpad Messages	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY ALERT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY CALL	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY DATALINK STBY	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-40-60 COMPANY MSG	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-50 Introduction	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-50 How to Initialize	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-46-10-60 ATC MSG RECORD NOT RELIABLE - Displayed at ATSU Power-up	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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OVERVIEW

Ident.: DSC-46-10-10-00020333.0001001 / 26 NOV 19

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

The datalink has:
- AOC applications ◁

L2 The flight crew uses the AOC applications to communicate with Airline Operational Center (AOC).

L1
- ATC applications ◁

L2 The flight crew uses the ATC applications to communicate with Air Traffic Control (ATC) centers.

L1 The ATC datalink provides communication, navigation, and surveillance for Air Traffic Management (ATM) services.
The ATC datalink applications enable air traffic controllers to follow the aircraft navigation, and enhance the air traffic flow.

The datalink communication (messages exchange) between the aircraft and the ground is achieved:
- Automatically (without a flight crew action)
- Manually (with a flight crew action via the DCDU/MCDU and/or RMP).

The datalink messages are:
- Uplink (from a ground facilities to the flight crew), or
- Downlink (from the flight crew to an ground facilities).

COMMUNICATION AND NAVIGATION FOR AIR TRAFFIC MANAGEMENT

At the beginning of the flight, the flight crew sends a notification message to the ATC center, via the MCDU, notification application ◁ .
Then, an air traffic controller will establish a connection between the aircraft and the ATC center. As a result, the flight crew can exchange messages with the ATC center, via the DCDU (CPDLC application ◁). The messages that the flight crew sends to the ATC center can be built with present frames and modified via the MCDU.

Depending on the type of datalink exchange, the datalink uses one of the following communication networks:
- ACARS for FANS A ◁ applications
- ACARS Air Traffic Services (ATS 623) for optional applications ◁
- Aeronautical Telecommunication Network (ATN) for FANS B ◁ applications

L2 The ATN supports increasing volume of ATC and AOC communication.

L1 _Note:_ *FANS A+ ◁ (FANS B+ ◁) is an evolution of the FANS A ◁ (FANS B ◁) that introduces ATS 623 applications and datalink recording capability.*

FUTURE AIR NAVIGATION SYSTEM (FANS)

The ATC datalink provides:
- FANS A ◁ Applications, for operations in remote and in oceanic areas:
  - Notification
  - Controller-Pilot Data Link Communication (CPDLC)
  - Automatic Dependent Surveillance Contract (ADS-C).
- FANS B ◁ Applications, for operations in high-density continental areas:
  - Notification
  - Controller-Pilot Data Link Communication (CPDLC).
- Optional applications ◁ (compatible only with FANS A+ or FANS B+):
  - Departure Clearance
  - Oceanic Clearance
  - Digital - Automatic Terminal Information Service (D-ATIS).

NAVIGATION AND SURVEILLANCE FOR AIR TRAFFIC MANAGEMENT

The Automatic Dependent Surveillance (ADS) system sends aircraft position and aircraft navigation data to ATC centers and other aircraft.

There are two different ADS applications:
- ADS-Contract (ADS-C) ◁
  The ADS-C automatically sends aircraft surveillance data to connected ATC centers via ATC Datalink ◁ in remote or oceanic areas.
- ADS-Broadcast (ADS-B) ◁
  The ADS-B automatically broadcasts the aircraft position and navigation data to other users (ATC centers or other aircraft) equipped with a Mode S transponder. The ATC Datalink ◁ does not host the ADS-B ◁ .

SERVICE PROVIDERS

The role of a communication service provider is to deliver a message from the A/C to a ground end system and vice versa.
A datalink service provider ensures routing of datalink messages between the aircraft and ATC center.

L2 For VHF communication, the two main providers are ARINC and SITA that operate worldwide networks.

L1 REVERSION TO VOICE COMMUNICATION

Voice communication is a primary means of communication on board.

The flight crew must revert from datalink communication to voice communication, if:
- There is an emergency situation (exchange of a critical or urgent message)
- There is a doubt about a datalink message, the voice should be used for clarification
- An operational timer of datalink message exchange times out
- A response to an ATC message was not correctly transmitted via datalink.

CLOCK ACCURACY

The required time precision for ATC datalink communications is +/-1 s UTC. If this constraint is not respected, a rejection of datalink message or acceptance of obsolete datalink message may occur.
Not respecting this constraint may lead to the rejection of messages or to the acceptance of obsolete messages.
For FANS operations, the flight crew should not manually set the clock during cockpit preparation.

OVERVIEW

Ident.: DSC-46-10-10-00020333.0002001 / 26 NOV 19
Applicable to: MSN 04827-04974

The datalink has:
- AOC applications ◁

L2 The flight crew uses the AOC applications to communicate with Airline Operational Center (AOC).

L1
- ATC applications ◁

L2 The flight crew uses the ATC applications to communicate with Air Traffic Control (ATC) centers.

L1 The ATC datalink provides communication, navigation, and surveillance for Air Traffic Management (ATM) services.
The ATC datalink applications enable air traffic controllers to follow the aircraft navigation, and enhance the air traffic flow.

The datalink communication (messages exchange) between the aircraft and the ground is achieved:
- Automatically (without a flight crew action)
- Manually (with a flight crew action via the DCDU/MCDU and/or RMP).

The datalink messages are:
- Uplink (from a ground facilities to the flight crew), or
- Downlink (from the flight crew to an ground facilities).

COMMUNICATION AND NAVIGATION FOR AIR TRAFFIC MANAGEMENT

At the beginning of the flight, the flight crew sends a notification message to the ATC center, via the MCDU, notification application ◁ .
Then, an air traffic controller will establish a connection between the aircraft and the ATC center.
As a result, the flight crew can exchange messages with the ATC center, via the DCDU (CPDLC

application ◁). The messages that the flight crew sends to the ATC center can be built with present frames and modified via the MCDU.

Depending on the type of datalink exchange, the datalink uses one of the following communication networks:

- ACARS for FANS A ◁ applications
- ACARS Air Traffic Services (ATS 623) for optional applications ◁
- Aeronautical Telecommunication Network (ATN) for FANS B ◁ applications
  L2 The ATN supports increasing volume of ATC and AOC communication.

L1 *Note:* *FANS A+ ◁ (FANS B+ ◁) is an evolution of the FANS A ◁ (FANS B ◁) that introduces ATS 623 applications and datalink recording capability.*

ATC DATALINK COMMUNICATION

The ATC datalink provides:

- FANS B applications (ATN B1 in ICAO designation) using ATN ground network, for operations in high-density continental areas:
  - Notification
  - Controller-Pilot Data Link Communication (CPDLC).

NAVIGATION AND SURVEILLANCE FOR AIR TRAFFIC MANAGEMENT

The Automatic Dependent Surveillance (ADS) system sends aircraft position and aircraft navigation data to ATC centers and other aircraft.

There are two different ADS applications:

- ADS-Contract (ADS-C) ◁
  The ADS-C automatically sends aircraft surveillance data to connected ATC centers via ATC Datalink ◁ in remote or oceanic areas.
- ADS-Broadcast (ADS-B) ◁
  The ADS-B automatically broadcasts the aircraft position and navigation data to other users (ATC centers or other aircraft) equipped with a Mode S transponder. The ATC Datalink ◁ does not host the ADS-B ◁ .

SERVICE PROVIDERS

The role of a communication service provider is to deliver a message from the A/C to a ground end system and vice versa.
A datalink service provider ensures routing of datalink messages between the aircraft and ATC center.
L2 For VHF communication, the two main providers are ARINC and SITA that operate worldwide networks.

L1 REVERSION TO VOICE COMMUNICATION

Voice communication is a primary means of communication on board.

The flight crew must revert from datalink communication to voice communication, if:
- There is an emergency situation (exchange of a critical or urgent message)
- There is a doubt about a datalink message, the voice should be used for clarification
- An operational timer of datalink message exchange times out
- A response to an ATC message was not correctly transmitted via datalink.

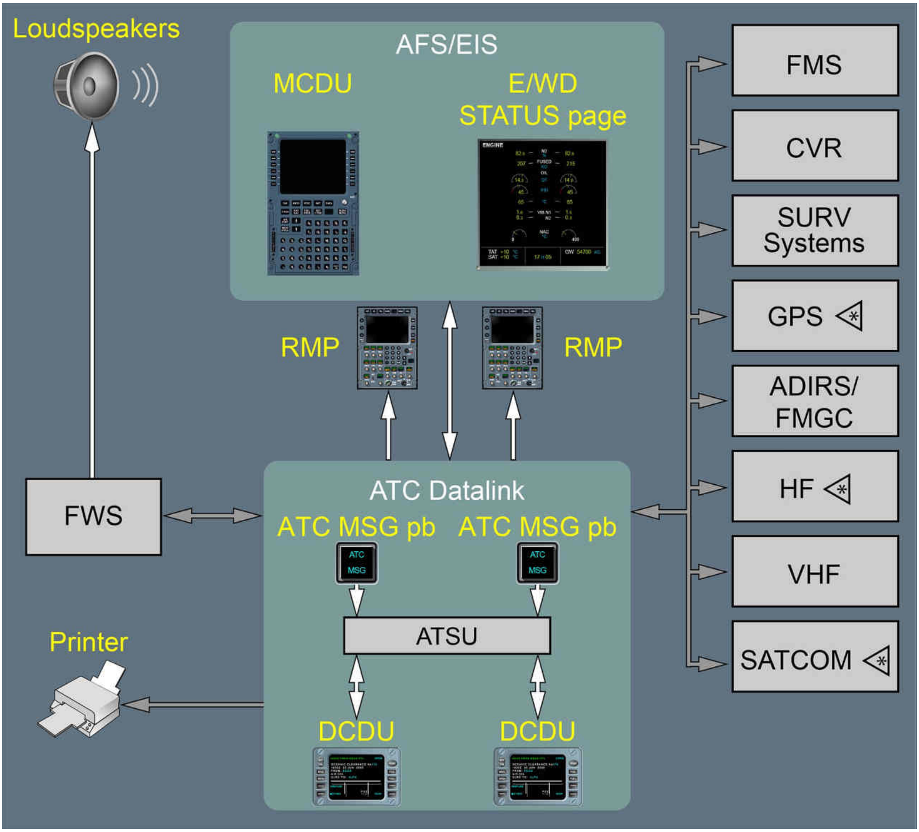
CLOCK ACCURACY

The required time precision for ATC datalink communications is +/-1 s UTC. If this constraint is not respected, a rejection of datalink message or acceptance of obsolete datalink message may occur.
Not respecting this constraint may lead to the rejection of messages or to the acceptance of obsolete messages.
For FANS operations, the flight crew should not manually set the clock during cockpit preparation.

ARCHITECTURE

Ident.: DSC-46-10-10-10-00020332.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

Architecture of the ATC Datalink


Loudspeakers
AFS/EIS
MCDU
E/WD
STATUS page
RMP
RMP
FWS
ATC Datalink
ATC MSG pb
ATC MSG pb
ATC
MSG
ATC
MSG
ATSU
DCDU
DCDU
Printer
FMS
CVR
SURV
Systems
GPS
ADIRS/
FMGC
HF
VHF
SATCOM

Ident.: DSC-46-10-10-10-00020323.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

AIR DATA/INERTIAL REFERENCE SYSTEM (ADIRS)

The ADIRS provide aircraft position data to the FMGC. The FMGC consolidates the position value from different sources and transmits it to the ATSU. This is the primary source for the aircraft position.

Ident.: DSC-46-10-10-10-00020329.0001001 / 17 MAR 17
Applicable to: ALL

AIR TRAFFIC SERVICE UNIT (ATSU)

The ATSU controls all datalink communication and automatically selects the best available communication media:
- VHF
- HF ◁
- SATCOM ◁ .

The ATSU hosts:
- AOC applications ◁
- ATC applications ◁
- Router services
  The ATSU routers automatically select VHF frequency, depending on the aircraft position, in accordance with an entered scan mask (airline policy).
  The scan mask means that a list of VHF datalink service providers, selected via the VHF3 SCAN SELECT page, is scanned, in accordance with their priority level. The VHF scan mask is compulsory for correct router operation. If there is no scan mask, the ECAM displays DATALINK ATSU FAULT – ATSU INIT FAULT.
  Refer to DSC-46-10-40-30 VHF3 SCAN SELECT for more information about the VHF3 SCAN SELECT page.

Ident.: DSC-46-10-10-10-00020330.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

DATALINK CONTROL AND DISPLAY UNIT (DCDU)

The DCDU enables the flight crew to:

- Read and answer datalink messages, received from the ground
- Display datalink messages, before sending.

Ident.: DSC-46-10-10-10-00020326.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

FLIGHT MANAGEMENT SYSTEM (FMS)

The ATC datalink interacts with Flight Management Computers (FMC).

The FMS:
- Processes datalink messages
- Prepares/generates an answer to datalink messages

- Monitors clearances
- Reminds the flight crew about a clearance, before reaching a clearance condition.
  When a monitored parameter reaches the assigned value, the FMS generates a reminder message via the DCDU.

Ident.: DSC-46-10-10-10-00020331.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

FLIGHT WARNING SYSTEM (FWS)

The FWS interacts with the ATSU and:

- Alerts, when a datalink message is received
- Alerts, in the case of detected failures
- Inhibits alerts, depending on the flight phase.

Ident.: DSC-46-10-10-10-00021433.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

GLOBAL POSITIONING SYSTEM (GPS)

The GPS provides the position information to the FMGC. The position information is consolidated with the ADIRS data and sent to the ATSU.
The GPS also enables time synchronization to the clock, in order to provide UTC date and time for datalink system. If the GPS fails, the clock continues to calculate the time by incrementing the last received pertinent information as the reference time.

Ident.: DSC-46-10-10-10-00020322.0001001 / 17 MAR 17
2 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

HIGH FREQUENCY (HF) ◁

The HF communication system ◁ has:
- Data mode
- Voice mode.

HF communication system ◁ can be used in the data mode as an alternative to VHF 3 and SATCOM ◁ . In this case, the communication between the aircraft and HF ground stations is established on a HF frequency. A HF frequency of HF DataLink (HFDL) is tuned automatically.

DATALINK/VOICE SWITCHING

The HF ◁ can be used in the voice mode. The flight crew can switch datalink/voice and set a voice frequency via the RMP.
Green HF VOICE memo indicates that HF datalink communication is interrupted, when the HF transceiver operates in the voice mode.

Ident.: DSC-46-10-10-10-00020328.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

MULTI-PURPOSE CONTROL AND DISPLAY UNIT (MCDU)

The MCDU enables the fight crew to access functions to:

- Manage the ATC datalink connections
- Send notifications
- Edit datalink messages
- Consult reports
- Access Message Record application.

Ident.: DSC-46-10-10-10-00021339.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

PRINTER

The flight crew can print ATC messages, displayed on the DCDU, or the MCDU.

Note: *Each time the flight crew prints a message, they must check that the printed message is identical to the message on the display unit.*
The reference information is the information, that the display unit displays.

Ident.: DSC-46-10-10-10-00020327.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

RADIO MANAGEMENT PANEL (RMP)

The flight crew sets a radio frequency into the RMP, when a specific datalink message (e.g.: CONTACT, MONITOR, ...) is received, or when a voice contact is required.

Ident.: DSC-46-10-10-10-00021236.0002001 / 21 MAR 17
Applicable to: MSN 04827-04974

Frequencies that some datalink messages contain, can be loaded into RMP via LOAD pb of the RMP.

Ident.: DSC-46-10-10-10-00020319.0001001 / 17 MAR 17
Applicable to: ALL

SATELLITE COMMUNICATIONS (SATCOM) ◁

The SATCOM system ◁ provides voice and data services. The voice/data are transmitted via satellite, from the aircraft to the ground earth stations, and then switched through international telecommunications networks (ARINC, SITA, etc.) to anywhere in the world (airline operational centers, ATC centers, etc).
The ATSU (router) manages switching to/from SATCOM ◁ (ACARS environments only).

Ident.: DSC-46-10-10-10-00020324.0002001 / 17 MAR 17
Applicable to: MSN 04827-04974

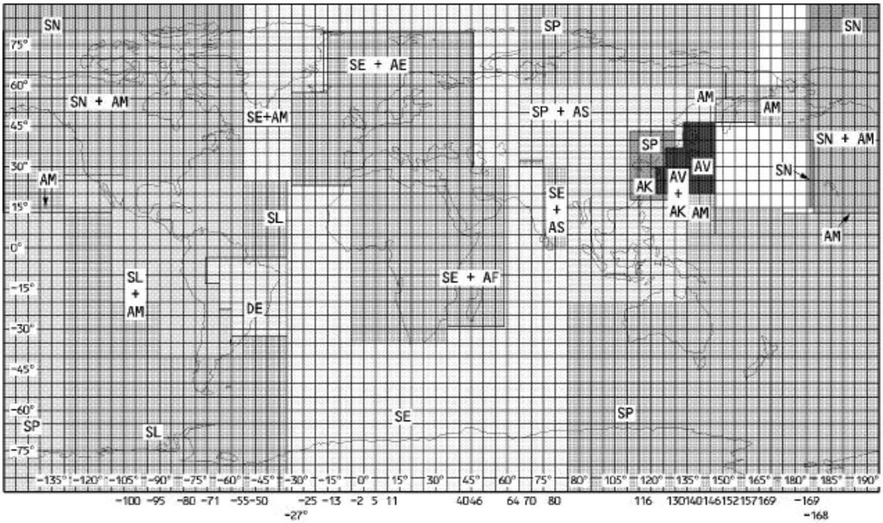
SURVEILLANCE SYSTEMS (SURV)

The ATC datalink system interacts with the surveillance system and enables the flight crew to:
- Provide the ATC center with a TCAS status, sent via the ADS application
- Provide the ATC center with the SQUAWK code as a response to CONFIRM SQUAWK uplink message.

Ident.: DSC-46-10-10-10-00020321.0001001 / 28 MAY 20
Applicable to: MSN 04827-04974

VERY HIGH FREQUENCY (VHF)

The communication between the aircraft and VHF ground stations is established on a VHF frequency. The datalink system primarily uses VHF 3 communication system. The ATSU router automatically selects a VHF frequency, depending on entered configuration, the scan mask for VHF DataLink (VDL), and the aircraft position.
VHF data link service providers are available in each geographical area.


SN
SP
SN
75°
SE + AE
60°
SN + AM
SE+AM
SP + AS
AM
AM
45°
SN + AM
SP
30°
AV
AM
AK
AV
+
AK
SN
SE
+
AS
15°
SL
AM
AM
0°
SL
+
AM
-15°
SE + AF
DE
-30°
-45°
SE
SP
-60°
SP
SL
-75°
-135° -120° -105° -90° -75° -60° -45° -30° -15° 0° 15° 30° 45° 60° 75° 80° 105° 120° 135° 150° 165° 180° 185° 190°
-100 -95 -80 -71 -55-50 -25 -13 -2 5 11 4046 64 70 80 116 130140146152157169 -169
-27° -168

SOUTH
ACARS WORLD MAP

The table below defines the world zone abbreviations, indicates their associated Service Provider, MCDU label, and ACARS frequency.

ABBREVIATION	SERVICE PROVIDER	MCDU LABEL	FREQUENCY	Family
SP	SITA PACIFIC	SIT-PAC	131.550 MHz	SITA
SN	SITA NORTH AMERICA	SIT-NAM	131.725 MHz	SITA
SL	SITA LATIN AMERICA	SIT-LAM	131.725 MHz	SITA
SE	SITA EUROPE	SIT-E/A	131.725 MHz	SITA
DE	DEPV BRAZIL	DEPV	131.550 MHz	SITA
AV	AVICOM	AVICOM	131.450 MHz	SITA
AM	ARINC AMERICA	ARI-AM	131.550 MHz	ARINC
AE	ARINC EUROPE	ARI-EUR	131.825 MHz	ARINC
AF	ARINC AFRICA	ARI-AFR	126.900 MHz	ARINC
AK	ARINC KOREA	ARI-KOR	131.725 MHz	ARINC
AS	ARINC ASIA	ARI-ASI	131.450 MHz	ARINC

The VHF3 communication system has:
- Data mode
- Voice mode.

DATALINK/VOICE SWITCHING

The VHF 3 can be used in the voice mode, in case of:
- VHF 1 failure
- VHF 2 failure
- Specific AOC functions (operator's customization)

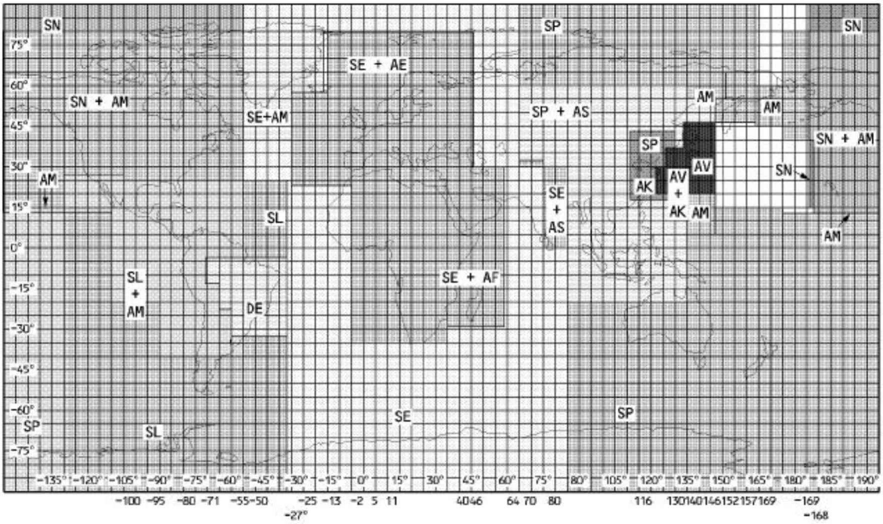
The flight crew can switch datalink/voice and set a voice frequency via the RMP.

Ident.: DSC-46-10-10-10-00020321.0002001 / 28 MAY 20

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

VERY HIGH FREQUENCY (VHF)

The communication between the aircraft and VHF ground stations is established on a VHF frequency. The datalink system primarily uses the VHF 3 radio communication system. The ATSU router automatically selects a VHF frequency, depending on entered configuration, the scan mask for VHF DataLink (VDL), and the aircraft position.
VHF data link service providers are available in each geographical area.


SN
SN + AM
AM
SE+AM
SE + AE
SL
SP
SP + AS
AM
AM
SN
SN + AM
SP
AK
AV
+
AK
AV
AM
SN
AM
SE
+
AS
SL
+
AM
DE
SE + AF
SP
SL
SE
SP
75°
60°
45°
30°
15°
0°
-15°
-30°
-45°
-60°
-75°
-135°
-120°
-105°
-90°
-75°
-60°
-45°
-30°
-15°
0°
15°
30°
45°
60°
75°
80°
105°
120°
135°
150°
165°
180°
185°
190°
-100
-95
-80
-71
-55-50
-25
-13
-2
5
11
-27°
4046
64
70
80
116
130140146152157169
-169
-168

SOUTH
ACARS WORLD MAP

The table below defines the world zone abbreviations, indicates their associated Service Provider, MCDU label, and ACARS frequency.

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SP	SITA PACIFIC	SIT-PAC	131.550 MHz	SITA
SN	SITA NORTH AMERICA	SIT-NAM	131.725 MHz	SITA
SL	SITA LATIN AMERICA	SIT-LAM	131.725 MHz	SITA
SE	SITA EUROPE	SIT-E/A	131.725 MHz	SITA
DE	DEPV BRAZIL	DEPV	131.550 MHz	SITA
AV	AVICOM	AVICOM	131.450 MHz	SITA
AM	ARINC AMERICA	ARI-AM	131.550 MHz	ARINC
AE	ARINC EUROPE	ARI-EUR	131.825 MHz	ARINC
AF	ARINC AFRICA	ARI-AFR	126.900 MHz	ARINC
AK	ARINC KOREA	ARI-KOR	131.725 MHz	ARINC
AS	ARINC ASIA	ARI-ASI	131.450 MHz	ARINC

The VHF3 radio communication system has:
- Data mode
- Voice mode.

DATALINK/VOICE SWITCHING

The VHF 3 can be used in the voice mode, in case of:
- VHF 1 failure
- VHF 2 failure
- Specific AOC functions (operator's customization).

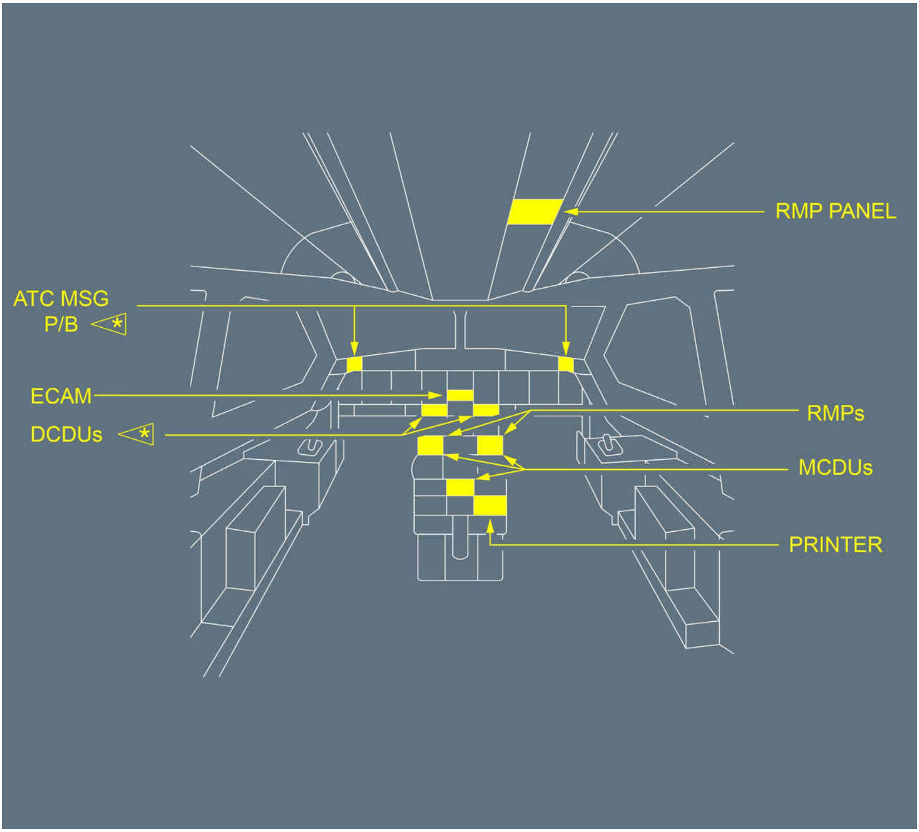
The flight crew can switch datalink/voice via the RMP, or via VHF3 VOICE DIRECTORY page of the MCDU.

The voice frequency can be tuned by:
- ATSU automatically
- Fight crew, via the RMP.

Green HF VOICE memo indicates that VHF 3 datalink communication is interrupted, when the VHF 3 transceiver operates in the voice mode.

COCKPIT INTERFACE

Ident.: DSC-46-10-10-00020373.0001001 / 17 MAR 17
Applicable to: ALL



The cockpit interface of the datalink system has:

- Datalink Control and Display Unit (DCDU) ◁* on the CAPT and F/O side
  The DCDU displays the uplink and downlink messages and enable the flight crew to control the datalink message exchange.
- ATC MSG pb-sw ◁* on the CAPT and F/O side of the glareshield
  The ATC MSG pb-sw alerts when an uplink message is received and enables the flight crew to cancel the alert.

- Multipurpose Control and Display Unit (MCDU)
  The MCDU enables to manage AOC and ATC functions and data transfer to the DCDU ⊲
- Printer
  Datalink messages can be printed, when displayed on the DCDU.
- RMP
  The RMP enables frequency tuning.
- ECAM
  The ECAM informs about the abnormal operation.

DATALINK MESSAGE

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-10-30-00020966.0001001 / 17 MAR 17

UPLINK MESSAGE RECEPTION

When a datalink message is received, the flight crew reads, and manages the messages on the DCDU. The status of received message is OPEN, and changes during processing. Urgent messages or messages with higher priority are automatically displayed to the flight crew.
If a normal message is displayed on the DCDU, when receiving an urgent message, the DCDU will display the urgent message. The normal message stays in the file queue. The flight crew can retrieve the normal message by pressing MSG+/MSG- keys.

Ident.: DSC-46-10-10-30-00020374.0001001 / 17 MAR 17

UPLINK MESSAGE RECEPTION ALERT

The flight crew is alerted, when a datalink message is received. A dedicated aural alert activates and the ATC MSG pb-sw illuminates on CAPT side and on F/O side.

Note: *The ATC chime is triggered:*
- *Every 15 s, if a normal datalink message is received*
- *Every 5 s, if an urgent datalink message is received*

These cockpit alerts stop, if one of the ATC MSG pb-sw is pushed, or if the flight crew answers the datalink message via the DCDU.

Note: *ATC datalink alerts are inhibited during takeoff and landing phases.*

When a normal datalink message is received, this message will appear on the DCDU screen, if the screen is empty. If the DCDU screen is not empty, this message will not appear on the screen automatically, and the MSG (number) will flash in the information field of the DCDU.
When an urgent datalink message is received, this message will automatically appear on the DCDU screen.

Ident.: DSC-46-10-10-30-00020968.0001001 / 17 MAR 17

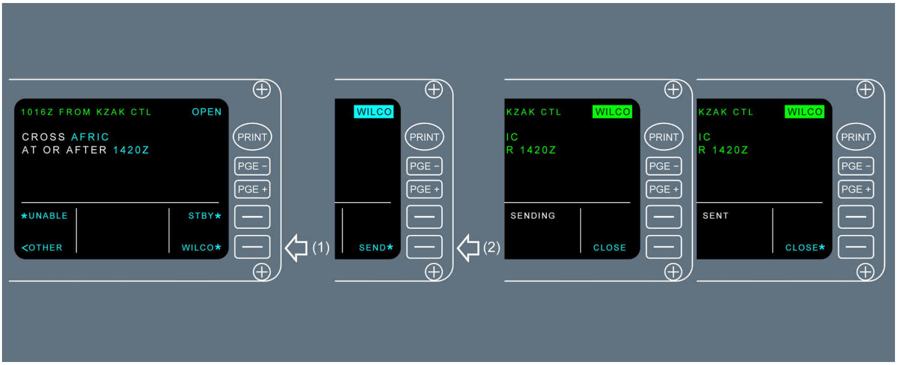
UPLINK MESSAGE RESPONSE

The flight crew can answer to an ATC datalink message:

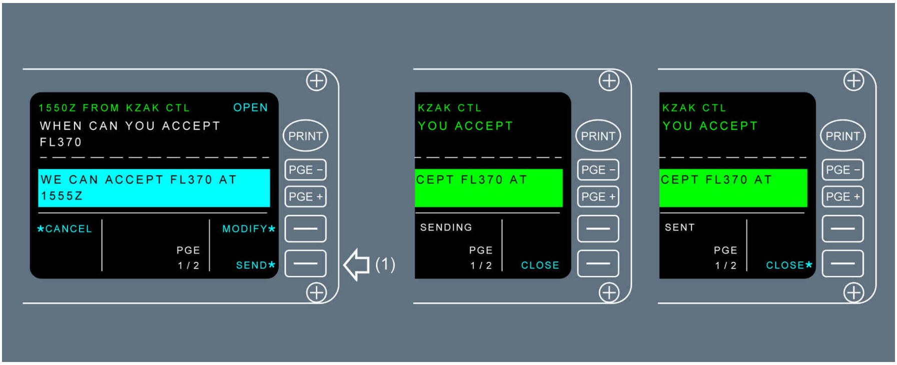
- Directly
  Several types of datalink messages enable the flight crew to answer directly, via the DCDU. The flight crew can launch preparation of a response message by pressing an appropriate function key (e.g.: WILCO, ROGER, AFFIRM, NEGATIVE, ...), on the DCDU. Consequently, the FMGS will generate a response message on the DCDU. The flight crew can send prepared response message to the ATC by pressing SEND function key of the DCDU.
- Indirectly
  Datalink messages that cannot be answered directly via the DCDU, are prepared on the MCDU. The flight crew selects the appropriate function key (EDIT or MODIFY), on the DCDU, in order to display desired MCDU page (EDIT or MESSAGE MODIFY page). The flight crew enters relevant values and information for the response via the page of the MCDU.
  When desired information is inserted, the flight crew must transfer the information from the MCDU to the DCDU, by pressing appropriate key on the MCDU. Consequently, prepared response message appears on the DCDU.

If the prepared downlink message has more than one page, the flight crew must display, and review all pages of the message on the DCDU, before the message is sent to the ATC. When the flight crew displays all pages of the message, an asterisk (*) appears next to SEND function key of the DCDU. The asterisk (*) indicates that the function key is active, and the function can be used.
If the flight crew cannot answer to an ATC uplink message immediately, a stand-by (STBY) message can be sent to the ATC. When a STBY response message is sent, the message status, displayed on the DCDU, changes to STBY. This message cannot be removed from the DCDU, until the flight crew sends a final response later on.
When a downlink message is successfully sent, the message information area will indicate SENT and the color code of the message will change.

EXAMPLE	Clearance message: The flight crew can answer positively, by selecting WILCO* See (1) and send the message to the ATC, by selecting SEND* See (2) on the DCDU. SENDING appears in the information area of the DCDU, when SEND* is selected. SENT appears in the information area of the DCDU, when the message is successfully sent.


1016Z FROM KZAK CTL
OPEN
CROSS AFRIC
AT OR AFTER 1420Z
*UNABLE
STBY*
<OTHER
WILCO*
PRINT
PGE -
PGE +
(1)
WILCO
SEND*
(2)
KZAK CTL
WILCO
IC
R 1420Z
SENDING
CLOSE
KZAK CTL
WILCO
IC
R 1420Z
SENT
CLOSE*

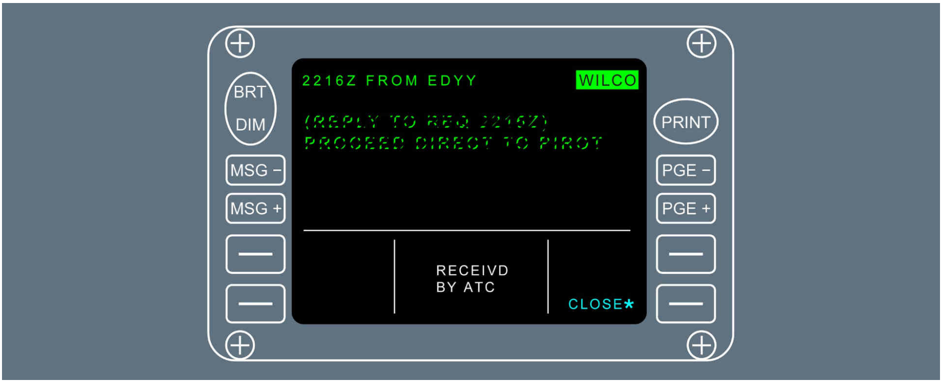
EXAMPLE	Negotiation message: The flight crew can send the response message, automatically generated on the DCDU, to the ATC, by selecting SEND* See (1). SENDING appears in the information area of the DCDU, when SEND* is selected. SENT appears in the information area of the DCDU, when the message is successfully sent.


1550Z FROM KZAK CTL
OPEN
WHEN CAN YOU ACCEPT
FL370
WE CAN ACCEPT FL370 AT
1555Z
*CANCEL
MODIFY*
PGE
1 / 2
SEND*
PRINT
PGE -
PGE +
(1)
KZAK CTL
YOU ACCEPT
CEPT FL370 AT
SENDING
PGE
1 / 2
CLOSE
KZAK CTL
YOU ACCEPT
CEPT FL370 AT
SENT
PGE
1 / 2
CLOSE*

When a downlink message is not successfully sent, the message information area will indicate SEND FAILED or other, depending on a datalink connection error or failure. In these cases, the flight crew must close the message. A new request can be created, in order to send the message.

Ident.: DSC-46-10-10-30-00021222.0002001 / 17 MAR 17

Note: *If the ATC center is equipped to support the Logical Acknowledgment (LACK) function. The LACK function informs the flight crew when the downlink message displays on the ATC screen. Consequently, RECEIVED BY ATC will appear in the information area of DCDU instead of SENT.*



2216Z FROM EDYY

(REPLY TO REQ 2216Z)
PROCEED DIRECT TO PIROT

RECEIVD
BY ATC

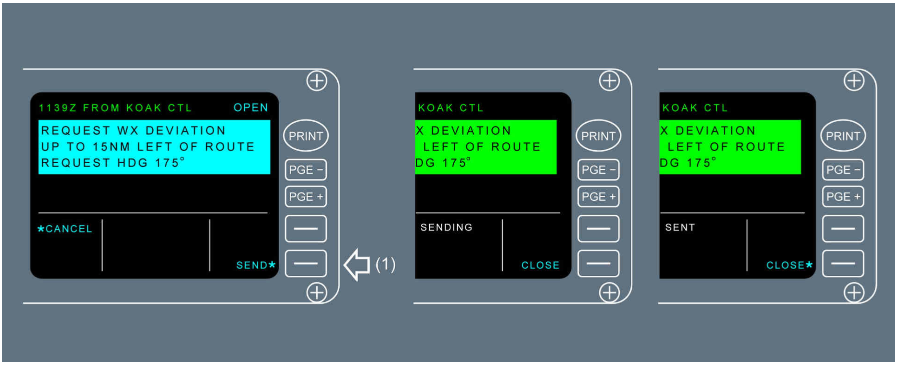
Ident.: DSC-46-10-10-30-00020970.0001001 / 17 MAR 17

DOWNLINK MESSAGE CREATION

The flight crew can also create and send a request to the ATC.

A request message created by the flight crew and sent to ATC has:
- Cyan (blue) background before sending
- Green background, after sending.

EXAMPLE	Request message: The flight crew can send prepared message to the ATC by selecting SEND* See (1) on the DCDU. SENDING appears in the information area of the DCDU, when SEND* is selected. SENT appears in the information area of the DCDU, when the message is successfully sent.



```
1139Z FROM KOAK CTL          OPEN
REQUEST WX DEVIATION
UP TO 15NM LEFT OF ROUTE
REQUEST HDG 175°
*CANCEL
                            SEND*
```

```
KOAK CTL
X DEVIATION
 LEFT OF ROUTE
DG 175°
SENDING
                           CLOSE
```

```
KOAK CTL
X DEVIATION
 LEFT OF ROUTE
DG 175°
SENT
                          CLOSE*
```

Note: *The flight crew should avoid:*
- *Sending multiple clearance requests in the same message.*
- *Re-sending a message, if the ATC does not answer immediately.*

Ident.: DSC-46-10-10-30-00021458.0001001 / 17 MAR 17

CLOSING AND REMOVAL OF THE MESSAGE FROM THE DCDU

When the flight crew sends the datalink message via the DCDU, The message should be closed, by pressing the CLOSE function key. Closing the message will clean the DCDU screen.

Ident.: DSC-46-10-10-30-00020972.0001001 / 17 MAR 17

The RECALL function key of the DCDU can be used to display the last closed message.
Other messages can be viewed on the MSG RECORD page of the MCDU .

Note: *Before each flight, the MSG RECORD file of previous flight should be erased.*

Ident.: DSC-46-10-10-30-00021192.0001001 / 21 MAR 17

AUTO-CLOSING

The message closes and the system automatically removes the message from the DCDU, 5 s after the ATC center successfully receives the message.
Clearance messages and messages, related to loss of communication or datalink transmission error, do not close automatically, when sent or received by the ATC. The flight crew must close these messages by pressing the CLOSE key, on the DCDU. Closing the message will remove the message from the DCDU screen.

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General

GENERAL

Ident.: DSC-46-10-20-10-00020385.0001001 / 17 MAR 17
Applicable to: ALL

The AOC applications ◁ are datalink applications. The AOC applications enable an exchange of specific messages between the flight crew and the Airline Operational Control (AOC).
The AOC applications are customized by each operator and depend on operator's choices and the datalink service provider.

Note: *Details about AOC applications cannot be provided due to the wide range of customization by the operator.*
Airbus does not supervise customization of AOC applications. It is recommended to insert AOC application description into this chapter in accordance with AOC applications installed on the aircraft.

The AOC applications can offer the following functions:

EXAMPLE

- Preflight Functions:
  - Flight log
  - Departure Delay Message
  - Takeoff Delay Message
  - Weather Request
  - NOTAM Request
  - Loadsheet Request
  - Others
- En-Route Functions:
  - Flight log
  - Diversion Message
  - En-route Delay
  - Estimated Time of Arrival (ETA) Message
  - Weather Request
  - NOTAM Request
  - Others
- Postflight Functions:
  - Flight log
  - Flight summary
  - Gate delay
  - Others

The flight crew uses the datalink cockpit interface for the AOC applications.

EXAMPLE	**Flight Plan Modification** This flight plan modification example is based on following assumptions: - The AOC sends a flight plan modification message to the flight crew. - The flight crew loads the fight plan modification in the FMGS, into the secondary F-PLN. - The crew obtains ATC clearance before activating the modified flight plan. - *Refer to DSC-46-10-50 How to Modify FLT Plan* for the flight plan modification based on an AOC request.

Notifications

NOTIFICATION

Ident.: DSC-46-10-30-10-00020375.0001001 / 03 NOV 22
Applicable to: MSN 04827-04974

The Notification application enables the flight crew to send a notification message to an ATC center, if the datalink system is correctly initialized.
Refer to DSC-46-10-50 How to Initialize for more information about datalink initialization.
The flight crew must notify the ATC center, from 15 min to 45 min, before entering the ATC area.
The flight crew notifies a desired ATC center via the NOTIFICATION page of the MCDU.
However, ATC centers initiate automatic notification, when the aircraft flies from one ATC area to another.

Note: *The ATC center initiates a CPDLC connection, when the flight crew sends the notification. The NOTIFICATION page of the MCDU will display “XXXX NOTIFIED HHMM Z”). Therefore, it is not necessary to repeat notifications to the ATC center.*

The notification procedure enables the ATC to correlate the aircraft with the ICAO flight number.

Note: *The FMGC provides the FLT number.*

Consequently, it is essential to enter, into the FMGC, via the INIT page of the MCDU, the same flight number as the flight number, indicated on the ICAO flight plan (with the same number of letters).
ATS623 ◁ applications (Departure CLearance (DCL), OCL and D-ATIS) do not require previous notifications, or connection to an ATC center.

ATS623 ◁ applications workflow are based on equivalent voice exchanges:
1. Request - crew requests
2. Clearance - ground clears
3. Read-back - crew reads back
4. Confirmation - ground confirms.

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Controller/Pilot Datalink Communication (CPDLC)

GENERAL

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-30-20-10-00020376.0001001 / 17 MAR 17

The CPDLC application enables an exchange of specific ATC messages between the flight crew and air traffic controller.
The air traffic controller initiates the CPDLC connection with the aircraft, after the reception of a notification message from the flight crew.

Note: *When the aircraft flies from one air traffic control area to another, the CPDLC ensures an automatic transfer of ATC centers.*

The flight crew and air traffic controller use a set of predefined messages to build datalink messages. The flight crew and air traffic controller can also send freetext datalink messages. Freetext messages can only be used, when pre-formatted datalink messages do not allow to send the information.

Note: *The freetext message does not allow the datalink system to generate automatic pre-formatted answer.*
The freetext message must contain standard ATC phraseology and standard abbreviations.

The CPDLC application enables the flight crew to answer following uplink messages via the DCDU:
- Clearance
- Report request
- Negotiation message
- Information message.

Ident.: DSC-46-10-30-20-10-00021043.0002001 / 05 JUN 18

The CPDLC application supports the following functions:
- Connection (Refer to DSC-46-10-30-20 Connection)
- Request (Refer to DSC-46-10-30-20 Request)
- Edit (Refer to DSC-46-10-30-20 Edit)
- Message Timer (Refer to DSC-46-10-30-20 Message Timer).

CONNECT

Ident.: DSC-46-10-30-20-00020998.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

The notified ATC center can initiate a CPDLC connection with the aircraft. This ATC center is then considered as active. The active ATC center appears on the DCDU, and on the MCDU, in the active ATC field of the CONNECTION STATUS page.

Only one ATC center can be active at a time.
During flight, the aircraft may move from one ATC area to another ATC area. The next ATC may anticipate this change. The next ATC center may initiate a passive connection with the aircraft, when the aircraft is still connected to the active ATC. In this case, the next ATC center appears on the DCDU, and on the MCDU, in the next ATC field of the CONNECTION STATUS page. When the ATC area changes, the active ATC center ends the connection with the aircraft, and the next ATC center automatically becomes the active ATC center.
The CONNECTION STATUS page of the MCDU displays ICAO codes of both, the active and the next (if any) ATC centers. The flight crew can manually disconnect the ATC centers via the CONNECTION STATUS page.
Refer to DSC-46-10-40-30 CONNECTION STATUS for information about the CONNECTION STATUS page.

REQUEST

Ident.: DSC-46-10-30-20-00021000.0002001 / 01 MAR 18
Applicable to: MSN 04827-04974

In the REQUEST page of the MCDU, the flight crew can request:

- Direct to
- Altitude / Flight Level
- Speed / Mach

Note: *Requests of the departure clearance, oceanic clearance and ATIS are not part of the CPDLC application.*

EDIT

Ident.: DSC-46-10-30-20-00021013.0002001 / 17 MAR 17
Applicable to: MSN 04827-04974

The EDIT function enables the flight crew to modify a downlink message before sending.
The flight crew can modify the message on the MCDU, before the message is sent to ATC center via the DCDU.

Note: *The EDIT page appears automatically on the MCDU, if the EDIT function key is pressed on the DCDU. Pressing EDIT also triggers MCDU FOR EDIT indication, in the message information area, on the DCDU.*

Refer to DSC-46-10-40-20 Message Information Area for information about MCDU FOR EDIT indication on the DCDU.
Refer to DSC-46-10-40-30 EDIT for more information about the EDIT page.

MESSAGE TIMER

Ident.: DSC-46-10-30-20-00021031.0003001 / 17 MAR 17
Applicable to: MSN 04827-04974

The message latency timer is a fixed time value. The message becomes invalid, after expiry of the message latency timer. The flight crew or air traffic controller cannot receive invalid datalink message.

DOWNLINK MESSAGE

The ATC center must receive the message in a limited time. The air traffic controller cannot see an invalid message. When an invalid message is not received by the air traffic controller, the DCDU displays an associated message (NO ATC REPLAY) to inform the flight crew.

UPLINK MESSAGE

The ATC center must transmit the message to the aircraft in a limited time. If the time difference between the time reference/timestamp in the message, and the reception of the message by the aircraft, exceeds the message latency time, the message is rejected. The DCDU will not display the message.
The flight crew must respond to an uplink message in a limited time. The flight crew may press STBY, in the case of an expected delay that exceeds the message timer.

Note: *The DCDU displays XXs FOR REPLAY, in the message information area, 30 s before the expiration of replay timer. This message informs the flight crew about the time that remains to the expiration of the message latency timer.*

When the uplink message timer expires (the flight crew did not respond within the limit), the DCDU displays REPLAY: TIME OUT, in the message information area. The message becomes invalid. An invalid uplink message can only be closed, and the flight crew reverts to voice communication, if a response to the message is required.

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Message Record

MESSAGE RECORD

Ident.: DSC-46-10-30-70-00020377.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

The Message Record application enables to store datalink messages. The flight crew can display the recorded messages at any time.

When the flight crew closes a message on the DCDU, the message is stored and disappears from the DCDU.

The messages are stored in chronological order and grouped by flight number. When the maximum number of stored messages is reached (up to 99 messages), any new message will be stored and the oldest message will be deleted.

The flight crew can access the stored message via the MSG RECORD page of the MCDU.

Note: *1. The flight crew can print recorded messages.*
2. The flight crew can erase all recorded messages.
3. The ADS-C ◁ reports are not stored.

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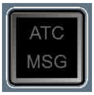
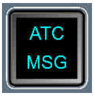
ATC Message Pushbutton (ATC MSG PB)

ATC MSG PB

Ident.: DSC-46-10-40-10-00021077.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974



No datalink message from the ATC center was received.



Flashes when a datalink message from the ATC center is received, or a reminder message is received. When a message is received, the DCDU automatically displays the message on the screen.
Associated with audio alert.
When the flight crew presses one of the two ATC MSG pbs, the ATC MSG lights go off and the aural alert associated with the reception of the message is cancelled.

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Datalink Control and Display Unit (DCDU)

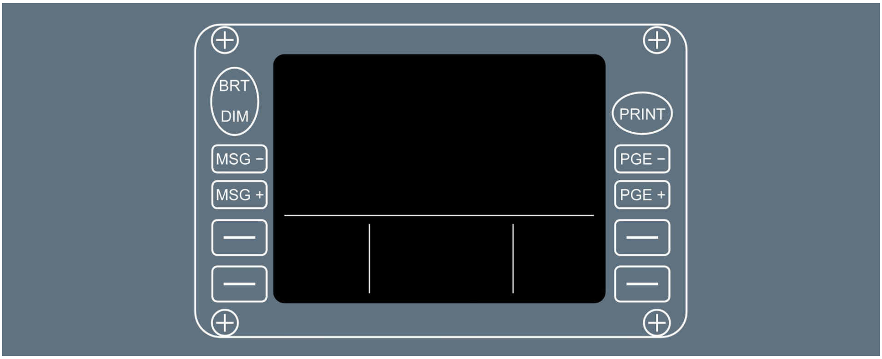
DCDU

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-40-20-10-00021076.0001001 / 17 MAR 17

■ If datalink connection is not established:

By default, the DCDU displays no information. The DCDU screen is black without information.



DCDU Screen with No Datalink Connected

■ If datalink connection is established:

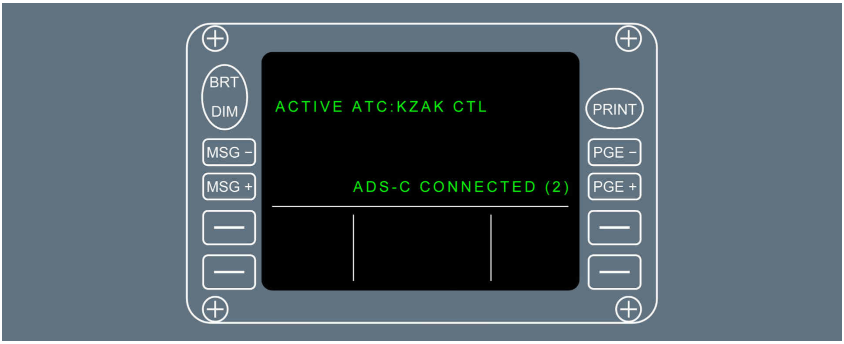
● If no datalink message is displayed on the DCDU:

By default, the DCDU displays:

- ACTIVE ATC and the active ATC ICAO code
- NEXT ATC and the next ATC ICAO code, if the active ATC initiated an automatic transfer to a next ATC
- ADS-C status, when the ADS-C is set to OFF
- ADS-C CONNECTED (X), if an ADS-Contract ◁ is established with ATC center(s)
  (X) : Displays the number of ADS-C active connections, when at least one ATC center is connected
- NO ATC DLK/ATC DISCONNECTED, when the datalink connection is lost.

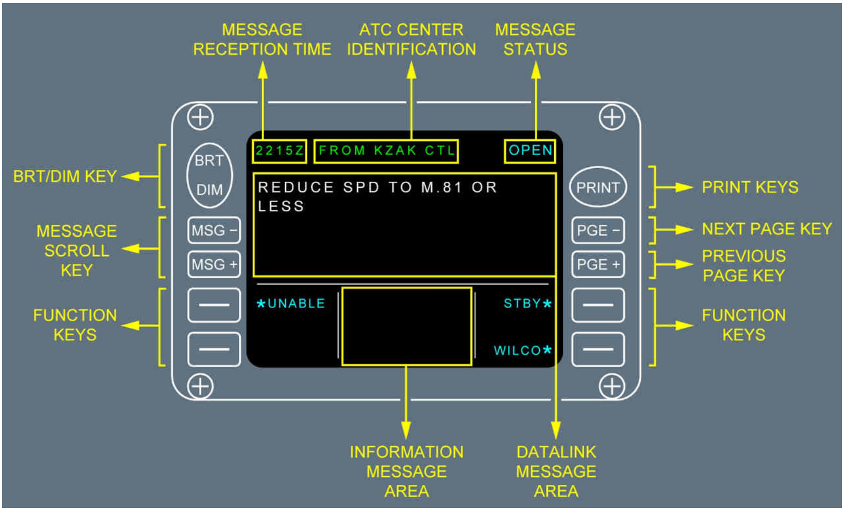
EXAMPLE	The DCDU default screen, when the datalink is connected and no message is displayed on the screen:

DCDU Screen with Datalink Connected and No Datalink Message Displayed


BRT
DIM
MSG –
MSG +
ACTIVE ATC:KZAK CTL
ADS-C CONNECTED (2)
PRINT
PGE –
PGE +

- **If a datalink message is displayed on the DCDU:**

DCDU Screen with Datalink Connected and Datalink Message Displayed


MESSAGE RECEPTION TIME
ATC CENTER IDENTIFICATION
MESSAGE STATUS
BRT/DIM KEY
MESSAGE SCROLL KEY
FUNCTION KEYS
PRINT KEYS
NEXT PAGE KEY
PREVIOUS PAGE KEY
FUNCTION KEYS
BRT
DIM
MSG –
MSG +
PRINT
PGE –
PGE +
2215Z
FROM KZAK CTL
OPEN
REDUCE SPD TO M.81 OR LESS
*UNABLE
STBY*
WILCO*
INFORMATION MESSAGE AREA
DATALINK MESSAGE AREA

Ident.: DSC-46-10-40-20-10-00021243.0002001 / 17 MAR 17

DATALINK MESSAGE AREA

Displays uplink and downlink messages.

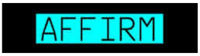
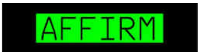
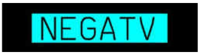
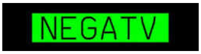
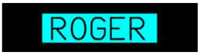
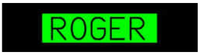
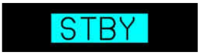
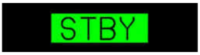
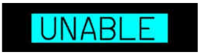
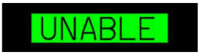
Uplink messages are displayed on a black background, and:
- When received, the message appears in white and the main parameters in cyan.
- When answered, the message becomes green.

Downlink messages appear in black:
- On a cyan background before sending
- On a green background while and after sending.

Ident.: DSC-46-10-40-20-10-00021241.0001001 / 17 MAR 17

MESSAGE STATUS

Indicates the status of the message or the response of the flight crew to a message received from the active ATC center.

	The status of the message changes to AFFIRM, when the flight crew selects a positive answer to the ATC uplink message on the DCDU.
	The status of the message changes to AFFIRM, when the flight crew sends a positive answer to the ATC center.
	The status of the message changes to NEGATV, when the flight crew selects a negative answer to the ATC uplink message on the DCDU.
	The status of the message changes to NEGATV, when the flight crew sends a negative answer to the ATC center.
	The status of the message changes to ROGER, when the flight crew selects ROGER, in order to inform the ATC center that they received and understood the uplink message.
	The status of the message changes to ROGER, when the flight crew sends a ROGER answer to the ATC center.
	The status of the message changes to STBY, when the flight crew selects STBY, in order to inform the ATC center that they need time to answer the uplink message.
	The status of the message changes to STBY, when the flight crew sends a STBY answer to the ATC center.
	The status of the message changes to UNABLE, when the flight crew selects UNABLE, in order to inform the ATC center that they cannot comply with the request.
	The status of the message changes to UNABLE, when the flight crew sends a UNABLE answer to the ATC center.

WILCO	The status of the message changes to WILCO, when the flight crew selects WILCO, in order to inform the ATC center that they understood the request and that they will comply with it.
WILCO	The status of the message changes to WILCO, when the flight crew sends a WILCO answer to the ATC center.
OPEN	Indicates that the received uplink message requires a response. The status OPEN remains until the flight crew answers the uplink message.
OPEN	Indicates that: - The flight crew did not answer the uplink message in due time, or - The flight crew sent a downlink or a response message, but no acknowledgment from the ground was received.
ABORT	Indicates that a disconnection occurred during a pending uplink or downlink message.

Note: *The status field remains empty for:*
- *A downlink message sent to the active ATC center*
- *An uplink message for which no response is expected.*

Ident.: DSC-46-10-40-20-10-00021242.0004001 / 17 MAR 17

FUNCTION KEYS

Depending on the nature of the message, the system automatically displays an appropriate function by each function key.

Possible unctions are detailed below.

AFFIRM : When selected, prepares an affirmative response to accept an ATC negotiation message (e.g. CAN YOU ACCEPT [altitude] AT [time])..

ANSWER : When selected, prepares a default response to an uplink message with two or more confirm/open negotiation message elements.

CANCEL : When selected, enables the flight crew to:
- Remove a prepared downlink message from the DCDU
- Cancel a selected reply to an uplink message.

CANNOT : When selected, prepares a negative answer to an OPEN negotiation message from the ATC.

CLOSE : When selected, erases a message (from the DCDU screen) that was sent to the ATC, or erases a message from the ATC that was answered. This message is stored in the MSG RECORD. This is not applicable when the answer is on stand-by (STBY).

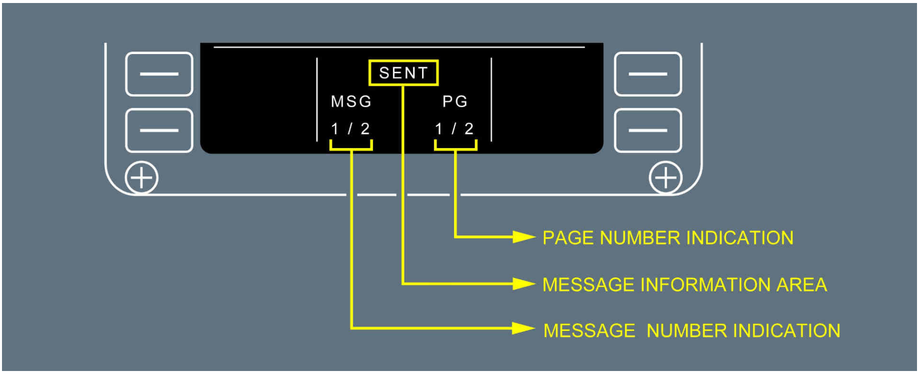
EDIT : When selected, accesses the EDIT page, on the MCDU.

NEGATIV : When selected, prepares a negative response to an ATC message.

RECALL	:	When selected, recalls the most recently closed message if it was closed within the last 5 min. If the flight crew selects the RECALL more than 5 min after the last message was closed, the RECALL EMPTY CONSULT MSG RECORD message appears.
ROGER	:	When selected, confirms the reception, and understanding of ATC information or report request.
SEND	:	When selected, sends a message or an answer, that was prepared by using other function keys (Example: WILCO, ROGER, AFFIRMATIVE, STBY, ...).
STBY	:	When selected, informs the ATC that the flight crew needs to delay the answer.
UNABLE	:	When selected, rejects an ATC clearance.
WILCO	:	When selected, accepts an ATC clearance.
*	:	The function keys are operative, if an asterisk or a function is visible.

Ident.: DSC-46-10-40-20-10-00021240.0004001 / 17 MAR 17

Message Information Area on the DCDU



MESSAGE NUMBER INDICATION

Indicates the rank of the message that is displayed on the DCDU.
If there is only one message on the DCDU, the message number information does not appear in the information field. In the case of a new message reception, the message number indication flashes.

PAGE NUMBER INDICATION

Indicates the page number of the message that is displayed on the DCDU.
If the message contains only one page, the page number information does not appear in the information field.

MESSAGE INFORMATION AREA

ANSWER MSG (amber) :	Maximum number of pending uplink messages is reached.
COM FAULT (amber) :	ATC communication means faulty.
COM NOT AVAIL (amber) :	Communication means temporarily unavailable.
COM NOT INIT (amber) :	Router not initialized.
FILE FULL (amber) :	Maximum number of downlink messages, accessible on the DCDUs, is reached.
LINK LOST (amber) :	Communication with the ATC is unavailable (displayed on any message pending when the loss occured).
MCDU FOR EDIT (white) :	Follows pressing of the “EDIT” key.
MCDU FOR TEXT (white) :	Follows pressing the “UNABLE“ key.
NO ATC DLK (white) :	ATC communication means temporarily unavailable.
NO ATC REPLY (amber) :	No answer received within 270 s.
NO MORE MSG (white) :	Follows pressing of the “MSG + “ or “MSG -” key, when no more messages are accessible.
NO MORE PGE (white) :	Follows pressing of the “PGE +” or “PGE -” key, when no more pages are accessible.
OVERFLW CLOSED (amber) :	Maximum number of non-pending messages is reached, and a new non-pending message is registered in the file.
PRINT FAILED (amber) :	Printing was requested from the DCDUs and printing failed.
PRINTING (white) :	Printing was requested from the DCDUs and printing is in progress.
PRINTING UNAVAIL (white) :	Printing was requested from the DCDUs, but the printer is unavailable.
RECALL EMPTY CONSULT MSG RECORD (white) :	If the flight crew has pressed the “RECALL“ key, and the last message was closed more than 5 minutes before.
RECALL MODE (white) :	If the flight crew has pressed the “RECALL“ key and the last message was closed within the last 5 minutes.
RECEIVD BY ATC (white) :	The current message has been received by the controller.

REJ BY ATC (amber) : Message rejected by the ATC system, controller not aware of this message.

REPLY: TIME OUT (amber) : Crew answers have to be delivered within 100 s.

SENDING (white) : The current message is being sent.

SEND FAILED (amber) : Transmission of a request or a reply to an uplink message are unsuccessful.

SENT (white) : The current message was sent, but not necessarily received.

Ident.: DSC-46-10-40-20-10-00021244.0003001 / 17 MAR 17

TIME

Indicated time corresponds to the time of:
- *Uplink message*, when the ATC center sent the message.
- *Downlink message*, when the flight crew transferred the message from the MCDU.

Ident.: DSC-46-10-40-20-10-00021245.0001001 / 17 MAR 17

BRT/DIM KEY

Adjusts the brightness of the DCDU

DESTINATION/ORIGIN ATC CENTER

Indicates the active ATC center that sent or received the message.

MESSAGE SCROLL KEY (MSG- / MSG+)

When pressed, displays the previous/next message in the file.

NEXT/PREVIOUS PAGE KEYS (PGE- / PGE+)

When pressed, displays the previous/next page of the message, if the message cannot be displayed on one single page.

PRINT KEY

Prints the message that is currently displayed on the DCDU.

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MCDU Datalink Pages

INTRODUCTION

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-40-30-10-00021078.0002001 / 17 MAR 17

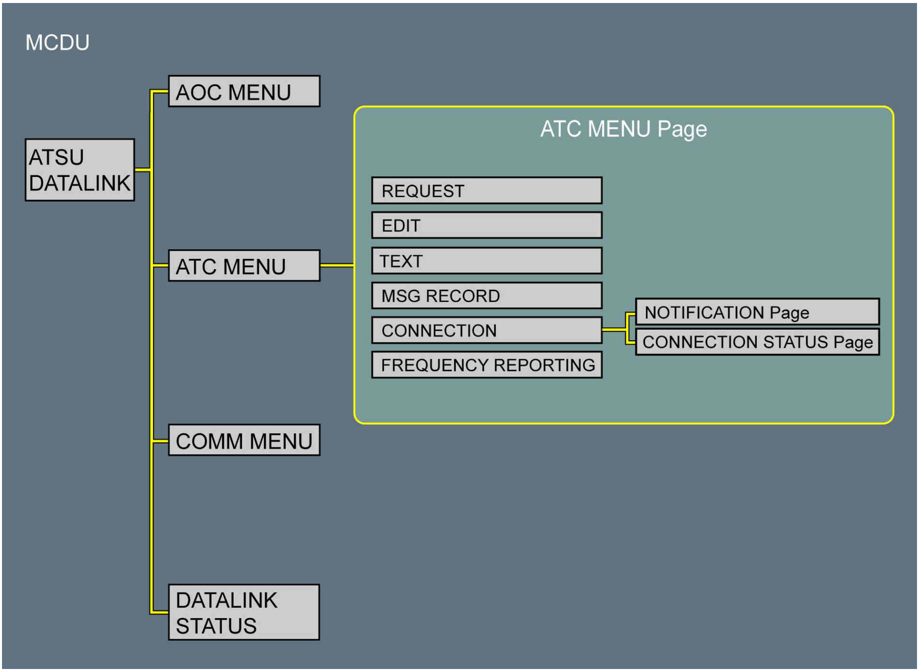
The MCDU MENU page enables access to datalink pages when the flight crew selects ATSU.

The ATSU of the MCDU MENU enables to access ATSU DATALINK page. The ATSU DATALINK page provides a subsequent access to:
- AOC MENU pages

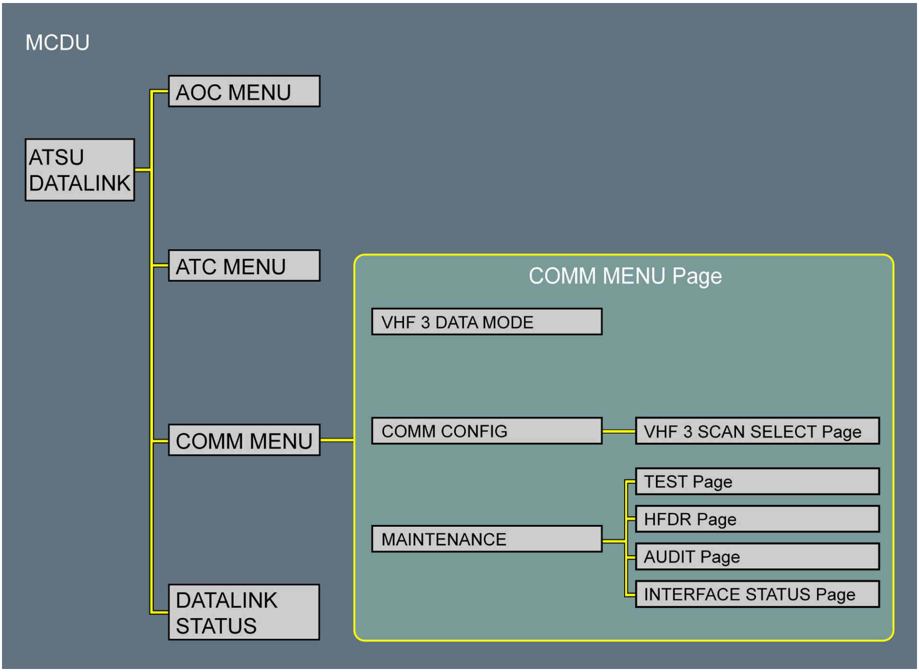
  Note: *Due to the customization of AOC applications ◁ by each operator that is not monitored by Airbus, this Controls and Indicators chapter does not contain a description of controls and indicators associated with AOC applications.*

- ATC MENU pages
- COMM MENU pages
- DATALINK STATUS page
  Refer to DSC-46-10-40-30 DATALINK STATUS

Ident.: DSC-46-10-40-30-10-00021195.0001001 / 17 MAR 17


MCDU
ATSU DATALINK
AOC MENU
ATC MENU
COMM MENU
DATALINK STATUS
ATC MENU Page
REQUEST
EDIT
TEXT
MSG RECORD
CONNECTION
FREQUENCY REPORTING
NOTIFICATION Page
CONNECTION STATUS Page

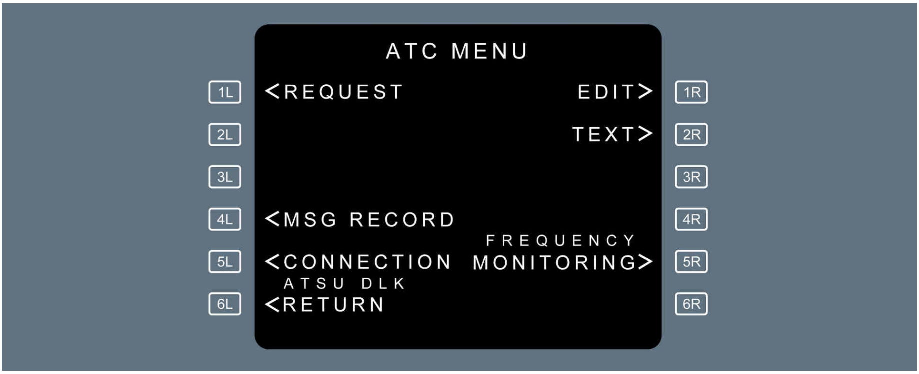
Ident.: DSC-46-10-40-30-10-00021463.0002001 / 17 MAR 17


MCDU
ATSU DATALINK
AOC MENU
ATC MENU
COMM MENU
DATALINK STATUS
COMM MENU Page
VHF 3 DATA MODE
COMM CONFIG
VHF 3 SCAN SELECT Page
MAINTENANCE
TEST Page
HFDR Page
AUDIT Page
INTERFACE STATUS Page

ATC MENU

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-40-30-20-00021079.0004001 / 17 MAR 17

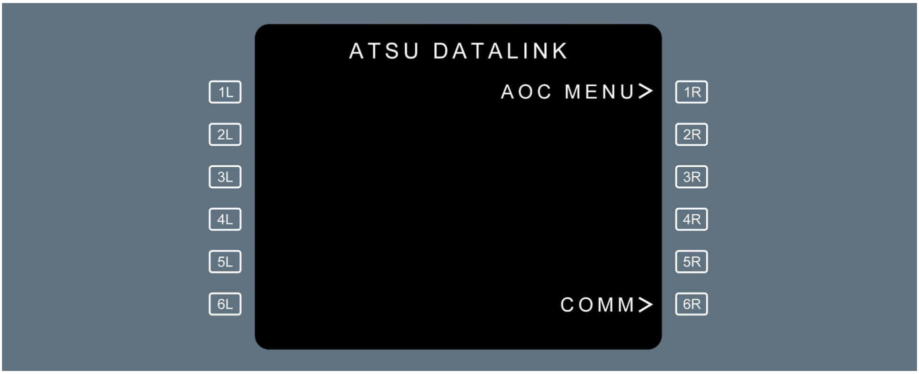

ATC MENU
1L
<REQUEST
EDIT>
1R
2L
TEXT>
2R
3L
3R
4L
<MSG RECORD
4R
FREQUENCY
5L
<CONNECTION
MONITORING>
5R
ATSU DLK
6L
<RETURN
6R

[1L] REQUEST	When selected, the MCDU displays the REQUEST page.
[4L] MSG RECORD	When selected, the MCDU displays the MSG RECORD page.
[5L] CONNECTION	When selected, the MCDU displays the CONNECTION page.
[6L] ATSU DLK RETURN	When selected, the MCDU displays the ATSU DATALINK page.
[1R] EDIT	When selected, the MCDU displays the EDIT page. *Note:* *EDIT appears on the ATC MENU page, when the flight crew presses EDIT on the DCDU, associated with a datalink message.*
[2R] TEXT	When selected, the MCDU displays the TEXT page. *Note:* *TEXT appears on the ATC MENU page, when the flight crew selects a negative answer (e.g.: UNABLE) on a DCDU, associated with a datalink message.*
[5R] FREQUENCY MONITORING	When selected, the MCDU displays the FREQUENCY MONITORING page.

ATSU DATALINK

Ident.: DSC-46-10-40-30-00021081.0003001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597

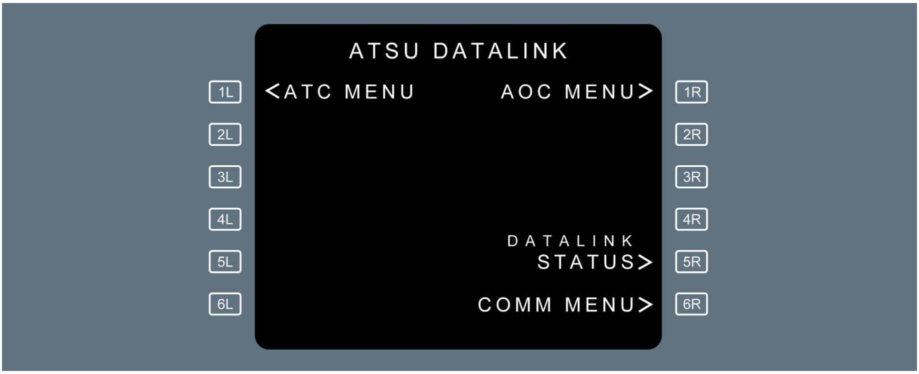

ATSU DATALINK
AOC MENU>
COMM>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1R] AOC MENU	When selected, the MCDU displays the AOC MENU page.
[6R] COMM	When selected, the MCDU displays the COMM MENU page.

ATSU DATALINK

Ident.: DSC-46-10-40-30-00021081.0002001 / 17 MAR 17

Applicable to: MSN 04827-04974


ATSU DATALINK
<ATC MENU
AOC MENU>
DATALINK
STATUS>
COMM MENU>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

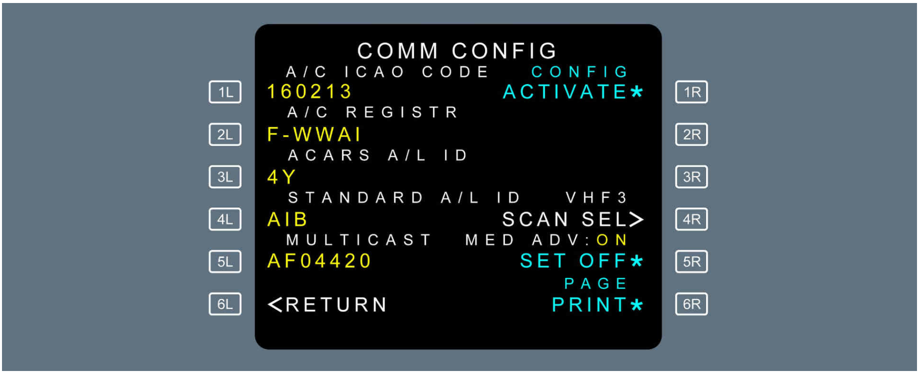
[1L] ATC MENU	When selected, the MCDU displays the ATC MENU page.
[1R] AOC MENU	When selected, the MCDU displays the AOC MENU page.

[5R] DATALINK STATUS	When selected, the MCDU displays the DATALINK STATUS page.
[6R] COMM MENU	When selected, the MCDU displays the COMM MENU page.

COMM CONFIG

Ident.: DSC-46-10-40-30-00021253.0002001 / 17 MAR 17
Applicable to: MSN 04827-04974

EXAMPLE	This is an example of the COMM CONFIG page. Information, that are displayed on the COMM CONFIG page, depend on datalink customization, selected by each operator. E.g.: If a router configuration file, integrated in the ATSU, contains a customized VHF scan mask, the access to the VHF 3 SCAN SELECT page will not display. The VHF 3 SCAN SELECT page will not accessible.



```
      COMM CONFIG
 A/C ICAO CODE      CONFIG
160213           ACTIVATE*
 A/C REGISTR
F-WWAI
 ACARS A/L ID
4Y
 STANDARD A/L ID      VHF3
AIB              SCAN SEL>
 MULTICAST     MED ADV:ON
AF04420           SET OFF*
                      PAGE
<RETURN             PRINT*
```

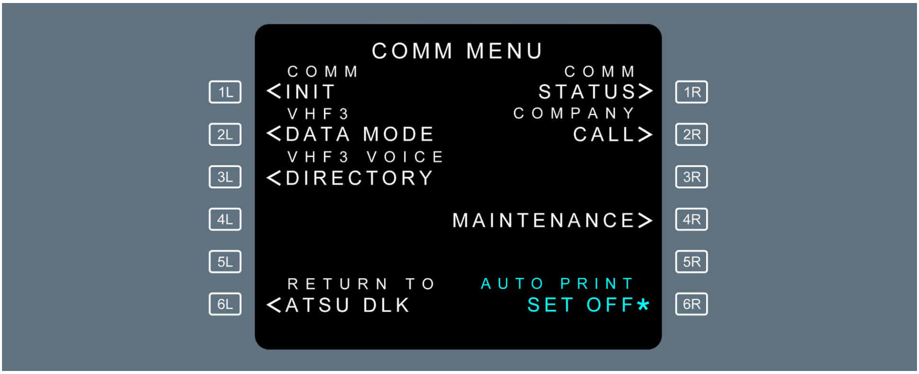
EXAMPLE	[1L] A/C ICAO CODE	Displays the aircraft ICAO code. Note: *If the FMGC does not enter the parameter automatically, the flight crew can enter the A/C ICAO CODE manually.*
	[2L] A/C REGISTR	Displays the aircraft registration. Note: *If the FMGC does not enter the parameter automatically, the flight crew can enter the A/C REGISTR manually.*
	[3L] ACARS A/L ID	Displays the ACARS airline identification. Note: *If the FMGC does not enter the parameter automatically, the flight crew can enter the ACARS A/L ID manually.*
	[4L] STANDARD A/L ID	Displays the standard airline identification. Note: *If the FMGC does not enter the parameter automatically, the flight crew can enter the STANDARD A/L ID manually.*
	[5L] MULTICAST	Displays the optional multicast ACARS address.
	[6L] RETURN	When selected, the MCDU displays the COMM MENU page.
	[1R] CONFIG ACTIVATE	When selected, the system activates parameters that were entered manually.
	[5R] VHF3 SCAN SEL	When selected, the DCDU displays the VHF3 SCAN SELECT page.
	[5R] MED ADV	Sets the transition status of labels on/off.
	[6R] PAGE PRINT	When selected, the printer prints information.

COMM MENU

Ident.: DSC-46-10-40-30-00021090.0003001 / 17 MAR 17

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

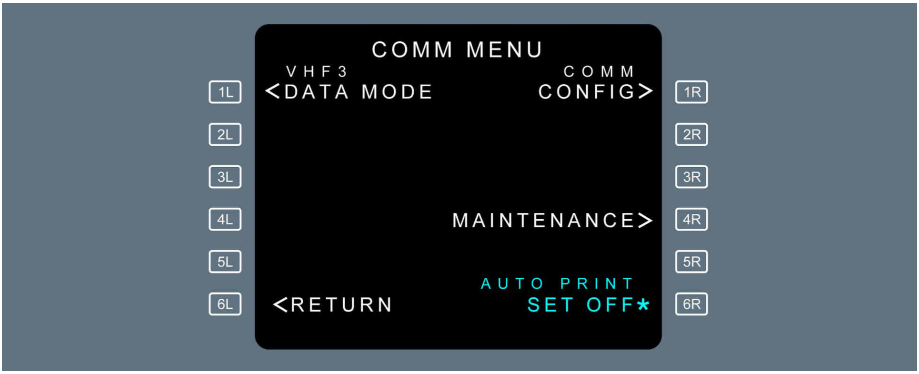
EXAMPLE	This is an example of the COMM MENU page. Information, that are displayed on the COMM MENU page and subsequent pages, accessible via the COMM MENU page, depend on datalink customization, selected by each operator for AOC applications.


COMM MENU
COMM
<INIT
COMM
STATUS>
VHF3
<DATA MODE
COMPANY
CALL>
VHF3 VOICE
<DIRECTORY
MAINTENANCE>
RETURN TO
<ATSU DLK
AUTO PRINT
SET OFF*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

EXAMPLE	[1L] COMM INIT	When selected, the DCDU displays the COMM INIT page.
	[2L] VHF3 DATA MODE	When selected, the DCDU displays the VHF3 DATA MODE page.
	[3L] VHF3 VOICE DIRECTORY	When selected, the DCDU displays the VHF3 VOICE DIRECTORY page.
	[6L] RETURN TO ATSU DLK	When selected, the MCDU displays the ATSU DATALINK page.
	[1R] COMM STATUS	When selected, the DCDU displays the COMM STATUS page.
	[2R] COMPANY CALL	When selected, the DCDU displays the COMM CONFIG page.
	[4R] MAINTENANCE	When selected, the MCDU displays the MAINTENANCE page.
	[6R] AUTO PRINT	Sets the auto-print on or off.

COMM MENU

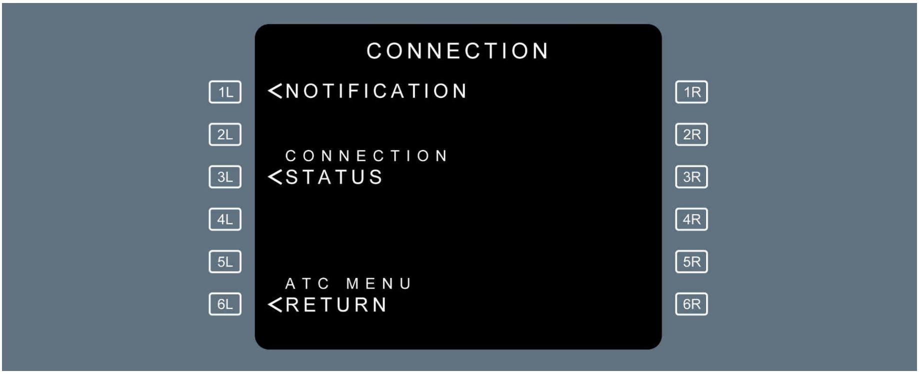
Ident.: DSC-46-10-40-30-00021090.0002001 / 17 MAR 17
Applicable to: MSN 04827-04974


COMM MENU
VHF3
<DATA MODE
COMM
CONFIG>
MAINTENANCE>
AUTO PRINT
<RETURN
SET OFF*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1L] VHF3 DATA MODE	When selected, the MCDU displays the VHF3 DATA MODE page.
[6L] RETURN	When selected, the MCDU displays the ATSU DATALINK page.
[1R] COMM CONFIG	When selected, the MCDU displays the COMM CONFIG page.
[4R] MAINTENANCE	When selected, the MCDU displays the MAINTENANCE page.
[6R] AUTO PRINT	Sets the auto-print on or off.

CONNECTION

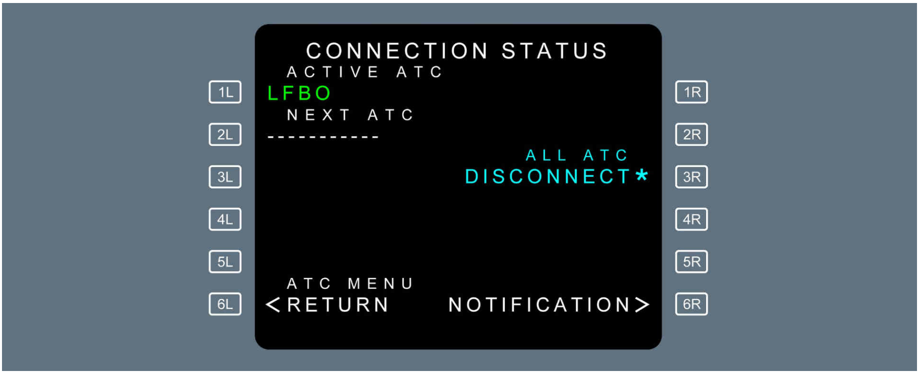
Ident.: DSC-46-10-40-30-00021104.0003001 / 17 MAR 17
Applicable to: MSN 04827-04974


CONNECTION
<NOTIFICATION
CONNECTION
<STATUS
ATC MENU
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1L] NOTIFICATION	When selected, the MCDU displays the NOTIFICATION page.
[3L] CONNECTION STATUS	When selected, the MCDU displays the CONNECTION STATUS page.
[6L] ATC MENU RETURN	When selected, the MCDU displays the ATC MENU page.

CONNECTION STATUS

Ident.: DSC-46-10-40-30-00021101.0003001 / 17 MAR 17
Applicable to: MSN 04827-04974



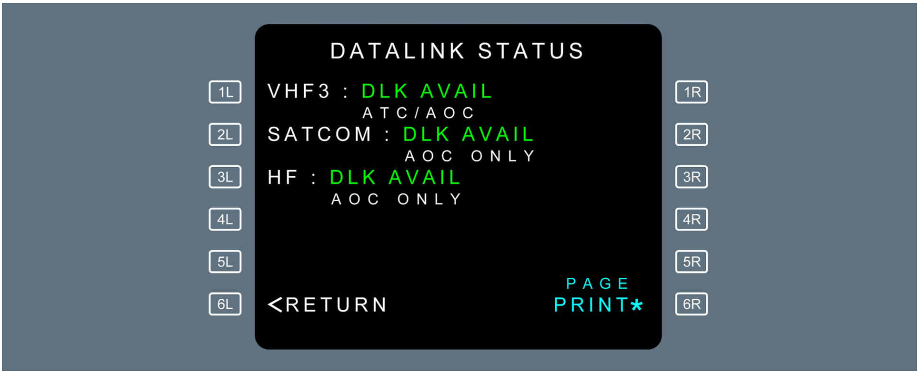
CONNECTION STATUS
ACTIVE ATC
LFBO
NEXT ATC

ALL ATC
DISCONNECT*
ATC MENU
<RETURN
NOTIFICATION>

[1L] ACTIVE ATC	Displays the currently active ATC for CPDLC connection.
[2L] NEXT ATC	Displays the next ATC for CPDLC connection.
[6L] ATC MENU RETURN	When selected, the MCDU displays the ATC MENU page.
[1R] ALL ATC DISCONNECT	Disconnects all established CPDLC connections.
[6R] NOTIFICATION	When selected, the MCDU displays the NOTIFICATION page.

DATALINK STATUS

Ident.: DSC-46-10-40-30-00021091.0002001 / 05 MAR 19
Applicable to: MSN 04827-04974



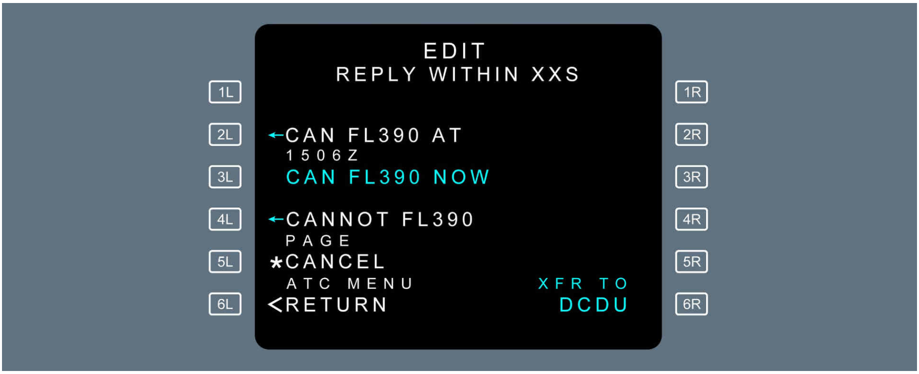
```
        DATALINK STATUS
VHF3 : DLK AVAIL
        ATC/AOC
SATCOM : DLK AVAIL
           AOC ONLY
HF : DLK AVAIL
       AOC ONLY


                          PAGE
<RETURN                 PRINT*
```

VHF 3 Line 1	Displays datalink status: - DLK AVAIL The datalink communication is established and available. - DLK NOT AVAIL The datalink communication is not established. - INOP The VHF3 datalink is not operative. - NO NETWORK The VHF3 datalink is inhibited. - VOICE The VHF3 datalink operates in the voice mode.
VHF 3 Line 2	Displays availability of datalink applications: - ATC / AOC Datalink communication via ATC and AOC applications is available. - ATC ONLY Datalink communication via ATC applications is available. - AOC ONLY Datalink communication via AOC applications is available.

SATCOM Line 1	Displays datalink status: - DLK AVAIL The datalink communication is established and available. - DLK NOT AVAIL The datalink communication is not established. - INOP The SATCOM datalink is not operative. - NOT INSTALLED The SATCOM datalink is not installed.
SATCOM Line 2	Displays availability of datalink applications: - ATC / AOC Datalink communication via ATC and AOC applications is available. - ATC ONLY Datalink communication via ATC applications is available. - AOC ONLY Datalink communication via AOC applications is available.
HF Line 1	Displays datalink status: - DLK AVAIL The datalink communication is established and available. - DLK NOT AVAIL The datalink communication is not established. - INOP The HF datalink is not operative. - VOICE The HF datalink operates in the voice mode. - NOT INSTALLED The HF datalink is not installed.
HF Line 2	Displays availability of datalink applications: - ATC / AOC Datalink communication via ATC and AOC applications is available. - ATC ONLY Datalink communication via ATC applications is available. - AOC ONLY Datalink communication via AOC applications is available.
[6L] RETURN	When selected, the MCDU displays the ATSU DATALINK page.
[6R] PAGE PRINT	When selected, the printer prints the information.

EDIT

Ident.: DSC-46-10-40-30-00021107.0003001 / 17 MAR 17
Applicable to: MSN 04827-04974



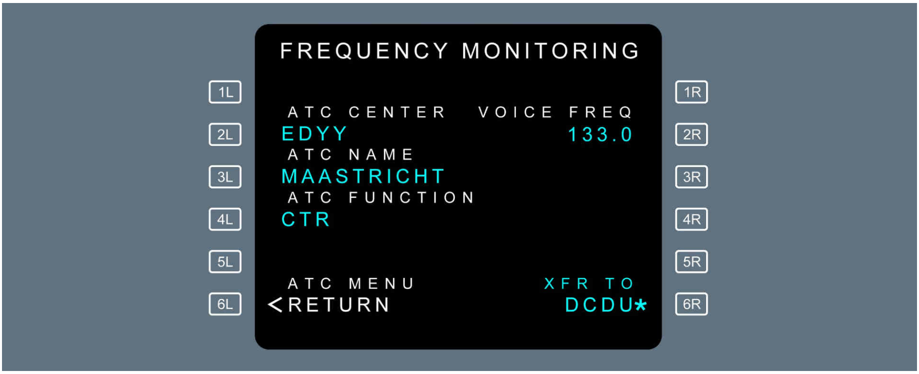
```
              EDIT
       REPLY WITHIN XXS

←CAN FL390 AT
  1506Z
 CAN FL390 NOW

←CANNOT FL390
  PAGE
*CANCEL
  ATC MENU              XFR TO
<RETURN                   DCDU
```

REPLAY WITHIN XXS	Appears for 5 s, when the remaining time to answer is less than 30 s. XX represents the number of remaining seconds, before the message timer expires.
[2L]:	
PRESENT LEVEL	Inserts the present flight level in the message, in order to notify the ATC.
ASSIGNED LEVEL	Inserts the assigned flight level in the message, in order to read–back the assigned flight level.
CAN (AT)	Inserts CAN (AT), in order to accept the specified flight level (at the specified time).
CAN BLOCK LEVEL (AT)	Inserts CAN BLOCK LEVEL (AT), in order to accept the specified block flight level (at the specified time).
PREFERRED LEVEL	Inserts the preferred flight level, in order to notify the ATC.
TOP OF DESCENT	Inserts the preferred time to commence descent for approach, in order to notify the ATC.
[3L] CAN LEVEL NOW	Inserts CAN LEVEL NOW, in order to accept the specified flight level immediately.
[4L]:	
CANNOT	Inserts CANNOT, in order to refuse the specified flight level.
CANNOT BLOCK LEVEL	Inserts CANNOT BLOCK LEVEL, in order to refuse the specified block flight level.
[5L] PAGE CANCEL	When selected, the MCDU displays the EDIT page.

[6L] ATC MENU RETURN	When selected, the MCDU displays the ATC MENU page.
[6R] XFR TO DCDU	When selected, the DCDU displays prepared message.

FREQUENCY REPORTING

Ident.: DSC-46-10-40-30-00021099.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

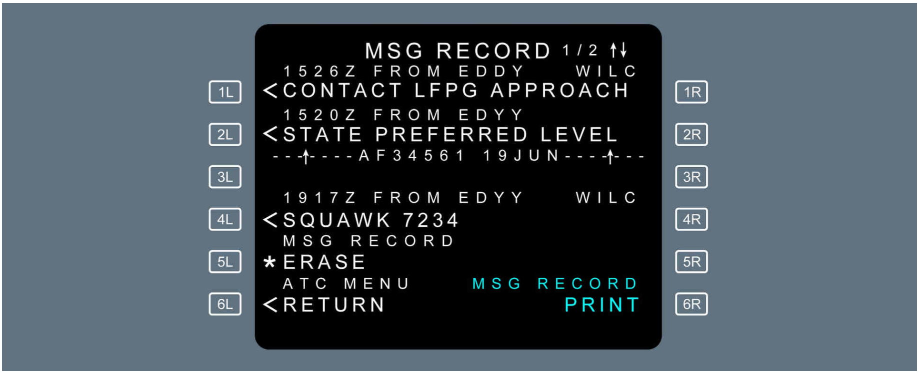


FREQUENCY MONITORING
ATC CENTER VOICE FREQ
EDYY 133.0
ATC NAME
MAASTRICHT
ATC FUNCTION
CTR
ATC MENU XFR TO
<RETURN DCDU*

[2L]	Enters the ICAO code of the ATC center.
[3L]	Enters the ATC facility.
[4L]	Enters the ATC function name.
[6L]	When selected, the MCDU displays the ATC MENU page.
[2R]	Enters the voice frequency of the ATC center.
[6R]	When selected, the DCDU displays prepared message.

MSG RECORD

Ident.: DSC-46-10-40-30-00021098.0004001 / 17 MAR 17
Applicable to: MSN 04827-04974



```
     MSG RECORD 1/2 ↑↓
 1526Z FROM EDDY     WILC
<CONTACT LFPG APPROACH
 1520Z FROM EDYY
<STATE PREFERRED LEVEL
--↑----AF34561 19JUN----↑--

 1917Z FROM EDYY     WILC
<SQUAWK 7234
 MSG RECORD
*ERASE
 ATC MENU      MSG RECORD
<RETURN             PRINT
```

Lines 1 to 4	Display a summary of each recorded message: - Time - ATC center - Message status - Beginning of the message The latest recorded message is displayed at the top of the message record list. Pressing the left key, adjacent to each message title, displays full content of recorded message. *Note:* *Due to limitations of line length, the status of datalink messages is abbreviated:* - *"WILC" for WILCO* - *"UNBL" for UNABLE* - *"ABRT" for ABORT* - *"ROGR" for ROGER* - *"AFRM" for AFFIRM* - *"NEG" for NEGATIVE* - *"STBY" for STANDBY*
[5L] MSG RECORD ERASE	Clears all the recorded messages. When pressing MSG RECORD ERASE, MSG RECORD ERASE is replaced by ERASE MSG RECORD CONFIRM, in order to prevent an inadvertent erase.

[6L] ATC MENU RETURN	When selected, the MCDU displays the ATC MENU page.
[6R] MSG RECORD PRINT	When selected, the printer prints all recorded messages.

Note: *If sending a downlink message fails, the message appears in white on the MSG RECORD page.*

EXAMPLE

Indication of Flight Number Change

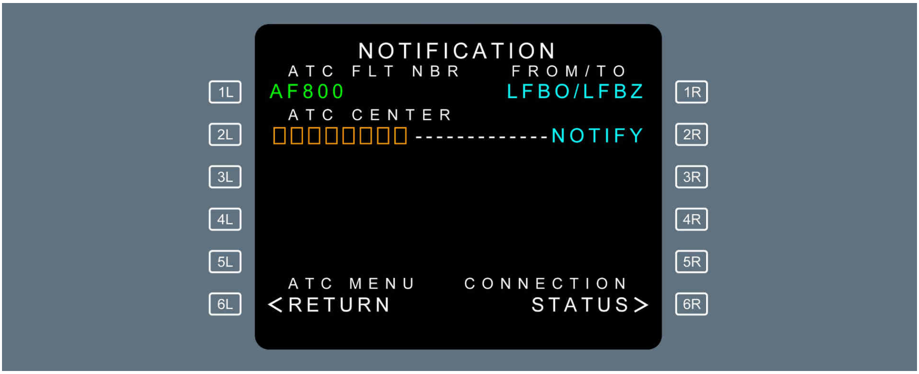
When the flight number changes, a specific message with the new flight number value is stored in the message record.

Line 3 : The specific message of the flight number change, indicating:
- New flight number
- Date of change.

NOTIFICATION

Ident.: DSC-46-10-40-30-00021100.0002001 / 17 MAR 17

Applicable to: MSN 04827-04974



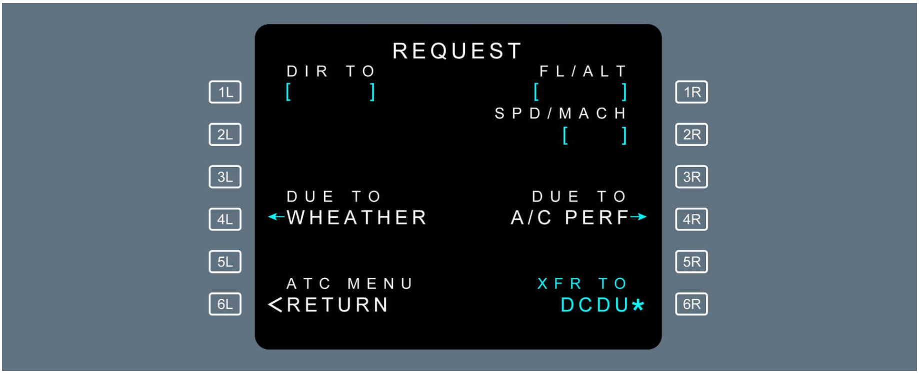
NOTIFICATION
ATC FLT NBR FROM/TO
AF800 LFBO/LFBZ
ATC CENTER
□□□□□□□□ -------------NOTIFY
ATC MENU CONNECTION
<RETURN STATUS>

[1L] ATC FLT NBR	Displays the flight number, filled by the FMGS. The FLT NBR cannot be modified via this page.
Line 2 ATC CENTER	Displays the logon status in front of the ATC CENTER. The logon status can indicate: - NOTIFYING indicates that the logon is in progress. - NOTIF FAILED indicates that the logon has failed. The logon status disappears, when the logon notification is completed.

[2L] ATC CENTER	Enters the ATC ICAO code for notification. The ATC code, entered correctly, is displayed in large cyan font. When the logon procedure is successfully completed, 8 amber boxes will be displayed. *Note:* *At initialization, a default code is displayed in small cyan font, and corresponds to one of following options:* - *Last manually-entered ATC code* - *Last ATC code, associated to an established CPDLC connection, if no ATC code was manually entered* - *8 amber boxes appear.*
Lines 3 to 5	Displays the last ATC centers, to which a manual and successful logon notification was performed. Once a CPDLC connection is established, the indication disappears. *Note:* *NOTIFICATION UNAVAILABLE is displayed in line 5, if the communication means, or the flight number are unavailable.*
[6L] ATC MENU RETURN	When selected, the MCDU displays the ATC MENU page.
[1R] FROM/TO	Displays the departure and destination airports.
[2R] NOTIFY	Sends a notification to the ATC. NOTIFY is not active, during a notification process, or if the communication means, ATC center, flight number, or departure/destination airport are unavailable.
[6R] CONNECTION STATUS	When selected, the MCDU displays the CONNECTION STATUS page.

REQUEST

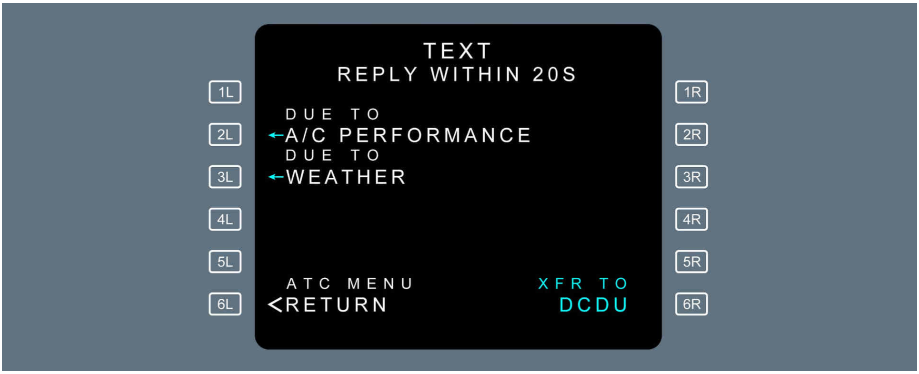
Ident.: DSC-46-10-40-30-00021113.0003001 / 17 MAR 17
Applicable to: MSN 04827-04974


REQUEST
DIR TO
[ ]
FL/ALT
[ ]
SPD/MACH
[ ]
DUE TO
←WHEATHER
DUE TO
A/C PERF→
ATC MENU
<RETURN
XFR TO
DCDU*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

[1L] DIR TO	Prepares a request, in order to proceed from the present position to a selected waypoint.
[4L] DUE TO WEATHER	When selected, DUE TO WEATHER conditions (justification) is inserted into the datalink message.
[6L] ATC MENU RETURN	When selected, the MCDU displays the ATC MENU page.
[1R] FL/ALT	Prepares a request of new altitude.
[2R] SPD/MACH	Prepares a request of new speed.
[4R] DUE TO A/C PERF	When selected, DUE TO A/C PERFORMANCE justification is inserted into the datalink message.
[6R] XFR TO DCDU	When selected, the DCDU displays prepared message.

TEXT

Ident.: DSC-46-10-40-30-00021096.0003001 / 17 MAR 17
Applicable to: MSN 04827-04974

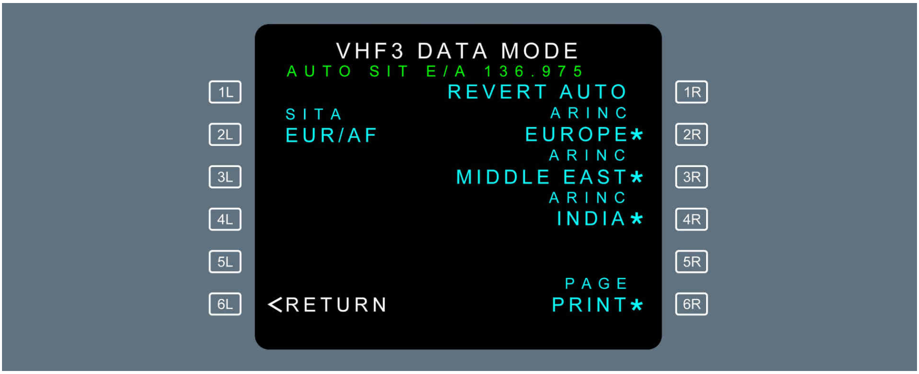


REPLAY WITHIN XXS	Appears for 5 s, when the remaining time to answer is less than 30 s. XX represents the number of remaining seconds, before the message timer expires. When selected, due to aircraft performance justification is inserted into the datalink message.
[2L] DUE TO A/C PERFORMANCE	When selected, due to aircraft performance (justification) is inserted into the datalink message.
[3L] DUE TO WEATHER	When selected, due to weather conditions (justification) is inserted into the datalink message.
[6L] ATC MENU RETURN	When selected, the MCDU displays the ATC MENU page.
[6R] XFR TO DCDU	When selected, the DCDU displays the prepared message.

VHF3 DATA MODE

Ident.: DSC-46-10-40-30-00021252.0002001 / 17 MAR 17
Applicable to: MSN 04827-04974

EXAMPLE	This is an example of the VHF3 DATA MODE page. Information, that are displayed on the VHF3 DATA MODE page, depend on the service provider and datalink customization, selected by each operator. The VHF3 DATA MODE displays regions, and associated frequencies of datalink service providers that were selected.



```
         VHF3 DATA MODE
 AUTO SIT E/A 136.975
                   REVERT AUTO
 SITA                    ARINC
 EUR/AF                EUROPE*
                         ARINC
                  MIDDLE EAST*
                         ARINC
                        INDIA*


                          PAGE
<RETURN                 PRINT*
```

EXAMPLE	Line 1	Displays:
		- Mode of VHF provider selection:
		  - MANUAL
		The VHF3 is tuned to a frequency manually selected by the flight crew via the VHF3 DATA MODE page.
		  - AUTO
		The VHF3 is tuned to a frequency automatically selected by the ATSU.
		  - VOICE
		The VHF3 is in the voice mode.
		  - SCAN
		The VHF3 system scans for a data frequency.
		  - AUTO DATA INHIB
		No datalink service provider is available in the area.
		- Datalink service provider identification
		- The frequency of the service provide that the system is tuned to

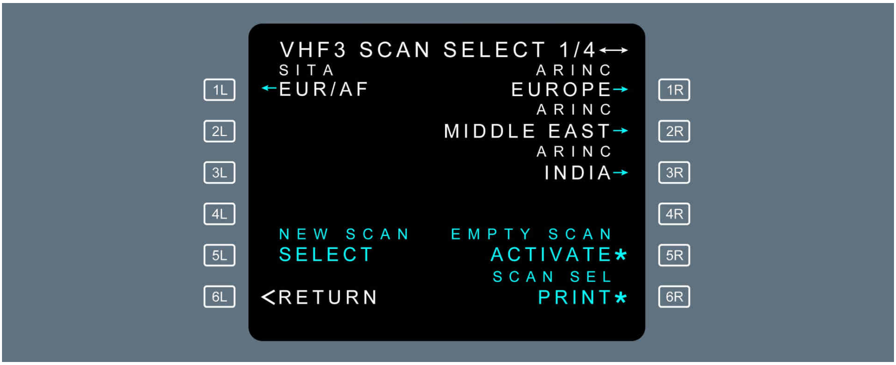
	[2L] SITA EUR/AF	Displays the service provider (SITA Europe/Africa). In this example, the ATSU is connected to the provider SITA Europe/Africa (136.975 MHz).
	[6L] RETURN	When selected, the MCDU displays the COMM MENU page.
	[1R] REVERT AUTO	Reverts to VHF3 auto-tuning.
	[2R] ARINC EUROPE	When selected, the VHF3 tunes to the frequency of the ARINC EUROPE provider. The mode of VHF provider selection changes to MANUAL.
	[3R] ARINC MIDDLE EAST	When selected, the VHF3 tunes to the frequency of the ARINC MIDDLE EAST provider. The mode of VHF provider selection changes to MANUAL.
	[4R] ARINC INDIA	When selected, the VHF3 tunes to the frequency of the ARINC INDIA provider. The mode of VHF provider selection changes to MANUAL.
	[6R] PAGE PRINT	When selected, the printer prints information from the VHF3 DATA MODE page.

VHF3 SCAN SELECT

Ident.: DSC-46-10-40-30-00021254.0001001 / 17 MAR 17
Applicable to: ALL

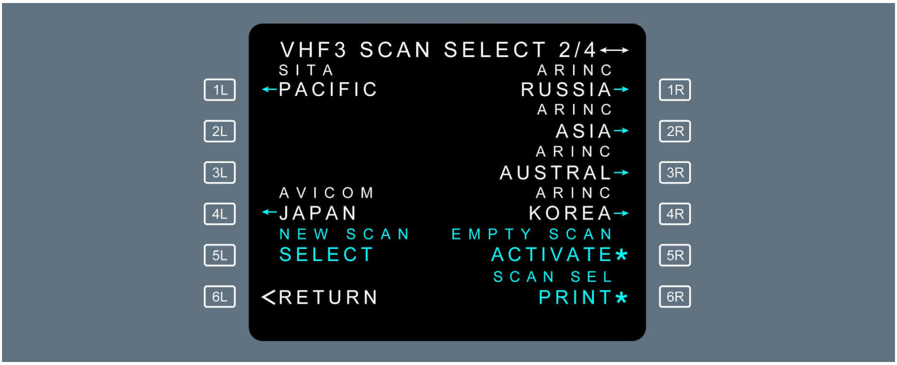
EXAMPLE	This is an example of VHF3 SCAN SELECT pages. Information, that are displayed on the VHF3 SCAN SELECT pages, depend on datalink customization, selected by each operator.

THE VHF 3 SCAN SELECT PAGE 1/4


VHF3 SCAN SELECT 1/4←→
SITA
←EUR/AF
ARINC
EUROPE→
ARINC
MIDDLE EAST→
ARINC
INDIA→
NEW SCAN
SELECT
EMPTY SCAN
ACTIVATE*
SCAN SEL
PRINT*
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

EXAMPLE	[1L] SITA EUR/AF	Selects the SITA Europe/Africa (datalink service provider).
	[5L]: NEW SCAN SELECT : ACTIVE SEL DISPLAY :	 Selects the scan mask. Displays the scan mask used by ATSU.
	[6L] RETURN	When selected, the MCDU displays the COMM CONFIG page.
	[1R] ARINC EUROPE	Selects the ARINC Europe (datalink service provider).
	[2R] ARINC MIDDLE EAST	Selects the ARINC Eiddle East (datalink service provider).
	[3R] ARINC INDIA	Selects the ARINC India (datalink service provider).
	[5R] EMPTY SCAN ACTIVATE	Activates an emprty scan mask to inhibit VHF datalink communication.
	[6R] SCAN SEL PRINT	When selected, the printer prints information.

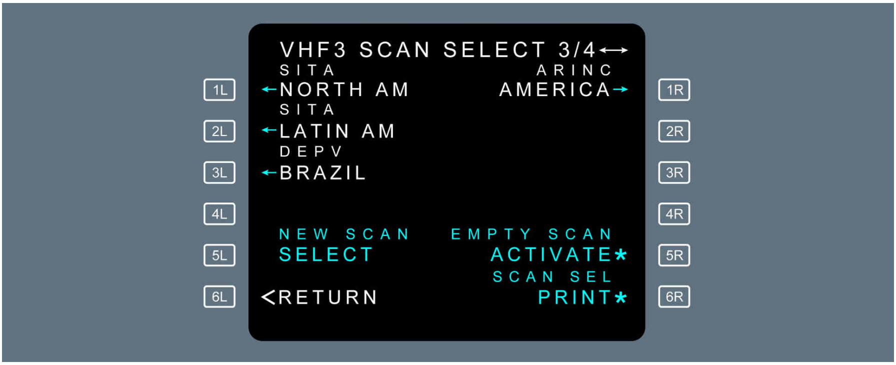
THE VHF 3 SCAN SELECT PAGE 2/4



```
  VHF3 SCAN SELECT 2/4←→
  SITA               ARINC
←PACIFIC            RUSSIA→
                     ARINC
                      ASIA→
                     ARINC
                   AUSTRAL→
  AVICOM             ARINC
←JAPAN               KOREA→
  NEW SCAN      EMPTY SCAN
  SELECT          ACTIVATE*
                  SCAN SEL
<RETURN              PRINT*
```

EXAMPLE	[1L] SITA PACIFIC	Selects the SITA Pacific (datalink service provider).
	[4L] AVICOM JAPAN	Selects the AVCOM Japan (datalink service provider).
	[5L]: NEW SCAN SELECT : ACTIVE SEL DISPLAY :	 Selects the scan mask. Displays the scan mask used by ATSU.
	[6L] RETURN	When selected, the MCDU displays the COMM CONFIG page.
	[1R] ARINC RUSSIA	Selects the ARINC Russia (datalink service provider).
	[2R] ARINC ASIA	Selects the ARINC Asia (datalink service provider).
	[3R] ARINC AUSTRAL	Selects the ARINC Australia (datalink service provider).
	[4R] ARINC KOREA	Selects the ARINC Korea (datalink service provider).
	[5R] EMPTY SCAN ACTIVATE	Activates an emprty scan mask, in order to inhibit VHF datalink communication.
	[6R] SCAN SEL PRINT	When selected, the printer prints information.

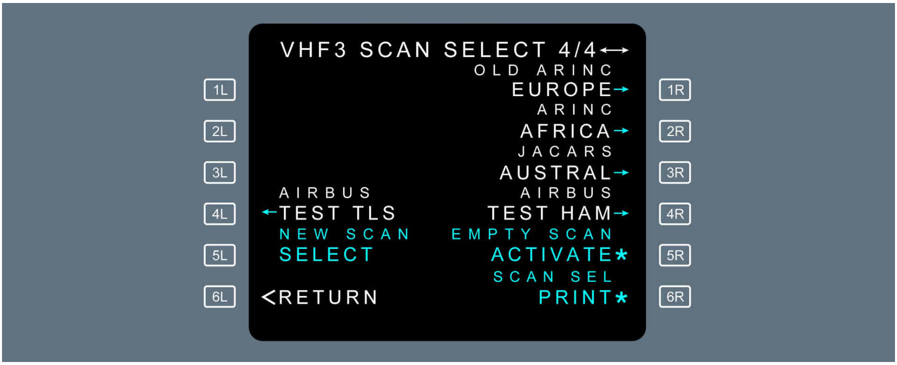
THE VHF 3 SCAN SELECT PAGE 3/4



```
VHF3 SCAN SELECT 3/4←→
SITA                   ARINC
←NORTH AM            AMERICA→
SITA
←LATIN AM
DEPV
←BRAZIL

NEW SCAN          EMPTY SCAN
SELECT              ACTIVATE*
                     SCAN SEL
<RETURN                PRINT*
```

EXAMPLE	[1L] SITA NORTH AM	Selects the SITA North America (datalink service provider).
	[2L] SITA SOUTH AM	Selects the SITA South America (datalink service provider).
	[3L] DEPV BRASIL	Selects the DEPV Brasil (datalink service provider).
	[5L]: NEW SCAN SELECT : ACTIVE SEL DISPLAY :	 Selects the scan mask. Displays the scan mask used by ATSU.
	[6L] RETURN	When selected, the MCDU displays the COMM CONFIG page.
	[1R] ARINC AMERICA	Selects the ARINC America (datalink service provider).
	[5R] EMPTY SCAN ACTIVATE	Activates an emprty scan mask, in order to inhibit VHF datalink communication.
	[6R] SCAN SEL PRINT	When selected, the printer prints information.

THE VHF 3 SCAN SELECT PAGE 4/4



```
     VHF3 SCAN SELECT 4/4←→
                  OLD ARINC
                    EUROPE→
                      ARINC
                    AFRICA→
                     JACARS
                   AUSTRAL→
 AIRBUS              AIRBUS
←TEST TLS         TEST HAM→
 NEW SCAN        EMPTY SCAN
 SELECT           ACTIVATE*
                   SCAN SEL
<RETURN              PRINT*
```

EXAMPLE	[5L]:	
	NEW SCAN SELECT :	Selects the scan mask.
	ACTIVE SEL DISPLAY :	Displays the scan mask used by ATSU.
	[6L] RETURN	When selected, the MCDU displays the COMM CONFIG page.
	[1R] OLD ARINC EUROPE	Selects the OLD ARINC Europe (datalink service provider).
	[2R] ARINC AFRICA	Selects the ARINC Africa (datalink service provider).
	[3R] JACARS AUSTRAL	Selects the JACARS Australia (datalink service provider).
	[5R] EMPTY SCAN ACTIVATE	Activates an emprty scan mask, in order to inhibit VHF datalink communication.
	[6R] SCAN SEL PRINT	When selected, the printer prints information.

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MCDU Scratchpad Messages

MCDU SCRATCHPAD MESSAGES

Ident.: DSC-46-10-40-40-10-00021084.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

MESSAGE	CONDITIONS
FORMAT: _ _ _	The acquisition format is not valid. An example of the required format is displayed (FORMAT: NNN, FORMAT : XXXX, etc), where: - N : Numerical data (0 to 9) - X : Alphanumerical data (0 to 9, or A to Z). To display the required format of specific data on the scratchpad message field, press on the corresponding empty field. This serves as a reference to the crew.
ENTRY OUT OF RANGE	The single value that was entered is out of range.
OUT OF RANGE	A single value of double data is out of range.
TWO ENTRIES OUT OF RANGE	The double value that was entered is out of range.
NON MODIFIABLE FIELD	A non-modifiable field was selected.
KEY NOT ACTIVE	It is not allowed to press this key.
ALREADY SELECTED	The selectable key has already been selected.
NOT ALLOWED	Data entry not allowed, or deselection of a selectable key not yet selected, or selection of a selectable key with any entry on the scratchpad other than CLR.
CLR NOT ALLOWED	An available key has been selected, but the function is not available due to CLR still displayed on the scratchpad field.
FLIGHT NBR UNAVAILABLE	Notification is not available, because the flight number is unavailable.
ENTER MANDATORY FIELDS	Selection of a command is not available, because mandatory fields are not filled in.
NO WHOLE MSG PREPARED	Selection of the ATC DISPL or ADD TEXT command is not available, because the message is not completely prepared.
COM UNAVAILABLE	The selected command is not available, because datalink comunications means are currently unavailable.
DCDU FILE FULL	The selected command is not available, because the DCDU file is full.

Continued on the following page

Continued from the previous page

MESSAGE	CONDITIONS
MSG ALREADY DISPLAYED	The XFR to DCDU command (FANS B / FANS B+), or the ATC DISPL command (FANS A+) is not available, because the message is already displayed on the DCDU.
NO MSG TO PRINT	The PRINT key was selected, but the function is currently unavailable because there is no message to be printed.
PRINTER UNAVAILABLE	The PRINT key was selected, but the printer is currently unavailable.
LAST MSG ELEMENT	Maximum number of message elements for a given downlink message is reached.
TOO MANY MSG ELEMENTS	Entry of a new parameter is not allowed, because the maximum number of message elements has been reached.
NO ACTIVE ATC	The XFR to DCDU key (FANS B / FANS B+) or ATC DISPL command (FANS A+) or MAX UPLINK DELAY command (FANS A+) was selected, but the function is currently unavailable because there is no active CPDLC connection.
LAT/LON DISPL ABREVIATED	The LAT/LONG display is abbreviated only on the MCDU display field, because there is lack of space.
MSG RECORD NOT RELIABLE	Due to a technical problem, the list of messages recorded is not reliable. All CPDLC messages are deleted and new messages should not be recorded.
MSG RECORD IS EMPTY	The MSG RECORD ERASE command is not available, because there are no messages recorded.
NOT IN DATABASE	Entry not in database.

Ident.: DSC-46-10-40-40-10-00021338.0002001 / 17 MAR 17
Applicable to: MSN 04827-04974

SCRATCHPAD MESSAGES ON THE COMM MENU PAGE

MESSAGE	CONDITIONS
COMMAND NOT AVAIL	The command is not available.
DEFAULT VHF SP LIST *(1)*	The new SCAN MASK is not available. The system displays the default SCAN MASK instead.
ENTER A/C ICAO CODE	The aircraft ICAO code is not valid. To enter the A/C ICAO code, *Refer to DSC-46-10-50 How to Initialize*

Continued on the following page

Continued from the previous page

MESSAGE	CONDITIONS
ENTER A/C REGISTR or ENTER A/C REGISTER	The aircraft registration number is not valid. To enter this parameter, *Refer to DSC-46-10-50 How to Initialize*.
ENTER A/L ID or ENTER ACARS A/L ID or ENTER STANDARD A/L ID	The airline identification number is not valid. To enter this parameter, *Refer to DSC-46-10-50 How to Initialize*.
ENTER VHF 3 SCAN SELECT *(1)* or ENTER VHF 3 SCAN MASK *(1)*	No service provider has been selected.
FAILED COMMAND	The command, selected by the flight crew, cannot currently be performed.
FORMAT ERROR	The message was entered in an inappropriate format.
KEY NOT ACTIVE	The flight crew has pressed on MCDU a non allocated/non active key.
MULTICAST IGNORED	The multicast address is invalid (because equal to a/c ARN).
NOT ALLOWED	It is not permitted to press this key.
PRESS CONFIG ACTIVATE	Parameters of COMM MENU page have been modified. It is required to activate the new configuration.
PRINT FAILED	A print command is not successful.
PRT MSG PRINT FAIL	Automatic print of an AOC uplink message was not successful.
SYSTEM BUSY-TRY LATER	The system is busy. The command, selected by the flight crew, cannot currently be performed.
VHF 3 CAN BE SET IN VOICE	VHF 3 datalink communications are lost. However, VHF 3 can be used in voice mode.
VHF 3 SWITCH IMPOSSIBLE	It is not possible to switch from VHF 3 voice mode to VHF 3 data mode.

(1) *Depending on airline customization, access to the SCAN SELECT menu may not be possible. If it is not, the DEFAULT VHF SP LIST and ENTER VHF 3 SCAN SELECT/MASK scratchpad messages are not applicable.*

Ident.: DSC-46-10-40-40-10-00021338.0001001 / 17 MAR 17

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

SCRATCHPAD MESSAGES ON THE COMM MENU PAGE

MESSAGE	CONDITIONS
COMMAND NOT AVAIL	The command is not available.
DEFAULT VHF SP LIST	The new SCAN MASK is not available. The system displays the default SCAN MASK instead.
ENTER A/C REGISTR	The aircraft registration number is not valid. To enter this parameter, *Refer to DSC-46-10-50 How to Initialize*.
ENTER A/L ID	The airline identification number is not valid. To enter this parameter, *Refer to DSC-46-10-50 How to Initialize*.
ENTER VHF 3 SCAN MASK	No service provider has been selected.
FAILED COMMAND	The command, selected by the flight crew, cannot currently be performed.
FORMAT ERROR	The message was entered in an inappropriate format.
NOT ALLOWED	It is not permitted to press this key.
PRINT FAILED	A print command is not successful.
PRT MSG PRINT FAIL	Automatic print of an AOC uplink message was not successful.
VHF 3 CAN BE SET IN VOICE	VHF 3 datalink communications are lost. However, VHF 3 can be used in voice mode.
VHF 3 SWITCH IMPOSSIBLE	It is not possible to switch from VHF 3 voice mode to VHF 3 data mode.

MCDU Data Entry Format

MCDU DATA ENTRY FORMAT

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-40-50-10-00021085.0003001 / 21 MAR 17

This chapter lists the data that the flight crew can enter in the ATSU DATALINK pages of the MCDU.

For each type of data, the table displays:
- Acceptable format
- Units of entry
- Acceptable range
- Page(s) where the flight crew enters the data

The following characters are used to indicate the format:

A : Letters
N : Numeric (numbers)
X : Alphanumeric (letters and numbers).

DATA NAME	FORMAT	RANGE	UNIT	DISPLAY PAGE
A/C ICAO CODE	XXXXXXXX	8 characters		COMM CONFIG
A/C REGISTR	XXXXXXX	7 characters		COMM CONFIG
ACARS A/L ID	AA	2 letters		COMM CONFIG
ASSIGNED ALT	Same as ALT			EDIT
ATC CENTER	XXXXXXXX	4 to 8 characters		NOTIFICATION or FREQUENCY MONITORING
ATC NAME	AAAAAAAAAAAAAAAAAA	3 to 18 letters		FREQUENCY MONITORING
ATC FUNCTION	CTR/APP/TWR/FNL/GND/ CLR/DEP/CTL/RAD	3 letters		FREQUENCY MONITORING
DIR TO	XXXXX (Fixname)	Min 1 alphanumeric Max 5 alphanumeric		REQUEST
	DDMM.MB/ EEEMM.MC (LAT/LONG)	DD: 0-89 B: N or S	Degrees	
	"DD" = LAT degrees "EEE" = LONG degrees	MM.M: 0-59,9	Minutes	
	"MM.M" = LAT and LONG minutes Leading zeros may be omitted	EEE: 0-179 C: E or W	Degrees	

Continued on the following page

Continued from the previous page

DATA NAME	FORMAT	RANGE	UNIT	DISPLAY PAGE
FL/ALT	FLNNN or NNN Leading zeros on NNN may be omitted	30-410	Hundreds of feet (MSL)	REQUEST
	NNNNNFT or NNNNN Between 0 and 410 feet, “FT” must be written. Leading zeros may be omitted.	-600-41 000	Feet	
	NNNNNM or -NNNNNM or +NNNNNM Leading zeros may be omitted	-30-12 500	Meters	
FROM/TO	AAAA			NOTIFICATION
PRESENT ALT	Same as ALT			EDIT
PREFERRED	Same as ALT			EDIT
SPD/MACH	NNN or NNNKT Leading zeros may be omitted	0-350	Kt	REQUEST
	M.NN or .NN The decimal point must be written, trailing zeros may be omitted	0.5-0.92	Mach	
STANDARD A/L ID	AAA			COMM CONFIG
TOD	HHMM ”HH” = NN or NNH ”MM” = NN or NNMIN ”MIN” = “MIN” or “MN” or “M” or “Z”	HH: 0-23 MM: 0-59	Hours Minutes	EDIT
VOICE FREQ	NNN.NNN	118.000 to 136.975	MHz	FREQUENCY MONITORING

ECAM

MEMO DISPLAY

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-46-10-40-60-A-00016906.0001001 / 21 MAR 16

1 COMPANY ALERT : This memo appears in green when the aircraft receives an uplink alert message, or when an AOC special condition requires a pilot action on the MCDU (depends on AOC programming). This memo pulses green for 180 s, then remains steady. It is associated with a buzzer for 1 s.

Ident.: DSC-46-10-40-60-A-00016904.0001001 / 21 MAR 16

2 COMPANY CALL : This memo appears in green when the aircraft receives a message from the ground requesting voice communication on VHF.

Ident.: DSC-46-10-40-60-A-00016903.0001001 / 21 MAR 16

3 COMPANY DATALINK STBY : This memo appears in green when AOC datalink air-ground communication is temporarily unavailable, but not lost.

Ident.: DSC-46-10-40-60-A-00016905.0001001 / 21 MAR 16

4 COMPANY MSG : This memo appears in green when the aircraft receives a message from the ground.

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INTRODUCTION

Ident.: DSC-46-10-50-00021191.0002001 / 17 MAR 17
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

How To chapter contains examples of:
- How to initialize the datalink
- How to modify the flight plan.

Illustrations in How To are generic and do not reflect differences depending on the datalink standard installed in the aircraft.

INTRODUCTION

Ident.: DSC-46-10-50-00021191.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

How To chapter contains examples of:
- How to activate the datalink connection
- How to receive a datalink message
- How to create a datalink message
- How to send a datalink message.

Illustrations in How To are generic and do not reflect differences depending on the datalink standard installed in the aircraft.

HOW TO INITIALIZE

Ident.: DSC-46-10-50-00021142.0002001 / 17 MAR 17
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

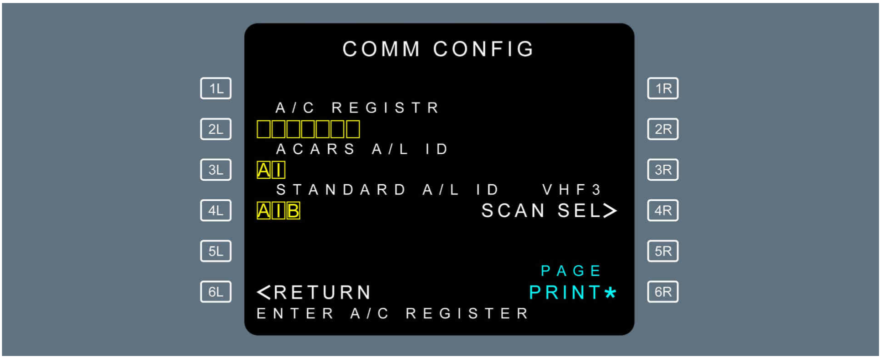
Datalink may be initialized:
- Automatically
  Datalink initializes automatically, provided that a list of service providers is scanned, and all required parameters are received, and validated by the ATSU.
- Manually
  Datalink may be initialized manually, when the system is not correctly initialized automatically.

The VHF3 SCAN SELECT page of the MCDU displays the list of service providers.
The COMM CONFIG / COMM INIT page, on the MCDU displays required parameters.

MANUAL INITIALIZATION

If one of required parameters is not valid, one or more manual entries may be required:

- **<u>If ARN is not valid</u>:**
  The MCDU scratchpad displays ENTER A/C REGISTER:



```
         COMM CONFIG

 A/C REGISTR
□□□□□□□
 ACARS A/L ID
AI
 STANDARD A/L ID    VHF3
AIB               SCAN SEL>

                      PAGE
<RETURN             PRINT*
ENTER A/C REGISTER
```

The flight crew clears the scratchpad, and inserts the A/C registration via the MCDU scratchpad.

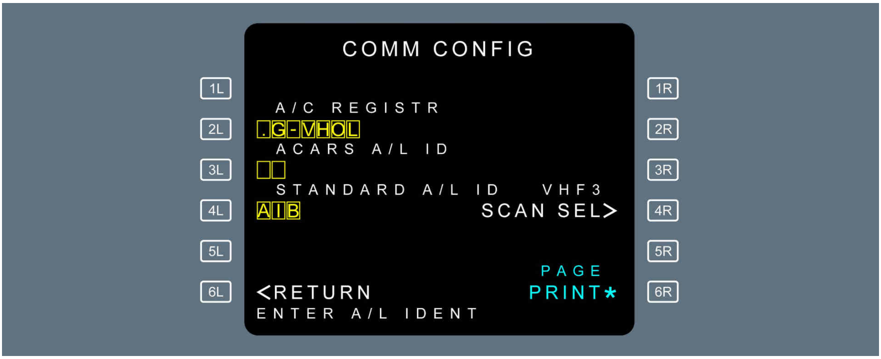
A/C REGISTR... INSERT

The flight crew inserts A/C ICAO registration via the MCDU scratchpad to A/C REGISTR.

CONFIG ACTIVATE...SELECT

The flight crew selects 1R/CONFIG ACTIVATE to activate manual entry of the A/C registration.

- **<u>If the A/L ID is not valid</u>:**
  The MCDU scratchpad displays ENTER A/L IDENT:



```
         COMM CONFIG

 A/C REGISTR
.G-VHOL
 ACARS A/L ID
□□
 STANDARD A/L ID    VHF3
AIB               SCAN SEL>

                      PAGE
<RETURN             PRINT*
ENTER A/L IDENT
```

The flight crew clears the scratchpad, and inserts the two-letter A/L ID code via the MCDU scratchpad.

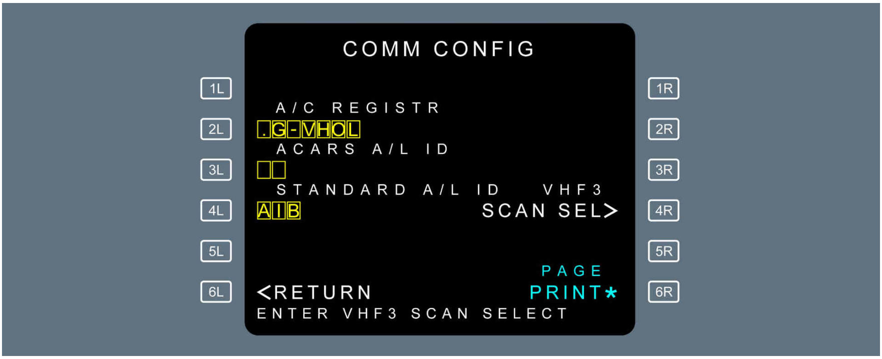
A/L ID.. INSERT

The flight crew inserts A/L ID code via the MCDU scratchpad to A/L ID.

CONFIG ACTIVATE.. SELECT

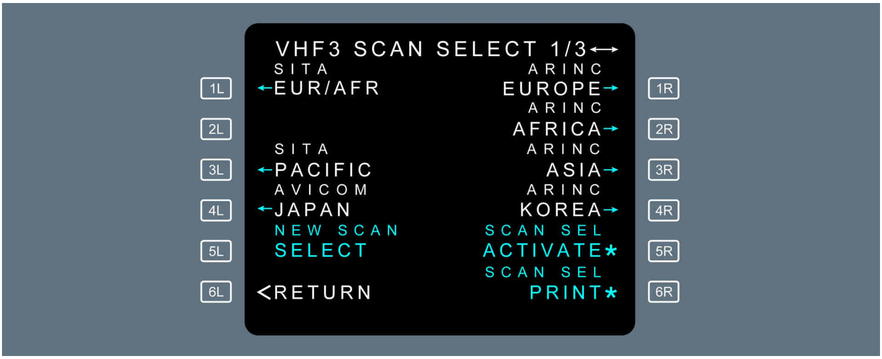
The flight crew selects 1R/CONFIG ACTIVATE to activate manual entry of the A/C registration.

- **<u>If VHF service provider is not selected</u>**
  and
  <u>if the VHF3 SCAN/MASK SELECT menu can be accessed:</u>
  The MCDU scratchpad displays ENTER VHF3 SCAN SELECT:



```
         COMM CONFIG

 A/C REGISTR
.G-VHOL
 ACARS A/L ID
□□
 STANDARD A/L ID     VHF3
AIB              SCAN SEL>

                      PAGE
<RETURN             PRINT*
ENTER VHF3 SCAN SELECT
```

On the VHF3 SCAN SELECT page, select service providers, in the airline priority order, and activate the VHF SCAN SELECT function.



```
 VHF3 SCAN SELECT 1/3←→
 SITA                ARINC
←EUR/AFR           EUROPE→
                     ARINC
                   AFRICA→
 SITA                ARINC
←PACIFIC             ASIA→
 AVICOM              ARINC
←JAPAN              KOREA→
 NEW SCAN         SCAN SEL
 SELECT          ACTIVATE*
                  SCAN SEL
<RETURN             PRINT*
```

EXAMPLE OF SELECTION OF DATALINK SERVICE PROVIDERS:

Selection of SITA 725 and ARINC service providers :

1. Press 5L key: The asterisk next to SELECT indication disappears, then reappears.
2. Press 1L key to select SITA 725: SELECT indication goes off, and the priority number of selection 1 appears.
3. Press 1R key to select ARINC: SELECT indication goes off, and the priority number of selection 2 appears.
4. Press 5R key to activate the VHF SCAN SELECT function: The star next to SCAN SELECT ACTIVATE indication disappears, then reappears.

Note: *Modification of the SCAN SELECT setting may result in the loss of air-ground VHF datalink communication, and the increase of datalink service provider charges. Therefore, the SCAN SELECT setting should not be modified by the flight crew, unless the flight crew is instructed to do so.*

HOW TO INITIALIZE

Ident.: DSC-46-10-50-00021142.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

Datalink may be initialized:

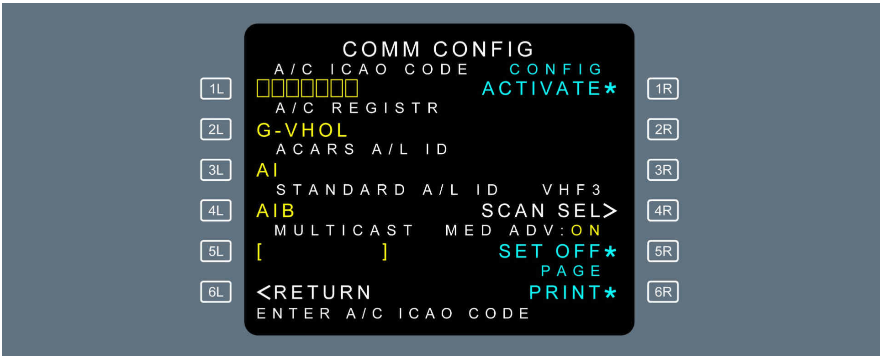
- Automatically
  Datalink initializes automatically, provided that a list of service providers is scanned, and all required parameters are received, and validated by the ATSU.
- Manually
  Datalink may be initialized manually, when the system is not correctly initialized automatically.

The VHF3 SCAN SELECT page of the MCDU displays the list of service providers.
The COMM COMFIG page, on the MCDU displays required parameters.

MANUAL INITIALIZATION

If one of required parameters is not valid, one or more manual entries may be required:

- **If the A/C ICAO CODE is not valid:**
  The MCDU scratchpad displays ENTER A/C ICAO CODE:



```
         COMM CONFIG
 A/C ICAO CODE     CONFIG
□□□□□□□□         ACTIVATE*
 A/C REGISTR
G-VHOL
 ACARS A/L ID
AI
 STANDARD A/L ID    VHF3
AIB               SCAN SEL>
 MULTICAST    MED ADV:ON
[        ]          SET OFF*
                       PAGE
<RETURN               PRINT*
ENTER A/C ICAO CODE
```

The flight crew clears the scratchpad, and inserts the A/C ICAO code (in hexal encoding) via the MCDU scratchpad.

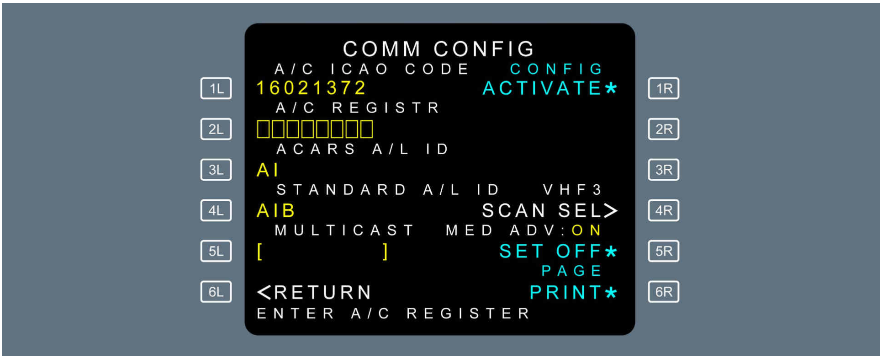
A/C ICAO CODE..INSERT

The flight crew inserts A/C ICAO code via the MCDU scratchpad into A/C ICAO CODE.

CONFIG ACTIVATE...SELECT

The flight crew selects 1R/CONFIG ACTIVATE to activate manual entry of the A/C ICAO code.

- **<u>If ARN is not valid</u>:**
  The MCDU scratchpad displays ENTER A/C REGISTER:



```
         COMM CONFIG
 A/C ICAO CODE     CONFIG
16021372         ACTIVATE*
 A/C REGISTR
□□□□□□□□□
 ACARS A/L ID
AI
 STANDARD A/L ID    VHF3
AIB               SCAN SEL>
 MULTICAST    MED ADV:ON
[        ]          SET OFF*
                       PAGE
<RETURN               PRINT*
ENTER A/C REGISTER
```

The flight crew clears the scratchpad, and inserts the A/C registration via the MCDU scratchpad.

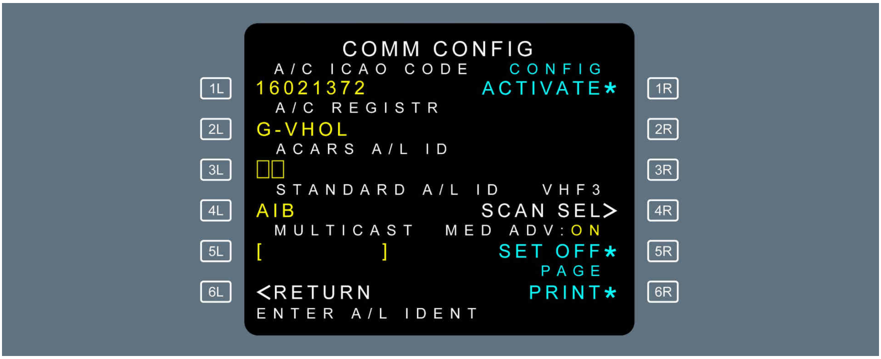
A/C REGISTR...INSERT

The flight crew inserts A/C ICAO registration via the MCDU scratchpad to A/C REGISTR.

CONFIG ACTIVATE..SELECT

The flight crew selects 1R/CONFIG ACTIVATE to activate manual entry of the A/C registration.

- **<u>If the A/L ID is not valid</u>:**
  The MCDU scratchpad displays ENTER A/L IDENT:



```
         COMM CONFIG
  A/C ICAO CODE      CONFIG
16021372          ACTIVATE*
  A/C REGISTR
G-VHOL
  ACARS A/L ID
□□
  STANDARD A/L ID       VHF3
AIB                SCAN SEL>
  MULTICAST     MED ADV:ON
[         ]         SET OFF*
                        PAGE
<RETURN               PRINT*
ENTER A/L IDENT
```

The flight crew clears the scratchpad, and inserts the two-letter A/L ID code via the MCDU scratchpad.

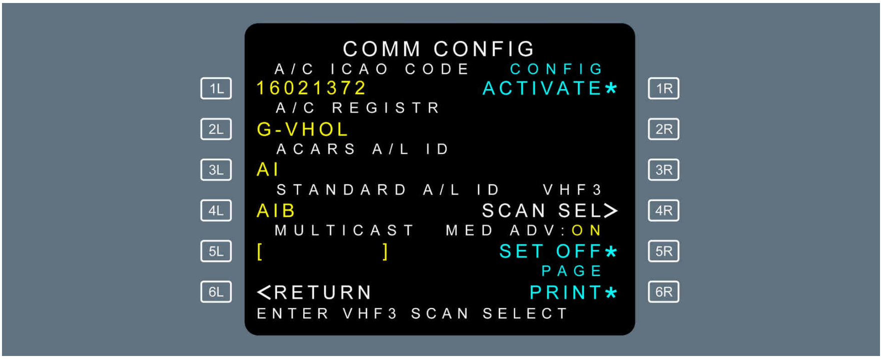
A/L ID..INSERT

The flight crew inserts A/L ID code via the MCDU scratchpad to A/L ID.

CONFIG ACTIVATE..SELECT

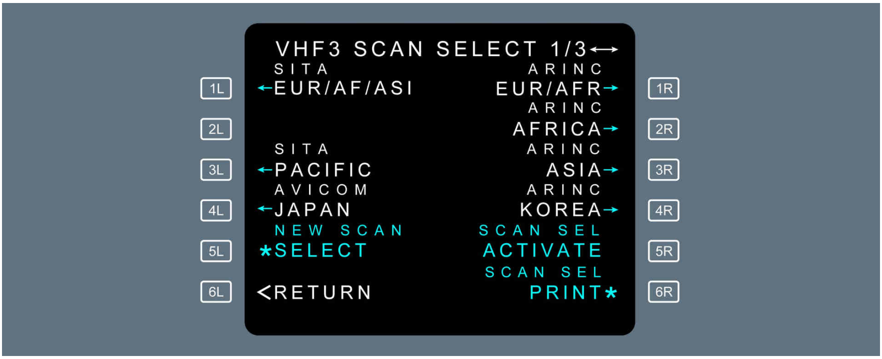
The flight crew selects 1R/CONFIG ACTIVATE to activate manual entry of the A/C registration.

- **<u>If VHF Service Provider is not selected</u>**
  and
  <u>if the VHF3 SCAN/MASK SELECT menu can be accessed</u>:
  The MCDU scratchpad displays ENTER VHF3 SCAN SELECT:



```
         COMM CONFIG
   A/C ICAO CODE      CONFIG
1L 16021372        ACTIVATE* 1R
   A/C REGISTR
2L G-VHOL                    2R
   ACARS A/L ID
3L AI                        3R
   STANDARD A/L ID    VHF3
4L AIB             SCAN SEL> 4R
   MULTICAST     MED ADV:ON
5L [         ]      SET OFF* 5R
                       PAGE
6L <RETURN            PRINT* 6R
ENTER VHF3 SCAN SELECT
```

On the VHF3 SCAN SELECT page, select service providers, in the airline priority order, and activate the VHF SCAN SELECT function.



```
     VHF3 SCAN SELECT 1/3←→
   SITA                ARINC
1L ←EUR/AF/ASI      EUR/AFR→ 1R
                       ARINC
2L                   AFRICA→ 2R
   SITA                ARINC
3L ←PACIFIC            ASIA→ 3R
   AVICOM              ARINC
4L ←JAPAN             KOREA→ 4R
   NEW SCAN         SCAN SEL
5L *SELECT          ACTIVATE 5R
                    SCAN SEL
6L <RETURN            PRINT* 6R
```

EXAMPLE OF SELECTION OF DATALINK SERVICE PROVIDERS:

Selection of SITA 725 and ARINC service providers :

1. Press 5L key: The asterisk next to SELECT indication disappears, then reappears.
2. Press 1L key to select SITA 725: SELECT indication goes off, and the priority number of selection # 1 appears.
3. Press 1R key to select ARINC: SELECT indication goes off, and the priority number of selection # 2 appears.
4. Press 5R key to activate the VHF SCAN SELECT function: The asterisk next to SCAN SELECT ACTIVATE indication disappears, then reappears.

Note: *Modification of the SCAN SELECT setting may result in the loss of air-ground VHF datalink communication, and the increase of datalink service provider charges. Therefore, the SCAN SELECT setting should not be modified by the flight crew, unless the flight crew is instructed to do so.*

HOW TO NOTIFY

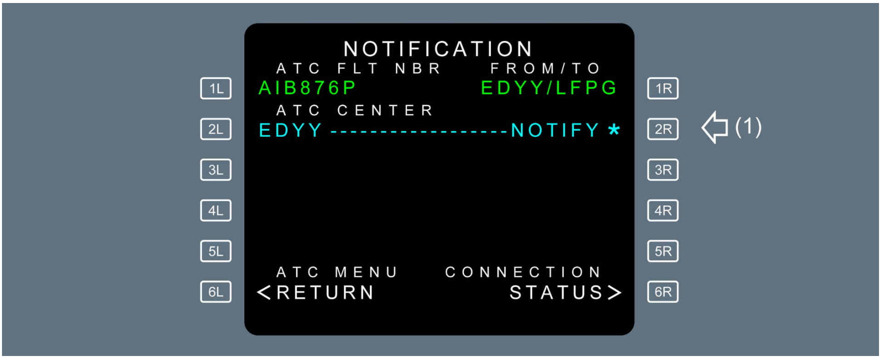
Ident.: DSC-46-10-50-00021143.0001001 / 17 MAR 17
Applicable to: MSN 04827-04974

- **On the MCDU:**

  NOTIFICATION Page:

  NOTIFY .... SELECT See (1)

  The flight crew enters the ATC code via the MCDU scratchpad, if the FMS does not enter the ATC code automatically.

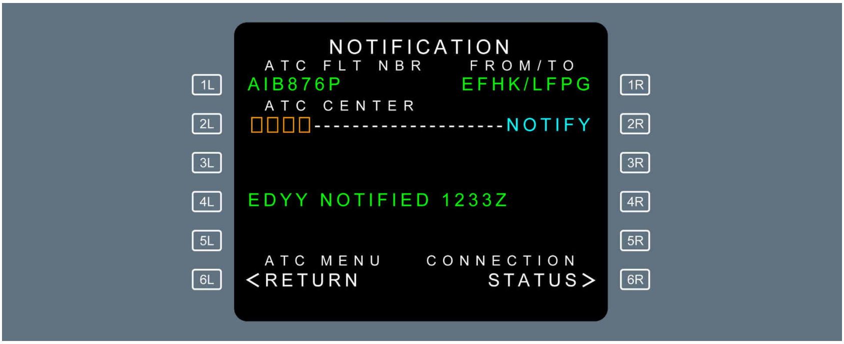


```
       NOTIFICATION
 ATC FLT NBR      FROM/TO
AIB876P         EDYY/LFPG
 ATC CENTER
EDYY -----------------NOTIFY *




 ATC MENU       CONNECTION
<RETURN             STATUS>
```

■ If the ATC center accepts the notification:

When ATC center accepts the notification, the MCDU displays the name of the notified ATC center:

ATC NOTIFIED on the MCDU

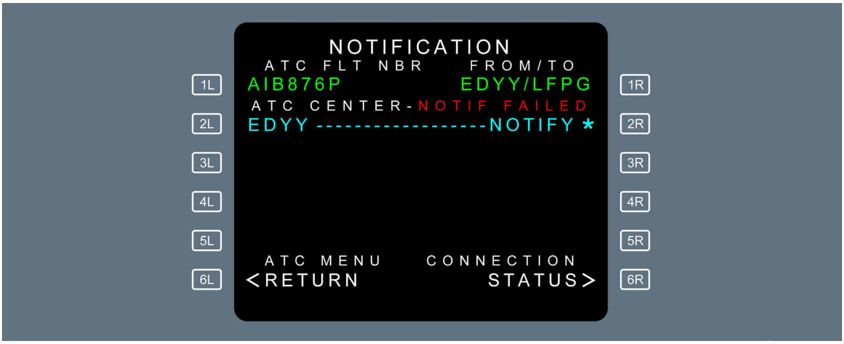


```
            NOTIFICATION
   ATC FLT NBR       FROM/TO
 AIB876P              EFHK/LFPG
   ATC CENTER
 □□□□------------------NOTIFY


 EDYY NOTIFIED 1233Z


   ATC MENU        CONNECTION
 <RETURN               STATUS>
```

- **If the notification fails:**

If the notification fails, the MCDU displays NOTIF FAILED information:

NOTIF FAILED on the MCDU



```
            NOTIFICATION
   ATC FLT NBR       FROM/TO
 AIB876P              EDYY/LFPG
  ATC CENTER-NOTIF FAILED
 EDYY -----------------NOTIFY*




   ATC MENU        CONNECTION
 <RETURN               STATUS>
```

Note: *1. For ADS-C ◁ operations, check on the CONNECTION STATUS page, on the MCDU, that the ADS-C ◁ is set to ARMED before sending a notification.*
2. The notified ATC center initiates the CPDLC and/or ADS-C ◁ connection. Therefore, re-notifications should be avoided.
3. An automatic transfer from one ATC center to the next ATC center can be expected, if:

- *The MCDU displays the next ATC code, on the CONNECTION STATUS Page*
- *The DCDU displays NEXT ATC information with the desired ATC code, on the default screen, when no datalink message is displayed.*

HOW TO CONNECT

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-50-10-00021239.0003001 / 17 MAR 17

CPDLC CONNECTION

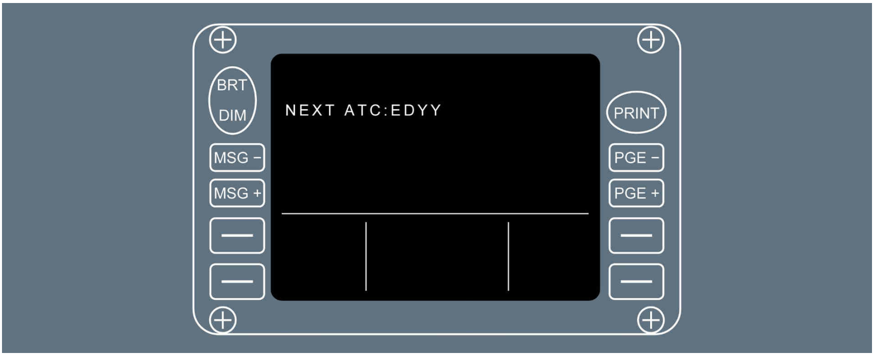
CONNECTION TO ACTIVE ATC

The ATC center initializes the CPDLC connection, when the ATC center receives a notification from the aircraft.
The DCDU displays the connected ATC (ACTIVE ATC), when the connection is established.
The MCDU displays the connected ATC (ACTIVE ATC) on the CONNECTION STATUS page.

NEXT ATC.. VERIFY

The flight crew should verify that the desired ATC center is connected.

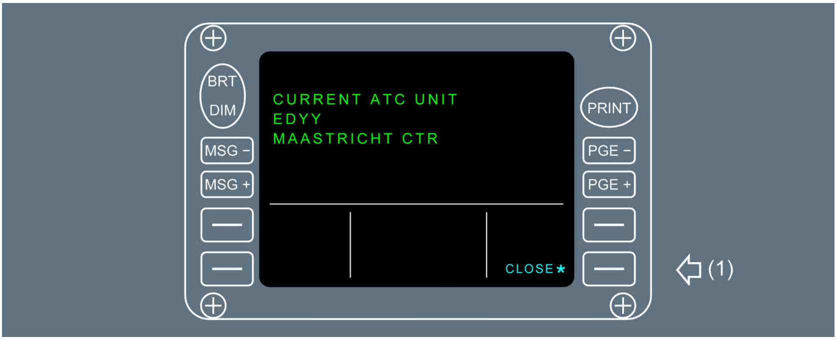
NEXT ATC on the DCDU



- **When the *CURRENT ATC* uplink message is received:**

CAUTION	The aircraft can be considered under the control of the active ATC center, when the flight crew receives a *CURRENT ATC* uplink message.

Note: *The transmission of the CURRENT ATC uplink message may take a few minutes.*



CURRENT ATC UNIT
EDYY
MAASTRICHT CTR

CLOSE*

CLOSE.. SELECT See (1)

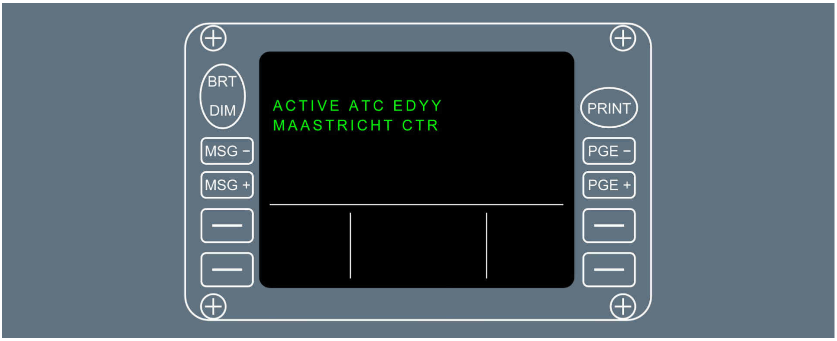
The flight crew must close the message.

ACTIVE ATC...VERIFY

The status of the connected ATC center, indicated as NEXT ATC (when the connection was initialized), changes to ACTIVE ATC.
The flight crew must verify that the desired ATC center is connected.

The aircraft is connected with the active ATC center (e.g. EDYY) and can exchange datalink messages.

ACTIVE ATC on the DCDU



ACTIVE ATC EDYY
MAASTRICHT CTR

CONNECTION TO NEXT ATC

The active ATC can transfer the datalink connection to a next ATC without requiring a flight crew action.

If the active ATC transfers the connection to the next ATC, the DCDU will automatically display the next ATC code in the NEXT ATC field, on the default screen, under the next ATC code in the NEXT ATC field.
When the flight crew receives a message of service termination from the active ATC, the next ATC becomes the active ATC.

HOW TO SEND REQUEST TO ATC

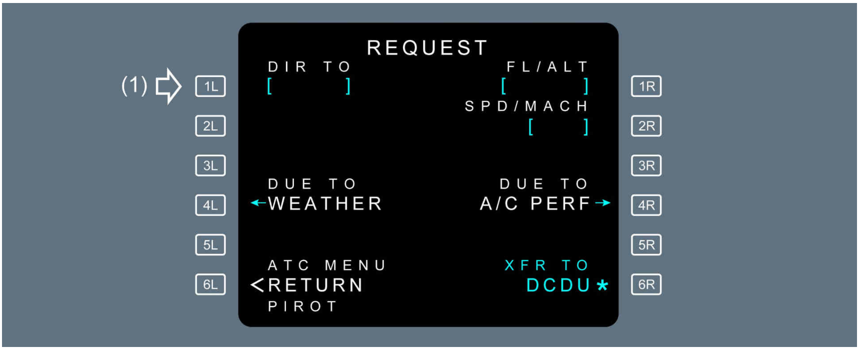
Ident.: DSC-46-10-50-00021188.0002001 / 17 MAR 17
Applicable to: MSN 04827-04974

AIRCRAFT REQUEST OF LATERAL FLIGHT PLAN DEVIATION

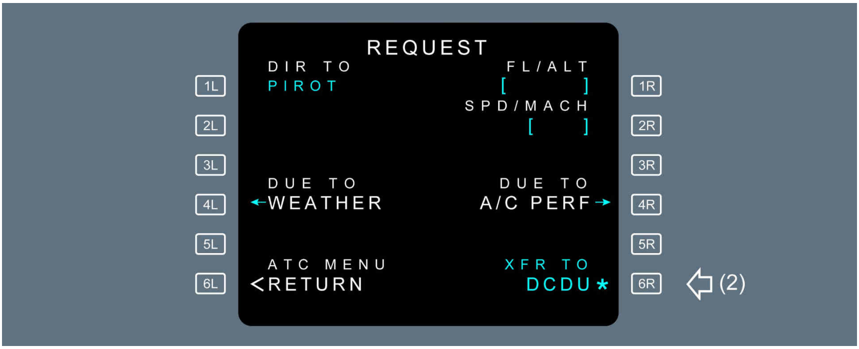
Example: DIRECT TO REQUEST

- **On the MCDU:**
  REQUEST Page:

  DIR TO...INSERT See (1)
  Insert a desired waypoint via the MCDU scratchpad.
  XFR TO DCDU...SELECT See (2)
  The DCDU displays prepared DIR TO request.



```
                 REQUEST
 DIR TO                      FL/ALT
[      ]                   [      ]
                           SPD/MACH
                             [    ]


 DUE TO                      DUE TO
←WEATHER                  A/C PERF→


 ATC MENU                    XFR TO
<RETURN                      DCDU*
 PIROT
```

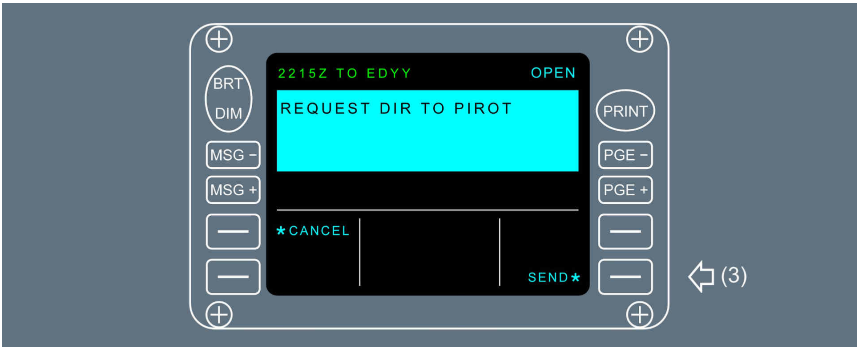

REQUEST
DIR TO
PIROT
FL/ALT
[ ]
SPD/MACH
[ ]
DUE TO
←WEATHER
DUE TO
A/C PERF→
ATC MENU
<RETURN
XFR TO
DCDU*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
(2)

- **On the DCDU:**

SEND.. SELECT See (3)

L2 *The OPEN status of the message disappears.*

L1 *The flight crew can close the message by selecting CLOSE, if the message is not closed automatically.*


2215Z TO EDYY
OPEN
REQUEST DIR TO PIROT
*CANCEL
SEND*
BRT
DIM
MSG −
MSG +
PRINT
PGE −
PGE +
(3)

HOW TO ANSWER

Applicable to: MSN 04827-04974

Ident.: DSC-46-10-50-20-00021187.0002001 / 17 MAR 17

ATC IMMEDIATE CLEARANCE

Example: DIRECT ROUTE Clearance:

- **On the glareshield:**

  ATC MSG pb...PRESS

  The aural and visual alerts stop.

- **On the DCDU:**

  WILCO...SELECT See (1)

  The message status changes to WILCO See (2).

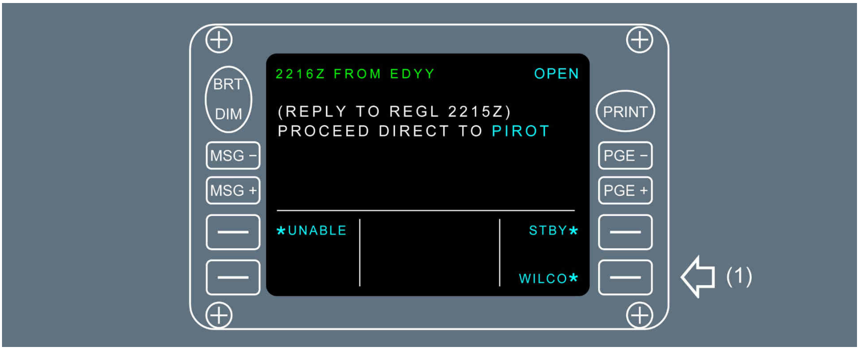
  SEND...SELECT See (3)

  L2 *The DCDU displays the message and the message status in green See (4).*

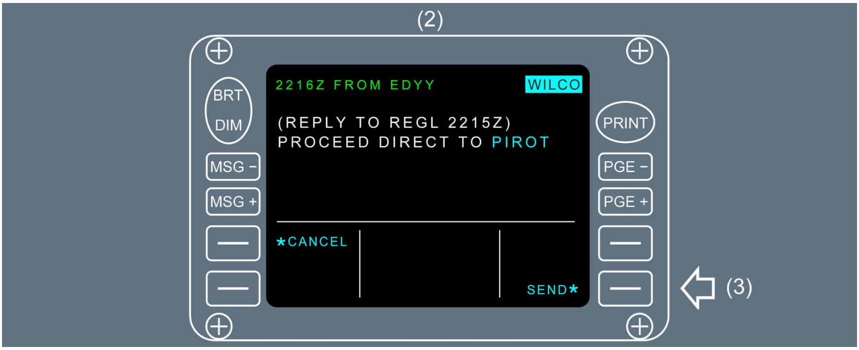
  L1 CLOSE...SELECT See (5)

  Closing the message clears the DCDU.

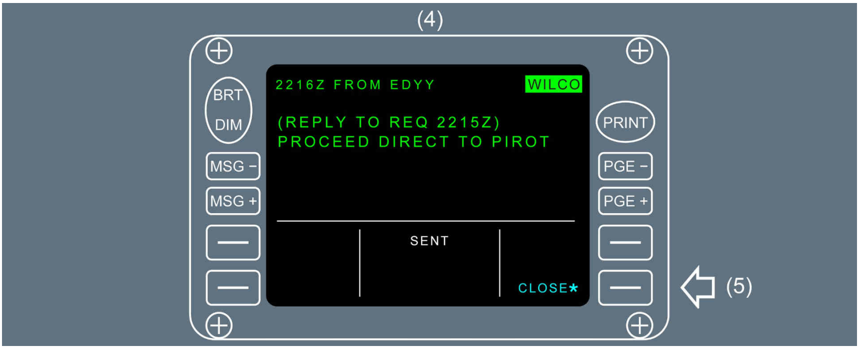
  The flight crew must insert the direct to in the FMGS flight plan..



```
2216Z FROM EDYY                OPEN

(REPLY TO REGL 2215Z)
PROCEED DIRECT TO PIROT

*UNABLE                       STBY*

                              WILCO*
```



```
2216Z FROM EDYY               WILCO

(REPLY TO REGL 2215Z)
PROCEED DIRECT TO PIROT

*CANCEL

                              SEND*
```



2216Z FROM EDYY WILCO

(REPLY TO REQ 2215Z)
PROCEED DIRECT TO PIROT

SENT

CLOSE*

Ident.: DSC-46-10-50-20-00021221.0001001 / 04 JUN 19

ATC NEGOTIATION MESSAGE

Example: WHEN CAN YOU ACCEPT Negotiation

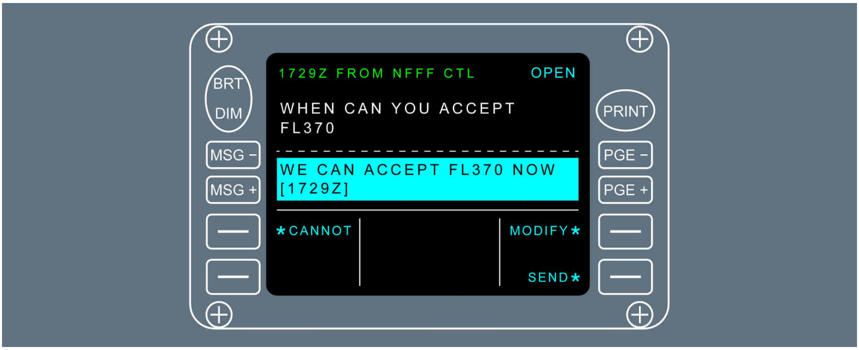
- **On the glareshield:**

  ATC MSG pb..PRESS

  The aural and visual alerts stop.

- **On the DCDU:**

  The DCDU displays the ATC negotiation message:



1729Z FROM NFFF CTL OPEN

WHEN CAN YOU ACCEPT
FL370

WE CAN ACCEPT FL370 NOW
[1729Z]

CANNOT MODIFY

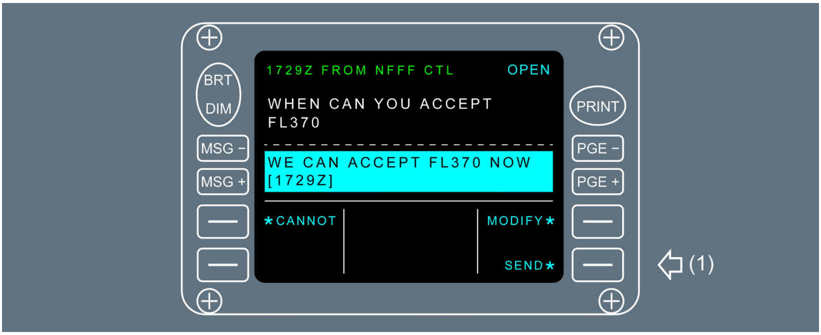
SEND*

Note: *A default answer is automatically generated on the DCDU and proposed to the flight crew.*

- **If the flight crew can comply with the proposed action immediately:**
  - **On the DCDU:**

SEND..SELECT See (1)

The flight crew can close the message, if the message is not closed automatically.



1729Z FROM NFFF CTL OPEN

WHEN CAN YOU ACCEPT
FL370

WE CAN ACCEPT FL370 NOW
[1729Z]

*CANNOT

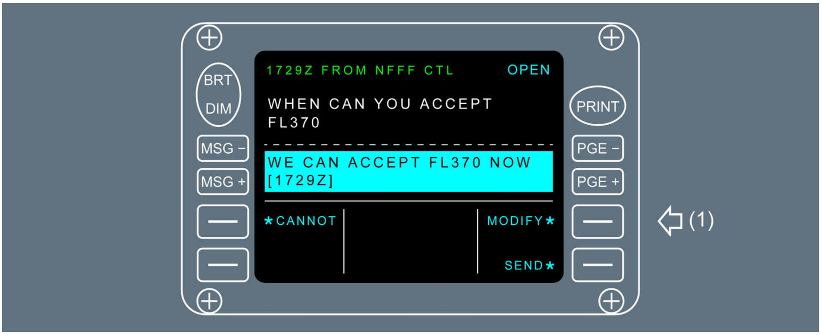
MODIFY*

SEND*

- **If the flight crew can comply with the proposed action, but cannot perform the proposed action immediately:**
  - **On the DCDU:**

MODIFY...SELECT (1)

MCDU FOR MODIF/MCDU FOR EDIT appears on the DCDU, in the message information area See (2) .
The MESSAGE MODIFY page appears automatically on the corresponding MCDU if an ATC page was displayed See (3).



1729Z FROM NFFF CTL OPEN

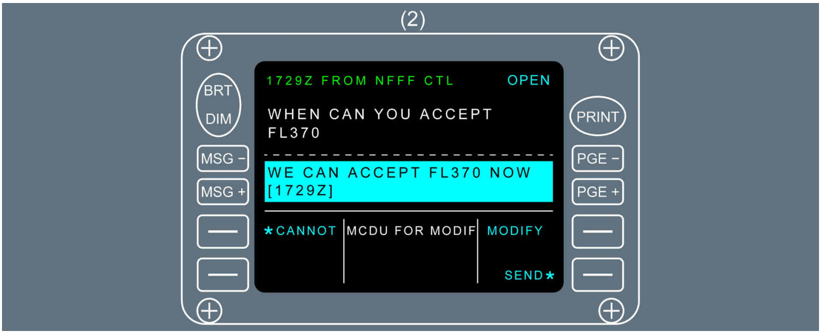
WHEN CAN YOU ACCEPT
FL370

WE CAN ACCEPT FL370 NOW
[1729Z]

*CANNOT

MODIFY*

SEND*


(2)

1729Z FROM NFFF CTL OPEN
WHEN CAN YOU ACCEPT
FL370

WE CAN ACCEPT FL370 NOW
[1729Z]

*CANNOT | MCDU FOR MODIF | MODIFY
SEND*

- **On the MCDU:**

  MESSAGE MODIFY Page

  or

  EDIT Page:

  The flight crew specifies, when they can comply with the proposed action.

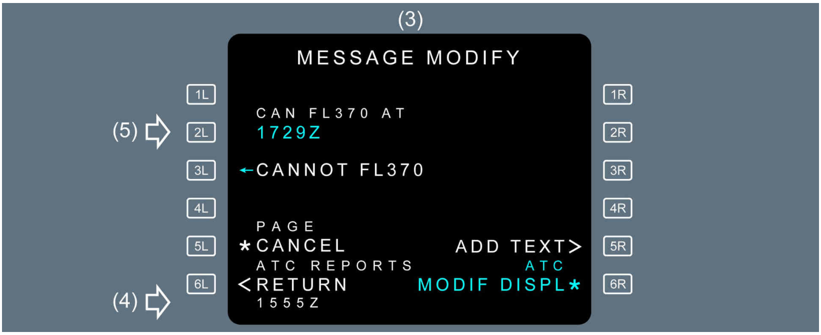
  A default time value appears in the 2L field, on the MESSAGE MODIFY/EDIT page. The flight crew can modify the default time value via the MCDU scratchpad.

  CAN FL370 AT..SELECT See (5)

  The flight crew can propose a new time value via the scratchpad See (4). The new time value will be inserted to the datalink message via the MESSAGE MODIFY/EDIT page See (6).

  ATC MODIF DISPL...SELECT See (7)

  The message appears on the DCDU See (8).

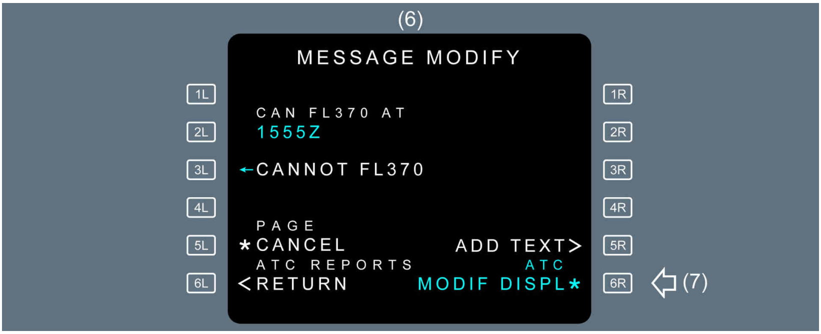

(3)

MESSAGE MODIFY

CAN FL370 AT
1729Z

←CANNOT FL370

PAGE
*CANCEL
ADD TEXT>
ATC REPORTS
<RETURN
ATC
MODIF DISPL*
1555Z



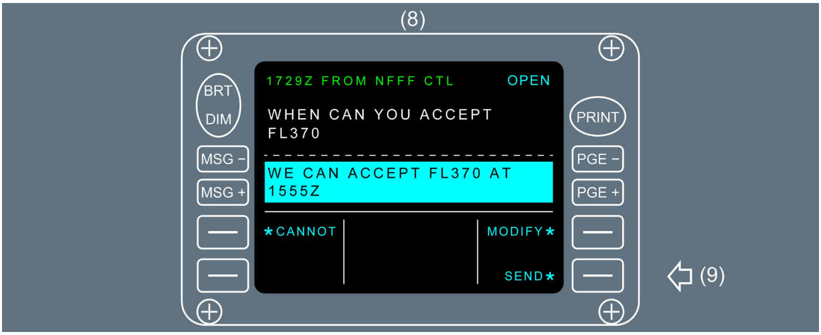
```
MESSAGE MODIFY

CAN FL370 AT
1555Z
←CANNOT FL370

PAGE
*CANCEL                ADD TEXT>
ATC REPORTS                  ATC
<RETURN            MODIF DISPL*
```

- **On the DCDU:**

SEND..SELECT See (9)

L2 *The OPEN status of the message disappears.*

L1 *The flight crew can close the message, if the message is not closed automatically.*



```
1729Z FROM NFFF CTL        OPEN

WHEN CAN YOU ACCEPT
FL370
- - - - - - - - - - - - - - - -
WE CAN ACCEPT FL370 AT
1555Z

*CANNOT                 MODIFY*

                          SEND*
```

■ **If the flight crew cannot comply with the proposed action:**

- **On the DCDU:**

CANNOT..SELECT See (1)

The generated message changes from the positive message (CAN) to a negative message (CANNOT).

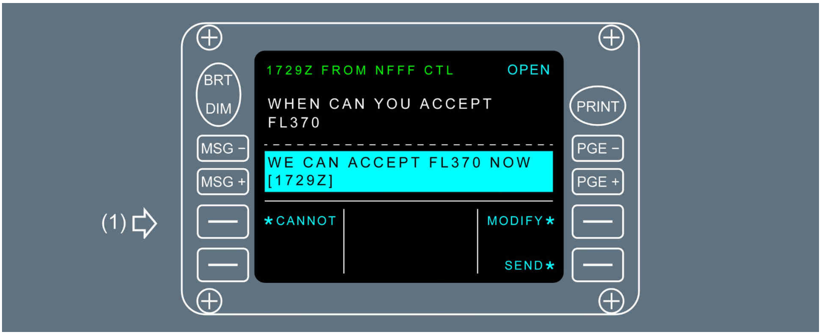
L2 *The message status remains OPEN See (2).*

L1 SEND..SELECT See (3)

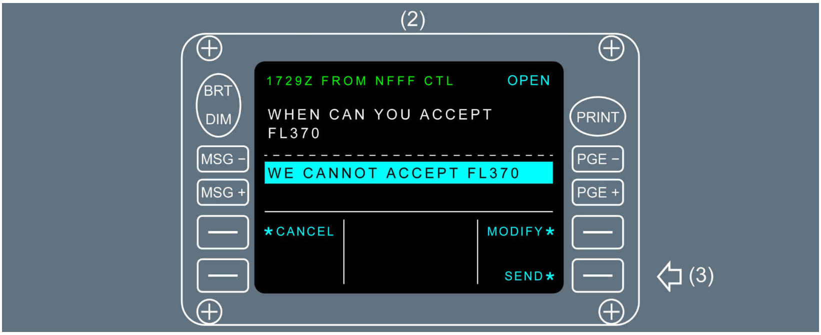
The flight crew can close the message, if the message is not closed automatically.

L2 *The OPEN status of the message disappears.*

L1



```
1729Z FROM NFFF CTL          OPEN
WHEN CAN YOU ACCEPT
FL370
- - - - - - - - - - - - - - - - -
WE CAN ACCEPT FL370 NOW
[1729Z]
*CANNOT                  MODIFY*

                           SEND*
```



```
1729Z FROM NFFF CTL          OPEN
WHEN CAN YOU ACCEPT
FL370
- - - - - - - - - - - - - - - - -
WE CANNOT ACCEPT FL370

*CANCEL                  MODIFY*

                           SEND*
```

Ident.: DSC-46-10-50-20-00021190.0002001 / 17 MAR 17

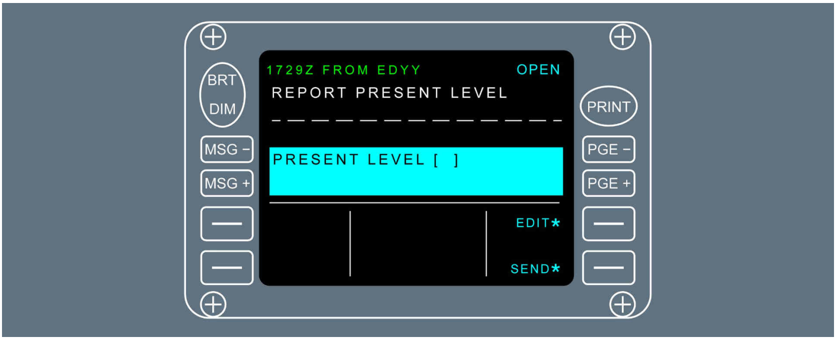
ATC CONFIRMATION REQUEST

Example: CONFIRM PRESENT LEVEL Request

RECEPTION

- **On the glareshield:**
  ATC MSG pb..PRESS
  The aural and visual alerts stop.
- **On the DCDU:**

  The DCDU displays the ATC confirmation request:



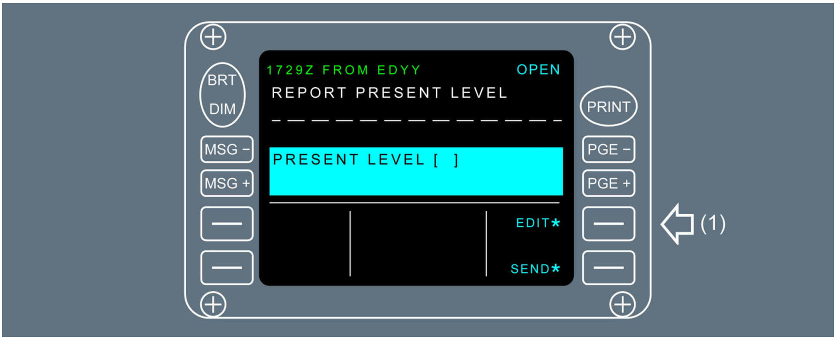
1729Z FROM EDYY
OPEN
REPORT PRESENT LEVEL
PRESENT LEVEL [ ]
EDIT*
SEND*
BRT
DIM
MSG −
MSG +
PRINT
PGE −
PGE +

RESPONSE

- **On the DCDU:**

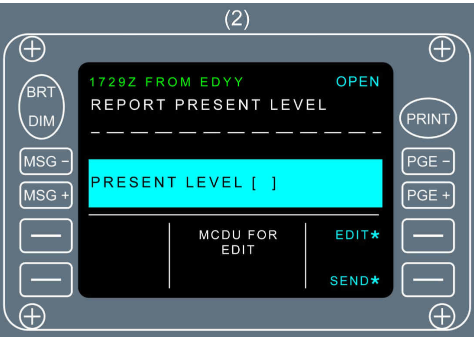
EDIT.. SELECT See (1)

MCDU FOR EDIT information appears on the DCDU, in the message information area See (2). The MCDU automatically displays the EDIT page See (3).



1729Z FROM EDYY
OPEN
REPORT PRESENT LEVEL
PRESENT LEVEL [ ]
EDIT*
SEND*
BRT
DIM
MSG −
MSG +
PRINT
PGE −
PGE +
(1)

(2)



1729Z FROM EDYY OPEN
REPORT PRESENT LEVEL

PRESENT LEVEL [ ]

MCDU FOR EDIT
EDIT*
SEND*

- **On the MCDU:**

  EDIT Page:

  PRESENT LEVEL..INSERT See (4)

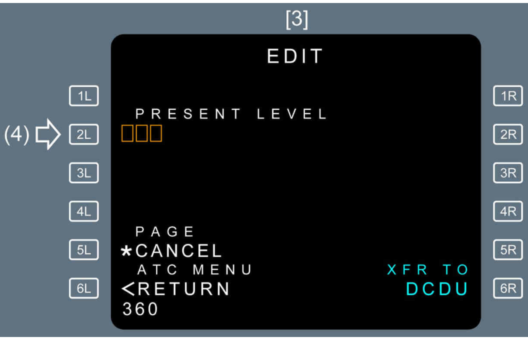
  Insert the value of the present flight level via the MCDU scratchpad.

  L2 *A default value may appear in the 2L field of the MCDU EDIT page.*

  L1 XFR TO DCDU..SELECT See (5)

  The DCDU displays the prepared message.

[3]

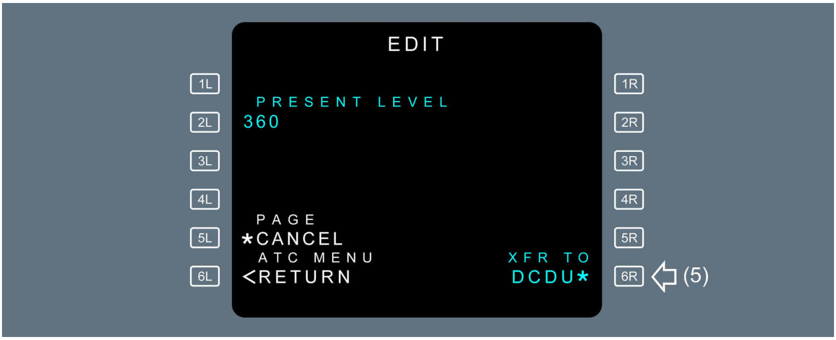


EDIT

PRESENT LEVEL
□□□

PAGE
*CANCEL
ATC MENU
<RETURN
360

XFR TO
DCDU

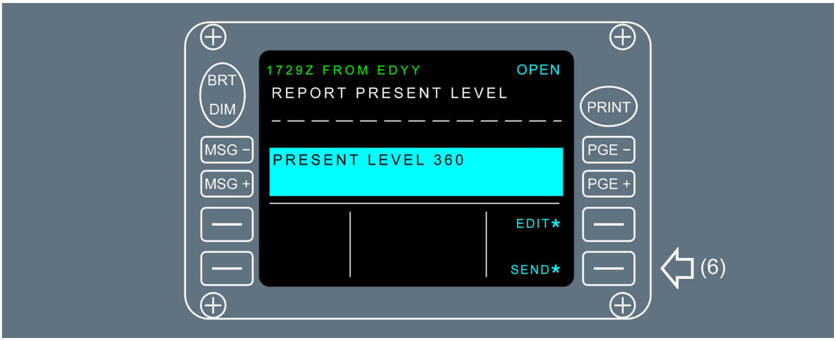

EDIT
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PRESENT LEVEL
360
PAGE
*CANCEL
ATC MENU
<RETURN
XFR TO
DCDU*
(5)

- **On the DCDU:**

  SEND..SELECT See (6)

L2 *The OPEN status of the message disappears.*

L1 *The flight crew can close the message, if the message is not closed automatically.*


BRT
DIM
MSG –
MSG +
1729Z FROM EDYY
OPEN
REPORT PRESENT LEVEL
PRESENT LEVEL 360
EDIT*
SEND*
PRINT
PGE –
PGE +
(6)

HOW TO MODIFY FLT PLAN

Ident.: DSC-46-10-50-00021153.0001001 / 21 MAR 17
Applicable to: ALL

- **When the scratchpad (1) displays the AOC SEC F-PLN UPLINK message:**
  - **On the MCDU:**

    SEC INDEX Page:

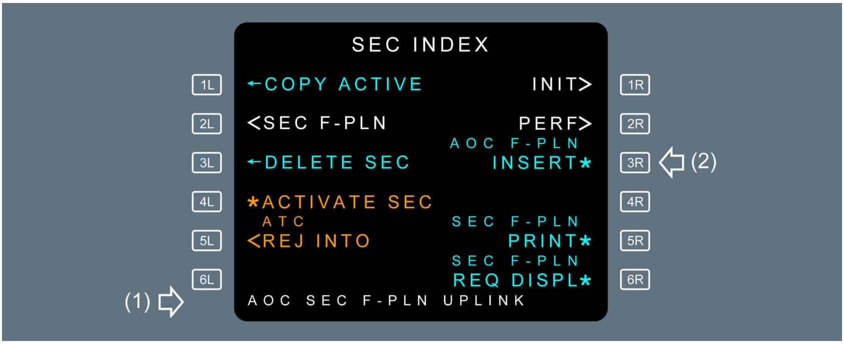
    AOC F-PLN INSERT..SELECT See (2)

    The flight plan is inserted in the secondary F-PLN See (3).
    The flight can review and modify the flight plan.

SEC F-PLN REQ DISPLAY..SELECT See (4)

L2 *The DCDU automatically displays a datalink message See (5).*

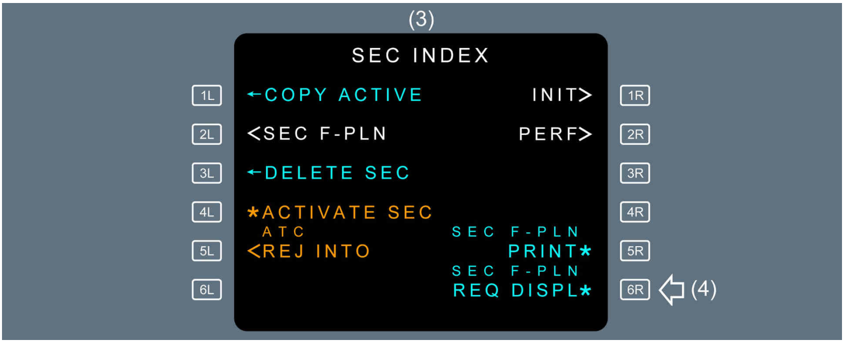
L1 *The flight crew sends the message to the ATC from the DCDU.*



```
SEC INDEX
←COPY ACTIVE            INIT>
<SEC F-PLN              PERF>
                   AOC F-PLN
←DELETE SEC           INSERT*
*ACTIVATE SEC
 ATC               SEC F-PLN
<REJ INTO              PRINT*
                   SEC F-PLN
                   REQ DISPL*
AOC SEC F-PLN UPLINK
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
(1)
(2)

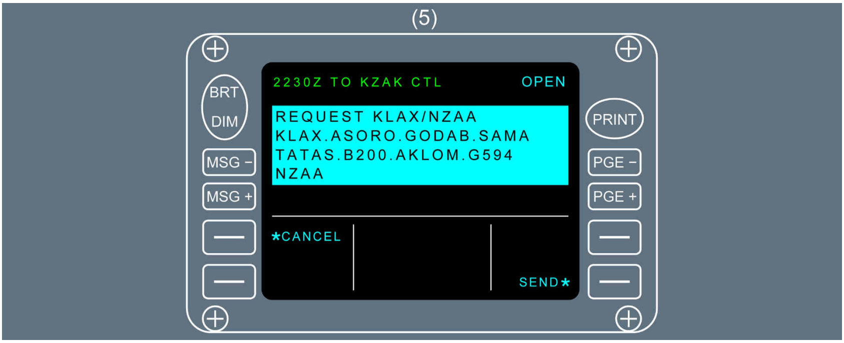
(3)



```
SEC INDEX
←COPY ACTIVE            INIT>
<SEC F-PLN              PERF>
←DELETE SEC
*ACTIVATE SEC
 ATC               SEC F-PLN
<REJ INTO              PRINT*
                   SEC F-PLN
                   REQ DISPL*
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
(4)

(5)



```
2230Z TO KZAK CTL         OPEN
REQUEST KLAX/NZAA
KLAX.ASORO.GODAB.SAMA
TATAS.B200.AKLOM.G594
NZAA
*CANCEL
                         SEND*
```

BRT
DIM
MSG –
MSG +
PRINT
PGE –
PGE +

- **When ATC clearance is received:**
  - **On the glareshield:**

    ATC MSG pb.. PRESS

    The aural and visual alerts stop.
  - **On the DCDU:**

    STBY.. SELECT See (1)

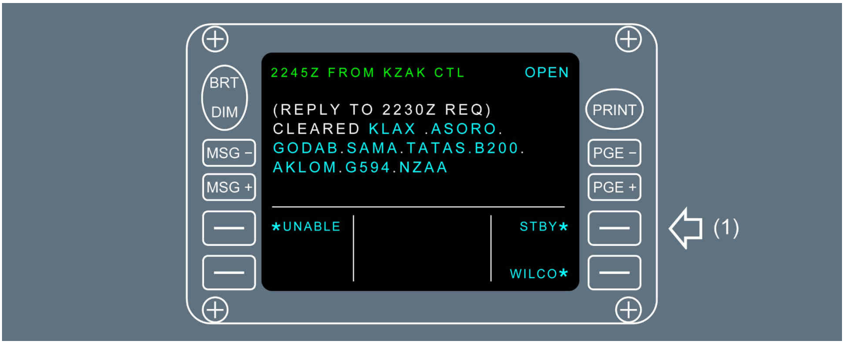
    The message status changes to STBY on a blue background See (2).

    SEND.. SELECT See (3)

    The background color of the STBY message status changes to green.

    LOAD.. SELECT See (4)

    LOAD must be selected. Other selection may prevent loading of the clearance.
    The LOAD SEC OK displays in the information field of the DCDU, if loading is successful.
    The flight crew can review the clearance on the MCDU, in SEC F-PLN pages.

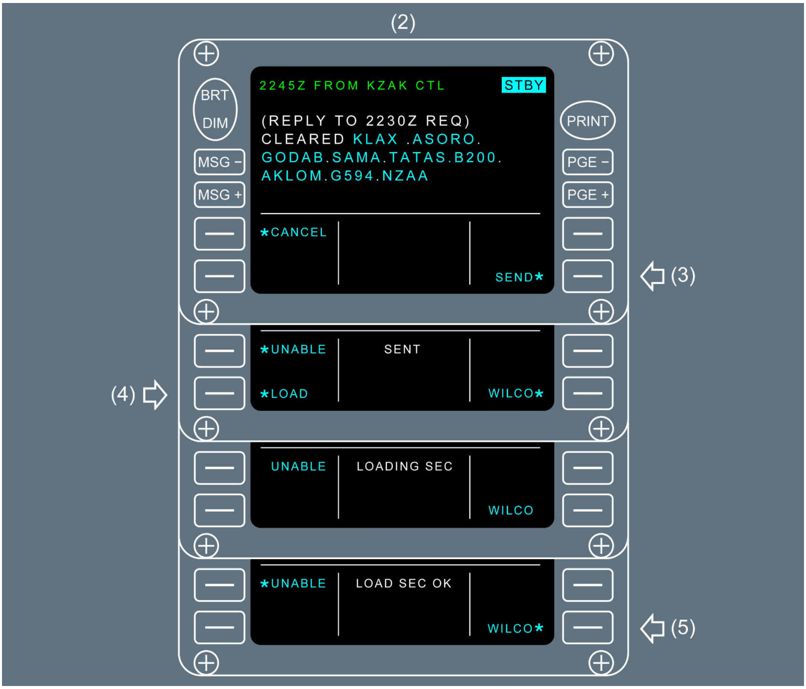


2245Z FROM KZAK CTL OPEN
(REPLY TO 2230Z REQ)
CLEARED KLAX .ASORO.
GODAB.SAMA.TATAS.B200.
AKLOM.G594.NZAA
*UNABLE
STBY*
WILCO*

■ **If the flight crew accepts the clearance:**

WILCO.. SELECT See (5)

The flight crew can activate the secondary F-PLN.


(2)
BRT
DIM
MSG –
MSG +
PRINT
PGE –
PGE +
2245Z FROM KZAK CTL
STBY
(REPLY TO 2230Z REQ)
CLEARED KLAX .ASORO.
GODAB.SAMA.TATAS.B200.
AKLOM.G594.NZAA
*CANCEL
SEND*
(3)
(4)
*UNABLE
SENT
*LOAD
WILCO*
UNABLE
LOADING SEC
WILCO
*UNABLE
LOAD SEC OK
WILCO*
(5)

If the flight crew decides to modify the clearance:

- The flight crew loads the clearance into the SEC F-PLN, on the MCDU and modifies it.
- The flight crew rejects the clearance by selecting UNABLE on the DCDU.
- The flight crew sends a new request (with the modified F-PLN) to the ATC.

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ATC MSG RECORD NOT RELIABLE - DISPLAYED AT ATSU POWER-UP

Ident.: DSC-46-10-60-00024038.0001001 / 28 MAY 20

1 **Applicable to: MSN 02734, 02924, 03032-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

DESCRIPTION

In some specific cases, such as ATSU power-up, the flight crew may experience the following:

- ATC MSG RECORD NOT RELIABLE DCDU message
- MSG RECORD NOT RELIABLE MCDU scratchpad message when the flight crew selects the MSG RECORD menu on the MCDU.

The flight crew may experience this abnormal behavior if, before the previous ATSU power-off, two CPDLC messages with the same time stamp were stored in the MSG RECORD.
At the next ATSU power-up, the MSG RECORD is emptied and the subsequent CPDLC messages are not stored in the MSG RECORD.

OPERATIONAL RECOMMENDATION

In such situation, the flight crew should perform a manual reset of the ATSU in order to recover the nominal ATSU behavior. *Refer to PRO-ABN-ABN-RESET System Reset Table - DATALINK*.

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INTRODUCTION

Ident.: DSC-46-20-20-00021223.0001001 / 04 JUN 19
Applicable to: ALL

The FlySmart with Airbus application suite is composed of:
- Takeoff application
- Landing application
- In-flight application
- Loadsheet application
- Operational Documentation application (OLB)
- Electronic QRH application (eQRH)
- Manager application (available for iPad version).

The FlySmart with Airbus application suite is designed to:
- Improve access to flight crew’s operational information
- Reduce the quantity of paper documents in the cockpit by replacing them with electronic documents
- Enable reduced revision and distribution cycles to ensure better technical data accuracy
- Ease and improve the operational data updating process
- Provide an accurate and optimized computation of performance.

The FlySmart with Airbus application suite can be used by the flight crew on a Portable Electronic Device (PED). The flight crew can use the power outlets ◁* (110 VAC / 60 Hz) installed on each lateral console to plug their PED.

Note: *The power outlets (115 VAC / 400 Hz) located on the rear of the cockpit are for maintenance use only.*

GENERAL

Ident.: DSC-46-20-20-00021224.0001001 / 20 MAR 17
Applicable to: ALL

The My Flight page enables:
- To check that FlySmart with Airbus applications are up to date. The My Flight page provides the version of the installed applications and data (EFB version)
- To start the Manager application, that enables to update the operational data (performance, manuals)
- To initialize the applications with the applicable aircraft tail number, flight number and citypair. This avoids multiple entries of the same data in the different applications.

There is one My Flight page per application. All the inputs that the user has entered on one My Flight page are retrieved by the other applications.

Note: *On the My Flight page of OLB application, the user can only enter the a/c type and a/c registration.*

LANDING APPLICATION

Ident.: DSC-46-20-20-00021225.0001001 / 20 MAR 17
Applicable to: ALL

The Landing application aims at computing the landing performance data (maximum landing weight, approach speed) according to the aircraft configuration and external conditions (runway, surrounding obstacles, weather).
The Landing application allows straightforward computations and provides the optimized landing performance for the given conditions.

TAKEOFF APPLICATION

Ident.: DSC-46-20-20-00021226.0001001 / 20 MAR 17
Applicable to: ALL

The Takeoff application aims at computing the takeoff performance data (maximum takeoff weight, takeoff speeds, flexible temperature) according to the aircraft configuration and external conditions (runway, surrounding obstacles, weather).
The Takeoff application allows straightforward computations and provides the optimized takeoff performance for the given conditions.

IN-FLIGHT APPLICATION

Ident.: DSC-46-20-20-00023257.0001001 / 04 JUN 19
Applicable to: ALL

The In-flight application aims at computing the in-flight performance data (time, fuel consumption, distance, altitude) according to the aircraft configuration and external conditions (weather).
The In-flight application allows straightforward computations and provides the optimized in-flight performance for the given conditions.

LOADSHEET APPLICATION

Ident.: DSC-46-20-20-00021227.0001001 / 20 MAR 17
Applicable to: ALL

The Loadsheet application allows the flight crew users to prepare the aircraft loading and to check that all weights and CG remain within the loading operational envelope. This eases the computation of the ZFWCG, ZFW, TOW and TOCG, and enables last–minute changes to the passenger/cargo/fuel distribution.

Depending on airline's authority requirements, the Loadsheet application can also generate a load and trim sheet.

OPS LIBRARY APPLICATION

Ident.: DSC-46-20-20-00021228.0001001 / 20 MAR 17
Applicable to: ALL

The OLB application enables the onboard consultation of any flight operations document published in the relevant format (e.g. airline's manuals), including the ones delivered by Airbus (FCOM, MEL, AFM, CDL, FCTM).
MEL and CDL items (including missing items) selected on OLB application are automatically transferred to Takeoff and Landing applications.

ELECTRONIC QRH APPLICATION

Ident.: DSC-46-20-20-00021515.0001001 / 04 JUN 19
Applicable to: ALL

The electronic QRH application (eQRH) is an application that enables the flight crew to:
- Manage the Normal Checklists and some Abnormal Procedures
- Access to some important operational data that may be required during the flight (such as the OEBs).

MANAGER APPLICATION

Ident.: DSC-46-20-20-00021229.0001001 / 20 MAR 17
Applicable to: ALL

The Manager application aims at updating on the iPad the operational data used by FlySmart with Airbus applications for iPad: performance data and operational manuals.

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GENERAL

Ident.: DSC-46-40-10-00017604.0001001 / 04 MAY 18
Applicable to: ALL

The aircraft is equipped with cabin connectivity systems which enable passengers to use:
- Mobile phones for voice and data services, and/or
- Internet wireless connection for access to the World Wide Web

The use of mobile phones is prohibited in cockpit and lavatories.
The following table provides the list of controls dedicated to Pax Entertainment & Connectivity Systems:

P/B	**EQUIPMENTS (FUNCTIONS)**	**DESCRIPTIONS**
GALLEY	Mobile, Wifi, IFE, Seat actuators, PED	*Refer to DSC-24-20 Overhead Panel*
COMMERCIAL	Mobile, Wifi, IFE, Seat actuators, PED	*Refer to DSC-24-20 Overhead Panel*
NO PED	Signs	*Refer to DSC-33-40-10 Overhead Panel*
PAX SYS	Mobile, Wifi, IFE, Seat actuators, PED	*Refer to DSC-46-40-30 PAX SYS PB-SW*
PAX PERSONAL ELEC SPLY	PED	*Refer to DSC-46-40-30 PAX PERSONAL ELEC SPLY PB-SW*
MOBILE COM	Mobile, Wifi	*Refer to DSC-46-40-30 MOBILE COM PB-SW*
CINS reset	Mobile, Wifi	*Refer to DSC-46-40-30 CINS RESET PB*

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IN SEAT POWER SUPPLY SYSTEM ◁

Ident.: DSC-46-40-20-00017606.0001001 / 04 MAY 18
Applicable to: ALL

The In-Seat Power Supply System (ISPSS) provides electrical power to the In-Seat Power Supply Unit (ISPSU) outlets, and enables passengers to use Portable Electronic Devices (PED).
In the case of rapid cabin decompression, the ISPSS is automatically disconnected.

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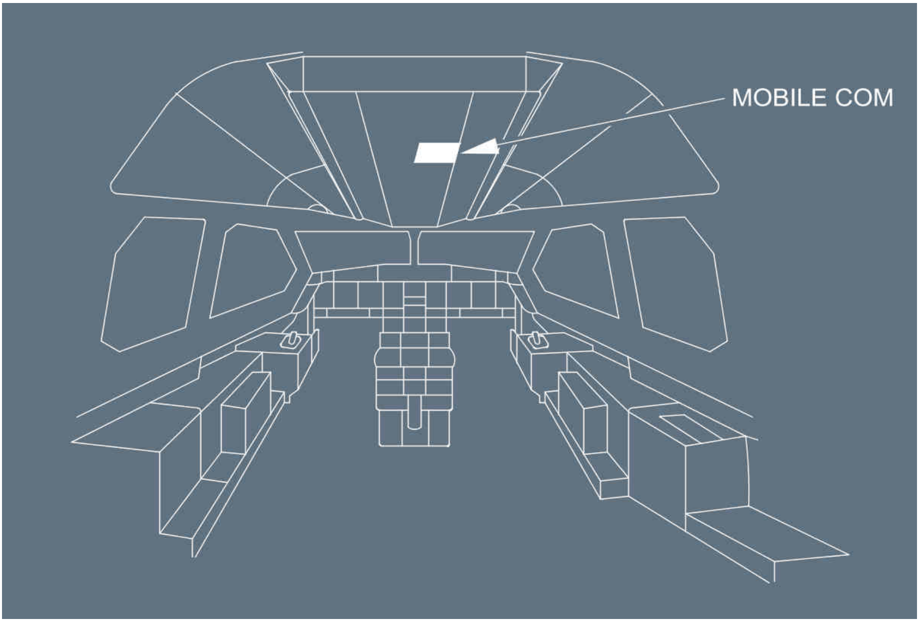
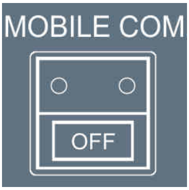
MOBILE COM PB-SW ⊲

Ident.: DSC-46-40-30-00017631.0001001 / 04 MAY 18
Applicable to: ALL



The pushbutton-switch described here below is installed on the 45 VU panel on the overhead panel.



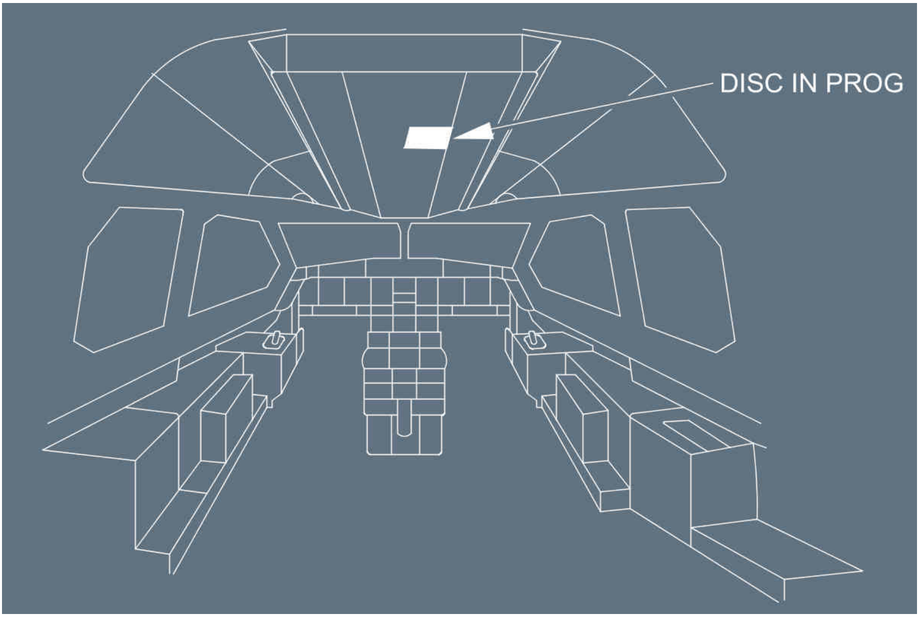
ON : The mobile phone system and the passenger Internet wireless connection are activated. ⊲

OFF : The mobile phone system and the passenger Internet wireless connection are deactivated. ⊲

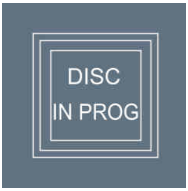
Note: *When the pushbutton is released, the OFF light comes on in white however the mobile phone system takes approximately 4 min to disconnect. During this disconnection process, the passengers can use their mobile phones.*

DISC IN PROG LIGHT ⊲

Ident.: DSC-46-40-30-00019278.0001001 / 21 MAR 17
Applicable to: ALL



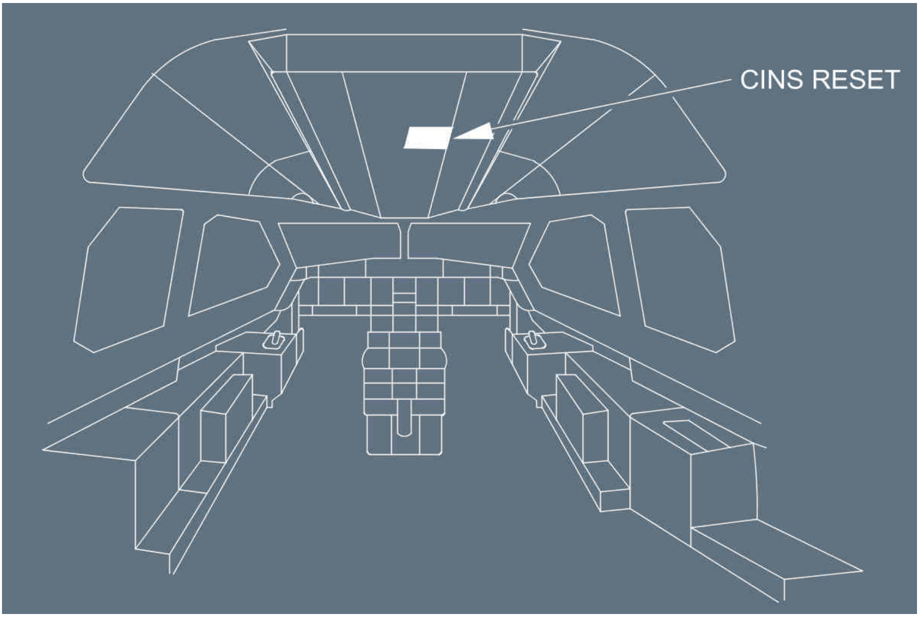
The pushbutton-switch described here below is installed on the 45 VU panel on the overhead panel.



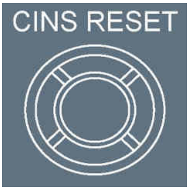
Note: *After the release of Mobile Com pushbutton, the DISC IN PROG light comes in blue and remains on until the total disconnection of the system.*

CINS RESET PB ⊲

Ident.: DSC-46-40-30-00017630.0001001 / 10 NOV 15
Applicable to: ALL



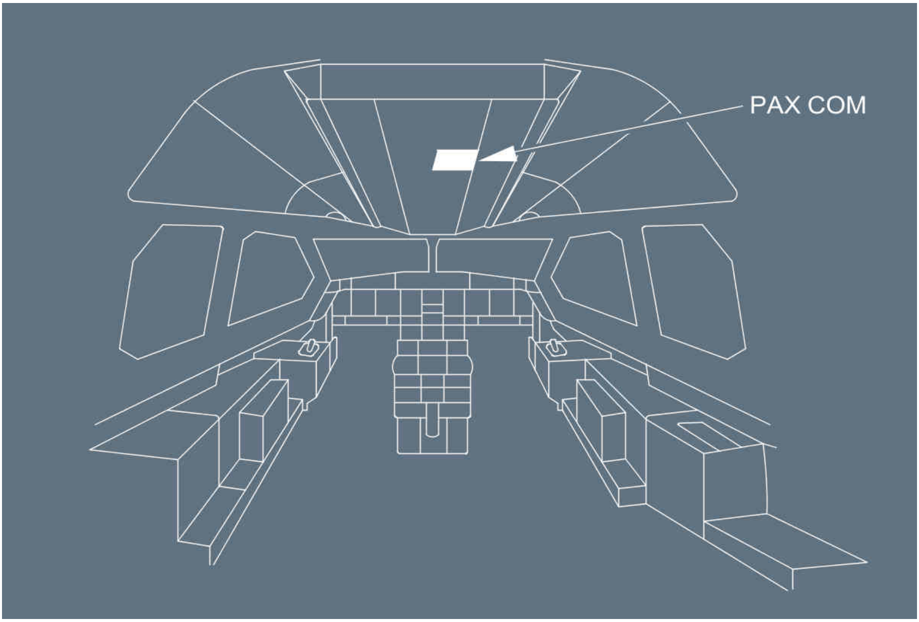
The pushbutton-switch described here below is installed on the 45 VU panel on the overhead panel.



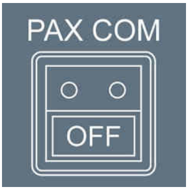
When pressed, it resets all Cabin Connectivity systems.

PAX COM PB-SW ⩤

Ident.: DSC-46-40-30-00021654.0001001 / 05 JUN 18
Applicable to: ALL



The pushbutton-switch described here below is installed on the overhead panel.

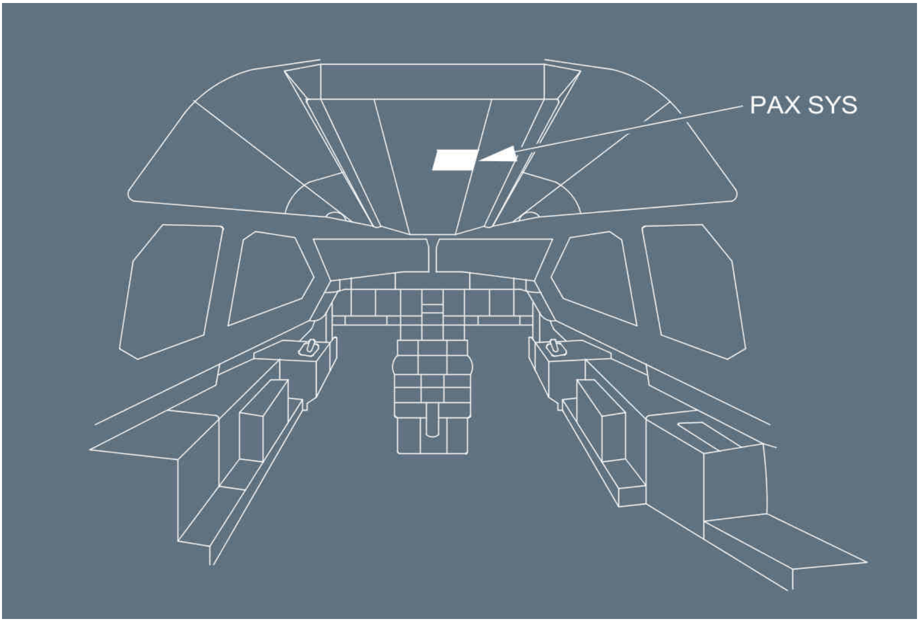


OFF : The Cabin Connectivity system is cut-off. When the pushbutton-switch is released, the OFF light comes on in white.

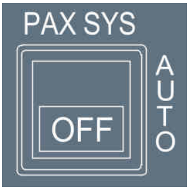
Note: *The location of the PAX COM PB-SW ⩤ on the overhead panel may differ (e.g. 45VU or 9020VU) depending on the aircraft configuration.*

PAX SYS PB-SW ◁

Ident.: DSC-46-40-30-00017735.0001001 / 05 JUN 18
Applicable to: ALL



The pushbutton-switch described here below is installed on the overhead panel.

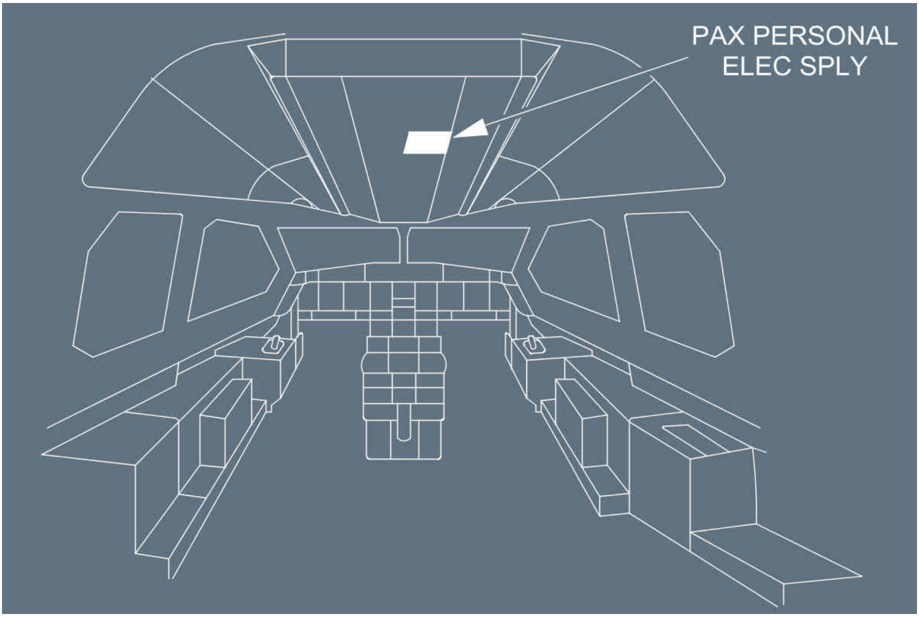


On or AUTO ◁ : All ISPSUs, In-Flight Entertainment (IFE) and Cabin Connectivity systems are powered.

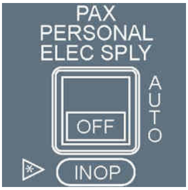
OFF : Simultaneously turns off all ISPSUs, In-Flight Entertainment (IFE) and Cabin Connectivity systems.

PAX PERSONAL ELEC SPLY PB-SW ◁

Ident.: DSC-46-40-30-00017629.0001001 / 04 MAY 18
Applicable to: ALL



The pushbutton-switch described here below is installed on the 56VU panel on the overhead panel.



AUTO ◁ : All ISPSUs are powered except in the following conditions:

- If the PED power switch located on the FAP is in the OFF position, or
- Takeoff, landing or decompression.

OFF : Turns off all ISPSUs.

INOP ◁ : This label indicates that the ISPSS has been deactivated and is inoperative.

MEMO DISPLAY

Ident.: DSC-46-40-30-00017628.0001001 / 05 MAY 22
Applicable to: ALL

GSM DISC < 4 MN	This memo appears, if the MOBILE COM pb-sw ◁* is pushed. It initiates a shutdown of the cabin connectivity systems within 4 minutes. This message is replaced by the NO MOBILE memo when the shutdown is completed.

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AIRCRAFT SYSTEMS

APU

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DSC-49-10 Description

DSC-49-10-10 General

General....................A

DSC-49-10-20 Main Components

APU Engine....................A
Electronic Control Box....................B
Air Intake System....................C
Starter....................D
Fuel System....................E
Oil System....................F
Inlet Guide Vanes (IGV)....................G
Air Bleed System....................H
Controls....................I
Ground Operation Safety Devices....................J

DSC-49-20 Controls and Indicators

Overhead Panel....................A
External Controls....................B
ECAM APU Page....................C
Memo Display....................D

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PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
DSC-49-10-10 Architecture	A	1	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-10-10 Architecture	A	2	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-10-20 Air Bleed System	H	1	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-10-20 Air Bleed System	H	2	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 O.verhead Panel - Master SW pb-sw	A	1	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 Overhead Panel - Master SW pb-sw	A	2	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 Overhead Panel - Start pb-sw	A	3	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 Overhead Panel - Start pb-sw	A	4	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 ECAM - AVAIL	C	5	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 ECAM - AVAIL	C	6	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 ECAM - FLAP OPEN	C	7	Effectivity update: The information no longer applies to MSN 06689.
DSC-49-20 ECAM - FLAP OPEN	C	8	Effectivity update: The information now also applies to MSN 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-49-20 ECAM - APU EGT	C	9	Effectivity update: The information no longer applies to MSN 02321, 06689.
DSC-49-20 ECAM - APU EGT	C	10	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: DSC-49-10-10-A-00017436.0001001 / 21 MAR 17
Applicable to: ALL

The Auxiliary Power Unit (APU) is a self-contained unit that supplies the aircraft with pneumatic and electrical power.

On the ground

- It supplies bleed air for starting the engines and for the air conditioning system
- It supplies electrical power to the electrical system.

During takeoff

- It supplies bleed air for air conditioning (for example, when optimum aircraft performance is required).

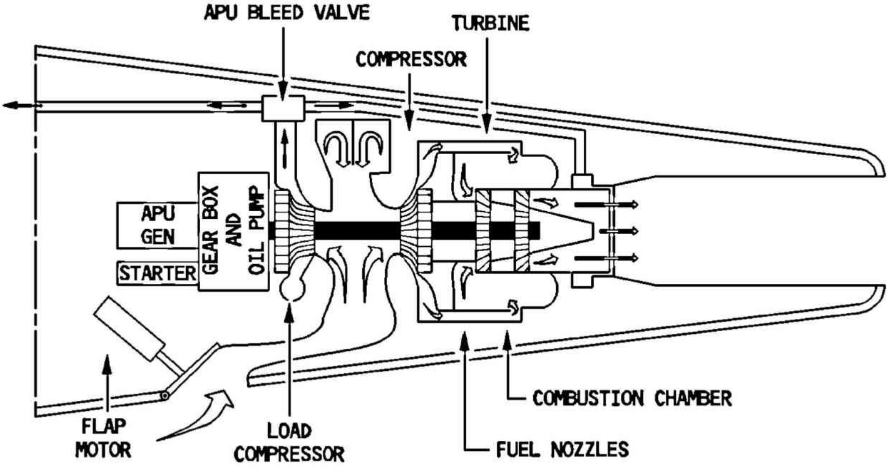
In flight

- It backs up the electrical system
- It backs up the air conditioning
- It can be used to start the engines.

The APU may obtain power for starting from the aircraft's batteries or normal electrical system, or from ground service.
APU starting is permitted throughout the normal flight envelope (*Refer to LIM-APU Operational Envelope*).

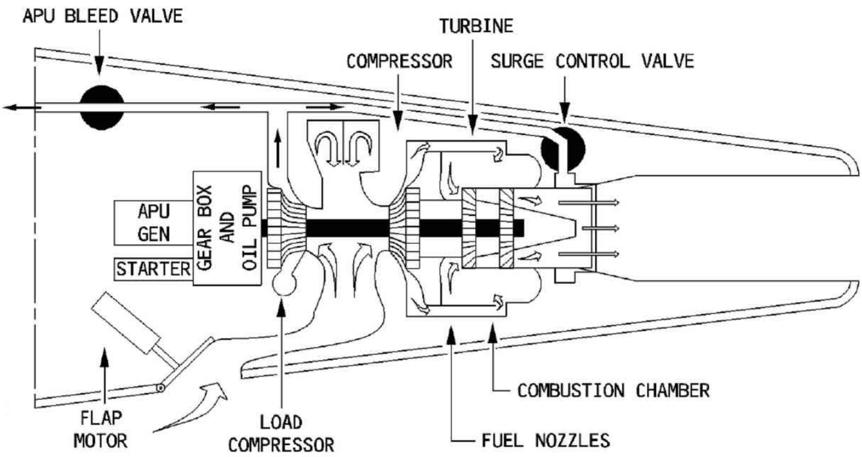
Ident.: DSC-49-10-10-A-00017437.0002001 / 21 MAR 16

1 **Applicable to: MSN 06871-06876**


APU BLEED VALVE
TURBINE
COMPRESSOR
APU GEN
STARTER
GEAR BOX AND OIL PUMP
COMBUSTION CHAMBER
FLAP MOTOR
LOAD COMPRESSOR
FUEL NOZZLES

Ident.: DSC-49-10-10-A-00017437.0003001 / 21 MAR 16

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**


APU BLEED VALVE
TURBINE
COMPRESSOR
SURGE CONTROL VALVE
APU
GEN
STARTER
GEAR BOX
AND
OIL PUMP
FLAP
MOTOR
LOAD
COMPRESSOR
COMBUSTION CHAMBER
FUEL NOZZLES

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APU ENGINE

Ident.: DSC-49-10-20-00001528.0001001 / 21 MAR 16
Applicable to: ALL

The basic element of the APU is a single-shaft gas turbine that delivers mechanical shaft power for driving the accessory gearbox (electrical generator, starter, etc.) and produces bleed air (engine starting and pneumatic supply).

ELECTRONIC CONTROL BOX

Ident.: DSC-49-10-20-00001529.0001001 / 21 MAR 16
Applicable to: ALL

The Electronic Control Box (ECB) is a full-authority digital electronic controller that performs the bulk of the APU system logic for all modes of engine operation, such as :

- Sequences the start and monitors it.
- Monitors speed and temperature.
- Monitors bleed air.
- Sequences the shutdown.
- Controls the automatic shutdown.

AIR INTAKE SYSTEM

Ident.: DSC-49-10-20-00001530.0001001 / 21 MAR 16
Applicable to: ALL

The air intake and an electrically operated flap allow external air to reach the compressor inlet.

STARTER

Ident.: DSC-49-10-20-00001531.0001001 / 21 MAR 16
Applicable to: ALL

The ECB controls the electric starter. The starter engages if the air intake is fully open and the MASTER SW and the START pushbutton are ON.

FUEL SYSTEM

Ident.: DSC-49-10-20-00001532.0001001 / 21 MAR 16
Applicable to: ALL

The left fuel feed line supplies the APU.
The required pressure is normally available from tank pumps.
If pressure is not available (batteries only or pumps off) the APU FUEL PUMP starts automatically.
The ECB controls the fuel flow.

OIL SYSTEM

Ident.: DSC-49-10-20-00001533.0001001 / 21 MAR 16
Applicable to: ALL

The APU has an integral independent lubrication system (for lubrication and cooling).

INLET GUIDE VANES (IGV)

Ident.: DSC-49-10-20-00001534.0001001 / 21 MAR 16
Applicable to: ALL

The IGVs control bleed air flow, and a fuel-pressure-powered actuator positions the IGVs.
The ECB controls the actuator in response to aircraft demand.

AIR BLEED SYSTEM

Ident.: DSC-49-10-20-00001535.0002001 / 03 FEB 11
1 **Applicable to: MSN 06871-06876**

The air bleed system is fully automatic.
The APU speed is always 100 % whatever the air bleed system demand and the ground/flight configuration are.

AIR BLEED SYSTEM

Ident.: DSC-49-10-20-00001535.0003001 / 03 FEB 11
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

The air bleed system is fully automatic.
The ECB always sets the APU speed to 100 % except for air conditioning demand, if the ambient temperature is between -18 °C and 35 °C. In this case, the ECB sets the APU speed to 99 %. For all other ambient temperatures (less than -18 °C or more than 35 °C), the ECB sets the APU speed to 100 %.

CONTROLS

Ident.: DSC-49-10-20-00001536.0001001 / 21 MAR 16
Applicable to: ALL

The flight crew uses the controls on the APU panel for routine shutdown. For emergency shutdown :
- the flight crew can push the APU FIRE handle, or
- the ground crew can push the APU SHUT OFF pushbutton on the interphone panel under the nose fuselage.

GROUND OPERATION SAFETY DEVICES

Ident.: DSC-49-10-20-00001537.0001001 / 21 MAR 16
Applicable to: ALL

The APU may run without cockpit crew supervision when the aircraft is on the ground. In case of fire in the APU compartment :

- APU fire warnings operate in the cockpit.
- A horn in the nose gear bay sounds.
- The AVAIL light goes out.
- The FAULT light in the MASTER SW lights up.
- The APU shuts down.
- The APU fire extinguisher discharges.

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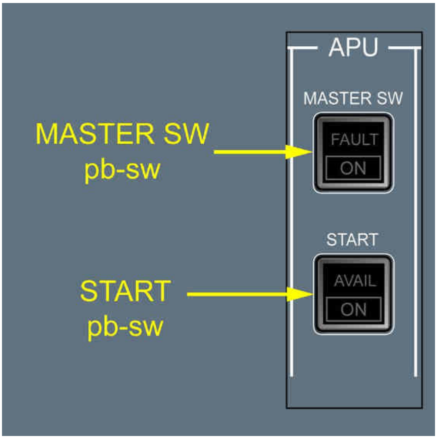
OVERHEAD PANEL

Ident.: DSC-49-20-A-00017438.0001001 / 28 MAY 20
Applicable to: ALL

APU Panel



Ident.: DSC-49-20-A-00017685.0002001 / 28 MAY 20
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

MASTER SW pb-sw

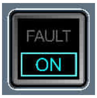
This switch controls the electric power supply for the operation of the APU and its protective features. It also controls the starting and shutdown sequences.

L12

- The APU is off, or
- The APU is in manual shutdown sequence

  Manual shutdown sequence:
  - The ON light on the MASTER SW pb-sw, and the AVAIL light on the START pb go out
  - If the aircraft was using APU bleed air, the APU keeps running for a cooling period of 60 to 120 s
  - At 7 % the air inlet flap closes.
- When pressed, initiates APU operation.

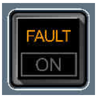
L12



- The APU is in operation, or
- The APU is in starting sequence

  Starting sequence:
  - Electric power goes to the APU system; the ECB performs a power-up test
  - The APU air intake flap opens
  - The APU fuel isolation valve opens
  - If no fuel tank pump is running, the APU fuel pump operates
  - If the aircraft has ground power or main generator power, the APU page appears on the ECAM display.
- When pressed, the APU shutdown sequence begins.

L12



Depending on version of the ECB:

- Indicates that an automatic APU shutdown occurs

  An automatic shutdown of the APU can happen in case of:
  - Fire (on ground only)
  - Air inlet flap closed
  - Overspeed
  - No acceleration
  - Slow start
  - EGT overtemperature
  - No flame
  - Reverse flow
  - Low oil pressure
  - High oil temperature
  - DC power lost (BAT OFF when aircraft on batteries only)
  - Overcurrent
  - Sensor failure
  - IGV failure
  - ECB failure
  - No speed
  - Underspeed
  - Loss of overspeed protection
  - Oil system shutdown
  - Inlet overheat
  - Clogged oil filter
  - Loss of EGT thermocouples.
- A caution appears on ECAM.

  Associated to the following ECAM alert:
  - APU AUTO (EMER) SHUT DOWN (*Refer to PRO-ABN-APU APU AUTO (EMER) SHUT DOWN - ANNUNCIATION*).

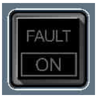
Ident.: DSC-49-20-A-00017685.0003001 / 28 MAY 20

2 **Applicable to: MSN 06871-06876**

MASTER SW pb-sw

This switch controls the electric power supply for the operation of the APU and its protective features. It also controls the starting and shutdown sequences.

L12

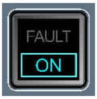


- The APU is off, or
- The APU is in manual shutdown sequence

Manual shutdown sequence:
- The ON light on the MASTER SW pb-sw, and the AVAIL light on the START pb go out
- If the aircraft was using APU bleed air, the APU keeps running for a cooling period of 60 to 120 s
- At 7 % the air inlet flap closes.

- When pressed, initiates APU operation.

L12

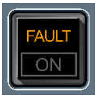


- The APU is in operation, or
- The APU is in starting sequence

Starting sequence:
- Electric power goes to the APU system; the ECB performs a power-up test
- The APU air intake flap opens
- The APU fuel isolation valve opens
- If no fuel tank pump is running, the APU fuel pump operates
- If the aircraft has ground power or main generator power, the APU page appears on the ECAM display.

- When pressed, the APU shutdown sequence begins.

L12



Depending on version of the ECB:

- Indicates that an automatic APU shutdown occurs

  An automatic shutdown of the APU can happen in case of:
  - Fire (on ground only)
  - Air inlet flap closed
  - Overspeed
  - No acceleration
  - Slow start
  - EGT overtemperature
  - No flame
  - Reverse flow
  - Low oil pressure
  - High oil temperature
  - DC power lost (BAT OFF when aircraft on batteries only)
  - Overcurrent
  - Sensor failure
  - IGV failure
  - ECB failure
  - No speed
  - Underspeed
  - Loss of overspeed protection
  - Oil system shutdown
  - Inlet overheat
  - Clogged oil filter
  - Loss of EGT thermocouples.

  Note: *In the case of an automatic, non-emergency shutdown, the air inlet flap closes 15 min after the APU speed is lower than 7%. If an automatic, non-emergency shutdown happens on ground, the 15 min countdown starts after liftoff.*

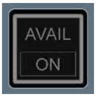
- A caution appears on ECAM.

  Associated to the following ECAM alert:
  - APU AUTO (EMER) SHUT DOWN (*Refer to PRO-ABN-APU APU AUTO (EMER) SHUT DOWN - ANNUNCIATION*).

Ident.: DSC-49-20-A-00017439.0002001 / 28 MAY 20

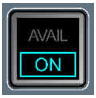
3 **Applicable to: MSN 06871-06876**

START pb-sw

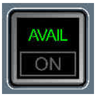


- The APU is off
- When pressed, starts the APU.

L12



- The APU start sequence is in progress
- When the APU reaches the appropriate speed, the ON light goes off and the AVAIL light comes on.
- Regarding the start sequence:
  - When the flap is completely open, the APU starter is energized
  - 1.5 s after the starter is energized, the ignition turns ON
  - When N = 55 %, the APU starter is de-energized, and the ignition turns OFF
  - 2 s after N reaches 95 %, or when N is above 99.5 %, the ON light on the START pb goes out
  - 10 s later, the APU page disappears from the ECAM display.

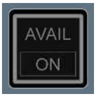


- The APU is started, and can supply bleed air and electrical power to the aircraft systems
- The AVAIL light comes on when N is above 99.5 % or 2 s after N reaches 95 %.

Ident.: DSC-49-20-A-00017439.0003001 / 28 MAY 20

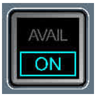
4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

START pb-sw

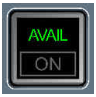


- The APU is off
- When pressed, starts the APU.

L12



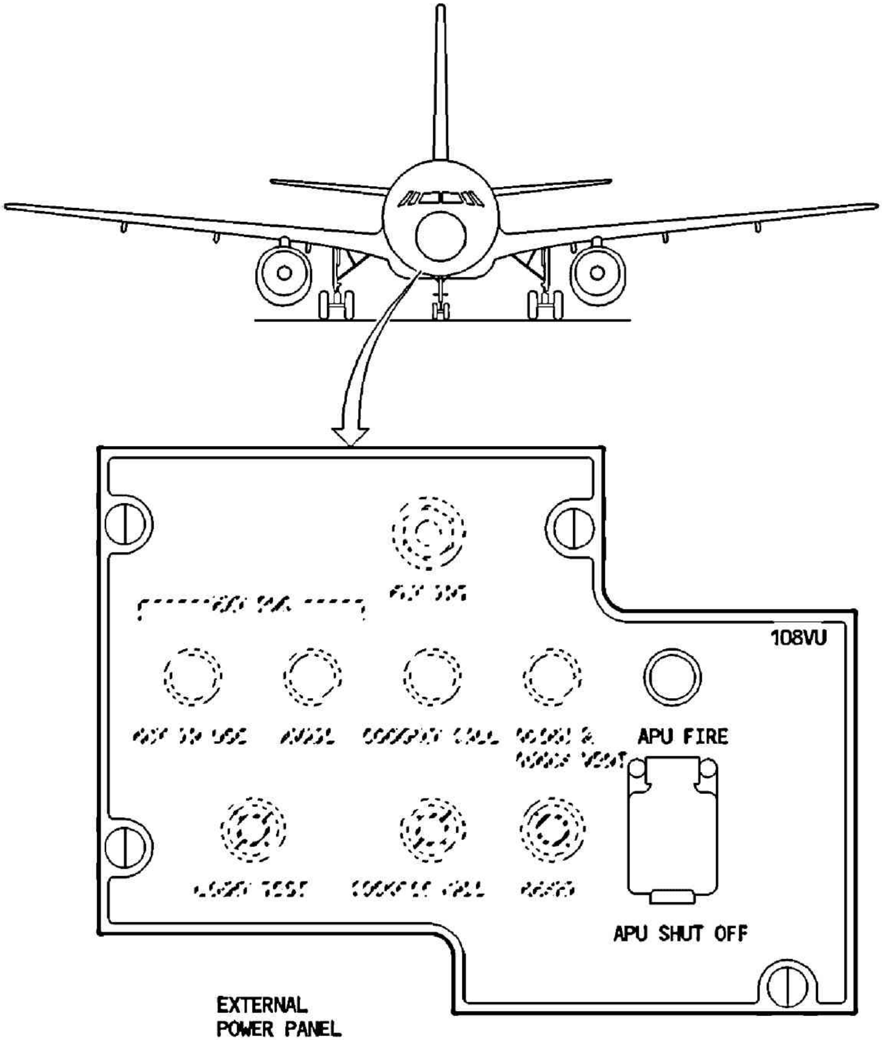
- The APU start sequence is in progress
- When the APU reaches the appropriate speed, the ON light goes off and the AVAIL light comes on.
- Regarding the start sequence:
  - When the flap is completely open, the APU starter is energized
  - 1.5 s after the starter is energized, the ignition turns ON
  - When N = 60 %, the APU starter is de-energized, and the ignition turns OFF
  - 2 s after N reaches 95 %, or when N is above 99.5 % the ON light on the START pb goes out
  - 10 s later, the APU page disappears from the ECAM display.



- The APU is started, and can supply bleed air and electrical power to the aircraft systems
- The AVAIL light comes on when N is above 95 %.

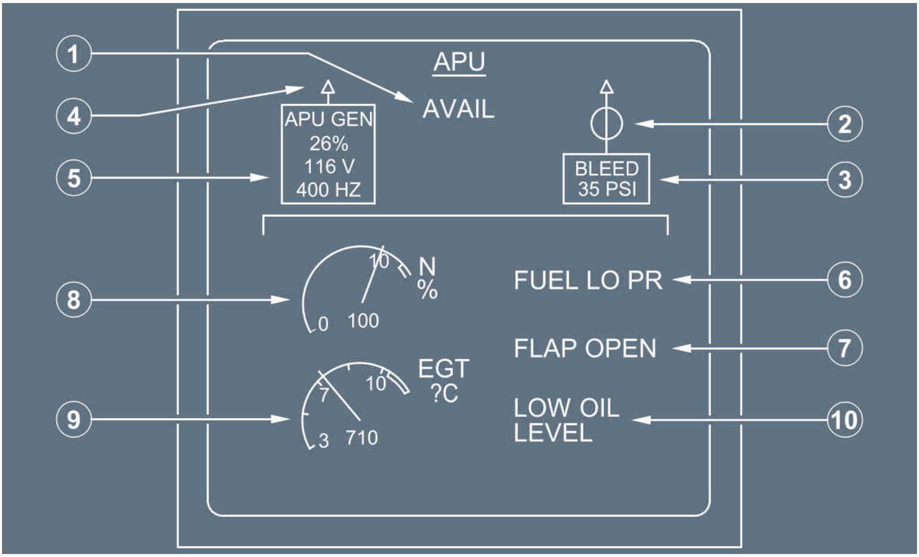
EXTERNAL CONTROLS

Ident.: DSC-49-20-00001539.0001001 / 21 MAR 16


108VU
APU FIRE
APU SHUT OFF
EXTERNAL
POWER PANEL

ECAM APU PAGE

Ident.: DSC-49-20-B-00017440.0001001 / 21 MAR 16
Applicable to: ALL


1
4
5
8
9
APU
AVAIL
APU GEN
26%
116 V
400 HZ
BLEED
35 PSI
10
N
%
0
100
EGT
?C
7
10
3
710
FUEL LO PR
FLAP OPEN
LOW OIL
LEVEL
2
3
6
7
10

Ident.: DSC-49-20-B-00017441.0002001 / 21 MAR 16
5 **Applicable to: MSN 06871-06876**

(1) AVAIL
Displayed in green when APU N is above 99.5 % or 2 s after N is above 95 %.

Ident.: DSC-49-20-B-00017441.0001001 / 21 MAR 16
6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

(1) AVAIL
Displayed in green when APU N is above 95 %.

Ident.: DSC-49-20-B-00017442.0001001 / 21 MAR 16
Applicable to: ALL

(2) APU bleed air valve position

Inline-Green : The APU bleed air valve is not closed.
Crossline-Green : The APU bleed air valve is closed.
Crossline-Amber : The APU bleed air valve is closed and the APU bleed is ON.

XX-Amber : The APU bleed air valve status information is not available, or the APU BLEED pb status is not available.

Ident.: DSC-49-20-B-00017443.0001001 / 21 MAR 16
Applicable to: ALL

(3) APU bleed air pressure

This box displays the relative bleed air pressure in green.
It shows an amber XX when the ADIRS1 or the ADIRS2 is not available or selected OFF or the data from the ECB are invalid or not transmitted.

Ident.: DSC-49-20-B-00017444.0001001 / 21 MAR 16
Applicable to: ALL

(4) APU GEN line contactor indication

Displayed in green when the APU GEN line contactor is closed.

Ident.: DSC-49-20-B-00017445.0001001 / 21 MAR 16
Applicable to: ALL

(5) APU GEN parameters

Identical to the APU GEN parameters on the ELEC page.

Ident.: DSC-49-20-B-00017446.0001001 / 21 MAR 16
Applicable to: ALL

(6) FUEL LO PR

Displayed in amber if APU fuel pressure gets low.

Ident.: DSC-49-20-B-00017447.0001001 / 21 MAR 16
7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 06871-06876**

(7) FLAP OPEN

Displayed in green when APU air intake flap is fully open.

Ident.: DSC-49-20-B-00017447.0003001 / 21 MAR 16
8 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

(7) FLAP OPEN

- Displayed in green when APU air intake flap is fully open.
- Advisory if the flap is not fully closed 3 min after the MASTER sw has been turned OFF.

Ident.: DSC-49-20-B-00017448.0001001 / 21 MAR 16
Applicable to: ALL

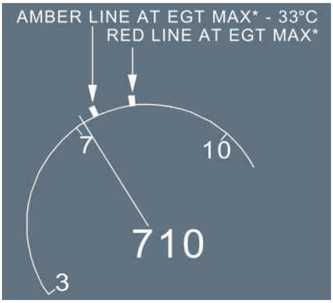
(8) APU N

- Displays APU speed in green.
- Becomes amber when N ≥ 102 %.
- Becomes red when N ≥ 107 %.

Ident.: DSC-49-20-B-00017449.0002001 / 06 SEP 16

9 **Applicable to: MSN 06871-06876**

(9) APU EGT


AMBER LINE AT EGT MAX* - 33°C
RED LINE AT EGT MAX*
7
10
710
3

- Displays APU EGT in green.
- Becomes amber when EGT ≥ EGT MAX -33 °C.
- Becomes red when EGT ≥ EGT MAX (automatic shutdown begins).

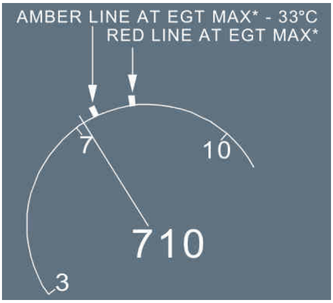
Note: *ECB calculates EGT MAX and transmits it to the ECAM. It is a function of N during start, and a function of ambient temperature when the APU is running.*
Maximum EGT during start: 982 °C.
Maximum EGT with APU running:

- *682 °C during at least 5 s.*
- *or, 700 °C to 742 °C depending on the ambient temperature.*

Ident.: DSC-49-20-B-00017449.0003001 / 06 SEP 16

10 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

(9) APU EGT


AMBER LINE AT EGT MAX* - 33°C
RED LINE AT EGT MAX*
7
10
710
3

- Displays APU EGT in green.
- Becomes amber when EGT ≥ EGT MAX -33 °C.
- Becomes red when EGT ≥ EGT MAX (automatic shutdown begins).

Note: *ECB calculates EGT MAX and transmits it to the ECAM. It is a function of N during start, and a function of ambient temperature when the APU is running.*
Maximum EGT during start: 1 120 °C (above 35 000 ft).
Maximum EGT during start: 1 090 °C (below 35 000 ft).
Maximum EGT with APU running: 675 °C.

Ident.: DSC-49-20-B-00017450.0001001 / 21 MAR 16
Applicable to: ALL

(10) LOW OIL LEVEL

Advisory: Displayed if the ECB detects a low APU oil level when the aircraft is on the ground, and the APU is not running.

MEMO DISPLAY

Ident.: DSC-49-20-00016689.0001001 / 21 MAR 16
Applicable to: ALL

APU AVAIL : This memo appears in green, when APU N is above 99.5 % or 2 s after N is above 95 % (depending on the aircraft configuration).

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AIRCRAFT SYSTEMS

DOORS

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DSC-52-10 Description

DSC-52-10-10 General

Description.......A

DSC-52-10-20 Passenger Doors

General.......A
Outside.......B
Inside.......C

DSC-52-10-30 Emergency Exits

Cockpit.......A
Cabin.......B

DSC-52-10-40 Cargo Doors

General.......A
Fwd and Aft Cargo Doors.......B
Bulk Cargo Door ◁ C
Location of Service Panels.......D

DSC-52-10-50 Avionics Compartment Access Door

Avionics Compartment Access Door.......A

DSC-52-10-60 Cockpit Door

Cockpit Door.......A

[1] DSC-52-10-80 Escape Slides/Rafts

Door Slides.......A
Wing Slides.......B
Escape Slide Arrangement.......C

DSC-52-20 Controls and Indicators

DOOR/OXY SD Page.......A

DSC-52-40 Cockpit Door Security System

DSC-52-40-10 Description

Cockpit Door Description.......A

DSC-52-40-20 Cockpit Door Locking System (CDLS)

COCKPIT DOOR LOCKING SYSTEM (CDLS).......A
Controls.......B

Continued on the following page

Continued from the previous page

DSC-52-40-30 Cockpit Door Surveillance System (CDSS)

General........A
Controls........B

DSC-52-50 How to

How to Operate the Cockpit Door ....A
How to Operate the Fwd and Aft Cargo Door........B
How to Operate the Fwd and Aft Cargo Doors (Auxiliary Operation)........C

DSC-52-70 Temporary Abnormal Behaviors

Erroneous Activation of the Cabin Pressure Warning Lights without Residual differential Pressure........A

Localization Title	Toc Index	ID	Reason
DSC-52-PLP-TOC Escape Slides/Rafts		1	Documentation update: Deletion of the "00005952 Cabin Emergency Exit Lights" table of content entry.
			Documentation update: Deletion of the "00005952.0001001 Cabin Emergency Exit Slides" documentary unit.
DSC-52-10-10 Description	A	1	Documentation update: Addition of "Description" documentary unit
DSC-52-10-30 Cabin	B	1	Documentation update: Addition of "Cabin" documentary unit
DSC-52-10-80 Wing Slides	B	1	Documentation update: Addition of "Wing Slides" documentary unit
DSC-52-10-80 Escape Slide Arrangement	C	4	Documentation update: Addition of "Escape Slide Arrangement" documentary unit
DSC-52-20 DOOR/OXY SD Page	A	1	Documentation update: Addition of "DOOR/OXY SD Page" documentary unit

DSC-52-10-10 Description	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-10-30 Cabin	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-10-60 Cockpit Door	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-10-80 Wing Slides	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-10-80 Escape Slide Arrangement	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-20 DOOR/OXY SD Page	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-40-10 Cockpit Door Description	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-20 COCKPIT DOOR LOCKING SYSTEM (CDLS)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-20 Controls - Keypad	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-20 Central Pedestal Cockpit Door Panel	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-20 Controls - Overhead Control Panel	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-52-40-30 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-40-30 General	A	2	Effectivity update: The information now also applies to MSN 11531.

Continued on the following page

Continued from the previous page

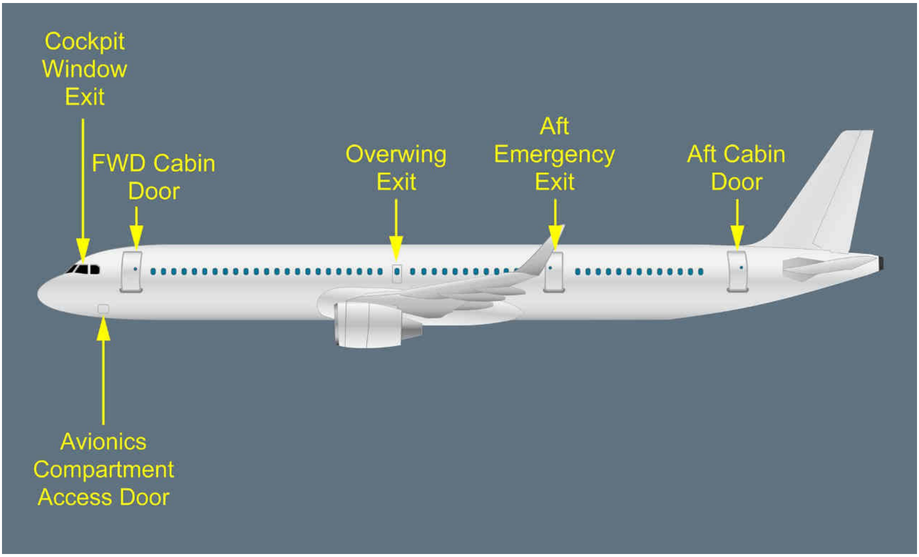
Localization Title	Toc Index	ID	Reason
DSC-52-40-30 Central Pedestal	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
DSC-52-40-30 Central Pedestal	B	4	Effectivity update: The information now also applies to MSN 11531.
DSC-52-40-30 Overhead Panel	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

DESCRIPTION

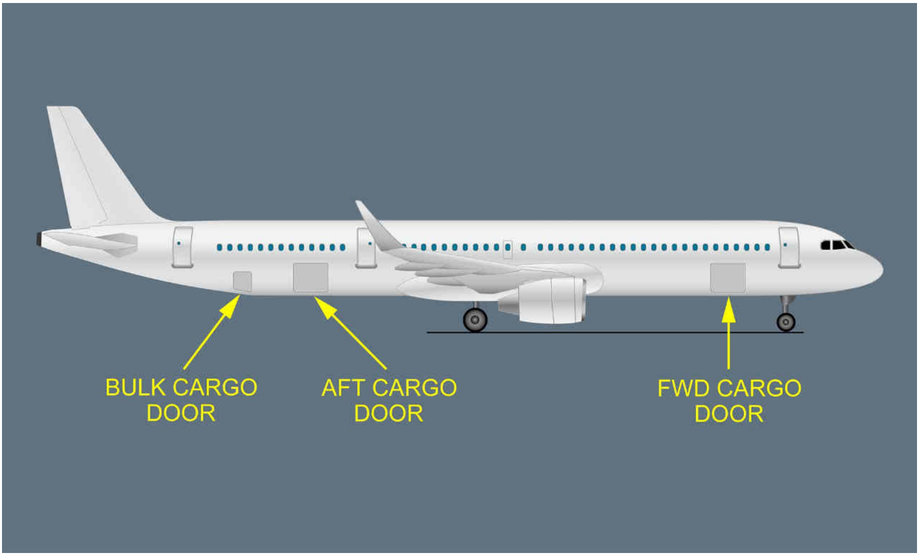
1 Ident.: DSC-52-10-10-00001544.0023001 / 03 NOV 21

Applicable to: MSN 11531

The A321's fuselage has:
- Six cabin doors (two FWD, two aft emergency, two aft)
- Two cabin emergency overwing exits
- Two cockpit emergency exits (sliding windows)
- Three cargo compartment doors
- Four avionic compartment access doors.


Cockpit Window Exit
FWD Cabin Door
Overwing Exit
Aft Emergency Exit
Aft Cabin Door
Avionics Compartment Access Door

Note:
- *FWD cabin doors are called doors 1 on the FAP*
- *Overwing exits are called doors 2 on the FAP*
- *Aft emergency exits are called doors 3 on the FAP*
- *Aft cabin doors are called doors 4 on the FAP.*

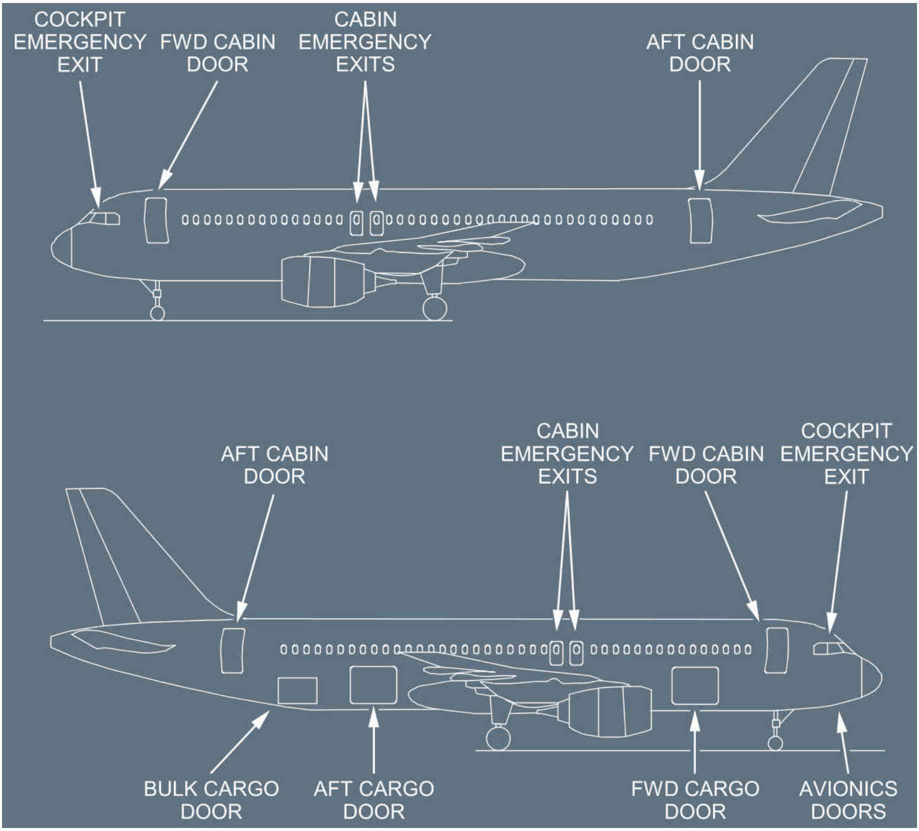


DESCRIPTION

Ident.: DSC-52-10-10-00001544.0002001 / 22 MAY 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

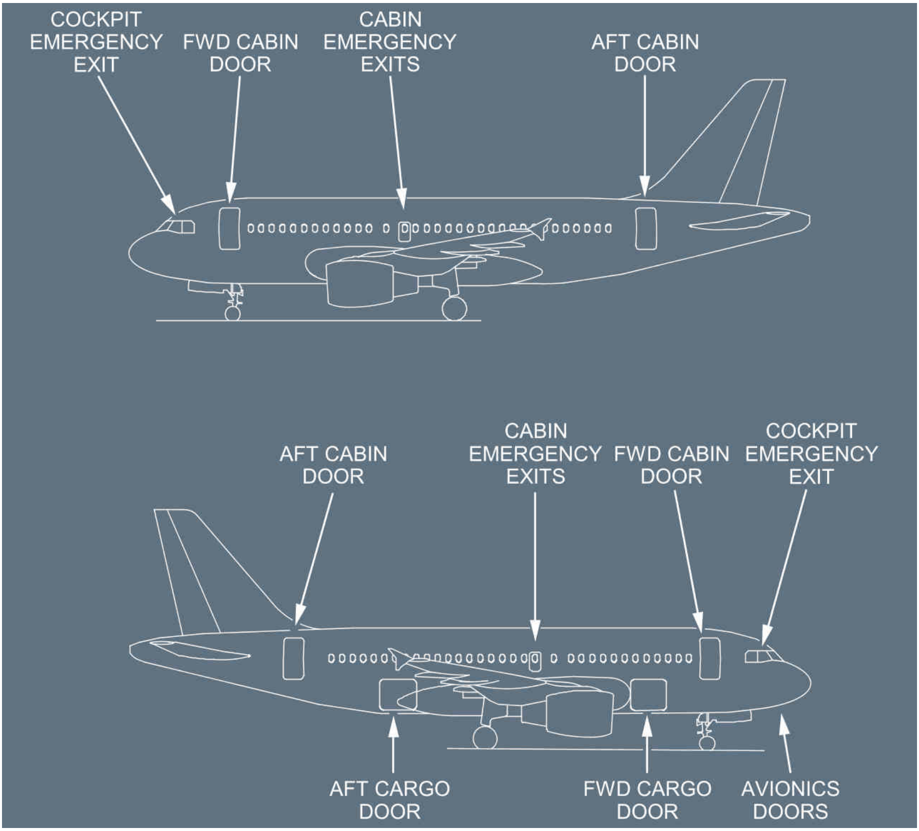
The A320's fuselage has:
- Four passenger doors
- Four emergency exits in the cabin
- Cockpit emergency exits (two sliding windows)
- Three cargo compartment doors
- Four avionic compartment access doors.


COCKPIT EMERGENCY EXIT
FWD CABIN DOOR
CABIN EMERGENCY EXITS
AFT CABIN DOOR
AFT CABIN DOOR
CABIN EMERGENCY EXITS
FWD CABIN DOOR
COCKPIT EMERGENCY EXIT
BULK CARGO DOOR
AFT CARGO DOOR
FWD CARGO DOOR
AVIONICS DOORS

DESCRIPTION

Ident.: DSC-52-10-10-00001544.0004001 / 22 MAY 12
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

The A319's fuselage has:
- Four passenger doors
- Two emergency exits in the cabin
- Cockpit emergency exits (two sliding windows)
- Two cargo compartment doors
- Four avionic compartment access doors.

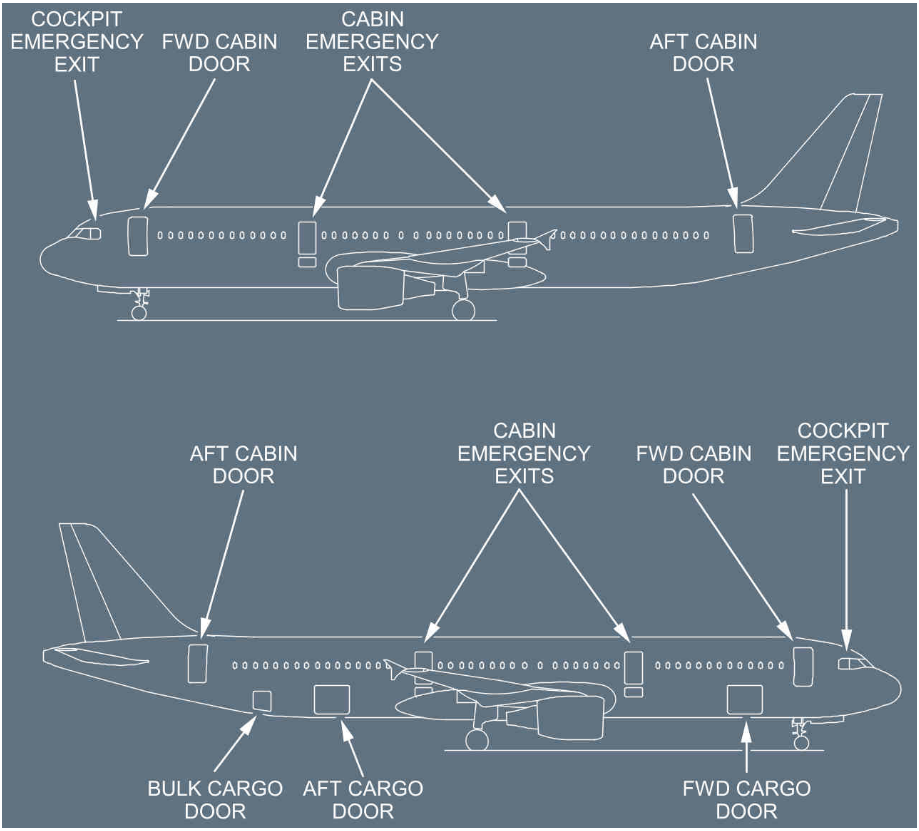

COCKPIT EMERGENCY EXIT
FWD CABIN DOOR
CABIN EMERGENCY EXITS
AFT CABIN DOOR
AFT CABIN DOOR
CABIN EMERGENCY EXITS
FWD CABIN DOOR
COCKPIT EMERGENCY EXIT
AFT CARGO DOOR
FWD CARGO DOOR
AVIONICS DOORS

DESCRIPTION

Ident.: DSC-52-10-10-00001544.0007001 / 22 MAY 12

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

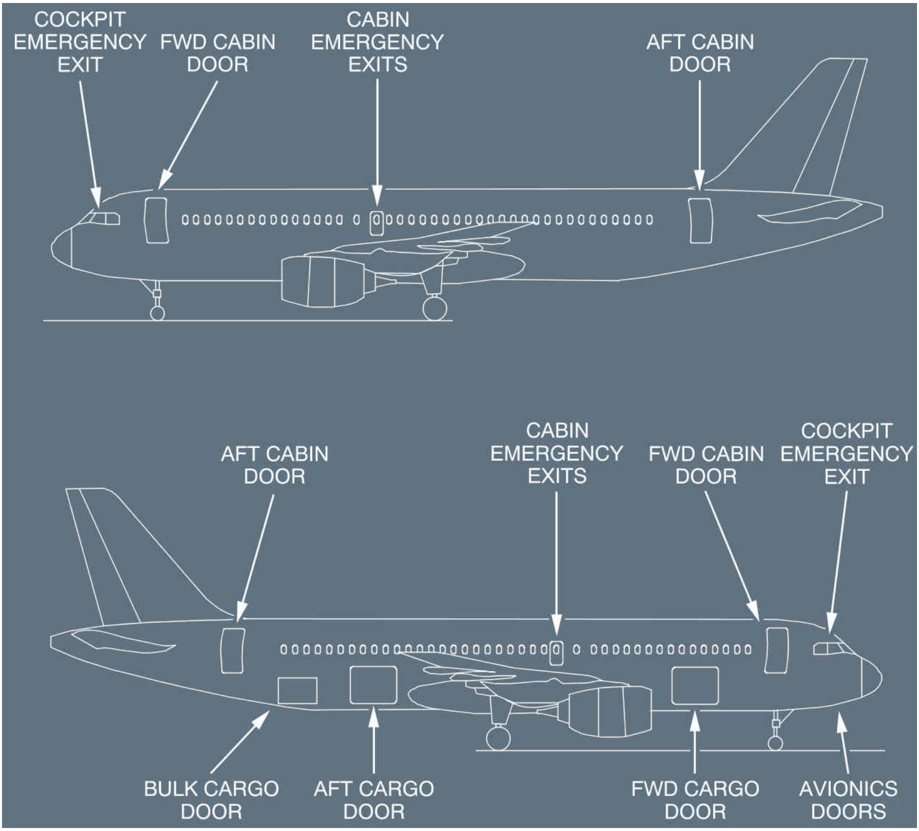
The A321's fuselage has :
- Four passenger doors
- Four emergency exits in the cabin
- Cockpit emergency exits (two sliding windows)
- Three cargo compartment doors
- Four avionic compartment access doors.


COCKPIT EMERGENCY EXIT
FWD CABIN DOOR
CABIN EMERGENCY EXITS
AFT CABIN DOOR
AFT CABIN DOOR
CABIN EMERGENCY EXITS
FWD CABIN DOOR
COCKPIT EMERGENCY EXIT
BULK CARGO DOOR
AFT CARGO DOOR
FWD CARGO DOOR

DESCRIPTION

Ident.: DSC-52-10-10-00001544.0016001 / 02 JUL 12
Applicable to: MSN 04827-04860

The A320's fuselage has:
- Four passenger doors
- Two emergency exits in the cabin
- Cockpit emergency exits (two sliding windows)
- Three cargo compartment doors
- Four avionic compartment access doors.


COCKPIT EMERGENCY EXIT
FWD CABIN DOOR
CABIN EMERGENCY EXITS
AFT CABIN DOOR
AFT CABIN DOOR
CABIN EMERGENCY EXITS
FWD CABIN DOOR
COCKPIT EMERGENCY EXIT
BULK CARGO DOOR
AFT CARGO DOOR
FWD CARGO DOOR
AVIONICS DOORS

GENERAL

Ident.: DSC-52-10-20-00017564.0001001 / 12 MAY 22
Applicable to: ALL

The aircraft has four plug-type doors that open outward and forward. There are two doors on each side of the fuselage (one door in the FWD section and one door in the AFT section).
The doors are operated from inside or outside of the aircraft. Normal operation is manual, with hydraulic damping.

Each door has emergency features:
- A slide stowed in a container attached to the inboard lower side of the door
- A damper actuator. In normal mode, the damper actuator limits the door travel. In emergency mode, the damper actuator drives the automatic door opening
- A slide arming lever.

Note: *The aircraft can be equipped with either escape slide or slide raft.*

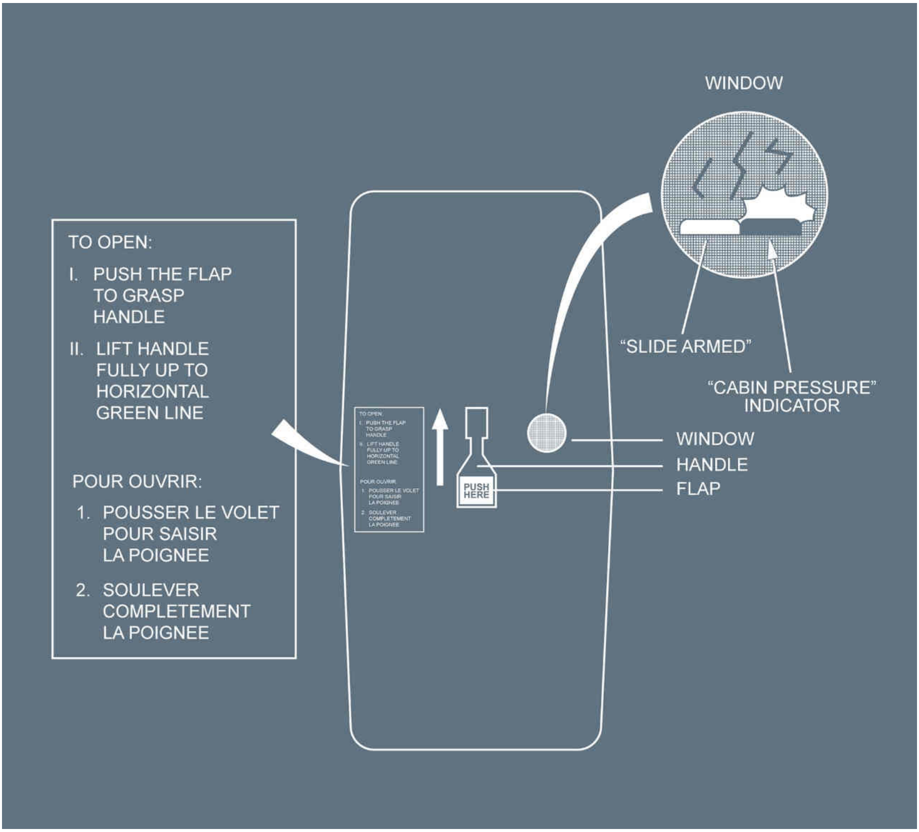
When the slide arming lever is in the ARMED position, the slide is connected to the floor brackets on both sides of the door. When the door is opened, the slide inflates and deploys automatically. If the inflation bottle fails to discharge automatically, a crew member can open its valve to make it discharge. Opening the door from outside disarms the door and the slide.

Each passenger door has :
- A mechanical locking indicator that confirms the locked or unlocked position of the door
- One warning light to show the ARMED or DISARMED indication of the slides
- One CABIN PRESSURE warning light that illuminates in the case of a residual pressure in the cabin.

OUTSIDE

Ident.: DSC-52-10-20-00017565.0001001 / 21 MAR 16

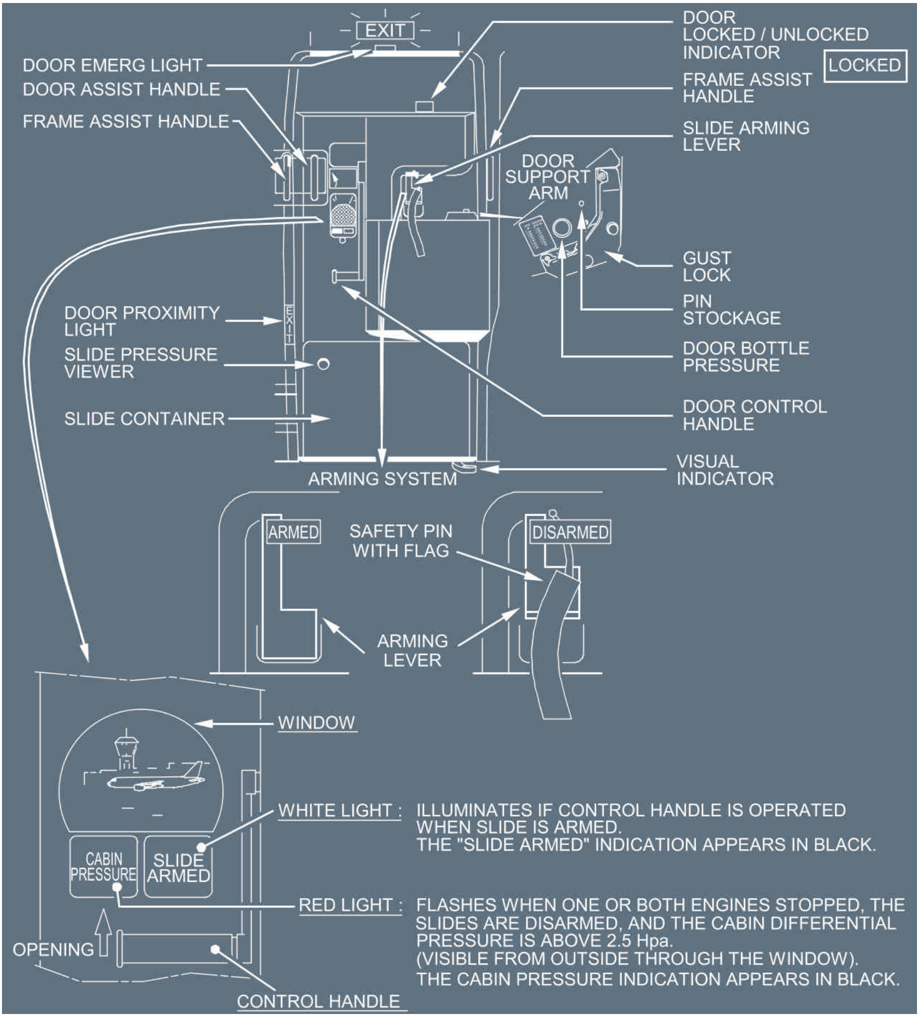
Applicable to: ALL


TO OPEN:
I. PUSH THE FLAP TO GRASP HANDLE
II. LIFT HANDLE FULLY UP TO HORIZONTAL GREEN LINE
POUR OUVRIR:
1. POUSSER LE VOLET POUR SAISIR LA POIGNEE
2. SOULEVER COMPLETEMENT LA POIGNEE
PUSH HERE
WINDOW
"SLIDE ARMED"
"CABIN PRESSURE" INDICATOR
WINDOW
HANDLE
FLAP

INSIDE

Ident.: DSC-52-10-20-00001547.0002001 / 22 MAY 12

Applicable to: ALL


EXIT
DOOR EMERG LIGHT
DOOR ASSIST HANDLE
FRAME ASSIST HANDLE
DOOR LOCKED / UNLOCKED INDICATOR
LOCKED
FRAME ASSIST HANDLE
SLIDE ARMING LEVER
DOOR SUPPORT ARM
GUST LOCK
PIN STOCKAGE
DOOR BOTTLE PRESSURE
DOOR CONTROL HANDLE
DOOR PROXIMITY LIGHT
SLIDE PRESSURE VIEWER
SLIDE CONTAINER
EXIT
ARMING SYSTEM
VISUAL INDICATOR
ARMED
SAFETY PIN WITH FLAG
DISARMED
ARMING LEVER
WINDOW
CABIN PRESSURE
SLIDE ARMED
OPENING
CONTROL HANDLE

WHITE LIGHT : ILLUMINATES IF CONTROL HANDLE IS OPERATED WHEN SLIDE IS ARMED.
THE "SLIDE ARMED" INDICATION APPEARS IN BLACK.

RED LIGHT : FLASHES WHEN ONE OR BOTH ENGINES STOPPED, THE SLIDES ARE DISARMED, AND THE CABIN DIFFERENTIAL PRESSURE IS ABOVE 2.5 Hpa.
(VISIBLE FROM OUTSIDE THROUGH THE WINDOW).
THE CABIN PRESSURE INDICATION APPEARS IN BLACK.

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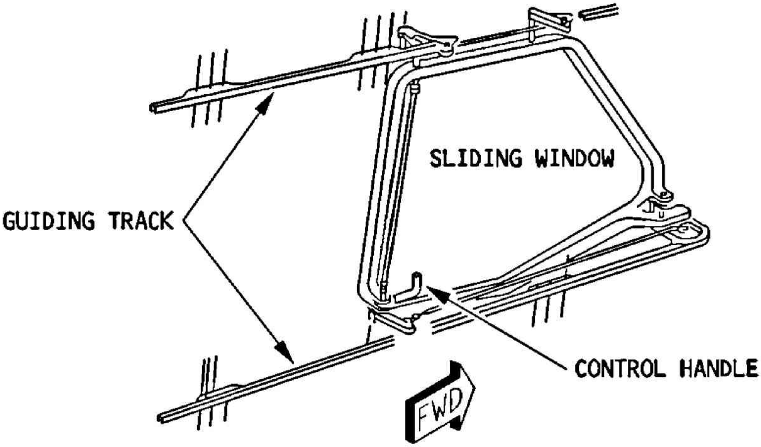
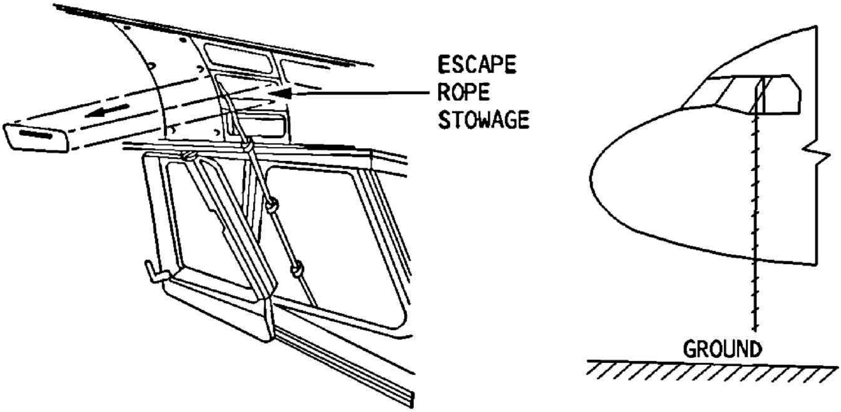
COCKPIT

Ident.: DSC-52-10-30-00017567.0001001 / 21 MAR 16
Applicable to: ALL

The two sliding windows in the cockpit are flight crew emergency exits.
A small compartment, located above each window, contains an escape rope that is long enough to reach the ground when lowered through either sliding window. The cockpit windows can only be opened from inside.


SLIDING WINDOW
GUIDING TRACK
CONTROL HANDLE
FWD


ESCAPE
ROPE
STOWAGE
GROUND

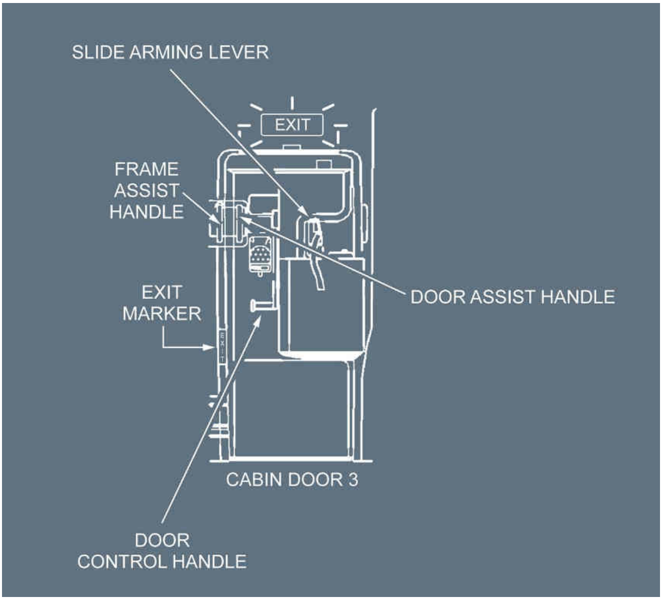
Emergency cockpit evacuation is also possible through the cockpit door escape panel ◁ . This panel is designed to be pushed open in the direction of the cabin after removal of the quick-release pins.

CABIN

1 Ident.: DSC-52-10-30-00017568.0011001 / 09 MAR 18
Applicable to: MSN 11531

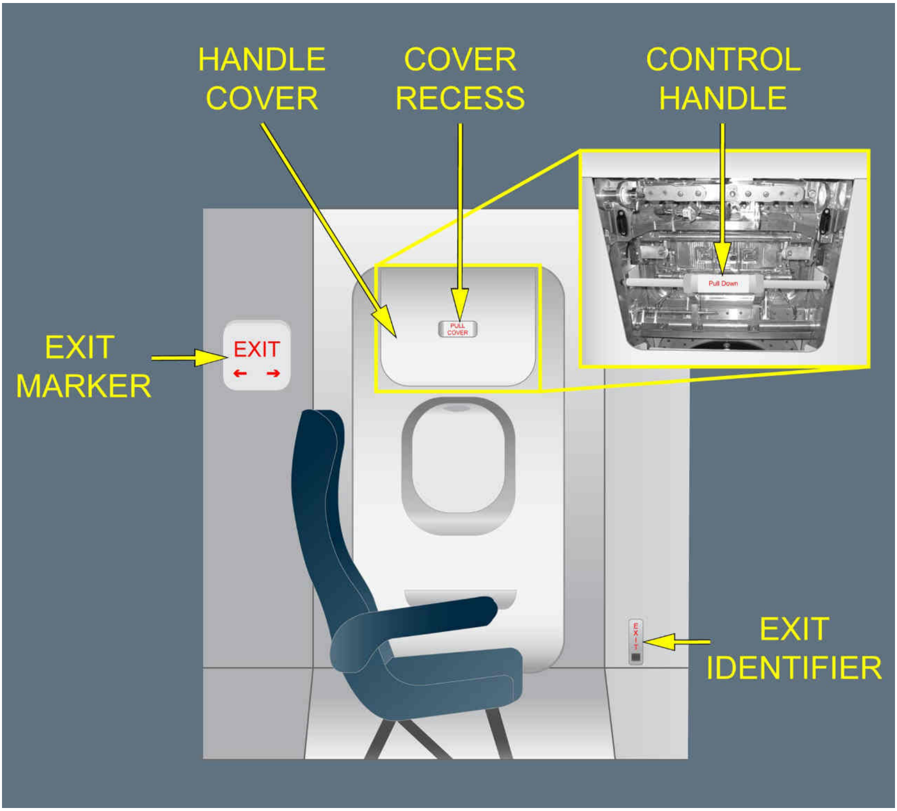
CABIN DOORS 3

One plug type door on each side of the cabin are emergency exits. The exits open outward and forward. Each cabin door 3 has an escape slide stowed in a compartment below the cabin floor. The operation of these emergency exits is similar to the operation of passenger doors.


SLIDE ARMING LEVER
EXIT
FRAME ASSIST HANDLE
EXIT MARKER
DOOR ASSIST HANDLE
CABIN DOOR 3
DOOR CONTROL HANDLE

CABIN OVERWING EXITS

One overwing exit is located on each side of the cabin, in addition to the passenger doors. The overwing exits are also equipped with escape slides. In the case of an emergency, the overwing exits open outward and up.


HANDLE COVER
COVER RECESS
CONTROL HANDLE
Pull Down
PULL COVER
EXIT MARKER
EXIT
← →
EXIT IDENTIFIER
EXIT

The slides of the overwing exits are always in armed configuration.

To open an overwing exit:

- Remove and discard the HANDLE COVER via the COVER RECESS
- Fully pull down and release the CONTROL HANDLE

Each overwing exit is equipped with an electrical flight lock actuator that locks the overwing exit handle, in order to prevent inadvertent operation during flight.
All flight lock actuators engage during the takeoff roll.

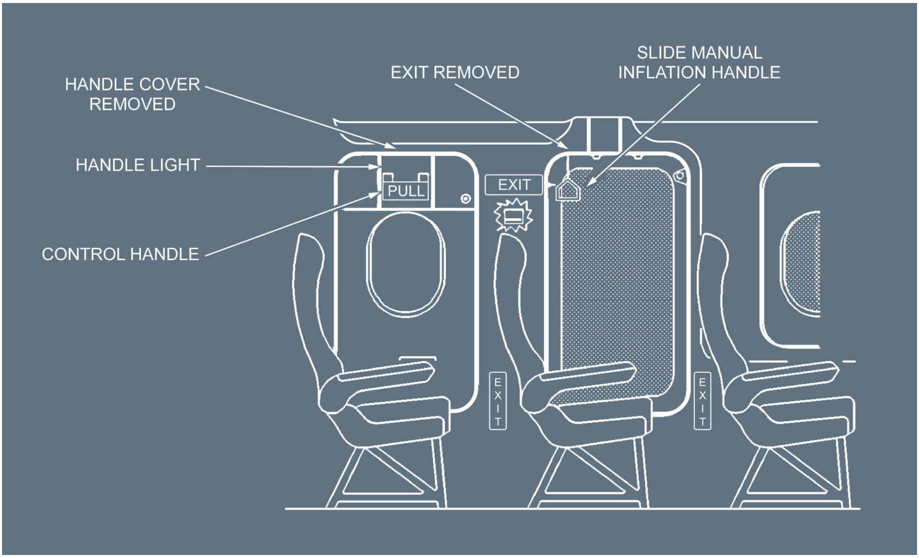
All flight lock actuators disengage:
- During the landing roll, or
- In the case of a rejected takeoff, or
- In the case of a loss of DC BUS 1.

CABIN

Ident.: DSC-52-10-30-00017568.0001001 / 06 DEC 16

2 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

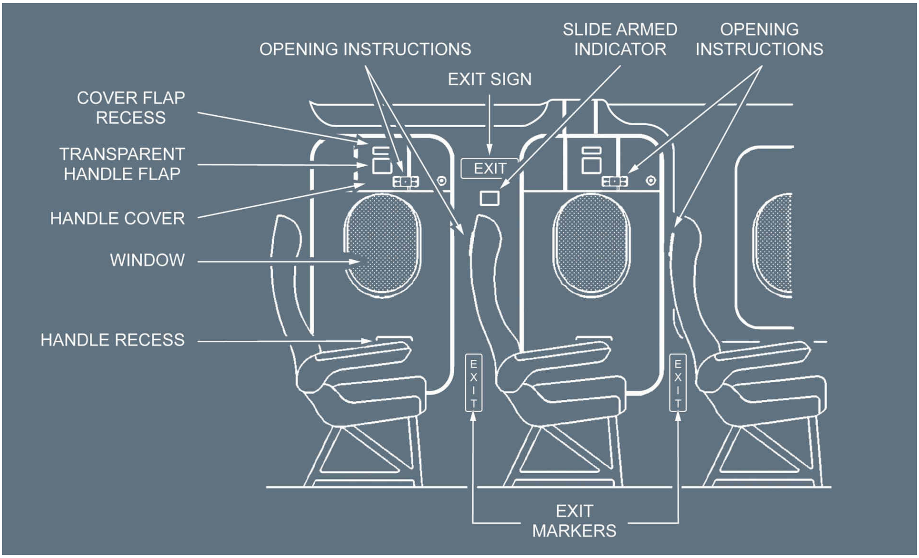
Two emergency exits are located on each side of the cabin, in addition to the passenger doors. The emergency exits are also equipped with escape slides. In the case of an emergency, the exits open inwards.



The slides of the overwing emergency exits are always in armed configuration.

To open :
- Remove HANDLE COVER : The HANDLE LIGHT and SLIDE ARMED indicator illuminate
- Pull CONTROL HANDLE : The EXIT moves inwards
- Lift EXIT from frame by holding the HANDLE RECESS

- Throw EXIT out.

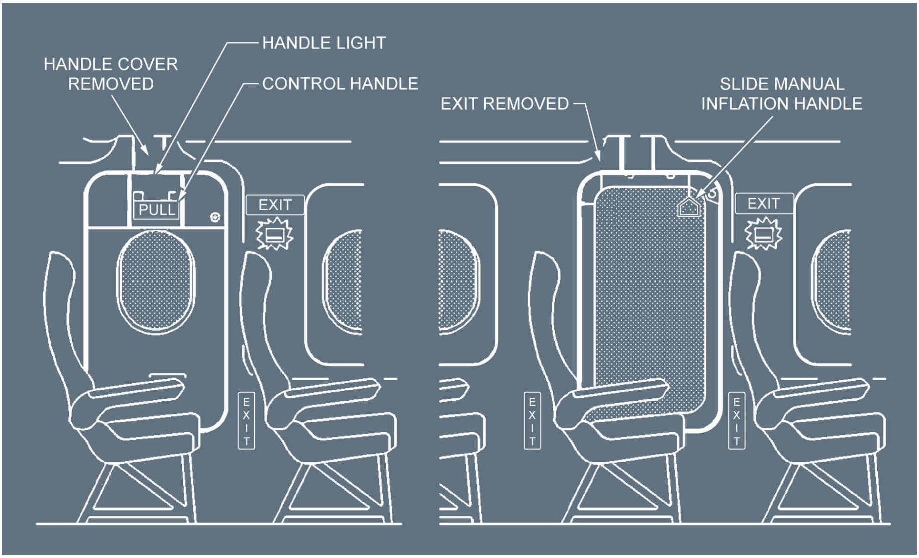

OPENING INSTRUCTIONS
SLIDE ARMED INDICATOR
OPENING INSTRUCTIONS
EXIT SIGN
COVER FLAP RECESS
TRANSPARENT HANDLE FLAP
HANDLE COVER
WINDOW
HANDLE RECESS
EXIT
EXIT
EXIT
EXIT MARKERS

CABIN

Ident.: DSC-52-10-30-00017568.0002001 / 20 MAR 17

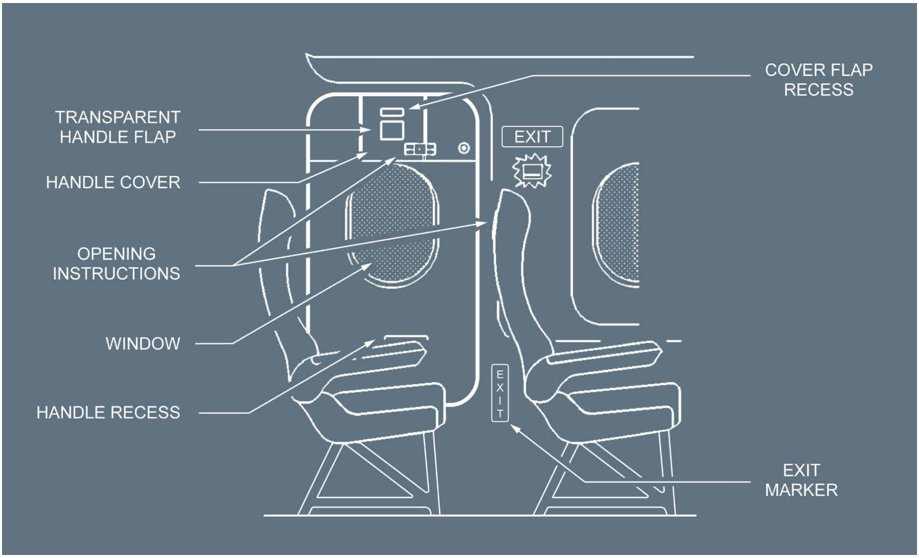
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345

One emergency exits is located on each side of the cabin, in addition to the passenger doors. The emergency exit is also equipped with an escape slide. In the case of an emergency, the exit opens inwards.


HANDLE LIGHT
HANDLE COVER
REMOVED
CONTROL HANDLE
EXIT REMOVED
SLIDE MANUAL
INFLATION HANDLE
PULL
EXIT
EXIT
EXIT
EXIT
EXIT

The slide of the overwing emergency exits is always in armed configuration.

To open:
- Remove HANDLE COVER : The HANDLE LIGHT and SLIDE ARMED indicator illuminate
- Pull CONTROL HANDLE : The EXIT moves inwards
- Lift EXIT from frame by holding the HANDLE RECESS
- Throw EXIT out.

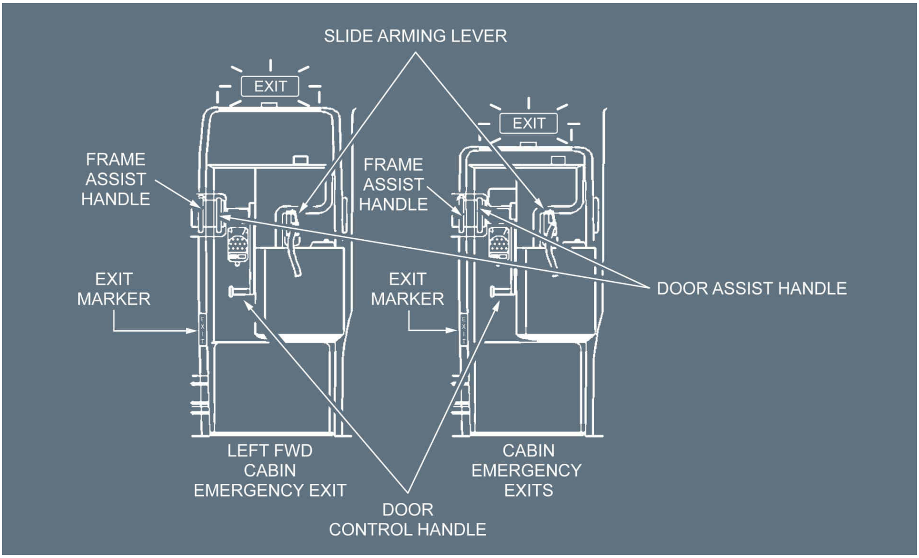

COVER FLAP RECESS
TRANSPARENT HANDLE FLAP
EXIT
HANDLE COVER
OPENING INSTRUCTIONS
WINDOW
HANDLE RECESS
EXIT
EXIT MARKER

CABIN

Ident.: DSC-52-10-30-00017568.0004001 / 06 DEC 16

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Two plug type doors on each side of the cabin are emergency exits. The exits open outward and forward. Each emergency exit has an escape slide stowed in a compartment below the cabin floor. The operation of these emergency exits is similar to the operation of passenger doors.


SLIDE ARMING LEVER
EXIT
EXIT
FRAME ASSIST HANDLE
FRAME ASSIST HANDLE
EXIT MARKER
EXIT MARKER
DOOR ASSIST HANDLE
LEFT FWD CABIN EMERGENCY EXIT
CABIN EMERGENCY EXITS
DOOR CONTROL HANDLE

GENERAL

Ident.: DSC-52-10-40-00017569.0001001 / 21 MAR 16
Applicable to: ALL

The aircraft has two cargo doors (FWD and AFT cargo doors) on the right side of the fuselage below the cabin floor.

FWD AND AFT CARGO DOORS

Ident.: DSC-52-10-40-00017570.0001001 / 21 MAR 16
Applicable to: ALL

The FWD and AFT cargo doors hydraulically open outward and upward. The doors are hydraulically operated by the yellow hydraulic system. The door locking system (locked open/locked closed) is mechanical.
If the electric pump of the yellow hydraulic system fails, the system can be powered by using a hand pump, located on the hydraulic maintenance panel.
The FWD and AFT cargo doors open only from outside.

Note: *When the electric pump operates the FWD or AFT cargo door, the remaining yellow system devices that operate are the brakes and the engine 2 thrust reverser.*

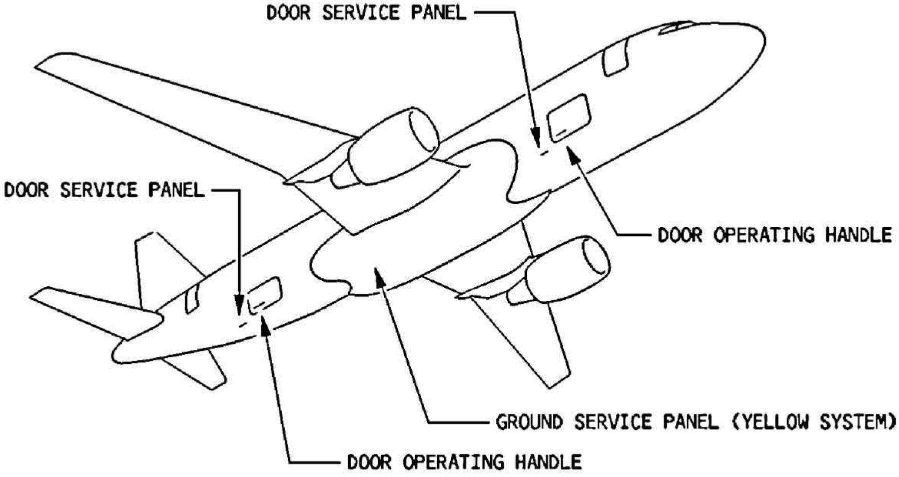
BULK CARGO DOOR ◁

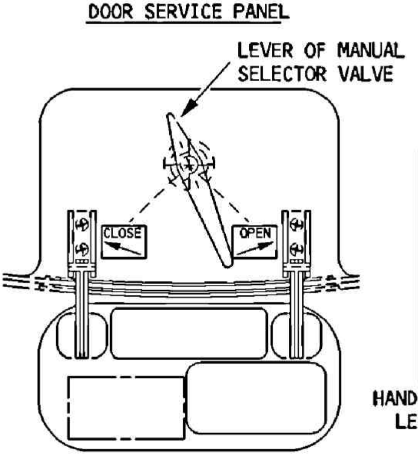
Ident.: DSC-52-10-40-00017571.0001001 / 21 MAR 16
Applicable to: ALL

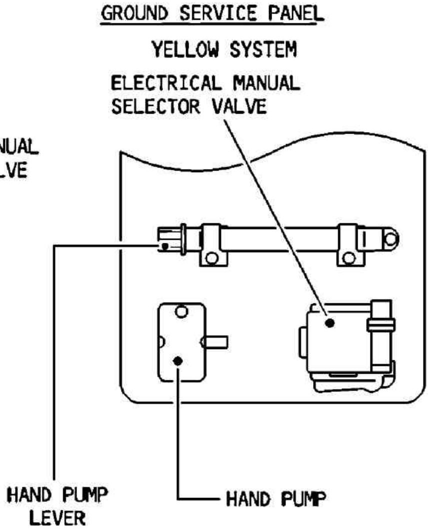
The bulk cargo door opens inward and upward. The bulk cargo door is a plug-type door. The door is mechanically locked and manually operated.
The bulk cargo door opens from the outside or from the inside.

LOCATION OF SERVICE PANELS

Ident.: DSC-52-10-40-00020676.0002001 / 17 MAR 17


DOOR SERVICE PANEL
DOOR SERVICE PANEL
DOOR OPERATING HANDLE
GROUND SERVICE PANEL (YELLOW SYSTEM)
DOOR OPERATING HANDLE


DOOR SERVICE PANEL
LEVER OF MANUAL SELECTOR VALVE
CLOSE
OPEN


GROUND SERVICE PANEL
YELLOW SYSTEM
ELECTRICAL MANUAL SELECTOR VALVE
HAND PUMP LEVER
HAND PUMP

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AVIONICS COMPARTMENT ACCESS DOOR

Ident.: DSC-52-10-50-00017579.0001001 / 21 MAR 16
Applicable to: ALL

Four avionics compartment access doors enable an external access to the avionics compartment.
The doors are manually operated, hinged doors. The doors open inwards.
These doors are in the lower fuselage, around the nose landing gear bay.

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COCKPIT DOOR

Ident.: DSC-52-10-60-00017573.0002001 / 21 MAR 17
1 **Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Refer to DSC-52-40-10 Cockpit Door Description for information about the secured cockpit door.

COCKPIT DOOR

Ident.: DSC-52-10-60-00017573.0001001 / 21 MAR 16
Applicable to: MSN 01143-01251, 01518, 01593-01628

A forward-opening hinged door separates the cockpit from the passenger compartment. In the case of an emergency, the cockpit door can be forced open in either direction.

The cockpit door has:
- An electric locking latch ◁ controlled by the DOOR UNLOCK pb on the pedestal
- An eye-level viewing lens.

To unlock the door, the pilot must press the DOOR UNLOCK pb, and maintain it pressed, while the cabin attendant pushes the cockpit door open.

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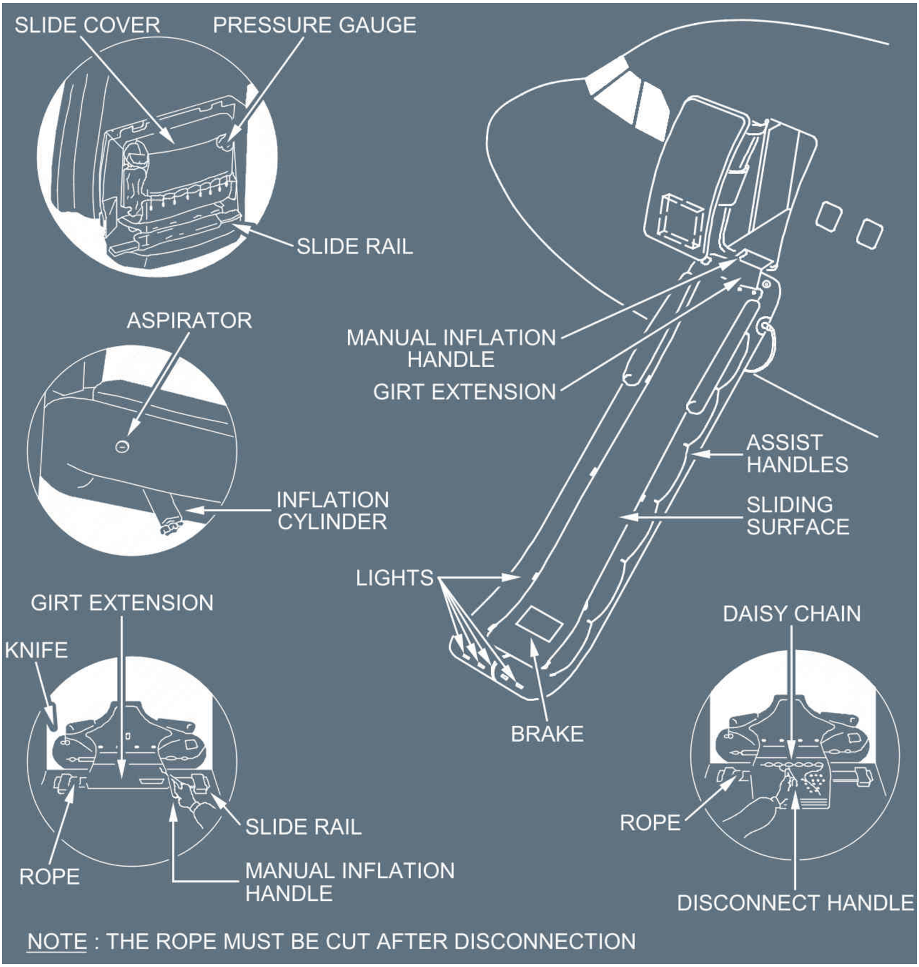
DOOR SLIDES

Ident.: DSC-52-10-80-00001555.0001001 / 09 OCT 12
Applicable to: ALL

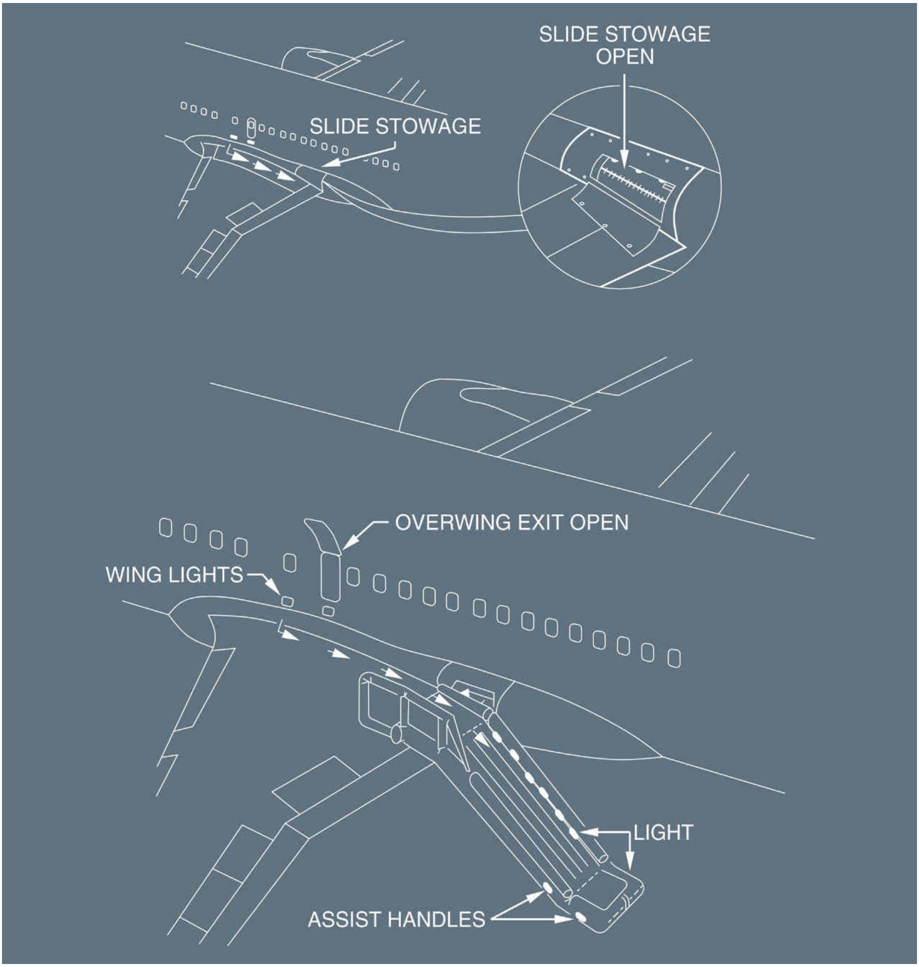

SLIDE COVER
PRESSURE GAUGE
SLIDE RAIL
ASPIRATOR
INFLATION CYLINDER
MANUAL INFLATION HANDLE
GIRT EXTENSION
ASSIST HANDLES
SLIDING SURFACE
LIGHTS
GIRT EXTENSION
KNIFE
BRAKE
DAISY CHAIN
SLIDE RAIL
ROPE
ROPE
MANUAL INFLATION HANDLE
DISCONNECT HANDLE

NOTE : THE ROPE MUST BE CUT AFTER DISCONNECTION

WING SLIDES

1 Ident.: DSC-52-10-80-00001556.0008001 / 09 MAR 18

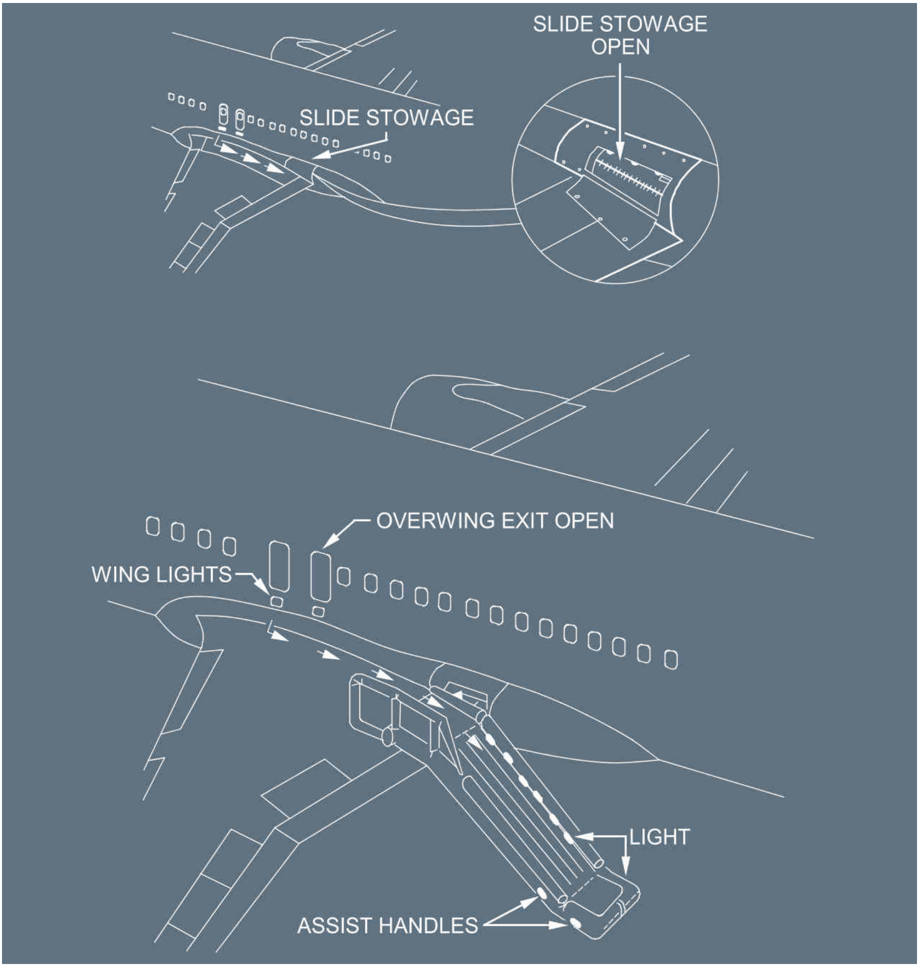
Applicable to: MSN 11531


SLIDE STOWAGE OPEN
SLIDE STOWAGE
OVERWING EXIT OPEN
WING LIGHTS
LIGHT
ASSIST HANDLES

WING SLIDES

Ident.: DSC-52-10-80-00001556.0001001 / 09 OCT 12

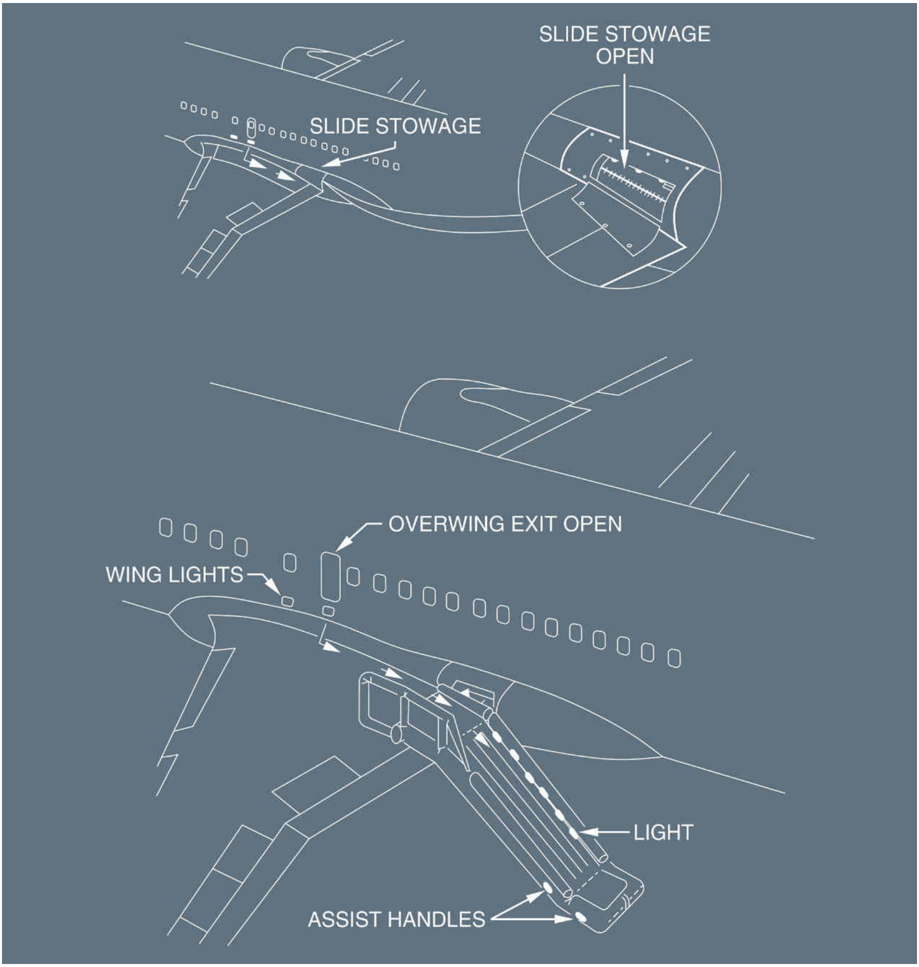
2 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


SLIDE STOWAGE
OPEN
SLIDE STOWAGE
OVERWING EXIT OPEN
WING LIGHTS
LIGHT
ASSIST HANDLES

WING SLIDES

Ident.: DSC-52-10-80-00001556.0002001 / 09 MAR 18

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345

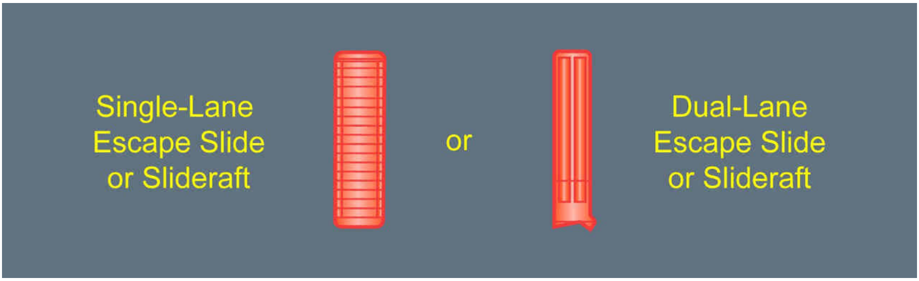

SLIDE STOWAGE OPEN
SLIDE STOWAGE
OVERWING EXIT OPEN
WING LIGHTS
LIGHT
ASSIST HANDLES

ESCAPE SLIDE ARRANGEMENT

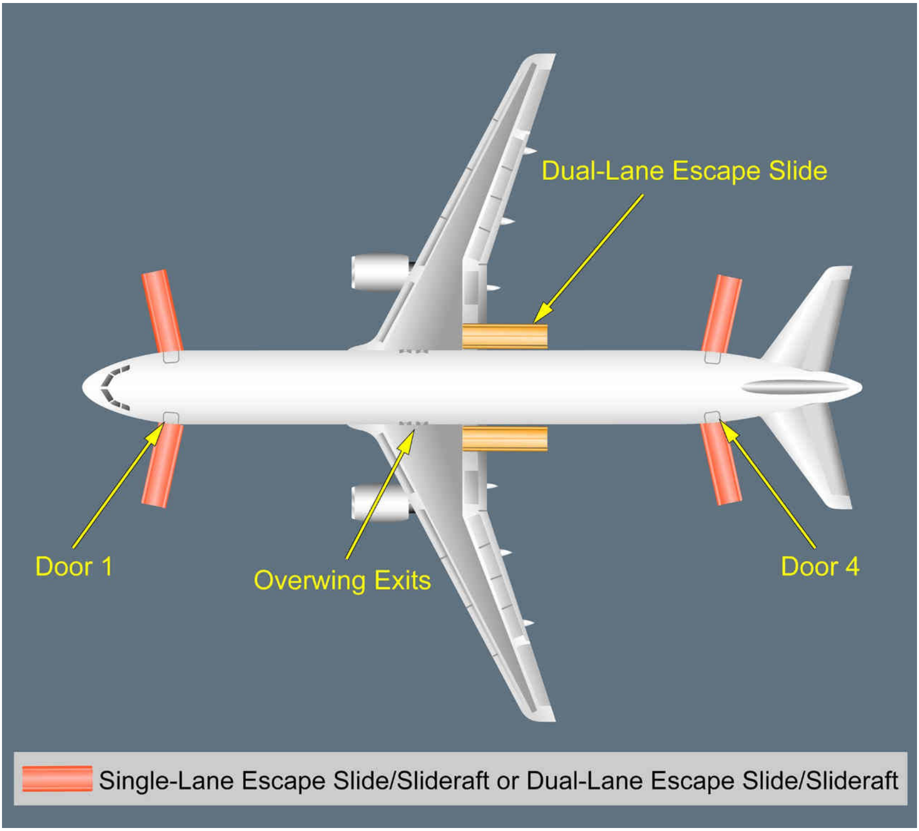
Ident.: DSC-52-10-80-00017577.0001001 / 26 NOV 19

3 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

There are two types of emergency slides: a single-lane escape slide/slideraft or a dual-lane escape slide/slideraft.



Each passenger door either has a single-lane escape slide/slideraft, or a dual-lane escape slide/slideraft, and each emergency exit has a dual-lane escape slide.

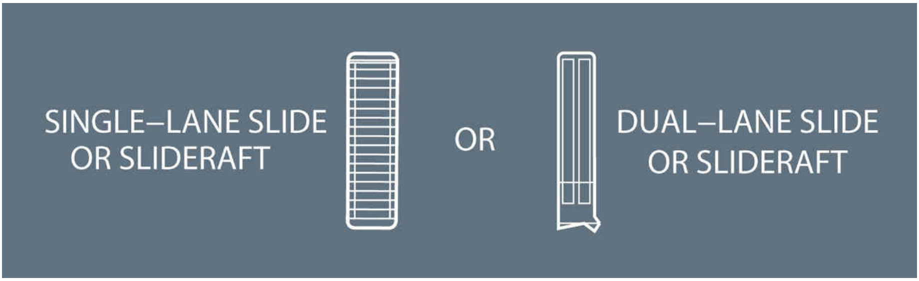

Dual-Lane Escape Slide
Door 1
Overwing Exits
Door 4
🟥 Single-Lane Escape Slide/Slideraft or Dual-Lane Escape Slide/Slideraft

ESCAPE SLIDE ARRANGEMENT

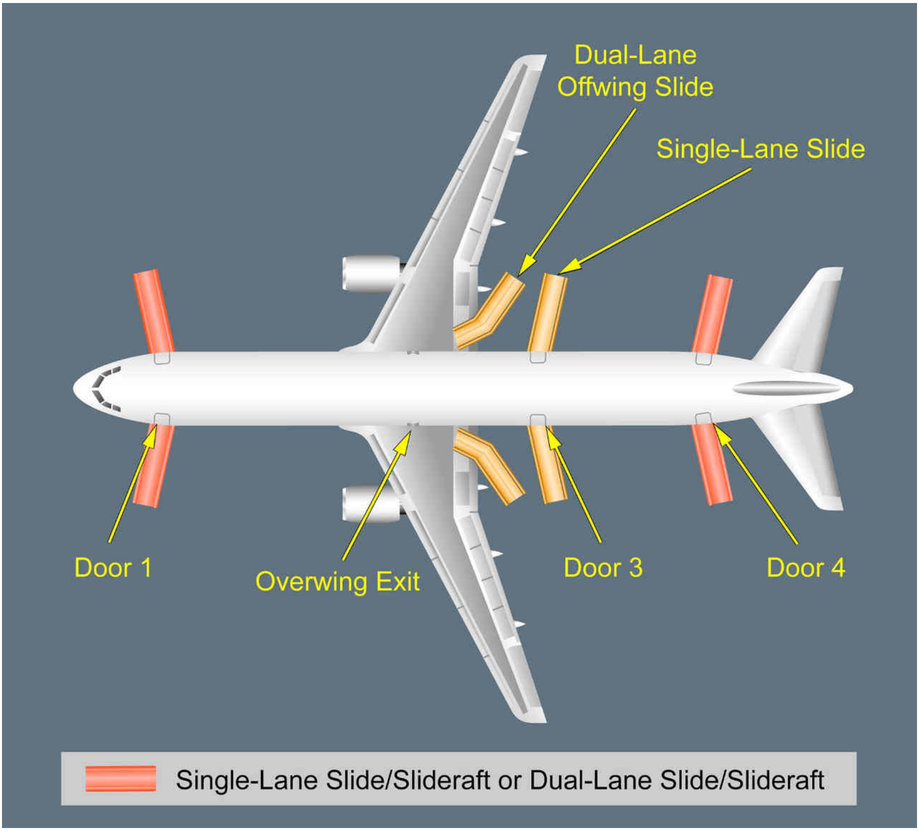
4 Ident.: DSC-52-10-80-00017577.0011001 / 09 MAR 18
Applicable to: MSN 11531

There are two types of emergency slides: a single-lane escape slide/slideraft or a dual-lane escape slide/slideraft.

DESCRIPTION - ESCAPE SLIDES/RAFTS


SINGLE–LANE SLIDE
OR SLIDERAFT
OR
DUAL–LANE SLIDE
OR SLIDERAFT

Each cabin door 1 & 4 either has a single-lane escape slide/slideraft or a dual-lane escape slide/slideraft, and each cabin door 3 has a single-lane escape slide.
Each overwing exit has a dual-lane escape slide.
In addition, to accommodate high density configurations, additional rafts may be installed in the overhead stowage compartments that are located near the doors.

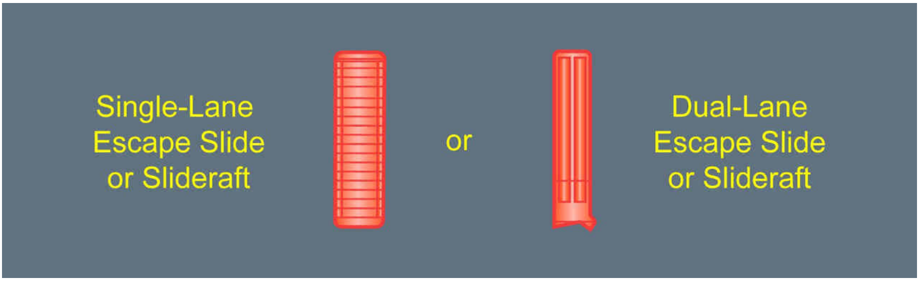

Dual-Lane
Offwing Slide
Single-Lane Slide
Door 1
Overwing Exit
Door 3
Door 4
🟥 Single-Lane Slide/Slideraft or Dual-Lane Slide/Slideraft

ESCAPE SLIDE ARRANGEMENT

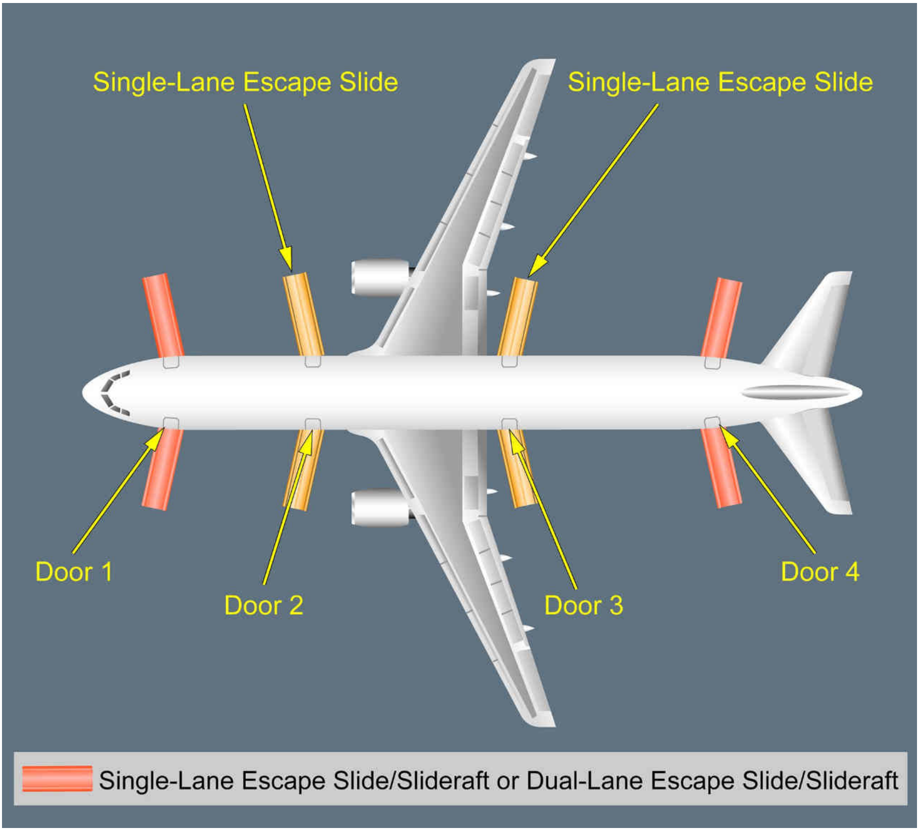
Ident.: DSC-52-10-80-00017577.0004001 / 26 NOV 19

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

There are two types of emergency slides: a single-lane escape slide/slideraft or a dual-lane escape slide/slideraft.


Single-Lane
Escape Slide
or Slideraft
or
Dual-Lane
Escape Slide
or Slideraft

Each cabin door 1 & 4 either has a single-lane escape slide/slideraft or a dual-lane escape slide/slideraft. Each cabin door 2 & 3 has a single-lane escape slide.
In addition, to accommodate high-density configurations, additional rafts may be installed in the overhead stowage compartments that are near the doors.

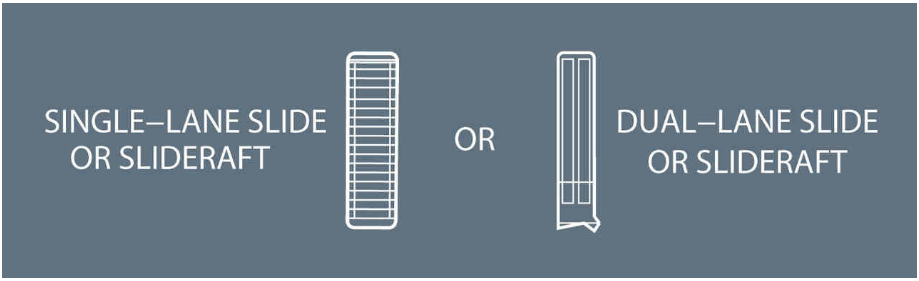

Single-Lane Escape Slide
Single-Lane Escape Slide
Door 1
Door 2
Door 3
Door 4
🟥 Single-Lane Escape Slide/Slideraft or Dual-Lane Escape Slide/Slideraft

ESCAPE SLIDE ARRANGEMENT

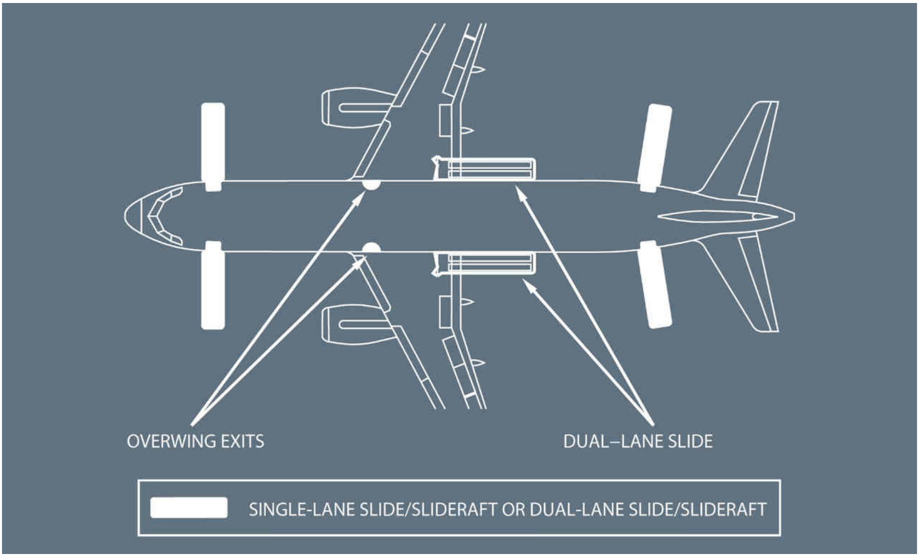
Ident.: DSC-52-10-80-00017577.0003001 / 21 MAR 16

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345

There are two types of emergency slides: a single-lane escape slide/slideraft or a dual-lane escape slide/slideraft.


SINGLE–LANE SLIDE
OR SLIDERAFT
OR
DUAL–LANE SLIDE
OR SLIDERAFT

Each passenger door either has a single-lane escape slide/slideraft or a dual-lane escape slide/slideraft, and each emergency exit has a dual-lane escape slide.


OVERWING EXITS
DUAL–LANE SLIDE
SINGLE-LANE SLIDE/SLIDERAFT OR DUAL-LANE SLIDE/SLIDERAFT

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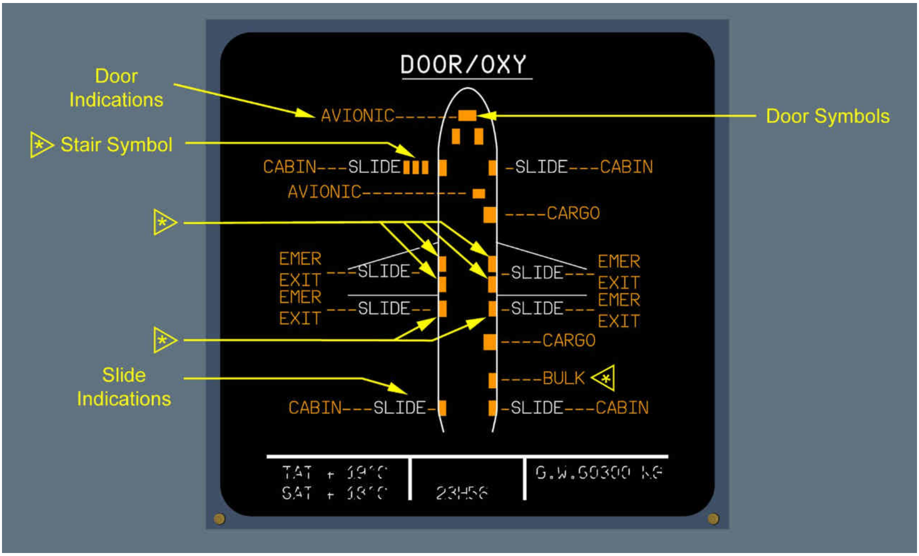
DOOR/OXY SD PAGE

1 Ident.: DSC-52-20-00017645.0008001 / 28 MAY 20
Applicable to: MSN 11531


Door
Indications
Stair Symbol
Door Symbols
Slide
Indications
DOOR/OXY
AVIONIC-----
CABIN---SLIDE
-SLIDE---CABIN
AVIONIC----------
----CARGO
EMER
EXIT
---SLIDE-
-SLIDE---
EMER
EXIT
EMER
EXIT
---SLIDE--
-SLIDE---
EMER
EXIT
----CARGO
----BULK
CABIN---SLIDE-
-SLIDE---CABIN
TAT + 19°C
SAT + 13°C
23H56
G.W.60300 KG

DOOR SYMBOLS

☐	The door is closed and locked.
■	The door is not locked.
X	The information is not valid.

DOOR INDICATIONS

AVIONIC-----	The door is not locked.
AVIONIC-----	The information is not valid.

SLIDE INDICATIONS

SLIDE	The slide is armed.

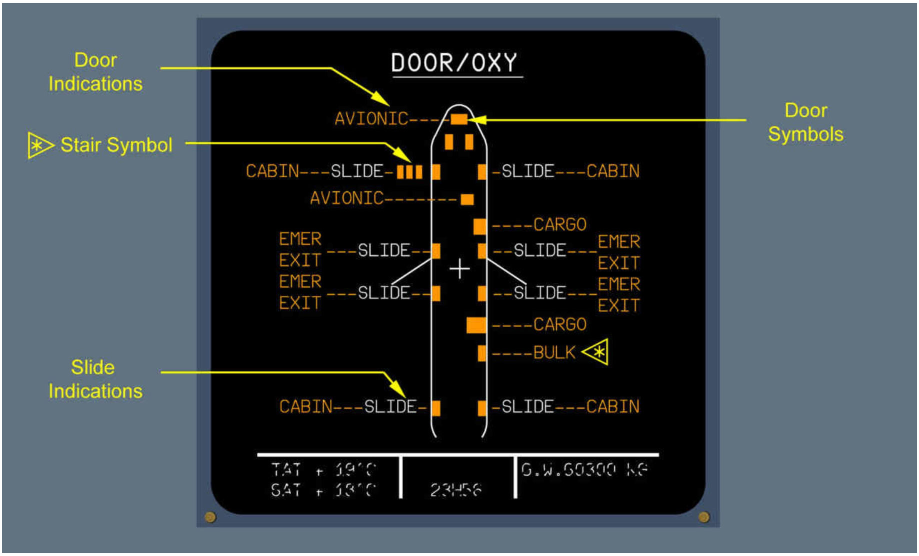
STAIR SYMBOL ⋖✳

▮▮▮	The stair door is not closed.

DOOR/OXY SD PAGE

Ident.: DSC-52-20-00017645.0004001 / 28 MAY 20

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098


Door Indications
Stair Symbol
Slide Indications
Door Symbols
DOOR/OXY
AVIONIC
CABIN---SLIDE
SLIDE---CABIN
AVIONIC
CARGO
EMER EXIT ---SLIDE
SLIDE--- EMER EXIT
EMER EXIT ---SLIDE
SLIDE--- EMER EXIT
CARGO
BULK
CABIN---SLIDE
SLIDE---CABIN
TAT +19°C
SAT +13°C
23H56
G.W.60300 KG

DOOR SYMBOLS

🟩	The door is closed and locked.
🟧	The door is not locked.
X	The information is not valid.

DOOR INDICATIONS

AVIONIC-----	The door is not locked.
AVIONIC-----	The information is not valid.

SLIDE INDICATIONS

SLIDE	The slide is armed.

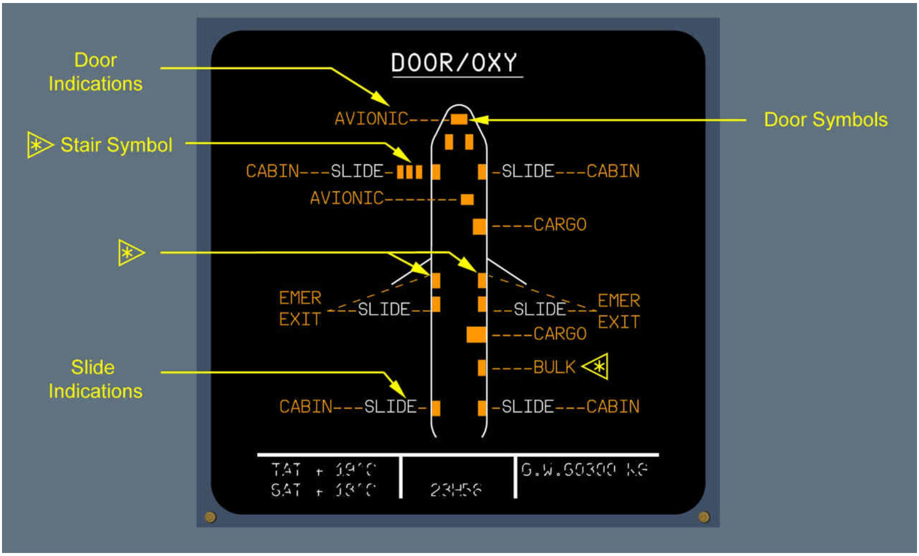
STAIR SYMBOL ◁

▮▮▮	The stair door is not closed.

DOOR/OXY SD PAGE

Ident.: DSC-52-20-00017645.0001001 / 28 MAY 20

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**


Door Indications
Stair Symbol
Door Symbols
Slide Indications
DOOR/OXY
AVIONIC---
CABIN---SLIDE-
-SLIDE---CABIN
AVIONIC--------
----CARGO
EMER EXIT
--SLIDE--
--SLIDE--
EMER EXIT
----CARGO
----BULK
CABIN---SLIDE-
-SLIDE---CABIN
TAT + 19°C
SAT + 13°C
23H56
G.W.60300 KG

DOOR SYMBOLS

□	The door is closed and locked.
🟧	The door is not locked.
X	The information is not valid.

Note: *For aircraft without FWD EMER EXIT ◁ doors, the FWD EMER EXIT door symbols are always displayed in green.*

DOOR INDICATIONS

AVIONIC-----	The door is not locked.
AVIONIC-----	The information is not valid.

SLIDE INDICATIONS

SLIDE	The slide is armed.

STAIR SYMBOL ◁

▮▮▮	The stair door is not closed.

COCKPIT DOOR DESCRIPTION

Ident.: DSC-52-40-10-00017010.0001001 / 17 MAR 17

1 **Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

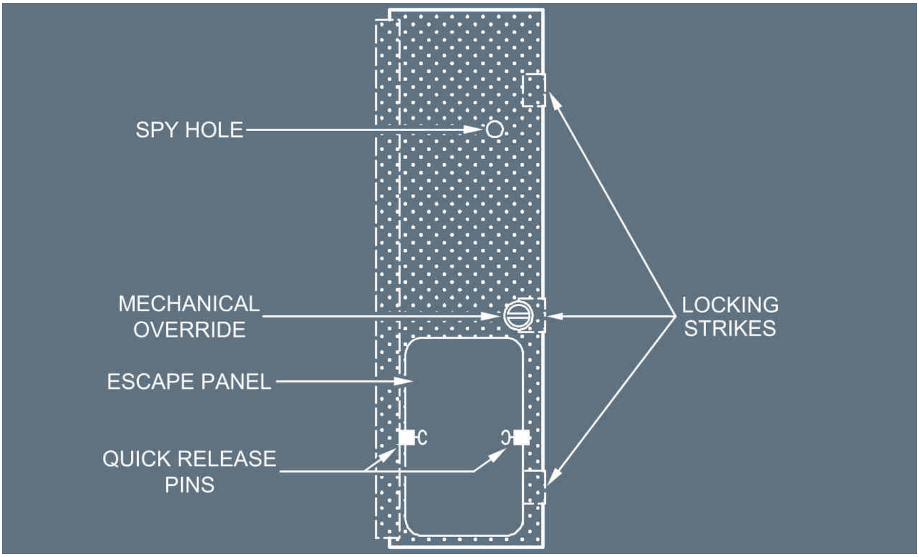
A forward-opening hinge door separates the cockpit from the passenger compartment. It has three electric locking strikes, controlled by the flight crew. In normal conditions, when the door is closed, they remain locked. When there is a request to enter the cockpit, the flight crew can authorize entry by unlocking the door, that remains closed until it is pushed open.

When the flight crew does not respond to requests for entry, the door can also be unlocked by the cabin crew, by entering a two to seven-digit code (programmed by the airline) on the keypad, installed on the lateral side of the Forward Attendant Panel (FAP).

The door is bulletproof and fully compliant with rapid decompression requirements.

A mechanical override enables the flight crew to open the door from the cockpit side.

A deadbolt ◁ is installed at the level of the center latch area of the cockpit door. This deadbolt bolts the door from the cockpit side, in the event that more than one locking latch strike fails, or in the case of a total CLS failure.



Note: 1. *The escape panel enables the flight crew to evacuate the cockpit, in case of an emergency, when the door is jammed. This panel can only be removed from the cockpit side by pulling the quick release pins towards the center of the flap and kicking the panel open.*
2. *In case of an electrical supply failure, the door is automatically unlocked, but remains closed.*

COCKPIT DOOR LOCKING SYSTEM (CDLS)

Ident.: DSC-52-40-20-00001007.0001001 / 21 MAR 17

1 **Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

The Cockpit Door Locking System (CDLS) provides a means of electrically locking and unlocking the cockpit door. This system is mainly composed of :
- A keypad, located in the forward cabin, near the cockpit door,
- A toggle switch, located in the center pedestal's Cockpit Door panel,
- A control unit and its CKPT DOOR CONT normal panel, located on the overhead panel,
- A buzzer.

The keypad enables the cabin crew to request access to the cockpit. There are two different access request types : “Routine” and “Emergency” access request.
The toggle switch enables the flight crew to lock or unlock the cockpit door, following an access request, thereby allowing or denying the entry to the cockpit.

The cockpit door control unit is the system controller, in charge of :
- Locking or unlocking the door latches, upon flight crew action.
- Unlocking the door, in case of cockpit decompression (the door then opens towards the cockpit under differential pressure).
- Indicating system failures of electrical latches and pressure sensors.
- Activating the access request buzzer and turning on the keypad LEDs.

The buzzer sounds in the cockpit for 1 to 9 s to indicate that a routine access request has been made, or sounds continuously if an emergency access procedure has been initiated.

CONTROLS

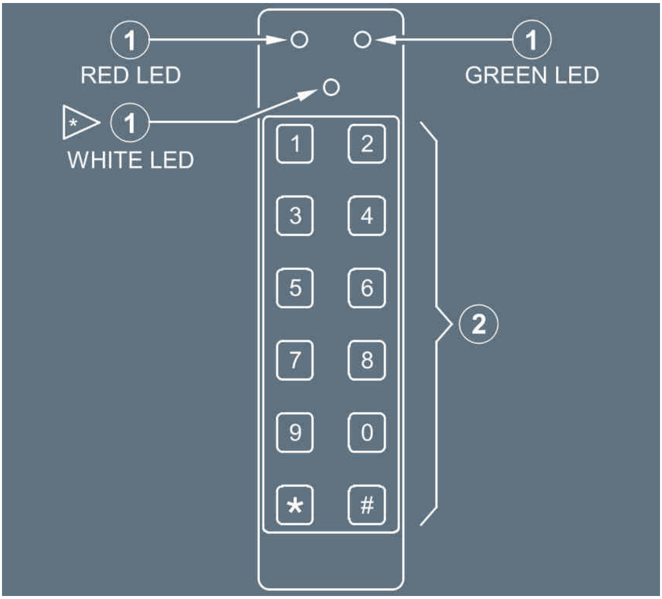
Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: DSC-52-40-20-A-00001008.0001001 / 21 MAR 17

2

KEYPAD

The keypad is used by the cabin crew to request pilots to open the door.



(1) Locked/Unlocked Door Indicator

GREEN light ON	:	The door has been unlocked either by a flight crew action, or automatically (during 5 s) when no flight crew action is performed during the delay following an emergency access request. The door can be pushed open.
GREEN light flashes	:	An emergency request to enter the cockpit has been made; the buzzer will sound continuously in the cockpit, but no action has yet been taken by the flight crew.
RED light ON	:	The flight crew has denied access, and the door remains locked.
WHITE light ON ◁*	:	The light comes on each time the cabin crew presses a key on the keypad.

(2) Digital Keypad
The keypad is used to sound the buzzer in the cockpit for 1 to 9 s (3 s by default), by entering a zero to seven-digit code, as programmed by the airline, followed by the '#' key.
It is also used to enter the two to seven-digit emergency code, followed by the '#' key, when the flight crew does not respond.

Note: *During the test performed by the cockpit door control unit, the CDLS keypad remains operational, and the CDLS operates as follows:*
The control unit will store access codes that are entered, and the LOCKED/UNLOCKED DOOR INDICATOR (RED/GREEN LEDs) of the keypad will remain on, as long as the test is running.

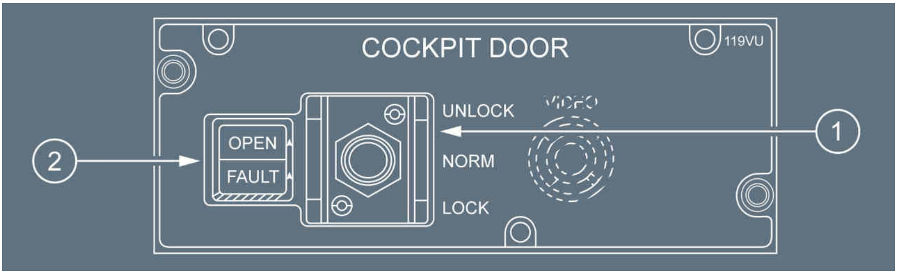
- *If the correct access code is entered on the keypad, the buzzer will not sound, until the test is completed.*
- *If the emergency access code is entered, the door will unlock. The cockpit buzzer and the LOCKED/UNLOCKED DOOR INDICATOR will be inoperative.*

Ident.: DSC-52-40-20-A-00018437.0001001 / 17 MAR 17

3

CENTRAL PEDESTAL COCKPIT DOOR PANEL

The secured cockpit door opening is controlled by a toggle switch, located on the central pedestal.



(1) COCKPIT DOOR toggle switch

UNLOCK position	:	This position is used to enable the cabin crewmember to open the door. The switch must be pulled and maintained in the unlock position until the door is pushed open.
NORM position	:	All latches are locked, and EMERGENCY access is possible for the cabin crew.
LOCK position	:	Once the button has been moved to this position, the door is locked ; emergency access, the buzzer, and the keypad are inhibited for a preselected time (5 to 20 min).

Note: 1. *If the LOCK position has not been used by the pilot, for at least 5 to 20 min, the cabin crew is able to request emergency access to open the cockpit door.*
2. *The UNLOCK position overrides and resets any previous selection.*
3. *In case of an electrical supply failure, the cockpit door is automatically unlocked, but remains closed.*

(2) COCKPIT DOOR Fault Open indicator

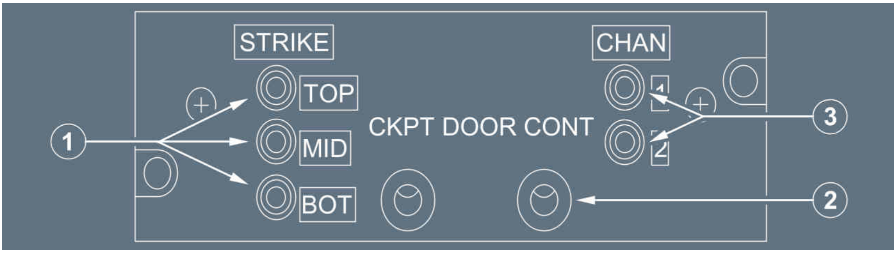
OPEN light ON	:	The door is not closed.
OPEN light flashes	:	The cabin crew has started an emergency access procedure. If there is no reaction from the flight crew, the door will unlock at the end of the adjustable time delay (15 to 120 s).
FAULT	:	This light comes on when a system failure has been identified (Example : Latch, pressure sensors, control unit). The inoperative item can be identified by checking the strike and pressure sensor status lights on the CKPT DOOR CONT panel.

Ident.: DSC-52-40-20-A-00001010.0001001 / 09 OCT 12

4

OVERHEAD CONTROL PANEL

The Cockpit Door Locking System's control panel is located on the overhead panel.



(1) Strikes' status lights

Off : The corresponding (upper, mid, or lower) locking latch is operative.

On : The corresponding (upper, mid, or lower) locking latch is faulty.

(2) Pressure sensor

Two redundant differential pressure sensors enable rapid pressure variation in the cockpit to be detected, in order to command simultaneous opening of all latches when a defined pressure drop is detected.

(3) Pressure sensor status lights

Off : The corresponding (1 or 2) pressure sensor is operative.

On : The corresponding (1 or 2) pressure sensor is faulty.

Note: *These indicators enable the crew to identify the faulty item, when the Central Pedestal Fault indicator light is ON.*

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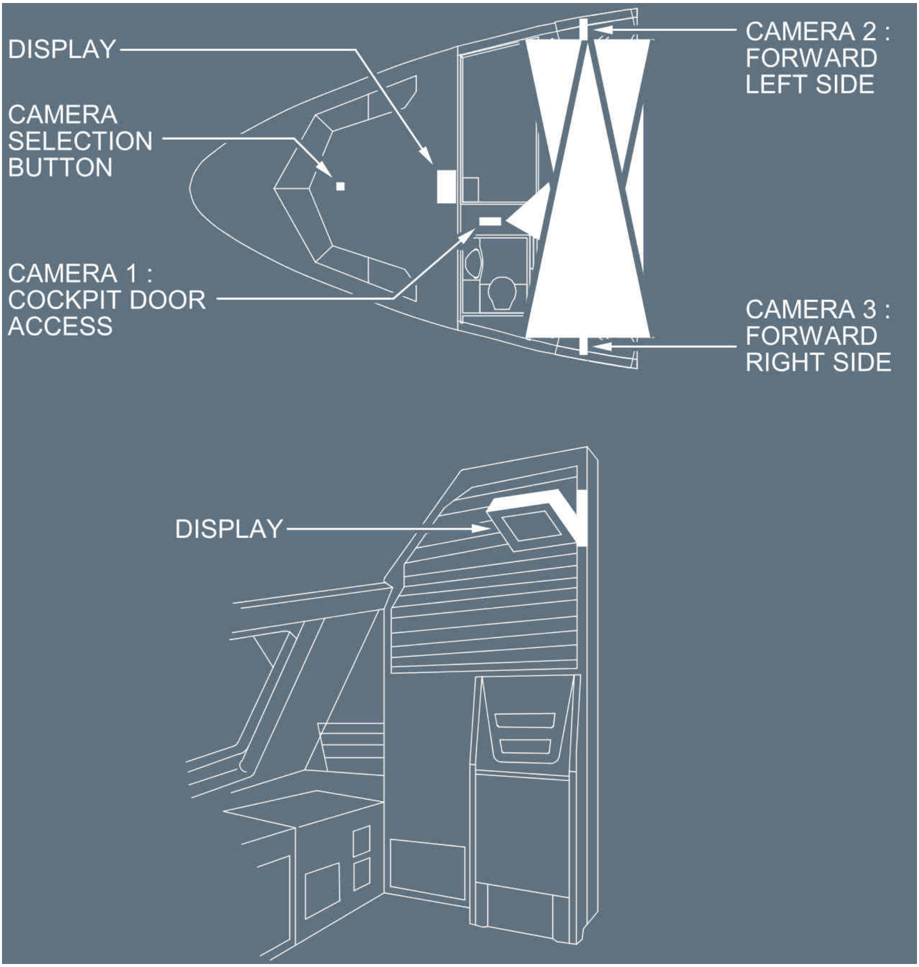
GENERAL

Ident.: DSC-52-40-30-00018415.0002001 / 17 MAR 17

1 **Applicable to: MSN 01459, 02321, 02734, 04827-04860, 05005, 05097, 08635-09324, 10949-11522, 11572-11597**

The Cockpit Door Surveillance system consists of three video cameras, which enable the flight crew to identify persons prior to authorizing their entry into the cockpit. An LCD display, located on the rear panel, shows the various camera views. It has automatic brightness adjustment and is activated by the Cockpit Door Video pb.

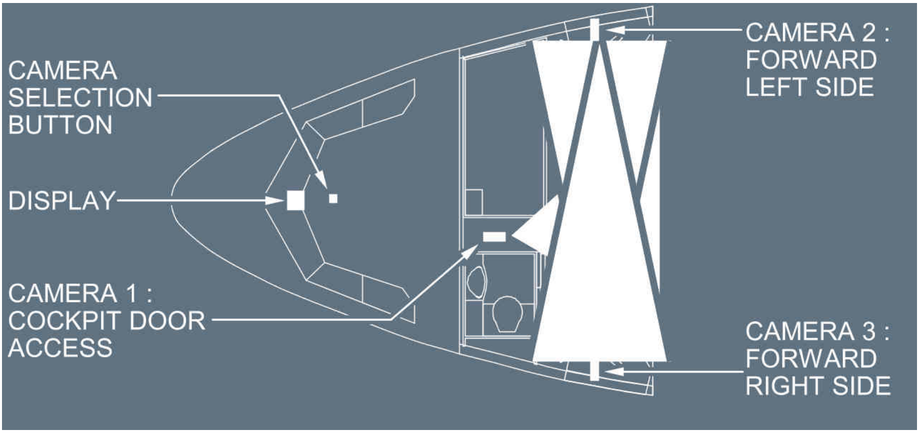

DISPLAY
CAMERA SELECTION BUTTON
CAMERA 1 : COCKPIT DOOR ACCESS
CAMERA 2 : FORWARD LEFT SIDE
CAMERA 3 : FORWARD RIGHT SIDE
DISPLAY

GENERAL

Ident.: DSC-52-40-30-00018415.0001001 / 17 MAR 17

2 **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11531**

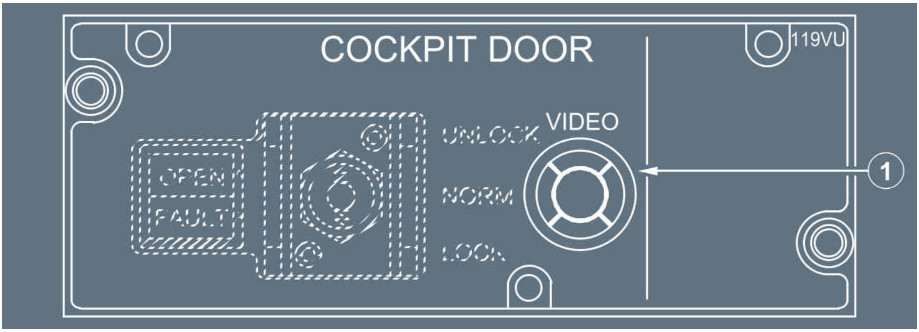
The Cockpit Door Surveillance System (CDSS) consists of three video cameras, that enable the flight crew to identify persons prior to authorizing their entry into the cockpit. The lower ECAM display displays the various camera views. A control panel, located on the central pedestal allows the flight crew members to select the CDSS display on the SD and to swap between the different camera views.


CAMERA SELECTION BUTTON
DISPLAY
CAMERA 1 : COCKPIT DOOR ACCESS
CAMERA 2 : FORWARD LEFT SIDE
CAMERA 3 : FORWARD RIGHT SIDE

CONTROLS

Ident.: DSC-52-40-30-A-00018416.0004001 / 17 MAR 17

3 **Applicable to: MSN 02321, 02734, 04827-04860, 05005, 05097, 08635-09324, 10949-11522, 11572-11597**


COCKPIT DOOR
119VU
OPEN
FAULT
UNLOCK
NORM
LOCK
VIDEO
1

(1) Cockpit Door Video pb
Selects the various camera image displays.

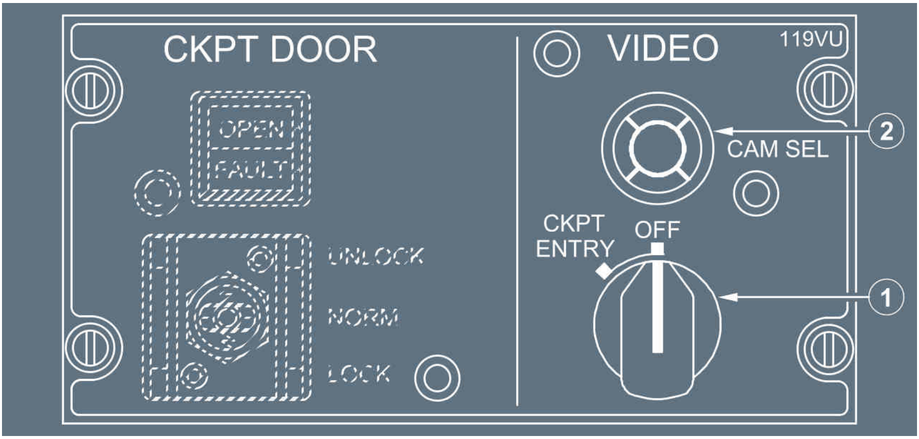
Camera 1 image	:	Displayed by pressing the pushbutton when the screen is on standby, or after Camera 2 and 3 images have been displayed. Automatically displayed, after an entry request is performed on the keypad.

Camera 2 and 3 images	:	Displayed on a split screen, when the pushbutton is pressed after Camera 1's image has been displayed.
Standby	:	If the pushbutton is maintained pressed for at least two seconds, or if no action has been taken for 5 min, the screen goes blank and remains on standby.

Note: *An entry request, performed on the keypad within 30 s following an earlier entry request, will not lead to the automatic selection of Camera 1, since the flight crew is given authority to select any desired camera image via the cockpit door video pb. After these 30 s, the system reverts to its normal operation.*

Ident.: DSC-52-40-30-A-00018416.0003001 / 17 MAR 17

4 **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11531**



(1) Lower ECAM rotary selector

CKPT ENTRY	:	The lower ECAM displays the camera 1 image. The camera images are not displayed on the Lower ECAM display in the case of: - A subsequent automatic system page call following a warning, a caution, or an advisory, or - A subsequent manual selection of a system page on the ECAM Control Panel (ECP), or - A SD failure, or - An EWD failure.
OFF	:	The lower ECAM display operates normally.

(2) Lower ECAM CAM SEL

Selects various camera image displays, when the lower ECAM rotary selector is set to the CKPT ENTRY position.

The image from camera 1 appears:

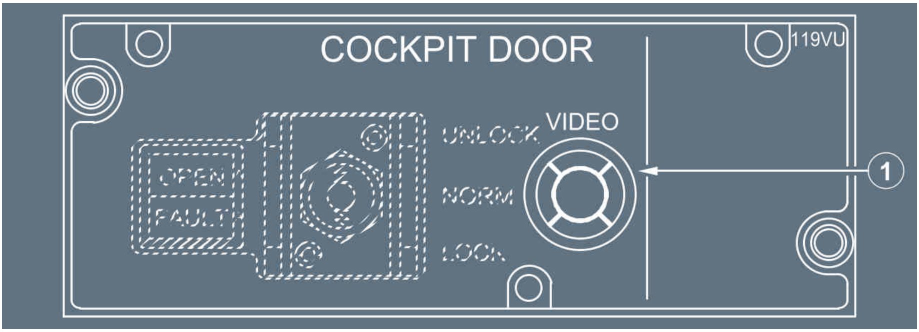
- Automatically, when the lower ECAM rotary selector is set to the CKPT ENTRY position.
- When images from cameras 2 and 3 are displayed, and after the flight crew presses the lower ECAM CAM SEL pb
- Automatically, when images from cameras 2 and 3 are displayed, and after a crew member uses the cabin keypad to make an entry request at least 30 s after a previous entry request.

Images from cameras 2 and 3 are displayed simultaneously on a split screen, when the image from camera 1 is displayed, and after the flight crew presses the lower ECAM CAM SEL pb.

Note: *1. The message "PLEASE WAIT" is displayed during the transition between two video images when the flight crew requests an image change.*
2. The message "VIDEO NOT AVAIL" is displayed when the flight crew requests a video image and no image can be displayed.

Ident.: DSC-52-40-30-A-00018416.0001001 / 17 MAR 17

Applicable to: MSN 01459



(1) Cockpit Door Video pb

Selects the various camera image displays.

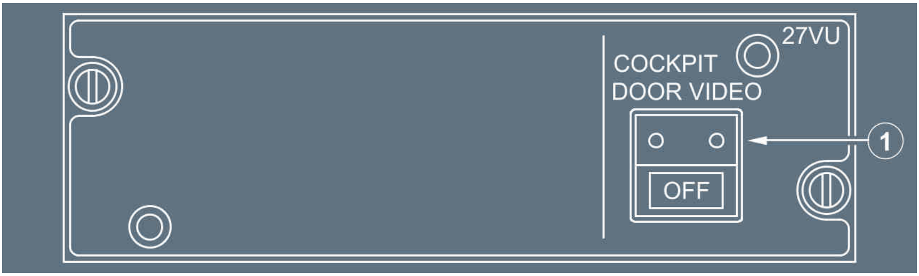
Camera 1 image	:	Displayed by pressing the pushbutton when the screen is on standby, or after Camera 2 and 3 images have been displayed. Automatically displayed, after an entry request is performed on the keypad.
Camera 2 and 3 images	:	Displayed on a split screen, when the pushbutton is pressed after Camera 1's image has been displayed.

Standby	:	If no action has been taken for 5 min, the screen goes blank and remains on standby.

Note: *An entry request, performed on the keypad within 30 s following an earlier entry request, will not lead to the automatic selection of Camera 1, since the flight crew is given authority to select any desired camera image via the cockpit door video pb. After these 30 s, the system reverts to its normal operation.*

Ident.: DSC-52-40-30-A-00018417.0001001 / 17 MAR 17

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 04827-04860, 05005, 05097, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08635-09324, 10949-11597**



(1) Cockpit Door Video pb

OFF : The Cockpit Door Surveillance System is manually de-energized.

HOW TO OPERATE THE COCKPIT DOOR

Ident.: DSC-52-50-00020495.0001001 / 17 MAR 17
Applicable to: ALL

The secured cockpit door operation is controlled by a toggle sw that is located on the COCKPIT DOOR panel (central pedestal).

DOOR OPENING FROM THE COCKPIT

To enable access to the cockpit, set and maintain the COCKPIT DOOR sw to the UNLOCK position until the door is fully opened. When the door is fully opened, the COCKPIT DOOR sw can be released to the NORM position.

DOOR CLOSING FROM THE COCKPIT

Close the door and check that the OPEN indicator goes off. If the COCKPIT DOOR sw is in the NORM position, the door is locked and emergency access is possible from the cabin. When the door is fully closed, if the cockpit door FAULT light is ON, *Refer to PRO-ABN-DOOR [QRH] COCKPIT DOOR FAULT*.

Note: *If the OPEN indicator is ON when the door is closed, the door may be unlocked. Repeat the above-mentioned opening/closing procedure.*

When the COCKPIT DOOR sw is in the LOCK position the door is locked. In this position, the emergency access, the buzzer, and the keypad are inhibited for a preselected time (5 to 20 min).

ROUTINE ACCESS TO THE COCKPIT FROM THE CABIN (I.E. NORMAL ACCESS)

To request access to the cockpit from the cabin, use the keypad to enter the code and validate with the “#” key.

L2 The Operator defines this code (between 0 and 7 digits).

L1 The buzzer sounds in the cockpit for 1 to 9 s (3 s by default).
After identification of the person (using the Cockpit Door Surveillance System ◁) that requests access, set the COCKPIT DOOR sw to UNLOCK position to unlock the door. A steady green light on the keypad comes on, that indicates that the door is unlocked.
If the flight crew refuses access to the cockpit by setting the COCKPIT DOOR sw to LOCK position, a steady red light on the keypad comes on, that indicates that the door is locked. The keypad and the buzzer are inhibited for a defined period of time.
If the flight crew does not respond, the door remains locked. If the flight crew does not take any action after a routine cabin request, the cabin crew will be able to open the door with the emergency access procedure.

EMERGENCY ACCESS FROM CABIN TO THE COCKPIT

To request emergency access to the cockpit, use the keypad to enter the emergency code and validate with the “#” key.

L2 The Operator defines this emergency code (between 2 and 7 digits).

L1 The buzzer continuously sounds in the cockpit and the OPEN light flashes on the COCKPIT DOOR panel (central pedestal). In the cabin, the green light on the keypad flashes until the flight crew uses the COCKPIT DOOR sw to either lock or unlock the cockpit door.
After identification of the person (via the Cockpit Door Surveillance system ◁) that requests access, use the COCKPIT DOOR sw to unlock the door.
If the flight crew refuses access by setting the COCKPIT DOOR sw to LOCK position, the keypad and the buzzer are inhibited for a defined period of time.
If the flight crew does not respond, after a preselected time between 15 and 120 s, the door automatically unlocks for 5 s and a steady green light on the keypad comes. The buzzer stops and indicates that the door is unlocked.

EVACUATION THROUGH THE DECOMPRESSION AND EVACUATION PANEL

Pull the quick-release pins of the escape panel towards the center of the flap.
Kick the escape panel toward the cabin and evacuate the cockpit.

HOW TO OPERATE THE FWD AND AFT CARGO DOOR

Ident.: DSC-52-50-00020574.0003001 / 17 MAR 17
Applicable to: ALL

NORMAL OPERATION

OPENING

On the cargo door, push the door handle flap inward to release the door handle from the recess of the door structure. Then, pull the door handle away and upward from the LOCKED to the UNLOCKED position.
Open the access door of the service panel to get access to the selector valve lever. Set the selector valve lever to the OPEN position and maintain the lever in this position until the green indicator light comes on. The green indicator light indicates that the door is fully opened and locked.

Note: *The yellow hydraulic system is pressurized (the YELLOW ELEC PUMP is energized). The operation of the flight controls and PTU is inhibited.*

When the door is fully open, release the selector valve lever. When released, the selector valve lever returns to the neutral position and shuts down the electrical pump.

CLOSING

In order to close the cargo door, set the selector valve lever to the CLOSE position and maintain the lever in this position until the green indicator light goes off. When this light goes off, it means that the door is fully closed and locked.

Note: *At first the selector valve lever locks in an intermediate position maintaining a preset pressurization to prevent the door from dropping open.*

When the door is fully closed, the selector valve lever returns to the neutral position and shuts down the electrical pump.
On the cargo door, push the door handle flap downwards to the LOCKED position. When the door is locked, the cargo door symbol appears in green on the DOOR/OXY SD page. The CARGO door indication on the ECAM goes off, and the handle flap mechanism locks the operating handle.
Close the access door of the service panel.

HOW TO OPERATE THE FWD AND AFT CARGO DOORS (AUXILIARY OPERATION)

Ident.: DSC-52-50-00020577.0002001 / 17 MAR 17
Applicable to: ALL

AUXILIARY OPERATION

If there is an electrical failure or if the yellow hydraulic electric pump fails, the operator can open or close the cargo door with the use of the hand pump that is accessible via the ground service panel.

Note: *Two persons are necessary for this operation.*

MANUAL OPENING

To open the cargo door with the use of the hand pump, unlock the cargo door by using the operating handle as for normal operation.
Open the ground service panel of the yellow hydraulic system that is in the belly fairing area.
Open the access door of the door service panel. Set the selector valve lever to the OPEN position and maintain the lever in this position during the operation of the hand pump.
Operate the hand pump until the cargo door is in the fully open position. The green light comes on and indicates that the door is fully opened and locked.
When the cargo door is fully opened, release the selector valve lever of the door service panel.

MANUAL CLOSING

To close the cargo door, set the selector valve lever (on the door service panel) to the CLOSE position and maintain the lever in this position during the operation of the hand pump.
Operate the hand pump until the cargo door is in the fully closed position.
When the cargo door is fully closed, release the selector valve lever of the door service panel.
Lock the cargo door with the use of the operating handle as for normal operation.
Close the access door of the door service panel and of the ground service panel.

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ERRONEOUS ACTIVATION OF THE CABIN PRESSURE WARNING LIGHTS WITHOUT RESIDUAL DIFFERENTIAL PRESSURE

Ident.: DSC-52-70-00023541.0001001 / 02 DEC 19
Applicable to: ALL

DESCRIPTION

At touchdown, the CPCS automatically operates the opening of the OFV to reduce the differential pressure to a safe level, even when both packs are operating.
However, the differential pressure sensor may have a defect. The CABIN PRESSURE WARNING lights may temporarily come on without residual differential pressure. In that case, the CAB PR EXCESS RESIDUAL PR alert may not trigger.
This erroneous activation of the CABIN PRESSURE WARNING lights can last up to 30 min.

OPERATIONAL RECOMMENDATION

Before the cabin crew opens the cabin door, the flight crew must confirm the absence of residual differential pressure. The flight crew must wait for the CABIN PRESSURE WARNING lights to stop flashing, or perform both of the following actions:

- Check that both air conditioning packs are set to OFF, and
- Open one of the cockpit sliding windows.

If the flight crew cannot open one of the cockpit sliding windows, it means that residual pressure remains. Therefore, the cabin doors MUST NOT BE OPENED. In this case, the flight crew may regularly try to open the cockpit sliding window, to confirm the absence of residual pressure.
If the flight crew can open one of cockpit sliding windows, the flight crew can consider the CABIN PRESSURE WARNING lights as spurious. The flight crew can therefore order the cabin crew to open the cabin doors.

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AIRCRAFT SYSTEMS

COCKPIT WINDOWS

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DSC-56-10 General

General.....A

DSC-56-20 Fixed Windows

Fixed Windows.....A

DSC-56-30 Sliding Windows

Sliding Windows.....A

DSC-56-40 Description

Description..... A

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GENERAL

Ident.: DSC-56-10-00000998.0001001 / 17 MAR 17
Applicable to: ALL

The cockpit has fixed and sliding windows.

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FIXED WINDOWS

Ident.: DSC-56-20-00000999.0001001 / 17 MAR 17
Applicable to: ALL

There are four fixed windows :
- two windshields
- two fixed side windows

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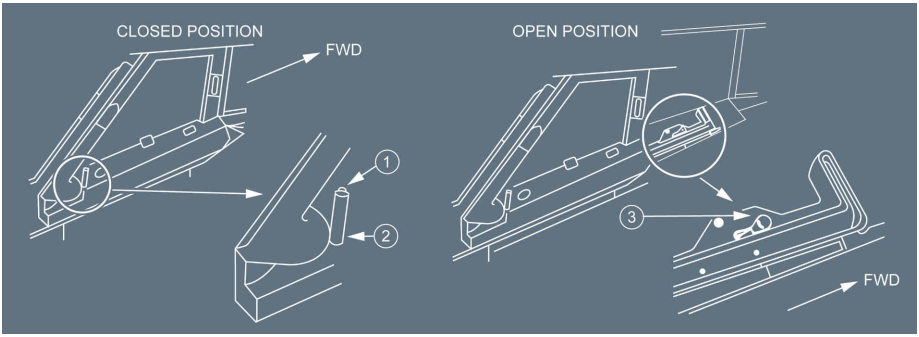
SLIDING WINDOWS

Ident.: DSC-56-30-00018432.0001001 / 17 MAR 17
Applicable to: ALL

The flight crew can use the sliding windows as emergency exits. Therefore they are not permitted to stow any object so that it protrudes into the window area from the side console. Members of the flight crew can use the control handle to slide each of the windows rearward, and can use a locking pin to lock each window open.



(1) Unlocking button
Flight crew presses this button to unlock the control handle.

(2) Control handle

- To open the window, the crew member pulls inward and rearward.
- To close the window, the crew member pushes forward.

(3) Locking pin
This pin locks the window open.
It is near the window’s lower guide track and is visible when the window is open.

- Forward
  Between the closed position and the one-third open position, the window is free to move forward and aft.
  When the window is more than one-third open, this pin prevents it from moving forward.
- Aft
  Flight crew must move the locking pin aft in order to close the window. Left sliding window.

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DESCRIPTION

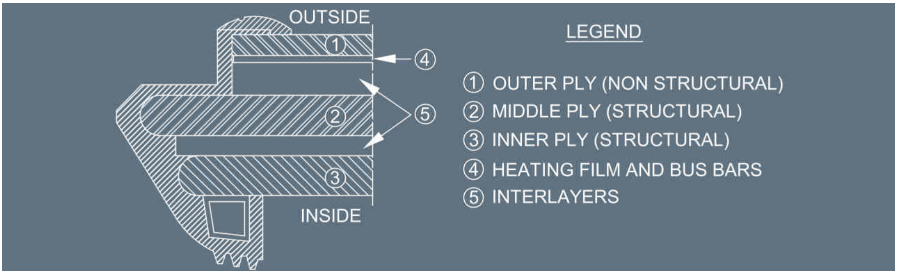
Ident.: DSC-56-40-00013772.0001001 / 17 MAR 17
Applicable to: ALL

COCKPIT WINDSHIELD AND WINDOWS DESCRIPTION

All cockpit windows are fail-safe design.
The windows are made of:

- A non structural ply, the Outer ply (1), which is only a protective layer
- Two structural plies, the Middle ply (2) and the Inner ply (3)
  Each structural ply is able to sustain individually the pressurization loads
- A heating film (4) to defog and/or de-ice the windshield/window
- Two interlayers (5).

Typical Structure Of A Cockpit Window (Cut View)


OUTSIDE
①
④
②
⑤
③
INSIDE
LEGEND
① OUTER PLY (NON STRUCTURAL)
② MIDDLE PLY (STRUCTURAL)
③ INNER PLY (STRUCTURAL)
④ HEATING FILM AND BUS BARS
⑤ INTERLAYERS

For information on cockpit window damage procedure, description and evaluation method, *Refer to FCTM/PR-AEP-MISC Cockpit Windshield/Window Cracked*.

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AIRCRAFT SYSTEMS

ENGINES

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DSC-70-05 Overview

Overview.. A

DSC-70-10 System Description

Engine.. A
Engine.. B
LP Compressor Turbine Assembly.. C
HP Compressor Turbine Assembly.. D
Combustion Chamber.. E
Accessory Gearbox.. F

DSC-70-20 FADEC

General.. A
Architecture.. B
Functions C
Idle Control.. D

DSC-70-30 Thrust Control System (CFM+PW)

DSC-70-30-10 General

General.. A

DSC-70-30-20 Thrust Levers

Thrust Levers.. A

DSC-70-30-30 Thrust Rating Limit

Thrust Rating Limit.. A

DSC-70-30-40 Thrust Control

Manual Mode.. A
Automatic Mode.. B
Thrust Control Malfunction Logic.. C

DSC-70-35 Thrust Control System (IAE)

DSC-70-35-10 General

General.. A

DSC-70-35-20 Engine Power Setting

General.. A
EPR Mode.. B
N1 Modes.. C
EPR Recovery Logic.. D

Continued on the following page

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DSC-70-35-30 Thrust Levers

Thrust Levers.....A

DSC-70-35-40 Thrust Rating Limit

Thrust Rating Limit.....A

DSC-70-35-50 Thrust Control

Manual Mode.....A
Automatic Mode.....B

DSC-70-40 Fuel System (CFM56)

General.....A
Fuel pump Unit.....B
Shut-Off Valves.....C
Hydromechanical Unit.....D
IDG Cooling System.....E

DSC-70-45 Fuel System (IAE)

General.....A
Fuel Pump Unit.....B
Fuel Oil Heat Exchanger.....C
Fuel Metering Unit.....D
Fuel Filter.....E
IDG Cooling Recirculation System.....F

DSC-70-48 Fuel System (PW1100G)

General.....A
Integrated Fuel Pump and Control (IFPC).....B
Fuel Oil Heat Exchanger.....C
Fuel Filter.....D
IDG Cooling Recirculation System.....E

DSC-70-50 Oil System

General.....A

DSC-70-60 Airbleed System (CFM56)

General.....A
Cooling.....B

Continued on the following page

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DSC-70-65 Airbleed System (IAE)

General....A
Cooling....B
Engine Stability....C

DSC-70-68 Airbleed System (PW1100G)

General....A
Cooling....B
Engine Stability....C

DSC-70-70 Thrust Reverser System

General....A
Actuation Logic....B
Protection....C
Schematic....D

DSC-70-80 Ignition and Starting

DSC-70-80-10 General

General....A

DSC-70-80-20 Architecture

Architecture....A

DSC-70-80-30 Ignition System

General....A
Ignition for Starting....B
Continuous Ignition....C

DSC-70-80-40 Engine Starting System

General....A
Automatic Starting....B
Automatic Starting Sequence....C
Manual Starting....D
Engine Ventilation (Dry Cranking)....E
Engine Cooling....F
Automatic Engine Start with Dual Cooling - Envelope....G

Continued on the following page

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DSC-70-90 Controls and Indicators

DSC-70-90-10 Overhead Panel

ENG MAN START Panel....A
ENG N1 MODE Panel....B
ENG DUAL COOLING Panel....C

DSC-70-90-20 Pedestal

ENG MODE Selector and ENG MASTER Levers....A
Thrust Levers....B

DSC-70-90-30 Maintenance Panel

ENG FADEC GND PWR Panel....A

DSC-70-90-40 Engine Display

Engine/Warning Display....A
ENG SD Page....B

DSC-70-90-50 Memo Display

Memo Display....A

DSC-70-95 Temporary Abnormal Behaviours

Erroneous Detection of Engine Fuel Leak....A

Localization Title	Toc Index	ID	Reason
DSC-70-30-40 Manual Mode	A	2	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**
DSC-70-30-40 Manual Mode	A	3	**Wording enhancement in order to comply with the Airbus Policy regarding the gender neutral documentation.**

DSC-70-05 Overview	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-10 Engine	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-10 LP Compressor Turbine Assembly	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-10 HP Compressor Turbine Assembly	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-20 Architecture	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-20 Functions	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-20 Idle Control	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-10 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-20 Thrust Levers	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-30 Thrust Rating Limit	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-40 Manual Mode	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-40 Automatic Mode	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-30-40 Thrust Control Malfunction Logic	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 Integrated Fuel Pump and Control (IFPC)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 Fuel Oil Heat Exchanger	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 Fuel Filter	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-48 IDG Cooling Recirculation System	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-70-50 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-68 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-68 Cooling	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-68 Engine Stability	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-70 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-70 Protection	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-70 Schematic	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-20 Architecture	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-30 Ignition for Starting	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-30 Continuous Ignition	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Protection	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Dry Cranking	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Second Step	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Manual Starting	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Engine Cooling	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-80-40 Automatic Engine Start with Dual Cooling - Envelope	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-10 ENG MAN START Panel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-10 ENG DUAL COOLING Panel	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-10 ENG DUAL COOLING pb-sw	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Engine Warning Display	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-70-90-40 Thrust Rating Mode and Thrust Limit Value	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Thrust Limit Value	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Flex Temperature	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Bleed Air Configuration	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Current EGT	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 EGT Limit	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 EGT Red Line	A	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Indicator	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Current N1	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Trend	A	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Command	A	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Transient N1	A	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Thrust Lever Position	A	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Limit	A	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1 Red Line	A	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N2	A	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Cooling Indication	A	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 ENG SD Page	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Oil Quantity	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Oil Pressure	B	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
DSC-70-90-40 Oil Temperature	B	22	Effectivity update: The information now also applies to MSN 07081, 07098.
DSC-70-90-40 Oil Temperature	B	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Oil Temperature	B	24	Effectivity update: The information no longer applies to MSN 07081, 07098.
DSC-70-90-40 Oil Filter CLOG Indication	B	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 N1, N2 Vibrations	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Starting Sequence Indication	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-40 Nacelle Temperature Indication	B	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-50 ENG 1(2) COWL	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-90-50 DUAL COOLING	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
DSC-70-95 Erroneous Detection of Engine Fuel Leak	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

OVERVIEW

Ident.: DSC-70-05-10-00018242.0007001 / 21 MAR 16
1 **Applicable to: MSN 08495-09324, 10949-11597**

The aircraft has two Pratt & Whitney's PurePower PW1100G-JM engines that supply power to the aircraft.

Ident.: DSC-70-05-10-00018242.0004001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The aircraft has two International Aero Engines V2500-A5 engines that supply power to the aircraft.

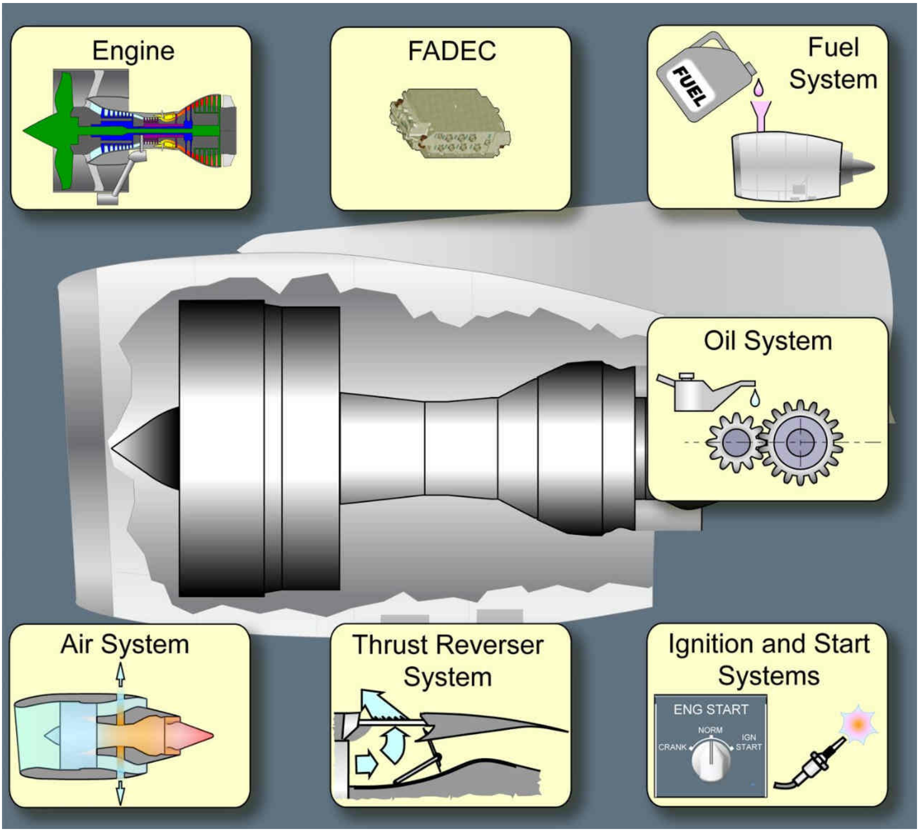
Ident.: DSC-70-05-10-00018242.0002001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The aircraft has two CFM International CFM56-5B engines that supply power to the aircraft.

Ident.: DSC-70-05-10-00018265.0001001 / 21 MAR 16
Applicable to: ALL

The engines are turbofan engines that have:
- A high bypass ratio,
- A Full Authority Digital Engine Control (FADEC),
- A fuel system,
- An oil system,
- An air system,
- A thrust reverser system,
- An ignition system and a start system.

Overview


Engine
FADEC
Fuel System
FUEL
Oil System
Air System
Thrust Reverser System
Ignition and Start Systems
ENG START
NORM
CRANK
IGN START

ENGINE

Ident.: DSC-70-10-00018361.0001001 / 21 MAR 16
Applicable to: ALL

The engine has:
- Two compressor turbine assemblies:
  - The Low Pressure (LP) compressor turbine assembly,
  - The High Pressure (HP) compressor turbine assembly.

L2 Each turbine operates its associated compressor via a shaft.

L1
- One accessory gearbox,
- One combustion chamber.

The engine operates as follows:
1. The LP compressor, compresses the air.
2. Then, the air is divided into two flows:
   - Most of the air flows out of the core engine, and provides most of the engine thrust.
   - The remaining air enters the core engine.
3. The HP compressor compresses the air that enters the core engine.
4. The fuel is added to and mixed with the compressed air of the core engine. The mixture is ignited in the combustion chamber.
5. The gas that results from combustion drives the HP and the LP turbines.

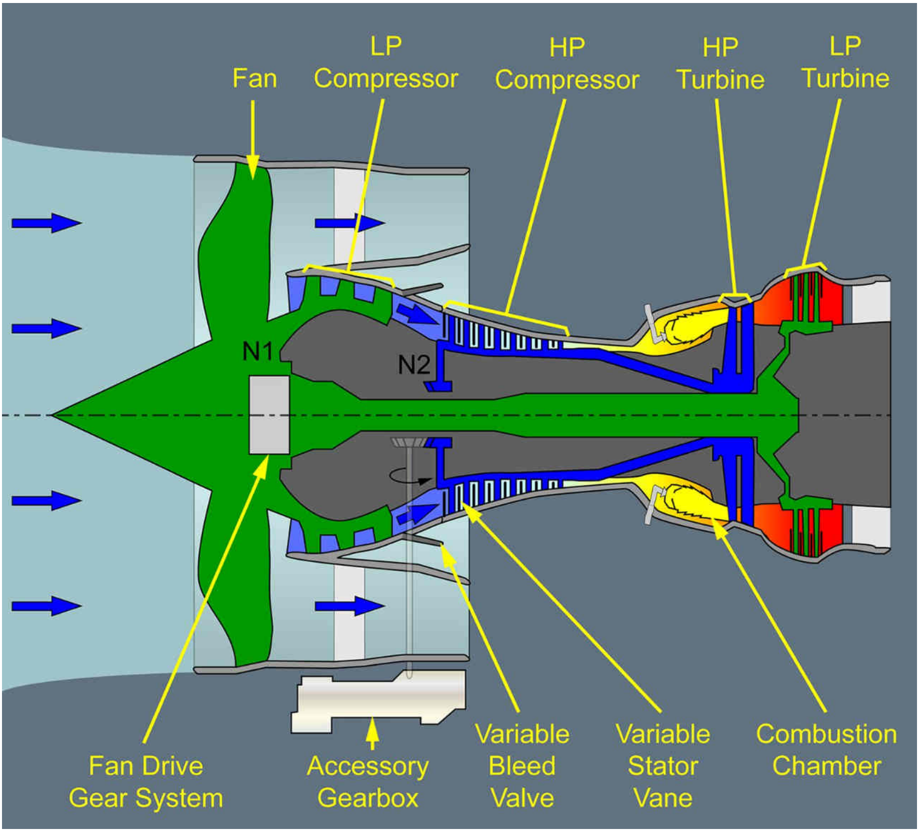
The rotation speed of the fan provides the N1 engine parameter.
The rotation speed of the HP rotor provides the N2 engine parameter.
The N1 and N2 engine parameters appear on the Engine/Warning Display (E/WD).
L2 The N1 and N2 engine parameters are current rotation speeds displayed in percentage.

L1 The FADEC uses:
- The N1 engine parameter to compute the applicable engine thrust,
- The N1 and N2 engine parameters for engine control and monitoring.

ENGINE

Ident.: DSC-70-10-00018362.0007001 / 21 MAR 16

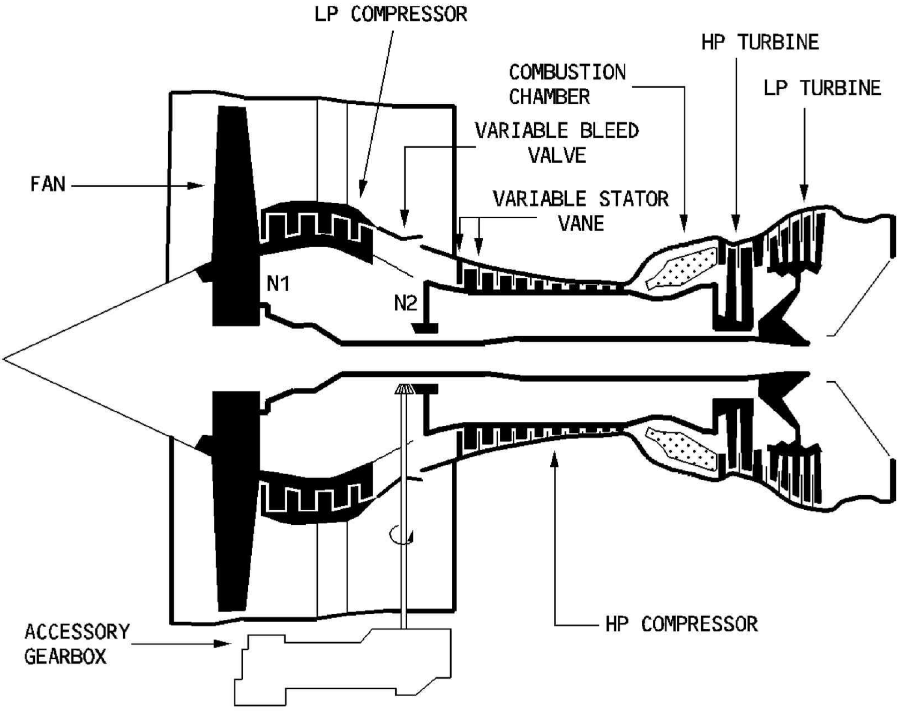
1 **Applicable to: MSN 08495-09324, 10949-11597**


Fan
LP Compressor
HP Compressor
HP Turbine
LP Turbine
N1
N2
Fan Drive Gear System
Accessory Gearbox
Variable Bleed Valve
Variable Stator Vane
Combustion Chamber

ENGINE

Ident.: DSC-70-10-00018362.0004001 / 21 MAR 16

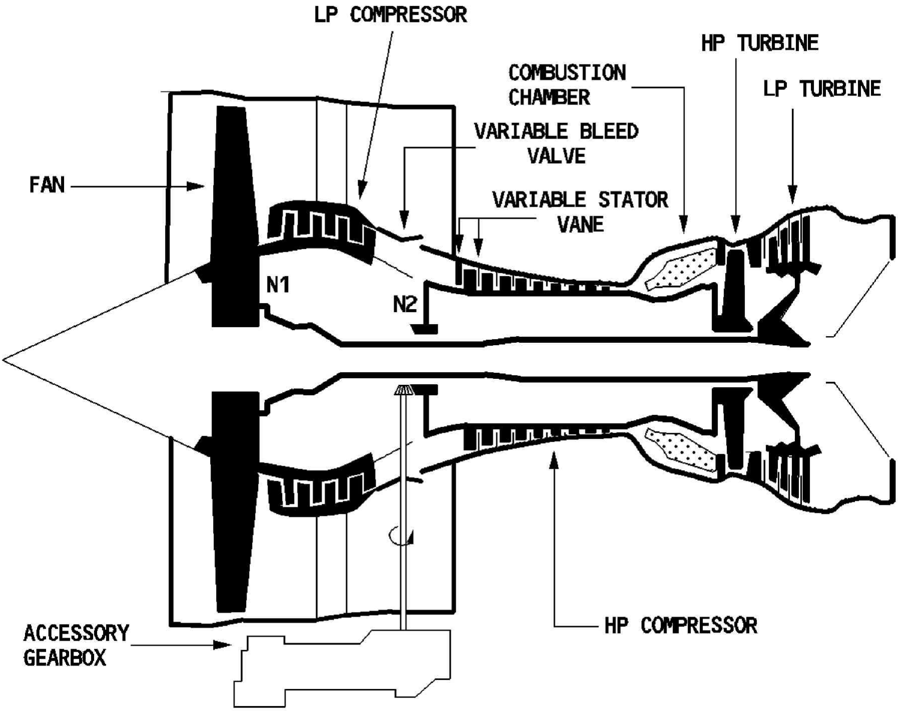
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165


LP COMPRESSOR
HP TURBINE
COMBUSTION CHAMBER
LP TURBINE
VARIABLE BLEED VALVE
FAN
VARIABLE STATOR VANE
N1
N2
ACCESSORY GEARBOX
HP COMPRESSOR

ENGINE

Ident.: DSC-70-10-00018362.0002001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098


LP COMPRESSOR
HP TURBINE
COMBUSTION CHAMBER
LP TURBINE
VARIABLE BLEED VALVE
FAN
VARIABLE STATOR VANE
N1
N2
ACCESSORY GEARBOX
HP COMPRESSOR

LP COMPRESSOR TURBINE ASSEMBLY

Ident.: DSC-70-10-00018289.0007001 / 04 JUN 19

2 **Applicable to: MSN 08495-09324, 10949-11597**

LP COMPRESSOR TURBINE ASSEMBLY

The LP compressor turbine assembly has:

- One LP compressor,
- L2 One Fan Drive Gear System (FDGS),
- One LP shaft,
- L1 One LP turbine.

L2 The FDGS is a planetary gear reduction unit that connects the fan rotor to the LP compressor. The LP shaft connects the LP compressor to the LP turbine.

L3 The LP compressor has a fan and 3 stages, and the LP turbine has 3 stages.

LP COMPRESSOR TURBINE ASSEMBLY

Ident.: DSC-70-10-00018289.0004001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

LP COMPRESSOR TURBINE ASSEMBLY

The LP compressor turbine assembly has:

- One LP compressor,
- L2 One LP shaft,
- L1 One LP turbine.

L2 The LP shaft connects the LP compressor to the LP turbine.

L3 The LP compressor has a fan and 4 stages, and the LP turbine has 5 stages.

LP COMPRESSOR TURBINE ASSEMBLY

Ident.: DSC-70-10-00018289.0002001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

LP COMPRESSOR TURBINE ASSEMBLY

The LP compressor turbine assembly has:

- One LP compressor,
- L2 One LP shaft,
- L1 One LP turbine.

L2 The LP shaft connects the LP compressor to the LP turbine.

L3 The LP compressor has a fan and 4 stages, and the LP turbine has 4 stages.

HP COMPRESSOR TURBINE ASSEMBLY

Ident.: DSC-70-10-00018290.0007001 / 09 JAN 18

3 **Applicable to: MSN 08495-09324, 10949-11597**

HP COMPRESSOR TURBINE ASSEMBLY

The HP compressor turbine assembly has:

- One HP compressor,
- L2 One HP shaft,
- L1 One HP turbine.

L2 The HP shaft connects the HP compressor to the HP turbine.
L3 The HP compressor has 8 stages, and the HP turbine has 2 stages.

HP COMPRESSOR TURBINE ASSEMBLY

Ident.: DSC-70-10-00018290.0003001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

HP COMPRESSOR TURBINE ASSEMBLY

The HP compressor turbine assembly has:
- One HP compressor,
- L2 One HP shaft,
- L1 One HP turbine.

L2 The HP shaft connects the HP compressor to the HP turbine.
L3 The HP compressor has 10 stages, and the HP turbine has 2 stages.

HP COMPRESSOR TURBINE ASSEMBLY

Ident.: DSC-70-10-00018290.0001001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

HP COMPRESSOR TURBINE ASSEMBLY

The HP compressor turbine assembly has:
- One HP compressor,
- L2 One HP shaft,
- L1 One HP turbine.

L2 The HP shaft connects the HP compressor to the HP turbine.
L3 The HP compressor has 9 stages, and the HP turbine has a single stage.

COMBUSTION CHAMBER

Ident.: DSC-70-10-00018292.0001001 / 21 MAR 16
Applicable to: ALL

COMBUSTION CHAMBER

The combustion chamber burns a mixture of fuel and HP air. The FADEC controls the fuel/air mixture in accordance with the position of the thrust lever and the aircraft operating conditions.
L3 The combustion chamber is an annular assembly with fuel nozzles and two igniters.
The combustion chamber is between the HP compressor and the HP turbine.

ACCESSORY GEARBOX

Ident.: DSC-70-10-00018364.0001001 / 21 MAR 16
Applicable to: ALL

ACCESSORY GEARBOX

The accessory gearbox drives various accessories with mechanical power via the HP shaft for the operation of the engine and the aircraft systems.

L2 The accessory gearbox of each engine operates:
- The oil feed pump that provides the oil system with oil.
- The main engine fuel pump that provides the combustion chamber with fuel.
- The engine-driven hydraulic pumps that pressurize the GREEN and the YELLOW hydraulic systems.
- The engine-driven generators that are the primary source of electrical power.
- The FADEC alternator that provides the FADEC with electrical power.
- The pneumatic starter that enables the engine start.

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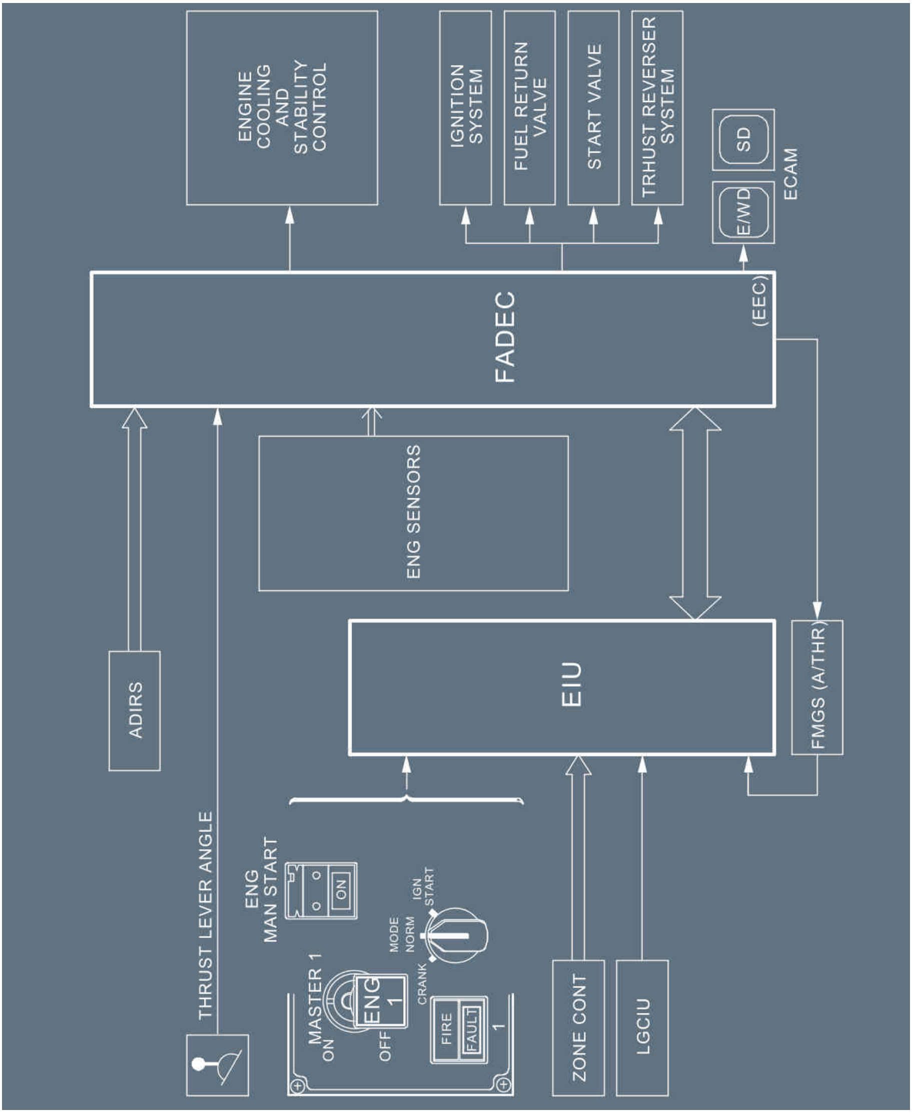
GENERAL

Ident.: DSC-70-20-00020869.0001001 / 17 MAR 17
Applicable to: ALL

Each powerplant has a FADEC (Full Authority Digital Engine Control) system.
FADEC is a digital control system that performs complete engine management.
FADEC has two-channel redundancy, with one channel active and one in standby.
If one channel fails, the other automatically takes control.
The system has a magnetic alternator for an internal power source.
FADEC is mounted on the fan case.
The Engine Interface Unit (EIU) transmits to FADEC the data it uses for engine management.

ARCHITECTURE

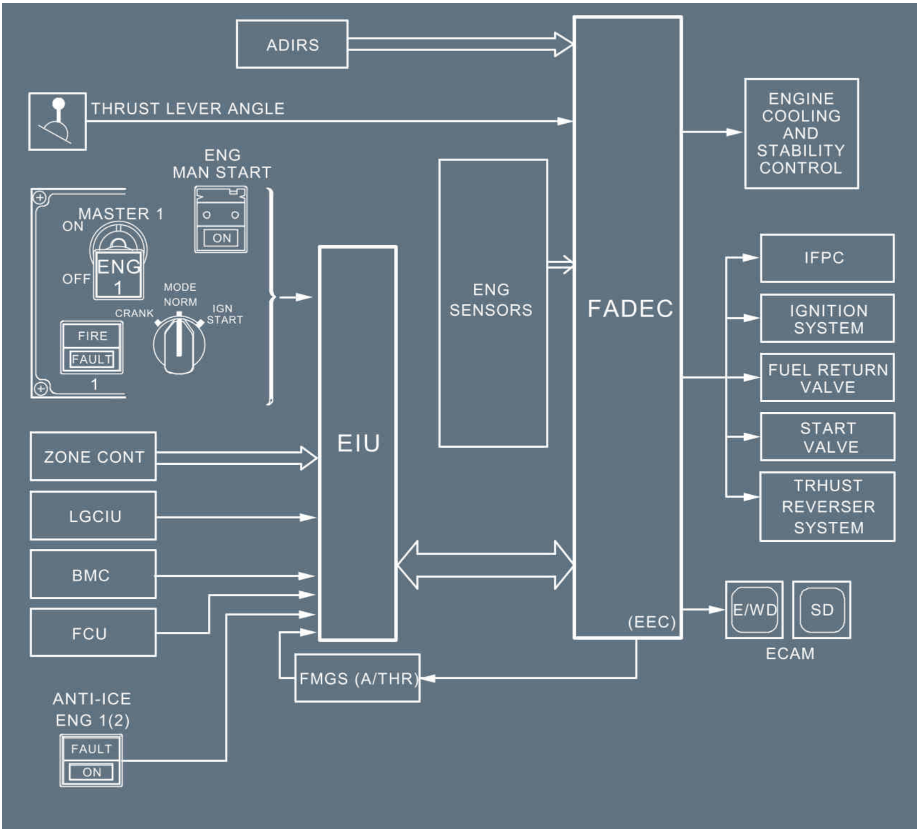
Ident.: DSC-70-20-00001566.0002001 / 21 MAR 16


ENGINE COOLING AND STABILITY CONTROL
IGNITION SYSTEM
FUEL RETURN VALVE
START VALVE
TRHUST REVERSER SYSTEM
SD
E/WD
ECAM
FADEC
(EEC)
ENG SENSORS
EIU
FMGS (A/THR)
ADIRS
THRUST LEVER ANGLE
ENG MAN START
ON
IGN START
MODE NORM
CRANK
MASTER 1
ON
OFF
ENG 1
FIRE
FAULT
1
ZONE CONT
LGCIU

ARCHITECTURE

Ident.: DSC-70-20-00001566.0014001 / 25 FEB 14

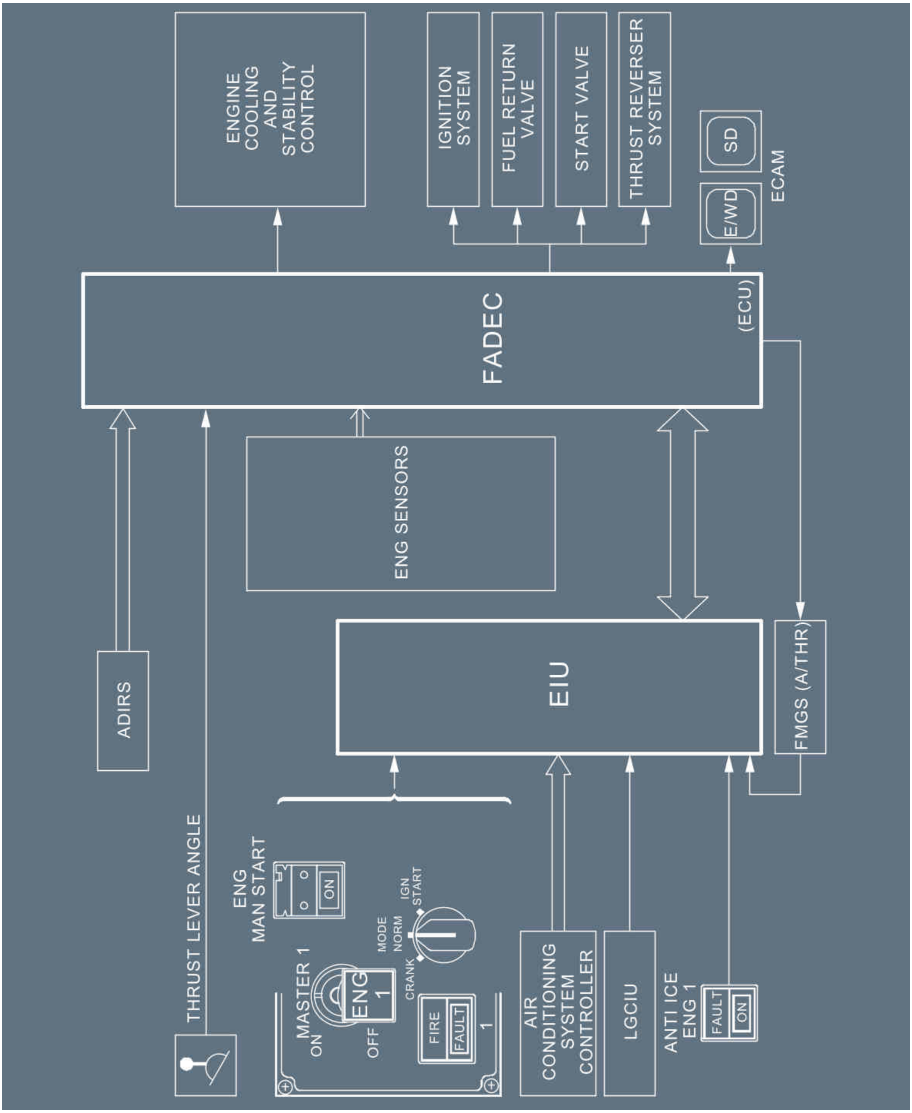
1 **Applicable to: MSN 08495-09324, 10949-11597**


ADIRS
THRUST LEVER ANGLE
ENG
MAN START
ON
MASTER 1
ON
OFF
ENG
1
MODE
NORM
CRANK
IGN
START
FIRE
FAULT
1
ENG
SENSORS
FADEC
ENGINE
COOLING
AND
STABILITY
CONTROL
IFPC
IGNITION
SYSTEM
FUEL RETURN
VALVE
START
VALVE
TRHUST
REVERSER
SYSTEM
EIU
ZONE CONT
LGCIU
BMC
FCU
ANTI-ICE
ENG 1(2)
FAULT
ON
FMGS (A/THR)
(EEC)
E/WD
SD
ECAM

ARCHITECTURE

Ident.: DSC-70-20-00001566.0005001 / 21 MAR 16

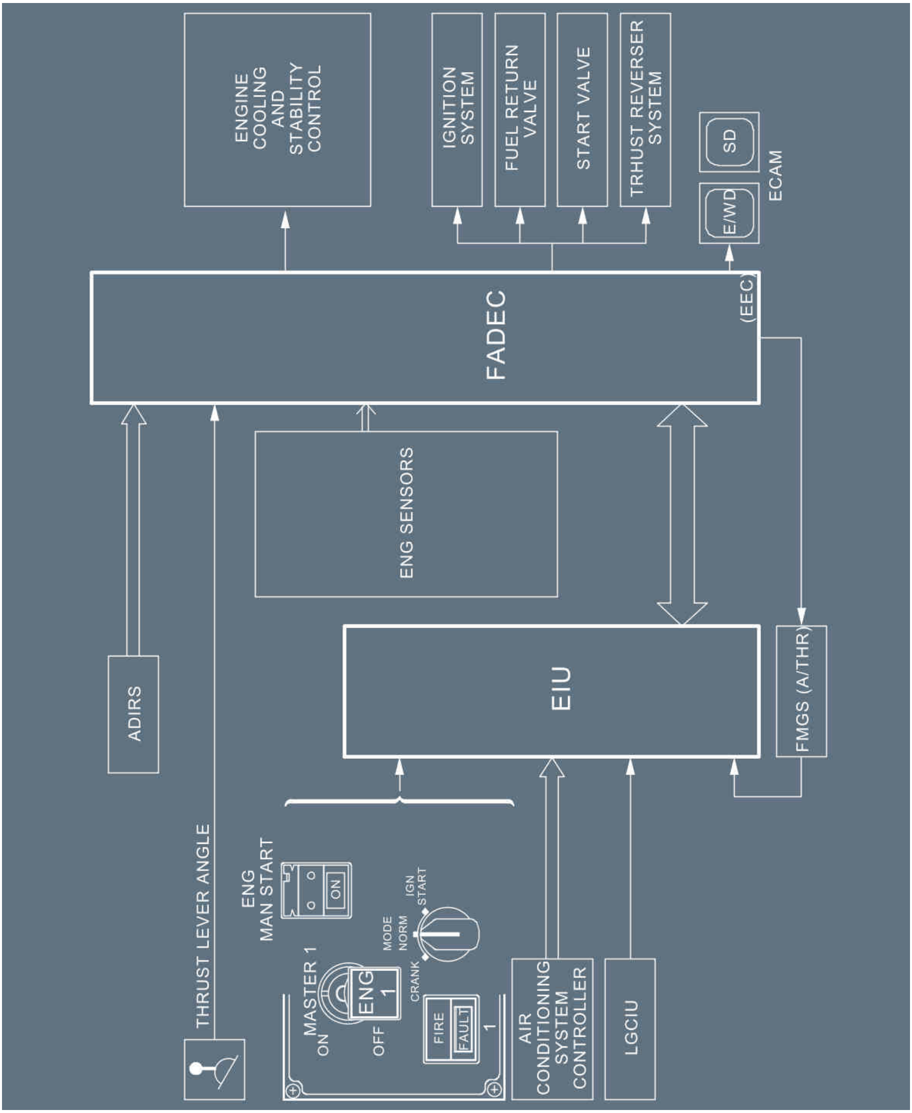
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098


ENGINE COOLING AND STABILITY CONTROL
IGNITION SYSTEM
FUEL RETURN VALVE
START VALVE
THRUST REVERSER SYSTEM
SD
E/WD
ECAM
FADEC
(ECU)
ENG SENSORS
EIU
FMGS (A/THR)
ADIRS
THRUST LEVER ANGLE
ENG MAN START
ON
MASTER 1
ON
OFF
ENG 1
MODE
NORM
CRANK
IGN START
FIRE
FAULT
1
AIR CONDITIONING SYSTEM CONTROLLER
LGCIU
ANTI ICE ENG 1
FAULT
ON

ARCHITECTURE

Ident.: DSC-70-20-00001566.0006001 / 21 MAR 16

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165


ENGINE COOLING AND STABILITY CONTROL
IGNITION SYSTEM
FUEL RETURN VALVE
START VALVE
TRHUST REVERSER SYSTEM
SD
E/WD
ECAM
FADEC
(EEC)
ENG SENSORS
EIU
FMGS (A/THR)
ADIRS
THRUST LEVER ANGLE
ENG MAN START
ON
MASTER 1
ENG 1
ON
OFF
CRANK
MODE NORM
IGN START
FIRE
FAULT
1
AIR CONDITIONING SYSTEM CONTROLLER
LGCIU

FUNCTIONS

Ident.: DSC-70-20-00001567.0001001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The FADEC system performs the following functions :

Control of gas generator

- control of fuel flow
- acceleration and deceleration schedules
- variable bleed valve and variable stator vane schedules
- control of turbine clearance
- idle setting

Protection against engine exceeding limits

- protection against N1 and N2 overspeed
- monitoring of EGT during engine start

Power management

- automatic control of engine thrust rating
- computation of thrust parameter limits
- manual management of power as a function of thrust lever position
- automatic management of power (A/THR demand).

Automatic engine starting sequence

- control of :
  - the start valve (ON/OFF)
  - the HP fuel valve
  - the fuel flow
  - the ignition (ON/OFF)
- monitoring of N1, N2, FF and EGT
- initiation of abort and recycle (on the ground only)

Manual engine starting sequence

- passive monitoring of engine
- control of :
  - the start valve
  - the HP fuel valve
  - the ignition

Thrust reverser control

- Actuation of the blocker doors
- Engine setting during reverser operation

Fuel recirculation control

- Recirculation of fuel to the fuel tanks, depending on the engine oil temperature, the fuel system configuration, and the flight phase.

Transmission of engine parameters and engine monitoring information to cockpit indicators

- Primary engine parameters
- Starting system status
- Thrust reverser system status
- FADEC system status

Detection, isolation, and recording of failures

FADEC cooling

FUNCTIONS

Ident.: DSC-70-20-00001567.0003001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The FADEC system performs the following functions :

Control of gas generator

- control of fuel flow
- acceleration and deceleration schedules
- variable bleed valve and variable stator vane schedules
- control of turbine clearance
- idle setting

Protection against engine exceeding limits

- protection against N1 and N2 overspeed
- monitoring of EGT during engine start

Power management

- automatic control of engine thrust rating
- computation of thrust parameter limits
- manual management of power as a function of thrust lever position
- automatic management of power (A/THR demand).

Automatic engine starting sequence

- control of:
  - the start valve (ON/OFF)
  - the HP fuel valve
  - the fuel flow
  - the ignition (ON/OFF)
- monitoring of N1, N2, FF and EGT
- initiation of abort and recycle (on the ground only)

Manual engine starting sequence

- passive monitoring of engine
- control of:
  - the start valve
  - the HP fuel valve
  - the ignition

Thrust reverser control

- Actuation of the blocker doors
- Engine setting during reverser operation

Fuel recirculation control

- Recirculation of fuel to the fuel tanks, depending on the engine oil temperature, the fuel system configuration, and the flight phase.

Transmission of engine parameters and engine monitoring information to cockpit indicators:

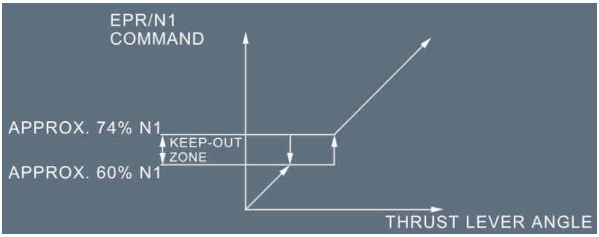
- Primary engine parameters
- Starting system status
- Thrust reverser system status
- FADEC system status

Detection, isolation, and recording of failures

FADEC cooling

Protection against fan flutter

- When on ground at low speed (less than or equal to M 0.1), the Electronic Engine Computer (EEC) protects against fan flutter. In so doing, the EEC prevents the engine from being stabilized between an approximate range of 60 % to 74 % N1 (depending on the outside air temperature). Therefore, during engine acceleration on ground, the pilot may notice a non-linear thrust response to thrust lever movement.



FUNCTIONS

Ident.: DSC-70-20-00001567.0004001 / 16 NOV 15

2 **Applicable to: MSN 08495-09324, 10949-11597**

The FADEC system performs the following functions :

Control of gas generator

- Control of fuel and oil flow
- Acceleration and deceleration schedules
- Variable bleed valve and variable stator vane schedules
- Control of turbine clearance
- Idle setting

Protection against engine exceeding limits

- Protection against N1 and N2 overspeed
- Protection against EGT overlimit, during autostart on ground only

Power management

- Automatic control of engine thrust rating
- Computation of thrust parameter limits
- Manual management of power as a function of thrust lever position
- Automatic management of power (A/THR demand)

Automatic engine starting sequence

- Control of :
  - The start valve (ON/OFF)
  - The HP fuel valve
  - The fuel flow
  - The ignition (ON/OFF)
- Monitoring of N1, N2, FF and EGT
- Initiation of abort and recycle (on the ground only)

Manual engine starting sequence

- Passive monitoring of engine
- Actuation of:
  - The start valve
  - The HP fuel valve
  - The ignition

Thrust reverser control

- Actuation of the blocker doors
- Engine setting during reverser operation

Fuel recirculation control

- Recirculation of fuel to the fuel tanks, depending on the engine oil temperature, the fuel system configuration, and the flight phase

Transmission of engine parameters and engine monitoring information to cockpit indicators

- Primary and secondary engine parameters
- Starting system status
- Thrust reverser system status
- Vibration monitoring
- FADEC system status

Detection, isolation, and recording of failures

FADEC cooling

Protection against engine stall

Protection against Thrust Control Malfunction

IDLE CONTROL

Ident.: DSC-70-20-00015374.0002001 / 03 DEC 15

3 **Applicable to: MSN 08495-09324, 10949-11597**

The FADEC has the following three idle modes :

Minimum idle

- Is regulated according to :
  - bleed system demand
  - ambient conditions
- Is selected :
  - In flight, when the landing gear is retracted and not in CONF 3 or FULL.
  - On ground, provided reverse is not selected.

Approach idle

- Is regulated according to aircraft altitude, the bleed system demand, and ambient conditions.
- Is selected in flight, in CONF 3 or FULL, or when the landing gear is down.
- Allows the engine to accelerate rapidly from idle to go-around thrust.

Reverse idle

- Is selected on ground, when the thrust lever is in REV IDLE position.
- Is slightly higher than forward idle thrust.

IDLE CONTROL

Ident.: DSC-70-20-00015374.0001001 / 17 NOV 14

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

The FADEC has the following three idle modes :

Modulated idle

- Is regulated according to :
  - bleed system demand
  - ambient conditions
- Is selected :
  - In flight, when the flaps are retracted (FLAPS lever at zero position)
  - On ground, provided reverse is not selected.

Approach idle

- Is regulated according to aircraft altitude, regardless of bleed system demand.
- Is selected in flight, when the flaps are extended (FLAPS lever not at zero position)
- Allows the engine to accelerate rapidly from idle to go-around thrust.

Reverse idle

- Is selected on ground, when the thrust lever is in REV IDLE position.
- Is slightly higher than forward idle thrust.

GENERAL

Ident.: DSC-70-30-10-00020872.0002001 / 17 MAR 17

1 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

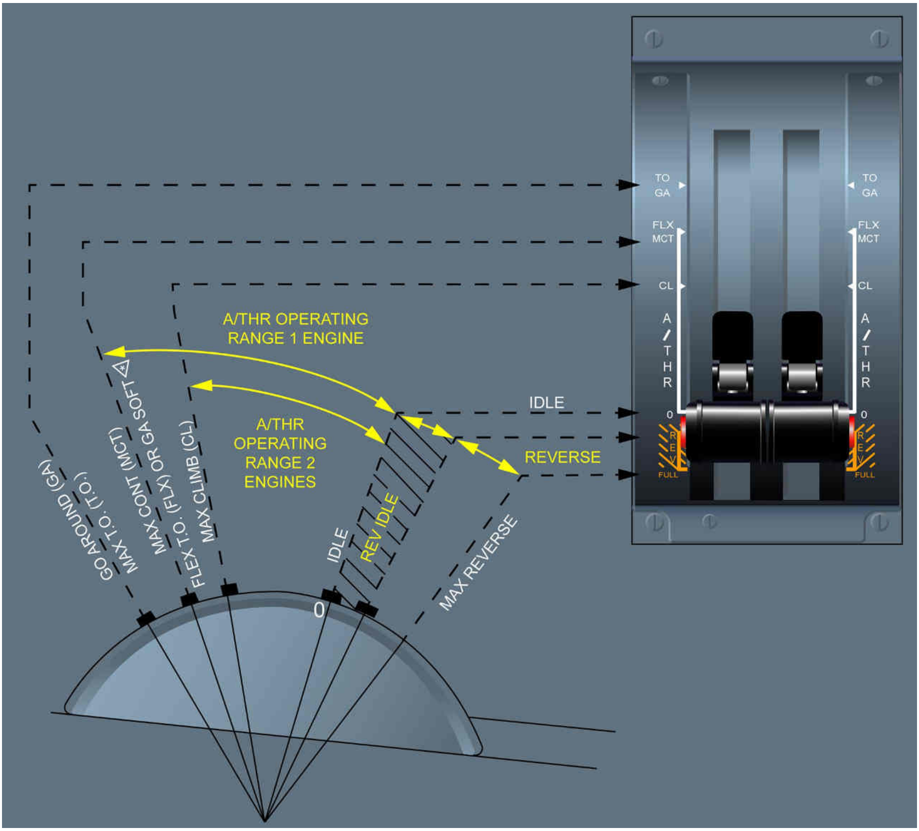
A FADEC dedicated to each engine controls the thrust.
The pilot uses the thrust levers to set the thrust in manual mode, and the FMGS sets the thrust in automatic mode (A/THR function).
The FADEC prevents the thrust from exceeding the limit for the thrust lever position in both manual and automatic modes.

Intentionally left blank

THRUST LEVERS

Ident.: DSC-70-30-20-00020873.0002001 / 28 MAY 20

1 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**


TO GA
FLX MCT
CL
A/THR
0
REV
FULL
A/THR OPERATING RANGE 1 ENGINE
A/THR OPERATING RANGE 2 ENGINES
IDLE
REVERSE
GO AROUND (GA)
MAX T.O. (T.O.)
MAX CONT (MCT) OR GA SOFT
FLEX T.O. (FLX)
MAX CLIMB (CL)
IDLE
REV IDLE
MAX REVERSE
0

The thrust levers are only manually moved.
The thrust levers move over a sector divided into four operating segments.
The sector has six positions defined by detents or stops.
The FADEC receives the thrust lever position, then computes and displays all of the following:

- The thrust rating limit
- The N1 for the TLA.

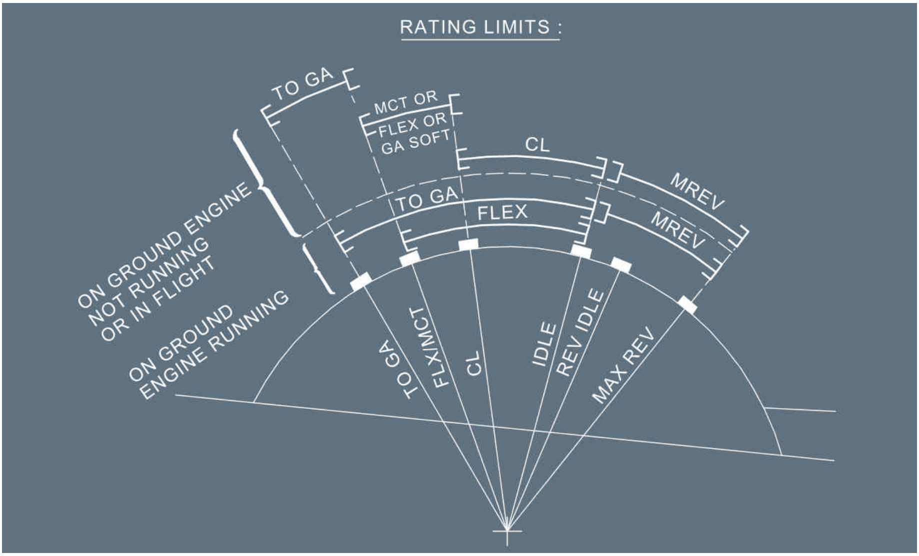
Note: *To select reverse idle, the flight crew pulls up the reverse lever. The thrust lever can no longer remain in the idle position.*

THRUST RATING LIMIT

Ident.: DSC-70-30-30-00001571.0002001 / 04 DEC 17

Applicable to: MSN 08495-09324, 10949-11597

The FADEC computes the thrust rating limit for each thrust lever position, as shown below.
If the thrust lever is set in a detent, the FADEC selects the rating limit corresponding to this detent.
If the thrust lever is set between two detents, the FADEC selects the rating limit corresponding to the higher detent.

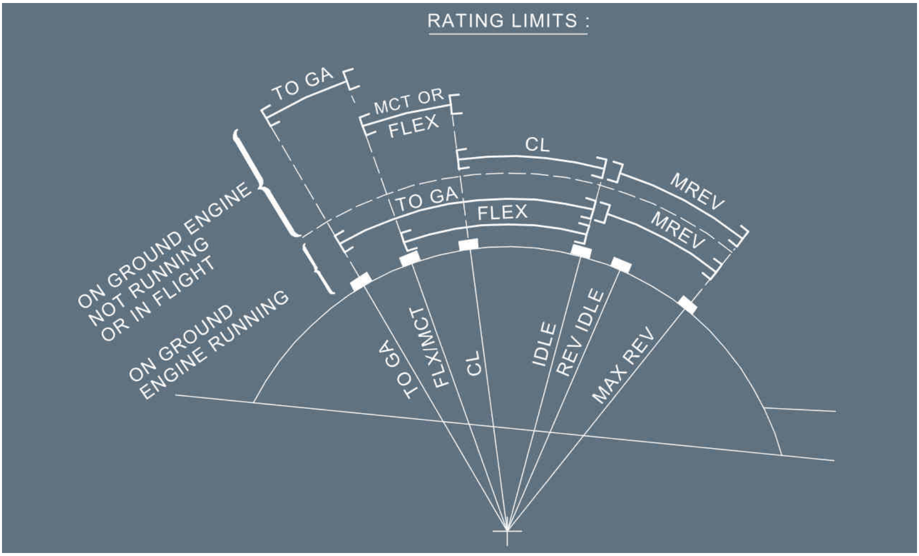

RATING LIMITS :
TO GA
MCT OR
FLEX OR
GA SOFT
CL
MREV
TO GA
FLEX
MREV
ON GROUND ENGINE
NOT RUNNING
OR IN FLIGHT
ON GROUND
ENGINE RUNNING
TO GA
FLX/MCT
CL
IDLE
REV IDLE
MAX REV

THRUST RATING LIMIT

Ident.: DSC-70-30-30-00001571.0001001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The FADEC computes the thrust rating limit for each thrust lever position, as shown below.
If the thrust lever is set in a detent, the FADEC selects the rating limit corresponding to this detent.
If the thrust lever is set between two detents, the FADEC selects the rating limit corresponding to the higher detent.


RATING LIMITS :
TO GA
MCT OR FLEX
CL
MREV
TO GA
FLEX
MREV
ON GROUND ENGINE NOT RUNNING OR IN FLIGHT
ON GROUND ENGINE RUNNING
TO GA
FLX/MCT
CL
IDLE
REV IDLE
MAX REV

MANUAL MODE

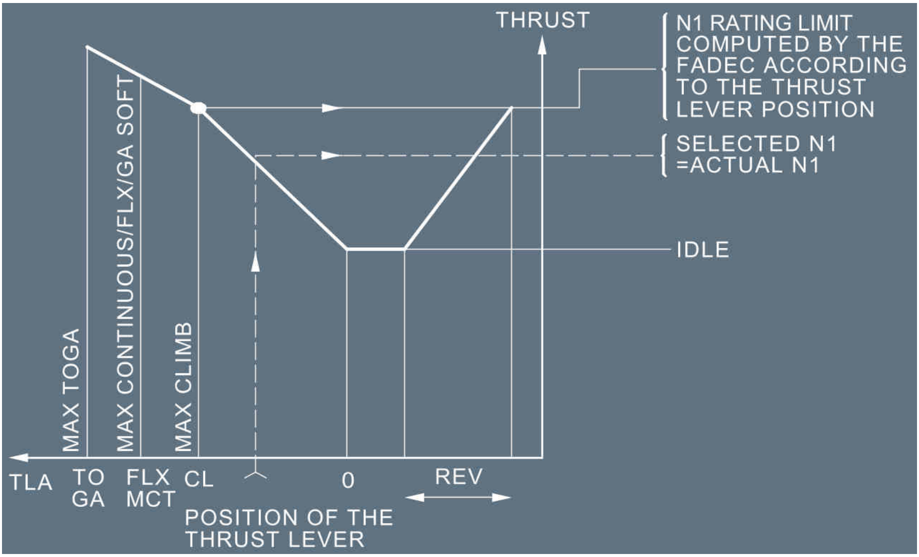
Ident.: DSC-70-30-40-00001572.0002001 / 02 MAY 23

1 **Applicable to: MSN 08495-09324, 10949-11597**

2

The engines are in the manual mode provided the A/THR function is:
- not armed or
- armed and not active (thrust lever not in the A/THR operating range and no alpha floor).

In these conditions, each engine is controlled by the position of its thrust lever.
The flight crew controls thrust by moving the thrust lever between the IDLE and TOGA positions.
Each position of the thrust lever within these limits corresponds to an N1.
When the thrust lever is in a detent, the corresponding N1 is equal to the N1 rating limit computed by the FADEC for that engine.


THRUST
N1 RATING LIMIT COMPUTED BY THE FADEC ACCORDING TO THE THRUST LEVER POSITION
SELECTED N1 =ACTUAL N1
IDLE
MAX TOGA
MAX CONTINUOUS/FLX/GA SOFT
MAX CLIMB
TLA
TO GA
FLX MCT
CL
0
REV
POSITION OF THE THRUST LEVER

When the thrust lever is in the FLX/MCT detent:

- **On the ground**
  The engine runs at the flex takeoff thrust rating if the flight crew has selected a flex takeoff temperature on the MCDU that is higher than the current Total Air Temperature (TAT).
  Otherwise the engine produces Maximum Continuous Thrust (MCT).
- **After takeoff**
  The flight crew can change from FLX to MCT by moving the thrust lever to TOGA or CL, then back to MCT. After that, the flight crew cannot use the FLX rating.

  Note: Setting the thrust lever out of FLX/MCT detent without reaching TOGA or CL detent has no effect.

The flight crew can always get MAX TO thrust by setting the thrust levers to TOGA.
In go-around, the A/THR controls the thrust in accordance with the following thrust lever position:

- At the TOGA detent, the thrust target is the TOGA thrust
- At the FLX/MCT detent, when TOGA was previously set in the case of soft go-around, the thrust target is one of the following:
  - The thrust to target a vertical speed of approximately 2 300 ft/min, or
  - The maximum thrust (TOGA) if the 2 300 ft/min target cannot be reached.

MANUAL MODE

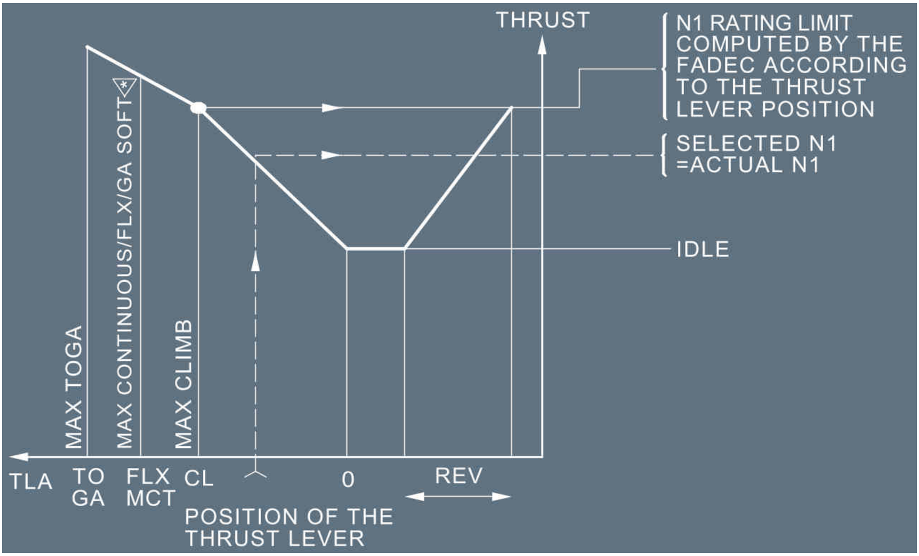
Ident.: DSC-70-30-40-00001572.0001001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

3

The engines are in the manual mode provided the A/THR function is:

- not armed or
- armed and not active (thrust lever not in the A/THR operating range and no alpha floor).

In these conditions, each engine is controlled by the position of its thrust lever.
The flight crew controls thrust by moving the thrust lever between the IDLE and TOGA positions.
Each position of the thrust lever within these limits corresponds to an N1.
When the thrust lever is in a detent, the corresponding N1 is equal to the N1 rating limit computed by the FADEC for that engine.


THRUST
N1 RATING LIMIT COMPUTED BY THE FADEC ACCORDING TO THE THRUST LEVER POSITION
SELECTED N1 =ACTUAL N1
IDLE
MAX TOGA
MAX CONTINUOUS/FLX/GA SOFT
MAX CLIMB
TLA
TO GA
FLX MCT
CL
0
REV
POSITION OF THE THRUST LEVER

When the thrust lever is in the FLX/MCT detent:

- **On the ground**
  The engine runs at the flex takeoff thrust rating if the flight crew has selected a flex takeoff temperature on the MCDU that is higher than the current Total Air Temperature (TAT). Otherwise the engine produces Maximum Continuous Thrust (MCT).
- **After takeoff**
  The flight crew can change from FLX to MCT by moving the thrust lever to TOGA or CL, then back to MCT. After that, the flight crew cannot use the FLX rating.

  Note: Setting the thrust lever out of FLX/MCT detent without reaching TOGA or CL detent has no effect.

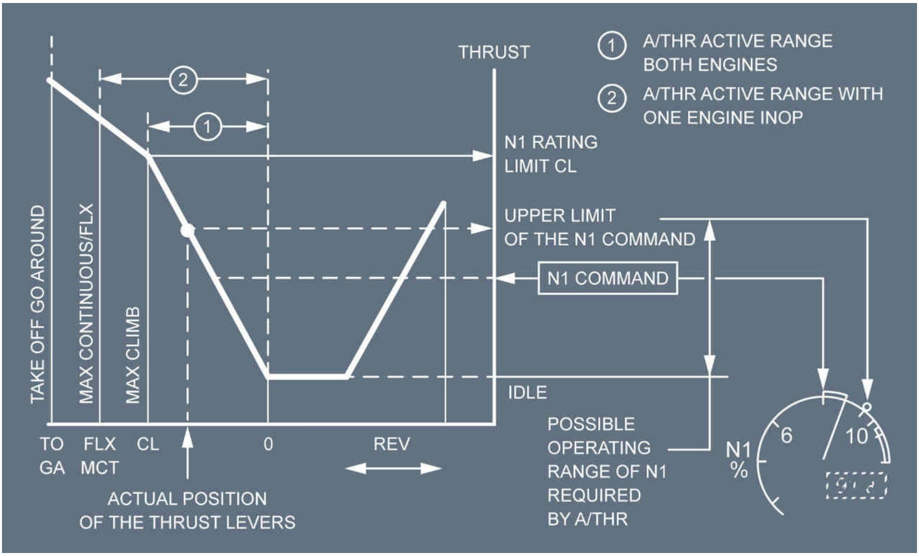
The flight crew can always get MAX TO thrust by setting the thrust levers to TOGA.

AUTOMATIC MODE

Ident.: DSC-70-30-40-00020874.0003001 / 18 MAY 22

4 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

In the autothrust mode (A/THR function active), the FMGC computes the thrust which is limited to the value corresponding to the thrust lever position (unless the alpha-floor mode is activated).


THRUST
① A/THR ACTIVE RANGE BOTH ENGINES
② A/THR ACTIVE RANGE WITH ONE ENGINE INOP
②
①
N1 RATING LIMIT CL
UPPER LIMIT OF THE N1 COMMAND
N1 COMMAND
IDLE
TAKE OFF GO AROUND
MAX CONTINUOUS/FLX
MAX CLIMB
TO GA
FLX MCT
CL
0
REV
ACTUAL POSITION OF THE THRUST LEVERS
POSSIBLE OPERATING RANGE OF N1 REQUIRED BY A/THR
N1 %
6
10

INDICATIONS ON FMA

The FADECs monitor the positions of the thrust levers, and trigger appropriate indications on the FMA. *Refer to DSC-22_30-80-20 MAN TOGA*.

THRUST CONTROL MALFUNCTION LOGIC

Ident.: DSC-70-30-40-00005364.0003001 / 16 NOV 15

5 **Applicable to: MSN 08495-09324, 10949-11597**

The FADEC provides a protection in the case of uncontrollable high thrust during critical flight phases: the Thrust Control Malfunction (TCM) protection.
The TCM protection is active on ground and during the takeoff and the approach phases.

TCM protection logic enables the following:
- Detection of the Thrust Control Malfunction
- Reaction to the detected Thrust Control Malfunction

A Thrust Control Malfunction is detected either:
- When actual N1 exceeds the commanded N1 value increased by 3 %, or
- When actual N1 exceeds the maximum possible N1 value for takeoff.

When a Thrust Control Malfunction is detected, the TCM protection function performs the following:

- Shuts down the engine on ground if thrust levers are at idle or in reverse position, or
- Reduces the fuel flow during flare and approach phases.

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GENERAL

Ident.: DSC-70-35-10-00020875.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

A FADEC dedicated to each engine controls the thrust.
The pilot uses the thrust levers to set the thrust in manual mode, and the FMGS sets the thrust in automatic mode (A/THR).
The FADEC prevents the thrust from exceeding the limit for the thrust lever position in both manual and automatic modes.
The engine thrust setting is made through control of the Engine Pressure Ratio (EPR).

EPR = Low Pressure Turbine exhaust pressure (P5)/Engine inlet pressure (P2)

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GENERAL

Ident.: DSC-70-35-20-00001576.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The FADEC has two mode of power setting, EPR and N1 modes.

EPR MODE

Ident.: DSC-70-35-20-00020876.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

EPR mode is the normal mode to control the thrust.
The required EPR is set by controlling the fuel flow.

The FADEC computes the command EPR as a function of:
- Thrust Lever Angle (TLA)
- Altitude
- Mach number
- Ambient temperature
- Air inlet total temperature (T2)
- Extracted bleed air.

N1 MODES

Ident.: DSC-70-35-20-00020877.0001001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

If no EPR is available (either sensed or computed) the affected FADEC will automatically revert to N1 mode.
Depending on the failure case leading to EPR mode loss, the FADEC will revert to either rated or degraded mode.
At the reversion to N1 mode (rated or degraded) an equivalent thrust to that achieved in EPR mode is provided until a thrust lever position change.
Autothrust control is lost. Alpha-floor protection is lost.

RATED N1 MODE

An automatic reversion to rated N1 mode occurs in the event of loss of sensed EPR. This occurs when P2 (engine inlet total pressure) and/or P5 (LP turbine exit total pressure) engine parameters are not available.
The FADEC will determine N1 power setting as a function of TLA, altitude and engine inlet total temperature.

The rated N1 mode can also be manually selected through the ENG N1 MODE pb-sw on the overhead panel.

DEGRADED N1 MODE

An automatic reversion to degraded N1 mode occurs in the event of loss of computed EPR due to the loss of T2 (engine inlet total air temperature) or ambient pressure (ambient pressure engine sensor) engine parameters.

The N1 is defined as a function of TLA only and is limited by the FADEC to either:
- The smallest of maximum N1 or N1 redline, if T2 is available, or
- The N1 redline if T2 is not available.

The degraded N1 mode is an unrated N1 mode.
The N1 rating limit and maximum N1 indications on ECAM E/WD are lost.
In electrical emergency configuration, the EPR mode is lost on both engines, and each FADEC reverts to the degraded N1 mode.

Note: *An overboost can occur during reversion in the degraded N1 mode, with thrust lever at full forward position.*

EPR RECOVERY LOGIC

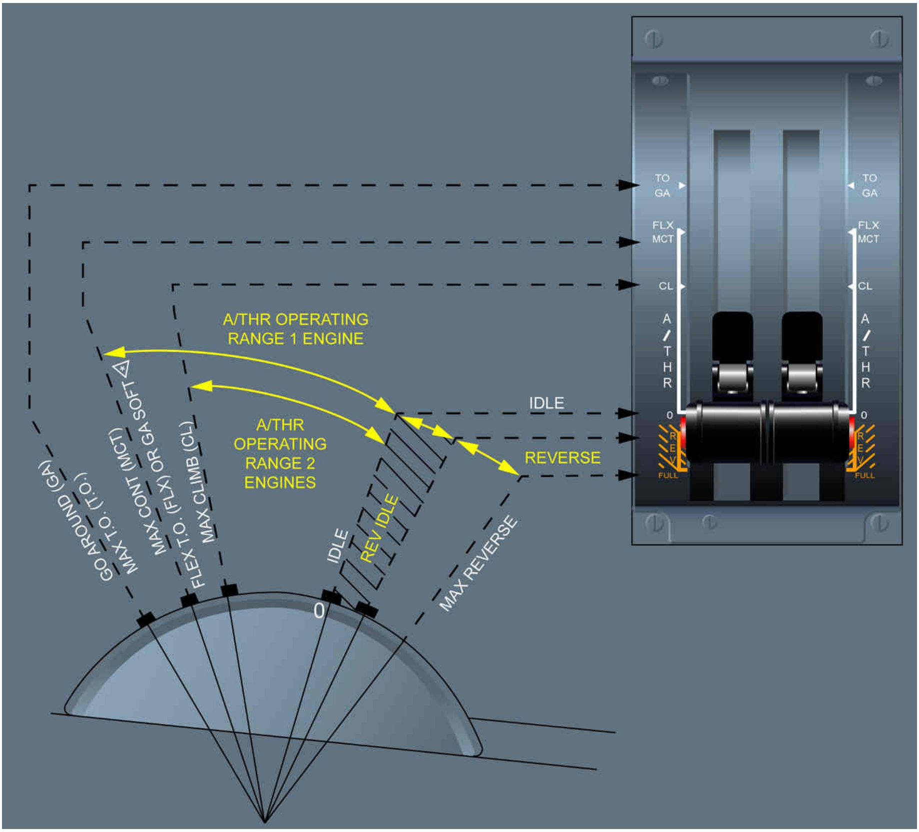
Ident.: DSC-70-35-20-00001579.0001001 / 03 APR 13
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

With the FADEC in either rated or degraded N1 mode, switching OFF the ENG N1 MODE pb on the overhead panel will permit to return to the EPR mode if the failure has disappeared.

THRUST LEVERS

Ident.: DSC-70-35-30-00020878.0002001 / 04 NOV 20

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165


TO
GA
FLX
MCT
CL
A
/
T
H
R
0
R
E
V
FULL
A/THR OPERATING RANGE 1 ENGINE
A/THR OPERATING RANGE 2 ENGINES
IDLE
REVERSE
GO AROUND (GA)
MAX T.O. (T.O.)
MAX CONT (MCT) OR GA SOFT
FLEX T.O. (FLX)
MAX CLIMB (CL)
IDLE
REV IDLE
MAX REVERSE
0

The thrust levers can only be moved manually.
They move over a sector that is divided into four operating segments.
The sector has six positions defined by detents or stops.
Thrust lever position is transmitted to the FADEC, which computes and displays the thrust rating limit and the N1 for that Thrust Lever Angle (TLA).

Note: *To select reverse idle, the flight crew pulls up the thrust reverse levers. The thrust lever can no longer remain in the idle position.*

THRUST RATING LIMIT

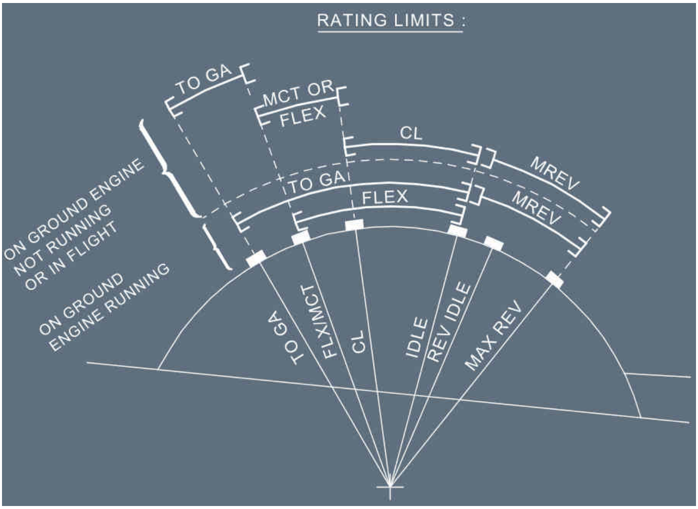
Ident.: DSC-70-35-40-00001581.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The FADEC computes the thrust rating limit for each thrust lever position, as shown below.

If the thrust lever is set in a detent, the FADEC selects the rating limit corresponding to this detent.

If the thrust lever is set between two detents, the FADEC selects the rating limit corresponding to the higher detent.


RATING LIMITS :
TO GA
MCT OR FLEX
CL
MREV
ON GROUND ENGINE NOT RUNNING OR IN FLIGHT
TO GA
FLEX
MREV
ON GROUND ENGINE RUNNING
TO GA
FLX/MCT
CL
IDLE
REV IDLE
MAX REV

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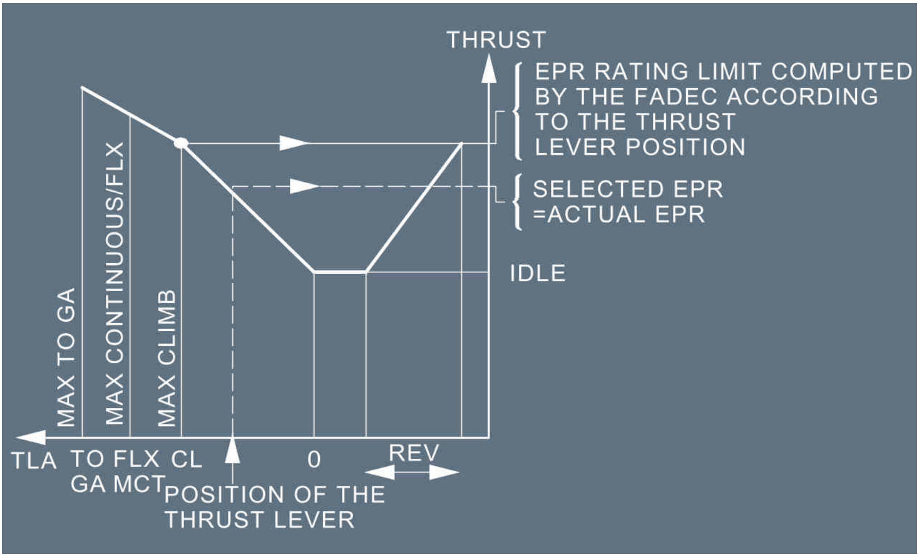
MANUAL MODE

Ident.: DSC-70-35-50-00001582.0001001 / 03 NOV 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The engines are in the manual mode provided the A/THR function is :
- not armed or
- armed and not active (thrust lever not in the A/THR operating range and no alpha floor).

In these conditions, each engine is controlled by the position of its thrust lever.
The flight crew controls thrust by moving the thrust lever between IDLE and TOGA positions. Each position of the thrust lever within these limits corresponds to an EPR.
When the thrust lever is in a detent, the corresponding EPR is equal to the EPR rating limit computed by the FADEC for that engine.


THRUST
EPR RATING LIMIT COMPUTED BY THE FADEC ACCORDING TO THE THRUST LEVER POSITION
SELECTED EPR =ACTUAL EPR
IDLE
MAX TO GA
MAX CONTINUOUS/FLX
MAX CLIMB
TLA
TO GA
FLX MCT
CL
0
REV
POSITION OF THE THRUST LEVER

When the thrust lever is in the FLX/MCT detent :

- **On the ground**
  The engine runs at the flex takeoff thrust rating if the flight crew has selected a flex takeoff temperature on the MCDU that is higher than the current Total Air Temperature (TAT). Otherwise the engine produces Maximum Continuous Thrust (MCT).

  Note: *A change in FLEX TEMP during the takeoff has no effect on the thrust.*

- **After takeoff**
  The flight crew can change from FLX to MCT by moving the thrust lever to TOGA or CL, then back to MCT. After that, the flight crew cannot use the FLX rating.

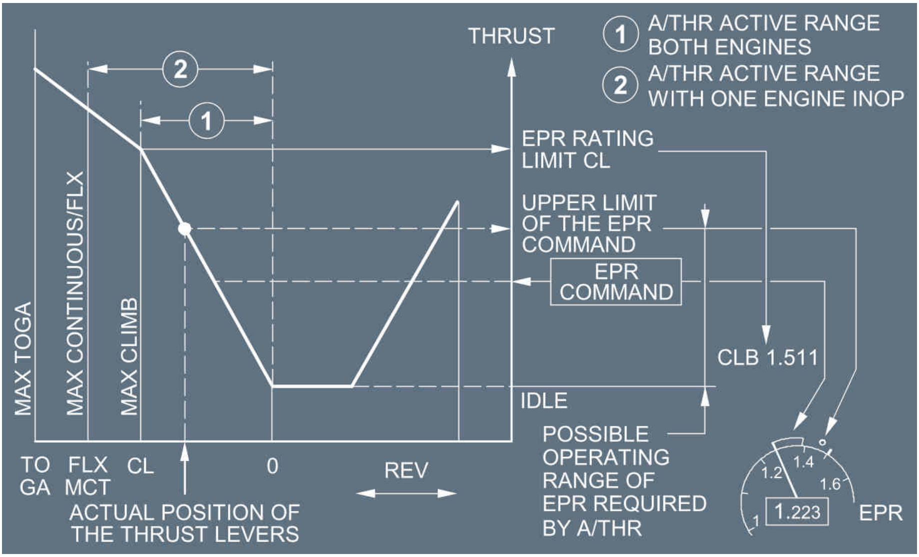
The flight crew can always get MAX TO thrust by pushing the thrust lever all the way forward.

Note: *Setting the thrust lever out of FLX/MCT detent without reaching TOGA or CL detent has no effect.*

AUTOMATIC MODE

Ident.: DSC-70-35-50-00001583.0003001 / 18 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

In the autothrust mode (A/THR function active), the FMGC computes the thrust, which is limited to the value corresponding to the thrust lever position (unless the alpha-floor mode is activated).


THRUST
① A/THR ACTIVE RANGE BOTH ENGINES
② A/THR ACTIVE RANGE WITH ONE ENGINE INOP
2
1
EPR RATING LIMIT CL
UPPER LIMIT OF THE EPR COMMAND
EPR COMMAND
CLB 1.511
IDLE
MAX TOGA
MAX CONTINUOUS/FLX
MAX CLIMB
TO GA
FLX MCT
CL
0
REV
ACTUAL POSITION OF THE THRUST LEVERS
POSSIBLE OPERATING RANGE OF EPR REQUIRED BY A/THR
1
1.2
1.4
1.6
1.223
EPR

INDICATIONS ON FMA

The FADECs monitor the positions of the thrust levers, and trigger appropriate indications on the FMA. *Refer to DSC-22_30-80-20 MAN TOGA*.

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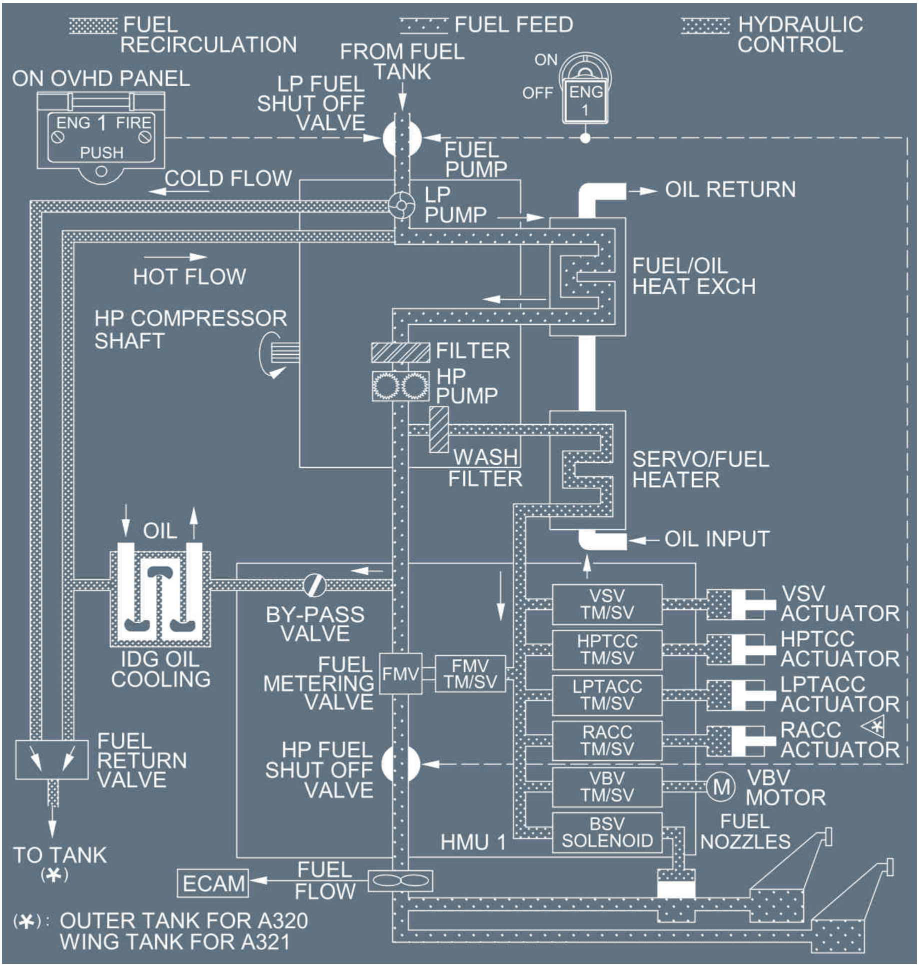
GENERAL

Ident.: DSC-70-40-00020868.0001001 / 17 MAR 17

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The fuel system supplies fuel to the combustion chamber at the required flow rate, pressure, and temperature.
The fuel flows from the tank, via the fuel pump unit and the fuel/oil heat exchanger, to the Hydromechanical Unit (HMU) and to the fuel nozzles.


FUEL RECIRCULATION
FUEL FEED
HYDRAULIC CONTROL
FROM FUEL TANK
ON OVHD PANEL
ENG 1 FIRE
PUSH
LP FUEL SHUT OFF VALVE
ON
OFF
ENG 1
FUEL PUMP
COLD FLOW
LP PUMP
OIL RETURN
FUEL/OIL HEAT EXCH
HOT FLOW
HP COMPRESSOR SHAFT
FILTER
HP PUMP
WASH FILTER
SERVO/FUEL HEATER
OIL
OIL INPUT
IDG OIL COOLING
BY-PASS VALVE
VSV TM/SV
VSV ACTUATOR
HPTCC TM/SV
HPTCC ACTUATOR
FUEL METERING VALVE
FMV
FMV TM/SV
LPTACC TM/SV
LPTACC ACTUATOR
RACC TM/SV
RACC ACTUATOR
FUEL RETURN VALVE
HP FUEL SHUT OFF VALVE
VBV TM/SV
VBV MOTOR
M
BSV SOLENOID
FUEL NOZZLES
HMU 1
TO TANK (✱)
ECAM
FUEL FLOW
(✱): OUTER TANK FOR A320
WING TANK FOR A321

FUEL PUMP UNIT

Ident.: DSC-70-40-00001586.0001001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The HP compressor shaft drives the HP fuel pump assembly. Fuel flows through the LP pump, then through the fuel/oil heat exchanger and the HP pump (gear pump).

The fuel then divides into a filtered flow for the servo fuel heater and the servo valves of the HMU, and an unfiltered flow for the metering valve of the HMU.

SHUT-OFF VALVES

Ident.: DSC-70-40-00001587.0001001 / 12 MAY 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Moving the ENG1 (ENG2) MASTER switch to OFF directly commands the closing of the LP and HP fuel shut off valves for that engine's fuel system.
It also closes the fuel return valve and opens the bypass valve.

HYDROMECHANICAL UNIT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: DSC-70-40-A-00001588.0001001 / 17 MAR 17

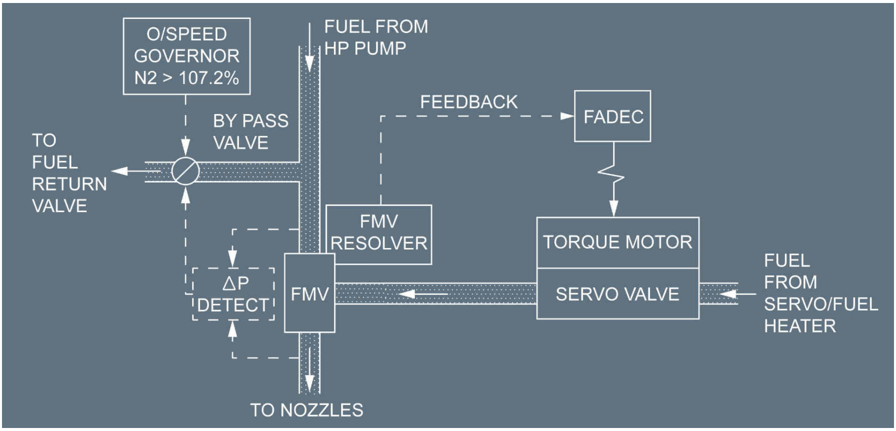
GENERAL

The FADEC controls the HMU, which :
- controls fuel flow to the engine combustion chamber
- controls fuel hydraulic signals to actuators
- protects against overspeeding.

Ident.: DSC-70-40-A-00020880.0001001 / 17 MAR 17

FUEL FLOW

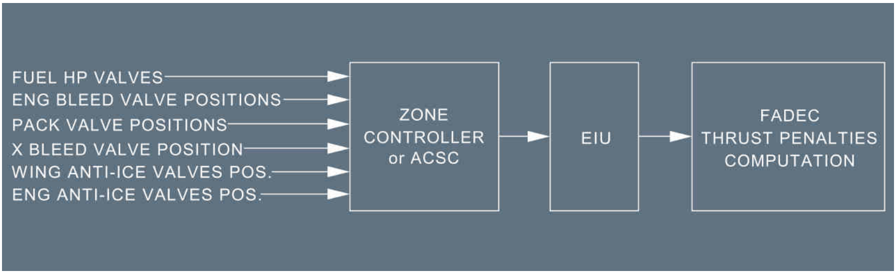
L3 The Fuel Metering Valve (FMV) transforms FADEC orders through a torque motor and servo valve into fuel flow to the engine fuel nozzles.
The FMV resolver generates a feedback signal proportional to the FMV position.
The bypass valve maintains a constant pressure drop across the FMV to ensure that the metered fuel flow is proportional to the FMV position.


O/SPEED
GOVERNOR
N2 > 107.2%
FUEL FROM
HP PUMP
BY PASS
VALVE
FEEDBACK
FADEC
TO
FUEL
RETURN
VALVE
FMV
RESOLVER
TORQUE MOTOR
ΔP
DETECT
FMV
SERVO VALVE
FUEL
FROM
SERVO/FUEL
HEATER
TO NOZZLES

L1 The FADEC computes the fuel flow that will maintain the target N1.

As the FADEC maintains this N1, it allows N2 to vary while remaining between N2 minimum and N2 maximum. The FADEC also controls the engine parameters to :
- Limit acceleration and deceleration ;
- Avoid engine stall or flameout ;
- Limit maximum N1 and N2 ;
- Maintain air bleed pressure requirement.

The FADEC computes an N2 correction according to the bleed configuration.


FUEL HP VALVES
ENG BLEED VALVE POSITIONS
PACK VALVE POSITIONS
X BLEED VALVE POSITION
WING ANTI-ICE VALVES POS.
ENG ANTI-ICE VALVES POS.
ZONE
CONTROLLER
or ACSC
EIU
FADEC
THRUST PENALTIES
COMPUTATION

Ident.: DSC-70-40-A-00001590.0001001 / 17 MAR 17

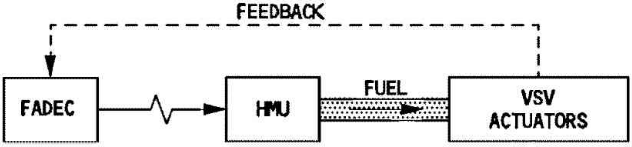
OVERSPEED GOVERNOR SYSTEM

Independent of the FADEC, the overspeed governor limits the N2 by opening the fuel bypass valve, in the event of a malfunction that could lead to an overspeed condition.

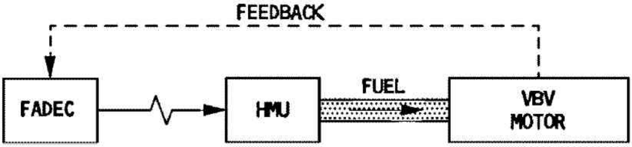
FUEL HYDRAULIC SIGNALS

L3 Fuel hydraulic signals go to :

- Low Pressure Turbine Clearance Control (LPTCC) valves
  (*Refer to DSC-70-60 General*)
- High Pressure Turbine Clearance Control (HPTCC) valves
  (*Refer to DSC-70-60 General*)
- Rotor Active Clearance Control (RACC) system
  (*Refer to DSC-70-60 General*)
- Variable Stator Vanes (VSV)
  The VSV system positions the compressor variable vanes.
  The FADEC maintains optimum compressor efficiency at a steady state and an adequate stall margin for transient engine operation.
  VSVs are fully closed during engine start and are fully open at high thrust.



- Variable Bleed Valves (VBV)
  The FADEC controls the VBVs, upstream of the HP compressor. Their setting depends on compressor inlet temperature and on N2. It varies between full open (start, low thrust, and during fast deceleration) and full closed (high thrust) positions.



IDG COOLING SYSTEM

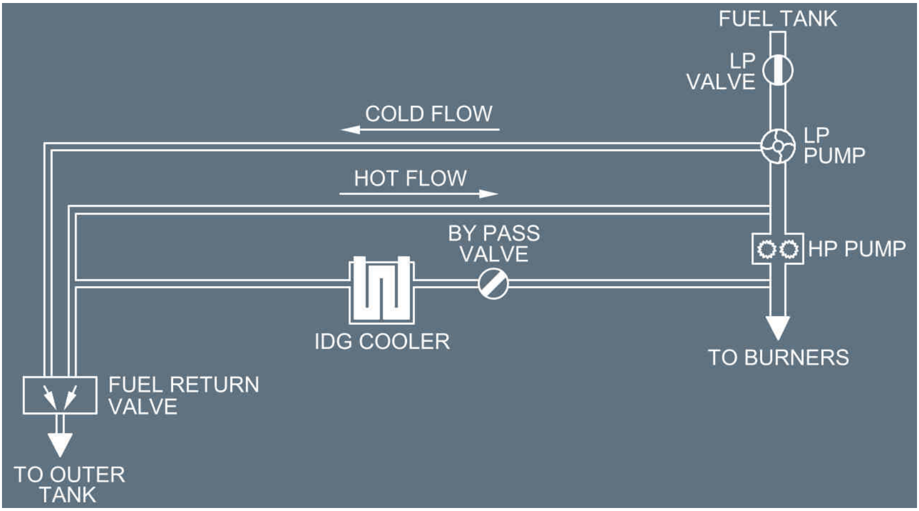
Ident.: DSC-70-40-00001593.0001001 / 26 JUL 12

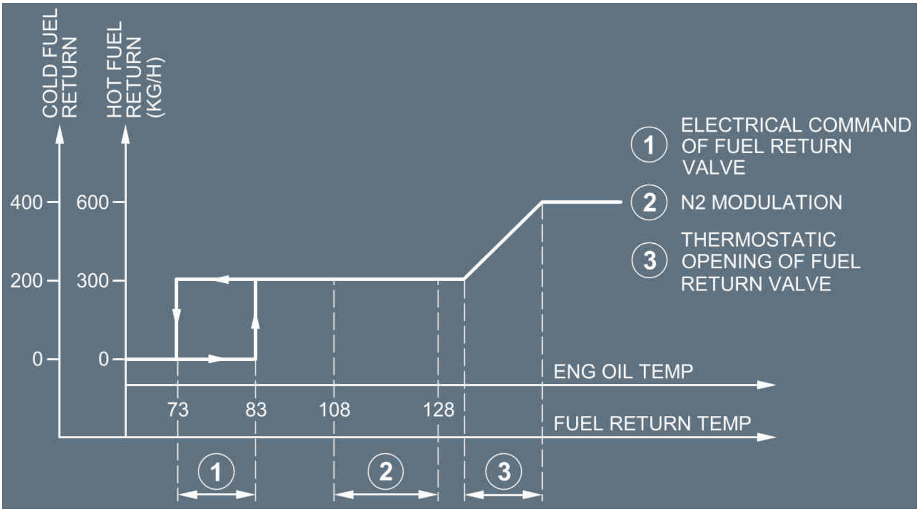
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Some of the fuel flowing out of the HMU goes to cool the oil systems of the Integrated Drive Generators (IDGs). It then returns to the fuel pump unit or to the tank.
The Fuel Return Valve (FRV), controlled by the FADEC, ensures that this flow is adequate.
L3 At low engine thrust, if the oil going into the IDG is too hot, the cooling fuel is sent back to the tank (300 kg/h).
If oil temperature continues to rise, the ECU increases the minimum N2.
If oil temperature still keeps rising, the FADEC increases the fuel flow to the tank (from 300 to 600 kg/h, depending on fuel return temperature).
The fuel return valve is always mixing hot fuel with cold fuel so that the temperature of fuel returning to the tank stays below 100 °C (from 200 to 400 kg/h, depending on fuel return temperature).

Fuel recirculation to the tank is inhibited (FRV closed) in the following cases :
- at engine shutdown
- during takeoff and climb
- if :
  - wing tank level is below about 300 kg (660 lb).
  - there is fuel overflow in the surge tank
  - fuel feed is by gravity only.
- when fuel temperature in the wing tank in flight is above 52.5 °C

Note: *On the ground, high fuel temperature in the wing tank or fuel overflow in the surge tank does not inhibit the fuel recirculation to the wing tank (FRV remains open).*


FUEL TANK
LP VALVE
COLD FLOW
LP PUMP
HOT FLOW
BY PASS VALVE
HP PUMP
IDG COOLER
TO BURNERS
FUEL RETURN VALVE
TO OUTER TANK


COLD FUEL RETURN
HOT FUEL RETURN (KG/H)
400
200
0
600
300
0
73
83
108
128
ENG OIL TEMP
FUEL RETURN TEMP
1
2
3
① ELECTRICAL COMMAND OF FUEL RETURN VALVE
② N2 MODULATION
③ THERMOSTATIC OPENING OF FUEL RETURN VALVE

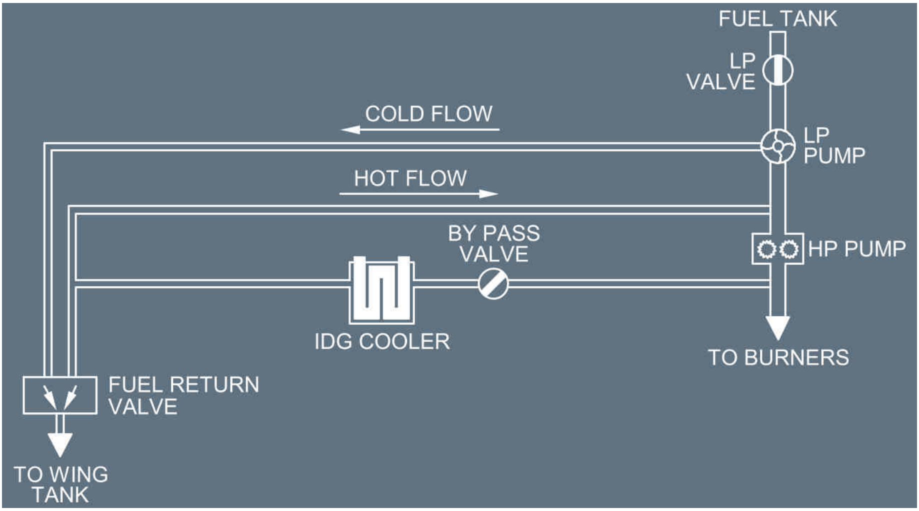
IDG COOLING SYSTEM

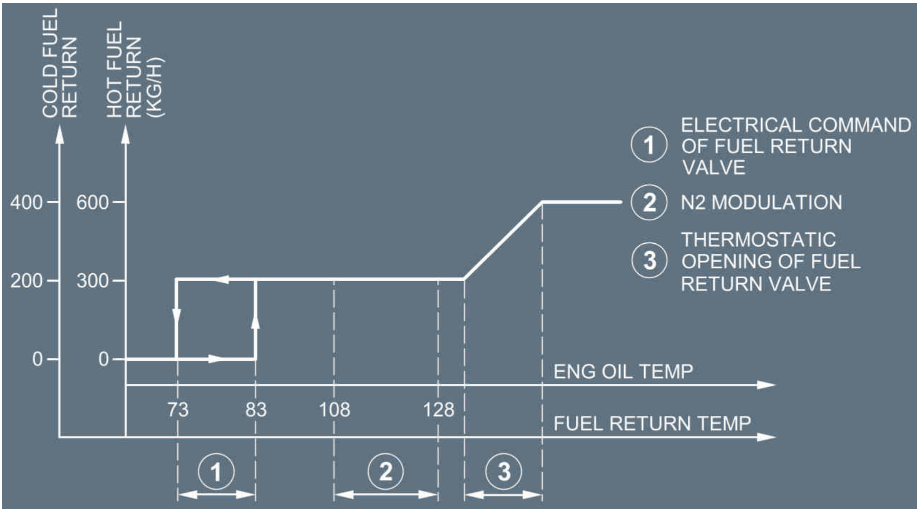
Ident.: DSC-70-40-00001593.0002001 / 26 JUL 12
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Some of the fuel flowing out of the HMU goes to cool the oil systems of the Integrated Drive Generators (IDGs). It then returns to the fuel pump unit or to the tank.
The Fuel Return Valve (FRV), controlled by the FADEC, ensures that this flow is adequate.
L3 At low engine thrust, if the oil going into the IDG is too hot, the cooling fuel is sent back to the tank (300 kg/h).
If oil temperature continues to rise, the ECU increases the minimum N2.
If oil temperature still keeps rising, the FADEC increases the fuel flow to the tank (from 300 to 600 kg/h, depending on fuel return temperature).
The fuel return valve is always mixing hot fuel with cold fuel so that the temperature of fuel returning to the tank stays below 100 °C (from 200 to 400 kg/h, depending on fuel return temperature).

Fuel recirculation to the tank is inhibited (FRV closed) in the following cases :
- at engine shutdown
- during takeoff and climb
- if :
  - wing tank level is below about 280 kg (620 lb).
  - there is fuel overflow in the surge tank
  - fuel feed is by gravity only.
- when fuel temperature in the wing tank in flight is above 52.5 °C

Note: *On the ground, high fuel temperature in the wing tank or fuel overflow in the surge tank does not inhibit the fuel recirculation to the wing tank (FRV remains open).*


FUEL TANK
LP VALVE
COLD FLOW
LP PUMP
HOT FLOW
BY PASS VALVE
HP PUMP
IDG COOLER
TO BURNERS
FUEL RETURN VALVE
TO WING TANK


COLD FUEL RETURN
HOT FUEL RETURN (KG/H)
400
200
0
600
300
0
73
83
108
128
ENG OIL TEMP
FUEL RETURN TEMP
1
2
3
1 ELECTRICAL COMMAND OF FUEL RETURN VALVE
2 N2 MODULATION
3 THERMOSTATIC OPENING OF FUEL RETURN VALVE

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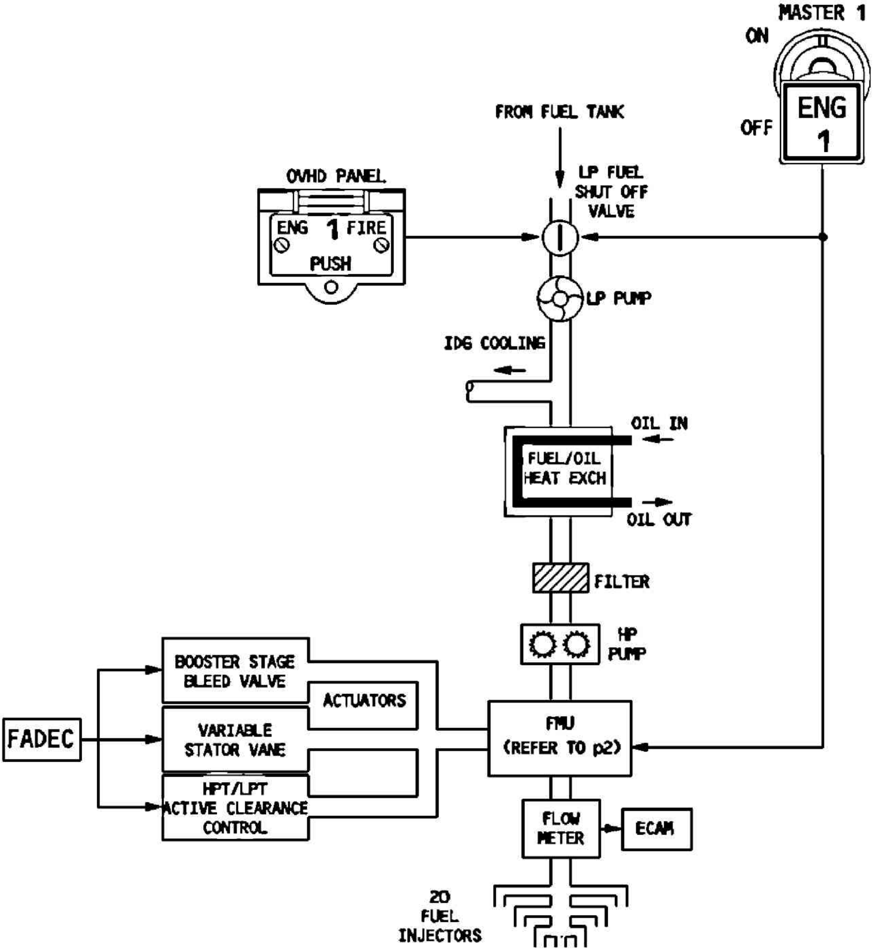
GENERAL

Ident.: DSC-70-45-00001594.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The fuel system enables the combustion of fuel under appropriate conditions of flow rate and pressure. The FADEC controls the fuel supply via the Fuel Metering Unit (FMU).
High pressure fuel is also used to provide pressure for some actuators.

The major components are :
- High and low pressure fuel pumps (dual unit)
- Fuel/oil heat exchanger
- Low pressure fuel filter
- Fuel Metering Unit (FMU)
- Fuel distribution valve
- 20 fuel injectors
- Diverter and return to tank valve
- IDG fuel/oil heat exchanger.


MASTER 1
ON
OFF
ENG
1
FROM FUEL TANK
OVHD PANEL
ENG 1 FIRE
PUSH
LP FUEL
SHUT OFF
VALVE
LP PUMP
IDG COOLING
OIL IN
FUEL/OIL
HEAT EXCH
OIL OUT
FILTER
HP
PUMP
BOOSTER STAGE
BLEED VALVE
ACTUATORS
FADEC
VARIABLE
STATOR VANE
HPT/LPT
ACTIVE CLEARANCE
CONTROL
FMU
(REFER TO p2)
FLOW
METER
ECAM
20
FUEL
INJECTORS

FUEL PUMP UNIT

Ident.: DSC-70-45-00001595.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Consists of the low and high pressure stages which are driven from a common gearbox output shaft.

- The LP stage increases the pressure to :
  - suppress the cavitation
  - account for the pressure losses of the fuel oil heat exchanger and the low pressure fuel filter
  - provide enough pressure at the inlet of the HP stage
- The HP stage increases the pressure to the appropriate level for optimum fuel flow and atomization at all engine operating conditions.

FUEL OIL HEAT EXCHANGER

Ident.: DSC-70-45-00001596.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Enables fuel to be heated by the oil, to reduce temperature of the oil, and prevent fuel icing.

FUEL METERING UNIT

Ident.: DSC-70-45-00020882.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The FADEC controls the Fuel Metering Valve (FMV) which transforms its orders through three torque motors/servo valves.

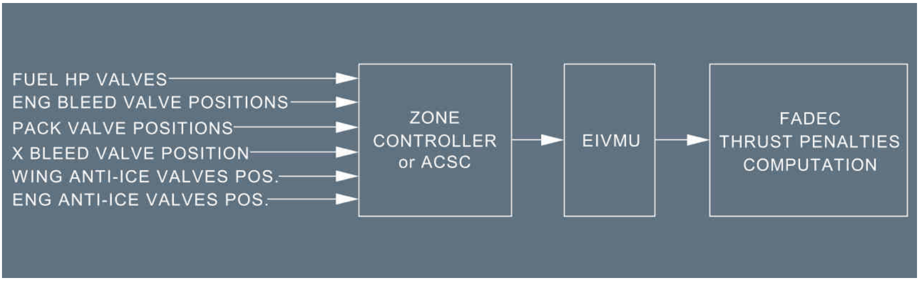
The FMV :
- Controls the fuel flow
- Protects against overspeeding (by reducing down to the minimum fuel flow).
- Controls the shut off valve (to start or stop the engine)
- Supplies high pressure fuel to the various actuators.

The three FADEC controlled torque motors are used to direct fuel servo pressure to open/close three valves :
- The fuel metering valve meters the fuel supply.
- The overspeed valve reduces the fuel flow in case of a FADEC detected overspeed. This reduction is made according to a preset value.
  Once this valve is operated it remains in the minimum fuel flow position until the engine is shutdown.
- The shut off valve opens/closes to isolate fuel supplies for starting or stopping the engine.

The servo pressure regulator regulates the pressure for FMU internal use.
The FADEC computes the fuel flow that will maintain the target EPR.
As the FADEC maintains this EPR, it allows N2 to vary while remaining between minimum N2 and maximum N2.

The FADEC also controls the engine parameters to :
- Limit acceleration and deceleration ;
- Avoid engine stall or flameout ;
- Limit maximum N1 and N2 ;
- Maintain air bleed pressure requirement.

The FADEC computes an N2 correction according to the bleed configuration.


FUEL HP VALVES
ENG BLEED VALVE POSITIONS
PACK VALVE POSITIONS
X BLEED VALVE POSITION
WING ANTI-ICE VALVES POS.
ENG ANTI-ICE VALVES POS.
ZONE CONTROLLER or ACSC
EIVMU
FADEC THRUST PENALTIES COMPUTATION

FUEL FILTER

Ident.: DSC-70-45-00001599.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Cockpit indication is provided by a differential pressure switch.

IDG COOLING RECIRCULATION SYSTEM

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

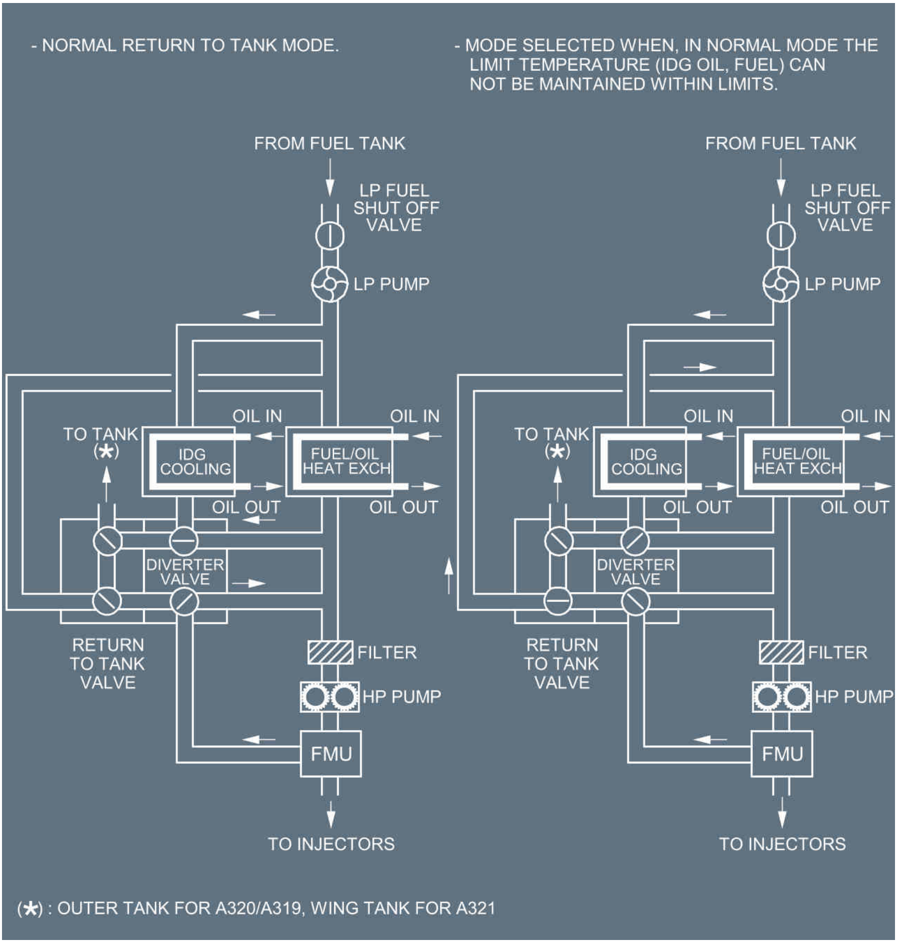
Ident.: DSC-70-45-A-00020885.0001001 / 17 MAR 17

GENERAL

Cooling of IDG oil and engine oil are accomplished respectively by the IDG cooler and by the Fuel/Oil heat exchanger.
Fuel, IDG oil and engine oil temperatures are regulated by the FADEC commanding the fuel diverter valve and the return to tank valve in four operation modes.

Ident.: DSC-70-45-A-00001601.0001001 / 17 MAR 17

TWO RETURNS TO TANK MODES

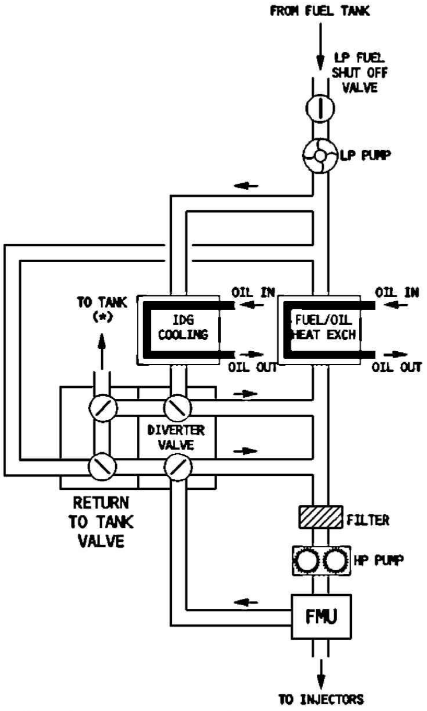

- NORMAL RETURN TO TANK MODE.
- MODE SELECTED WHEN, IN NORMAL MODE THE LIMIT TEMPERATURE (IDG OIL, FUEL) CAN NOT BE MAINTAINED WITHIN LIMITS.
FROM FUEL TANK
LP FUEL SHUT OFF VALVE
LP PUMP
OIL IN
OIL IN
TO TANK (*)
IDG COOLING
FUEL/OIL HEAT EXCH
OIL OUT
OIL OUT
DIVERTER VALVE
RETURN TO TANK VALVE
FILTER
HP PUMP
FMU
TO INJECTORS
FROM FUEL TANK
LP FUEL SHUT OFF VALVE
LP PUMP
OIL IN
OIL IN
TO TANK (*)
IDG COOLING
FUEL/OIL HEAT EXCH
OIL OUT
OIL OUT
DIVERTER VALVE
RETURN TO TANK VALVE
FILTER
HP PUMP
FMU
TO INJECTORS
(*) : OUTER TANK FOR A320/A319, WING TANK FOR A321

Ident.: DSC-70-45-A-00001602.0001001 / 17 MAR 17

TWO NO-RETURNS TO TANK MODES

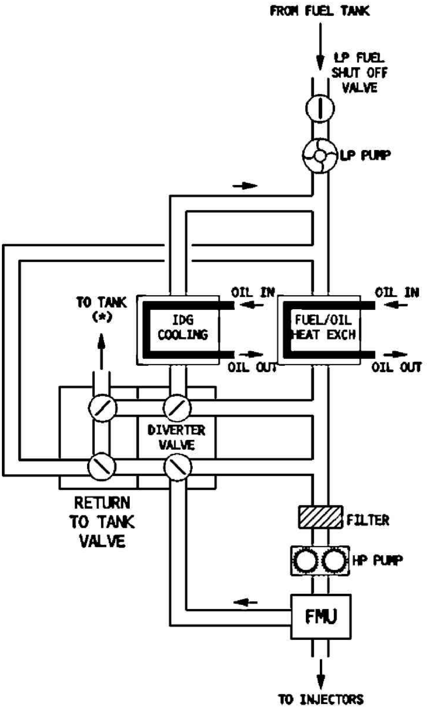
L3 Modes selected when return to tank is not allowed, in particular in case of high fuel flow or high tank fuel temperature.

- HIGH ENGINE SPEED


FROM FUEL TANK
LP FUEL
SHUT OFF
VALVE
LP PUMP
TO TANK
(*)
IDG
COOLING
OIL IN
OIL OUT
FUEL/OIL
HEAT EXCH
OIL IN
OIL OUT
DIVERTER
VALVE
RETURN
TO TANK
VALVE
FILTER
HP PUMP
FMU
TO INJECTORS

(*) : OUTER TANK FOR A320/A319, WING TANK FOR A321

- LOW ENGINE SPEED AND HIGH IDG OIL TEMP
- COLD FUEL
- FAIL-SAFE MODE


FROM FUEL TANK
LP FUEL
SHUT OFF
VALVE
LP PUMP
TO TANK
(*)
IDG
COOLING
OIL IN
OIL OUT
FUEL/OIL
HEAT EXCH
OIL IN
OIL OUT
DIVERTER
VALVE
RETURN
TO TANK
VALVE
FILTER
HP PUMP
FMU
TO INJECTORS

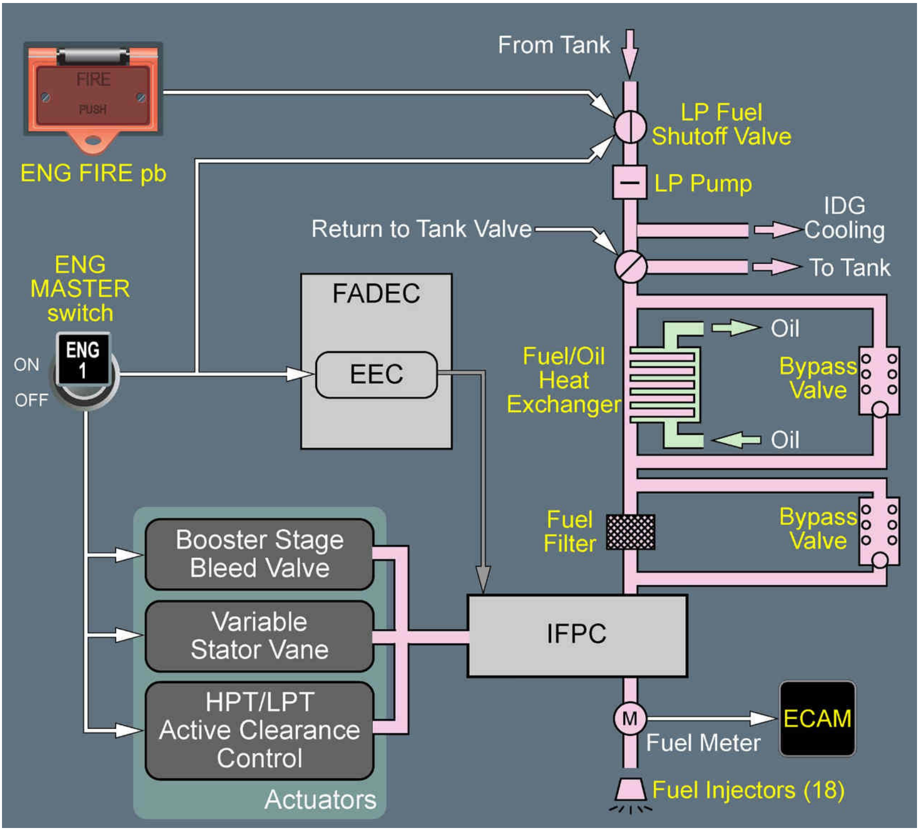
GENERAL

Ident.: DSC-70-48-00015367.0001001 / 21 MAR 16

1 **Applicable to: MSN 08495-09324, 10949-11597**

The fuel system enables the combustion of fuel under appropriate conditions of flow rate and pressure. The FADEC controls the fuel supply via the Integrated Fuel Pump and Control (IFPC). High pressure fuel is also used to provide pressure for some actuators.

The major components are :
- High and low pressure fuel pumps (dual unit)
- Fuel/oil heat exchanger
- Low pressure fuel filter
- Fuel distribution valve
- 18 fuel injectors
- Integrated Fuel Pump and Control (IFPC)
- Diverter and return to tank valve
- Fuel Oil Heat Exchanger (FOHE).


From Tank
FIRE
PUSH
ENG FIRE pb
LP Fuel Shutoff Valve
LP Pump
IDG Cooling
Return to Tank Valve
To Tank
ENG MASTER switch
ON
OFF
ENG 1
FADEC
EEC
Oil
Fuel/Oil Heat Exchanger
Bypass Valve
Oil
Fuel Filter
Bypass Valve
Booster Stage Bleed Valve
Variable Stator Vane
HPT/LPT Active Clearance Control
Actuators
IFPC
M
Fuel Meter
ECAM
Fuel Injectors (18)

INTEGRATED FUEL PUMP AND CONTROL (IFPC)

Ident.: DSC-70-48-00015368.0001001 / 21 MAR 16

2 **Applicable to: MSN 08495-09324, 10949-11597**

The Integrated Fuel Pump and Control (IFPC) combines both fuel pump and fuel control functions into a single unit. Therefore, this enables to reduce the number of components installed on the Main Gearbox (MGB).

The IFPC performs the following functions:

- Provide pressurised and metered fuel to the engine to support combustion, and
- Pressurize the fuel for the engine component actuators

The FADEC controls the Fuel Metering Functions of the IFPC which transmits its orders through valves.

The IFPC :
- Commands the Fuel Metering Valve (FMV) to meter the fuel that flow to the engine combustion chamber
- Commands the overspeed valve to reduce the fuel flow in case the FADEC detects overspeed. Once this valve is operated, it remains in the minimum fuel flow position until the engine is shutdown.
- Controls the shut off valve to isolate fuel supplies to start or stop the engine.
- Supplies high pressure fuel to the various actuators

FUEL OIL HEAT EXCHANGER

Ident.: DSC-70-48-00015369.0001001 / 21 MAR 16

3 **Applicable to: MSN 08495-09324, 10949-11597**

The Fuel Oil Heat Exchanger (FOHE) uses the cold fuel to decrease the temperature of the engine oil, and increases the temperature of the fuel.
The heat is continuously transmitted from the oil to the fuel when the engine is in operation. This prevents the fuel from icing.
If the FOHE is clogged (e.g. ice accretion from the upstream pipes), a bypass valve opens to ensure that the fuel continuously flows to the fuel nozzles.

FUEL FILTER

Ident.: DSC-70-48-00015370.0001001 / 21 MAR 16

4 **Applicable to: MSN 08495-09324, 10949-11597**

The fuel filter protects the fuel system from contamination.
The fuel filter is downstream of the FOHE.
A fuel filter bypass valve may open if the fuel filter is clogged. It ensures that fuel continuously flows to the fuel nozzles.

IDG COOLING RECIRCULATION SYSTEM

Ident.: DSC-70-48-00020917.0001001 / 17 MAR 17

5 **Applicable to: MSN 08495-09324, 10949-11597**

The Integrated Drive Generator/Fuel Oil Heat Exchanger (IDG/FOHE) and the main Fuel/Oil heat exchanger enable cooling of both the IDG oil and the engine oil.
Fuel, IDG oil and engine oil temperatures are regulated by the FADEC.

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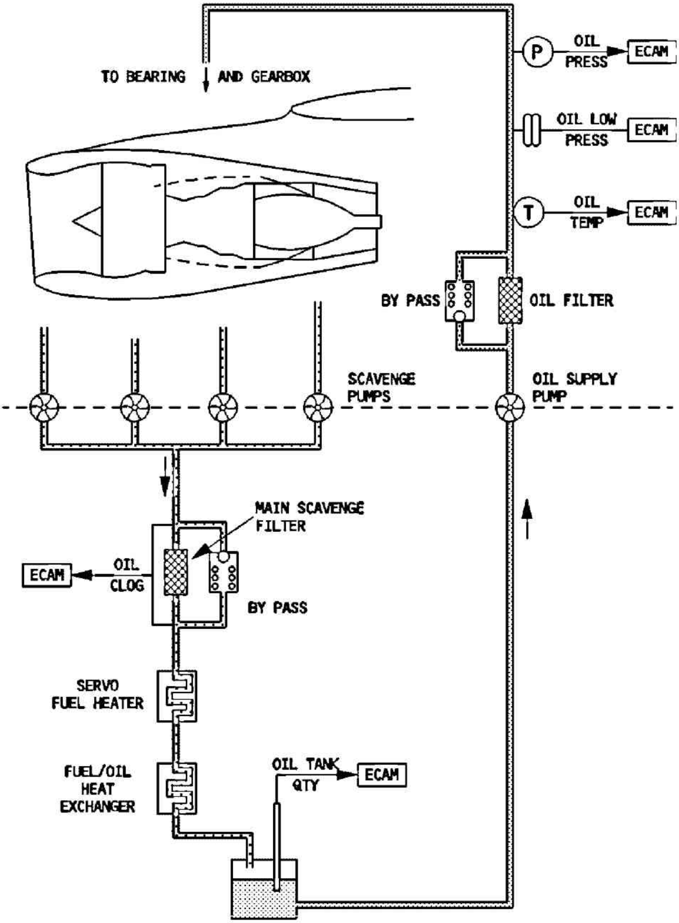
GENERAL

Ident.: DSC-70-50-00001603.0001001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The oil system lubricates the engine components.

It contains :
- the oil tank
- the lube and scavenge pump modules
- the fuel/oil heat exchanger
- the filters, chip detectors, pressure relief and bypass valves.


TO BEARING AND GEARBOX
P
OIL PRESS
ECAM
OIL LOW PRESS
ECAM
T
OIL TEMP
ECAM
BY PASS
OIL FILTER
SCAVENGE PUMPS
OIL SUPPLY PUMP
MAIN SCAVENGE FILTER
ECAM
OIL CLOG
BY PASS
SERVO FUEL HEATER
FUEL/OIL HEAT EXCHANGER
OIL TANK QTY
ECAM

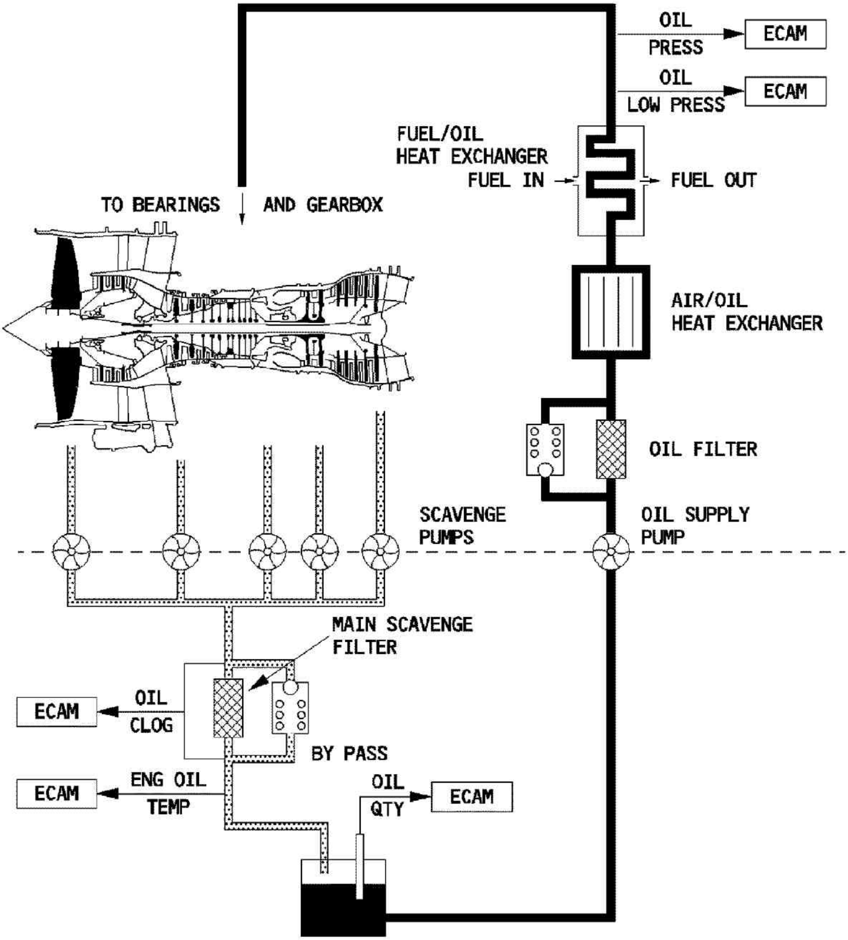
GENERAL

Ident.: DSC-70-50-00001603.0003001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The oil system lubricates the engine components.

It contains :
- the oil tank
- the lube and scavenge pump modules
- the fuel/oil heat and air/oil heat exchangers
- the filters, chip detectors, pressure relief and bypass valves.


OIL PRESS
ECAM
OIL LOW PRESS
ECAM
FUEL/OIL HEAT EXCHANGER
FUEL IN
FUEL OUT
TO BEARINGS
AND GEARBOX
AIR/OIL HEAT EXCHANGER
OIL FILTER
SCAVENGE PUMPS
OIL SUPPLY PUMP
MAIN SCAVENGE FILTER
ECAM
OIL CLOG
BY PASS
ECAM
ENG OIL TEMP
OIL QTY
ECAM

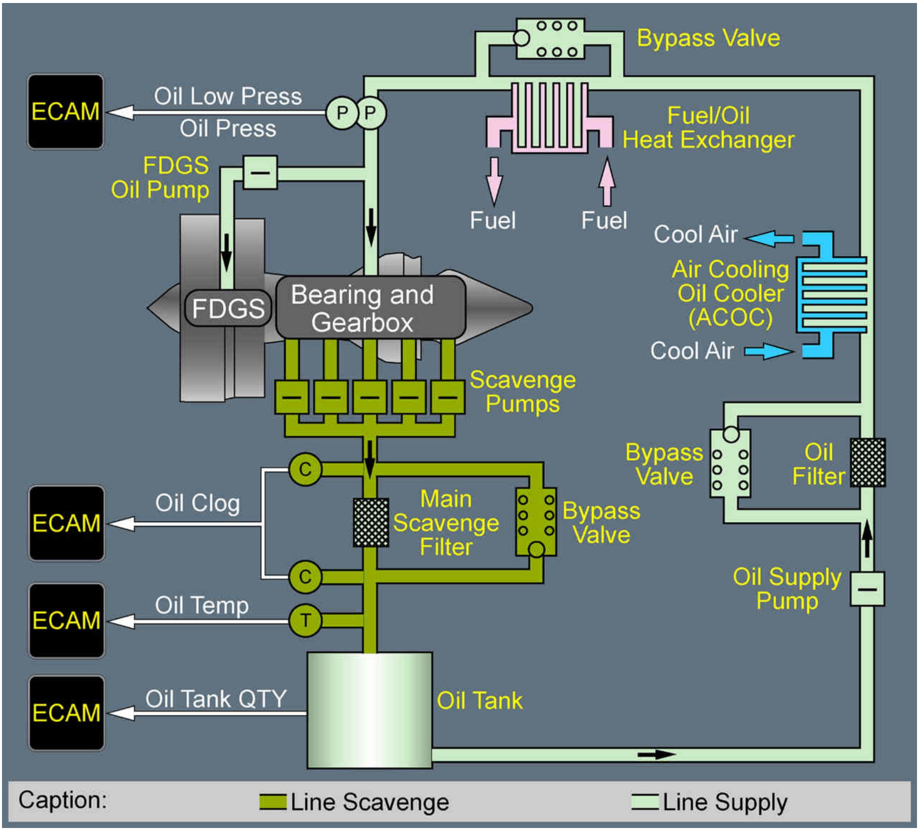
GENERAL

Ident.: DSC-70-50-00001603.0004001 / 21 MAR 16

1 **Applicable to: MSN 08495-09324, 10949-11597**

The oil system lubricates the engine components.

The oil system includes the following:
- The oil tank
- The lube and scavenge pump modules
- The fuel/oil heat and air/oil heat exchangers
- The filters, chip detectors, pressure relief and bypass valves
- Oil pump for HP and LP rotors
- Oil pump for FDGS.


Bypass Valve
ECAM
Oil Low Press
Oil Press
P
P
Fuel/Oil
Heat Exchanger
FDGS
Oil Pump
Fuel
Fuel
Cool Air
Air Cooling
Oil Cooler
(ACOC)
Cool Air
FDGS
Bearing and
Gearbox
Scavenge
Pumps
Bypass
Valve
Oil
Filter
C
ECAM
Oil Clog
Main
Scavenge
Filter
Bypass
Valve
C
Oil Supply
Pump
ECAM
Oil Temp
T
ECAM
Oil Tank QTY
Oil Tank
Caption:
Line Scavenge
Line Supply

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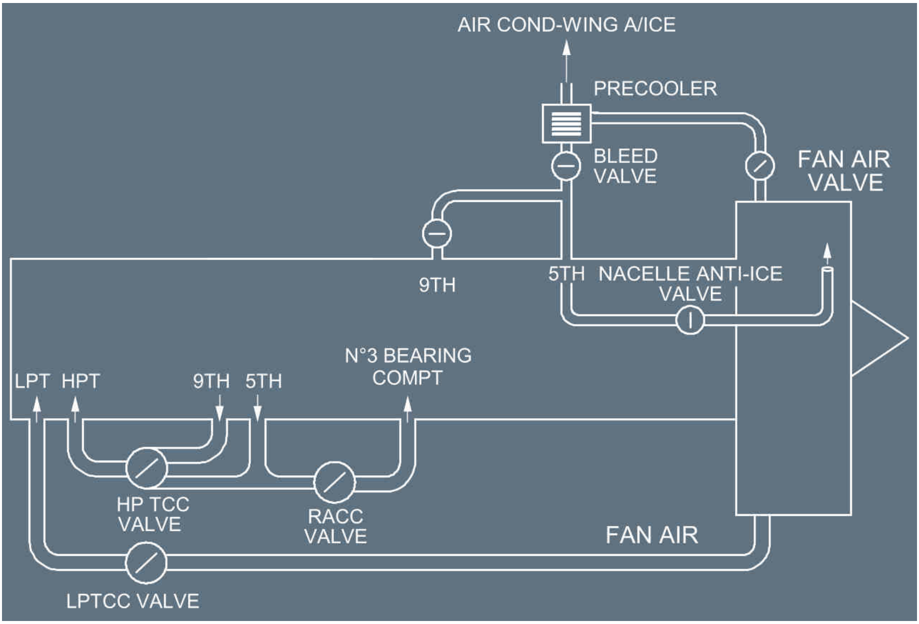
GENERAL

Ident.: DSC-70-60-00001604.0002001 / 21 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The air bleed system supplies the aircraft with compressed air.

It uses the air for:
- pneumatic system (*Refer to DSC-36-10-10 General*)
- cooling the engine compartment and the turbines.


AIR COND-WING A/ICE
PRECOOLER
BLEED VALVE
FAN AIR VALVE
9TH
5TH
NACELLE ANTI-ICE VALVE
N°3 BEARING COMPT
LPT
HPT
9TH
5TH
HP TCC VALVE
RACC VALVE
FAN AIR
LPTCC VALVE

COOLING

Ident.: DSC-70-60-00001605.0002001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

ROTOR ACTIVE CLEARANCE CONTROL (RACC) SYSTEM

The FADEC controls the RACC system through the HMU. The RACC system controls the clearance between the rotor blades of the HP compressor and its stator case.

The RACC system uses fifth-stage compressor bleed air that has been modulated according to the N2 and the flight parameters. The bleed air goes to the N°3 bearing compartment, where it is mixed with fan boost discharge.
Clearances are at the maximum when the RACC valve is closed.

HP TURBINE CLEARANCE CONTROL (HPTCC) SYSTEM

The FADEC controls the HPTCC system through the HMU. The HPTCC system controls the HP turbine clearance by modulating the HP compressor bleed air flow for cooling the HP turbine case. It optimizes HP turbine performance and reduces exhaust gas temperature.

LP TURBINE CLEARANCE CONTROL (LPTCC) SYSTEM

The FADEC controls the LPTCC system through the HMU. The LPTCC system controls LP turbine clearance by modulating the fan bleed air flow for cooling the LP turbine case.

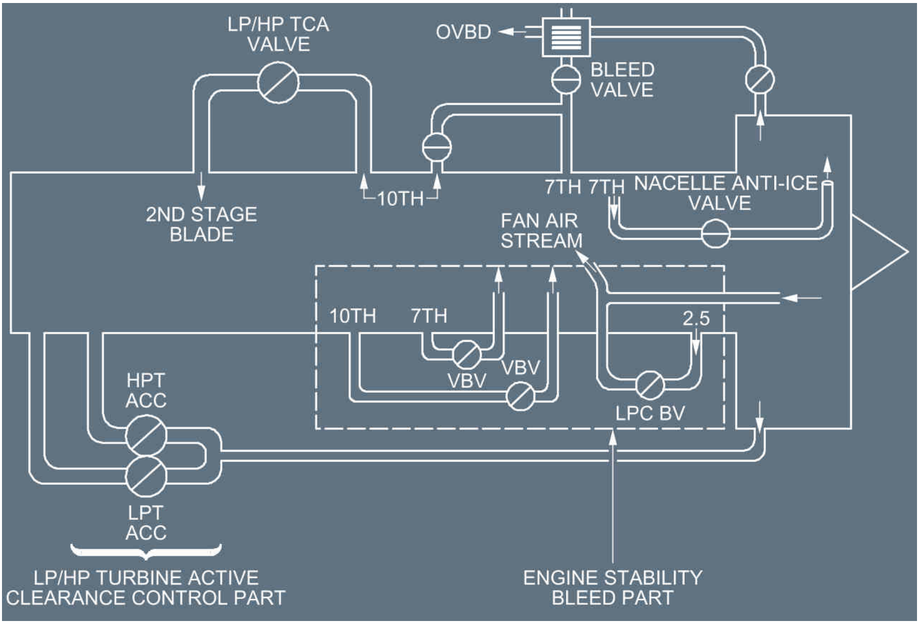
GENERAL

Ident.: DSC-70-65-00012945.0001001 / 21 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The air bleed system supplies the aircraft with compressed air.

It uses the air for:
- pneumatic system (*Refer to DSC-36-10-10 General*)
- cooling the engine compartment and the turbines
- engine stability.


LP/HP TCA
VALVE
OVBD
BLEED
VALVE
2ND STAGE
BLADE
10TH
7TH 7TH
NACELLE ANTI-ICE
VALVE
FAN AIR
STREAM
10TH
7TH
2.5
VBV
VBV
HPT
ACC
LPC BV
LPT
ACC
LP/HP TURBINE ACTIVE
CLEARANCE CONTROL PART
ENGINE STABILITY
BLEED PART

COOLING

Ident.: DSC-70-65-00012946.0001001 / 20 DEC 10
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

- Active clearance control for the high and low pressure turbines is to optimize the turbine blade tip clearance by cooling the related turbine cases.
  This control is made by the FADEC through the FMU as a function of the high pressure rotor speed, and altitude.
  In case of failures the system is designed to failsafe to the closed position.
  Should this happen, fuel consumption would be slightly higher.
- LP/HP turbine cooling air.
  Under FADEC control as a function of N2 and altitude, cooling air is taken from the 10th stage of the HPC to cool the HPT second stage blade. The control valve is either fully open or closed and is normally (failsafe) open.

ENGINE STABILITY

Ident.: DSC-70-65-00012947.0001001 / 20 DEC 10
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Two air bleed systems (station 2.5 of the LPC and stages 7th and 10th) provide greater compressor stability in the different flight phases.

- The LPC 2.5 bleed valve moves under FADEC control as a function of the low rotor speed, altitude and Mach and is dedicated to improve stall margin during starting, low power or transient operation. The failsafe position of this valve is open.
- The 7th and 10th stage bleed valves are normally closed for most engine operation but fully open for engine starting. Their failsafe position is open. Theses valves are controlled by FADEC through FMU.

In the two cases, the air is vented to the fan air stream.

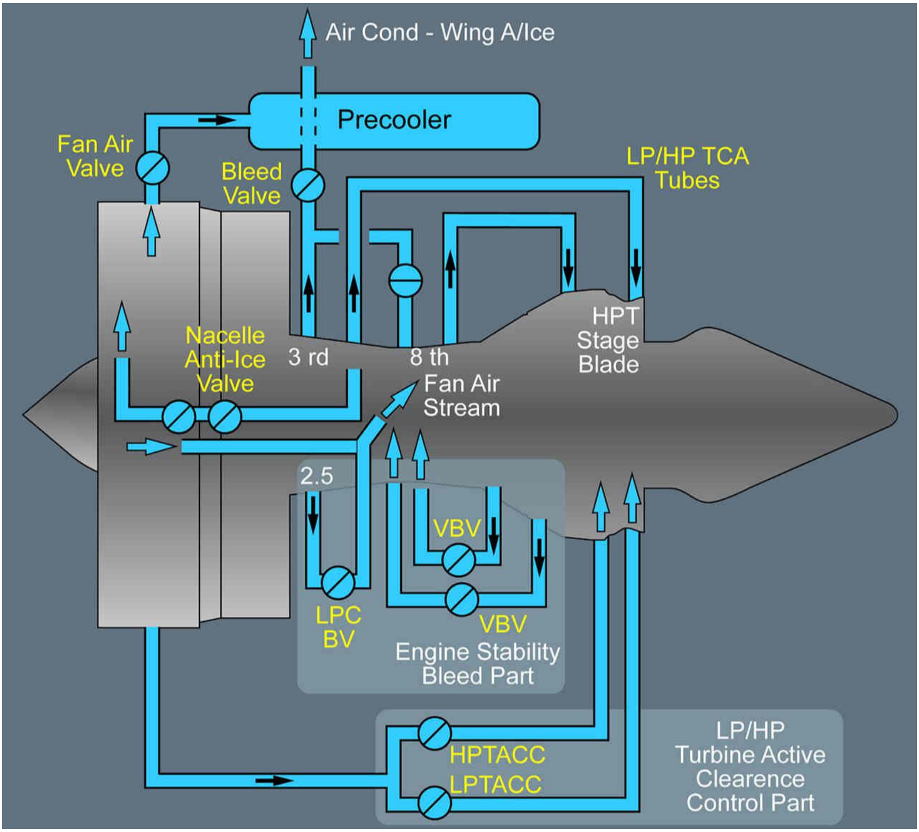
GENERAL

Ident.: DSC-70-68-00015397.0001001 / 21 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**

The air bleed system supplies the aircraft with compressed air.

It uses the air for:
- Pneumatic system (*Refer to DSC-36-10-10 General*)
- Cooling the engine compartment and the turbines
- Engine stability.


Air Cond - Wing A/Ice
Precooler
Fan Air Valve
Bleed Valve
LP/HP TCA Tubes
HPT Stage Blade
Nacelle Anti-Ice Valve
3 rd
8 th
Fan Air Stream
2.5
VBV
LPC BV
VBV
Engine Stability Bleed Part
HPTACC
LPTACC
LP/HP Turbine Active Clearence Control Part

COOLING

Ident.: DSC-70-68-00015398.0001001 / 16 NOV 15

2 **Applicable to: MSN 08495-09324, 10949-11597**

The cooling of the engine is ensured by two systems:

- The Active Clearance Control (ACC) system that controls the clearance between the blades and the case. The ACC directs cooling air from the fan to the High Pressure Turbine (HPT) and Low Pressure Turbine (LPT) cases.
  This control is made by the FADEC as a function of the high pressure rotor speed, and altitude.
- The LP/HP Turbine Cooling Air (TCA) system that provides a continuous flow of cooling air.
  This cooling air is taken from either 3rd, 6th or 8th stage of the HPC to cool the LP/HP Turbines and the Turbine Intermediate Case (TIC).
  The control valve is either fully open or closed.

ENGINE STABILITY

Ident.: DSC-70-68-00015399.0001001 / 06 JAN 16

3 **Applicable to: MSN 08495-09324, 10949-11597**

The air system ensures the engine stability via the control of the air flow through LP and HP compressors.

This control is made by the FADEC via the airbleed system. This system includes the following:

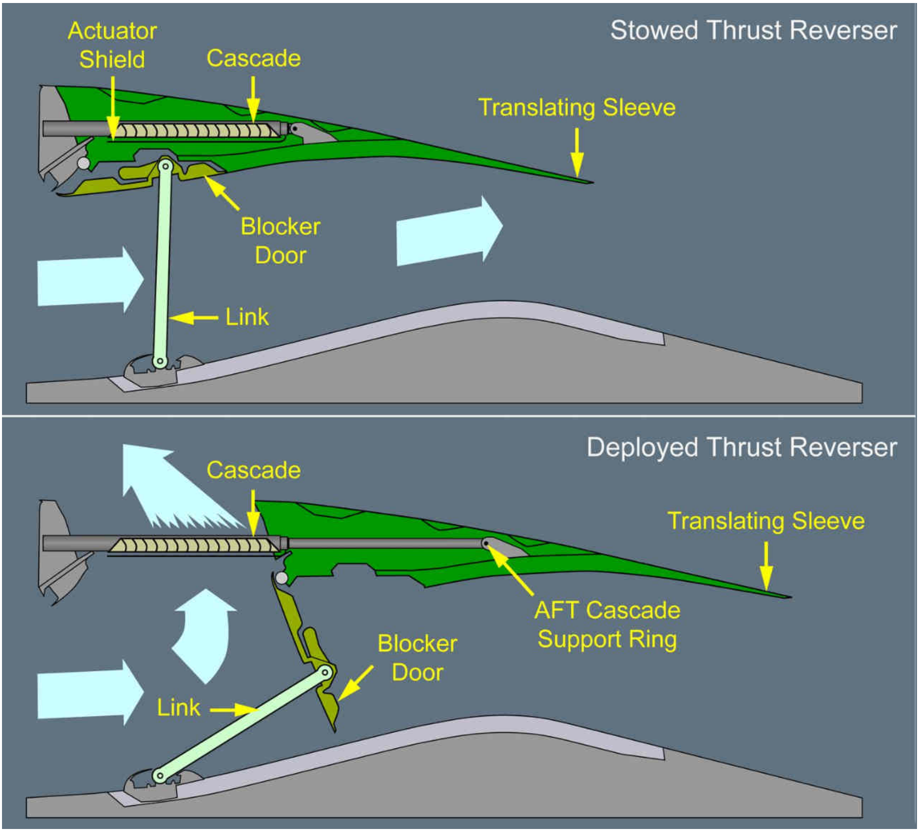
- The bleed valve at the 6th stage of the HP compressor.
  This valve is normally closed for most engine operation but fully open for engine starting.
- The 2.5 Bleed Compressor valve.
  This valve is controlled by the FADEC as a function of N1, altitude and Mach. The valve enables to improve stall margin during engine start, low power or transient operations.

GENERAL

Ident.: DSC-70-70-00020918.0006001 / 17 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**

The reverse thrust is obtained by deflecting the fan airstream. This is done when the translating sleeves are fully deployed rearward, thus enabling the pivoting blocker doors to divert forward the fan flow through the cascades.


Stowed Thrust Reverser
Actuator Shield
Cascade
Translating Sleeve
Blocker Door
Link
Deployed Thrust Reverser
Cascade
Translating Sleeve
AFT Cascade Support Ring
Blocker Door
Link

The translating sleeves are hydraulically-actuated (ENG 1 : Green circuit, ENG 2 : Yellow circuit). The FADEC controls the thrust reverser system. Each FADEC channel performs control and monitoring functions. The systems for the two engines are independent of each other.

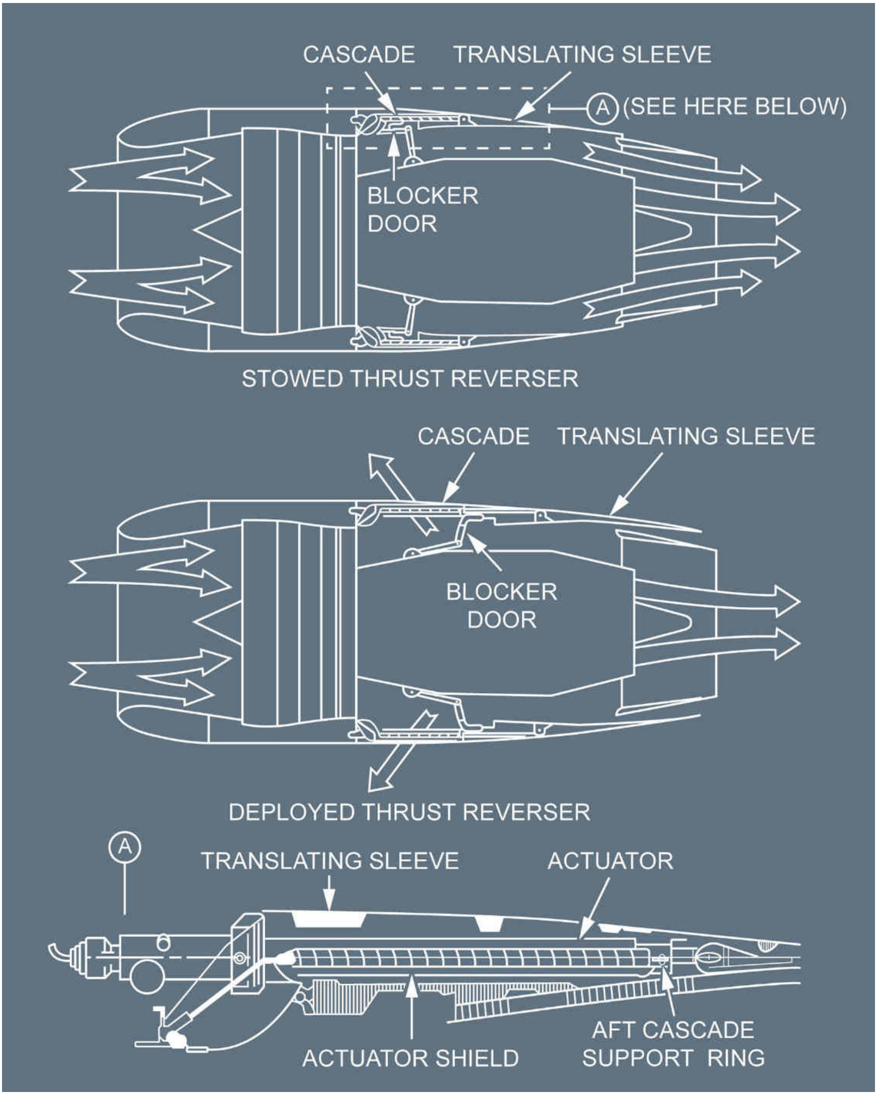
The thrust reverser system on each engine has :
- A Hydraulic Control Unit (HCU), which controls the hydraulic fluid flow to the thrust reverser actuators ;
- 4 hydraulic actuators ;
- A flexible shaft (divided into 3 parts, each of which are connected to the actuators) to synchronize the operation speed of the actuators on each door;
- 2 linear variable differential transducers, which monitor and transmit the reverser position to the FADEC ;
- 8 proximity switches, to monitor whether the sleeves are locked or not (2 per hydraulic actuator).

GENERAL

Ident.: DSC-70-70-00020918.0004001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The reverse thrust is obtained by deflecting the fan airstream. This is done when the translating sleeves are fully deployed rearward, thus enabling the pivoting blocker doors to forward divert the fan flow through the cascades.


CASCADE
TRANSLATING SLEEVE
A (SEE HERE BELOW)
BLOCKER
DOOR
STOWED THRUST REVERSER
CASCADE
TRANSLATING SLEEVE
BLOCKER
DOOR
DEPLOYED THRUST REVERSER
A
TRANSLATING SLEEVE
ACTUATOR
AFT CASCADE
SUPPORT RING
ACTUATOR SHIELD

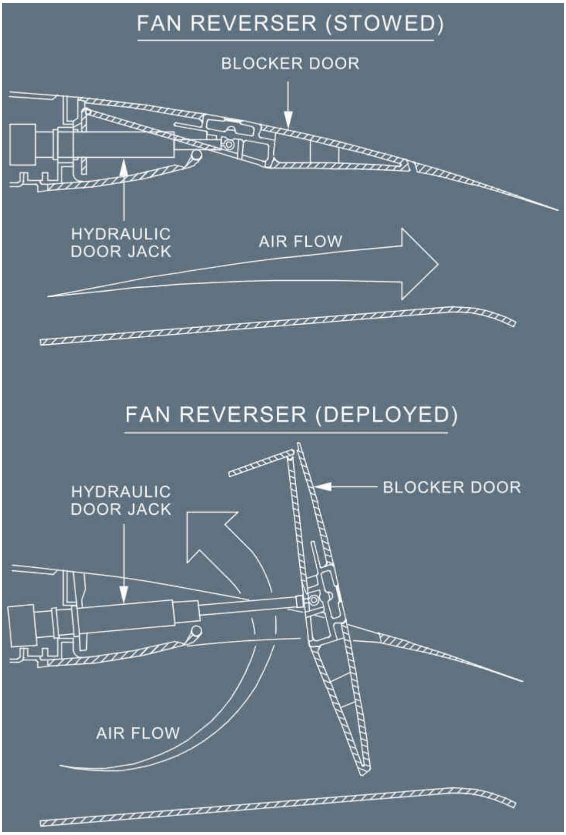
The translating sleeves are hydraulically-actuated (ENG 1 : Green circuit, ENG 2 : Yellow circuit). The FADEC controls the thrust reverser system. Each FADEC channel performs control and monitoring functions. The systems for the two engines are independent of each other.

The thrust reverser system on each engine has :
- A Hydraulic Control Unit (HCU), which controls the hydraulic fluid flow to the thrust reverser actuators ;
- A hydraulic shutoff valve, which allows hydraulic pressure to the HCU.
- 4 hydraulic actuators ;
- 1 flexible shaft (divided into 3 parts, each of which are connected to the actuators) to synchronize the operation speed of the actuators ;
- 2 linear variable differential transducers, which monitor and transmit the reverser position to the FADEC ;
- 2 proximity switches, to monitor whether the sleeves are locked or not.

GENERAL

Ident.: DSC-70-70-00020918.0003001 / 17 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The aircraft reverses engine thrust by using four pivoting blocker doors on each engine to deflect the fan airstream.


FAN REVERSER (STOWED)
BLOCKER DOOR
HYDRAULIC DOOR JACK
AIR FLOW
FAN REVERSER (DEPLOYED)
HYDRAULIC DOOR JACK
BLOCKER DOOR
AIR FLOW

A hydraulic door jack positions each door.
- The green circuit powers the doors on ENG 1.
- The yellow circuit powers the doors en ENG 2.

The FADEC controls the thrust reverser system. Each FADEC channel performs control and monitoring functions. The systems for the two engines are independent of each other.

The thrust reverser system on each engine has :
- 4 actuators,
- 4 latches,

- Door position switches,
- A Hydraulic Control Unit (HCU) that :
  - Pressurizes the thrust reverser hydraulic system,
  - Regulates the speed of the blocker doors, and
  - Supplies actuators with hydraulic power.
- A hydraulic shutoff valve which allows hydraulic pressure to the HCU.

Each pivoting door moves independently (the doors are not synchronized).
The total actuation time is less than two seconds.

ACTUATION LOGIC

Ident.: DSC-70-70-00020920.0001001 / 17 MAR 17
Applicable to: ALL

Deployment requires :
- One FADEC channel, operating with its associated throttle reverse signal ;
- Right and left main gear compressed signal from the corresponding LGCIUs ;
- A Thrust Lever Angle (TLA) reverse signals from at least one Spoiler Elevator Computer (SEC).

Before deployment is completed, the FADEC sets reverse idle thrust on the engine that is having its thrust reversed.

PROTECTION

Ident.: DSC-70-70-00020921.0006001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

- IDLE PROTECTION

The FADEC will automatically select the thrust to idle :
- In case of inadvertent thrust reverser deployment (while thrust reversers are commanded stowed), as soon as the thrust reverser feedback position is above 15 % deployed (thrust decreasing toward idle, when the detected position is between 10 % and 15 %).
- In case of inadvertent thrust reverser stowage (while thrust reversers are commanded deployed), as soon as the thrust reverser feedback position is below 78 % deployed (thrust decreasing toward idle between 90 % and 78 %).

PROTECTION

Ident.: DSC-70-70-00020921.0004001 / 17 MAR 17

2 **Applicable to: MSN 08495-09324, 10949-11597**

On ground, the FADEC automatically commands the reverse thrust to stow, if the thrust reversers are not commanded to deploy and :

- The thrust levers are in forward thrust position, and
- One lock failed open

In case of inadvertent thrust reverser deployment (while thrust reversers are commanded stowed) the FADEC automatically selects the thrust to idle. This occurs in flight or on ground as soon as the thrust reverser feedback position is above 5 % deployed.

PROTECTION

Ident.: DSC-70-70-00020921.0002001 / 17 MAR 17

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

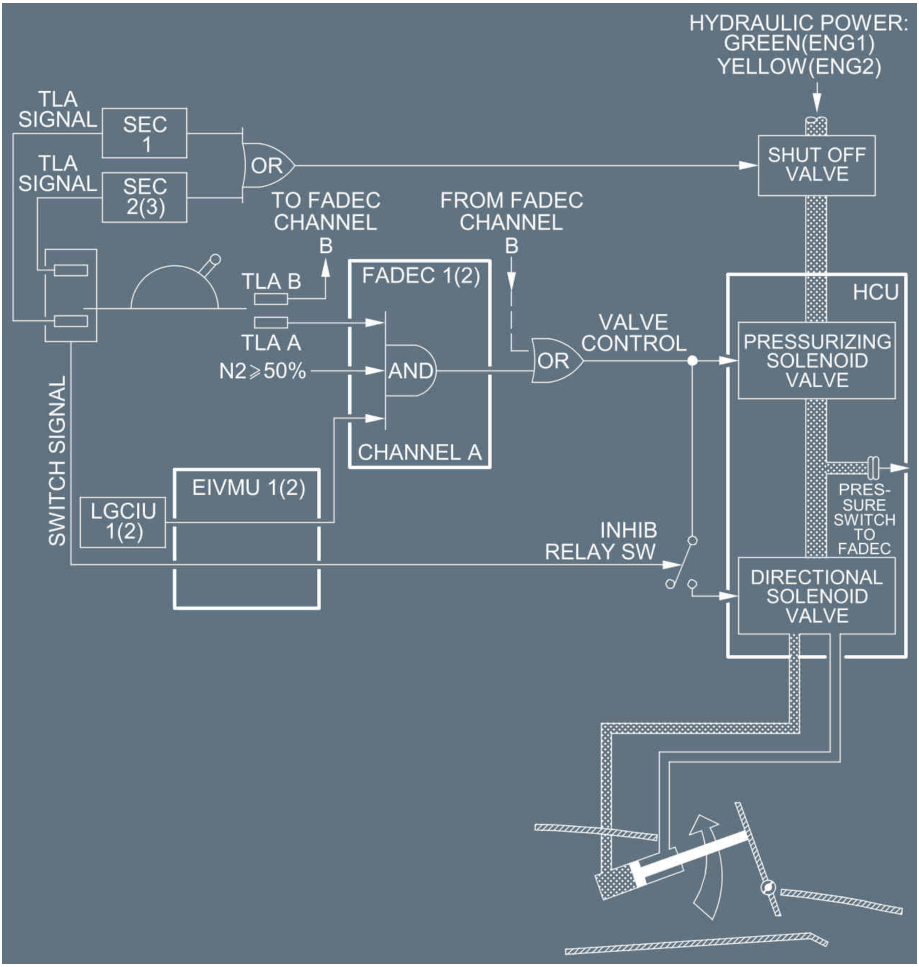
- AUTO RESTOW FUNCTION
  The FADEC will automatically command the reverse to stow, if at least one door is unstowed and reverse thrust is not selected while the engine is running.
  Auto restow is inhibited in flight, and on ground, with N1 greater than 70 %.
- IDLE PROTECTION

  The FADEC will automatically select idle thrust if reverse thrust is not selected and :
  - The four doors are detected unstowed, or
  - At least one door is detected unstowed, and hydraulic pressure is detected in the HCU (downstream of the pressurizing valve), or
  - The door position is indefinite, and hydraulic pressure is detected in the HCU (downstream of the pressurizing valve).

SCHEMATIC

Ident.: DSC-70-70-00020919.0014001 / 17 MAR 17

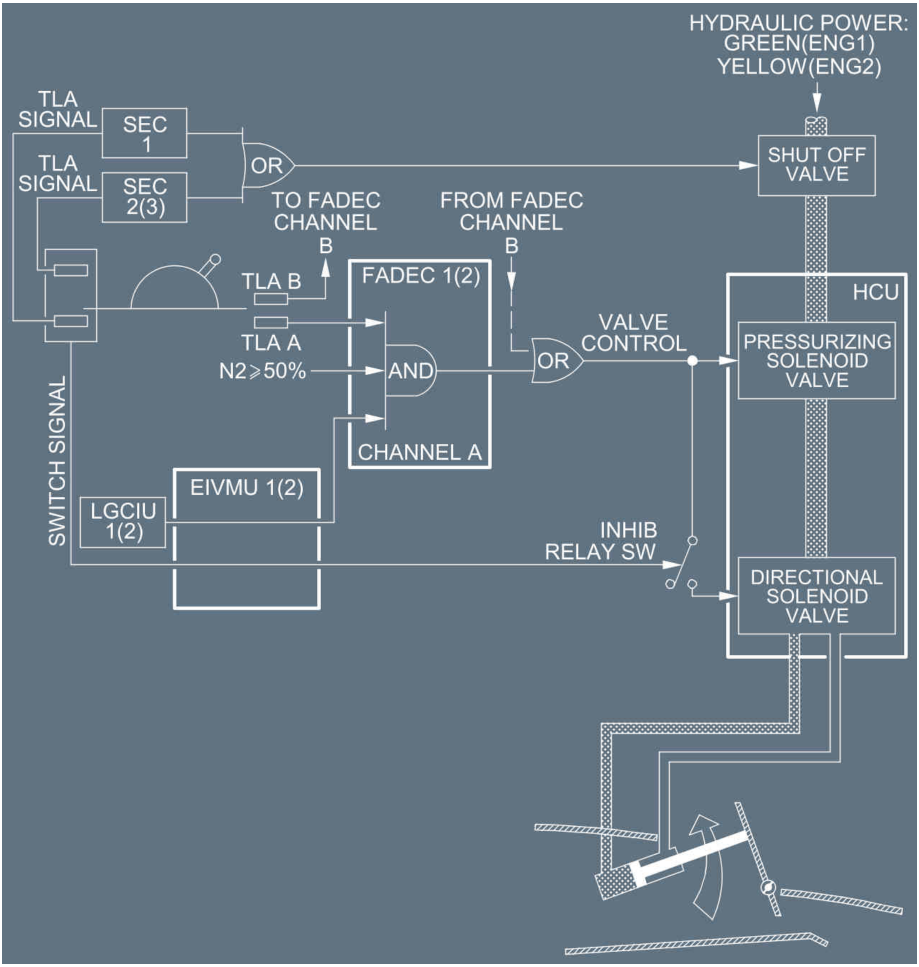
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098


HYDRAULIC POWER:
GREEN(ENG1)
YELLOW(ENG2)
TLA SIGNAL
SEC 1
TLA SIGNAL
SEC 2(3)
OR
SHUT OFF VALVE
TO FADEC CHANNEL B
FROM FADEC CHANNEL B
TLA B
FADEC 1(2)
HCU
TLA A
VALVE CONTROL
N2⩾50%
AND
OR
PRESSURIZING SOLENOID VALVE
CHANNEL A
PRES-SURE SWITCH TO FADEC
SWITCH SIGNAL
EIVMU 1(2)
LGCIU 1(2)
INHIB RELAY SW
DIRECTIONAL SOLENOID VALVE

SCHEMATIC

Ident.: DSC-70-70-00020919.0006001 / 17 MAR 17

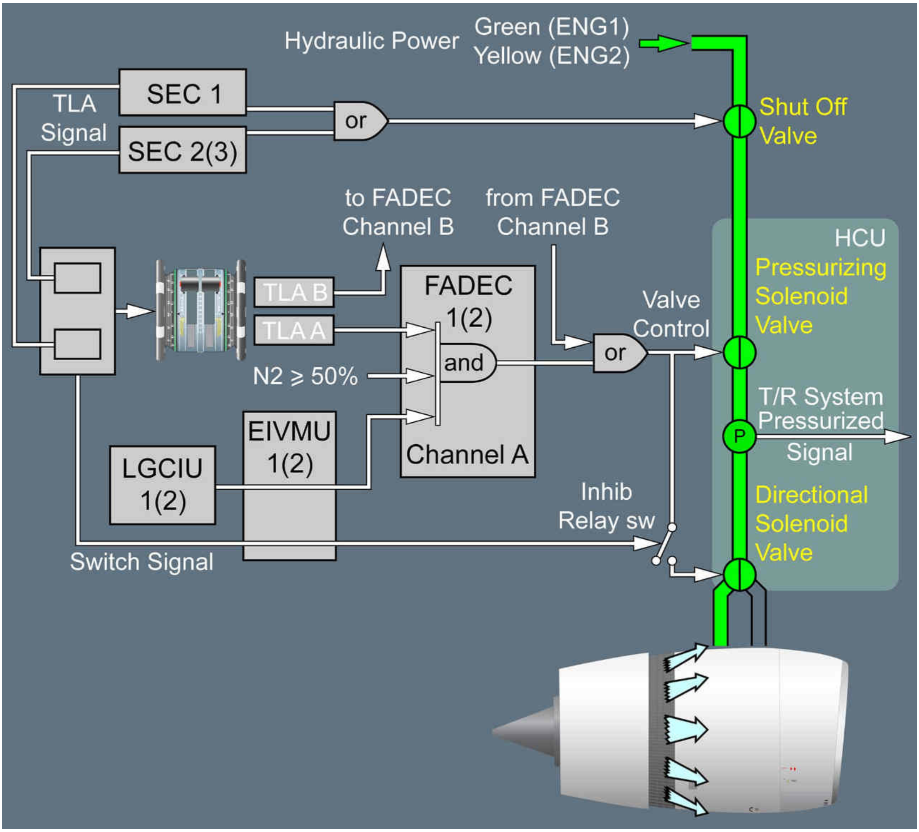
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876


HYDRAULIC POWER:
GREEN(ENG1)
YELLOW(ENG2)
TLA SIGNAL
SEC 1
TLA SIGNAL
SEC 2(3)
OR
SHUT OFF VALVE
TO FADEC CHANNEL B
FROM FADEC CHANNEL B
TLA B
FADEC 1(2)
HCU
TLA A
VALVE CONTROL
N2⩾50%
AND
OR
PRESSURIZING SOLENOID VALVE
CHANNEL A
SWITCH SIGNAL
EIVMU 1(2)
LGCIU 1(2)
INHIB RELAY SW
DIRECTIONAL SOLENOID VALVE

SCHEMATIC

Ident.: DSC-70-70-00020919.0005001 / 17 MAR 17

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**


Hydraulic Power
Green (ENG1)
Yellow (ENG2)
SEC 1
TLA
Signal
SEC 2(3)
or
Shut Off
Valve
to FADEC
Channel B
from FADEC
Channel B
HCU
Pressurizing
Solenoid
Valve
TLA B
TLA A
FADEC
1(2)
Valve
Control
and
or
N2 ≥ 50%
T/R System
Pressurized
Signal
P
EIVMU
1(2)
Channel A
LGCIU
1(2)
Inhib
Relay sw
Directional
Solenoid
Valve
Switch Signal

GENERAL

Ident.: DSC-70-80-10-00020922.0001001 / 28 MAY 20
Applicable to: ALL

The FADEC controls and monitors the ignition and starting system according to:
- The position of the ENG MODE selector
- The position of the ENG MASTER lever
- The position of the ENG MAN START pb-sw
- The aircraft status (flight or ground).

The FADEC receives the previous inputs from the EIVMU/EIU.

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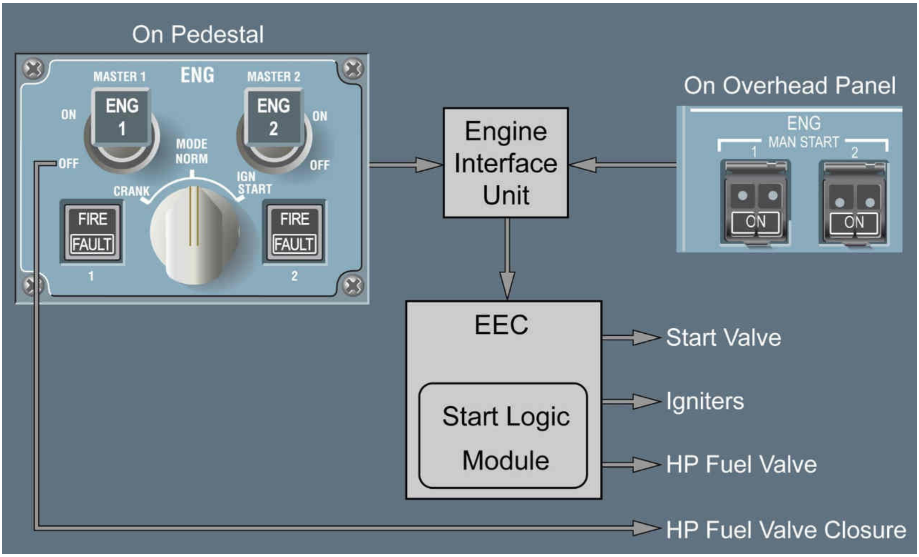
ARCHITECTURE

Ident.: DSC-70-80-20-00001617.0001001 / 21 MAR 16

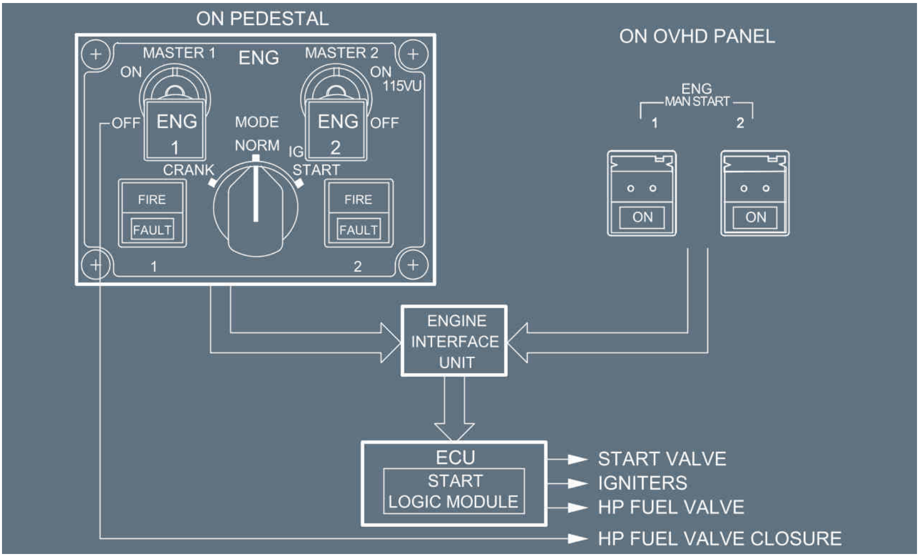
1 **Applicable to: MSN 08495-09324, 10949-11597**


On Pedestal
MASTER 1
ENG
MASTER 2
ON
ENG 1
ENG 2
ON
OFF
MODE
NORM
OFF
CRANK
IGN
START
FIRE
FAULT
FIRE
FAULT
1
2
On Overhead Panel
ENG
MAN START
1
2
ON
ON
Engine Interface Unit
EEC
Start Logic Module
Start Valve
Igniters
HP Fuel Valve
HP Fuel Valve Closure

ARCHITECTURE

Ident.: DSC-70-80-20-00001617.0002001 / 21 MAR 16

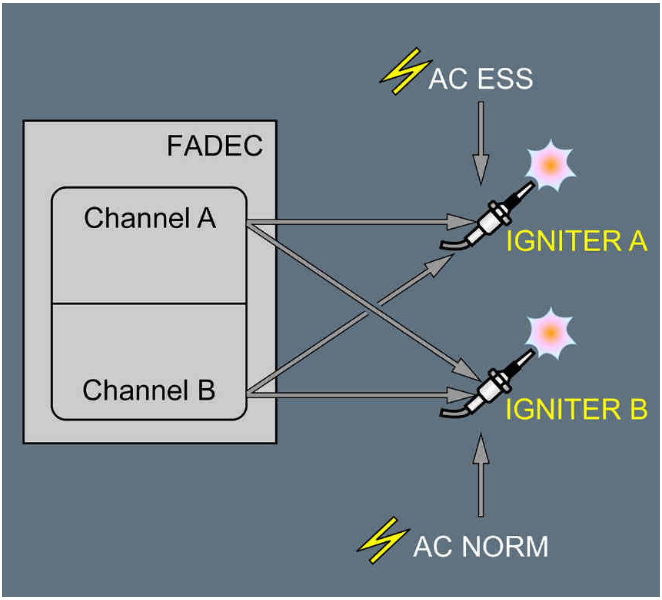
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098


ON PEDESTAL
MASTER 1
ENG
MASTER 2
ON
ON
115VU
OFF
ENG 1
MODE
ENG 2
OFF
NORM
IG
CRANK
START
FIRE
FAULT
FIRE
FAULT
1
2
ON OVHD PANEL
ENG MAN START
1
2
ON
ON
ENGINE INTERFACE UNIT
ECU
START LOGIC MODULE
START VALVE
IGNITERS
HP FUEL VALVE
HP FUEL VALVE CLOSURE

GENERAL

Ident.: DSC-70-80-30-00020923.0001001 / 17 MAR 17
Applicable to: ALL

The ignition system is for engine starting on the ground and restarting in flight. It consists of two identical independent circuits for each engine, normally controlled by the FADEC channel A and channel B. Each FADEC channel can control both igniters.



Note: *Supply for igniter A switches to the STAT INV BUS BAR as soon as the static inverter is operative.*

IGNITION FOR STARTING

Ident.: DSC-70-80-30-00020924.0001001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

ON THE GROUND

Automatic start:

- During a first automatic start attempt only one igniter is supplied. The FADEC automatically alternates the igniters and/or channels used in successive start sequences.
- The ignition comes on automatically after the dry crank sequence, and cuts off automatically when N2 reaches 43 %
- After an aborted automatic start, the flight crew initiates another automatic start sequence. The FADEC energizes alternate igniters during successive automatic start sequences.

Manual start:

- During a manual start both igniters are supplied, when the ENG MASTER lever is ON
- Both igniters are cut off when N2 reaches 43 %.

IN FLIGHT

In case of start attempt in flight, when the ENG MASTER lever is ON, both igniters are supplied.

IGNITION FOR STARTING

Ident.: DSC-70-80-30-00020924.0002001 / 28 MAY 20
Applicable to: MSN 04441-04465, 04827-04860, 05184, 05591, 05752, 06139, 06173, 06414

ON THE GROUND

Automatic start:

- During a first automatic start attempt only one igniter is supplied. The FADEC automatically alternates the igniters and/or channels used in successive start sequences.
- The ignition comes on automatically when N2 reaches 16 % and cuts off automatically when N2 reaches 50 %
- During an automatic start, if the first attempt fails, the FADEC automatically initiates a new start attempt with both igniters energized.

Manual start:

- During a manual start both igniters are supplied, when the ENG MASTER lever is ON
- Both igniters are cut off when N2 reaches approximately 50 %.

IN FLIGHT

In case of start attempt in flight, when the ENG MASTER lever is ON, both igniters are supplied.

IGNITION FOR STARTING

Ident.: DSC-70-80-30-00020924.0018001 / 28 MAY 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04544, 04734-04756, 04953-05107, 05222-05342, 05621-05749, 05883, 06409, 06528-07098

ON THE GROUND

Automatic start:

- During a first automatic start attempt only one igniter is supplied. The FADEC automatically alternates the igniters and/or channels used in successive start sequences.
- The ignition comes on automatically when N2 reaches 16 % and cuts off automatically when N2 reaches 50 %
- During automatic ground start, when engine is cold and above 10 000 ft:

  1. One igniter is supplied, and
  2. When the ignition is detected, the second igniter is supplied.

- During an automatic start, if the first attempt fails, the FADEC automatically initiates a new start attempt with both igniters energized.

Manual start:

- During a manual start both igniters are supplied, when the ENG MASTER lever is ON
- Both igniters are cut off when N2 reaches approximately 50 %.

IN FLIGHT

In case of start attempt in flight, when the ENG MASTER lever is ON, both igniters are supplied.

IGNITION FOR STARTING

Ident.: DSC-70-80-30-00020924.0017001 / 28 MAY 20
1 **Applicable to: MSN 08495-09324, 10949-11597**

ON THE GROUND

Automatic start:

- During a first automatic start attempt only one igniter is supplied. The FADEC automatically alternates the igniters and/or channels used in successive start sequences.
- The ignition comes on automatically when N2 reaches 18 % and cuts off automatically when N2 reaches approximately 55 %
- During an automatic start, if the first attempt fails, the FADEC automatically initiates a new start attempt with both igniters energized.

Manual start:

- During a manual start both igniters are supplied, when the ENG MASTER lever is ON
- Both igniters are cut off when N2 reaches approximately 55 %.

IN FLIGHT

In case of start attempt in flight, when the ENG MASTER lever is ON, both igniters are supplied.

CONTINUOUS IGNITION

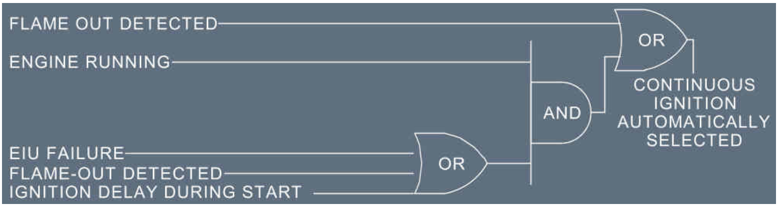
Ident.: DSC-70-80-30-00001620.0004001 / 04 SEP 18
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Continuous ignition may be selected either manually or automatically to maintain engine combustion.

MANUAL SELECTION

In flight, continuous ignition is on when the ENG MODE selector is on IGN/START, if the corresponding engine is running.
Only one igniter is selected. If failed, both igniters are automatically selected.
On the ground after the engine is started, because ignition cuts off automatically, the flight crew must switch the ENG MODE selector to NORM then back to IGN/START to turn on continuous ignition.

AUTOMATIC SELECTION


FLAME OUT DETECTED
ENGINE RUNNING
OR
AND
CONTINUOUS IGNITION AUTOMATICALLY SELECTED
EIU FAILURE
FLAME-OUT DETECTED
IGNITION DELAY DURING START
OR

WINDMILLING QUICK RELIGHT

In case of inadvertent engine shutdown by cycling the Engine Master lever to OFF then ON, in the windmilling quick relight envelope, the FADEC will attempt automatically a relight regardless of the rotary selector position.

CONTINUOUS IGNITION

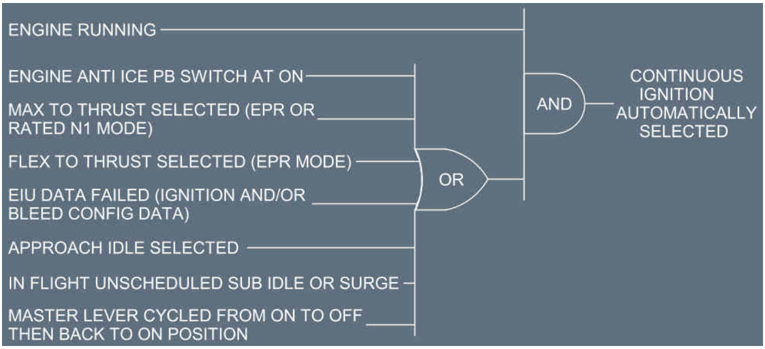
Ident.: DSC-70-80-30-00001620.0003001 / 04 SEP 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Continuous ignition may be selected either manually or automatically to maintain engine combustion.

MANUAL SELECTION

In flight, continuous ignition is on when the ENG MODE selector is on IGN/START, if the corresponding engine is running.
On the ground after the engine is started, because ignition cuts off automatically, the flight crew must switch the ENG MODE selector to NORM then back to IGN/START to turn on continuous ignition.
It must be noted that the igniters should be turned off to conserve the life of the ignition system components whenever ignition is not needed on the ground or in flight (mode selector on NORM position).

AUTOMATIC SELECTION


ENGINE RUNNING
ENGINE ANTI ICE PB SWITCH AT ON
MAX TO THRUST SELECTED (EPR OR RATED N1 MODE)
FLEX TO THRUST SELECTED (EPR MODE)
EIU DATA FAILED (IGNITION AND/OR BLEED CONFIG DATA)
APPROACH IDLE SELECTED
IN FLIGHT UNSCHEDULED SUB IDLE OR SURGE
MASTER LEVER CYCLED FROM ON TO OFF THEN BACK TO ON POSITION
OR
AND
CONTINUOUS IGNITION AUTOMATICALLY SELECTED

WINDMILLING QUICK RELIGHT

In case of inadvertent engine shutdown by cycling the Engine Master lever to OFF then ON, in the windmilling quick relight envelope, the FADEC will attempt automatically a relight regardless of the rotary selector position.

CONTINUOUS IGNITION

Ident.: DSC-70-80-30-00001620.0005001 / 04 SEP 18

2 **Applicable to: MSN 08495-09324, 10949-11597**

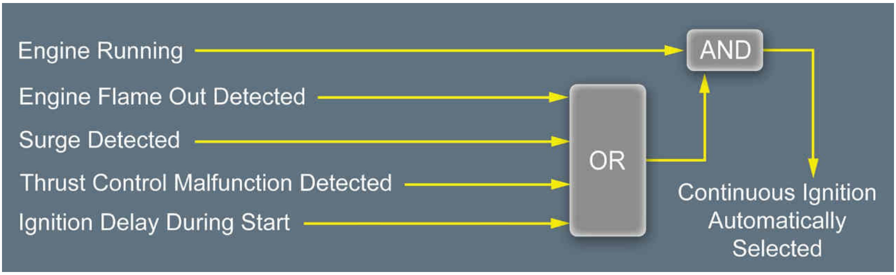
Continuous ignition may be selected either manually or automatically to maintain engine combustion.

MANUAL SELECTION

In flight, continuous ignition is on when the ENG MODE selector is on IGN/START, if the corresponding engine is running.
Both igniters are selected.

On the ground after the engine is started, because ignition cuts off automatically, the flight crew must switch the ENG MODE selector to NORM then back to IGN/START to turn on continuous ignition.

AUTOMATIC SELECTION


Engine Running
Engine Flame Out Detected
Surge Detected
Thrust Control Malfunction Detected
Ignition Delay During Start
OR
AND
Continuous Ignition Automatically Selected

WINDMILLING QUICK RELIGHT

In case of inadvertent engine shutdown by cycling the Engine Master lever to OFF then ON, in the windmilling quick relight envelope, the FADEC will attempt automatically a relight regardless of the rotary selector position.

GENERAL

Ident.: DSC-70-80-40-00001621.0001001 / 21 MAR 16
Applicable to: ALL

The engine starting system consists of an air turbine starter and a start valve.
The start valve admits air supplied by the pneumatic system to operate the starter.
The FADEC controls the start valve electrically and bleed pressure is required for opening the start valve. If electrical control fails when the aircraft is on the ground, a handle allows the start valve to be operated manually.

AUTOMATIC STARTING

Ident.: DSC-70-80-40-10-00020932.0001001 / 21 MAR 17
Applicable to: ALL

GENERAL

This sequence is under the full authority of the FADEC, which controls:
- The start valve
- The igniters
- The fuel HP valves.

Ident.: DSC-70-80-40-10-00020933.0008001 / 04 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

PROTECTION

The FADEC:
- Detects a hot start, a hung start, a stall, a failed light up, a low start air pressure and a thrust lever not at idle
- Announces FAULT and identifies the fault in an ECAM message
- Runs an abort sequence if a start aborts on the ground when N2 less than 50 %, and:
  - Closes the HP valve
  - Closes the start valve
  - Turns off ignition
  - Ensures an automatic dry crank cycle after the abort sequence in order to remove the fuel vapors
- Ensures an automatic dry crank sequence of 30 s at maximum motoring speed.

Ident.: DSC-70-80-40-10-00020933.0001001 / 04 NOV 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

PROTECTION

The FADEC:
- Detects a hot start, a hung start, a stall, a failed light up, a low start air pressure, a starter time exceeded and a thrust lever not at idle
- Announces FAULT and identifies the fault in an ECAM message
- Runs an abort sequence if a start aborts on the ground, and :
  - Closes the HP valve
  - Closes the start valve
  - Turns off ignition
  - Ensures an automatic dry crank cycle after the abort sequence in order to remove the fuel vapors
  - Controls any additional start attempts.

Ident.: DSC-70-80-40-10-00020933.0004001 / 04 NOV 20
1 **Applicable to: MSN 08495-09324, 10949-11597**

PROTECTION

The FADEC:
- Detects a hot start, a hung start, a stall, a failed light up, a low start air pressure, a starter time exceeded, a thrust lever not at idle and a starter shaft shear
- Announces FAULT and identifies the fault in an ECAM message
- Runs an abort sequence if a start aborts on the ground when N2 less than 55 %, and:
  - Closes the HP valve
  - Closes the start valve
  - Turns off ignition
  - Ensures an automatic dry crank cycle after the abort sequence in order to remove the fuel vapors
  - Controls any additional start attempts.

Ident.: DSC-70-80-40-10-00020934.0003001 / 21 MAR 17
2 **Applicable to: MSN 08495-09324, 10949-11597**

DRY CRANKING

Depending on the engine thermal state, the FADEC can command an automatic dry cranking before the start of the engine. A memo COOLING is displayed on the E/WD during dry cranking. The dry cranking time is of approximately 2 min.

Ident.: DSC-70-80-40-10-00020934.0002001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

DRY CRANKING

During engine start with residual EGT > 250 °C, an auto-crank function motors the engine until EGT decreases below 250 °C.
There is no crew awareness message to indicate the reason for the extended motoring.
This auto-crank function may be activated in very hot condition (typically ISA + 40 °C) or short turn-around times (< 20 min).

Ident.: DSC-70-80-40-10-00020935.0001001 / 28 MAY 20
Applicable to: ALL

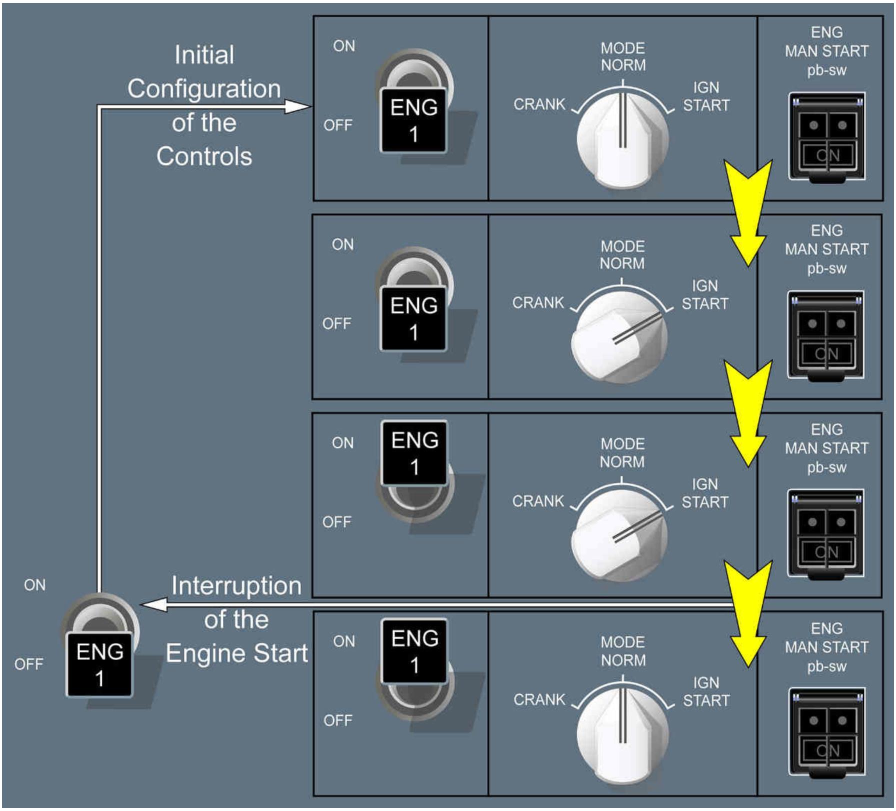
WINDMILLING

For an in-flight start, the FADEC decides whether the engine is windmilling fast enough or needs assistance from the starter in view of current engine parameters and flight environment parameters.
Flight crew may interrupt this start sequence by moving the ENG MASTER lever to OFF.

AUTOMATIC STARTING SEQUENCE

Ident.: DSC-70-80-40-20-00020925.0001001 / 21 MAR 17
Applicable to: ALL

SEQUENCE OF THE AUTOMATIC START


Initial Configuration of the Controls
ON
OFF
ENG 1
MODE NORM
CRANK
IGN START
ENG MAN START pb-sw
ON
Interruption of the Engine Start

Ident.: DSC-70-80-40-20-00020926.0001001 / 21 MAR 17
Applicable to: ALL

INITIAL CONFIGURATION OF THE CONTROLS

The initial configuration prior an automatic engine start is the following :
- The ENG MASTER sw is set to OFF
- The ENG MODE selector is set to NORM
- The ENG MAN START pb-sw is set to OFF.

Ident.: DSC-70-80-40-20-00020927.0001001 / 28 MAY 20
Applicable to: ALL

FIRST STEP

The flight crew must set the ENG MODE selector to IGN/START, leading to the following:
- The ENG SD page page appears on the SD
- All engine parameters are available
- Pack valves automatically close.

After 30 s, if the flight crew does not set the ENG MASTER lever to ON (*Refer to DSC-70-80-40 Second Step*), pack valves automatically open again.

Ident.: DSC-70-80-40-20-00020928.0005001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

SECOND STEP

The flight crew must set the ENG MASTER lever to ON, and the following steps occur:
- The LP fuel valve opens
- The engine start valve opens
- After the automatic dry crank sequence (approx. 30 s):
  - The ignition starts
  - The HP fuel valve opens.
- When N2 is more than 43 %:
  - The engine start valve closes
  - The ignition stops
  - The pack valves reopen if another engine is not started within 30 s.

Ident.: DSC-70-80-40-20-00020928.0004001 / 28 MAY 20

3 **Applicable to: MSN 08495-09324, 10949-11597**

SECOND STEP

The flight crew must set the ENG MASTER lever to ON, and the following steps occur:

- The LP fuel valve opens
- The engine start valve opens
- After the automatic dry crank sequence (approx. 2 min):
  - The ignition starts
  - The HP fuel valve opens.
- When N2 is more than 55 %:
  - The engine start valve closes
  - The ignition stops
  - The pack valves reopen if another engine is not started within 60 s.

Ident.: DSC-70-80-40-20-00020928.0001001 / 28 MAY 20

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

SECOND STEP

The flight crew must set the ENG MASTER lever to ON, and the following steps occur:

- The LP fuel valve opens
- The engine start valve opens
- The ignition starts:
  - On ground: when N2 is more than 16 %
  - In flight: Immediately.
- The HP fuel valve opens:
  - On ground: when N2 is more than 22 %
  - In flight: when N2 is more than 15 %.
- When N2 is more than 50 %:
  - The engine start valve closes
  - The ignition stops if on ground
  - The pack valves reopen if another engine is not started within 30 s.

Ident.: DSC-70-80-40-20-00020929.0001001 / 21 MAR 17
Applicable to: ALL

THIRD STEP

The automatic engine start is finished.
The flight crew must set the ENG START selector to NORM.

Ident.: DSC-70-80-40-20-00020930.0001001 / 28 MAY 20
Applicable to: ALL

INTERRUPTION OF THE AUTOMATIC START

When required by ECAM and after confirmation, the flight crew must set the ENG MASTER lever to OFF.

If the flight crew sets the ENG MASTER lever to OFF, the FADEC automatically :
- Closes the LP and the HP fuel shutoff valves
- Stops to energize the ignitor
- Closes the engine start valve.

MANUAL STARTING

Ident.: DSC-70-80-40-00020937.0004001 / 28 MAY 20
4 **Applicable to: MSN 08495-09324, 10949-11597**

If an automatic start is not successful, the flight crew can perform a manual start.
In the manual start sequence, the FADEC has limited control. As a result, the flight crew must monitor engine acceleration.

To perform a manual start, the flight crew must :
- Set the ENG MODE selector to IGN/START
- Set the ENG MAN START pb-sw to ON
- Set the ENG MASTER lever to ON.

The FADEC :
- Opens the engine start valve when the flight crew :
  - Sets the ENG MODE selector to IGN/START
  - Sets the ENG MAN START pb-sw to ON.
- Opens the HP shutoff valve, and operates both igniters when the flight crew sets the ENG MASTER lever to ON
- Closes the engine start valve, and cuts off the ignition when N2 reaches 55 %.

For more information about the manual start sequence, *Refer to PRO-NOR-SUP-ENG Manual Engine Start - General*.

Depending on the engine thermal state, the FADEC can command an automatic dry cranking before the start of the engine. A memo COOLING is displayed on the E/WD during dry cranking. Thy dry cranking is of approximately 2 min.
The FADEC makes a passive survey of the engine during the starting sequence (up to 55 % N2): A dedicated ECAM alert informs the flight crew of an abnormal start, and the flight crew has to interrupt the start sequence.
The FADEC has not the authority to abort the manual start.

MANUAL STARTING

Ident.: DSC-70-80-40-00020937.0002001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

If an automatic start is not successful, the flight crew can perform a manual start.
In the manual start sequence, the FADEC has limited control. As a result, the flight crew must monitor engine acceleration.

To perform a manual start, the flight crew must :
- Set the ENG MODE selector to IGN/START
- Set the ENG MAN START pb-sw to ON
- Set the ENG MASTER lever to ON.

The FADEC :
- Opens the engine start valve when the flight crew :
  - Sets the ENG MODE selector to IGN/START
  - Sets the ENG MAN START pb-sw to ON.
- Opens the HP shutoff valve, and operates both igniters when the flight crew sets the ENG MASTER lever to ON
- Closes the engine start valve, and cuts off the ignition when N2 reaches 43 %.

For more information about the manual start sequence, *Refer to PRO-NOR-SUP-ENG Manual Engine Start - General*.
The FADEC makes a passive survey of the engine during the starting sequence (up to 50 % N2): the flight crew is made aware of an abnormal start by a proper ECAM warning and has to interrupt the start sequence. The FADEC has not the authority to abort the manual start.
In flight, the FADEC always commands a starter-assisted air start.

MANUAL STARTING

Ident.: DSC-70-80-40-00020937.0001001 / 28 MAY 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

If an automatic start is not successful, the flight crew can perform a manual start.
In the manual start sequence, the FADEC has limited control. As a result, the flight crew must monitor engine acceleration.

To perform a manual start, the flight crew must :
- Set the ENG MODE selector to IGN/START
- Set the ENG MAN START pb-sw to ON
- Set the ENG MASTER lever to ON.

The FADEC:
- Opens the engine start valve when the flight crew :
  - Sets the ENG MODE selector to IGN/START
  - Sets the ENG MAN START pb-sw to ON.
- Opens the HP shutoff valve, and operates both igniters when the flight crew sets the ENG MASTER lever to ON
- Closes the engine start valve, and cuts off the ignition when N2 reaches 50 %.

For more information about the manual start sequence,*Refer to PRO-NOR-SUP-ENG Manual Engine Start - General*.

The FADEC makes a passive survey of the engine during the starting sequence: the flight crew is made aware of an abnormal start by a proper ECAM warning and has to interrupt the start sequence.
The FADEC has not the authority to abort the manual start:
- In flight
- On ground, except if the start EGT limit is exceeded before reaching 50 % N2. In this case only, the FADEC aborts the start.

In flight, the FADEC always commands a starter-assisted air start.

ENGINE VENTILATION (DRY CRANKING)

Ident.: DSC-70-80-40-00020938.0001001 / 21 MAR 17
Applicable to: ALL

A dry cranking cycle ventilates the engine to remove fuel vapors after an unsuccessful start attempt on the ground.

The flight crew can manually select cranking by setting the ENG MODE selector to CRANK and the ENG MAN START pb-sw to ON (ENG MASTER sw OFF). Flight crew can stop the cranking by setting the ENG MAN START pb-sw to OFF.

ENGINE COOLING

Ident.: DSC-70-80-40-00020228.0004001 / 21 OCT 16

5 **Applicable to: MSN 08495-09324, 10949-11597**

Before a start (automatic or manual) or before a manual dry crank cycle, the FADEC can command an automatic dry cranking (engine cooling) to prevent any potential bowed rotor condition. During this engine cooling, the FADEC logic limits the maximum N2 around 10 %.

Note: *A bowed rotor can occur when engine internal components cool at different rates, leading to unequal thermal expansion. This can cause some deflection (or bow) of the rotor shaft.*

The engine cooling time depends on the engine temperature at shutdown, the length of time the engine has been shutdown, the current ambient, and the engine oil temperature.
When the FADEC is powered and if engine cooling is required, a COOLING indication appears on the E/WD for both engines with the expected engine cooling time indicated.
Refer to DSC-70-90-40 Engine Warning Display
When the engine cooling process is completed, the COOLING indication and the expected engine cooling time disappear.

Note: *The FADEC takes into account the previous dry cranking operation to reduce the engine cooling time during the subsequent engine start.*

The FADEC does not initiate any automatic dry cranking during an in-flight engine start.

DUAL COOLING:

Dual cooling is commanded via the DUAL COOLING pb-sw on the overhead panel.
Refer to DSC-70-90-10 ENG DUAL COOLING Panel
The dual cooling function enables that during an automatic start sequence on ground, when the ENG MASTER lever is set to ON, the FADEC commands the cooling on both engines simultaneously (if cooling is required).
The dual cooling function is available in a dedicated envelope of use depending on the APU performance, and on engine oil temperature.
Refer to DSC-70-80-40 Automatic Engine Start with Dual Cooling - Envelope

Note: *The dual cooling function is available if the COOLING message is indicated for both engine on the E/WD.*

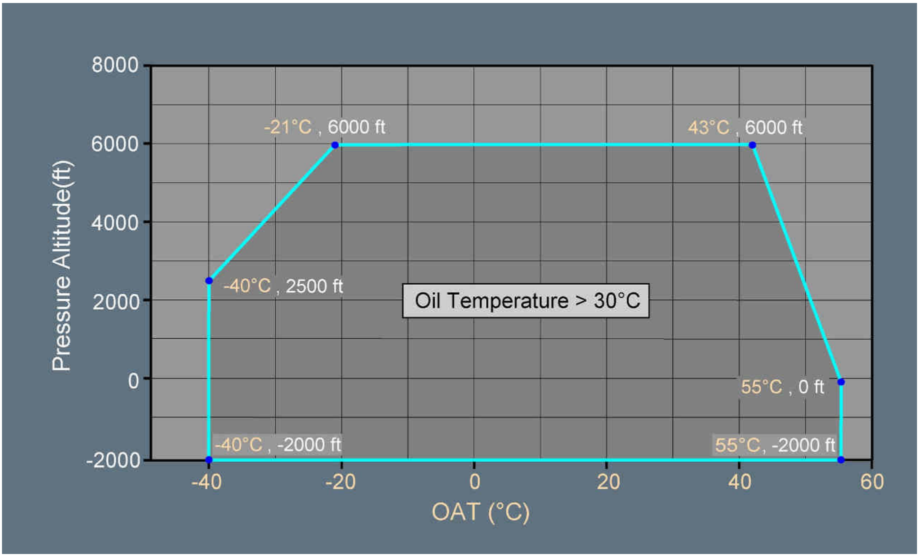
AUTOMATIC ENGINE START WITH DUAL COOLING - ENVELOPE

Ident.: DSC-70-80-40-00020229.0020001 / 04 JUN 19
Applicable to: MSN 08529

When engine cooling is required, the dual cooling function enables the crew to perform an automatic dry cranking on both engines simultaneously. The function is available in a dedicated envelope of use depending on both the APU performance and the engine oil temperature.

CAUTION	The dual cooling function is designed for use with APU bleed air only.

Dual Cooling Assisted by APU



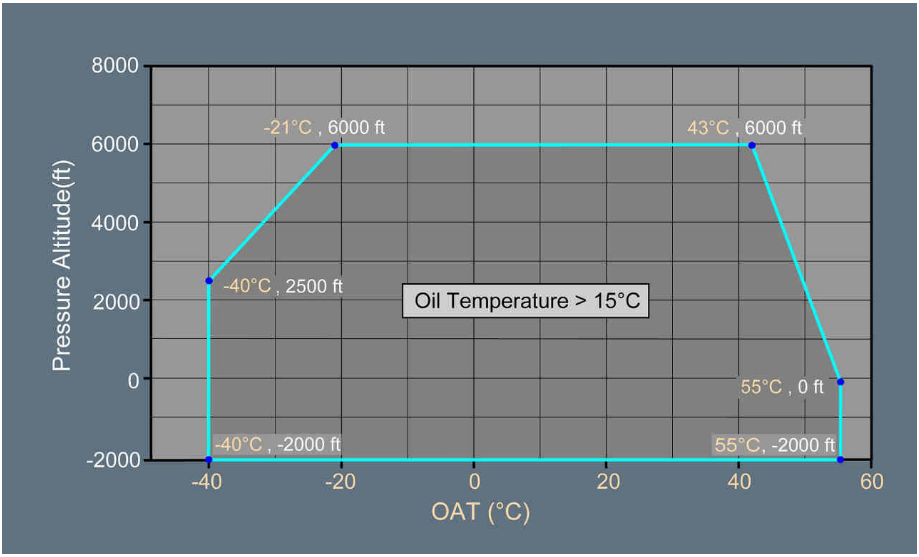
AUTOMATIC ENGINE START WITH DUAL COOLING - ENVELOPE

Ident.: DSC-70-80-40-00020229.0023001 / 04 JUN 19
6 **Applicable to: MSN 08495, 08596-09324, 10949-11597**

When engine cooling is required, the dual cooling function enables the crew to perform an automatic dry cranking on both engines simultaneously. The function is available in a dedicated envelope of use depending on both the APU performance and the engine oil temperature.

CAUTION	The dual cooling function is designed for use with APU bleed air only.

Dual Cooling Assisted by APU

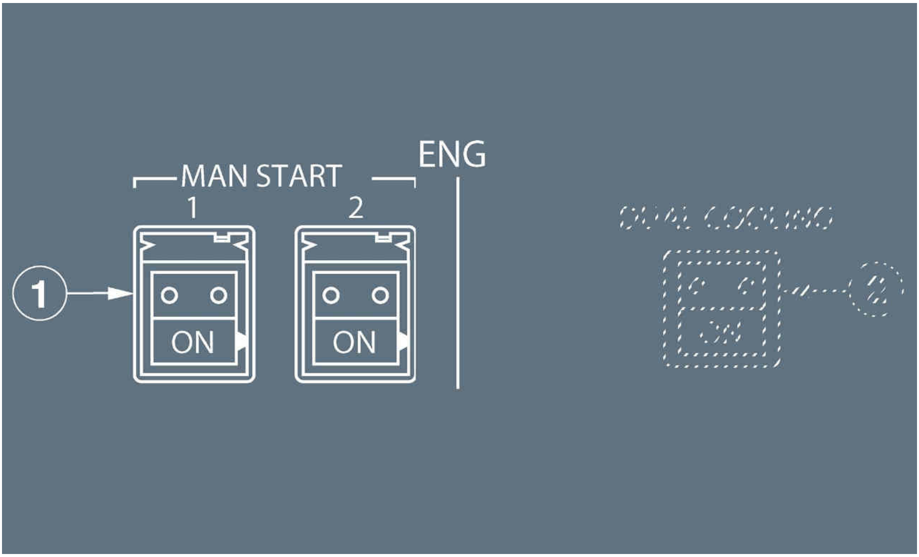


ENG MAN START PANEL

Ident.: DSC-70-90-10-20-00018366.0003001 / 21 OCT 16

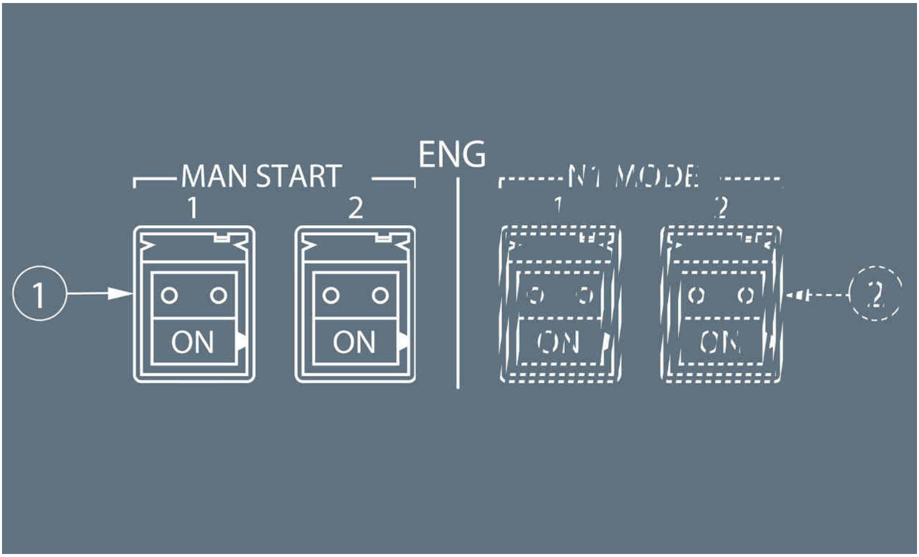
1 **Applicable to: MSN 08495-09324, 10949-11597**

ENG MAN START Panel


ENG
MAN START
1
2
ON
ON
①
DUAL COOLING
ON
②

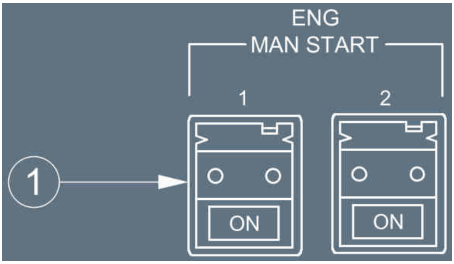
Ident.: DSC-70-90-10-20-00018366.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

ENG MAN START Panel



Ident.: DSC-70-90-10-20-00018366.0001001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

ENG MAN START Panel



Ident.: DSC-70-90-10-20-00018370.0001001 / 12 MAY 16
Applicable to: ALL

ENG MAN START pb-sw

Off :
- Aborts the manual start sequence of the associated engine, when the ENG MODE selector is set to IGN/START and the ENG MASTER lever is set to OFF, or
- Stops the dry crank process of the associated engine, when the ENG MODE selector is set to CRANK and the ENG MASTER lever is set to OFF.

L13

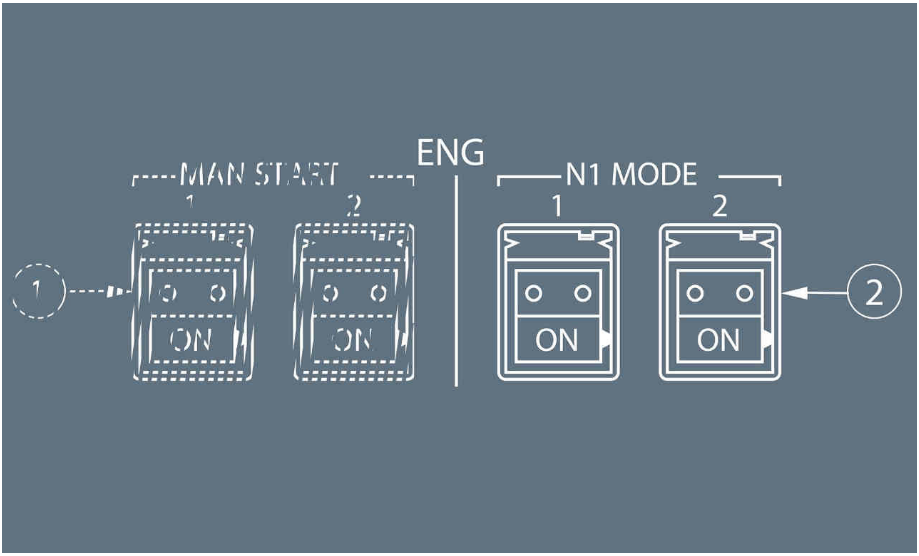
ON (in blue) :
- Initiates the manual start sequence of the associated engine, when the ENG MODE selector is set to IGN/START, or
- Initiates the wet crank process of the associated engine, when the ENG MODE selector is set to CRANK and the ENG MASTER lever is set to ON, or
- Initiates the dry crank process of the associated engine, when the ENG MODE selector is set to CRANK and the ENG MASTER lever is set to OFF.

ENG N1 MODE PANEL

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: DSC-70-90-10-25-00018374.0001001 / 21 MAR 16

ENG N1 MODE Panel



Ident.: DSC-70-90-10-25-00018375.0001001 / 21 MAR 16

ENG N1 MODE pb-sw

Off	:	The FADEC controls the engine in EPR mode, if available.
ON (in blue)	:	The FADEC controls the engine in N1 mode.

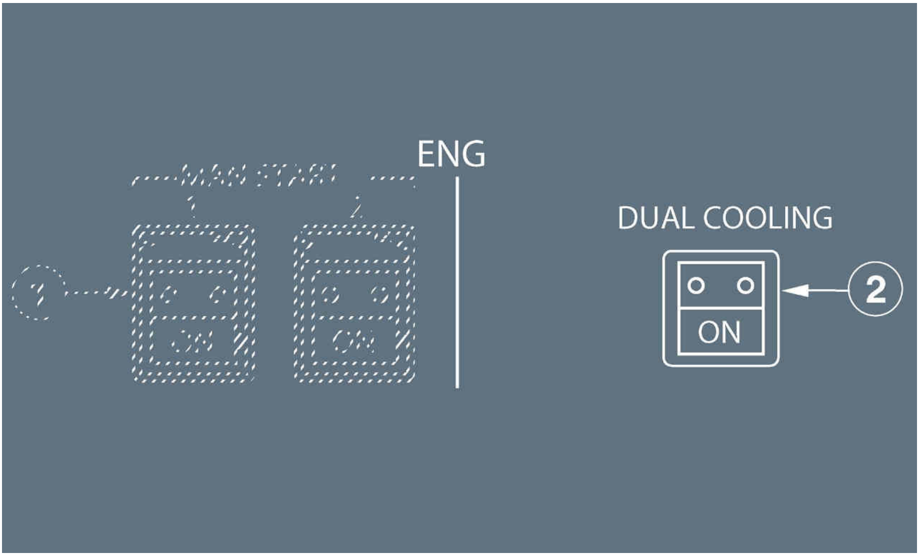
ENG DUAL COOLING PANEL

Applicable to: MSN 08495-09324, 10949-11597

Ident.: DSC-70-90-10-26-00020022.0001001 / 21 OCT 16

2

ENG DUAL COOLING Panel



Ident.: DSC-70-90-10-26-00020023.0001001 / 21 OCT 16

3

ENG DUAL COOLING pb-sw

L12

Off	The dual cooling function is not armed. If dual cooling is in progress, the FADEC stops the automatic dry cranking on the engine that is not commanded to start.

L12

ON (in blue)	Arms the dual cooling function. If required, the FADEC can command an automatic dry cranking of both engines simultaneously, when the flight crew initiates the automatic start of the first engine.

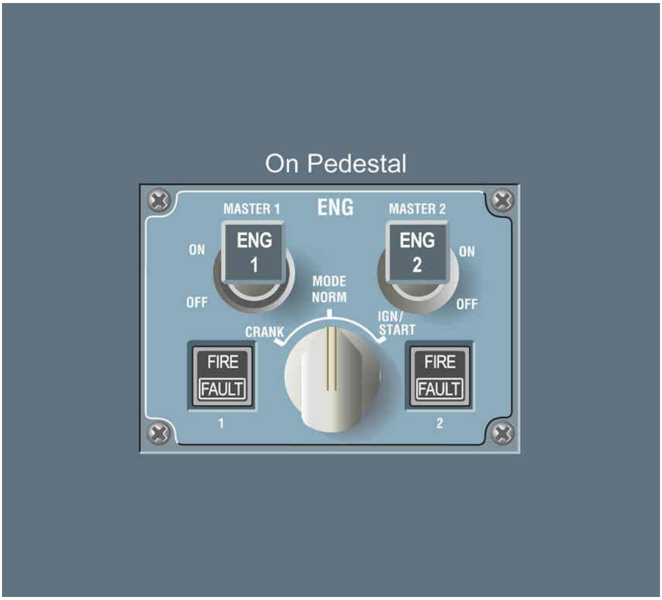
Intentionally left blank

ENG MODE SELECTOR AND ENG MASTER LEVERS

Applicable to: ALL

Ident.: DSC-70-90-20-30-00018367.0001001 / 12 OCT 16

ENG MODE selector and ENG MASTER Levers


On Pedestal
MASTER 1
ENG
MASTER 2
ENG 1
ENG 2
ON
OFF
ON
OFF
MODE
NORM
CRANK
IGN/ START
FIRE
FAULT
FIRE
FAULT
1
2

Ident.: DSC-70-90-20-30-00018373.0001001 / 21 MAR 17

ENG MODE START selector

NORM : Normal mode of operation.

IGN/START : Use the IGN/START position to:

- Initiate the automatic or manual start sequences of the associated engine, when the ENG MASTER lever is set to OFF, or
- Initiate the ignitors in flight as required.

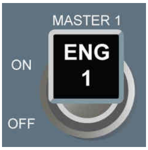
L13

CRANK : Use the CRANK position to:

- Initiate the dry crank process of the associated engine, when the ENG MASTER lever is set to OFF and the ENG MAN START pb-sw is set to ON.
- Initiate the wet crank process of the associated engine for maintenance purpose, when the ENG MASTER lever, and the ENG MAN START pb-sw are set to ON.

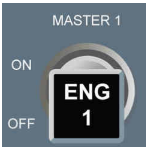
Ident.: DSC-70-90-20-30-00018371.0001001 / 28 MAY 20

ENG MASTER lever



The FADEC:

- Initiates the automatic start sequence of the associated engine, when the ENG MODE selector is set to IGN/START, or
- Initiates the manual start sequence of the associated engine, when the ENG MODE selector is set to IGN/START and the ENG MAN START pb-sw is set to ON.



The FADEC:

- Shuts down the associated engine, or
- Aborts the start sequence of the associated engine.

Ident.: DSC-70-90-20-30-00018372.0001001 / 21 MAR 17

ENG 1(2) FIRE light

FIRE Light :
A fire is detected in the corresponding engine.
Refer to DSC-26-20-20 ENG 1(2) FIRE Light

ENG 1(2) FAULT light

FAULT light :
This amber light comes on, and a caution appears on ECAM, if there is:

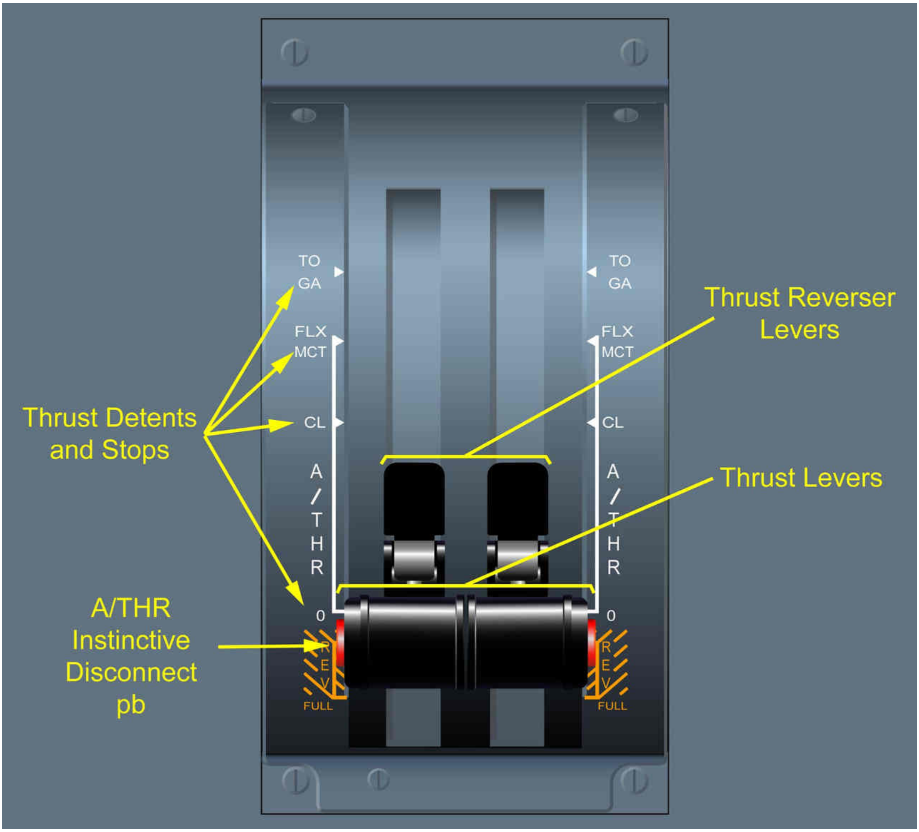
- The position of the HP fuel shutoff valve is abnormal, or
- The automatic start sequence of the associated engine aborts, or
- There is a malfunction of the thrust control.

THRUST LEVERS

Applicable to: ALL

Ident.: DSC-70-90-20-40-00018368.0001001 / 28 JUL 16

Thrust Levers


TO
GA
FLX
MCT
CL
A/THR
0
REV
FULL
TO
GA
FLX
MCT
CL
A/THR
0
REV
FULL
Thrust Detents and Stops
A/THR Instinctive Disconnect pb
Thrust Reverser Levers
Thrust Levers

Ident.: DSC-70-90-20-40-00018376.0001001 / 21 MAR 16

THRUST LEVERS

The flight crew uses the thrust levers in order to:
- Adjust the thrust, or
- Select a thrust stop or detent, or

- Control the deployment and the stowage of the associated reversers, or
- Adjust the associated reverse thrust.

The flight crew can move each thrust lever individually.

L2 The position of the thrust levers appears on the E/WD, via a blue circle on the thrust gauge.

L1 The flight crew can move each thrust lever forward the Idle (0) stop, when the associated thrust reverser lever is set to the locked position.
The flight crew can move each thrust lever backward the Idle (0) stop, when the associated thrust reverser lever is in the unlocked position.

Ident.: DSC-70-90-20-40-00018377.0001001 / 28 MAY 20

THRUST DETENTS AND STOPS

There are three stops and three detents:
- The Rev Max (F or FULL) stop
- The Rev Idle (R or REV) detent
- The Idle (0) stop
- The Climb (CL) detent
- The Maximum Continuous Thrust (MCT)/Flexible Take Off (FLX) detent
- The Takeoff (TO)/Go-Around (GA) stop.

Ident.: DSC-70-90-20-40-00018378.0001001 / 21 MAR 16

THRUST REVERSER LEVERS

The flight crew uses the thrust reverser levers in order to unlock the associated thrust lever.
The flight crew can move each thrust reverser lever upward to the unlocked position, when the associated thrust lever is set to the Idle (0) stop.
The thrust reverser levers are automatically reset to the locked position, when the flight crew moves the thrust levers forward the Idle (0) stop.

Ident.: DSC-70-90-20-40-00018379.0001001 / 18 MAY 22

A/THR Instinctive Disconnect pb

Pressing the A/THR instinctive disconnect pb disconnects the A/THR.

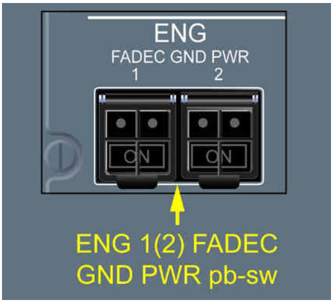
L2 For more information about A/THR instinctive disconnect pb, *Refer to DSC-22_30-50-40 A/THR Disconnection*.

ENG FADEC GND PWR PANEL

Applicable to: ALL

Ident.: DSC-70-90-30-10-00018365.0001001 / 12 OCT 16

ENG FADEC GND PWR Panel



Ident.: DSC-70-90-30-10-00018369.0001001 / 21 MAR 16

ENG FADEC GND PWR PB-SW

Off : The electrical network of the aircraft or the FADEC alternator automatically supplies the FADEC.

ON : On ground, when pressed the electrical network of the aircraft supplies the FADEC when:

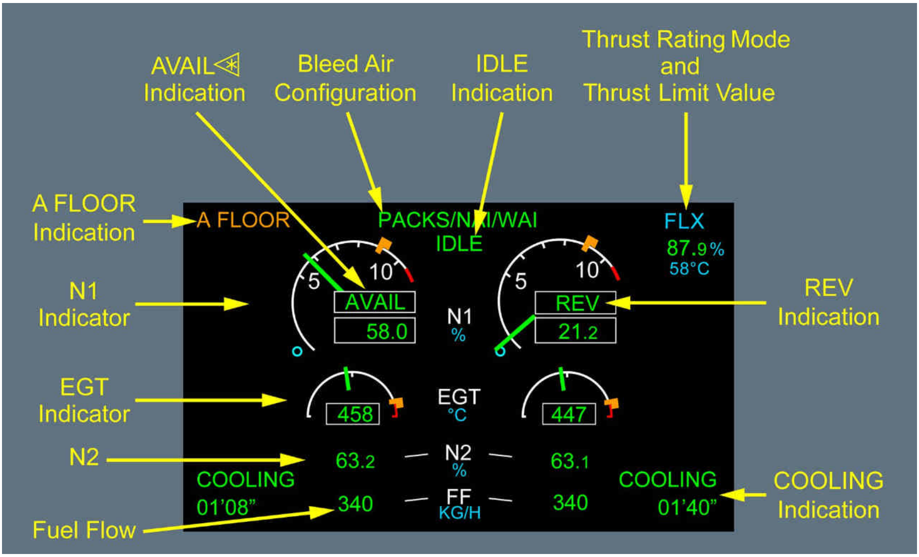
- The ENG FIRE pb-sw is not pressed,
- The FADEC alternator does not supply the FADEC.

Intentionally left blank

ENGINE/WARNING DISPLAY

Ident.: DSC-70-90-40-50-00017843.0006001 / 12 OCT 16

1 **Applicable to: MSN 08495-09324, 10949-11597**

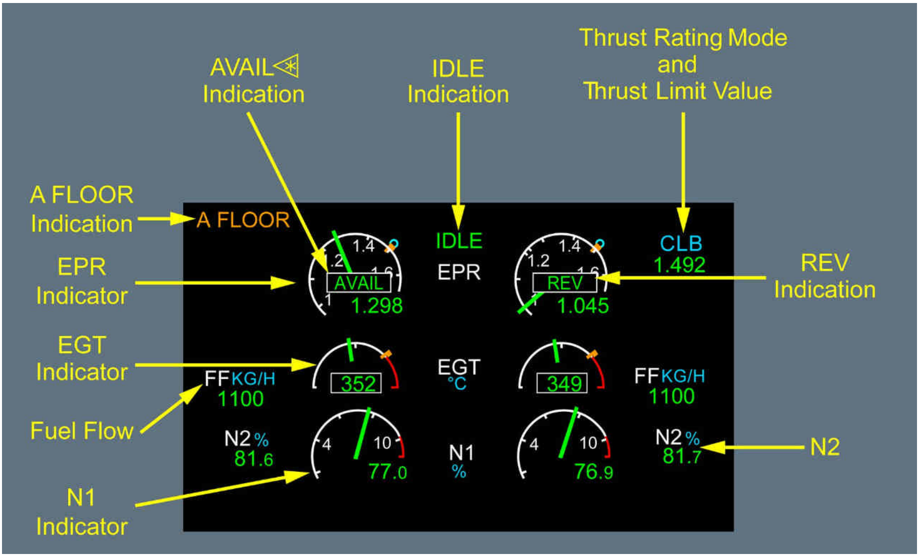

AVAIL Indication
Bleed Air Configuration
IDLE Indication
Thrust Rating Mode and Thrust Limit Value
A FLOOR Indication
N1 Indicator
EGT Indicator
N2
Fuel Flow
REV Indication
COOLING Indication
A FLOOR
PACKS/NAI/WAI
IDLE
FLX
87.9%
58°C
5
10
AVAIL
58.0
N1
%
REV
21.2
458
EGT
°C
447
63.2
N2
%
63.1
COOLING
01'08"
340
FF
KG/H
340
COOLING
01'40"

Engine/Warning Display

Ident.: DSC-70-90-40-50-00017843.0004001 / 12 OCT 16

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

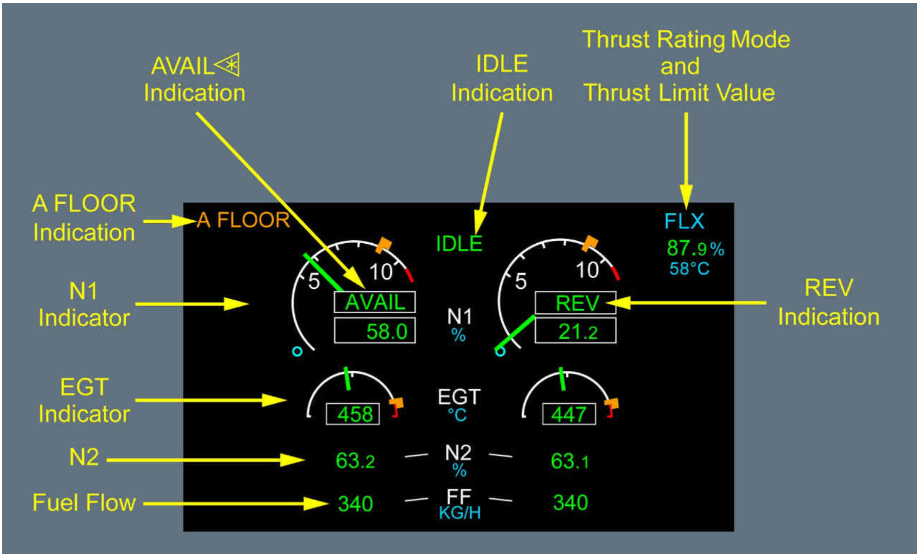
Engine/Warning Display


AVAIL Indication
IDLE Indication
Thrust Rating Mode and Thrust Limit Value
A FLOOR Indication
A FLOOR
IDLE
CLB
1.492
EPR Indicator
AVAIL
1.298
EPR
REV
1.045
REV Indication
EGT Indicator
352
EGT
°C
349
FF KG/H
1100
FF KG/H
1100
Fuel Flow
N2 %
81.6
77.0
N1
%
76.9
N2 %
81.7
N2
N1 Indicator

Ident.: DSC-70-90-40-50-00017843.0003001 / 12 OCT 16

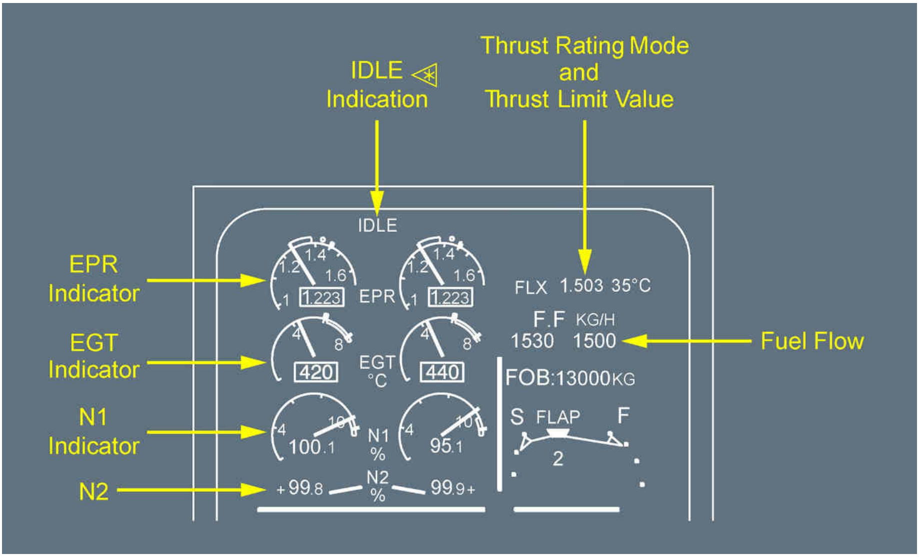
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Engine/Warning Display


AVAIL Indication
IDLE Indication
Thrust Rating Mode and Thrust Limit Value
A FLOOR Indication
N1 Indicator
EGT Indicator
N2
Fuel Flow
REV Indication
A FLOOR
IDLE
FLX
87.9%
58°C
5
10
AVAIL
58.0
N1
%
REV
21.2
458
EGT
°C
447
63.2
N2
%
63.1
340
FF
KG/H
340

Ident.: DSC-70-90-40-50-00017843.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Engine/Warning Display


IDLE
Indication
Thrust Rating Mode
and
Thrust Limit Value
EPR
Indicator
EGT
Indicator
N1
Indicator
N2
Fuel Flow
IDLE
1.2
1.4
1.6
1
1.223
EPR
FLX 1.503 35°C
F.F KG/H
1530 1500
4
8
420
EGT
°C
440
FOB:13000KG
100.1
N1
%
95.1
S FLAP F
2
+99.8
N2
%
99.9+

Ident.: DSC-70-90-40-50-00017845.0001001 / 18 MAY 22
Applicable to: ALL

A FLOOR INDICATION

The alpha floor protection is active.

L2 For more information, *Refer to DSC-22_30-50-50 ALPHA FLOOR*

Ident.: DSC-70-90-40-50-00017846.0001001 / 21 MAR 16
Applicable to: ALL

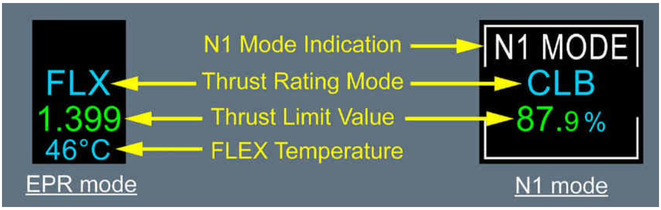
THRUST RATING MODE AND THRUST LIMIT VALUE

Indicates the thrust limit value and the associated thrust rating mode based on:

- The position of the thrust levers,
- Aircraft on ground or in flight,
- The engine status, i.e. running or not running,
- The data entered in the T.O and CLB panels of the FMS ACTIVE/PERF page.

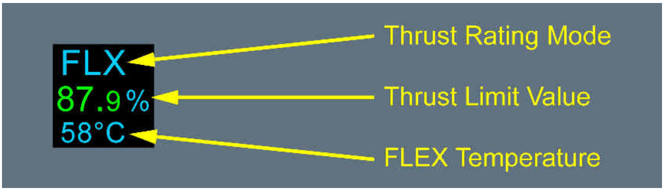
Ident.: DSC-70-90-40-50-00017847.0004001 / 12 OCT 16

Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

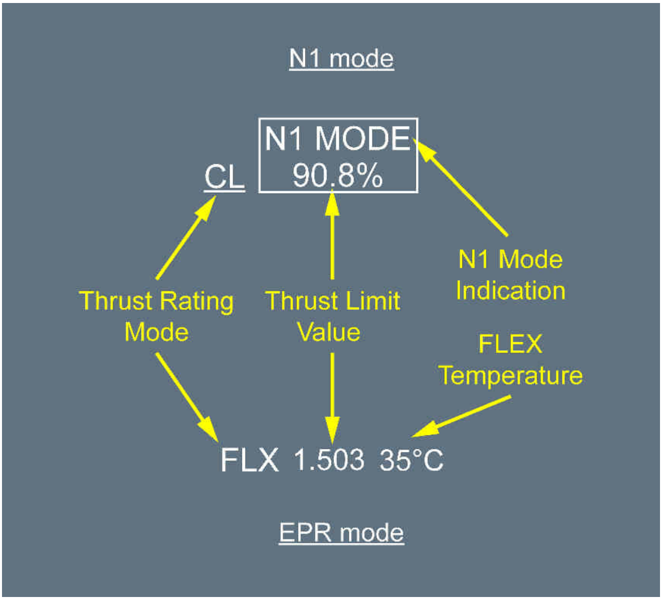

FLX
1.399
46°C
N1 Mode Indication
Thrust Rating Mode
Thrust Limit Value
FLEX Temperature
N1 MODE
CLB
87.9%
EPR mode
N1 mode

Ident.: DSC-70-90-40-50-00017847.0003001 / 21 MAR 16

2 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**


FLX
87.9%
58°C
Thrust Rating Mode
Thrust Limit Value
FLEX Temperature

Ident.: DSC-70-90-40-50-00017847.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321


N1 mode
CL
N1 MODE
90.8%
Thrust Rating Mode
Thrust Limit Value
N1 Mode Indication
FLEX Temperature
FLX 1.503 35°C
EPR mode

Ident.: DSC-70-90-40-50-00018201.0001001 / 05 MAR 19
Applicable to: ALL

THRUST RATING MODES

The thrust rating modes are:

TOGA : Takeoff or go-around thrust rating mode is selected.
MCT : Maximum continuous thrust rating mode is selected.
CLB : Climb thrust rating mode is selected.
FLX : Flexible takeoff thrust rating mode is selected.
D04 : Derated takeoff ◁ thrust rating mode is selected.
There are several levels of derated takeoff: D04, D08, D12, D16, D20, ...
GA SOFT : Soft go-around ◁ thrust rating mode is selected.
MREV : Maximum reverse thrust rating mode is selected.

Ident.: DSC-70-90-40-50-00018203.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

THRUST LIMIT VALUE

EPR value : Indicates the EPR limit value associated with the thrust rating mode, when at least one engine operates in EPR mode.

L12

N1 value : Indicates the N1 limit value associated with the thrust rating mode, when both engines operate in N1 mode.
The N1 MODE indication appears.

L2 The thrust limit value disappears when the thrust reversers are selected.

Ident.: DSC-70-90-40-50-00018203.0001001 / 21 MAR 16
3 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

THRUST LIMIT VALUE

N1 value : Indicates the N1 limit value associated with the thrust rating mode.

L2 The thrust limit value disappears when the thrust reversers are selected.

Ident.: DSC-70-90-40-50-00017849.0002001 / 12 MAY 16
4 **Applicable to: MSN 08495-09324, 10949-11597**

FLEX TEMPERATURE

Cyan : Indicates the flexible temperature that the flight crew entered in the T.O panel of the FMS PERF page, when the FLX rating mode is selected, and the Static Air Temperature is at most 10 °C above the flexible temperature.

Ident.: DSC-70-90-40-50-00017849.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

FLEX TEMPERATURE

Cyan : Indicates the flexible temperature that the flight crew entered in the T.O panel of the FMS PERF page, when the FLX rating mode is selected

Dashes in cyan : Indicates that the Static Air Temperature is above the flexible temperature.

Ident.: DSC-70-90-40-50-00017851.0001001 / 18 MAY 16
5 **Applicable to: MSN 08495-09324, 10949-11597**

BLEED AIR CONFIGURATION

PACKS : The engine bleeds supply the air conditioning packs.
NAI : The engine nacelle anti-ice is on.
WAI : The wing anti-ice is on.

All indications can appear independently.

L2 They appear:

- On ground, when at least one engine is running
- During takeoff or go-around phase, until thrust lever reduction to the CL detent
- In flight, when thrust rating mode is MCT.

Ident.: DSC-70-90-40-50-00018209.0001001 / 21 MAR 16
Applicable to: ALL

IDLE INDICATION

Both engines are at idle speed, and the aircraft is in flight.

L2 Pulses during 10 s, and then remains steady.

Ident.: DSC-70-90-40-50-00018210.0001001 / 21 MAR 16
Applicable to: ALL

AVAIL INDICATION ◁

The engine is started, and at or above idle.

L2 On ground, appears steady during 10 s after a successful start. In flight, pulses during 1 min after a successful relight.

The AVAIL Indication ◁ disappears when the flight crew moves the thrust lever forward the idle detent.

Ident.: DSC-70-90-40-50-00018211.0001001 / 21 MAR 16
Applicable to: ALL

REV INDICATION

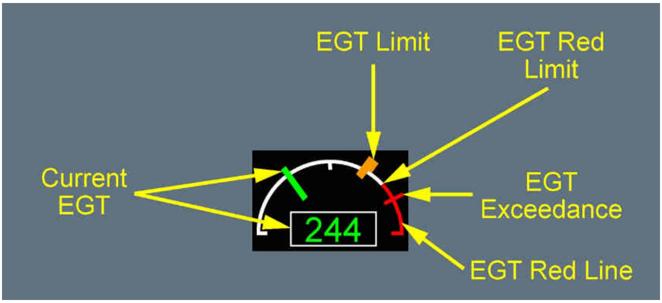
REV in green : On ground, the thrust reverser system is fully deployed.

L12

REV in amber : The thrust reverser system is unlocked.
In flight, the REV indication pulses during 9 s and then remains steady.

Ident.: DSC-70-90-40-50-00018213.0001001 / 21 MAR 16
Applicable to: ALL

EGT INDICATOR



Ident.: DSC-70-90-40-50-00018216.0002001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

CURRENT EGT

L12

Green	:	The current EGT is in normal range. The scale goes from 0 °C to 1 000 °C.
Amber	:	The current EGT exceeds the EGT amber limit.
Red	:	The current EGT exceeds the EGT red limit.

Ident.: DSC-70-90-40-50-00018216.0003001 / 21 MAR 16
6 **Applicable to: MSN 08495-09324, 10949-11597**

CURRENT EGT

L12

Green	:	The current EGT is in normal range. The scale goes from 0 °C to 1 200 °C.
Amber	:	The current EGT exceeds the EGT amber limit.
Red	:	The current EGT exceeds the EGT red limit.

Ident.: DSC-70-90-40-50-00018216.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

CURRENT EGT

L12

Green	:	The current EGT is in normal range. The scale goes from 0 °C to 800 °C.
Amber	:	The current EGT exceeds the EGT amber limit.
Red	:	The current EGT exceeds the EGT red limit.

Ident.: DSC-70-90-40-50-00018218.0008001 / 18 MAY 18
7 **Applicable to: MSN 08495-09324, 10949-11597**

EGT LIMIT

The amber line indicates the maximum EGT (i.e. the EGT limit).
L2 The maximum EGT is set at 1 043 °C as soon as the engine is started.
The EGT limit does not appear:

- During engine start or engine relight, or
- When a takeoff or a go-around mode is selected, or
- When the thrust reversers are selected, or
- If the alpha floor protection is activated.

Ident.: DSC-70-90-40-50-00018218.0007001 / 21 MAR 16
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

EGT LIMIT

The amber line indicates the maximum EGT (i.e. the EGT limit).
L2 The maximum EGT is:

- 635 °C, during the engine start sequence on ground, or
- 610 °C, in all other cases.

The EGT limit does not appear:

- When a takeoff or a go-around mode is selected, or
- When the thrust reversers are selected, or
- If the alpha floor protection is activated.

Ident.: DSC-70-90-40-50-00018218.0003001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

EGT LIMIT

The amber line indicates the maximum EGT (i.e. the EGT limit).
L2 The maximum EGT is:

- 725 °C, during the engine start sequence on ground, or
- 915 °C, in all other cases.

The EGT limit does not appear:

- When a takeoff or a go-around mode is selected, or
- When the thrust reversers are selected, or
- If the alpha floor protection is activated.

Ident.: DSC-70-90-40-50-00018218.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

EGT LIMIT

The amber line indicates the maximum EGT (i.e. the EGT limit), when different than the EGT red limit.
L2 The maximum EGT is:

- 635 °C, during the engine start sequence on ground, or
- 610 °C, in all other cases.

The EGT limit does not appear:

- When a takeoff or a go-around mode is selected, or
- When the thrust reversers are selected, or
- If the alpha floor protection is activated.
- During the engine start sequence on ground.

Ident.: DSC-70-90-40-50-00018219.0001001 / 21 MAR 16
Applicable to: ALL

EGT EXCEEDANCE

The EGT exceedance is the highest value that the EGT reached.
The EGT exceedance appears when:

- The current EGT exceeds the EGT red limit, or
- The EGT exceeded the EGT red limit.

L2 The red mark no longer appears at the next engine start sequence on ground, or after a maintenance action.

Ident.: DSC-70-90-40-50-00018220.0007001 / 21 MAR 16
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

EGT RED LINE

The EGT red line appears between the EGT red limit and the end of the scale.
L2 The EGT red limit is 650 °C.

Ident.: DSC-70-90-40-50-00018220.0006001 / 21 MAR 16
8 **Applicable to: MSN 08495-09324, 10949-11597**

EGT RED LINE

The EGT red line appears between the EGT red limit and the end of the scale.
L2 The EGT red limit is 1 083 °C.

Ident.: DSC-70-90-40-50-00018220.0003001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

EGT RED LINE

The EGT red line appears between the EGT red limit and the end of the scale.
L2 The EGT red limit is 950 °C.

Ident.: DSC-70-90-40-50-00018220.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

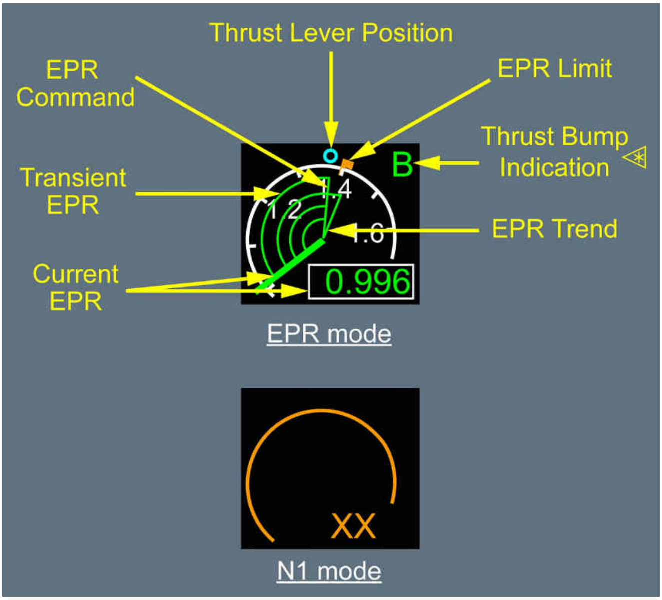
EGT RED LINE

The EGT red line appears between the EGT red limit and the end of the scale.
L2 The EGT red limit is 635 °C.

Ident.: DSC-70-90-40-50-00018221.0005001 / 12 OCT 16

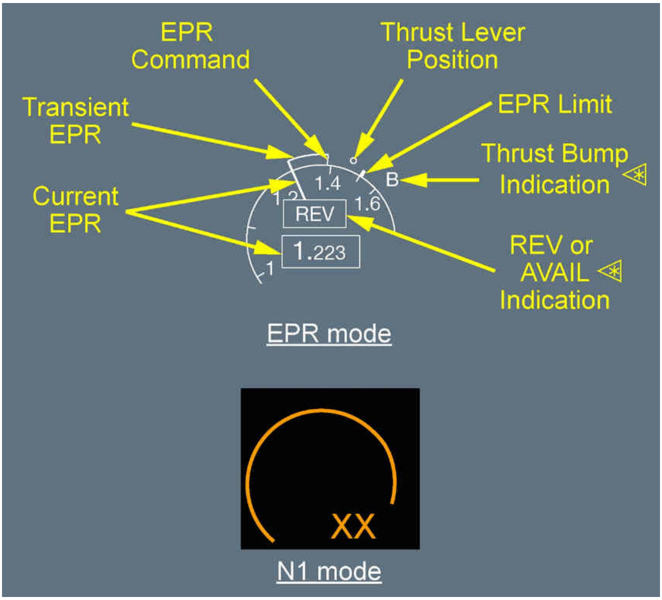
Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

EPR INDICATOR


Thrust Lever Position
EPR Command
EPR Limit
Thrust Bump Indication
B
Transient EPR
1.2
1.4
1.6
EPR Trend
Current EPR
0.996
EPR mode
XX
N1 mode

Ident.: DSC-70-90-40-50-00018221.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

EPR INDICATOR


EPR Command
Thrust Lever Position
Transient EPR
EPR Limit
Thrust Bump Indication
Current EPR
1.2
1.4
1.6
B
REV
1.223
1
REV or AVAIL Indication
EPR mode
XX
N1 mode

Ident.: DSC-70-90-40-50-00018222.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

CURRENT EPR

Green : The current EPR is valid and the engine operates in EPR mode.

L12

XX in amber : The Current EPR is not valid, or the engine operates in N1 mode.
The EPR scale appears in amber.
The EPR needle and the box around current the EPR value disappear.

Ident.: DSC-70-90-40-50-00018223.0001001 / 21 MAR 16
Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

EPR TREND

The green triangle indicates the direction of the EPR trend, when the A/THR mode is active.

Ident.: DSC-70-90-40-50-00018224.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

EPR COMMAND

Indicates the EPR target, when the A/THR mode is active.

Ident.: DSC-70-90-40-50-00018225.0002001 / 21 MAR 16
Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

TRANSIENT EPR

The four green arcs indicate the difference between the EPR command and the current EPR, when the A/THR is active.

Ident.: DSC-70-90-40-50-00018225.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

TRANSIENT EPR

The green arc indicates the difference between the EPR command and the current EPR, when the A/THR is active.

Ident.: DSC-70-90-40-50-00018226.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

THRUST LEVER POSITION

The blue circle indicates the position of the thrust lever.
In manual mode, the blue circle corresponds to the EPR value reached after the stabilization of the engine parameters.
L2 The thrust lever position disappears when the thrust reversers are selected.

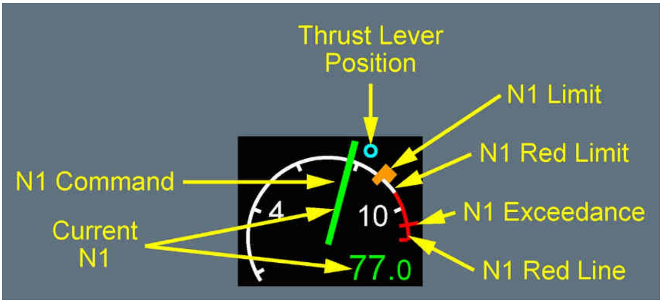
Ident.: DSC-70-90-40-50-00018227.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

EPR LIMIT

The amber mark indicates the EPR limit.
L2 This corresponds to the maximum EPR value when the thrust levers are in TO/GA detent.
The amber mark disappears when the thrust reversers are selected.

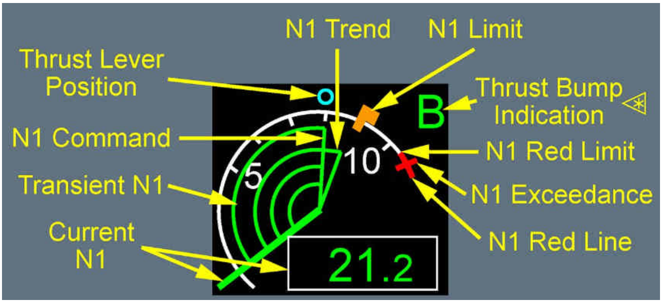
Ident.: DSC-70-90-40-50-00018228.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

N1 INDICATOR


Thrust Lever
Position
N1 Limit
N1 Red Limit
N1 Command
N1 Exceedance
Current
N1
N1 Red Line
4
10
77.0

Ident.: DSC-70-90-40-50-00018228.0001001 / 21 MAR 16
9 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

N1 INDICATOR


N1 Trend
N1 Limit
Thrust Lever
Position
Thrust Bump
Indication
B
N1 Command
N1 Red Limit
Transient N1
N1 Exceedance
Current
N1
N1 Red Line
5
10
21.2

Ident.: DSC-70-90-40-50-00018229.0006001 / 21 MAR 16
10 **Applicable to: MSN 08495-09324, 10949-11597**

CURRENT N1

Green	:	The current N1 is in normal range.
Amber	:	The current N1 exceeds the N1 limit.
Red	:	The current N1 exceeds the N1 red limit. N1 red limit is 100 %.

L12

L12

Dashed	:	The accuracy of the N1 measurement is degraded. Two amber dashes appear over the last digit.

Ident.: DSC-70-90-40-50-00018229.0003001 / 04 JUL 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

CURRENT N1

Green	:	The current N1 is in normal range.
Amber	:	The current N1 exceeds the N1 limit.

L12

Red	:	The current N1 exceeds the N1 red limit. N1 red limit is 104 %.

L12

Dashed	:	The accuracy of the N1 measurement is degraded. Two amber dashes appear over the last digit.

Ident.: DSC-70-90-40-50-00018229.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

CURRENT N1

L12

Green	:	The current N1 is in normal range. The box around current N1 appears, when the engine operates in N1 mode.
Amber	:	The current N1 exceeds the N1 limit.

L12

Red	:	The current N1 exceeds the N1 red limit. N1 red limit is 100 %.

L12

Dashed	:	The accuracy of the N1 measurement is degraded. Two amber dashes appear over the last digit.

Ident.: DSC-70-90-40-50-00018231.0001001 / 21 MAR 16
11 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

N1 TREND

The green triangle indicates the direction of the N1 trend, when the A/THR mode is active.

Ident.: DSC-70-90-40-50-00018232.0001001 / 21 MAR 16
12 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

N1 COMMAND

Indicates the N1 target, when the A/THR mode is active.

Ident.: DSC-70-90-40-50-00018233.0001001 / 21 MAR 16
13 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

TRANSIENT N1

The four green arcs indicate the difference between the N1 command and the current N1, when the A/THR is active.

Ident.: DSC-70-90-40-50-00018235.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

THRUST LEVER POSITION

The blue circle indicates the position of the thrust lever, when the engine operates in N1 mode.
In manual mode, the blue circle corresponds to the N1 value reached after the stabilization of the engine parameters.
L2 The thrust lever position disappears when the thrust reversers are selected.

Ident.: DSC-70-90-40-50-00018235.0001001 / 21 MAR 16
14 **Applicable to: MSN 08495-09324, 10949-11597**

THRUST LEVER POSITION

The blue circle indicates the position of the thrust lever.
In manual mode, the blue circle corresponds to the N1 value reached after the stabilization of the engine parameters.

Ident.: DSC-70-90-40-50-00018235.0003001 / 28 MAY 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

THRUST LEVER POSITION

The blue circle indicates the position of the thrust lever.

Ident.: DSC-70-90-40-50-00018236.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

N1 LIMIT

The amber mark indicates the N1 limit.
L2 This corresponds to the maximum N1 value when the thrust levers are in TO/GA detent and the engine operates in rated N1 mode.
The N1 limit disappears when the thrust reversers are selected.

Ident.: DSC-70-90-40-50-00018236.0001001 / 21 MAR 16
15 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

N1 LIMIT

The amber mark indicates the N1 limit.
L2 This corresponds to the maximum N1 value when the thrust levers are in TO/GA detent.

Ident.: DSC-70-90-40-50-00018237.0001001 / 21 MAR 16
Applicable to: ALL

N1 EXCEEDANCE

The N1 exceedance is the highest value that the N1 reached.
The N1 exceedance appears when the current N1 exceeds the N1 red limit.
The N1 exceedance remains even if the N1 value decreases below the N1 red limit.
L2 The red mark no longer appears at the next engine start sequence on ground, or after a maintenance action.

Ident.: DSC-70-90-40-50-00018238.0003001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

N1 RED LINE

The N1 red line appears between the N1 red limit and the end of the scale.
L2 The N1 red limit is 104 %.

Ident.: DSC-70-90-40-50-00018238.0001001 / 21 MAR 16
16 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**

N1 RED LINE

The N1 red line appears between the N1 red limit and the end of the scale.
L2 The N1 red limit is 100 %.

Ident.: DSC-70-90-40-50-00018239.0002001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

N2

In a grey box : The engine start sequence or the crank process is in progress.

Green: : N2 is in normal range.

L12

Red : N2 exceeds the N2 red limit.
N2 red limit is 105 %.
A red cross appears.
The red cross no longer appears at the next engine start sequence on ground, or after a maintenance action.

L12

Dashed : The accuracy of the N2 measurement is degraded.
Two amber dashes appear over the last digit.

Ident.: DSC-70-90-40-50-00018239.0001001 / 21 MAR 16
17 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**

N2

In a grey box : The engine start sequence or the crank process is in progress.

Green: : N2 is in normal range.

L12

Red : N2 exceeds the N2 red limit.
N2 red limit is 100 %.
A red cross appears.
The red cross no longer appears at the next engine start sequence on ground, or after a maintenance action.

L12

Dashed : The accuracy of the N2 measurement is degraded.
Two amber dashes appear over the last digit.

Ident.: DSC-70-90-40-50-00018243.0001001 / 21 MAR 16
Applicable to: ALL

FUEL FLOW

Green : The fuel flow is normal.

Note: *If the system detects a discrepancy between the N1, N2, EGT and fuel flow values on the FADEC-DMC bus and the corresponding displayed values, an amber CHECK appears underneath the affected parameter.*

Ident.: DSC-70-90-40-50-00018244.0001001 / 21 MAR 16
Applicable to: ALL

THRUST BUMP ◁ INDICATION

Green	:	Indicates that the thrust bump is engaged.
Amber	:	When on the ground, indicates that the thrust bump is selected but not engaged.
Cyan	:	When on the ground, Indicates that the thrust bump is selected.

Ident.: DSC-70-90-40-50-00018563.0003001 / 16 JUN 16
18 **Applicable to: MSN 08495-09324, 10949-11597**

COOLING INDICATION

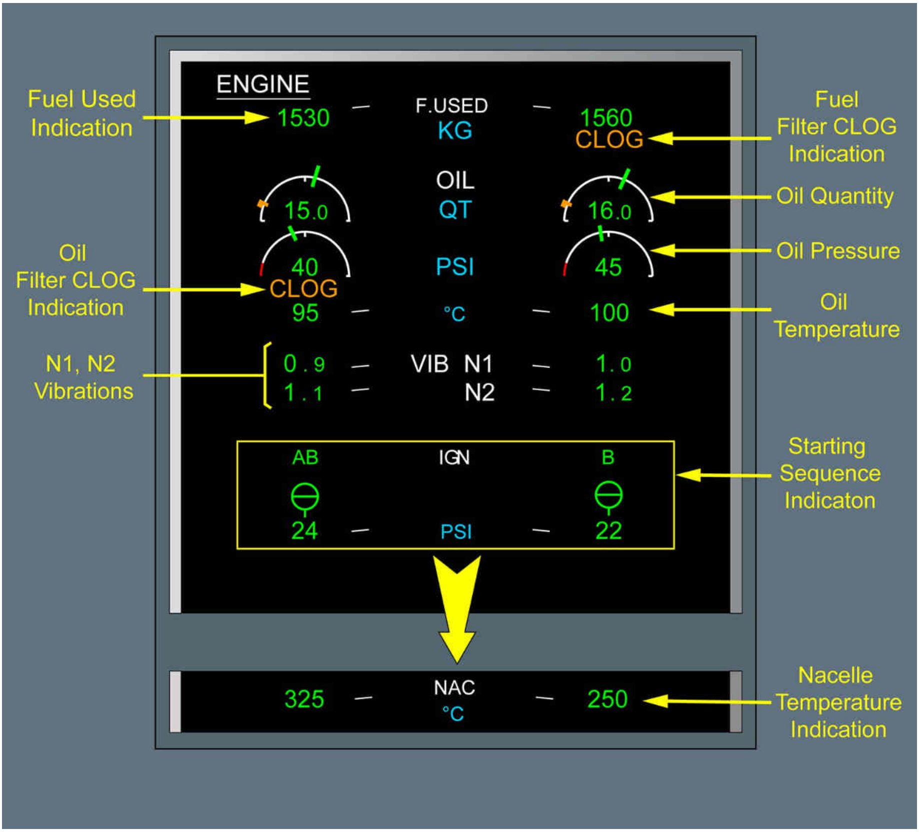
The green COOLING indication is displayed when an automatic dry crank is required to cool the engine before it starts. The timer indicates the time of the automatic dry crank before the engine start.
The COOLING indication can be displayed for automatic and manual start.

ENG SD PAGE

Ident.: DSC-70-90-40-60-00018259.0006001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

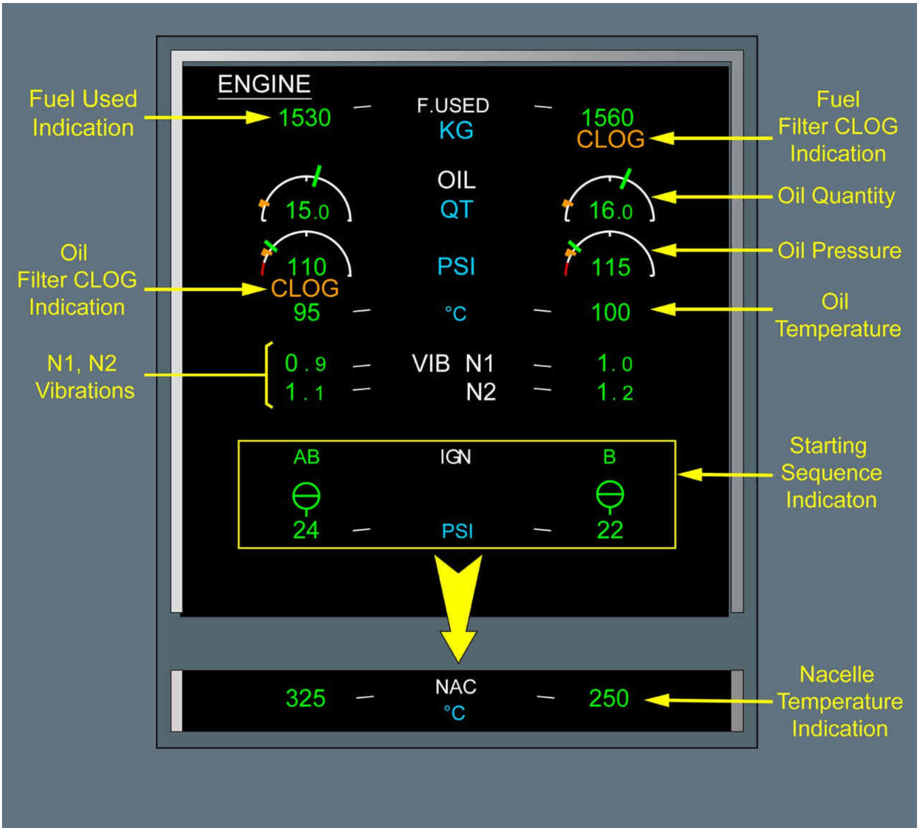
ENG SD page


Fuel Used Indication
ENGINE
1530
F.USED
KG
1560
CLOG
Fuel Filter CLOG Indication
OIL
QT
15.0
16.0
Oil Quantity
40
PSI
45
Oil Pressure
Oil Filter CLOG Indication
CLOG
95
°C
100
Oil Temperature
N1, N2 Vibrations
0.9
VIB N1
1.0
1.1
N2
1.2
AB
IGN
B
24
PSI
22
Starting Sequence Indicaton
325
NAC
°C
250
Nacelle Temperature Indication

Ident.: DSC-70-90-40-60-00018259.0005001 / 21 MAR 16

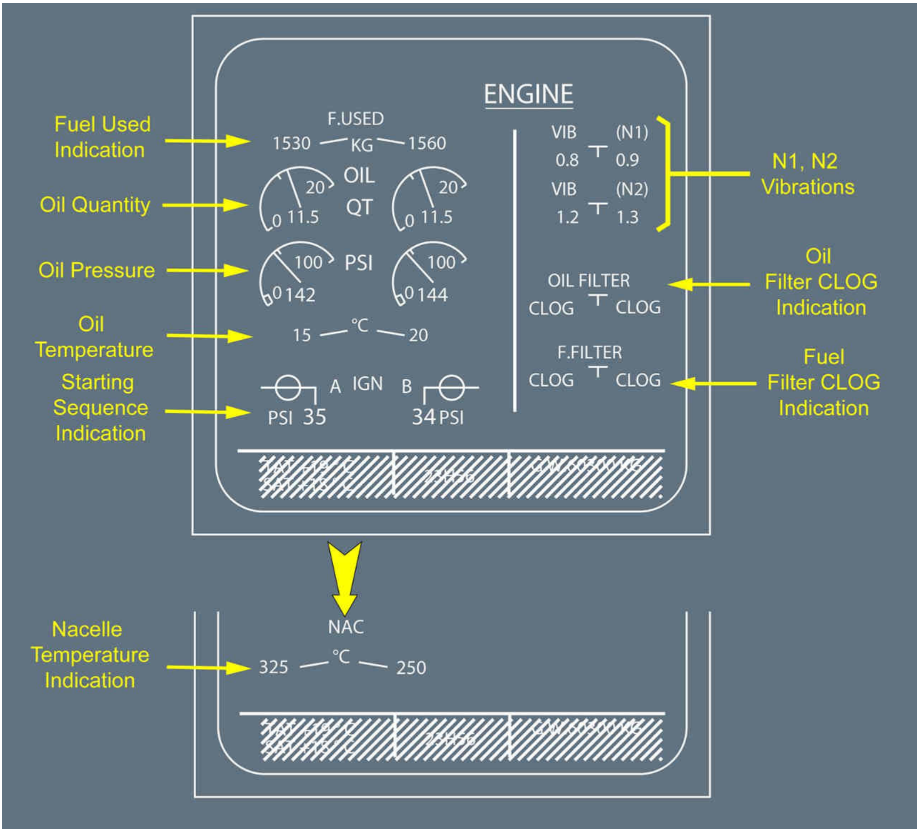
19 **Applicable to: MSN 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**

ENG SD page


Fuel Used Indication
ENGINE
1530
F.USED
KG
1560
CLOG
Fuel Filter CLOG Indication
OIL
QT
15.0
16.0
Oil Quantity
110
PSI
115
Oil Pressure
Oil Filter CLOG Indication
CLOG
95
°C
100
Oil Temperature
N1, N2 Vibrations
0.9
VIB N1
1.0
1.1
N2
1.2
AB
IGN
B
24
PSI
22
Starting Sequence Indicaton
325
NAC
°C
250
Nacelle Temperature Indication

Ident.: DSC-70-90-40-60-00018259.0002001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ENG SD page


ENGINE
F.USED
1530
KG
1560
OIL
QT
20
0 11.5
20
0 11.5
PSI
100
0 142
100
0 144
15
°C
20
A IGN B
PSI 35
34 PSI
VIB (N1)
0.8 0.9
VIB (N2)
1.2 1.3
OIL FILTER
CLOG CLOG
F.FILTER
CLOG CLOG
TAT +19 °C
SAT +18 °C
23 H 56
G.W. 60300 KG
NAC
325
°C
250
Fuel Used Indication
Oil Quantity
Oil Pressure
Oil Temperature
Starting Sequence Indication
Nacelle Temperature Indication
N1, N2 Vibrations
Oil Filter CLOG Indication
Fuel Filter CLOG Indication

Ident.: DSC-70-90-40-60-00018230.0001001 / 21 MAR 16
Applicable to: ALL

FUEL USED INDICATION

L12

Green	:	Indicates the fuel used by each engine. This value automatically resets on ground, at the next engine start. Appears in multiples of 10 kg (20 lb).

L12

Dashed	:	The value accuracy is degraded. Two amber dashes appear over all five digits. This occurs when the Fuel Flow is not valid in flight, for more than 1 min.

Ident.: DSC-70-90-40-60-00018260.0001001 / 21 MAR 16
Applicable to: ALL

FUEL FILTER CLOG INDICATION

Indicates that the pressure loss across the fuel filter is excessive.

Ident.: DSC-70-90-40-60-00018262.0006001 / 22 MAR 16
20 **Applicable to: MSN 08495-09324, 10949-11597**

OIL QUANTITY

L12

Green	:	The oil quantity is in normal range. The scale goes from 0 to 35 QT.
Pulses green	:	The oil quantity goes below the oil advisory limit (1.20 QT), that corresponds to the amber mark. The needle and the oil quantity value pulse green. The indication pulses, when oil quantity goes below 1.45 QT, and remains pulsing as long as oil quantity is below 2.95 QT.

Ident.: DSC-70-90-40-60-00018262.0002001 / 22 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

OIL QUANTITY

L12

Green	:	The oil quantity is in normal range. The scale goes from 0 to 22 QT.
Pulses green	:	The oil quantity goes below the oil advisory limit (3 QT), that corresponds to the amber mark. The needle and the oil quantity value pulse green. The indication pulses, when oil quantity goes below 3.25 QT, and remains pulsing as long as oil quantity is below 4.75 QT.

Ident.: DSC-70-90-40-60-00018262.0001001 / 22 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

OIL QUANTITY

L12

Green	:	The oil quantity is in normal range. The scale goes from 0 to 27.5 QT.
Pulses green	:	The oil quantity goes below the oil advisory limit (5 QT), that corresponds to the amber mark. The needle and the oil quantity value pulse green. The indication pulses, when oil quantity goes below 5.25 QT, and remains pulsing as long as oil quantity is below 6.75 QT.

Ident.: DSC-70-90-40-60-00018261.0006001 / 21 MAR 16
21 **Applicable to: MSN 08495-09324, 10949-11597**

OIL PRESSURE

L12

Green	:	The oil pressure is in normal range. The scale goes from 0 to 450 PSI.

L12

Pulses green	:	The oil pressure is above the advisory limit. The advisory limit is 259 PSI.

L12

Amber	:	The oil pressure is in amber range. The amber range is between the upper red threshold and the upper amber threshold. The upper amber threshold varies with N2, and increases from 75 PSI at idle, to 186 PSI at high thrust.

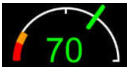
L12

Red	:	The oil pressure is in the red range. The red range is between 0 PSI and the upper red threshold. The upper red threshold varies with N2, and increases from 65 PSI at idle, to 176 PSI at high thrust.

Ident.: DSC-70-90-40-60-00018261.0002001 / 28 MAY 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

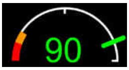
OIL PRESSURE

L12



Green
The oil pressure is in normal range.
The scale goes from 0 to 100 PSI.

L12



Pulses green
The oil pressure is:

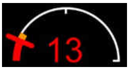
- Above 90 PSI, or

The oil pressure stops pulsing when oil pressure goes below 85 PSI.

- Between 13 PSI and 16 PSI, when N2 is above 75 %.

The oil pressure stops pulsing when oil pressure goes above 20 PSI.

L12



Red
The oil pressure is in the red range.
The red range is between 0 and 13 PSI.

Ident.: DSC-70-90-40-60-00018261.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

OIL PRESSURE

L12

Green : The oil pressure is in normal range.
The scale goes from 0 to 400 PSI.

L12

Pulses green : The oil pressure is above the advisory limit.
The advisory limit is 390 PSI.
The oil pressure stops pulsing, when oil pressure goes below 385 PSI.

L12

Amber : The oil pressure is in amber range.
The amber range is between 60 and 80 PSI.

L12

Red : The oil pressure is in the red range.
The red range is between 0 and 60 PSI.

Ident.: DSC-70-90-40-60-00018263.0007001 / 30 AUG 18

22 **Applicable to: MSN 04827-04860, 06634, 06871, 07081-07098**

OIL TEMPERATURE

Green	:	The oil temperature is in normal range.
Pulses green	:	The oil temperature is between the advisory and caution thresholds for less than 15 min.
Amber	:	The oil temperature is: - Between the advisory and caution thresholds for more than 15 min, or - Above the caution threshold, or - Under the minimum temperature before takeoff threshold.

Ident.: DSC-70-90-40-60-00018263.0006001 / 21 MAR 16

23 **Applicable to: MSN 08495-09324, 10949-11597**

OIL TEMPERATURE

Green	:	The oil temperature is in normal range.
L12 Pulses green	:	The oil temperature is between the advisory and caution thresholds for less than 15 min. The advisory threshold: - Varies with engine power level, - Decreases from 146 °C at idle, to 141 °C at cruise thrust, and to 135 °C at high thrust.
L12 Amber	:	The oil temperature is: - Between the advisory and caution thresholds for more than 15 min, or - Above the caution threshold, or - Below 51.7 °C. The caution threshold: - Varies with engine power level, - Decreases from 152 °C at idle, to 146 °C cruise thrust, and to 141 °C at high thrust.

Ident.: DSC-70-90-40-60-00018263.0002001 / 21 MAR 16

24 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05883, 06139, 06173-06632, 06658-06813, 06876-07005**

OIL TEMPERATURE

Green : The oil temperature is in normal range.
Pulses green : The oil temperature is between 140 °C and 155 °C for less than 15 min.
Amber : The oil temperature is:

- Between 140 °C and 155 °C for more than 15 min, or
- Above 155 °C.

Ident.: DSC-70-90-40-60-00018263.0001001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

OIL TEMPERATURE

Green : The oil temperature is in normal range.
Pulses green : The oil temperature is between 155 °C and 165 °C for less than 15 min.
Amber : The oil temperature is:

- Between 155 °C and 165 °C for more than 15 min, or
- Above 165 °C, or
- Below -10 °C.

Ident.: DSC-70-90-40-60-00018266.0002001 / 21 MAR 16

25 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597**

OIL FILTER CLOG INDICATION

Indicates that the pressure loss across the main scavenge oil filter is excessive.

Ident.: DSC-70-90-40-60-00018266.0001001 / 21 MAR 16

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

OIL FILTER CLOG INDICATION

Indicates that the pressure loss across the oil filter is excessive.

Ident.: DSC-70-90-40-60-00018267.0003001 / 14 MAR 17

26 **Applicable to: MSN 08495-09324, 10949-11597**

N1, N2 VIBRATIONS

Green : The vibration of the LP(HP) rotor is in normal range.

Amber	:	The level of LP(HP) rotor vibration is excessive.

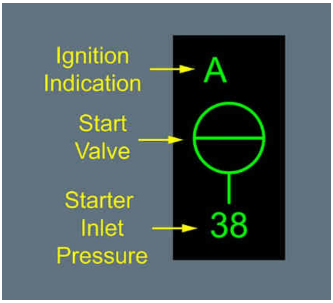
Ident.: DSC-70-90-40-60-00018267.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

N1, N2 VIBRATIONS

Green	:	The vibration of the LP(HP) rotor is in normal range.
Pulses green	:	The level of LP(HP) rotor vibration is excessive.

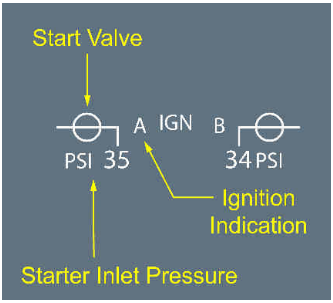
Ident.: DSC-70-90-40-60-00018268.0002001 / 21 MAR 16
27 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

STARTING SEQUENCE INDICATION


Ignition Indication
A
Start Valve
Starter Inlet Pressure
38

Ident.: DSC-70-90-40-60-00018268.0001001 / 21 MAR 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

STARTING SEQUENCE INDICATION


Start Valve
A
IGN
B
PSI 35
34 PSI
Ignition Indication
Starter Inlet Pressure

Ident.: DSC-70-90-40-60-00018269.0001001 / 21 MAR 16
Applicable to: ALL

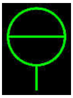
IGNITION INDICATION

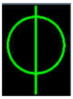
A : The igniter A (B) is used for the engine start sequence.

A B : Both igniters A and B are used for the engine start sequence or continuous ignition.

Ident.: DSC-70-90-40-60-00018270.0001001 / 21 MAR 16
Applicable to: ALL

START VALVE


: The engine start valve is fully closed.


: The engine start valve is fully open.

Ident.: DSC-70-90-40-60-00018271.0001001 / 21 MAR 16
Applicable to: ALL

STARTER INLET PRESSURE

Green : The starter inlet pressure is normal.

Amber : The starter inlet pressure is either:

- Abnormally high, or
- Abnormally low (below 21 PSI, when N2 is above 10 % and the starter valve is not closed).

Ident.: DSC-70-90-40-60-00018272.0006001 / 21 MAR 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

NACELLE TEMPERATURE INDICATION

The nacelle temperature indication appears when the nacelle temperature of at least one engine goes above the advisory limit if not during the start sequence.

Green : The nacelle temperature is normal.

L12

Pulses green :	The nacelle temperature goes above the advisory limit. The advisory limit is 240 °C.

Ident.: DSC-70-90-40-60-00018272.0003001 / 21 MAR 16

28 **Applicable to: MSN 08495-09324, 10949-11597**

NACELLE TEMPERATURE INDICATION

The nacelle temperature indication appears when the nacelle temperature of at least one engine goes above the advisory limit if not during the start sequence.

Green :	The nacelle temperature is normal.

L12

Pulses green :	The nacelle temperature goes above the advisory limit. The advisory limit is 280 °C.

Ident.: DSC-70-90-40-60-00018272.0002001 / 21 MAR 16

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

NACELLE TEMPERATURE INDICATION

The nacelle temperature indication appears when the nacelle temperature of at least one engine goes above the advisory limit if not during the start sequence.

Green :	The nacelle temperature is normal.

L12

Pulses green :	The nacelle temperature goes above the advisory limit. The advisory limit is 320 °C.

MEMO DISPLAY

Ident.: DSC-70-90-50-A-00019566.0001001 / 13 MAY 16
1 **Applicable to: MSN 08495-09324, 10949-11597**

ENG 1(2) COWL	:	This memo appears in amber, when the engine fan cowl is not closed on ground.

Ident.: DSC-70-90-50-A-00018777.0001001 / 13 MAY 16
Applicable to: ALL

IGNITION	:	This memo appears in green when continuous ignition is activated on any engine.

Ident.: DSC-70-90-50-A-00020037.0003001 / 09 APR 18
2 **Applicable to: MSN 08635, 10949-11597**

DUAL COOLING	:	This memo appears in green when the dual cooling function is armed, i.e. when the DUAL COOLING pb-sw is ON. This memo appears in amber when the alert ENG DUAL COOLING - NOT AVAIL is triggered.

Ident.: DSC-70-90-50-A-00020037.0001001 / 21 OCT 16
Applicable to: MSN 08495-08596, 09190-09324

DUAL COOLING	:	This memo appears in green when the dual cooling function is armed, i.e. when the DUAL COOLING pb-sw is ON.

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ERRONEOUS DETECTION OF ENGINE FUEL LEAK

Ident.: DSC-70-95-00024094.0001001 / 28 MAY 20

1 **Applicable to: MSN 08495-09324, 10949-11597**

DESCRIPTION

A spurious display of the ENG 1(2) FUEL LEAK alert may occur on an engine that is not affected by a fuel leak.
One of the triggering conditions of the ENG 1(2) FUEL LEAK alert is a comparison between the fuel flows of both engines. A misbehaviour of an engine may cause the fuel flow of this engine to decrease. In this case, if both thrust levers are in the same position, the FWC may erroneously consider that a fuel leak affects the engine that has the highest fuel flow.
The ENG 1(2) FUEL LEAK alert requires the flight crew to shutdown the affected engine, if they confirm the fuel leak.
For more information about the fuel leak detection, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*.

OPERATIONAL RECOMMENDATION

Before the flight crew considers an engine shutdown, they should check engine and fuel parameters on both engines (e.g. N1, FOB, FU, fuel flow, fuel distribution, fuel imbalance), in order to confirm the leak.
For more information about the fuel leak, *Refer to FCTM/PR-AEP-FUEL Fuel Leak*.

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PROCEDURES

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PRO-ABN Abnormal and Emergency Procedures

1 PRO-NOR Normal Procedures

PRO-SPO Special Operations

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Localization Title	Toc Index	ID	Reason
PRO-PLP-TOC Normal Procedures		1	Documentation update: The "GPS PRIMARY Availability (If Installed)" table of content entry moved from "NP02584" to "AIL-00001802"
			Documentation update: The "Exterior Walkaround - ENG 1 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Preliminary Cockpit Preparation - EFB/ACARS Initialization" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Preliminary Cockpit Preparation - Before Walkaround" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Cockpit Preparation - Pedestal" table of content entry moved from "NG01999" to "AIL-00001872"
			Documentation update: The "Aircraft Configuration for Approach" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP)" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Engine Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Engine Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Exterior Walkaround - ENG 1 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "After Start For One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Taxi" table of content entry moved from "NP05794" to "AIL-00001870"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Before Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Climb" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Cruise" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Descent Preparation" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Overhead Panel - RCDR" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "Manual Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Automatic Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Go Around (With FD On)" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Parking" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Overhead Panel - Air Cond" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: Deletion of the "NP02582 Standard Operating Procedures" table of content entry.
			Documentation update: The "Overhead Panel - Fuel" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "CTR Instrument Panel - STBY Instrument " table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - ISIS" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - Clock" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "Pedestal - Cockpit Door " table of content entry moved from "NG00854" to "AIL-00001815"
			Documentation update: The "EFB/ACARS Init - FMGS Pre-Initialization - FM Database Validity" table of content entry moved from "NG01252" to "AIL-00001808"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "FMGS Preparation - FM Database Validity" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - NAVAID Deselection" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - ADIRS Position Initialization" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - RNP Insertion (PROG page)" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "ATC Datalink Communication" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "Instrument Panels" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "At Pushback/Start Clearance - Windows and Doors" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "At Pushback/Start Clearance - NW STRG DISC" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "One Engine Taxi Procedure" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Automatic Engine Start" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Before Walkaround - ECAM Pages" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Ground Run Up - Danger Areas" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "After Start - Flow Pattern" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Mode Selector" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - Dual Cooling" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - APU Bleed" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Anti-Ice" table of content entry moved from "NG00714" to "AIL-00001823"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Taxi - Brakes" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - Engine 2 Start" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - ENG Mode Selector" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Before Walkaround - Alternate Braking System" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Taxi - Radar" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Departure Change" table of content entry moved from "NP05905" to "AIL-00001826"
			Documentation update: The "Before Takeoff - Exterior Lights" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Before Takeoff - RNP AR Departure Check" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Takeoff - Thrust Setting" table of content entry moved from "NG00917" to "AIL-00001830"
			Documentation update: The "Takeoff - Above Acceleration Altitude (or Once in Climb Phase)" table of content entry moved from "NG00917" to "AIL-00001830"
			Documentation update: The "After Takeoff - ENG MODE Selector" table of content entry moved from "NG00706" to "AIL-00001832"
			Documentation update: The "After Takeoff - Anti-Ice Protection" table of content entry moved from "NG00706" to "AIL-00001832"
			Documentation update: Deletion of the "NP02609 Standard Callouts" table of content entry.
			Documentation update: The "Climb - At the Transition Altitude" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: The "ADIRS" table of content entry moved from "NP02586" to "AIL-00001805"
			Documentation update: The "Climb - Radar" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: Deletion of the "NP05794 Tasksharing" table of content entry.
			Documentation update: The "Cruise - Radar Tilt" table of content entry moved from "NG00734" to "AIL-00001836"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Descent Preparation - FMGS - PERF APPR - PERF GO AROUND" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - FMGS - RADIO NAV" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - RUNWAY CONDITION" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Radar" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Anti-Ice Protection" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Cross-Reference Table" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Stabilization Criteria" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Initial Approach - Radar" table of content entry moved from "NG01260" to "AIL-00001844"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At Green Dot Speed" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Approach using LOC G/S Guidance - Final Approach" table of content entry moved from "NG01262" to "AIL-00001847"
			Documentation update: The "Approach using FINAL APP Guidance - General" table of content entry moved from "NG01263" to "AIL-00001848"
			Documentation update: The "Approach using FINAL APP Guidance - At Entered Minimum" table of content entry moved from "NG01263" to "AIL-00001848"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - General" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Aircraft Equipment" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Exterior Walkaround - Lower Center Fuselage" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Flight Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Engine Failure" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Management of Degraded Navigation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FPA Guidance - At Entered Minimum" table of content entry moved from "NG01265" to "AIL-00001850"
			Documentation update: The "Visual Approach - General" table of content entry moved from "NG01267" to "AIL-00001853"
			Documentation update: The "Exterior Walkaround - ENG 2 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Landing - At Touchdown" table of content entry moved from "NG00743" to "AIL-00001855"
			Documentation update: The "Autoland - At Touch Down" table of content entry moved from "NG01757" to "AIL-00001856"
			Documentation update: The "Go Around with FD - Go Around Initiation" table of content entry moved from "NG00919" to "AIL-00001858"
			Documentation update: The "After Landing - Predictive Windshear" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Flaps" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - TCAS" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - ATC" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Anti-Ice Protection" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Brake Temperature" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Exterior Walkaround - ENG 2 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "After Landing - Single Engine Taxi" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Parking - General" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - ENG MASTER Levers" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Fuel Pumps" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Severe Icing Conditions" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Securing the Aircraft - ADIRS" table of content entry moved from "NG00742" to "AIL-00001864"
			Documentation update: The "Securing the Aircraft - EMER Lights and Signs" table of content entry moved from "NG00742" to "AIL-00001864"
			Documentation update: The "Approach" table of content entry moved from "NG01819" to "AIL-00001868"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Landing" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Summary for Each Phase - Taxi" table of content entry moved from "NG00990" to "AIL-00001869"

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-00		**Content**	00020862.0001001	09 NOV 20
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-00		**Procedure Layout**	NG01756	
	PRO-ABN-ABN-00			00020863.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-00			00020864.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-00			00020865.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-00			00020866.0001001	26 OCT 22
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-00		**Abnormal and Emergency Callouts**	NG00989	
	PRO-ABN-ABN-00		**Abnormal and Emergency Callouts - ECAM Procedures**	00011915.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-00		**Abnormal and Emergency Callouts - Emergency Call**	00020059.0001001	16 JAN 18
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-00		**Abnormal and Emergency Callouts - Memory Items**	00011916.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0001001	05 MAR 19
	Criteria: K17996, SA, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0003001	04 NOV 20
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0001001	21 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0001001	17 MAR 17
	Criteria: P0160, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0001001	17 MAR 17
	Criteria: 49-1067, 49-1075, 49-1082, K2450, SA				
	Applicable to: MSN 01459				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0001001	05 MAR 19
	Criteria: K17996, SA, A321				
E	**Applicable to: MSN 01459**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01459				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0003001	04 NOV 20
	Criteria: IAE				
	Applicable to: MSN 01459				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0001001	21 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01459**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0001001	17 MAR 17
	Criteria: P0160, SA				
	Applicable to: MSN 01459				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
E	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0001001	05 MAR 19
E	Criteria: K17996, SA, A321 **Applicable to: MSN 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0003001	04 NOV 20
	Criteria: IAE **Applicable to: MSN 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0001001	21 MAR 17
E	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0029001	17 MAR 17
	Criteria: 31-1276, P0160, P7062, P7278, P9824, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				

E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
E	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0001001	05 MAR 19
E	Criteria: K17996, SA, A321 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0002001	04 NOV 20
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0001001	21 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0029001	17 MAR 17
	Criteria: 31-1276, P0160, P7062, P7278, P9824, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				

E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0003001	05 MAR 19
	Criteria: SA, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0003001	04 NOV 20
	Criteria: IAE				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0002001	21 MAR 17
	Criteria: SA, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0029001	17 MAR 17
	Criteria: 31-1276, P0160, P7062, P7278, P9824, SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
E	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0004001	05 MAR 19
	Criteria: K0066, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0002001	04 NOV 20
	Criteria: CFMI **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0001001	21 MAR 17
E	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0028001	17 MAR 17
	Criteria: P7278, P9824, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
E	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0003001	05 MAR 19
	Criteria: SA, A321 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0002001	04 NOV 20
	Criteria: CFMI **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0002001	21 MAR 17
	Criteria: SA, A321 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0029001	17 MAR 17
	Criteria: 31-1276, P0160, P7062, P7278, P9824, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
E	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0001001	05 MAR 19
E	Criteria: K17996, SA, A321 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0004001	04 NOV 20
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0001001	21 MAR 17
E	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0030001	17 MAR 17
E	Criteria: K17059, P7278, P9824, SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions**	NG01016	
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - APU**	00012117.0003001	17 MAR 17
E	Criteria: 49-1067, 49-1075, 49-1082, G0553, K10494, K10516, K2450, K4457, SA **Applicable to: MSN 11531**				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - CAB PR**	00012107.0001001	05 MAR 19
E	Criteria: K17996, SA, A321 **Applicable to: MSN 11531**				

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M$^{(1)}$	Localization	T$^{(2)}$	DU Title	DU identification	DU date
	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ELEC**	00012112.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - ENG**	00012122.0004001	04 NOV 20
	Criteria: IAL				
E	**Applicable to: MSN 11531**				
N	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - FUEL**	00012114.0003001	12 JUL 18
	Criteria: J4530, SA, A321				
	Applicable to: MSN 11531				
E	PRO-ABN-ABN-ADV		**ECAM Advisory Conditions - OXY**	00012119.0030001	17 MAR 17
	Criteria: K17059, P7278, P9824, SA				
E	**Applicable to: MSN 11531**				

	PRO-ABN-ABN-MEM		**[MEM] Memory Items**	NG01761	
	PRO-ABN-ABN-MEM		**[MEM] BRAKES**	00020871.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-MEM		**[MEM] MISC**	00020948.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-MEM		**[MEM] NAV**	00020949.0001001	01 JUN 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-MEM		**[MEM] SURV**	00020950.0001001	16 MAY 22
	Criteria: SA				
	Applicable to: ALL				

E	PRO-ABN-ABN-QRH		**[QRH] Procedures**	NG01790	
	PRO-ABN-ABN-QRH		**[QRH] A-ICE**	00021342.0002001	17 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324				
	PRO-ABN-ABN-QRH		**[QRH] AIR**	00021355.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251, 02014, 06561				
E	PRO-ABN-ABN-QRH		**[QRH] AIR**	00021355.0002001	17 MAR 17
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**				
	PRO-ABN-ABN-QRH		**[QRH] BRAKES**	00021352.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ABN-QRH		**[QRH] BRAKES**	00021352.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-ABN-QRH		**[QRH] CAB PR**	00021343.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-QRH		**[QRH] COND**	00021344.0002001	04 NOV 20
	Criteria: K3984, SA				
	Applicable to: ALL				
E	PRO-ABN-ABN-QRH		**[QRH] DOOR**	00021346.0001001	17 MAR 17
	Criteria: 25-1305, K7790				
E	**Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-ABN-QRH		**[QRH] EIS**	00021511.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-QRH		**[QRH] ELEC**	00021345.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321				
	Applicable to: ALL				
	PRO-ABN-ABN-QRH		**[QRH] ENG**	00021356.0001001	05 MAR 19
	Criteria: SA				
	Applicable to: MSN 01251, 02014, 06561				
E	PRO-ABN-ABN-QRH		**[QRH] ENG**	00021356.0003001	05 MAR 19
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**				
	PRO-ABN-ABN-QRH		**[QRH] F/CTL**	00021347.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: ALL				
N	PRO-ABN-ABN-QRH		**[QRH] FUEL**	00021348.0007001	24 MAR 20
	Criteria: J4530, SA				
	Applicable to: MSN 11531				
E	PRO-ABN-ABN-QRH		**[QRH] FUEL**	00021348.0001001	16 NOV 20
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	PRO-ABN-ABN-QRH		**[QRH] L/G**	00021353.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-QRH		**[QRH] MISC**	00022319.0001001	17 NOV 20
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-ABN-ABN-QRH		**[QRH] NAV**	00021354.0005001	03 NOV 22
	Criteria: 31-1575, P20610, P9171, SA				
	Applicable to: MSN 08635, 10949-11597				
	PRO-ABN-ABN-QRH		**[QRH] NAV**	00021354.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-04192				
E	PRO-ABN-ABN-QRH		**[QRH] NAV**	00021354.0002001	17 MAR 17
	Criteria: 34-1397, P9171, SA				
E	**Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-08596, 09190-09324**				
E	PRO-ABN-ABN-QRH		**[QRH] SMOKE**	00020870.0001001	17 MAR 17
	Criteria: 25-1305, K7755, K7778, K7790, K9235, SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03710, 03733-04974, 05066, 05101-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-ABN-QRH		**[QRH] SMOKE**	00020870.0003001	19 MAY 21
	Criteria: 23-1208, 23-1695, 25-1305, K7755, K7790, SA				
	Applicable to: MSN 01459, 02321, 05005, 05097				
	PRO-ABN-ABN-QRH		**[QRH] WHEEL**	00021512.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

	PRO-ABN-ABN-RESET		**System Reset - General**	NG01117	
	PRO-ABN-ABN-RESET		**System Reset - General**	00012644.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-RESET		**System Reset - Procedure**	00012645.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ABN-RESET		**System Reset - System Reset Table**	00014340.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: ALL				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0003001	04 NOV 20
	Criteria: 31-1492, K5213, K6156, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0001001	10 MAY 21
	Criteria: K3901, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS FAP Failure Messages**	00024310.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0018001	20 MAR 17
	Criteria: 31-1414, J2360, J2361, J2527, J2662, J3240, J3241, P13023, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0001001	20 MAR 17
	Criteria: P2590, P2859				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0011001	20 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, K1806, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0001001	05 JUN 18
	Criteria: K5213, K6156, SA				
	Applicable to: MSN 01251				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01251**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 01251				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0001001	10 MAY 21
	Criteria: K3901, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS FAP Failure Messages**	00024310.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 01251**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0001001	20 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01251**				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA **Applicable to: MSN 01251**				
	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0001001	20 MAR 17
	Criteria: P2590, P2859 **Applicable to: MSN 01251**				
	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0002001	20 MAR 17
	Criteria: 31-1257, K1806, SA **Applicable to: MSN 01251**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 01251**				
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA **Applicable to: MSN 01801, 01826, 01837, 01855**				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0003001	04 NOV 20
	Criteria: 31-1492, K5213, K6156, SA **Applicable to: MSN 01801, 01826, 01837, 01855**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
E	Criteria: 22-1102, 22-1226, P6954, SA **Applicable to: MSN 01801, 01826, 01837, 01855**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200 **Applicable to: MSN 01801, 01826, 01837, 01855**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0002001	10 MAY 21
	Criteria: K3901, SA **Applicable to: MSN 01801, 01826, 01837, 01855**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0002001	10 MAY 21
	Criteria: K3901, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0001001	10 MAY 21
	Criteria: K3901, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS FAP Failure Messages**	00024310.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 01801, 01826, 01837, 01855**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0018001	20 MAR 17
	Criteria: 31-1414, J2360, J2361, J2527, J2662, J3240, J3241, P13023, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0001001	20 MAR 17
	Criteria: P2590, P2859				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0011001	20 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, K1806, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855				
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0001001	05 JUN 18
	Criteria: K5213, K6156, SA				
	Applicable to: MSN 02014				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 02014**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0002001	10 MAY 21
	Criteria: K3901, SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0002001	10 MAY 21
	Criteria: K3901, SA				
	Applicable to: MSN 02014				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0001001	10 MAY 21
	Criteria: K3901, SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS FAP Failure Messages**	00024310.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 02014				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 02014**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0018001	20 MAR 17
	Criteria: 31-1414, J2360, J2361, J2527, J2662, J3240, J3241, P13023, SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0008001	20 MAR 17
	Criteria: P2590, P2859, P5638				
	Applicable to: MSN 02014				
	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0011001	20 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, K1806, SA				
	Applicable to: MSN 02014				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 02014**				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 02014**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0003001	04 NOV 20
	Criteria: 31-1492, K5213, K6156, SA **Applicable to: MSN 02321**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
E	Criteria: 22-1102, 22-1226, P6954, SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200 **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0002001	10 MAY 21
	Criteria: K3901, SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0002001	10 MAY 21
	Criteria: K3901, SA **Applicable to: MSN 02321**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0001001	10 MAY 21
	Criteria: K3901, SA **Applicable to: MSN 02321**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS FAP Failure Messages**	00024310.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 02321**				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
E	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0023001	20 MAR 17
	Criteria: 28-1150, 31-1414, J2360, J2361, J2527, SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0041001	03 NOV 22
	Criteria: 34-1345, P2859 **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0011001	20 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, K1806, SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02321				
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 02734				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 02734**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0005001	10 MAY 21
	Criteria: K3901, K8400, SA				
	Applicable to: MSN 02734				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 02734**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 02734				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 02734**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - COND**	00024336.0001001	10 MAY 21
	Criteria: K6443, K9458				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 02734**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 02734**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0023001	20 MAR 17
	Criteria: 28-1150, 31-1414, J2360, J2361, J2527, SA				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0008001	20 MAR 17
	Criteria: P2590, P2859, P5638				
	Applicable to: MSN 02734				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 02734**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 02734				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 02734				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 02887, 02896, 02904, 03032**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 02887, 02896, 02904, 03032				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0005001	10 MAY 21
	Criteria: K3901, K8400, SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 02887, 02896, 02904, 03032**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 02887, 02896, 02904, 03032**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 02887, 02896, 02904, 03032**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 02887, 02896, 02904, 03032**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0023001	20 MAR 17
	Criteria: 28-1150, 31-1414, J2360, J2361, J2527, SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 02887, 02896, 02904, 03032**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 02887, 02896, 02904, 03032**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 02887, 02896, 02904, 03032				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0005001	10 MAY 21
	Criteria: K3901, K8400, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313**				
N	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0011001	07 NOV 22
	Criteria: CFMI				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0023001	20 MAR 17
	Criteria: 28-1150, 31-1414, J2360, J2361, J2527, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0009001	10 MAY 21
	Criteria: K8400, SA, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0009001	10 MAY 21
	Criteria: K8400, SA, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0006001	20 MAR 17
	Criteria: 31-1414, J2567, K2113, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
E	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
E	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358**				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA **Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA **Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
E	Criteria: 22-1102, 22-1226, P6954, SA **Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0005001	10 MAY 21
	Criteria: K3901, K8400, SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
N	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0011001	07 NOV 22
	Criteria: CFMI				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0018001	20 MAR 17
	Criteria: 31-1414, J2360, J2361, J2527, J2662, J3240, J3241, P13023, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0005001	10 MAY 21
	Criteria: K3901, K8400, SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0018001	20 MAR 17
	Criteria: 31-1414, J2360, J2361, J2527, J2662, J3240, J3241, P13023, SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
E	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321 **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
E	Criteria: K3901, K8400, P20374, SA, A321 **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
E	Criteria: K3901, K8400, SA, A321 **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
E	Criteria: SA **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
E	Criteria: P4801 **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
N	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0011001	07 NOV 22
	Criteria: CFMI **Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0018001	20 MAR 17
	Criteria: 31-1414, J2360, J2361, J2527, J2662, J3240, J3241, P13023, SA				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 04465, 04544, 04734, 04756, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04563, 04773, 05345				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 04563, 04773, 05345				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 04563, 04773, 05345**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 04563, 04773, 05345				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 04563, 04773, 05345**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 04563, 04773, 05345**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 04563, 04773, 05345				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 04563, 04773, 05345**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 04563, 04773, 05345				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 04563, 04773, 05345**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 04563, 04773, 05345**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 04563, 04773, 05345				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0018001	20 MAR 17
	Criteria: 31-1414, J2360, J2361, J2527, J2662, J3240, J3241, P13023, SA				
	Applicable to: MSN 04563, 04773, 05345				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 04563, 04773, 05345				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 04563, 04773, 05345				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 04563, 04773, 05345**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 04563, 04773, 05345**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 04563, 04773, 05345				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 04563, 04773, 05345				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0017001	10 MAY 21
	Criteria: K12824, K12825, K8400, SA, A321				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0009001	10 MAY 21
	Criteria: K8400, SA, A321				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0009001	20 MAR 17
	Criteria: 31-1414, J2567, J2937, J2938, K2113, P13023, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0009001	08 NOV 22
	Criteria: P6954, P7666, SA				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04827, 04860				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 04827, 04860**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 04827, 04860**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 04827, 04860**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 04827, 04860**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 04827, 04860**				
N	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0011001	07 NOV 22
	Criteria: CFMI				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0019001	20 MAR 17
	Criteria: 28-1214, 31-1414, J2360, J2361, J2527, J2662, J3240, P13023, SA				
	Applicable to: MSN 04827, 04860				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0037001	20 MAR 17
	Criteria: P10960, P11490, P2590, P2859, P5638, P8751, P9654 **Applicable to: MSN 04827, 04860**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
E	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 04827, 04860**				
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
E	Criteria: 22-1102, 22-1226, P6954, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200 **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
E	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321 **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
E	Criteria: K3901, K8400, P20374, SA, A321 **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
E	Criteria: K3901, K8400, SA, A321 **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
E	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ABN-RESET		**System Reset Table - DOOR**	00014274.0001001	20 MAR 17
E	Criteria: K11047 **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
N	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0011001	07 NOV 22
	Criteria: CFMI				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0019001	20 MAR 17
	Criteria: 28-1214, 31-1414, J2360, J2361, J2527, J2662, J3240, P13023, SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0010001	06 MAY 22
	Criteria: 31-1492, K10463, K5213, K6156, K6443, K9458, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
E	Criteria: 22-1102, 22-1226, P6954, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0017001	10 MAY 21
	Criteria: K12824, K12825, K8400, SA, A321 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0009001	10 MAY 21
	Criteria: K8400, SA, A321 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
E	Criteria: K3901, K8400, SA, A321 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
E	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
E	Criteria: P4801 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
N	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0011001	07 NOV 22
	Criteria: CFMI **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0009001	20 MAR 17
	Criteria: 31-1414, J2567, J2937, J2938, K2113, P13023, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
E	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
E	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0001001	06 MAY 22
	Criteria: SA **Applicable to: MSN 06561**				
	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0006001	10 MAY 21
	Criteria: K10463, K5213, K6156, K6443, K9458, SA **Applicable to: MSN 06561**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
E	Criteria: 22-1102, 22-1226, P6954, SA **Applicable to: MSN 06561**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200 **Applicable to: MSN 06561**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 06561**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 06561**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 06561				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 06561**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 06561				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 06561**				
E	PRO-ABN-ABN-RESET		**System Reset Table - DOOR**	00014274.0001001	20 MAR 17
	Criteria: K11047				
E	**Applicable to: MSN 06561**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 06561**				
N	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0011001	07 NOV 22
	Criteria: CFMI				
	Applicable to: MSN 06561				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 06561				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0019001	20 MAR 17
	Criteria: 28-1214, 31-1414, J2360, J2361, J2527, J2662, J3240, P13023, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 06561				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 06561				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 06561				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 06561**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 06561**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 06561				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 06561				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
E	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0002001	20 MAR 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0011001	03 NOV 22
	Criteria: PW1100G-JM, G1174, K10463, K5213, K6156, K6443, K9458, P14826, SA, 320-200N				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 09190				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0004001	07 MAR 22
	Criteria: PW1100G-JM, P15967, P20374, P21270, P21984, P22033, P22550				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0019001	20 MAR 17
	Criteria: 28-1214, 31-1414, J2360, J2361, J2527, J2662, J3240, P13023, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190				
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
E	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0002001	20 MAR 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08635**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0011001	03 NOV 22
	Criteria: PW1100G-JM, G1174, K10463, K5213, K6156, K6443, K9458, P14826, SA, 320-200N				
E	**Applicable to: MSN 08635**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 08635				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 08635**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 08635				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 08635**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 08635				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0004001	07 MAR 22
	Criteria: PW1100G-JM, P15967, P20374, P21270, P21984, P22033, P22550				
E	**Applicable to: MSN 08635**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 08635				
E	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0028001	09 APR 20
	Criteria: 31-1575, J2360, J2361, J2527, J2662, J3240, P13023, P20610, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 08635				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 08635				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 08635				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 08635				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
E	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0002001	20 MAR 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 09324**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0011001	03 NOV 22
	Criteria: PW1100G-JM, G1174, K10463, K5213, K6156, K6443, K9458, P14826, SA, 320-200N				
E	**Applicable to: MSN 09324**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 09324**				
	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0001001	20 MAR 17
	Criteria: SA, 319-100, 320-200, 321-200				
	Applicable to: MSN 09324				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 09324**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 09324**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP Emergency Exits**	00024307.0002001	10 MAY 21
	Criteria: K32081, P20374, A321				
E	**Applicable to: MSN 09324**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 09324				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 09324**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 09324				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 09324**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 09324**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0004001	07 MAR 22
	Criteria: PW1100G-JM, P15967, P20374, P21270, P21984, P22033, P22550				
E	**Applicable to: MSN 09324**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 09324				
	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0019001	20 MAR 17
	Criteria: 28-1214, 31-1414, J2360, J2361, J2527, J2662, J3240, P13023, SA				
	Applicable to: MSN 09324				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 09324				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 09324				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 09324**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 09324**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 09324				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 09324				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
E	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0002001	20 MAR 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0011001	03 NOV 22
	Criteria: PW1100G-JM, G1174, K10463, K5213, K6156, K6443, K9458, P14826, SA, 320-200N				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
E	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0003001	22 FEB 22
	Criteria: J4604, P22484, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP Emergency Exits**	00024307.0002001	10 MAY 21
	Criteria: K32081, P20374, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0003001	07 NOV 22
	Criteria: PW1100G-JM, P15967, P21270, P21984				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
E	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0028001	09 APR 20
	Criteria: 31-1575, J2360, J2361, J2527, J2662, J3240, P13023, P20610, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
E	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0002001	20 MAR 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0011001	03 NOV 22
	Criteria: PW1100G-JM, G1174, K10463, K5213, K6156, K6443, K9458, P14826, SA, 320-200N				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0007001	08 NOV 22
	Criteria: 22-1102, 22-1226, P6954, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0003001	22 FEB 22
	Criteria: J4604, P22484, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP Emergency Exits**	00024307.0002001	10 MAY 21
	Criteria: K32081, P20374, A321				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
N	PRO-ABN-ABN-RESET		**System Reset Table - COM - RMP Malfunction**	00024736.0002001	10 MAY 21
	Criteria: P20240				
	Applicable to: MSN 11482, 11522, 11572, 11597				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0002001	10 MAY 21
	Criteria: K3901, K8400, SA, A321				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
R	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0004001	07 MAR 22
	Criteria: PW1100G-JM, P15967, P20374, P21270, P21984, P22033, P22550				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
E	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0028001	09 APR 20
	Criteria: 31-1575, J2360, J2361, J2527, J2662, J3240, P13023, P20610, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
E	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0016001	05 MAY 22
	Criteria: 31-1334, 31-1414, K1806, K8400, P10383, P7125, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				

N	PRO-ABN-ABN-RESET		**System Reset Table**	NG01118	
E	PRO-ABN-ABN-RESET		**System Reset Table - A-ICE**	00012654.0002001	20 MAR 17
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 11531**				
R	PRO-ABN-ABN-RESET		**System Reset Table - AIR**	00021069.0011001	03 NOV 22
	Criteria: PW1100G-JM, G1174, K10463, K5213, K6156, K6443, K9458, P14826, SA, 320-200N				
E	**Applicable to: MSN 11531**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ABN-RESET		**System Reset Table - AUTO FLT**	00021067.0008001	08 NOV 22
	Criteria: P20374, P6954, SA				
	Applicable to: MSN 11531				
E	PRO-ABN-ABN-RESET		**System Reset Table - BRAKES**	00021056.0003001	22 FEB 22
	Criteria: J4604, P22484, SA				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - CIDS Fault**	00024305.0015001	10 MAY 21
	Criteria: K12824, K12825, K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - EVAC Horn**	00024306.0005001	10 MAY 21
	Criteria: K3901, K8400, P20374, SA, A321				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP Emergency Exits**	00024307.0002001	10 MAY 21
	Criteria: K32081, P20374, A321				
E	**Applicable to: MSN 11531**				
R	PRO-ABN-ABN-RESET		**System Reset Table - COM - Frozen RMP**	00024308.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 11531				
N	PRO-ABN-ABN-RESET		**System Reset Table - COM - RMP Malfunction**	00024736.0002001	10 MAY 21
	Criteria: P20240				
	Applicable to: MSN 11531				
N	PRO-ABN-ABN-RESET		**System Reset Table - COM - FAP freezing**	00024309.0004001	10 MAY 21
	Criteria: K8400, P20374, SA, A321				
	Applicable to: MSN 11531				
	PRO-ABN-ABN-RESET		**System Reset Table - COM - SATCOM**	00024311.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 11531				
N	PRO-ABN-ABN-RESET		**System Reset Table - DATALINK**	00022080.0002001	03 NOV 22
	Criteria: P20374, SA				
	Applicable to: MSN 11531				
E	PRO-ABN-ABN-RESET		**System Reset Table - DOOR**	00014274.0001001	20 MAR 17
	Criteria: K11047				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ELEC**	00012650.0001001	20 MAR 17
	Criteria: P4801				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ABN-RESET		**System Reset Table - ENG**	00012660.0004001	07 MAR 22
	Criteria: PW1100G-JM, P15967, P20374, P21270, P21984, P22033, P22550				
E	**Applicable to: MSN 11531**				
	PRO-ABN-ABN-RESET		**System Reset Table - F/CTL**	00012652.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 11531				
N	PRO-ABN-ABN-RESET		**System Reset Table - FUEL**	00012653.0027001	09 APR 20
	Criteria: J2567, J2937, K2113, P13023, P20374, P20610, SA				
	Applicable to: MSN 11531				
	PRO-ABN-ABN-RESET		**System Reset Table - FWC**	00012655.0002001	20 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 11531				
	PRO-ABN-ABN-RESET		**System Reset Table - L/G**	00021057.0003001	05 MAR 19
	Criteria: 32-1346, J2818, SA				
	Applicable to: MSN 11531				
R	PRO-ABN-ABN-RESET		**System Reset Table - NAV**	00012657.0048001	03 NOV 22
	Criteria: P10960, P11490, P13061, P14306, P14313, P2590, P2859, P3112, P5638, P8751, P9654, P9964				
E	**Applicable to: MSN 11531**				
N	PRO-ABN-ABN-RESET		**System Reset Table - SMOKE**	00012651.0018001	05 MAY 22
	Criteria: K1806, K8400, P10383, P20374, P7125, SA				
	Applicable to: MSN 11531				
	PRO-ABN-ABN-RESET		**System Reset Table - VENT**	00021071.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 11531				
	PRO-ABN-ABN-RESET		**System Reset Table - WHEEL**	00021058.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 11531				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**[QRH] DOUBLE AOA HEAT FAILURE**	00010253.0002001	17 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324				

E	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	NG00741	
	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	00017184.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	00018180.0004001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT - FWSPAGE**	00018298.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	NG00741	
	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	00017184.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107 **Applicable to: MSN 01251**				
	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	00018180.0003001	21 MAR 17
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300 **Applicable to: MSN 01251**				
	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT - FWSPAGE**	00018298.0003001	21 MAR 16
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300 **Applicable to: MSN 01251**				
	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	NG00741	
	PRO-ABN-A-ICE		**ANTI ICE ALL PITOT**	00017184.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107 **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT(F/O) TAT**	NG00721	
	PRO-ABN-A-ICE		**ANTI ICE CAPT(F/O) TAT**	00017171.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT (F/O) TAT**	00018299.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT(F/O) TAT - FWSPAGE**	00018889.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O AOA**	NG01850	
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O AOA**	00022251.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O AOA**	00022252.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O AOA - FWSPAGE**	00022253.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	NG00738	
	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	00017177.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	00018300.0002001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT - FWSPAGE**	00018301.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	NG00738	
	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	00017177.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107				
	Applicable to: MSN 01251				
	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	00018300.0003001	21 MAR 17
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300				
	Applicable to: MSN 01251				
	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT - FWSPAGE**	00018301.0003001	21 MAR 16
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300				
	Applicable to: MSN 01251				
	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	NG00738	
	PRO-ABN-A-ICE		**ANTI ICE CAPT + F/O PITOT**	00017177.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY AOA**	NG01851	
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY AOA**	00022254.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY AOA**	00022256.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY AOA - FWSPAGE**	00022257.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	NG00739	
	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	00017178.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	00018302.0002001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT - FWSPAGE**	00018303.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	NG00739	
	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	00017178.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107 **Applicable to: MSN 01251**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	00018302.0003001	21 MAR 17
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300 **Applicable to: MSN 01251**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT - FWSPAGE**	00018303.0003001	21 MAR 16
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300 **Applicable to: MSN 01251**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	NG00739	
	PRO-ABN-A-ICE		**ANTI ICE CAPT + STBY PITOT**	00017178.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107 **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	NG01957	
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	00024161.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	00024162.0002001	10 MAY 21
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT - FWSPAGE**	00024163.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	NG01957	
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	00024161.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT - FWSPAGE**	00024163.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	NG01957	
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	00024161.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT**	00024162.0003001	21 JAN 21
	Criteria: P20614, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PITOT - FWSPAGE**	00024163.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	NG01964	
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	00024219.0001001	10 MAY 21
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	00024220.0002001	10 MAY 21
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT - FWSPAGE**	00024221.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				

	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	NG01964	
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	00024219.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT - FWSPAGE**	00024221.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	NG01964	
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	00024219.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT**	00024220.0003001	21 JAN 21
	Criteria: P20614, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT L(R) STAT - FWSPAGE**	00024221.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	NG01965	
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	00024222.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	00024223.0002001	10 MAY 21
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA - FWSPAGE**	00024224.0001001	10 MAY 21
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	NG01965	
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	00024222.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	NG01965	
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	00024222.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 08635				
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	00024223.0004001	10 MAY 21
	Criteria: 31-1575, P9107, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA - FWSPAGE**	00024224.0002001	10 MAY 21
	Criteria: 31-1575, P20610, SA				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	NG01965	
	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	00024222.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA**	00024223.0003001	21 JAN 21
	Criteria: P20610, P20614, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT AOA - FWSPAGE**	00024224.0002001	10 MAY 21
	Criteria: 31-1575, P20610, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	NG00724	
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	00017173.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	00010255.0002001	05 AUG 10
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES - FWSPAGE**	00010256.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				

	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	NG00724	
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	00017173.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES - FWSPAGE**	00010256.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	NG00724	
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	00017173.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES**	00010255.0003001	21 JAN 21
E	Criteria: P20614, P9107, SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE CAPT PROBES - FWSPAGE**	00010256.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-A-ICE		**ANTI ICE DETECT FAULT**	NG00729	
E	PRO-ABN-A-ICE		**ANTI ICE DETECT FAULT**	00017189.0001001	21 MAR 16
E	Criteria: P2650 **Applicable to: MSN 04563, 04827, 04860, 05005, 05097, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE DETECT FAULT**	00018890.0001001	21 MAR 16
E	Criteria: P2650 **Applicable to: MSN 04563, 04827, 04860, 05005, 05097, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE DETECT FAULT - FWSPAGE**	00010276.0001001	05 AUG 10
E	Criteria: P2650 **Applicable to: MSN 04563, 04827, 04860, 05005, 05097, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)**	NG01584	
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)**	00017164.0001001	21 MAR 16
E	Criteria: P13491 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)**	00015626.0001001	09 FEB 15
E	Criteria: P13491 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)**	NG01371	
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)**	00017494.0001001	21 MAR 16
E	Criteria: P13491 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)**	00016138.0001001	09 FEB 15
E	Criteria: P13491 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) CTL FAULT - FWSPAGE (ENG 1(2) A.ICE MON FAULT)**	00016134.0001001	09 FEB 15
E	Criteria: P13491 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) OVER PRESS**	NG01585	
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) OVER PRESS**	00017165.0001001	21 MAR 16
E	Criteria: P13491 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) OVER PRESS**	00018306.0001001	21 MAR 16
E	Criteria: P13491 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	NG00727	
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	00017163.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	00010269.0001001	05 AUG 10
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD - FWSPAGE**	00010270.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	NG00727	
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	00017163.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD - FWSPAGE**	00010270.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	NG00727	
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	00017163.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD**	00010269.0005001	03 JAN 17
	Criteria: PW1100G-JM, P15993, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE CLSD - FWSPAGE**	00010270.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	NG00728	
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	00017162.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	00010272.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN - FWSPAGE**	00010273.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	NG00728	
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	00017162.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	NG00728	
	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	00017162.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ENG 1(2) VALVE OPEN**	00010272.0002001	17 JUN 14
	Criteria: P13491, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY AOA**	NG01852	
E	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY AOA**	00022258.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY AOA**	00022259.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY AOA - FWSPAGE**	00022260.0001001	30 MAR 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	NG00740	
	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	00017179.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	00018307.0002001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT - FWSPAGE**	00018308.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P12484, P7125, P8176, P8232, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	NG00740	
	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	00017179.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107				
	Applicable to: MSN 01251				
	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	00018307.0003001	21 MAR 17
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300				
	Applicable to: MSN 01251				
	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT - FWSPAGE**	00018308.0003001	21 MAR 16
	Criteria: 31-1257, 31-1266, 31-1267, 31-1300				
	Applicable to: MSN 01251				

	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	NG00740	
	PRO-ABN-A-ICE		**ANTI ICE F/O + STBY PITOT**	00017179.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1266, 31-1267, 31-1300, 31-1334, 31-1414, P10383, P7125, P8176, P8232, P9107				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	NG00720	
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	00017170.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	00018309.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA - FWSPAGE**	00018901.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	NG00720	
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	00017170.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA - FWSPAGE**	00018901.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	NG00720	
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	00017170.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA**	00018309.0003001	21 JAN 21
	Criteria: P20614, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE F/O PITOT or L(R) STAT or AOA - FWSPAGE**	00018901.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	NG00725	
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	00017174.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	00010261.0002001	05 AUG 10
	Criteria: 31-1267, 31-1300, P9107, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES - FWSPAGE**	00010263.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				

	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	NG00725	
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	00017174.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES - FWSPAGE**	00010263.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	NG00725	
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	00017174.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES**	00010261.0003001	21 JAN 21
	Criteria: P20614, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE F/O PROBES - FWSPAGE**	00010263.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-A-ICE		**ANTI ICE ICE DETECTED**	NG01586	
E	PRO-ABN-A-ICE		**ANTI ICE ICE DETECTED**	00017187.0001001	21 MAR 16
E	Criteria: P2650 **Applicable to: MSN 04563, 04827, 04860, 05005, 05097, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE ICE DETECTED**	00018891.0001001	21 MAR 16
E	Criteria: P2650 **Applicable to: MSN 04563, 04827, 04860, 05005, 05097, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-A-ICE		**ANTI ICE L + R WINDSHIELD**	NG00718	
	PRO-ABN-A-ICE		**ANTI ICE L + R WINDSHIELD**	00017167.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE L + R WINDSHIELD**	00010236.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE L + R WINDSHIELD - FWSPAGE**	00010237.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				

	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDOW**	NG00717	
	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDOW**	00017168.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDOW**	00010234.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDOW - FWSPAGE**	00010235.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				

	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDSHIELD**	NG00716	
	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDSHIELD**	00017166.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDSHIELD**	00010232.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE L(R) WINDSHIELD - FWSPAGE**	00010233.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	NG00722	
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	00017172.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	00010250.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA - FWSPAGE**	00010251.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	NG00722	
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	00017172.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA - FWSPAGE**	00010251.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	NG00722	
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	00017172.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA**	00010250.0002001	21 JAN 21
	Criteria: P20614, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE STBY PITOT or L(R) STAT or AOA - FWSPAGE**	00010251.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	NG00726	
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	00017176.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	00010265.0001001	25 FEB 14
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES - FWSPAGE**	00010266.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	NG00726	
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	00017176.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES - FWSPAGE**	00010266.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	NG00726	
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	00017176.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES**	00010265.0002001	21 JAN 21
	Criteria: P20614, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-A-ICE		**ANTI ICE STBY PROBES - FWSPAGE**	00010266.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**[QRH] Engine 1+2 Bleed Fault**	00017611.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251, 02014, 06561				
E	PRO-ABN-AIR		**[QRH] BLEED 1+2 FAULT**	00017611.0002001	21 MAR 17
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**				
	PRO-ABN-AIR		**AIR APU BLEED FAULT**	NG00836	
	PRO-ABN-AIR		**AIR APU BLEED FAULT**	00017375.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR APU BLEED FAULT**	00017552.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR APU BLEED FAULT - FWSPAGE**	00011266.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR APU BLEED LEAK**	NG00835	
	PRO-ABN-AIR		**AIR APU BLEED LEAK**	00017376.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR APU BLEED LEAK**	00017553.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR APU BLEED LEAK - FWSPAGE**	00011100.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-AIR		**AIR APU BLEED LEAK APU LEAK FED BY ENG**	NG01354	
E	PRO-ABN-AIR		**AIR APU BLEED LEAK APU LEAK FED BY ENG**	00018057.0001001	21 MAR 16
	Criteria: 31-1492, 31-1558, 36-1075, PW1100G-JM, P14826, P20466				
E	**Applicable to: MSN 02734, 02904, 02924, 03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR APU BLEED LEAK APU LEAK FED BY ENG**	00017554.0001001	21 MAR 16
	Criteria: 31-1492, 31-1558, 36-1075, PW1100G-JM, P14826, P20466				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02904, 02924, 03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR APU BLEED LEAK - FWSPAGE APU LEAK FED BY ENG**	00015878.0001001	17 MAR 17
	Criteria: 31-1492, 31-1558, 31-1575, 36-1075, PW1100G-JM, P14826, P20466, P20610, P21265				
E	**Applicable to: MSN 02734, 02904, 02924, 03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR APU LEAK DET FAULT**	NG01342	
E	PRO-ABN-AIR		**AIR APU LEAK DET FAULT**	00017394.0001001	21 MAR 16
	Criteria: 31-1492, PW1100G-JM, P14826				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR APU LEAK DET FAULT**	00015830.0001001	21 AUG 15
	Criteria: 31-1492, PW1100G-JM, P14826				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR APU LEAK DET FAULT - FWSPAGE**	00015831.0001001	21 AUG 15
	Criteria: 31-1492, PW1100G-JM, P14826				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR BLEED 1(2) OFF**	NG01501	
	PRO-ABN-AIR		**AIR BLEED 1(2) OFF**	00017374.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR BLEED 1(2) OFF**	00017555.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-AIR		**AIR BLEED LEAK**	NG01502	
	PRO-ABN-AIR		**AIR BLEED LEAK**	00018172.0001001	21 MAR 16
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-AIR		**AIR BLEED LEAK**	00016189.0001001	21 AUG 15
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-AIR		**AIR BLEED LEAK**	NG01502	
E	PRO-ABN-AIR		**AIR BLEED LEAK**	00018172.0002001	27 FEB 18
	Criteria: 31-1558, PW1100G-JM, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR BLEED LEAK**	00016189.0001001	21 AUG 15
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR COND CTL 1(2) - A(B) FAULT**	NG00814	
E	PRO-ABN-AIR		**AIR COND CTL 1(2) - A(B) FAULT**	00017315.0001001	21 MAR 16
	Criteria: K6443, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR COND CTL 1(2) - A(B) FAULT**	00018084.0001001	21 MAR 16
	Criteria: K6443				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR COND CTL 1(2) - A(B) FAULT - FWSPAGE**	00010777.0001001	05 AUG 10
	Criteria: K6443				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	NG00831	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017378.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017584.0009001	02 MAY 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, A319, A320 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR - FWSPAGE**	00011089.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	NG00831	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017378.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017584.0001001	21 MAR 16
	Criteria: A320 **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR - FWSPAGE**	00011089.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				

	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	NG00831	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017378.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	NG00831	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017378.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017584.0005001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, A320 **Applicable to: MSN 02014, 06561**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR - FWSPAGE**	00011089.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 02014, 06561**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	NG00831	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017378.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017584.0010001	02 MAY 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR - FWSPAGE**	00011089.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	NG00831	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017378.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR**	00017584.0008001	02 MAY 16
E	Criteria: PW1100G-JM, K17996, P11819, P14826, A320, A321 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED ABNORM PR - FWSPAGE**	00011089.0002001	21 AUG 15
E	Criteria: PW1100G-JM, SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	NG00832	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017369.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02887, 02896, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06173, 06528, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017605.0005001	21 MAR 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, A319, A320 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02887, 02896, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06173, 06528, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE**	00011092.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02887, 02896, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06173, 06528, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	NG00832	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017369.0001001	21 MAR 16
E	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017605.0001001	21 MAR 16
	Criteria: A320 **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE**	00011092.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	NG00832	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017369.0002001	20 JAN 18
E	Criteria: 36-1075, PW1100G-JM, SA **Applicable to: MSN 02734, 02904, 02924, 03002, 03565, 04465, 06139, 06536**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017605.0005001	21 MAR 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, A319, A320 **Applicable to: MSN 02734, 02904, 02924, 03002, 03565, 04465, 06139, 06536**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE**	00011092.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 02734, 02904, 02924, 03002, 03565, 04465, 06139, 06536				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	NG00832	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017369.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 03222, 03294, 03816, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06592, 06632, 06658, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07098**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017605.0008001	21 MAR 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, A321				
	Applicable to: MSN 03222, 03294, 03816, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06592, 06632, 06658, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07098				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE**	00011092.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 03222, 03294, 03816, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06592, 06632, 06658, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07098				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	NG00832	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017369.0002001	20 JAN 18
	Criteria: 36-1075, PW1100G-JM, SA				
E	**Applicable to: MSN 03229, 03761, 04352, 06414, 06670, 07081**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017605.0008001	21 MAR 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, A321				
	Applicable to: MSN 03229, 03761, 04352, 06414, 06670, 07081				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE**	00011092.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 03229, 03761, 04352, 06414, 06670, 07081				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	NG00832	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017369.0002001	20 JAN 18
	Criteria: 36-1075, PW1100G-JM, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017605.0010001	27 FEB 18
	Criteria: PW1100G-JM, P11819, P14826, A320				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE**	00011092.0002001	21 AUG 15
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	NG00832	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017369.0002001	20 JAN 18
	Criteria: 36-1075, PW1100G-JM, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT**	00017605.0011001	27 FEB 18
	Criteria: 31-1558, PW1100G-JM, P11819, P14826, P20466, A320, A321				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE**	00011092.0002001	21 AUG 15
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	NG01358	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00018049.0002001	02 MAY 16
	Criteria: 31-1492, PW1100G-JM, P14826				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00017607.0005001	02 MAY 16
	Criteria: 31-1492, A319, A320				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE Bleed not closed**	00015887.0028001	05 MAY 22
	Criteria: 31-1492, PW1100G-JM, P14826, P20610, P21265, P21423, A320				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	NG01358	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00018049.0002001	02 MAY 16
E	Criteria: 31-1492, PW1100G-JM, P14826 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00017607.0006001	02 MAY 16
	Criteria: 31-1492, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE Bleed not closed**	00015887.0028001	05 MAY 22
E	Criteria: 31-1492, PW1100G-JM, P14826, P20610, P21265, P21423, A320 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	NG01358	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00018049.0002001	02 MAY 16
E	Criteria: 31-1492, PW1100G-JM, P14826 **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00017607.0003001	02 MAY 16
E	Criteria: 31-1558, PW1100G-JM, P14826, P20466, A320, A321 **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE Bleed not closed**	00015887.0012001	05 MAY 22
	Criteria: PW1100G-JM, P14826, A320 **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	NG01358	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00018049.0002001	02 MAY 16
E	Criteria: 31-1492, PW1100G-JM, P14826 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00017607.0003001	02 MAY 16
	Criteria: 31-1558, PW1100G-JM, P14826, P20466, A320, A321				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE Bleed not closed**	00015887.0001001	05 MAY 22
	Criteria: 31-1575, PW1100G-JM, P14826, P20610, P21265, P21423, A320				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	NG01358	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00018049.0002001	02 MAY 16
	Criteria: 31-1492, PW1100G-JM, P14826				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED**	00017607.0003001	02 MAY 16
	Criteria: 31-1558, PW1100G-JM, P14826, P20466, A320, A321				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED FAULT - FWSPAGE Bleed not closed**	00015887.0028001	05 MAY 22
	Criteria: 31-1492, PW1100G-JM, P14826, P20610, P21265, P21423, A320				
E	**Applicable to: MSN 11531**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT**	NG01344	
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT**	00017092.0001001	21 MAR 16
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT**	00017556.0001001	21 MAR 17
	Criteria: 31-1492, P14629				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT - FWSPAGE**	00015836.0001001	17 MAR 17
	Criteria: 31-1492				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT**	NG01344	
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT**	00017092.0001001	21 MAR 16
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT**	00017556.0001001	21 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT - FWSPAGE**	00015836.0002001	17 MAR 17
	Criteria: 31-1575, PW1100G-JM, P14629, P20610, P21265, P21423				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT LEFT LEAK**	NG01355	
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT LEFT LEAK**	00017094.0001001	21 MAR 16
	Criteria: 31-1492, P14629				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT LEFT LEAK**	00017557.0001001	21 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT - FWSPAGE LEFT LEAK**	00015880.0001001	17 MAR 17
	Criteria: 31-1492, 31-1575, P14629, P20610, P21265, P21423				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT RIGHT LEAK**	NG01356	
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT RIGHT LEAK**	00017093.0001001	21 MAR 16
	Criteria: 31-1492, P14629				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT RIGHT LEAK**	00017558.0001001	21 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT - FWSPAGE RIGHT LEAK**	00015882.0001001	17 MAR 17
	Criteria: 31-1492, 31-1575, P14629, P20610, P21265, P21423				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT LEFT LEAK and RIGHT LEAK**	NG01357	
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT LEFT LEAK and RIGHT LEAK**	00017095.0001001	21 MAR 16
	Criteria: 31-1492, P14629				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT LEFT LEAK RIGHT LEAK**	00017559.0001001	21 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED FAULT - FWSPAGE LEFT LEAK RIGHT LEAK**	00015884.0001001	17 MAR 17
	Criteria: 31-1492, 31-1575, P14629, P20610, P21265, P21423				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed Available)**	NG00842	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed Available)**	00017379.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed Available)**	00017560.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (Opposite Bleed Available)**	00011115.0001001	21 AUG 15
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	NG00843	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	00018208.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	00017561.0002001	21 MAR 16
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (Opposite Bleed not Available)**	00011117.0003001	17 MAR 17
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	NG00843	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	00018208.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	00017561.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (Opposite Bleed not Available)**	00011117.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	NG00843	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	00018208.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	NG00843	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	00018208.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP (Opposite Bleed not Available)**	00017561.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 02014, 06561				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (Opposite Bleed not Available)**	00011117.0003001	17 MAR 17
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 02014, 06561**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	NG00844	
	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	00017381.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	00011118.0002001	21 AUG 15
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1 + 2 BLEED LO TEMP - FWSPAGE**	00011119.0003001	17 MAR 17
	Criteria: 31-1334, 31-1414, 31-1492, 31-1575, P10383, P14826, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	NG00844	
	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	00017381.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1 + 2 BLEED LO TEMP**	00011118.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1 + 2 BLEED LO TEMP - FWSPAGE**	00011119.0001001	21 AUG 15
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	NG00844	
	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	00017381.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	NG00844	
	PRO-ABN-AIR		**AIR ENG 1+2 BLEED LO TEMP**	00017381.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-AIR		**AIR ENG 1 + 2 BLEED LO TEMP**	00011118.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 02014, 06561**				
E	PRO-ABN-AIR		**AIR ENG 1 + 2 BLEED LO TEMP - FWSPAGE**	00011119.0003001	17 MAR 17
	Criteria: 31-1334, 31-1414, 31-1492, 31-1575, P10383, P14826, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 02014, 06561**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	NG01242	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	00017391.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	00014306.0001001	21 AUG 15
	Criteria: 31-1373, 31-1414, 31-1492, P11819, A319, A320				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP - FWSPAGE**	00014307.0005001	17 MAR 17
	Criteria: 31-1373, 31-1414, 31-1575, P11819, P20610, P21265, P21423, A319, A320, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	NG01242	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	00017391.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	00014306.0004001	21 AUG 15
	Criteria: 31-1373, 31-1414, 31-1492, P11819, P14629, P14826, A320, A321, 320-200N				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP - FWSPAGE**	00014307.0005001	17 MAR 17
	Criteria: 31-1373, 31-1414, 31-1575, P11819, P20610, P21265, P21423, A319, A320, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	NG01242	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	00017391.0003001	03 JUN 16
	Criteria: PW1100G-JM, P11819, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP**	00014306.0004001	21 AUG 15
	Criteria: 31-1373, 31-1414, 31-1492, P11819, P14629, P14826, A320, A321, 320-200N				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED HI TEMP - FWSPAGE**	00014307.0005001	17 MAR 17
	Criteria: 31-1373, 31-1414, 31-1575, P11819, P20610, P21265, P21423, A319, A320, A321				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	NG01859	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022402.0001001	04 JUN 19
	Criteria: 31-1492, 36-1075, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022403.0001001	04 NOV 20
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK - FWSPAGE**	00022404.0002001	04 JUN 19
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	NG01859	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022402.0001001	04 JUN 19
	Criteria: 31-1492, 36-1075, SA				
	Applicable to: MSN 01251				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022403.0001001	04 NOV 20
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK - FWSPAGE**	00022404.0001001	04 JUN 19
	Criteria: SA				
	Applicable to: MSN 01251				

E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	NG01859	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022402.0004001	04 JUN 19
	Criteria: PW1100G-JM, P14826, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022403.0001001	04 NOV 20
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK - FWSPAGE**	00022404.0002001	04 JUN 19
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	NG01859	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022402.0004001	04 JUN 19
	Criteria: PW1100G-JM, P14826, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022403.0002001	04 NOV 20
	Criteria: 31-1558, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK - FWSPAGE**	00022404.0002001	04 JUN 19
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 08635**				

E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	NG01859	
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022402.0004001	04 JUN 19
	Criteria: PW1100G-JM, P14826, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK**	00022403.0003001	18 NOV 21
	Criteria: P20466, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED LEAK - FWSPAGE**	00022404.0002001	04 JUN 19
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	NG00830	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	00017372.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	00017562.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD - FWSPAGE**	00011087.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	NG00830	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	00017372.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	00017562.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	NG00830	
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	00017372.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD**	00017562.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-AIR		**AIR ENG 1(2) BLEED NOT CLSD - FWSPAGE**	00011087.0002001	17 SEP 15
	Criteria: PW1100G-JM, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR ENG 1(2) HP VALVE FAULT**	NG00837	
	PRO-ABN-AIR		**AIR ENG 1(2) HP VALVE FAULT**	00017384.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR ENG 1(2) HP VALVE FAULT**	00011103.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR ENG 1(2) HP VALVE FAULT - FWSPAGE**	00011104.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT**	NG00838	
	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT**	00017389.0002001	21 MAR 16
	Criteria: P9107, P9594				
	Applicable to: MSN 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT**	00011105.0004001	25 FEB 14
	Criteria: P9107, P9594				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT - FWSPAGE**	00011106.0004001	17 MAR 11
	Criteria: P9107, P9594				
E	**Applicable to: MSN 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT**	NG00838	
E	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT**	00017389.0003001	21 MAR 16
	Criteria: PW1100G-JM, P9107, P9594				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT**	00011105.0004001	25 FEB 14
	Criteria: P9107, P9594				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR ENG 1(2) LEAK DET FAULT - FWSPAGE**	00011106.0004001	17 MAR 11
	Criteria: P9107, P9594				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR FWD(AFT) CRG VENT FAULT** ◁	NG00801	
	PRO-ABN-AIR		**AIR FWD(AFT) CRG VENT FAULT** ◁	00017337.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AIR		**AIR FWD(AFT) CRG VENT FAULT** ◁	00017933.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AIR		**AIR FWD(AFT) CRG VENT FAULT** ◁ **- FWSPAGE**	00017934.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	NG00833	
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017370.0001001	04 JUN 19
	Criteria: 31-1492, 36-1075, PW1100G-JM, P14826, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017563.0001001	04 NOV 20
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-AIR		**AIR L(R) WING LEAK - FWSPAGE**	00011096.0003001	04 JUN 19
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				

E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	NG00833	
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017370.0001001	04 JUN 19
	Criteria: 31-1492, 36-1075, PW1100G-JM, P14826, SA				
E	**Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017563.0001001	04 NOV 20
	Criteria: SA				
	Applicable to: MSN 01251				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-AIR		**AIR L(R) WING LEAK - FWSPAGE**	00011096.0001001	04 JUN 19
	Criteria: SA				
	Applicable to: MSN 01251				
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	NG00833	
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017370.0001001	04 JUN 19
	Criteria: 31-1492, 36-1075, PW1100G-JM, P14826, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017563.0002001	04 NOV 20
	Criteria: 31-1558, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-AIR		**AIR L(R) WING LEAK - FWSPAGE**	00011096.0003001	04 JUN 19
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	NG00833	
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017370.0001001	04 JUN 19
	Criteria: 31-1492, 36-1075, PW1100G-JM, P14826, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR L(R) WING LEAK**	00017563.0003001	18 NOV 21
	Criteria: P20466, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR L(R) WING LEAK - FWSPAGE**	00011096.0003001	04 JUN 19
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR L(R) WNG LEAK DET FAULT**	NG00839	
	PRO-ABN-AIR		**AIR L(R) WNG LEAK DET FAULT**	00017387.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR L(R) WNG LEAK DET FAULT**	00011107.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR L(R) WNG LEAK DET FAULT - FWSPAGE**	00011108.0005001	17 MAR 11
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	NG00788	
	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	00017290.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: **MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	00010712.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: **MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-AIR		**AIR PACK 1(2) FAULT - FWSPAGE**	00010713.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: **MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	NG00788	
	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	00010712.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: **MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	NG00788	
E	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	00017290.0002001	21 MAR 16
	Criteria: K6443, SA				
E	**Applicable to:** **MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR PACK 1(2) FAULT**	00010712.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: **MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR PACK 1(2) FAULT - FWSPAGE**	00010713.0002001	16 NOV 11
	Criteria: K6443, SA				

Continued on the following page

Continued from the previous page

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	NG00790	
	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	00017292.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321**				
	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT**	00017935.0002001	21 MAR 16
	Criteria: 31-1492, PW1100G-JM, P14629, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321**				
	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT - FWSPAGE**	00017936.0006001	17 MAR 17
	Criteria: 31-1492, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321**				
	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	NG00790	
	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	00017292.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014**				
	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT**	00017935.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014**				
	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT - FWSPAGE**	00017936.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01251, 02014**				
E	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	NG00790	
E	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	00017292.0002001	21 MAR 16
	Criteria: K6443, SA				

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Continued from the previous page

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT**	00017935.0002001	21 MAR 16
	Criteria: 31-1492, PW1100G-JM, P14629, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT - FWSPAGE**	00017936.0005001	17 MAR 17
	Criteria: 31-1492, K6443, P14629, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				

E	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	NG00790	
E	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	00017292.0002001	21 MAR 16
	Criteria: K6443, SA				
E	**Applicable to: MSN 06561**				
	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT**	00017935.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 06561**				
	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT - FWSPAGE**	00017936.0002001	17 MAR 17
	Criteria: K6443, SA **Applicable to: MSN 06561**				

E	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	NG00790	
E	PRO-ABN-AIR		**AIR PACK 1+2 FAULT**	00017292.0002001	21 MAR 16
	Criteria: K6443, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT**	00017935.0005001	27 FEB 18
	Criteria: 31-1558, PW1100G-JM, P14629, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR PACK 1 + 2 FAULT - FWSPAGE**	00017936.0005001	17 MAR 17
	Criteria: 31-1492, K6443, P14629, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR PACK 1(2) OFF**	NG00789	
	PRO-ABN-AIR		**AIR PACK 1(2) OFF**	00017294.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR PACK 1(2) OFF**	00017941.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR PACK 1(2) OFF - FWSPAGE**	00010715.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	NG00787	
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	00017284.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	00017942.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT - FWSPAGE**	00010711.0001001	10 JAN 11
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	NG00787	
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	00017942.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT - FWSPAGE**	00010711.0001001	10 JAN 11
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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Continued from the previous page

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	NG00787	
E	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	00017284.0002001	21 MAR 16
	Criteria: K6443, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT**	00017942.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-AIR		**AIR PACK 1(2) OVHT - FWSPAGE**	00010711.0001001	10 JAN 11
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	NG00791	
	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	00017298.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	00018089.0001001	21 MAR 16
	Criteria: PW1100G-JM, K5213, K6156, K6443, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT-FWSPAGE**	00010719.0002001	10 JAN 11
	Criteria: K4793, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	NG00791	
	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	00017298.0002001	21 MAR 16
	Criteria: PW1100G-JM, K6443, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	00018089.0001001	21 MAR 16
	Criteria: PW1100G-JM, K5213, K6156, K6443, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT-FWSPAGE**	00010719.0003001	10 JAN 11
	Criteria: PW1100G-JM, K4793, K6443, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	NG00791	
E	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	00017298.0005001	09 APR 18
	Criteria: 31-1558, PW1100G-JM, K6443, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT**	00018089.0005001	09 APR 18
	Criteria: 31-1558, PW1100G-JM, K5213, K6156, K6443, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR PACK 1(2) REGUL FAULT-FWSPAGE**	00010719.0006001	09 APR 18
	Criteria: 31-1558, PW1100G-JM, K4793, K6443, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AIR		**AIR X BLEED FAULT**	NG00834	
	PRO-ABN-AIR		**AIR X BLEED FAULT**	00017383.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR X BLEED FAULT**	00011097.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AIR		**AIR X BLEED FAULT - FWSPAGE**	00017612.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A320, A321				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AIR		**AIR X BLEED FAULT**	NG00834	
	PRO-ABN-AIR		**AIR X BLEED FAULT**	00017383.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR X BLEED FAULT**	00011097.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR X BLEED FAULT - FWSPAGE**	00017612.0003001	22 MAR 17
	Criteria: SA, A320 **Applicable to: MSN 01251**				
	PRO-ABN-AIR		**AIR X BLEED FAULT**	NG00834	
	PRO-ABN-AIR		**AIR X BLEED FAULT**	00017383.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-AIR		**AIR X BLEED FAULT**	00011097.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-APU		**APU AUTO (EMER) SHUT DOWN**	NG00704	
	PRO-ABN-APU		**APU AUTO (EMER) SHUT DOWN**	00016876.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-APU		**APU AUTO (EMER) SHUT DOWN**	00018193.0001001	05 MAY 22
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-APU		**APU AUTO (EMER) SHUT DOWN - FWSPAGE**	00010106.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-APU		**APU FIRE DET FAULT**	NG01791	
R	PRO-ABN-APU		**APU FIRE DET FAULT**	00021359.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-APU		**APU FIRE DET FAULT**	00021360.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-APU		**APU FIRE DET FAULT**	00021361.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
R	PRO-ABN-APU		**APU FIRE LOOP A(B) FAULT**	NG01792	
R	PRO-ABN-APU		**APU FIRE LOOP A(B) FAULT**	00021362.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-APU		**APU FIRE LOOP A(B) FAULT**	00021363.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-APU		**APU FIRE LOOP A(B) FAULT**	00021364.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-APUF		**APU FIRE**	NG01038	
	PRO-ABN-APUF		**APU FIRE**	00017402.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-APUF		**APU FIRE**	00017925.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-APUF		**APU FIRE - FWSPAGE**	00012211.0001001	16 NOV 11
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AUTO_FLT		**AUTO FLT A/THR LIMITED**	NG01642	
	PRO-ABN-AUTO_FLT		**AUTO FLT A/THR LIMITED**	00016943.0001001	21 MAR 16
	Criteria: P3420				
	Applicable to: ALL				
	PRO-ABN-AUTO_FLT		**AUTO FLT A/THR LIMITED**	00018689.0001001	21 MAR 16
	Criteria: P3420				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AUTO_FLT		**AUTO FLT A/THR OFF**	NG00764	
	PRO-ABN-AUTO_FLT		**AUTO FLT A/THR OFF**	00016941.0002001	20 APR 17
	Criteria: P3420, SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT A/THR OFF**	00018694.0002001	21 MAR 16
	Criteria: P3420, SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT A/THR OFF - FWSPAGE**	00010469.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT AP OFF**	NG00763	
	PRO-ABN-AUTO_FLT		**AUTO FLT AP OFF**	00016947.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT AP OFF**	00018695.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT AP OFF - FWSPAGE**	00017453.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1(2) FAULT**	NG00759	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1(2) FAULT**	00016911.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1(2) FAULT**	00010457.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1(2) FAULT - FWSPAGE**	00017506.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0002001	22 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P7125, A320, A321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0006001	22 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P2316, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0002001	22 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P7125, A320, A321				
	Applicable to: MSN 01251				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0004001	22 MAR 17
	Criteria: 31-1267, 31-1300, P2316, SA				
	Applicable to: MSN 01251				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0002001	22 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P7125, A320, A321				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0011001	22 MAR 17
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P2316, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0003001	22 MAR 17
	Criteria: 31-1257, 31-1334, 31-1414, P10383, P7125, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0018001	22 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P2316, P9107, SA, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				

	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0006001	04 NOV 20
	Criteria: 57-1173, 57-1187, J3283, J3448, P10383, P7125, A320, A321				
	Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0008001	04 NOV 20
	Criteria: 31-1492, 57-1173, 57-1187, J3283, J3448, P10383, P2316, P9107, SA				
	Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

N	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0004001	04 NOV 20
	Criteria: J3283, P10383, P7125, A320, 320-200N				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0021001	04 NOV 20
	Criteria: J3283, P10383, P13922, P15992, P2316, P9107, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
N	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0004001	04 NOV 20
	Criteria: J3283, P10383, P7125, A320, 320-200N				
E	**Applicable to: MSN 08635**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0024001	04 NOV 20
	Criteria: 31-1575, J3283, P10383, P13922, P15992, P2316, P9107, SA, 320-200N				
	Applicable to: MSN 08635				
N	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	NG00760	
	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00016926.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
N	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT**	00017454.0030001	03 NOV 22
	Criteria: J3283, J3448, P10383, P20614, P21265, P7125, A320, A321, 320-200N, 321-200NX				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FAC 1 + 2 FAULT - FWSPAGE**	00017456.0038001	18 NOV 21
	Criteria: J3283, J3448, P10383, P13922, P15992, P20610, P20614, P21265, P2316, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FAC VERSIONS DISAGREE**	NG01990	
E	PRO-ABN-AUTO_FLT		**AUTO FLT FAC VERSIONS DISAGREE**	00024825.0002001	18 NOV 21
	Criteria: P21265, P21844				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FAC VERSIONS DISAGREE**	00024826.0002001	18 NOV 21
	Criteria: P21265, P21844				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1(2) FAULT**	NG00762	
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1(2) FAULT**	00016923.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1(2) FAULT**	00010464.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1(2) FAULT - FWSPAGE**	00010465.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	NG00761	
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	00016946.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02887, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06876, 06895, 06949, 07005, 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	00017463.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02887, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06876, 06895, 06949, 07005, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT - FWSPAGE**	00017512.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02887, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06876, 06895, 06949, 07005, 08495, 08529, 08596, 08635, 09190, 09324				

	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	NG00761	
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	00016946.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT - FWSPAGE**	00017512.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	NG00761	
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	00016946.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02896, 04827, 04860, 05947, 05987, 06634, 06871, 07081, 07098, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT**	00017463.0002001	18 JUL 17
	Criteria: 31-1576, P20375, SA				
E	**Applicable to: MSN 02734, 02896, 04827, 04860, 05947, 05987, 06634, 06871, 07081, 07098, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AUTO_FLT		**AUTO FLT FCU 1 + 2 FAULT - FWSPAGE**	00017512.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 02734, 02896, 04827, 04860, 05947, 05987, 06634, 06871, 07081, 07098, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AUTO_FLT		**AUTO FLT FMGC VERSIONS DISAGREE**	NG01991	
E	PRO-ABN-AUTO_FLT		**AUTO FLT FMGC VERSIONS DISAGREE**	00024827.0004001	18 NOV 21
	Criteria: P21265, P21566				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT FMGC VERSIONS DISAGREE**	00024828.0004001	18 NOV 21
	Criteria: P21265, P21566				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AUTO_FLT		**AUTO FLT REAC W/S DET FAULT**	NG00766	
E	PRO-ABN-AUTO_FLT		**AUTO FLT REAC W/S DET FAULT**	00017473.0001001	21 MAR 16
	Criteria: P20442, P4308, P4642, P4647, P4766				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT REAC W/S DET FAULT**	00017479.0001001	21 MAR 16
	Criteria: P20442, P4308, P4642, P4647, P4766				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT REAC W/S DET FAULT - FWSPAGE**	00017480.0001001	05 JUN 18
	Criteria: P20442, P4308, P4642, P4647, P4766				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM 1(2) FAULT**	NG00755	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM 1(2) FAULT**	00016921.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM 1(2) FAULT**	00010449.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM 1(2) FAULT - FWSPAGE**	00017513.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	NG00756	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	00016928.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	00010451.0002001	05 AUG 10
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS - FWSPAGE**	00017464.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				

	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	NG00756	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	00016928.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS - FWSPAGE**	00017464.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	NG00756	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	00016928.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS**	00010451.0003001	03 MAR 20
	Criteria: 31-1575, P20610, P7125, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRIM SYS - FWSPAGE**	00017464.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	NG00757	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	00016922.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	00010453.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2) - FWSPAGE**	00010454.0001001	05 AUG 10
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	NG00757	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	00016922.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2) - FWSPAGE**	00010454.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	NG00757	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	00016922.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2)**	00010453.0002001	09 APR 18
	Criteria: 31-1558, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM 1(2) - FWSPAGE**	00010454.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	NG00758	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00016929.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00017465.0003001	22 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS - FWSPAGE**	00017467.0003001	28 MAY 20
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	NG00758	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00016929.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01251				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00017465.0002001	21 MAR 16
	Criteria: 31-1257, SA				
	Applicable to: MSN 01251				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS - FWSPAGE**	00017467.0002001	28 MAY 20
	Criteria: 31-1257, SA				
	Applicable to: MSN 01251				

	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	NG00758	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00016929.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	NG00758	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00016929.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00017465.0006001	22 MAR 17
	Criteria: 31-1257, 31-1334, 31-1414, P10383, P7125, SA, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS - FWSPAGE**	00017467.0006001	28 MAY 20
	Criteria: 31-1257, 31-1334, 31-1414, P10383, P7125, SA, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				

E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	NG00758	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00016929.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00017465.0004001	21 MAR 16
	Criteria: P10383, P7125, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS - FWSPAGE**	00017467.0004001	28 MAY 20
	Criteria: P10383, P7125, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	NG00758	
	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00016929.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS**	00017465.0008001	03 MAR 20
	Criteria: 31-1575, P10383, P20610, P7125, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT RUD TRV LIM SYS - FWSPAGE**	00017467.0004001	28 MAY 20
	Criteria: P10383, P7125, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-AUTO_FLT		**AUTO FLT TCAS MODE FAULT**	NG01251	
E	PRO-ABN-AUTO_FLT		**AUTO FLT TCAS MODE FAULT**	00016998.0001001	21 MAR 16
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT TCAS MODE FAULT**	00014408.0001001	07 NOV 13
	Criteria: 22-1472, P11363				
E	**Applicable to: MSN 01459, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-AUTO_FLT		**AUTO FLT TCAS MODE FAULT - FWSPAGE**	00014409.0001001	07 NOV 13
E	Criteria: 22-1472, P11363 **Applicable to: MSN 01459, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER 1(2)**	NG00753	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER 1(2)**	00016912.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER 1(2)**	00010444.0001001	25 FEB 14
	Criteria: 22-1079, 22-1102, 22-1226, P4983, P6703, P6954, P8256, SA **Applicable to: ALL**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER 1(2) - FWSPAGE**	00017515.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	NG00754	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00016927.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05345**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00017469.0002001	22 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA, A319 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05345**				
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS - FWSPAGE**	00017470.0003001	02 MAY 23
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P9107, SA, A319 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05345**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	NG00754	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00016927.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00017469.0002001	22 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA, A319 **Applicable to: MSN 01251**				
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS - FWSPAGE**	00017470.0002001	02 MAY 23
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	NG00754	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00016927.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00017469.0002001	22 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA, A319 **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS - FWSPAGE**	00017470.0006001	02 MAY 23
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P8211, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	NG00754	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00016927.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	NG00754	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00016927.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00017469.0004001	04 NOV 20
	Criteria: 57-1173, 57-1187, J3283, J3448, P7125, SA, 320-200N **Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS - FWSPAGE**	00017470.0014001	02 MAY 23
	Criteria: 31-1492, 57-1173, 57-1187, J3283, J3448, P10383, P9107, SA **Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	NG00754	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00016927.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00017469.0004001	04 NOV 20
	Criteria: 57-1173, 57-1187, J3283, J3448, P7125, SA, 320-200N **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS - FWSPAGE**	00017470.0010001	04 NOV 20
	Criteria: J3283, P10383, P15992, P9107, SA, 320-200N **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
R	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	NG00754	
	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00016927.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS**	00017469.0007001	04 NOV 20
	Criteria: 31-1575, J3283, J3448, P20610, P7125, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-AUTO_FLT		**AUTO FLT YAW DAMPER SYS - FWSPAGE**	00017470.0015001	03 NOV 21
	Criteria: 31-1575, J3283, P10383, P15992, P20610, P9107, SA, 320-200N				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-AVNCS		**AVIONICS SMOKE**	NG01495	
	PRO-ABN-AVNCS		**AVIONICS SMOKE**	00017405.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-AVNCS		**AVIONICS SMOKE**	00014922.0001001	22 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-BLEED		**BLEED MONITORING FAULT**	NG00841	
	PRO-ABN-BLEED		**BLEED MONITORING FAULT**	00017385.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-BLEED		**BLEED MONITORING FAULT**	00011111.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-BLEED		**BLEED MONITORING FAULT - FWSPAGE**	00011112.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

E	PRO-ABN-BLEED		**BLEED MONIT SYS 1(2) FAULT**	NG00840	
E	PRO-ABN-BLEED		**BLEED MONIT SYS 1(2) FAULT**	00017388.0002001	21 MAR 16
	Criteria: P9107, P9594				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BLEED		**BLEED MONIT SYS 1(2) FAULT**	00011109.0004001	25 FEB 14
	Criteria: P9107, P9594				
E	**Applicable to: MSN 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BLEED		**BLEED MONIT SYS 1(2) FAULT - FWSPAGE**	00011110.0004001	17 MAR 11
	Criteria: P9107, P9594				
E	**Applicable to: MSN 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**[MEM] LOSS OF BRAKING**	00011315.0002001	05 JUN 18
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-BRAKES		**[MEM] LOSS OF BRAKING**	00011315.0001001	05 JUN 18
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	PRO-ABN-BRAKES		**[QRH] ASYMMETRIC BRAKING**	00011331.0001001	17 MAR 17
	Criteria: P4576				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-BRAKES		**[QRH] RESIDUAL BRAKING**	00011318.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-BRAKES		**BRAKES A/SKID N/WS FAULT or A/SKID N/WS OFF**	NG00879	
	PRO-ABN-BRAKES		**BRAKES A/SKID N/WS FAULT or A/SKID N/WS OFF**	00017807.0002001	04 DEC 18
	Criteria: 31-1197, 31-1218, 31-1257, P6801, SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-BRAKES		**BRAKES A/SKID N/WS FAULT or A/SKID N/WS OFF**	00018571.0001001	05 MAR 19
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-BRAKES		**BRAKES A/SKID N/WS FAULT or A/SKID N/WS OFF - FWSPAGE**	00018670.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, P6801, P9107, SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-BRAKES		**BRAKES ALTN BRK FAULT**	NG00887	
E	PRO-ABN-BRAKES		**BRAKES ALTN BRK FAULT**	00017816.0001001	21 MAR 16
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES ALTN BRK FAULT**	00018357.0001001	21 MAR 16
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES ALTN BRK FAULT - FWSPAGE**	00011328.0001001	05 AUG 10
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-BRAKES		**BRAKES ALTN L(R) RELEASED**	NG00888	
E	PRO-ABN-BRAKES		**BRAKES ALTN L(R) RELEASED**	00017817.0001001	21 MAR 16
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES ALTN L(R) RELEASED**	00011329.0001001	05 AUG 10
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES ALTN L(R) RELEASED - FWSPAGE**	00011330.0001001	11 MAY 12
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	NG00883	
	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	00017806.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 11531				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	00018672.0001001	26 NOV 19
E	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, P7125, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 11531**				
E	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT - FWSPAGE**	00011314.0001001	21 NOV 17
E	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, P7125, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 11531**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	NG00883	
	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	00017806.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	NG00883	
	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	00017806.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT**	00018672.0004001	21 MAR 16
E	Criteria: 31-1267, 31-1300, P6911, P7125, P9107, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES AUTO BRK FAULT - FWSPAGE**	00011314.0004001	21 NOV 17
	Criteria: 31-1267, 31-1300, P6911, P7125, P9107, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-BRAKES		**BRAKES BRK Y ACCU LO PR**	NG00889	
E	PRO-ABN-BRAKES		**BRAKES BRK Y ACCU LO PR**	00017820.0001001	21 MAR 16
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES BRK Y ACCU LO PR**	00011332.0002001	05 AUG 10
	Criteria: 31-1334, 31-1414, P10383, P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES BRK Y ACCU LO PR - FWSPAGE**	00011333.0001001	05 AUG 10
	Criteria: P4576				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES HOT**	NG00882	
	PRO-ABN-BRAKES		**BRAKES HOT**	00017786.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, 32-1242, K2113, P3341, P4507, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-BRAKES		**BRAKES HOT**	00018675.0008001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, 31-1414, 32-1242, P13023, P3341, P4507, P5706, P6437, P6801, P7125, P9107, SA, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-BRAKES		**BRAKES HOT - FWSPAGE**	00011312.0001001	05 AUG 10
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-BRAKES		**BRAKES HOT**	NG00882	
	PRO-ABN-BRAKES		**BRAKES HOT**	00017786.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, 32-1242, K2113, P3341, P4507, P9107, SA				
	Applicable to: MSN 01251				
	PRO-ABN-BRAKES		**BRAKES HOT**	00018675.0005001	21 MAR 17
	Criteria: 31-1257, 31-1267, 31-1300, P6437, SA				
	Applicable to: MSN 01251				
	PRO-ABN-BRAKES		**BRAKES HOT - FWSPAGE**	00011312.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01251				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-BRAKES		**BRAKES HOT**	NG00882	
	PRO-ABN-BRAKES		**BRAKES HOT**	00017786.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, 32-1242, K2113, P3341, P4507, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-BRAKES		**BRAKES HOT - FWSPAGE**	00011312.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-BRAKES		**BRAKES NORM + ALTN FAULT**	NG00886	
E	PRO-ABN-BRAKES		**BRAKES NORM + ALTN FAULT**	00017819.0001001	21 MAR 16
	Criteria: P4576				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES NORM + ALTN FAULT**	00018358.0001001	21 MAR 16
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-BRAKES		**BRAKES NORM + ALTN FAULT - FWSPAGE**	00011325.0001001	02 MAY 23
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT**	NG00884	
	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT**	00017814.0001001	21 MAR 16
	Criteria: P4576, P6911				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT**	00018679.0001001	21 MAR 16
	Criteria: P4576, P6911				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
E	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT - FWSPAGE**	00011321.0001001	09 NOV 17
	Criteria: P4576, P6911				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

E	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT**	NG00884	
E	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT**	00017814.0002001	09 NOV 21
	Criteria: P21265, P4576, P6911				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT**	00018679.0001001	21 MAR 16
	Criteria: P4576, P6911				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES NORM BRK FAULT - FWSPAGE**	00011321.0001001	09 NOV 17
	Criteria: P4576, P6911				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-BRAKES		**BRAKES PARK BRK FAULT** ◁	NG01648	
E	PRO-ABN-BRAKES		**BRAKES PARK BRK FAULT** ◁	00017823.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES PARK BRK FAULT** ◁	00018359.0002001	20 MAY 16
	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-BRAKES		**BRAKES PARK BRK LO PR**	NG00890	
E	PRO-ABN-BRAKES		**BRAKES PARK BRK LO PR**	00017821.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES PARK BRK LO PR**	00018572.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, P4576				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES PARK BRK LO PR - FWSPAGE**	00011335.0003001	05 AUG 10
	Criteria: 31-1334, 31-1414, P10383, P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-BRAKES		**BRAKES PARK BRK ON**	NG01649	
	PRO-ABN-BRAKES		**BRAKES PARK BRK ON**	00017815.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107				
	Applicable to: ALL				
	PRO-ABN-BRAKES		**BRAKES PARK BRK ON**	00018360.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107				
	Applicable to: ALL				

E	PRO-ABN-BRAKES		**BRAKES RELEASED**	NG00885	
E	PRO-ABN-BRAKES		**BRAKES RELEASED**	00017813.0001001	21 MAR 16
	Criteria: P6538				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES RELEASED**	00018663.0001001	21 MAR 16
	Criteria: P6538				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-BRAKES		**BRAKES RELEASED - FWSPAGE**	00011323.0001001	21 NOV 17
	Criteria: P6538				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-BRAKES		**BRAKES SYS 1(2) FAULT**	NG00881	
	PRO-ABN-BRAKES		**BRAKES SYS 1(2) FAULT**	00017812.0001001	21 MAR 16
	Criteria: 31-1257, P5706, P6437				
	Applicable to: ALL				
	PRO-ABN-BRAKES		**BRAKES SYS 1(2) FAULT**	00011309.0001001	25 FEB 14
	Criteria: 31-1257, P5706, P6437				
	Applicable to: ALL				
	PRO-ABN-BRAKES		**BRAKES SYS 1(2) FAULT - FWSPAGE**	00011310.0001001	05 AUG 10
	Criteria: 31-1257, P5706, P6437				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NWS		**BRAKES-N/WS MINOR FAULT**	NG01647	
E	PRO-ABN-NWS		**BRAKES-N/WS MINOR FAULT**	00017730.0001001	21 MAR 16
	Criteria: P4576				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NWS		**BRAKES - N/WS MINOR FAULT**	00011326.0001001	25 FEB 14
	Criteria: P4576				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-CAB_PR		**[QRH] CABIN OVERPRESSURE**	00010761.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

E	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	NG00806	
	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	00017316.0005001	21 MAR 16
	Criteria: 31-1267, 31-1300, K2393, K5801, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	00018066.0005001	20 DEC 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1373, 31-1414, 31-1492, P10383, P11819, P14629, P7125, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT - FWSPAGE**	00010755.0002001	22 DEC 14
	Criteria: 31-1334, 31-1414, 31-1492, P10383, P14629				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	NG00806	
	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	00017316.0005001	21 MAR 16
	Criteria: 31-1267, 31-1300, K2393, K5801, P9107, SA				
	Applicable to: MSN 01251				
	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	00018066.0002001	20 DEC 16
	Criteria: 31-1257, SA				
	Applicable to: MSN 01251				

	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	NG00806	
	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	00017316.0005001	21 MAR 16
	Criteria: 31-1267, 31-1300, K2393, K5801, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	NG00806	
	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	00017316.0005001	21 MAR 16
	Criteria: 31-1267, 31-1300, K2393, K5801, P9107, SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT**	00018066.0004001	20 DEC 16
	Criteria: 31-1257, 31-1334, 31-1373, 31-1414, P10383, P11819, P7125, SA				
	Applicable to: MSN 02014, 06561				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-CAB_PR		**CAB PR EXCESS CAB ALT - FWSPAGE**	00010755.0001001	05 AUG 10
	Criteria: 31-1334, 31-1414, P10383				
	Applicable to: MSN 02014, 06561				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-CAB_PR		**CAB PR EXCES RESIDUAL PR**	NG01592	
E	PRO-ABN-CAB_PR		**CAB PR EXCES RESIDUAL PR**	00017328.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, P8863, P9107, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-CAB_PR		**CAB PR EXCES RESIDUAL PR**	00018790.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P8863, P9107				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	NG01593	
	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	00017325.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	00018936.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	NG01593	
	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	00017325.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	00018936.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	NG01593	
	PRO-ABN-CAB_PR		**CAB PR LDG ELEV FAULT**	00017325.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-CAB_PR		**CAB PR LO DIFF PR**	NG01594	
	PRO-ABN-CAB_PR		**CAB PR LO DIFF PR**	00017320.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-CAB_PR		**CAB PR LO DIFF PR**	00010762.0002001	05 AUG 10
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA **Applicable to: ALL**				
	PRO-ABN-CAB_PR		**CAB PR OFV NOT OPEN**	NG01595	
	PRO-ABN-CAB_PR		**CAB PR OFV NOT OPEN**	00017323.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: ALL**				
	PRO-ABN-CAB_PR		**CAB PR OUTFLOW VALVE NOT OPEN**	00018802.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	NG00809	
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	00017324.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	00018092.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN - FWSPAGE**	00018093.0003001	28 MAY 20
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	NG00809	
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	00017324.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	00018092.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01251				
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN - FWSPAGE**	00018093.0002001	28 MAY 20
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	NG00809	
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	00017324.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-CAB_PR		**CAB PR SAFETY VALVE OPEN**	00018092.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-CAB_PR		**CAB PR SYS 1(2) FAULT**	NG00807	
	PRO-ABN-CAB_PR		**CAB PR SYS 1(2) FAULT**	00017326.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-CAB_PR		**CAB PR SYS 1(2) FAULT**	00010756.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-CAB_PR		**CAB PR SYS 1(2) FAULT - FWSPAGE**	00010758.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	NG00808	
	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	00017319.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	00010759.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT - FWSPAGE**	00018107.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	NG00808	
	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	00017319.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	00010759.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT - FWSPAGE**	00018107.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				

	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	NG00808	
	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	00017319.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-CAB_PR		**CAB PR SYS 1+2 FAULT**	00010759.0001001	05 AUG 10
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-CRG_SMOKE		**CARGO SMOKE FWD(AFT) BTL SQUIB FAULT**	NG01491	
	PRO-ABN-CRG_SMOKE		**CARGO SMOKE FWD(AFT) BTL SQUIB FAULT**	00017415.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, K0037, K6109, K6163 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-CRG_SMOKE		**CARGO SMOKE FWD (AFT) BTL SQUIB FAULT**	00018442.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, K0037, K6109, K6163 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-C_B		**C/B TRIPPED**	NG01657	
	PRO-ABN-C_B		**C/B TRIPPED**	00017390.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-C_B		**C/B TRIPPED**	00012551.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM ACARS FAULT ◁**	NG00690	
	PRO-ABN-COM		**COM ACARS FAULT ◁**	00016895.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM ACARS FAULT ◁**	00017538.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM ACARS ◁ FAULT - FWSPAGE**	00010037.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				
N	PRO-ABN-COM		**COM AMU PART FAULT**	NG01959	
N	PRO-ABN-COM		**COM AMU PART FAULT**	00024200.0001001	25 MAY 20
	Criteria: P20240 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		**COM AMU PART FAULT**	00024201.0001001	25 MAY 20
	Criteria: P20240 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-COM		**COM CAPT(F/O)(3RD OCC)(4TH OCC ◁) PTT STUCK**	NG01872	
N	PRO-ABN-COM		**COM CAPT(F/O)(3RD OCC)(4TH OCC ◁) PTT STUCK**	00022695.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		**COM CAPT(F/O) (3RD OCC) (4TH OCC ◁) PTT STUCK**	00022696.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		**COM CAPT(F/O) (3RD OCC) (4TH OCC) PTT STUCK - FWSPAGE**	00022697.0001001	25 MAY 20
	Criteria: P20240, P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-COM		**COM CIDS 1 + 2 FAULT**	NG00689	
	PRO-ABN-COM		**COM CIDS 1 + 2 FAULT**	00016887.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM CIDS 1 + 2 FAULT**	00010033.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM CIDS 1 + 2 FAULT - FWSPAGE**	00010034.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM HF 1(2) DATA FAULT ◁**	NG00694	
	PRO-ABN-COM		**COM HF 1(2) DATA FAULT ◁**	00016896.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COM		**COM HF 1(2) DATA FAULT ◁**	00017499.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COM		**COM HF 1(2) DATA ◁ FAULT - FWSPAGE**	00010045.0001001	17 MAR 11
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-COM		COM RMP 1(2)(3) FAULT	NG01868	
N	PRO-ABN-COM		COM RMP 1(2)(3) FAULT	00022698.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1(2)(3) FAULT	00022699.0001001	05 MAY 22
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1(2)(3) FAULT - FWSPAGE	00022700.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1+2(1+3)(2+3) FAULT	NG01870	
N	PRO-ABN-COM		COM RMP 1+2(1+3)(2+3) FAULT	00024184.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1+2(1+3)(2+3) FAULT	00024185.0001001	05 MAY 22
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1+2(1+3)(2+3)	00024187.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1+2+3 FAULT	NG01873	
N	PRO-ABN-COM		COM RMP 1+2+3 FAULT	00024191.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1+2+3 FAULT	00024192.0001001	05 MAY 22
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1+2+3 FAULT - FWSPAGE	00024193.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1(2)(3) OFF	NG01874	
N	PRO-ABN-COM		COM RMP 1(2)(3) OFF	00024197.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1(2)(3) OFF	00024198.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-COM		COM RMP 1(2)(3) OFF - FWSPAGE	00024199.0001001	25 MAY 20
	Criteria: P20323 **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-COM		**COM SATCOM DATA FAULT ◁**	NG00692	
	PRO-ABN-COM		**COM SATCOM DATA FAULT ◁**	00016899.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COM		**COM SATCOM DATA FAULT ◁**	00017548.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COM		**COM SATCOM DATA FAULT ◁ - FWSPAGE**	00010041.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COM		**COM SATCOM FAULT ◁**	NG00691	
	PRO-ABN-COM		**COM SATCOM FAULT ◁**	00016894.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM SATCOM FAULT ◁**	00017500.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COM		**COM SATCOM FAULT ◁ - FWSPAGE**	00017502.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	PRO-ABN-COM		**COM SINGLE PTT STUCK ◁**	NG01274	
E	PRO-ABN-COM		**COM SINGLE PTT STUCK ◁**	00016902.0001001	21 MAR 16
E	Criteria: 31-1414, P13023 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-COM		**COM SINGLE PTT STUCK**	00017503.0001001	21 MAR 16
	Criteria: 31-1414, P13023				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-COM		**COM SINGLE PTT STUCK - FWSPAGE**	00014765.0001001	26 NOV 12
	Criteria: 31-1414, P13023				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-COM		**COM SINGLE PTT STUCK** ⊲	NG01274	
E	PRO-ABN-COM		**COM SINGLE PTT STUCK** ⊲	00016902.0001001	21 MAR 16
	Criteria: 31-1414, P13023				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293**				
E	PRO-ABN-COM		**COM SINGLE PTT STUCK**	00017503.0003001	03 APR 18
	Criteria: 31-1558, P13023, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293**				
E	PRO-ABN-COM		**COM SINGLE PTT STUCK - FWSPAGE**	00014765.0001001	26 NOV 12
	Criteria: 31-1414, P13023				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-COM		**COM VHF 1(2)(3) /HF 1(2) EMITTING** ⊲	NG01518	
	PRO-ABN-COM		**COM VHF 1(2)(3) /HF 1(2) EMITTING** ⊲	00016892.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-COM		**COM VHF 1(2)(3)/HF 1(2) EMITTING** ⊲	00017549.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-COM		**COM VHF 3 DATA FAULT**	NG00693	
	PRO-ABN-COM		**COM VHF 3 DATA FAULT**	00016897.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COM		**COM VHF 3 DATA FAULT**	00017550.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COM		**COM VHF 3 DATA FAULT - FWSPAGE**	00010043.0001001	17 MAR 11
	Criteria: 31-1197, 31-1218, 31-1257, P6801 **Applicable to: ALL**				
	PRO-ABN-COND		**[QRH] TOO HOT COCKPIT AND CABIN TEMPERATURE IN FLIGHT**	00010753.0002001	04 NOV 20
	Criteria: K3984, SA **Applicable to: ALL**				
E	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	NG00792	
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00017295.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321**				
E	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00010720.0002001	22 APR 16
E	Criteria: 31-1492, P14826, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321**				
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE**	00018037.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321**				
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	NG00792	
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00017295.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00010720.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251, 02014**				
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE**	00018037.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014**				

	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE**	NG00792	
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE**	00018037.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	NG00792	
E	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00017295.0002001	21 MAR 16
E	Criteria: K6443, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00010720.0002001	22 APR 16
E	Criteria: 31-1492, P14826, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE**	00018037.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	NG00792	
E	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00017295.0002001	21 MAR 16
E	Criteria: K6443, SA **Applicable to: MSN 06561**				
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT**	00010720.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 06561**				
	PRO-ABN-COND		**COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE**	00018037.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 06561**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁	NG00793	
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁	00017339.0002001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁	00018038.0002001	22 APR 16
	Criteria: 31-1492, P14826, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁ **- FWSPAGE**	00018039.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁	NG00793	
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁	00017339.0002001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014, 06561**				
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁	00018038.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014, 06561**				
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT** ◁ **- FWSPAGE**	00018039.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014, 06561**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT ◁**	NG00793	
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT ◁**	00017339.0002001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-COND		**COND FWD(AFT) CARGO DUCT OVHT ◁ - FWSPAGE**	00018039.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-COND		**COND FWD(AFT) CRG HEAT FAULT ◁**	NG00800	
	PRO-ABN-COND		**COND FWD(AFT) CRG HEAT FAULT ◁**	00017341.0002001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COND		**COND FWD(AFT) CRG HEAT FAULT ◁**	00018040.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COND		**COND FWD(AFT) CRG HEAT FAULT ◁ - FWSPAGE**	00018041.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COND		**COND FWD(AFT) CRG ISOL VALVE ◁**	NG00799	
	PRO-ABN-COND		**COND FWD(AFT) CRG ISOL VALVE ◁**	00017335.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COND		**COND FWD(AFT) CRG ISOL VALVE ◁**	00018042.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COND		**COND FWD(AFT) CRG ISOL VALVE ◁ - FWSPAGE**	00018043.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
R	PRO-ABN-COND		**COND HOT AIR FAULT**	NG00795	
	PRO-ABN-COND		**COND HOT AIR FAULT**	00017296.0001001	03 NOV 22
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
R	PRO-ABN-COND		**COND HOT AIR FAULT**	00018940.0002001	03 NOV 22
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-COND		**COND HOT AIR FAULT - FWSPAGE**	00018044.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

	PRO-ABN-COND		**COND HOT AIR FAULT**	NG00795	
	PRO-ABN-COND		**COND HOT AIR FAULT**	00017296.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 01251, 02014, 06561				
	PRO-ABN-COND		**COND HOT AIR FAULT**	00018940.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 01251, 02014, 06561				
	PRO-ABN-COND		**COND HOT AIR FAULT - FWSPAGE**	00018044.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251, 02014, 06561				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND HOT AIR FAULT**	NG00795	
	PRO-ABN-COND		**COND HOT AIR FAULT**	00017296.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-COND		**COND HOT AIR FAULT - FWSPAGE**	00018044.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	NG00804	
	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	00017297.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	00018045.0001001	22 MAR 17
	Criteria: SA, A321, 321-200NX				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-COND		**COND L+R CAB FAN FAULT - FWSPAGE**	00018046.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	NG00804	
	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	00017297.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-COND		**COND L+R CAB FAN FAULT - FWSPAGE**	00018046.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	NG00804	
	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	00017297.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-COND		**COND L+R CAB FAN FAULT**	00018045.0002001	22 MAR 17
	Criteria: SA, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-COND		**COND L+R CAB FAN FAULT - FWSPAGE**	00018046.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	NG00805	
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	00017300.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	00010751.0002001	25 FEB 14
	Criteria: K2335, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT - FWSPAGE**	00010752.0002001	05 AUG 10
	Criteria: 31-1267, 31-1300, K2335, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	NG00805	
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	00017300.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	00010751.0002001	25 FEB 14
	Criteria: K2335, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	NG00805	
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	00017300.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT**	00010751.0002001	25 FEB 14
	Criteria: K2335, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-COND		**COND LAV + GALLEY FAN FAULT - FWSPAGE**	00010752.0011001	05 AUG 10
	Criteria: 31-1267, 31-1300, K2335, K6443, P9107, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to:** **MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND TRIM AIR SYS FAULT**	NG01596	
	PRO-ABN-COND		**COND TRIM AIR SYS FAULT**	00017305.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-COND		**COND TRIM AIR SYS FAULT**	00010730.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND ZONE REGUL FAULT (Primary Channel Failed)**	NG00802	
	PRO-ABN-COND		**COND ZONE REGUL FAULT (Primary Channel Failed)**	00017309.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-COND		**COND ZONE REGUL FAULT (Primary Channel Failed)**	00010744.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-COND		**COND ZONE REGUL FAULT - FWSPAGE (Primary Channel Failed)**	00018078.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND ZONE REGUL FAULT (Primary and Secondary Channels Failed)**	NG00803	
	PRO-ABN-COND		**COND ZONE REGUL FAULT (Primary and Secondary Channels Failed)**	00018304.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-COND		**COND ZONE REGUL FAULT (Primary and Secondary Channels Failed)**	00010746.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-COND		**COND ZONE REGUL FAULT - FWSPAGE (Primary and Secondary Channels Failed)**	00018081.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-CONFIG		**CONFIG L(R) SIDESTICK FAULT (By Take Over)**	NG01623	
	PRO-ABN-CONFIG		**CONFIG L(R) SIDESTICK FAULT (By Take Over)**	00018894.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-CONFIG		**CONFIG L(R) SIDESTICK FAULT BY TAKE OVER**	00018411.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	NG01650	
E	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	00017858.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	00011302.0001001	05 AUG 10
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	NG01650	
	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	00017858.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	00011302.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	NG01650	
	PRO-ABN-CONFIG		**CONFIG PARK BRK ON**	00011302.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-CONFIG		**CONFIG PITCH TRIM NOT IN T.O RANGE**	NG01624	
	PRO-ABN-CONFIG		**CONFIG PITCH TRIM NOT IN T.O RANGE**	00018895.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-CONFIG		**CONFIG PITCH TRIM NOT IN T.O RANGE**	00011773.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-CONFIG		**CONFIG RUD TRIM NOT IN T.O RANGE**	NG01625	
	PRO-ABN-CONFIG		**CONFIG RUD TRIM NOT IN T.O RANGE**	00018896.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-CONFIG		**CONFIG RUD TRIM NOT IN T.O RANGE**	00011776.0001001	25 FEB 14
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
	PRO-ABN-CONFIG		**CONFIG SLATS (FLAPS) NOT IN T.O CONFIG**	NG01626	
	PRO-ABN-CONFIG		**CONFIG SLATS (FLAPS) NOT IN T.O CONFIG**	00018897.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-CONFIG		**CONFIG SLATS (FLAPS) NOT IN T.O CONFIG**	00011758.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-CONFIG		**CONFIG SPD BRK NOT RETRACTED**	NG01627	
	PRO-ABN-CONFIG		**CONFIG SPD BRK NOT RETRACTED**	00018898.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-CONFIG		**CONFIG SPD BRK Not Retracted**	00011766.0001001	09 FEB 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-DATALINK		**DATALINK ATC FAULT**	NG00749	
	PRO-ABN-DATALINK		**DATALINK ATC FAULT**	00017149.0001001	21 MAR 16
	Criteria: 46-1062, P11247, P4502, P6801 **Applicable to: MSN 04827, 04860, 04953, 04974**				
	PRO-ABN-DATALINK		**DATALINK ATC FAULT**	00018460.0001001	21 MAR 16
	Criteria: 46-1062, P11247, P4502, P6801 **Applicable to: MSN 04827, 04860, 04953, 04974**				
	PRO-ABN-DATALINK		**DATALINK ATC FAULT - FWSPAGE**	00018461.0001001	21 MAR 16
	Criteria: 46-1062, P11247, P4502, P6801 **Applicable to: MSN 04827, 04860, 04953, 04974**				
E	PRO-ABN-DATALINK		**DATALINK ATSU FAULT**	NG00748	
E	PRO-ABN-DATALINK		**DATALINK ATSU FAULT**	00017150.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DATALINK		**DATALINK ATSU FAULT**	00018462.0001001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DATALINK		**DATALINK ATSU FAULT - FWSPAGE**	00018463.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DATALINK		**DATALINK ATSU FAULT**	NG00748	
E	PRO-ABN-DATALINK		**DATALINK ATSU FAULT**	00017150.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				
E	**Applicable to: MSN 04827, 04860, 04953, 04974**				
E	PRO-ABN-DATALINK		**DATALINK ATSU FAULT**	00018462.0001001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				
E	**Applicable to: MSN 04827, 04860, 04953, 04974**				
	PRO-ABN-DATALINK		**DATALINK ATSU FAULT - FWSPAGE**	00018463.0002001	21 MAR 16
	Criteria: 46-1062, P11247, P4502, P6801				
	Applicable to: MSN 04827, 04860, 04953, 04974				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-DATALINK		**DATALINK COMPANY FAULT**	NG00750	
E	PRO-ABN-DATALINK		**DATALINK COMPANY FAULT**	00017151.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DATALINK		**DATALINK COMPANY FAULT**	00018458.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DATALINK		**DATALINK COMPANY FAULT - FWSPAGE**	00018459.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P4502, P6801				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-DOOR		**[QRH] COCKPIT DOOR FAULT**	00009968.0001001	17 MAR 17
	Criteria: 25-1305 **Applicable to: MSN 01376**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-DOOR		**[QRH] COCKPIT DOOR FAULT**	00009968.0003001	17 MAR 17
	Criteria: 25-1305, 25-1444, K10009, K7790				
E	**Applicable to: MSN 01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	NG00710	
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	00016888.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	00018945.0004001	21 MAR 16
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS or STAIRS - FWSPAGE (In flight)**	00018944.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, 31-1492, P10383, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	NG00710	
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	00016888.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	00018945.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS or STAIRS - FWSPAGE (In flight)**	00018944.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	NG00710	
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	00016888.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	NG00710	
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	00016888.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (In flight)**	00018945.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS or STAIRS - FWSPAGE (In flight)**	00018944.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 02014, 06561**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (On ground)**	NG01673	
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (On ground)**	00019100.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-DOOR		**DOOR L(R)(FWD)(AFT) AVIONICS (On ground)**	00019096.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	NG01674	
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	00019103.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	00019101.0002001	21 MAR 16
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN - FWSPAGE (In flight)**	00019104.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, 31-1492, P10383, P14629, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	NG01674	
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	00019103.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	00019101.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN - FWSPAGE (In flight)**	00019104.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				

	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	NG01674	
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	00019103.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	NG01674	
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	00019103.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (In flight)**	00019101.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN - FWSPAGE (In flight)**	00019104.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 02014, 06561**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (On ground)**	NG01675	
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (On ground)**	00019106.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) CABIN (On ground)**	00019102.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	NG01676	
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	00019121.0001001	21 MAR 16
	Criteria: A320, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	00019120.0003001	21 MAR 16
	Criteria: 31-1492, P14629, A320, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT - FWSPAGE (In flight)**	00019122.0009001	21 MAR 16
	Criteria: 31-1334, 31-1414, 31-1492, P10383, P14629, A320, A321				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	NG01676	
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	00019121.0001001	21 MAR 16
	Criteria: A320, A321				
E	**Applicable to: MSN 01251**				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	00019120.0001001	21 MAR 16
	Criteria: A320				
	Applicable to: MSN 01251				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT - FWSPAGE (In flight)**	00019122.0001001	21 MAR 16
	Criteria: A320				
	Applicable to: MSN 01251				
	PRO-ABN-DOOR		**DOOR L(R) EMER EXIT (In flight)**	NG01676	
	PRO-ABN-DOOR		**DOOR L(R) EMER EXIT (In flight)**	00019113.0002001	21 MAR 16
	Criteria: A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-DOOR		**DOOR L(R) EMER EXIT (In flight)**	00019112.0003001	21 MAR 16
	Criteria: 31-1492, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-DOOR		**DOOR L(R) EMER EXIT - FWSPAGE (In flight)**	00019114.0009001	21 MAR 16
	Criteria: 31-1334, 31-1414, 31-1492, P10383, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	NG01676	
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	00019121.0001001	21 MAR 16
	Criteria: A320, A321				
E	**Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (In flight)**	00019120.0001001	21 MAR 16
	Criteria: A320				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT - FWSPAGE (In flight)**	00019122.0004001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, A320				
	Applicable to: MSN 02014, 06561				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-DOOR		**DOOR L(R) AFT EMER EXIT (In flight)**	NG01676	
N	PRO-ABN-DOOR		**DOOR L(R) AFT EMER EXIT (In flight)**	00022239.0001001	12 MAR 18
	Criteria: 321-200NX				
	Applicable to: MSN 11531				
N	PRO-ABN-DOOR		**DOOR L(R) AFT EMER EXIT (In flight)**	00022240.0001001	27 FEB 18
	Criteria: 321-200NX				
	Applicable to: MSN 11531				
N	PRO-ABN-DOOR		**DOOR L(R) AFT EMER EXIT - FWSPage (In flight)**	00022241.0001001	27 FEB 18
	Criteria: 321-200NX				
	Applicable to: MSN 11531				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (On ground)**	NG01677	
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (On ground)**	00019125.0001001	21 MAR 16
	Criteria: A320, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR L(R) FWD(AFT) EMER EXIT (On ground)**	00019124.0001001	21 MAR 16
	Criteria: A320, A321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	PRO-ABN-DOOR		**DOOR L(R) EMER EXIT (On ground)**	NG01677	
	PRO-ABN-DOOR		**DOOR L(R) EMER EXIT (On ground)**	00019117.0002001	21 MAR 16
	Criteria: A319 **Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	PRO-ABN-DOOR		**DOOR L(R) EMER EXIT (On ground)**	00019116.0002001	21 MAR 16
	Criteria: A319 **Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
N	PRO-ABN-DOOR		**DOOR L(R) AFT EMER EXIT (On ground)**	NG01677	
N	PRO-ABN-DOOR		**DOOR L(R) AFT EMER EXIT (On ground)**	00022242.0001001	12 MAR 18
	Criteria: 321-200NX **Applicable to: MSN 11531**				
N	PRO-ABN-DOOR		**DOOR L(R) AFT EMER EXIT (On ground)**	00022243.0001001	27 FEB 18
	Criteria: 321-200NX **Applicable to: MSN 11531**				
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG EXIT (In flight)**	NG01845	
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG EXIT (In flight)**	00022218.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG EXIT (In flight)**	00022219.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG EXIT (In flight)**	00022220.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG EXIT (On ground)**	NG01846	
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG EXIT (On ground)**	00022223.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG EXIT (On ground)**	00022224.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG FAULT**	NG01847	
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG FAULT**	00022228.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG FAULT**	00022229.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				
N	PRO-ABN-DOOR		**DOOR L(R) OVERWNG FAULT - FWSPAGE**	00022230.0002001	27 FEB 18
	Criteria: K30154, 321-200NX **Applicable to: MSN 11531**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	NG00711	
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	00016890.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	00019126.0002001	21 MAR 16
	Criteria: 31-1492, P14629, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) - FWSPAGE (In flight)**	00018946.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, 31-1492, P10383, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	NG00711	
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	00016890.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	00019126.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) - FWSPAGE (In flight)**	00018946.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	NG00711	
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	00016890.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	NG00711	
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	00016890.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (In flight)**	00019126.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) - FWSPAGE (In flight)**	00018946.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 02014, 06561**				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (On ground)**	NG01679	
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (On ground)**	00019129.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-DOOR		**DOOR FWD(AFT)(BULK) CARGO (On ground)**	00018947.0002001	21 MAR 16
	Criteria: K1420, SA **Applicable to: ALL**				
E	PRO-ABN-EIS		**[QRH] Display Unit Failure**	00021170.0005001	28 MAY 20
E	Criteria: P11614, P6578, SA **Applicable to: MSN 05528-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-EIS		**[QRH] Display Unit Failure**	00021170.0002001	28 MAY 20
	Criteria: P6578, SA **Applicable to: MSN 02734-03710, 03733-05345**				
	PRO-ABN-EIS		**[QRH] Display Unit Failure**	00021170.0001001	28 MAY 20
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	NG00700	
E	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	00017307.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	00010057.0002001	10 AUG 10
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT - FWSPAGE**	00010058.0001001	10 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	NG00700	
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	00017307.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	00010057.0002001	10 AUG 10
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01251**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT - FWSPAGE**	00010058.0001001	10 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	NG00700	
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT**	00010057.0002001	10 AUG 10
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-EIS		**EIS DMC 1(2)(3) FAULT - FWSPAGE**	00010058.0001001	10 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-EIS		**EIS DMC/FWC COM FAULT**	NG01499	
E	PRO-ABN-EIS		**EIS DMC/FWC COM FAULT**	00017317.0002001	21 MAR 16
E	Criteria: 31-1373, 31-1414, P11819, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-EIS		**EIS DMC/FWC COM FAULT**	00014308.0001001	25 FEB 14
E	Criteria: 31-1373, 31-1414, P11819 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] C/B Tripped**	00012643.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
E	Criteria: P1970, SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
E	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0002001	17 MAR 17
	Criteria: P4789, SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01158, 01251**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
E	Criteria: P1970, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01158, 01251**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
	Criteria: A319, A320				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0002001	17 MAR 17
	Criteria: P4789, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 01158, 01251**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01158, 01251**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0008001	17 MAR 17
	Criteria: K1806, P1872, P1875, SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02014**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
	Criteria: P1970, SA				
E	**Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02014**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02014**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02014**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
E	Criteria: P4789, P5638, SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 02014**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 02014**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02014**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0003001	17 MAR 17
	Criteria: K1806, P1872, SA **Applicable to: MSN 02321**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02321**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
E	Criteria: P1970, SA **Applicable to: MSN 02321**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02321**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
E	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX **Applicable to: MSN 02321**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02321**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
	Criteria: A319, A320				
E	**Applicable to: MSN 02321**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0002001	17 MAR 17
	Criteria: P4789, SA				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321				
	Applicable to: MSN 02321				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA				
	Applicable to: MSN 02321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02321**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0015001	05 MAY 22
	Criteria: K1806, K6443, P1872, P1875, SA **Applicable to: MSN 02734, 03032**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02734, 03032**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
E	Criteria: P1970, SA **Applicable to: MSN 02734, 03032**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02734, 03032**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
E	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX **Applicable to: MSN 02734, 03032**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02734, 03032**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 02734, 03032**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02734, 03032**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02734, 03032				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02734, 03032				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734, 03032**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02734, 03032				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
	Criteria: P4789, P5638, SA				
E	**Applicable to: MSN 02734, 03032**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02734, 03032				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321				
	Applicable to: MSN 02734, 03032				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA				
	Applicable to: MSN 02734, 03032				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02734, 03032				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0013001	05 MAY 22
E	Criteria: K1806, K6443, P1872, SA **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
E	Criteria: P1970, SA **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
E	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
	Criteria: P4789, P5638, SA				
E	**Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321				
	Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0012001	05 MAY 22
	Criteria: K1806, K6443, SA **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
	Criteria: P1970, SA				
E	**Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
E	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
	Criteria: P4789, P5638, SA				
E	**Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321				
	Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02896, 02904, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0012001	05 MAY 22
	Criteria: K1806, K6443, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
	Criteria: P1970, SA				
E	**Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
E	Criteria: P4576, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
E	Criteria: P4789, P5638, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03035, 03047, 03111, 04953, 04974**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0012001	05 MAY 22
	Criteria: K1806, K6443, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
E	Criteria: P1970, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
E	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0002001	17 MAR 17
	Criteria: A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
E	Criteria: P4789, P5638, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				

E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0015001	05 MAY 22
	Criteria: K1806, K6443, P1872, P1875, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 04827, 04860**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
E	Criteria: P1970, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 04827, 04860**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 04827, 04860**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
E	Criteria: P4576, SA **Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 04827, 04860**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
	Criteria: P4789, P5638, SA				
E	**Applicable to: MSN 04827, 04860**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA				
	Applicable to: MSN 04827, 04860				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 04827, 04860				

E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0014001	05 MAY 22
	Criteria: K1806, K6443, P1873, SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
	Criteria: P1970, SA				
E	**Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
E	Criteria: A319, A320 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
E	Criteria: P4576, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
E	Criteria: P4789, P5638, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0012001	05 MAY 22
	Criteria: K1806, K6443, SA **Applicable to: MSN 06895**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 06895**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0002001	17 MAR 17
	Criteria: P1970, SA				
E	**Applicable to: MSN 06895**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06895				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 06895				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06895				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0002001	17 MAR 17
	Criteria: A321				
E	**Applicable to: MSN 06895**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06895				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 06895				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 06895				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 06895**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06895				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
	Criteria: P4789, P5638, SA				
E	**Applicable to: MSN 06895**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 06895				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321				
	Applicable to: MSN 06895				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA				
	Applicable to: MSN 06895				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06895				

E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0013001	05 MAY 22
	Criteria: K1806, K6443, P1872, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
N	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0004001	05 MAY 22
	Criteria: P1970, P20240, P20323, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0001001	17 MAR 17
	Criteria: A319, A320				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
	Criteria: P4576, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
	Criteria: P4789, P5638, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 11482, 11522, 11572, 11597**				

E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING**	NG01107	
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION**	00018562.0013001	05 MAY 22
E	Criteria: K1806, K6443, P1872, SA **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 22 - AUTO FLIGHT**	00012522.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 11531**				
N	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS**	00018533.0004001	05 MAY 22
	Criteria: P1970, P20240, P20323, SA **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 25 - EMERGENCY EQUIPMENTS**	00012524.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 11531**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE**	00012525.0003001	17 MAR 17
E	Criteria: 26-1103, K1806, SA, 320-200N, 321-200NX **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 27 - FLIGHT CONTROLS**	00018017.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 11531**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL**	00018018.0002001	17 MAR 17
E	Criteria: A321 **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 29 - HYDRAULIC**	00012528.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 30 - ICE AND RAIN PROTECTION**	00018539.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 31 - INDICATING AND RECORDING**	00018538.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 11531**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR**	00018537.0002001	17 MAR 17
E	Criteria: P4576, SA **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 33 - LIGHTS**	00012532.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 11531**				
E	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION**	00018550.0005001	17 MAR 17
E	Criteria: P4789, P5638, SA **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 36 - PNEUMATIC**	00018541.0002001	17 MAR 17
	Criteria: K1806, SA **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 49 - APU**	00018019.0002001	17 MAR 17
	Criteria: P5768, A319, A320, A321 **Applicable to: MSN 11531**				
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 70 - ENGINES**	00018540.0002001	17 MAR 17
	Criteria: P4121, SA **Applicable to: MSN 11531**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**[QRH] ELEC EMER CONFIG SYS REMAINING - 80 - MISCELLANEOUS**	00012537.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	NG01097	
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017346.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014				
E	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017853.0003001	01 MAR 18
	Criteria: 31-1414, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014**				
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT - FWSPAGE**	00017867.0021001	02 MAY 23
	Criteria: 31-1373, 31-1414, K1806, P1970, P4121, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	NG01097	
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017346.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017853.0001001	01 MAR 18
	Criteria: SA				
	Applicable to: MSN 01251				
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT - FWSPAGE**	00017867.0007001	02 MAY 23
	Criteria: K1806, P1970, P4121, SA				
	Applicable to: MSN 01251				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	NG01097	
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017346.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	NG01097	
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017346.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02321				
E	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017853.0003001	01 MAR 18
	Criteria: 31-1414, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02321**				
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT - FWSPAGE**	00017867.0023001	02 MAY 23
	Criteria: 31-1373, 31-1414, K1806, P1970, P4121, P4808, SA				
	Applicable to: MSN 02321				
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	NG01097	
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017346.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017853.0004001	01 MAR 18
	Criteria: 31-1414, P13023, P4576, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT - FWSPAGE**	00017867.0028001	02 MAY 23
	Criteria: 31-1373, 31-1414, K1806, K6443, P11819, P13023, P1970, P4121, P4576, P4808, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	NG01097	
	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017346.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT**	00017853.0004001	01 MAR 18
	Criteria: 31-1414, P13023, P4576, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC AC BUS 1 FAULT - FWSPAGE**	00017867.0035001	02 MAY 23
	Criteria: J3527, K1806, K6443, P11819, P13023, P1970, P4121, P4576, P4808, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	NG01098	
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017348.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017877.0002001	01 MAR 18
	Criteria: 31-1414, P11620, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT - FWSPAGE**	00017878.0004001	04 JUN 19
	Criteria: 31-1267, 31-1300, P4789, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	NG01098	
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017348.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017877.0001001	01 MAR 18
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT - FWSPAGE**	00017878.0004001	04 JUN 19
	Criteria: 31-1267, 31-1300, P4789, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	NG01098	
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017348.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	NG01098	
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017348.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017877.0002001	01 MAR 18
	Criteria: 31-1414, P11620, P13023, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT - FWSPAGE**	00017878.0005001	04 JUN 19
	Criteria: 31-1267, 31-1300, K6443, P4789, P9107, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	NG01098	
	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017348.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT**	00017877.0002001	01 MAR 18
	Criteria: 31-1414, P11620, P13023, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC AC BUS 2 FAULT - FWSPAGE**	00017878.0007001	05 MAY 22
	Criteria: J3527, K6443, P4789, P9107, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC AC ESS BUS ALTN**	NG01658	
E	PRO-ABN-ELEC		**ELEC AC ESS BUS ALTN**	00017356.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC AC ESS BUS ALTN**	00017893.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	NG01099	
	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	00017357.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	00012502.0002001	24 MAR 11
	Criteria: 31-1334, 31-1414, P10383, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT - FWSPAGE**	00018552.0014001	02 MAY 23
	Criteria: 31-1267, 31-1300, K1806, P1970, P4789, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	NG01099	
	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	00017357.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	00012502.0001001	05 MAR 13
	Criteria: SA **Applicable to: MSN 01251**				
R	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT - FWSPAGE**	00018552.0014001	02 MAY 23
	Criteria: 31-1267, 31-1300, K1806, P1970, P4789, P9107, SA **Applicable to: MSN 01251**				
E	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	NG01099	
	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT**	00017357.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
R	PRO-ABN-ELEC		**ELEC AC ESS BUS FAULT - FWSPAGE**	00018552.0014001	02 MAY 23
	Criteria: 31-1267, 31-1300, K1806, P1970, P4789, P9107, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	NG01100	
	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	00017349.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	00012504.0002001	03 DEC 13
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED - FWSPAGE**	00018554.0004001	21 MAR 16
	Criteria: K1806, P1970, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	NG01100	
	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	00017349.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	00012504.0001001	19 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED - FWSPAGE**	00018554.0004001	21 MAR 16
	Criteria: K1806, P1970, SA **Applicable to: MSN 01251**				

	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	NG01100	
	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED**	00017349.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**ELEC AC ESS BUS SHED - FWSPAGE**	00018554.0004001	21 MAR 16
	Criteria: K1806, P1970, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	NG01093	
	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	00017362.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	00012490.0002001	18 MAR 11
	Criteria: P3524, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC APU GEN FAULT - FWSPAGE**	00012491.0001001	18 MAR 11
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	NG01093	
	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	00017362.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	00012490.0002001	18 MAR 11
	Criteria: P3524, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	NG01093	
	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	00017362.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
	PRO-ABN-ELEC		**ELEC APU GEN FAULT**	00012490.0002001	18 MAR 11
	Criteria: P3524, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-ELEC		**ELEC APU GEN FAULT - FWSPAGE**	00012491.0008001	18 MAR 11
	Criteria: P6380, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
	PRO-ABN-ELEC		**ELEC BAT 1(2) FAULT**	NG01094	
	PRO-ABN-ELEC		**ELEC BAT 1(2) FAULT**	00017367.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ELEC		**ELEC BAT 1(2) FAULT**	00017894.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC BAT 1(2) FAULT - FWSPAGE**	00017895.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC BAT 1(2) OFF**	NG01095	
	PRO-ABN-ELEC		**ELEC BAT 1(2) OFF**	00017371.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC BAT 1(2) OFF**	00018943.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC BAT 1(2) OFF - FWSPAGE**	00012495.0001001	19 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC BCL 1(2) FAULT**	NG01096	
	PRO-ABN-ELEC		**ELEC BCL 1(2) FAULT**	00017377.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC BCL 1(2) FAULT**	00012496.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC BCL 1(2) FAULT - FWSPAGE**	00012497.0001001	19 AUG 10
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	NG01111	
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00017358.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00012545.0001001	22 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT - FWSPAGE**	00012546.0002001	21 MAR 16
	Criteria: 31-1257, 31-1267, 31-1300, K1806, P5706, P6437, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				

	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	NG01111	
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00017358.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	NG01111	
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00017358.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02014, 02734, 03032, 04827, 04860				
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00012545.0001001	22 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 02014, 02734, 03032, 04827, 04860**				
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT - FWSPAGE**	00012546.0009001	21 MAR 16
	Criteria: 31-1257, 31-1267, 31-1300, K1806, P1872, P1875, P5706, P9107, SA				
	Applicable to: MSN 02014, 02734, 03032, 04827, 04860				

E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	NG01111	
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00017358.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00012545.0001001	22 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT - FWSPAGE**	00012546.0006001	21 MAR 16
	Criteria: 31-1257, 31-1267, 31-1300, K1806, P1872, P20240, P20323, P21977, P22284, P5706, P9107, SA				
E	**Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	NG01111	
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00017358.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00012545.0001001	22 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT - FWSPAGE**	00012546.0021001	21 MAR 16
	Criteria: K1806, P1873, P5706, P9107, SA				
	Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	NG01111	
	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00017358.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				
N	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT**	00012545.0003001	03 NOV 22
	Criteria: P20240, P20323, P21977, P22284, SA				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC DC BAT BUS FAULT - FWSPAGE**	00012546.0006001	21 MAR 16
	Criteria: 31-1257, 31-1267, 31-1300, K1806, P1872, P20240, P20323, P21977, P22284, P5706, P9107, SA				
E	**Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	NG01101	
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00017350.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00012507.0001001	15 DEC 15
	Criteria: 31-1373, 31-1414, K1806, P11819, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT - FWSPAGE**	00018555.0011001	22 MAR 17
	Criteria: 31-1257, K1806, P4121, P4789, P5706, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	NG01101	
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00017350.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00012507.0001001	15 DEC 15
	Criteria: 31-1373, 31-1414, K1806, P11819, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
N	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	NG01101	
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00017350.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11228, 11293				
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00012507.0001001	15 DEC 15
	Criteria: 31-1373, 31-1414, K1806, P11819, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11228, 11293				
R	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT - FWSPAGE**	00018555.0012001	02 MAY 23
	Criteria: K1806, K6443, P4121, P4789, P5706, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11228, 11293**				
N	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	NG01101	
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00017350.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139				
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00012507.0001001	15 DEC 15
	Criteria: 31-1373, 31-1414, K1806, P11819, SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139				
R	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT - FWSPAGE**	00018555.0014001	02 MAY 23
	Criteria: 31-1575, J3527, K1806, K6443, P20610, P4121, P4789, P5706, SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139				
N	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	NG01101	
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00017350.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00012507.0001001	15 DEC 15
	Criteria: 31-1373, 31-1414, K1806, P11819, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
N	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT - FWSPAGE**	00018555.0020001	18 NOV 21
	Criteria: J3527, K1806, K6443, P20240, P20610, P4121, P4789, P5706, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
N	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	NG01101	
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00017350.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11531				
	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT**	00012507.0001001	15 DEC 15
	Criteria: 31-1373, 31-1414, K1806, P11819, SA				
	Applicable to: MSN 11531				
N	PRO-ABN-ELEC		**ELEC DC BUS 1 FAULT - FWSPAGE**	00018555.0019001	18 NOV 21
	Criteria: K1806, K6443, P20240, P20610, P4121, P4789, P5706, SA				
	Applicable to: MSN 11531				
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017898.0004001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT - FWSPAGE**	00017899.0012001	02 MAY 23
	Criteria: 31-1257, 31-1334, 31-1373, 31-1414, P4789, P5706, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017898.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT - FWSPAGE**	00017899.0004001	22 MAR 17
	Criteria: 31-1257, P4789, P6437, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017898.0004001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P9107, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
R	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT - FWSPAGE**	00017899.0013001	02 MAY 23
	Criteria: 31-1334, 31-1373, 31-1414, K6443, P10383, P11819, P13023, P4789, P5706, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017898.0004001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P9107, SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324				
R	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT - FWSPAGE**	00017899.0015001	02 MAY 23
	Criteria: J3527, K6443, P10383, P11819, P13023, P4789, P5706, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293				
E	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017898.0010001	09 NOV 21
	Criteria: P11819, P13023, P20614, P21265, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				
R	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT - FWSPAGE**	00017899.0015001	02 MAY 23
	Criteria: J3527, K6443, P10383, P11819, P13023, P4789, P5706, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017898.0012001	09 NOV 21
	Criteria: P11819, P13023, P20240, P20614, P21265, P21977, P22284, P9107, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT - FWSPAGE**	00017899.0017001	18 NOV 21
	Criteria: J3527, K6443, P10383, P11819, P13023, P20240, P20323, P21977, P22284, P4789, P5706, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	NG01102	
	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017352.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11531				
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT**	00017898.0012001	09 NOV 21
	Criteria: P11819, P13023, P20240, P20614, P21265, P21977, P22284, P9107, SA				
	Applicable to: MSN 11531				
N	PRO-ABN-ELEC		**ELEC DC BUS 2 FAULT - FWSPAGE**	00017899.0016001	18 NOV 21
	Criteria: K6443, P10383, P11819, P13023, P20240, P20323, P21977, P22284, P4789, P5706, SA				
	Applicable to: MSN 11531				
R	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00018565.0004001	21 MAR 16
	Criteria: 31-1414, K1806, P13023, P20240, P21977, P22284, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
R	PRO-ABN-ELEC		**ELEC DC BUS 1 + 2 FAULT - FWSPAGE**	00018566.0017001	02 MAY 23
	Criteria: 31-1257, 31-1414, K1806, P4121, P4789, P5706, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
R	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00018565.0002001	21 MAR 16
	Criteria: K1806, SA				
	Applicable to: MSN 01251				
R	PRO-ABN-ELEC		**ELEC DC BUS 1 + 2 FAULT - FWSPAGE**	00018566.0010001	02 MAY 23
	Criteria: 31-1257, K1806, P4121, P4789, P6437, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
E	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00018565.0004001	21 MAR 16
	Criteria: 31-1414, K1806, P13023, P20240, P21977, P22284, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
R	PRO-ABN-ELEC		**ELEC DC BUS 1 + 2 FAULT - FWSPAGE**	00018566.0018001	02 MAY 23
	Criteria: 31-1414, K1806, K6443, P13023, P4121, P4789, P5706, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00018565.0004001	21 MAR 16
	Criteria: 31-1414, K1806, P13023, P20240, P21977, P22284, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
R	PRO-ABN-ELEC		**ELEC DC BUS 1 + 2 FAULT - FWSPAGE**	00018566.0030001	02 MAY 23
	Criteria: 31-1414, K1806, K6443, P13023, P4121, P4789, P5706, SA, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293				
E	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00018565.0004001	21 MAR 16
	Criteria: 31-1414, K1806, P13023, P20240, P21977, P22284, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
R	PRO-ABN-ELEC		**ELEC DC BUS 1 + 2 FAULT - FWSPAGE**	00018566.0020001	18 NOV 21
	Criteria: 31-1575, J3527, K1806, K6443, P13023, P20610, P4121, P4789, P5706, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
R	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00018565.0004001	21 MAR 16
	Criteria: 31-1414, K1806, P13023, P20240, P21977, P22284, SA				
E	**Applicable to: MSN 11482, 11522, 11572, 11597**				
N	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT - FWSPAGE**	00018566.0035001	18 NOV 21
	Criteria: J3527, K1806, K6443, P13023, P20240, P20610, P4121, P4789, P5706, SA				
	Applicable to: MSN 11482, 11522, 11572, 11597				
R	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	NG01105	
	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00017353.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11531				
E	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT**	00018565.0004001	21 MAR 16
	Criteria: 31-1414, K1806, P13023, P20240, P21977, P22284, SA				
E	**Applicable to: MSN 11531**				
N	PRO-ABN-ELEC		**ELEC DC BUS 1+2 FAULT - FWSPAGE**	00018566.0036001	18 NOV 21
	Criteria: K1806, K6443, P13023, P20240, P20610, P4121, P4789, P5706, SA, A321				
	Applicable to: MSN 11531				
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	NG01112	
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	00017359.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	00018557.0006001	21 MAR 16
	Criteria: 31-1414, K1806, P13023, P5768, A319, A320, A321				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG - FWSPAGE**	00018558.0004001	22 MAR 18
	Criteria: K1806, K2762, K4913, P5768, A319, A320, A321				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				

	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	NG01112	
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	00017359.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	00018557.0003001	21 MAR 16
	Criteria: K1806, P5768, A320				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG - FWSPAGE**	00018558.0004001	22 MAR 18
	Criteria: K1806, K2762, K4913, P5768, A319, A320, A321				
	Applicable to: MSN 01251				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	NG01112	
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	00017359.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	NG01112	
	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	00017359.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC DC EMER CONFIG**	00018557.0007001	18 MAR 20
	Criteria: 31-1575, K1806, P13023, P20610, P5768, A320, A321				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC DC EMER CONFIG - FWSPAGE**	00018558.0008001	18 MAR 20
	Criteria: 31-1575, K1806, K2762, K4913, P20610, P21265, P21423, P5768, A320, A321				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0005001	05 MAR 13
	Criteria: 31-1373, 31-1414, K1806, P10402, P11819, P13023, P6319, P7009, P7455, P8315, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0021001	02 MAY 23
	Criteria: 31-1373, 31-1414, 33-1057, IAE, K1806, P6142, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014				
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0001001	05 MAR 13
	Criteria: K1806, SA				
	Applicable to: MSN 01251				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0015001	02 MAY 23
	Criteria: 33-1057, IAE, K1806, P6142, SA				
	Applicable to: MSN 01251				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0018001	10 MAY 21
	Criteria: 31-1373, 31-1414, K1806, P6319, P7009, P7455, P8315, SA **Applicable to: MSN 02321**				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0021001	02 MAY 23
	Criteria: 31-1373, 31-1414, 33-1057, IAE, K1806, P6142, SA **Applicable to: MSN 02321**				

N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 03032**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0018001	10 MAY 21
	Criteria: 31-1373, 31-1414, K1806, P6319, P7009, P7455, P8315, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 03032**				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0023001	02 MAY 23
	Criteria: 31-1373, 31-1414, IAE, K1806, P11819, P13023, P4576, P6142, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 03032**				

N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0018001	10 MAY 21
	Criteria: 31-1373, 31-1414, K1806, P6319, P7009, P7455, P8315, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111**				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0011001	02 MAY 23
	Criteria: 31-1373, 31-1414, K1806, P11819, P13023, P4576, P6142, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111**				

N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0005001	05 MAR 13
	Criteria: 31-1373, 31-1414, K1806, P10402, P11819, P13023, P6319, P7009, P7455, P8315, SA				
	Applicable to: MSN 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0011001	02 MAY 23
	Criteria: 31-1373, 31-1414, K1806, P11819, P13023, P4576, P6142, SA				
	Applicable to: MSN 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0005001	05 MAR 13
	Criteria: 31-1373, 31-1414, K1806, P10402, P11819, P13023, P6319, P7009, P7455, P8315, SA				
	Applicable to: MSN 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0023001	02 MAY 23
	Criteria: 31-1373, 31-1414, IAE, K1806, P11819, P13023, P4576, P6142, SA				
	Applicable to: MSN 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0029001	03 NOV 21
	Criteria: PW1100G-JM, K1806, P10402, P11819, P13023, P6319, P7455, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0030001	02 MAY 23
	Criteria: 31-1575, PW1100G-JM, K1806, P11819, P13023, P20610, P21265, P21423, P4576, P6142, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635				
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0031001	03 NOV 21
	Criteria: 31-1558, PW1100G-JM, K1806, P10402, P11819, P13023, P6319, P7455, SA				
	Applicable to: MSN 08635				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0030001	02 MAY 23
	Criteria: 31-1575, PW1100G-JM, K1806, P11819, P13023, P20610, P21265, P21423, P4576, P6142, SA				
	Applicable to: MSN 08635				
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139				
E	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0034001	03 NOV 21
	Criteria: PW1100G-JM, K1806, P10402, P11819, P13023, P20466, P21265, P6319, P7455, SA				
E	**Applicable to: MSN 10949, 11139**				
R	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0030001	02 MAY 23
	Criteria: 31-1575, PW1100G-JM, K1806, P11819, P13023, P20610, P21265, P21423, P4576, P6142, SA				
	Applicable to: MSN 10949, 11139				
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11228, 11293				
E	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0034001	03 NOV 21
	Criteria: PW1100G-JM, K1806, P10402, P11819, P13023, P20466, P21265, P6319, P7455, SA				
E	**Applicable to: MSN 11228, 11293**				
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	NG01103	
	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00017354.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT**	00012511.0040001	03 NOV 21
	Criteria: PW1100G-JM, K1806, P10402, P11819, P13023, P20240, P20323, P20466, P21265, P21977, P22284, P6319, P7455, SA				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-ELEC		**ELEC DC ESS BUS FAULT - FWSPAGE**	00018671.0035001	03 NOV 22
	Criteria: PW1100G-JM, K1806, P11819, P13023, P20240, P20610, P21265, P21423, P21977, P22284, P4576, P6142, SA **Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	NG01104	
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	00017355.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	00012513.0001001	30 MAR 12
	Criteria: 31-1373, 31-1414, K1806, P11819, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED - FWSPAGE**	00018561.0005001	17 MAR 17
	Criteria: 31-1334, 31-1373, 31-1414, 31-1575, K1806, P10383, P11819, P20610, P21265, P21423, A319, A320, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	NG01104	
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	00017355.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	00012513.0001001	30 MAR 12
	Criteria: 31-1373, 31-1414, K1806, P11819, SA **Applicable to: MSN 01251**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED - FWSPAGE**	00018561.0002001	21 MAR 16
	Criteria: K1806, A320 **Applicable to: MSN 01251**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	NG01104	
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	00017355.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ELEC		**ELEC DC ESS BUS SHED**	00012513.0001001	30 MAR 12
	Criteria: 31-1373, 31-1414, K1806, P11819, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
R	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018642.0006001	03 NOV 21
E	Criteria: 31-1414, K1806, P13023, P5768, A319, A320, A321 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-ELEC		**ELEC EMER CONFIG - FWSPAGE**	00018643.0023001	17 MAY 21
	Criteria: 31-1257, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, K1806, P10383, P13023, P4121, P5706, P5768, P6437, P9107, A319, A320				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018642.0003001	03 NOV 21
	Criteria: K1806, P5768, A320				
	Applicable to: MSN 01251				
	PRO-ABN-ELEC		**ELEC EMER CONFIG - FWSPAGE**	00018643.0011001	03 DEC 19
	Criteria: 31-1257, 31-1267, 31-1300, K1806, P4121, P5768, P6437, A320				
	Applicable to: MSN 01251				
E	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
R	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018642.0006001	03 NOV 21
	Criteria: 31-1414, K1806, P13023, P5768, A319, A320, A321				
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-ELEC		**ELEC EMER CONFIG - FWSPAGE**	00018643.0026001	17 MAY 21
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, K1806, P4121, P5706, P5768, P6437, P8211, A320				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018642.0006001	03 NOV 21
	Criteria: 31-1414, K1806, P13023, P5768, A319, A320, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ELEC		**ELEC EMER CONFIG - FWSPAGE**	00018643.0031001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, K1806, P10383, P13023, P4121, P5706, P9107, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				

E	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
R	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018642.0006001	03 NOV 21
	Criteria: 31-1414, K1806, P13023, P5768, A319, A320, A321				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ELEC		**ELEC EMER CONFIG - FWSPAGE**	00018643.0025001	17 MAY 21
	Criteria: 31-1492, J3527, K1806, P10383, P13023, P4121, P5706, P5768, P9107, A320				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				

E	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
R	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018642.0006001	03 NOV 21
	Criteria: 31-1414, K1806, P13023, P5768, A319, A320, A321				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ELEC		**ELEC EMER CONFIG - FWSPAGE**	00018643.0027001	17 MAY 21
	Criteria: J3527, K1806, P10383, P13023, P15992, P4121, P5706, P5768, P9107, A320, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

E	PRO-ABN-ELEC		**ELEC EMER CONFIG**	NG01106	
	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018283.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
R	PRO-ABN-ELEC		**ELEC EMER CONFIG**	00018642.0006001	03 NOV 21
	Criteria: 31-1414, K1806, P13023, P5768, A319, A320, A321				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC EMER CONFIG - FWSPAGE**	00018643.0032001	17 MAY 21
	Criteria: 31-1575, J3527, K1806, P10383, P13023, P15992, P20610, P4121, P5706, P5768, P9107, A320, A321, 320-200N, 321-200NX				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ELEC		**ELEC EMER GEN 1 LINE OFF**	NG01660	
	PRO-ABN-ELEC		**ELEC EMER GEN 1 LINE OFF**	00017382.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC EMER GEN 1 LINE OFF**	00012550.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC ESS BUSES ON BAT**	NG01659	
	PRO-ABN-ELEC		**ELEC ESS BUSES ON BAT**	00018284.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC ESS BUSES ON BAT**	00018021.0002001	21 MAR 16
	Criteria: P5768, A319, A320, A321				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC GEN 1(2) or APU GEN OVERLOAD**	NG01108	
	PRO-ABN-ELEC		**ELEC GEN 1(2) or APU GEN OVERLOAD**	00017363.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC GEN 1(2) or APU GEN OVERLOAD**	00018023.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC GEN 1(2) or APU GEN OVERLOAD - FWSPAGE**	00018024.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA				
	Applicable to: ALL				
E	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	NG01090	
	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	00017360.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	00018025.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT - FWSPAGE**	00018026.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	NG01090	
	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	00017360.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	00018025.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	NG01090	
	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	00017360.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531				
	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT**	00018025.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC GEN 1(2) FAULT - FWSPAGE**	00018026.0002001	21 MAR 16
E	Criteria: P6380, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				

E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	NG01091	
E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	00017361.0002001	22 APR 16
E	Criteria: 31-1492, P14826, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	00018027.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF - FWSPAGE**	00018028.0001001	21 MAR 16
E	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	NG01091	
	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	00017361.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014, 06561**				
	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	00018027.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 02014, 06561**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF - FWSPAGE**	00018028.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01251, 02014, 06561**				
	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	NG01091	
	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	00018027.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	NG01091	
E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	00017361.0002001	22 APR 16
	Criteria: 31-1492, P14826, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF**	00018027.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531				
E	PRO-ABN-ELEC		**ELEC GEN 1(2) OFF - FWSPAGE**	00018028.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, P6380, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	NG01092	
	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00017366.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00018029.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED - FWSPAGE**	00018030.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	NG01092	
	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00017366.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00018029.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED - FWSPAGE**	00018030.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, P6380				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	NG01092	
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00017366.0002001	24 MAR 20
	Criteria: 31-1575, P10383, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00018029.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED - FWSPAGE**	00018030.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	NG01092	
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00017366.0002001	24 MAR 20
	Criteria: 31-1575, P10383, P20610				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED**	00018029.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) DISCONNECTED - FWSPAGE**	00018030.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, P6380				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) FILTER CLOG**	NG01662	
E	PRO-ABN-ELEC		**ELEC IDG 1(2) FILTER CLOG**	00018937.0001001	21 MAR 16
	Criteria: P13489				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) FILTER CLOG**	00015561.0001001	05 NOV 15
	Criteria: P13489				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO LVL**	NG01663	
E	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO LVL**	00018939.0001001	21 MAR 16
	Criteria: P13489				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO LVL**	00015560.0001001	05 NOV 15
	Criteria: P13489				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	NG01089	
	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	00018285.0001001	25 SEP 17
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	00018031.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT - FWSPAGE**	00018032.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	NG01089	
	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	00018285.0001001	25 SEP 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	00018031.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	NG01089	
	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	00018285.0001001	25 SEP 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531				
	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT**	00018031.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531				
E	PRO-ABN-ELEC		**ELEC IDG 1(2) OIL LO PR/OVHT - FWSPAGE**	00018032.0002001	21 MAR 16
	Criteria: P6380, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC STATIC INV FAULT**	NG01661	
	PRO-ABN-ELEC		**ELEC STATIC INV FAULT**	00017380.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC STAT INV FAULT**	00012549.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ELEC		**ELEC TR 1(2) FAULT**	NG01109	
	PRO-ABN-ELEC		**ELEC TR 1(2) FAULT**	00017373.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC TR 1(2) FAULT**	00012541.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ELEC		**ELEC TR 1(2) FAULT - FWSPAGE**	00018531.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**[QRH] ENG RELIGHT IN FLIGHT**	00012594.0040001	13 DEC 17
	Criteria: PW1100G-JM, P15993, P8564				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	PRO-ABN-ENG		**[QRH] ENG RELIGHT IN FLIGHT**	00012594.0002001	05 MAR 19
	Criteria: G-V2524-A5				
	Applicable to: MSN 02321, 02887				
	PRO-ABN-ENG		**[QRH] ENG RELIGHT IN FLIGHT**	00012594.0015001	17 MAR 17
	Criteria: 31-1331, CFM56-5B				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924-03002, 03035-03211				
	PRO-ABN-ENG		**[QRH] ENG RELIGHT IN FLIGHT**	00012594.0014001	17 MAR 17
	Criteria: 31-1331, G-V2524-A5, G-V2527-A5, G-V2527E-A5, G-V2533-A5, P8564				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	PRO-ABN-ENG		**[QRH] ENG RELIGHT IN FLIGHT**	00012594.0026001	17 MAR 17
	Criteria: 31-1331, CFM56-5B, P8564, P9873				
	Applicable to: MSN 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0004001	17 MAR 17
	Criteria: 31-1492, PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ENG		**ECAM - Note**	00017540.0002001	04 NOV 15
	Criteria: 31-1492, V2500-A5				
	Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
E	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0003001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0004001	21 MAR 17
	Criteria: 31-1492				
	Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0001001	31 AUG 17
	Criteria: 31-1492				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0005001	10 MAY 21
E	Criteria: 26-1103, 31-1492, P14629, P15347 **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0002001	31 AUG 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 01143, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				

E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0004001	17 MAR 17
E	Criteria: 31-1492, PW1100G-JM, P14629, P15993 **Applicable to: MSN 01158**				
	PRO-ABN-ENG		**ECAM - Note**	00017540.0002001	04 NOV 15
	Criteria: 31-1492, V2500-A5 **Applicable to: MSN 01158**				
E	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0003001	17 MAR 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 01158**				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0004001	21 MAR 17
	Criteria: 31-1492 **Applicable to: MSN 01158**				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 01158**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0001001	31 AUG 17
	Criteria: 31-1492 **Applicable to: MSN 01158**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01158**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0002001	31 AUG 17
	Criteria: 31-1492				
	Applicable to: MSN 01158				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0002001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01158**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 02924, 03002, 03058, 03180, 03211				
	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 02924, 03002, 03058, 03180, 03211				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0005001	21 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 02924, 03002, 03058, 03180, 03211				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 02924, 03002, 03058, 03180, 03211**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0010001	31 AUG 17
	Criteria: 31-1492, CFMI				
	Applicable to: MSN 02924, 03002, 03058, 03180, 03211				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 02924, 03002, 03058, 03180, 03211**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0005001	10 MAY 21
	Criteria: 26-1103, 31-1492, P14629, P15347				
E	**Applicable to: MSN 02924, 03002, 03058, 03180, 03211**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0002001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 02924, 03002, 03058, 03180, 03211**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 03035, 03047, 03111				
	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 03035, 03047, 03111				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0005001	21 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 03035, 03047, 03111				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 03035, 03047, 03111**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0010001	31 AUG 17
	Criteria: 31-1492, CFMI				
	Applicable to: MSN 03035, 03047, 03111				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 03035, 03047, 03111**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0002001	31 AUG 17
	Criteria: 31-1492				
	Applicable to: MSN 03035, 03047, 03111				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0002001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 03035, 03047, 03111**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0004001	17 MAR 17
	Criteria: 31-1492, PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ECAM - Note**	00017540.0002001	04 NOV 15
	Criteria: 31-1492, V2500-A5				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0004001	17 MAR 17
	Criteria: 31-1492, P14629, A321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0004001	21 MAR 17
	Criteria: 31-1492				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0001001	31 AUG 17
	Criteria: 31-1492				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0005001	10 MAY 21
	Criteria: 26-1103, 31-1492, P14629, P15347				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0003001	31 AUG 17
	Criteria: 31-1492, P14629, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0005001	21 MAR 17
	Criteria: 31-1492, CFM56-5B **Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0012001	31 AUG 17
	Criteria: 31-1492, CFMI, P9873 **Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0005001	10 MAY 21
E	Criteria: 26-1103, 31-1492, P14629, P15347 **Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0002001	31 AUG 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				

E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B **Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0005001	21 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0012001	31 AUG 17
	Criteria: 31-1492, CFMI, P9873				
	Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0002001	31 AUG 17
	Criteria: 31-1492				
	Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0002001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 04827, 04860, 04953, 04974, 06139, 06173, 06528, 06536, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0006001	17 MAR 17
	Criteria: 31-1492, CFM56-5B, A321				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0005001	21 MAR 17
	Criteria: 31-1492, CFM56-5B				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0012001	31 AUG 17
	Criteria: 31-1492, CFMI, P9873				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0005001	10 MAY 21
	Criteria: 26-1103, 31-1492, P14629, P15347				
E	**Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0003001	31 AUG 17
	Criteria: 31-1492, P14629, A321				
E	**Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06949, 07005, 07081, 07098**				

E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0005001	17 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 06895				
	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0006001	17 MAR 17
	Criteria: 31-1492, CFM56-5B, A321				
	Applicable to: MSN 06895				
	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0005001	21 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 06895				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 06895**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0012001	31 AUG 17
	Criteria: 31-1492, CFMI, P9873 **Applicable to: MSN 06895**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 06895**				
	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0002001	31 AUG 17
	Criteria: 31-1492 **Applicable to: MSN 06895**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0003001	31 AUG 17
E	Criteria: 31-1492, P14629, A321 **Applicable to: MSN 06895**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0004001	17 MAR 17
E	Criteria: 31-1492, PW1100G-JM, P14629, P15993 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0003001	17 MAR 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0007001	17 MAR 17
E	Criteria: PW1100G-JM, P14629, P15993 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
E	Criteria: 31-1492, P14629 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0015001	07 DEC 17
E	Criteria: PW1100G-JM, P14629, P15993 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0005001	10 MAY 21
	Criteria: 26-1103, 31-1492, P14629, P15347				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0002001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	NG01439	
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL**	00017524.0004001	17 MAR 17
	Criteria: 31-1492, PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ENG		**ECAM - Pitch Table**	00017541.0004001	17 MAR 17
	Criteria: 31-1492, P14629, A321				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ENG		**ECAM - Gliding Distance & FAC**	00017543.0007001	17 MAR 17
	Criteria: PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ENG		**ECAM - Relight Attempted or not Attempted**	00021154.0001001	17 MAR 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight can be attempted**	00017544.0015001	07 DEC 17
	Criteria: PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If engine relight cannot be attempted**	00021158.0001001	31 AUG 17
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If ditching anticipated**	00017529.0005001	10 MAY 21
	Criteria: 26-1103, 31-1492, P14629, P15347				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-ENG		**[QRH] ALL ENG FAIL - If forced landing anticipated**	00017530.0003001	31 AUG 17
	Criteria: 31-1492, P14629, A321				
E	**Applicable to: MSN 11531**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - FUEL REMAINING**	NG01054	
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - FUEL REMAINING**	00012309.0159001	17 MAR 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, P5768 **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - SECURE CABIN AND COCKPIT**	00012310.0131001	17 MAR 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, P5451, P7175 **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - COMMON ACTIONS FOR THE APPROACH**	00012311.0001001	17 MAR 17
	Criteria: 31-1334, 31-1414, G-CFM56-5B4, G-V2527E-A5, P10383 **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - FORCED LANDING**	00012312.0090001	09 MAY 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, J0071, SA **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - DITCHING**	00012313.0090001	17 MAR 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, J0071 **Applicable to: MSN 02014**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - FUEL REMAINING**	NG01054	
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - FUEL REMAINING**	00012309.0061001	17 MAR 17
	Criteria: G-CFM56-5B4, P10383, P5768 **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - SECURE CABIN AND COCKPIT**	00012310.0041001	17 MAR 17
	Criteria: G-CFM56-5B4, P10383, P5451, P7175 **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - COMMON ACTIONS FOR THE APPROACH**	00012311.0001001	17 MAR 17
	Criteria: 31-1334, 31-1414, G-CFM56-5B4, G-V2527E-A5, P10383 **Applicable to: MSN 06561**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - FORCED LANDING**	00012312.0065001	09 MAY 17
	Criteria: G-CFM56-5B4, J0071, P10383, SA **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FUEL REMAINING - DITCHING**	00012313.0065001	17 MAR 17
	Criteria: G-CFM56-5B4, J0071, P10383 **Applicable to: MSN 06561**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - NO FUEL REMAINING**	NG01055	
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - NO FUEL REMAINING**	00012602.0132001	17 MAR 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, P5451, P7175 **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - NO FUEL REMAINING - COMMON APPROACH FOR THE ACTION**	00012317.0001001	17 MAR 17
	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - NO FUEL REMAINING - FORCED LANDING**	00012318.0089001	09 MAY 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, J0071 **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - NO FUEL REMAINING - DITCHING**	00012319.0092001	17 MAR 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, J0071 **Applicable to: MSN 02014**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - NO FUEL REMAINING**	NG01055	
	PRO-ABN-ENG		**[QRH] ENG DUAL FAILURE - NO FUEL REMAINING**	00012602.0108001	17 MAR 17
	Criteria: G-CFM56-5B4, P10383, P5451, P7175 **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - NO FUEL REMAINING - COMMON APPROACH FOR THE ACTION**	00012317.0001001	17 MAR 17
	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - NO FUEL REMAINING - FORCED LANDING**	00012318.0065001	09 MAY 17
	Criteria: G-CFM56-5B4, J0071, P10383				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 06561				
	PRO-ABN-ENG		**ENG DUAL FAILURE - NO FUEL REMAINING - DITCHING**	00012319.0065001	17 MAR 17
	Criteria: G-CFM56-5B4, J0071, P10383				
	Applicable to: MSN 06561				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**[QRH] ENG 1(2) STALL**	00015730.0002001	05 MAR 19
	Criteria: IAL, P10383, P14629, P7125, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	PRO-ABN-ENG		**[QRH] ENG 1(2) STALL**	00015730.0001001	05 MAR 19
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, 31-1492, 73-1100, CFMI, IAE, P10383, P12367, P7125, SA				
	Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-07098				
	PRO-ABN-ENG		**[QRH] ENGINE TAILPIPE FIRE**	00017781.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	PRO-ABN-ENG		**[QRH] ENGINE TAILPIPE FIRE**	00017781.0002001	17 MAR 17
	Criteria: IAL, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	PRO-ABN-ENG		**[QRH] HIGH ENGINE VIBRATION**	00012294.0006001	19 SEP 17
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	PRO-ABN-ENG		**[QRH] HIGH ENGINE VIBRATION**	00012294.0001001	19 SEP 17
	Criteria: G-V2524-A5, G-V2527-A5, G-V2527E-A5, G-V2533-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	PRO-ABN-ENG		**[QRH] HIGH ENGINE VIBRATION**	00012294.0010001	17 MAY 21
	Criteria: PW1100G-JM, P21265				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	PRO-ABN-ENG		**[QRH] On Ground - Non ENG Shutdown after ENG Master OFF**	00020795.0001001	30 MAR 18
	Criteria: SA				
	Applicable to: ALL				
N	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0091001	21 MAR 17
	Criteria: G-PW1133G-JM, J0071, J3448				
	Applicable to: MSN 11531				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0086001	17 MAR 17
E	Criteria: G-PW1127G-JM, PW1129G-JM, J0071, J3283 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0072001	17 MAR 17
	Criteria: 57-1173, G-CFM56-5B4, J0071, J3283 **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0071001	17 MAR 17
	Criteria: G-CFM56-5B3, J0071, J3448 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0067001	17 MAR 17
	Criteria: 57-1187, G-V2533-A5, J0071, J3448 **Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0004001	17 MAR 17
	Criteria: G-CFM56-5B4, J0071 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0005001	17 MAR 17
	Criteria: G-CFM56-5B6, J0071 **Applicable to: MSN 03733, 04734-04756, 05005, 05097**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0015001	17 MAR 17
	Criteria: G-V2524-A5, J0071 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0011001	17 MAR 17
	Criteria: G-V2527-A5, G-V2527E-A5, J0071 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Circling Approach**	00010682.0012001	17 MAR 17
	Criteria: G-V2533-A5, J0071 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662**				
	PRO-ABN-ENG		**[QRH] One Engine Inoperative - Straight-In Approach**	00010681.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	NG01438	
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00017096.0001001	29 JUN 16
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00015739.0004001	21 MAR 17
	Criteria: 31-1492, PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**Note**	00017522.0002001	04 NOV 15
	Criteria: 31-1492, V2500-A5				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**FAC 1**	00017523.0004001	21 MAR 17
	Criteria: 31-1492				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
R	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00019673.0022001	03 NOV 22
	Criteria: 27-1154, 27-1160, 31-1492, J1617, K1806, P11140, P14826, P5768, P7635, A319, A320, A321				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	NG01438	
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00017096.0001001	29 JUN 16
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00015739.0004001	21 MAR 17
	Criteria: 31-1492, PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-ENG		**Note**	00017522.0002001	04 NOV 15
	Criteria: 31-1492, V2500-A5				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-ENG		**FAC 1**	00017523.0004001	21 MAR 17
	Criteria: 31-1492				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	NG01438	
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00017096.0001001	29 JUN 16
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00015739.0005001	21 MAR 17
	Criteria: 31-1492, CFM56-5B				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**FAC 1**	00017523.0004001	21 MAR 17
	Criteria: 31-1492				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00019673.0022001	03 NOV 22
	Criteria: 27-1154, 27-1160, 31-1492, J1617, K1806, P11140, P14826, P5768, P7635, A319, A320, A321				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	NG01438	
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00017096.0001001	29 JUN 16
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00015739.0004001	21 MAR 17
	Criteria: 31-1492, PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**FAC 1**	00017523.0003001	21 MAR 17
	Criteria: PW1100G-JM, P14629, P14826				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00019673.0022001	03 NOV 22
	Criteria: 27-1154, 27-1160, 31-1492, J1617, K1806, P11140, P14826, P5768, P7635, A319, A320, A321				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	NG01438	
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00017096.0001001	29 JUN 16
	Criteria: 31-1492, P14629				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE**	00015739.0004001	21 MAR 17
	Criteria: 31-1492, PW1100G-JM, P14629, P15993				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**FAC 1**	00017523.0003001	21 MAR 17
	Criteria: PW1100G-JM, P14629, P14826				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG ALL ENGINES FAILURE - FWS PAGE**	00019673.0034001	03 NOV 22
	Criteria: 31-1575, J1617, K1806, P14826, P20610, P5768, P7635, A320, A321				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG FUEL CONTAMINATED**	NG01930	
	PRO-ABN-ENG		**ENG FUEL CONTAMINATED**	00023769.0006001	25 FEB 20
	Criteria: 31-1575, PW1100G-JM				
	Applicable to: MSN 08635				
E	PRO-ABN-ENG		**ENG FUEL CONTAMINATED**	00023770.0005001	25 FEB 20
	Criteria: 31-1575, J3527, J4530, P20610, SA, A321				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-ENG		**ENG FUEL CONTAMINATED - FWSPAGE**	00023771.0003001	25 FEB 20
	Criteria: 31-1575, P20610, SA				
E	**Applicable to: MSN 08635**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG FUEL CONTAMINATED**	NG01930	
E	PRO-ABN-ENG		**ENG FUEL CONTAMINATED**	00023769.0009001	18 NOV 21
	Criteria: PW1100G-JM, P20610, P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG FUEL CONTAMINATED**	00023770.0005001	25 FEB 20
	Criteria: 31-1575, J3527, J4530, P20610, SA, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG FUEL CONTAMINATED - FWSPAGE**	00023771.0003001	25 FEB 20
	Criteria: 31-1575, P20610, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) A/C FADEC SUPPLY**	NG01051	
	PRO-ABN-ENG		**ENG 1(2) A/C FADEC SUPPLY**	00017960.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**ENG 1(2) A/C FADEC SUPPLY**	00018706.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) AIRCRAFT FADEC SUPPLY - FWSPAGE**	00012297.0002001	17 AUG 10
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**ENG 1(2) A/C FADEC SUPPLY**	NG01051	
E	PRO-ABN-ENG		**ENG 1(2) A/C FADEC SUPPLY**	00017960.0002001	21 MAR 16
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) A/C FADEC SUPPLY**	00018706.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) A/C FADEC SUPPLY - FWSPAGE**	00012297.0001001	17 AUG 10
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) AIR EXCHGR FAULT**	NG01527	
	PRO-ABN-ENG		**ENG 1(2) AIR EXCHGR FAULT**	00017961.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) AIR EXCHGR FAULT**	00017654.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ENG		**ENG 1(2) AIR MINOR FAULT**	NG01334	
E	PRO-ABN-ENG		**ENG 1(2) AIR MINOR FAULT**	00018154.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) AIR MINOR FAULT**	00015569.0004001	04 JUN 19
	Criteria: PW1100G-JM, P14826				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) AIR SYS FAULT**	NG01330	
E	PRO-ABN-ENG		**ENG 1(2) AIR SYS FAULT**	00018155.0001001	22 MAR 18
	Criteria: PW1100G-JM, P20351, P20496				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) AIR SYS FAULT**	00015563.0005001	22 MAR 18
	Criteria: PW1100G-JM, P15991, P20305, P20351, P20496				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) AIR SYS FAULT - FWSPAGE**	00015630.0002001	10 MAY 16
	Criteria: PW1100G-JM, P15991				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) AIR SYS FAULT**	NG01330	
E	PRO-ABN-ENG		**ENG 1(2) AIR SYS FAULT**	00018155.0001001	22 MAR 18
	Criteria: PW1100G-JM, P20351, P20496				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) AIR SYS FAULT**	00015563.0007001	30 MAR 18
	Criteria: 31-1558, PW1100G-JM, P15991, P20305, P20351, P20466, P20496				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) AIR VALVE**	NG01528	
E	PRO-ABN-ENG		**ENG 1(2) AIR VALVE**	00018156.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) AIR VALVE**	00015566.0001001	18 AUG 14
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) BEARING 4 OIL SYS**	NG01529	
	PRO-ABN-ENG		**ENG 1(2) BEARING 4 OIL SYS**	00017962.0001001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) BEARING 4 OIL SYS**	00012298.0002001	12 JAN 11
	Criteria: IAE, P3704 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT (In Flight)**	NG01053	
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT (In Flight)**	00017963.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT (In Flight)**	00018707.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT - FWSPAGE (In Flight)**	00012303.0001001	17 AUG 10
	Criteria: CFMI				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT (On Ground)**	NG01052	
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT (On Ground)**	00017965.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT (On Ground)**	00018708.0001001	28 MAY 20
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) BLEED STATUS FAULT - FWSPAGE (On Ground)**	00012301.0001001	28 MAY 20
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ENG		**ENG 1(2) BOWED ROTOR PROTECTION FAULT**	NG01708	
E	PRO-ABN-ENG		**ENG 1(2) BOWED ROTOR PROTECTION FAULT**	00020041.0001001	21 OCT 16
E	Criteria: PW1100G-JM, P15992 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) BOWED ROTOR PROTECTION FAULT**	00020042.0003001	10 JAN 17
	Criteria: PW1100G-JM, P15967, P15992 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) BOWED ROTOR PROTECTION FAULT**	NG01708	
E	PRO-ABN-ENG		**ENG 1(2) BOWED ROTOR PROTECTION FAULT**	00020041.0001001	21 OCT 16
	Criteria: PW1100G-JM, P15992				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) BOWED ROTOR PROTECTION FAULT**	00020042.0006001	18 NOV 21
	Criteria: PW1100G-JM, P15967, P15992, P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) COLD FUEL**	NG01691	
E	PRO-ABN-ENG		**ENG 1(2) COLD FUEL**	00019521.0002001	13 MAY 16
	Criteria: PW1100G-JM, P14826				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) COLD FUEL**	00019523.0002001	13 MAY 16
	Criteria: PW1100G-JM, P14826				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1+2 COMPRESSOR VANE**	NG01598	
E	PRO-ABN-ENG		**ENG 1+2 COMPRESSOR VANE**	00017907.0003001	31 AUG 17
	Criteria: 31-1492, CFMI, IAE, P14629				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1+2 COMPRESSOR VANE**	00017757.0002001	31 AUG 17
	Criteria: 31-1492, CFMI, IAE, P14629				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG COMPRESSOR VANE**	NG01598	
	PRO-ABN-ENG		**ENG COMPRESSOR VANE**	00017907.0001001	31 AUG 17
	Criteria: CFMI, IAE **Applicable to: MSN 01251, 02014, 06561**				
	PRO-ABN-ENG		**ENG COMPRESSOR VANE**	00017757.0001001	21 MAR 16
	Criteria: CFMI, IAE **Applicable to: MSN 01251, 02014, 06561**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	NG01029	
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017966.0002001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017655.0005001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, IAE, P10383, P7125 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE - FWSPAGE**	00012155.0002001	17 AUG 10
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	NG01029	
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017966.0002001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01251**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017655.0004001	21 MAR 16
	Criteria: 31-1257, IAE				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE - FWSPAGE**	00012155.0002001	17 AUG 10
	Criteria: IAE				
	Applicable to: MSN 01251				

	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	NG01029	
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017966.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017655.0003001	21 MAR 17
	Criteria: 31-1334, 31-1414, CFMI, P10383, P7125				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE - FWSPAGE**	00012155.0001001	17 AUG 10
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

E	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	NG01029	
E	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017966.0004001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE**	00017655.0006001	21 MAR 17
	Criteria: IAL, P10383, P7125				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) COMPRESSOR VANE - FWSPAGE**	00012155.0005001	17 MAR 17
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) CTL SYS FAULT**	NG01530	
	PRO-ABN-ENG		**ENG 1(2) CTL SYS FAULT**	00018157.0001001	21 MAR 16
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) CTL SYS FAULT**	00015571.0001001	21 MAR 17
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) CTL SYS FAULT**	NG01530	
E	PRO-ABN-ENG		**ENG 1(2) CTL SYS FAULT**	00018157.0003001	09 APR 18
E	Criteria: 31-1558, PW1100G-JM, P20466 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) CTL SYS FAULT**	00015571.0003001	09 APR 18
E	Criteria: 31-1558, PW1100G-JM, P20466 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) CTL SYS FAULT - FWSPAGE**	00022268.0003001	09 APR 18
E	Criteria: 31-1558, PW1100G-JM, P20466 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-ENG		**ENG 1(2) CTL VALVE FAULT**	NG01044	
N	PRO-ABN-ENG		**ENG 1(2) CTL VALVE FAULT**	00017967.0001001	21 MAR 16
	Criteria: CFMI, CFM56-5B **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) CTL VALVE FAULT**	00018709.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) CTL VALVE FAULT - FWSPAGE**	00012233.0001001	17 AUG 10
	Criteria: CFMI				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG DUAL COOLING NOT AVAIL**	NG01707	
	PRO-ABN-ENG		**ENG DUAL COOLING NOT AVAIL**	00020038.0001001	21 OCT 16
	Criteria: P15967				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG DUAL COOLING NOT AVAIL**	00020039.0001001	21 OCT 16
	Criteria: P15967				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG DUAL COOLING NOT AVAIL**	NG01707	
E	PRO-ABN-ENG		**ENG DUAL COOLING NOT AVAIL**	00020038.0003001	09 APR 18
	Criteria: 31-1558, P15967, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG DUAL COOLING NOT AVAIL**	00020039.0003001	09 APR 18
	Criteria: 31-1558, P15967, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG DUAL FAILURE**	NG01968	
	PRO-ABN-ENG		**ENG DUAL FAILURE**	00017909.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG DUAL FAILURE**	00012282.0291001	21 MAR 17
	Criteria: 31-1257, G-V2527-A5, K4457, P5768				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FWSPAGE**	00012283.0044001	21 MAR 16
	Criteria: 27-1154, 27-1160, 31-1267, 31-1300, 31-1334, 31-1414, J1617, K1806, P10383, P5768, P7635, P9107, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG DUAL FAILURE**	NG01968	
	PRO-ABN-ENG		**ENG DUAL FAILURE**	00017909.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 02014				
	PRO-ABN-ENG		**ENG DUAL FAILURE**	00012282.0380001	21 MAR 17
	Criteria: 31-1334, 31-1414, G-V2527E-A5, K4457, P5768, P6801				
	Applicable to: MSN 02014				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FWSPAGE**	00012283.0044001	21 MAR 16
	Criteria: 27-1154, 27-1160, 31-1267, 31-1300, 31-1334, 31-1414, J1617, K1806, P10383, P5768, P7635, P9107, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 02014				
	PRO-ABN-ENG		**ENG DUAL FAILURE**	NG01968	
	PRO-ABN-ENG		**ENG DUAL FAILURE**	00017909.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG DUAL FAILURE**	00012282.0370001	21 MAR 17
	Criteria: 49-1082, G-CFM56-5B4, K10494, K2450, P10383, P5768, P6801 **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG DUAL FAILURE - FWSPAGE**	00012283.0044001	21 MAR 16
	Criteria: 27-1154, 27-1160, 31-1267, 31-1300, 31-1334, 31-1414, J1617, K1806, P10383, P5768, P7635, P9107, SA **Applicable to: MSN 06561**				
E	PRO-ABN-ENG		**ENG 1(2) EGT EXCEEDED DURING AIR START**	NG01531	
E	PRO-ABN-ENG		**ENG 1(2) EGT EXCEEDED DURING AIR START**	00017968.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) EGT EXCEEDED DURING AIR START**	00012124.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	NG01011	
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017970.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017658.0003001	21 MAR 16
	Criteria: IAE				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT - FWSPAGE**	00017659.0002001	03 DEC 19
	Criteria: 31-1492, IAE, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	NG01011	
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017970.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251, 02014				
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017658.0003001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01251, 02014				
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT - FWSPAGE**	00017659.0001001	03 DEC 19
	Criteria: 31-1492, CFMI, IAE, SA				
	Applicable to: MSN 01251, 02014				

	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	NG01011	
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017970.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017658.0002001	01 MAR 18
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT - FWSPAGE**	00017659.0001001	03 DEC 19
	Criteria: 31-1492, CFMI, IAE, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	NG01011	
	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017970.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017658.0001001	21 MAR 16
	Criteria: 31-1558, 31-1575, IAL, P20466, P20610				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) EIU FAULT - FWSPAGE**	00017659.0003001	03 DEC 19
	Criteria: 31-1558, PW1100G-JM, P13922, P14826, P20466, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	NG01011	
E	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017970.0002001	30 MAR 18
	Criteria: 31-1558, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) EIU FAULT**	00017658.0001001	21 MAR 16
	Criteria: 31-1558, 31-1575, IAL, P20466, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) EIU FAULT - FWSPAGE**	00017659.0003001	03 DEC 19
	Criteria: 31-1558, PW1100G-JM, P13922, P14826, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	NG01018	
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	00017971.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	00017728.0004001	24 AUG 18
	Criteria: 31-1334, 31-1373, 31-1414, IAE, P10383, P11819				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	00017729.0003001	21 MAR 16
	Criteria: 22-1090, 22-1676, IAE, P7520				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT - FWSPAGE**	00017660.0003001	21 MAR 16
	Criteria: 31-1334, 31-1414, IAE, P10383				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	NG01018	
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	00017971.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	00017728.0002001	24 AUG 18
	Criteria: IAE				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT**	00017729.0003001	21 MAR 16
	Criteria: 22-1090, 22-1676, IAE, P7520				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) EPR MODE FAULT - FWSPAGE**	00017660.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01251				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-ENG		**ENG 1(2) FADEC A(B) FAULT**	NG01532	
	PRO-ABN-ENG		**ENG 1(2) FADEC A(B) FAULT**	00017972.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
R	PRO-ABN-ENG		**ENG 1(2) FADEC A(B) FAULT**	00017661.0001001	07 NOV 22
	Criteria: IAE, CFM56-5B				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) FADEC ALTERNATOR**	NG01533	
	PRO-ABN-ENG		**ENG 1(2) FADEC ALTERNATOR**	00017974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ENG		**ENG 1(2) FADEC ALTERNATOR**	00017662.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	NG01535	
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017663.0006001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, 31-1334, 31-1414, IAE, P10383, P7125, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT - FWSPAGE**	00019553.0001001	13 MAY 16
	Criteria: 31-1373, 31-1414, P11819				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	NG01535	
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017663.0003001	21 MAR 17
	Criteria: 31-1257, 31-1267, 31-1300, IAE				
	Applicable to: MSN 01251				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	NG01535	
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	NG01535	
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017663.0005001	21 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, CFMI, P10383, P7125, P9107				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT - FWSPAGE**	00019553.0001001	13 MAY 16
	Criteria: 31-1373, 31-1414, P11819				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	NG01535	
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017663.0004001	21 MAR 17
	Criteria: IAL, P10383, P7125, P9107				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT - FWSPAGE**	00019553.0001001	13 MAY 16
	Criteria: 31-1373, 31-1414, P11819				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	NG01535	
	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ENG		**ENG 1(2) FADEC FAULT**	00017663.0007001	30 MAR 18
	Criteria: 31-1558, IAL, P10383, P20466, P7125, P9107				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) FADEC HI TEMP**	NG01536	
	PRO-ABN-ENG		**ENG 1(2) FADEC HI TEMP**	00017976.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) FADEC HI TEMP**	00017664.0004001	21 MAR 17
	Criteria: 31-1334, 31-1414, CFMI, P10383, P7125				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**ENG 1(2) FADEC IDENT FAULT**	NG01537	
E	PRO-ABN-ENG		**ENG 1(2) FADEC IDENT FAULT**	00018158.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FADEC IDENT FAULT**	00015573.0001001	18 AUG 14
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	NG01539	
E	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	00017978.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	00017665.0005001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, 31-1334, 31-1414, IAE, P10383, P7125, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

E	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	NG01539	
E	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	00017978.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01251**				
	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	00017665.0004001	21 MAR 17
	Criteria: 31-1257, 31-1267, 31-1300, IAE				
	Applicable to: MSN 01251				

E	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	NG01539	
E	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	00017978.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FADEC OVHT**	00017665.0006001	21 MAR 17
	Criteria: IAL, P10383, P7125, P9107				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-ENG		**ENG 1(2) FADEC PLUG FAULT**	NG01540	
	PRO-ABN-ENG		**ENG 1(2) FADEC PLUG FAULT**	00017979.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) FADEC PLUG FAULT**	00012295.0001001	25 FEB 14
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

E	PRO-ABN-ENG		**ENG 1(2) FADEC SYS FAULT**	NG01541	
E	PRO-ABN-ENG		**ENG 1(2) FADEC SYS FAULT**	00018159.0001001	21 MAR 16
	Criteria: PW1100G-JM				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) FADEC SYS FAULT**	00015570.0001001	18 AUG 14
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) FADEC SYS FAULT**	NG01541	
E	PRO-ABN-ENG		**ENG 1(2) FADEC SYS FAULT**	00018159.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FADEC SYS FAULT**	00015570.0004001	25 FEB 20
	Criteria: 31-1558, 31-1575, PW1100G-JM, P20466, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FAN COWL NOT CLSD**	NG01542	
E	PRO-ABN-ENG		**ENG 1(2) FAN COWL NOT CLSD**	00018160.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FAN COWL NOT CLSD**	00015580.0001001	18 AUG 14
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) FAIL**	NG01543	
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017982.0002001	06 JUN 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017667.0003001	04 JUN 19
	Criteria: 31-1197, 31-1218, 31-1257, P5706, P6437, P7125, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) FAIL**	NG01543	
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017982.0002001	06 JUN 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ENG		**ENG 1(2) FAIL**	NG01543	
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017982.0002001	06 JUN 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017667.0004001	04 JUN 19
	Criteria: IAL, P5706, P7125, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) FAIL**	NG01543	
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017982.0002001	06 JUN 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 08635				
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017667.0007001	10 MAY 21
	Criteria: 31-1558, IAL, P5706, P7125, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-ENG		**ENG 1(2) FAIL**	NG01543	
	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017982.0002001	06 JUN 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ENG		**ENG 1(2) FAIL**	00017667.0011001	18 NOV 21
	Criteria: IAL, P20466, P21265, P5706, P7125, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) FIRE (In Flight)**	NG01492	
	PRO-ABN-ENG		**ENG 1(2) FIRE (In Flight)**	00017401.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG 1(2) FIRE (In Flight)**	00018190.0002001	21 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: ALL**				
E	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	NG01493	
	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	00018553.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	00018192.0004001	14 FEB 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P0357, P10383, P9107, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	NG01493	
	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	00018553.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	00018192.0002001	09 MAY 17
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	NG01493	
	PRO-ABN-ENG		**ENG 1(2) FIRE (On Ground)**	00018553.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ENG		**ENG 1(2) FIRE DET FAULT**	NG01754	
	PRO-ABN-ENG		**ENG 1(2) FIRE DET FAULT**	00020838.0001001	03 NOV 21
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG 1(2) FIRE DET FAULT**	00020837.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG 1(2) FIRE DET FAULT**	00020839.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG 1(2) FIRE LOOP A(B) FAULT**	NG01755	
	PRO-ABN-ENG		**ENG 1(2) FIRE LOOP A(B) FAULT**	00020841.0001001	03 NOV 21
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG 1(2) FIRE LOOP A(B) FAULT**	00020840.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG 1(2) FIRE LOOP A(B) FAULT**	00020842.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	NG01031	
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	00017983.0001001	21 MAR 16
	Criteria: 31-1558, P20466, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	00017679.0004001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, IAE, P3379, P7125 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT - FWSPAGE**	00017681.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, IAE, P7125				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	NG01031	
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	00017983.0001001	21 MAR 16
	Criteria: 31-1558, P20466, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	NG01031	
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	00017983.0001001	21 MAR 16
	Criteria: 31-1558, P20466, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	00017679.0003001	05 JUN 18
	Criteria: CFMI, P3379, P7125 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT - FWSPAGE**	00017681.0001001	21 MAR 16
	Criteria: CFMI, P7125 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	NG01031	
	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	00017983.0001001	21 MAR 16
	Criteria: 31-1558, P20466, SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT**	00017679.0005001	05 JUN 18
	Criteria: IAL, P3379, P7125				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) FUEL CTL FAULT - FWSPAGE**	00017681.0004001	21 MAR 16
	Criteria: IAL, P7125				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER CLOG**	NG01544	
	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER CLOG**	00017984.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: ALL				
	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER CLOG**	00012068.0001001	16 JAN 18
	Criteria: SA				
	Applicable to: ALL				

E	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER - PARTLY CLOGGED**	NG01855	
E	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER - PARTLY CLOGGED**	00022281.0003001	28 MAY 20
	Criteria: 31-1558, IAL, PW1100G-JM, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER - PARTLY CLOGGED**	00022282.0003001	09 APR 18
	Criteria: 31-1558, IAL, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-ENG		**ENG 1+2 FUEL FILTER CLOG**	NG01545	
	PRO-ABN-ENG		**ENG 1+2 FUEL FILTER CLOG**	00018173.0001001	21 MAR 16
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1+2 FUEL FILTER CLOG**	00015600.0001001	05 NOV 15
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER DEGRAD**	NG01546	
	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER DEGRAD**	00018161.0001001	28 MAY 20
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) FUEL FILTER DEGRAD**	00015592.0001001	05 NOV 15
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) FUEL HEAT SYS**	NG01547	
E	PRO-ABN-ENG		**ENG 1(2) FUEL HEAT SYS**	00017985.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FUEL HEAT SYS**	00017684.0001001	13 MAY 16
E	Criteria: IAE, IAL **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-ENG		**ENG 1(2) FUEL LEAK**	NG01548	
E	PRO-ABN-ENG		**ENG 1(2) FUEL LEAK**	00018162.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FUEL LEAK**	00018720.0001001	28 MAY 20
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-ENG		**ENG 1(2) FUEL RETURN VALVE**	NG01549	
	PRO-ABN-ENG		**ENG 1(2) FUEL RETURN VALVE**	00017986.0001001	13 MAY 16
	Criteria: CFM56-5B **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) FUEL RETURN VALVE**	00012277.0001001	25 FEB 14
	Criteria: CFM56-5B **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) FUEL SENSOR FAULT**	NG01550	
E	PRO-ABN-ENG		**ENG 1(2) FUEL SENSOR FAULT**	00018163.0001001	13 MAY 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FUEL SENSOR FAULT**	00017687.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	NG01552	
E	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	00017988.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	00012102.0004001	29 MAR 12
	Criteria: 31-1334, 31-1414, IAE, IAL, P10383 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 09190, 09324**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	NG01552	
E	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	00017988.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 01251**				
	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	00012102.0001001	12 JAN 11
	Criteria: IAE **Applicable to: MSN 01251**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	NG01552	
E	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	00017988.0001001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) FUEL VALVE FAULT**	00012102.0007001	30 MAR 18
E	Criteria: 31-1558, IAL, P10383, P20466 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG GA SOFT FAULT**	NG01693	
E	PRO-ABN-ENG		**ENG GA SOFT FAULT**	00019563.0001001	28 MAY 20
E	Criteria: P13922 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG GA SOFT FAULT**	00019564.0001001	04 DEC 17
E	Criteria: P13922 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG GA SOFT FAULT - FWSPAGE**	00019565.0001001	04 DEC 17
E	Criteria: P13922 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-ENG		**ENG 1(2) HEAT EXCHGR CLOG**	NG01553	
E	PRO-ABN-ENG		**ENG 1(2) HEAT EXCHGR CLOG**	00018164.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) HEAT EXCHGR CLOG**	00015590.0001001	18 AUG 14
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

E	PRO-ABN-ENG		**ENG 1(2) HEAT EXCHGR CLOG**	NG01553	
E	PRO-ABN-ENG		**ENG 1(2) HEAT EXCHGR CLOG**	00018164.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HEAT EXCHGR CLOG**	00015590.0003001	30 MAR 18
E	Criteria: 31-1558, PW1100G-JM, P20466 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG**	NG01336	
	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG**	00018174.0001001	21 MAR 16
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG**	00015591.0001001	18 AUG 14
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG - FWSPAGE**	00015747.0001001	18 AUG 14
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG**	NG01336	
	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG**	00018174.0001001	21 MAR 16
	Criteria: PW1100G-JM **Applicable to: MSN 08635**				
	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG**	00015591.0003001	30 MAR 18
	Criteria: 31-1558, PW1100G-JM **Applicable to: MSN 08635**				
	PRO-ABN-ENG		**ENG 1+2 HEAT EXCHGR CLOG - FWSPAGE**	00015747.0003001	30 MAR 18
	Criteria: 31-1558, PW1100G-JM **Applicable to: MSN 08635**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS DEGRADED**	NG01554	
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS DEGRADED**	00018165.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS DEGRADED**	00018721.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS FAULT**	NG01555	
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS FAULT**	00018166.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) HEAT SYS FAULT**	00015557.0001001	18 AUG 14
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS FAULT**	NG01555	
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS FAULT**	00018166.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HEAT SYS FAULT**	00015557.0002001	30 MAR 18
E	Criteria: 31-1558, PW1100G-JM, P20466 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) HIGH VIBRATION**	NG01556	
	PRO-ABN-ENG		**ENG 1(2) HIGH VIBRATION**	00018167.0001001	14 MAR 17
	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) HIGH VIBRATION**	00018722.0001001	21 MAR 16
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) HIGH VIBRATION**	NG01556	
E	PRO-ABN-ENG		**ENG 1(2) HIGH VIBRATION**	00018167.0004001	25 FEB 20
	Criteria: 31-1575, PW1100G-JM, P20610, P21265				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HIGH VIBRATION**	00018722.0002001	25 FEB 20
	Criteria: 31-1575, PW1100G-JM, P20610, P21265				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR DET FAULT**	NG01557	
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR DET FAULT**	00018168.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) HOT AIR DET FAULT**	00015581.0001001	18 AUG 14
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR DET FAULT**	NG01557	
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR DET FAULT**	00018168.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR DET FAULT**	00015581.0002001	30 MAR 18
	Criteria: 31-1558, PW1100G-JM, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK**	NG01326	
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK**	00018169.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK**	00015584.0001001	05 NOV 15
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK - FWSPAGE**	00015585.0001001	18 AUG 14
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK**	NG01326	
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK**	00018169.0001001	21 MAR 16
	Criteria: PW1100G-JM				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK**	00015584.0004001	30 MAR 18
	Criteria: 31-1558, 31-1575, PW1100G-JM, P20466, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HOT AIR LEAK - FWSPAGE**	00015585.0004001	30 MAR 18
	Criteria: 31-1558, 31-1575, PW1100G-JM, P20466, P20610, P21265, P21423				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) HOT FUEL**	NG01032	
E	PRO-ABN-ENG		**ENG 1(2) HOT FUEL**	00017953.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HOT FUEL**	00012173.0001001	17 AUG 10
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) HOT FUEL - FWSPAGE**	00017693.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) HP FUEL VALVE**	NG01558	
	PRO-ABN-ENG		**ENG 1(2) HP FUEL VALVE**	00017955.0001001	13 MAY 16
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) HP FUEL VALVE**	00012096.0001001	13 MAY 16
	Criteria: CFMI				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
R	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	NG01023	
E	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	00017956.0002001	20 APR 17
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	00012134.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault) - FWSPAGE**	00012136.0001001	17 AUG 10
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	NG01023	
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	00017956.0001001	20 APR 17
	Criteria: SA **Applicable to:** MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	00012134.0001001	25 FEB 14
	Criteria: SA **Applicable to:** MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault) - FWSPAGE**	00012136.0001001	17 AUG 10
	Criteria: SA **Applicable to:** MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	NG01023	
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault)**	00012134.0001001	25 FEB 14
	Criteria: SA **Applicable to:** MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A or B Fault) - FWSPAGE**	00012136.0001001	17 AUG 10
	Criteria: SA **Applicable to:** MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B FAULT)**	NG01024	
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B FAULT)**	00017957.0001001	21 MAR 16
	Criteria: SA **Applicable to:** MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B Fault)**	00012139.0001001	12 JAN 11
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B Fault) - FWSPAGE**	00012141.0002001	12 JAN 11
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B FAULT)**	NG01024	
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B FAULT)**	00017957.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B Fault)**	00012139.0001001	12 JAN 11
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B FAULT)**	NG01024	
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B FAULT)**	00017957.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B Fault)**	00012139.0001001	12 JAN 11
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) IGN FAULT (IGN A+B Fault) - FWSPAGE**	00012141.0001001	12 JAN 11
	Criteria: CFMI, IAL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	NG01683	
	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	00019230.0003001	13 MAY 16
	Criteria: PW1100G-JM, P14826				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	00019232.0003001	13 MAY 16
	Criteria: PW1100G-JM, P14826				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	NG01683	
	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	00019230.0005001	09 APR 18
	Criteria: 31-1558, PW1100G-JM, P14826				
	Applicable to: MSN 08635				
E	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	00019232.0003001	13 MAY 16
	Criteria: PW1100G-JM, P14826				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	NG01683	
E	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	00019230.0006001	18 NOV 21
	Criteria: PW1100G-JM, P14826, P20466, P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) LO START AIR PRESS**	00019232.0003001	13 MAY 16
	Criteria: PW1100G-JM, P14826				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) LOW N1 (On Ground)**	NG01560	
	PRO-ABN-ENG		**ENG 1(2) LOW N1 (On Ground)**	00017958.0003001	13 MAY 16
	Criteria: 31-1492, CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) LOW N1 (On Ground)**	00012101.0004001	16 NOV 11
	Criteria: CFMI, P7125				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) LOW N1 (On Ground)**	NG01560	
	PRO-ABN-ENG		**ENG 1(2) LOW N1 (On Ground)**	00017958.0001001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG 1(2) LOW N1 (On Ground)**	00012101.0004001	16 NOV 11
	Criteria: CFMI, P7125 **Applicable to: MSN 06561**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) MINOR FAULT**	NG01561	
E	PRO-ABN-ENG		**ENG 1(2) MINOR FAULT**	00018170.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) MINOR FAULT**	00015572.0001001	22 FEB 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) EPR or N1 or N2 or EGT or FF DISCREPANCY**	NG01562	
	PRO-ABN-ENG		**ENG 1(2) EPR or N1 or N2 or EGT or FF DISCREPANCY**	00017959.0002001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY**	00017696.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY**	NG01562	
	PRO-ABN-ENG		**ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY**	00017696.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-ENG		**ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY**	NG01562	
E	PRO-ABN-ENG		**ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY**	00017959.0001001	21 MAR 16
E	Criteria: CFMI, IAL **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY**	00017696.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	NG01566	
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00018006.0003001	21 MAR 16
	Criteria: V2524-A5, V2527-A5, V2527E-A5 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00012079.0014001	21 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, G-V2524-A5, G-V2527-A5, G-V2527E-A5, P7125 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	NG01566	
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00018006.0002001	21 MAR 16
	Criteria: CFM56-5B **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00012079.0013001	21 MAR 17
	Criteria: CFM56-5B, P7125 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	NG01566	
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00018006.0004001	21 MAR 16
	Criteria: V2533-A5 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00012079.0012001	21 MAR 17
	Criteria: G-V2533-A5, P7125 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	NG01566	
E	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00018006.0018001	16 MAY 18
E	Criteria: 31-1558, PW1100G-JM, P20466, P20903 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) N1/N2/EGT OVER LIMIT**	00012079.0025001	21 MAR 17
E	Criteria: 31-1558, PW1100G-JM, P20466, P7125 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL CHIP DETECTED**	NG01563	
E	PRO-ABN-ENG		**ENG 1(2) OIL CHIP DETECTED**	00018171.0001001	21 MAR 16
E	Criteria: PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL CHIP DETECTED**	00015577.0001001	18 AUG 14
	Criteria: PW1100G-JM				

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Continued from the previous page

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	NG01567	
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00017964.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00012078.0001001	18 AUG 14
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	NG01567	
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00017964.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	NG01567	
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00017964.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00012078.0003001	18 AUG 14
	Criteria: CFM56-5B				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	NG01567	
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00017964.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00012078.0004001	18 AUG 14
	Criteria: IAL				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	NG01567	
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00017964.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ENG		**ENG 1(2) OIL FILTER CLOG**	00012078.0006001	30 MAR 18
	Criteria: 31-1558, IAL, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) OIL FILTER - PARTLY CLOGGED**	NG01856	
E	PRO-ABN-ENG		**ENG 1(2) OIL FILTER - PARTLY CLOGGED**	00022283.0003001	28 MAY 20
	Criteria: 31-1558, IAL, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL FILTER - PARTLY CLOGGED**	00022284.0003001	09 APR 18
	Criteria: 31-1558, IAL, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER DEGRAD**	NG01568	
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER DEGRAD**	00018176.0001001	21 MAR 16
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) OIL FILTER DEGRAD**	00015593.0001001	05 NOV 15
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	NG01569	
	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	00017969.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	00017822.0002001	26 NOV 19
	Criteria: CFMI, IAE, P3105				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: **MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	NG01569	
	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	00017969.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	00017822.0002001	26 NOV 19
	Criteria: CFMI, IAE, P3105				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	NG01569	
E	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	00017969.0004001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL HI TEMP**	00017822.0004001	21 MAR 17
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	NG01582	
	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018002.0007001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018796.0002001	26 NOV 19
	Criteria: IAE				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	NG01582	
	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018002.0006001	21 MAR 16
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018796.0001001	26 NOV 19
	Criteria: CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	NG01582	
E	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018002.0004001	21 MAR 16
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018796.0004001	03 NOV 21
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	NG01583	
	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018004.0004001	21 MAR 16
	Criteria: IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018795.0001001	21 MAR 16
	Criteria: IAE, IAL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	NG01583	
E	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018004.0003001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO PR**	00018795.0001001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	NG01570	
E	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	00017973.0001001	22 MAR 17
	Criteria: IAE, IAL, P15993				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	00012077.0001001	12 JAN 11
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	NG01570	
E	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	00017973.0001001	22 MAR 17
	Criteria: IAE, IAL, P15993				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	00012077.0003001	15 DEC 15
	Criteria: IAL, P15993				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	NG01570	
E	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	00017973.0001001	22 MAR 17
	Criteria: IAE, IAL, P15993				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) OIL LO TEMP**	00012077.0014001	03 NOV 21
	Criteria: 31-1558, IAL, P15993, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL SENSOR FAULT**	NG01571	
E	PRO-ABN-ENG		**ENG 1(2) OIL SENSOR FAULT**	00018177.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL SENSOR FAULT**	00015576.0001001	18 AUG 14
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL SYS FAULT**	NG01572	
E	PRO-ABN-ENG		**ENG 1(2) OIL SYS FAULT**	00018178.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) OIL SYS FAULT**	00015567.0001001	18 AUG 14
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) OIL SYS FAULT**	NG01572	
E	PRO-ABN-ENG		**ENG 1(2) OIL SYS FAULT**	00018178.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OIL SYS FAULT**	00015567.0003001	30 MAR 18
	Criteria: 31-1558, PW1100G-JM, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) ONE TLA FAULT**	NG01573	
	PRO-ABN-ENG		**ENG 1(2) ONE TLA FAULT**	00017977.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ENG		**ENG 1(2) ONE TLA FAULT**	00012144.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-ENG		**ENG 1(2) OVSPD PROT FAULT**	NG01574	
	PRO-ABN-ENG		**ENG 1(2) OVSPD PROT FAULT**	00017980.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, CFMI, IAE, P9107				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) OVSPD PROT FAULT**	00012166.0006001	06 JUN 17
	Criteria: 73-1097, V2500-A5, P11677				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) OVSPD PROT FAULT**	NG01574	
	PRO-ABN-ENG		**ENG 1(2) OVSPD PROT FAULT**	00017980.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, CFMI, IAE, P9107				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) OVSPD PROT FAULT**	00012166.0001001	25 FEB 14
	Criteria: CFM56-5B				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**ENG 1(2) OVTHR PROT FAULT**	NG01012	
E	PRO-ABN-ENG		**ENG 1(2) OVTHR PROT FAULT**	00018005.0001001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OVTHR PROT FAULT**	00017700.0001001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) OVTHR PROT FAULT - FWSPAGE**	00017701.0001001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) PROBES FAULT**	NG01575	
	PRO-ABN-ENG		**ENG 1(2) PROBES FAULT**	00017981.0003001	06 JUN 16
	Criteria: 31-1492, CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) PROBES FAULT**	00018734.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

	PRO-ABN-ENG		**ENG 1(2) PROBES FAULT**	NG01575	
	PRO-ABN-ENG		**ENG 1(2) PROBES FAULT**	00017981.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 06561				
	PRO-ABN-ENG		**ENG 1(2) PROBES FAULT**	00018734.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 06561				

E	PRO-ABN-ENG		**ENG 1(2) REV INHIBITED**	NG01017	
E	PRO-ABN-ENG		**ENG 1(2) REV INHIBITED**	00017987.0004001	21 MAR 16
	Criteria: 31-1373, 31-1414, 73-1097, 73-1100, CFMI, IAE, IAL, P11677, P11819, P12367				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REV INHIBITED**	00012111.0001001	25 FEB 14
	Criteria: 31-1373, 31-1414, 73-1097, 73-1100, CFMI, IAE, IAL, P11677, P11819, P12367				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REV INHIBITED - FWSPAGE**	00012113.0001001	30 MAR 12
	Criteria: 31-1373, 31-1414, 73-1097, 73-1100, CFMI, IAE, IAL, P11677, P11819, P12367				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) REV ISOL FAULT**	NG01576	
	PRO-ABN-ENG		**ENG 1(2) REV ISOL FAULT**	00017989.0001001	21 MAR 16
	Criteria: P3956, P3957				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) REV ISOL FAULT**	00018735.0001001	21 MAR 16
	Criteria: P3956, P3957				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**ENG 1(2) REV LOCKED (on Ground)**	NG01015	
E	PRO-ABN-ENG		**ENG 1(2) REV LOCKED (on Ground)**	00017990.0001001	21 MAR 16
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REV LOCKED (On Ground)**	00018736.0001001	21 MAR 16
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REV LOCKED - FWSPAGE (On Ground)**	00012110.0001001	12 JAN 11
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REV MINOR FAULT**	NG01577	
E	PRO-ABN-ENG		**ENG 1(2) REV MINOR FAULT**	00017991.0002001	13 MAY 16
E	Criteria: IAL, P14629 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REV MINOR FAULT**	00012085.0001001	25 FEB 14
E	Criteria: IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	NG01578	
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017992.0001001	13 MAY 16
	Criteria: 31-1492, CFMI, IAE				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017702.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	NG01578	
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017992.0003001	02 AUG 16
	Criteria: IAE				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017702.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	NG01578	
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017992.0003001	02 AUG 16
	Criteria: IAE				
	Applicable to: MSN 02014				
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017702.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 02014				

E	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	NG01578	
E	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017992.0004001	13 MAY 16
	Criteria: IAL, P14629				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017702.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

E	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	NG01578	
E	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017992.0004001	13 MAY 16
	Criteria: IAL, P14629				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REV PRESSURIZED**	00017702.0003001	30 MAR 18
	Criteria: 31-1558, P10383, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-ENG		**ENG REV SET**	NG01600	
	PRO-ABN-ENG		**ENG REV SET**	00017905.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125				
	Applicable to: ALL				
	PRO-ABN-ENG		**ENG REV SET**	00017776.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125				
	Applicable to: ALL				

	PRO-ABN-ENG		**ENG 1(2) REV SWITCH FAULT**	NG01579	
	PRO-ABN-ENG		**ENG 1(2) REV SWITCH FAULT**	00017870.0001001	21 MAR 16
	Criteria: CFMI, IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) REV SWITCH FAULT**	00012098.0001001	25 FEB 14
	Criteria: CFMI, IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	NG01580	
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	00017871.0001001	26 NOV 19
	Criteria: PW1100G-JM, P21265, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	00012084.0009001	09 JAN 18
	Criteria: 31-1197, 31-1218, 31-1257, IAE, P4121, P6801 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	NG01580	
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	00017871.0001001	26 NOV 19
	Criteria: PW1100G-JM, P21265, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	NG01580	
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	00017871.0001001	26 NOV 19
	Criteria: PW1100G-JM, P21265, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	00012084.0007001	09 JAN 18
	Criteria: CFMI, P4121, P6801 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	NG01580	
	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	00017871.0001001	26 NOV 19
	Criteria: PW1100G-JM, P21265, SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REVERSE UNLOCKED**	00012084.0010001	21 MAR 17
	Criteria: IAL, P4121, P6801				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REVERSER CTL FAULT**	NG01324	
E	PRO-ABN-ENG		**ENG 1(2) REVERSER CTL FAULT**	00018179.0001001	21 MAR 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REVERSER CTL FAULT**	00015578.0001001	18 AUG 14
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REVERSER CTL FAULT - FWSPAGE**	00015579.0001001	18 AUG 14
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	NG01010	
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	00017872.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	00017703.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1558, CFMI, IAE, IAL, P20466, P5429, P6801, P7919, P8069				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT - FWSPAGE**	00012070.0001001	17 AUG 10
	Criteria: CFMI, IAE **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	NG01010	
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	00017872.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	00017703.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1558, CFMI, IAE, IAL, P20466, P5429, P6801, P7919, P8069 **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	NG01010	
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	00017872.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT**	00017703.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1558, CFMI, IAE, IAL, P20466, P5429, P6801, P7919, P8069 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) REVERSER FAULT - FWSPAGE**	00012070.0002001	04 DEC 17
	Criteria: IAL, PW1100G-JM, P13922				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG SAT ABOVE FLEX TEMP**	NG01601	
E	PRO-ABN-ENG		**ENG SAT ABOVE FLEX TEMP**	00017904.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, 73-1100, PW1100G-JM, P11819, P12367				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG SAT ABOVE FLEX TEMP**	00014243.0004001	30 MAR 12
	Criteria: 31-1373, 31-1414, 73-1100, PW1100G-JM, P11819, P12367				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	NG01046	
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	00017873.0002001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	00012235.0004001	05 JUN 18
	Criteria: 31-1197, 31-1218, 31-1257, IAE, P7125				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT - FWSPAGE**	00017707.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, CFMI, IAE, IAL, P7125				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT - FWSPAGE**	NG01046	
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT - FWSPAGE**	00017707.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, CFMI, IAE, IAL, P7125				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	NG01046	
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	00017873.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	00012235.0003001	05 JUN 18
	Criteria: CFMI, P7125				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT - FWSPAGE**	00017707.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, CFMI, IAE, IAL, P7125				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

E	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	NG01046	
E	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	00017873.0003001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT**	00012235.0009001	17 NOV 20
	Criteria: IAL, P7125				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) SENSOR FAULT - FWSPAGE**	00017707.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, CFMI, IAE, IAL, P7125				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	NG01022	
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017874.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017837.0006001	20 MAR 17
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P5706, P6437, P6544, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN - FWSPAGE**	00017852.0005001	17 NOV 20
	Criteria: 31-1257, 31-1334, 31-1414, 31-1492, P10383, P6801, P7125, SA, A320, A321				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	NG01022	
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017874.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017837.0006001	20 MAR 17
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P5706, P6437, P6544, P7125, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN - FWSPAGE**	00017852.0017001	17 NOV 20
	Criteria: 31-1257, SA, A320				
	Applicable to: MSN 01251				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	NG01022	
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017874.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017837.0006001	20 MAR 17
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P5706, P6437, P6544, P7125, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN - FWSPAGE**	00017852.0008001	17 NOV 20
	Criteria: 22-1159, 31-1197, 31-1218, 31-1334, 31-1414, 31-1492, P6801, P7125, P8211, SA, A320				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	NG01022	
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017874.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	NG01022	
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017874.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017837.0009001	21 MAR 16
	Criteria: PW1100G-JM, P5706, P6544, P7125, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN - FWSPAGE**	00017852.0019001	17 NOV 20
	Criteria: PW1100G-JM, P10383, P13922, P14629, P14826, P15992, P6801, P7125, SA, A320				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	NG01022	
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017874.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635				
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017837.0009001	21 MAR 16
	Criteria: PW1100G-JM, P5706, P6544, P7125, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN - FWSPAGE**	00017852.0020001	17 NOV 20
	Criteria: 31-1575, PW1100G-JM, P10383, P13922, P14629, P14826, P15992, P20610, P6801, P7125, SA, A320, A321				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	NG01022	
	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017874.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN**	00017837.0012001	18 NOV 21
	Criteria: PW1100G-JM, P21265, P5706, P6544, P7125, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) SHUT DOWN - FWSPAGE**	00017852.0020001	17 NOV 20
	Criteria: 31-1575, PW1100G-JM, P10383, P13922, P14629, P14826, P15992, P20610, P6801, P7125, SA, A320, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-ENG		**ENG 1(2) STALL**	NG01237	
	PRO-ABN-ENG		**ENG 1(2) STALL**	00017876.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ENG		**ENGINE STALL**	00017749.0005001	17 MAR 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, 31-1492, 73-1100, CFMI, IAE, IAL, P10383, P12367, P14629, P7125				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) STALL - FWSPAGE**	00017748.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) STALL**	NG01237	
	PRO-ABN-ENG		**ENG 1(2) STALL**	00017876.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENGINE STALL**	00017749.0004001	28 MAY 20
	Criteria: 31-1257, 31-1334, 31-1414, CFMI, IAE, P10383, P12367, P7125				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) STALL**	NG01237	
	PRO-ABN-ENG		**ENG 1(2) STALL**	00017876.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-ENG		**ENG 1(2) STALL**	NG01237	
	PRO-ABN-ENG		**ENG 1(2) STALL**	00017876.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-ENG		**ENGINE STALL**	00017749.0004001	28 MAY 20
	Criteria: 31-1257, 31-1334, 31-1414, CFMI, IAE, P10383, P12367, P7125				
	Applicable to: MSN 02014, 06561				
E	PRO-ABN-ENG		**ENG 1(2) STALL - FWSPAGE**	00017748.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 02014, 06561**				
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	NG01333	
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00017995.0002001	13 MAY 16
	Criteria: 31-1492, IAE				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00012100.0006001	19 MAY 14
	Criteria: 31-1334, 31-1414, 31-1492, IAE, P10383				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	NG01333	
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00017995.0002001	13 MAY 16
	Criteria: 31-1492, IAE **Applicable to: MSN 01251**				
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00012100.0002001	23 JUN 15
	Criteria: IAE **Applicable to: MSN 01251**				
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	NG01333	
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00017995.0001001	13 MAY 16
	Criteria: 31-1492, CFMI **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00012100.0005001	05 MAR 19
	Criteria: 31-1334, 31-1414, 31-1492, CFMI, P10383 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-ENG		**ENG 1(2) START FAULT**	NG01333	
	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00017995.0007001	21 OCT 16
	Criteria: IAL, P14826, P15992, P15993 **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00012100.0013001	10 JAN 17
	Criteria: 31-1558, PW1100G-JM, P10383, P14826, P15991, P15992, P15993, P20466				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) START FAULT - FWSPAGE**	00015583.0001001	05 NOV 15
	Criteria: PW1100G-JM, P15993				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) START FAULT**	NG01333	
E	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00017995.0010001	09 APR 18
	Criteria: 31-1558, IAL, P14826, P15992, P15993, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) START FAULT**	00012100.0013001	10 JAN 17
	Criteria: 31-1558, PW1100G-JM, P10383, P14826, P15991, P15992, P15993, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) START FAULT - FWSPAGE**	00015583.0001001	05 NOV 15
	Criteria: PW1100G-JM, P15993				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00018010.0003001	10 MAY 21
	Criteria: 31-1373, 31-1414, 31-1492, P11819, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT - FWSPAGE**	00012091.0003001	17 MAR 17
	Criteria: 31-1492, 31-1575, IAE, IAL, P14629, P20610, P21265, P21423				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00018010.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT - FWSPAGE**	00012091.0001001	17 AUG 10
	Criteria: IAE				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00018010.0002001	10 MAY 21
	Criteria: 31-1373, 31-1414, P11819, SA **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT - FWSPAGE**	00012091.0001001	17 AUG 10
	Criteria: IAE **Applicable to: MSN 02014**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00018010.0003001	10 MAY 21
	Criteria: 31-1373, 31-1414, 31-1492, P11819, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT - FWSPAGE**	00012091.0002001	17 MAR 17
	Criteria: 31-1492 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA **Applicable to: MSN 06561**				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00018010.0002001	10 MAY 21
	Criteria: 31-1373, 31-1414, P11819, SA **Applicable to: MSN 06561**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00018010.0005001	10 MAY 21
	Criteria: 31-1575, P11819, P14629, P15967, SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT - FWSPAGE**	00012091.0003001	17 MAR 17
	Criteria: 31-1492, 31-1575, IAE, IAL, P14629, P20610, P21265, P21423				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	NG01013	
	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00017932.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT**	00018010.0013001	18 NOV 21
	Criteria: P11819, P14629, P15967, P20610, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) START VALVE FAULT - FWSPAGE**	00012091.0003001	17 MAR 17
	Criteria: 31-1492, 31-1575, IAE, IAL, P14629, P20610, P21265, P21423				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	NG01014	
	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017915.0001001	21 MAR 16
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017753.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, IAE, P7125				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	NG01014	
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017915.0003001	17 JAN 18
	Criteria: IAL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017753.0005001	26 NOV 19
	Criteria: IAL, P7125				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT - FWSPAGE**	00012105.0001001	17 AUG 10
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	NG01014	
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017915.0003001	17 JAN 18
	Criteria: IAL				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293**				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017753.0007001	26 NOV 19
	Criteria: 31-1558, IAL, P20466, P7125				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293**				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT - FWSPAGE**	00012105.0001001	17 AUG 10
	Criteria: IAL				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293**				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	NG01014	
N	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017915.0004001	30 NOV 21
	Criteria: IAL, P22033				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT**	00017753.0007001	26 NOV 19
	Criteria: 31-1558, IAL, P20466, P7125				
E	**Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) SYSTEM FAULT - FWSPAGE**	00012105.0001001	17 AUG 10
	Criteria: IAL				
E	**Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER ABV IDLE**	NG01589	
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER ABV IDLE**	00017922.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER ABV IDLE**	00018748.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER ABV IDLE**	NG01589	
	PRO-ABN-ENG		**ENG 1(2) THR LEVER ABV IDLE**	00017922.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER ABV IDLE**	00018748.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	NG01026	
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	00017999.0004001	06 SEP 16
	Criteria: 31-1334, 31-1414, CFMI, IAE, P10383				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	00012146.0017001	02 MAY 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, 73-1075, 73-1088, P4456, P4528, P5429, P6801, P7876, P7919, P8069, P9107, P9496, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE - FWSPAGE**	00018067.0013001	28 MAY 20
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, 73-1075, CFMI, IAE, P10383, P4456, P4528, P5429, P7876, P7919, P8069, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	NG01026	
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	00017999.0002001	06 SEP 16
	Criteria: IAE				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	00012146.0017001	02 MAY 17
	Criteria: 31-1197, 31-1218, 31-1257, 31-1267, 31-1300, 73-1075, 73-1088, P4456, P4528, P5429, P6801, P7876, P7919, P8069, P9107, P9496, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE - FWSPAGE**	00018067.0013001	28 MAY 20
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, 73-1075, CFMI, IAE, P10383, P4456, P4528, P5429, P7876, P7919, P8069, P9107				
	Applicable to: MSN 01251				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	NG01026	
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	00017999.0001001	21 MAR 16
	Criteria: IAL, P10383				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE**	00012146.0018001	12 JAN 11
	Criteria: IAL, P6801, P9107, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER DISAGREE - FWSPAGE**	00018067.0023001	28 MAY 20
	Criteria: IAL, P10383, P13922, P14629, P9107				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	NG01028	
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018000.0003001	01 JUN 16
	Criteria: 31-1334, 31-1414, CFMI, IAE, P10383				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018069.0006001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P4456, P4985, P6801, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
R	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT - FWSPAGE**	00012152.0002001	04 NOV 21
	Criteria: 31-1334, 31-1414, P10383, P4456, P4528, P4985, P7919, P8069, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	NG01028	
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018000.0002001	13 MAY 16
	Criteria: IAE				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018069.0006001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P4456, P4985, P6801, SA				
	Applicable to: MSN 01251				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT - FWSPAGE**	00012152.0002001	04 NOV 21
	Criteria: 31-1334, 31-1414, P10383, P4456, P4528, P4985, P7919, P8069, SA				
	Applicable to: MSN 01251				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	NG01028	
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018000.0003001	01 JUN 16
	Criteria: 31-1334, 31-1414, CFMI, IAE, P10383				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018069.0009001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, P4528, P6801, P7919, P8069, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT - FWSPAGE**	00012152.0002001	04 NOV 21
	Criteria: 31-1334, 31-1414, P10383, P4456, P4528, P4985, P7919, P8069, SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

E	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	NG01028	
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018000.0001001	21 MAR 16
	Criteria: IAL, P10383				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT**	00018069.0007001	21 MAR 16
	Criteria: IAL, P10383, P6801, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-ENG		**ENG 1(2) THR LEVER FAULT - FWSPAGE**	00012152.0013001	04 NOV 21
	Criteria: IAL, P10383, P13922, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-ENG		**ENG T.O. THRUST DISAGREE**	NG01602	
E	PRO-ABN-ENG		**ENG T.O. THRUST DISAGREE**	00018282.0001001	13 MAY 16
	Criteria: IAL, P10383				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG T.O. THRUST DISAGREE**	00017779.0001001	21 MAR 16
	Criteria: IAL				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) TURB COOL FAULT**	NG01597	
E	PRO-ABN-ENG		**ENG 1(2) TURB COOL FAULT**	00017908.0003001	13 MAY 16
	Criteria: PW1100G-JM, P14629				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG 1(2) TURB COOL FAULT**	00012292.0002001	06 DEC 16
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG THR LEVERS NOT SET**	NG01603	
	PRO-ABN-ENG		**ENG THR LEVERS NOT SET**	00017892.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG THR LEVERS NOT SET**	00017863.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, IAE, P9107				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04773, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-ENG		**ENG THR LEVERS NOT SET**	NG01603	
	PRO-ABN-ENG		**ENG THR LEVERS NOT SET**	00017892.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-ENG		**ENG THR LEVERS NOT SET**	00017863.0007001	05 MAY 22
	Criteria: 31-1267, 31-1300, 73-1100, CFMI, P12367, P9107				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-ENG		**ENG THR LEVERS NOT SET (ON GROUND)**	NG01830	
E	PRO-ABN-ENG		**ENG THR LEVERS NOT SET (ON GROUND)**	00022038.0001001	04 DEC 17
E	Criteria: P13922 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG THR LEVERS NOT SET (ON GROUND)**	00022039.0001001	05 MAY 22
E	Criteria: P13922 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG THR LEVERS NOT SET (AT GO-AROUND)**	NG01831	
E	PRO-ABN-ENG		**ENG THR LEVERS NOT SET (AT GO-AROUND)**	00022040.0001001	04 DEC 17
E	Criteria: P13922 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-ENG		**ENG THR LEVERS NOT SET (AT GO-AROUND)**	00022041.0001001	04 DEC 17
E	Criteria: P13922 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-ENG		**ENG THRUST LOCKED**	NG01604	
	PRO-ABN-ENG		**ENG THRUST LOCKED**	00017888.0001001	21 MAR 16
	Criteria: P3420 **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG THRUST LOCKED**	00017865.0002001	21 MAR 16
	Criteria: P3420 **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-ENG		**ENG TYPE DISAGREE**	NG01605	
	PRO-ABN-ENG		**ENG TYPE DISAGREE**	00017881.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG TYPE DISAGREE**	00017868.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-ENG		**ENG VIB SYS FAULT**	NG01606	
	PRO-ABN-ENG		**ENG VIB SYS FAULT**	00017879.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-ENG		**ENG VIB SYS FAULT**	00012074.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-F_CTL		**[QRH] Landing with Slats or Flaps Jammed**	00010683.0001001	29 NOV 19
E	Criteria: 22-1079, 22-1090, 22-1102, 22-1226, 22-1676, 31-1257, P5706, P6437, P6703, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
N	PRO-ABN-F_CTL		**[QRH] Landing with Slats or Flaps Jammed**	00010683.0105001	29 NOV 19
	Criteria: K2113, P5706, P6703, P7520, SA, 321-200NX **Applicable to: MSN 11531**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**[QRH] Landing with Slats or Flaps Jammed**	00010683.0050001	29 NOV 19
	Criteria: K2113, K6345, P5706, P6703, P7519, P7520, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-ABN-F_CTL		**[QRH] RUDDER JAM**	00011807.0001001	26 NOV 19
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-F_CTL		**[QRH] STABILIZER JAM**	00011806.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL AIL SERVO FAULT**	NG01628	
	PRO-ABN-F_CTL		**F/CTL AIL SERVO FAULT**	00016986.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-F_CTL		**F/CTL AIL SERVO FAULT**	00018412.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	NG00967	
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00016965.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05345**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00018413.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05345**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW - FWSPAGE**	00018414.0003001	22 MAR 17
	Criteria: 31-1334, 31-1414, 31-1492, P10383, SA, A319 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05345**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	NG00967	
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00016965.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00018413.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW - FWSPAGE**	00018414.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				

	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	NG00967	
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00016965.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00018413.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW - FWSPAGE**	00018414.0006001	21 MAR 17
	Criteria: 22-1159, 31-1334, 31-1414, 31-1492, P8211, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				

	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	NG00967	
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00016965.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00018413.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	NG00967	
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00016965.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00018413.0001001	22 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW - FWSPAGE**	00018414.0004001	22 MAR 17
	Criteria: 31-1492, 57-1173, 57-1187, J3283, J3448, P10383, SA				
	Applicable to: MSN 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	NG00967	
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00016965.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00018413.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW - FWSPAGE**	00018414.0014001	04 DEC 17
	Criteria: J3283, P10383, P13922, P15992, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	NG00967	
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00016965.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-F_CTL		**F/CTL ALTN LAW**	00018413.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL ALTN LAW - FWSPAGE**	00018414.0016001	24 MAR 20
	Criteria: 31-1575, J3283, J3448, P10383, P13922, P15992, P20610, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	NG00966	
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00016964.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00018420.0001001	22 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW - FWSPAGE**	00018422.0003001	22 MAR 17
	Criteria: 31-1334, 31-1414, 31-1492, P10383, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	NG00966	
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00016964.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00018420.0001001	22 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW - FWSPAGE**	00018422.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	NG00966	
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00016964.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00018420.0002001	21 MAR 16
	Criteria: 22-1159, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW - FWSPAGE**	00018422.0004001	21 MAR 16
	Criteria: 22-1159, 31-1334, 31-1414, 31-1492, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	NG00966	
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00016964.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	NG00966	
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00016964.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00018420.0001001	22 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW - FWSPAGE**	00018422.0005001	08 NOV 16
	Criteria: P10383, P15992, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	NG00966	
	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00016964.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW**	00018420.0001001	22 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL DIRECT LAW - FWSPAGE**	00018422.0010001	24 MAR 20
	Criteria: 31-1575, P10383, P15992, P20610, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	NG00962	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	00016960.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	00018425.0011001	10 MAY 16
	Criteria: 31-1414, J1617, SA **Applicable to: MSN 01143, 01158, 01246**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed) - FWSPAGE**	00018426.0003001	17 MAY 21
E	Criteria: 31-1373, 31-1414, P11819, P13023, SA **Applicable to: MSN 01143, 01158, 01246**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	NG00962	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	00016960.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	00018425.0007001	10 MAY 16
	Criteria: J1617, SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed) - FWSPAGE**	00018426.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	NG00962	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	00016960.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	00018425.0006001	21 MAR 16
	Criteria: 31-1414, 57-1173, 57-1187, J1617, J3283, J3448, K2113, K3154, P11140, P13023, P4916, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed) - FWSPAGE**	00018426.0003001	17 MAY 21
	Criteria: 31-1373, 31-1414, P11819, P13023, SA				
E	**Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	NG00962	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (One Computer Failed)**	00016960.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0009001	05 MAY 22
	Criteria: 31-1414, P13023, SA, A320				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0004001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, 31-1492, P11819, P13023, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0008001	05 MAY 22
	Criteria: SA, A320 **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0009001	05 MAY 22
	Criteria: 31-1414, P13023, SA, A320				
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0007001	17 MAY 21
	Criteria: 22-1159, 31-1267, 31-1300, 31-1373, 31-1414, 31-1492, P8211, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05097, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0003001	05 MAY 22
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05097, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0004001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, 31-1492, P11819, P13023, P9107, SA **Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05097, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 04827, 04860, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0004001	05 MAY 22
	Criteria: 31-1414, P11140, P13023, SA, A320				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04827, 04860, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0004001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, 31-1492, P11819, P13023, P9107, SA				
	Applicable to: MSN 04827, 04860, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0009001	05 MAY 22
	Criteria: 31-1414, P13023, SA, A320				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0008001	17 MAY 21
	Criteria: P11819, P13023, P15992, P9107, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0009001	05 MAY 22
	Criteria: 31-1414, P13023, SA, A320				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0011001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P15992, P20610, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	NG00963	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed)**	00018899.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 11531				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) FAULT (Both Computers Failed)**	00018433.0003001	05 MAY 22
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) FAULT (Both Computers Failed) - FWSPAGE**	00018434.0011001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P15992, P20610, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 11531**				

	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (One Computer Failed)**	NG00964	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (One Computer Failed)**	00016977.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) PITCH FAULT (One Computer Failed)**	00018447.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) PITCH FAULT - FWSPAGE (One Computer Failed)**	00018448.0001001	28 NOV 19
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (One Computer Failed)**	NG00964	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (One Computer Failed)**	00016977.0001001	28 NOV 19
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) PITCH FAULT (One Computer Failed)**	00018447.0001001	28 NOV 19
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (One Computer Failed)**	NG00964	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (One Computer Failed)**	00016977.0001001	28 NOV 19
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1 (2) PITCH FAULT (One Computer Failed)**	00018447.0001001	28 NOV 19
	Criteria: SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT - FWSPAGE (One Computer Failed)**	00018448.0002001	18 NOV 21
E	Criteria: P21265, SA **Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (Both Computer Failed)**	NG01888	
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (Both Computer Failed)**	00023245.0001001	28 NOV 19
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (Both Computer Failed)**	00023244.0001001	28 NOV 19
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL ELAC 1(2) PITCH FAULT (Both Computer Failed)**	00023243.0001001	28 NOV 19
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

E	PRO-ABN-F_CTL		**F/CTL ELAC PITCH FAULT**	NG01992	
E	PRO-ABN-F_CTL		**F/CTL ELAC PITCH FAULT**	00024839.0001001	18 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC PITCH FAULT**	00024843.0001001	18 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELAC PITCH FAULT**	00024845.0001001	18 NOV 21
	Criteria: P21265				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-F_CTL		**F/CTL ELEV REDUND DEGRDD**	NG01929	
E	PRO-ABN-F_CTL		**F/CTL ELEV REDUND DEGRDD**	00023753.0001001	03 MAR 20
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL ELEV REDUND DEGRDD**	00023754.0001001	03 MAR 20
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-F_CTL		**F/CTL ELEV SERVO FAULT**	NG00972	
	PRO-ABN-F_CTL		**F/CTL ELEV SERVO FAULT**	00016979.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL ELEV SERVO FAULT**	00018449.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL ELEV SERVO FAULT - FWSPAGE**	00018450.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

	PRO-ABN-F_CTL		**F/CTL FCDC 1(2) FAULT**	NG00968	
	PRO-ABN-F_CTL		**F/CTL FCDC 1(2) FAULT**	00016981.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL FCDC 1 (2) FAULT**	00011777.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL FCDC 1 (2) FAULT - FWSPAGE**	00011778.0001001	18 AUG 10
	Criteria: SA				
	Applicable to: ALL				

	PRO-ABN-F_CTL		**F/CTL FCDC 1+2 FAULT**	NG00969	
	PRO-ABN-F_CTL		**F/CTL FCDC 1+2 FAULT**	00016963.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL FCDC 1+2 FAULT**	00011779.0001001	18 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL FCDC 1+2 FAULT - FWSPAGE**	00018451.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL FLAP ATTACH SENSOR**	NG01630	
	PRO-ABN-F_CTL		**F/CTL FLAP ATTACH SENSOR**	00016989.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL FLAP ATTACH SENSOR**	00018453.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	NG00957	
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	00022643.0001001	05 MAR 19
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	00011744.0002001	10 MAY 21
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED - FWSPAGE**	00018456.0004001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P13023, P9107, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	NG00957	
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	00022643.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	00011744.0001001	10 MAY 21
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED - FWSPAGE**	00018456.0002001	17 MAY 21
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	NG00957	
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	00022643.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	NG00957	
	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	00022643.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED**	00011744.0002001	10 MAY 21
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL FLAPS FAULT/LOCKED - FWSPAGE**	00018456.0006001	17 MAY 21
	Criteria: 31-1558, 31-1575, P10383, P13023, P20466, P20610, P9107, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL FLAP LVR NOT ZERO**	NG01631	
	PRO-ABN-F_CTL		**F/CTL FLAP LVR NOT ZERO**	00018902.0001001	21 MAR 16
	Criteria: 31-1257, 31-1264, 31-1334, 31-1414, P10383, P5706, P6146				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL FLAP LVR NOT ZERO**	00018454.0001001	21 MAR 16
	Criteria: 31-1257, 31-1264, 31-1334, 31-1414, P10383, P5706, P6146				
	Applicable to: ALL				
E	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	NG00961	
	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	00016990.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	00011753.0002001	25 FEB 14
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT - FWSPAGE**	00011754.0002001	30 MAR 12
	Criteria: 31-1373, 31-1414, P11819, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	NG00961	
	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	00016990.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	00011753.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT - FWSPAGE**	00011754.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	NG00961	
	PRO-ABN-F_CTL		**F/CTL FLAP SYS 1(2) FAULT**	00016990.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-F_CTL		**F/CTL FLAP/MCDU DISAGREE**	NG01629	
E	PRO-ABN-F_CTL		**F/CTL FLAP/MCDU DISAGREE**	00016987.0001001	21 MAR 16
	Criteria: 22-1462, 31-1433, 31-1492, P12697, P14629, P20467				
E	**Applicable to: MSN 04827, 04860, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL FLAP/MCDU DISAGREE**	00018452.0011001	21 MAR 16
	Criteria: 22-1462, 31-1433, 31-1492, P12697, P14629, P20467				
E	**Applicable to: MSN 04827, 04860, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-F_CTL		**F/CTL FLAPS/SLATS FAULT/LOCKED**	00018457.0024001	17 NOV 20
	Criteria: P15993, P20466, P5706, P6703, P7125, A321, 321-200NX **Applicable to: MSN 11531**				
	PRO-ABN-F_CTL		**F/CTL FLAPS/SLATS FAULT/LOCKED**	00018457.0001001	17 NOV 20
	Criteria: 22-1079, 22-1102, 22-1226, 31-1257, P5706, P6437, P6703, P7125, A319, A320				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-ABN-F_CTL		**F/CTL FLAPS/SLATS FAULT/LOCKED**	00018457.0016001	17 NOV 20
	Criteria: 22-1079, 22-1102, 22-1159, 22-1226, 31-1197, 31-1218, P5706, P6437, P6703, P7125, P8211, A320				
	Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904				
	PRO-ABN-F_CTL		**F/CTL FLAPS/SLATS FAULT/LOCKED**	00018457.0017001	17 NOV 20
	Criteria: K6345, P5706, P6703, P7125, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
E	PRO-ABN-F_CTL		**F/CTL FLAPS/SLATS FAULT/LOCKED**	00018457.0020001	17 NOV 20
	Criteria: 31-1558, P15993, P20466, P5706, P6703, P7125, A320, 320-200N				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				

E	PRO-ABN-F_CTL		**F/CTL GND SPLR 5 FAULT**	NG01239	
E	PRO-ABN-F_CTL		**F/CTL GND SPLR 5 FAULT**	00016967.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL GND SPLR 5 FAULT**	00018903.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL GND SPLR 5 FAULT - FWSPAGE**	00014253.0001001	23 MAY 12
	Criteria: 31-1373, 31-1414, P11819				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	NG00975	
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	00016968.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	00018466.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT - FWSPAGE**	00011793.0002001	04 NOV 20
	Criteria: 31-1373, 31-1414, P11819, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	NG00975	
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	00016968.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	00018466.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT - FWSPAGE**	00011793.0001001	11 MAY 12
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	NG00975	
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	00016968.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL GND SPLR / 1+2 / 3+4 / FAULT**	00018466.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-F_CTL		**F/CTL GND SPLR NOT ARMED**	NG01632	
E	PRO-ABN-F_CTL		**F/CTL GND SPLR NOT ARMED**	00016966.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL GND SPLR NOT ARMED**	00018905.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	NG00970	
	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	00016975.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	00018474.0002001	21 MAR 16
	Criteria: 31-1414, P13023, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL L (R) AIL FAULT - FWSPAGE**	00011783.0003001	17 MAY 21
	Criteria: 31-1373, 31-1414, P11819, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	NG00970	
	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	00016975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	00018474.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-F_CTL		**F/CTL L (R) AIL FAULT - FWSPAGE**	00011783.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	NG00970	
	PRO-ABN-F_CTL		**F/CTL L(R) AIL FAULT**	00016975.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00018484.0003001	22 MAR 17
	Criteria: 31-1492, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-F_CTL		**F/CTL L (R) ELEV FAULT - FWSPAGE**	00018490.0007001	22 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00018484.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-F_CTL		**F/CTL L (R) ELEV FAULT - FWSPAGE**	00018490.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				

	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00018484.0003001	22 MAR 17
	Criteria: 31-1492, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT - FWSPAGE**	00018490.0008001	21 MAR 17
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P8211, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00018484.0003001	22 MAR 17
	Criteria: 31-1492, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-F_CTL		**F/CTL L (R) ELEV FAULT - FWSPAGE**	00018490.0012001	22 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P9107, SA, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00018484.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-F_CTL		**F/CTL L (R) ELEV FAULT - FWSPAGE**	00018490.0003001	22 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00018484.0002001	21 MAR 16
	Criteria: P14826, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL L (R) ELEV FAULT - FWSPAGE**	00018490.0006001	21 MAR 17
	Criteria: P10383, P14826, P9107, SA, 320-200N				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	NG00973	
	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00016974.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT**	00018484.0006001	19 APR 19
	Criteria: 31-1558, P14826, P20466, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL L(R) ELEV FAULT - FWSPAGE**	00018490.0025001	03 MAR 20
	Criteria: 31-1558, 31-1575, P10383, P14826, P20466, P20610, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	NG00971	
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00016958.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00018491.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT - FWSPAGE**	00018492.0006001	22 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, J1617, P10383, P11140, P9107, SA, A320				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	NG00971	
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00016958.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00018491.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT - FWSPAGE**	00018492.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, J1617, SA, A320 **Applicable to: MSN 01251**				

	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	NG00971	
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00016958.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00018491.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT - FWSPAGE**	00018492.0014001	21 MAR 16
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, J1617, P10383, P15992, P8211, P9107, SA, A320, 320-200N **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324**				

	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	NG00971	
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00016958.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00018491.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	NG00971	
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00016958.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT**	00018491.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL L+R ELEV FAULT - FWSPAGE**	00018492.0027001	24 MAR 20
	Criteria: 31-1575, J1617, P10383, P15992, P20610, P9107, SA, A320, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL L(R) SIDESTICK FAULT**	NG01238	
	PRO-ABN-F_CTL		**F/CTL L(R) SIDESTICK FAULT**	00016959.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-F_CTL		**F/CTL L(R) SIDESTICK FAULT**	00011756.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL L(R) SIDESTICK FAULT - FWSPAGE**	00014250.0001001	30 MAR 12
	Criteria: 31-1373, 31-1414, P11819				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-F_CTL		**F/CTL L(R) SIDESTICK FAULT**	NG01238	
	PRO-ABN-F_CTL		**F/CTL L(R) SIDESTICK FAULT**	00016959.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251, 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL L(R) SIDESTICK FAULT**	00011756.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01251, 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	NG01634	
E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	00016956.0001001	28 MAY 20
	Criteria: 22-1270, 22-1375, 22-1553, 31-1373, 31-1414				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014**				
E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	00018906.0025001	06 AUG 18
	Criteria: 22-1269, 22-1270, 22-1375, 22-1427, 22-1461, 22-1553, 22-1676, 31-1359, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10762, P10763, P11807, P11819, P12126, P12753, P13834, P8014, P8483				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014**				

E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	NG01634	
E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	00016956.0002001	28 MAY 20
	Criteria: 22-1270, 22-1375, 22-1553, 22-1676, 31-1373, 31-1414, 31-1421, 31-1602				
E	**Applicable to: MSN 01459, 02321**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	00018906.0025001	06 AUG 18
	Criteria: 22-1269, 22-1270, 22-1375, 22-1427, 22-1461, 22-1553, 22-1676, 31-1359, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10762, P10763, P11807, P11819, P12126, P12753, P13834, P8014, P8483				
E	**Applicable to: MSN 01459, 02321**				
E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	NG01634	
E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	00016956.0003001	28 MAY 20
	Criteria: 22-1269, 22-1270, 22-1375, 22-1427, 22-1461, 22-1553, 31-1359, 31-1372, 31-1373, 31-1414, 31-1433, P10762, P10763, P11807, P11819, P12126, P12753, P13834, P8014, P8483				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL PITCH TRIM/MCDU/CG DISAGREE**	00018906.0025001	06 AUG 18
	Criteria: 22-1269, 22-1270, 22-1375, 22-1427, 22-1461, 22-1553, 22-1676, 31-1359, 31-1372, 31-1373, 31-1414, 31-1421, 31-1433, 31-1602, P10762, P10763, P11807, P11819, P12126, P12753, P13834, P8014, P8483				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00018502.0002001	21 MAR 16
	Criteria: J1617, P11140, A320				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT - FWSPAGE**	00018504.0004001	18 NOV 21
	Criteria: 31-1257, 31-1334, 31-1414, 31-1492, P10383, P5706, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 02014, 02734, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00018502.0002001	21 MAR 16
	Criteria: J1617, P11140, A320				
E	**Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT - FWSPAGE**	00018504.0002001	18 NOV 21
	Criteria: 31-1257, P6437, SA				
	Applicable to: MSN 01251				
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00018502.0002001	21 MAR 16
	Criteria: J1617, P11140, A320				
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT - FWSPAGE**	00018504.0010001	18 NOV 21
	Criteria: 22-1159, 31-1334, 31-1414, 31-1492, P5706, P6437, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05097, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00018502.0001001	21 MAR 16
	Criteria: A319, A321				
E	**Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05097, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT - FWSPAGE**	00018504.0004001	18 NOV 21
	Criteria: 31-1257, 31-1334, 31-1414, 31-1492, P10383, P5706, P6437, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03222, 03229, 03294, 03588, 03595, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04563, 04570, 04662, 04734, 04756, 04773, 05005, 05097, 05345, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00018502.0002001	21 MAR 16
	Criteria: J1617, P11140, A320				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL SEC 1(2) (3) FAULT - FWSPAGE**	00018504.0011001	18 NOV 21
	Criteria: P10383, P15992, P5706, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00018502.0002001	21 MAR 16
	Criteria: J1617, P11140, A320				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT - FWSPAGE**	00018504.0014001	18 NOV 21
	Criteria: 31-1575, P10383, P15992, P20610, P5706, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	NG00965	
	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00016961.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11531				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT**	00018502.0001001	21 MAR 16
	Criteria: A319, A321				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-F_CTL		**F/CTL SEC 1(2)(3) FAULT - FWSPAGE**	00018504.0014001	18 NOV 21
	Criteria: 31-1575, P10383, P15992, P20610, P5706, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 11531**				
	PRO-ABN-F_CTL		**F/CTL SIDESTICK PRIORITY**	NG01635	
	PRO-ABN-F_CTL		**F/CTL SIDESTICK PRIORITY**	00016983.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SIDESTICK PRIORITY**	00018509.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SLAT(FLAP) TIP BRK FAULT**	NG01636	
	PRO-ABN-F_CTL		**F/CTL SLAT(FLAP) TIP BRK FAULT**	00016996.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SLAT (FLAP) TIP BRK FAULT**	00018510.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	NG00959	
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	00018511.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE**	00018512.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	NG00959	
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	00018511.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE**	00018512.0004001	21 MAR 16
	Criteria: 22-1159, 31-1267, 31-1300, P8211, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	NG00959	
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	00018511.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	NG00959	
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	00018511.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE**	00018512.0003001	25 JAN 17
	Criteria: 31-1267, 31-1300, J3527, P9107, SA, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	NG00959	
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	00018511.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE**	00018512.0005001	21 MAR 16
	Criteria: J3527, P15993, P9107, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	NG00959	
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	00018511.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE**	00018512.0016001	24 MAR 20
	Criteria: 31-1575, J3527, P15993, P20610, P9107, SA, 320-200N				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	NG00959	
	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0**	00018511.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				
N	PRO-ABN-F_CTL		**F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE**	00018512.0017001	24 MAR 20
	Criteria: P15993, P20610, P9107, SA, A321, 321-200NX				
	Applicable to: MSN 11531				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00018517.0006001	10 MAY 21
	Criteria: 31-1414, P13023, SA, A320				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
R	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED - FWSPAGE**	00018518.0004001	03 NOV 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P13023, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00018517.0004001	10 MAY 21
	Criteria: SA, A320 **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED - FWSPAGE**	00018518.0002001	10 MAY 21
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00018517.0002001	10 MAY 21
	Criteria: 31-1414, SA **Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED - FWSPAGE**	00018518.0004001	03 NOV 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P13023, P9107, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00018517.0007001	10 MAY 21
E	Criteria: 31-1414, P13023, SA, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED - FWSPAGE**	00018518.0008001	03 NOV 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P13023, P9107, SA, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00018517.0008001	10 MAY 21
E	Criteria: J3527, P13023, SA, A320 **Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED - FWSPAGE**	00018518.0005001	03 NOV 21
	Criteria: J3527, P10383, P13023, P9107, SA **Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00018517.0008001	10 MAY 21
E	Criteria: J3527, P13023, SA, A320 **Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED - FWSPAGE**	00018518.0014001	10 MAY 21
	Criteria: 31-1558, 31-1575, J3527, P10383, P13023, P20466, P20610, P9107, SA, A321				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	NG00958	
	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00022652.0001001	05 MAR 19
	Criteria: SA				
	Applicable to: MSN 11531				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED**	00018517.0007001	10 MAY 21
	Criteria: 31-1414, P13023, SA, A321				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-F_CTL		**F/CTL SLATS FAULT/LOCKED - FWSPAGE**	00018518.0014001	10 MAY 21
	Criteria: 31-1558, 31-1575, J3527, P10383, P13023, P20466, P20610, P9107, SA, A321				
E	**Applicable to: MSN 11531**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SLAT SYS 1(2) FAULT**	NG00960	
	PRO-ABN-F_CTL		**F/CTL SLAT SYS 1(2) FAULT**	00016995.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SLAT SYS 1(2) FAULT**	00011751.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SLAT SYS 1(2) FAULT - FWSPAGE**	00011752.0001001	18 AUG 10
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SPD BRK 2 (3+4) FAULT**	NG00979	
	PRO-ABN-F_CTL		**F/CTL SPD BRK 2 (3+4) FAULT**	00016980.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SPD BRK 2 (3+4) FAULT**	00018519.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-F_CTL		**F/CTL SPD BRK 2 (3+4) FAULT - FWSPAGE**	00018520.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SPD BRK DISAGREE (Surfaces 3+4 affected)**	NG00976	
	PRO-ABN-F_CTL		**F/CTL SPD BRK DISAGREE (Surfaces 3+4 affected)**	00016970.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK DISAGREE (Surfaces 3+4 affected)**	00018521.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK DISAGREE - FWSPAGE (Surfaces 3+4 affected)**	00018522.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK DISAGREE (Surfaces 2+3+4 affected)**	NG00977	
	PRO-ABN-F_CTL		**F/CTL SPD BRK DISAGREE (Surfaces 2+3+4 affected)**	00018907.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK DISAGREE (Surfaces 2+3+4 affected)**	00018523.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	NG00978	
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	00016971.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	00018534.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: **MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT - FWSPAGE**	00018535.0002001	22 MAR 17
	Criteria: SA, A320, A321				
E	**Applicable to:** **MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662, 03761, 03816, 04352, 04358, 04441, 04446, 04465, 04544, 04570, 04662, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	NG00978	
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	00016971.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: **MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	00018534.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: **MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	NG00978	
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	00016971.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: **MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT**	00018534.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: **MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK FAULT - FWSPAGE**	00018535.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: **MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04563, 04734, 04756, 04773, 05005, 05097, 05345**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SPD BRK STILL OUT**	NG01637	
	PRO-ABN-F_CTL		**F/CTL SPD BRK STILL OUT**	00016972.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA **Applicable to: ALL**				
	PRO-ABN-F_CTL		**F/CTL SPD BRK STILL OUT**	00011810.0014001	25 FEB 14
	Criteria: 31-1257, P5706, P6437 **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	NG00974	
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00016976.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00018536.0003001	22 MAR 17
	Criteria: 31-1414, J1617, P11140, P13023, SA, A320				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT - FWSPAGE**	00018544.0004001	17 MAY 21
	Criteria: 31-1373, 31-1414, 31-1492, P11819, P13023, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	NG00974	
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00016976.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01251				
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00018536.0002001	21 MAR 16
	Criteria: J1617, SA, A320				
	Applicable to: MSN 01251				
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT - FWSPAGE**	00018544.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
E	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	NG00974	
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00016976.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00018536.0003001	22 MAR 17
	Criteria: 31-1414, J1617, P11140, P13023, SA, A320				
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT - FWSPAGE**	00018544.0006001	17 MAY 21
	Criteria: 22-1159, 31-1373, 31-1414, 31-1492, P11819, P13023, P15992, P8211, SA, 320-200N				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	NG00974	
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00016976.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	NG00974	
	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00016976.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL SPLR FAULT**	00018536.0003001	22 MAR 17
	Criteria: 31-1414, J1617, P11140, P13023, SA, A320				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL SPLR FAULT - FWSPAGE**	00018544.0007001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P15992, P20610, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	NG00980	
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00016973.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00018545.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM - FWSPAGE**	00018546.0003001	22 MAR 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	NG00980	
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00016973.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00018545.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM - FWSPAGE**	00018546.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				

	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	NG00980	
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00016973.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00018545.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM - FWSPAGE**	00018546.0005001	21 MAR 16
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P15992, P8211, P9107, SA, 320-200N				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				

	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	NG00980	
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00016973.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	NG00980	
	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00016973.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM**	00018545.0003001	19 APR 19
	Criteria: 31-1558, P20466, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-F_CTL		**F/CTL STABILIZER JAM - FWSPAGE**	00018546.0012001	03 MAR 20
	Criteria: 31-1558, 31-1575, P10383, P15992, P20466, P20610, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

N	PRO-ABN-FUEL		**[QRH] ACT SYSTEM FAULT**	00011274.0005001	04 SEP 18
	Criteria: J4530				
	Applicable to: MSN 11531				
N	PRO-ABN-FUEL		**[QRH] ACT XFR FAULT**	00011268.0005001	03 NOV 21
	Criteria: J4530				
	Applicable to: MSN 11531				
	PRO-ABN-FUEL		**[QRH] FUEL IMBALANCE**	00011257.0002001	10 MAY 21
	Criteria: J0006, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
E	PRO-ABN-FUEL		**[QRH] FUEL IMBALANCE**	00011257.0003001	17 MAR 17
	Criteria: J0006, J3527, K2113, SA				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**[QRH] FUEL LEAK**	00018665.0003001	28 MAY 20
	Criteria: 22-1269, 22-1270, 22-1676, 31-1197, 31-1218, 31-1257, J0006, P10762, P10763, P7125, P8483, P9652, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
E	PRO-ABN-FUEL		**[QRH] FUEL LEAK**	00018665.0006001	28 MAY 20
	Criteria: J0006, J3527, P10762, P10763, P7125, SA				
E	**Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	PRO-ABN-FUEL		**[QRH] FUEL LEAK**	00018665.0015001	28 MAY 20
	Criteria: 22-1270, J0006, J2567, K2113, P10762, P10763, P7125, SA				
E	**Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	PRO-ABN-FUEL		**[QRH] FUEL OVERREAD**	00022322.0003001	05 MAR 19
	Criteria: SA				
	Applicable to: ALL				
N	PRO-ABN-FUEL		**[QRH] FWD ACT ISOLATED**	00011279.0005001	04 SEP 18
	Criteria: J4530				
	Applicable to: MSN 11531				
E	PRO-ABN-FUEL		**[QRH] GRAVITY FUEL FEEDING**	00011261.0002001	17 MAR 17
	Criteria: PW1100G-JM, J3527, J4302, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	PRO-ABN-FUEL		**[QRH] GRAVITY FUEL FEEDING**	00011261.0001001	17 MAR 17
	Criteria: 28-1242, J3527, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				

N	PRO-ABN-FUEL		**FUEL ACT PUMP LO PR**	NG00871	
N	PRO-ABN-FUEL		**FUEL ACT PUMP LO PR**	00018189.0001001	21 MAR 16
	Criteria: J4530				
	Applicable to: MSN 11531				
N	PRO-ABN-FUEL		**FUEL ACT PUMP LO PR**	00011276.0001001	13 AUG 10
	Criteria: J4530				
	Applicable to: MSN 11531				
N	PRO-ABN-FUEL		**FUEL ACT PUMP LO PR - FWSPAGE**	00011277.0001001	13 AUG 10
	Criteria: J4530				
	Applicable to: MSN 11531				

N	PRO-ABN-FUEL		**FUEL ACT SYSTEM FAULT**	NG01487	
N	PRO-ABN-FUEL		**FUEL ACT SYSTEM FAULT**	00016812.0001001	21 MAR 16
	Criteria: J4530				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 11531				
N	PRO-ABN-FUEL		**FUEL ACT SYSTEM FAULT**	00018838.0001001	21 MAR 16
	Criteria: J4530 **Applicable to: MSN 11531**				

E	PRO-ABN-FUEL		**FUEL ACT XFR FAULT** ◁	NG00869	
	PRO-ABN-FUEL		**FUEL ACT XFR FAULT** ◁	00016820.0001001	21 MAR 16
	Criteria: J4530, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL ACT XFR FAULT** ◁	00017614.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL ACT ◁ XFR FAULT - FWSPAGE**	00011267.0001001	13 AUG 10
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL ACT XFR FAULT**	NG00869	
	PRO-ABN-FUEL		**FUEL ACT XFR FAULT**	00016820.0001001	21 MAR 16
	Criteria: J4530, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-FUEL		**FUEL ACT XFR FAULT**	NG00869	
	PRO-ABN-FUEL		**FUEL ACT XFR FAULT**	00016820.0001001	21 MAR 16
	Criteria: J4530, SA **Applicable to: MSN 11531**				
N	PRO-ABN-FUEL		**FUEL ACT XFR FAULT**	00017614.0003001	30 MAR 18
	Criteria: J4530, SA **Applicable to: MSN 11531**				
E	PRO-ABN-FUEL		**FUEL ACT PUMP LO PR**	NG01488	
E	PRO-ABN-FUEL		**FUEL ACT PUMP LO PR**	00016811.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL ACT PUMP LO PR**	00018877.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL APU LP VALVE FAULT**	NG01607	
	PRO-ABN-FUEL		**FUEL APU LP VALVE FAULT**	00016826.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-FUEL		**FUEL APU LP VALVE FAULT**	00017633.0002001	21 MAR 16
	Criteria: K3118, K3279, SA **Applicable to: ALL**				
	PRO-ABN-FUEL		**FUEL AUTO FEED FAULT**	NG00867	
	PRO-ABN-FUEL		**FUEL AUTO FEED FAULT**	00016698.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-FUEL		**FUEL AUTO FEED FAULT**	00017666.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-FUEL		**FUEL AUTO FEED FAULT - FWSPAGE**	00018882.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
E	PRO-ABN-FUEL		**FUEL AUTO TRANSFER FAULT**	NG00863	
E	PRO-ABN-FUEL		**FUEL AUTO TRANSFER FAULT**	00016830.0001001	21 MAR 16
E	Criteria: J3527, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL AUTO TRANSFER FAULT**	00011223.0001001	31 AUG 17
	Criteria: J3527, K2113				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL AUTO TRANSFER FAULT - FWSPAGE**	00011225.0001001	13 NOV 13
	Criteria: J3527, K2113				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-FUEL		**FUEL CTR L(R) XFR FAULT**	NG01284	
R	PRO-ABN-FUEL		**FUEL CTR L(R) XFR FAULT**	00016835.0001001	07 NOV 22
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-FUEL		**FUEL CTR L(R) XFR FAULT**	00018886.0001001	07 NOV 22
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-FUEL		**FUEL CTR L(R) XFR FAULT - FWSPAGE**	00014902.0008001	07 NOV 22
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT (Valves not Fully Closed)**	NG01287	
E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT (Valves not Fully Closed)**	00016838.0001001	28 JUL 16
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT (Valves not Fully Closed)**	00014908.0008001	13 NOV 13
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT - FWSPAGE (Valves not Fully Closed)**	00014907.0008001	13 NOV 13
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT (Valves not Fully Open)**	NG01285	
E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT (Valves not Fully Open)**	00018051.0003001	28 JUL 16
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT (Valves not Fully Open)**	00014903.0012001	13 NOV 13
	Criteria: 31-1414, J3527, P13023, A321				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL CTR L + R XFR FAULT - FWSPAGE (Valves not Fully Open)**	00014904.0011001	13 NOV 13
	Criteria: 31-1414, J3527, P13023, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR**	NG00861	
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR**	00016843.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR**	00018914.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1373, 31-1414, P11819, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR - FWSPAGE**	00018918.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR**	NG00861	
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR**	00016843.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR**	00018914.0002001	21 MAR 16
	Criteria: 31-1257, SA **Applicable to: MSN 01251**				
	PRO-ABN-FUEL		**FUEL CTR TK PUMP 1(2) LO PR - FWSPAGE**	00018918.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				

	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR**	NG00862	
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR**	00016845.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR**	00011221.0003001	30 MAR 12
	Criteria: 31-1373, 31-1414, J0006, P11819 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR - FWSPAGE**	00011222.0001001	13 AUG 10
	Criteria: J0006 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				

	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR**	NG00862	
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR**	00016845.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR**	00011221.0001001	13 AUG 10
	Criteria: J0006				
	Applicable to: MSN 01251				
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS LO PR - FWSPAGE**	00011222.0001001	13 AUG 10
	Criteria: J0006				
	Applicable to: MSN 01251				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS OFF**	NG01609	
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS OFF**	00016846.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL CTR TK PUMPS OFF**	00011260.0002001	10 JAN 11
	Criteria: J0006, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				

M	Localization	T	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL CTR TK XFR OFF**	NG01610	
E	PRO-ABN-FUEL		**FUEL CTR TK XFR OFF**	00016847.0001001	21 MAR 16
	Criteria: J3527, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL CTR TK XFR OFF**	00011239.0001001	13 AUG 10
	Criteria: J3527, K2113				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL ENG 1(2) LP VALVE FAULT**	NG01988	
E	PRO-ABN-FUEL		**FUEL ENG 1(2) LP VALVE FAULT**	00024813.0001001	19 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL ENG 1(2) LP VALVE FAULT**	00024818.0001001	19 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FUEL		**FUEL ENG 1(2) LP VALVE OPEN**	NG01611	
	PRO-ABN-FUEL		**FUEL ENG 1(2) LP VALVE OPEN**	00016814.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-FUEL		**FUEL ENG 1(2) LP VALVE OPEN**	00011217.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-FUEL		**FUEL F. USED/FOB DISAGREE**	NG01612	
E	PRO-ABN-FUEL		**FUEL F. USED/FOB DISAGREE**	00016816.0002001	21 MAR 16
	Criteria: 28-1214, J2360, J2361, J2937, J3240				
E	**Applicable to: MSN 04827, 04860, 05528, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-FUEL		**FUEL F. USED/FOB DISAGREE**	00017634.0001001	21 MAR 16
	Criteria: 28-1214, J2360, J2361, J2937, J3240				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04827, 04860, 05528, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-FUEL		**FUEL F. USED/FOB DISAGREE**	NG01612	
E	PRO-ABN-FUEL		**FUEL F. USED/FOB DISAGREE**	00016816.0002001	21 MAR 16
	Criteria: 28-1214, J2360, J2361, J2937, J3240				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL F.USED/FOB DISAGREE**	00017634.0005001	30 MAR 18
	Criteria: 31-1558, J2360, J2361, J2937, J3240, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FUEL		**FUEL FQI CH 1(2) FAULT**	NG01613	
	PRO-ABN-FUEL		**FUEL FQI CH 1(2) FAULT**	00016817.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-FUEL		**FUEL FQI CH 1(2) FAULT**	00011216.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-FUEL		**FUEL FQI CH 1+2 FAULT**	NG01931	
E	PRO-ABN-FUEL		**FUEL FQI CH 1+2 FAULT**	00023773.0001001	09 APR 20
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL FQI CH 1+2 FAULT**	00023774.0001001	09 APR 20
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-FUEL		**FUEL FWD ACT ISOLATED**	NG01614	
N	PRO-ABN-FUEL		**FUEL FWD ACT ISOLATED**	00016819.0001001	21 MAR 16
	Criteria: J4530				
	Applicable to: MSN 11531				
N	PRO-ABN-FUEL		**FUEL FWD ACT ISOLATED**	00017635.0001001	21 MAR 16
	Criteria: J4530				
	Applicable to: MSN 11531				
N	PRO-ABN-FUEL		**FUEL FWD ACT LINE FAULT**	NG01849	
N	PRO-ABN-FUEL		**FUEL FWD ACT LINE FAULT**	00022249.0001001	28 MAY 20
	Criteria: J4530				
	Applicable to: MSN 11531				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-ABN-FUEL		**FUEL FWD ACT LINE FAULT**	00022250.0001001	30 MAR 18
	Criteria: J4530				
	Applicable to: MSN 11531				
E	PRO-ABN-FUEL		**FUEL IDG 1(2) COOL FAULT**	NG01615	
E	PRO-ABN-FUEL		**FUEL IDG 1(2) COOL FAULT**	00016821.0001001	21 MAR 17
	Criteria: J3238, J3702, J3703, J3739, J3896, P10383				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL IDG 1(2) COOL FAULT**	00011262.0001001	25 FEB 14
	Criteria: J3238, J3702, J3703, J3739, J3896, P10383				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL FUEL INERTING SYS FAULT**	NG01250	
E	PRO-ABN-FUEL		**FUEL FUEL INERTING SYS FAULT**	00016823.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, 47-1026, 47-1035, 47-1041, J2879, P11819				
E	**Applicable to: MSN 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03058, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL INERTING SYS FAULT**	00014390.0002001	25 FEB 14
	Criteria: 31-1373, 31-1414, 47-1026, 47-1035, 47-1041, J2879, P11819				
E	**Applicable to: MSN 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03058, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL INERTING SYS FAULT - FWSPAGE**	00014391.0002001	30 MAR 12
	Criteria: 31-1373, 31-1414, 47-1026, 47-1035, 47-1041, J2879, P11819				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03058, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M	Localization	T	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	NG01616	
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00016825.0002001	21 MAR 16
	Criteria: IAE, IAL				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00011214.0002001	26 NOV 19
	Criteria: IAE				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	NG01616	
	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00016825.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00011214.0001001	10 MAY 21
	Criteria: CFMI				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	NG01616	
	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00016825.0001001	21 MAR 16
	Criteria: CFMI				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00011214.0005001	10 MAY 21
	Criteria: CFMI, J3238, J3703, J3739				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	NG01616	
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00016825.0002001	21 MAR 16
E	Criteria: IAE, IAL **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK HI TEMP**	00011214.0006001	26 NOV 19
E	Criteria: IAL, PW1100G-JM **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK LO TEMP**	NG01617	
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK LO TEMP**	00016827.0001001	21 MAR 16
E	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) OUTER (INNER) TK LO TEMP**	00011208.0001001	25 FEB 14
E	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR CLOSED**	NG01282	
E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR CLOSED**	00016829.0001001	21 MAR 16
E	Criteria: 31-1414, P13023 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR CLOSED**	00014879.0006001	07 MAR 13
	Criteria: 31-1414, P13023				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR CLOSED - FWSPAGE**	00014881.0006001	07 MAR 13
	Criteria: 31-1414, P13023				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR OPEN**	NG01283	
E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR OPEN**	00016831.0001001	21 MAR 16
	Criteria: 31-1414, P13023				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR OPEN**	00014882.0006001	25 FEB 14
	Criteria: 31-1414, P13023				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) OUTER XFR OPEN - FWSPAGE**	00014883.0006001	07 MAR 13
	Criteria: 31-1414, P13023				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to:** MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				

	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	NG00850	
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	00016832.0001001	21 MAR 16
	Criteria: SA **Applicable to:** MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	00011177.0002001	13 AUG 10
	Criteria: SA **Applicable to:** MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR - FWSPAGE**	00011178.0001001	13 AUG 10
	Criteria: SA **Applicable to:** MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	NG00850	
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	00016832.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR - FWSPAGE**	00011178.0001001	13 AUG 10
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	NG00850	
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	00016832.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR**	00011177.0001001	13 AUG 10
	Criteria: IAL, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1(2) LO PR - FWSPAGE**	00011178.0001001	13 AUG 10
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR**	NG00847	
E	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR**	00016833.0001001	21 MAR 16
	Criteria: J3527, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR**	00017636.0001001	21 MAR 16
	Criteria: J3527, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR - FWSPAGE**	00018926.0001001	21 MAR 16
	Criteria: J3527, A321				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				

M	Localization	T	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR**	NG00847	
E	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR**	00016833.0001001	21 MAR 16
	Criteria: J3527, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L(R) TK PUMP 1 + 2 LO PR**	00017636.0002001	19 NOV 21
	Criteria: J3527, P21265, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L(R) TK PUMP 1 + 2 LO PR - FWSPAGE**	00018926.0002001	19 NOV 21
	Criteria: J3527, P21265, A321				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M	Localization	T	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank Empty)**	NG00849	
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank Empty)**	00018184.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank Empty)**	00017648.0004001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR - FWSPAGE (Center Tank Empty)**	00011175.0001001	13 AUG 10
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank not Empty)**	NG00848	
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank not Empty)**	00018196.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank not Empty)**	00011170.0001001	13 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR - FWSPAGE (Center Tank not Empty)**	00011171.0001001	13 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank not Empty)**	NG00848	
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank not Empty)**	00018196.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR (Center Tank not Empty)**	00011170.0003001	26 JUL 12
	Criteria: CFMI, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL L (R) TK PUMP 1 + 2 LO PR - FWSPAGE (Center Tank not Empty)**	00011171.0001001	13 AUG 10
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	NG01618	
	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	00016834.0001001	21 MAR 16
	Criteria: IAE, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	00011215.0004001	16 NOV 11
	Criteria: IAE, K2113				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	NG01618	
E	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	00016834.0002001	21 MAR 16
	Criteria: CFMI, A321				
E	**Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	00011215.0003001	10 MAY 21
	Criteria: CFMI, K2113				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	NG01618	
E	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	00016834.0002001	21 MAR 16
	Criteria: CFMI, A321				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK HI TEMP**	00011215.0004001	16 NOV 11
	Criteria: IAE, K2113				
E	**Applicable to: MSN 11531**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL**	NG00851	
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL**	00016837.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL**	00018927.0002001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL - FWSPAGE**	00018928.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				

	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL**	NG00851	
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL**	00016837.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL - FWSPAGE**	00018928.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL**	NG00851	
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL**	00016837.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-FUEL		**FUEL L(R) WING TK LO LVL**	00018927.0003001	30 MAR 18
	Criteria: 31-1558, P20466, P7125, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FUEL		**FUEL L (R) WING TK LO LVL - FWSPAGE**	00018928.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	NG01619	
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00016810.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00018673.0003001	21 MAR 16
	Criteria: 31-1373, 31-1414, J0006, P11819, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173				
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	NG01619	
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00016810.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01251**				
	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00018673.0001001	21 MAR 16
	Criteria: J0006, SA				
	Applicable to: MSN 01251				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	NG01619	
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00016810.0002001	21 MAR 16
E	Criteria: SA, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00018673.0004001	21 MAR 16
E	Criteria: 31-1373, 31-1414, J0006, J3527, K2113, P11819, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	NG01619	
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00016810.0001001	21 MAR 16
E	Criteria: SA **Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L + R WING TK LO LVL**	00018673.0004001	21 MAR 16
E	Criteria: 31-1373, 31-1414, J0006, J3527, K2113, P11819, SA **Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK LO TEMP**	NG01620	
E	PRO-ABN-FUEL		**FUEL L (R) WING TK LO TEMP**	00016815.0001001	21 MAR 16
E	Criteria: A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK LO TEMP**	00011209.0001001	25 FEB 14
E	Criteria: K2113 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW**	NG00865	
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW**	00016818.0002001	21 MAR 16
E	Criteria: 31-1373, 31-1414, J3527, J3559, P11819, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-FUEL		**FUEL L(R) WING TK OVERFLOW**	00018938.0001001	03 NOV 21
	Criteria: 31-1373, 31-1414, J3527, J3559, P11819, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW - FWSPAGE**	00018980.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, J3527, J3559, P11819, A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW**	NG00865	
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW**	00016818.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, J3527, J3559, P11819, A321				
E	**Applicable to: MSN 05621, 05643, 05749, 05752, 05883, 06139, 06173**				
	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW**	00018938.0003001	21 MAR 16
	Criteria: J3559, P11819				
	Applicable to: MSN 05621, 05643, 05749, 05752, 05883, 06139, 06173				
	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW - FWSPAGE**	00018980.0002001	21 MAR 16
	Criteria: J3559, P11819				
	Applicable to: MSN 05621, 05643, 05749, 05752, 05883, 06139, 06173				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW**	NG00865	
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW**	00016818.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, J3527, J3559, P11819, A321				
E	**Applicable to: MSN 11531**				
N	PRO-ABN-FUEL		**FUEL L(R) WING TK OVERFLOW**	00018938.0005001	03 NOV 21
	Criteria: J4530, P11819, A321				
	Applicable to: MSN 11531				
E	PRO-ABN-FUEL		**FUEL L (R) WING TK OVERFLOW - FWSPAGE**	00018980.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, J3527, J3559, P11819, A321				
E	**Applicable to: MSN 11531**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE CLOSED**	NG00853	
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE CLOSED**	00016824.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE CLOSED**	00011183.0001001	13 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE CLOSED - FWSPAGE**	00011193.0001001	13 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE OPEN**	NG00855	
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE OPEN**	00016836.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE OPEN**	00011194.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-FUEL		**FUEL L (R) XFR VALVE OPEN - FWSPAGE**	00011196.0001001	13 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-FUEL		**FUEL LO LVL DET FAULT**	NG01621	
E	PRO-ABN-FUEL		**FUEL LO LVL DET FAULT**	00016840.0002001	21 MAR 16
E	Criteria: J3238, J3702, J3703, J3739, J3896, P10383 **Applicable to: MSN 06528, 06536, 06561, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FUEL		**FUEL LO LVL DET FAULT**	00011263.0001001	25 FEB 14
E	Criteria: J3238, J3702, J3703, J3739, J3896, P10383 **Applicable to: MSN 06528, 06536, 06561, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-FUEL		**FUEL X FEED VALVE FAULT**	NG00858	
	PRO-ABN-FUEL		**FUEL X FEED VALVE FAULT**	00016842.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-FUEL		**FUEL X FEED VALVE FAULT**	00011206.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-FUEL		**FUEL X FEED VALVE FAULT - FWSPAGE**	00011207.0001001	13 AUG 10
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-FWS		**FWS AUDIO DEGRADED**	NG02001	
E	PRO-ABN-FWS		**FWS AUDIO DEGRADED**	00024990.0001001	18 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FWS		**FWS AUDIO DEGRADED**	00024991.0001001	18 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FWS		**FWS AUDIO REDUND LOST ON FWC 1(2)**	NG02000	
E	PRO-ABN-FWS		**FWS AUDIO REDUND LOST ON FWC 1(2)**	00024988.0001001	18 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FWS		**FWS AUDIO REDUND LOST ON FWC 1(2)**	00024989.0001001	18 NOV 21
	Criteria: P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FWS		**FWS FWC 1 + 2 FAULT**	NG00699	
	PRO-ABN-FWS		**FWS FWC 1 + 2 FAULT**	00017311.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-FWS		**FWS FWC 1 + 2 FAULT**	00010055.0001001	14 FEB 13
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-FWS		**FWS FWC 1 + 2 FAULT - FWSPAGE**	00010056.0001001	14 FEB 13
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-FWS		**FWS FWC 1(2) FAULT**	NG00701	
	PRO-ABN-FWS		**FWS FWC 1(2) FAULT**	00017310.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-FWS		**FWS FWC 1(2) FAULT**	00010059.0001001	10 AUG 10
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-FWS		**FWS FWC 1(2) FAULT - FWSPAGE**	00010060.0001001	10 AUG 10
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-FWS		**FWS OEB/FWC DISCREPANCY**	NG01500	
	PRO-ABN-FWS		**FWS OEB/FWC DISCREPANCY**	00017314.0002001	21 MAR 16
	Criteria: 31-1113, 31-1264, P4287, SA **Applicable to: ALL**				
	PRO-ABN-FWS		**FWS OEB/FWC DISCREPANCY**	00010050.0001001	10 AUG 10
	Criteria: 31-1113, 31-1264, P4287 **Applicable to: ALL**				

E	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	NG00698	
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	00017306.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	00010053.0001001	04 SEP 18
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT - FWSPAGE**	00010054.0002001	10 AUG 10
	Criteria: 31-1334, 31-1414, P10383, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	NG00698	
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	00017306.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	00010053.0001001	04 SEP 18
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT - FWSPAGE**	00010054.0001001	10 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	NG00698	
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	00017306.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-FWS		**FWS SDAC 1 + 2 FAULT**	00010053.0001001	04 SEP 18
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-FWS		**FWS SDAC 1(2) FAULT**	NG00697	
	PRO-ABN-FWS		**FWS SDAC 1(2) FAULT**	00017308.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-FWS		**FWS SDAC 1(2) FAULT**	00010051.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-FWS		**FWS SDAC 1(2) FAULT - FWSPAGE**	00010052.0001001	10 AUG 10
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-FWS		**FWS SLAT (FLAP) SYNCHRO FAULT**	NG01986	
E	PRO-ABN-FWS		**FWS SLAT (FLAP) SYNCHRO FAULT**	00024805.0002001	18 NOV 21
	Criteria: P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-FWS		**FWS SLAT (FLAP) SYNCHRO FAULT**	00024809.0002001	18 NOV 21
	Criteria: P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	NG00947	
	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	00017137.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	00011661.0002001	27 NOV 12
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT - FWSPAGE**	00018313.0003001	21 MAR 17
	Criteria: 31-1373, 31-1414, P11819, P13023, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	NG00947	
	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	00017137.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	00011661.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT - FWSPAGE**	00018313.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	NG00947	
	PRO-ABN-HYD		**HYD B ELEC PUMP LO PR or OVHT**	00017137.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	NG00925	
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	00017106.0002001	21 MAR 16
E	Criteria: K2962, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	00011602.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				

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Continued from the previous page

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR - FWSPAGE**	00018312.0003001	17 MAY 21
	Criteria: 31-1373, 31-1414, P11819, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	NG00925	
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	00017106.0002001	21 MAR 16
	Criteria: K2962, SA				
E	**Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	00011602.0001001	05 MAR 13
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD B RSVR LO AIR PR - FWSPAGE**	00018312.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	NG00925	
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	00017106.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR**	00011602.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				
E	PRO-ABN-HYD		**HYD B RSVR LO AIR PR - FWSPAGE**	00018312.0003001	17 MAY 21
	Criteria: 31-1373, 31-1414, P11819, P13023, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to:** **MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11531**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD B RSVR LO LVL**	NG00927	
	PRO-ABN-HYD		**HYD B RSVR LO LVL**	00017144.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD B RSVR LO LVL**	00011606.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD B RSVR LO LVL - FWSPAGE**	00018314.0003001	17 MAY 21
	Criteria: 31-1373, 31-1414, P11819, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD B RSVR LO LVL**	NG00927	
	PRO-ABN-HYD		**HYD B RSVR LO LVL**	00017144.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD B RSVR LO LVL**	00011606.0001001	05 MAR 13
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD B RSVR LO LVL - FWSPAGE**	00018314.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-HYD		**HYD B RSVR LO LVL**	NG00927	
	PRO-ABN-HYD		**HYD B RSVR LO LVL**	00017144.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-HYD		**HYD B RSVR OVHT**	NG00926	
	PRO-ABN-HYD		**HYD B RSVR OVHT**	00017108.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD B RSVR OVHT**	00011604.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD B RSVR OVHT - FWSPAGE**	00018315.0003001	17 MAY 21
	Criteria: 31-1373, 31-1414, P11819, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD B RSVR OVHT**	NG00926	
	PRO-ABN-HYD		**HYD B RSVR OVHT**	00017108.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD B RSVR OVHT**	00011604.0001001	05 MAR 13
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD B RSVR OVHT - FWSPAGE**	00018315.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD B RSVR OVHT**	NG00926	
	PRO-ABN-HYD		**HYD B RSVR OVHT**	00017108.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	NG00940	
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	00017136.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	00011648.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR - FWSPAGE (PTU Operative)**	00011649.0001001	17 MAR 11
	Criteria: 31-1492, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	NG00940	
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	00017136.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	00011648.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	NG00940	
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	00017136.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative)**	00011648.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Operative) - FWSPAGE**	00011649.0003001	02 MAY 16
E	Criteria: P14826, SA, 320-200N, 321-200NX **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	NG00942	
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00018805.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00011652.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR - FWSPAGE (PTU Inoperative)**	00018316.0003001	10 NOV 20
	Criteria: 31-1492, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	NG00942	
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00018805.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00011652.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	NG00942	
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00018805.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00011652.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR - FWSPAGE (PTU Inoperative)**	00018316.0004001	10 NOV 20
	Criteria: 31-1492, P4576, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	NG00942	
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00018805.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR (PTU Inoperative)**	00011652.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G ENG 1 PUMP LO PR - FWSPAGE (PTU Inoperative)**	00018316.0002001	28 MAY 20
	Criteria: P14826, P4576, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	NG00928	
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00017104.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00011609.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR - FWSPAGE**	00018317.0006001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	NG00928	
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00017104.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00011609.0001001	05 MAR 13
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR - FWSPAGE**	00018317.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				

	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	NG00928	
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00017104.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	NG00928	
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00017104.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00011609.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR - FWSPAGE**	00018317.0007001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	NG00928	
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00017104.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635				
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00011609.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR - FWSPAGE**	00018317.0009001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	NG00928	
	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00017104.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR**	00011609.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G RSVR LO AIR PR - FWSPAGE**	00018317.0011001	09 NOV 21
	Criteria: P11819, P13023, P20610, P21265, P4576, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	NG00930	
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00017142.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00011614.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD G RSVR LO LVL - FWSPAGE**	00018320.0006001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-HYD		**HYD G RSVR LO LVL**	NG00930	
	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00017142.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00011614.0001001	05 MAR 13
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G RSVR LO LVL - FWSPAGE**	00018320.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	NG00930	
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00017142.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00011614.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD G RSVR LO LVL - FWSPAGE**	00018320.0007001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				

E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	NG00930	
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00017142.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G RSVR LO LVL**	00011614.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G RSVR LO LVL - FWSPAGE**	00018320.0009001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P20610, P4576, P9107, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-HYD		**HYD G RSVR OVHT**	NG00929	
	PRO-ABN-HYD		**HYD G RSVR OVHT**	00017107.0001001	21 MAR 16
	Criteria: 31-1492, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00011612.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD G RSVR OVHT - FWSPAGE**	00018321.0006001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				

	PRO-ABN-HYD		**HYD G RSVR OVHT**	NG00929	
	PRO-ABN-HYD		**HYD G RSVR OVHT**	00017107.0001001	21 MAR 16
	Criteria: 31-1492, SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G RSVR OVHT**	00011612.0001001	05 MAR 13
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G RSVR OVHT - FWSPAGE**	00018321.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01251				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	NG00929	
	PRO-ABN-HYD		**HYD G RSVR OVHT**	00017107.0001001	21 MAR 16
	Criteria: 31-1492, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00011612.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G RSVR OVHT - FWSPAGE**	00018321.0007001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	NG00929	
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00017107.0002001	01 JUN 16
	Criteria: P15991, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00011612.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD G RSVR OVHT - FWSPAGE**	00018321.0007001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	NG00929	
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00017107.0002001	01 JUN 16
	Criteria: P15991, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00011612.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-HYD		**HYD G RSVR OVHT - FWSPAGE**	00018321.0009001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	NG00929	
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00017107.0002001	01 JUN 16
	Criteria: P15991, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G RSVR OVHT**	00011612.0002001	05 MAR 13
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G RSVR OVHT - FWSPAGE**	00018321.0011001	09 NOV 21
	Criteria: P11819, P13023, P20610, P21265, P4576, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	NG00939	
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	00017133.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	00019032.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT - FWSPAGE**	00018322.0003001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1414, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	NG00939	
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	00017133.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	00019032.0002001	21 MAR 16
	Criteria: 31-1257, SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT - FWSPAGE**	00018322.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				

	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	NG00939	
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	00017133.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	NG00939	
	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	00017133.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT**	00019032.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y ELEC PUMP LO PR or OVHT - FWSPAGE**	00018322.0004001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1414, P13023, P4576, P9107, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Operative)**	NG00941	
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Operative)**	00017135.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Operative)**	00011650.0001001	18 AUG 10
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR - FWSPAGE (PTU Operative)**	00011651.0001001	18 AUG 10
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	NG00943	
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	00018806.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	00011654.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR - FWSPAGE (PTU Inoperative)**	00018323.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	NG00943	
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	00018806.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	00011654.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	NG00943	
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	00018806.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR (PTU Inoperative)**	00011654.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y ENG 2 PUMP LO PR - FWSPAGE (PTU Inoperative)**	00018323.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P4576, P9107, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	NG00931	
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00017105.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00011626.0003001	27 NOV 12
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR - FWSPAGE**	00018324.0006001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	NG00931	
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00017105.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00011626.0002001	18 AUG 10
	Criteria: 31-1257, SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR - FWSPAGE**	00018324.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	NG00931	
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00017105.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	NG00931	
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00017105.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00011626.0003001	27 NOV 12
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR - FWSPAGE**	00018324.0007001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				

E	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	NG00931	
	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00017105.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR**	00011626.0003001	27 NOV 12
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y RSVR LO AIR PR - FWSPAGE**	00018324.0009001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P20610, P4576, P9107, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	NG00933	
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00017143.0002001	06 SEP 16
E	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00011631.0003001	05 MAR 13
E	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD Y RSVR LO LVL - FWSPAGE**	00018326.0005001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	NG00933	
	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00017143.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00011631.0002001	05 MAR 13
	Criteria: 31-1257, SA **Applicable to: MSN 01251**				
	PRO-ABN-HYD		**HYD Y RSVR LO LVL - FWSPAGE**	00018326.0001001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	NG00933	
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00017143.0002001	06 SEP 16
E	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00011631.0003001	05 MAR 13
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD Y RSVR LO LVL - FWSPAGE**	00018326.0006001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	NG00933	
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00017143.0002001	06 SEP 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL**	00011631.0003001	05 MAR 13
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y RSVR LO LVL - FWSPAGE**	00018326.0008001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P20610, P4576, P9107, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	NG00932	
	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00017109.0001001	21 MAR 16
	Criteria: 31-1492, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00011629.0003001	05 MAR 13
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-HYD		**HYD Y RSVR OVHT - FWSPAGE**	00018327.0006001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD Y RSVR OVHT**	NG00932	
	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00017109.0001001	21 MAR 16
	Criteria: 31-1492, SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00011629.0002001	05 MAR 13
	Criteria: 31-1257, SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD Y RSVR OVHT - FWSPAGE**	00018327.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	NG00932	
	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00017109.0001001	21 MAR 16
	Criteria: 31-1492, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00011629.0003001	05 MAR 13
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD Y RSVR OVHT - FWSPAGE**	00018327.0007001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	NG00932	
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00017109.0002001	01 JUN 16
	Criteria: P15991, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00011629.0003001	05 MAR 13
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD Y RSVR OVHT - FWSPAGE**	00018327.0007001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	NG00932	
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00017109.0002001	01 JUN 16
	Criteria: P15991, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT**	00011629.0003001	05 MAR 13
	Criteria: 31-1197, 31-1218, 31-1257, 31-1414, P13023, P6801, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD Y RSVR OVHT - FWSPAGE**	00018327.0009001	17 MAY 21
	Criteria: 31-1575, P11819, P13023, P20610, P4576, P9107, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0003001	21 MAR 16
	Criteria: 31-1414, 31-1492, P13023, P14826, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0011001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				

	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02014				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0002001	21 MAR 16
	Criteria: 31-1414, P13023, SA				
	Applicable to: MSN 02014				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0008001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, SA				
	Applicable to: MSN 02014				

	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0003001	21 MAR 16
	Criteria: 31-1414, 31-1492, P13023, P14826, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0013001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, P10383, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06561				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0002001	21 MAR 16
	Criteria: 31-1414, P13023, SA				
	Applicable to: MSN 06561				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0009001	17 MAY 21
	Criteria: P10383, P11819, P13023, P4576, P9107, SA				
	Applicable to: MSN 06561				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0003001	21 MAR 16
	Criteria: 31-1414, 31-1492, P13023, P14826, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0010001	17 MAY 21
	Criteria: P10383, P11819, P13023, P14826, P4576, P9107, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635				
E	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0004001	16 APR 19
	Criteria: 31-1558, P13023, P14826, P20466, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0023001	17 MAY 21
	Criteria: 31-1558, 31-1575, P10383, P11819, P13023, P14826, P4576, P9107, SA, 320-200N				
	Applicable to: MSN 08635				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0004001	16 APR 19
	Criteria: 31-1558, P13023, P14826, P20466, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0028001	09 NOV 21
	Criteria: P10383, P11819, P13023, P14826, P20466, P20610, P21265, P4576, P9107, SA, 320-200N				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

E	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	NG00937	
	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018917.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 11531				
E	PRO-ABN-HYD		**HYD B+Y SYS LO PR**	00018727.0004001	16 APR 19
	Criteria: 31-1558, P13023, P14826, P20466, SA				
E	**Applicable to: MSN 11531**				
N	PRO-ABN-HYD		**HYD B+Y SYS LO PR - FWSPAGE**	00018342.0026001	09 NOV 21
	Criteria: P10383, P11819, P13023, P14826, P20466, P20610, P21265, P4576, P9107, SA, 321-200NX				
	Applicable to: MSN 11531				

	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0004001	10 MAY 21
	Criteria: 31-1414, 31-1492, P13023, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0017001	17 MAY 21
	Criteria: 31-1257, 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, P5706, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321				

	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0003001	21 MAR 16
	Criteria: 31-1257, 31-1267, 31-1300, P6437, SA				
	Applicable to: MSN 01251				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0004001	10 MAY 21
	Criteria: 31-1414, 31-1492, P13023, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0018001	17 MAY 21
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, P5706, P6437, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02014**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0002001	10 MAY 21
	Criteria: 31-1414, P13023, SA **Applicable to: MSN 02014**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0011001	17 MAY 21
	Criteria: 31-1257, 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, P5706, SA **Applicable to: MSN 02014**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0004001	10 MAY 21
	Criteria: 31-1414, 31-1492, P13023, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0023001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, P10383, P11819, P13023, P4576, P5706, P9107, SA				
	Applicable to: MSN 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02896, 02904				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0004001	10 MAY 21
	Criteria: 31-1414, 31-1492, P13023, SA				
	Applicable to: MSN 02896, 02904				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0019001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, P4576, P5706, P8211, SA				
	Applicable to: MSN 02896, 02904				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 06561				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0002001	10 MAY 21
	Criteria: 31-1414, P13023, SA				
	Applicable to: MSN 06561				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0013001	17 MAY 21
	Criteria: P10383, P11819, P13023, P4576, P5706, P9107, SA				
	Applicable to: MSN 06561				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0003001	10 MAY 21
	Criteria: P13023, P14826, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0016001	17 MAY 21
	Criteria: P10383, P11819, P13023, P14826, P4576, P5706, P9107, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635				
E	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0008001	26 NOV 19
	Criteria: 31-1558, P13023, P14826, P20466, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635**				
	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0050001	10 MAY 21
	Criteria: 31-1558, 31-1575, P10383, P11819, P13023, P14826, P4576, P5706, P9107, SA, 320-200N				
	Applicable to: MSN 08635				
E	PRO-ABN-HYD		**HYD G+B SYS LO PR**	NG00934	
	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018920.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD G+B SYS LO PR**	00018349.0008001	26 NOV 19
	Criteria: 31-1558, P13023, P14826, P20466, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G+B SYS LO PR - FWSPAGE**	00018350.0059001	09 NOV 21
	Criteria: P10383, P11819, P13023, P14826, P20466, P20610, P21265, P4576, P5706, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018352.0003001	10 MAY 21
	Criteria: 31-1334, 31-1414, P10383, P13023, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR - FWSPAGE**	00018353.0014001	17 MAY 21
	Criteria: 27-1154, 27-1160, 31-1257, 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, P10383, P11819, P13023, P6801, P7635, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018352.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR - FWSPAGE**	00018353.0005001	21 MAR 16
	Criteria: 27-1154, 31-1257, 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018352.0003001	10 MAY 21
	Criteria: 31-1334, 31-1414, P10383, P13023, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR - FWSPAGE**	00018353.0015001	17 MAY 21
	Criteria: 22-1159, 27-1160, 31-1197, 31-1218, 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, P6801, P7635, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018352.0003001	10 MAY 21
	Criteria: 31-1334, 31-1414, P10383, P13023, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR - FWSPAGE**	00018353.0021001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, P10383, P11819, P13023, P6801, P7635, P9107, SA, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018352.0003001	10 MAY 21
	Criteria: 31-1334, 31-1414, P10383, P13023, SA **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR - FWSPAGE**	00018353.0016001	17 MAY 21
	Criteria: P10383, P11819, P13023, P6801, P7635, P9107, SA, 320-200N **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

E	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 08635**				
E	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018352.0006001	26 NOV 19
	Criteria: 31-1558, P10383, P13023, P20466, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-HYD		**HYD G+Y SYS LO PR - FWSPAGE**	00018353.0033001	17 MAY 21
	Criteria: 31-1558, 31-1575, P10383, P11819, P13023, P6801, P7635, P9107, SA, 320-200N **Applicable to: MSN 08635**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	NG00936	
	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018921.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-HYD		**HYD G+Y SYS LO PR**	00018352.0006001	26 NOV 19
	Criteria: 31-1558, P10383, P13023, P20466, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-HYD		**HYD G+Y SYS LO PR - FWSPAGE**	00018353.0041001	09 NOV 21
	Criteria: P10383, P11819, P13023, P20466, P20610, P21265, P6801, P7635, P9107, SA, A321, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-HYD		**HYD PTU FAULT**	NG00945	
	PRO-ABN-HYD		**HYD PTU FAULT**	00017140.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-HYD		**HYD PTU FAULT**	00011657.0001001	31 AUG 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-HYD		**HYD PTU FAULT - FWSPAGE**	00011658.0001001	18 AUG 10
	Criteria: SA				
	Applicable to: ALL				

	PRO-ABN-HYD		**HYD RAT FAULT**	NG00946	
	PRO-ABN-HYD		**HYD RAT FAULT**	00017141.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-HYD		**HYD RAT FAULT**	00011659.0001001	16 NOV 11
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-HYD		**HYD RAT FAULT - FWSPAGE**	00011660.0001001	18 AUG 10
	Criteria: SA				
	Applicable to: ALL				

E	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G**	NG01524	
E	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G**	00018650.0002001	17 MAR 17
	Criteria: 31-1373, 31-1414, P11819, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Preparation**	00018651.0002001	17 MAR 17
	Criteria: P5451, P7455, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Approach**	00018652.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Flare, Touchdown and Rollout**	00018654.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - When A/C Stopped**	00018655.0001001	09 MAY 17
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Illustration**	00018711.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G**	NG01524	
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G**	00018650.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Preparation**	00018651.0002001	17 MAR 17
	Criteria: P5451, P7455, SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Approach**	00018652.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Flare, Touchdown and Rollout**	00018654.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - When A/C Stopped**	00018655.0001001	09 MAY 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Illustration**	00018711.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				

	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Preparation**	NG01524	
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Preparation**	00018651.0002001	17 MAR 17
	Criteria: P5451, P7455, SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Approach**	00018652.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Flare, Touchdown and Rollout**	00018654.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - When A/C Stopped**	00018655.0001001	09 MAY 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-LG		**[QRH] Landing with Abnormal L/G - Illustration**	00018711.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-LG		**[QRH] L/G GRAVITY EXTENSION**	00011286.0010001	05 MAY 22
	Criteria: 31-1257, 31-1373, 31-1414, J1334, P5706, P6437, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
	PRO-ABN-LG		**[QRH] L/G GRAVITY EXTENSION**	00011286.0004001	05 MAY 22
	Criteria: 31-1257, J1334, P6437, SA **Applicable to: MSN 01251**				
E	PRO-ABN-LG		**[QRH] L/G GRAVITY EXTENSION**	00011286.0011001	05 MAY 22
E	Criteria: 31-1373, 31-1414, J1334, P11819, P4576, P5706, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	NG00873	
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	00017734.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	00011287.0003001	01 DEC 14
	Criteria: 31-1267, 31-1300, 31-1414, P13023, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
E	PRO-ABN-LG		**L/G DOORS NOT CLOSED - FWSPAGE**	00011288.0002001	17 MAR 17
	Criteria: 31-1414, P13023, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	NG00873	
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	00017734.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	00011287.0002001	01 DEC 14
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G DOORS NOT CLOSED - FWSPAGE**	00011288.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	NG00873	
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	00017734.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	NG00873	
	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	00017734.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-LG		**L/G DOORS NOT CLOSED**	00011287.0004001	09 NOV 21
	Criteria: P13023, P21265, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G DOORS NOT CLOSED - FWSPAGE**	00011288.0002001	17 MAR 17
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G GEAR NOT DOWN**	NG01651	
	PRO-ABN-LG		**L/G GEAR NOT DOWN**	00017859.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-LG		**L/G GEAR NOT DOWN**	00018573.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-LG		**L/G GEAR NOT DOWN**	NG01651	
	PRO-ABN-LG		**L/G GEAR NOT DOWN**	00017859.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G GEAR NOT DOWN**	00018573.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-LG		**L/G GEAR NOT DOWN**	NG01651	
	PRO-ABN-LG		**L/G GEAR NOT DOWN**	00017859.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	NG00872	
E	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00017860.0002001	21 MAR 16
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00011284.0002001	01 DEC 14
	Criteria: 31-1414, P13023, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
R	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED - FWSPAGE**	00011285.0001001	03 NOV 22
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				

	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	NG00872	
	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00017860.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00011284.0001001	01 DEC 14
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED - FWSPAGE**	00011285.0001001	03 NOV 22
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				

E	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	NG00872	
E	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00017860.0002001	21 MAR 16
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00011284.0002001	01 DEC 14
	Criteria: 31-1414, P13023, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED - FWSPAGE**	00011285.0003001	03 NOV 22
	Criteria: 31-1267, 31-1300, P4576, P9107, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	NG00872	
E	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00017860.0002001	21 MAR 16
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED**	00011284.0003001	09 NOV 21
	Criteria: P13023, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-LG		**L/G GEAR NOT DOWNLOCKED - FWSPAGE**	00011285.0003001	03 NOV 22
	Criteria: 31-1267, 31-1300, P4576, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	NG00829	
	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	00017736.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	00011061.0003001	01 DEC 14
	Criteria: 31-1334, 31-1414, P10383, P13023, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED - FWSPAGE**	00018687.0002001	17 NOV 20
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	NG00829	
	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	00017736.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	00011061.0001001	01 DEC 14
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED - FWSPAGE**	00018687.0001001	17 NOV 20
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	NG00829	
	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	00017736.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	NG00829	
	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	00017736.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED**	00011061.0004001	09 NOV 21
	Criteria: P10383, P13023, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G GEAR NOT UPLOCKED - FWSPAGE**	00018687.0002001	17 NOV 20
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	NG00874	
	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	00017737.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	00011289.0002001	27 NOV 12
	Criteria: 31-1414, P13023, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT - FWSPAGE**	00018719.0002001	17 NOV 20
	Criteria: 31-1414, P13023, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	NG00874	
	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	00017737.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	00011289.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT - FWSPAGE**	00018719.0001001	17 NOV 20
	Criteria: SA **Applicable to: MSN 01251**				

	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	NG00874	
	PRO-ABN-LG		**L/G GEAR UPLOCK FAULT**	00017737.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

E	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	NG00876	
E	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	00018059.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	00018681.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT - FWSPAGE**	00018682.0001001	05 MAY 22
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	NG00876	
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	00018059.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	00018681.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT - FWSPAGE**	00018682.0001001	05 MAY 22
	Criteria: SA				
	Applicable to: MSN 01251				
E	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	NG00876	
E	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	00018059.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT**	00018681.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT - FWSPAGE**	00018682.0002001	05 MAY 22
	Criteria: PW1100G-JM, SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	NG01241	
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00017739.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00018683.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT - FWSPAGE**	00018684.0008001	05 MAY 22
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT (Two LGCIUs Faulty)**	NG01241	
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT (Two LGCIUs Faulty)**	00017739.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00018683.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**L/G LGCIU 1(2) FAULT - FWSPAGE (Two LGCIUs Faulty)**	00018684.0003001	05 MAY 22
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	NG01241	
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00017739.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00018683.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT - FWSPAGE**	00018684.0006001	05 MAY 22
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P4576, P9107, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				

E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	NG01241	
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00017739.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 08635**				
	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00018683.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 08635				
	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT - FWSPAGE**	00018684.0009001	05 MAY 22
	Criteria: 31-1575, P11819, P4576, P9107, SA				
	Applicable to: MSN 08635				

E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	NG01241	
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00017739.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT**	00018683.0003001	09 NOV 21
	Criteria: P10383, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G LGCIU 1+2 FAULT - FWSPAGE**	00018684.0013001	05 MAY 22
	Criteria: P11819, P20604, P20610, P4576, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber Extended on Ground)**	NG01652	
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber Extended on Ground)**	00017733.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber Extended on the Ground)**	00011056.0001001	25 FEB 14
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	NG00828	
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	00018062.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	00011058.0003001	25 FEB 14
E	Criteria: 31-1334, 31-1414, P10383, P13023, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT - FWSPAGE (Shock Absorber not Extended after Liftoff)**	00011059.0003001	17 NOV 20
	Criteria: 31-1334, 31-1414, P10383, P13023, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	NG00828	
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	00018062.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	00011058.0001001	05 AUG 10
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT - FWSPAGE (Shock Absorber not Extended after Liftoff)**	00011059.0001001	17 NOV 20
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	NG00828	
	PRO-ABN-LG		**L/G SHOCK ABSORBER FAULT (Shock Absorber not Extended after Liftoff)**	00018062.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-LG		**L/G SYS DISAGREE**	NG01653	
	PRO-ABN-LG		**L/G SYS DISAGREE**	00017861.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-LG		**L/G SYS DISAGREE**	00018664.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				

	PRO-ABN-LG		**L/G SYS DISAGREE**	NG01653	
	PRO-ABN-LG		**L/G SYS DISAGREE**	00017861.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-LG		**L/G SYS DISAGREE**	00018664.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA				
	Applicable to: MSN 01251				

	PRO-ABN-LG		**L/G SYS DISAGREE**	NG01653	
	PRO-ABN-LG		**L/G SYS DISAGREE**	00018664.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-LG		**L/G SYS DISAGREE**	NG01653	
E	PRO-ABN-LG		**L/G SYS DISAGREE**	00017861.0003001	09 NOV 21
	Criteria: P10383, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-LG		**L/G SYS DISAGREE**	00018664.0002001	21 MAR 16
	Criteria: 31-1257, P5706, P6437, SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-MISC		**[MEM] EMER DESCENT**	00012092.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-MISC		**[MEM] Stall Recovery**	00013768.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974				
E	PRO-ABN-MISC		**[MEM] Stall Recovery**	00013768.0002001	17 MAR 17
	Criteria: 31-1482, P14628, SA				
E	**Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-MISC		**[MEM] Stall Warning At Liftoff**	00013769.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-MISC		**[QRH] BOMB ON BOARD**	00012095.0004001	05 MAY 22
	Criteria: P5451, P7175, SA				
E	**Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-MISC		**[QRH] BOMB ON BOARD**	00012095.0003001	05 MAY 22
	Criteria: P5451, SA				
	Applicable to: MSN 01143-01518, 01593-01628				
	PRO-ABN-MISC		**[QRH] COCKPIT WINDSHIELD / WINDOW ARCING**	00012099.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-MISC		**[QRH] COCKPIT WINDSHIELD / WINDOW CRACKED**	00012097.0001001	04 DEC 18
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-MISC		**[QRH] DITCHING**	00022090.0006001	05 MAR 19
	Criteria: P5451, P7175, SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-MISC		**[QRH] DITCHING**	00022090.0004001	05 MAR 19
	Criteria: P5451, SA				
	Applicable to: MSN 01251				
	PRO-ABN-MISC		**[QRH] DITCHING**	00022090.0013001	05 MAR 19
	Criteria: 31-1492, P5451, SA				
	Applicable to: MSN 01143-01246, 01376-01518, 01593-01628				
E	PRO-ABN-MISC		**[QRH] DITCHING**	00022090.0015001	05 MAR 19
	Criteria: 31-1492, P14629, P5451, P7175, SA				
E	**Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-MISC		**[QRH] EMER EVAC**	00012083.0003001	04 MAY 18
E	Criteria: 26-1103, P15347, SA **Applicable to: MSN 01143, 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03032, 03058, 03180-03710, 03733-04773, 05005-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-09324, 10949-11597**				
	PRO-ABN-MISC		**[QRH] EMER EVAC**	00012083.0001001	09 MAY 17
	Criteria: SA **Applicable to: MSN 01158, 01251, 02014, 03035-03047, 03111, 04827-04974, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06895**				
	PRO-ABN-MISC		**[QRH] EMER LANDING ALL ENG FAILURE**	00015075.0009001	17 MAR 17
	Criteria: A319, A320, A321 **Applicable to: ALL**				
	PRO-ABN-MISC		**[QRH] FORCED LANDING**	00022092.0004001	05 JUN 18
	Criteria: P5451, SA **Applicable to: MSN 01251**				
	PRO-ABN-MISC		**[QRH] FORCED LANDING**	00022092.0009001	05 JUN 18
	Criteria: 31-1492, P5451, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628**				
	PRO-ABN-MISC		**[QRH] FORCED LANDING**	00022092.0006001	05 JUN 18
	Criteria: P5451, P7175, SA **Applicable to: MSN 02014, 06561**				
E	PRO-ABN-MISC		**[QRH] FORCED LANDING**	00022092.0010001	05 JUN 18
E	Criteria: 31-1492, P14629, P5451, P7175, SA **Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**				
	PRO-ABN-MISC		**[QRH] Overweight Landing**	00023093.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				

E	PRO-ABN-MISC		**[QRH] Severe Turbulence**	NG01816	
	PRO-ABN-MISC		**[QRH] GENERAL**	00002202.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-MISC		**SIGNS**	00002203.0001001	22 FEB 17
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-MISC		**AUTOPILOT/AUTOTHRUST**	00002301.0001001	09 DEC 09
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-MISC		**Thrust and Airspeed**	00002208.0004001	22 MAY 12
	Criteria: K5939, SA, 319-100				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02321, 02887				
	PRO-ABN-MISC		**Thrust and Airspeed**	00002208.0008001	22 MAY 12
	Criteria: 00-1070, 00-1106, G-CFM56-5B6, K4705, K5779, SA, 319-100				
	Applicable to: MSN 01801, 01826, 01837-01855, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345				
	PRO-ABN-MISC		**Thrust and Airspeed**	00002208.0002001	22 MAY 12
	Criteria: G-CFM56-5B4, G-V2527-A5, G-V2527E-A5, SA, 320-200				
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-ABN-MISC		**Thrust and Airspeed**	00002208.0005001	22 MAY 12
	Criteria: G-CFM56-5B3, G-V2533-A5, SA, 321-200				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
N	PRO-ABN-MISC		**Thrust and Airspeed**	00002208.0007001	18 JAN 17
	Criteria: SA, 321-200NX				
	Applicable to: MSN 11531				
E	PRO-ABN-MISC		**Thrust and Airspeed**	00002208.0055001	16 NOV 15
	Criteria: SA, 320-200N				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
N	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0108001	30 OCT 18
	Criteria: 321-271NX, J3448				
	Applicable to: MSN 11531				
E	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0103001	06 JAN 16
	Criteria: 320-271N, 320-273N, J3283				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0092001	01 FEB 19
	Criteria: 321-211, J3448				
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0091001	01 FEB 19
	Criteria: 57-1187, 321-231, J3448				
	Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0071001	14 DEC 12
	Criteria: 57-1173, 320-214, J3283				
	Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0005001	21 NOV 11
	Criteria: 320-232, 320-233				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0009001	16 NOV 11
	Criteria: 320-214				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0012001	17 MAR 11
	Criteria: 321-231				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0024001	17 MAR 11
	Criteria: 319-132				
	Applicable to: MSN 02321, 02887				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0003001	17 MAR 11
	Criteria: 00-1106, 319-112, K4705, K5779				
	Applicable to: MSN 03733, 04734-04756, 05005, 05097				
	PRO-ABN-MISC		**Thrust Setting (N1) for Recommended Speed**	00007380.0058001	17 MAR 11
	Criteria: 00-1070, 00-1106, 319-132, K4705, K5779				
	Applicable to: MSN 01801, 01826, 01837-01855, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345				
	PRO-ABN-MISC		**ALTITUDE**	00007386.0001001	09 JUN 15
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-MISC		**LANDING**	00007388.0002001	29 SEP 15
	Criteria: P3878, SA				
	Applicable to: ALL				
	PRO-ABN-MISC		**[QRH] TAILSTRIKE**	00012273.0001001	04 JUN 19
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-MISC		**[QRH] VOLCANIC ASH ENCOUNTER**	00012176.0005001	17 MAR 17
	Criteria: 31-1492, K2113, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
E	PRO-ABN-MISC		**[QRH] VOLCANIC ASH ENCOUNTER**	00012176.0004001	17 MAR 17
	Criteria: 31-1492, K17996, K2113, P14629, SA				
E	**Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-MISC		**[QRH] VOLCANIC ASH ENCOUNTER**	00012176.0001001	29 MAY 20
	Criteria: SA				
	Applicable to: MSN 01251, 02014, 06561				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 02014, 02734				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0019001	10 MAY 21
	Criteria: G-V2527-A5, G-V2527E-A5, A320				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 02014, 02734				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 02014, 02734				
R	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0001001	15 NOV 22
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 02014, 02734				
R	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0019001	10 NOV 22
	Criteria: G-V2527-A5, G-V2527E-A5, A320				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 02014, 02734				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0019001	10 MAY 21
	Criteria: G-V2527-A5, G-V2527E-A5, A320				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0004001	15 NOV 22
	Criteria: 22-1159, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0019001	10 NOV 22
	Criteria: G-V2527-A5, G-V2527E-A5, A320				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
R	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0018001	10 MAY 21
	Criteria: G-V2524-A5, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0001001	15 NOV 22
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192				
N	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0028001	10 NOV 22
	Criteria: G-V2524-A5, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192				
R	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02887, 04389, 04563, 04773, 05345				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0018001	10 MAY 21
	Criteria: G-V2524-A5, A319				
	Applicable to: MSN 02887, 04389, 04563, 04773, 05345				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02887, 04389, 04563, 04773, 05345				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0003001	15 NOV 22
	Criteria: 34-1397, P9171, SA **Applicable to: MSN 02887, 04389, 04563, 04773, 05345**				
N	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0028001	10 NOV 22
	Criteria: G-V2524-A5, A319 **Applicable to: MSN 02887, 04389, 04563, 04773, 05345**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0040001	03 NOV 21
	Criteria: G-CFM56-5B4, A320 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0001001	15 NOV 22
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662**				
	PRO-ABN-NAV		**UNRELIABLE SPEED INDICATION - Pitch/Thrust Tables**	00017726.0026001	10 NOV 22
	Criteria: G-CFM56-5B4, A320 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0020001	10 MAY 21
	Criteria: G-V2533-A5, A321 **Applicable to: MSN 03222, 03229, 03294, 03761, 03816**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0001001	15 NOV 22
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816				
	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0020001	10 NOV 22
	Criteria: G-V2533-A5, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816				

	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03733				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0006001	10 MAY 21
	Criteria: G-CFM56-5B6, A319				
	Applicable to: MSN 03733				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03733				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0001001	15 NOV 22
	Criteria: SA				
	Applicable to: MSN 03733				
	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0006001	10 NOV 22
	Criteria: G-CFM56-5B6, A319				
	Applicable to: MSN 03733				

	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0020001	10 MAY 21
	Criteria: G-V2533-A5, A321				
	Applicable to: MSN 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0003001	15 NOV 22
	Criteria: 34-1397, P9171, SA **Applicable to: MSN 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0020001	10 NOV 22
	Criteria: G-V2533-A5, A321 **Applicable to: MSN 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA **Applicable to: MSN 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0040001	03 NOV 21
	Criteria: G-CFM56-5B4, A320 **Applicable to: MSN 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA **Applicable to: MSN 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0003001	15 NOV 22
	Criteria: 34-1397, P9171, SA **Applicable to: MSN 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**UNRELIABLE SPEED INDICATION - Pitch/Thrust Tables**	00017726.0026001	10 NOV 22
	Criteria: G-CFM56-5B4, A320 **Applicable to: MSN 04441, 04446, 04465, 04544, 04827, 04860, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 04734, 04756, 05005, 05097				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0006001	10 MAY 21
	Criteria: G-CFM56-5B6, A319				
	Applicable to: MSN 04734, 04756, 05005, 05097				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 04734, 04756, 05005, 05097				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0003001	15 NOV 22
	Criteria: 34-1397, P9171, SA				
	Applicable to: MSN 04734, 04756, 05005, 05097				
	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0006001	10 NOV 22
	Criteria: G-CFM56-5B6, A319				
	Applicable to: MSN 04734, 04756, 05005, 05097				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017722.0011001	10 NOV 22
	Criteria: G-CFM56-5B3, A321				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0003001	15 NOV 22
	Criteria: 34-1397, P9171, SA				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017726.0011001	10 NOV 22
	Criteria: G-CFM56-5B3, A321				
	Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017723.0004001	03 NOV 21
	Criteria: PW1129G-JM, P15825, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0003001	20 MAR 17
	Criteria: P15825, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0005001	15 NOV 22
	Criteria: 31-1575, P15825, P9171, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
R	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017727.0001001	10 NOV 22
	Criteria: G-PW1127G-JM, PW1129G-JM, 320-200N				
E	**Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 08635				
	PRO-ABN-NAV		**Unreliable Speed Indication - Level-Off**	00017723.0004001	03 NOV 21
	Criteria: PW1129G-JM, P15825, 320-200N				
	Applicable to: MSN 08635				
	PRO-ABN-NAV		**Unreliable Speed Indication - Flight Path Stabilized**	00017724.0005001	09 APR 20
	Criteria: 31-1575, P15825, SA				
	Applicable to: MSN 08635				
	PRO-ABN-NAV		**Unreliable Speed Indication - Troubleshooting**	00017725.0005001	15 NOV 22
	Criteria: 31-1575, P15825, P9171, SA				
	Applicable to: MSN 08635				
R	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017727.0001001	10 NOV 22
	Criteria: G-PW1127G-JM, PW1129G-JM, 320-200N				
E	**Applicable to: MSN 08635**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	PRO-ABN-NAV		**UNRELIABLE SPEED INDICATION**	00024138.0001001	10 MAY 21
	Criteria: G-PW1127G-JM, P20614, 320-200N				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
R	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017727.0001001	10 NOV 22
	Criteria: G-PW1127G-JM, PW1129G-JM, 320-200N				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
R	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	NG01459	
	PRO-ABN-NAV		**[MEM] Unreliable Speed Indication**	00017720.0002001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				
N	PRO-ABN-NAV		**UNRELIABLE SPEED INDICATION**	00024138.0004001	10 MAY 21
	Criteria: G-PW1133G-JM, P20614, 321-200NX				
	Applicable to: MSN 11531				
N	PRO-ABN-NAV		**Unreliable Speed Indication - Pitch/Thrust Tables**	00017727.0013001	10 NOV 22
	Criteria: G-PW1133G-JM, 321-200NX				
	Applicable to: MSN 11531				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 02014, 02734				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0005001	17 MAR 17
	Criteria: 27-1238, 27-1243, 31-1334, 31-1414, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 02014, 02734				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 02014, 02734				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 02014, 02734				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, SA				
	Applicable to: MSN 01251				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0001001	17 MAR 17
	Criteria: 27-1238, SA **Applicable to: MSN 01251**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01251**				

	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, SA **Applicable to: MSN 01459, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0009001	17 MAR 17
	Criteria: 27-1238, 31-1334, 31-1414, 34-1350, P10493, P6985, P9332, SA **Applicable to: MSN 01459, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01459, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662**				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01459, 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03630, 03658, 03662**				

	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0005001	17 MAR 17
	Criteria: 27-1238, 27-1243, 31-1334, 31-1414, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0003001	01 JUN 16
	Criteria: 22-1159, 31-1267, 31-1300, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0005001	17 MAR 17
	Criteria: 27-1238, 27-1243, 31-1334, 31-1414, SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0006001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, SA				
	Applicable to: MSN 02896, 02904				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0009001	17 MAR 17
	Criteria: 27-1238, 31-1334, 31-1414, 34-1350, P10493, P6985, P9332, SA				
	Applicable to: MSN 02896, 02904				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02896, 02904				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0003001	01 JUN 16
	Criteria: 22-1159, 31-1267, 31-1300, P8211, SA				
	Applicable to: MSN 02896, 02904				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0001001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, SA				
	Applicable to: MSN 03032, 03588, 03595				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0009001	17 MAR 17
	Criteria: 27-1238, 31-1334, 31-1414, 34-1350, P10493, P6985, P9332, SA **Applicable to: MSN 03032, 03588, 03595**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03032, 03588, 03595**				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0006001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA, A319 **Applicable to: MSN 03032, 03588, 03595**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0002001	17 MAR 17
	Criteria: P7218, P9522, SA **Applicable to: MSN 03710, 03733, 04000, 04163, 04171, 04192**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0009001	17 MAR 17
	Criteria: 27-1238, 31-1334, 31-1414, 34-1350, P10493, P6985, P9332, SA **Applicable to: MSN 03710, 03733, 04000, 04163, 04171, 04192**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03710, 03733, 04000, 04163, 04171, 04192**				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0006001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA, A319 **Applicable to: MSN 03710, 03733, 04000, 04163, 04171, 04192**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	NG01068	
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT**	00017828.0002001	17 MAR 17
	Criteria: P7218, P9522, SA **Applicable to: MSN 03761, 03816**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Associated Procedure**	00021399.0009001	17 MAR 17
	Criteria: 27-1238, 31-1334, 31-1414, 34-1350, P10493, P6985, P9332, SA **Applicable to: MSN 03761, 03816**				
	PRO-ABN-NAV		**[QRH] ADR 1+2+3 FAULT - Approach Procedure**	00021262.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03761, 03816**				
	PRO-ABN-NAV		**ADR 1+2+3 FAULT - FWSPAGE**	00016863.0002001	22 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 03761, 03816**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**[QRH] ADR CHECK PROC**	00015311.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-NAV		**[QRH] ALL ADR OFF**	00012464.0030001	21 JAN 21
	Criteria: P10383, P20467, P20614, P7520, P9171, P9522				
E	**Applicable to: MSN 10949-11597**				
	PRO-ABN-NAV		**[QRH] ALL ADR OFF**	00012464.0020001	26 NOV 19
	Criteria: 31-1334, 31-1414, 34-1397, P10383, P7373, P7519, P7520, P9171, P9522				
	Applicable to: MSN 02887, 04827-04860				
	PRO-ABN-NAV		**[QRH] ALL ADR OFF**	00012464.0026001	26 NOV 19
	Criteria: P10383, P7519, P7520, P9171, P9522				
	Applicable to: MSN 04352-04773, 04953-05987, 06097, 06121, 06139-09324				
E	PRO-ABN-NAV		**[QRH] IR Alignment in ATT Mode**	00012425.0006001	04 NOV 20
	Criteria: P5253, P7519, P7520, SA				
E	**Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-ABN-NAV		**[QRH] IR Alignment in ATT Mode**	00012425.0002001	04 NOV 20
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662				
E	PRO-ABN-NAV		**NAV AIR SPD STS CHANGED**	NG01902	
E	PRO-ABN-NAV		**NAV AIR SPD STS CHANGED**	00023395.0001001	05 MAY 22
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV AIR SPD STS CHANGED**	00023396.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV AIR SPD STS CHANGED**	00023397.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	NG01066	
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	00018111.0001001	21 MAR 16
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT- Second Threshold**	00017302.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT - FWSPAGE**	00017505.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	NG01066	
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	00018111.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT- Second Threshold**	00017302.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT - FWSPAGE**	00017505.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	NG01066	
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	00018111.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	NG01066	
	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT**	00018111.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT - Second Threshold**	00017302.0004001	21 JAN 21
	Criteria: P10383, P20614, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR 1(2)(3) FAULT - FWSPAGE**	00017505.0002001	21 JAN 21
	Criteria: P20614, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00017147.0003001	10 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00017397.0007001	09 FEB 18
	Criteria: 31-1257, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P6801, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00017147.0002001	10 MAY 21
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00017397.0003001	09 FEB 18
	Criteria: 31-1257, 31-1267, 31-1300, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01251				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00017147.0003001	10 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00017397.0012001	09 FEB 18
	Criteria: 22-1159, 31-1197, 31-1218, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P4576, P6801, P7125, P8211, SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00017147.0003001	10 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA **Applicable to: MSN 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00017397.0009001	09 FEB 18
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P4576, P6801, P7125, P9107, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00017147.0003001	10 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00017397.0011001	04 JUN 19
	Criteria: P10383, P13922, P15992, P4576, P6801, P7125, P9107, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635				
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00017147.0006001	10 MAY 21
	Criteria: 31-1575, P10383, P9107, SA				
	Applicable to: MSN 08635				
	PRO-ABN-NAV		**NAV 1+2(1+3)(2+3) FAULT - FWSPAGE**	00017397.0014001	24 MAR 20
	Criteria: 31-1575, P10383, P13922, P15992, P4576, P6801, P7125, P9107, SA, 320-200N				
	Applicable to: MSN 08635				
E	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	NG01067	
	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00018113.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT**	00017147.0007001	10 MAY 21
	Criteria: P10383, P20610, P20614, P9107, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00017397.0021001	21 JAN 21
	Criteria: P10383, P13922, P15992, P20610, P20614, P4576, P6801, P7125, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	NG01086	
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00018114.0001001	21 MAR 16
E	Criteria: 34-1397, P9171 **Applicable to: MSN 02887, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00017497.0003001	10 OCT 17
	Criteria: 27-1182, 27-1225, 27-1234, 27-1238, 27-1243, 31-1334, 31-1373, 31-1414, 34-1397, P10383, P10443, P10493, P11819, P12127, P9171 **Applicable to: MSN 02887, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
R	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT - FWSPAGE**	00016858.0002001	18 NOV 21
	Criteria: 31-1414, 34-1397, P13023, P9171 **Applicable to: MSN 02887, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	NG01086	
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00018114.0001001	21 MAR 16
E	Criteria: 34-1397, P9171 **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00017497.0006001	10 OCT 17
	Criteria: P10383, P10443, P10493, P11819, P12127, P15825, P9171 **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT - FWSPAGE**	00016858.0004001	18 NOV 21
	Criteria: P13023, P13922, P15825, P9171 **Applicable to: MSN 08495, 08529, 08596, 09190, 09324**				
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	NG01086	
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00018114.0001001	21 MAR 16
E	Criteria: 34-1397, P9171 **Applicable to: MSN 08635**				
	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00017497.0006001	10 OCT 17
	Criteria: P10383, P10443, P10493, P11819, P12127, P15825, P9171 **Applicable to: MSN 08635**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT - FWSPAGE**	00016858.0011001	18 NOV 21
	Criteria: 31-1575, P13023, P13922, P15825, P9171				
	Applicable to: MSN 08635				
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	NG01086	
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00018114.0001001	21 MAR 16
	Criteria: 34-1397, P9171				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT**	00017497.0012001	21 JAN 21
	Criteria: P10383, P10443, P10493, P11819, P12127, P15825, P20614, P9171				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR 1+2+3 FAULT - FWSPAGE**	00016858.0018001	18 NOV 21
	Criteria: P13023, P13922, P15825, P20610, P20614, P9171				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR ALT DISAGREE**	NG01907	
E	PRO-ABN-NAV		**NAV ADR ALT DISAGREE**	00023414.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR ALT DISAGREE**	00023415.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV ADR DISAGREE**	NG01083	
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00018110.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00017130.0002001	18 MAY 21
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**NAV ADR DISAGREE - FWSPAGE**	00017131.0001001	22 MAR 17
	Criteria: 31-1492, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV ADR DISAGREE**	NG01083	
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00018110.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00017130.0002001	18 MAY 21
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**NAV ADR DISAGREE - FWSPAGE**	00017131.0002001	21 MAR 16
	Criteria: 22-1159, 31-1492, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV ADR DISAGREE**	NG01083	
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00018110.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00017130.0003001	18 MAY 21
	Criteria: P15825, P7125, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV ADR DISAGREE - FWSPAGE**	00017131.0014001	18 NOV 21
	Criteria: P15825, P15992, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV ADR DISAGREE**	NG01083	
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00018110.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 08635				
	PRO-ABN-NAV		**NAV ADR DISAGREE**	00017130.0003001	18 MAY 21
	Criteria: P15825, P7125, SA				
	Applicable to: MSN 08635				
E	PRO-ABN-NAV		**NAV ADR DISAGREE - FWSPAGE**	00017131.0020001	18 NOV 21
	Criteria: 31-1575, P15825, P15992, P20610, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-NAV		**NAV ADR DISAGREE**	NG01083	
E	PRO-ABN-NAV		**NAV ADR DISAGREE**	00018110.0004001	21 JAN 21
	Criteria: P20614, P7125, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR DISAGREE**	00017130.0005001	18 NOV 21
	Criteria: P15825, P21265, P7125, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADR DISAGREE - FWSPAGE**	00017131.0020001	18 NOV 21
	Criteria: 31-1575, P15825, P15992, P20610, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADS-B RPTG 1(2) FAULT**	NG01338	
E	PRO-ABN-NAV		**NAV ADS-B RPTG 1(2) FAULT**	00018118.0001001	21 MAR 16
	Criteria: 31-1414, 31-1450, 34-1595, 34-1630, 34-1663, 34-1711, P13023, P13630, P13843, P13844, P14155, P14828				
E	**Applicable to: MSN 02321, 03180, 03211, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADS-B RPTG 1(2) FAULT**	00015758.0001001	08 AUG 14
	Criteria: 31-1414, 31-1450, 34-1595, 34-1630, 34-1663, 34-1711, P13023, P13630, P13843, P13844, P14155, P14828				
E	**Applicable to: MSN 02321, 03180, 03211, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ADS-B RPTG 1 (2) FAULT - FWSPAGE**	00015760.0001001	08 AUG 14
	Criteria: 31-1414, 31-1450, 34-1595, 34-1630, 34-1663, 34-1711, P13023, P13630, P13843, P13844, P14155, P14828				
E	**Applicable to: MSN 02321, 03180, 03211, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ALL SPD UNCERTAIN**	NG01906	
E	PRO-ABN-NAV		**NAV ALL SPD UNCERTAIN**	00023398.0001001	21 JAN 21
	Criteria: P20614				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ALL SPD UNCERTAIN**	00023399.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ALL SPD UNCERTAIN - FWSPAGE**	00024150.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ALT DISCREPANCY**	NG01958	
E	PRO-ABN-NAV		**NAV ALT DISCREPANCY**	00024168.0001001	21 JAN 21
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ALT DISCREPANCY**	00024169.0001001	21 JAN 21
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV ALTI DISCREPANCY**	NG01504	
	PRO-ABN-NAV		**NAV ALTI DISCREPANCY**	00018116.0001001	09 NOV 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV ALTI DISCREPANCY**	00012411.0002001	09 APR 14
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				
E	PRO-ABN-NAV		**NAV AOA DISAGREE**	NG01908	
E	PRO-ABN-NAV		**NAV AOA DISAGREE**	00023416.0001001	09 APR 20
	Criteria: 31-1575, P20610				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 08635**				
	PRO-ABN-NAV		**NAV AOA DISAGREE**	00023417.0003001	09 APR 20
	Criteria: 31-1575, P15825				
	Applicable to: MSN 08635				
E	PRO-ABN-NAV		**NAV AOA DISAGREE**	00023418.0001001	21 JAN 21
	Criteria: 31-1575, P15825, P20610, P20614				
E	**Applicable to: MSN 08635**				
E	PRO-ABN-NAV		**NAV AOA DISAGREE**	NG01908	
E	PRO-ABN-NAV		**NAV AOA DISAGREE**	00023416.0001001	09 APR 20
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV AOA DISAGREE**	00023417.0001001	09 APR 20
	Criteria: P15825, P20610, P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV AOA DISAGREE**	00023418.0001001	21 JAN 21
	Criteria: 31-1575, P15825, P20610, P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV CAPT(F/O)(STBY) AOA FAULT**	NG01084	
E	PRO-ABN-NAV		**NAV CAPT(F/O)(STBY) AOA FAULT**	00018124.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV CAPT (F/O) (STBY) AOA FAULT**	00012458.0003001	25 FEB 14
	Criteria: 31-1334, 31-1414, P10383				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV CAPT (F/O) (STBY) AOA FAULT - FWSPAGE**	00012459.0003001	19 JUN 12
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT**	NG01203	
E	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT**	00018119.0001001	21 MAR 16
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT**	00013539.0001001	18 JAN 17
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT - FWSPAGE**	00013541.0002001	08 AUG 14
	Criteria: 34-1595, 34-1630, 34-1663, 34-1711, P11620, P14155, P15322				
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT**	NG01203	
E	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT**	00018119.0001001	21 MAR 16
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT**	00013539.0001001	18 JAN 17
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV ATC/XPDR 1(2) FAULT - FWSPAGE**	00013541.0001001	17 MAR 11
	Criteria: 34-1663, P11620, P15275, P15322				
	Applicable to: MSN 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	NG01204	
E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	00018120.0001001	21 MAR 16
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	00013542.0001001	25 FEB 14
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				
E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT - FWSPAGE**	00013543.0002001	08 AUG 14
	Criteria: 34-1595, 34-1630, 34-1663, 34-1711, P11620, P14155, P15322				
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 04827, 04860, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293**				

E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	NG01204	
E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	00018120.0001001	21 MAR 16
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	00013542.0001001	25 FEB 14
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT - FWSPAGE**	00013543.0001001	17 MAR 11
	Criteria: 34-1663, P11620, P15275, P15322				
	Applicable to: MSN 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	NG01204	
N	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	00018120.0002001	25 MAY 20
	Criteria: P11620, P15322, P20240				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT**	00013542.0001001	25 FEB 14
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-NAV		**NAV ATC/XPDR 1+2 FAULT - FWSPAGE**	00013543.0003001	26 NOV 19
	Criteria: P11620, P14155, P15322, P20240				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-NAV		**NAV ATC/XPDR 2 CTL FAULT**	NG01963	
N	PRO-ABN-NAV		**NAV ATC/XPDR 2 CTL FAULT**	00024207.0001001	25 MAY 20
	Criteria: P20240				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				
N	PRO-ABN-NAV		**NAV ATC/XPDR 2 CTL FAULT**	00024208.0001001	25 MAY 20
	Criteria: P20240				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				
N	PRO-ABN-NAV		**NAV ATC/XPDR 2 CTL FAULT - FWSPAGE**	00024209.0001001	25 MAY 20
	Criteria: P20240				
	Applicable to: MSN 11482, 11522, 11531, 11572, 11597				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV ATC/XPDR STBY**	NG01505	
E	PRO-ABN-NAV		**NAV ATC/XPDR STBY**	00018121.0001001	21 MAR 16
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV ATC/XPDR STBY**	00013545.0001001	25 FEB 14
	Criteria: 34-1663, 34-1711, P11620, P15275, P15322				
E	**Applicable to: MSN 02321, 02734, 02924, 03002, 03058, 03180, 03211, 03266, 03284, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-NAV		**NAV ATT DISCREPANCY**	NG01506	
	PRO-ABN-NAV		**NAV ATT DISCREPANCY**	00018122.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-NAV		**NAV ATT DISCREPANCY**	00012410.0001001	19 AUG 10
	Criteria: SA **Applicable to: ALL**				

E	PRO-ABN-NAV		**NAV BARO REF DISCREPANCY**	NG01507	
E	PRO-ABN-NAV		**NAV BARO REF DISCREPANCY**	00018123.0001001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BARO REF DISCREPANCY**	00012413.0001001	16 NOV 11
	Criteria: 31-1373, 31-1414, P11819				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BARO VALUE DISAGREE**	NG01853	
E	PRO-ABN-NAV		**NAV BARO VALUE DISAGREE**	00022266.0001001	27 FEB 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BARO VALUE DISAGREE**	00022267.0001001	27 FEB 18
	Criteria: 31-1558, P20466				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT(F/O) PFD**	NG01729	
	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT(F/O) PFD**	00020395.0001001	20 MAR 17
	Criteria: P15825				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT(F/O) PFD**	00020394.0001001	20 MAR 17
	Criteria: P15825				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT(F/O) PFD**	NG01729	
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT(F/O) PFD**	00020395.0003001	03 NOV 21
	Criteria: P15825, P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT(F/O) PFD**	00020394.0003001	21 JAN 21
	Criteria: P15825, P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT+F/O PFD**	NG01730	
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT+F/O PFD**	00020396.0001001	20 MAR 17
	Criteria: P15825				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT+F/O PFD**	00020398.0001001	20 MAR 17
	Criteria: P15825				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT+F/O PFD**	NG01730	
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT+F/O PFD**	00020396.0001001	20 MAR 17
	Criteria: P15825				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD/ALT ON CAPT+F/O PFD**	00020398.0003001	21 JAN 21
	Criteria: P15825, P20614, P21265				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD FAULT**	NG01901	
E	PRO-ABN-NAV		**NAV BKUP SPD FAULT**	00023392.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD FAULT**	00023393.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD FAULT**	00023394.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD UNCERTAIN**	NG01956	
E	PRO-ABN-NAV		**NAV BKUP SPD UNCERTAIN**	00024152.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD UNCERTAIN**	00024153.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV BKUP SPD UNCERTAIN - FWSPAGE**	00024154.0001001	21 JAN 21
	Criteria: P20614				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
N	PRO-ABN-NAV		**NAV FLS 1(2)(1+2) FAULT**	NG01206	
N	PRO-ABN-NAV		**NAV FLS 1(2)(1+2) FAULT**	00018125.0001001	21 MAR 16
	Criteria: P20596				
	Applicable to: MSN 11531				
N	PRO-ABN-NAV		**NAV FLS 1(2)(1+2) FAULT**	00017481.0001001	21 MAR 16
	Criteria: P20596				
	Applicable to: MSN 11531				
N	PRO-ABN-NAV		**NAV FLS 1(2)(1+2) FAULT - FWSPAGE**	00017482.0001001	21 MAR 16
	Criteria: P20596				
	Applicable to: MSN 11531				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	NG01213	
E	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	00017090.0001001	21 MAR 16
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02734**				
	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	00017148.0002001	09 FEB 18
	Criteria: 31-1257, P5706, P5895, P6437, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02734				
	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	NG01213	
	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	00017090.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251, 02014				
	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	00017148.0002001	09 FEB 18
	Criteria: 31-1257, P5706, P5895, P6437, SA				
	Applicable to: MSN 01251, 02014				
E	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	NG01213	
E	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	00017090.0001001	21 MAR 16
	Criteria: 31-1492, P14629, SA				
E	**Applicable to: MSN 02321, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE**	00017148.0003001	09 FEB 18
	Criteria: 31-1257, 34-1352, P5706, P5895, P8799, P9050, P9654, SA				
E	**Applicable to: MSN 02321, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE ◁**	NG01213	
	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE ◁**	00017090.0002001	21 MAR 16
	Criteria: SA **Applicable to: MSN 06561**				
E	PRO-ABN-NAV		**NAV FM/GPS POS DISAGREE ◁**	00017148.0003001	09 FEB 18
	Criteria: 31-1257, 34-1352, P5706, P5895, P8799, P9050, P9654, SA				
E	**Applicable to: MSN 06561**				
	PRO-ABN-NAV		**NAV GLS 1(2)(1+2) FAULT**	NG01208	
	PRO-ABN-NAV		**NAV GLS 1(2)(1+2) FAULT**	00018127.0001001	21 MAR 16
	Criteria: P8500 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**NAV GLS 1(2)(1+2) FAULT**	00017477.0001001	21 MAR 16
	Criteria: P8500 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**NAV GLS 1(2)(1+2) FAULT - FWSPAGE**	00017478.0001001	21 MAR 16
	Criteria: P8500 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-NAV		**NAV GPS 1(2) FAULT ◁**	NG01076	
	PRO-ABN-NAV		**NAV GPS 1(2) FAULT ◁**	00018144.0001001	10 MAY 21
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-NAV		**NAV GPS 1(2) FAULT ◁**	00017127.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-NAV		**NAV GPS 1(2) FAULT ◁ - FWSPAGE**	00017128.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-NAV		**NAV GPWS FAULT**	NG01078	
	PRO-ABN-NAV		**NAV GPWS FAULT**	00018129.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: ALL**				
	PRO-ABN-NAV		**NAV GPWS FAULT**	00012443.0001001	16 NOV 11
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-NAV		**NAV GPWS FAULT - FWSPAGE**	00012444.0001001	19 AUG 10
	Criteria: SA				

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M$^{(1)}$	Localization	T$^{(2)}$	DU Title	DU identification	DU date
	Applicable to: ALL				
E	PRO-ABN-NAV		**NAV GPWS TERR DET FAULT**	NG01508	
	PRO-ABN-NAV		**NAV GPWS TERR DET FAULT**	00018130.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-NAV		**NAV GPWS TERR DET FAULT**	00017542.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV GPWS TERR DET FAULT**	00019752.0001001	01 JUN 16
	Criteria: 31-1373, 31-1414, P11819				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV GPWS TERR DET FAULT**	NG01508	
	PRO-ABN-NAV		**NAV GPWS TERR DET FAULT**	00018130.0001001	21 MAR 16
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01251, 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-NAV		**NAV GPWS TERR DET FAULT**	00017542.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251, 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	NG01509	
	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	00018131.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662				
	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	00012409.0001001	19 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662				
	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	NG01509	
	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	00018131.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	NG01509	
	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	00018131.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV HDG DISCREPANCY**	00012409.0003001	19 AUG 10
	Criteria: P5253, P9522, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV IAS DISCREPANCY**	NG01085	
	PRO-ABN-NAV		**NAV IAS DISCREPANCY**	00018146.0003001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P12484, P2546, P7125, P8175 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-NAV		**NAV IAS DISCREPANCY**	00017528.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P12484, P2546, P7125, P8175 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-NAV		**NAV IAS DISCREPANCY - FWSPAGE**	00017525.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, 31-1334, 31-1414, P10383, P12484, P2546, P7125, P8175 **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV ILS 1(2)(1+2) FAULT**	NG01077	
	PRO-ABN-NAV		**NAV ILS 1(2)(1+2) FAULT**	00018138.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-NAV		**NAV ILS 1(2)(1+2) FAULT**	00017125.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-NAV		**NAV ILS 1(2)(1+2) FAULT - FWSPAGE**	00017126.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: ALL				

E	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	NG01069	
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	00018140.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01801, 01826, 01855				
E	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	00017521.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1414, P11620, P13023, P9107, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01801, 01826, 01855**				
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT - FWSPAGE**	00017123.0001001	18 NOV 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01801, 01826, 01855				
E	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT - FMGS Specificity**	00015142.0001001	29 JUL 13
	Criteria: 22-1203				
E	**Applicable to: MSN 01143, 01158, 01246, 01801, 01826, 01855**				

E	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	NG01069	
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	00018140.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	00017521.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT - FWSPAGE**	00017123.0001001	18 NOV 21
	Criteria: SA				
	Applicable to: MSN 01251				
E	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT - FMGS Specificity**	00015142.0001001	29 JUL 13
	Criteria: 22-1203				
E	**Applicable to: MSN 01251**				

E	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	NG01069	
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	00018140.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01825, 01832, 01837, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	00017521.0003001	21 MAR 16
	Criteria: 31-1267, 31-1300, 31-1414, P11620, P13023, P9107, SA				
E	**Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01825, 01832, 01837, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT - FWSPAGE**	00017123.0001001	18 NOV 21
	Criteria: SA				
	Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01825, 01832, 01837, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	NG01069	
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT**	00018140.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-NAV		**NAV IR 1(2)(3) FAULT - FWSPAGE**	00017123.0001001	18 NOV 21
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M$^{(1)}$	Localization	T$^{(2)}$	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	NG01070	
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00018139.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00017111.0002001	03 DEC 19
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00016864.0004001	05 MAR 19
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	NG01070	
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00018139.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00017111.0002001	03 DEC 19
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: MSN 01251**				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00016864.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	NG01070	
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00018139.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00017111.0002001	03 DEC 19
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00016864.0006001	05 MAR 19
	Criteria: 22-1159, 31-1267, 31-1300, 31-1334, 31-1414, 31-1492, P10383, P15992, P8211, P9107, SA, 320-200N				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	NG01070	
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00018139.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00017111.0002001	03 DEC 19
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	NG01070	
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00018139.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT**	00017111.0002001	03 DEC 19
	Criteria: 31-1267, 31-1300, P9107, SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV IR 1+2(1+3)(2+3) FAULT - FWSPAGE**	00016864.0009001	24 MAR 20
	Criteria: 31-1575, P10383, P15992, P20610, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV IR DISAGREE**	NG01072	
	PRO-ABN-NAV		**NAV IR DISAGREE**	00018147.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**NAV IR DISAGREE**	00016851.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-NAV		**NAV IR DISAGREE- FWSPAGE**	00016852.0001001	22 MAR 17
	Criteria: 31-1492, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02014, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098				

	PRO-ABN-NAV		**NAV IR DISAGREE**	NG01072	
	PRO-ABN-NAV		**NAV IR DISAGREE**	00018147.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**NAV IR DISAGREE**	00016851.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				
	PRO-ABN-NAV		**NAV IR DISAGREE- FWSPAGE**	00016852.0002001	21 MAR 16
	Criteria: 22-1159, 31-1492, P8211, SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904				

	PRO-ABN-NAV		**NAV IR DISAGREE**	NG01072	
	PRO-ABN-NAV		**NAV IR DISAGREE**	00018147.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-NAV		**NAV IR DISAGREE**	00016851.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

	PRO-ABN-NAV		**NAV IR DISAGREE**	NG01072	
	PRO-ABN-NAV		**NAV IR DISAGREE**	00018147.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV IR DISAGREE**	00016851.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				
	PRO-ABN-NAV		**NAV IR DISAGREE- FWSPAGE**	00016852.0005001	08 NOV 16
	Criteria: P15992, SA, 320-200N				
	Applicable to: MSN 08495, 08529, 08596, 09190, 09324				

E	PRO-ABN-NAV		**NAV IR DISAGREE**	NG01072	
	PRO-ABN-NAV		**NAV IR DISAGREE**	00018147.0001001	21 MAR 16
	Criteria: 31-1197, 31-1218, 31-1257, P7125, SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-NAV		**NAV IR DISAGREE**	00016851.0001001	22 MAR 17
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV IR DISAGREE- FWSPAGE**	00016852.0009001	24 MAR 20
	Criteria: 31-1575, P15992, P20610, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-NAV		**NAV IR NOT ALIGNED**	NG01510	
E	PRO-ABN-NAV		**NAV IR NOT ALIGNED**	00018141.0002001	21 MAR 16
	Criteria: 31-1267, 31-1276, 31-1300, 31-1334, 31-1414, P10383, P9107, P9824				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV IR NOT ALIGNED**	00012570.0001001	19 AUG 10
	Criteria: 31-1267, 31-1276, 31-1300, P9107, P9824				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV LS 1(2)(1+2) FAULT**	NG01082	
E	PRO-ABN-NAV		**NAV LS 1(2)(1+2) FAULT**	00018148.0001001	21 MAR 16
E	Criteria: P20596, P8500 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 11531**				
E	PRO-ABN-NAV		**NAV LS 1(2)(1+2) FAULT**	00017155.0001001	21 MAR 16
E	Criteria: P20596, P8500 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 11531**				
E	PRO-ABN-NAV		**NAV LS 1(2)(1+2) FAULT - FWSPAGE**	00017156.0001001	21 MAR 16
E	Criteria: P20596, P8500 **Applicable to: MSN 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 11531**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV LS TUNING DISAGREE**	NG01245	
E	PRO-ABN-NAV		**NAV LS TUNING DISAGREE**	00018151.0001001	21 MAR 16
E	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, 31-1334, 31-1414, P10383, P10801, P13321, P13322 **Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01825, 01832, 01837, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV LS TUNING DISAGREE**	00018932.0004001	21 MAR 16
	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, 31-1334, 31-1414, P10383, P10801, P13321, P13322				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01825, 01832, 01837, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV LS TUNING DISAGREE - FWSPAGE**	00014337.0001001	29 MAR 12
	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, 31-1334, 31-1414, P10383, P10801, P13321, P13322, SA				
E	**Applicable to: MSN 01376, 01459, 01518, 01593, 01628, 01825, 01832, 01837, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

E	PRO-ABN-NAV		**NAV PRED W/S DET FAULT** ◁	NG01071	
E	PRO-ABN-NAV		**NAV PRED W/S DET FAULT** ◁	00018855.0002001	21 MAR 16
	Criteria: P4647, P4766, P5698, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT** ◁	00018853.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT - FWSPAGE**	00018854.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT**	NG01071	
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT**	00018855.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01459**				
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT**	00018853.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01459**				
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT - FWSPAGE**	00018854.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01459**				
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT**	NG01071	
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT**	00018853.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV PRED W/S DET FAULT ◁ - FWSPAGE**	00018854.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	NG01074	
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00018403.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00012432.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT - FWSPAGE (Dual RA Failure)**	00016850.0004001	01 JUN 16
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, 31-1492, P11819, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02734, 02887, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	NG01074	
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00018403.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00012432.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-NAV		**NAV RA 1 + 2 FAULT - FWSPAGE (Dual RA Failure)**	00016850.0002001	21 MAR 16
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	NG01074	
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00018403.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00012432.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT - FWSPAGE (Dual RA Failure)**	00016850.0005001	01 JUN 16
	Criteria: 22-1159, 31-1267, 31-1300, 31-1373, 31-1414, 31-1492, P11819, P14629, P15992, P8211, P9107, SA, 320-200N **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02896, 02904, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	NG01074	
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00018403.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00012432.0001001	25 FEB 14
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	NG01074	
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00018403.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00012432.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT - FWSPAGE (Dual RA Failure)**	00016850.0003001	01 JUN 16
	Criteria: 31-1267, 31-1300, 31-1373, 31-1414, P11819, P9107, SA				
	Applicable to: MSN 02014, 06561				
E	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	NG01074	
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00018403.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT (Dual RA Failure)**	00012432.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV RA 1 AND 2 FAULT - FWSPAGE (Dual RA Failure)**	00016850.0006001	24 MAR 20
	Criteria: 31-1575, P11819, P14629, P15992, P20610, P9107, SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	NG01073	
	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	00018135.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414				
	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	00012430.0001001	25 FEB 14
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414				
	PRO-ABN-NAV		**NAV RA 1(2) FAULT - FWSPAGE**	00016849.0001001	05 MAY 22
	Criteria: P10960, P14313, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414				

	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	NG01073	
	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	00018135.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	00012430.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

E	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	NG01073	
	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	00018135.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 04827, 04860, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-NAV		**NAV RA 1(2) FAULT**	00012430.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 04827, 04860, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-NAV		**NAV RA 1(2) FAULT - FWSPAGE**	00016849.0002001	05 MAY 22
	Criteria: P10960, P13061, P14313, SA				
E	**Applicable to: MSN 04827, 04860, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV RA DEGRADED**	NG01511	
E	PRO-ABN-NAV		**NAV RA DEGRADED**	00018134.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV RA DEGRADED**	00018933.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV TCAS FAULT ◁**	NG01075	
E	PRO-ABN-NAV		**NAV TCAS FAULT ◁**	00018397.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-NAV		**NAV TCAS ◁ FAULT**	00012434.0001001	25 FEB 14
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-NAV		**NAV TCAS ◁ FAULT - FWSPAGE**	00012435.0001001	19 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

	PRO-ABN-NAV		**NAV TCAS FAULT ◁**	NG01075	
	PRO-ABN-NAV		**NAV TCAS FAULT ◁**	00018397.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV TCAS ◁ FAULT**	00012434.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-NAV		**NAV TCAS ◁ FAULT - FWSPAGE**	00012435.0001001	19 AUG 10
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-NAV		**NAV TCAS ◁ FAULT**	NG01075	
	PRO-ABN-NAV		**NAV TCAS ◁ FAULT**	00012434.0001001	25 FEB 14
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-NAV		**NAV TCAS ◁ FAULT - FWSPAGE**	00012435.0001001	19 AUG 10
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
E	PRO-ABN-NAV		**NAV TCAS STBY**	NG01512	
E	PRO-ABN-NAV		**NAV TCAS STBY**	00018133.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV TCAS STBY**	00018847.0001001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV L(R) CAPT(F/O) STATIC FAULT**	NG01290	
E	PRO-ABN-NAV		**NAV L(R) CAPT(F/O) STATIC FAULT**	00018132.0001001	21 MAR 16
	Criteria: P12946				
E	**Applicable to: MSN 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-NAV		**NAV L(R) CAPT(F/O) STATIC FAULT**	00015067.0001001	08 AUG 13
	Criteria: P12946				
E	**Applicable to: MSN 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-NAV		**NAV L(R) CAPT(F/O) STATIC FAULT - FWSPAGE**	00015068.0001001	08 AUG 13
E	Criteria: P12946 **Applicable to: MSN 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-NAV		**Stall Warning**	00013994.0001001	21 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974**				
E	PRO-ABN-NAV		**STALL WARNING**	00013994.0002001	21 MAR 17
E	Criteria: 31-1482, P14628, SA **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
N	PRO-ABN-OVERSPEED		**OVERSPEED**	NG01513	
	PRO-ABN-OVERSPEED		**OVERSPEED**	00018108.0001001	20 APR 17
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-OVERSPEED		**OVERSPEED**	00016848.0001001	21 MAR 16
E	Criteria: 31-1558, P20466, A319, A320 **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04563, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-OVERSPEED		**OVERSPEED**	NG01513	
	PRO-ABN-OVERSPEED		**OVERSPEED**	00018108.0001001	20 APR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-OVERSPEED		**OVERSPEED**	NG01513	
	PRO-ABN-OVERSPEED		**OVERSPEED**	00018108.0001001	20 APR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	PRO-ABN-OVERSPEED		**OVERSPEED**	00016848.0003001	21 MAR 16
	Criteria: K6345, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
N	PRO-ABN-OVERSPEED		**OVERSPEED**	NG01513	
	PRO-ABN-OVERSPEED		**OVERSPEED**	00018108.0001001	20 APR 17
	Criteria: SA				
	Applicable to: MSN 11531				
N	PRO-ABN-OVERSPEED		**OVERSPEED**	00016848.0005001	09 APR 18
	Criteria: P20466, A321, 321-200NX				
	Applicable to: MSN 11531				
E	PRO-ABN-RECORDER		**RECORDER CVR FAULT-ANNUNCIATION**	NG01212	
E	PRO-ABN-RECORDER		**RECORDER CVR FAULT-ANNUNCIATION**	00017318.0003001	18 NOV 21
	Criteria: K30988, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-RECORDER		**RECORDER CVR FAULT**	00013630.0002001	25 FEB 14
	Criteria: K30988, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-RECORDER		**RECORDER CVR FAULT - FWSPAGE**	00013631.0002001	29 MAR 12
	Criteria: K30988, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-RECORDER		**RECORDER DFDR FAULT**	NG00695	
	PRO-ABN-RECORDER		**RECORDER DFDR FAULT**	00017312.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-RECORDER		**RECORDER DFDR FAULT**	00010046.0001001	10 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-RECORDER		**RECORDER DFDR FAULT - FWSPAGE**	00010047.0001001	10 AUG 10
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-RECORDER		**RECORDER FDR FAULT**	NG00695	
E	PRO-ABN-RECORDER		**RECORDER FDR FAULT**	00017312.0003001	18 NOV 21
	Criteria: K30988, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-RECORDER		**RECORDER FDR FAULT**	00010046.0003001	18 NOV 21
	Criteria: K30988, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-RECORDER		**RECORDER FDR FAULT - FWSPAGE**	00010047.0003001	18 NOV 21
	Criteria: K30988, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-RECORDER		**RECORDER SYS FAULT**	NG00696	
	PRO-ABN-RECORDER		**RECORDER SYS FAULT**	00017313.0002001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-RECORDER		**RECORDER SYS FAULT**	00010048.0002001	10 AUG 10
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
	PRO-ABN-RECORDER		**RECORDER SYS FAULT - FWSPAGE**	00010049.0002001	10 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-RECORDER		**RECORDER FDIU FAULT**	NG00696	
E	PRO-ABN-RECORDER		**RECORDER FDIU FAULT**	00017313.0001001	21 MAR 16
	Criteria: K30988, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-RECORDER		**RECORDER FDIU FAULT**	00010048.0001001	10 AUG 10
	Criteria: K30988, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-RECORDER		**RECORDER FDIU FAULT - FWSPAGE**	00010049.0001001	10 AUG 10
	Criteria: K30988, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SEVERE_ICE		**SEVERE ICE DETECTED**	NG01588	
E	PRO-ABN-SEVERE_ICE		**SEVERE ICE DETECTED**	00017188.0001001	21 MAR 16
	Criteria: P2650				
E	**Applicable to: MSN 04563, 05947, 05987, 06097, 06121, 06163, 06165**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-ABN-SEVERE_ICE		**SEVERE ICE DETECTED**	00018892.0001001	21 MAR 16
	Criteria: P2650				
	Applicable to: MSN 04563, 05947, 05987, 06097, 06121, 06163, 06165				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-ABN-SEVERE_ICE		**SEVERE ICE DETECTED**	NG01588	
E	PRO-ABN-SEVERE_ICE		**SEVERE ICE DETECTED**	00017188.0001001	21 MAR 16
	Criteria: P2650				
E	**Applicable to: MSN 04827, 04860, 05005, 05097, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SEVERE_ICE		**SEVERE ICE DETECTED**	00018892.0003001	04 JUN 19
	Criteria: CFM56-5B, PW1100G-JM, P2650				
E	**Applicable to: MSN 04827, 04860, 05005, 05097, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628**				
R	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0017001	06 JUL 17
	Criteria: 31-1334, 31-1414, IAE, K1806, K2113, K3154, P10383, P5768				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628**				
	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0002001	15 NOV 21
	Criteria: P5451, SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0008001	06 JUL 17
	Criteria: IAE, K1806, P5768 **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0011001	31 AUG 17
	Criteria: 31-1267, 31-1300, IAE, K1806, P5768, SA **Applicable to: MSN 01251**				
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
E	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA **Applicable to: MSN 01459**				
	PRO-ABN-SMOKE		**[QRH] CDSS Smoke / Fumes from LCD Monitor**	00024296.0002001	15 NOV 21
	Criteria: 23-1208, 23-1695, 25-1305, K7755, K7790, SA **Applicable to: MSN 01459**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 01459**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 01459**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0017001	06 JUL 17
	Criteria: 31-1334, 31-1414, IAE, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 01459**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 01459**				

	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	NG01039	
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
E	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA **Applicable to: MSN 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04773, 05345**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0004001	15 NOV 21
	Criteria: P7175, SA **Applicable to: MSN 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04773, 05345**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04773, 05345**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0017001	06 JUL 17
	Criteria: 31-1334, 31-1414, IAE, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04773, 05345**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 01801, 01825-01826, 01832, 01837, 01855, 02896, 02904, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04773, 05345**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
E	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA **Applicable to: MSN 02014, 02734, 02887, 03032, 04563**				
R	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0007001	15 NOV 21
E	Criteria: K0070, P7175, SA **Applicable to: MSN 02014, 02734, 02887, 03032, 04563**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 02014, 02734, 02887, 03032, 04563**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0017001	06 JUL 17
	Criteria: 31-1334, 31-1414, IAE, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 02014, 02734, 02887, 03032, 04563**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 02014, 02734, 02887, 03032, 04563**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
E	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA **Applicable to: MSN 02321**				
	PRO-ABN-SMOKE		**[QRH] CDSS Smoke / Fumes from LCD Monitor**	00024296.0002001	15 NOV 21
	Criteria: 23-1208, 23-1695, 25-1305, K7755, K7790, SA **Applicable to: MSN 02321**				
R	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0007001	15 NOV 21
E	Criteria: K0070, P7175, SA **Applicable to: MSN 02321**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 02321**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0017001	06 JUL 17
	Criteria: 31-1334, 31-1414, IAE, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 02321**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 02321**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
E	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0004001	15 NOV 21
	Criteria: P7175, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
E	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0019001	17 MAR 17
E	Criteria: 31-1334, 31-1414, CFMI, IAL, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 03733, 04441, 04446, 04465, 04544, 04734, 04756, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240, 05342, 05591, 05621, 05643, 05749, 05752, 05883**				
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
E	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0004001	15 NOV 21
	Criteria: P7175, SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0017001	06 JUL 17
	Criteria: 31-1334, 31-1414, IAE, K1806, K2113, K3154, P10383, P5768				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0066001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K2113, P10383, P11819, P13023, P9107, SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165				

R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA				
E	**Applicable to: MSN 04827, 04860**				
R	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0007001	15 NOV 21
	Criteria: K0070, P7175, SA				
E	**Applicable to: MSN 04827, 04860**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
E	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0019001	17 MAR 17
	Criteria: 31-1334, 31-1414, CFMI, IAL, K1806, K2113, K3154, P10383, P5768				
E	**Applicable to: MSN 04827, 04860**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA				
	Applicable to: MSN 04827, 04860				

R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 05005, 05097**				
	PRO-ABN-SMOKE		**[QRH] CDSS Smoke / Fumes from LCD Monitor**	00024296.0002001	15 NOV 21
	Criteria: 23-1208, 23-1695, 25-1305, K7755, K7790, SA				
	Applicable to: MSN 05005, 05097				
R	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0007001	15 NOV 21
	Criteria: K0070, P7175, SA				
E	**Applicable to: MSN 05005, 05097**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: MSN 05005, 05097				
E	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0019001	17 MAR 17
	Criteria: 31-1334, 31-1414, CFMI, IAL, K1806, K2113, K3154, P10383, P5768				
E	**Applicable to: MSN 05005, 05097**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA				
	Applicable to: MSN 05005, 05097				
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA				
E	**Applicable to: MSN 06139, 06173**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0005001	15 NOV 21
	Criteria: K0066, P7175, SA				
	Applicable to: MSN 06139, 06173				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: MSN 06139, 06173				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0019001	17 MAR 17
E	Criteria: 31-1334, 31-1414, CFMI, IAL, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 06139, 06173**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0057001	17 MAY 21
	Criteria: 31-1267, 31-1300, 31-1334, 31-1373, 31-1414, 31-1492, IAE, K1806, K3154, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 06139, 06173**				
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
E	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0004001	15 NOV 21
	Criteria: P7175, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0019001	17 MAR 17
E	Criteria: 31-1334, 31-1414, CFMI, IAL, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0064001	17 MAY 21
	Criteria: 31-1492, J3527, K1806, K2113, P10383, P11819, P13023, P5768, P9107, SA **Applicable to: MSN 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0005001	15 NOV 21
	Criteria: K0066, P7175, SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0019001	17 MAR 17
	Criteria: 31-1334, 31-1414, CFMI, IAL, K1806, K2113, K3154, P10383, P5768				
E	**Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0064001	17 MAY 21
	Criteria: 31-1492, J3527, K1806, K2113, P10383, P11819, P13023, P5768, P9107, SA				
	Applicable to: MSN 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	NG01039	
R	PRO-ABN-SMOKE		**[QRH] SMOKE / FUMES / AVNCS SMOKE**	00012212.0004001	15 NOV 21
	Criteria: 31-1334, 31-1373, 31-1414, P10383, P11819, P5451, P7455, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE**	00012214.0007001	15 NOV 21
	Criteria: K0070, P7175, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE**	00012215.0001001	15 NOV 21
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-SMOKE		**SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG**	00012565.0019001	17 MAR 17
E	Criteria: 31-1334, 31-1414, CFMI, IAL, K1806, K2113, K3154, P10383, P5768 **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SMOKE		**SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE**	00012217.0070001	17 MAY 21
E	Criteria: J3527, K1806, K2113, P10383, P11819, P13023, P15992, P5768, P9107, SA, 320-200N, 321-200NX **Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-SMOKE		**[QRH] REMOVAL OF SMOKE / FUMES**	00012218.0001001	05 MAY 22
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
R	PRO-ABN-SMOKE		**[QRH] REMOVAL OF SMOKE / FUMES**	00012218.0003001	05 MAY 22
E	Criteria: K17996, K2113, K6443, SA **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**				
R	PRO-ABN-SMOKE		**[QRH] REMOVAL OF SMOKE / FUMES**	00012218.0004001	05 MAY 22
	Criteria: K2113, K6443, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-ABN-SMOKE		**[QRH] SMOKE / FIRE FROM LITHIUM BATTERY**	00016024.0001001	15 NOV 21
	Criteria: SA **Applicable to: ALL**				
E	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	NG01516	
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	00018698.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	00018589.0007001	06 OCT 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1575, J4530, K0037, K1688, P10383, P20610, P9107, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324**				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE - FWSPAGE**	00018590.0002001	06 OCT 17
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 09190, 09324				

	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	NG01516	
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	00018698.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	00018589.0004001	21 MAR 16
	Criteria: 31-1267, 31-1300, K0037, SA				
	Applicable to: MSN 01251				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE - FWSPAGE**	00018590.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	NG01516	
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	00018698.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01459				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE**	00018589.0006001	06 OCT 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, K0037, K6163, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01459				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁ - FWSPAGE**	00018590.0002001	06 OCT 17
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 01459				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	NG01516	
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	00018698.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	NG01516	
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	00018698.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02014, 04827, 04860				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	00018589.0008001	06 OCT 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, K0037, K10575, K1688, P10383, P9107, SA				
	Applicable to: MSN 02014, 04827, 04860				
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁ - FWSPAGE**	00018590.0002001	06 OCT 17
	Criteria: 31-1334, 31-1414, P10383, SA				
	Applicable to: MSN 02014, 04827, 04860				
E	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	NG01516	
	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	00018698.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁**	00018589.0007001	06 OCT 17
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1575, J4530, K0037, K1688, P10383, P20610, P9107, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SMOKE		**SMOKE AFT CARGO SMOKE ◁ - FWSPAGE**	00018590.0003001	16 JUL 19
	Criteria: 31-1575, P10383, P20610, SA				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-SMOKE		**SMOKE AFT CRG DET FAULT ◁**	NG01517	
	PRO-ABN-SMOKE		**SMOKE AFT CRG DET FAULT ◁**	00018699.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-SMOKE		**SMOKE AFT CRG DET FAULT ◁**	00018592.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-SMOKE		**SMOKE aft crg det fault ◁ - fwspage**	00018593.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

	PRO-ABN-SMOKE		**SMOKE DISCH AGENT 2 ◁**	NG02012	
	PRO-ABN-SMOKE		**SMOKE DISCH AGENT 2 ◁**	00025148.0001001	05 MAY 22
	Criteria: K10575, K1688 **Applicable to: MSN 02014, 04827, 04860**				
	PRO-ABN-SMOKE		**SMOKE DISCH AGENT 2 ◁**	00025149.0001001	05 MAY 22
	Criteria: K10575, K1688 **Applicable to: MSN 02014, 04827, 04860**				

R	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE ◁**	NG01040	
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE ◁**	00017408.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
R	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE ◁**	00018287.0005001	03 NOV 22
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, 31-1575, J4530, K0037, K1688, P10383, P20610, P9107, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE ◁**	00018588.0002001	06 OCT 17
	Criteria: 31-1334, 31-1414, P10383, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	NG01040	
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00017408.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00018287.0003001	03 NOV 22
	Criteria: 31-1267, 31-1300, K0037, SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00018588.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
R	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	NG01040	
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00017408.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01459**				
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00018287.0004001	03 NOV 22
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, K0037, K6163, SA **Applicable to: MSN 01459**				
E	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00018588.0002001	06 OCT 17
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01459**				
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	NG01040	
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00017408.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
R	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	NG01040	
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE**	00017408.0001001	21 MAR 16
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02014, 04827, 04860				
	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE** ◁	00018287.0009001	03 NOV 22
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, K0037, K10575, K1688, P10383, P9107, SA **Applicable to: MSN 02014, 04827, 04860**				
E	PRO-ABN-SMOKE		**SMOKE FWD CARGO SMOKE** ◁	00018588.0002001	06 OCT 17
E	Criteria: 31-1334, 31-1414, P10383, SA **Applicable to: MSN 02014, 04827, 04860**				
E	PRO-ABN-SMOKE		**SMOKE FWD(AFT) CRG BTL 1(2) FAULT** ◁	NG01494	
E	PRO-ABN-SMOKE		**SMOKE FWD(AFT) CRG BTL 1(2) FAULT** ◁	00017414.0001001	21 MAR 16
E	Criteria: K8400, P7125 **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SMOKE		**SMOKE FWD(AFT) CRG BTL (1)(2) FAULT** ◁	00018325.0001001	21 MAR 16
E	Criteria: K8400, P7125 **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-SMOKE		**SMOKE FWD CRG DET FAULT** ◁	NG01041	
	PRO-ABN-SMOKE		**SMOKE FWD CRG DET FAULT** ◁	00017689.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-SMOKE		**SMOKE FWD CRG DET FAULT** ◁	00018336.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-SMOKE		**SMOKE fwd crg det fault ◁ - fwspage**	00018337.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

E	PRO-ABN-SMOKE		**SMOKE DET FAULT**	NG01042	
E	PRO-ABN-SMOKE		**SMOKE DET FAULT**	00017400.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SMOKE		**SMOKE DET FAULT**	00018423.0002001	21 MAR 16
	Criteria: 31-1334, 31-1414, P10383, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SMOKE		**SMOKE DET FAULT - FWSPAGE**	00012226.0011001	01 APR 11
	Criteria: 31-1267, 31-1300, 31-1334, 31-1414, P10383, P9107, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-SMOKE		**SMOKE LAV+CRG DET FAULT**	NG01042	
	PRO-ABN-SMOKE		**SMOKE LAV+CRG DET FAULT**	00017400.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE DET FAULT**	00018423.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE LAV+CRG DET FAULT - FWSPAGE**	00012226.0005001	01 APR 11
	Criteria: 31-1267, 31-1300, SA **Applicable to: MSN 01251**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	NG01043	
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	00017407.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	00018724.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT - FWSPAGE**	00012228.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	NG01043	
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	00018724.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT - FWSPAGE**	00012228.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	NG01043	
E	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	00017407.0002001	21 MAR 16
	Criteria: K8400, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT**	00018724.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY DET FAULT - FWSPAGE**	00012228.0001001	18 AUG 10
	Criteria: SA **Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

	PRO-ABN-SMOKE		**SMOKE LAVATORY SMOKE**	NG01496	
	PRO-ABN-SMOKE		**SMOKE LAVATORY SMOKE**	00017406.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-SMOKE		**SMOKE LAVATORY SMOKE**	00018427.0002001	21 MAR 17
	Criteria: 31-1267, 31-1300, P9107, SA **Applicable to: ALL**				

	PRO-ABN-SURV		**[MEM] EGPWS Cautions**	00018751.0009001	04 DEC 18
	Criteria: P10960, P12094, P14313, P14314, P4885, P5224, P7188, P9867, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	PRO-ABN-SURV		**[MEM] EGPWS Cautions**	00018751.0005001	04 DEC 18
E	Criteria: 34-1345, P10960, P12094, P14313, P14314, P4885, P7188, P9867, SA **Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-ABN-SURV		**[MEM] EGPWS Cautions**	00018751.0002001	04 DEC 18
	Criteria: P4885, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734**				
	PRO-ABN-SURV		**[MEM] EGPWS Cautions**	00018751.0006001	04 DEC 18
	Criteria: P4885, P5224, SA **Applicable to: MSN 02014**				
	PRO-ABN-SURV		**[MEM] GPWS Cautions**	00018751.0011001	04 DEC 18
	Criteria: P10960, P12094, P4885, P7188, P9867, SA **Applicable to: MSN 04827-04860**				
	PRO-ABN-SURV		**[MEM] EGPWS Warnings**	00016878.0002001	04 DEC 18
	Criteria: P4885, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734**				
	PRO-ABN-SURV		**[MEM] GPWS Warnings**	00016878.0017001	04 DEC 18
	Criteria: P10960, P12094, P4885, P7188, P9867, SA **Applicable to: MSN 04827-04860**				
	PRO-ABN-SURV		**[MEM] EGPWS Warnings**	00016878.0018001	04 DEC 18
	Criteria: P4885, P5224, SA **Applicable to: MSN 02014**				
E	PRO-ABN-SURV		**[MEM] EGPWS Warnings**	00016878.0019001	04 DEC 18
E	Criteria: 34-1345, P10960, P12094, P14314, P4885, P7188, P9867, SA **Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-ABN-SURV		**[MEM] EGPWS Warnings**	00016878.0020001	04 DEC 18
	Criteria: P10960, P12094, P14314, P4885, P5224, P7188, P9867, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	PRO-ABN-SURV		**[MEM] TCAS CAUTION - TRAFFIC ADVISORY**	00025023.0002001	16 MAY 22
E	Criteria: 22-1472, P11363, SA **Applicable to: MSN 01459, 08495-09324, 10949-11597**				
	PRO-ABN-SURV		**[MEM] TCAS CAUTION - TRAFFIC ADVISORY**	00025023.0001001	16 MAY 22
	Criteria: SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-SURV		**[MEM] TCAS WARNING - RESOLUTION ADVISORY**	00012455.0031001	16 MAY 22
	Criteria: 22-1472, P10960, P11363, P11510, P12330, P12746, P14306, P2590, P2859, P3112, P5613, P5669, P6316				
E	**Applicable to: MSN 01459, 08495-09324, 10949-11597**				
	PRO-ABN-SURV		**[MEM] TCAS WARNING - RESOLUTION ADVISORY**	00012455.0022001	16 MAY 22
	Criteria: 34-1206, 34-1506, 34-1517, 34-1532, 34-1667, P10960, P11510, P12330, P12746, P14306, P14307, P2590, P2859, P3112, P5613, P5669, P6167, P6316				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
	PRO-ABN-SURV		**[MEM] WINDSHEAR WARNING - REACTIVE WINDSHEAR**	00012271.0002001	04 NOV 20
	Criteria: P2316, SA				
	Applicable to: ALL				
E	PRO-ABN-SURV		**SURV ROW/ROP LOST**	NG01503	
E	PRO-ABN-SURV		**SURV ROW/ROP LOST**	00018109.0001001	26 NOV 19
	Criteria: P15323				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SURV		**SURV ROW/ROP LOST**	00015138.0001001	29 JUL 13
	Criteria: P15323				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-SURV		**SURV ROW/ROP LOST - FWSPAGE**	00018647.0002001	17 MAR 16
	Criteria: P15323				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-T-O		**T.O SPEEDS NOT INSERTED**	NG01643	
E	PRO-ABN-T-O		**T.O SPEEDS NOT INSERTED**	00016999.0001001	05 JUN 18
	Criteria: P13487, P14628, P20467				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-T-O		**T.O SPEEDS NOT INSERTED**	00016083.0001001	05 JUN 18
	Criteria: P13487, P14628, P20467				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-T-O		**T.O SPEEDS TOO LOW**	NG01644	
E	PRO-ABN-T-O		**T.O SPEEDS TOO LOW**	00017000.0001001	05 JUN 18
	Criteria: P13487, P14628, P20467				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-T-O		**T.O SPEEDS TOO LOW**	00016081.0002001	05 JUN 18
	Criteria: P13487, P14628, P20466, P20467				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-T-O		**T.O V1/VR/V2 DISAGREE**	NG01645	
E	PRO-ABN-T-O		**T.O V1/VR/V2 DISAGREE**	00017001.0001001	05 JUN 18
	Criteria: P13487, P14628, P20467				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-T-O		**T.O V1/VR/V2 DISAGREE**	00016082.0001001	05 JUN 18
	Criteria: P13487, P14628, P20467				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-VENT		**VENT AVNCS SYS FAULT**	NG00813	
	PRO-ABN-VENT		**VENT AVNCS SYS FAULT**	00017332.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-VENT		**VENT AVNCS SYS FAULT**	00018047.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-VENT		**VENT AVNCS SYS FAULT - FWSPAGE**	00010775.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: ALL				
N	PRO-ABN-VENT		**VENT BLOWER FAULT**	NG00810	
E	PRO-ABN-VENT		**VENT BLOWER FAULT**	00017329.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				
	PRO-ABN-VENT		**VENT BLOWER FAULT**	00010768.0005001	12 APR 16
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P6544, P7125, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
N	PRO-ABN-VENT		**VENT BLOWER FAULT - FWSPAGE**	00010769.0001001	03 NOV 22
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P6544, SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-VENT		**VENT BLOWER FAULT**	NG00810	
	PRO-ABN-VENT		**VENT BLOWER FAULT**	00010768.0005001	12 APR 16
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P6544, P7125, SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-VENT		**VENT BLOWER FAULT**	NG00810	
E	PRO-ABN-VENT		**VENT BLOWER FAULT**	00017329.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	PRO-ABN-VENT		**VENT BLOWER FAULT**	00010768.0005001	12 APR 16
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P6544, P7125, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
N	PRO-ABN-VENT		**VENT BLOWER FAULT - FWSPAGE**	00010769.0006001	03 NOV 22
	Criteria: P6544, P6578, P7125, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-VENT		**VENT BLOWER FAULT**	NG00810	
N	PRO-ABN-VENT		**VENT BLOWER FAULT**	00017329.0002001	03 NOV 21
	Criteria: K33563, SA				
	Applicable to: MSN 11531				
	PRO-ABN-VENT		**VENT BLOWER FAULT**	00010768.0005001	12 APR 16
	Criteria: 31-1153, 31-1197, 31-1218, 31-1257, P6544, P7125, SA				
	Applicable to: MSN 11531				
N	PRO-ABN-VENT		**VENT BLOWER FAULT - FWSPAGE**	00010769.0006001	03 NOV 22
	Criteria: P6544, P6578, P7125, SA				
	Applicable to: MSN 11531				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-VENT		**VENT EXTRACT FAULT**	NG00811	
	PRO-ABN-VENT		**VENT EXTRACT FAULT**	00017330.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-VENT		**VENT EXTRACT FAULT**	00010770.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
R	PRO-ABN-VENT		**VENT EXTRACT FAULT - FWSPAGE**	00010771.0001001	03 NOV 22
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-VENT		**VENT EXTRACT FAULT**	NG00811	
	PRO-ABN-VENT		**VENT EXTRACT FAULT**	00017330.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-VENT		**VENT EXTRACT FAULT**	00010770.0001001	05 AUG 10
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-ABN-VENT		**VENT EXTRACT FAULT**	NG00811	
	PRO-ABN-VENT		**VENT EXTRACT FAULT**	00017330.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
	PRO-ABN-VENT		**VENT EXTRACT FAULT**	00010770.0001001	05 AUG 10
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
N	PRO-ABN-VENT		**VENT EXTRACT FAULT - FWSPAGE**	00010771.0002001	03 NOV 22
	Criteria: P6578, SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	NG00812	
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00017331.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				
	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00018941.0002001	21 MAR 16
	Criteria: 31-1492, P14629, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324				
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT - FWSPAGE**	00018942.0003001	21 MAR 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, P14629, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	NG00812	
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00017331.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 01251**				
	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00018941.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-VENT		**VENT SKIN VALVE FAULT - FWSPAGE**	00018942.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01251				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	NG00812	
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00017331.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 02014, 06561**				
	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00018941.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02014, 06561				
	PRO-ABN-VENT		**VENT SKIN VALVE FAULT - FWSPAGE**	00018942.0002001	21 MAR 16
	Criteria: 31-1373, 31-1414, P11819, SA				
	Applicable to: MSN 02014, 06561				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	NG00812	
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00017331.0001001	21 MAR 16
	Criteria: SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00018941.0003001	18 NOV 21
	Criteria: P14629, P21265, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT - FWSPAGE**	00018942.0003001	21 MAR 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, P14629, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
N	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	NG00812	
N	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00017331.0002001	03 NOV 21
	Criteria: K33563, SA				
	Applicable to: MSN 11531				
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT**	00018941.0003001	18 NOV 21
	Criteria: P14629, P21265, SA				
E	**Applicable to: MSN 11531**				
E	PRO-ABN-VENT		**VENT SKIN VALVE FAULT - FWSPAGE**	00018942.0003001	21 MAR 16
	Criteria: 31-1373, 31-1414, 31-1492, P11819, P14629, SA				
E	**Applicable to: MSN 11531**				
	PRO-ABN-WHEEL		**[QRH] WHEEL TIRE DAMAGE SUSPECTED**	00019841.0002001	12 SEP 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	NG01654	
	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	00017810.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	00018363.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321				
	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	NG01654	
	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	00017810.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	NG01654	
	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	00017810.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-WHEEL		**WHEEL HYD SEL FAULT**	00018363.0003001	21 MAR 16
	Criteria: P4576, SA				
E	**Applicable to: MSN 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-WHEEL		**WHEEL N/W STRG FAULT**	NG01655	
	PRO-ABN-WHEEL		**WHEEL N/W STRG FAULT**	00017744.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-WHEEL		**WHEEL N/W STRG FAULT**	00018712.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-WHEEL		**WHEEL N/W STRG FAULT - FWSPAGE**	00018713.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	PRO-ABN-WHEEL		**WHEEL TYRE LO PR** ◁	NG01656	
E	PRO-ABN-WHEEL		**WHEEL TYRE LO PR** ◁	00017824.0003001	21 MAR 16
	Criteria: 31-1414, P13023, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-WHEEL		**WHEEL TYRE LO PR**	00018714.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-WHEEL		**WHEEL TYRE LO PR**	NG01656	
	PRO-ABN-WHEEL		**WHEEL TYRE LO PR**	00017824.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-ABN-WHEEL		**WHEEL TYRE LO PR**	00018714.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01251**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-WHEEL		**WHEEL TYRE LO PR**	NG01656	
	PRO-ABN-WHEEL		**WHEEL TYRE LO PR**	00018714.0001001	21 MAR 16
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) HI PR**	NG00737	
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) HI PR**	00017161.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) HI PR**	00018328.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) HI PR - FWSPAGE**	00018330.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN (Failure Detected in Flight)**	NG00731	
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN (Failure Detected in Flight)**	00017160.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN (Failure Detected in Flight)**	00018331.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN - FWSPAGE (Failure Detected in Flight)**	00018332.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN (Failure Detected on Ground)**	NG00730	
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN (Failure Detected on Ground)**	00017495.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN (Failure Detected on Ground)**	00018333.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-W_A_ICE		**WING A.ICE L(R) VALVE OPEN - FWSPAGE (Failure Detected on Ground)**	00018334.0001001	21 MAR 16
	Criteria: SA **Applicable to: ALL**				
E	PRO-ABN-W_A_ICE		**WING A.ICE L(R) WING LO PR**	NG01933	
E	PRO-ABN-W_A_ICE		**WING A.ICE L(R) WING LO PR**	00023800.0001001	24 MAR 20
	Criteria: 31-1575, P20610				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-W_A_ICE		**WING A.ICE L(R) WING LO PR**	00023801.0001001	24 MAR 20
	Criteria: 31-1575, P20610				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
E	PRO-ABN-W_A_ICE		**WING A.ICE L(R) WING LO PR - FWSPAGE**	00023802.0001001	24 MAR 20
	Criteria: 31-1575, P20610, P21265, P21423				
E	**Applicable to: MSN 08635, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-W_A_ICE		**WING A.ICE OPEN ON GND**	NG00732	
	PRO-ABN-W_A_ICE		**WING A.ICE OPEN ON GND**	00017158.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-W_A_ICE		**WING A.ICE OPEN ON GND**	00018311.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				
	PRO-ABN-W_A_ICE		**WING A.ICE OPEN ON GND - FWSPAGE**	00018335.0001001	21 MAR 16
	Criteria: SA				
	Applicable to: ALL				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	NG01953	
	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	00024062.0002001	24 MAR 20
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597				
E	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	00024063.0002001	24 MAR 20
	Criteria: 31-1334, 31-1414, 31-1558, 31-1575, P10383, P20466, P20610, SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT - FWSPAGE**	00024064.0002001	24 MAR 20
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21265, P21423, SA, A319, A320, A321				
E	**Applicable to: MSN 01143, 01158, 01246, 01376, 01459, 01518, 01593, 01628, 01801, 01825-01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597**				
	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	NG01953	
	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	00024062.0002001	24 MAR 20
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	00024063.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: MSN 01251				
	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT - FWSPAGE**	00024064.0006001	10 MAY 21
	Criteria: SA, A320				
	Applicable to: MSN 01251				
	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	NG01953	
	PRO-ABN-W_A_ICE		**WING A.ICE SYS FAULT**	00024062.0002001	24 MAR 20
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	PRO-ABN-W_S		**WINDSHEAR DET FAULT**	NG00765	
	PRO-ABN-W_S		**WINDSHEAR DET FAULT**	00016997.0001001	21 MAR 16
	Criteria: P2316				
	Applicable to: MSN 01459				
	PRO-ABN-W_S		**WINDSHEAR DET FAULT**	00010471.0001001	25 FEB 14
	Criteria: P2316				
	Applicable to: MSN 01459				
	PRO-ABN-W_S		**WINDSHEAR DET FAULT - FWSPAGE**	00010472.0001001	05 JUN 18
	Criteria: P2316				
	Applicable to: MSN 01459				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-90		**General**	00010415.0001001	15 OCT 12
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-90		**Cockpit-Assigned Duties for Evacuation**	00010416.0001001	03 NOV 21
	Criteria: SA **Applicable to: ALL**				
N	PRO-ABN-90		**Cabin Crew-Assigned Areas for Evacuation**	00010607.0004001	05 MAR 19
	Criteria: K2113, SA, 321-200NX **Applicable to: MSN 11531**				
E	PRO-ABN-90		**Cabin Crew-Assigned Areas for Evacuation**	00010607.0001001	27 FEB 18
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	PRO-ABN-90		**Cabin Crew-Assigned Areas for Evacuation**	00010607.0003001	09 NOV 17
	Criteria: K12999, K3154, SA **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345**				
	PRO-ABN-90		**Cabin Crew-Assigned Areas for Evacuation**	00010607.0002001	09 NOV 17
	Criteria: K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-ABN-90		**Communications**	00010418.0001001	27 FEB 18
	Criteria: SA **Applicable to: ALL**				

	PRO-ABN-90		**On Ground Evacuation**	NG00767	
	PRO-ABN-90		**On Ground Evacuation - Cockpit Crew Procedures**	00010419.0001001	16 JAN 18
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-90		**On Ground Evacuation - Cabin Crew Procedures**	00010420.0001001	26 JAN 18
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-ABN-90		**Cockpit Evacuation through Window**	NG00768	
	PRO-ABN-90		**Cockpit Evacuation through Window - Opening the Sliding Window**	00010421.0001001	05 AUG 10
	Criteria: SA **Applicable to: ALL**				
	PRO-ABN-90		**Cockpit Evacuation through Window - Cockpit Evacuation with Escape Rope**	00010422.0001001	24 NOV 15
	Criteria: SA **Applicable to: ALL**				
E	PRO-ABN-90		**Evacuation on Water**	NG00769	
E	PRO-ABN-90		**Evacuation on Water - Cabin Crew Responsible for Type "I" Doors**	00010423.0001001	05 AUG 10
E	Criteria: SA **Applicable to: MSN 01143-01158, 01459, 02321, 02734-02924, 03032-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04544, 04734-04773, 04953-05345, 05591-05883, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-ABN-90		**Evacuation on Water - Cabin Crew Responsible for Type "I" Doors**	00010423.0002001	17 MAR 11
	Criteria: K0151, K3712, K3838, K4670, SA **Applicable to: MSN 01246-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 03002, 03222-03229, 03294, 03761-03816, 04352-04358, 04563-04662, 04827-04860, 05528, 05947-05987, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-01		**Foreword**	20806557.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-01		**Golden Rules for Pilots**	20806558.9001001	02 MAY 23
	Criteria:				
	Applicable to: ALL				
N	PRO-NOR-SOP-01		**Airlines Policy**	20806559.9001001	02 MAY 23
	Criteria:				
	Applicable to: ALL				
R	PRO-NOR-SOP-02		**GPS PRIMARY Availability (If Installed)**	00014998.0001001	02 MAY 23
	Criteria: P3996, P4087, P5168, P6054, P6183, A319, A320				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734				
R	PRO-NOR-SOP-02		**GPS PRIMARY Availability (If Installed)**	00014998.0002001	02 MAY 23
	Criteria: 34-1350, P3042, P3996, P4087, P5168, P6054, P6183, P6985, P7397, P9332, A319, A320, A321				
E	**Applicable to: MSN 01459, 02887-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
N	PRO-NOR-SOP-03		**Safety Exterior Inspection**	AIL-00001804	
N	PRO-NOR-SOP-03		**Safety Exterior Inspection - General**	20806561.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-03		**Safety Exterior Inspection - Wheel Chocks**	20806562.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-03		**Safety Exterior Inspection - Landing Gear Doors**	20806563.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-03		**Safety Exterior Inspection - APU Area**	20806564.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**General**	20806565.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**Aircraft Setup**	AIL-00001806	
N	PRO-NOR-SOP-04		**General**	20806566.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**Aircraft Power Up - ENG**	20806567.9001001	02 MAY 23
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**Aircraft Power Up - Weather Radar**	20806568.9001001	02 MAY 23
	Criteria: (SA or (P4308 and P4642 and SA) or (P4642 and P4766 and SA) or (P4642 and P4647 and SA) or (P4308 and P4766 and SA) or (P4308 and SA) or (P4766 and SA) or (P4647 and SA) or (P11652 and P20441 and P20442 and P4642 and P4647 and P4766 and SA) or (P11652 and P20441 and P4642 and P4647 and P4766 and SA) or (P11652 and P20441 and P20442 and P4642 and P4766 and SA) or (P4642 and SA) or (P4647 and P4766 and SA))				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**Aircraft Power Up - L/G**	20806569.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**Aircraft Power Up - Wipers**	20806570.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**Batteries Check/External Power**	20806571.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**APU Fire Test/APU Start**	AIL-00001807	
N	PRO-NOR-SOP-04		**RMP**	20806572.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**APU Fire Test/Start - APU fire**	20806573.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-04		**APU Fire Test/Start - APU Start**	20806574.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	*PRO-NOR-SOP-04*		***ADIRS***	*00011159.0038001*	*02 MAY 23*
	Criteria: 34-1350, P5465, P5726, SA				
	Applicable to: MSN 01459				
R	*PRO-NOR-SOP-04*		***ADIRS***	*00011159.0009001*	*02 MAY 23*
	Criteria: P12310, P3042, P3996, P5465, P5726, P8194, P9332, SA				
	Applicable to: MSN 10949-11139				
	Impacted by TDU: 00022626 ADIRS				
R	*PRO-NOR-SOP-04*		***ADIRS***	*00011159.0009001*	*02 MAY 23*
	Criteria: P12310, P3042, P3996, P5465, P5726, P8194, P9332, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324				
R	PRO-NOR-SOP-04	x	**ADIRS**	00022626.0014001	02 MAY 23
	Criteria: P12909, P20614, P21265, P6985, P8194				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 10949-11139 *Impacted DU: 00011159 ADIRS*				
N	PRO-NOR-SOP-04		**Cockpit Lights**	20806577.9001001	02 MAY 23
	Criteria: ((SA and 33-1057) or (P4801 and SA) or (P4801 and P5638 and SA) or (P4801 and SA and 33-1057) or (P4801 and P5638 and SA and 33-1057) or (P5638 and SA) or (P5638 and SA and 33-1057)) **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**EFB/ACARS (If Installed) Initialization**	AIL-00001808	
N	PRO-NOR-SOP-04		**EFB Initialization**	20806578.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**EFB/ACARS Init - ACARS Initialization**	20806579.9001001	02 MAY 23
	Criteria: (SA or (P4502 and P5956 and SA)) **Applicable to: MSN 01459**				
N	PRO-NOR-SOP-04		**FMGS Pre-Initialization - General**	20806580.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**FMGS Pre-Initialization - Engine and Aircraft Type**	20806581.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SOP-04		**FMGS Pre-Initialization - FM Database Validity**	00014424.0001001	26 OCT 22
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139**				
	PRO-NOR-SOP-04		**FMGS Pre-Initialization - FM Database Validity**	00014424.0002001	26 OCT 22
	Criteria: P7373, SA **Applicable to: MSN 04827-04860**				
N	PRO-NOR-SOP-04		**FMGS Pre-Initialization - FLT NBR - FROM/TO**	20806583.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**EFB STATUS Page**	20806584.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**AIRCRAFT ACCEPTANCE**	20806585.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**Preliminary Performance Determination**	20806586.9001001	02 MAY 23
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				

N	PRO-NOR-SOP-04		**Before Walkaround**	AIL-00001809	
	PRO-NOR-SOP-04		**ECAM Pages**	00021917.0001001	26 OCT 22
	Criteria: CFMI, IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
	PRO-NOR-SOP-04		**ECAM Pages**	00021917.0003001	26 OCT 22
	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11139**				
N	PRO-NOR-SOP-04		**Before Walk-Around - F/CTL**	20806588.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**Before Walk-Around - Parking Brake**	20806589.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-04		**Before Walk-Around - Alternate Braking System**	00010175.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
N	PRO-NOR-SOP-04		**Before Walk-Around - Emergency Equipment**	20806591.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**Before Walk-Around - Rain Repellent** ◁	20806592.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**Before Walk-Around - Rear and Overhead Circuit Breakers Panels**	20806593.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-04		**Before Walkaround - Landing Gear Pins**	20806594.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-SOP-05		**General**	20806595.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-SOP-05		**Exterior Walkaround**	AIL-00001811	
N	PRO-NOR-SOP-05		**Exterior Walk-Around - Schematic**	20806596.9001001	02 MAY 23
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: ALL				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - LH FWD Fuselage**	20806597.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - Nose Section**	20806598.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - Nose L/G**	20806599.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - RH FWD Fuselage**	20806600.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SOP-05		**Exterior Walk-Around - Lower Center Fuselage**	00010367.0001001	09 NOV 21
	Criteria: A320				
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139				
	PRO-NOR-SOP-05		**Exterior Walk-Around - Lower Center Fuselage**	00010367.0002001	09 NOV 21
	Criteria: A319, A321				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - RH Center Wing**	20806602.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 2 LH Side**	00010370.0020001	09 NOV 21
	Criteria: 71-1068, CFM56-5B, P14762, SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	PRO-NOR-SOP-05		**Exterior Walkaround - ENG 2 LH Side**	00010370.0011001	09 NOV 21
	Criteria: 71-1069, IAE, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 2 LH Side**	00010370.0007001	09 NOV 21
	Criteria: PW1100G-JM, SA				
	Applicable to: MSN 08495-09324, 10949-11139				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 2 RH Side**	00010371.0014001	09 NOV 21
	Criteria: 71-1068, CFM56-5B, P14762, SA **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 2 RH Side**	00010371.0011001	09 NOV 21
	Criteria: 71-1069, IAE, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SOP-05		**Exterior Walkaround - ENG 2 RH Side**	00010371.0010001	09 NOV 21
	Criteria: PW1100G-JM, SA **Applicable to: MSN 08495-09324, 10949-11139**				
N	PRO-NOR-SOP-05		**Exterior WalkAround RH Wing Leading Edge**	20806605.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - RH Wing Trailing Edge**	20806606.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - RH L/G and Fuselage**	20806607.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - RH AFT Fuselage**	20806608.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - TAIL**	20806609.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - APU**	20806610.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - LH AFT Fuselage**	20806611.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - LH Landing Gear**	20806612.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - LH Wing Trailing Edge**	20806613.9001001	02 MAY 23
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - LH Wing Leading Edge**	20806614.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 1 LH Side**	00010384.0015001	09 NOV 21
	Criteria: 71-1068, CFM56-5B, P14762, SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 1 LH Side**	00010384.0012001	09 NOV 21
	Criteria: 71-1069, IAE, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 1 LH Side**	00010384.0011001	09 NOV 21
	Criteria: PW1100G-JM, SA				
	Applicable to: MSN 08495-09324, 10949-11139				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 1 RH Side**	00010386.0015001	09 NOV 21
	Criteria: 71-1068, CFM56-5B, P14762, SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 1 RH Side**	00010386.0012001	09 NOV 21
	Criteria: 71-1069, IAE, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	PRO-NOR-SOP-05		**Exterior Walk-around - ENG 1 RH Side**	00010386.0011001	09 NOV 21
	Criteria: PW1100G-JM, SA				
	Applicable to: MSN 08495-09324, 10949-11139				
N	PRO-NOR-SOP-05		**Exterior Walk-Around - LH Center Wing**	20806617.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

N	PRO-NOR-SOP-06		**General**	20806618.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-06		**Flow Pattern**	20806619.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-06		**Overhead Panel**	AIL-00001813	
N	PRO-NOR-SOP-06		**Overhead Panel - White Lights On Overhead Panel**	20806620.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	*PRO-NOR-SOP-06*		***Overhead Panel - RCDR***	*00015476.0006001*	*02 MAY 23*
	Criteria: K30988, P20095, P20327, SA				
	Applicable to: MSN 10949-11139				
R	*PRO-NOR-SOP-06*		***Overhead Panel - RCDR***	*00015476.0004001*	*02 MAY 23*
	Criteria: P12301, P20095, P20327, SA				
	Applicable to: MSN 08495-08635				
	Impacted by TDU: 00021691 Overhead Panel - RCDR				
R	*PRO-NOR-SOP-06*		***Overhead Panel - RCDR***	*00015476.0004001*	*02 MAY 23*
	Criteria: P12301, P20095, P20327, SA				
	Applicable to: MSN 09190-09324				
R	*PRO-NOR-SOP-06*		***Overhead Panel - RCDR***	*00015476.0001001*	*02 MAY 23*
	Criteria: P12301, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
R	PRO-NOR-SOP-06	x	**Overhead Panel - RCDR**	00021691.0006001	02 MAY 23
	Criteria: PW1100G-JM, P12301, P20095, P20327				
	Applicable to: MSN 08495-08635				
	Impacted DU: 00015476 Overhead Panel - RCDR				
N	PRO-NOR-SOP-06		**Overhead Panel - EVAC**	20806623.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-06		**Overhead Panel - EXTERIOR LIGHTS**	20806624.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-06		**Overhead Panel - SIGNS**	20806625.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-06		**Overhead Panel - Probe/Window Heat**	20806626.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-06		**Overhead Panel - Cabin Press**	20806627.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-06		**Overhead Panel - Air Cond**	00011163.0010001	02 MAY 23
	Criteria: A320				
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-06		**Overhead Panel - Air Cond**	00011163.0001001	02 MAY 23
	Criteria: A319 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345**				
R	PRO-NOR-SOP-06		**Overhead Panel - Air COND**	00011163.0002001	02 MAY 23
	Criteria: A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
N	PRO-NOR-SOP-06		**Overhead Panel - Elec**	20806629.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-06		**Overhead Panel - Fuel**	00011166.0003001	02 MAY 23
	Criteria: J0006, J1255, J3527, K2113 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11139**				
R	PRO-NOR-SOP-06		**Overhead Panel - Fuel**	00011166.0002001	02 MAY 23
	Criteria: J0006, J1255 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
N	PRO-NOR-SOP-06		**Overhead Panel - ENG 1- ENG 2 Fire**	20806631.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Overhead Panel - Audio Switching Panel**	20806632.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Cargo Heat** ◁	20806633.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Overhead Panel - Third Occupant Audio Control Panel**	20806634.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Overhead Panel - Maintenance Panel**	20806635.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-06		**CTR Instrument Panel**	AIL-00001814	
R	PRO-NOR-SOP-06		**CTR Instrument Panel - STBY Instrument**	00011179.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-NOR-SOP-06		**CTR Instrumental Panel - ISIS**	00011184.0001001	02 MAY 23
	Criteria: P5638 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-06		**CTR Instrument Panel - Clock**	00011185.0001001	02 MAY 23
	Criteria: P5465, P6119, SA **Applicable to: MSN 01459**				
R	PRO-NOR-SOP-06		**CTR Instrument Panel - Clock**	00011185.0009001	02 MAY 23
	Criteria: P5465, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-06		**CTR Instrument Panel - Nosewheel Steering**	20806639.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Pedestal**	AIL-00001815	
N	PRO-NOR-SOP-06		**Pedestal - ACP**	20806640.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Pedestal - Parking BRK**	20806641.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-06		**Pedestal - Cockpit Door**	00011191.0001001	02 MAY 23
	Criteria: 25-1305, K7755, K7790 **Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-06		**Pedestal - Switching Panel**	20806643.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Pedestal - Engines**	20806644.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Pedestal - Gravity Gear EXTN**	20806645.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Pedestal - ATC**	20806646.9001001	02 MAY 23
	Criteria: (P5583 or (P5583 and P7268 and 34-1222) or P7268 or 34-1222 or (P5583 and P7268) or (P5583 and 34-1252) or (P5583 and 34-1222) or (P5583 and 34-1222 and 34-1252)) **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**RMP**	20806647.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SOP-06		**ATC Datalink Communication**	00013746.0002001	09 NOV 21
	Criteria: 46-1062, P11247 **Applicable to: MSN 04827-04974**				
R	PRO-NOR-SOP-06		**FMGS Preparation**	AIL-00001816	
N	PRO-NOR-SOP-06		**FMGS Initialization - General**	20806649.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**FMGS Initialization - Engine and Aircraft Type**	20806650.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-06		**FMGS Initialization - FM Database Validity**	00011228.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-06		**FMGS Initialization - FM Database Validity**	00011228.0002001	02 MAY 23
	Criteria: P7373, SA **Applicable to: MSN 04827-04860**				
R	PRO-NOR-SOP-06		**FMGS Initialization - NAVAID Deselection**	00011229.0001001	02 MAY 23
	Criteria: P10785, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222**				
R	PRO-NOR-SOP-06		**FMGS Initialization - NAVAID Deselection**	00011229.0002001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P9593, SA **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-07098**				
R	PRO-NOR-SOP-06		**FMGS Initialization - NAVAID Deselection**	00011229.0011001	02 MAY 23
	Criteria: P15572, SA **Applicable to: MSN 08495-09324, 10949-11139**				
N	PRO-NOR-SOP-06		**FMGS Initialization - Flight Plan Initialization**	20806653.9001001	02 MAY 23
	Criteria: ((P10762 and P10785 and P1450 and P9652 and SA) or (P10785 and P1450 and P9652 and SA) or (P10762 and P1450 and SA) or (P10763 and P1450 and SA) or (P1450 and SA and 22-1270) or (P1450 and SA and 22-1269) or (P1450 and SA and 22-1676)) **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-06		**FMGS Initialization - ADIRS Position Initialization**	00011232.0011001	02 MAY 23
	Criteria: 34-1350, P3996, P8194, P9332, P9351, SA **Applicable to: MSN 01459, 02887**				
R	PRO-NOR-SOP-06		**FMGS Initialization - ADIRS Position Initialization**	00011232.0001001	02 MAY 23
	Criteria: P12310, P3042, P3996, P8194, P9332, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-06		**FMGS Initialization - Active F-PLN Check**	20806655.9001001	02 MAY 23
	Criteria: ((P7520 and SA) or (SA and 22-1090) or (P7519 and SA) or (SA and 22-1676)) **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**FMGS Initialization - Secondary F-PLN**	20806656.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**FMGS Initialization - Radio NAV**	20806657.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**FMGS Data Insertion - Gross Weight Insertion (INIT B page)**	20806658.9001001	02 MAY 23
	Criteria: ((P8483 and SA) or (P10762 and P10785 and P8483 and SA) or (P10785 and P8483 and SA) or (SA and 22-1269) or (SA and 22-1269 and 22-1523) or (P10762 and SA and 22-1523) or (P10762 and SA) or (SA and 22-1270) or (P10763 and SA) or (SA and 22-1676)) **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**FMGS Data Insertion - Takeoff Data Insertion (PERF Takeoff page)**	20806659.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-06		**FMGS Data Insertion - RNP Insertion (PROG page)**	00011241.0001001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-07098**				
N	PRO-NOR-SOP-06		**FMGS Data Insertion - Climb, Cruise, Descent, SpeEd Preselection**	20806661.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**FMGS Preparation - Check of FMGS Preparation**	20806662.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-06		**Glareshield**	AIL-00001817	
N	PRO-NOR-SOP-06		**Glareshield - EFIS Control Panel**	20806663.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Glareshield - FCU**	20806664.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-SOP-06		**Lateral Consoles**	20806665.9001001	02 MAY 23
	Criteria: (P2040 and SA) **Applicable to: ALL**				
R	PRO-NOR-SOP-06		**Instrument Panels**	00011252.0001001	02 MAY 23
	Criteria: P10267, P8303, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-04974, 05066, 05101-05345, 05591-05643, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
R	PRO-NOR-SOP-06		**Instrument Panels**	00011252.0002001	02 MAY 23
	Criteria: P8303, SA **Applicable to: MSN 04827-04860, 05005, 05097, 05528, 05749-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11139**				
N	PRO-NOR-SOP-06		**ECAM Control Panel**	20806667.9001001	02 MAY 23
	Criteria: (SA or (P3511 and P3686 and P4576 and SA and 32-1305 and 32-1335) or (P3511 and P3686 and P4576 and P8866 and SA and 32-1335) or (P3511 and P3686 and P8866 and SA and 32-1305) or (P3686 and SA) or (P3511 and P3686 and P4576 and P8866 and SA and 32-1305 and 32-1335) or (P3511 and P3686 and SA) or (P3511 and P3686 and P8866 and SA) or (P3511 and P3686 and SA and 32-1305) or (P3511 and P3686 and SA and 32-1305 and 32-1335) or (P3511 and P3686 and P4576 and P8866 and SA) or (P3511 and P3686 and P4576 and SA and 32-1305)) **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**ADIRS**	20806668.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Fuel on Board**	20806669.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Departure Briefing**	20806670.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-06		**Cockpit Preparation Checklist**	20806671.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-07		**Before Pushback/Start Clearance**	AIL-00001819	
N	PRO-NOR-SOP-07		**Before Pushback/Start Clearance - Loadsheet**	20806672.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**Before Pushback/Start Clearance - Fuel**	20806673.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**Before Pushback/Start Clearance - Takeoff Data**	20806674.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**Before Pushback/Start Clearance - Seating Position**	20806675.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**Before Pushback/Start Clearance - MCDU**	20806676.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**Before Pushback/Start Clearance - EXT PWR**	20806677.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance**	AIL-00001820	
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance - Flow Pattern**	20806678.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**At Start Clearance**	20806679.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**At Start Clearance - Slides Armed Announce**	20806680.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**At Start Clearance - Safety Check**	20806681.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance - Pushback/Start Clearance**	20806682.9001001	02 MAY 23
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance - Beacon Light**	20806683.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance - ATC**	20806684.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-07		**At Pushback/Start Clearance - Windows and Doors**	00010199.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01251, 01518, 01593-01628				
R	PRO-NOR-SOP-07		**At Pushback/Start Clearance - Windows and Doors**	00010199.0002001	02 MAY 23
	Criteria: 25-1305, K7755, K7790, SA				
	Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139				
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance - THR Levers**	20806686.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance - ACCU PRESSURE**	20806687.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-07		**At Pushback/Start Clearance - Parking Brake**	20806688.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-07		**At Pushback/Start Clearance - NW STRG DISC**	00010198.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
R	PRO-NOR-SOP-07		**At Pushback/Start Clearance - NW STRG DISC**	00010198.0002001	02 MAY 23
	Criteria: P4576, SA				
	Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139				
R	PRO-NOR-SOP-08		**One Engine Taxi Procedure**	20800213.9001001	02 MAY 23
	Criteria:				
	Applicable to: MSN 01143, 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014				
R	PRO-NOR-SOP-08		**One Engine Taxi Procedure**	20800213.9001002	02 MAY 23
	Criteria:				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 04827-04974				
R	PRO-NOR-SOP-08		**One Engine Taxi Procedure**	20800213.9001003	02 MAY 23
	Criteria: **Applicable to: MSN 08495-09324, 10949-11139**				
R	PRO-NOR-SOP-08		**One Engine Taxi Procedure**	20800213.9001004	02 MAY 23
	Criteria: **Applicable to: MSN 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-07098**				
R	PRO-NOR-SOP-08		**One Engine Taxi Procedure**	20800213.9001005	02 MAY 23
	Criteria: **Applicable to: MSN 01158, 01251, 02321**				
R	PRO-NOR-SOP-08	x	**Automatic Engine Start**	00022757.0001001	02 MAY 23
	Criteria: PW1100G-JM, P15967 **Applicable to: MSN 08495-09324, 10949-11139** *Impacted DU: 00010162 Automatic Engine Start*				
R	*PRO-NOR-SOP-08*		***Automatic Engine Start***	*00010162.0060001*	*02 MAY 23*
	Criteria: 31-1331, G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6, P8564 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
R	*PRO-NOR-SOP-08*		***Automatic Engine Start***	*00010162.0040001*	*02 MAY 23*
	Criteria: G-V2524-A5, P4149, P4354, P4456, P4985, P5206, P5577 **Applicable to: MSN 02321, 02887**				
R	*PRO-NOR-SOP-08*		***Automatic Engine Start***	*00010162.0056001*	*02 MAY 23*
	Criteria: 31-1331, G-V2524-A5, G-V2527-A5, G-V2527E-A5, G-V2533-A5, P4149, P4354, P4456, P4985, P5206, P5577, P8564 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
R	*PRO-NOR-SOP-08*		***Automatic Engine Start***	*00010162.0065001*	*02 MAY 23*
	Criteria: PW1100G-JM, P15967, P15994, P8564 **Applicable to: MSN 08495-09324, 10949-11139** *Impacted by TDU: 00022757 Automatic Engine Start*				
	PRO-NOR-SOP-08		**Ground Run Up - Danger Areas**	00010163.0019001	20 OCT 22
	Criteria: V2500-A5, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	PRO-NOR-SOP-08		**Ground Run Up - Danger Areas**	00010163.0006001	06 JAN 16
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6, A319, A320, A321 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-NOR-SOP-08		**Ground Run Up - Danger Areas**	00010163.0015001	06 JAN 16
	Criteria: V2500-A5, A319, A321 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SOP-08		**Ground Run Up - Danger Areas**	00010163.0018001	16 NOV 15
	Criteria: PW1100G-JM, A320				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-SOP-09		**After Start**	AIL-00001823	
R	PRO-NOR-SOP-09		**After Start - Flow Pattern**	00020074.0002001	02 MAY 23
	Criteria: P15967, SA				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-SOP-09		**After Start - Flow Pattern**	00020074.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
R	PRO-NOR-SOP-09		**After Start - ENG Mode Selector**	00010210.0001001	02 MAY 23
	Criteria: CFMI, J0006, J3527, A321				
	Applicable to: MSN 06409-07098				
R	PRO-NOR-SOP-09		**After Start - ENG Mode Selector**	00010210.0002001	02 MAY 23
	Criteria: CFMI, J0006				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173				
R	PRO-NOR-SOP-09		**After Start - ENG Mode Selector**	00010210.0003001	02 MAY 23
	Criteria: IAE, J0006				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345				
R	PRO-NOR-SOP-09		**After Start - ENG Mode Selector**	00010210.0006001	02 MAY 23
	Criteria: IAE, PW1100G-JM, J0006, J3527, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11139				
R	PRO-NOR-SOP-09		**After Start - Dual Cooling**	00020192.0001001	02 MAY 23
	Criteria: P15967				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-SOP-09		**After Start - APU Bleed**	00010211.0001001	02 MAY 23
	Criteria: SA				
E	**Applicable to: MSN 01143-11293**				
R	PRO-NOR-SOP-09		**After Start - ENG Anti Ice**	00010212.0007001	02 MAY 23
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-SOP-09		**After Start - ENG Anti Ice**	00010212.0004001	02 MAY 23
	Criteria: G-V2524-A5, G-V2527-A5, G-V2527E-A5, G-V2533-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
R	PRO-NOR-SOP-09		**After Start - ENG Anti Ice**	00010212.0005001	02 MAY 23
	Criteria: CFMI, P7919, P8069				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - Wing Anti Ice**	20806699.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - APU**	20806700.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - Ground Spoilers**	20806701.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - Rudder Trim**	20806702.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - Flaps Lever**	20806703.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - Pitch Trim**	20806704.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - ECAM Status**	20806705.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - N/W STEER DISC MEMO**	20806706.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - Ground Crew**	20806707.9001001	02 MAY 23
N	PRO-NOR-SOP-09 Criteria: SA **Applicable to: ALL**		**After Start - Checklist**	20806708.9001001	02 MAY 23
R	PRO-NOR-SOP-10		**Taxi**	AIL-00001825	
N	PRO-NOR-SOP-10 Criteria: SA **Applicable to: ALL**		**Taxi - Taxi Clearance**	20806709.9001001	02 MAY 23
N	PRO-NOR-SOP-10 Criteria: SA **Applicable to: ALL**		**Taxi - Lights**	20806710.9001001	02 MAY 23
N	PRO-NOR-SOP-10 Criteria: **Applicable to: ALL**		**Taxi - Y Elec Pump**	20806711.9001001	02 MAY 23

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-10		**Taxi - Parking Brake**	20806712.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-10		**Taxi - Brakes**	00010231.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
R	PRO-NOR-SOP-10		**Taxi - Brakes**	00010231.0002001	02 MAY 23
	Criteria: P4576, SA				
	Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139				
R	PRO-NOR-SOP-10		**Taxi - Engine 2 Start**	20800241.9001001	02 MAY 23
	Criteria:				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
R	PRO-NOR-SOP-10		**Taxi - Engine 2 Start**	20800241.9001002	02 MAY 23
	Criteria:				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
R	PRO-NOR-SOP-10		**Taxi - Engine 2 Start**	20800241.9001003	02 MAY 23
	Criteria:				
	Applicable to: MSN 08495-09324, 10949-11139				
N	PRO-NOR-SOP-10		**Taxi - Flight Controls**	20806715.9001001	02 MAY 23
	Criteria: (P1850 and P1883 and SA)				
	Applicable to: ALL				
N	PRO-NOR-SOP-10		**Taxi - ATC Clearance**	20806716.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-10		**Taxi - AFS/Flight Instruments**	20806717.9001001	02 MAY 23
	Criteria: (SA or (SA and 34-1480) or (SA and 34-1480) or (SA and 34-1480) or (P10530 and P9593 and SA and 34-1480) or (P11256 and SA) or (SA and 34-1374 and 34-1403 and 34-1480) or (P10530 and P11256 and SA) or (P10530 and P11256 and P11569 and SA and 34-1480) or (P10530 and P9593 and SA and 34-1480) or (P10530 and P11256 and P9593 and SA) or (P15572 and SA) or (P11256 and SA and 34-1480) or (P11570 and SA and 34-1480) or (P11256 and SA and 34-1480) or (P10530 and P9593 and SA and 34-1480) or (SA and 34-1662) or (SA and 34-1662) or (SA and 34-1662) or (SA and 34-1480) or (SA and 34-1480) or (P10530 and P11569 and P9593 and SA) or (SA and 34-1480) or (SA and 34-1662) or (SA and 34-1662) or (SA and 34-1662) or (SA and 34-1662) or (P11256 and SA and 34-1480) or (P10530 and P11570 and P9593 and SA) or (SA and 34-1662) or (SA and 34-1480) or (SA and 34-1480) or (SA and 34-1480) or (SA and 34-1480))				
	Applicable to: ALL				
N	PRO-NOR-SOP-10		**Taxi - Flow Pattern**	20806718.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-10		**Taxi - Auto BRK**	20806719.9001001	02 MAY 23
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
N	PRO-NOR-SOP-10		**Taxi - Terr on ND**	20806720.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-10		**Taxi - ATC**	20806721.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-10		**Taxi - ENG Mode Selector**	00010397.0002001	02 MAY 23
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
R	PRO-NOR-SOP-10		**Taxi - ENG Mode Selector**	00010397.0004001	02 MAY 23
	Criteria: CFMI, P7919, P8069				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
R	PRO-NOR-SOP-10	x	**Radar**	00015299.0001001	02 MAY 23
	Criteria: P4647, P7929				
	Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192				
	Impacted DU: 00015298 Taxi - Radar				
R	PRO-NOR-SOP-10	x	**Radar**	00015299.0002001	02 MAY 23
	Criteria: 34-1443, P12173, P4647, P4766, P7929, P9902				
	Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098				
	Impacted DU: 00015298 Taxi - Radar				
R	*PRO-NOR-SOP-10*		***Radar***	*00015298.0001001*	*02 MAY 23*
	Criteria: P4308, P4647, P4766, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563				
R	*PRO-NOR-SOP-10*		***Radar***	*00015298.0002001*	*02 MAY 23*
	Criteria: 34-1571, P11652, P12173, P12994, P20441, P20442, P4642, P4647, P4766, P7929, SA				
	Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098				
	Impacted by TDU: 00015299 Taxi - Radar				
R	*PRO-NOR-SOP-10*		***Radar***	*00015298.0002001*	*02 MAY 23*
	Criteria: 34-1571, P11652, P12173, P12994, P20441, P20442, P4642, P4647, P4766, P7929, SA				
	Applicable to: MSN 04827-04860, 08495-09324, 10949-11139				
N	PRO-NOR-SOP-10		**Taxi - Final Check**	20806725.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-10		**Taxi - Checklist**	20806726.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-NOR-SOP-10B		**Departure Change**	00010248.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-11		**Before Takeoff**	AIL-00001828	
N	PRO-NOR-SOP-11		**Before Takeoff - Line-Up Flow Pattern**	20806728.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-11		**Before Takeoff - Brake Temperature**	20806729.9001001	02 MAY 23
	Criteria: (SA or (K2113 and P3341 and SA) or (P4507 and SA and 32-1242))				
	Applicable to: ALL				
N	PRO-NOR-SOP-11		**Before Takeoff - Line-Up Clearance**	20806730.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-11		**Before Takeoff - TCAS**	20806731.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-11		**Before Takeoff - Takeoff Runway Check**	20806732.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-11		**Before Takeoff - Approach Path Cleared of Traffic**	20806733.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-11	x	**Before Takeoff - Exterior Lights**	00014740.0001001	02 MAY 23
	Criteria: 57-1173, 57-1187, J3283, J3448				
	Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11139				
	Impacted DU: 00010392				
N	PRO-NOR-SOP-11		**Before Takeoff - Exterior Lights**	20806735.9001001	02 MAY 23
	Criteria: (K0064 and SA)				
	Applicable to: ALL				
N	PRO-NOR-SOP-11		**Before Takeoff - Packs**	20806736.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-11		**Before Takeoff - RNP AR Departure Check**	00010395.0001001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593				
	Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139				
N	PRO-NOR-SOP-11		**Before Takeoff - Sliding Table/efb**	20806738.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-11		**Before Takeoff - Cabin Crew**	20806739.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-11		**Before Takeoff - Line-Up Checklist**	20806740.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-12		**Takeoff**	AIL-00001830	
N	PRO-NOR-SOP-12		**Takeoff - Takeoff Clearance**	20806741.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-12		**Takeoff - Exterior Lights**	20806742.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-12		**Takeoff - Thrust Setting**	00011560.0032001	02 MAY 23
	Criteria: 22-1090, 22-1676, 73-1075, G-V2524-A5, G-V2527-A5, G-V2527E-A5, G-V2533-A5, P3379, P7520, P7876, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
R	PRO-NOR-SOP-12		**Takeoff - Thrust Setting**	00011560.0006001	02 MAY 23
	Criteria: P3379, P7519, P7520, SA, PW1100G-JM **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139**				
N	PRO-NOR-SOP-12		**Takeoff - Below 80 Knots**	20806744.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-12		**Takeoff - At 80 kt**	20806745.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-12		**Takeoff - At 100 Knots**	20806746.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-12		**Takeoff - At V1**	20806747.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-12		**Takeoff - At VR**	20806748.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-12		**Takeoff - When Positive Climb**	20806749.9001001	02 MAY 23
	Criteria: (SA or ((SA and 34-1480) or (SA and 34-1480) or (SA and 34-1480) or (SA and 34-1374 and 34-1403 and 34-1480) or (P10530 and P9593 and SA and 34-1480) or (SA and 34-1480) or (P10530 and P11256 and P11569 and SA and 34-1480) or (P10530 and P11570 and P9593 and SA) or (P10530 and P9593 and SA and 34-1480) or (P15572 and SA) or (P11256 and SA and 34-1480) or (P11570 and SA and 34-1480) or (P11256 and SA and 34-1480) or (P10530 and P9593 and SA and 34-1480) or (SA and 34-1662) or (P10530 and P11256 and P9593 and SA) or (SA and 34-1662) or (SA and 34-1480) or (SA and 34-1480) or (SA and 34-1662) or (SA and 34-1480) or (SA and 34-1662) or (P10530 and P11569 and P9593 and SA) or (SA and 34-1662) or (SA and 34-1662) or (P11256 and SA and 34-1480) or (SA and 34-1662) or (SA and 34-1662) or (P10530 and P11256 and SA) or (P11256 and SA) or (SA and 34-1480) or (SA and 34-1480))) **Applicable to: ALL**				
N	PRO-NOR-SOP-12		**Takeoff - At Thrust Reduction Altitude**	20806750.9001001	02 MAY 23
	Criteria: (P3379 and SA) **Applicable to: ALL**				
R	PRO-NOR-SOP-12		**Takeoff - Above Acceleration Altitude (or Once in Climb Phase)**	00011568.0001001	02 MAY 23
	Criteria: 22-1079, 22-1102, 22-1226, 31-1257, P5706, P6437, P6703, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139**				
R	PRO-NOR-SOP-12		**Takeoff - Above Acceleration Altitude (or Once in Climb Phase)**	00011568.0032001	02 MAY 23
	Criteria: K2113, K6345, P5706, P6703, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
N	PRO-NOR-SOP-12		**Takeoff - Takeoff Pattern**	20806752.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-13		**After Takeoff**	AIL-00001832	
N	PRO-NOR-SOP-13		**After Takeoff - APU**	20806753.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-13		**After Takeoff - ENG MODE Selector**	00010158.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
N	PRO-NOR-SOP-13		**After Takeoff - TCAS**	20806755.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-13		**After Takeoff - Anti-Ice Protection**	00010160.0001001	02 MAY 23
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
R	PRO-NOR-SOP-13		**After Takeoff - Anti-Ice Protection**	00010160.0002001	02 MAY 23
	Criteria: PW1100G-JM, P7919, P8069, SA **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139**				

R	PRO-NOR-SOP-14		**Climb**	AIL-00001834	
N	PRO-NOR-SOP-14		**Climb - Initial Climb**	20806757.9001001	02 MAY 23
	Criteria: (P3379 and SA) **Applicable to: ALL**				
N	PRO-NOR-SOP-14		**Climb - At the Transition Altitude**	20806758.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-14	x	**Climb - At the Transition Altitude**	00025011.0003001	02 MAY 23
	Criteria: 34-1259, 34-1369, 34-1663, P10960, P11588, P13843, P14310, P14311, P14828, P3379, P7424, P7425, P7585, P9207, SA **Applicable to: MSN 01459, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06173, 06528-06561, 06598, 06634, 06689-06712, 06800-07098** *Impacted DU: 00025005*				
N	PRO-NOR-SOP-14		**Climb - Climb**	20806760.9001001	02 MAY 23
	Criteria: (P3379 and SA) **Applicable to: ALL**				
N	PRO-NOR-SOP-14		**Climb - Anti Ice Protection**	20806761.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-14	x	**Climb - Radar**	00013047.0003001	02 MAY 23
	Criteria: 34-1443, P12173, P7929, P9902, SA **Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098** *Impacted DU: 00010259 Climb - Radar*				
R	PRO-NOR-SOP-14	x	**Climb - Radar**	00013047.0001001	02 MAY 23
	Criteria: P7929, SA **Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192** *Impacted DU: 00010259 Climb - Radar*				
R	*PRO-NOR-SOP-14*		***Climb - Radar***	*00010259.0001001*	*02 MAY 23*
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563**				
R	*PRO-NOR-SOP-14*		***Climb - Radar***	*00010259.0002001*	*02 MAY 23*
	Criteria: 34-1571, P11652, P12173, P12994, P20441, P8710, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098				
	Impacted by TDU: 00013047 Climb - Radar				
R	*PRO-NOR-SOP-14*		***Climb - Radar***	*00010259.0002001*	*02 MAY 23*
	Criteria: 34-1571, P11652, P12173, P12994, P20441, P8710, SA				
	Applicable to: MSN 04827-04860, 08495-09324, 10949-11139				
N	PRO-NOR-SOP-14			20806764.9001001	02 MAY 23
	Criteria:				
	Applicable to: ALL				
N	PRO-NOR-SOP-14		**Climb - Climb At 10 000 ft**	20806765.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-15		**Cruise**	AIL-00001836	
N	PRO-NOR-SOP-15		**Cruise - ECAM**	20806766.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-15		**Cruise - Flight Progress**	20806767.9001001	02 MAY 23
	Criteria: (SA or (K2113 and SA))				
	Applicable to: ALL				
N	PRO-NOR-SOP-15		**Cruise - Step Flight Level**	20806768.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-15		**Cruise - Navigation Accuracy**	20806769.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SOP-15	x	**Cruise - Radar Tilt**	00013068.0001001	26 OCT 22
	Criteria: P7929, SA				
	Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192				
	Impacted DU: 00010291 Cruise - Radar Tilt				
	PRO-NOR-SOP-15	x	**Cruise - Radar Tilt**	00013068.0006001	26 OCT 22
	Criteria: 34-1443, P12173, P7929, P9902, SA				
	Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098				
	Impacted DU: 00010291 Cruise - Radar Tilt				
R	*PRO-NOR-SOP-15*		***Cruise - Radar Tilt***	*00010291.0001001*	*02 MAY 23*
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563				
R	*PRO-NOR-SOP-15*		***Cruise - Radar Tilt***	*00010291.0002001*	*02 MAY 23*
	Criteria: 34-1571, P11652, P12173, P12994, P20441, P8710, SA				
	Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098				
	Impacted by TDU: 00013068 Cruise - Radar Tilt				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	*PRO-NOR-SOP-15*		***Cruise - Radar Tilt***	*00010291.0002001*	*02 MAY 23*
	Criteria: 34-1571, P11652, P12173, P12994, P20441, P8710, SA				
	Applicable to: MSN 04827-04860, 08495-09324, 10949-11139				
N	PRO-NOR-SOP-15		**Cruise - Oxygen Masks**	20806772.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-15		**Cruise - Cruise Briefing**	20806773.9001001	02 MAY 23
	Criteria:				
	Applicable to: ALL				

N	PRO-NOR-SOP-16		**Descent Preparation**	AIL-00001838	
N	PRO-NOR-SOP-16		**Descent Preparation - General**	20806774.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-16		**Descent Preparation - Landing Information**	20806775.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-16		**Descent Preparation - ECAM Status**	20806776.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-16		**Descent Preparation - Landing Performance**	20806777.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-16		**Descent Preparation - FMGS - ARRIVAL - F-PLN**	20806778.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-16		**Descent Preparation - FMGS - DES WIND - PERF CRUISE - PERF DES**	20806779.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-16		**Descent Preparation - FMGS - PERF APPR - PERF GO AROUND**	00020102.0002001	02 MAY 23
	Criteria: 00-1043, P4709, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139				
R	PRO-NOR-SOP-16		**Descent Preparation - FMGS - PERF APPR - PERF GO AROUND**	00020102.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 04827-04860				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-16		**Descent Preparation - FMGS - RADIO NAV**	00020103.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222**				
R	PRO-NOR-SOP-16		**Descent Preparation - FMGS - RADIO NAV**	00020103.0002001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593, SA **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-16		**Descent Preparation - FMGS - SEC F-PLN**	20806782.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-16		**Descent Preparation - Check of FMGS Preparation**	20806783.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-16		**Preferential Setting for Landing**	20806784.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	PRO-NOR-SOP-16		**Descent Preparation - VIP**	20806785.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	PRO-NOR-SOP-16		**Descent Preparation - GPWS LDG Flaps 3**	20806786.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-16		**Descent Preparation - Landing Elevation**	20806787.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-16		**Descent Preparation - Runway Condition**	00024115.0001001	02 MAY 23
	Criteria: P20473 **Applicable to: MSN 10949-11139**				
N	PRO-NOR-SOP-16		**Descent Preparation - Autobrake**	20806789.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-16		**Descent Preparation - Arrival Briefing**	20806790.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-16	x	**Descent Preparation - Radar**	00013353.0003001	02 MAY 23
	Criteria: 34-1443, P12173, P7929, P9902, SA **Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098** *Impacted DU: 00011545*				
R	PRO-NOR-SOP-16	x	**Descent Preparation - Radar**	00013353.0001001	02 MAY 23
	Criteria: P7929, SA **Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192** *Impacted DU: 00011545*				
N	PRO-NOR-SOP-16		**Descent Preparation - Radar**	20806792.9001001	02 MAY 23
	Criteria: (SA or (P12994 and P8710 and SA) or (P12173 and P12994 and SA) or (P12173 and SA) or (P8710 and SA and 34-1571) or (P12173 and SA and 34-1571) or (P8710 and SA) or (P11652 and P12173 and P12994 and SA) or (P11652 and P12994 and P8710 and SA) or (P11652 and SA)) **Applicable to: ALL**				
N	PRO-NOR-SOP-16		**Descent PREPARATION - TCAS**	20806793.9001001	02 MAY 23
	Criteria: (SA or (P12994 and P8710 and SA) or (P12173 and P12994 and SA) or (P12173 and SA) or (P8710 and SA) or (P11652 and P12173 and P12994 and SA) or (P11652 and P12994 and P8710 and SA) or (SA and 34-1348) or (P11652 and SA)) **Applicable to: ALL**				
R	PRO-NOR-SOP-16		**Descent Preparation - Anti-Ice Protection**	00011558.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
R	PRO-NOR-SOP-16		**Descent Preparation - Anti-Ice Protection**	00011558.0004001	02 MAY 23
	Criteria: PW1100G-JM, P7919, P8069, SA **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139**				
N	PRO-NOR-SOP-16		**Descent Preparation - Descent Clearance**	20806795.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-17		**Descent Initiation**	20806796.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-17		**Descent Monitoring**	20806797.9001001	02 MAY 23
	Criteria: ((J0664 and P6054 and SA) or (J0664 and P5168 and SA) or (J0664 and P5168 and P6054 and P6183 and SA)) **Applicable to: ALL**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-17		**Descent Adjustment**	AIL-00001840	
N	PRO-NOR-SOP-17		**Descent Adjustment - General**	20806798.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-17		**Descent Adjustment - Terr on ND**	20806799.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-17		**Descent Adjustment - BARO Ref**	20806800.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-17			20806801.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	PRO-NOR-SOP-17		**Descent Adjustment - At 10000 FT**	20806802.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-17		**descent Adjustment - ENG MODE**	20806803.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-17		**Descent Adjustment - Navigation Accuracy**	20806804.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-17		**Approach Checklist**	20806805.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-A		**Introduction**	20806806.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-18-A		**Cross-Reference Table**	00014489.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222**				
R	PRO-NOR-SOP-18-A		**Cross-Reference Table**	00014489.0004001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593, SA **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-18-A		**Flying Reference**	20806808.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SOP-18-A		**Stabilization Criteria**	00014487.0001001	17 OCT 22
	Criteria: SA **Applicable to: MSN 04827-04860**				
R	PRO-NOR-SOP-18-A		**Stabilization Criteria**	00014487.0002001	02 MAY 23
	Criteria: 00-1043, P4709, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-18-A		**Approach Speed Technique**	20806810.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-A		**Discontinued Approach**	20806811.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-18-B		**Initial Approach**	AIL-00001844	
N	PRO-NOR-SOP-18-B		**Initial Approach - General**	20806812.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-B		**Initial Approach - Initial Approach**	20806813.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-18-B	x	**Initial Approach - Radar**	00014648.0002001	02 MAY 23
	Criteria: P7929, SA **Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192** *Impacted DU: 00014647*				
R	PRO-NOR-SOP-18-B	x	**Initial Approach - Radar**	00014648.0003001	02 MAY 23
	Criteria: 34-1443, P12173, P7929, P9902, SA **Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098** *Impacted DU: 00014647*				
N	PRO-NOR-SOP-18-B		**Initial Approach - Radar**	20806815.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-B		**Initial Approach - Navigation Accuracy**	20806816.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches**	AIL-00001845	
N	PRO-NOR-SOP-18-B		**Intermediate/Final Approach**	20806817.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At green dot speed**	20800055.9001001	02 MAY 23
	Criteria: (A319 or A320) **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139**				
R	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches- At green dot speed**	20800055.9001002	02 MAY 23
	Criteria: A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
N	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - One Dot Below Flight Path, Prior To VIP OR 2 000 ft AFE, Whichever Occurs First**	20806819.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At 2 500 ft AFE**	20806820.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
R	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2**	20800058.9001002	02 MAY 23
	Criteria: SA **Applicable to: MSN 10949-11139**				
R	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2**	20800058.9001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
R	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE**	20800059.9001001	02 MAY 23
	Criteria: (A319 or A320) **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE**	20800059.9001002	02 MAY 23
	Criteria: ((P4576 and A319) or (P4576 and A320)) **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139**				
R	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE**	20800059.9001003	02 MAY 23
	Criteria: (P4576 and A321) **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
N	PRO-NOR-SOP-18-B		**Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - Pattern (decelerated)**	20806823.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance**	AIL-00001847	
N	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance - General**	20806824.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance - Descent Preparation**	20806825.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance - Initial/Intermediate Approach**	20806826.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance - Glide Interception from Above**	20806827.9001001	02 MAY 23
	Criteria: (P4320 and SA) **Applicable to: ALL**				
R	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance - Final Approach**	00014511.0002001	02 MAY 23
	Criteria: 31-1576, P20611, SA **Applicable to: MSN 02734, 02896, 04827-04860, 06634, 06871, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance - Final APPROACH**	00014511.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**				
N	PRO-NOR-SOP-18-C		**Approach using LOC G/S Guidance - Management of Degraded Guidance**	20806829.9001001	02 MAY 23
	Criteria: ((P13619 and SA) or (SA and 27-1234) or (SA and 27-1243) or (SA and 27-1234 and 27-1243) or (SA and 27-1238 and 27-1243) or (SA and 27-1238) or (SA and 27-1234 and 27-1238 and 27-1243)) **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance**	AIL-00001848	
	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - General**	00014521.0002001	21 OCT 22
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222**				
	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - General**	00014521.0003001	29 MAY 13
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593, SA **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - Aircraft Equipment**	20806831.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - Flight Preparation**	20806832.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - Descent Preparation**	20806833.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - Descent**	20806834.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - Initial/Intermediate/Final Approach**	20806835.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - At Entered Minimum +100 ft**	20806836.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - At Entered Minimum**	00014527.0012001	02 MAY 23
	Criteria: 22-1315, 22-1360, 22-1379, 22-1547, 31-1433, 31-1576, P10527, P11856, P12911, P13322, P20611, SA **Applicable to: MSN 02734, 02896, 04827-04860, 06634, 06871, 10949-11139**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - At Entered Minimum**	00014527.0008001	02 MAY 23
	Criteria: 22-1315, 22-1359, 22-1379, 22-1547, 22-1614, 22-1676, 31-1335, 31-1372, 31-1421, 31-1433, P10527, P11856, P12911, P13322, SA **Applicable to: MSN 01459, 02887, 02904-03266, 03294, 03391, 03588-03658, 03710, 03733-04465, 04563-04662, 04756-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - At Entered Minimum**	00014527.0010001	02 MAY 23
	Criteria: 22-1315, 22-1379, 22-1547, SA **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - At Entered Minimum**	00014527.0009001	02 MAY 23
	Criteria: 22-1315, 31-1433, P10527, P11856, SA **Applicable to: MSN 03284, 03313, 03565, 03662, 04544, 04734**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - At Entered Minimum**	00014527.0003001	02 MAY 23
	Criteria: 22-1315, SA **Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - Management of Degraded Navigation**	20806838.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance - Selected Vertical (NAV/FPA - TRACK/FPA) FDP (BIRD ON)**	20806839.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP)**	AIL-00001849	
	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - General**	00014663.0002001	29 MAY 13
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - Aircraft Equipment**	00014664.0002001	29 MAY 13
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - Flight Preparation**	00014677.0002001	29 MAY 13
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation**	00014666.0002001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - Descent**	00014667.0002001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach**	00014668.0002001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9464, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft**	00015016.0001001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum**	00014669.0015001	02 MAY 23
	Criteria: 31-1576, P10527, P11256, P11856, P12911, P13322, P15572, P20611, P9593 **Applicable to: MSN 06634, 06871, 10949-11139**				
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum**	00014669.0008001	02 MAY 23
	Criteria: 22-1315, 22-1359, 22-1379, 22-1547, 31-1335, 31-1372, 31-1433, 34-1374, 34-1480, P10527, P11256, P11569, P11570, P11856, P12911, P13322, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04756-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum**	00014669.0005001	02 MAY 23
	Criteria: 34-1480, P10527, P11856 **Applicable to: MSN 04734**				
	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - Engine Failure**	00014670.0002001	21 OCT 22
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11569, P11570, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 06895**				
	PRO-NOR-SOP-18-C		**Approach using FINAL APP Guidance for RNAV(RNP) - Management of Degraded Navigation**	00014671.0002001	25 JAN 17
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				

N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance**	AIL-00001850	
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - General**	20806850.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - Aircraft Equipment**	20806851.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - Flight Preparation**	20806852.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - Descent Preparation**	20806853.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - Descent**	20806854.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - Initial/Intermediate/Final Approach**	20806855.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - At Entered Minimum +100 ft**	20806856.9001001	02 MAY 23
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
R	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - At Entered Minimum**	00014555.0014001	02 MAY 23
	Criteria: 31-1433, 31-1576, P10527, P20611, SA				
	Applicable to: MSN 02734, 02896, 04827-04860, 06634, 06871, 10949-11139				
R	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - At Entered Minimum**	00014555.0002001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
R	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - At Entered Minimum**	00014555.0013001	02 MAY 23
	Criteria: 31-1335, 31-1372, 31-1421, 31-1433, P10527, SA				
	Applicable to: MSN 01459, 02887, 02904-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324				
N	PRO-NOR-SOP-18-C		**Approach using FPA Guidance - Management of Degraded Navigation**	20806858.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-18-C		**Circling Approach**	AIL-00001851	
N	PRO-NOR-SOP-18-C		**Circling Approach - General**	20806859.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-18-C		**Circling Approach - Approach Preparation**	20806860.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-18-C		**Circling Approach - Instrument Approach**	20806861.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-18-C		**Circling Approach - Circling Approach**	20806862.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-18-C		**Circling Approach - Circling Approach Pattern**	20806863.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-18-C		**RNAV Visual Approach**	AIL-00001852	
N	PRO-NOR-SOP-18-C		**RNAV Visual Approach - General**	20806864.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-18-C		**RNAV Visual Approach - Equipment Required**	20806865.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**RNAV Visual Approach - FMGC guidance mode**	20806866.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**RNAV Visual Approach - Descent Preparation**	20806867.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**RNAV Visual Approach - Descent**	20806868.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**RNAV Visual Approach - Final Approach**	20806869.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-SOP-18-C		**Visual Approach**	AIL-00001853	
	PRO-NOR-SOP-18-C		**Visual Approach - General**	00014574.0001001	17 OCT 22
	Criteria: SA **Applicable to: MSN 04827-04860**				
R	PRO-NOR-SOP-18-C		**Visual Approach - General**	00014574.0002001	02 MAY 23
	Criteria: 00-1043, P4709, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-18-C		**Visual Approach - Initial/Intermediate Approach**	20806871.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Visual Approach - Final Approach**	20806872.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-18-C		**Visual Approach - Visual Approach (1 or 2 engines) Pattern**	20806873.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-SOP-18-C		**Selected Vertical (NAV/FPA - TRACK/FPA) FPD (Bird On)**	20806874.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-19		**Manual Landing**	AIL-00001855	
N	PRO-NOR-SOP-19		**Landing**	20806875.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-19		**Landing - Flare**	20806876.9001001	02 MAY 23
	Criteria: ((K3154 and P11744 and SA) or (K3154 and SA and 27-1219) or (K3154 and SA and 27-1230) or (P11744 and SA) or (SA and 27-1219) or (SA and 27-1230) or (K2113 and P11744 and SA) or (K2113 and SA and 27-1219) or (K2113 and SA and 27-1230)) **Applicable to: ALL**				
R	PRO-NOR-SOP-19		**Landing - At Touchdown**	00010352.0008001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA **Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139**				
R	PRO-NOR-SOP-19		**Landing - At Touchdown**	00010352.0001001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**				
N	PRO-NOR-SOP-19		**Landing - At 70 Knots**	20806878.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-19		**Landing - At Taxi Speed**	20806879.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-19		**Landing - Before 20 Knots**	20806880.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-19		**Autoland**	AIL-00001856	
N	PRO-NOR-SOP-19		**Autoland**	20806881.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-19		**Autoland - At 350 ft RA**	20806882.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-19		**Autoland - At 40 ft RA**	20806883.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-19		**Autoland - At 30 ft RA**	20806884.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-19		**Autoland - At 10 ft RA**	20806885.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-NOR-SOP-19		**Landing - At Touch Down**	00020902.0008001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA				
	Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139				
R	PRO-NOR-SOP-19		**Landing - At Touchdown**	00020902.0001001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324				
N	PRO-NOR-SOP-19		**Autoland - At 70 Knots**	20806887.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-19		**Autoland - Before 20 Knots**	20806888.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-19		**Autoland - End of Roll Out**	20806889.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-20		**Go Around with FD**	AIL-00001858	
R	PRO-NOR-SOP-20		**Go Around with FD - Go Around Initiation**	00011576.0006001	02 MAY 23
	Criteria: P4320, SA				
	Applicable to: MSN 01376				
R	PRO-NOR-SOP-20		**Go Around with FD - Go Around Initiation**	00011576.0046001	02 MAY 23
	Criteria: P10694, P13922, P15572, P4320, SA				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-SOP-20		**Go Around with FD - Go Around Initiation**	00011576.0014001	02 MAY 23
	Criteria: 22-1296, 22-1614, P10694, P4320, SA				
	Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222				
R	PRO-NOR-SOP-20		**Go Around with FD - Go Around Initiation**	00011576.0004001	02 MAY 23
	Criteria: 22-1296, 34-1374, 34-1403, 34-1480, P10694, P11256, P11569, P11570, P4320, P9593, SA				
	Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-07098				
N	PRO-NOR-SOP-20		**Go Around with FD - At Go-Around Thrust Reduction Altitude**	20806891.9001001	02 MAY 23
	Criteria: ((P4319 and SA) or (P4319 and P6197 and SA and 22-1142) or (P6197 and SA and 22-1142))				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-20		**Go Around with FD - At Go-Around Acceleration Altitude**	20806892.9001001	02 MAY 23
	Criteria: (SA or (P7977 and SA)) **Applicable to: ALL**				
R	PRO-NOR-SOP-21		**After Landing**	AIL-00001860	
N	PRO-NOR-SOP-21		**After Landing - Flow Pattern**	20806893.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-21		**After Landing - Ground Spoilers**	20806894.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-21		**After Landing - Lights**	20806895.9001001	02 MAY 23
	Criteria: (SA or (K0064 and SA)) **Applicable to: ALL**				
N	PRO-NOR-SOP-21		**After Landing - Radar**	20806896.9001001	02 MAY 23
	Criteria: (SA or (P11652 and P20441 and SA)) **Applicable to: ALL**				
R	PRO-NOR-SOP-21		**After Landing - Predictive Windshear**	00011843.0001001	02 MAY 23
	Criteria: P11652, P20441, P20442, P4308, P4642, P4647, P4766, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-SOP-21		**After Landing - ENG Mode Selector**	20806898.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-21		**After Landing - Flaps**	00011845.0002001	02 MAY 23
	Criteria: 22-1629, P20429, SA **Applicable to: MSN 06165, 06670, 06718, 06798, 06813, 07081, 08495-09324, 10949-11139**				
R	PRO-NOR-SOP-21		**After Landing - Flaps**	00011845.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06163, 06173-06658, 06685-06712, 06729, 06800-06806, 06871-07005, 07098**				
R	PRO-NOR-SOP-21		**After Landing - TCAS**	00011846.0002001	02 MAY 23
	Criteria: P5020, SA **Applicable to: MSN 01459**				
R	PRO-NOR-SOP-21		**After Landing - TCAS**	00011846.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-SOP-21		**After Landing - ATC**	00011847.0001001	02 MAY 23
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139				
N	PRO-NOR-SOP-21		**TERR ON ND**	20806902.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-21		**After Landing - APU**	20806903.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-21		**After Landing - Anti-Ice Protection**	00011849.0005001	02 MAY 23
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
R	PRO-NOR-SOP-21		**After Landing - Anti-Ice Protection**	00011849.0002001	02 MAY 23
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
R	PRO-NOR-SOP-21		**After Landing - Anti-Ice Protection**	00011849.0003001	02 MAY 23
	Criteria: PW1100G-JM				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-SOP-21	x	**After Landing - Brake Temperature**	00019773.0003001	02 MAY 23
	Criteria: P10257, 320-200N				
	Applicable to: MSN 08529				
	Impacted DU: 00011850 After Landing - Brake Temperature				
R	*PRO-NOR-SOP-21*		***After Landing - Brake Temperature***	*00011850.0001001*	*02 MAY 23*
	Criteria: 32-1242, P4507, SA				
	Applicable to: MSN 08529				
	Impacted by TDU: 00019773 After Landing - Brake Temperature				
R	*PRO-NOR-SOP-21*		***After Landing - Brake Temperature***	*00011850.0001001*	*02 MAY 23*
	Criteria: 32-1242, P4507, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495, 08596-09324, 10949-11139				
R	*PRO-NOR-SOP-21*		***After Landing - Brake Temperature***	*00011850.0003001*	*02 MAY 23*
	Criteria: P3341, SA, A321				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
N	PRO-NOR-SOP-21		**After Landing - After Landing Checklist**	20806907.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-21		**After Landing - Single Engine Taxi**	20800446.9001001	02 MAY 23
	Criteria:				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
R	PRO-NOR-SOP-21		**After Landing - Single Engine Taxi**	20800446.9001002	02 MAY 23
	Criteria:				
	Applicable to: MSN 08495-09324, 10949-11139				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-SOP-22		**Parking**	AIL-00001862	
	PRO-NOR-SOP-22		**Parking - General**	00011852.0003001	09 NOV 21
	Criteria: P10257, SA, 320-200N				
	Applicable to: MSN 08529				
N	PRO-NOR-SOP-22		**Parking - Flow Pattern**	20806910.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Parking Brake**	20806911.9001001	02 MAY 23
	Criteria: ((P6375 and SA) or (P4507 and SA and 32-1201 and 32-1242) or (P4507 and P6375 and SA and 32-1242) or (SA and 32-1201) or (K2113 and P3341 and P6375 and SA) or (K2113 and P3341 and SA and 32-1201))				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Anti-Ice Protection**	20806912.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - APU**	20806913.9001001	02 MAY 23
	Criteria: ((P6375 and SA) or (P4507 and SA and 32-1201 and 32-1242) or (P4507 and P6375 and SA and 32-1242) or (SA and 32-1201) or (K2113 and P3341 and P6375 and SA) or (K2113 and P3341 and SA and 32-1201))				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - APU Bleed**	20806914.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Y ELEC PUMP**	20806915.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-22		**Parking - ENG MASTER Levers**	00011856.0008001	02 MAY 23
	Criteria: PW1100G-JM, SA				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-SOP-22		**Parking - ENG MASTER Levers**	00011856.0005001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
R	PRO-NOR-SOP-22		**Parking - ENG MASTER Levers**	00011856.0004001	02 MAY 23
	Criteria: CFMI, SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-22		**Parking - Slide Disarmed Announce**	20806917.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Exterior Lights**	20806918.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-22		**Parking - Fuel Pumps**	00011862.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
R	PRO-NOR-SOP-22		**Parking - Fuel Pumps**	00011862.0002001	02 MAY 23
	Criteria: J3527, K2113, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11139				
N	PRO-NOR-SOP-22		**Parking - Slide Disarmed Check**	20806920.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Seat Belts**	20806921.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Ground Contact**	20806922.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Brake Fan**	20806923.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Parking Brake**	20806924.9001001	02 MAY 23
	Criteria: ((P7125 and SA) or (K2113 and P3341 and SA and 31-1197) or (K2113 and P3341 and SA and 31-1257) or (P4507 and SA and 31-1257 and 32-1242) or (SA and 31-1197) or (SA and 31-1218) or (SA and 31-1257) or (SA and 31-1197 and 31-1257) or (K2113 and P3341 and P7125 and SA))				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Parking Checklist**	20806925.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - ATC**	20806926.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - IRS Performance**	20806927.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Fuel Quantity**	20806928.9001001	02 MAY 23
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Icing Conditions**	20806929.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-22		**Parking - Electronic Flight Bag (EFB)**	20806930.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-22		**Parking - Severe Icing Conditions**	00011874.0001001	02 MAY 23
	Criteria: CFMI				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
N	PRO-NOR-SOP-22		**Parking - Display Unit**	20806932.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SOP-23		**Securing the Aircraft**	AIL-00001864	
N	PRO-NOR-SOP-23		**Securing the Aircraft - General**	20806933.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-23		**Securing the Aircraft - Parking Brake**	20806934.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-23		**Securing the Aircraft - Oxygen Crew Supply**	20806935.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SOP-23		**Securing the Aircraft - ADIRS**	00010339.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139				
R	PRO-NOR-SOP-23		**Securing the Aircraft - ADIRS**	00010339.0002001	02 MAY 23
	Criteria: P9351, SA				
	Applicable to: MSN 02887				
N	PRO-NOR-SOP-23		**Securing the Aircraft - Exterior Lights**	20806937.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-23		**Securing the Aircraft - APU BLEED**	20806938.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
N	PRO-NOR-SOP-23		**Securing the Aircraft - External Power**	20806939.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SOP-23		**Securing the Aircraft - APU**	20806940.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SOP-23		**Securing the Aircraft - EMER Lights and Signs**	00010343.0002001	02 MAY 23
	Criteria: K2113, K3154, K4787, K4788, P12310, P3040, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11139**				
R	PRO-NOR-SOP-23		**Securing the Aircraft - EMER Lights and Signs**	00010343.0004001	02 MAY 23
	Criteria: K4787, P9508, SA **Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
N	PRO-NOR-SOP-23		**Securing the Aircraft - BAT**	20806942.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-23		**Securing the Aircraft - Securing the Aircraft Checklist**	20806943.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-23		**Securing the Aircraft - Electronic Flight Bag (EFB)**	20806944.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SOP-23		**Securing the Aircraft - Maintenance Bus**	20806945.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-SCO		**Communications and Standard Terms**	20806946.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Checklist Callouts**	20806947.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-SCO		**Actions Commanded by PF**	AIL-00001866	
N	PRO-NOR-SCO		**Actions Commanded by PF - General**	20806948.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Actions Commanded by PF - Set**	20806949.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SCO		**Actions Commanded by PF - Manage/Pull**	20806950.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Actions Commanded by PF - Arm**	20806951.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Actions Commanded by PF - On/Off**	20806952.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**FMA**	20806953.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Altitude**	20806954.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Flaps or Gear Callouts**	AIL-00001867	
N	PRO-NOR-SCO		**Flaps or Gear Callouts - Flaps' Callouts**	20806955.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Flaps or Gear Callouts - Gear Callouts**	20806956.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Flight Parameters**	AIL-00001868	
	PRO-NOR-SCO		**Approach**	00011912.0001001	22 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05222**				
	PRO-NOR-SCO		**Approach**	00011912.0002001	22 MAR 17
	Criteria: K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662**				
	PRO-NOR-SCO		**Approach**	00011912.0003001	28 MAY 20
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P15572, P9464, P9593, SA **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139**				
	PRO-NOR-SCO		**Approach**	00011912.0005001	28 MAY 20
	Criteria: K2113, P10530, P11570, P9464, P9593, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	PRO-NOR-SCO		**Landing**	00021570.0004001	22 MAR 17
	Criteria: A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-NOR-SCO		**Landing**	00021570.0001001	22 MAR 17
	Criteria: A319, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139**				
N	PRO-NOR-SCO		**Go-Around**	20806959.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SCO		**PF/PM Duties Transfer**	20806960.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Pilot/Cabin Crew Announcements**	20806961.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-SCO		**Summary for Each Phase**	AIL-00001869	
N	PRO-NOR-SCO		**Summary for Each Phase**	20806962.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	PRO-NOR-SCO		**Summary for Each Phase - To Remove Ground Supply**	20806963.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Before Engine Start / Push Back**	20806964.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Summary for Each Phase - Pushback/Engine Start**	20806965.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-SCO		**Summary for Each Phase - Taxi**	00011921.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
R	PRO-NOR-SCO		**Summary for Each Phase - Taxi**	00011921.0002001	02 MAY 23
	Criteria: P4576, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SCO		**Summary for Each Phase - Take Off**	20806967.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Summary for Each Phase - Altimeter Setting Changes To/From QNH/QFE-STD**	20806968.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Summary for Each Phase - Approach and Landing**	20806969.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Summary for Each Phase - Discontinued Approach**	20806970.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-SCO		**Summary for Each Phase - Go Around**	20806971.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Safety Exterior Inspection**	20806972.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation**	AIL-00001871	
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation - AIRCRAFT SETUP**	20806973.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation - BATTERIES/EXTERNAL POWER**	20806974.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation - APU FIRE TEST/APU START**	20806975.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation - ADIRS**	20806976.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation - COCKPIT LIGHTS**	20806977.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-NOR-TSK		**Preliminary Cockpit Preparation - EFB/ACARS ◁ INITIALIZATION**	00024974.0001001	02 MAY 23
	Criteria: P4502, P5956, SA **Applicable to: MSN 01459**				
R	PRO-NOR-TSK		**Preliminary Cockpit Preparation - EFB Initialization**	00024974.0002001	02 MAY 23
	Criteria: P4502, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation - AIRCRAFT ACCEPTANCE**	20806979.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Preliminary Cockpit Preparation - PRELIMINARY PERFORMANCE DETERMINATION**	20806980.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-TSK		**Preliminary CocKpit Preparation - Before Walkaround**	00024979.0002001	02 MAY 23
	Criteria: P4576, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-TSK		**Preliminary Cockpit Preparation - BEFORE WALKAROUND**	00024979.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
R	PRO-NOR-TSK		**Cockpit Preparation**	AIL-00001872	
N	PRO-NOR-TSK		**Cockpit Preparation - OVERHEAD PANEL**	20806982.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Cockpit Preparation - CTR Instrument Panel**	20806983.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-TSK		**Cockpit Preparation - PEDESTAL**	00024982.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11139**				
R	PRO-NOR-TSK		**Cockpit Preparation - PEDESTAL**	00024982.0003001	02 MAY 23
	Criteria: 46-1062, P11247, SA **Applicable to: MSN 04827-04974**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
N	PRO-NOR-TSK		**Cockpit Preparation - RMP**	20807016.9001002	02 MAY 23
	Criteria: ((P11247 and SA) or (SA and 46-1062)) **Applicable to: ALL**				
N	PRO-NOR-TSK		**Cockpit Preparation - GLARESHIELD**	20806985.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Cockpit Preparation - LATERAL CONSOLE AND PF/PM INSTRUMENT PANELS**	20806986.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

N	PRO-NOR-TSK		**Before Pushback or Start**	AIL-00001873	
N	PRO-NOR-TSK		**Before Pushback or Start - BEFORE PUSHBACK/START CLEARANCE**	20806987.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**BEFORE PUSHBACK OR START - At Pushback/Start Clearance**	20806988.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

R	PRO-NOR-TSK		**Engine Start**	00024899.0004001	02 MAY 23
	Criteria: P15967, SA **Applicable to: MSN 08495-09324, 10949-11139**				
R	PRO-NOR-TSK		**Engine Start**	00024899.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
R	PRO-NOR-TSK		**Engine Start for One Engine Taxi**	20800673.9001001	02 MAY 23
	Criteria: (P15967 and SA) **Applicable to: MSN 08495-09324, 10949-11139**				
R	PRO-NOR-TSK		**Engine Start For One Engine Taxi**	20800673.9001002	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
R	PRO-NOR-TSK		**After Start**	00024894.0003001	02 MAY 23
	Criteria: P15967, SA **Applicable to: MSN 08495-09324, 10949-11139**				
R	PRO-NOR-TSK		**After Start**	00024894.0001001	02 MAY 23
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
R	PRO-NOR-TSK		**After Start For One Engine Taxi**	20800674.9001001	02 MAY 23
	Criteria: (P15967 and SA)				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-TSK		**After Start For One Engine Taxi**	20800674.9001002	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
R	PRO-NOR-TSK		**After Start For One Engine Taxi SETWA**	20800675.9001001	02 MAY 23
	Criteria: (P15967 and SA)				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-TSK		**After Start For One Engine Taxi SETWA**	20800675.9001002	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
R	PRO-NOR-TSK		**One Engine Taxi**	20800676.9001001	02 MAY 23
	Criteria: (SA or (P4308 and SA) or (P4766 and SA))				
E	**Applicable to: MSN 01143-11293**				
R	PRO-NOR-TSK		**One Engine Taxi SETWA**	20800716.9001003	02 MAY 23
	Criteria:				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
R	PRO-NOR-TSK		**One Engine Taxi SETWA**	20800716.9001002	02 MAY 23
	Criteria:				
	Applicable to: MSN 08495-09324, 10949-11139				
R	PRO-NOR-TSK		**Taxi**	00024904.0001001	02 MAY 23
	Criteria: P4308, P4766, SA				
E	**Applicable to: MSN 01143-11293**				
N	PRO-NOR-TSK		**DEPARTURE CHANGE**	20806997.9001001	02 MAY 23
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-TSK		**Before Takeoff**	00024905.0003001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593, SA				
	Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139				
R	PRO-NOR-TSK		**Before Takeoff**	00024905.0001001	02 MAY 23
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-NOR-TSK		**Takeoff**	00024906.0001001	26 OCT 22
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-TSK		**After Takeoff**	00024907.0001001	26 OCT 22
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-TSK		**Climb**	00024908.0001001	26 OCT 22
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-TSK		**Cruise**	00024909.0001001	26 OCT 22
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-TSK		**Descent Preparation**	00024910.0003001	02 MAY 23
	Criteria: P20473, SA **Applicable to: MSN 10949-11139**				
R	PRO-NOR-TSK		**Descent Preparation**	00024910.0002001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
N	PRO-NOR-TSK		**Descent**	20807004.9001001	02 MAY 23
	Criteria: (P4539 and SA) **Applicable to: ALL**				

M	Localization	T	DU Title	DU identification	DU date
N	PRO-NOR-TSK		**Approach**	AIL-00001874	
R	PRO-NOR-TSK		**APPROACH - Aircraft Configuration for Approach**	00024913.0001001	02 MAY 23
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
R	PRO-NOR-TSK		**APPROACH - Aircraft Configuration for Approach**	00024913.0007001	02 MAY 23
	Criteria: P20473, SA **Applicable to: MSN 10949-11139**				
N	PRO-NOR-TSK		**APPROACH - Approach using LOC G/S Guidance**	20807006.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-TSK		**Approach - Approach using FINAL APP Guidance for RNAV(RNP)**	00024919.0001001	02 MAY 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
R	PRO-NOR-TSK		**Approach - Approach using FINAL APP Guidance**	00024917.0001001	02 MAY 23
E	Criteria: SA **Applicable to: MSN 01143-11293**				
N	PRO-NOR-TSK		**Approach - Approach using FPA Guidance**	20807009.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-TSK		**Manual Landing**	00024921.0008001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA **Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139**				
R	PRO-NOR-TSK		**Manual Landing**	00024921.0001001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**				
R	PRO-NOR-TSK		**Automatic Landing**	00024922.0008001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, P20375, SA **Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139**				
R	PRO-NOR-TSK		**Automatic landing**	00024922.0001001	02 MAY 23
	Criteria: 31-1450, 31-1576, 32-1432, J4030, P13630, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324**				
R	PRO-NOR-TSK		**Go Around (With FD On)**	00024925.0003001	02 MAY 23
	Criteria: P13922, P4319, SA **Applicable to: MSN 08495-09324, 10949-11139**				
R	PRO-NOR-TSK		**GO AROUND (With FD On)**	00024925.0001001	02 MAY 23
	Criteria: 22-1142, P4319, P6197, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
N	PRO-NOR-TSK		**After Landing**	20807013.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
R	PRO-NOR-TSK		**Parking**	00024929.0004001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				
N	PRO-NOR-TSK		**Securing the Aircraft**	20807015.9001001	02 MAY 23
	Criteria: SA **Applicable to: ALL**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-NOR-SUP-SUP		**Supplementary Procedures**	NG01714	
	PRO-NOR-SUP-SUP		**Adverse Weather**	00020244.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-SUP		**Engine**	00020248.0001001	18 OCT 22
	Criteria: CFM56-5B, V2500-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-07098**				
	PRO-NOR-SUP-SUP		**Engine**	00020248.0008001	18 OCT 22
	Criteria: 021246N, V2500-A5 **Applicable to: MSN 02321, 02887**				
	PRO-NOR-SUP-SUP		**Engine**	00020248.0006001	26 OCT 22
	Criteria: PW1100G-JM, P15797, P15897, P15983, P15994, P15997 **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-SUP		**Fuel**	00020249.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-SUP		**GPS Interferences**	00025164.0001001	26 JAN 22
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-SUP		**Landing Gear**	00020251.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-SUP		**Miscellaneous**	00020254.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-SUP		**Surveillance**	00020253.0011001	17 MAR 17
	Criteria: 34-1352, 34-1595, 34-1630, 34-1663, 34-1711, P10960, P14155, P14313, P14314, P14582, P4885, P5895, P8799, P9050, P9051, P9654 **Applicable to: MSN 02321, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11139**				
	PRO-NOR-SUP-SUP		**Surveillance**	00020253.0010001	17 MAR 17
	Criteria: 34-1630, 34-1663, P4885, P5895 **Applicable to: MSN 02734**				
	PRO-NOR-SUP-SUP		**Surveillance**	00020253.0002001	17 MAR 17
	Criteria: 34-1663, P4885, P5895, P8799 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 03284**				

E	PRO-NOR-SUP-ADVWXR		**Airframe Deicing/Anti-Icing Procedure on Ground**	NG01742	
	PRO-NOR-SUP-ADVWXR		**Before Fluid Spraying**	00020694.0001001	17 MAY 21
	Criteria: P14629, P20610, P21265, P21423, SA **Applicable to: MSN 01251, 02014, 06561, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-ADVWXR		**Before Fluid Spraying**	00020694.0003001	17 MAY 21
	Criteria: 31-1492, 31-1575, P14629, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324**				
E	PRO-NOR-SUP-ADVWXR		**Deicing/Anti-Icing Procedure on Ground - Upon Completion of the Spraying Operation**	00002311.0001001	05 MAR 19
E	Criteria: SA **Applicable to: MSN 01143-11293**				
	PRO-NOR-SUP-ADVWXR		**Ground Operations in Cold Weather Conditions**	NG01743	
	PRO-NOR-SUP-ADVWXR		**General**	00020703.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Safety Exterior Inspection**	00020698.0001001	13 DEC 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Preliminary Cockpit Preparation**	00020699.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Exterior Walkaround**	00020700.0001001	05 JUN 18
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**After Start**	00020701.0003001	03 NOV 21
	Criteria: IAL, SA **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-ADVWXR		**After Start**	00020701.0001001	21 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
	PRO-NOR-SUP-ADVWXR		**Takeoff**	00021770.0001001	13 JUN 17
	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-ADVWXR		**Takeoff**	00021770.0002001	23 FEB 18
	Criteria: V2500-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SUP-ADVWXR		**Ground Operations in Heavy Rain**	00020720.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Minimum Speed with Ice Accretion**	00020722.0002001	21 MAR 17
	Criteria: 31-1334, 31-1414, 31-1575, P10383, P20610, P21423, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
	PRO-NOR-SUP-ADVWXR		**Minimum Speed with Ice Accretion**	00020722.0001001	21 MAR 17
	Criteria: SA **Applicable to: MSN 01251**				
	PRO-NOR-SUP-ADVWXR		**Operations on Contaminated Airports**	NG01744	
	PRO-NOR-SUP-ADVWXR		**General**	00020729.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Spurious Alerts**	00020726.0002001	26 OCT 22
	Criteria: 31-1197, 31-1218, 31-1257, P8274, SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Parking**	00020725.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Operations with Volcanic Ash, Sand or Dust**	NG01745	
	PRO-NOR-SUP-ADVWXR		**Preliminary Cockpit Preparation**	00020733.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-NOR-SUP-ADVWXR		**Exterior Walkaround**	00020734.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Engine Start**	00020735.0001001	10 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**After Start**	00022532.0002001	16 OCT 18
	Criteria: IAE, CFM56-5B, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
	PRO-NOR-SUP-ADVWXR		**Taxi**	00020736.0001001	21 MAR 17
	Criteria: P14629, P21265, SA **Applicable to: MSN 01251, 02014, 06561, 10949-11139**				
	PRO-NOR-SUP-ADVWXR		**Taxi**	00020736.0002001	28 MAY 20
	Criteria: 31-1492, P14629, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324**				
	PRO-NOR-SUP-ADVWXR		**Takeoff**	00020737.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**After Takeoff**	00020738.0001001	21 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324**				
	PRO-NOR-SUP-ADVWXR		**After Takeoff**	00020738.0004001	18 NOV 21
	Criteria: P21265, SA **Applicable to: MSN 10949-11139**				
	PRO-NOR-SUP-ADVWXR		**In Flight**	00020739.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Descent Preparation**	00020740.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-ADVWXR		**Descent**	00020741.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Landing**	00020742.0001001	21 MAR 17
	Criteria: SA **Applicable to: MSN 01251, 02014, 06561**				
	PRO-NOR-SUP-ADVWXR		**Landing**	00020742.0002001	28 MAY 20
	Criteria: 31-1492, P14629, SA **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11139**				
	PRO-NOR-SUP-ADVWXR		**After Landing**	00020744.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Securing the Aircraft**	00020745.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Securing the Aircraft for Cold Soak**	00020772.0001001	28 MAY 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**For Draining Water Procedure**	NG00129	
	PRO-NOR-SUP-ADVWXR		**For Draining Water Procedure - Introduction**	00002313.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**For Draining Water Procedure - Forward Drain Panel**	00002314.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**For Draining Water Procedure - AFT Service Panel**	00002315.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-NOR-SUP-ADVWXR		**For Draining Water Procedure - Freezing Conditions**	00002316.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ADVWXR		**Water System Draining**	00002205.0001001	21 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-ENG		**Manual Engine Start**	NG01787	
	PRO-NOR-SUP-ENG		**Manual Engine Start - General**	00009443.0004001	24 OCT 22
	Criteria: 73-1100, CFMI, P12367 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-NOR-SUP-ENG		**Manual Engine Start - General**	00009443.0002001	24 OCT 22
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SUP-ENG		**Manual Engine Start - General**	00009443.0005001	24 OCT 22
	Criteria: IAL **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-ENG		**Manual Engine Start - Procedure**	00020858.0048001	24 OCT 22
	Criteria: V2500-A5, P4456, P4985, P5451, P5577, P7455 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SUP-ENG		**Manual Engine Start - Procedure**	00020858.0003001	24 OCT 22
	Criteria: CFMI, P5451, P7455 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-NOR-SUP-ENG		**Manual Engine Start - Procedure**	00020858.0009001	26 OCT 22
	Criteria: PW1100G-JM, P5451, P7455 **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-ENG		**Engine Start with an Air Start Unit**	00020859.0005001	04 NOV 20
	Criteria: PW1100G-JM, P6703, P6954 **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-ENG		**Engine Start with an Air Start Unit**	00020859.0002001	04 NOV 20
	Criteria: CFMI, P6703, P6954 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-NOR-SUP-ENG		**Engine Start with an Air Start Unit**	00020859.0001001	04 NOV 20
	Criteria: 22-1079, 22-1102, 22-1226, IAE, P6703, P6954 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SUP-ENG		***Crossbleed Engine Start***	*00020860.0004001*	*29 NOV 19*
	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11139** *Impacted by TDU: 00023018 Crossbleed Engine Start*				
	PRO-NOR-SUP-ENG		***Crossbleed Engine Start***	*00020860.0001001*	*17 MAR 17*
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-NOR-SUP-ENG		***Crossbleed Engine Start***	*00020860.0002001*	*17 MAR 17*
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SUP-ENG	x	**Crossbleed Engine Start**	00023018.0001001	29 NOV 19
	Criteria: PW1100G-JM **Applicable to: MSN 08495-09324, 10949-11139** *Impacted DU: 00020860 Crossbleed Engine Start*				
	PRO-NOR-SUP-ENG		**Air Conditioning during Automatic Engine Start**	00021159.0002001	04 MAY 18
	Criteria: PW1100G-JM, P20717 **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-ENG		**Engine Start Valve Manual Operation**	00020861.0010001	17 MAR 17
	Criteria: PW1100G-JM, P15797, P15897, P15983, P15994, P15997 **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-ENG		**Engine Start Valve Manual Operation**	00020861.0001001	17 MAR 17
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-NOR-SUP-ENG		**Engine Start Valve Manual Operation**	00020861.0002001	17 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SUP-ENG		**Engine Ventilation (Dry Cranking)**	00020943.0003001	17 MAR 17
	Criteria: PW1100G-JM, SA **Applicable to: MSN 08495-09324, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-ENG		**Engine Ventilation (Dry Cranking)**	00020943.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
	PRO-NOR-SUP-ENG		**Engine Start Using Air Supplied by Another A320**	NG00662	
	PRO-NOR-SUP-ENG		**Engine Start Using Air Supplied by Another A320 - General**	00009615.0002001	26 NOV 14
	Criteria: 021246N, SA				
	Applicable to: MSN 02321, 02887				
	PRO-NOR-SUP-ENG		**Engine Start Using Air Supplied by Another A320 - Engine Start Using Air Supplied by Another A320**	00009590.0002001	16 NOV 11
	Criteria: 021246N, SA				
	Applicable to: MSN 02321, 02887				
	PRO-NOR-SUP-FUEL		**Refueling**	NG01784	
	PRO-NOR-SUP-FUEL		**Refueling - Preparation**	00021256.0002001	25 JUL 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SUP-FUEL		**Refueling - Automatic Refueling**	00021257.0002001	21 MAR 17
	Criteria: J0022, J1255, J2190, SA				
	Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-NOR-SUP-FUEL		**Refueling - Automatic Refueling**	00021257.0001001	21 MAR 17
	Criteria: J1255, J2190, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11139				
	PRO-NOR-SUP-FUEL		**Refueling - Manual Refueling**	00021260.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SUP-FUEL		**Refueling with One Engine Running**	00001677.0003001	21 MAR 17
	Criteria: J0006, P0147, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139				
	PRO-NOR-SUP-FUEL		**Refueling with One Engine Running**	00001677.0005001	21 MAR 17
	Criteria: J0006, K2113, P0147, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-FUEL		**Ground Fuel Transfer**	00021258.0001001	25 JUL 17
	Criteria: J0006, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				
	PRO-NOR-SUP-FUEL		**Ground Fuel Transfer**	00021258.0004001	25 JUL 17
	Criteria: J0006, J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139**				
	PRO-NOR-SUP-FUEL		**Ground Fuel Transfer**	00021258.0005001	25 JUL 17
	Criteria: J0006, K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-NOR-SUP-FUEL		**Defueling**	00021259.0004001	22 MAR 18
	Criteria: J0006, J3527, SA **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139**				
	PRO-NOR-SUP-FUEL		**Defueling**	00021259.0002001	22 MAR 18
	Criteria: J0006, K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-NOR-SUP-FUEL		**Defueling**	00021259.0001001	22 MAR 18
	Criteria: J0006, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173**				

	PRO-NOR-SUP-GPSINT		**GPS Interferences**	NG02011	
	PRO-NOR-SUP-GPSINT		**GPS Interferences**	00025101.0001001	26 JAN 22
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-GPSINT		**GPS Interferences - Cockpit Effects Header**	00025102.0001001	26 JAN 22
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-GPSINT		**ADS-B OUT**	00025152.0001001	26 JAN 22
	Criteria: 31-1414, 31-1450, 34-1595, 34-1630, 34-1663, 34-1711, P13023, P13630, P13843, P13844, P14155, P14828 **Applicable to: MSN 02321, 03211, 04827-04860, 08495-09324, 10949-11139**				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects - Aircraft Position**	00025153.0001001	26 JAN 22
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects - DBUS**	00025154.0001001	26 JAN 22
	Criteria: P20614				
	Applicable to: MSN 10949-11139				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects - GLS**	00025155.0002001	26 JAN 22
	Criteria: P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects Header - GPS**	00025157.0001001	26 JAN 22
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects - ROW/ROPS**	00025159.0002001	26 JAN 22
	Criteria: P15323, SA				
	Applicable to: MSN 08495-09324, 10949-11139				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects - TAWS**	00025160.0001001	26 JAN 22
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects - Time Predictions**	00025161.0001001	26 JAN 22
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SUP-GPSINT		**SATCOM**	00025162.0002001	26 JAN 22
	Criteria: P13389, P5905, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	PRO-NOR-SUP-GPSINT		**Cockpit Effects - SATCOM**	00025163.0001001	26 JAN 22
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SUP-GPSINT		**GPS Interferences - Procedure**	00025103.0001001	26 JAN 22
	Criteria: 34-1350, 34-1384, P10054, P12310, P3040, P3790, P4017, P7373, P8484, P9332, SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-LG-LG_DN		**Flight With Landing Gear Down**	NG01900	
	PRO-NOR-SUP-LG-LG_DN		**Flight With Landing Gear Down**	00023362.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Flight Preparation - Limitations**	00023363.0003001	17 NOV 20
	Criteria: P5768, SA **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Flight Preparation - Limitations**	00023363.0002001	17 NOV 20
	Criteria: P13922, P5768, SA **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Flight Preparation - Limitations**	00023363.0001001	17 NOV 20
	Criteria: SA **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Preliminary Cockpit Preparation**	00023364.0002001	17 MAY 21
	Criteria: K2113, K3154, P5768, SA **Applicable to: ALL**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Cockpit Preparation**	00023365.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Takeoff**	00023366.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Climb and Cruise**	00023367.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Descent Preparation**	00023369.0002001	17 NOV 20
	Criteria: P13922, SA **Applicable to: MSN 08495-09324, 10949-11139**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Descent Preparation**	00023369.0001001	17 NOV 20
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - Go-Around**	00023370.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0002001	05 MAY 22
	Criteria: G-V2527-A5, G-V2527E-A5, K4913, P5768 **Applicable to: MSN 01251, 02014**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0091001	05 MAY 22
	Criteria: 31-1492, 57-1173, G-CFM56-5B4, J3283, K4913, P5768 **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0029001	05 MAY 22
	Criteria: 31-1492, G-V2524-A5, G-V2527-A5, K4913, P5768 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0032001	05 MAY 22
	Criteria: 31-1492, G-V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0075001	05 MAY 22
	Criteria: G-CFM56-5B4, J3283, K4913, P5768 **Applicable to: MSN 06561**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0044001	05 MAY 22
	Criteria: 31-1492, G-CFM56-5B4, G-CFM56-5B6, K4913, P5768 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05240**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0053001	05 MAY 22
	Criteria: 31-1492, G-CFM56-5B3, J3448 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0054001	05 MAY 22
	Criteria: 31-1492, 57-1187, G-V2533-A5, J3448 **Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-NOR-SUP-LG-LG_DN		**Flight With Gear Down - abnormal procedures**	00025310.0063001	05 MAY 22
	Criteria: PW1100G-JM, J3283, K4913, P13487, P5768 **Applicable to: MSN 08495-09324, 10949-11139**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-NOR-SUP-LG-LG		**Operation with Nosewheel Steering Offset**	NG01760	
	PRO-NOR-SUP-LG-LG		**Operations with Nosewheel Steering Offset - General**	00020945.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-LG-LG		**Operations with Nosewheel Steering Offset - Procedure**	00020946.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-NOR-SUP-MISC-E		**Flight Without Cabin Pressurization**	NG01974	
	PRO-NOR-SUP-MISC-E		**Flight Without Cabin Pressurization**	00024334.0001001	17 NOV 20
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-MISC-E		**During Preliminary Cockpit Preparation**	00024335.0001001	17 NOV 20
	Criteria: 31-1276, P7062, P7278, P9824, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098**				
	PRO-NOR-SUP-MISC-E		**During Preliminary Cockpit Preparation**	00024335.0005001	17 NOV 20
	Criteria: K17059, P7278, P9824, SA **Applicable to: MSN 08495-09324, 10949-11139**				
	PRO-NOR-SUP-MISC-E		**During Cockpit Preparation**	00024424.0002001	05 MAY 22
	Criteria: K9473, SA **Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11139**				
	PRO-NOR-SUP-MISC-E		**During Cockpit Preparation**	00024424.0001001	05 MAY 22
	Criteria: K9473, K9995, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563**				
	PRO-NOR-SUP-MISC-E		**After Takeoff**	00024425.0002001	10 MAY 21
	Criteria: K9473, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11139				
	PRO-NOR-SUP-MISC-E		**After Takeoff**	00024425.0001001	10 MAY 21
	Criteria: K9473, K9995, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563				
	PRO-NOR-SUP-MISC-A		**High Altitude Airport Operations**	NG01741	
	PRO-NOR-SUP-MISC-A		**Operation Above 8 000 ft**	00020648.0002001	05 MAY 22
	Criteria: 00-1020, SA				
	Applicable to: MSN 03002				
	PRO-NOR-SUP-MISC-A		**Operation at or Above 9 200 ft**	00020650.0017001	05 MAY 22
	Criteria: CFMI, K2393, K5801, P3197, P4378, P4495, P4983				
	Applicable to: MSN 04441-04465, 05184, 05591, 05752, 06139, 06173, 06414				
	PRO-NOR-SUP-MISC-A		**Operation at or Above 9 200 ft**	00020650.0012001	05 MAY 22
	Criteria: 00-1020, 00-1054, 73-1103, 73-1112, CFMI, IAE, IAL, K2393, K5801, P14708, P2842, P3197, P4378, P4495, P4983				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02924, 03035-03710, 03733-04389, 04544-04773, 04953-05107, 05222-05528, 05621-05749, 05883-05987, 06097, 06121, 06163-06165, 06409, 06528-09324, 10949-11139				
	PRO-NOR-SUP-MISC-C		**General**	00024567.0002001	10 MAY 21
	Criteria: P4539				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	PRO-NOR-SUP-MISC-C		**General**	00024567.0003001	10 MAY 21
	Criteria: PW1100G-JM, P4539, P8243				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139				
	PRO-NOR-SUP-MISC-C		**Procedures**	NG01979	
	PRO-NOR-SUP-MISC-C		**Before Takeoff**	00024599.0002001	10 MAY 21
	Criteria: PW1100G-JM, P4539, P5638, P8243				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139				
	PRO-NOR-SUP-MISC-C		**Before Takeoff**	00024599.0001001	10 MAY 21
	Criteria: P4539 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321**				
	PRO-NOR-SUP-MISC-C		**Takeoff**	00024600.0001001	10 MAY 21
	Criteria: PW1100G-JM, P8243 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139**				
	PRO-NOR-SUP-MISC-C		**Descent Preparation**	00024607.0001001	26 OCT 22
	Criteria: 22-1270, 22-1676, P10763, P4539 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-NOR-SUP-MISC-C		**Descent**	00024601.0001001	10 MAY 21
	Criteria: P4539 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321**				
	PRO-NOR-SUP-MISC-C		**Approach**	00024602.0001001	10 MAY 21
	Criteria: PW1100G-JM, P8243 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139**				

	PRO-NOR-SUP-MISC-C		**Standby Altitude Correction**	00024744.0001001	10 MAY 21
	Criteria: P4539 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321**				

	PRO-NOR-SUP-MISC-D		**Pushback with Power Push Unit Via the Main Landing Gear**	NG01733	
	PRO-NOR-SUP-MISC-D		**Pushback with Power Push Unit via the Main Landing Gear - Procedure 1/2**	00020472.0002001	26 OCT 22
	Criteria: 25-1305, K7755, K7790, SA **Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
	PRO-NOR-SUP-MISC-D		**Pushback with Power Push Unit via the Main Landing Gear - Procedure 1/2**	00020472.0001001	26 OCT 22
	Criteria: SA **Applicable to: MSN 01143-01251, 01518, 01593-01628**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SUP-MISC-D		**Pushback with Power Push Unit via the Main Landing Gear - Procedure 2/2**	00020473.0002001	17 MAR 17
	Criteria: P4576, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139**				
	PRO-NOR-SUP-MISC-D		**Pushback with Power Push Unit via the Main Landing Gear - Procedure 2/2**	00020473.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
	PRO-NOR-SUP-MISC-D		**Pushback with Power Push Unit via the Main Landing Gear - Pushback**	00020474.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-NOR-SUP-SURV		**Automatic Dependent Surveillance - Broadcast (ADS-B)**	00020957.0001001	17 MAR 17
	Criteria: 34-1595, 34-1630, 34-1663, 34-1711, P14155, P14582 **Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11139**				
	PRO-NOR-SUP-SURV		**Enhanced Ground Proximity Warning System (EGPWS)**	00020960.0004001	17 MAR 17
	Criteria: P4885, P5895 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734**				
	PRO-NOR-SRP-01-05		**Introduction**	00003959.0001001	09 OCT 12
	Criteria: SA **Applicable to: ALL**				
E	PRO-NOR-SRP-01-10		**FMGS Initialization**	00003960.0009001	25 MAY 21
E	Criteria: P21566, P7520, SA **Applicable to: MSN 10949-11597**				
	PRO-NOR-SRP-01-10		**FMGS Initialization**	00003960.0002001	22 MAY 12
	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324**				
	PRO-NOR-SRP-01-10		**FMGS Initialization**	00003960.0008001	22 MAY 12
	Criteria: P10785, P7373, P7519, SA **Applicable to: MSN 04827-04860**				
E	PRO-NOR-SRP-01-10		**Flight Plan Initialization**	NG00285	
E	PRO-NOR-SRP-01-10		**Flight Plan Initialization - General**	00003961.0025001	22 MAY 12
E	Criteria: 22-1083, 22-1269, 22-1270, 22-1676, P10762, P10763, P4954, P5180, P6986, P6987, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-NOR-SRP-01-10		**Flight Plan Initialization - General**	00003961.0062001	22 MAY 12
	Criteria: P10762, P10785, P4954, P6987, P7373, P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
	PRO-NOR-SRP-01-10		**Flight Plan Initialization - Aligning IRS**	00003962.0037001	23 JUN 15
	Criteria: 22-1083, 22-1090, 22-1270, 22-1676, P5180, P6986, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-02904				
E	PRO-NOR-SRP-01-10		**Flight Plan Initialization - Aligning IRS**	00003962.0046001	23 JUN 15
	Criteria: 22-1269, 22-1270, P10762, P10763, P10785, P4954, P5180, P6986, P6987, P7373, P7519, P7520, P8194, P8483, P9652, SA				
E	**Applicable to: MSN 02887, 02924-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	PRO-NOR-SRP-01-10		**Flight Plan Initialization - Lateral Flight Plan**	00003963.0010001	22 MAY 12
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-10		**Flight Plan Initialization - Lateral Flight Plan**	00003963.0026001	22 MAY 12
	Criteria: P10762, P10785, P7373, P7519, P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
E	PRO-NOR-SRP-01-10		**Flight Plan Initialization - Vertical Flight Plan**	00003964.0004001	22 MAY 12
	Criteria: 22-1083, 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P4954, P5180, P6986, P6987, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-10		**Flight Plan Initialization - Vertical Flight Plan**	00003964.0039001	22 MAY 12
	Criteria: P10762, P10785, P4954, P6987, P7373, P7519, P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
	PRO-NOR-SRP-01-10		**FLIGHT PLAN INITIALIZATION - FLIGHT PLAN CHECK**	00003965.0001001	15 FEB 11
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-10		**FLIGHT PLAN INITIALIZATION - SECONDARY F-PLN**	00003966.0001001	09 DEC 09
	Criteria: SA				
	Applicable to: ALL				
E	PRO-NOR-SRP-01-10		**FLIGHT PLAN INITIALIZATION - RADIO NAV**	00003967.0001001	15 FEB 11
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-NOR-SRP-01-10		**Flight Plan Initialization - Radio NAV**	00003967.0003001	17 MAR 11
	Criteria: P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-NOR-SRP-01-10		**FMGS Data Insertion**	NG00286	
	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Gross Weight Insertion**	00003968.0024001	28 MAY 20
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, P7373, P7519, P7520, P8483, P9652, SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Takeoff with No Weight/CG Entry Data**	00003969.0010001	15 FEB 11
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7373, P7519, P7520, P8483, P9652, SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Inserting Weight/CG after Engine Start**	00003970.0007001	15 FEB 11
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P7373, P7519, P7520, P8483, P9652, SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Takeoff Data Insertion**	00003971.0001001	22 MAR 16
	Criteria: SA				
	Applicable to: ALL				
E	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Climb Speed Preselection**	00003972.0003001	22 MAY 12
	Criteria: 22-1090, 22-1676, P3379, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Climb Speed Preselection**	00003972.0011001	22 MAY 12
	Criteria: P10785, P3379, P7373, P7519, SA				
	Applicable to: MSN 04827-04860				
E	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Cruise Mach (Speed) Preselection**	00003973.0003001	09 OCT 12
	Criteria: 22-1090, 22-1676, P3379, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Cruise Mach (Speed) Preselection**	00003973.0004001	09 OCT 12
	Criteria: P3379, P7373, P7519, SA				
	Applicable to: MSN 04827-04860				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SRP-01-10		**FMGS Data Insertion - Entering a Heading/Track Preset Function**	00004095.0001001	09 OCT 12
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-10		**FMGS Re-Initialization After a Canceled Flight**	00013064.0001001	16 NOV 11
	Criteria: SA				
	Applicable to: ALL				
R	PRO-NOR-SRP-01-15		**Change of Runway**	00003975.0003001	03 NOV 21
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-15		**Change of Runway**	00003975.0015001	28 NOV 17
	Criteria: P7373, P7519, P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
	PRO-NOR-SRP-01-15		**TAKEOFF FROM INTERSECTION**	00003976.0001001	09 DEC 09
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-20		**FCU Selection for Takeoff**	00003978.0004001	09 OCT 12
	Criteria: P3202, P4539, SA				
	Applicable to: ALL				
E	PRO-NOR-SRP-01-20		**FMA Mode Check**	00003979.0002001	22 MAY 12
	Criteria: P3379, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-20		**FMA Mode Check**	00003979.0003001	22 MAY 12
	Criteria: P3379, P8483, SA				
	Applicable to: MSN 04827-04860				
	PRO-NOR-SRP-01-20		**Selecting a Navigation Display**	00003980.0001001	22 MAY 12
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-20		**Selecting Takeoff Displays for Pilot's and Copilot's MCDU**	00003981.0001001	23 DEC 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-30		**Monitoring the Takeoff**	00003983.0007001	09 MAY 22
	Criteria: 22-1244, 22-1248, 22-1676, P10439, P10440, P3379, P8014, P9823, SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-30		**PRESELECTING A HDG OR A TRK**	00003984.0001001	16 NOV 11
	Criteria: SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-NOR-SRP-01-30		**Normal Takeoff Profile**	00003985.0002001	22 MAY 12
	Criteria: P3379, SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-30		**No Flight Director Takeoff**	00003986.0004001	09 OCT 12
	Criteria: P3379, SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-30		**TAKEOFF WITH NO V2 ENTRY**	00003987.0001001	16 NOV 11
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-30		**Takeoff Using the Localizer of the Opposite Runway**	00003988.0003001	09 OCT 12
	Criteria: P4539, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321				
E	PRO-NOR-SRP-01-30		**Takeoff Using the Localizer of the Opposite Runway**	00003988.0005001	09 OCT 12
	Criteria: P4539, P5638, SA				
E	**Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	PRO-NOR-SRP-01-40		**Monitoring the Climb Phase**	00003989.0031001	10 MAY 21
	Criteria: 22-1090, 22-1269, 22-1270, 22-1676, P10762, P10763, P3379, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-40		**Monitoring the Climb Phase**	00003989.0025001	10 MAY 21
	Criteria: P10762, P10785, P3379, P7519, P9652, SA				
	Applicable to: MSN 04827-04860				
E	PRO-NOR-SRP-01-40		**Expedite Climb**	00003990.0002001	11 FEB 11
	Criteria: 22-1230, P3379, P3401, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	PRO-NOR-SRP-01-40		**Immediate Return to Origin Airport**	00003991.0003001	23 JUN 15
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-40		**Immediate Return to Origin Airport**	00003991.0007001	23 JUN 15
	Criteria: P7373, P7519, P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
	PRO-NOR-SRP-01-50		**Reaching Cruise Flight Level**	00003992.0002001	03 NOV 14
	Criteria: P3379, SA				
	Applicable to: ALL				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-NOR-SRP-01-50		**Monitoring the Navigation Accuracy**	NG00287	
	PRO-NOR-SRP-01-50		**Monitoring the Navigation Accuracy - General**	00003993.0001001	22 MAY 12
	Criteria: SA **Applicable to: ALL**				
E	PRO-NOR-SRP-01-50		**Monitoring the Navigation Accuracy - Position Discrepancy**	00003994.0013001	22 NOV 11
E	Criteria: 22-1090, 22-1676, P5168, P6054, P6183, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Monitoring the Navigation Accuracy - Position Discrepancy**	00003994.0014001	14 FEB 11
	Criteria: P5168, P7373, P7519, SA **Applicable to: MSN 04827-04860**				
	PRO-NOR-SRP-01-50		**Monitoring the Fuel Predictions**	00003995.0013001	14 FEB 11
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, P8014, P8483, P9652, SA **Applicable to: ALL**				
E	PRO-NOR-SRP-01-50		**Entering a Step Climb or a Step Descent**	00003996.0002001	22 MAY 12
E	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Entering a Step Climb or a Step Descent**	00003996.0012001	22 MAY 12
	Criteria: P7373, P7519, P8483, P9652, SA **Applicable to: MSN 04827-04860**				
E	PRO-NOR-SRP-01-50		**Immediate Change of Level in Cruise**	00003997.0001001	14 FEB 11
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Immediate Change of Level in Cruise**	00003997.0002001	14 FEB 11
	Criteria: P9652, SA **Applicable to: MSN 04827-04860**				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach**	NG00288	
	PRO-NOR-SRP-01-50		**PREPARATION FOR DESCENT AND APPROACH - GENERAL**	00003998.0001001	09 DEC 09
	Criteria: SA **Applicable to: ALL**				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Revision of Lateral F-PLN**	00003999.0001001	22 MAY 12
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P8500, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Revision of Lateral F-PLN**	00003999.0015001	22 MAY 12
	Criteria: P10762, P10785, P7373, P8483, P9652, SA				
	Applicable to: MSN 04827-04860				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Revision of Vertical Flight Plan**	00004000.0001001	22 MAY 12
	Criteria: 31-1335, 31-1372, 31-1433, P10527, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Revision of Vertical Flight Plan**	00004000.0003001	28 NOV 17
	Criteria: P10527, P7666, SA				
	Applicable to: MSN 04827-04860				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Entering the Winds for Descent**	00004001.0002001	05 JUN 18
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Entering the Winds for Descent**	00004001.0003001	05 JUN 18
	Criteria: P10785, P7373, P7519, SA				
	Applicable to: MSN 04827-04860				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Preselecting a Managed Speed/Mach**	00004002.0002001	22 MAY 12
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Preselecting a Managed Speed/Mach**	00004002.0009001	22 MAY 12
	Criteria: P10785, P7373, P7519, SA				
	Applicable to: MSN 04827-04860				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Modification of the Cabin Rate**	00004003.0003001	16 NOV 11
	Criteria: 22-1083, 22-1090, 22-1676, P4954, P5180, P6986, P6987, P7519, P7520, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Modification of the Cabin Rate**	00004003.0004001	16 NOV 11
	Criteria: P4954, P6987, P7373, P7519, SA				
	Applicable to: MSN 04827-04860				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
N	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Entering the Approach Data**	00004004.0028001	04 SEP 18
	Criteria: P10763, P20596, P7520, P8671, SA **Applicable to: MSN 11531**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Entering the Approach Data**	00004004.0002001	22 MAY 12
	Criteria: 22-1090, 22-1270, 22-1676, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Entering the Approach Data**	00004004.0010001	22 MAY 12
E	Criteria: 22-1269, 22-1270, P10762, P10763, P7519, P7520, P8671, SA **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Entering the Approach Data**	00004004.0027001	19 APR 17
	Criteria: P10762, P10785, P7373, P7519, P8014, P8483, P8671, SA **Applicable to: MSN 04827-04860**				
E	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Selecting the Radio NAVAIDs**	00004005.0001001	22 MAY 12
E	Criteria: P15674, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Selecting the Radio NAVAIDs**	00004005.0006001	12 MAY 22
	Criteria: P8500, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	PRO-NOR-SRP-01-50		**Preparation for Descent and Approach - Cost Index for Long-Range Cruise**	00004006.0003001	08 DEC 16
	Criteria: 22-1090, 22-1676, P7519, P7520, SA **Applicable to: ALL**				

	PRO-NOR-SRP-01-60		**DESCENT INITIATION**	00004007.0001001	17 MAY 21
	Criteria: SA **Applicable to: ALL**				

E	PRO-NOR-SRP-01-60		**Descent Monitoring**	NG00289	
	PRO-NOR-SRP-01-60		**Descent Monitoring - DES Mode Engaged**	00004008.0004001	06 JUN 16
	Criteria: 22-1090, 22-1676, P3379, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	PRO-NOR-SRP-01-60		**Descent Monitoring - DES Mode Engaged**	00004008.0007001	06 JUN 16
	Criteria: P3379, P6578, P7519, P7520, SA				
E	**Applicable to:** **MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-60		**Descent Monitoring - DES Mode Engaged**	00004008.0032001	06 JUN 16
	Criteria: P3379, P6578, P7373, P7519, P8483, SA				
	Applicable to: **MSN 04827-04860**				
	PRO-NOR-SRP-01-60		**Descent Monitoring - OP DES, V/S or FPA Mode Engaged**	00004009.0007001	03 NOV 21
	Criteria: P5168, P7373, P7666, SA				
	Applicable to: **MSN 04827-04860**				
E	PRO-NOR-SRP-01-60		**Descent Monitoring - OP DES, V/S or FPA Mode Engaged**	00004009.0002001	22 MAY 12
	Criteria: P5168, P6054, P6183, SA				
E	**Applicable to:** **MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	PRO-NOR-SRP-01-60		**Descent Monitoring - OP DES, V/S or FPA Mode Engaged**	00004009.0004001	22 MAY 12
	Criteria: P20596, P5168, SA				
	Applicable to: **MSN 11531**				

	PRO-NOR-SRP-01-60		**Expedite Descent (If installed)**	00004010.0001001	10 MAY 21
	Criteria: SA				
	Applicable to: **ALL**				
	PRO-NOR-SRP-01-60		**Monitoring the Navigation in the Terminal Control Area**	00004012.0002001	14 FEB 11
	Criteria: 22-1090, 22-1676, P7373, P7519, P7520, P8483, SA				
	Applicable to: **ALL**				
E	PRO-NOR-SRP-01-60		**Too Steep Path**	00004013.0007001	22 MAY 12
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				
E	**Applicable to:** **MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-60		**Too Steep Path**	00004013.0008001	22 MAY 12
	Criteria: P7373, P7519, P8483, SA				
	Applicable to: **MSN 04827-04860**				
	PRO-NOR-SRP-01-60		**Holding Pattern**	00004014.0001001	09 OCT 12
	Criteria: 22-1269, 22-1270, 31-1335, SA				
	Applicable to: **ALL**				
	PRO-NOR-SRP-01-60		**MANUAL TERMINATION**	00004016.0001001	09 DEC 09
	Criteria: SA				
	Applicable to: **ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-NOR-SRP-01-70		**Initial Approach**	00004017.0002001	26 NOV 19
	Criteria: 22-1090, 22-1676, P7218, P7666, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
N	PRO-NOR-SRP-01-70		**Initial Approach**	00004017.0015001	26 NOV 19
	Criteria: P20596, P7218, SA				
	Applicable to: MSN 11531				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-NOR-SRP-01-70		**ILS/MLS/GLS/FLS/SLS Approach**	NG00290	
E	PRO-NOR-SRP-01-70		**ILS Approach - Intermediate/Final Approach (ILS Approach Entered in the F-PLN)**	00004018.0001001	17 MAR 11
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-NOR-SRP-01-70		**ILS / GLS Approach - Intermediate/Final Approach (ILS / GLS Approach Entered in the F-PLN)**	00004018.0003001	12 MAY 22
	Criteria: P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	PRO-NOR-SRP-01-70		**ILS / GLS ◁ / LPV(with SLS ◁) Approach - Approach Mode Activation (LOC - G/S)**	00004019.0014001	12 MAY 22
	Criteria: P20467, P20596, P6578, P7520, SA				
E	**Applicable to: MSN 10949-11597**				
	PRO-NOR-SRP-01-70		**ILS/GLS Approach - Approach Mode Activation (LOC-G/S)**	00004019.0011001	17 MAR 11
	Criteria: P6578, P7519, P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-NOR-SRP-01-70		**ILS Approach - Approach Mode Activation (LOC-G/S)**	00004019.0009001	17 MAR 11
	Criteria: P6578, P7519, P7520, SA				
	Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324				
	PRO-NOR-SRP-01-70		**ILS Approach - Approach Mode Activation (LOC-G/S)**	00004019.0008001	17 MAR 11
	Criteria: 22-1090, 22-1676, P7520, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	PRO-NOR-SRP-01-70		**ILS/MLS Approach - Autoland**	00004020.0002001	05 MAY 22
	Criteria: 22-1090, 22-1676, P7519, P7520, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 08495-09324, 10949-11522, 11572-11597**				
E	PRO-NOR-SRP-01-70		**ILS/MLS Approach - Autoland**	00004020.0012001	05 MAY 22
	Criteria: K2113, K3154, P7519, P7520, SA				
E	**Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	PRO-NOR-SRP-01-70		**ILS/MLS Approach - Autoland**	00004020.0033001	06 SEP 22
	Criteria: P7519, P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-NOR-SRP-01-70		**ILS/MLS Approach - Manual Landing**	00004021.0001001	17 MAR 11
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-70		**ILS Approach - Standard ILS Automatic Approach**	00004022.0004001	22 MAY 12
	Criteria: 22-1270, 22-1676, P3379, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	PRO-NOR-SRP-01-70		**ILS Approach - Standard ILS Automatic Approach**	00004022.0011001	22 MAY 12
	Criteria: 22-1269, 22-1270, P10762, P10763, P10785, P3379, P8671, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-70		**ILS/GLS Approach - Standard GLS Automatic Approach**	00013748.0003001	17 MAR 11
	Criteria: P3379, P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-NOR-SRP-01-70		**Standard LPV Approach (SLS ◁)**	00024846.0001001	12 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-70		**ILS/MLS/GLS Approach - Early Selection of Approach Mode LOC-G/S**	00004023.0001001	26 NOV 13
	Criteria: SA				
	Applicable to: ALL				
	PRO-NOR-SRP-01-70		**ILS/MLS Approach - Glideslope Interception from Above**	00004024.0002001	10 MAY 21
	Criteria: P4320, SA				
	Applicable to: ALL				
E	PRO-NOR-SRP-01-70		**ILS Approach - Data Lock**	00004025.0001001	17 MAR 11
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-NOR-SRP-01-70		**ILS/GLS/SLS Approach - Data Lock**	00004025.0003001	12 MAY 22
	Criteria: P8500, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	PRO-NOR-SRP-01-70		**ILS Approach - Use of RMPs for ILS/DME**	00004026.0001001	17 MAR 11
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-NOR-SRP-01-70		**ILS/GLS Approach - Use of RMPs for ILS/GLS/DME**	00004026.0003001	17 MAR 11
	Criteria: P8500, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	PRO-NOR-SRP-01-70		**ILS Approach - Localizer (LOC) Beam Capture**	00004027.0001001	22 MAY 12
E	Criteria: SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11522, 11572-11597**				
	PRO-NOR-SRP-01-70		**ILS/GLS Approach - Localizer (LOC) Beam Capture**	00004027.0004001	22 MAY 12
	Criteria: P8500, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
N	PRO-NOR-SRP-01-70		**ILS/FLS Approach - Localizer (LOC) or F-LOC Beam Capture**	00004027.0003001	22 MAY 12
	Criteria: P20596, SA **Applicable to: MSN 11531**				
R	PRO-NOR-SRP-01-70		**Switching from Non ILS to ILS Approach**	00004028.0002001	03 NOV 21
E	Criteria: 22-1083, 22-1090, 22-1676, P6986, P7519, P7520, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	PRO-NOR-SRP-01-70		**Switching from Non PRECISION to ILS/GLS/SLS Approach**	00004028.0016001	12 MAY 22
	Criteria: P7519, P8500, SA **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	PRO-NOR-SRP-01-70		**Switching from GLS/SLS to ILS Approach**	00013072.0016001	12 MAY 22
	Criteria: P7519, P8500 **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	PRO-NOR-SRP-01-70		**Landing Categories**	00004038.0001001	16 NOV 11
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11522, 11572-11597**				
N	PRO-NOR-SRP-01-70		**Landing Capabilities**	00004038.0002001	12 MAY 22
	Criteria: P20596, SA				
	Applicable to: MSN 11531				
	PRO-NOR-SRP-01-70		**Landing Categories**	00004038.0003001	06 SEP 22
	Criteria: P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-NOR-SRP-01-70		**Warnings for ILS/GLS Approach**	00004039.0011001	18 MAY 22
	Criteria: P10383, P13321, P7519, P8500, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	PRO-NOR-SRP-01-70		**Warnings for ILS Approach**	00004039.0010001	18 MAY 22
	Criteria: 22-1090, 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, 31-1334, 31-1414, P10383, P10801, P13321, P13322, P7519, P7520, SA				
E	**Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
E	PRO-NOR-SRP-01-70		**Warnings for ILS Approach**	00004039.0002001	18 MAY 22
	Criteria: 22-1090, 31-1334, 31-1414, P7520, SA				
E	**Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
N	PRO-NOR-SRP-01-80		**Monitoring the Go-Around**	00004054.0008001	04 SEP 18
	Criteria: P13322, P20596, P4320, SA				
	Applicable to: MSN 11531				
E	PRO-NOR-SRP-01-80		**MONITORING THE GO-AROUND**	00004054.0005001	09 JUL 13
	Criteria: 22-1359, 22-1360, 22-1379, 22-1547, 22-1676, P10801, P13321, P13322, P4320, SA				
E	**Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				
E	PRO-NOR-SRP-01-80		**MONITORING THE GO-AROUND**	00004054.0002001	09 DEC 09
	Criteria: P4320, SA				
E	**Applicable to: MSN 01143-01251, 01801, 01826, 01855**				
	PRO-NOR-SRP-01-80		**Go-Around Profile**	00004055.0014001	22 MAY 12
	Criteria: 22-1090, 22-1203, P3379, P4319, SA				
	Applicable to: MSN 01376				
E	PRO-NOR-SRP-01-80		**Go-Around Profile**	00004055.0043001	22 MAY 12
	Criteria: 22-1090, 22-1142, 22-1203, 22-1296, 22-1614, 22-1676, 34-1403, P10694, P3379, P4319, P6197, P7519, P7520, P7977, P8014, P8708, P9126, SA				
E	**Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-80		**Missed Approach: Try Again**	00004057.0001001	14 FEB 11
	Criteria: 22-1270, 22-1676, SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	PRO-NOR-SRP-01-80		**Missed Approach: Try Again**	00004057.0008001	14 FEB 11
E	Criteria: 22-1269, 22-1270, P10762, P10763, P10785, P8671, SA **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	PRO-NOR-SRP-01-80		**Missed Approach: Divert**	00004058.0005001	10 MAY 21
E	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-NOR-SRP-01-80		**Missed Approach: Divert**	00004058.0004001	10 MAY 21
	Criteria: P10762, P10785, P9652, SA **Applicable to: MSN 04827-04860**				
	PRO-NOR-SRP-01-80		**Task Sharing During a Go-Around**	00004059.0002001	20 JUL 15
	Criteria: P3379, SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-SPO-40-30		**ETOPS Critical Fuel Reserves**	00023321.0001001	03 NOV 21
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-40-40		**Diversion Decision Making**	00023322.0001001	03 NOV 22
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-40-50		**General**	00002051.0001001	26 JUN 17
	Criteria: SA **Applicable to: ALL**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-SPO-40-50		**Normal Procedures**	NG01821	
	PRO-SPO-40-50		**Cockpit Preparation**	00021794.0002001	26 JUN 17
	Criteria: K4574, SA **Applicable to: ALL**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-SPO-40-50		**Abnormal and Emergency Procedures**	00002053.0006001	05 JUN 18
	Criteria: 31-1197, 31-1218, 31-1257, IAE, P8274 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-SPO-40-50		**Abnormal and Emergency Procedures**	00002053.0004001	05 JUN 18
	Criteria: CFMI, P8274 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
E	PRO-SPO-40-50		**Abnormal and Emergency Procedures**	00002053.0011001	21 MAR 17
E	Criteria: IAL, P8274 **Applicable to: MSN 08495-09324, 10949-11597**				
	PRO-SPO-40-50		**Abnormal and Emergency Procedures**	00002053.0007001	05 JUN 18
	Criteria: CFMI, K0066, P8274 **Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0098001	17 NOV 20
	Criteria: 57-1187, G-V2533-A5, J0071, J3448, P7876, P8521 **Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165**				
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0053001	17 NOV 20
	Criteria: 73-1075, 73-1082, G-V2527-A5, G-V2527E-A5, J0071, P7876, P8521 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0051001	17 NOV 20
	Criteria: 73-1075, 73-1082, G-V2524-A5, J0071, P7876, P8521 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0049001	17 NOV 20
	Criteria: 57-1173, G-CFM56-5B4, J0071, J3283, P4230 **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0046001	17 NOV 20
	Criteria: G-CFM56-5B3, J0071, J3448, P4230 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0035001	17 NOV 20
	Criteria: G-V2533-A5, J0071, P7876, P8521 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662**				
N	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0028001	17 NOV 20
	Criteria: G-PW1133G-JM, J0071, J3448 **Applicable to: MSN 11531**				
E	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0024001	17 NOV 20
E	Criteria: G-PW1127G-JM, J0071, J3283 **Applicable to: MSN 10949-11522, 11572-11597**				
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0018001	17 NOV 20
	Criteria: G-CFM56-5B6, J0071, P4230 **Applicable to: MSN 03733, 04734-04756, 05005, 05097**				
	PRO-SPO-40-60		**Maximum Diversion Distance**	00023324.0005001	17 NOV 20
	Criteria: G-CFM56-5B4, J0071, P4230 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-SPO-45		**Engine Intermix Type 1**	NG01123	
	PRO-SPO-45		**Engine Intermix Type 1 - General**	00002059.0001001	30 JUN 14
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-SPO-45		**Engine Intermix Type 1 - Engine Parameters**	00002060.0001001	07 DEC 10
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-SPO-45		**Engine Intermix Type 1 - Crossbleed ENG Start**	00002061.0001001	07 DEC 10
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-SPO-45		**Engine Intermix Type 1 - Takeoff Procedure**	00004068.0001001	07 DEC 10
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	PRO-SPO-45		**Engine Intermix Type 1 - Engine Response**	00002062.0001001	07 DEC 10
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	PRO-SPO-45		**Engine Intermix Type 1 - Engine Relight**	00004067.0001001	09 OCT 12
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-SPO-45		**Engine Intermix Type 2**	NG01124	
	PRO-SPO-45		**Engine Intermix Type 2 - General**	00012731.0007001	06 MAR 17
	Criteria: G-CFM56-5B4, G-CFM56-5B6				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-SPO-45		**Engine Intermix Type 2 - General**	00012731.0008001	06 MAR 17
	Criteria: G-CFM56-5B3				
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	PRO-SPO-45		**Engine Intermix Type 2 - Engine Parameters**	00012732.0010001	24 FEB 15
	Criteria: G-CFM56-5B3, P11325				
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	PRO-SPO-45		**Engine Intermix Type 2 - Engine Parameters**	00012732.0001001	07 DEC 10
	Criteria: 73-1095, G-CFM56-5B4, G-CFM56-5B6, P11325				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-SPO-45		**Engine Intermix Type 2 - Takeoff Procedure**	00012733.0001001	07 DEC 10
	Criteria: 73-1095, G-CFM56-5B4, G-CFM56-5B6, P11325				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-SPO-45		**Engine Intermix Type 2 - Engine Response**	00012734.0007001	14 MAY 12
	Criteria: 73-1095, G-CFM56-5B4, G-CFM56-5B6, P11325				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	PRO-SPO-45		**Engine Intermix Type 2 - Engine Relight**	00016162.0010001	02 MAY 17
	Criteria: 73-1095, G-CFM56-5B4, G-CFM56-5B6, P11325				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-SPO-50		**General**	00020828.0001001	17 MAR 17
	Criteria: 34-1252, P5583, P7268				
	Applicable to: ALL				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	PRO-SPO-50		**Required Equipments/Functions for RVSM**	00020955.0001001	17 MAR 17
	Criteria: P5583 **Applicable to: MSN 01143-01251, 01459**				
E	PRO-SPO-50		**Required Equipments/Functions for RVSM**	00020955.0002001	17 MAR 17
E	Criteria: 34-1252, P5583, P7268 **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
E	PRO-SPO-50		**RVSM Normal Procedure**	00020830.0002001	17 MAR 17
E	Criteria: 34-1252, P5583, P7268 **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-SPO-50		**RVSM Normal Procedure**	00020830.0001001	17 MAR 17
	Criteria: P5583 **Applicable to: MSN 01143-01251, 01459**				
	PRO-SPO-50		**RVSM Abnormal and Emergency Procedure**	00020831.0001001	17 MAR 17
	Criteria: P5583 **Applicable to: MSN 01143-01251, 01459**				
E	PRO-SPO-50		**RVSM Abnormal and Emergency Procedure**	00020831.0002001	17 MAR 17
E	Criteria: 34-1252, P5583, P7268 **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	PRO-SPO-51		**General**	NG01351	
	PRO-SPO-51		**General - General**	00015857.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**General - RNAV/RNP Capability**	00015859.0001001	09 SEP 14
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNAV 10 / RNP 10**	NG01350	
	PRO-SPO-51		**RNAV 10 / RNP 10 - General**	00015854.0001001	09 SEP 14
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNAV 10 / RNP 10 - Required RNAV 10 Equipment**	00015855.0001001	28 MAY 20
	Criteria: SA **Applicable to: ALL**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	PRO-SPO-51		**RNAV 10 / RNP 10 - Procedure**	00015863.0001001	11 APR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNAV 5 / BRNAV**	NG01349	
	PRO-SPO-51		**RNAV 5 / BRNAV - General**	00015851.0001001	20 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNAV 5 / BRNAV - Required RNAV 5 Equipment**	00015852.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNAV 5 / BRNAV - Procedure**	00015864.0001001	11 APR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNAV 1 RNAV 2 / P-RNAV - Terminal RNAV**	NG01348	
	PRO-SPO-51		**RNAV 1 RNAV 2 / P-RNAV - Terminal RNAV - General**	00015848.0001001	20 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNAV 1 RNAV 2 / P-RNAV - Terminal RNAV - Required RNAV 1(2) Equipment**	00015849.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNAV 1 RNAV 2 / P-RNAV - Terminal RNAV - Procedure**	00015865.0001001	20 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNP 4**	NG01347	
	PRO-SPO-51		**RNP 4 - General**	00015845.0001001	09 SEP 14
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNP 4 - Required RNP 4 Equipment**	00015846.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-51		**RNP 4 - Procedure**	00015866.0001001	17 MAY 21
	Criteria: SA				
	Applicable to: ALL				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	PRO-SPO-51		**RNP 2 in Oceanic and Remote Continental Area**	NG01814	
	PRO-SPO-51		**RNP 2 in oceanic and remote continental area - General**	00021541.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNP 2 in Oceanic and Remote Continental Area - Required RNP 2 in Oceanic and Remote Continental Area Equipment**	00021542.0001001	28 MAY 20
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNP 2 in Oceanic and Remote Continental Area - Procedure**	00021544.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNP 2 in Domestic Area**	NG01815	
	PRO-SPO-51		**RNP 2 in Domestic Area - Required RNP 2 in Domestic Area Equipment**	00021545.0001001	28 MAY 20
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNP 2 in Domestic Area - Procedure**	00021546.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNP 1 / Terminal RNP 1- Basic RNP 1**	NG01346	
	PRO-SPO-51		**RNP 1 / Terminal RNP 1 - Basic RNP 1- General**	00015842.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNP 1 / Terminal RNP 1 - Basic RNP 1- Required RNP 1 Equipment**	00015843.0001001	28 MAY 20
	Criteria: SA **Applicable to: ALL**				
	PRO-SPO-51		**RNP 1 / Terminal RNP 1 - Basic RNP 1 - Procedure**	00015867.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				
E	PRO-SPO-51		**RNP APCH / RNAV(GNSS)**	NG01345	
	PRO-SPO-51		**RNP APCH / RNAV(GNSS) - General**	00015839.0001001	20 MAR 17
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: ALL				
	PRO-SPO-51		**RNP APCH / RNAV(GNSS) - Required RNP APCH Equipment**	00015840.0001001	11 JUL 17
	Criteria: SA				
	Applicable to: ALL				
N	PRO-SPO-51		**RNP APCH / RNAV(GNSS) - Procedure**	00015868.0003001	12 MAY 22
	Criteria: P20596, SA				
	Applicable to: MSN 11531				
E	PRO-SPO-51		**RNP APCH / RNAV(GNSS) - Procedure**	00015868.0001001	10 MAY 21
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-SPO-51		**RNP AR / RNAV(RNP)**	NG01125	
E	PRO-SPO-51		**RNP AR Operations - General**	00012736.0002001	23 JUN 15
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593				
E	**Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**				
R	PRO-SPO-51		**RNP AR Operations - Required RNP AR Equipment**	00012737.0003001	03 NOV 22
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593				
E	**Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**				
R	PRO-SPO-51		**RNP AR Operations - Procedures**	00014680.0002001	24 FEB 23
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9464, P9593				
E	**Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**				

M[1]	Localization	T[2]	DU Title	DU identification	DU date
R	PRO-SPO-60		**General**	00023439.0002001	17 NOV 20
	Criteria: 00-1058, P6630, SA				
	Applicable to: ALL				
R	PRO-SPO-60		**Limitations**	00023440.0002001	15 NOV 21
	Criteria: 00-1058, 320-271N, P4576, P6630, SA				
	Applicable to: ALL				
E	PRO-SPO-60		**Procedures**	00023441.0003001	17 NOV 20
	Criteria: P4576, P6630, SA				
E	**Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 11531**				
	PRO-SPO-60		**Procedures**	00023441.0002001	17 NOV 20
	Criteria: 00-1058, P6630, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321				
E	PRO-SPO-60		**Procedures**	00023441.0005001	17 NOV 20
	Criteria: 320-271N, P4576, P6630, SA				
E	**Applicable to: MSN 10949-11522, 11572-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	PRO-SPO-62		**General**	00002095.0001001	22 OCT 14
	Criteria: P5914				
E	**Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**				
E	PRO-SPO-62		**Limitations**	00002096.0001001	21 MAR 17
	Criteria: P5914				
E	**Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**				
E	PRO-SPO-62		**Procedures**	00002097.0001001	21 MAR 17
	Criteria: P5914				
E	**Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**				
E	PRO-SPO-62		**Performance**	00002098.0001001	21 MAR 17
	Criteria: P5914				
E	**Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**				
	PRO-SPO-85		**Overview**	00020844.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-85		**Break out Turn and Climb Procedure**	00020845.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	PRO-SPO-85		**Break out Turn and Descent Procedure**	00020846.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M [(1)]	Localization	DU Title	DU identification	DU date
R	PRO-NOR-SOP-04	**ADIRS**	00022626.0014001	02 MAY 23
	Criteria: P12909, P20614, P21265, P6985, P8194 **Applicable to: MSN 10949-11139** *Impacted DU: 00011159 ADIRS*			
	Reason for issue: *This TDU is issued to inform Operators that with some dedicated FWC standards, some systems that depend on ADIRS data might generate spurious alerts until at least one IR mode selector is switched to NAV.*			
R	PRO-NOR-SOP-06	**Overhead Panel**	AIL-00001813	
R	PRO-NOR-SOP-06	**Overhead Panel - RCDR**	00021691.0006001	02 MAY 23
	Criteria: PW1100G-JM, P12301, P20095, P20327 **Applicable to: MSN 08495-08635** *Impacted DU: 00015476 Overhead Panel - RCDR*			
	Reason for issue: *On A320neo Family aircraft, before engine start, the RCDR GND CTL pb-sw may revert to AUTO in the case of electrical transient between EXT PWR and APU GEN. In that case, the flight crew must set the RCDR GND CTL pb-sw back to ON.*			
R	PRO-NOR-SOP-08	**Automatic Engine Start**	00022757.0001001	02 MAY 23
	Criteria: PW1100G-JM, P15967 **Applicable to: MSN 08495-09324, 10949-11139** *Impacted DU: 00010162 Automatic Engine Start*			
	Reason for issue: *This temporary documentary unit adds information about the indications to be displayed before pressing the dual cooling pb-sw in order to avoid the "dual cooling not avail" message while the operating envelope is respected. If the pb-sw is pressed before the cooling times for both engines is displayed this message will appear. This issue is planned to be fixed with the introduction of subsequent EIU and FCS software updates.*			
R	PRO-NOR-SOP-10	**Taxi**	AIL-00001825	
R	PRO-NOR-SOP-10	**Radar**	00015299.0001001	02 MAY 23
	Criteria: P4647, P7929 **Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192** *Impacted DU: 00015298 Taxi - Radar*			

Continued on the following page

Continued from the previous page

M [(1)]	Localization	DU Title	DU identification	DU date
	Reason for issue: *When the MULTISCAN sw is in the AUTO position (tilt in automatic mode) and the GAIN is set to CAL (automatically calibrated), the radar display may not entirely correspond to the current weather. Therefore, this Temporary DU is issued to indicate that, when the MULTISCAN sw is in the AUTO position, the GAIN should be manually set to +8 to ensure that the radar display provides an optimum reflection of the current weather condition.* *In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:* *- The weather is good, or not significant, in order to check that the radar is operating correctly* *- The weather display is ambiguous or unexpected, in order to better analyze the weather situation.* *When the MULTISCAN sw is in the AUTO position and the GAIN is manually set, the Path Attenuation Compensation (PAC) alert is not available. However, the radar display corresponds to the current weather conditions, when the aircraft is above FL 150.* *Therefore, the flight crew can set the GAIN back to CAL, when the aircraft is above FL 150.*			
R	PRO-NOR-SOP-10	**Radar**	00015299.0002001	02 MAY 23
	Criteria: 34-1443, P12173, P4647, P4766, P7929, P9902 **Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098** *Impacted DU: 00015298 Taxi - Radar*			
	Reason for issue: *When in the AUTO position, the MultiScan AUTO mode adjusts the tilt according to the altitude of the aircraft.* *In cruise, MULTISCAN function provides a large view of the weather ahead, ie display of weather cells located on and below aircraft path.* *At low altitudes (below FL 200), the tilt is adjusted upward to manage clutter from strong ground targets. In some cases, the weather may be low-lying and therefore may be below the radar beam and not be displayed until the aircraft descends closer to the precipitation level.* *Therefore, this Temporary Revision is issued to indicate that, when the Multiscan is in the AUTO position, the GAIN should be manually set to +4 when the aircraft is below FL 200.* *In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:* *- If the weather is good, or not significant, in order to check that the radar is operating correctly: down tilt until displaying ground echoes* *- The weather display is ambiguous or unexpected, in order to better analyze the weather situation using manual tilt according to standard technique* *- In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display.* *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*			

N	PRO-NOR-SOP-11	**Before Takeoff**	AIL-00001828	
R	PRO-NOR-SOP-11	**Before Takeoff - Exterior Lights**	00014740.0001001	02 MAY 23
	Criteria: 57-1173, 57-1187, J3283, J3448			

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<table>
<tr><th>M (1)</th><th>Localization</th><th>DU Title</th><th>DU identification</th><th>DU date</th></tr>
<tr><td></td><td colspan="4">Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11139
<i>Impacted DU: 00010392</i></td></tr>
<tr><td></td><td colspan="4"><i>Reason for issue:</i>
<i>The new strobe lights on the Sharklet aircraft can cause visual troubles. Pending final fix, this temporary amendment recalls that the flight crew can switch off the strobe lights if deemed necessary.</i></td></tr>
</table>

<table>
<tr><th>R</th><th>PRO-NOR-SOP-14</th><th>Climb</th><th>AIL-00001834</th><th></th></tr>
<tr><td>R</td><td>PRO-NOR-SOP-14</td><td>Climb - At the Transition Altitude</td><td>00025011.0003001</td><td>02 MAY 23</td></tr>
<tr><td></td><td colspan="4">Criteria: 34-1259, 34-1369, 34-1663, P10960, P11588, P13843, P14310, P14311, P14828, P3379, P7424, P7425, P7585, P9207, SA
Applicable to: MSN 01459, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06173, 06528-06561, 06598, 06634, 06689-06712, 06800-07098
<i>Impacted DU: 00025005</i></td></tr>
<tr><td></td><td colspan="4"><i>Reason for issue:</i>
<i>Issue 2:</i>
<i>The temporary information is reissued to provide more information concerning BPS issue in line with EASA SIB 2016-05.</i>
<i>Issue 1:</i>
<i>The temporary revision is issued to advise operators that above the transition level, when the flight crew selects "STD" on the FCU, the last QNH or QFE barometric pressure setting is transmitted to the ground, instead of the standard pressure value (1 013 hPa).</i>
<i>Only the FCU selected altitude, if used by the ATC on ground, may be misinterpreted. The real aircraft altitude transmitted to the ground is not affected, because the standard barometric altitude is transmitted, regardless of the barometric setting selected on the FCU.</i>
<i>In addition, the "STD" value is correctly transmitted to other aircraft systems.</i></td></tr>
<tr><td>R</td><td>PRO-NOR-SOP-14</td><td>Climb - Radar</td><td>00013047.0003001</td><td>02 MAY 23</td></tr>
<tr><td></td><td colspan="4">Criteria: 34-1443, P12173, P7929, P9902, SA
Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
<i>Impacted DU: 00010259 Climb - Radar</i></td></tr>
</table>

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<table>
<tr><th>M [1]</th><th>Localization</th><th>DU Title</th><th>DU identification</th><th>DU date</th></tr>
<tr><td></td><td colspan="4">*Reason for issue:*
When in the AUTO position, the MultiScan AUTO mode adjusts the tilt according to the altitude of the aircraft.
In cruise, MULTISCAN function provides a large view of the weather ahead, ie display of weather cells located on and below aircraft path.
At low altitudes (below FL 200), the tilt is adjusted upward to manage clutter from strong ground targets. In some cases, the weather may be low-lying and therefore may be below the radar beam and not be displayed until the aircraft descends closer to the precipitation level.
Therefore, this Temporary Revision is issued to indicate that, when the Multiscan is in the AUTO position, the GAIN should be manually set to +4 when the aircraft is below FL 200.

In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:
- If the weather is good, or not significant, in order to check that the radar is operating correctly: down tilt until displaying ground echoes
- The weather display is ambiguous or unexpected, in order to better analyze the weather situation using manual tilt according to standard technique
- In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display.

In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.</td></tr>
<tr><td>R</td><td>PRO-NOR-SOP-14</td><td>**Climb - Radar**</td><td>00013047.0001001</td><td>02 MAY 23</td></tr>
<tr><td></td><td colspan="4">Criteria: P7929, SA</td></tr>
<tr><td></td><td colspan="4">**Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192**</td></tr>
<tr><td></td><td colspan="4">*Impacted DU: 00010259 Climb - Radar*</td></tr>
<tr><td></td><td colspan="4">*Reason for issue:*
When the MULTISCAN sw is in the AUTO position (tilt in automatic mode) and the GAIN is set to CAL (automatically calibrated), the radar display may not entirely correspond to the current weather. Therefore, this Temporary DU is issued to indicate that, when the MULTISCAN sw is in the AUTO position, the GAIN should be manually set to +8 to ensure that the radar display provides an optimum reflection of the current weather condition.

In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:
- The weather is good, or not significant, in order to check that the radar is operating correctly
- The weather display is ambiguous or unexpected, in order to better analyze the weather situation.

When the MULTISCAN sw is in the AUTO position and the GAIN is manually set, the Path Attenuation Compensation (PAC) alert is not available. However, the radar display corresponds to the current weather conditions, when the aircraft is above FL 150.
Therefore, the flight crew can set the GAIN back to CAL, when the aircraft is above FL 150.</td></tr>
</table>

<table>
<tr><td>N</td><td>PRO-NOR-SOP-15</td><td>**Cruise**</td><td>AIL-00001836</td><td></td></tr>
<tr><td></td><td>PRO-NOR-SOP-15</td><td>**Cruise - Radar Tilt**</td><td>00013068.0001001</td><td>26 OCT 22</td></tr>
<tr><td></td><td colspan="4">Criteria: P7929, SA</td></tr>
</table>

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M [1]	Localization	DU Title	DU identification	DU date
	Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192 *Impacted DU: 00010291 Cruise - Radar Tilt*			
	Reason for issue: *When the MULTISCAN sw is in the AUTO position (tilt in automatic mode) and the GAIN is set to CAL (automatically calibrated), the radar display may not entirely correspond to the current weather. Therefore, this Temporary DU is issued to indicate that, when the MULTISCAN sw is in the AUTO position, the GAIN should be manually set to +8 to ensure that the radar display provides an optimum reflection of the current weather condition.* *In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:* *- The weather is good, or not significant, in order to check that the radar is operating correctly* *- The weather display is ambiguous or unexpected, in order to better analyze the weather situation.* *When the MULTISCAN sw is in the AUTO position and the GAIN is manually set, the Path Attenuation Compensation (PAC) alert is not available. However, the radar display corresponds to the current weather conditions, when the aircraft is above FL 150.* *Therefore, the flight crew can set the GAIN back to CAL, when the aircraft is above FL 150.*			
	PRO-NOR-SOP-15	**Cruise - Radar Tilt**	00013068.0006001	26 OCT 22
	Criteria: 34-1443, P12173, P7929, P9902, SA **Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098** *Impacted DU: 00010291 Cruise - Radar Tilt*			
	Reason for issue: *When in the AUTO position, the MultiScan AUTO mode adjusts the tilt according to the altitude of the aircraft.* *In cruise, MULTISCAN function provides a large view of the weather ahead, ie display of weather cells located on and below aircraft path.* *At low altitudes (below FL 200), the tilt is adjusted upward to manage clutter from strong ground targets. In some cases, the weather may be low-lying and therefore may be below the radar beam and not be displayed until the aircraft descends closer to the precipitation level.* *Therefore, this Temporary Revision is issued to indicate that, when the Multiscan is in the AUTO position, the GAIN should be manually set to +4 when the aircraft is below FL 200.* *In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:* *- The weather is good, or not significant, in order to check that the radar is operating correctly: down tilt until displaying ground echoes* *- The weather display is ambiguous or unexpected, in order to better analyze the weather situation using manual tilt according to standard technique* *- In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display.* *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*			

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M [(1)]	Localization	DU Title	DU identification	DU date
N	PRO-NOR-SOP-16	**Descent Preparation**	AIL-00001838	
R	PRO-NOR-SOP-16	**Descent Preparation - Radar**	00013353.0003001	02 MAY 23
	Criteria: 34-1443, P12173, P7929, P9902, SA **Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098** *Impacted DU: 00011545*			
	Reason for issue: *When in the AUTO position, the MultiScan AUTO mode adjusts the tilt according to the altitude of the aircraft.* *In cruise, MULTISCAN function provides a large view of the weather ahead, ie display of weather cells located on and below aircraft path.* *At low altitudes (below FL 200), the tilt is adjusted upward to manage clutter from strong ground targets. In some cases, the weather may be low-lying and therefore may be below the radar beam and not be displayed until the aircraft descends closer to the precipitation level.* *Therefore, this Temporary Revision is issued to indicate that, when the Multiscan is in the AUTO position, the GAIN should be manually set to +4 when the aircraft is below FL 200.* *In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:* - *If the weather is good, or not significant, in order to check that the radar is operating correctly: down tilt until displaying ground echoes* - *The weather display is ambiguous or unexpected, in order to better analyze the weather situation using manual tilt according to standard technique* - *In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display.* *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*			
R	PRO-NOR-SOP-16	**Descent Preparation - Radar**	00013353.0001001	02 MAY 23
	Criteria: P7929, SA **Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192** *Impacted DU: 00011545*			

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M [(1)]	Localization	DU Title	DU identification	DU date
	Reason for issue: *When the MULTISCAN sw is in the AUTO position (tilt in automatic mode) and the GAIN is set to CAL (automatically calibrated), the radar display may not entirely correspond to the current weather. Therefore, this Temporary DU is issued to indicate that, when the MULTISCAN sw is in the AUTO position, the GAIN should be manually set to +8 to ensure that the radar display provides an optimum reflection of the current weather condition.* *In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:* *- The weather is good, or not significant, in order to check that the radar is operating correctly* *- The weather display is ambiguous or unexpected, in order to better analyze the weather situation.* *When the MULTISCAN sw is in the AUTO position and the GAIN is manually set, the Path Attenuation Compensation (PAC) alert is not available. However, the radar display corresponds to the current weather conditions, when the aircraft is above FL 150.* *Therefore, the flight crew can set the GAIN back to CAL, when the aircraft is above FL 150.*			
N	PRO-NOR-SOP-18-B	**Initial Approach**	AIL-00001844	
R	PRO-NOR-SOP-18-B	**Initial Approach - Radar**	00014648.0002001	02 MAY 23
	Criteria: P7929, SA **Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192** *Impacted DU: 00014647*			
	Reason for issue: *When the MULTISCAN sw is in the AUTO position (tilt in automatic mode) and the GAIN is set to CAL (automatically calibrated), the radar display may not entirely correspond to the current weather. Therefore, this Temporary DU is issued to indicate that, when the MULTISCAN sw is in the AUTO position, the GAIN should be manually set to +8 to ensure that the radar display provides an optimum reflection of the current weather condition.* *In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:* *- The weather is good, or not significant, in order to check that the radar is operating correctly* *- The weather display is ambiguous or unexpected, in order to better analyze the weather situation.* *When the MULTISCAN sw is in the AUTO position and the GAIN is manually set, the Path Attenuation Compensation (PAC) alert is not available. However, the radar display corresponds to the current weather conditions, when the aircraft is above FL 150.* *Therefore, the flight crew can set the GAIN back to CAL, when the aircraft is above FL 150.*			
R	PRO-NOR-SOP-18-B	**Initial Approach - Radar**	00014648.0003001	02 MAY 23
	Criteria: 34-1443, P12173, P7929, P9902, SA **Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098** *Impacted DU: 00014647*			

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<table>
<tr><th>M (1)</th><th>Localization</th><th>DU Title</th><th>DU identification</th><th>DU date</th></tr>
<tr><td></td><td colspan="4"><i><u>Reason for issue:</u></i>
<i>When in the AUTO position, the MultiScan AUTO mode adjusts the tilt according to the altitude of the aircraft.</i>
<i>In cruise, MULTISCAN function provides a large view of the weather ahead, ie display of weather cells located on and below aircraft path.</i>
<i>At low altitudes (below FL 200), the tilt is adjusted upward to manage clutter from strong ground targets. In some cases, the weather may be low-lying and therefore may be below the radar beam and not be displayed until the aircraft descends closer to the precipitation level.</i>
<i>Therefore, this Temporary Revision is issued to indicate that, when the Multiscan is in the AUTO position, the GAIN should be manually set to +4 when the aircraft is below FL 200.</i>

<i>In addition, the flight crew should temporarily set the MULTISCAN sw to MAN, if:</i>
<i>- If the weather is good, or not significant, in order to check that the radar is operating correctly: down tilt until displaying ground echoes</i>
<i>- The weather display is ambiguous or unexpected, in order to better analyze the weather situation using manual tilt according to standard technique</i>
<i>- In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display.</i>

<i>In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.</i></td></tr>
</table>

<table>
<tr><td>R</td><td>PRO-NOR-SOP-21</td><td>After Landing</td><td>AIL-00001860</td><td></td></tr>
<tr><td>R</td><td>PRO-NOR-SOP-21</td><td>After Landing - Brake Temperature</td><td>00019773.0003001</td><td>02 MAY 23</td></tr>
<tr><td></td><td colspan="4">Criteria: P10257, 320-200N
Applicable to: MSN 08529
<i>Impacted DU: 00011850 After Landing - Brake Temperature</i></td></tr>
<tr><td></td><td colspan="4"><i><u>Reason for issue:</u></i>
<i>Removal of the recommendation to delay the selection of the brake fans. Delaying the selection of the brake fans after landing has not proved to efficiently prevent brake oxidation. Furthermore, the removal of this recommendation provides additional flexibility for the flight crew to manage brake temperature.</i></td></tr>
</table>

<table>
<tr><td></td><td>PRO-NOR-SUP-ENG</td><td>Crossbleed Engine Start</td><td>00023018.0001001</td><td>29 NOV 19</td></tr>
<tr><td></td><td colspan="4">Criteria: PW1100G-JM
Applicable to: MSN 08495-09324, 10949-11139
<i>Impacted DU: 00020860 Crossbleed Engine Start</i></td></tr>
<tr><td></td><td colspan="4"><i><u>Reason for issue:</u></i>
<i>This TDU is created to add the action to turn off the pack on receiving engine side during the crossbleed engine start procedure. This action prevents an increase of the supplying engine ground idle thrust. It ensures cooling control capability and mitigates the risk for an aborted start on receiving engine side. A subsequent FCS update will improve cooling control to enable removing this TDU.</i></td></tr>
</table>

(1) Evolution code : N=New, R=Revised, E=Effectivity

PROCEDURES

ABNORMAL AND EMERGENCY PROCEDURES

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1 System Reset Table....................B

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ANTI ICE ALL PITOT....................B
ANTI ICE CAPT(F/O) TAT....................C
ANTI ICE CAPT + F/O AOA....................D
ANTI ICE CAPT + F/O PITOT....................E
ANTI ICE CAPT + STBY AOA....................F
ANTI ICE CAPT + STBY PITOT....................G
ANTI ICE CAPT PITOT ....H
ANTI ICE CAPT L(R) STAT....................I
ANTI ICE CAPT AOA....................J
ANTI ICE CAPT PROBES....................K
ANTI ICE DETECT FAULT....................L
ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)....................M
ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)....................N
ANTI ICE ENG 1(2) OVER PRESS....................O
ANTI ICE ENG 1(2) VALVE CLSD....................P
ANTI ICE ENG 1(2) VALVE OPEN....................Q
ANTI ICE F/O + STBY AOA....................R
ANTI ICE F/O + STBY PITOT....................S

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ANTI ICE F/O PITOT or L(R) STAT or AOA........T
ANTI ICE F/O PROBES........U
ANTI ICE ICE DETECTED........V
ANTI ICE L + R WINDSHIELD........W
ANTI ICE L(R) WINDOW........X
ANTI ICE L(R) WINDSHIELD........Y
ANTI ICE STBY PITOT or L(R) STAT or AOA........Z
ANTI ICE STBY PROBES........AA

PRO-ABN-AIR AIR

[QRH] Engine 1+2 Bleed Fault........A
[QRH] BLEED 1+2 FAULT........B
AIR APU BLEED FAULT........C
AIR APU BLEED LEAK........D
AIR APU BLEED LEAK APU LEAK FED BY ENG........E
AIR APU LEAK DET FAULT........F
AIR BLEED 1(2) OFF........G
[redacted] AIR BLEED LEAK [redacted]........H
AIR COND CTL 1(2) - A(B) FAULT........I
AIR ENG 1(2) BLEED ABNORM PR........J
AIR ENG 1(2) BLEED FAULT........K
AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED........L
AIR ENG 1+2 BLEED FAULT........M
AIR ENG 1+2 BLEED FAULT LEFT LEAK........N
AIR ENG 1+2 BLEED FAULT RIGHT LEAK........O
AIR ENG 1+2 BLEED FAULT LEFT LEAK AND RIGHT LEAK........P
AIR ENG 1(2) BLEED LO TEMP (OPPOSITE BLEED AVAILABLE)........Q
AIR ENG 1(2) BLEED LO TEMP (OPPOSITE BLEED NOT AVAILABLE)........R
AIR ENG 1+2 BLEED LO TEMP........S
AIR ENG 1(2) BLEED HI TEMP........T
AIR ENG 1(2) BLEED LEAK........U
AIR ENG 1(2) BLEED NOT CLSD........V
AIR ENG 1(2) HP VALVE FAULT........W
AIR ENG 1(2) LEAK DET FAULT........X
AIR FWD(AFT) CRG VENT FAULT ....Y
AIR L(R) WING LEAK........Z
AIR L(R) WNG LEAK DET FAULT........AA

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AIR PACK 1(2) FAULT.......... AB
AIR PACK 1+2 FAULT.......... AC
AIR PACK 1(2) OFF.......... AD
AIR PACK 1(2) OVHT.......... AE
AIR PACK 1(2) REGUL FAULT.......... AF
AIR X BLEED FAULT.......... AG

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APU FIRE DET FAULT.......... B
APU FIRE LOOP A(B) FAULT.......... C

PRO-ABN-APUF APU FIRE

■ APU FIRE ■.......... A

PRO-ABN-AUTO_FLT AUTO FLT

AUTO FLT A/THR LIMITED.......... A
AUTO FLT A/THR OFF.......... B
■ AUTO FLT AP OFF ■.......... C
AUTO FLT FAC 1(2) FAULT.......... D
AUTO FLT FAC 1 + 2 FAULT.......... E
AUTO FLT FAC VERSIONS DISAGREE.......... F
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AUTO FLT FMGC VERSIONS DISAGREE.......... I
AUTO FLT REAC W/S DET FAULT.......... J
AUTO FLT RUD TRIM 1(2) FAULT.......... K
AUTO FLT RUD TRIM SYS.......... L
AUTO FLT RUD TRV LIM 1(2).......... M
AUTO FLT RUD TRV LIM SYS.......... N
AUTO FLT TCAS MODE FAULT.......... O
AUTO FLT YAW DAMPER 1(2).......... P
AUTO FLT YAW DAMPER SYS.......... Q

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AVIONICS SMOKE.......... A

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PRO-ABN-BLEED BLEED

BLEED MONITORING FAULT.......A
BLEED MONIT SYS 1(2) FAULT.......B

PRO-ABN-BRAKES BRAKES

■ [MEM] LOSS OF BRAKING ■.......A
[QRH] ASYMMETRIC BRAKING.......B
[QRH] RESIDUAL BRAKING.......C
BRAKES A/SKID N/WS FAULT or A/SKID N/WS OFF.......D
BRAKES ALTN BRK FAULT.......E
BRAKES ALTN L(R) RELEASED.......F
BRAKES AUTO BRK FAULT.......G
BRAKES BRK Y ACCU LO PR.......H
BRAKES HOT.......I
BRAKES NORM + ALTN FAULT.......J
BRAKES NORM BRK FAULT.......K
BRAKES PARK BRK FAULT ◁ L
BRAKES PARK BRK LO PR.......M
BRAKES PARK BRK ON.......N
BRAKES RELEASED.......O
BRAKES SYS 1(2) FAULT.......P

PRO-ABN-NWS BRAKES-N/WS

BRAKES-N/WS MINOR FAULT.......A

PRO-ABN-CAB_PR CAB PR

[QRH] CABIN OVERPRESSURE.......A
■ CAB PR EXCESS CAB ALT ■.......B
■ CAB PR EXCES RESIDUAL PR ■.......C
CAB PR LDG ELEV FAULT.......D
CAB PR LO DIFF PR.......E
CAB PR OFV NOT OPEN.......F
CAB PR SAFETY VALVE OPEN.......G
CAB PR SYS 1(2) FAULT.......H
CAB PR SYS 1+2 FAULT.......I

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PRO-ABN-CRG_SMOKE CARGO SMOKE

CARGO SMOKE FWD(AFT) BTL SQUIB FAULT........A

PRO-ABN-C_B C/B

C/B TRIPPED........A

PRO-ABN-COM COM

COM ACARS FAULT ◁✻ ....A
COM AMU PART FAULT........B
COM CAPT(F/O)(3RD OCC)(4TH OCC ◁✻) PTT STUCK C
COM CIDS 1 + 2 FAULT........D
COM HF 1(2) DATA FAULT ◁✻ ....E
COM RMP 1(2)(3) FAULT........F
COM RMP 1+2(1+3)(2+3) FAULT........G
COM RMP 1+2+3 FAULT........H
COM RMP 1(2)(3) OFF........I
COM SATCOM DATA FAULT ◁✻ ....J
COM SATCOM FAULT ◁✻ ....K
COM SINGLE PTT STUCK ◁✻ L
COM VHF 1(2)(3) /HF 1(2) EMITTING ◁✻ ....M
COM VHF 3 DATA FAULT ◁✻ ....N

PRO-ABN-COND COND

[QRH] TOO HOT COCKPIT AND CABIN TEMPERATURE IN FLIGHT........A
COND FWD CAB/AFT CAB/CKPT DUCT OVHT........B
COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE........C
COND FWD CAB/AFT CAB/CKPT DUCT OVHT........D
COND FWD(AFT) CARGO DUCT OVHT ◁✻ ....E
COND FWD(AFT) CRG HEAT FAULT ◁✻ ....F
COND FWD(AFT) CRG ISOL VALVE ◁✻ ....G
COND HOT AIR FAULT........H
COND L+R CAB FAN FAULT........I
COND LAV + GALLEY FAN FAULT........J
COND TRIM AIR SYS FAULT........K
COND ZONE REGUL FAULT (PRIMARY CHANNEL FAILED)........L
COND ZONE REGUL FAULT (PRIMARY AND SECONDARY CHANNELS FAILED)........M

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PRO-ABN-CONFIG CONFIG

■ CONFIG L(R) SIDESTICK FAULT (BY TAKE OVER) ■ .... A
■ CONFIG PARK BRK ON ■ .... B
■ CONFIG PITCH TRIM NOT IN T.O RANGE ■ C
■ CONFIG RUD TRIM NOT IN T.O RANGE ■ .... D
■ CONFIG SLATS (FLAPS) NOT IN T.O CONFIG ■ .... E
■ CONFIG SPD BRK NOT RETRACTED ■ .... F

PRO-ABN-DATALINK DATALINK

DATALINK ATC FAULT .... A
DATALINK ATSU FAULT .... B
DATALINK COMPANY FAULT C

PRO-ABN-DOOR DOOR

[QRH] COCKPIT DOOR FAULT .... A
DOOR L(R)(FWD)(AFT) AVIONICS (IN FLIGHT) .... B
DOOR L(R)(FWD)(AFT) AVIONICS (ON GROUND) C
DOOR L(R) FWD(AFT) CABIN (IN FLIGHT) .... D
DOOR L(R) FWD(AFT) CABIN (ON GROUND) .... E
DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT) .... F
DOOR L(R) EMER EXIT (IN FLIGHT) .... G
DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT) .... H
DOOR L(R) AFT EMER EXIT (IN FLIGHT) I
DOOR L(R) FWD(AFT) EMER EXIT (ON GROUND) .... J
DOOR L(R) EMER EXIT (ON GROUND) .... K
DOOR L(R) AFT EMER EXIT (ON GROUND) L
DOOR L(R) OVERWNG EXIT (IN FLIGHT) .... M
DOOR L(R) OVERWNG EXIT (ON GROUND) .... N
DOOR L(R) OVERWNG FAULT .... O
DOOR FWD(AFT)(BULK) CARGO (IN FLIGHT) .... P
DOOR FWD(AFT)(BULK) CARGO (ON GROUND) .... Q

PRO-ABN-EIS EIS

[QRH] Display Unit Failure .... A
EIS DMC 1(2)(3) FAULT .... B
EIS DMC/FWC COM FAULT C

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PRO-ABN-ELEC ELEC

[QRH] C/B Tripped.......... A
[QRH] ELEC EMER CONFIG SYS REMAINING.......... B
ELEC AC BUS 1 FAULT.......... C
ELEC AC BUS 2 FAULT.......... D
ELEC AC ESS BUS ALTN.......... E
ELEC AC ESS BUS FAULT.......... F
ELEC AC ESS BUS SHED.......... G
ELEC APU GEN FAULT.......... H
ELEC BAT 1(2) FAULT.......... I
ELEC BAT 1(2) OFF.......... J
ELEC BCL 1(2) FAULT.......... K
ELEC DC BAT BUS FAULT.......... L
ELEC DC BUS 1 FAULT.......... M
ELEC DC BUS 2 FAULT.......... N
ELEC DC BUS 1+2 FAULT.......... O
ELEC DC EMER CONFIG.......... P
ELEC DC ESS BUS FAULT.......... Q
ELEC DC ESS BUS SHED.......... R
■ ELEC EMER CONFIG ■.......... S
ELEC EMER GEN 1 LINE OFF.......... T
■ ELEC ESS BUSES ON BAT ■.......... U
ELEC GEN 1(2) or APU GEN OVERLOAD.......... V
ELEC GEN 1(2) FAULT.......... W
ELEC GEN 1(2) OFF.......... X
ELEC IDG 1(2) DISCONNECTED.......... Y
ELEC IDG 1(2) FILTER CLOG.......... Z
ELEC IDG 1(2) OIL LO LVL.......... AA
ELEC IDG 1(2) OIL LO PR/OVHT.......... AB
ELEC STATIC INV FAULT.......... AC
ELEC TR 1(2) FAULT.......... AD

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PRO-ABN-ENG ENG

[QRH] ENG RELIGHT IN FLIGHT.......... A
■ [QRH] ALL ENG FAIL ■.......... B
■ [QRH] ENG DUAL FAILURE - FUEL REMAINING ■.......... C
■ [QRH] ENG DUAL FAILURE - NO FUEL REMAINING ■.......... D
[QRH] ENG 1(2) STALL.......... E
[QRH] ENGINE TAILPIPE FIRE.......... F
[QRH] HIGH ENGINE VIBRATION.......... G
[QRH] On Ground - Non ENG Shutdown after ENG Master OFF.......... H
[QRH] One Engine Inoperative - Circling Approach.......... I
[QRH] One Engine Inoperative - Straight-In Approach.......... J
■ ENG ALL ENGINES FAILURE ■.......... K
ENG FUEL CONTAMINATED.......... L
ENG 1(2) A/C FADEC SUPPLY.......... M
ENG 1(2) AIR EXCHGR FAULT.......... N
ENG 1(2) AIR MINOR FAULT.......... O
ENG 1(2) AIR SYS FAULT.......... P
ENG 1(2) AIR VALVE.......... Q
ENG 1(2) BEARING 4 OIL SYS.......... R
ENG 1(2) BLEED STATUS FAULT (IN FLIGHT).......... S
ENG 1(2) BLEED STATUS FAULT (ON GROUND).......... T
ENG 1(2) BOWED ROTOR PROTECTION FAULT.......... U
ENG 1(2) COLD FUEL.......... V
ENG 1+2 COMPRESSOR VANE.......... W
ENG COMPRESSOR VANE.......... X
ENG 1(2) COMPRESSOR VANE.......... Y
ENG 1(2) CTL SYS FAULT.......... Z
ENG 1(2) CTL VALVE FAULT.......... AA
ENG DUAL COOLING NOT AVAIL.......... AB
■ ENG DUAL FAILURE ■.......... AC
ENG 1(2) EGT EXCEEDED DURING AIR START.......... AD
ENG 1(2) EIU FAULT.......... AE
ENG 1(2) EPR MODE FAULT.......... AF
ENG 1(2) FADEC A(B) FAULT.......... AG
ENG 1(2) FADEC ALTERNATOR.......... AH
ENG 1(2) FADEC FAULT.......... AI
ENG 1(2) FADEC HI TEMP.......... AJ

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ENG 1(2) FADEC IDENT FAULT.......AK
ENG 1(2) FADEC OVHT.......AL
ENG 1(2) FADEC PLUG FAULT.......AM
2 ENG 1(2) FADEC SYS FAULT.......AN
ENG 1(2) FAN COWL NOT CLSD.......AO
ENG 1(2) FAIL.......AP
■ ENG 1(2) FIRE (IN FLIGHT) ■.......AQ
■ ENG 1(2) FIRE (ON GROUND) ■.......AR
ENG 1(2) FIRE DET FAULT.......AS
ENG 1(2) FIRE LOOP A(B) FAULT.......AT
ENG 1(2) FUEL CTL FAULT.......AU
ENG 1(2) FUEL FILTER CLOG.......AV
ENG 1(2) FUEL FILTER - PARTLY CLOGGED.......AW
ENG 1+2 FUEL FILTER CLOG.......AX
ENG 1(2) FUEL FILTER DEGRAD.......AY
ENG 1(2) FUEL HEAT SYS.......AZ
ENG 1(2) FUEL LEAK.......BA
ENG 1(2) FUEL RETURN VALVE.......BB
ENG 1(2) FUEL SENSOR FAULT.......BC
ENG 1(2) FUEL VALVE FAULT.......BD
ENG GA SOFT FAULT.......BE
ENG 1(2) HEAT EXCHGR CLOG.......BF
ENG 1+2 HEAT EXCHGR CLOG.......BG
ENG 1(2) HEAT SYS DEGRADED.......BH
ENG 1(2) HEAT SYS FAULT.......BI
ENG 1(2) HIGH VIBRATION.......BJ
ENG 1(2) HOT AIR DET FAULT.......BK
ENG 1(2) HOT AIR LEAK.......BL
ENG 1(2) HOT FUEL.......BM
ENG 1(2) HP FUEL VALVE.......BN
3 ENG 1(2) IGN FAULT (IGN A or B Fault).......BO
4 ENG 1(2) IGN FAULT (IGN A+B FAULT).......BP
ENG 1(2) LO START AIR PRESS.......BQ
ENG 1(2) LOW N1 (On Ground).......BR
ENG 1(2) MINOR FAULT.......BS
ENG 1(2) EPR or N1 or N2 or EGT or FF DISCREPANCY.......BT
ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY.......BU

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ENG 1(2) N1/N2/EGT OVER LIMIT....BV
ENG 1(2) OIL CHIP DETECTED....BW
ENG 1(2) OIL FILTER CLOG....BX
ENG 1(2) OIL FILTER - PARTLY CLOGGED....BY
ENG 1(2) OIL FILTER DEGRAD....BZ
ENG 1(2) OIL HI TEMP....CA
■ ENG 1(2) OIL LO PR ■....CB
ENG 1(2) OIL LO PR....CC
ENG 1(2) OIL LO TEMP....CD
ENG 1(2) OIL SENSOR FAULT....CE
ENG 1(2) OIL SYS FAULT....CF
ENG 1(2) ONE TLA FAULT....CG
ENG 1(2) OVSPD PROT FAULT....CH
ENG 1(2) OVTHR PROT FAULT....CI
ENG 1(2) PROBES FAULT....CJ
ENG 1(2) REV INHIBITED....CK
ENG 1(2) REV ISOL FAULT....CL
ENG 1(2) REV LOCKED (on Ground)....CM
ENG 1(2) REV MINOR FAULT....CN
ENG 1(2) REV PRESSURIZED....CO
ENG REV SET....CP
ENG 1(2) REV SWITCH FAULT....CQ
ENG 1(2) REVERSE UNLOCKED....CR
ENG 1(2) REVERSER CTL FAULT....CS
ENG 1(2) REVERSER FAULT....CT
ENG SAT ABOVE FLEX TEMP....CU
ENG 1(2) SENSOR FAULT....CV
ENG 1(2) SENSOR FAULT - FWSPAGE....CW
ENG 1(2) SENSOR FAULT....CX
ENG 1(2) SHUT DOWN....CY
ENG 1(2) STALL....CZ
ENG 1(2) START FAULT....DA
ENG 1(2) START VALVE FAULT....DB
ENG 1(2) SYSTEM FAULT....DC
■ ENG 1(2) THR LEVER ABV IDLE ■....DD
ENG 1(2) THR LEVER DISAGREE....DE
ENG 1(2) THR LEVER FAULT....DF

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ENG T.O. THRUST DISAGREE.......DG
ENG 1(2) TURB COOL FAULT.......DH
ENG THR LEVERS NOT SET.......DI
ENG THR LEVERS NOT SET (ON GROUND) ....DJ
ENG THR LEVERS NOT SET (AT GO-AROUND).......DK
ENG THRUST LOCKED.......DL
ENG TYPE DISAGREE.......DM
ENG VIB SYS FAULT.......DN

PRO-ABN-F_CTL F/CTL

[QRH] Landing with Slats or Flaps Jammed.......A
[QRH] RUDDER JAM.......B
[QRH] STABILIZER JAM.......C
F/CTL AIL SERVO FAULT.......D
F/CTL ALTN LAW.......E
F/CTL DIRECT LAW.......F
F/CTL ELAC 1(2) FAULT (ONE COMPUTER FAILED).......G
F/CTL ELAC 1(2) FAULT (BOTH COMPUTERS FAILED).......H
F/CTL ELAC 1(2) PITCH FAULT (ONE COMPUTER FAILED).......I
F/CTL ELAC 1(2) PITCH FAULT (BOTH COMPUTER FAILED).......J
F/CTL ELAC PITCH FAULT ....K
F/CTL ELEV REDUND DEGRDD L
F/CTL ELEV SERVO FAULT.......M
F/CTL FCDC 1(2) FAULT.......N
F/CTL FCDC 1+2 FAULT.......O
F/CTL FLAP ATTACH SENSOR.......P
F/CTL FLAPS FAULT/LOCKED.......Q
[redacted] F/CTL FLAP LVR NOT ZERO [redacted].......R
F/CTL FLAP SYS 1(2) FAULT.......S
F/CTL FLAP/MCDU DISAGREE.......T
F/CTL FLAPS/SLATS FAULT/LOCKED.......U
F/CTL GND SPLR 5 FAULT.......V
F/CTL GND SPLR / 1+2 / 3+4 / FAULT.......W
F/CTL GND SPLR NOT ARMED.......X
F/CTL L(R) AIL FAULT.......Y
F/CTL L(R) ELEV FAULT.......Z
[redacted] F/CTL L+R ELEV FAULT [redacted].......AA

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F/CTL L(R) SIDESTICK FAULT....AB
F/CTL PITCH TRIM/MCDU/CG DISAGREE....AC
F/CTL SEC 1(2)(3) FAULT....AD
F/CTL SIDESTICK PRIORITY....AE
F/CTL SLAT(FLAP) TIP BRK FAULT....AF
F/CTL SLATS AND FLAPS FAULT IN CONF 0....AG
F/CTL SLATS FAULT/LOCKED....AH
F/CTL SLAT SYS 1(2) FAULT....AI
F/CTL SPD BRK 2 (3+4) FAULT....AJ
F/CTL SPD BRK DISAGREE (SURFACES 3+4 AFFECTED)....AK
F/CTL SPD BRK DISAGREE (SURFACES 2+3+4 AFFECTED)....AL
F/CTL SPD BRK FAULT....AM
F/CTL SPD BRK STILL OUT....AN
F/CTL SPLR FAULT....AO
F/CTL STABILIZER JAM....AP

5 PRO-ABN-FUEL FUEL

[QRH] ACT SYSTEM FAULT....A
[QRH] ACT XFR FAULT....B
[QRH] FUEL IMBALANCE....C
[QRH] FUEL LEAK....D
[QRH] FUEL OVERREAD....E
[QRH] FWD ACT ISOLATED....F
[QRH] GRAVITY FUEL FEEDING....G
FUEL ACT PUMP LO PR....H
FUEL ACT SYSTEM FAULT....I
FUEL ACT XFR FAULT ◁ ....J
FUEL ACT PUMP LO PR ◁ ....K
FUEL APU LP VALVE FAULT....L
FUEL AUTO FEED FAULT....M
FUEL AUTO TRANSFER FAULT....N
6 FUEL CTR L(R) XFR FAULT....O
FUEL CTR L + R XFR FAULT (VALVES NOT FULLY CLOSED)....P
FUEL CTR L + R XFR FAULT (VALVES NOT FULLY OPEN)....Q
FUEL CTR TK PUMP 1(2) LO PR....R
FUEL CTR TK PUMPS LO PR....S
FUEL CTR TK PUMPS OFF....T

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FUEL CTR TK XFR OFF.......U
FUEL ENG 1(2) LP VALVE FAULT.......V
FUEL ENG 1(2) LP VALVE OPEN.......W
FUEL F. USED/FOB DISAGREE.......X
FUEL FQI CH 1(2) FAULT.......Y
FUEL FQI CH 1+2 FAULT.......Z
FUEL FWD ACT ISOLATED.......AA
FUEL FWD ACT LINE FAULT.......AB
FUEL IDG 1(2) COOL FAULT.......AC
FUEL FUEL INERTING SYS FAULT.......AD
FUEL L (R) OUTER (INNER) TK HI TEMP.......AE
FUEL L (R) OUTER (INNER) TK LO TEMP.......AF
FUEL L (R) OUTER XFR CLOSED.......AG
FUEL L (R) OUTER XFR OPEN.......AH
FUEL L (R) TK PUMP 1(2) LO PR.......AI
FUEL L (R) TK PUMP 1 + 2 LO PR.......AJ
FUEL L (R) TK PUMP 1 + 2 LO PR (CENTER TANK EMPTY).......AK
FUEL L (R) TK PUMP 1 + 2 LO PR (CENTER TANK NOT EMPTY).......AL
FUEL L (R) WING TK HI TEMP.......AM
FUEL L (R) WING TK LO LVL.......AN
FUEL L + R WING TK LO LVL.......AO
FUEL L (R) WING TK LO TEMP.......AP
FUEL L (R) WING TK OVERFLOW.......AQ
FUEL L (R) XFR VALVE CLOSED.......AR
FUEL L (R) XFR VALVE OPEN.......AS
FUEL LO LVL DET FAULT.......AT
FUEL X FEED VALVE FAULT.......AU

PRO-ABN-FWS FWS

FWS AUDIO DEGRADED.......A
FWS AUDIO REDUND LOST ON FWC 1(2).......B
FWS FWC 1 + 2 FAULT.......C
FWS FWC 1(2) FAULT.......D
FWS OEB/FWC DISCREPANCY.......E
FWS SDAC 1 + 2 FAULT.......F
FWS SDAC 1(2) FAULT.......G
FWS SLAT (FLAP) SYNCHRO FAULT.......H

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PRO-ABN-HYD HYD

HYD B ELEC PUMP LO PR or OVHT.......A
HYD B RSVR LO AIR PR.......B
HYD B RSVR LO LVL.......C
HYD B RSVR OVHT.......D
HYD G ENG 1 PUMP LO PR (PTU OPERATIVE).......E
HYD G ENG 1 PUMP LO PR (PTU INOPERATIVE).......F
HYD G RSVR LO AIR PR.......G
HYD G RSVR LO LVL.......H
HYD G RSVR OVHT.......I
HYD Y ELEC PUMP LO PR or OVHT.......J
HYD Y ENG 2 PUMP LO PR (PTU OPERATIVE).......K
HYD Y ENG 2 PUMP LO PR (PTU INOPERATIVE).......L
HYD Y RSVR LO AIR PR.......M
HYD Y RSVR LO LVL.......N
HYD Y RSVR OVHT.......O
[redacted] HYD B+Y SYS LO PR [redacted].......P
[redacted] HYD G+B SYS LO PR [redacted].......Q
[redacted] HYD G+Y SYS LO PR [redacted].......R
HYD PTU FAULT.......S
HYD RAT FAULT.......T

PRO-ABN-LG L/G

[QRH] Landing with Abnormal L/G.......A
[QRH] Landing with Abnormal L/G - Preparation.......B
[QRH] L/G GRAVITY EXTENSION.......C
L/G DOORS NOT CLOSED.......D
[redacted] L/G GEAR NOT DOWN [redacted].......E
[redacted] L/G GEAR NOT DOWNLOCKED [redacted].......F
L/G GEAR NOT UPLOCKED.......G

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L/G GEAR UPLOCK FAULT........H
L/G LGCIU 1(2) FAULT........I
L/G LGCIU 1+2 FAULT........J
L/G LGCIU 1(2) FAULT (TWO LGCIUS FAULTY)........K
L/G LGCIU 1+2 FAULT........L
L/G SHOCK ABSORBER FAULT (SHOCK ABSORBER EXTENDED ON GROUND)........M
L/G SHOCK ABSORBER FAULT (SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)........N
L/G SYS DISAGREE........O

PRO-ABN-MISC MISC

■ [MEM] EMER DESCENT ■........A
■ [MEM] Stall Recovery ■........B
■ [MEM] Stall Warning At Liftoff ■........C
[QRH] BOMB ON BOARD........D
[QRH] COCKPIT WINDSHIELD / WINDOW ARCING........E
[QRH] COCKPIT WINDSHIELD / WINDOW CRACKED........F
■ [QRH] DITCHING ■........G
■ [QRH] EMER EVAC ■........H
■ [QRH] EMER LANDING ALL ENG FAILURE ■........I
■ [QRH] FORCED LANDING ■........J
[QRH] Overweight Landing........K
[QRH] Severe Turbulence........L
[QRH] TAILSTRIKE........M
[QRH] VOLCANIC ASH ENCOUNTER........N

PRO-ABN-NAV NAV

7 [MEM] Unreliable Speed Indication........A
[QRH] ADR 1+2+3 FAULT........B
[QRH] ADR CHECK PROC........C
■ [QRH] ALL ADR OFF ■........D
[QRH] IR Alignment in ATT Mode........E
NAV AIR SPD STS CHANGED........F
NAV ADR 1(2)(3) FAULT........G
NAV ADR 1+2(1+3)(2+3) FAULT........H
■ NAV ADR 1+2+3 FAULT ■........I
NAV ADR ALT DISAGREE........J
NAV ADR DISAGREE........K
NAV ADS-B RPTG 1(2) FAULT........L

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■ NAV ALL SPD UNCERTAIN ■ .... M
NAV ALT DISCREPANCY .... N
NAV ALTI DISCREPANCY .... O
NAV AOA DISAGREE .... P
NAV CAPT(F/O)(STBY) AOA FAULT .... Q
NAV ATC/XPDR 1(2) FAULT .... R
NAV ATC/XPDR 1+2 FAULT .... S
NAV ATC/XPDR 2 CTL FAULT .... T
NAV ATC/XPDR STBY .... U
NAV ATT DISCREPANCY V
NAV BARO REF DISCREPANCY .... W
NAV BARO VALUE DISAGREE X
NAV BKUP SPD/ALT ON CAPT(F/O) PFD .... Y
NAV BKUP SPD/ALT ON CAPT+F/O PFD .... Z
NAV BKUP SPD FAULT .... AA
NAV BKUP SPD UNCERTAIN .... AB
NAV FLS 1(2)(1+2) FAULT .... AC
NAV FM/GPS POS DISAGREE ◁ .... AD
NAV GLS 1(2)(1+2) FAULT .... AE
NAV GPS 1(2) FAULT ◁ .... AF
NAV GPWS FAULT .... AG
NAV GPWS TERR DET FAULT .... AH
NAV HDG DISCREPANCY .... AI
NAV IAS DISCREPANCY .... AJ
NAV ILS 1(2)(1+2) FAULT .... AK
NAV IR 1(2)(3) FAULT .... AL
NAV IR 1+2(1+3)(2+3) FAULT .... AM
NAV IR DISAGREE .... AN
NAV IR NOT ALIGNED .... AO
NAV LS 1(2)(1+2) FAULT .... AP
NAV LS TUNING DISAGREE .... AQ
NAV PRED W/S DET FAULT ◁ .... AR
NAV RA 1 AND 2 FAULT (DUAL RA FAILURE) .... AS

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NAV RA 1(2) FAULT....AT
NAV RA DEGRADED....AU
NAV TCAS FAULT ◁ ....AV
NAV TCAS ◁ FAULT....AW
NAV TCAS STBY....AX
NAV L(R) CAPT(F/O) STATIC FAULT....AY
[redacted] Stall Warning [redacted]....AZ
[redacted] STALL WARNING [redacted]....BA

PRO-ABN-OVERSPEED OVERSPEED

[redacted] OVERSPEED [redacted]....A

PRO-ABN-RECORDER RECORDER

RECORDER CVR FAULT- ANNUNCIATION....A
RECORDER DFDR FAULT....B
RECORDER FDR FAULT....C
RECORDER SYS FAULT....D
RECORDER FDIU FAULT....E

PRO-ABN-SEVERE_ICE SEVERE ICE

SEVERE ICE DETECTED....A

PRO-ABN-SMOKE SMOKE

[redacted] [QRH] SMOKE / FUMES / AVNCS SMOKE [redacted]....A
[redacted] SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE [redacted]....B
[redacted] [QRH] SMOKE / FUMES / AVNCS SMOKE [redacted]....C
[redacted] [QRH] REMOVAL OF SMOKE / FUMES [redacted]....D
[QRH] SMOKE / FIRE FROM LITHIUM BATTERY....E
[redacted] SMOKE AFT CARGO SMOKE ◁ [redacted]....F
SMOKE AFT CRG DET FAULT ◁ ....G
SMOKE DISCH AGENT 2 ◁ ....H

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■ SMOKE FWD CARGO SMOKE ◁ ■ I
SMOKE FWD(AFT) CRG BTL 1(2) FAULT ◁ .... J
SMOKE FWD CRG DET FAULT ◁ .... K
SMOKE DET FAULT L
SMOKE LAV+CRG DET FAULT .... M
SMOKE LAVATORY DET FAULT .... N
SMOKE LAVATORY DET FAULT .... O
SMOKE LAVATORY DET FAULT .... P
■ SMOKE LAVATORY SMOKE ■ .... Q

PRO-ABN-SURV SURV

[MEM] EGPWS Cautions .... A
[MEM] GPWS Cautions .... B
■ [MEM] EGPWS Warnings ■ C
■ [MEM] GPWS Warnings ■ .... D
■ [MEM] EGPWS Warnings ■ .... E
[MEM] TCAS CAUTION - TRAFFIC ADVISORY .... F
■ [MEM] TCAS WARNING - RESOLUTION ADVISORY ■ .... G
■ [MEM] WINDSHEAR WARNING - REACTIVE WINDSHEAR ■ .... H
SURV ROW/ROP LOST I

PRO-ABN-T-O T.O

T.O SPEEDS NOT INSERTED .... A
T.O SPEEDS TOO LOW .... B
T.O V1/VR/V2 DISAGREE C

PRO-ABN-VENT VENT

VENT AVNCS SYS FAULT .... A
8 VENT BLOWER FAULT .... B
VENT EXTRACT FAULT C
VENT SKIN VALVE FAULT .... D

PRO-ABN-WHEEL WHEEL

[QRH] WHEEL TIRE DAMAGE SUSPECTED .... A
WHEEL HYD SEL FAULT .... B
WHEEL N/W STRG FAULT C
WHEEL TYRE LO PR ◁ .... D

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PRO-ABN-W_A_ICE WING A.ICE

WING A.ICE L(R) HI PR.....A
WING A.ICE L(R) VALVE OPEN (FAILURE DETECTED IN FLIGHT).....B
WING A.ICE L(R) VALVE OPEN (FAILURE DETECTED ON GROUND).....C
WING A.ICE L(R) WING LO PR.....D
WING A.ICE OPEN ON GND.....E
WING A.ICE SYS FAULT.....F

PRO-ABN-W_S WINDSHEAR

WINDSHEAR DET FAULT.....A

PRO-ABN-90 Detailed Cabin / Cockpit Evacuation Procedure

General.....A
Cockpit-Assigned Duties for Evacuation.....B
Cabin Crew-Assigned Areas for Evacuation.....C
Communications.....D
On Ground Evacuation.....E
Cockpit Evacuation through Window.....F
Evacuation on Water.....G

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Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
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PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC System Reset Table		1	Documentation update: Deletion of the "00012660.0001001 System Reset Table - ENG" documentary unit.
PRO-ABN-PLP-TOC ENG 1(2) FADEC SYS FAULT		2	Documentation update: Deletion of the "00015570.0011001 ENG 1(2) FADEC SYS FAULT" documentary unit.
PRO-ABN-PLP-TOC ENG 1(2) FADEC SYS FAULT		2	Documentation update: Deletion of the "00015570.0011001 ENG 1(2) FADEC SYS FAULT" documentary unit.
PRO-ABN-PLP-TOC ENG 1(2) IGN A(B) FAULT		3	Documentation update: The "ENG 1(2) IGN FAULT (IGN A or B Fault)" table of content entry renamed in "ENG 1(2) IGN A(B) FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A(B) FAULT		3	Documentation update: The "ENG 1(2) IGN FAULT (IGN A or B Fault)" table of content entry renamed in "ENG 1(2) IGN A(B) FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A(B) FAULT		3	Documentation update: The "ENG 1(2) IGN FAULT (IGN A or B Fault)" table of content entry renamed in "ENG 1(2) IGN A(B) FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A+B FAULT		4	Documentation update: The "ENG 1(2) IGN FAULT (IGN A+B Fault)" table of content entry renamed in "ENG 1(2) IGN A+B FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A+B FAULT		4	Documentation update: The "ENG 1(2) IGN FAULT (IGN A+B Fault)" table of content entry renamed in "ENG 1(2) IGN A+B FAULT"
PRO-ABN-PLP-TOC ENG 1(2) IGN A+B FAULT		4	Documentation update: The "ENG 1(2) IGN FAULT (IGN A+B Fault)" table of content entry renamed in "ENG 1(2) IGN A+B FAULT"
PRO-ABN-PLP-TOC FUEL		5	Documentation update: Deletion of the "NG01286 FUEL CTR L (R) XFR FAULT (Valve not Fully Open)" table of content entry. Documentation update: Deletion of the "00018050.0001001 FUEL CTR L(R) XFR FAULT (Valve not Fully OPEN)" documentary unit. Documentation update: Deletion of the "00018904.0001001 FUEL CTR L(R) XFR FAULT (Valve not Fully Open)" documentary unit. Documentation update: Deletion of the "00014906.0008001 FUEL CTR L (R) XFR FAULT - FWSPAGE (Valve not Fully Open)" documentary unit.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC FUEL CTR L(R) XFR FAULT		6	Documentation update: The "FUEL CTR L (R) XFR FAULT (Valve not Fully Closed)" table of content entry renamed in "FUEL CTR L(R) XFR FAULT"
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC [MEM] UNRELIABLE SPEED INDICATION		7	Documentation update: Deletion of the "00017726.0018001 Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.
PRO-ABN-PLP-TOC VENT BLOWER FAULT		8	Documentation update: Deletion of the "00010769.0005001 VENT BLOWER FAULT - FWSPAGE" documentary unit.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	24	Documentation update: Addition of "ECAM Advisory Conditions - FUEL" documentary unit
PRO-ABN-ABN-QRH [QRH] FUEL	A	5	Documentation update: Addition of "[QRH] FUEL" documentary unit
PRO-ABN-ABN-QRH [QRH] NAV	A	7	Documentation update: Addition of "[QRH] NAV" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	2	**Update of on ground procedure in order to indicate that C/B N11has to be pushed back.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	3	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	6	**Update of on ground procedure in order to indicate that C/B N11has to be pushed back.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	7	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	9	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	11	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	14	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	17	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	21	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	28	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	36	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - ENG	B	40	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	44	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	52	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - ENG	B	56	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	61	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	70	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - ENG	B	74	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	80	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET	B	87	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**

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Localization Title	Toc Index	ID	Reason
System Reset Table - COM - Frozen RMP			
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	95	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - ENG	B	99	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	104	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - ENG	B	109	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	113	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - ENG	B	117	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	123	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - ENG	B	128	Documentation update: Addition of "System Reset Table - ENG" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	136	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	148	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	162	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	176	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	191	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - RMP Malfunction	B	192	Documentation update: Addition of "System Reset Table - COM - RMP Malfunction" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	202	Documentation update: Addition of "System Reset Table - AUTO FLT" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - Frozen RMP	B	207	**Enhancement of the title of the system malfunction to clarify that reset procedure also apply to a blank RMP display.**
PRO-ABN-ABN-RESET System Reset Table - COM - RMP Malfunction	B	208	Documentation update: Addition of "System Reset Table - COM - RMP Malfunction" documentary unit
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	209	Documentation update: Addition of "System Reset Table - COM - FAP freezing" documentary unit
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	210	Documentation update: Addition of "System Reset Table - DATALINK" documentary unit
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	214	Documentation update: Addition of "System Reset Table - FUEL" documentary unit
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	216	Documentation update: Addition of "System Reset Table - SMOKE" documentary unit
PRO-ABN-APU APU FIRE DET FAULT	B	1	**Update of triggering conditions in order to clarify the fact that if both loops fail with more than 5 s between the failures, the fire detection function is considered inoperative.**
PRO-ABN-APU APU FIRE LOOP A(B) FAULT	C	2	**Addition of triggering condition.**
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT	E	3	Documentation update: Addition of "AUTO FLT FAC 1 + 2 FAULT" documentary unit
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	22	**Minor revision of the documentation structure. No technical change.** **A note is added to indicate where additional information about the alternate law can be found.** **Minor revision of the documentation structure. No technical**
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	23	**Minor revision of the documentation structure. No technical change.** **Minor revision of the documentation structure. No technical** **A note is added to indicate where additional information about the alternate law can be found.**
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	24	**A note is added to indicate where additional information about the alternate law can be found.** **Minor revision of the documentation structure. No technical change.**
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	25	**Minor revision of the documentation structure. No technical change.**

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Localization Title	Toc Index	ID	Reason
			A note is added to indicate where additional information about the alternate law can be found.
PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT - FWSPAGE	J	20	**Addition of the condition to display the INOP SYS "N/W STRG" in order to be in accordance with the ECAM.**
PRO-ABN-COM COM AMU PART FAULT	B	1	Documentation update: Addition of "COM AMU PART FAULT" documentary unit
PRO-ABN-COM COM AMU PART FAULT	B	2	Documentation update: Addition of "COM AMU PART FAULT" documentary unit
PRO-ABN-COM COM CAPT(F/O)(3RD OCC)(4TH OCC ◁) PTT STUCK	C	3	Documentation update: Addition of "COM CAPT(F/O)(3RD OCC)(4TH OCC (If Installed)) PTT STUCK" documentary unit
PRO-ABN-COM COM CAPT(F/O) (3RD OCC) (4TH OCC ◁) PTT STUCK	C	4	Documentation update: Addition of "COM CAPT(F/O) (3RD OCC) (4TH OCC (If Installed)) PTT STUCK" documentary unit
PRO-ABN-COM COM CAPT(F/O) (3RD OCC) (4TH OCC) PTT STUCK - FWSPAGE	C	5	Documentation update: Addition of "COM CAPT(F/O) (3RD OCC) (4TH OCC) PTT STUCK - FWSPAGE" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) FAULT	F	6	Documentation update: Addition of "COM RMP 1(2)(3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) FAULT	F	7	Documentation update: Addition of "COM RMP 1(2)(3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) FAULT - FWSPAGE	F	8	Documentation update: Addition of "COM RMP 1(2)(3) FAULT - FWSPAGE" documentary unit
PRO-ABN-COM COM RMP 1+2(1+3)(2+3) FAULT	G	9	Documentation update: Addition of "COM RMP 1+2(1+3)(2+3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2(1+3)(2+3) FAULT	G	10	Documentation update: Addition of "COM RMP 1+2(1+3)(2+3) FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2(1+3)(2+3)	G	11	Documentation update: Addition of "COM RMP 1+2(1+3)(2+3)" documentary unit
PRO-ABN-COM COM RMP 1+2+3 FAULT	H	12	Documentation update: Addition of "COM RMP 1+2+3 FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2+3 FAULT	H	13	Documentation update: Addition of "COM RMP 1+2+3 FAULT" documentary unit
PRO-ABN-COM COM RMP 1+2+3 FAULT - FWSPAGE	H	14	Documentation update: Addition of "COM RMP 1+2+3 FAULT - FWSPAGE" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) OFF	I	15	Documentation update: Addition of "COM RMP 1(2)(3) OFF" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-COM COM RMP 1(2)(3) OFF	I	16	Documentation update: Addition of "COM RMP 1(2)(3) OFF" documentary unit
PRO-ABN-COM COM RMP 1(2)(3) OFF - FWSPAGE	I	17	Documentation update: Addition of "COM RMP 1(2)(3) OFF - FWSPAGE" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (IN FLIGHT)	I	11	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (IN FLIGHT)	I	12	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT - FWSPage (IN FLIGHT)	I	13	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT - FWSPage (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (ON GROUND)	L	16	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) AFT EMER EXIT (ON GROUND)	L	17	Documentation update: Addition of "DOOR L(R) AFT EMER EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (IN FLIGHT)	M	18	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (IN FLIGHT)	M	19	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (IN FLIGHT)	M	20	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (In flight)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (ON GROUND)	N	21	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG EXIT (ON GROUND)	N	22	Documentation update: Addition of "DOOR L(R) OVERWNG EXIT (On ground)" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG FAULT	O	23	Documentation update: Addition of "DOOR L(R) OVERWNG FAULT" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG FAULT	O	24	Documentation update: Addition of "DOOR L(R) OVERWNG FAULT" documentary unit
PRO-ABN-DOOR DOOR L(R) OVERWNG FAULT - FWSPAGE	O	25	Documentation update: Addition of "DOOR L(R) OVERWNG FAULT - FWSPAGE" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	50	Documentation update: Addition of "[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS" documentary unit
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	56	Documentation update: Addition of "[QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS" documentary unit
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	62	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	63	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	65	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	67	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	70	**Relocation of TCAS from Other INOP SYS to the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC ESS BUS FAULT - FWSPAGE	F	79	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC ESS BUS FAULT - FWSPAGE	F	80	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC AC ESS BUS FAULT - FWSPAGE	F	81	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	90	Documentation update: Addition of "ELEC DC BAT BUS FAULT" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	93	**Addition of "CAB TEMP CKPT CTL ONLY" in the status information, for aircraft equipped with ACSC.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	94	**Addition of "CAB TEMP CKPT CTL ONLY" in the status information, for aircraft equipped with ACSC.** **Layout modification, no technical change.**

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	95	Documentation update: Addition of "ELEC DC BUS 1 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	96	Documentation update: Addition of "ELEC DC BUS 1 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	97	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	98	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	100	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	103	**Removal of ROW/ROP from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 2 FAULT	N	104	Documentation update: Addition of "ELEC DC BUS 2 FAULT" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	105	Documentation update: Addition of "ELEC DC BUS 2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT	N	106	Documentation update: Addition of "ELEC DC BUS 2 FAULT" documentary unit
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	107	Documentation update: Addition of "ELEC DC BUS 2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	109	**Addition of NORM BRK, move of AUTO BRK (from OTHER INOP SYS to INOP SYS), and removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	110	**Layout modification, no technical change.** **Removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.**
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	112	**Addition of NORM BRK, move of AUTO BRK (from OTHER INOP SYS to INOP SYS), and removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	114	**Addition of NORM BRK, move of AUTO BRK (from OTHER INOP SYS to INOP SYS), and removal of L+R CAB FAN from the INOP SYS to be consistent with the ECAM display.**
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE	O	118	Documentation update: Addition of "ELEC DC BUS 1+2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE	O	120	Documentation update: Addition of "ELEC DC BUS 1+2 FAULT - FWSPAGE" documentary unit
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	123	**Removal of GPWS from the INOP SYS to be consistent with the ECAM display.**
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	124	**Removal of GPWS from the INOP SYS to be consistent with the ECAM display.**
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	125	**Removal of GPWS from the INOP SYS to be consistent with the ECAM display.**
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	126	**Removal of GPWS from the INOP SYS to be consistent with the ECAM display.**
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	127	**Removal of GPWS from the INOP SYS to be consistent with the ECAM display.**
			Addition of an explanatory note to clarify the real landing capability of the aircraft.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	128	**Removal of GPWS from the INOP SYS to be consistent with the ECAM display.**
			Addition of an explanatory note to clarify the real landing capability of the aircraft.
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	129	**Removal of GPWS from the INOP SYS to be consistent with the ECAM display.**
			Layout modification, no technical change.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	130	**Removal of A/THR, ENG 2 START and REV 2 from the INOP SYS to be consistent with the ECAM display.**
			Removal of GPWS from the INOP SYS to be consistent with the ECAM display.
			Layout modification, no technical change.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	131	**Removal of A/THR, ENG 2 START and REV 2 from the INOP SYS to be consistent with the ECAM display.** **Removal of GPWS from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	133	**Removal of A/THR, ENG 2 START and REV 2 from the INOP SYS to be consistent with the ECAM display.** **Removal of GPWS from the INOP SYS to be consistent with the ECAM display.** **Layout modification, no technical change.**
PRO-ABN-ELEC ELEC DC ESS BUS FAULT	Q	135	Documentation update: Addition of "ELEC DC ESS BUS FAULT" documentary unit
PRO-ABN-ELEC ELEC DC ESS BUS FAULT - FWSPAGE	Q	136	Documentation update: Addition of "ELEC DC ESS BUS FAULT - FWSPAGE" documentary unit
PRO-ABN-ENG [QRH] One Engine Inoperative - Circling Approach	I	59	Documentation update: Addition of "[QRH] One Engine Inoperative - Circling Approach" documentary unit
PRO-ABN-ENG ENG 1(2) CTL VALVE FAULT	AA	102	Documentation update: Addition of "ENG 1(2) CTL VALVE FAULT" documentary unit
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	238	Documentation update: Addition of "ENG 1(2) SYSTEM FAULT" documentary unit
PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed	A	2	Documentation update: Addition of "[QRH] Landing with Slats or Flaps Jammed" documentary unit
PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED	U	33	Documentation update: Addition of "F/CTL FLAPS/SLATS FAULT/LOCKED" documentary unit
PRO-ABN-F_CTL F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE	AG	63	Documentation update: Addition of "F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE" documentary unit
PRO-ABN-FUEL [QRH] ACT SYSTEM FAULT	A	1	Documentation update: Addition of "[QRH] ACT SYSTEM FAULT" documentary unit
PRO-ABN-FUEL [QRH] ACT XFR FAULT	B	2	Documentation update: Addition of "[QRH] ACT XFR FAULT" documentary unit
PRO-ABN-FUEL [QRH] FWD ACT ISOLATED	F	6	Documentation update: Addition of "[QRH] FWD ACT ISOLATED" documentary unit
PRO-ABN-FUEL FUEL ACT PUMP LO PR	H	8	Documentation update: Addition of "FUEL ACT PUMP LO PR" documentary unit
PRO-ABN-FUEL FUEL ACT PUMP LO PR	H	9	Documentation update: Addition of "FUEL ACT PUMP LO PR" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-ABN-FUEL FUEL ACT PUMP LO PR - FWSPAGE	H	10	Documentation update: Addition of "FUEL ACT PUMP LO PR - FWSPAGE" documentary unit
PRO-ABN-FUEL FUEL ACT SYSTEM FAULT	I	11	Documentation update: Addition of "FUEL ACT SYSTEM FAULT" documentary unit
PRO-ABN-FUEL FUEL ACT SYSTEM FAULT	I	12	Documentation update: Addition of "FUEL ACT SYSTEM FAULT" documentary unit
PRO-ABN-FUEL FUEL ACT XFR FAULT ◁	J	15	Documentation update: Addition of "FUEL ACT XFR FAULT (If Installed)" documentary unit
PRO-ABN-FUEL FUEL FWD ACT ISOLATED	AA	39	Documentation update: Addition of "FUEL FWD ACT ISOLATED" documentary unit
PRO-ABN-FUEL FUEL FWD ACT ISOLATED	AA	40	Documentation update: Addition of "FUEL FWD ACT ISOLATED" documentary unit
PRO-ABN-FUEL FUEL FWD ACT LINE FAULT	AB	41	Documentation update: Addition of "FUEL FWD ACT LINE FAULT" documentary unit
PRO-ABN-FUEL FUEL FWD ACT LINE FAULT	AB	42	Documentation update: Addition of "FUEL FWD ACT LINE FAULT" documentary unit
PRO-ABN-FUEL FUEL L(R) WING TK OVERFLOW	AQ	82	Documentation update: Addition of "FUEL L(R) WING TK OVERFLOW" documentary unit
PRO-ABN-HYD HYD B+Y SYS LO PR - FWSPAGE	P	63	Documentation update: Addition of "HYD B+Y SYS LO PR - FWSPAGE" documentary unit
PRO-ABN-MISC Thrust and Airspeed	L	6	Documentation update: Addition of "Thrust and Airspeed" documentary unit
PRO-ABN-MISC Thrust Setting (N1) for Recommended Speed	L	8	Documentation update: Addition of "Thrust Setting (N1) for Recommended Speed" documentary unit
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	1	Documentation update: Addition of "Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	2	Documentation update: Addition of "Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit
PRO-ABN-NAV UNRELIABLE SPEED INDICATION	A	7	Documentation update: Addition of "UNRELIABLE SPEED INDICATION" documentary unit
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	8	Documentation update: Addition of "Unreliable Speed Indication - Pitch/Thrust Tables" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	56	Documentation update: Addition of "NAV ATC/XPDR 1+2 FAULT" documentary unit
PRO-ABN-NAV	S	58	Documentation update: Addition of "NAV ATC/XPDR 1+2 FAULT - FWSPAGE" documentary unit

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Localization Title	Toc Index	ID	Reason
NAV ATC/XPDR 1+2 FAULT - FWSPAGE			
PRO-ABN-NAV NAV ATC/XPDR 2 CTL FAULT	T	59	Documentation update: Addition of "NAV ATC/XPDR 2 CTL FAULT" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 2 CTL FAULT	T	60	Documentation update: Addition of "NAV ATC/XPDR 2 CTL FAULT" documentary unit
PRO-ABN-NAV NAV ATC/XPDR 2 CTL FAULT - FWSPAGE	T	61	Documentation update: Addition of "NAV ATC/XPDR 2 CTL FAULT - FWSPAGE" documentary unit
PRO-ABN-NAV NAV FLS 1(2)(1+2) FAULT	AC	79	Documentation update: Addition of "NAV FLS 1(2)(1+2) FAULT" documentary unit
PRO-ABN-NAV NAV FLS 1(2)(1+2) FAULT	AC	80	Documentation update: Addition of "NAV FLS 1(2)(1+2) FAULT" documentary unit
PRO-ABN-NAV NAV FLS 1(2)(1+2) FAULT - FWSPAGE	AC	81	Documentation update: Addition of "NAV FLS 1(2)(1+2) FAULT - FWSPAGE" documentary unit
PRO-ABN-OVERSPEED OVERSPEED	A	2	Documentation update: Addition of "OVERSPEED" documentary unit
PRO-ABN-VENT VENT BLOWER FAULT - FWSPAGE	B	2	Documentation update: Addition of "VENT BLOWER FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT BLOWER FAULT - FWSPAGE	B	4	Documentation update: Addition of "VENT BLOWER FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT BLOWER FAULT	B	5	Documentation update: Addition of "VENT BLOWER FAULT" documentary unit
PRO-ABN-VENT VENT BLOWER FAULT - FWSPAGE	B	6	Documentation update: Addition of "VENT BLOWER FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT EXTRACT FAULT - FWSPAGE	C	8	Documentation update: Addition of "VENT EXTRACT FAULT - FWSPAGE" documentary unit
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	16	Documentation update: Addition of "VENT SKIN VALVE FAULT" documentary unit
PRO-ABN-90 Cabin Crew-Assigned Areas for Evacuation	C	1	Documentation update: Addition of "Cabin Crew-Assigned Areas for Evacuation" documentary unit

PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - ENG	A	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - FUEL	A	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - OXY	A	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - APU	A	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - CAB PR	A	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-ADV ECAM Advisory Conditions - ENG	A	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-ADV ECAM Advisory Conditions - OXY	A	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] AIR	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] BRAKES	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] DOOR	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] ENG	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-QRH [QRH] FUEL	A	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-QRH [QRH] NAV	A	8	Effectivity update: The information no longer applies to MSN 08635, 10949, 11139.
PRO-ABN-ABN-QRH [QRH] SMOKE	A	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000,

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			04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000,

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PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	15	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	18	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000,

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			04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	23	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	30	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET	B	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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System Reset Table - COM - FAP freezing			
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	38	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	46	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101,

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PRO-ABN-ABN-RESET System Reset Table - ELEC	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	54	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

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PRO-ABN-ABN-RESET System Reset Table - ELEC	B	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	63	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	72	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	82	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	89	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773,

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			04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	97	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139,

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			11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	98	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	100	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	101	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	102	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	106	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - DOOR	B	107	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - NAV	B	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	112	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	114	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	115	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	116	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	118	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	119	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	120	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	121	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET	B	122	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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System Reset Table - COM - EVAC Horn			
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	124	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	125	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - DOOR	B	126	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	127	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	129	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	130	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	131	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	132	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	133	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	134	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	135	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	137	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	138	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	139	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	140	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	141	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	142	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	143	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	144	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	145	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET	B	146	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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System Reset Table - COM - CIDS Fault			
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	147	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	149	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	150	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	151	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	152	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	153	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	154	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	155	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	156	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	157	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	158	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	159	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	160	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	161	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	163	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	164	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	165	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	166	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	167	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	168	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	169	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	170	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	171	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - BRAKES	B	172	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	173	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	174	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	175	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	177	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	178	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	179	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ABN-RESET System Reset Table - ENG	B	180	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	181	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	182	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	183	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	184	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	185	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AUTO FLT	B	186	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - BRAKES	B	187	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	188	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	189	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	190	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP freezing	B	193	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DATALINK	B	194	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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			06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	195	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	196	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - FUEL	B	197	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	198	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - SMOKE	B	199	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - A-ICE	B	200	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - AIR	B	201	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - BRAKES	B	203	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - CIDS Fault	B	204	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - EVAC Horn	B	205	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - COM - FAP Emergency Exits	B	206	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - DOOR	B	211	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ABN-RESET System Reset Table - ELEC	B	212	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - ENG	B	213	Effectivity update: The information now also applies to MSN 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ABN-RESET System Reset Table - NAV	B	215	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ALL PITOT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-A-ICE ANTI ICE ALL PITOT - FWSPAGE	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O AOA	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O AOA	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O AOA - FWSPAGE	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O PITOT	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + F/O PITOT - FWSPAGE	E	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY AOA	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY AOA	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY AOA - FWSPAGE	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY PITOT	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT + STBY PITOT - FWSPAGE	G	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT PITOT	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT L(R) STAT	I	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT AOA - FWSPAGE	J	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT AOA	J	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT AOA - FWSPAGE	J	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE CAPT PROBES	K	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE DETECT FAULT	L	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-A-ICE ANTI ICE DETECT FAULT	L	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE DETECT FAULT - FWSPAGE	L	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)	M	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE VALVE OPEN)	M	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)	N	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT (ENG 1(2) A.ICE MON FAULT)	N	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) CTL FAULT - FWSPAGE (ENG 1(2) A.ICE MON FAULT)	N	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) OVER PRESS	O	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) OVER PRESS	O	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) VALVE CLSD	P	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ENG 1(2) VALVE OPEN	Q	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY AOA	R	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY AOA	R	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY AOA - FWSPAGE	R	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY PITOT	S	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O + STBY PITOT - FWSPAGE	S	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-A-ICE ANTI ICE F/O PITOT or L(R) STAT or AOA	T	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE F/O PROBES	U	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ICE DETECTED	V	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE ICE DETECTED	V	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE STBY PITOT or L(R) STAT or AOA	Z	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-A-ICE ANTI ICE STBY PROBES	AA	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR [QRH] BLEED 1+2 FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU BLEED LEAK APU LEAK FED BY ENG	E	2	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU BLEED LEAK APU LEAK FED BY ENG	E	3	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU BLEED LEAK - FWSPAGE APU LEAK FED BY ENG	E	4	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU LEAK DET FAULT	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU LEAK DET FAULT	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR APU LEAK DET FAULT - FWSPAGE	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR BLEED LEAK	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR BLEED LEAK	H	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR BLEED LEAK	H	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR COND CTL 1(2) - A(B) FAULT	I	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-AIR AIR COND CTL 1(2) - A(B) FAULT	I	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR COND CTL 1(2) - A(B) FAULT - FWSPAGE	I	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED ABNORM PR	J	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED ABNORM PR - FWSPAGE	J	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	16	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	17	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	18	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	19	Effectivity update: The information no longer applies to MSN 03229, 03565, 07081.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	20	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	21	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE	K	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	23	Effectivity update: The information now also applies to MSN 03229, 03565, 07081, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT	K	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE	K	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR	L	27	Effectivity update: The information now also applies to MSN 11531.

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AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED			
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED	L	29	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED	L	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT BLEED NOT CLOSED	L	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED FAULT - FWSPAGE BLEED NOT CLOSED	L	37	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT	M	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE	M	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK	N	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK	N	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE LEFT LEAK	N	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT RIGHT LEAK	O	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT RIGHT LEAK	O	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE RIGHT LEAK	O	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK AND RIGHT LEAK	P	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT LEFT LEAK RIGHT LEAK	P	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1+2 BLEED FAULT - FWSPAGE LEFT LEAK RIGHT LEAK	P	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LO TEMP (OPPOSITE BLEED NOT AVAILABLE)	R	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (OPPOSITE BLEED NOT AVAILABLE)	R	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR	R	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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AIR ENG 1(2) BLEED LO TEMP - FWSPAGE (OPPOSITE BLEED NOT AVAILABLE)			
PRO-ABN-AIR AIR ENG 1+2 BLEED LO TEMP	S	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1 + 2 BLEED LO TEMP - FWSPAGE	S	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1 + 2 BLEED LO TEMP - FWSPAGE	S	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP - FWSPAGE	T	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP	T	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP - FWSPAGE	T	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP	T	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP	T	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED HI TEMP - FWSPAGE	T	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK - FWSPAGE	U	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK - FWSPAGE	U	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK - FWSPAGE	U	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK	U	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED LEAK - FWSPAGE	U	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) BLEED NOT CLSD - FWSPAGE	V	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT	X	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT - FWSPAGE	X	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT	X	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT	X	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR ENG 1(2) LEAK DET FAULT - FWSPAGE	X	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	78	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK - FWSPAGE	Z	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-AIR AIR L(R) WING LEAK	Z	80	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	81	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK - FWSPAGE	Z	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	83	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593,

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			01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-AIR AIR L(R) WING LEAK	Z	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR L(R) WING LEAK - FWSPAGE	Z	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) FAULT	AB	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) FAULT - FWSPAGE	AB	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1+2 FAULT	AC	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1 + 2 FAULT - FWSPAGE	AC	89	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1+2 FAULT	AC	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1+2 FAULT	AC	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1 + 2 FAULT	AC	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1 + 2 FAULT - FWSPAGE	AC	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) OVHT	AE	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) REGUL FAULT	AF	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-AIR AIR PACK 1(2) REGUL FAULT	AF	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR PACK 1(2) REGUL FAULT-FWSPAGE	AF	97	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AIR AIR X BLEED FAULT - FWSPAGE	AG	98	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT	E	1	Effectivity update: The information no longer applies to MSN 10949, 11139.
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT	E	2	Effectivity update: The information no longer applies to MSN 10949, 11139.
PRO-ABN-AUTO_FLT AUTO FLT FAC 1 + 2 FAULT - FWSPAGE	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FAC VERSIONS DISAGREE	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FAC VERSIONS DISAGREE	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FCU 1 + 2 FAULT	H	7	Effectivity update: The information no longer applies to MSN 05947, 05987, 07081, 07098.
PRO-ABN-AUTO_FLT AUTO FLT FCU 1 + 2 FAULT	H	8	Effectivity update: The information now also applies to MSN 05947, 05987, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FMGC VERSIONS DISAGREE	I	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT FMGC VERSIONS DISAGREE	I	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT REAC W/S DET FAULT	J	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT REAC W/S DET FAULT	J	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT REAC W/S DET FAULT - FWSPAGE	J	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRIM SYS	L	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM 1(2)	M	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM SYS - FWSPAGE	N	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM SYS	N	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT RUD TRV LIM SYS - FWSPAGE	N	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT TCAS MODE FAULT	O	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT TCAS MODE FAULT	O	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT TCAS MODE FAULT - FWSPAGE	O	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS	Q	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-AUTO_FLT AUTO FLT YAW DAMPER SYS - FWSPAGE	Q	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BLEED BLEED MONIT SYS 1(2) FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BLEED BLEED MONIT SYS 1(2) FAULT	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BLEED BLEED MONIT SYS 1(2) FAULT - FWSPAGE	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES [MEM] LOSS OF BRAKING	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES [QRH] ASYMMETRIC BRAKING	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN BRK FAULT	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN BRK FAULT	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN BRK FAULT - FWSPAGE	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-BRAKES BRAKES ALTN L(R) RELEASED	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN L(R) RELEASED	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES ALTN L(R) RELEASED - FWSPAGE	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT	G	9	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT - FWSPAGE	G	10	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-BRAKES BRAKES AUTO BRK FAULT - FWSPAGE	G	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-BRAKES BRAKES BRK Y ACCU LO PR	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES BRK Y ACCU LO PR	H	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES BRK Y ACCU LO PR - FWSPAGE	H	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES HOT	I	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT	J	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT	J	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM + ALTN FAULT - FWSPAGE	J	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT	K	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT - FWSPAGE	K	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT	K	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-BRAKES BRAKES NORM BRK FAULT	K	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES NORM BRK FAULT - FWSPAGE	K	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK FAULT ◁✻	L	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK FAULT ◁✻	L	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK LO PR	M	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK LO PR	M	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES PARK BRK LO PR - FWSPAGE	M	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES RELEASED	O	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES RELEASED	O	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-BRAKES BRAKES RELEASED - FWSPAGE	O	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NWS BRAKES-N/WS MINOR FAULT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NWS BRAKES - N/WS MINOR FAULT	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR EXCESS CAB ALT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR EXCESS CAB ALT - FWSPAGE	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR EXCES RESIDUAL PR	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR EXCES RESIDUAL PR	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR LDG ELEV FAULT	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CAB_PR CAB PR SAFETY VALVE OPEN - FWSPAGE	G	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-CAB_PR CAB PR SYS 1+2 FAULT - FWSPAGE	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COM COM SINGLE PTT STUCK ◁	L	18	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK - FWSPAGE	L	19	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK ◁	L	20	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK	L	21	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COM COM SINGLE PTT STUCK - FWSPAGE	L	22	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND FWD CAB/AFT CAB/CKPT DUCT OVHT	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND FWD(AFT) CARGO DUCT OVHT ◁	E	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND HOT AIR FAULT	H	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND L+R CAB FAN FAULT	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-COND COND LAV + GALLEY FAN FAULT - FWSPAGE	J	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-CONFIG CONFIG PARK BRK ON	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-DATALINK DATALINK ATSU FAULT	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT - FWSPAGE	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK ATSU FAULT	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK COMPANY FAULT	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK COMPANY FAULT	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DATALINK DATALINK COMPANY FAULT - FWSPAGE	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR [QRH] COCKPIT DOOR FAULT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R)(FWD)(AFT) AVIONICS (IN FLIGHT)	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R)(FWD)(AFT) AVIONICS or STAIRS - FWSPAGE (IN FLIGHT)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) CABIN (IN FLIGHT)	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) CABIN - FWSPAGE (IN FLIGHT)	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT - FWSPAGE (IN FLIGHT)	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)			
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (IN FLIGHT)	H	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (ON GROUND)	J	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR L(R) FWD(AFT) EMER EXIT (ON GROUND)	J	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-DOOR DOOR FWD(AFT)(BULK) CARGO (IN FLIGHT)	P	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-DOOR DOOR FWD(AFT)(BULK) - FWSPAGE (IN FLIGHT)	P	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS [QRH] Display Unit Failure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS EIS DMC 1(2)(3) FAULT	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS EIS DMC/FWC COM FAULT	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-EIS EIS DMC/FWC COM FAULT	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098,

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			08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	4	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	6	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528,

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			06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	9	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000,

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION	B	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	18	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670,

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			06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	23	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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[QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR			
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	28	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	32	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101,

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	34	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	37	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	41	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 23 - COMMUNICATIONS	B	45	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773,

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PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	46	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION	B	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 21 - AIR CONDITIONING/VENTILATION/ PRESSURIZATION	B	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC	B	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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[QRH] ELEC EMER CONFIG SYS REMAINING - 26 - FIRE			
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 28 - FUEL	B	58	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 32 - LANDING GEAR	B	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC [QRH] ELEC EMER CONFIG SYS REMAINING - 34 - NAVIGATION	B	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	61	Effectivity update: The information now also applies to MSN 02321. The information no longer applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	64	Effectivity update: The information now also applies to MSN 02321. The information no longer applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	66	Effectivity update: The information now also applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 02321.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT	C	68	Effectivity update: The information now also applies to MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 02321.
PRO-ABN-ELEC ELEC AC BUS 1 FAULT - FWSPAGE	C	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT	D	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ELEC ELEC AC BUS 2 FAULT	D	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT - FWSPAGE	D	73	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT	D	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC BUS 2 FAULT - FWSPAGE	D	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS ALTN	E	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS ALTN	E	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS FAULT	F	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC AC ESS BUS SHED	G	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC APU GEN FAULT - FWSPAGE	H	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC APU GEN FAULT - FWSPAGE	H	84	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	85	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	86	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	87	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT - FWSPAGE	L	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT	L	89	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014,

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Localization Title	Toc Index	ID	Reason
			02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-ABN-ELEC ELEC DC BAT BUS FAULT - FWSPAGE	L	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1 FAULT - FWSPAGE	M	92	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	99	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 2 FAULT	N	101	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 2 FAULT - FWSPAGE	N	102	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	115	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1 + 2 FAULT - FWSPAGE	O	116	Effectivity update: The information now also applies to MSN 11228, 11293.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	117	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT	O	119	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC EMER CONFIG	P	121	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC EMER CONFIG - FWSPAGE	P	122	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT	Q	132	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC ESS BUS FAULT	Q	134	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ELEC ELEC DC ESS BUS SHED - FWSPAGE	R	137	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	138	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	139	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	140	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	141	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	142	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG	S	143	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC EMER CONFIG - FWSPAGE	S	144	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) FAULT - FWSPAGE	W	145	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) FAULT - FWSPAGE	W	146	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC GEN 1(2) OFF	X	147	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) OFF - FWSPAGE	X	148	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) OFF - FWSPAGE	X	149	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-ELEC ELEC GEN 1(2) OFF	X	150	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC GEN 1(2) OFF - FWSPAGE	X	151	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	152	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	153	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	154	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	155	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	156	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	157	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	158	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	159	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED	Y	160	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) DISCONNECTED - FWSPAGE	Y	161	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ELEC ELEC IDG 1(2) FILTER CLOG	Z	162	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) FILTER CLOG	Z	163	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) OIL LO LVL	AA	164	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) OIL LO LVL	AA	165	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ELEC ELEC IDG 1(2) OIL LO PR/OVHT - FWSPAGE	AB	166	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ELEC	AB	167	Effectivity update: The information now also applies to MSN 11531.

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Localization Title	Toc Index	ID	Reason
ELEC IDG 1(2) OIL LO PR/OVHT - FWSPAGE			
PRO-ABN-ENG [QRH] ENG RELIGHT IN FLIGHT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG	B	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
[QRH] ALL ENG FAIL - If ditching anticipated			
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	21	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	25	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG	B	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
[QRH] ALL ENG FAIL - If forced landing anticipated			
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	36	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	39	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG ECAM - Gliding Distance & FAC	B	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted	B	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL	B	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Pitch Table	B	49	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG ECAM - Gliding Distance & FAC	B	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ECAM - Relight Attempted or not Attempted	B	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted	B	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted	B	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated	B	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated	B	55	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-ENG [QRH] ENG 1(2) STALL	E	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] ENGINE TAILPIPE FIRE	F	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION	G	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG	I	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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[QRH] One Engine Inoperative - Circling Approach			
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG FAC 1	K	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE	K	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG FAC 1	K	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG ALL ENGINES FAILURE - FWS PAGE	K	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED	L	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED - FWSPAGE	L	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED	L	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED	L	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG FUEL CONTAMINATED - FWSPAGE	L	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY	M	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY	M	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY	M	80	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) A/C FADEC SUPPLY - FWSPAGE	M	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR MINOR FAULT	O	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR MINOR FAULT	O	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR SYS FAULT	P	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR SYS FAULT	P	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR SYS FAULT	P	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR VALVE	Q	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) AIR VALVE	Q	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) BOWED ROTOR PROTECTION FAULT	U	89	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) BOWED ROTOR PROTECTION FAULT	U	90	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) BOWED ROTOR PROTECTION FAULT	U	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COLD FUEL	V	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COLD FUEL	V	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1+2 COMPRESSOR VANE	W	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1+2 COMPRESSOR VANE	W	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COMPRESSOR VANE	Y	96	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) COMPRESSOR VANE	Y	97	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) COMPRESSOR VANE - FWSPAGE	Y	98	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) CTL SYS FAULT	Z	99	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) CTL SYS FAULT	Z	100	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) CTL SYS FAULT - FWSPAGE	Z	101	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG DUAL COOLING NOT AVAIL	AB	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG DUAL COOLING NOT AVAIL	AB	104	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EGT EXCEEDED DURING AIR START	AD	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EGT EXCEEDED DURING AIR START	AD	106	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT	AE	107	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT - FWSPAGE	AE	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT	AE	109	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT	AE	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) EIU FAULT - FWSPAGE	AE	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC FAULT	AI	112	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC IDENT FAULT	AK	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC IDENT FAULT	AK	114	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	115	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	116	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	117	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC OVHT	AL	118	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC SYS FAULT	AN	119	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC SYS FAULT	AN	120	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FADEC SYS FAULT	AN	121	Effectivity update: The information now also applies to MSN 10949, 11139, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FAN COWL NOT CLSD	AO	122	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FAN COWL NOT CLSD	AO	123	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FAIL	AP	124	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FIRE (ON GROUND)	AR	125	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL CTL FAULT	AU	126	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL CTL FAULT - FWSPAGE	AU	127	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL FILTER - PARTLY CLOGGED	AW	128	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL FILTER - PARTLY CLOGGED	AW	129	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL HEAT SYS	AZ	130	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL HEAT SYS	AZ	131	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL LEAK	BA	132	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL LEAK	BA	133	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) FUEL SENSOR FAULT	BC	134	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL SENSOR FAULT	BC	135	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	136	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	137	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	138	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) FUEL VALVE FAULT	BD	139	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG GA SOFT FAULT	BE	140	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG GA SOFT FAULT	BE	141	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG GA SOFT FAULT - FWSPAGE	BE	142	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT EXCHGR CLOG	BF	143	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT EXCHGR CLOG	BF	144	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT EXCHGR CLOG	BF	145	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS DEGRADED	BH	146	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS DEGRADED	BH	147	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS FAULT	BI	148	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS FAULT	BI	149	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HEAT SYS FAULT	BI	150	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HIGH VIBRATION	BJ	151	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HIGH VIBRATION	BJ	152	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR DET FAULT	BK	153	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) HOT AIR DET FAULT	BK	154	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR DET FAULT	BK	155	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK	BL	156	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK	BL	157	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK	BL	158	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT AIR LEAK - FWSPAGE	BL	159	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT FUEL	BM	160	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT FUEL	BM	161	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) HOT FUEL - FWSPAGE	BM	162	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) IGN FAULT (IGN A or B Fault)	BO	163	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) IGN FAULT (IGN A+B Fault) - FWSPAGE	BP	164	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	165	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	166	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	167	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) LO START AIR PRESS	BQ	168	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) MINOR FAULT	BS	169	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) MINOR FAULT	BS	170	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) N1 or N2 or EGT or FF DISCREPANCY	BU	171	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) N1/N2/EGT OVER LIMIT	BV	172	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) N1/N2/EGT OVER LIMIT	BV	173	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL CHIP DETECTED	BW	174	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL CHIP DETECTED	BW	175	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL FILTER CLOG	BX	176	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL FILTER - PARTLY CLOGGED	BY	177	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL FILTER - PARTLY CLOGGED	BY	178	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL HI TEMP	CA	179	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL HI TEMP	CA	180	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CB	181	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CB	182	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CC	183	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CC	184	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO PR	CC	185	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	186	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	187	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	188	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL LO TEMP	CD	189	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SENSOR FAULT	CE	190	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) OIL SENSOR FAULT	CE	191	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SYS FAULT	CF	192	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SYS FAULT	CF	193	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OIL SYS FAULT	CF	194	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OVTHR PROT FAULT	CI	195	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OVTHR PROT FAULT	CI	196	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) OVTHR PROT FAULT - FWSPAGE	CI	197	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV INHIBITED	CK	198	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV INHIBITED	CK	199	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV INHIBITED - FWSPAGE	CK	200	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV LOCKED (on Ground)	CM	201	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV LOCKED (On Ground)	CM	202	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV LOCKED - FWSPAGE (ON GROUND)	CM	203	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV MINOR FAULT	CN	204	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV MINOR FAULT	CN	205	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV PRESSURIZED	CO	206	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV PRESSURIZED	CO	207	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REV PRESSURIZED	CO	208	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) REVERSE UNLOCKED	CR	209	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER CTL FAULT	CS	210	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER CTL FAULT	CS	211	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER CTL FAULT - FWSPAGE	CS	212	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) REVERSER FAULT - FWSPAGE	CT	213	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG SAT ABOVE FLEX TEMP	CU	214	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG SAT ABOVE FLEX TEMP	CU	215	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SENSOR FAULT	CX	216	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SENSOR FAULT	CX	217	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SHUT DOWN - FWSPAGE	CY	218	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SHUT DOWN	CY	219	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SHUT DOWN - FWSPAGE	CY	220	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENGINE STALL	CZ	221	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) STALL - FWSPAGE	CZ	222	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) STALL - FWSPAGE	CZ	223	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT	DA	224	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT - FWSPAGE	DA	225	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT	DA	226	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START FAULT	DA	227	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-ENG ENG 1(2) START FAULT - FWSPAGE	DA	228	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT - FWSPAGE	DB	229	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT - FWSPAGE	DB	230	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT	DB	231	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) START VALVE FAULT - FWSPAGE	DB	232	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	233	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT - FWSPAGE	DC	234	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	235	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	236	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT - FWSPAGE	DC	237	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT	DC	239	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) SYSTEM FAULT - FWSPAGE	DC	240	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER ABV IDLE	DD	241	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER ABV IDLE	DD	242	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER DISAGREE	DE	243	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER DISAGREE	DE	244	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG	DE	245	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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ENG 1(2) THR LEVER DISAGREE - FWSPAGE			
PRO-ABN-ENG ENG 1(2) THR LEVER FAULT	DF	246	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER FAULT	DF	247	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) THR LEVER FAULT - FWSPAGE	DF	248	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG T.O. THRUST DISAGREE	DG	249	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG T.O. THRUST DISAGREE	DG	250	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) TURB COOL FAULT	DH	251	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG 1(2) TURB COOL FAULT	DH	252	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (ON GROUND)	DJ	253	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (ON GROUND)	DJ	254	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (AT GO-AROUND)	DK	255	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-ENG ENG THR LEVERS NOT SET (AT GO-AROUND)	DK	256	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ALTN LAW - FWSPAGE	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-F_CTL F/CTL DIRECT LAW	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL DIRECT LAW - FWSPAGE	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (One Computer Failed) - FWSPAGE	G	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (ONE COMPUTER FAILED)	G	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (One Computer Failed) - FWSPAGE	G	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	14	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (Both Computers Failed) - FWSPAGE	H	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1 (2) FAULT (BOTH COMPUTERS FAILED)	H	18	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL ELAC 1(2) FAULT (Both Computers Failed) - FWSPAGE	H	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC 1(2) PITCH FAULT - FWSPAGE (ONE COMPUTER FAILED)	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-F_CTL F/CTL ELAC PITCH FAULT	K	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC PITCH FAULT	K	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELAC PITCH FAULT	K	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELEV REDUND DEGRDD	L	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL ELEV REDUND DEGRDD	L	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS FAULT/LOCKED	Q	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS FAULT/LOCKED	Q	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS FAULT/LOCKED - FWSPAGE	Q	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP SYS 1(2) FAULT	S	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP SYS 1(2) FAULT - FWSPAGE	S	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP/MCDU DISAGREE	T	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAP/MCDU DISAGREE	T	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED	U	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR 5 FAULT	V	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR 5 FAULT	V	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR 5 FAULT - FWSPAGE	V	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR / 1+2 / 3+4 / FAULT - FWSPAGE	W	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL GND SPLR NOT ARMED	X	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-F_CTL F/CTL GND SPLR NOT ARMED	X	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) AIL FAULT	Y	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L (R) AIL FAULT - FWSPAGE	Y	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) ELEV FAULT	Z	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) ELEV FAULT - FWSPAGE	Z	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L+R ELEV FAULT - FWSPAGE	AA	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL L(R) SIDESTICK FAULT - FWSPAGE	AB	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	47	Effectivity update: The information no longer applies to MSN 02321.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	49	Effectivity update: The information now also applies to MSN 01459, 02321. The information no longer applies to MSN 03111.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	51	Effectivity update: The information now also applies to MSN 03111, 11228, 11293, 11482, 11522, 11531, 11572, 11597. The information no longer applies to MSN 01459.
PRO-ABN-F_CTL F/CTL PITCH TRIM/MCDU/CG DISAGREE	AC	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	56	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT - FWSPAGE	AD	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT	AD	60	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SEC 1(2)(3) FAULT - FWSPAGE	AD	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS AND FLAPS FAULT IN CONF 0 - FWSPAGE	AG	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	64	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED - FWSPAGE	AH	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED	AH	68	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-F_CTL F/CTL SLATS FAULT/LOCKED - FWSPAGE	AH	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPD BRK FAULT - FWSPAGE	AM	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPLR FAULT	AO	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPLR FAULT	AO	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL SPLR FAULT	AO	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-F_CTL F/CTL SPLR FAULT - FWSPAGE	AO	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL STABILIZER JAM	AP	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-F_CTL F/CTL STABILIZER JAM - FWSPAGE	AP	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL [QRH] FUEL IMBALANCE	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL [QRH] FUEL LEAK	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL [QRH] FUEL LEAK	D	5	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL ACT XFR FAULT ◁	J	13	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL ACT ◁ XFR FAULT - FWSPAGE	J	14	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446,

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			04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL ACT PUMP LO PR ◁	K	16	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL ACT PUMP LO PR ◁	K	17	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097,

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			06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-FUEL FUEL AUTO TRANSFER FAULT	N	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL AUTO TRANSFER FAULT	N	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL AUTO TRANSFER FAULT - FWSPAGE	N	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L(R) XFR FAULT	O	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L(R) XFR FAULT	O	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L(R) XFR FAULT - FWSPAGE	O	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY CLOSED)	P	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY CLOSED)	P	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT - FWSPAGE (VALVES NOT FULLY CLOSED)	P	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY OPEN)	Q	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT (VALVES NOT FULLY OPEN)	Q	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR L + R XFR FAULT - FWSPAGE (VALVES NOT FULLY OPEN)	Q	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-FUEL FUEL CTR TK XFR OFF	U	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL CTR TK XFR OFF	U	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL ENG 1(2) LP VALVE FAULT	V	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL ENG 1(2) LP VALVE FAULT	V	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL F. USED/FOB DISAGREE	X	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL F. USED/FOB DISAGREE	X	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL F.USED/FOB DISAGREE	X	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL FQI CH 1+2 FAULT	Z	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL FQI CH 1+2 FAULT	Z	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL IDG 1(2) COOL FAULT	AC	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL IDG 1(2) COOL FAULT	AC	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL FUEL INERTING SYS FAULT	AD	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL INERTING SYS FAULT	AD	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL INERTING SYS FAULT - FWSPAGE	AD	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK HI TEMP	AE	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK HI TEMP	AE	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK HI TEMP	AE	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK LO TEMP	AF	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-FUEL FUEL L (R) OUTER (INNER) TK LO TEMP	AF	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR CLOSED	AG	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR CLOSED	AG	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR CLOSED - FWSPAGE	AG	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR OPEN	AH	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR OPEN	AH	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) OUTER XFR OPEN - FWSPAGE	AH	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) TK PUMP 1(2) LO PR	AI	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) TK PUMP 1 + 2 LO PR	AJ	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) TK PUMP 1 + 2 LO PR	AJ	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L(R) TK PUMP 1 + 2 LO PR	AJ	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L(R) TK PUMP 1 + 2 LO PR - FWSPAGE	AJ	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	64	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	65	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	66	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK HI TEMP	AM	67	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L(R) WING TK LO LVL	AN	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	71	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L + R WING TK LO LVL	AO	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK LO TEMP	AP	75	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK LO TEMP	AP	76	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW	AQ	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L(R) WING TK OVERFLOW	AQ	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW - FWSPAGE	AQ	79	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW	AQ	80	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW	AQ	81	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL L (R) WING TK OVERFLOW - FWSPAGE	AQ	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL LO LVL DET FAULT	AT	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FUEL FUEL LO LVL DET FAULT	AT	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS AUDIO DEGRADED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS AUDIO DEGRADED	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS AUDIO REDUND LOST ON FWC 1(2)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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FWS AUDIO REDUND LOST ON FWC 1(2)			
PRO-ABN-FWS FWS SDAC 1 + 2 FAULT - FWSPAGE	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS SLAT (FLAP) SYNCHRO FAULT	H	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-FWS FWS SLAT (FLAP) SYNCHRO FAULT	H	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B ELEC PUMP LO PR or OVHT	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B ELEC PUMP LO PR or OVHT - FWSPAGE	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR - FWSPAGE	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	7	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-HYD HYD B RSVR LO AIR PR	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO AIR PR - FWSPAGE	B	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO LVL	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR LO LVL - FWSPAGE	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR OVHT	D	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B RSVR OVHT - FWSPAGE	D	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-HYD HYD G ENG 1 PUMP LO PR (PTU Operative) - FWSPAGE	E	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G ENG 1 PUMP LO PR - FWSPAGE (PTU INOPERATIVE)	F	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR	G	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO AIR PR - FWSPAGE	G	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL	H	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR LO LVL - FWSPAGE	H	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-HYD HYD G RSVR OVHT	I	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT	I	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G RSVR OVHT - FWSPAGE	I	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ELEC PUMP LO PR or OVHT	J	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ELEC PUMP LO PR or OVHT	J	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ELEC PUMP LO PR or OVHT - FWSPAGE	J	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y ENG 2 PUMP LO PR - FWSPAGE (PTU INOPERATIVE)	L	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR	M	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR	M	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR	M	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO AIR PR - FWSPAGE	M	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL	N	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR LO LVL - FWSPAGE	N	51	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-HYD HYD Y RSVR OVHT	O	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	53	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	54	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	56	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT	O	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD Y RSVR OVHT - FWSPAGE	O	58	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR	P	59	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR	P	60	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR - FWSPAGE	P	61	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-HYD HYD B+Y SYS LO PR	P	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+B SYS LO PR	Q	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+B SYS LO PR	Q	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+B SYS LO PR - FWSPAGE	Q	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+Y SYS LO PR	R	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+Y SYS LO PR	R	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-HYD HYD G+Y SYS LO PR - FWSPAGE	R	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG [QRH] Landing with Abnormal L/G	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G DOORS NOT CLOSED - FWSPAGE	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-LG L/G DOORS NOT CLOSED	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G DOORS NOT CLOSED - FWSPAGE	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWN	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED - FWSPAGE	F	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT DOWNLOCKED - FWSPAGE	F	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT UPLOCKED - FWSPAGE	G	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT UPLOCKED	G	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR NOT UPLOCKED - FWSPAGE	G	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR UPLOCK FAULT	H	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G GEAR UPLOCK FAULT - FWSPAGE	H	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-LG L/G LGCIU 1(2) FAULT	I	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1(2) FAULT - FWSPAGE	I	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	J	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT	L	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G LGCIU 1+2 FAULT - FWSPAGE	L	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G SHOCK ABSORBER FAULT (SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)	N	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G SHOCK ABSORBER FAULT - FWSPAGE (SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)	N	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-LG L/G SYS DISAGREE	O	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [MEM] Stall Recovery	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] BOMB ON BOARD	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] DITCHING	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] EMER EVAC	H	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC [QRH] FORCED LANDING	J	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-MISC Thrust and Airspeed	L	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-MISC Thrust Setting (N1) for Recommended Speed	L	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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PRO-ABN-MISC [QRH] VOLCANIC ASH ENCOUNTER	N	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV UNRELIABLE SPEED INDICATION	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV Unreliable Speed Indication - Pitch/Thrust Tables	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-NAV [QRH] ALL ADR OFF	D	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV [QRH] IR Alignment in ATT Mode	E	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AIR SPD STS CHANGED	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AIR SPD STS CHANGED	F	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AIR SPD STS CHANGED	F	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1(2)(3) FAULT - Second Threshold	G	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1(2)(3) FAULT - FWSPAGE	G	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2(1+3)(2+3) FAULT	H	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2(1+3)(2+3) FAULT - FWSPAGE	H	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT	I	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR 1+2+3 FAULT - FWSPAGE	I	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR ALT DISAGREE	J	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR ALT DISAGREE	J	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE - FWSPAGE	K	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE	K	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE	K	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADR DISAGREE - FWSPAGE	K	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADS-B RPTG 1(2) FAULT	L	30	Effectivity update: The information now also applies to MSN 03180, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADS-B RPTG 1(2) FAULT	L	31	Effectivity update: The information now also applies to MSN 03180, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ADS-B RPTG 1 (2) FAULT - FWSPAGE	L	32	Effectivity update: The information now also applies to MSN 03180, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALL SPD UNCERTAIN	M	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALL SPD UNCERTAIN	M	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALL SPD UNCERTAIN - FWSPAGE	M	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALT DISCREPANCY	N	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ALT DISCREPANCY	N	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-NAV NAV AOA DISAGREE	P	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	41	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV AOA DISAGREE	P	42	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV CAPT(F/O)(STBY) AOA FAULT	Q	43	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV CAPT (F/O) (STBY) AOA FAULT	Q	44	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV CAPT (F/O) (STBY) AOA FAULT - FWSPAGE	Q	45	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	46	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	47	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT - FWSPAGE	R	48	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	49	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1(2) FAULT	R	50	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	51	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	52	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT - FWSPAGE	S	53	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	54	Effectivity update: The information now also applies to MSN 11228, 11293.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	55	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR 1+2 FAULT	S	57	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV ATC/XPDR STBY	U	62	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-NAV NAV ATC/XPDR STBY	U	63	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO REF DISCREPANCY	W	64	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO REF DISCREPANCY	W	65	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO VALUE DISAGREE	X	66	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BARO VALUE DISAGREE	X	67	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT(F/O) PFD	Y	68	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT(F/O) PFD	Y	69	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD	Z	70	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD	Z	71	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD/ALT ON CAPT+F/O PFD	Z	72	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD FAULT	AA	73	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD FAULT	AA	74	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD FAULT	AA	75	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD UNCERTAIN	AB	76	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD UNCERTAIN	AB	77	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV BKUP SPD UNCERTAIN - FWSPAGE	AB	78	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	82	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	83	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	84	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV FM/GPS POS DISAGREE ◁	AD	85	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV GPWS TERR DET FAULT	AH	86	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV HDG DISCREPANCY	AI	87	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT	AL	88	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT - FMGS Specificity	AL	89	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT - FMGS Specificity	AL	90	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-ABN-NAV NAV IR 1(2)(3) FAULT	AL	91	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR 1+2(1+3)(2+3) FAULT - FWSPAGE	AM	92	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR DISAGREE- FWSPAGE	AN	93	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR NOT ALIGNED	AO	94	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV IR NOT ALIGNED	AO	95	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV LS 1(2)(1+2) FAULT	AP	96	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-NAV NAV LS 1(2)(1+2) FAULT	AP	97	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-NAV NAV LS 1(2)(1+2) FAULT - FWSPAGE	AP	98	Effectivity update: The information now also applies to MSN 11531.
PRO-ABN-NAV NAV LS TUNING DISAGREE	AQ	99	Effectivity update: The information now also applies to MSN 02014, 03002, 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-NAV NAV LS TUNING DISAGREE	AQ	100	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV LS TUNING DISAGREE - FWSPAGE	AQ	101	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV PRED W/S DET FAULT ◁	AR	102	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA 1 AND 2 FAULT - FWSPAGE (DUAL RA FAILURE)	AS	103	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA 1(2) FAULT - FWSPAGE	AT	104	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA DEGRADED	AU	105	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV RA DEGRADED	AU	106	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV TCAS FAULT ◁	AV	107	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV TCAS STBY	AX	108	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV TCAS STBY	AX	109	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV L(R) CAPT(F/O) STATIC FAULT	AY	110	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV L(R) CAPT(F/O) STATIC FAULT	AY	111	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV NAV L(R) CAPT(F/O) STATIC FAULT - FWSPAGE	AY	112	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-NAV STALL WARNING	BA	113	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-OVERSPEED OVERSPEED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-RECORDER RECORDER CVR FAULT-ANNUNCIATION	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER CVR FAULT	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-RECORDER RECORDER CVR FAULT - FWSPAGE	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDR FAULT	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDR FAULT	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDR FAULT - FWSPAGE	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDIU FAULT	E	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDIU FAULT	E	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-RECORDER RECORDER FDIU FAULT - FWSPAGE	E	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SEVERE_ICE SEVERE ICE DETECTED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SEVERE_ICE SEVERE ICE DETECTED	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SEVERE_ICE SEVERE ICE DETECTED	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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[QRH] SMOKE / FUMES / AVNCS SMOKE			
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	16	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE	C	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - AIR COND SMOKE / CAB EQUIPMENT SMOKE	C	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG	C	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE/FUMES/AVNCS SMOKE - ELEC EMER CONFIG - FWSPAGE	C	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES	D	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE AFT CARGO SMOKE ◁	F	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE AFT CARGO SMOKE ◁	F	29	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE AFT CARGO SMOKE ◁ - FWSPAGE	F	30	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	33	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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PRO-ABN-SMOKE SMOKE FWD CARGO SMOKE ◁	I	34	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD(AFT) CRG BTL 1(2) FAULT ◁	J	35	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE FWD(AFT) CRG BTL (1)(2) FAULT ◁	J	36	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE DET FAULT	L	37	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE DET FAULT	L	38	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE DET FAULT - FWSPAGE	L	39	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SMOKE SMOKE LAVATORY DET FAULT	P	40	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] EGPWS Cautions	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] EGPWS Warnings	E	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] TCAS CAUTION - TRAFFIC ADVISORY	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV [MEM] TCAS WARNING - RESOLUTION ADVISORY	G	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV SURV ROW/ROP LOST	I	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV SURV ROW/ROP LOST	I	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-SURV SURV ROW/ROP LOST - FWSPAGE	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O SPEEDS NOT INSERTED	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O SPEEDS NOT INSERTED	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O SPEEDS TOO LOW	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O SPEEDS TOO LOW	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
PRO-ABN-T-O T.O V1/VR/V2 DISAGREE	C	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-T-O T.O V1/VR/V2 DISAGREE	C	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT BLOWER FAULT	B	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT BLOWER FAULT	B	3	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

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Continued from the previous page

Localization Title	Toc Index	ID	Reason
PRO-ABN-VENT VENT EXTRACT FAULT - FWSPAGE	C	7	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	9	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT - FWSPAGE	D	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	11	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098,

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
			08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	12	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	13	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.

Continued on the following page

Continued from the previous page

Localization Title	Toc Index	ID	Reason
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT - FWSPAGE	D	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT	D	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-VENT VENT SKIN VALVE FAULT - FWSPAGE	D	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-WHEEL WHEEL HYD SEL FAULT	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-WHEEL WHEEL TYRE LO PR ◁	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE L(R) WING LO PR	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE L(R) WING LO PR	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE L(R) WING LO PR - FWSPAGE	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE SYS FAULT	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-W_A_ICE WING A.ICE SYS FAULT - FWSPAGE	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-ABN-90 Cabin Crew-Assigned Areas for Evacuation	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-ABN-90 Evacuation on Water - Cabin Crew Responsible for Type "I" Doors	G	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

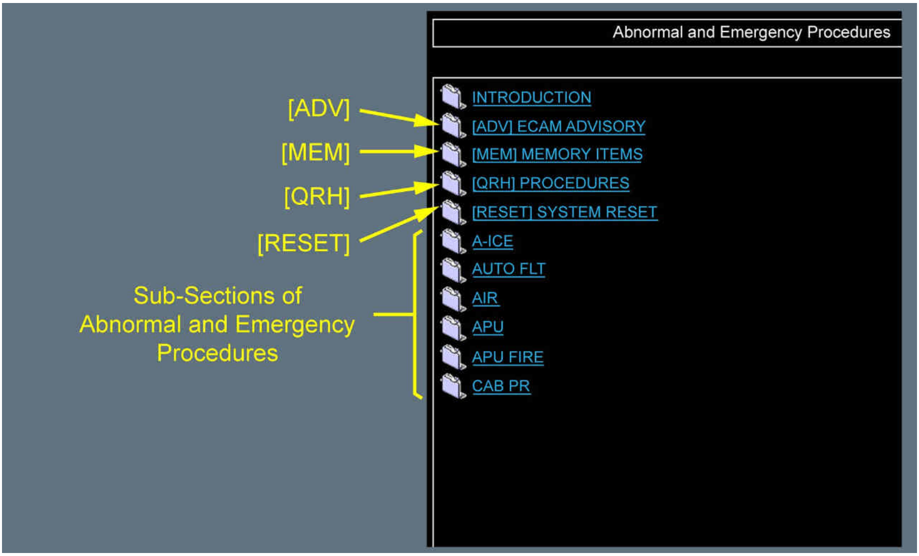
CONTENT

Ident.: PRO-ABN-ABN-00-00020862.0001001 / 09 NOV 20
Applicable to: ALL

Abnormal and Emergency procedures involve actions that the flight crew must perform to ensure the overall safety of the flight, and adequate workload.

L2 For more information about the management of abnormal operations, *Refer to FCTM/AOP-30-10 Introduction*.

Abnormal and Emergency Procedure Overview


Abnormal and Emergency Procedures
[ADV]
[MEM]
[QRH]
[RESET]
Sub-Sections of Abnormal and Emergency Procedures
INTRODUCTION
[ADV] ECAM ADVISORY
[MEM] MEMORY ITEMS
[QRH] PROCEDURES
[RESET] SYSTEM RESET
A-ICE
AUTO FLT
AIR
APU
APU FIRE
CAB PR

L1 [ADV] ECAM ADVISORY

The [ADV] ECAM ADVISORY section provides direct access to the list of all advisories that can be displayed on the ECAM SD pages. The [ADV] section is also available in the QRH.

L2 For more information, *Refer to [ADV] ECAM Advisory*.

L1 Advisories are system parameters that start to deviate from their usual operational range. However, an advisory does not require flight crew actions, except monitoring.

L2 For more information about Advisory function, *Refer to DSC-31-20 System Pages*.

L1 [MEM] MEMORY ITEMS

The [MEM] MEMORY ITEMS menu provides direct access to the list of memory items.

L2 For more information, *Refer to [MEM] Memory Items*.

L1 The content of the memory items are described in the applicable sub-sections of the abnormal and emergency procedures.
Memory items are procedures of an ECAM or QRH procedure that the flight crew must apply by memory to ensure a safe flight path. In some time-critical situations, the flight crew has no time to refer to the ECAM and/or to the QRH.

L2 For more information, *Refer to FCTM/AOP-10-40 Abnormal and Emergency Procedures*.

L1 [QRH] PROCEDURES

The [QRH] PROCEDURES menu provides direct access to the list of all the FCOM abnormal and emergency procedures that are also in the QRH.

L2 For more information, *Refer to [QRH] Procedures*.

L1 The content of the QRH procedures are described in the applicable sub-sections of the abnormal and emergency procedures.

Note: *Only the FCOM version of a procedure provides layer 2 and 3 information for consultation purpose.*

[RESET] SYSTEM RESET

The [RESET] SYSTEM RESET section provides direct access to the table listing all the system resets that are permitted, and the condition to apply them. The [RESET] section is also available in the QRH.

L2 For direct access to the table, *Refer to [RESET] System Reset*.

L1 SUB-SECTIONS OF ABNORMAL AND EMERGENCY PROCEDURES

This part of the FCOM describes the detailed content of all abnormal and emergency procedures.
All procedures are grouped in sub-sections that can be system related (e.g. AIR, FUEL, etc.) or non-system related (e.g. MISC, T.O, CONFIG, etc.).
The sub-sections are sorted by alphabetic order.
For each sub-section, procedures are listed in the following order:

1. The memory items
   The title of the memory items starts with the [MEM] prefix
2. The abnormal and emergency procedures of the QRH
   The title of these procedures starts with the [QRH] prefix
3. The ECAM procedures.

PROCEDURE LAYOUT

Applicable to: ALL

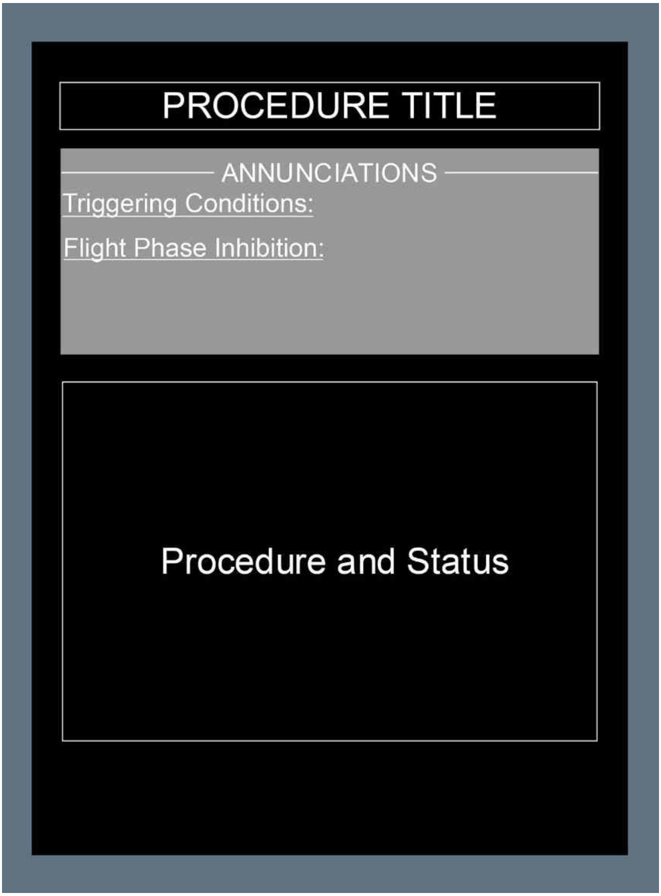
Ident.: PRO-ABN-ABN-00-A-00020863.0001001 / 17 MAR 17

GENERAL

The presentation of procedures is, as far as practicable, identical to the way it is displayed on the ECAM. The abbreviations are identical to those used on the cockpit panels.
All actions and information displayed on ECAM are provided in large letters. Other information, not on ECAM, is provided in small letters.
Expanded information is as far as practicable provided in layer 2. This information:

- Identifies the particular failures
- Explains actions for which the reason is not self-evident
- Provides some background on the reasons and /or the effects of a given action.

FCOM presentation of ABN or EMER procedures


PROCEDURE TITLE
ANNUNCIATIONS
Triggering Conditions:
Flight Phase Inhibition:
Procedure and Status

Ident.: PRO-ABN-ABN-00-A-00020864.0001001 / 17 MAR 17

PROCEDURE TITLE

The title of an abnormal or emergency procedure, displayed on the ECAM, appears on white background.
Abnormal procedure displayed on ECAM (amber caution) :

CAB PR SAFETY VALVE OPEN

Emergency procedure displayed on ECAM (red warning) :

🟥 CAB PR EXCESS CAB ALT 🟥

The title of an abnormal or emergency procedure, that does not appear on the ECAM is on a grey background.
Abnormal procedure not displayed on ECAM :

[QRH] L/G GRAVITY EXTENSION

Emergency procedure not displayed on ECAM :

🟥 [QRH] DITCHING 🟥

SEVERAL ALERTS UNDER THE SAME TITLE

When applicable, several alerts may be grouped under the same procedure title. However, depending on the failure, the actions that the flight crew should perform may differ.

Note: *Alerts that have the same procedure title may be differentiated by a subtitle (e.g. ENG FIRE (On Ground) versus ENG FIRE (In Flight)).*

Ident.: PRO-ABN-ABN-00-A-00020865.0001001 / 17 MAR 17

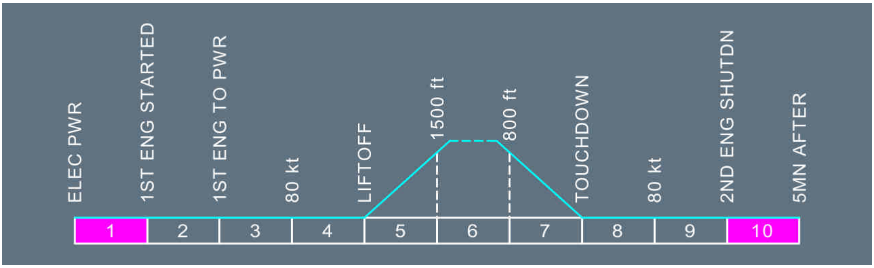
ANNUNCIATIONS

When applicable, the annunciations section provides:

- The triggering conditions, that describe the cause of the alert activation
- The flight phase inhibition.

FLIGHT PHASE INHIBITION

The Flight Phase Inhibition section indicates the flight phases during which the alert is inhibited. In the below example, the alert is inhibited in flight phase 1, and 10.



L2 For more information, *Refer to DSC-31-15 Flight Phases*.

Ident.: PRO-ABN-ABN-00-A-00020866.0001001 / 26 OCT 22

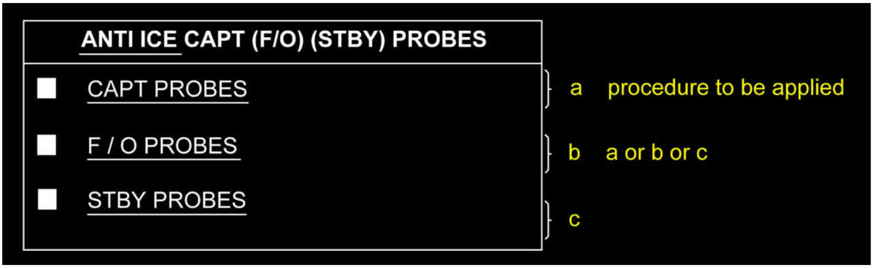
PROCEDURES AND STATUS

The Procedure and Status section provides the procedure and the Status (including approach procedure, limitations, inoperative systems, etc.), with additional information when relevant.

CONDITIONS

BLACK SQUARE

When several procedures appear under the same title, a black square marks the starting point of each procedure.
For example:



ANTI ICE CAPT (F/O) (STBY) PROBES

■ CAPT PROBES

■ F / O PROBES

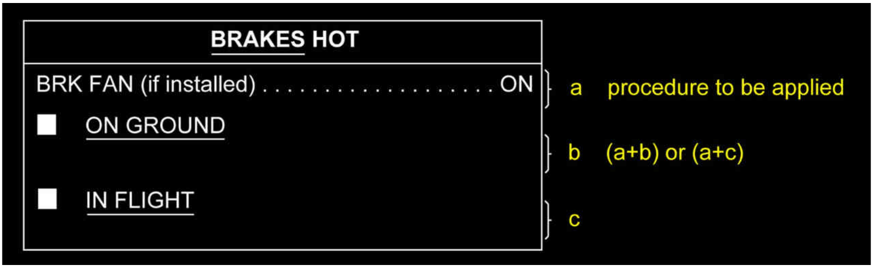
■ STBY PROBES

a procedure to be applied

b a or b or c

c

Black squares also indicate parts of a procedure among which only one is applicable.
For example:



BRAKES HOT

BRK FAN (if installed) . . . . ON

■ ON GROUND

■ IN FLIGHT

a procedure to be applied

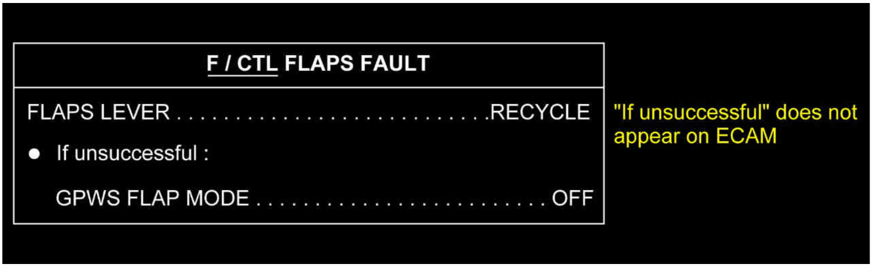
b (a+b) or (a+c)

c

The ECAM does not display black squares.

BLACK DOT

If an action depends on a precondition, a black dot identifies the precondition. If the precondition appears on ECAM, it appears in LARGE LETTERS. If not, it appears in small letters.
For example:



F / CTL FLAPS FAULT

FLAPS LEVER . . . . .RECYCLE

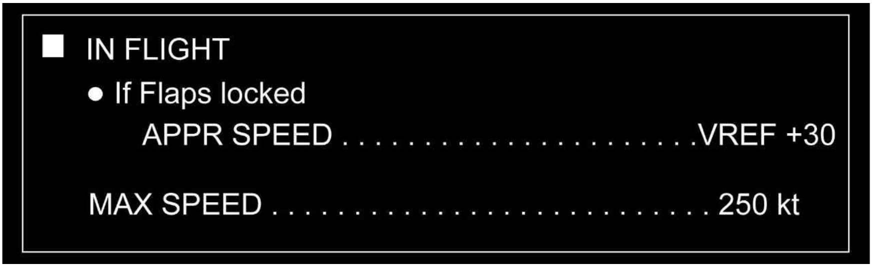
- If unsuccessful :

  GPWS FLAP MODE . . . . OFF

"If unsuccessful" does not appear on ECAM

INDENTATION

Indentation is used in order to identify when an action depends on a precondition/flight phase/procedure.
For example:



■ IN FLIGHT

- If Flaps locked

  APPR SPEED . . . . .VREF +30

MAX SPEED . . . . 250 kt

- The APPR SPEED is equal to VREF +30 kt only if the flaps are locked, because "APPR SPEED......VREF +30" is indented below "• If flaps locked".
- The MAX SPEED of 250 kt does not depend on the flaps locked condition because it is aligned with "• If Flaps locked". Therefore, MAX SPEED has to be respected whether the flaps are locked or not.

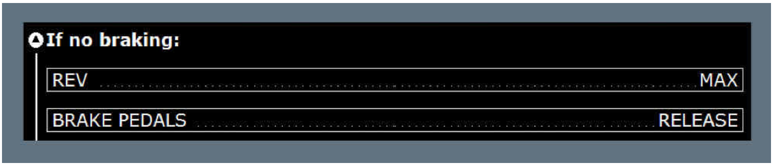
BOXED ITEMS

Items surrounded by a box enable the flight crew to easily identify them, as Memory items, OEB immediate actions or items introduced by “At ANY TIME of the procedure”.

MEMORY ITEMS

Memory items are items that the flight crew must memorize, in order to be able to rapidly apply them, without referring to the ECAM, and/or to the QRH.

Memory items



If no braking:

REV .... MAX

BRAKE PEDALS .... RELEASE

ABNORMAL AND EMERGENCY CALLOUTS

Applicable to: ALL

Ident.: PRO-ABN-ABN-00-B-00011915.0001001 / 17 MAR 17

ECAM PROCEDURES

1. "ECAM ACTION" is commanded by PF when required.
2. "CLEAR __ (title of the system) ?" is asked by the PM for confirmation by the PF, that all actions have been taken/reviewed on the present WARNING/CAUTION or SYSTEM PAGE. e.g.: CLEAR HYDRAULIC ?
3. "CLEAR __ (title of the system)" is the command by the PF that the action and review is confirmed. For status page; REMOVE STATUS will be used.
4. "ECAM ACTIONS COMPLETE" is the announcement by the PM that all APPLICABLE ACTIONS have been completed.
5. Should the PF require an action from the PM during ECAM procedures, the order "STOP ECAM" will be used. When ready to resume the ECAM the order "CONTINUE ECAM" will be used.

Ident.: PRO-ABN-ABN-00-B-00020059.0001001 / 16 JAN 18

EMERGENCY CALL

Some abnormal/emergency procedures require flight and cabin crews to use specific phraseology when communicating with each other. To ensure effective communication between the flight and cabin crews, the standard phraseology may be recalled at the preflight phase.

FROM	TO	PHRASEOLOGY	REMARKS
cockpit	cabin	Passenger Address (PA) System: "PURSER TO COCKPIT, PLEASE!"	The Purser, or any other cabin crewmember, must go to the cockpit
Cockpit	Cabin	Passenger Address (PA) System: "ATTENTION CREW! AT STATIONS!"	An emergency evacuation may soon be required.
cockpit	cabin	Passenger Address (PA) System: "CABIN CREW and PASSENGERS REMAIN SEATED!"	The captain decides that an evacuation is not required

Continued on the following page

Continued from the previous page

cockpit	cabin	Passenger Address (PA) System: "EVACUATE, EVACUATE"	The captain orders an immediate evacuation
cabin	cockpit	Interphone: "PRIO CAPT"	Any crew member can make such a call. The flight crew must reply.

Ident.: PRO-ABN-ABN-00-B-00011916.0001001 / 06 MAY 22

MEMORY ITEMS

The aim of such callouts is to callout the appropriate procedure by calling out, in most cases, the title of the procedure. This will allow the crew to be aware of the situation and be prepared to properly react (crew coordination, task sharing and communication).

GPWS

As soon as avoidance maneuver is envisaged.
"PULL UP TOGA"

REACTIVE WINDSHEAR WARNING

"WINDSHEAR TOGA"

UNRELIABLE SPEED INDICATION

"UNRELIABLE SPEED"

TCAS

- **For aircraft equipped with AP/FD TCAS ◁ function:**

  As soon as a TA is triggered:
  - If the AP/FD TCAS mode is armed: "TCAS blue"
  - If the AP/FD TCAS mode does not arm: "TCAS, I have control"

- **For aircraft not equipped with AP/FD TCAS ◁ function:**

  As soon as a TA is triggered: "TCAS, I have control".

EMERGENCY DESCENT

"EMERGENCY DESCENT"

LOSS OF BRAKING

"LOSS OF BRAKING"

STALL RECOVERY

As soon as any stall indication is recognized.
"STALL, I have control"

STALL WARNING AT LIFT-OFF

"STALL, TOGA 15°"

MALFUNCTION BEFORE V1 AT TAKEOFF

EVENT	CAPT	F/O
If GO decision	GO	
If RTO decision	STOP	
- REV on EWD		REVERSE GREEN (1)
- Deceleration		DECEL (2)
- Autobrake disengagement	MANUAL BRAKING (3)	AUTOBRAKE OFF (4)

(1) *If the reverse deployment is not as expected, call NO REVERSE ENGINE__or NO REVERSE, as appropriate.*

(2) *In the case of failure or no positive deceleration, NO DECEL.*
DECEL callout means that the deceleration is felt by the crew, and confirmed by the speed trend on the PFD.

(3) *CAPT announces MANUAL BRAKING if:*

- *CAPT uses the brake pedals*
- *No AUTOBRAKE OFF callout.*

(4) *F/O announces AUTOBRAKE OFF if:*

- *A/BRK does not engage as expected or A/BRK disengages*
- *No MANUAL BRAKING callout from the CAPT.*

ECAM ADVISORY CONDITIONS

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

1

APU	EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

Ident.: PRO-ABN-ABN-ADV-A-00012107.0001001 / 05 MAR 19

2

CAB PR	CAB VERTICAL SPEED V/S > 1 800 ft/min	CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	CAB ALTITUDE altitude ≥ 8 800 ft	PACK FLOW: HI CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST • If unsuccessful: - MODE SEL: MAN - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0003001 / 04 NOV 20

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ENG	OIL PRESS P < 80 PSI	- If the oil pressure is between 80 and 60 PSI, continue normal engine operation. - If the oil pressure is below 60 PSI (red indication) without the ENG 1(2) OIL LO PR alert, continue normal engine operation (it can be assumed that the oil pressure transducer is faulty). In both cases, monitor other engine parameters, particularly oil temperature and oil quantity.
	OIL PRESS P > 390 PSI	Closely monitor other engine parameters for symptoms of engine malfunction. If high oil pressure is not accompanied by other abnormal indications operate engine normally for remainder of the flight. Record high oil pressure, and corresponding N2 readings for maintenance action.
	OIL TEMP T > 155 °C	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. *Note: If the OIL TEMP increase follows thrust reduction: Increasing thrust may reduce oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To decrease oil temperature, before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If oil temperature continues to rise, mechanically disconnect IDG.
	OIL QTY < 5 qt	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, both of the following ECAM alerts can be triggered: - ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Caution) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
		- ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)
	NAC TEMP ≥ 320 °C	Monitor engine parameters and crosscheck with other engine.
	VIBRATION N1 ≥ 5 units N2 ≥ 5 units	*Refer to PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION*.

Ident.: PRO-ABN-ABN-ADV-A-00012114.0001001 / 21 MAR 17

3

SYSTEM	CONDITIONS	RECOMMENDED ACTION
FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in inner cell, or 55 °C in outer cell	GALLEY: OFF
	Fuel temp lower than -40 °C in inner or outer cell	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0001001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
OXY	OXY Amber when pressure is < 400 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 01459

Ident.: PRO-ABN-ABN-ADV-A-00012117.0001001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
APU	FLAP OPEN Flap not fully closed when APU master switch is off.	
	EGT > EGT MAX - 33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

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SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012107.0001001 / 05 MAR 19

4

CAB PR	CAB VERTICAL SPEED
	V/S > 1 800 ft/min
		CPC changeover is recommended:
		- MODE SEL: MAN
		- Wait 10 s
		- MODE SEL: AUTO
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

	CAB ALTITUDE
	altitude ≥ 8 800 ft
		PACK FLOW: HI
		CPC changeover is recommended:
		- MODE SEL: MAN
		- Wait 10 s
		- MODE SEL: AUTO
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0003001 / 04 NOV 20

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ENG	OIL PRESS P < 80 PSI	- If the oil pressure is between 80 and 60 PSI, continue normal engine operation. - If the oil pressure is below 60 PSI (red indication) without the ENG 1(2) OIL LO PR alert, continue normal engine operation (it can be assumed that the oil pressure transducer is faulty). In both cases, monitor other engine parameters, particularly oil temperature and oil quantity.
	OIL PRESS P > 390 PSI	Closely monitor other engine parameters for symptoms of engine malfunction. If high oil pressure is not accompanied by other abnormal indications operate engine normally for remainder of the flight. Record high oil pressure, and corresponding N2 readings for maintenance action.
	OIL TEMP T > 155 °C	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. *Note: If the OIL TEMP increase follows thrust reduction: Increasing thrust may reduce oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To decrease oil temperature, before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If oil temperature continues to rise, mechanically disconnect IDG.
	OIL QTY < 5 qt	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, both of the following ECAM alerts can be triggered: - ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Caution) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
		- ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)
	NAC TEMP ≥ 320 °C	Monitor engine parameters and crosscheck with other engine.
	VIBRATION N1 ≥ 5 units N2 ≥ 5 units	*Refer to PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION*.

Ident.: PRO-ABN-ABN-ADV-A-00012114.0001001 / 21 MAR 17

5

FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in inner cell, or 55 °C in outer cell	GALLEY: OFF
	Fuel temp lower than -40 °C in inner or outer cell	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0001001 / 17 MAR 17

OXY	OXY Amber when pressure is < 400 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

6

APU	EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

Ident.: PRO-ABN-ABN-ADV-A-00012107.0001001 / 05 MAR 19

7

CAB PR	CAB VERTICAL SPEED V/S > 1 800 ft/min	CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	CAB ALTITUDE altitude ≥ 8 800 ft	PACK FLOW: HI CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST • If unsuccessful: - MODE SEL: MAN - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0003001 / 04 NOV 20

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ENG	OIL PRESS P < 80 PSI	- If the oil pressure is between 80 and 60 PSI, continue normal engine operation. - If the oil pressure is below 60 PSI (red indication) without the ENG 1(2) OIL LO PR alert, continue normal engine operation (it can be assumed that the oil pressure transducer is faulty). In both cases, monitor other engine parameters, particularly oil temperature and oil quantity.
	OIL PRESS P > 390 PSI	Closely monitor other engine parameters for symptoms of engine malfunction. If high oil pressure is not accompanied by other abnormal indications operate engine normally for remainder of the flight. Record high oil pressure, and corresponding N2 readings for maintenance action.
	OIL TEMP T > 155 °C	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. *Note:* *If the OIL TEMP increase follows thrust reduction: Increasing thrust may reduce oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To decrease oil temperature, before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If oil temperature continues to rise, mechanically disconnect IDG.
	OIL QTY < 5 qt	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, both of the following ECAM alerts can be triggered: - ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Caution) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
		- ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)
	NAC TEMP ≥ 320 °C	Monitor engine parameters and crosscheck with other engine.
	VIBRATION N1 ≥ 5 units N2 ≥ 5 units	*Refer to PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION*.

Ident.: PRO-ABN-ABN-ADV-A-00012114.0001001 / 21 MAR 17

8

FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in inner cell, or 55 °C in outer cell	GALLEY: OFF
	Fuel temp lower than -40 °C in inner or outer cell	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0029001 / 17 MAR 17

OXY	CKPT OXY Pulsing green: When pressure is < 600 PSI. Amber: When pressure is < 300 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883

SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

9

APU	EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

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SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012107.0001001 / 05 MAR 19

10

CAB PR	CAB VERTICAL SPEED V/S > 1 800 ft/min	CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	CAB ALTITUDE altitude ≥ 8 800 ft	PACK FLOW: HI CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST • If unsuccessful: - MODE SEL: MAN - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0002001 / 04 NOV 20

SYSTEM	**CONDITIONS**	**RECOMMENDED ACTION**
ENG	OIL PRESS P < 16 PSI	- If oil pressure is between 16 and 13 PSI (advisory), continue normal operation. - If oil pressure is below 13 PSI (red indication) without the ENG 1(2) OIL LO PR alert, continue normal engine operation (it can be assumed that the oil pressure transducer is faulty). In both cases, monitor other engine parameters especially oil temperature and oil quantity.
	OIL PRESS P > 90 PSI	Monitor other engine parameters closely for symptoms of engine malfunction. If high oil pressure is not accompanied by other abnormal indications operate engine normally for remainder of flight. Record high oil pressure and corresponding N2 readings for maintenance action.
	OIL TEMP T > 140 °C	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. *Note:* *If the OIL TEMP increase follows thrust reduction, increasing thrust may reduce oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To reduce oil temperature increase before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If oil temperature continues to increase, mechanically disconnect IDG.
	OIL QTY < 3 qt	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, the ECAM alert ENG 1(2) OIL LO PR can be triggered. (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
	NAC TEMP ≥ 240 °C	Monitor engine parameters and crosscheck with other engine
	VIBRATION N1 ≥ 6 units N2 ≥ 4.3 units	*Refer to PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION*

Ident.: PRO-ABN-ABN-ADV-A-00012114.0001001 / 21 MAR 17

11

SYSTEM	CONDITIONS	RECOMMENDED ACTION
FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in inner cell, or 55 °C in outer cell	GALLEY: OFF
	Fuel temp lower than -40 °C in inner or outer cell	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0029001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
OXY	CKPT OXY Pulsing green: When pressure is < 600 PSI. Amber: When pressure is < 300 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

12

SYSTEM	CONDITIONS	RECOMMENDED ACTION
APU	EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

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Ident.: PRO-ABN-ABN-ADV-A-00012107.0003001 / 05 MAR 19

SYSTEM	**CONDITIONS**	**RECOMMENDED ACTION**

CAB PR	CAB VERTICAL SPEED
	V/S > 1 800 ft/min
		CPC changeover is recommended:
		- MODE SEL: MAN
		- Wait 10 s
		- MODE SEL: AUTO
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

	CAB ALTITUDE
	altitude ≥ 8 800 ft
		ECON FLOW: OFF
		CPC changeover is recommended:
		- MODE SEL: MAN
		- Wait 10 s
		- MODE SEL: AUTO
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Continued from the previous page

Ident.: PRO-ABN-ABN-ADV-A-00012122.0003001 / 04 NOV 20

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ENG	OIL PRESS P < 80 PSI	- If the oil pressure is between 80 and 60 PSI, continue normal engine operation. - If the oil pressure is below 60 PSI (red indication) without the ENG 1(2) OIL LO PR alert, continue normal engine operation (it can be assumed that the oil pressure transducer is faulty). In both cases, monitor other engine parameters, particularly oil temperature and oil quantity.
	OIL PRESS P > 390 PSI	Closely monitor other engine parameters for symptoms of engine malfunction. If high oil pressure is not accompanied by other abnormal indications operate engine normally for remainder of the flight. Record high oil pressure, and corresponding N2 readings for maintenance action.
	OIL TEMP T > 155 °C	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. *Note: If the OIL TEMP increase follows thrust reduction: Increasing thrust may reduce oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To decrease oil temperature, before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If oil temperature continues to rise, mechanically disconnect IDG.
	OIL QTY < 5 qt	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, both of the following ECAM alerts can be triggered: - ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Caution) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
		- ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)
	NAC TEMP ≥ 320 °C	Monitor engine parameters and crosscheck with other engine.
	VIBRATION N1 ≥ 5 units N2 ≥ 5 units	*Refer to PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION*.

Ident.: PRO-ABN-ABN-ADV-A-00012114.0002001 / 21 MAR 17

FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in wing tank	GALLEY: OFF
	Fuel temp lower than -40 °C in wing tank	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0029001 / 17 MAR 17

OXY	CKPT OXY Pulsing green: When pressure is < 600 PSI. Amber: When pressure is < 300 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
APU	13 EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

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Ident.: PRO-ABN-ABN-ADV-A-00012107.0004001 / 05 MAR 19

SYSTEM	CONDITIONS	RECOMMENDED ACTION
CAB PR	CAB VERTICAL SPEED V/S > 1 800 ft/min	CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	CAB ALTITUDE altitude ≥ 8 800 ft	PACK FLOW: HI CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control If the cargo freight permits, set FWD ISOL VALVE: OFF to reduce the rate of cabin altitude increase.
	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST • If unsuccessful: - MODE SEL: MAN - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0002001 / 04 NOV 20

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ENG	OIL PRESS P < 16 PSI	- If oil pressure is between 16 and 13 PSI (advisory), continue normal operation. - If oil pressure is below 13 PSI (red indication) without the ENG 1(2) OIL LO PR alert, continue normal engine operation (it can be assumed that the oil pressure transducer is faulty). In both cases, monitor other engine parameters especially oil temperature and oil quantity.
	OIL PRESS P > 90 PSI	Monitor other engine parameters closely for symptoms of engine malfunction. If high oil pressure is not accompanied by other abnormal indications operate engine normally for remainder of flight. Record high oil pressure and corresponding N2 readings for maintenance action.
	OIL TEMP T > 140 °C	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. *Note:* *If the OIL TEMP increase follows thrust reduction, increasing thrust may reduce oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To reduce oil temperature increase before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If oil temperature continues to increase, mechanically disconnect IDG.
	OIL QTY < 3 qt	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, the ECAM alert ENG 1(2) OIL LO PR can be triggered. (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
	NAC TEMP ≥ 240 °C	Monitor engine parameters and crosscheck with other engine
	VIBRATION N1 ≥ 6 units N2 ≥ 4.3 units	*Refer to PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION*

Ident.: PRO-ABN-ABN-ADV-A-00012114.0001001 / 21 MAR 17

14 FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in inner cell, or 55 °C in outer cell	GALLEY: OFF
	Fuel temp lower than -40 °C in inner or outer cell	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0028001 / 17 MAR 17

OXY	CKPT OXY Pulsing green: When pressure is < 800 PSI. Amber: When pressure is < 400 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
15 APU	EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

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Ident.: PRO-ABN-ABN-ADV-A-00012107.0003001 / 05 MAR 19

SYSTEM	CONDITIONS	RECOMMENDED ACTION
CAB PR	CAB VERTICAL SPEED V/S > 1 800 ft/min	CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	CAB ALTITUDE altitude ≥ 8 800 ft	ECON FLOW: OFF CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST • If unsuccessful: - MODE SEL: MAN - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0002001 / 04 NOV 20

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ENG	OIL PRESS P < 16 PSI	- If oil pressure is between 16 and 13 PSI (advisory), continue normal operation. - If oil pressure is below 13 PSI (red indication) without the ENG 1(2) OIL LO PR alert, continue normal engine operation (it can be assumed that the oil pressure transducer is faulty). In both cases, monitor other engine parameters especially oil temperature and oil quantity.
	OIL PRESS P > 90 PSI	Monitor other engine parameters closely for symptoms of engine malfunction. If high oil pressure is not accompanied by other abnormal indications operate engine normally for remainder of flight. Record high oil pressure and corresponding N2 readings for maintenance action.
	OIL TEMP T > 140 °C	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. *Note:* *If the OIL TEMP increase follows thrust reduction, increasing thrust may reduce oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To reduce oil temperature increase before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If oil temperature continues to increase, mechanically disconnect IDG.
	OIL QTY < 3 qt	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, the ECAM alert ENG 1(2) OIL LO PR can be triggered. (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
	NAC TEMP ≥ 240 °C	Monitor engine parameters and crosscheck with other engine
	VIBRATION N1 ≥ 6 units N2 ≥ 4.3 units	*Refer to PRO-ABN-ENG [QRH] HIGH ENGINE VIBRATION*

Ident.: PRO-ABN-ABN-ADV-A-00012114.0002001 / 21 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in wing tank	GALLEY: OFF
	Fuel temp lower than -40 °C in wing tank	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0029001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
OXY	CKPT OXY Pulsing green: When pressure is < 600 PSI. Amber: When pressure is < 300 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
16 APU	EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

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SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012107.0001001 / 05 MAR 19

CAB PR	CAB VERTICAL SPEED V/S > 1 800 ft/min	CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	CAB ALTITUDE altitude ≥ 8 800 ft	PACK FLOW: HI CPC changeover is recommended: - MODE SEL: MAN - Wait 10 s - MODE SEL: AUTO • If unsuccessful: - MODE SEL: MAN - Manual pressure control
	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST • If unsuccessful: - MODE SEL: MAN - Manual pressure control

17

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0004001 / 04 NOV 20

18

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ENG	OIL PRESS P < amber threshold value	- If the oil pressure indication is amber, continue normal engine operation. - If the oil pressure indication becomes red without the ENG 1(2) OIL LO PR alert, continue normal engine operation. In both cases, monitor other engine parameters, particularly oil temperature and oil quantity.
	OIL PRESS P > 259 PSI	Closely monitor other engine parameters for symptoms of engine malfunction. If a high oil pressure is not accompanied by other abnormal indications, operate the engine normally for the remainder of flight. Record high oil pressure, and corresponding N2 readings, for maintenance action.
	OIL TEMP Oil temperature above the advisory threshold and below the caution threshold.	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. Note: *If the OIL TEMP increases at thrust reduction, consider increasing the thrust again in order to attempt to lower the oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To reduce oil temperature, before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If the oil temperature continues to rise, mechanically disconnect IDG.
	OIL QTY < 1.45 QT	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, both of the following ECAM alerts can be triggered: - ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Caution) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
		- ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)
	NAC TEMP ≥ 280 °C	Monitor engine parameters and crosscheck with other engine.

Ident.: PRO-ABN-ABN-ADV-A-00012114.0001001 / 21 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
19 FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in inner cell, or 55 °C in outer cell	GALLEY: OFF
	Fuel temp lower than -40 °C in inner or outer cell	Consider descending to a lower altitude and/or increasing Mach to increase TAT.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0030001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
20 OXY	CKPT OXY Pulsing green: When pressure is < 500 PSI. Amber: When pressure is < 200 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

ECAM ADVISORY CONDITIONS

Applicable to: MSN 11531

Ident.: PRO-ABN-ABN-ADV-A-00012117.0003001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
21 APU	EGT > EGT MAX -33 °C (inhibited during APU start)	
	OIL QTY (message LOW OIL LEVEL pulsing)	If there is no oil leak, then the remaining oil quantity allows normal APU operation for about 10 h.

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SYSTEM	CONDITIONS	RECOMMENDED ACTION

Ident.: PRO-ABN-ABN-ADV-A-00012107.0001001 / 05 MAR 19

22

SYSTEM	CONDITIONS	RECOMMENDED ACTION

CAB PR	CAB VERTICAL SPEED
	V/S > 1 800 ft/min
		CPC changeover is recommended:
		- MODE SEL: MAN
		- Wait 10 s
		- MODE SEL: AUTO
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

	CAB ALTITUDE
	altitude ≥ 8 800 ft
		PACK FLOW: HI
		CPC changeover is recommended:
		- MODE SEL: MAN
		- Wait 10 s
		- MODE SEL: AUTO
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

	ΔP ≥ 1.5 PSI in phase 7	LDG ELEV: ADJUST
		• If unsuccessful:
		  - MODE SEL: MAN
		  - Manual pressure control

Ident.: PRO-ABN-ABN-ADV-A-00012112.0001001 / 17 MAR 17

SYSTEM	CONDITIONS	RECOMMENDED ACTION
ELEC	IDG OIL TEMP ≥ 147 °C	Reduce IDG load if possible (GALLEY or GEN OFF). If required, restore when temperature has dropped. Restrict use of generator to short time, if temperature rises again excessively.

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Ident.: PRO-ABN-ABN-ADV-A-00012122.0004001 / 04 NOV 20

23

SYSTEM	**CONDITIONS**	**RECOMMENDED ACTION**
ENG	OIL PRESS P < amber threshold value	- If the oil pressure indication is amber, continue normal engine operation. - If the oil pressure indication becomes red without the ENG 1(2) OIL LO PR alert, continue normal engine operation. In both cases, monitor other engine parameters, particularly oil temperature and oil quantity.
	OIL PRESS P > 259 PSI	Closely monitor other engine parameters for symptoms of engine malfunction. If a high oil pressure is not accompanied by other abnormal indications, operate the engine normally for the remainder of flight. Record high oil pressure, and corresponding N2 readings, for maintenance action.
	OIL TEMP Oil temperature above the advisory threshold and below the caution threshold.	An increase in oil temperature during normal steady-state operation indicates a system malfunction and should be closely monitored for other symptoms of engine malfunction. Note: *If the OIL TEMP increases at thrust reduction, consider increasing the thrust again in order to attempt to lower the oil temperature.* In addition, an increase in oil temperature could be related to the IDG oil cooling system. To reduce oil temperature, before limits are reached, the following are recommended: 1. Low Speed - Increase engine speed to increase fuel flow and thereby cool IDG oil. 2. High Speed - Reduce generator load or turn off generator. If the oil temperature continues to rise, mechanically disconnect IDG.
	OIL QTY < 1.45 QT	The oil quantity in the tank can decrease at high thrust setting due to the effect of oil gulping. In that case, the indicated oil quantity will increase after thrust reduction. Monitor the affected engine oil parameters and crosscheck with the other engine - As long as the oil temperature and the oil pressure of the affected engine remain within limits, normal engine operation is not affected. If the oil quantity continues to decrease, both of the following ECAM alerts can be triggered: - ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Caution) - ANNUNCIATION*)

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SYSTEM	CONDITIONS	RECOMMENDED ACTION
		- ENG 1(2) OIL LO PR (*Refer to PRO-ABN-ENG ENG 1(2) OIL LO PR (Warning) - ANNUNCIATION*)
	NAC TEMP ≥ 280 °C	Monitor engine parameters and crosscheck with other engine.

24 Ident.: PRO-ABN-ABN-ADV-A-00012114.0003001 / 12 JUL 18

FUEL	Difference between wing fuel quantities greater than 1 500 kg (3 307 lb)	FUEL MANAGEMENT: CHECK If a fuel leak is suspected, *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*. For limitations, *Refer to LIM-FUEL Maximum Allowed Fuel Imbalance*
	Fuel temp greater than 45 °C in wing tank	GALLEY: OFF
	Fuel temp lower than -40 °C in wing tank	Consider descending to a lower altitude and/or increasing Mach to increase TAT.
	ACT to be manually transferred	Turn the rotary selector to select the required ACT for manual transfer.

Ident.: PRO-ABN-ABN-ADV-A-00012119.0030001 / 17 MAR 17

25

OXY	CKPT OXY Pulsing green: When pressure is < 500 PSI. Amber: When pressure is < 200 PSI.	If mask is not being used, check if it is correctly stowed, *Refer to DSC-35-20-10 Mask Stowage*.

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[MEM] MEMORY ITEMS

Applicable to: ALL

Ident.: PRO-ABN-ABN-MEM-ABN-MEM-00020871.0001001 / 17 MAR 17

BRAKES

[MEM] LOSS OF BRAKING (*Refer to procedure*)

Ident.: PRO-ABN-ABN-MEM-ABN-MEM-00020948.0001001 / 17 MAR 17

MISC

[MEM] EMER DESCENT (*Refer to procedure*)
[MEM] STALL RECOVERY (*Refer to procedure*)
[MEM] STALL WARNING AT LIFT OFF (*Refer to procedure*)

Ident.: PRO-ABN-ABN-MEM-ABN-MEM-00020949.0001001 / 01 JUN 17

NAV

[MEM] UNRELIABLE SPEED INDICATION (*Refer to procedure*)

Ident.: PRO-ABN-ABN-MEM-ABN-MEM-00020950.0001001 / 16 MAY 22

SURV

[MEM] GPWS/EGPWS CAUTIONS (*Refer to procedure*)
[MEM] GPWS/EGPWS WARNINGS (*Refer to procedure*)
[MEM] TCAS CAUTION - TRAFFIC ADVISORY (*Refer to procedure*)
[MEM] TCAS WARNING - RESOLUTION ADVISORY (*Refer to procedure*)
[MEM] WINDSHEAR WARNING - REACTIVE WINDSHEAR (*Refer to procedure*)

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[QRH] PROCEDURES

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021342.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

A-ICE

[QRH] DOUBLE AOA HEAT FAILURE (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021355.0001001 / 17 MAR 17
Applicable to: MSN 01251, 02014, 06561

AIR

[QRH] ENGINE 1+2 BLEED FAULT (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021355.0002001 / 17 MAR 17
1 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**

AIR

[QRH] BLEED 1+2 FAULT (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021352.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

BRAKES

[QRH] RESIDUAL BRAKING (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021352.0002001 / 17 MAR 17
2 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

BRAKES

[QRH] ASYMMETRIC BRAKING (*Refer to procedure*)
[QRH] RESIDUAL BRAKING (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021343.0001001 / 17 MAR 17
Applicable to: ALL

CAB PR

[QRH] CABIN OVERPRESSURE (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021344.0002001 / 04 NOV 20
Applicable to: ALL

COND

[QRH] TOO HOT COCKPIT AND CABIN TEMPERATURE IN FLIGHT (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021346.0001001 / 17 MAR 17
3 **Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

DOOR

[QRH] COCKPIT DOOR FAULT (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021511.0001001 / 17 MAR 17
Applicable to: ALL

EIS

[QRH] DISPLAY UNIT FAILURE (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021345.0002001 / 17 MAR 17
Applicable to: ALL

ELEC

[QRH] C/B TRIPPED (*Refer to procedure*)
[QRH] ELEC EMER CONFIG SYS REMAINING (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021356.0001001 / 05 MAR 19
Applicable to: MSN 01251, 02014, 06561

ENG

[QRH] ENG DUAL FAILURE - FUEL REMAINING (*Refer to procedure*)
[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (*Refer to procedure*)
[QRH] ENG RELIGHT IN FLIGHT (*Refer to procedure*)
[QRH] ENG 1(2) STALL (*Refer to procedure*)
[QRH] ENG TAILPIPE FIRE (*Refer to procedure*)
[QRH] HIGH ENGINE VIBRATION (*Refer to procedure*)
[QRH] ON GROUND - NON ENG SHUTDOWN AFTER ENG MASTER OFF (*Refer to procedure*)
[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH (*Refer to procedure*)
[QRH] ONE ENGINE INOPERATIVE - STRAIGHT-IN APPROACH (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021356.0003001 / 05 MAR 19
4 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**

ENG

[QRH] ALL ENG FAIL (*Refer to procedure*)
[QRH] ENG RELIGHT IN FLIGHT (*Refer to procedure*)
[QRH] ENG 1(2) STALL (*Refer to procedure*)
[QRH] ENG TAILPIPE FIRE (*Refer to procedure*)
[QRH] HIGH ENGINE VIBRATION (*Refer to procedure*)
[QRH] ON GROUND - NON ENG SHUTDOWN AFTER ENG MASTER OFF (*Refer to procedure*)

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH (*Refer to procedure*)
[QRH] ONE ENGINE INOPERATIVE - STRAIGHT-IN APPROACH (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021347.0001001 / 10 MAY 21
Applicable to: ALL

F/CTL

[QRH] LANDING WITH SLATS OR FLAPS JAMMED (*Refer to procedure*)
[QRH] RUDDER JAM (*Refer to procedure*)
[QRH] STABILIZER JAM (*Refer to procedure*)

5 Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021348.0007001 / 24 MAR 20
Applicable to: MSN 11531

FUEL

[QRH] ACT SYSTEM FAULT (*Refer to procedure*)
[QRH] ACT XFR FAULT (*Refer to procedure*)
[QRH] FUEL IMBALANCE (*Refer to procedure*)
[QRH] FUEL LEAK (*Refer to procedure*)
[QRH] FUEL OVERREAD (*Refer to procedure*)
[QRH] FWD ACT ISOLATED (*Refer to procedure*)
[QRH] GRAVITY FUEL FEEDING (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021348.0001001 / 16 NOV 20
6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

FUEL

[QRH] FUEL IMBALANCE (*Refer to procedure*)
[QRH] FUEL LEAK (*Refer to procedure*)
[QRH] FUEL OVERREAD (*Refer to procedure*)
[QRH] GRAVITY FUEL FEEDING (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021353.0001001 / 17 MAR 17
Applicable to: ALL

L/G

[QRH] LANDING WITH ABNORMAL L/G (*Refer to procedure*)
[QRH] L/G GRAVITY EXTENSION (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00022319.0001001 / 17 NOV 20
Applicable to: ALL

MISC

[QRH] BOMB ON BOARD (*Refer to procedure*)
[QRH] COCKPIT WINDSHIELD / WINDOW ARCING (*Refer to procedure*)
[QRH] COCKPIT WINDSHIELD / WINDOW CRACKED (*Refer to procedure*)
[QRH] DITCHING (*Refer to procedure*)
[QRH] EMER EVAC (*Refer to procedure*)
[QRH] EMER LANDING (*Refer to procedure*)
[QRH] FORCED LANDING (*Refer to procedure*)
[QRH] OVERWEIGHT LANDING (*Refer to procedure*)
[QRH] SEVERE TURBULENCE (*Refer to procedure*)
[QRH] TAILSTRIKE (*Refer to procedure*)
[QRH] VOLCANIC ASH ENCOUNTER (*Refer to procedure*)

7 Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021354.0005001 / 03 NOV 22
Applicable to: MSN 08635, 10949-11597

NAV

[QRH] UNRELIABLE SPEED INDICATION (*Refer to procedure*)
[QRH] ADR CHECK PROC (*Refer to procedure*)
[QRH] ALL ADR OFF (*Refer to procedure*)
[QRH] IR ALIGNMENT IN ATT MODE (*Refer to procedure*)
[QRH] NAV FM / GPS POS DISAGREE (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021354.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-04192

NAV

[QRH] ADR 1+2+3 FAULT (*Refer to procedure*)
[QRH] ADR CHECK PROC (*Refer to procedure*)
[QRH] IR ALIGNMENT IN ATT MODE (*Refer to procedure*)
[QRH] NAV FM / GPS POS DISAGREE (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021354.0002001 / 17 MAR 17
8 **Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-08596, 09190-09324**

NAV

[QRH] ADR CHECK PROC (*Refer to procedure*)
[QRH] ALL ADR OFF (*Refer to procedure*)
[QRH] IR ALIGNMENT IN ATT MODE (*Refer to procedure*)
[QRH] NAV FM / GPS POS DISAGREE (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00020870.0001001 / 17 MAR 17

9 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03710, 03733-04974, 05066, 05101-05987, 06097, 06121, 06139-09324, 10949-11597**

SMOKE

[QRH] SMOKE / FUMES / AVNCS SMOKE (*Refer to procedure*)
[QRH] REMOVAL OF SMOKE / FUMES (*Refer to procedure*)
[QRH] SMOKE / FIRE FROM LITHIUM BATTERY (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00020870.0003001 / 19 MAY 21

Applicable to: MSN 01459, 02321, 05005, 05097

SMOKE

[QRH] SMOKE / FUMES / AVNCS SMOKE (*Refer to procedure*)
[QRH] REMOVAL OF SMOKE / FUMES (*Refer to procedure*)
[QRH] SMOKE / FIRE FROM LITHIUM BATTERY (*Refer to procedure*)

Ident.: PRO-ABN-ABN-QRH-ABN-QRH-00021512.0001001 / 17 MAR 17

Applicable to: ALL

WHEEL

[QRH] WHEEL TIRE DAMAGE SUSPECTED (*Refer to procedure*)

Intentionally left blank

SYSTEM RESET - GENERAL

Applicable to: ALL

Ident.: PRO-ABN-ABN-RESET-A-00012644.0001001 / 17 MAR 17

Some systems that operate abnormally can be recovered by a reset. The flight crew can perform a system reset with the use of:

- The associated cockpit control, or
- The associated circuit breaker.

WARNING	Only perform one reset at a time, unless indicated differently.

Ident.: PRO-ABN-ABN-RESET-A-00012645.0001001 / 17 MAR 17

Guidelines to reset a system:

- Set the related normal cockpit control to OFF, or pull the corresponding circuit breaker
- Wait 3 s if a normal cockpit control is used, or 5 s if a circuit breaker is used (unless a different time is indicated)
- Set the related normal cockpit control to ON, or push the corresponding circuit breaker
- Wait 3 s for the end of the reset.

Note: *The flight crew should report any in-flight reset to the maintenance.*

Ident.: PRO-ABN-ABN-RESET-A-00014340.0001001 / 05 JUN 18

■ On ground:

Reset ECU (CFM) or EEC (IAE) or EIU only when engine shut down.

Reset BSCU only when aircraft stopped.
Reset ELAC or SEC only when listed in the System Reset Table.

Other Systems not listed in the System Reset Table can be reset following the guidelines described above.

■ In flight:

WARNING	The flight crew can attempt a system reset only when: - An ECAM/OEB/FCOM/QRH procedure requests to reset the system, or - The System Reset Table permits.

CAUTION	Do not pull the following circuit breakers: - SFCC - ECU or EEC or EIU.

Note: *Before taking any action on the cockpit C/Bs, both the PF and PM must crosscheck and ensure the C/B label corresponds to the affected system.*

Refer to System Reset Table.

SYSTEM RESET TABLE

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01825, 01832

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021069.0003001 / 04 NOV 20

AIR	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO - PACK (affected side).................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
1 AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………..OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024305.0001001 / 02 MAY 23

COM	COM CIDS 1+2 FAULT (CIDS)	**On ground:** - Pull the C/Bs in the following order: G02 on 49VU, M05 and N11 ◁ on 121VU - Wait 10 s - Push the C/B G02 - Wait 5 min - Push the C/Bs in the following order: N11 ◁ , M05 - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: G02 on 49VU, M05 and N11 ◁ on 121VU - Wait 10 s - Push the C/B G02 - Wait 10 s - Push the C/Bs in the following order: N11 ◁ , M05 - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024306.0001001 / 10 MAY 21

COM	Uncommanded EVAC horn activation ◁ (CIDS)	**On ground, or in flight:** - Press EVAC HORN SHUT OFF pb - Set EVAC CAPT & PURS/CAPT sw to CAPT position only - Wait 3 s. • IF UNSUCCESSFUL: - Pull C/Bs in the following order: G02 on 49VU, M05 and N11 ◁ on 121VU - Wait for 1 min - Push C/Bs in the following order: N11 ◁ , M05, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0001001 / 10 MAY 21

COM	FAP freezing (FAP or Tape reproducer/PRAM)	**On ground, or in flight:** - Pull FAP C/B M14 (or Q14 ❄) in the 121VU - Wait 10 s - Push the C/B M14 (or Q14 ❄). • IF UNSUCCESSFUL: - Pull the tape reproducer/PRAM C/B D01 or E01 or F07 on 2000VU (cabin) - Wait 10 s - Push the C/B D01 or E01 or F07.

Ident.: PRO-ABN-ABN-RESET-B-00024310.0001001 / 10 MAY 21

COM	Failure messages on the CIDS FAP in the cabin (VSC)	**On ground, or in flight:** - Pull C/B A06 or B06 on 2001VU (aft cabin) - Wait 30 s - Push the C/B A06 or B06.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ❄ malfunction (SATCOM ❄)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS, DCL, OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note:* *As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note:* *The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0018001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00012657.0001001 / 20 MAR 17

NAV	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00012651.0011001 / 20 MAR 17

SMOKE	SMOKE DET FAULT (SDCU)	**On ground only:** - Pull C/B C06 on 49VU, and C/B T18 on 122VU - Wait 10 s before pushing the C/Bs.

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21		
WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 01251

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	*Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note: Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024305.0001001 / 02 MAY 23

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COM	COM CIDS 1+2 FAULT (CIDS)	**On ground:** - Pull the C/Bs in the following order: G02 on 49VU, M05 and N11 ◁ on 121VU - Wait 10 s - Push the C/B G02 - Wait 5 min - Push the C/Bs in the following order: N11 ◁ , M05 - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: G02 on 49VU, M05 and N11 ◁ on 121VU - Wait 10 s - Push the C/B G02 - Wait 10 s - Push the C/Bs in the following order: N11 ◁ , M05 - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024306.0001001 / 10 MAY 21

COM	Uncommanded EVAC horn activation ◁
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs in the following order: G02 on 49VU, M05 and N11 ◁ on 121VU
		  - Wait for 1 min
		  - Push C/Bs in the following order: N11 ◁ , M05, G02
		  - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0001001 / 10 MAY 21

COM	FAP freezing (FAP or Tape reproducer/PRAM)	**On ground, or in flight:** - Pull FAP C/B M14 (or Q14 ◁✳) in the 121VU - Wait 10 s - Push the C/B M14 (or Q14 ◁✳). • IF UNSUCCESSFUL: - Pull the tape reproducer/PRAM C/B D01 or E01 or F07 on 2000VU (cabin) - Wait 10 s - Push the C/B D01 or E01 or F07.

Ident.: PRO-ABN-ABN-RESET-B-00024310.0001001 / 10 MAY 21

COM	Failure messages on the CIDS FAP in the cabin (VSC)	**On ground, or in flight:** - Pull C/B A06 or B06 on 2001VU (aft cabin) - Wait 30 s - Push the C/B A06 or B06.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ◁✳ malfunction (SATCOM ◁✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ✳	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ✳ , DCL ✳ , OCL ✳ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ✳	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ✳)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0001001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L XFR VALVE CLOSED and FUEL R XFR VALVE CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00012657.0001001 / 20 MAR 17

NAV	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00012651.0002001 / 20 MAR 17

SMOKE	SMOKE LAV + CRG DET FAULT (SDCU)	**On ground only:** - Pull C/B C06 on 49VU, and C/B T18 on 122VU - Wait 10 s before pushing the C/Bs.

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

ECAM System	System Malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

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COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM malfunction (SATCOM)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System Malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** CAUTION - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** CAUTION - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System Malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System Malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System Malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note: Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

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Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

ECAM System	**System Malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 01801, 01826, 01837-01855

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22		
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0003001 / 04 NOV 20

<table>
<tr><th>ECAM System</th><th>System malfunction or ECAM Alert (Affected System)</th><th>Reset Procedure</th></tr>
<tr><td rowspan="2">AIR</td><td>AIR ENG 1(2) BLEED FAULT or
AIR ENG 1(2) BLEED ABNORM PR
(Engine Bleed Supply System)</td><td>
CAUTION If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED.

<i>Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.</i>

<u>On ground or in flight</u>
• If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:
- ENG BLEED (affected side)..............................OFF
■ If the ENG BLEED (affected side) pb-sw FAULT light is on:
- Delay application of the reset until FAULT light extinguishes.
■ If the ENG BLEED (affected side) pb-sw FAULT light is off:
- X BLEED...AUTO
- PACK (affected side).................................ON
- ENG BLEED (affected side)......................ON
- Check that the affected Engine Bleed Valve is open on the <u>BLEED</u> SD page.
• If AIR ENG (AFFECTED) BLEED FAULT alert or AIR ENG (AFFECTED) BLEED ABNORM PR alert reoccurs, or
If Engine Bleed Valve (affected side) not open on the <u>BLEED</u> SD page:
- ENG BLEED (affected side)...............OFF
- X BLEED.......................................OPEN

<i>Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).</i>
</td></tr>
<tr><td>AIR ENG 1(2) BLEED NOT CLSD
(Engine Bleed Supply System)</td><td>
<i>Note: Do not attempt more than one reset.</i>

<u>On ground only</u>
- ENG BLEED (affected side)..............................OFF
■ If the ENG BLEED (affected side) pb-sw FAULT light is on:
- Delay application of the reset until FAULT light extinguishes.
■ If the ENG BLEED (affected side) pb-sw FAULT light is off:
</td></tr>
</table>

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))...............................OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. CAUTION: Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note: After any BSCU reset:* *- Record BSCU reset in the logbook.*

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0002001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT (CIDS)	**On ground:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ✳ , M05 on 121VU G02 on 49VU, P14 ✳ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ✳ , P14 ✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ✳ , M05 on 121VU G02 on 49VU, P14 ✳ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ✳ , P14 ✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0002001 / 10 MAY 21

COM	Uncommanded EVAC horn activation ❄
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, P14 ❄ , M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, P13 ❄ , M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, P14 ❄ , G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024309.0001001 / 10 MAY 21

COM	FAP freezing (FAP or Tape reproducer/PRAM)	**On ground, or in flight:** - Pull FAP C/B M14 (or Q14 ✳) in the 121VU - Wait 10 s - Push the C/B M14 (or Q14 ✳). • IF UNSUCCESSFUL: - Pull the tape reproducer/PRAM C/B D01 or E01 or F07 on 2000VU (cabin) - Wait 10 s - Push the C/B D01 or E01 or F07.

Ident.: PRO-ABN-ABN-RESET-B-00024310.0001001 / 10 MAY 21

COM	Failure messages on the CIDS FAP in the cabin (VSC)	**On ground, or in flight:** - Pull C/B A06 or B06 on 2001VU (aft cabin) - Wait 30 s - Push the C/B A06 or B06.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ✳ malfunction (SATCOM ✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁✱	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁✱ , DCL ◁✱ , OCL ◁✱ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁✱	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁✱)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note: Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0018001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note: The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00012657.0001001 / 20 MAR 17

NAV	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00012651.0011001 / 20 MAR 17

SMOKE	SMOKE DET FAULT (SDCU)	**On ground only:** - Pull C/B C06 on 49VU, and C/B T18 on 122VU - Wait 10 s before pushing the C/Bs.

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21		
WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 02014

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0001001 / 05 JUN 18

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	*Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side)................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note: Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))................................OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: *After any BSCU reset:*
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: *After any BSCU reset:*
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0002001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT (CIDS)	**On ground:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ◁✳ , M05 on 121VU G02 on 49VU, P14 ◁✳ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ◁✳ , M05 on 121VU G02 on 49VU, P14 ◁✳ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0002001 / 10 MAY 21

COM	Uncommanded EVAC horn activation
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, P14 , M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, P13 , M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, P14 , G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

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COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024309.0001001 / 10 MAY 21

COM	FAP freezing (FAP or Tape reproducer/PRAM)	**On ground, or in flight:** - Pull FAP C/B M14 (or Q14) in the 121VU - Wait 10 s - Push the C/B M14 (or Q14). • IF UNSUCCESSFUL: - Pull the tape reproducer/PRAM C/B D01 or E01 or F07 on 2000VU (cabin) - Wait 10 s - Push the C/B D01 or E01 or F07.

Ident.: PRO-ABN-ABN-RESET-B-00024310.0001001 / 10 MAY 21

COM	Failure messages on the CIDS FAP in the cabin (VSC)	**On ground, or in flight:** - Pull C/B A06 or B06 on 2001VU (aft cabin) - Wait 30 s - Push the C/B A06 or B06.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM malfunction (SATCOM)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁ , DCL ◁ , OCL ◁ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note:* *As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note:* *The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0018001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00012657.0008001 / 20 MAR 17

NAV	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU - Wait 5 s, then push the C/B - Normal operation is expected after approximately 2 min. *Note: In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s wait 2 min additional to recover normal operation.*

Ident.: PRO-ABN-ABN-RESET-B-00012651.0011001 / 20 MAR 17

SMOKE	SMOKE DET FAULT (SDCU)	**On ground only:** - Pull C/B C06 on 49VU, and C/B T18 on 122VU - Wait 10 s before pushing the C/Bs.

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Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 02321

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0003001 / 04 NOV 20

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO - PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note: Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:**

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………..OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: - AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) - AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) - AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).

	Both MCDU locked or blank or FMGC malfunction
	(FMGC)
		The circuit breakers for the FMGCs are:
		- AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel)
		- AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel).
		On ground:
		- If no engine running:
		  - Apply external power or APU generator power
		  - Wait 2 min before resetting the FMGC circuit breakers
		  - Set FD 1(2) pb to OFF
		  - Pull the C/B of the affected FMGC
		  - Wait 10 s
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If engines running:
		  - Set FD 1(2) pb to OFF.
		  - Pull the C/B of the affected FMGC.
		  - Wait 10 s.
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If FMGC reset is unsuccessful:
		  - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: *After any BSCU reset:*
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: *After any BSCU reset:*
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0002001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT (CIDS)	**On ground:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ◁✻ , M05 on 121VU G02 on 49VU, P14 ◁✻ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✻ , P14 ◁✻ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ◁✻ , M05 on 121VU G02 on 49VU, P14 ◁✻ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✻ , P14 ◁✻ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0002001 / 10 MAY 21

COM	Uncommanded EVAC horn activation
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, P14, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, P13, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, P14, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024309.0001001 / 10 MAY 21

COM	FAP freezing (FAP or Tape reproducer/PRAM)	**On ground, or in flight:**
		- Pull FAP C/B M14 (or Q14 ✳) in the 121VU
		- Wait 10 s
		- Push the C/B M14 (or Q14 ✳).
		• IF UNSUCCESSFUL:
		  - Pull the tape reproducer/PRAM C/B D01 or E01 or F07 on 2000VU (cabin)
		  - Wait 10 s
		  - Push the C/B D01 or E01 or F07.

Ident.: PRO-ABN-ABN-RESET-B-00024310.0001001 / 10 MAY 21

COM	Failure messages on the CIDS FAP in the cabin (VSC)	**On ground, or in flight:** - Pull C/B A06 or B06 on 2001VU (aft cabin) - Wait 30 s - Push the C/B A06 or B06.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ✳ malfunction (SATCOM ✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS, DCL, OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0023001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.* **CAUTION** The FUEL AUTO FEED FAULT caution will be lost for the remainder of the flight. In flight: - If center tank is not empty, while one inner tank contains less than 5 000 kg (11 000 lb) of fuel: • FUEL MODE SEL (MAN) - When center tank is empty: • CTR TK PUMP 1 and 2 (OFF) • FUEL MODE SEL (MAN)

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00012657.0041001 / 03 NOV 22

NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00012651.0011001 / 20 MAR 17

SMOKE	SMOKE DET FAULT (SDCU)	**On ground only:** - Pull C/B C06 on 49VU, and C/B T18 on 122VU - Wait 10 s before pushing the C/Bs.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 02734

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note: During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*

	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR
	(Engine Bleed Supply System)
		CAUTION If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED.
		Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.
		On ground or in flight
		• **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:**
		- ENG BLEED (affected side)..............................OFF
		■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:**
		  - Delay application of the reset until FAULT light extinguishes.
		■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:**
		  - X BLEED...AUTO
		  - PACK (affected side).................................ON
		  - ENG BLEED (affected side)......................ON
		  - Check that the affected Engine Bleed Valve is open on the BLEED SD page.
		    • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED **SD page:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………..OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note: After any BSCU reset:* *- Record BSCU reset in the logbook.*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024305.0005001 / 10 MAY 21

COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**On ground:** - Pull the C/Bs in the following order: P13 ✳ and P14 ✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ✳ , P14 ✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ✳ and P14 ✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ✳ , P14 ✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

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COM	Uncommanded EVAC horn activation ◁✳
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

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COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

22

COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ◁✳ malfunction (SATCOM ◁✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

Ident.: PRO-ABN-ABN-RESET-B-00024336.0001001 / 10 MAY 21

COND	COND TRIM AIR SYS FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS, DCL, OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
24 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0023001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:**
		- Pull the 3 C/Bs:
		  • Channel 1 (A13 on 49VU)
		  • Channel 2 (M27 on 121VU)
		  • Channel 1 and 2 (L26 on 121VU).
		- Wait 5 s, before pushing the 3 C/Bs.
		Note: *The fuel quantity indication will be re-established within 1 min.*
		CAUTION The FUEL AUTO FEED FAULT caution will be lost for the remainder of the flight.
		In flight:
		- If center tank is not empty, while one inner tank contains less than 5 000 kg (11 000 lb) of fuel:
		  • FUEL MODE SEL (MAN)
		- When center tank is empty:
		  • CTR TK PUMP 1 and 2 (OFF)
		  • FUEL MODE SEL (MAN)

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00012657.0008001 / 20 MAR 17

NAV	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU - Wait 5 s, then push the C/B - Normal operation is expected after approximately 2 min. *Note: In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁✻ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁✻ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 02887-02904, 03032

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO - PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note: Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))...............................OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0005001 / 10 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

	ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
27	COM	Uncommanded EVAC horn activation ❄ (CIDS)	**On ground, or in flight:** - Press EVAC HORN SHUT OFF pb - Set EVAC CAPT & PURS/CAPT sw to CAPT position only - Wait 3 s. • IF UNSUCCESSFUL: - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU. • IF UNSUCCESSFUL - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU - Wait for 1 min - Push C/Bs for DIR 2 in the following order: M06, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

28	COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

29	COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✳ malfunction (SATCOM ◁✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁ , DCL ◁ , OCL ◁ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0023001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.* **CAUTION** The FUEL AUTO FEED FAULT caution will be lost for the remainder of the flight. In flight: - If center tank is not empty, while one inner tank contains less than 5 000 kg (11 000 lb) of fuel: • FUEL MODE SEL (MAN) - When center tank is empty: • CTR TK PUMP 1 and 2 (OFF) • FUEL MODE SEL (MAN)

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO - PACK (affected side)................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note: After any BSCU reset:* *- Record BSCU reset in the logbook.*

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0005001 / 10 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

35 COM	Uncommanded EVAC horn activation ✳
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

36 COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

37 COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✻ malfunction (SATCOM ◁✻)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁ , DCL ◁ , OCL ◁ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note:* *As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note:* *The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

39

ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

40 Ident.: PRO-ABN-ABN-RESET-B-00012660.0011001 / 07 NOV 22

ENG	ENG 1(2) FADEC A(B) FAULT (FADEC)	**On ground only:** If this alert triggers at engine start, apply the following procedure: - Set the associated ENG MASTER lever to OFF - Wait until N2 speed goes below 5 % (if N2 indication is not available, wait 2 min before going to next step) - Pull the associated C/B: • If ENG 1(2) FADEC A FAULT: C/B A04 or A05 on 49VU • If ENG 1(2) FADEC B FAULT: C/B R41 or Q40 on 121VU - Wait 5 s before pushing the C/Bs - Wait 10 s for the ECU power-up sequence, and the flight crew can restart the engine.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0023001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.* **CAUTION** The FUEL AUTO FEED FAULT caution will be lost for the remainder of the flight. In flight: - If center tank is not empty, while one inner tank contains less than 5 000 kg (11 000 lb) of fuel: • FUEL MODE SEL (MAN) - When center tank is empty: • CTR TK PUMP 1 and 2 (OFF) • FUEL MODE SEL (MAN)

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. Note: *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED..OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. CAUTION: Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. Note: *After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. Note: *After any BSCU reset:* *- Record BSCU reset in the logbook.*

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024305.0009001 / 10 MAY 21

COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49 VU M06 and M07 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M06, M07, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M06 and M07 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M06, M07, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0009001 / 10 MAY 21

COM	Uncommanded EVAC horn activation ◁
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M07 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M06 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M07, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

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COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

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COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	SATCOM ◁✳ malfunction (SATCOM ◁✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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46 Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁✳	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁✳ , DCL ◁✳ , OCL ◁✳ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁✳	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁✳)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0006001 / 20 MAR 17

FUEL	Loss of fuel quantity indication (FQIC)	**On ground, or in flight:** - Pull the C/B of the affected channel: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU). - Wait 5 s, before pushing both C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 03391-03565, 03630-03662, 03733, 04441-04446

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*

	AIR ENG 1(2) BLEED FAULT or
	AIR ENG 1(2) BLEED ABNORM PR
	(Engine Bleed Supply System)
		CAUTION If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED.
		Note: *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.*
		On ground or in flight
		• **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:**
		- ENG BLEED (affected side)..............................OFF
		■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:**
		  - Delay application of the reset until FAULT light extinguishes.
		■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:**
		  - X BLEED..AUTO
		  - PACK (affected side).................................ON
		  - ENG BLEED (affected side)......................ON
		  - Check that the affected Engine Bleed Valve is open on the BLEED SD page.
		    • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
50 AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………..OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0005001 / 10 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

51 COM	Uncommanded EVAC horn activation
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

52 COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

53 COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✳ malfunction (SATCOM ◁✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

54

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note:* *As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note:* *The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

55 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

56 Ident.: PRO-ABN-ABN-RESET-B-00012660.0011001 / 07 NOV 22

ENG	ENG 1(2) FADEC A(B) FAULT (FADEC)	**On ground only:** If this alert triggers at engine start, apply the following procedure: - Set the associated ENG MASTER lever to OFF - Wait until N2 speed goes below 5 % (if N2 indication is not available, wait 2 min before going to next step) - Pull the associated C/B: • If ENG 1(2) FADEC A FAULT: C/B A04 or A05 on 49VU • If ENG 1(2) FADEC B FAULT: C/B R41 or Q40 on 121VU - Wait 5 s before pushing the C/Bs - Wait 10 s for the ECU power-up sequence, and the flight crew can restart the engine.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0018001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 03588-03595, 03710, 04000-04192, 04389

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and** **If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO - PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: - AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) - AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) - AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).

	Both MCDU locked or blank or FMGC malfunction
	(FMGC)
		The circuit breakers for the FMGCs are:
		- AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel)
		- AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel).
		On ground:
		- If no engine running:
		  - Apply external power or APU generator power
		  - Wait 2 min before resetting the FMGC circuit breakers
		  - Set FD 1(2) pb to OFF
		  - Pull the C/B of the affected FMGC
		  - Wait 10 s
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If engines running:
		  - Set FD 1(2) pb to OFF.
		  - Pull the C/B of the affected FMGC.
		  - Wait 10 s.
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If FMGC reset is unsuccessful:
		  - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note:* *After any BSCU reset:* *- Record BSCU reset in the logbook.*

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0005001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**On ground:** - Pull the C/Bs in the following order: P13 ◁✱ and P14 ◁✱ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✱ , P14 ◁✱ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✱ and P14 ◁✱ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✱ , P14 ◁✱ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

60 COM	Uncommanded EVAC horn activation ◁✳
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

61 COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

62 COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✻ malfunction (SATCOM ◁✻)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0018001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.
WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 04465-04544, 04734-04756, 04953-05342, 05591-05883

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note: During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)...............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side)..................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………..OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

68

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

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COM	Uncommanded EVAC horn activation ◁* (CIDS)	**On ground, or in flight:**
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

70

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

71

COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	SATCOM ◁ malfunction (SATCOM ◁)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

73 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

74 Ident.: PRO-ABN-ABN-RESET-B-00012660.0011001 / 07 NOV 22

ENG	ENG 1(2) FADEC A(B) FAULT (FADEC)	**On ground only:** If this alert triggers at engine start, apply the following procedure: - Set the associated ENG MASTER lever to OFF - Wait until N2 speed goes below 5 % (if N2 indication is not available, wait 2 min before going to next step) - Pull the associated C/B: • If ENG 1(2) FADEC A FAULT: C/B A04 or A05 on 49VU • If ENG 1(2) FADEC B FAULT: C/B R41 or Q40 on 121VU - Wait 5 s before pushing the C/Bs - Wait 10 s for the ECU power-up sequence, and the flight crew can restart the engine.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check *Note: Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0018001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note: The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

L/G	L/G LGCIU 1(2) FAULT
	(LGCIU 1(2))
		On ground only:
		The flight crew must depressurize the green hydraulic system before resetting the LGCIU:
		- ENG 1 PUMP OFF
		- PTU OFF.
		When there is no green hydraulic pressure:
		- To reset LGCIU 1:
		  • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU.
		  • Wait for 15 s , then push the C/Bs.
		- To reset LGCIU 2:
		  • Pull C/B Q35 on 121VU, then R33 on 121VU.
		  • Wait for 15 s , then push the C/Bs.
		After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁✱ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁✱ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 04563, 04773, 05345

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note: Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21		

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COM
	Uncommanded EVAC horn activation ◁✳
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23		
80 COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.
Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21		
81 COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✳ malfunction (SATCOM ◁✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS, DCL, OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
83 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0018001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs. *Note:* *The fuel quantity indication will be re-established within 1 min.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side).................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note:* *After any BSCU reset:* *- Record BSCU reset in the logbook.*

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024305.0017001 / 10 MAY 21

COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✱ and P14 ◁✱ on 121VU G01 and G02 on 49VU M06 and M07 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M06, M07, P13 ◁✱ , P14 ◁✱ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✱ and P14 ◁✱ on 121VU G01 and G02 on 49VU M06 and M07 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M06, M07, P13 ◁✱ , P14 ◁✱ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0009001 / 10 MAY 21

COM	Uncommanded EVAC horn activation
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M07 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M06 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M07, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

87 COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

88 COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✳ malfunction (SATCOM ◁✳)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁ , DCL ◁ , OCL ◁ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
90 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check *Note: Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0009001 / 20 MAR 17

FUEL	Loss of fuel quantity indication (FQIC)	**On ground, or in flight:** - Pull the C/B of the affected channel: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU). - Wait 5 s, before pushing both C/Bs. *Note: 1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity according to this FCOM (Refer to PRO-NOR-SOP-15).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. Note: *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 04827-04860

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side).................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0009001 / 08 NOV 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))................................OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min, with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		On ground: - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min, with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON. Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **Short FMGC Reset:** On ground: • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the reset, before engaging or reengaging the FD and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the reset, before engaging or reengaging the FD and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running. *Note:* *The FMGC reset is more effective with engines not running.*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		In flight: - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the reset, before engaging or reengaging the FD and the AP of the reset FMGC. **Long FMGC Reset:** On ground: • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 15 min - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the reset, before engaging or reengaging the FD and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 15 min - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the reset, before engaging or reengaging the FD and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running. Note: *The FMGC reset is more effective with engines not running.* In flight: - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Pull the C/B of the affected FMGC - Wait 15 min - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the reset, before engaging or reengaging the FD and the AP of the reset FMGC. *Note:* *Consider a long FMGC reset only if a short FMGC reset has no effect.*

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note:* *After any BSCU reset:* *- Record BSCU reset in the logbook.*

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
93 COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁ , P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁ , P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

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COM	Uncommanded EVAC horn activation ◁*
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

95

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

96

COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21		
COM	SATCOM ◁ malfunction (SATCOM ◁)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

97

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁ , DCL ◁ , OCL ◁ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note:* *As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note:* *The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

98

ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

99 Ident.: PRO-ABN-ABN-RESET-B-00012660.0011001 / 07 NOV 22

ENG	ENG 1(2) FADEC A(B) FAULT (FADEC)	**On ground only:** If this alert triggers at engine start, apply the following procedure: - Set the associated ENG MASTER lever to OFF - Wait until N2 speed goes below 5 % (if N2 indication is not available, wait 2 min before going to next step) - Pull the associated C/B: • If ENG 1(2) FADEC A FAULT: C/B A04 or A05 on 49VU • If ENG 1(2) FADEC B FAULT: C/B R41 or Q40 on 121VU - Wait 5 s before pushing the C/Bs - Wait 10 s for the ECU power-up sequence, and the flight crew can restart the engine.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check *Note: Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0019001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs *Note: 1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity according to this FCOM (Refer to PRO-NOR-SOP-15).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

Ident.: PRO-ABN-ABN-RESET-B-00012657.0037001 / 20 MAR 17

NAV	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K7 on 121VU - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU - Wait 5 s, then push the C/B - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ❄ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ❄ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN _Note:_ *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	_Note:_ *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. _Note:_ *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: *After any BSCU reset:*
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: *After any BSCU reset:*
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

103	COM	Uncommanded EVAC horn activation
		(CIDS)
			On ground, or in flight:
			- Press EVAC HORN SHUT OFF pb
			- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
			- Wait 3 s.
			• IF UNSUCCESSFUL:
			  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
			  • IF UNSUCCESSFUL
			    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
			    - Wait for 1 min
			    - Push C/Bs for DIR 2 in the following order: M06, G02
			    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

104	COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

105	COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM malfunction (SATCOM)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

106

DATALINK	ATSU	The ATSU reset should be attempted, only if:
		- INVALID DATA is displayed on the DCDU, or
		- Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or
		- ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative.
		On ground or in flight:
		- Pull the C/Bs in the following order: L16, L15 on 121VU
		- Wait 5 s, then
		- Push the C/Bs in the following order: L15, L16.
		When the ATSU is reset, the following connections are no longer active:
		- CPDLC:
		  • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection.
		- ADS-C:
		  • The flight crew must check that ADS-C is ARMED or ON.
		  • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection.
		  Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.

	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
107 Ident.: PRO-ABN-ABN-RESET-B-00014274.0001001 / 20 MAR 17		
DOOR	Flickering or total loss of the video camera display (on the SD) accompanied by the "VIDEO NOT AVAIL" message. (CDSS)	**On ground, or in flight:** - Set the VIDEO rotary selector to OFF, on the center pedestal VIDEO panel - Set the COCKPIT DOOR VIDEO pb-sw to OFF, on the overhead panel - Wait 2 min, then - Set the COCKPIT DOOR VIDEO pb-sw back to ON, on the overhead panel - Wait 15 s, then - Set the VIDEO rotary selector to ″CKPT ENTRY″, on the center pedestal VIDEO panel.
108 Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17		

ELEC	GPU cannot be connected to the aircraft
	(GAPCU)
		On ground only:
		The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF):
		• If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft
		  - Reset the EXT PWR pb switch on 35VU (Press and release).
		• If no power source is connected to the electrical network of the aircraft
		  - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

09 Ident.: PRO-ABN-ABN-RESET-B-00012660.0011001 / 07 NOV 22		

ENG	ENG 1(2) FADEC A(B) FAULT
	(FADEC)
		On ground only:
		If this alert triggers at engine start, apply the following procedure:
		- Set the associated ENG MASTER lever to OFF
		- Wait until N2 speed goes below 5 % (if N2 indication is not available, wait 2 min before going to next step)
		- Pull the associated C/B:
		  • If ENG 1(2) FADEC A FAULT: C/B A04 or A05 on 49VU
		  • If ENG 1(2) FADEC B FAULT: C/B R41 or Q40 on 121VU
		- Wait 5 s before pushing the C/Bs
		- Wait 10 s for the ECU power-up sequence, and the flight crew can restart the engine.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check _Note:_ *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0019001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs _Note:_ *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity according to this FCOM (Refer to PRO-NOR-SOP-15).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0010001 / 06 MAY 22

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)...............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side)..................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:**

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))...............................OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: - AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) - AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) - AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).

	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are:
		- AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel)
		- AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel).
		On ground:
		- If no engine running:
		  - Apply external power or APU generator power
		  - Wait 2 min before resetting the FMGC circuit breakers
		  - Set FD 1(2) pb to OFF
		  - Pull the C/B of the affected FMGC
		  - Wait 10 s
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If engines running:
		  - Set FD 1(2) pb to OFF.
		  - Pull the C/B of the affected FMGC.
		  - Wait 10 s.
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If FMGC reset is unsuccessful:
		  - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: *After any BSCU reset:*
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: *After any BSCU reset:*
		- Record BSCU reset in the logbook.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
Ident.: PRO-ABN-ABN-RESET-B-00024305.0017001 / 10 MAY 21		
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M06 and M07 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M06, M07, P13 ◁ , P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M06 and M07 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M06, M07, P13 ◁ , P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0009001 / 10 MAY 21

COM	Uncommanded EVAC horn activation ◁✱
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M07 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M06 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M07, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

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COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

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COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✻ malfunction (SATCOM ◁✻)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

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ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

17 Ident.: PRO-ABN-ABN-RESET-B-00012660.0011001 / 07 NOV 22

ENG	ENG 1(2) FADEC A(B) FAULT (FADEC)	**On ground only:** If this alert triggers at engine start, apply the following procedure: - Set the associated ENG MASTER lever to OFF - Wait until N2 speed goes below 5 % (if N2 indication is not available, wait 2 min before going to next step) - Pull the associated C/B: • If ENG 1(2) FADEC A FAULT: C/B A04 or A05 on 49VU • If ENG 1(2) FADEC B FAULT: C/B R41 or Q40 on 121VU - Wait 5 s before pushing the C/Bs - Wait 10 s for the ECU power-up sequence, and the flight crew can restart the engine.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0009001 / 20 MAR 17

FUEL	Loss of fuel quantity indication (FQIC)	**On ground, or in flight:** - Pull the C/B of the affected channel: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU). - Wait 5 s, before pushing both C/Bs. *Note:* *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity according to this FCOM (Refer to PRO-NOR-SOP-15).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. Note: *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 06561

Ident.: PRO-ABN-ABN-RESET-B-00012654.0001001 / 06 MAY 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
A-ICE	ANTI ICE L(R) WINDSHIELD(WINDOW) (WHC)	**On ground only:** If the air conditioning packs are OFF with the OAT above 40 °C, and/or the windshield is under direct sunlight, a spurious ANTI ICE L(R) WINDSHIELD(WINDOW) alert may trigger. In this case, apply the following reset procedure: - Set both PACKS to ON - Wait 5 min - Pull the C/B X13 on 122VU (WHC1), or W13 on 122VU (WHC2) - Push it after 5 s.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0006001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note: During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	*Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED..AUTO - PACK (affected side).................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - X BLEED.......................................OPEN

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
120 AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

121

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✻ and P14 ◁✻ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✻ , P14 ◁✻ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✻ and P14 ◁✻ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✻ , P14 ◁✻ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

122

COM	Uncommanded EVAC horn activation
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

23

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

124

COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ◁✻ malfunction (SATCOM ◁✻)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

125

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00014274.0001001 / 20 MAR 17

126

DOOR	Flickering or total loss of the video camera display (on the SD) accompanied by the "VIDEO NOT AVAIL" message. (CDSS)	**On ground, or in flight:** - Set the VIDEO rotary selector to OFF, on the center pedestal VIDEO panel - Set the COCKPIT DOOR VIDEO pb-sw to OFF, on the overhead panel - Wait 2 min, then - Set the COCKPIT DOOR VIDEO pb-sw back to ON, on the overhead panel - Wait 15 s, then - Set the VIDEO rotary selector to ″CKPT ENTRY″, on the center pedestal VIDEO panel.

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

127

ELEC	GPU cannot be connected to the aircraft
	(GAPCU)
		On ground only:
		The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF):
		• If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft
		  - Reset the EXT PWR pb switch on 35VU (Press and release).
		• If no power source is connected to the electrical network of the aircraft
		  - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

28 Ident.: PRO-ABN-ABN-RESET-B-00012660.0011001 / 07 NOV 22

ENG	ENG 1(2) FADEC A(B) FAULT
	(FADEC)
		On ground only:
		If this alert triggers at engine start, apply the following procedure:
		- Set the associated ENG MASTER lever to OFF
		- Wait until N2 speed goes below 5 % (if N2 indication is not available, wait 2 min before going to next step)
		- Pull the associated C/B:
		  • If ENG 1(2) FADEC A FAULT: C/B A04 or A05 on 49VU
		  • If ENG 1(2) FADEC B FAULT: C/B R41 or Q40 on 121VU
		- Wait 5 s before pushing the C/Bs
		- Wait 10 s for the ECU power-up sequence, and the flight crew can restart the engine.

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- Perform a flight control check Note: *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0019001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs Note: *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity according to this FCOM (Refer to PRO-NOR-SOP-15).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 08495-08596, 09190

Ident.: PRO-ABN-ABN-RESET-B-00012654.0002001 / 20 MAR 17

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
A-ICE	WING A.ICE SYS FAULT (WAI)	When setting the WAI pb-sw to ON above FL 310, the air bleed pressure might not be sufficient, and the WING A.ICE SYS FAULT alert can trigger: - After ECAM application, another WAI selection attempt can be performed below FL 310 - If the ECAM triggers again, apply ECAM.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0011001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note: During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) ABNORM PR and AIR PACK 2(1) REGUL FAULT (EIU)	**On ground only:** If PACK 2(1) is set to ON: PACK 2(1)...............................OFF PACK 2(1)...............................ON *Note: This will clear the AIR PACK 2(1) REGUL FAULT ECAM alert.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note: Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)...............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- PACK (affected side)..................................ON - ENG BLEED (affected side)........................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - PACK (affected side)..........................OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: - AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) - AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) - AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).

	Both MCDU locked or blank or FMGC malfunction
	(FMGC)
		The circuit breakers for the FMGCs are:
		- AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel)
		- AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel).
		On ground:
		- If no engine running:
		  - Apply external power or APU generator power
		  - Wait 2 min before resetting the FMGC circuit breakers
		  - Set FD 1(2) pb to OFF
		  - Pull the C/B of the affected FMGC
		  - Wait 10 s
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If engines running:
		  - Set FD 1(2) pb to OFF.
		  - Pull the C/B of the affected FMGC.
		  - Wait 10 s.
		  - Push the C/B of the affected FMGC.
		CAUTION Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.
		- If FMGC reset is unsuccessful:
		  - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: *After any BSCU reset:*
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: *After any BSCU reset:*
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

134

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✻ and P14 ◁✻ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✻ , P14 ◁✻ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✻ and P14 ◁✻ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✻ , P14 ◁✻ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

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COM	Uncommanded EVAC horn activation
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

36

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

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COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	SATCOM ◁✻ malfunction (SATCOM ◁✻)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU ◁✳	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁✳ , DCL ◁✳ , OCL ◁✳ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note:* *As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁✳	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note:* *The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁✳)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

139 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

Ident.: PRO-ABN-ABN-RESET-B-00012660.0004001 / 07 MAR 22

140 ENG	ENG 1(2) EIU FAULT	**On ground only** If this ECAM alert triggers after engine start, during the selection of the ENG MODE selector from IGN to NORM, reset the ENG MODE selector as follows: - Switch the ENG MODE selector from NORM to IGN - Wait 1 s - Switch the ENG MODE selector back from IGN to NORM. If the ECAM alert disappears after the reset, resume normal operation. *Note: This reset procedure is only authorized if the ECAM alert triggers only on one side (ENG 1 EIU FAULT or ENG 2 EIU FAULT).*

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0019001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs *Note:* *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity according to this FCOM (Refer to PRO-NOR-SOP-15).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁✱ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁✱ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 08635

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012654.0002001 / 20 MAR 17

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A-ICE	WING A.ICE SYS FAULT (WAI)	When setting the WAI pb-sw to ON above FL 310, the air bleed pressure might not be sufficient, and the WING A.ICE SYS FAULT alert can trigger: - After ECAM application, another WAI selection attempt can be performed below FL 310 - If the ECAM triggers again, apply ECAM.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0011001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) ABNORM PR and AIR PACK 2(1) REGUL FAULT (EIU)	**On ground only:** If PACK 2(1) is set to ON: PACK 2(1)..............................OFF PACK 2(1)..............................ON *Note:* *This will clear the AIR PACK 2(1) REGUL FAULT ECAM alert.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- PACK (affected side)..................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - PACK (affected side)..........................OFF - X BLEED.......................................OPEN Note: *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	Note: *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. Note: *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT
	or
	BRAKES BSCU CH 1(2) FAULT
	(BSCU)
		On ground:
		- STOP aircraft
		- Set PARK BRK handle to ON
		- Confirm that towing bar is disconnected
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1
		  - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2
		  - Push C/Bs.
		After a successful reset, resume to normal operation.
		Note: After any BSCU reset:
		1. Check brake efficiency
		2. Record BSCU reset in the logbook.
		In flight:
		When landing gear is up only:
		- Set A/SKID & N/W STRG sw to OFF
		- Set A/SKID & N/W STRG sw to ON
		- If required, rearm the autobrake.
		When landing gear is down: reset not authorized.
		Note: After any BSCU reset:
		- Record BSCU reset in the logbook.

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

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COM	Uncommanded EVAC horn activation
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

148

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

149

COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM malfunction (SATCOM)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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150 Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS, DCL, OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. Note: *As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. Note: *The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17		
151 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.
Ident.: PRO-ABN-ABN-RESET-B-00012660.0004001 / 07 MAR 22		
152 ENG	ENG 1(2) EIU FAULT	**On ground only** If this ECAM alert triggers after engine start, during the selection of the ENG MODE selector from IGN to NORM, reset the ENG MODE selector as follows: - Switch the ENG MODE selector from NORM to IGN - Wait 1 s - Switch the ENG MODE selector back from IGN to NORM. If the ECAM alert disappears after the reset, resume normal operation. *Note: This reset procedure is only authorized if the ECAM alert triggers only on one side (ENG 1 EIU FAULT or ENG 2 EIU FAULT).*

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check Note: *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0028001 / 09 APR 20

153

FUEL	- Loss of fuel quantity indication, or - Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED although FUEL SD page indicates no anomaly, or - Triggering of FUEL FQI CH 1+2 FAULT. (FQIC)	**On ground or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s before pushing the 3 C/Bs. Note: *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity. Refer to PRO-NOR-SOP-15.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

155

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22		
VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.
Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21		
WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 09324

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012654.0002001 / 20 MAR 17

156 A-ICE	WING A.ICE SYS FAULT (WAI)	When setting the WAI pb-sw to ON above FL 310, the air bleed pressure might not be sufficient, and the WING A.ICE SYS FAULT alert can trigger: - After ECAM application, another WAI selection attempt can be performed below FL 310 - If the ECAM triggers again, apply ECAM.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0011001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) ABNORM PR and AIR PACK 2(1) REGUL FAULT (EIU)	**On ground only:** If PACK 2(1) is set to ON: PACK 2(1)..............................OFF PACK 2(1)..............................ON *Note:* *This will clear the AIR PACK 2(1) REGUL FAULT ECAM alert.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- PACK (affected side)..................................ON - ENG BLEED (affected side)........................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - PACK (affected side)..........................OFF - X BLEED.......................................OPEN *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note: Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))…………………………...OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: The FMGC reset is more effective with engines not running. **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0001001 / 20 MAR 17

BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. • IF UNSUCCESSFUL: - Pull C/Bs M33 and M34 on 121VU for BSCU channel 1 - Pull C/Bs M36 and M35 on 121VU for BSCU channel 2 - Push C/Bs. After a successful reset, resume to normal operation. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note: After any BSCU reset:* *- Record BSCU reset in the logbook.*

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁* and P14 ◁* on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁* , P14 ◁* - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁* and P14 ◁* on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁* , P14 ◁* - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21		

160 COM	Uncommanded EVAC horn activation ✻
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024307.0002001 / 10 MAY 21		
161 COM	Incorrect number of emergency exits on the FAP (CIDS)	**On ground, or in flight:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ✻ , M05 on 121VU G02 on 49VU, P14 ✻ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ✻ , P14 ✻ in order to re-engage the NORM power - Push the C/Bs in the following order: G01, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

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COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

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COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ◁ malfunction (SATCOM ◁)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22		
164 DATALINK	ATSU ◁	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS ◁ , DCL ◁ , OCL ◁ or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS ◁	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3 ◁)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17		
165 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.
Ident.: PRO-ABN-ABN-RESET-B-00012660.0004001 / 07 MAR 22		
166 ENG	ENG 1(2) EIU FAULT	**On ground only** If this ECAM alert triggers after engine start, during the selection of the ENG MODE selector from IGN to NORM, reset the ENG MODE selector as follows: - Switch the ENG MODE selector from NORM to IGN - Wait 1 s - Switch the ENG MODE selector back from IGN to NORM. If the ECAM alert disappears after the reset, resume normal operation. *Note: This reset procedure is only authorized if the ECAM alert triggers only on one side (ENG 1 EIU FAULT or ENG 2 EIU FAULT).*

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note: Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0019001 / 20 MAR 17

FUEL	Loss of fuel quantity indication or Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED, although FUEL SD indicates no anomaly. (FQIC)	**On ground, or in flight:** - Pull the 3 C/Bs • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s, before pushing the 3 C/Bs *Note: 1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity according to this FCOM (Refer to PRO-NOR-SOP-15).*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁* on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁* on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note: After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 10949-11293

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00012654.0002001 / 20 MAR 17

169 A-ICE	WING A.ICE SYS FAULT (WAI)	When setting the WAI pb-sw to ON above FL 310, the air bleed pressure might not be sufficient, and the WING A.ICE SYS FAULT alert can trigger: - After ECAM application, another WAI selection attempt can be performed below FL 310 - If the ECAM triggers again, apply ECAM.

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Ident.: PRO-ABN-ABN-RESET-B-00021069.0011001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. *Note:* *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) ABNORM PR and AIR PACK 2(1) REGUL FAULT (EIU)	**On ground only:** If PACK 2(1) is set to ON: PACK 2(1)..............................OFF PACK 2(1)..............................ON *Note:* *This will clear the AIR PACK 2(1) REGUL FAULT ECAM alert.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. *Note:* *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- PACK (affected side)...................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - PACK (affected side)..........................OFF - X BLEED.......................................OPEN Note: *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	Note: *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. Note: *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))................................OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** Note: *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0003001 / 22 FEB 22

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BRAKES	BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. After a successful reset, resume to normal operation. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note:* *After any BSCU reset, record the BSCU reset in the logbook.*

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁✳ and P14 ◁✳ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁✳ , P14 ◁✳ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

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COM	Uncommanded EVAC horn activation ✻ (CIDS)	**On ground, or in flight:** - Press EVAC HORN SHUT OFF pb - Set EVAC CAPT & PURS/CAPT sw to CAPT position only - Wait 3 s. • IF UNSUCCESSFUL: - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU. • IF UNSUCCESSFUL - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU - Wait for 1 min - Push C/Bs for DIR 2 in the following order: M06, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024307.0002001 / 10 MAY 21

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COM	Incorrect number of emergency exits on the FAP (CIDS)	**On ground, or in flight:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ✻ , M05 on 121VU G02 on 49VU, P14 ✻ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ✻ , P14 ✻ in order to re-engage the NORM power - Push the C/Bs in the following order: G01, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

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COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

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COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ◁ malfunction (SATCOM ◁)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
179 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

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Ident.: PRO-ABN-ABN-RESET-B-00012660.0003001 / 07 NOV 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
ENG	ENG 1(2) FADEC SYS FAULT (FADEC)	**On ground only:** - If this alert triggers after the associated ENG MASTER lever is set to ON, the ENG 1(2) FADEC SYS FAULT alert is latched. As a result, a maintenance action is due. - If this alert triggers during the FADEC power-up and when the associated ENG MASTER lever is still set to OFF, the alert may be spurious. Then apply the following procedure: • Set the ENG MODE selector to NORM • Check that the associated ENG FADEC GND PWR pb-sw is set to OFF • For ENG 1(2) FADEC channel A, pull the C/B A04 or A05 on 49VU • For ENG 1(2) FADEC channel B, pull the C/B R41 or Q40 on 121VU • Wait 5 s • Push the C/Bs • At the next FADEC power-up, check that the alert does not trigger. If the alert triggers again, do not attempt another reset, a maintenance action is due.
	ENG 1(2) EIU FAULT	**On ground only** If this ECAM alert triggers after engine start, during the selection of the ENG MODE selector from IGN to NORM, reset the ENG MODE selector as follows: - Switch the ENG MODE selector from NORM to IGN - Wait 1 s - Switch the ENG MODE selector back from IGN to NORM. If the ECAM alert disappears after the reset, resume normal operation. *Note: This reset procedure is only authorized if the ECAM alert triggers only on one side (ENG 1 EIU FAULT or ENG 2 EIU FAULT).*

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0028001 / 09 APR 20

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FUEL	- Loss of fuel quantity indication, or - Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED although FUEL SD page indicates no anomaly, or - Triggering of FUEL FQI CH 1+2 FAULT. (FQIC)	**On ground or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s before pushing the 3 C/Bs. *Note:* *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity. Refer to PRO-NOR-SOP-15.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

183

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 11482-11522, 11572-11597

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012654.0002001 / 20 MAR 17

184 A-ICE	WING A.ICE SYS FAULT (WAI)	When setting the WAI pb-sw to ON above FL 310, the air bleed pressure might not be sufficient, and the WING A.ICE SYS FAULT alert can trigger: - After ECAM application, another WAI selection attempt can be performed below FL 310 - If the ECAM triggers again, apply ECAM.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. Note: *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) ABNORM PR and AIR PACK 2(1) REGUL FAULT (EIU)	**On ground only:** If PACK 2(1) is set to ON: PACK 2(1)..............................OFF PACK 2(1)..............................ON Note: *This will clear the AIR PACK 2(1) REGUL FAULT ECAM alert.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. Note: *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- PACK (affected side).................................ON - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - PACK (affected side).........................OFF - X BLEED.......................................OPEN *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note:* *Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note:* *Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

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Ident.: PRO-ABN-ABN-RESET-B-00021067.0007001 / 08 NOV 22

186

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))................................OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B B05 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B B05 on 49VU and M21 on 121VU - Push them after 7 min , with a delay of less than 5 s between side 1 and 2 - Wait at least 30 seconds for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note:* *If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s - Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 B1 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 B2 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *The FMGC reset is more effective with engines not running.* **In flight:** - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0003001 / 22 FEB 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
BRAKES	187 BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. After a successful reset, resume to normal operation. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note:* *After any BSCU reset, record the BSCU reset in the logbook.*

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
188 Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21		
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁, P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁, P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

189

COM	Uncommanded EVAC horn activation (CIDS)	**On ground, or in flight:** - Press EVAC HORN SHUT OFF pb - Set EVAC CAPT & PURS/CAPT sw to CAPT position only - Wait 3 s. • IF UNSUCESSFUL: - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU. • IF UNSUCCESSFUL - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU - Wait for 1 min - Push C/Bs for DIR 2 in the following order: M06, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024307.0002001 / 10 MAY 21

190

COM	Incorrect number of emergency exits on the FAP (CIDS)	**On ground, or in flight:** - Pull the C/Bs in the following order: G01 on 49VU, P13 , M05 on 121VU G02 on 49VU, P14 , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 , P14 in order to re-engage the NORM power - Push the C/Bs in the following order: G01, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

91

COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

92 Ident.: PRO-ABN-ABN-RESET-B-00024736.0002001 / 10 MAY 21

COM	RMP malfunction (RMP)	**On ground, or in flight:** Flight crew must reset all RMPs one after the other via the RMP control panel: - Set RMP BRT/OFF knob to OFF position - Wait 5 s - Set RMP BRT/OFF knob to the desired BRT position.

Ident.: PRO-ABN-ABN-RESET-B-00024309.0002001 / 10 MAY 21

193

COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: H01 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, H01.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

COM	SATCOM ◁ malfunction (SATCOM ◁)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

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Ident.: PRO-ABN-ABN-RESET-B-00022080.0001001 / 03 NOV 22

194

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: L16, L15 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: L15, L16. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17

195 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.

Ident.: PRO-ABN-ABN-RESET-B-00012660.0004001 / 07 MAR 22

196 ENG	ENG 1(2) EIU FAULT	**On ground only** If this ECAM alert triggers after engine start, during the selection of the ENG MODE selector from IGN to NORM, reset the ENG MODE selector as follows: - Switch the ENG MODE selector from NORM to IGN - Wait 1 s - Switch the ENG MODE selector back from IGN to NORM. If the ECAM alert disappears after the reset, resume normal operation. *Note:* *This reset procedure is only authorized if the ECAM alert triggers only on one side (ENG 1 EIU FAULT or ENG 2 EIU FAULT).*

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note:* *Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

Ident.: PRO-ABN-ABN-RESET-B-00012653.0028001 / 09 APR 20

197

FUEL	- Loss of fuel quantity indication, or - Simultaneous triggering of FUEL L OUTER XFR CLOSED and FUEL R OUTER XFR CLOSED although FUEL SD page indicates no anomaly, or - Triggering of FUEL FQI CH 1+2 FAULT. (FQIC)	**On ground or in flight:** - Pull the 3 C/Bs: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU) • Channel 1 and 2 (L26 on 121VU). - Wait 5 s before pushing the 3 C/Bs. *Note:* *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity. Refer to PRO-NOR-SOP-15.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

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Ident.: PRO-ABN-ABN-RESET-B-00012651.0016001 / 05 MAY 22

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ◁✱ on 121VU, G01 and G02 on 49VU, M05 or M06 and M06 or M07 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 or M06 and M06 or M07 on 121VU, G01 and G02 on 49VU, P13 and P14 ◁✱ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

SYSTEM RESET TABLE

Applicable to: MSN 11531

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00012654.0002001 / 20 MAR 17

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A-ICE	WING A.ICE SYS FAULT (WAI)	When setting the WAI pb-sw to ON above FL 310, the air bleed pressure might not be sufficient, and the WING A.ICE SYS FAULT alert can trigger: - After ECAM application, another WAI selection attempt can be performed below FL 310 - If the ECAM triggers again, apply ECAM.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure

Ident.: PRO-ABN-ABN-RESET-B-00021069.0011001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AIR	AIR PACK 1(2) REGUL FAULT (ACSC)	**On ground only:** - Pull C/Bs W21 and W22 on 122VU - Pull C/Bs X21 and X22 on 122VU - Pull C/Bs Y18, Y20 and Y21 on 122VU - Pull C/B D8 on 49VU - Wait 5 s before pushing all the C/Bs. Note: *During the reset, a small increase of the engine thrust may be observed (N1 or EPR, as applicable). If the parking brake is set, vibrations can occur.*
	AIR ENG 1(2) ABNORM PR and AIR PACK 2(1) REGUL FAULT (EIU)	**On ground only:** If PACK 2(1) is set to ON: PACK 2(1)..............................OFF PACK 2(1)..............................ON Note: *This will clear the AIR PACK 2(1) REGUL FAULT ECAM alert.*
	AIR ENG 1(2) BLEED FAULT or AIR ENG 1(2) BLEED ABNORM PR (Engine Bleed Supply System)	**CAUTION** If the BLEED NOT CLOSED subtitle is displayed in the AIR ENG 1(2) BLEED FAULT alert, do not reset the affected ENG BLEED. Note: *Do not attempt more than one reset. However, if the first reset is unsuccessful and if the AIR ENG 1(2) BLEED FAULT alert occurred after takeoff with APU bleed ON, a second reset may be attempted when flight conditions permit and when the aircraft is stabilized in level flight.* **On ground or in flight** • **If the PACK (non-affected side) is operative, and If the Wing Anti-Ice is OFF:** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - X BLEED...AUTO

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
		- PACK (affected side)..................................ON - ENG BLEED (affected side).......................ON - Check that the affected Engine Bleed Valve is open on the BLEED SD page. • **If** AIR ENG (AFFECTED) BLEED FAULT **alert or** AIR ENG (AFFECTED) BLEED ABNORM PR **alert reoccurs, or** **If Engine Bleed Valve (affected side) not open on the** BLEED SD page**:** - ENG BLEED (affected side)...............OFF - PACK (affected side)..........................OFF - X BLEED.......................................OPEN *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*
	AIR ENG 1(2) BLEED NOT CLSD (Engine Bleed Supply System)	*Note: Do not attempt more than one reset.* **On ground only** - ENG BLEED (affected side)..............................OFF ■ **If the ENG BLEED (affected side) pb-sw FAULT light is on:** - Delay application of the reset until FAULT light extinguishes. ■ **If the ENG BLEED (affected side) pb-sw FAULT light is off:** - ENG BLEED (affected side)......................ON - Check that the affected Engine Bleed Valve is closed on the BLEED SD page. *Note: Record the ENG BLEED reset in the logbook (successful or unsuccessful).*

02 Ident.: PRO-ABN-ABN-RESET-B-00021067.0008001 / 08 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
AUTO FLT	AUTO FLT A/THR OFF	**On ground, before taxi only:** • If no engine running: - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR. • If at least one engine is running: - Apply external power or APU generator power - ENG MASTER (running engine(s))……………………………..OFF - Press FCU A/THR pb in order to re-engage the A/THR (this will cancel the ECAM alert) - Press A/THR instinctive disconnect pb to disconnect A/THR.
	AUTO FLT FCU 1(2) FAULT (FCU)	**In flight:** - Pull the C/B H11 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary. **On ground:** - Pull the C/B H11 on 49VU for FCU 1, or M21 on 121VU for FCU 2 - Push it after 5 s - If AUTO FLT FCU 1(2) FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1(2) FAULT remains, pull both C/B H11 on 49VU and M21 on 121VU - Push them after 7 min, with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful).
	AUTO FLT FCU 1 + 2 FAULT (FCU)	**In flight:** - Pull the C/B H11 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push them after 5 s - Check the displayed targets and the barometer reference, and correct them if necessary.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		On ground: - Pull the C/B H11 on 49VU for FCU 1, and then pull M21 on 121VU for FCU 2 - Push the C/Bs after 5 s - If AUTO FLT FCU 1+2 FAULT disappears, check the displayed targets and barometer reference, and correct them if necessary (RESET successful) - If AUTO FLT FCU 1+2 FAULT remains, pull again both C/B H11 on 49VU and M21 on 121VU - Push them after 7 min, with a delay of less than 5 s between side 1 and 2 - Wait at least 30 s for FCU 1 and FCU 2 safety tests completion - Check the displayed targets and barometer reference, and correct them if necessary (RESET successful). FCU targets are synchronized on current aircraft values and displayed as selected targets. - Re–enter the barometer altimeter setting value, if necessary.
	AUTO FLT YAW DAMPER 1(2) (FAC 1(2))	**In flight:** If AP is inoperative: - Set FAC 1(2) pb to OFF - Wait 3 s - Set FAC 1(2) pb to ON.
	CAT 3 DUAL displayed in INOP SYS without any other ECAM alert (FAC)	**On ground, or in flight:** *Note: If the CAT 3 DUAL INOP SYS is associated with another ECAM message (in particular ADR FAULT or IR FAULT), it means that the root cause is not an ADR or IR rejection by FAC or FMGC. Consequently, change of AP or FAC reset will not clear the CAT 3 DUAL INOP.* If CAT 3 DUAL is displayed in INOP SYS without any other failure being detected: - Change the AP in command. If unsuccessful: - Set FAC 1 pb to OFF - Wait 3 s - Set FAC 1 pb to ON. Wait for AUTO FLT FAC 1 FAULT to disappear, and: - Set FAC 2 pb to OFF - Wait 3 s

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Set FAC 2 pb to ON.
	One MCDU locked or blank (MCDU)	**On ground, or in flight:** - Pull the C/B for the locked or blank MCDU and push it back after 10 s. The circuit breakers for the MCDUs are: • AUTO FLT/MCDU 1 H07 ON 49 VU (Overhead Panel) • AUTO FLT/MCDU 2 N20 ON 121 VU (Right Rear Maintenance Panel) • AUTO FLT/MCDU 3 N21 ON 121 VU (Right Rear Maintenance Panel).
	Both MCDU locked or blank or FMGC malfunction (FMGC)	The circuit breakers for the FMGCs are: • AUTO FLT/FMGC 1 H08 ON 49 VU (Overhead Panel) • AUTO FLT/FMGC 2 M17 ON 121 VU (Right Rear Maintenance Panel). **On ground:** • If no engine running: - Apply external power or APU generator power - Wait 2 min before resetting the FMGC circuit breakers - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If engines running: - Set FD 1(2) pb to OFF. - Pull the C/B of the affected FMGC. - Wait 10 s. - Push the C/B of the affected FMGC. **CAUTION** Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC. • If FMGC reset is unsuccessful: - Consider FMGC reset with engines not running. *Note: The FMGC reset is more effective with engines not running.*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		In flight: - Set non-affected AP 2(1) pb to ON - Set FD 1(2) pb to OFF - Pull the C/B of the affected FMGC - Wait 10 s - Push the C/B of the affected FMGC. CAUTION: Always wait 1 min after the PLEASE WAIT message disappears from the MCDU, before engaging or reengaging the FDs and the AP of the reset FMGC.

Ident.: PRO-ABN-ABN-RESET-B-00021056.0003001 / 22 FEB 22

BRAKES	203 BRAKES SYS 1(2) FAULT or BRAKES BSCU CH 1(2) FAULT (BSCU)	**On ground:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. After a successful reset, resume to normal operation. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Record BSCU reset in the logbook.* **In flight:** When landing gear is up only: - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON - If required, rearm the autobrake. When landing gear is down: reset not authorized. *Note:* *After any BSCU reset, record the BSCU reset in the logbook.*

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Ident.: PRO-ABN-ABN-RESET-B-00024305.0015001 / 10 MAY 21

204

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	COM CIDS 1+2 FAULT and/or Loss of Passenger Address and/or Loss of Cabin Interphone (CIDS)	**Confirm if spurious:** - Check PA function - Check Cabin Interphone function - Check Cabin Lighting function. If spurious, reset the CIDS when aircraft is self powered (APU or engine). **On ground:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 5 min - Push the C/Bs in the following order: M05, M06, P13 ◁ , P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation. **In flight:** - Pull the C/Bs in the following order: P13 ◁ and P14 ◁ on 121VU G01 and G02 on 49VU M05 and M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: G01, G02 - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ◁ , P14 ◁ - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00024306.0005001 / 10 MAY 21

205

COM	Uncommanded EVAC horn activation ✳
	(CIDS)
		On ground, or in flight:
		- Press EVAC HORN SHUT OFF pb
		- Set EVAC CAPT & PURS/CAPT sw to CAPT position only
		- Wait 3 s.
		• IF UNSUCCESSFUL:
		  - Pull C/Bs for DIR 2 in the following order: G02 on 49VU, M06 on 121VU.
		  • IF UNSUCCESSFUL
		    - Pull C/Bs for DIR 1 in the following order: G01 on 49VU, M05 on 121VU
		    - Wait for 1 min
		    - Push C/Bs for DIR 2 in the following order: M06, G02
		    - After CIDS reset, wait approximately 4 min before recovering normal operation.

Ident.: PRO-ABN-ABN-RESET-B-00024307.0002001 / 10 MAY 21

206

COM	Incorrect number of emergency exits on the FAP (CIDS)	**On ground, or in flight:** - Pull the C/Bs in the following order: G01 on 49VU, P13 ✳ , M05 on 121VU G02 on 49VU, P14 ✳ , M06 on 121VU - Wait 10 s - Push the C/Bs in the following order: M05, M06, P13 ✳ , P14 ✳ in order to re-engage the NORM power - Push the C/Bs in the following order: G01, G02 - After CIDS reset, wait approximately 4 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

07 Ident.: PRO-ABN-ABN-RESET-B-00024308.0001001 / 02 MAY 23

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	Frozen/blank RMP display (RMP)	**On ground, or in flight:** The flight crew must reset all the RMPs one after the other via the RMP control panel: - Set RMP ON/OFF sw to OFF position - Wait 5 s - Set RMP ON/OFF sw to ON position.

08 Ident.: PRO-ABN-ABN-RESET-B-00024736.0002001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	RMP malfunction (RMP)	**On ground, or in flight:** Flight crew must reset all RMPs one after the other via the RMP control panel: - Set RMP BRT/OFF knob to OFF position - Wait 5 s - Set RMP BRT/OFF knob to the desired BRT position.

09 Ident.: PRO-ABN-ABN-RESET-B-00024309.0004001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	FAP freezing (FAP)	**On ground, or in flight:** - Pull FAP C/Bs in the following order: G03 on 49VU, Q14 on 121VU - Wait 10 s - Push the C/Bs in the following order: Q14, G03.

Ident.: PRO-ABN-ABN-RESET-B-00024311.0001001 / 10 MAY 21

ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**
COM	SATCOM ◁✱ malfunction (SATCOM ◁✱)	**On ground, or in flight:** - Pull the SATCOM C/B K01 on 121VU - Wait 5 s - Push the SATCOM C/B K01on 121VU. *Note:* - *SDUshould reset in less than 2 min* - *The flight crew cannot perform a software reset for SATCOM via the MCDU.*

10 Ident.: PRO-ABN-ABN-RESET-B-00022080.0002001 / 03 NOV 22

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
DATALINK	ATSU	The ATSU reset should be attempted, only if: - INVALID DATA is displayed on the DCDU, or - Key selection has no effect on the DCDU or any of the MCDU ATSU DATALINK submenus, or - ADS-C, CPDLC, D-ATIS , DCL , OCL , or AOC is inoperative. **On ground or in flight:** - Pull the C/Bs in the following order: K43, K42 on 121VU - Wait 5 s, then - Push the C/Bs in the following order: K42, K43. When the ATSU is reset, the following connections are no longer active: - CPDLC: • The flight crew should send a notification to the ATC center to re-establish the CPDLC connection. - ADS-C: • The flight crew must check that ADS-C is ARMED or ON. • The flight crew should contact the ATC center by voice to re-establish the ADS-C connection. *Note: As no ADS-C disconnect message is sent, the ATC center(s) consider that the ADS-C connection is still alive.*
	CINS	If there is a malfunction of the CINS and if the reset by the cabin crew is unsuccessful, the flight crew can attempt to reset the system using the CINS RESET pb on the panel 45VU on the overhead panel. *Note: The CINS reset may take up to 10 min.*
	DATALINK ATC FAULT or DATALINK COMPANY FAULT or COM VHF 3 DATA FAULT (VHF3)	**On ground or in flight:** - Pull the COM / VHF3 C/B L05 on 121VU - Wait 5 s - Push the COM / VHF3 C/B L05 on 121VU.

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Ident.: PRO-ABN-ABN-RESET-B-00014274.0001001 / 20 MAR 17
211 DOOR	Flickering or total loss of the video camera display (on the SD) accompanied by the "VIDEO NOT AVAIL" message. (CDSS)	**On ground, or in flight:** - Set the VIDEO rotary selector to OFF, on the center pedestal VIDEO panel - Set the COCKPIT DOOR VIDEO pb-sw to OFF, on the overhead panel - Wait 2 min, then - Set the COCKPIT DOOR VIDEO pb-sw back to ON, on the overhead panel - Wait 15 s, then - Set the VIDEO rotary selector to ″CKPT ENTRY″, on the center pedestal VIDEO panel.
		Ident.: PRO-ABN-ABN-RESET-B-00012650.0001001 / 20 MAR 17
212 ELEC	GPU cannot be connected to the aircraft (GAPCU)	**On ground only:** The GPU cannot be connected to the electrical network of the aircraft (AVAIL light is OFF): • If at least one power source (IDG 1 or 2, APU GEN or batteries) is connected to the electrical network of the aircraft - Reset the EXT PWR pb switch on 35VU (Press and release). • If no power source is connected to the electrical network of the aircraft - Set the BAT 1 pb-sw and BAT 2 pb-sw to AUTO.
		Ident.: PRO-ABN-ABN-RESET-B-00012660.0004001 / 07 MAR 22
213 ENG	ENG 1(2) EIU FAULT	**On ground only** If this ECAM alert triggers after engine start, during the selection of the ENG MODE selector from IGN to NORM, reset the ENG MODE selector as follows: - Switch the ENG MODE selector from NORM to IGN - Wait 1 s - Switch the ENG MODE selector back from IGN to NORM. If the ECAM alert disappears after the reset, resume normal operation. *Note:* *This reset procedure is only authorized if the ECAM alert triggers only on one side (ENG 1 EIU FAULT or ENG 2 EIU FAULT).*

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Ident.: PRO-ABN-ABN-RESET-B-00012652.0001001 / 05 JUN 18

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL ELAC 1 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 2 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 1 pb-sw to OFF - Wait 3 s - Set ELAC 1 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 reset in the logbook (successful or unsuccessful).*
	F/CTL ELAC 2 PITCH FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1 or SEC 2. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set pitch trim to 5 UP position - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - After 15 s, check pitch trim at 0 position - Perform a flight control check - Set ELAC 1 pb-sw to On - Set pitch trim to takeoff CG

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		Note: *Record the ELAC 2 reset in the logbook (successful or unsuccessful).*

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
F/CTL	F/CTL AIL SERVO FAULT (ELAC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset ELAC if more than one aileron actuator indication box is displayed in amber on the F/CTL SD page. - Do not reset ELAC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set ELAC 1 pb-sw to OFF - Set ELAC 2 pb-sw to OFF - Wait 3 s - Set ELAC 2 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to OFF - Set ELAC 1 pb-sw to On - Perform a flight control check - Set ELAC 2 pb-sw to On - Set pitch trim to takeoff CG *Note: Record the ELAC 1 and ELAC 2 resets in the logbook (successful or unsuccessful).*
F/CTL	F/CTL SPLR FAULT (SEC)	**In flight:** - Not authorized. **On ground:** **CAUTION** - Do not reset SEC in case of dispatch with MMEL item ELAC 1, SEC 1, SEC 2 or SEC 3. - Do not attempt more than one reset. - Set SEC 1 pb-sw to OFF - Wait 3 s - Set SEC 1 pb-sw to On - Set SEC 2 pb-sw to OFF - Wait 3 s - Set SEC 2 pb-sw to On - Set SEC 3 pb-sw to OFF - Wait 3 s - Set SEC 3 pb-sw to On

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
		- Perform a flight control check *Note:* *Record the SEC 1, SEC 2 and SEC 3 resets in the logbook (successful or unsuccessful).*

14 Ident.: PRO-ABN-ABN-RESET-B-00012653.0027001 / 09 APR 20

FUEL	- Loss of fuel quantity indication, or - Triggering of FUEL FQI CH 1+2 FAULT. (FQIC)	**On ground or in flight:** - Pull the C/B of the affected channel: • Channel 1 (A13 on 49VU) • Channel 2 (M27 on 121VU). - Wait 5 s before pushing both C/Bs. *Note:* *1. The fuel quantity indication will be re-established within 1 min* *2. The fuel leak detection function will be lost for the remainder of the flight. The flight crew must monitor the fuel quantity. Refer to PRO-NOR-SOP-15.*

Ident.: PRO-ABN-ABN-RESET-B-00012655.0002001 / 20 MAR 17

FWC	FWS FWC 1(2) FAULT (FWC)	**On ground:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU). Wait 50 s after pushing the C/Bs. **In flight:** Pull, then push, the C/B of the affected FWC: - FWC 1 (F01 on 49VU) - FWC 2 (Q7 on 121VU).

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Ident.: PRO-ABN-ABN-RESET-B-00021057.0003001 / 05 MAR 19

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
L/G	L/G LGCIU 1(2) FAULT (LGCIU 1(2))	**On ground only:** The flight crew must depressurize the green hydraulic system before resetting the LGCIU: - ENG 1 PUMP OFF - PTU OFF. When there is no green hydraulic pressure: - To reset LGCIU 1: • Pull C/B Q34 on 121VU, then C09 on 49VU, then R32 on 121VU. • Wait for 15 s , then push the C/Bs. - To reset LGCIU 2: • Pull C/B Q35 on 121VU, then R33 on 121VU. • Wait for 15 s , then push the C/Bs. After the LGCIU reset, restore green hydraulic pressure (ENG 1 PUMP ON, PTU AUTO).

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Ident.: PRO-ABN-ABN-RESET-B-00012657.0048001 / 03 NOV 22

ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
NAV	215 NAV GPWS FAULT and NAV GPWS TERR DET FAULT (EGPWS)	**On ground, or in flight:** Perform the following reset when both alerts are displayed at the same time. - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV GPWS FAULT or NAV GPWS TERR DET FAULT (EGPWS)	**On ground only:** - Pull C/B P07 on 121VU, - Set GPWS SYS pb and GPWS TERR pb to ON, - Wait 5 s, then push the C/B.
	NAV TCAS FAULT (TCAS)	**On ground only:** - Pull C/B K10 on 121VU. - Wait 5 s, then push the C/B.
	ISIS malfunction (ISIS)	**On ground only:** With aircraft not moving: - Pull C/B F12 on 49VU, - Wait 5 s, then push the C/B, - Normal operation is expected after approximately 2 min. *Note:* *In the case of small aircraft motion during the C/B reset (refueling, cargo loading conditions, etc.), the ATT red flag may appear on the ISIS. In this case, press the RST P/B for 2 s and wait 2 min additional to recover normal operation.*

216 Ident.: PRO-ABN-ABN-RESET-B-00012651.0018001 / 05 MAY 22

Continued on the following page

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ECAM System	System malfunction or ECAM Alert (Affected System)	Reset Procedure
SMOKE	SMOKE DET FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C05 and C06 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C05 and C06 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE LAVATORY DET FAULT with all lavatories declared inoperative on the FAP (CIDS or CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs P13 and P14 ❄ on 121VU, G01 and G02 on 49VU, M05 and M06 on 121VU - Wait 10 s, then - Push the C/Bs in the following order: M05 and M06 on 121VU, G01 and G02 on 49VU, P13 and P14 ❄ on 121VU. - After CIDS reset, wait approximately 4 min before recovering normal operation. **If unsuccessful:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU. - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.
	SMOKE FWD (AFT) CARGO DET FAULT SMOKE FWD (AFT) CRG 1/2 BTL FAULT (CIDS-SDF)	**On ground, or in flight:** Apply the following actions in the presented order: - Pull the C/Bs C06 and C05 on 49VU, T17 and T18 on 122VU - Wait 10 s, then - Push simultaneously the C/Bs C06 and C05 on 49VU - Within 2 s push simultaneously the C/Bs T17 and T18 on 122VU - After CIDS-SDF reset, wait approximately 1 min before recovering normal operation.

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ECAM System	**System malfunction or ECAM Alert (Affected System)**	**Reset Procedure**

Ident.: PRO-ABN-ABN-RESET-B-00021071.0001001 / 03 NOV 22

VENT	VENT AVNCS SYS FAULT (AEVC)	**On ground only:** - Pull C/B Y17 on 122VU - Wait 30 s before pushing the C/B.

Ident.: PRO-ABN-ABN-RESET-B-00021058.0001001 / 17 MAY 21

WHEEL	WHEEL N.W STEER FAULT or WHEEL N/W STRG FAULT (BSCU)	**On ground only:** **Case A** If the three conditions below are fulfilled: - the WHEEL N/W STRG FAULT alert was triggered just after engine start - the N/W STRG DISC memo was displayed before the start of the pushback (before the aircraft starts moving) - the N/W STRG DISC memo remained displayed even after the pushback is finished (nosewheel steering selector bypass pin is in the steering position). Apply the below reset procedure. If the ECAM alert disappears after the reset, the flight crew may continue the flight without troubleshooting. **Case B** In all other cases, including in case of doubt on the above conditions, troubleshooting must be performed before continuing the flight, even if the ECAM alert disappears after the reset. For a return to the gate : - Apply the below reset procedure - The taxi speed must not exceed 10 kt. **Reset Procedure:** - STOP aircraft - Set PARK BRK handle to ON - Confirm that towing bar is disconnected - Set A/SKID & N/W STRG sw to OFF - Set A/SKID & N/W STRG sw to ON. *Note:* *After any BSCU reset:* *1. Check brake efficiency* *2. Check absence of aircraft veering* *3. Record the BSCU reset in the logbook.*

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[QRH] DOUBLE AOA HEAT FAILURE

Ident.: PRO-ABN-A-ICE-00010253.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

In the case of double failure of alpha probe heaters, the choice made by the computers among the 3 ADR values may be erroneous.

One of affected ADRs..........OFF

Keep preferably ADR1 available as ADR1 is supplied in EMER ELEC config.

NAV ADR 1(2)(3) FAULT
In the case of disagreement between the two remaining ADRs, the NAV ADR DISAGREE ECAM alert will trigger.

ANTI ICE ALL PITOT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

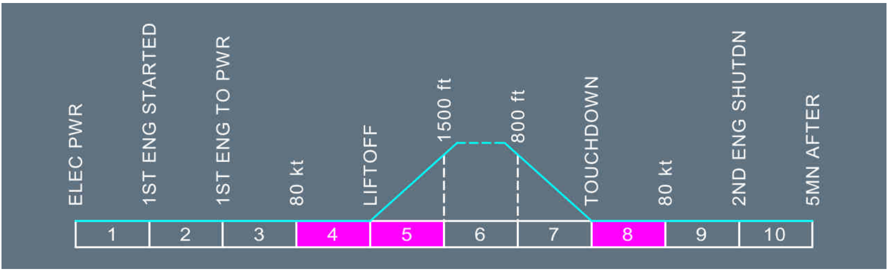
Ident.: PRO-ABN-A-ICE-U-00017184.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT, F/O and STBY pitot probes are failed.

Flight Phase Inhibition:



Continued on the following page

ANTI ICE ALL PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-U-00018180.0004001 / 21 MAR 17

1

L2 In the case of simultaneous pitot icing and in the same amount, ADR 1, ADR 2, and ADR 3 speeds will be in agreement, but incorrect. The following ECAM procedure avoids that the flight controls use erroneous, but coherent, sources.

L1 ADR 1(2)(3) P/B...OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1, 2 or 3 be switched OFF.*

Note: In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the "ADR DISAGREE" ECAM caution will trigger.

L1 ● **IF ICING EXPECTED:**

ADR 2(3) P/B...OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 2 or 3 be switched OFF.*

L1 UNREL SPD PROC...APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L12

ASSOCIATED PROCEDURES

NAV ADR FAULT

Single ADR FAULT or double ADR FAULT ECAM cautions may trigger, depending on the number of ADRs switched OFF.

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

Alternate law becomes active, if:
- *One ADR was already switched OFF, and the two remaining ADRs are not in agreement, or*
- *Two ADRs were switched OFF.*

Continued on the following page

ANTI ICE ALL PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-U-00018298.0002001 / 21 MAR 16

2

STATUS

- **IF ICING EXPECTED:**
  ADR 2(3) P/B .... OFF
  UNREL SPD PROC .... APPLY

INOP SYS

CAPT PITOT
F/O PITOT
STBY PITOT
CAPT PROBES (1)
F/O PROBES (2)
STBY PROBES (3)
STEEP APPR ⊲✱ (If in ALTN LAW)

(1) *(If all CAPT PROBES heating is lost)*
(2) *(If all F/O PROBES heating is lost)*
(3) *(If all STBY PROBES heating is lost)*

ANTI ICE ALL PITOT

Applicable to: MSN 01251

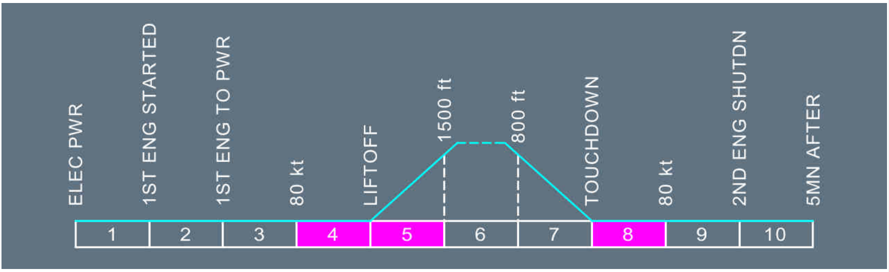
Ident.: PRO-ABN-A-ICE-U-00017184.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT, F/O and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ANTI ICE ALL PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-U-00018180.0003001 / 21 MAR 17

L2 In the case of simultaneous pitot icing and in the same amount, ADR 1, ADR 2, and ADR 3 speeds will be in agreement, but incorrect. The following ECAM procedure avoids that the flight controls use erroneous, but coherent, sources.

L1 ADR 1(2)(3).. OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1, 2 or 3 be switched OFF.*

Note: *In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the “ADR DISAGREE” ECAM caution will trigger.*

L1 ● **IF ICING EXPECTED:**

ADR 2(3).. OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 2 or 3 be switched OFF.*

L1 UNREL SPD PROC.. APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L12

ASSOCIATED PROCEDURES

NAV ADR FAULT

Single ADR FAULT or double ADR FAULT ECAM cautions may trigger, depending on the number of ADRs switched OFF.

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

Alternate law becomes active, if:
- *One ADR was already switched OFF, and the two remaining ADRs are not in agreement, or*
- *Two ADRs were switched OFF.*

Continued on the following page

ANTI ICE ALL PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-U-00018298.0003001 / 21 MAR 16

STATUS

- **IF ICING EXPECTED:**
  ADR 2(3).. OFF
  UNREL SPD PROC.................................. APPLY

INOP SYS

CAPT PITOT
F/O PITOT
STBY PITOT
CAPT PROBES (1)
F/O PROBES (2)
STBY PROBES (3)

(1) *(If all CAPT PROBES heating is lost)*
(2) *(If all F/O PROBES heating is lost)*
(3) *(If all STBY PROBES heating is lost)*

ANTI ICE ALL PITOT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

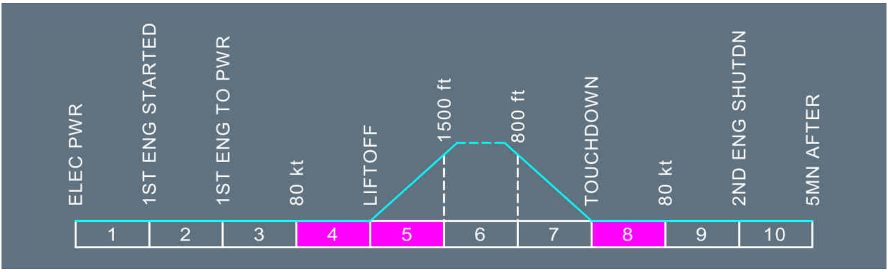
Ident.: PRO-ABN-A-ICE-U-00017184.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT, F/O and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
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7
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ANTI ICE CAPT(F/O) TAT

Applicable to: ALL

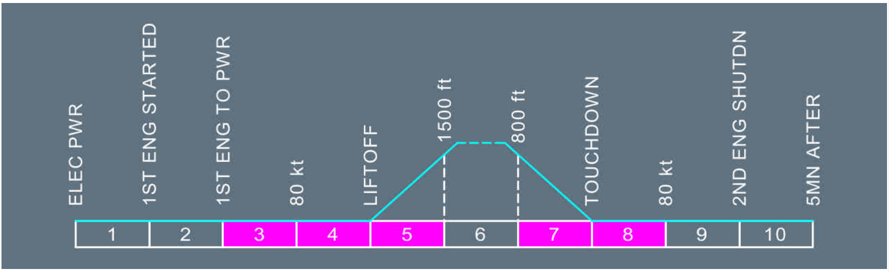
Ident.: PRO-ABN-A-ICE-E-00017171.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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Ident.: PRO-ABN-A-ICE-E-00018299.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-A-ICE-E-00018889.0001001 / 21 MAR 16

STATUS

	INOP SYS
	CAPT(F/O) TAT

ANTI ICE CAPT + F/O AOA

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-A-ICE-AA-00022251.0001001 / 30 MAR 18

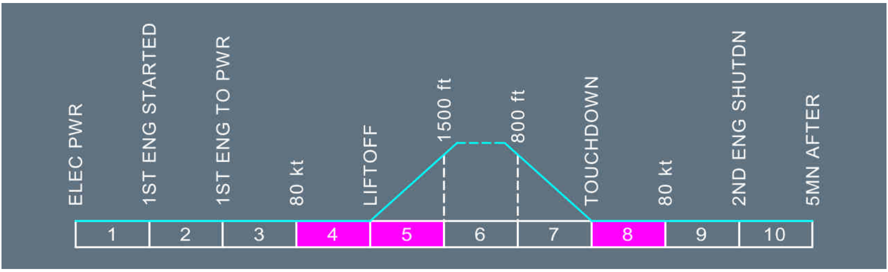
3

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and F/O AOA probes are failed.

Flight Phase Inhibition:



Ident.: PRO-ABN-A-ICE-AA-00022252.0001001 / 30 MAR 18

4

L2 In the case of simultaneous AOA probes icing and if the AOA probes are blocked in the same angular position, AOA values from ADR 1 and ADR 2 will be in agreement but incorrect. Therefore, flight controls will consider the remaining correct ADR 3 source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous but coherent AOA sources.

L1 ADR 1(2) P/B.. OFF

L2 *Depending on the status of the static, pitot and TAT heating, the ECAM requires that either ADR 1 or 2 be switched OFF.*

Note: In the case of subsequent and significant AOA discrepancy between the two remaining ADRs, the "NAV ADR DISAGREE" ECAM caution will trigger.

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE CAPT + F/O AOA (Cont'd)

Ident.: PRO-ABN-A-ICE-AA-00022253.0001001 / 30 MAR 18

5

STATUS

INOP SYS

CAPT AOA
F/O AOA
CAPT PROBES (1)
F/O PROBES (2)

(1) *(If all CAPT PROBES heating is lost)*
(2) *(If all F/O PROBES heating is lost)*

ANTI ICE CAPT + F/O PITOT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

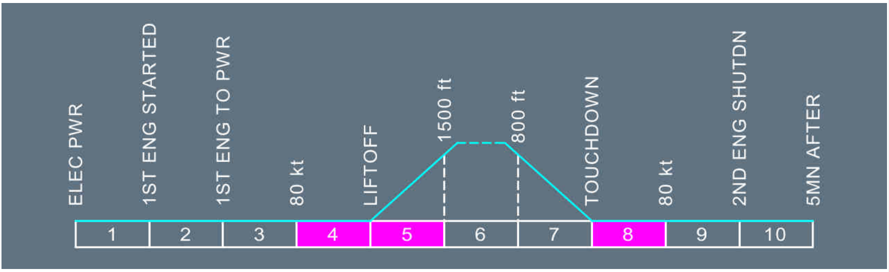
Ident.: PRO-ABN-A-ICE-R-00017177.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and F/O pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ANTI ICE CAPT + F/O PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-R-00018300.0002001 / 21 MAR 17

6

L2 In the case of simultaneous pitot icing and in the same amount, ADR 1 and ADR 2 speeds will be in agreement, but incorrect. Therefore, flight controls will consider the remaining correct source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous, but coherent, sources.

L1 ■ **If ADR 3 operative and ON:**

ADR 1(2) P/B..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 2 be switched OFF*

Note: In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the "ADR DISAGREE" ECAM caution will trigger.

L1 ■ **If ADR 3 failed or OFF:**

L2 No action is required, as long as there are no icing conditions, in order to keep two independent speed sources.

L1 ● **IF ICING EXPECTED:**

ADR 1(2) P/B..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 2 be switched OFF.*

L1 UNREL SPD PROC..APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE CAPT + F/O PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-R-00018301.0002001 / 21 MAR 16

7

STATUS

- **If ADR 3 failed or OFF:**
  - **IF ICING EXPECTED:**
    ADR 1(2) P/B....................OFF
    UNREL SPD PROC....................APPLY

INOP SYS

CAPT PITOT
F/O PITOT
CAPT PROBES (1)
F/O PROBES (2)

(1) *(If all CAPT PROBES heating is lost)*
(2) *(If all F/O PROBES heating is lost)*

ANTI ICE CAPT + F/O PITOT

Applicable to: MSN 01251

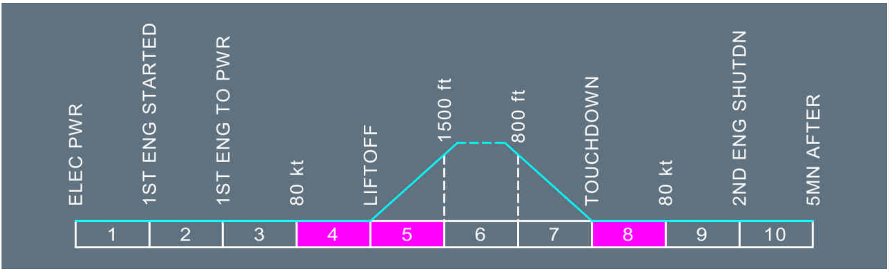
Ident.: PRO-ABN-A-ICE-R-00017177.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and F/O pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ANTI ICE CAPT + F/O PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-R-00018300.0003001 / 21 MAR 17

L2 In the case of simultaneous pitot icing and in the same amount, ADR 1 and ADR 2 speeds will be in agreement, but incorrect. Therefore, flight controls will consider the remaining correct source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous, but coherent, sources.

L1 ■ **If ADR 3 operative and ON:**

ADR 1(2)..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 2 be switched OFF*

Note: In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the "ADR DISAGREE" ECAM caution will trigger.

L1 ■ **If ADR 3 failed or OFF:**

L2 No action is required, as long as there are no icing conditions, in order to keep two independent speed sources.

L1 ● **IF ICING EXPECTED:**

ADR 1(2)..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 2 be switched OFF.*

L1 UNREL SPD PROC...APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE CAPT + F/O PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-R-00018301.0003001 / 21 MAR 16

STATUS

- **If ADR 3 failed or OFF:**
  - **IF ICING EXPECTED:**
    ADR 1(2)..OFF
    UNREL SPD PROC.................................... APPLY

INOP SYS

CAPT PITOT
F/O PITOT
CAPT PROBES (1)
F/O PROBES (2)

(1) *(If all CAPT PROBES heating is lost)*
(2) *(If all F/O PROBES heating is lost)*

ANTI ICE CAPT + F/O PITOT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

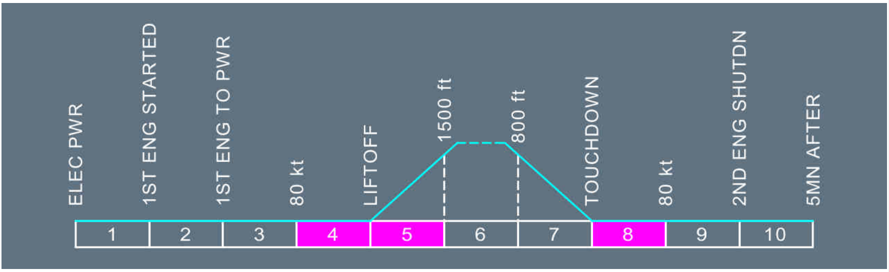
Ident.: PRO-ABN-A-ICE-R-00017177.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and F/O pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ANTI ICE CAPT + STBY AOA

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-A-ICE-AB-00022254.0001001 / 30 MAR 18

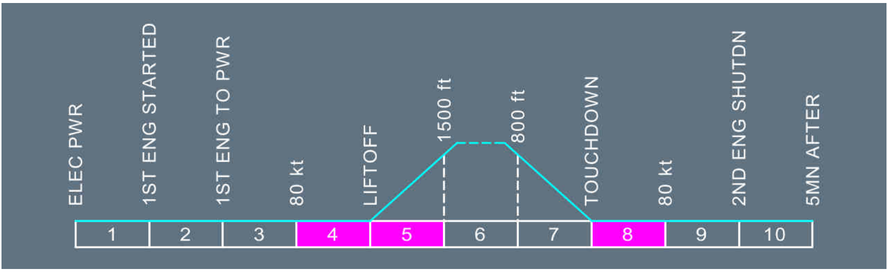
8

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and STBY AOA probes are failed.

Flight Phase Inhibition:



Ident.: PRO-ABN-A-ICE-AB-00022256.0001001 / 30 MAR 18

9

L2 In the case of simultaneous AOA probes icing and if the AOA probes are blocked in the same angular position, AOA values from ADR 1 and ADR 3 will be in agreement but incorrect. Therefore, flight controls will consider the remaining correct ADR 2 source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous but coherent AOA sources.

L1 ADR 1(3) P/B... OFF

L2 *Depending on the status of the static, pitot and TAT heating, the ECAM requires that either ADR 1 or 3 be switched OFF.*

Note: In the case of subsequent and significant AOA discrepancy between the two remaining ADRs, the "NAV ADR DISAGREE" ECAM caution will trigger.

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE CAPT + STBY AOA (Cont'd)

Ident.: PRO-ABN-A-ICE-AB-00022257.0001001 / 30 MAR 18

10

STATUS

INOP SYS

CAPT AOA
stby AOA
CAPT PROBES (1)
STBY PROBES (2)

(1) *(If all CAPT PROBES heating is lost)*
(2) *(If all STBY PROBES heating is lost)*

ANTI ICE CAPT + STBY PITOT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

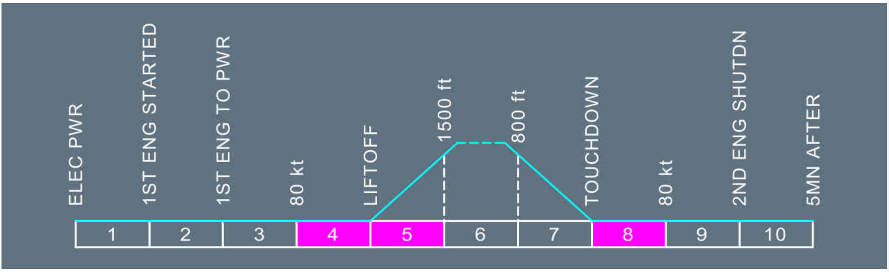
Ident.: PRO-ABN-A-ICE-S-00017178.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ANTI ICE CAPT + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-S-00018302.0002001 / 21 MAR 17

11

L2 In the case of simultaneous pitot icing and in the same amount, ADR 1 and ADR 3 speeds will be in agreement, but incorrect. Flight controls will consider the remaining correct source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous, but coherent, sources.

L1 ■ **If ADR 2 operative and ON:**

ADR 1(3) P/B..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 3 be switched OFF*

Note: In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the "ADR DISAGREE" ECAM caution will trigger.

L1 ■ **If ADR 2 failed or OFF:**

L2 No action is required, as long as there are no icing conditions, in order to keep two independent speed sources.

L1 ● **IF ICING EXPECTED:**

ADR 1(3) P/B..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 3 be switched OFF.*

L1 UNREL SPD PROC..APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE CAPT + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-S-00018303.0002001 / 21 MAR 16

12

STATUS

- **If ADR 2 failed or OFF:**
  - **IF ICING EXPECTED:**
    ADR 1(3) P/B..OFF
    UNREL SPD PROC..................................... APPLY

INOP SYS

CAPT PITOT
STBY PITOT
CAPT PROBES [1]
STBY PROBES [2]

[1] *(If all CAPT PROBES heating is lost)*
[2] *(If all STBY PROBES heating is lost)*

ANTI ICE CAPT + STBY PITOT

Applicable to: MSN 01251

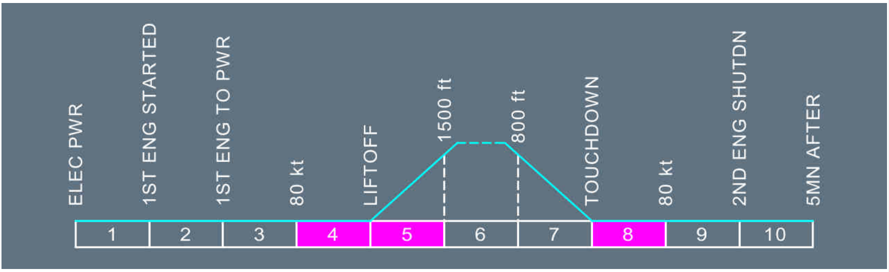
Ident.: PRO-ABN-A-ICE-S-00017178.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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Continued on the following page

ANTI ICE CAPT + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-S-00018302.0003001 / 21 MAR 17

L2 In the case of simultaneous pitot icing and in the same amount, ADR 1 and ADR 3 speeds will be in agreement, but incorrect. Flight controls will consider the remaining correct source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous, but coherent, sources.

L1 ■ **If ADR 2 operative and ON:**

ADR 1(3)...OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 3 be switched OFF*

Note: In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the “ADR DISAGREE” ECAM caution will trigger.

L1 ■ **If ADR 2 failed or OFF:**

L2 No action is required, as long as there are no icing conditions, in order to keep two independent speed sources.

L1 ● **IF ICING EXPECTED:**

ADR 1(3)... OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 1 or 3 be switched OFF.*

L1 UNREL SPD PROC..APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE CAPT + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-S-00018303.0003001 / 21 MAR 16

STATUS

- **If ADR 2 failed or OFF:**
  - **IF ICING EXPECTED:**

ADR 1(3)...OFF
UNREL SPD PROC...................................... APPLY

INOP SYS

CAPT PITOT
STBY PITOT
CAPT PROBES (1)
STBY PROBES (2)

(1) *(If all CAPT PROBES heating is lost)*
(2) *(If all STBY PROBES heating is lost)*

ANTI ICE CAPT + STBY PITOT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

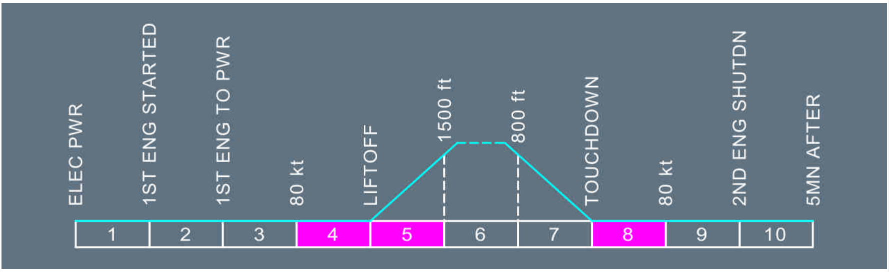
Ident.: PRO-ABN-A-ICE-S-00017178.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the CAPT and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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ANTI ICE CAPT PITOT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

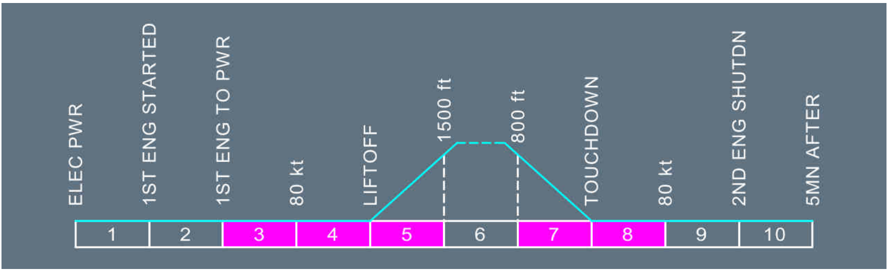
Ident.: PRO-ABN-A-ICE-AD-00024161.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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5
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7
8
9
10

Ident.: PRO-ABN-A-ICE-AD-00024162.0002001 / 10 MAY 21

AIR DATA SWTG ....CAPT 3

L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

Ident.: PRO-ABN-A-ICE-AD-00024163.0001001 / 10 MAY 21

STATUS

INOP SYS

CAPT PITOT

ANTI ICE CAPT PITOT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

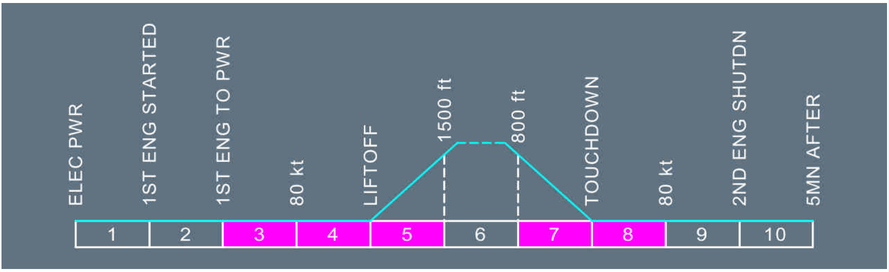
Ident.: PRO-ABN-A-ICE-AD-00024161.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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9
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Ident.: PRO-ABN-A-ICE-AD-00024163.0001001 / 10 MAY 21

STATUS

INOP SYS

CAPT PITOT

ANTI ICE CAPT PITOT

Applicable to: MSN 10949-11597

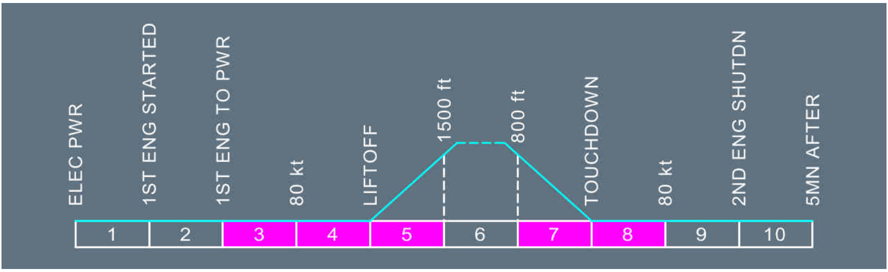
Ident.: PRO-ABN-A-ICE-AD-00024161.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-AD-00024162.0003001 / 21 JAN 21

13

- **If ADR 3 available:**

  AIR DATA SWTG .... CAPT 3

  L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

- L1 **In all other cases:**

  AIR DATA SWTG.. AS RQRD

Ident.: PRO-ABN-A-ICE-AD-00024163.0001001 / 10 MAY 21

STATUS

INOP SYS

CAPT PITOT

ANTI ICE CAPT L(R) STAT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

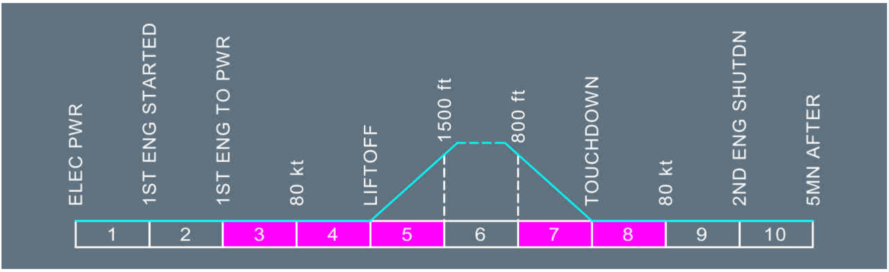
Ident.: PRO-ABN-A-ICE-AE-00024219.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-AE-00024220.0002001 / 10 MAY 21

AIR DATA SWTG ....CAPT 3

L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

Ident.: PRO-ABN-A-ICE-AE-00024221.0001001 / 10 MAY 21

STATUS

INOP SYS

CAPT L(R) STAT

ANTI ICE CAPT L(R) STAT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

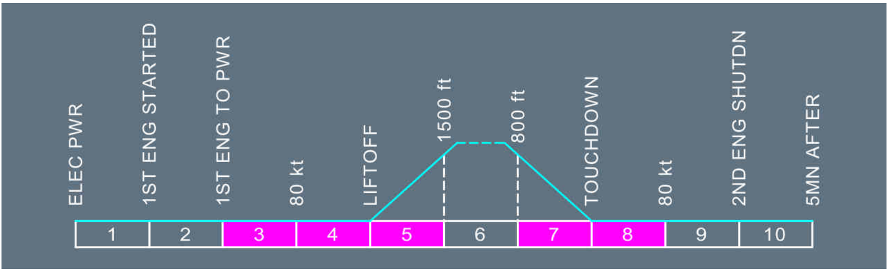
Ident.: PRO-ABN-A-ICE-AE-00024219.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-AE-00024221.0001001 / 10 MAY 21

STATUS

INOP SYS

CAPT L(R) STAT

ANTI ICE CAPT L(R) STAT

Applicable to: MSN 10949-11597

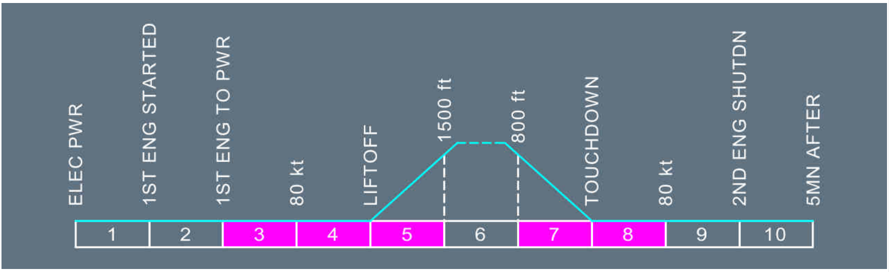
Ident.: PRO-ABN-A-ICE-AE-00024219.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-AE-00024220.0003001 / 21 JAN 21

14

- **If ADR 3 available:**

  AIR DATA SWTG .... CAPT 3

  L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

- L1 **In all other cases:**

  AIR DATA SWTG .... AS RQRD

Ident.: PRO-ABN-A-ICE-AE-00024221.0001001 / 10 MAY 21

STATUS

INOP SYS

CAPT L(R) STAT

ANTI ICE CAPT AOA

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

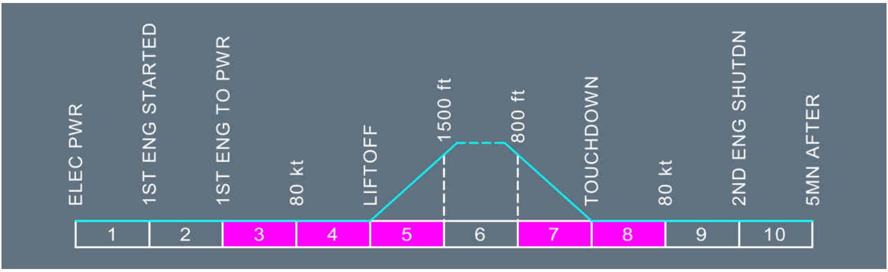
Ident.: PRO-ABN-A-ICE-AF-00024222.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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8
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Ident.: PRO-ABN-A-ICE-AF-00024223.0002001 / 10 MAY 21

AIR DATA SWTG ....CAPT 3

L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

Ident.: PRO-ABN-A-ICE-AF-00024224.0001001 / 10 MAY 21

STATUS

INOP SYS

CAPT AOA

ANTI ICE CAPT AOA

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

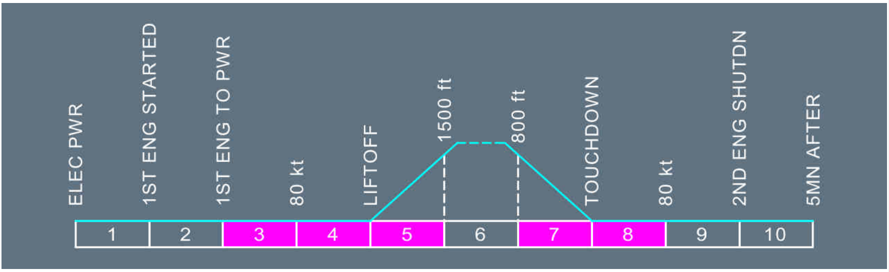
Ident.: PRO-ABN-A-ICE-AF-00024222.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ANTI ICE CAPT AOA

Applicable to: MSN 08635

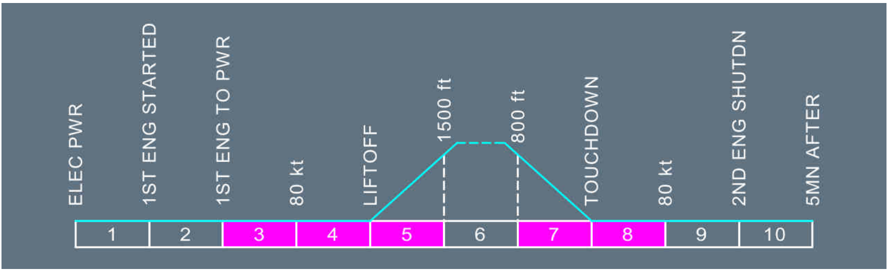
Ident.: PRO-ABN-A-ICE-AF-00024222.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-AF-00024223.0004001 / 10 MAY 21

AIR DATA SWTG.. CAPT 3

L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

L1
- **If** NAV ADR 2+3 FAULT**:**

  AVOID ICING CONDITIONS

Ident.: PRO-ABN-A-ICE-AF-00024224.0002001 / 10 MAY 21

15

STATUS

	INOP SYS
● **If** NAV ADR 2+3 FAULT**:** AVOID ICING CONDITIONS	CAPT AOA

ANTI ICE CAPT AOA

Applicable to: MSN 10949-11597

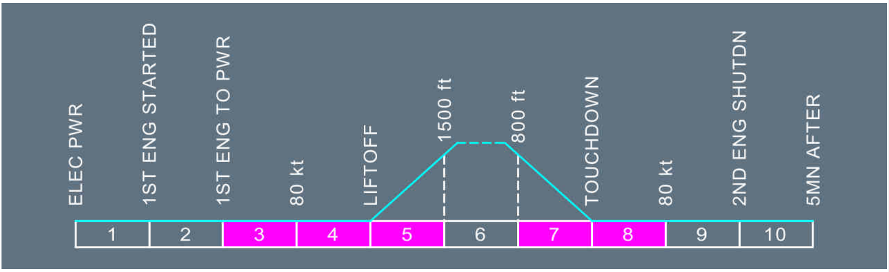
Ident.: PRO-ABN-A-ICE-AF-00024222.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-AF-00024223.0003001 / 21 JAN 21

16

- **If ADR 3 available:**

  AIR DATA SWTG .... CAPT 3

  L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

- L1 **In all other cases:**

  AIR DATA SWTG.. AS RQRD

- **If NAV ADR 2+3 FAULT:**

  AVOID ICING CONDITIONS

Ident.: PRO-ABN-A-ICE-AF-00024224.0002001 / 10 MAY 21

17

STATUS

- **If NAV ADR 2+3 FAULT:**

  AVOID ICING CONDITIONS

INOP SYS

CAPT AOA

ANTI ICE CAPT PROBES

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

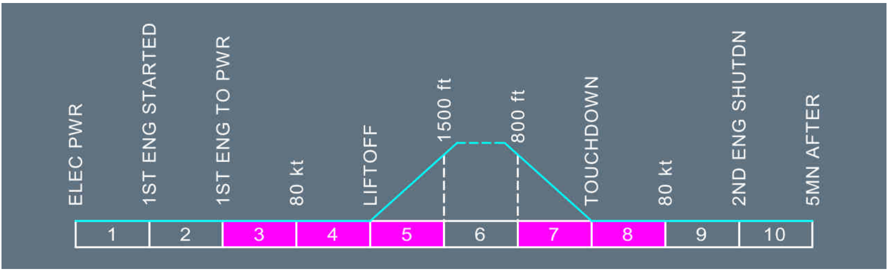
Ident.: PRO-ABN-A-ICE-G-00017173.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the captain probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-G-00010255.0002001 / 05 AUG 10

AIR DATA SWTG.. CAPT 3

L2 *Note: AIR DATA SWTG should not be selected to CAPT 3 if ADR 3 is not available.*

Ident.: PRO-ABN-A-ICE-G-00010256.0001001 / 05 AUG 10

STATUS

INOP SYS

CAPT PROBES

ANTI ICE CAPT PROBES

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

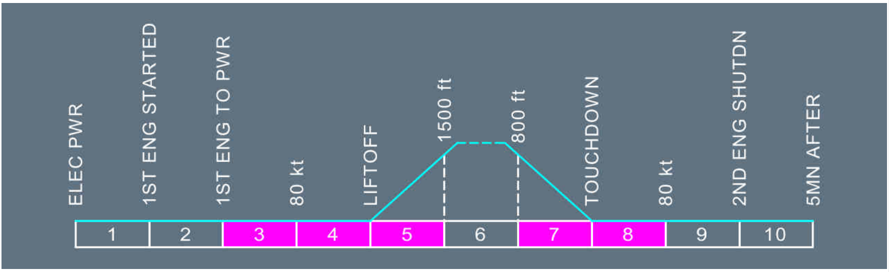
Ident.: PRO-ABN-A-ICE-G-00017173.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the captain probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-G-00010256.0001001 / 05 AUG 10

STATUS

INOP SYS

CAPT PROBES

ANTI ICE CAPT PROBES

Applicable to: MSN 10949-11597

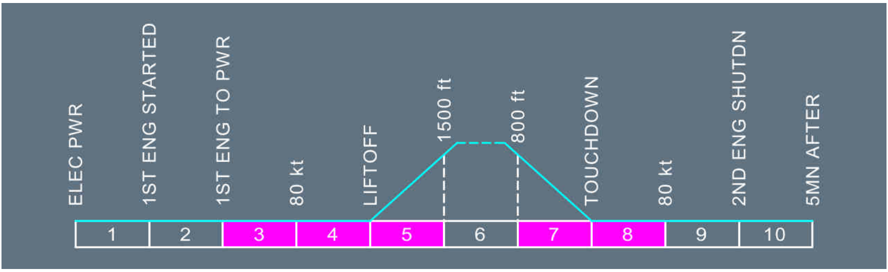
Ident.: PRO-ABN-A-ICE-G-00017173.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the captain probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-G-00010255.0003001 / 21 JAN 21

18

- **If ADR 3 available:**
  AIR DATA SWTG .... CAPT 3
  L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*
- L1 **In all other cases:**
  AIR DATA SWTG.. AS RQRD

Ident.: PRO-ABN-A-ICE-G-00010256.0001001 / 05 AUG 10

STATUS

INOP SYS

CAPT PROBES

ANTI ICE DETECT FAULT

Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597

Ident.: PRO-ABN-A-ICE-L-00017189.0001001 / 21 MAR 16

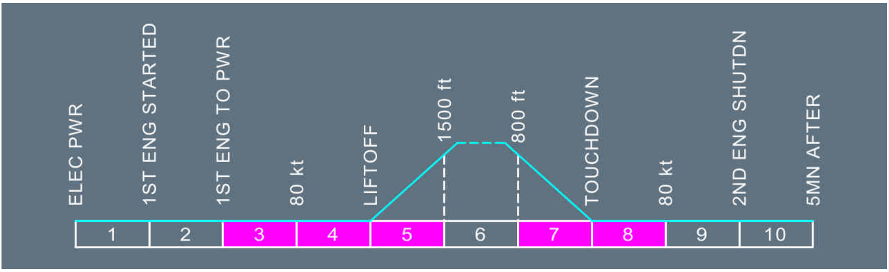
19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both ice detectors are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-L-00018890.0001001 / 21 MAR 16

20

ANTI ICE...AS RQRD

Ident.: PRO-ABN-A-ICE-L-00010276.0001001 / 05 AUG 10

21

STATUS

INOP SYS

ICE DETECT

ANTI ICE ENG 1(2) CTL FAULT
(ENG 1(2) A.ICE VALVE OPEN)

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-A-ICE-X-00017164.0001001 / 21 MAR 16

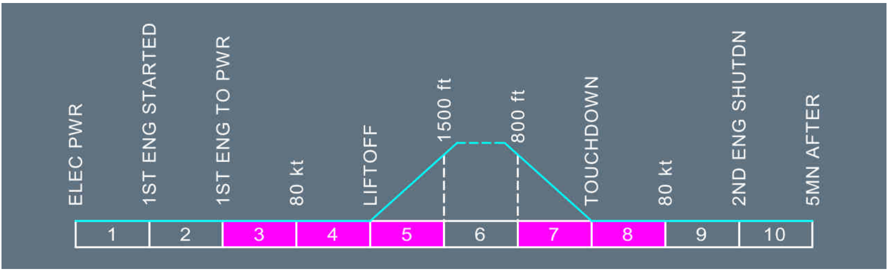
22

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the NAI control system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-X-00015626.0001001 / 09 FEB 15

23

ENG 1(2) A.ICE VALVE OPEN
ENG 1(2) ANTI ICE.. ON

L2 Note: *This is to have the NAI command consistent with system status and allow thrust adaptation.*

ANTI ICE ENG 1(2) CTL FAULT
(ENG 1(2) A.ICE MON FAULT)

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-A-ICE-W-00017494.0001001 / 21 MAR 16

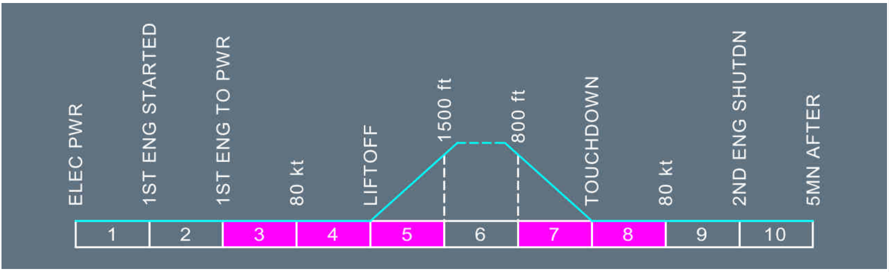
24

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the NAI control system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-A-ICE-W-00016138.0001001 / 09 FEB 15

25

ENG 1(2) A.ICE MON FAULT
AVOID ICING CONDITIONS

Ident.: PRO-ABN-A-ICE-W-00016134.0001001 / 09 FEB 15

26

STATUS

AVOID ICING CONDITIONS

ANTI ICE ENG 1(2) OVER PRESS

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-A-ICE-Y-00017165.0001001 / 21 MAR 16

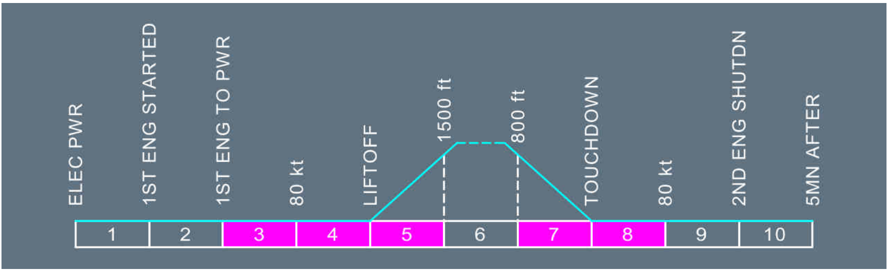
27

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure regulation is lost on both NAI valves.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-Y-00018306.0001001 / 21 MAR 16

28

Crew awareness.

ANTI ICE ENG 1(2) VALVE CLSD

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

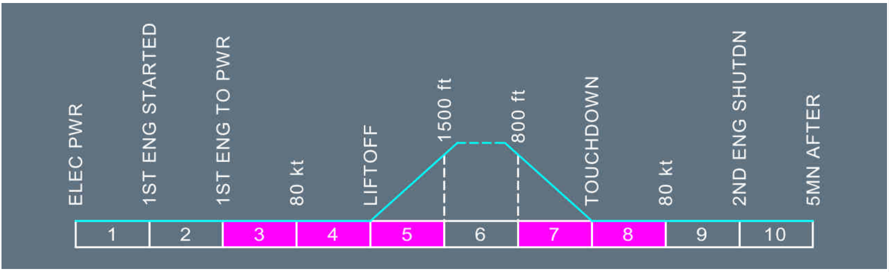
Ident.: PRO-ABN-A-ICE-J-00017163.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve is abnormally closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-J-00010269.0001001 / 05 AUG 10

AVOID ICING CONDITIONS

Ident.: PRO-ABN-A-ICE-J-00010270.0001001 / 05 AUG 10

STATUS

AVOID ICING CONDITIONS

INOP SYS

ENG 1 (2) A. ICE

ANTI ICE ENG 1(2) VALVE CLSD

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

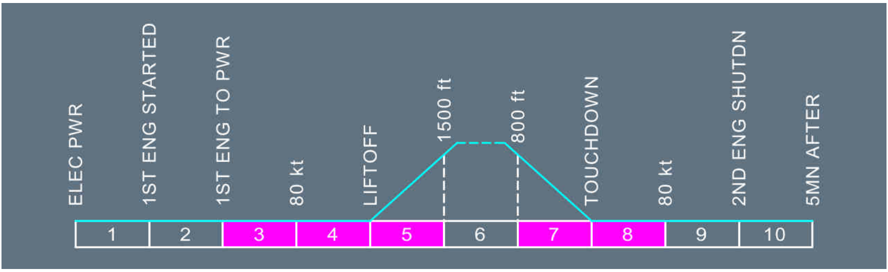
Ident.: PRO-ABN-A-ICE-J-00017163.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve is abnormally closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-J-00010270.0001001 / 05 AUG 10

STATUS

AVOID ICING CONDITIONS

INOP SYS

ENG 1 (2) A. ICE

ANTI ICE ENG 1(2) VALVE CLSD

Applicable to: MSN 08495-09324, 10949-11597

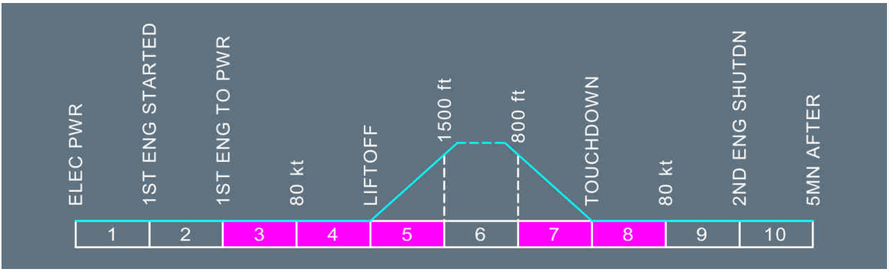
Ident.: PRO-ABN-A-ICE-J-00017163.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve is abnormally closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-J-00010269.0005001 / 03 JAN 17

29 THRUST.. INCREASE

- **IF UNSUCCESSFUL:**

  AVOID ICING CONDITIONS

Ident.: PRO-ABN-A-ICE-J-00010270.0001001 / 05 AUG 10

STATUS

	INOP SYS
AVOID ICING CONDITIONS	ENG 1 (2) A. ICE

ANTI ICE ENG 1(2) VALVE OPEN

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

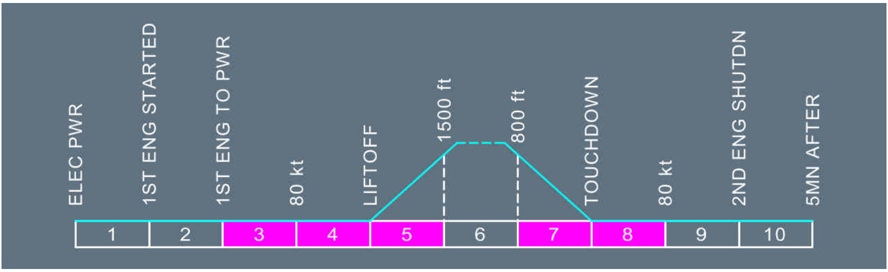
Ident.: PRO-ABN-A-ICE-K-00017162.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve is abnormally open.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-K-00010272.0001001 / 05 AUG 10

THRUST LIM PENALTY

Ident.: PRO-ABN-A-ICE-K-00010273.0001001 / 05 AUG 10

STATUS

THRUST LIM PENALTY

ANTI ICE ENG 1(2) VALVE OPEN

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

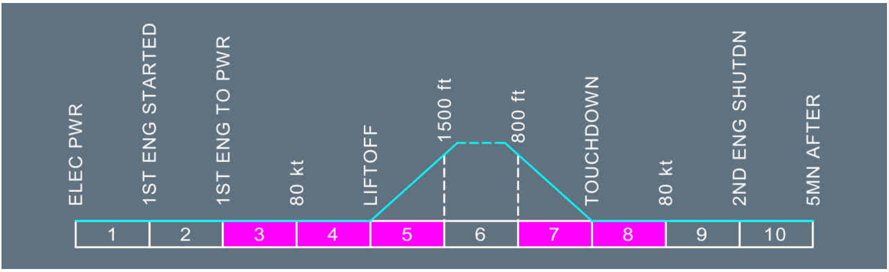
Ident.: PRO-ABN-A-ICE-K-00017162.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve is abnormally open.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ANTI ICE ENG 1(2) VALVE OPEN

Applicable to: MSN 08495-09324, 10949-11597

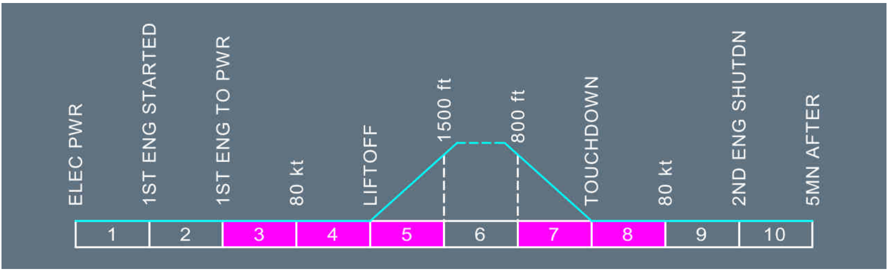
Ident.: PRO-ABN-A-ICE-K-00017162.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve is abnormally open.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-K-00010272.0002001 / 17 JUN 14

30 ENG 1(2) ANTI ICE.. ON

ANTI ICE F/O + STBY AOA

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-A-ICE-AC-00022258.0001001 / 30 MAR 18

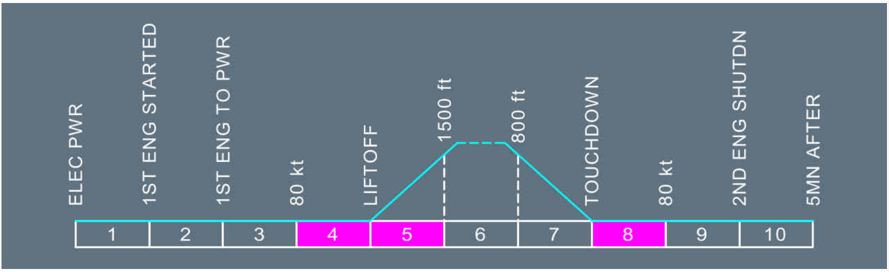
31

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the F/O and STBY AOA probes are failed.

Flight Phase Inhibition:



Ident.: PRO-ABN-A-ICE-AC-00022259.0001001 / 30 MAR 18

32

L2 In the case of simultaneous AOA probes icing and if the AOA probes are blocked in the same angular position, AOA values from ADR 2 and ADR 3 will be in agreement but incorrect. Therefore, flight controls will consider the remaining correct ADR 1 source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous but coherent AOA sources.

L1 ADR 2(3) P/B.. OFF

L2 *Depending on the status of the static, pitot and TAT heating, the ECAM requires that either ADR 2 or 3 be switched OFF.*

Note: In the case of subsequent and significant AOA discrepancy between the two remaining ADRs, the "NAV ADR DISAGREE" ECAM caution will trigger.

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE F/O + STBY AOA (Cont'd)

Ident.: PRO-ABN-A-ICE-AC-00022260.0001001 / 30 MAR 18

33

STATUS

INOP SYS

F/O AOA
STBY AOA
F/O PROBES (1)
STBY PROBES (2)

(1) *(If all F/O PROBES heating is lost)*

(2) *(If all STBY PROBES heating is lost)*

ANTI ICE F/O + STBY PITOT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

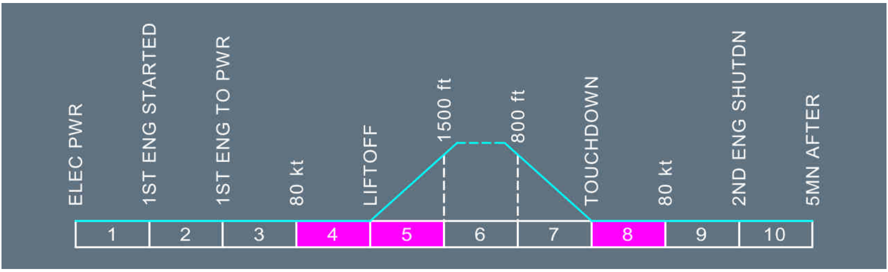
Ident.: PRO-ABN-A-ICE-T-00017179.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the F/O and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
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Continued on the following page

ANTI ICE F/O + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-T-00018307.0002001 / 21 MAR 17

34

L2 In the case of simultaneous pitot icing and in the same amount, ADR 2 and ADR 3 speeds will be in agreement, but incorrect. Therefore, flight controls will consider the remaining correct source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous, but coherent, sources.

L1 ■ **If ADR 1 operative and ON:**

ADR 2(3) P/B..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 2 or 3 be switched OFF.*

Note: In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the “ADR DISAGREE” ECAM caution will trigger.

L1 ■ **If ADR 1 failed or OFF:**

L2 No action is required, as long as there are no icing conditions, in order to keep two independent speed sources.

L1 ● **IF ICING EXPECTED:**

ADR 2(3) P/B..OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 2 or 3 be switched OFF.*

L1 UNREL SPD PROC..APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE F/O + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-T-00018308.0002001 / 21 MAR 16

35

STATUS

- **If ADR 1 failed or OFF:**
  - **IF ICING EXPECTED:**
    ADR 2(3) P/B..OFF
    UNREL SPD PROC...................................... APPLY

INOP SYS

F/O PITOT
STBY PITOT
F/O PROBES [1]
STBY PROBES [2]

---

(1) *(If all F/O PROBES heating is lost)*
(2) *(If all STBY PROBES heating is lost)*

ANTI ICE F/O + STBY PITOT

Applicable to: MSN 01251

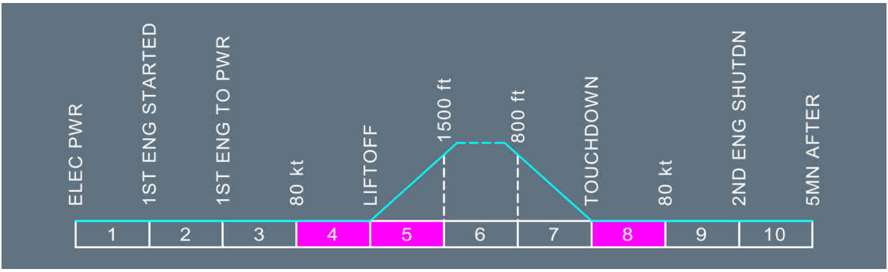
Ident.: PRO-ABN-A-ICE-T-00017179.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the F/O and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
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Continued on the following page

ANTI ICE F/O + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-T-00018307.0003001 / 21 MAR 17

L2 In the case of simultaneous pitot icing and in the same amount, ADR 2 and ADR 3 speeds will be in agreement, but incorrect. Therefore, flight controls will consider the remaining correct source as being faulty, and will reject the only correct source. The following ECAM procedure avoids that the flight controls use two erroneous, but coherent, sources.

L1 ■ **If ADR 1 operative and ON:**

ADR 2(3)...OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 2 or 3 be switched OFF.*

Note: In the case of subsequent, significant, speed discrepancy between the two remaining ADRs, the "ADR DISAGREE" ECAM caution will trigger.

L1 ■ **If ADR 1 failed or OFF:**

L2 No action is required, as long as there are no icing conditions, in order to keep two independent speed sources.

L1 ● **IF ICING EXPECTED:**

ADR 2(3)...OFF

L2 *Depending on the status of the static, AOA, and TAT heating, the ECAM requires that either ADR 2 or 3 be switched OFF.*

L1 UNREL SPD PROC...APPLY

L2 *Only one ADR is available, and the corresponding pitot probe may be affected by ice accretion. Be prepared to use the UNRELIABLE SPEED INDICATION procedure (Refer to procedure).*

L1

ASSOCIATED PROCEDURES

NAV ADR FAULT

Continued on the following page

ANTI ICE F/O + STBY PITOT (Cont'd)

Ident.: PRO-ABN-A-ICE-T-00018308.0003001 / 21 MAR 16

STATUS

- **If ADR 1 failed or OFF:**
  - **IF ICING EXPECTED:**

    ADR 2(3)..OFF

    UNREL SPD PROC..................................... APPLY

INOP SYS

F/O PITOT
STBY PITOT
F/O PROBES [1]
STBY PROBES [2]

[1] *(If all F/O PROBES heating is lost)*

[2] *(If all STBY PROBES heating is lost)*

ANTI ICE F/O + STBY PITOT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

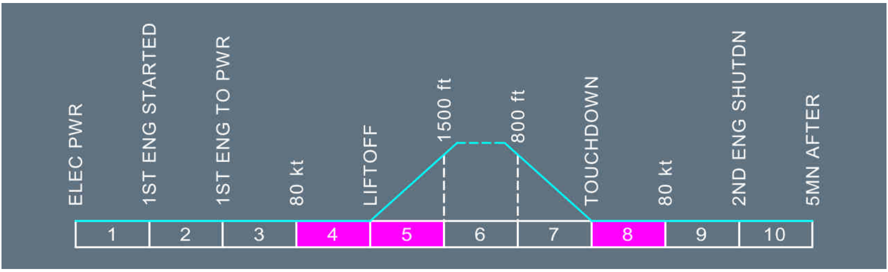
Ident.: PRO-ABN-A-ICE-T-00017179.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating systems of the F/O and STBY pitot probes are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
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8
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10

ANTI ICE F/O PITOT OR L(R) STAT OR AOA

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

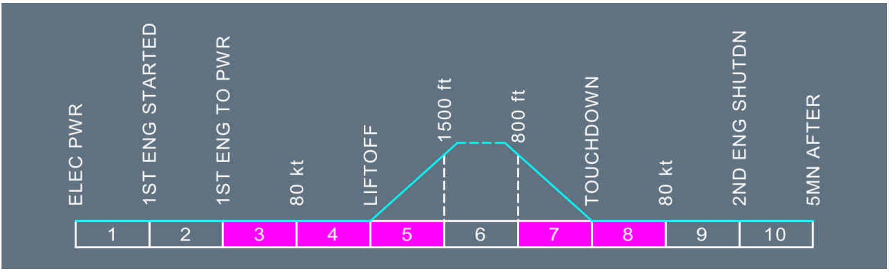
Ident.: PRO-ABN-A-ICE-D-00017170.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-D-00018309.0002001 / 21 MAR 16

AIR DATA SWTG..F/O 3

L2 *ADR 3 supplies data to PFD 2 and ND 2.*

Note: *AIR DATA SWTG should not be selected to F/O 3 if ADR 3 is not available.*

Ident.: PRO-ABN-A-ICE-D-00018901.0001001 / 21 MAR 16

STATUS

INOP SYS

F/O PITOT
F/O L(R) STAT
F/O AOA

ANTI ICE F/O PITOT OR L(R) STAT OR AOA

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

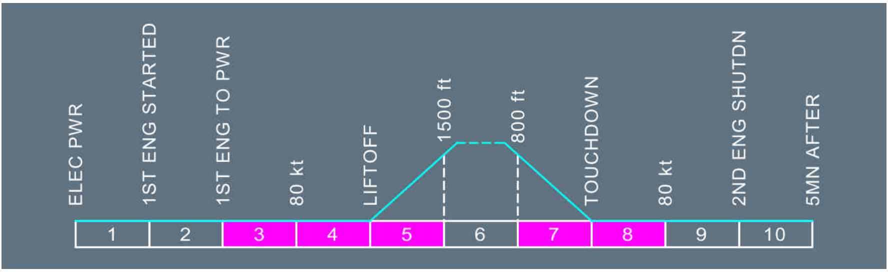
Ident.: PRO-ABN-A-ICE-D-00017170.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-A-ICE-D-00018901.0001001 / 21 MAR 16

STATUS

INOP SYS

F/O PITOT
F/O L(R) STAT
F/O AOA

ANTI ICE F/O PITOT OR L(R) STAT OR AOA

Applicable to: MSN 10949-11597

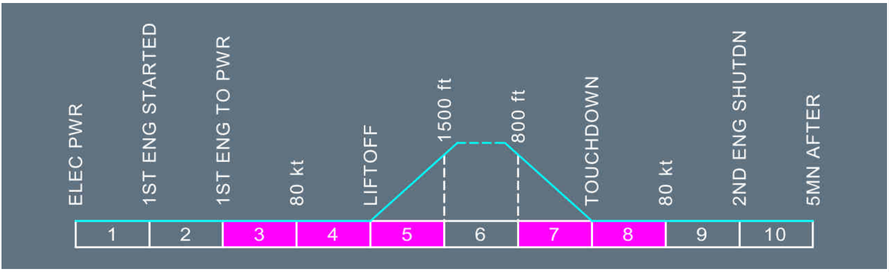
Ident.: PRO-ABN-A-ICE-D-00017170.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
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6
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8
9
10

Ident.: PRO-ABN-A-ICE-D-00018309.0003001 / 21 JAN 21

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- **If ADR 3 available:**

  AIR DATA SWTG .... F/O 3

L2 *Select ADR 3 to F/O side if ADR 3 is reliable and not in use.*

L1
- **In all other cases:**

  AIR DATA SWTG.. AS RQRD

Ident.: PRO-ABN-A-ICE-D-00018901.0001001 / 21 MAR 16

STATUS

INOP SYS

F/O PITOT
F/O L(R) STAT
F/O AOA

ANTI ICE F/O PROBES

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

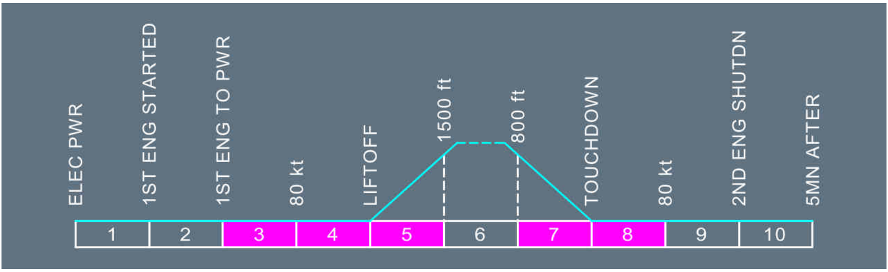
Ident.: PRO-ABN-A-ICE-H-00017174.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the F/O probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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9
10

Ident.: PRO-ABN-A-ICE-H-00010261.0002001 / 05 AUG 10

AIR DATA SWTG..F/O 3

L2 *Note: AIR DATA SWTG should not be selected to F/O 3 if ADR 3 is not available.*

Ident.: PRO-ABN-A-ICE-H-00010263.0001001 / 05 AUG 10

STATUS

	INOP SYS
	F/O PROBES

ANTI ICE F/O PROBES

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

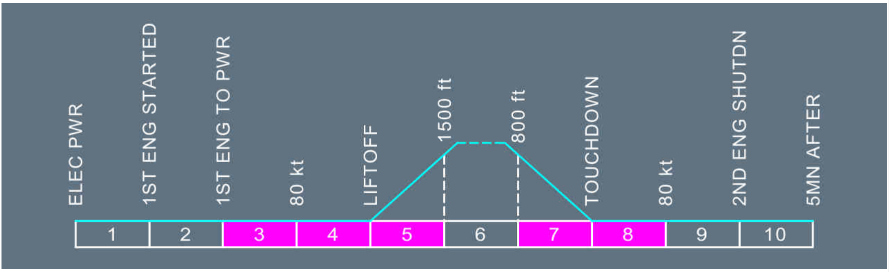
Ident.: PRO-ABN-A-ICE-H-00017174.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the F/O probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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6
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8
9
10

Ident.: PRO-ABN-A-ICE-H-00010263.0001001 / 05 AUG 10

STATUS

INOP SYS

F/O PROBES

ANTI ICE F/O PROBES

Applicable to: MSN 10949-11597

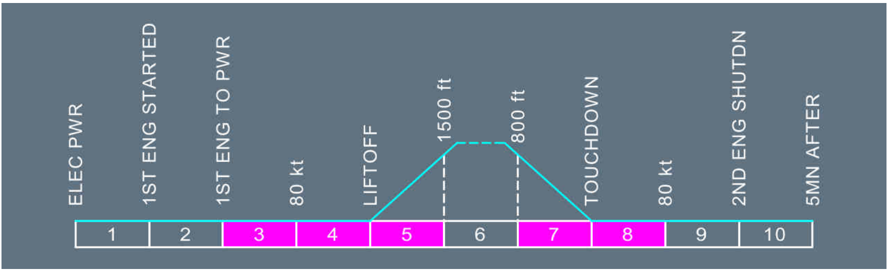
Ident.: PRO-ABN-A-ICE-H-00017174.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the F/O probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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8
9
10

Ident.: PRO-ABN-A-ICE-H-00010261.0003001 / 21 JAN 21

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- **If ADR 3 available:**

  AIR DATA SWTG ....F/O 3

  L2 *Select ADR 3 to F/O side if ADR 3 is reliable and not in use.*

- L1 **In all other cases:**

  AIR DATA SWTG..AS RQRD

Ident.: PRO-ABN-A-ICE-H-00010263.0001001 / 05 AUG 10

STATUS

INOP SYS

F/O PROBES

ANTI ICE ICE DETECTED

Applicable to: MSN 04563, 04827-04860, 05005, 05097, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597

Ident.: PRO-ABN-A-ICE-Z-00017187.0001001 / 21 MAR 16

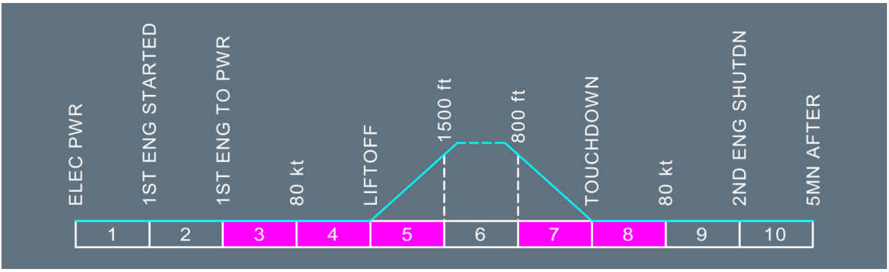
38

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ice is detected in flight above 1 500 ft (with TAT<10 °C) and the ENG ANTI ICE pb-sw is set to OFF.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-Z-00018891.0001001 / 21 MAR 16

39

ENG 1 ANTI ICE..ON

ENG 2 ANTI ICE..ON

ANTI ICE L + R WINDSHIELD

Applicable to: ALL

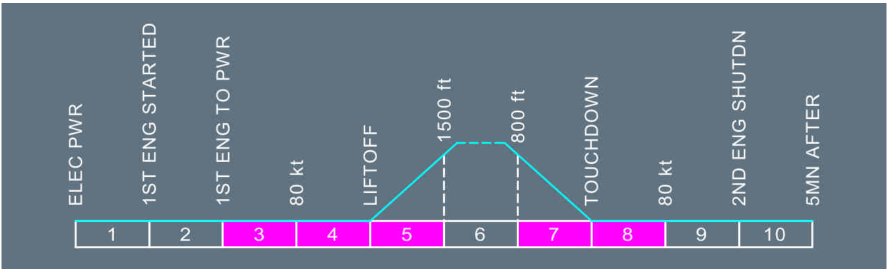
Ident.: PRO-ABN-A-ICE-B-00017167.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of both windshields is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-B-00010236.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-A-ICE-B-00010237.0001001 / 05 AUG 10

STATUS

INOP SYS

WSHLD HEAT

ANTI ICE L(R) WINDOW

Applicable to: ALL

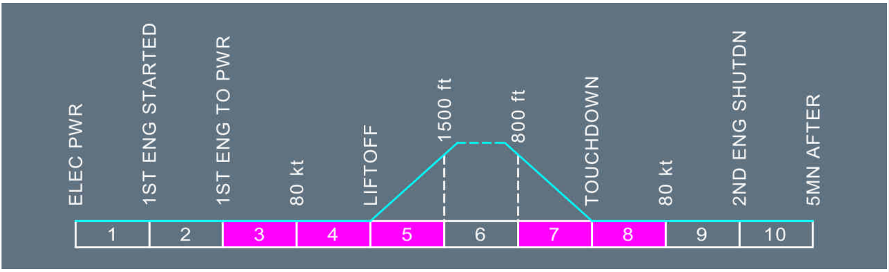
Ident.: PRO-ABN-A-ICE-V-00017168.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the left(right) cockpit window is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-V-00010234.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-A-ICE-V-00010235.0001001 / 05 AUG 10

STATUS

INOP SYS

L(R) WNDW HEAT

ANTI ICE L(R) WINDSHIELD

Applicable to: ALL

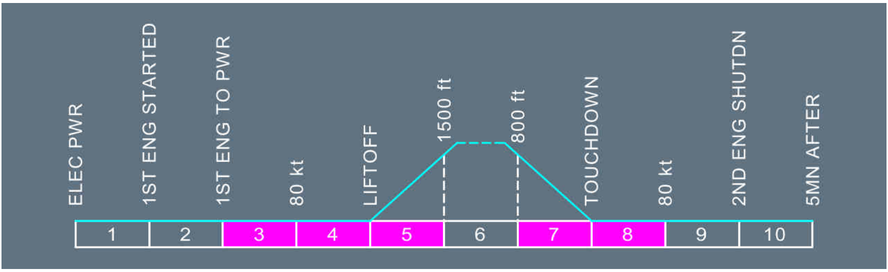
Ident.: PRO-ABN-A-ICE-A-00017166.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the left(right) windshield is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-A-00010232.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-A-ICE-A-00010233.0001001 / 05 AUG 10

STATUS

INOP SYS

L(R) WSHLD HEAT

ANTI ICE STBY PITOT OR L(R) STAT OR AOA

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

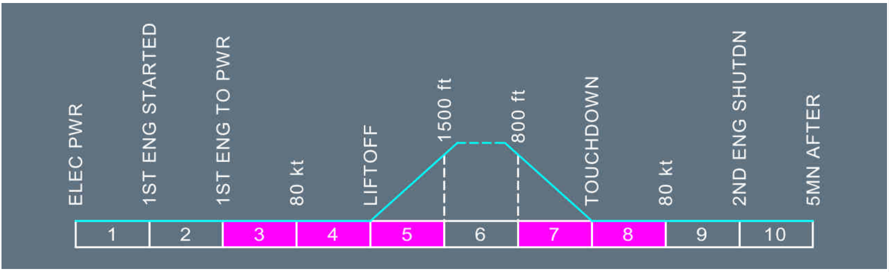
Ident.: PRO-ABN-A-ICE-F-00017172.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-F-00010250.0001001 / 25 FEB 14

Crew awareness.

L2 If standby instruments are used, monitor air data information.

Ident.: PRO-ABN-A-ICE-F-00010251.0001001 / 05 AUG 10

STATUS

INOP SYS

STBY PITOT
STBY L(R) STAT
STBY AOA

ANTI ICE STBY PITOT OR L(R) STAT OR AOA

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

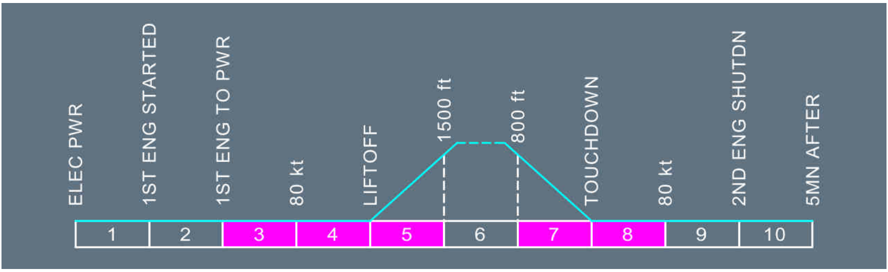
Ident.: PRO-ABN-A-ICE-F-00017172.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-F-00010251.0001001 / 05 AUG 10

STATUS

INOP SYS

STBY PITOT
STBY L(R) STAT
STBY AOA

ANTI ICE STBY PITOT OR L(R) STAT OR AOA

Applicable to: MSN 10949-11597

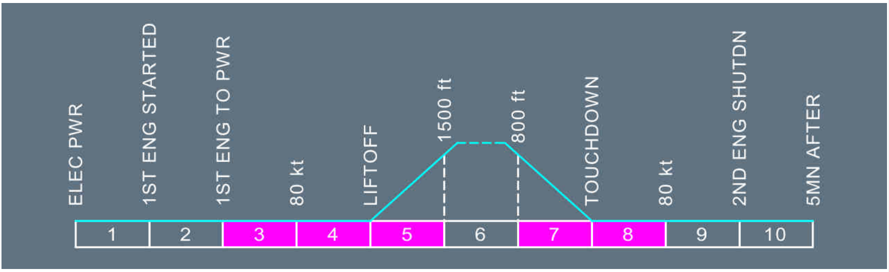
Ident.: PRO-ABN-A-ICE-F-00017172.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heating system of the corresponding probe is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-F-00010250.0002001 / 21 JAN 21

40

- **If ADR 3 in use:**
  AIR DATA SWTG....................AS RQRD
  If standby instruments are used, monitor air data information.

Ident.: PRO-ABN-A-ICE-F-00010251.0001001 / 05 AUG 10

STATUS

INOP SYS

STBY PITOT
STBY L(R) STAT
STBY AOA

ANTI ICE STBY PROBES

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

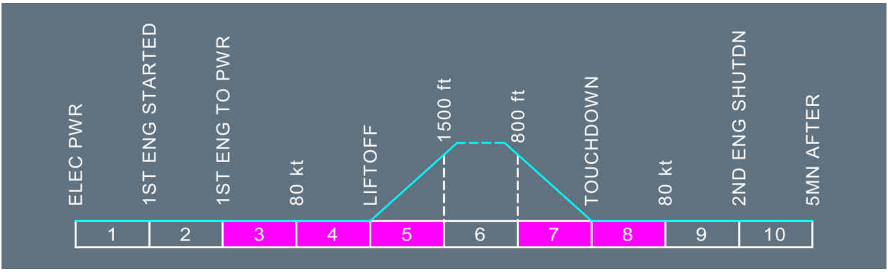
Ident.: PRO-ABN-A-ICE-I-00017176.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the standby probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-I-00010265.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-A-ICE-I-00010266.0001001 / 05 AUG 10

STATUS

INOP SYS

STBY PROBES

ANTI ICE STBY PROBES

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

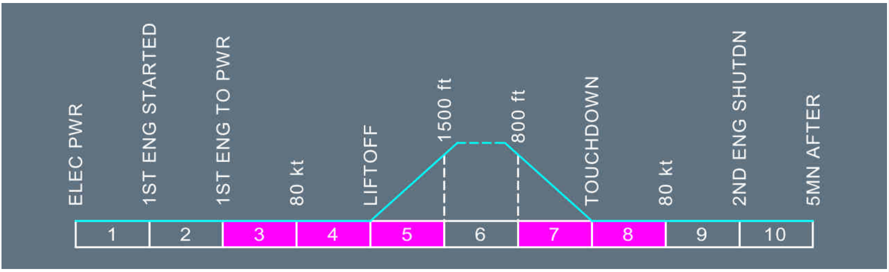
Ident.: PRO-ABN-A-ICE-I-00017176.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the standby probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-I-00010266.0001001 / 05 AUG 10

STATUS

INOP SYS

STBY PROBES

ANTI ICE STBY PROBES

Applicable to: MSN 10949-11597

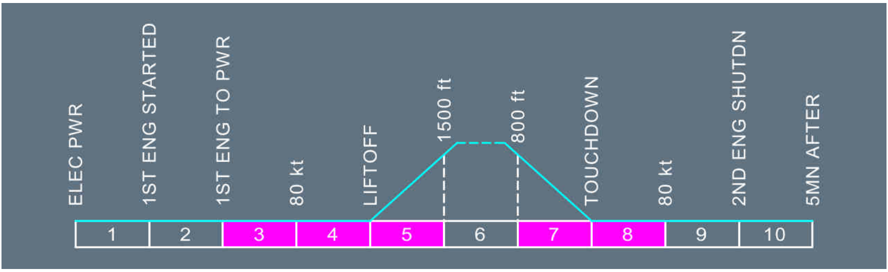
Ident.: PRO-ABN-A-ICE-I-00017176.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the standby probe heat computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-A-ICE-I-00010265.0002001 / 21 JAN 21

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- **If ADR 3 in use:**

  AIR DATA SWTG..AS RQRD

  If standby instruments are used, monitor air data information.

Ident.: PRO-ABN-A-ICE-I-00010266.0001001 / 05 AUG 10

STATUS

INOP SYS

STBY PROBES

Intentionally left blank

[QRH] ENGINE 1+2 BLEED FAULT

Ident.: PRO-ABN-AIR-00017611.0001001 / 21 MAR 17
Applicable to: MSN 01251, 02014, 06561

Apply this procedure when both engine bleed supply systems are failed.

- **At ANY TIME of the procedure, if** CAB PR EXCESS CAB ALT **alert triggers:** APPLY ECAM PROC

■ **If** AIR ENG 1 BLEED FAULT **alert or** AIR ENG 1 BLEED ABNORM PR **alert**
and
If AIR ENG 2 BLEED FAULT **alert or** AIR ENG 2 BLEED ABNORM PR **alert:**
X BLEED .... SHUT
ENG 1 BLEED .... OFF THEN ON
ENG 2 BLEED .... OFF THEN ON

- **If reset unsuccessful (NO engine bleed recovered):**
  DESCENT TO FL 100 / MEA-MORA........ INITIATE
  L2 *Descend rapidly to FL 100 / MEA-MORA, to prevent excessive cabin altitude.*
  L1 ENG 1 BLEED........ OFF
  ENG 2 BLEED........ OFF
  APU BLEED........ OFF
  APU........ START
  WING A.ICE........ OFF
  AVOID ICING CONDITIONS

  ■ **If APU available:**

  - **When at or below FL 200:**
    KEEP WING A.ICE OFF
    L2 *APU BLEED must not be used for wing anti-ice.*
    L1 APU BLEED........ ON
    L2 *When APU BLEED is ON and pressurization is recovered, reduce rate of descent and consider MAX FL 200.*

    L1 ■ **If APU bleed available:**
    MAX FL: 200
    ENG 1 BLEED........ ON
    ENG 2 BLEED........ ON
    APU BLEED........ OFF

Continued on the following page

[QRH] ENGINE 1+2 BLEED FAULT (Cont'd)

- **If no engine bleed recovered:**
  APU BLEED..ON
  ENG 1 BLEED..OFF
  ENG 2 BLEED..OFF

  WING A.ICE NOT AVAILABLE

  - **If PACK 1 inoperative:**
    X BLEED..OPEN

    L2 *To supply the PACK 2 from the APU bleed.*

L1

- **If APU bleed not available:**

  CONTINUE DESCENT TO FL 100 / MEA-MORA
  APU BLEED..OFF

  - **When at or below FL 100 / MEA-MORA:**
    ENG 1 BLEED..ON
    ENG 2 BLEED..ON

    - **If no engine bleed recovered:**
      ENG 1 BLEED..OFF
      ENG 2 BLEED..OFF

      WING A.ICE NOT AVAILABLE

      - **When CAB PR ΔP < 1 psi:**
        RAM AIR..ON

        MAX FL: 100 / MEA-MORA

- **If APU not available:**

  CONTINUE DESCENT TO FL 100 / MEA-MORA
  APU BLEED..OFF

  - **When at or below FL 100 / MEA-MORA:**
    ENG 1 BLEED..ON
    ENG 2 BLEED..ON

    - **If no engine bleed recovered:**
      ENG 1 BLEED..OFF
      ENG 2 BLEED..OFF

      WING A.ICE NOT AVAILABLE

Continued on the following page

[QRH] ENGINE 1+2 BLEED FAULT (Cont'd)

- **When CAB PR ΔP < 1 psi:**
  RAM AIR.......ON
  MAX FL: 100 / MEA-MORA

■ **If at least one engine bleed failed due to bleed leak or engine fire or Start Air Valve failed open:**

DESCENT TO FL 100 / MEA-MORA.......INITIATE

L2 *Descend rapidly to FL 100 / MEA-MORA, to prevent excessive cabin altitude.*

L1 X BLEED.......SHUT
ENG 1 BLEED.......OFF
ENG 2 BLEED.......OFF
APU BLEED.......OFF
APU.......START
WING A.ICE.......OFF

AVOID ICING CONDITIONS

■ **If** AIR ENG 2 BLEED FAULT **alert or** AIR ENG 2 BLEED ABNORM PR **alert:**

- **When at or below FL 100 / MEA-MORA:**
  ENG 2 BLEED.......ON
  - **If engine 2 bleed not recovered:**
    ENG 2 BLEED.......OFF

    WING A.ICE NOT AVAILABLE
    - **When CAB PR ΔP < 1 psi:**
      RAM AIR.......ON
      MAX FL: 100 / MEA-MORA

■ **If** AIR ENG 1 BLEED FAULT **alert or** AIR ENG 1 BLEED ABNORM PR **alert:**

■ **If APU available:**

- **When at or below FL 200:**
  KEEP WING A.ICE OFF

  L2 *APU BLEED must not be used for wing anti-ice.*

  L1 APU BLEED.......ON

  L2 *When APU BLEED is ON and pressurization is recovered, reduce rate of descent and consider MAX FL 200.*

Continued on the following page

[QRH] ENGINE 1+2 BLEED FAULT (Cont'd)

L1

- ■ **If APU bleed available:**

  MAX FL: 200
  ENG 1 BLEED....................ON
  APU BLEED....................OFF

  - ● **If engine 1 bleed not recovered:**

    APU BLEED....................ON
    ENG 1 BLEED....................OFF

    WING A.ICE NOT AVAILABLE

- ■ **If APU bleed not available:**

  CONTINUE DESCENT TO FL 100 / MEA-MORA
  APU BLEED....................OFF

  - ● **When at or below FL 100 / MEA-MORA:**

    ENG 1 BLEED....................ON

    - ● **If engine 1 bleed not recovered:**

      ENG 1 BLEED....................OFF

      WING A.ICE NOT AVAILABLE

      - ● **When CAB PR ΔP < 1 psi:**

        RAM AIR....................ON

        MAX FL: 100 / MEA-MORA

■ **If APU not available:**

CONTINUE DESCENT TO FL 100 / MEA-MORA
APU BLEED....................OFF

- ● **When at or below FL 100 / MEA-MORA:**

  ENG 1 BLEED....................ON

  - ● **If engine 1 bleed not recovered:**

    ENG 1 BLEED....................OFF

    WING A.ICE NOT AVAILABLE

    - ● **When CAB PR ΔP < 1 psi:**

      RAM AIR....................ON

      MAX FL: 100 / MEA-MORA

Continued on the following page

[QRH] ENGINE 1+2 BLEED FAULT (Cont'd)

- **If neither** AIR ENG 1(2) BLEED FAULT **alert nor** AIR ENG 1(2) BLEED ABNORM PR **alert on any side:**

  NO ENGINE BLEED CAN BE RECOVERED

  WING A.ICE NOT AVAILABLE

  - **When at or below FL 100 / MEA-MORA**
    and
    CAB PR ΔP < 1 psi:
    RAM AIR..ON
    MAX FL: 100 / MEA-MORA

[QRH] BLEED 1+2 FAULT

Ident.: PRO-ABN-AIR-00017611.0002001 / 21 MAR 17

1 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**

Apply this procedure when both engine bleed supply systems are failed at the end of the AIR ENG 1+2 BLEED FAULT ECAM procedure.

- **At ANY TIME of the procedure, if CAB PR EXCESS CAB ALT alert triggers:** APPLY ECAM PROC

CONTINUE DESCENT TO FL 100 / MEA-MORA
KEEP WING A.ICE OFF

L2 *APU BLEED must not be used for wing anti-ice.*

L1 AVOID ICING CONDITIONS
RCL pb.. PRESS

This action enables to recover the subtitle (if any) associated with the AIR ENG 1+2 BLEED FAULTalert.

■ **If no subtitle with AIR ENG 1+2 BLEED FAULT alert**
  and
  If both engine bleeds lost NOT due to engine fire NOR Start Air Valve failed open:
  APU.. START

  ■ **If APU available:**

    ● **When at or below FL 200:**
    KEEP WING A.ICE OFF

L2   *APU BLEED must not be used for wing anti-ice.*

L1   APU BLEED....................................ON

    When APU bleed is ON and pressurization is recovered, reduce rate of descent and consider MAX FL 200.

      ● **If PACK 1 available:**
      PACK 2....................................OFF

      ■ **If APU bleed available:**
      MAX FL: 200
      PACK 1.................................... ON
      PACK 2.................................... ON
      ENG 1 BLEED.............................. ON
      ENG 2 BLEED.............................. ON

Continued on the following page

[QRH] BLEED 1+2 FAULT (Cont'd)

APU BLEED..OFF

- **If no engine bleed recovered:**

  APU BLEED..ON

  - **If PACK 1 available:**

    PACK 2..OFF

  ENG 1 BLEED..OFF
  ENG 2 BLEED..OFF

  WING A.ICE NOT AVAILABLE

■ **If APU bleed not available:**

APU BLEED..OFF

- **When at or below FL 100 / MEA-MORA:**

  PACK 1..ON
  PACK 2..ON
  ENG 1 BLEED..ON
  ENG 2 BLEED..ON

  - **If no engine bleed recovered:**

    ENG 1 BLEED..OFF
    ENG 2 BLEED..OFF

    MAX FL: 100 / MEA-MORA

    WING A.ICE NOT AVAILABLE

    - **When CAB PR ΔP < 1 psi:**

      RAM AIR..ON

■ **If APU not available:**

APU BLEED..OFF

- **When at or below FL 100 /MEA-MORA:**

  PACK 1..ON
  PACK 2..ON
  ENG 1 BLEED..ON
  ENG 2 BLEED..ON

  - **If no engine bleed recovered:**

    ENG 1 BLEED..OFF
    ENG 2 BLEED..OFF

    MAX FL: 100 / MEA-MORA

Continued on the following page

[QRH] BLEED 1+2 FAULT (Cont'd)

WING A.ICE NOT AVAILABLE

● **When CAB PR ΔP < 1 psi:**
RAM AIR..ON

■ **If** LEFT LEAK **subtitle with** AIR ENG 1+2 BLEED FAULT **alert**
or
If engine 1 bleed lost due to engine 1 fire or Start Air Valve 1 failed open or APU leak fed by engine:

● **When at or below FL 100 / MEA-MORA:**
PACK 2..ON
ENG 2 BLEED..ON

● **If engine 2 bleed not recovered:**
ENG 2 BLEED..OFF

MAX FL: 100 / MEA-MORA

WING A.ICE NOT AVAILABLE

● **When CAB PR ΔP < 1 psi:**
RAM AIR..ON

■ **If** RIGHT LEAK **subtitle with** AIR ENG 1+2 BLEED FAULT **alert**
or
If engine 2 bleed lost due to engine 2 fire or Start Air Valve 2 failed open:
APU..START

■ **If APU available:**

● **When at or below FL 200:**

KEEP WING A.ICE OFF

L2 *APU BLEED must not be used for wing anti-ice.*

L1 APU BLEED..ON

When APU bleed is ON and pressurization is recovered, reduce rate of descent and consider MAX FL 200.

■ **If APU bleed available:**

MAX FL: 200
PACK 1..ON
ENG 1 BLEED..ON
APU BLEED..OFF

Continued on the following page

[QRH] BLEED 1+2 FAULT (Cont'd)

- **If engine 1 bleed not recovered:**
  APU BLEED.. ON
  ENG 1 BLEED..OFF

  WING A.ICE NOT AVAILABLE

■ **If APU bleed not available:**
APU BLEED.. OFF

- **When at or below FL 100 / MEA-MORA:**
  PACK 1..ON
  ENG 1 BLEED..ON
  - **If engine 1 bleed not recovered:**
    ENG 1 BLEED.. OFF

    MAX FL: 100 / MEA-MORA

    WING A.ICE NOT AVAILABLE
    - **When CAB PR ΔP < 1 psi:**
      RAM AIR..ON

■ **If APU not available:**
APU BLEED.. OFF

- **When at or below FL 100 / MEA-MORA:**
  PACK 1..ON
  ENG 1 BLEED..ON
  - **If engine 1 bleed not recovered:**
    ENG 1 BLEED.. OFF

    MAX FL: 100 / MEA-MORA

    WING A.ICE NOT AVAILABLE
    - **When CAB PR ΔP < 1 psi:**
      RAM AIR..ON

■ **If both** LEFT LEAK **and** RIGHT LEAK **subtitles with** AIR ENG 1+2 BLEED FAULT **alert**
or
If both engine bleeds lost due to engine fire or Start Air Valve failed open or APU leak fed by engine:

NO ENGINE BLEED CAN BE RECOVERED

MAX FL: 100 / MEA-MORA

Continued on the following page

[QRH] BLEED 1+2 FAULT (Cont'd)

WING A.ICE NOT AVAILABLE

- **When CAB PR ΔP < 1 psi:**

  RAM AIR..ON

AIR APU BLEED FAULT

Applicable to: ALL

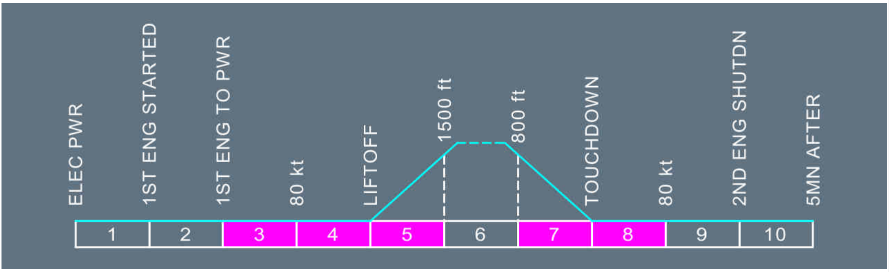
Ident.: PRO-ABN-AIR-G-00017375.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the APU is running and the position of the APU bleed valve disagrees with the selected position of the APU BLEED pb-sw.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-G-00017552.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-AIR-G-00011266.0001001 / 05 AUG 10

STATUS

INOP SYS

APU BLEED (If valve closed)

AIR APU BLEED LEAK

Applicable to: ALL

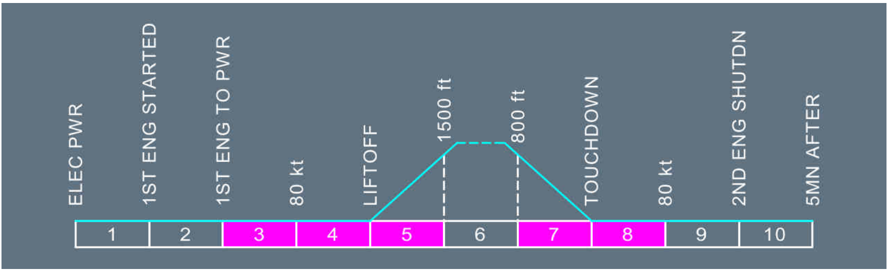
Ident.: PRO-ABN-AIR-F-00017376.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the APU bleed leak detection loop detects a temperature above 124 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-F-00017553.0001001 / 21 MAR 16

APU BLEED (IF NOT CLOSED)..OFF

L2 *When the APU BLEED pb-sw is ON, the FAULT light remains on.*
When the APU BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

Ident.: PRO-ABN-AIR-F-00011100.0001001 / 05 AUG 10

STATUS

INOP SYS

APU BLEED

AIR APU BLEED LEAK
APU LEAK FED BY ENG

Applicable to: MSN 02734, 02904-03002, 03229, 03565, 03761, 04352, 04465, 06139, 06414, 06536, 06670, 07081, 08495-09324, 10949-11597

Ident.: PRO-ABN-AIR-Z-00018057.0001001 / 21 MAR 16

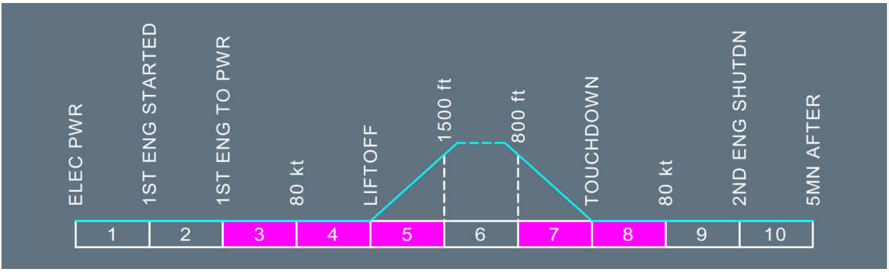
2

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a bleed leak is detected in the APU bleed ducts and the APU is OFF.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-Z-00017554.0001001 / 21 MAR 16

3

ENG 1 BLEED..........OFF
X BLEED..........SHUT
PACK 1..........OFF
WING ANTI ICE..........OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR APU BLEED LEAK (Cont'd)
APU LEAK FED BY ENG

Ident.: PRO-ABN-AIR-Z-00015878.0001001 / 17 MAR 17

4

STATUS

	INOP SYS
AVOID ICING CONDITIONS ● **IF SEVERE ICE ACCRETION:** MIN SPD....................VLS +10 / G DOT MANEUVER WITH CARE LDG DIST PROC....................APPLY	WING A. ICE ENG 1 BLEED PACK 1 APU BLEED

AIR APU LEAK DET FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-AIR-Q-00017394.0001001 / 21 MAR 16

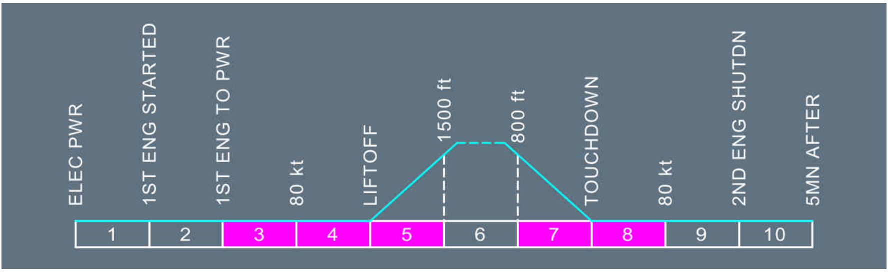
5

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the APU bleed leak detection loop is inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-Q-00015830.0001001 / 21 AUG 15

6

Crew awareness.

Continued on the following page

AIR APU LEAK DET FAULT (Cont'd)

Ident.: PRO-ABN-AIR-Q-00015831.0001001 / 21 AUG 15

7

STATUS

INOP SYS

APU LEAK DET

AIR BLEED 1(2) OFF

Applicable to: ALL

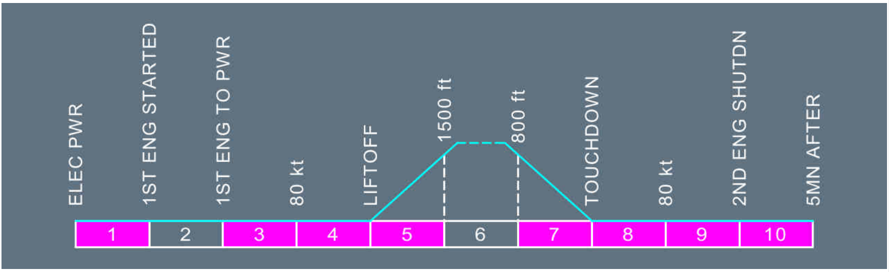
Ident.: PRO-ABN-AIR-AA-00017374.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ENG 1(2) BLEED pb-sw is abnormally set to OFF.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-AA-00017555.0001001 / 21 MAR 16

Crew awareness.

AIR BLEED LEAK

Applicable to: MSN 08495-08596, 09190-09324

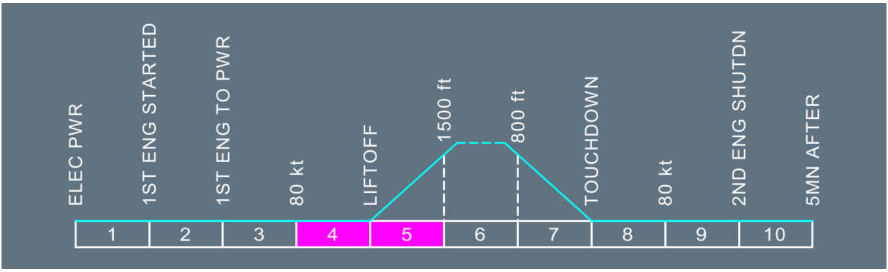
Ident.: PRO-ABN-AIR-AB-00018172.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a leak is detected in a bleed duct and the X-BLEED selector is set to OPEN.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-AB-00016189.0001001 / 21 AUG 15

8 X BLEED...SHUT

L2 *Closing the crossbleed valve isolates the bleed leak. Refer to DSC-36-10-50 Leak Detection.*

AIR BLEED LEAK

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-AIR-AB-00018172.0002001 / 27 FEB 18

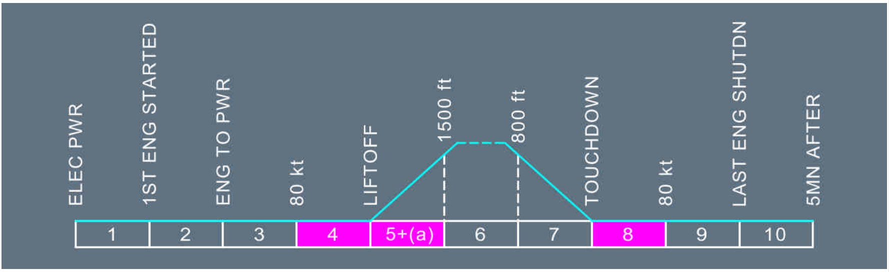
9

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a leak is detected in a bleed duct and the X-BLEED selector is set to OPEN.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

Note: (a) Alert inhibited during the first 15 s of the flight phase 5.

Ident.: PRO-ABN-AIR-AB-00016189.0001001 / 21 AUG 15

10

X BLEED..........SHUT

L2 *Closing the crossbleed valve isolates the bleed leak. Refer to DSC-36-10-50 Leak Detection.*

AIR COND CTL 1(2) - A(B) FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-AIR-AC-00017315.0001001 / 21 MAR 16

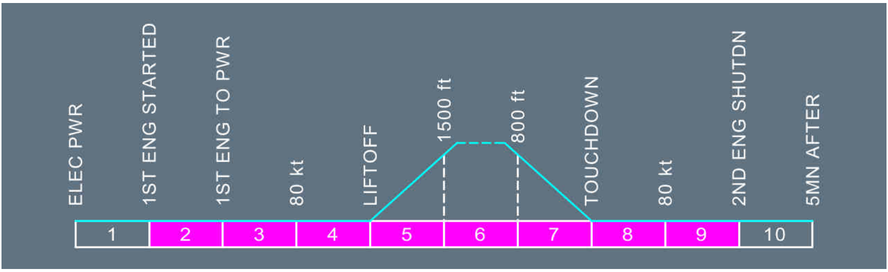
11

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the lane A(B) of ACSC 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-AC-00018084.0001001 / 21 MAR 16

12

Crew awareness.

Ident.: PRO-ABN-AIR-AC-00010777.0001001 / 05 AUG 10

13

STATUS

INOP SYS

COND CTL 1(2)-A(B)

AIR ENG 1(2) BLEED ABNORM PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876

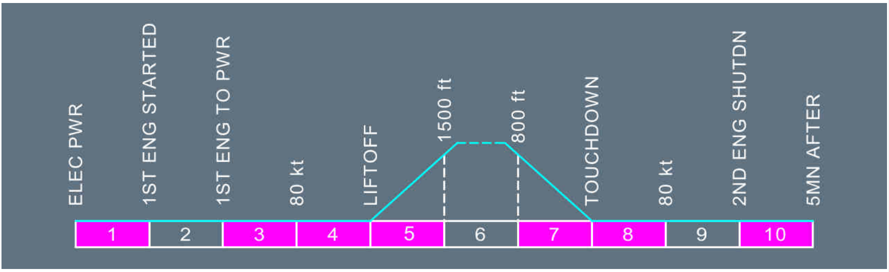
Ident.: PRO-ABN-AIR-B-00017378.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the regulated pressure in the engine bleed duct is abnormal.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-B-00017584.0009001 / 02 MAY 16

- **If wing anti-ice is off, and both packs are on:**

  PACK FLOW.. LO

  L2 *The PACK FLOW selector must be set to LO, due to precooler performance.*

- L1 **If wing anti-ice is on, and both packs are on:**

  PACK (AFFECTED).. OFF

  L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 ENG BLEED (AFFECTED).. OFF

X BLEED.. OPEN

Continued on the following page

AIR ENG 1(2) BLEED ABNORM PR (Cont'd)

Ident.: PRO-ABN-AIR-B-00011089.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED ABNORM PR

Applicable to: MSN 01251

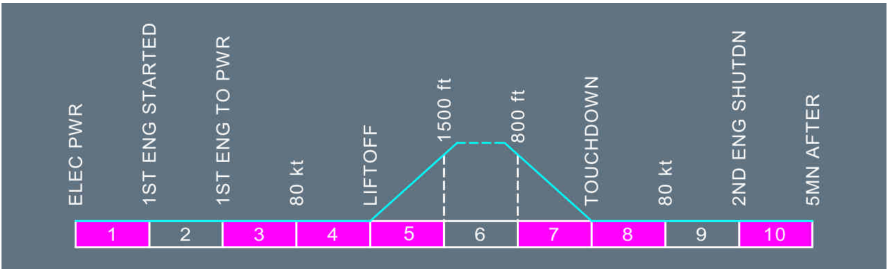
Ident.: PRO-ABN-AIR-B-00017378.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the regulated pressure in the engine bleed duct is abnormal.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

AIR ENG 1(2) BLEED ABNORM PR (Cont'd)

Ident.: PRO-ABN-AIR-B-00017584.0001001 / 21 MAR 16

- **If wing anti-ice is on and both packs are on:**

  PACK (AFFECTED)..OFF

L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 X BLEED..OPEN

Ident.: PRO-ABN-AIR-B-00011089.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED ABNORM PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

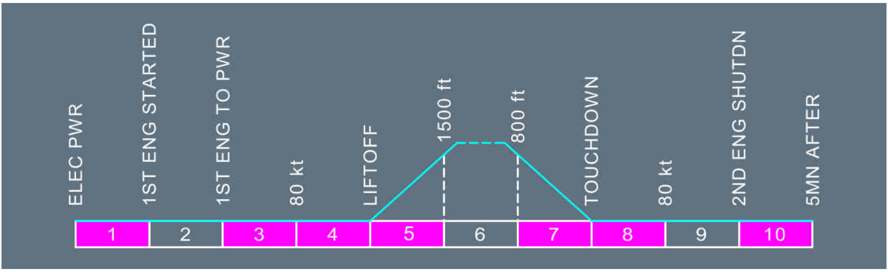
Ident.: PRO-ABN-AIR-B-00017378.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the regulated pressure in the engine bleed duct is abnormal.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

AIR ENG 1(2) BLEED ABNORM PR

Applicable to: MSN 02014, 06561

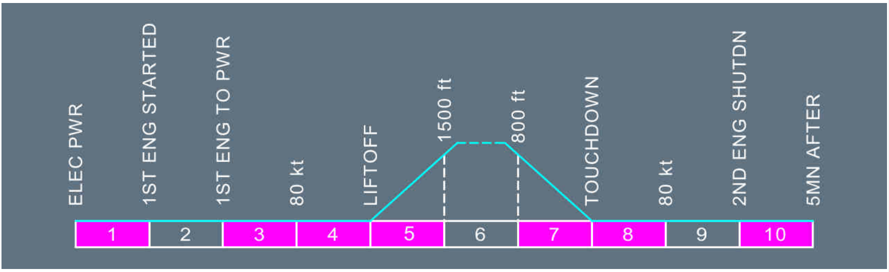
Ident.: PRO-ABN-AIR-B-00017378.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the regulated pressure in the engine bleed duct is abnormal.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-B-00017584.0005001 / 21 MAR 16

- **If wing anti-ice is off, and both packs are on:**

  PACK FLOW .... LO

L2 *The PACK FLOW selector must be set to LO, due to precooler performance.*

L1
- **If wing anti-ice is on, and both packs are on:**

  PACK (AFFECTED) .... OFF

L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 X BLEED .... OPEN

Continued on the following page

AIR ENG 1(2) BLEED ABNORM PR (Cont'd)

Ident.: PRO-ABN-AIR-B-00011089.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED ABNORM PR

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

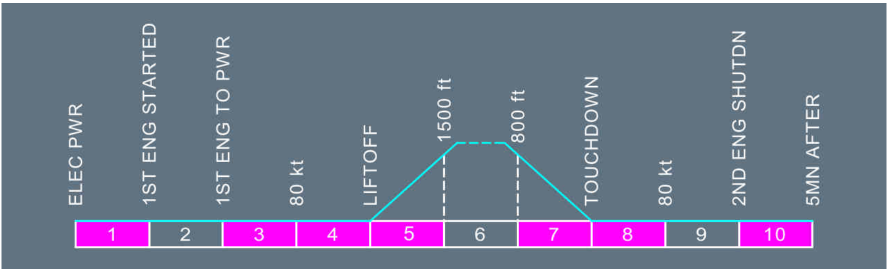
Ident.: PRO-ABN-AIR-B-00017378.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the regulated pressure in the engine bleed duct is abnormal.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

AIR ENG 1(2) BLEED ABNORM PR (Cont'd)

Ident.: PRO-ABN-AIR-B-00017584.0010001 / 02 MAY 16

● **If wing anti-ice is off, and both packs are on:**

ECON FLOW..ON
AFT CRG HOT AIR ◁ ....OFF

L2 *The ECON FLOW pb must be selected ON and aft cargo heating ◁ must be selected off, due to precooler performance.*

L1 ● **If wing anti-ice is on, and both packs are on:**

PACK (AFFECTED)..OFF

L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 ENG BLEED (AFFECTED)..OFF
X BLEED..OPEN

Ident.: PRO-ABN-AIR-B-00011089.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED ABNORM PR

Applicable to: MSN 08495-09324, 10949-11597

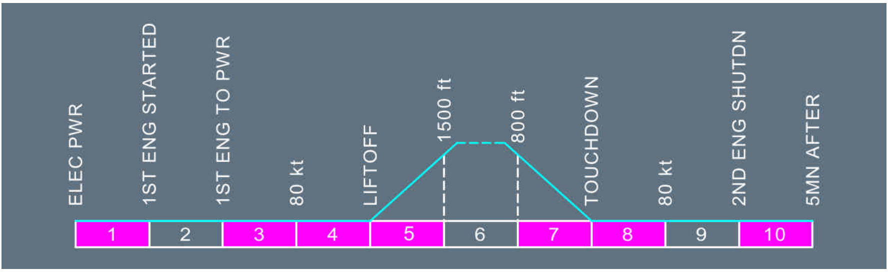
Ident.: PRO-ABN-AIR-B-00017378.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the regulated pressure in the engine bleed duct is abnormal.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-B-00017584.0008001 / 02 MAY 16

14

AFT CRG HOT AIR .... OFF

- **If both packs are on:**
  PACK (AFFECTED).. OFF

ENG BLEED (AFFECTED).. OFF
X BLEED.. OPEN

Ident.: PRO-ABN-AIR-B-00011089.0002001 / 21 AUG 15

15

STATUS

INOP SYS

ENG 1(2) BLEED
PACK 1(2)

AIR ENG 1(2) BLEED FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02896, 03032-03211, 03266-03284, 03313-03391, 03588-03710, 03733, 04000-04192, 04389-04446, 04544-04563, 04734-05345, 05591-05883, 06173, 06528, 06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-AIR-C-00017369.0001001 / 21 MAR 16

16

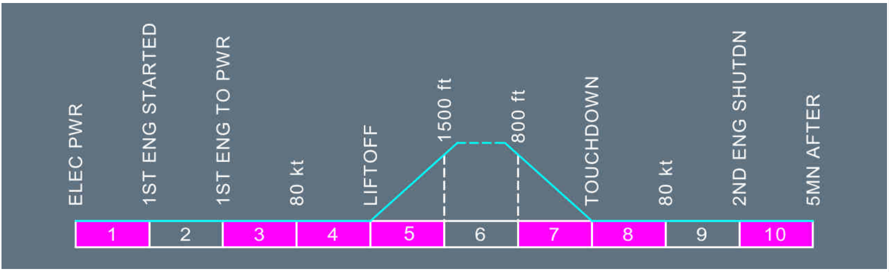
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the engine 1(2) is running and:
- The engine bleed air pressure is above 57 PSI (+3/-0), or
- The engine bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-C-00017605.0005001 / 21 MAR 16

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)....................OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the failure (overheat or overpressure) disappears.

L1
- **If wing anti-ice is off and both packs are on:**

  PACK FLOW....................LO

  The PACK FLOW selector must be set to LO, due to precooler performance.

- **If wing anti-ice is on and both packs are on:**

  PACK (AFFECTED)....................OFF

L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 X BLEED....................OPEN

Ident.: PRO-ABN-AIR-C-00011092.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED FAULT

Applicable to: MSN 01251

Ident.: PRO-ABN-AIR-C-00017369.0001001 / 21 MAR 16

17

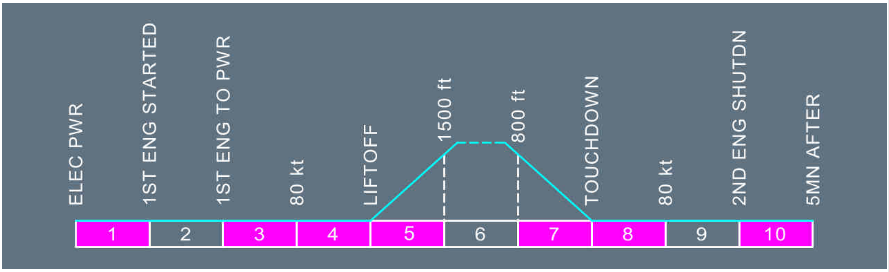
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the engine 1(2) is running and:
- The engine bleed air pressure is above 57 PSI (+3/-0), or
- The engine bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-C-00017605.0001001 / 21 MAR 16

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the failure (overheat or overpressure) disappears.

L1 ● **If wing anti-ice is on and both packs are on:**

PACK (AFFECTED)..OFF

L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 X BLEED... OPEN

Ident.: PRO-ABN-AIR-C-00011092.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED FAULT

Applicable to: MSN 02734, 02904-03002, 03565, 04465, 06139, 06536

Ident.: PRO-ABN-AIR-C-00017369.0002001 / 20 JAN 18

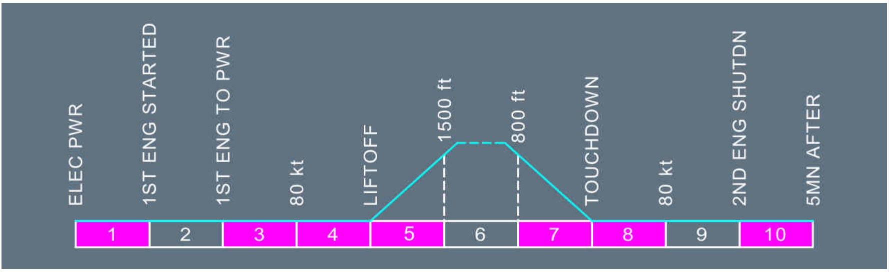
18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine 1(2) is running and:
- Both bleed temperature sensors are lost, or
- The engine bleed air pressure is above 57 PSI (+3/-0), or
- The engine bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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8
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-C-00017605.0005001 / 21 MAR 16

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the failure (overheat or overpressure) disappears.

L1
- **If wing anti-ice is off and both packs are on:**
  PACK FLOW.. LO
  The PACK FLOW selector must be set to LO, due to precooler performance.
- **If wing anti-ice is on and both packs are on:**
  PACK (AFFECTED)...OFF
  L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 X BLEED.. OPEN

Ident.: PRO-ABN-AIR-C-00011092.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED FAULT

Applicable to: MSN 03222, 03294, 03816, 04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409, 06592, 06632, 06658, 06685, 06718-06798, 06895-07005, 07098

Ident.: PRO-ABN-AIR-C-00017369.0001001 / 21 MAR 16

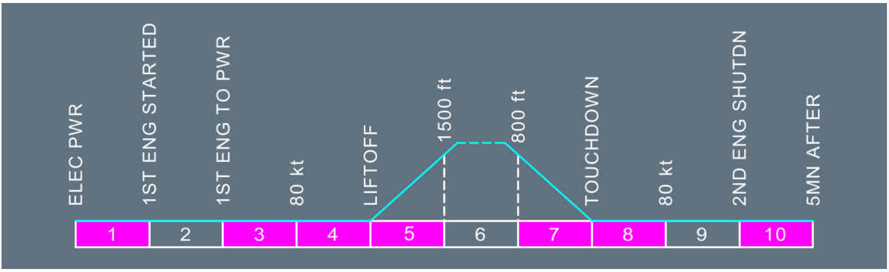
19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine 1(2) is running and:
- The engine bleed air pressure is above 57 PSI (+3/-0), or
- The engine bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-C-00017605.0008001 / 21 MAR 16

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the failure (overheat or overpressure) disappears.

L1 ● **If wing anti-ice is off, and both packs are on:**

ECON FLOW..ON
AFT CRG HOT AIR ◁✳ ....OFF

L2 *The ECON FLOW pb must be selected ON and aft cargo heating ◁✳ must be selected off, due to precooler performance.*

L1 ● **If wing anti-ice is on and both packs are on:**

PACK (AFFECTED)..OFF

L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 X BLEED...OPEN

Ident.: PRO-ABN-AIR-C-00011092.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED FAULT

Applicable to: MSN 03229, 03761, 04352, 06414, 06670, 07081

Ident.: PRO-ABN-AIR-C-00017369.0002001 / 20 JAN 18

20

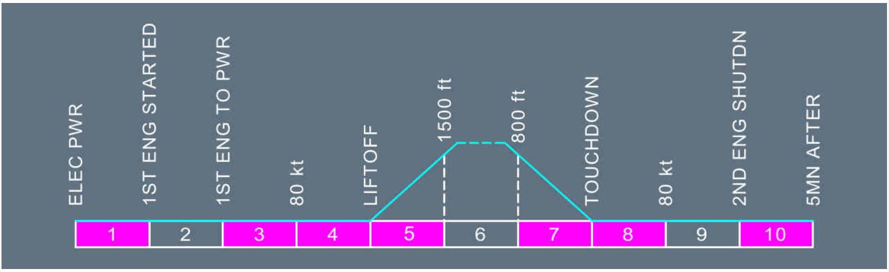
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the engine 1(2) is running and:
- Both bleed temperature sensors are lost, or
- The engine bleed air pressure is above 57 PSI (+3/-0), or
- The engine bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-C-00017605.0008001 / 21 MAR 16

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the failure (overheat or overpressure) disappears.

L1 ● **If wing anti-ice is off, and both packs are on:**

ECON FLOW..ON
AFT CRG HOT AIR ◁❄ ....OFF

L2 *The ECON FLOW pb must be selected ON and aft cargo heating* ◁❄ *must be selected off, due to precooler performance.*

L1 ● **If wing anti-ice is on and both packs are on:**

PACK (AFFECTED)...OFF

L2 *One pack must be closed when the flight crew uses wing anti-ice because of precooler performance.*

L1 X BLEED.. OPEN

Ident.: PRO-ABN-AIR-C-00011092.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) (If closed)

AIR ENG 1(2) BLEED FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-AIR-C-00017369.0002001 / 20 JAN 18

21

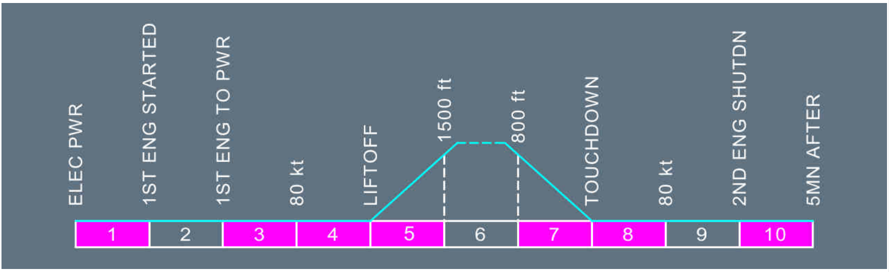
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the engine 1(2) is running and:
- Both bleed temperature sensors are lost, or
- The engine bleed air pressure is above 57 PSI (+3/-0), or
- The engine bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-C-00017605.0010001 / 27 FEB 18

- **On ground, if only one bleed temperature sensor is lost:**

  Crew awareness.

L2 Maintenance action is due.

L1 ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)............OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the failure (overheat or overpressure) disappears.

L1 AFT CRG HOT AIR ❄ ....OFF
PACK (AFFECTED)............OFF
X BLEED............OPEN

Ident.: PRO-ABN-AIR-C-00011092.0002001 / 21 AUG 15

22

STATUS

INOP SYS

ENG 1(2) BLEED
PACK 1(2)

AIR ENG 1(2) BLEED FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-AIR-C-00017369.0002001 / 20 JAN 18

23

ANNUNCIATIONS

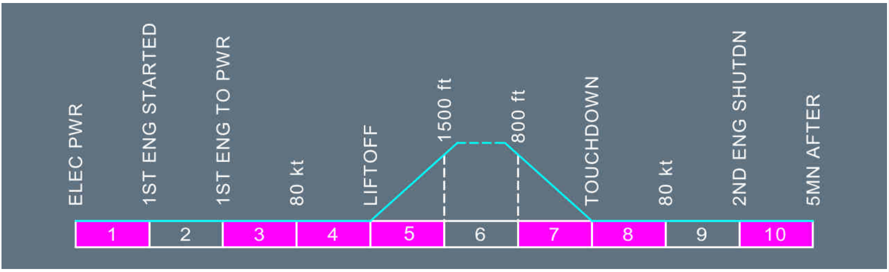
Triggering Conditions:

L2

This alert triggers when the engine 1(2) is running and:

- Both bleed temperature sensors are lost, or
- The engine bleed air pressure is above 57 PSI (+3/-0), or
- The engine bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-C-00017605.0011001 / 27 FEB 18

24

- **On ground, if only one bleed temperature sensor is lost:**

  Crew awareness.

L2 Maintenance action is due.

L1 ENG BLEED (AFFECTED).. OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the failure (overheat or overpressure) disappears.

L1 AFT CRG HOT AIR ❄ .... OFF
PACK (AFFECTED).. OFF
X BLEED.. OPEN

Ident.: PRO-ABN-AIR-C-00011092.0002001 / 21 AUG 15

25

STATUS

INOP SYS

ENG 1(2) BLEED
PACK 1(2)

AIR ENG 1(2) BLEED FAULT
BLEED NOT CLOSED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-AIR-T-00018049.0002001 / 02 MAY 16

26

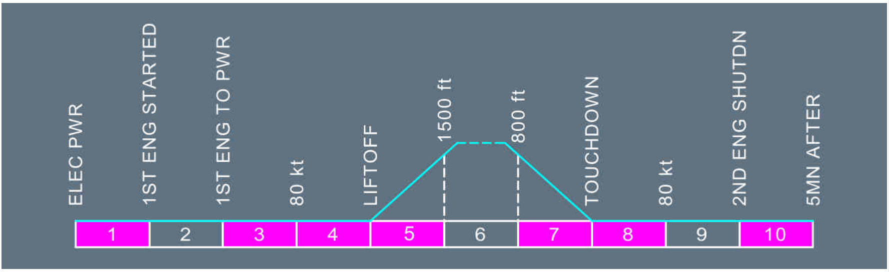
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the engine 1(2) is running, the engine 1(2) bleed valve fails to close, and:
- The engine 1(2) bleed air pressure is above 57 PSI (+3/-0), or
- The engine 1(2) bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

BLEED NOT CLOSED

Ident.: PRO-ABN-AIR-T-00017607.0005001 / 02 MAY 16

ENG BLEED (AFFECTED)....................OFF

- **If wing anti-ice is off:**
  PACK FLOW....................LO

PACK (AFFECTED)....................OFF
X BLEED....................SHUT
WING ANTI ICE....................OFF
AVOID ICING CONDITIONS

- **If engine 1 bleed is affected:**
  APU BLEED....................OFF

Ident.: PRO-ABN-AIR-T-00015887.0028001 / 05 MAY 22

27

STATUS

	INOP SYS
AVOID ICING CONDITIONS ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) WING A. ICE APU BLEED

AIR ENG 1(2) BLEED FAULT
BLEED NOT CLOSED

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: PRO-ABN-AIR-T-00018049.0002001 / 02 MAY 16

28

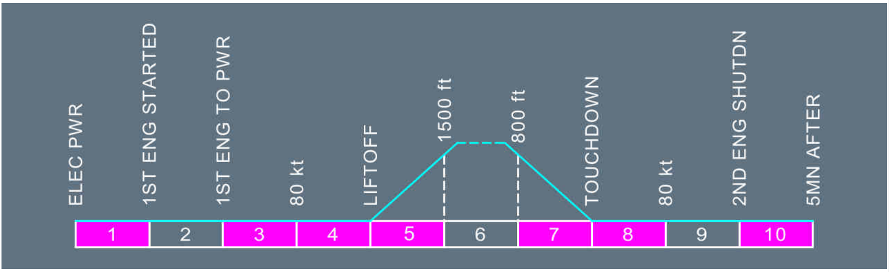
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine 1(2) is running, the engine 1(2) bleed valve fails to close, and:

- The engine 1(2) bleed air pressure is above 57 PSI (+3/-0), or
- The engine 1(2) bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

BLEED NOT CLOSED

Ident.: PRO-ABN-AIR-T-00017607.0006001 / 02 MAY 16

ENG BLEED (AFFECTED)..OFF

- **If wing anti-ice is off, and both packs are on:**
  - ECON FLOW..ON
  - AFT CRG HOT AIR ....OFF

PACK (AFFECTED)..OFF
X BLEED..SHUT
WING ANTI ICE..OFF
AVOID ICING CONDITIONS

- **If engine 1 bleed is affected:**
  - APU BLEED..OFF

Ident.: PRO-ABN-AIR-T-00015887.0028001 / 05 MAY 22

29

STATUS

	INOP SYS
AVOID ICING CONDITIONS ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED PACK 1(2) WING A. ICE APU BLEED

AIR ENG 1(2) BLEED FAULT
BLEED NOT CLOSED

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-AIR-T-00018049.0002001 / 02 MAY 16

30

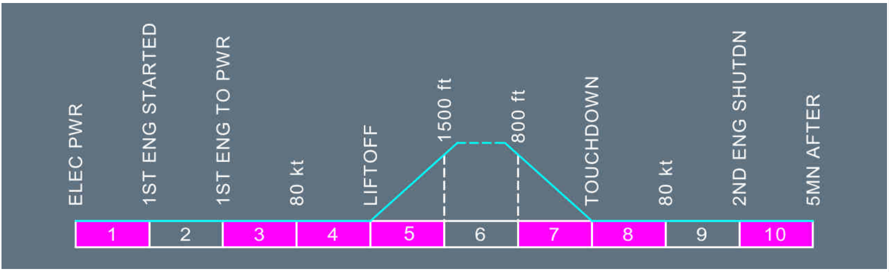
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine 1(2) is running, the engine 1(2) bleed valve fails to close, and:

- The engine 1(2) bleed air pressure is above 57 PSI (+3/-0), or
- The engine 1(2) bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
10

Ident.: PRO-ABN-AIR-T-00017607.0003001 / 02 MAY 16

31

ENG BLEED (AFFECTED)..OFF
AFT CRG HOT AIR ❄ ....OFF
PACK (AFFECTED)..OFF
X BLEED..SHUT
WING ANTI ICE..OFF
AVOID ICING CONDITIONS

- **If engine 1 bleed is affected:**

  APU BLEED..OFF

Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)
BLEED NOT CLOSED

Ident.: PRO-ABN-AIR-T-00015887.0012001 / 05 MAY 22

STATUS

AVOID ICING CONDITIONS

INOP SYS

ENG 1(2) BLEED
PACK 1(2)
WING A. ICE
APU BLEED

AIR ENG 1(2) BLEED FAULT
BLEED NOT CLOSED

Applicable to: MSN 08635, 10949-11522, 11572-11597

Ident.: PRO-ABN-AIR-T-00018049.0002001 / 02 MAY 16

32

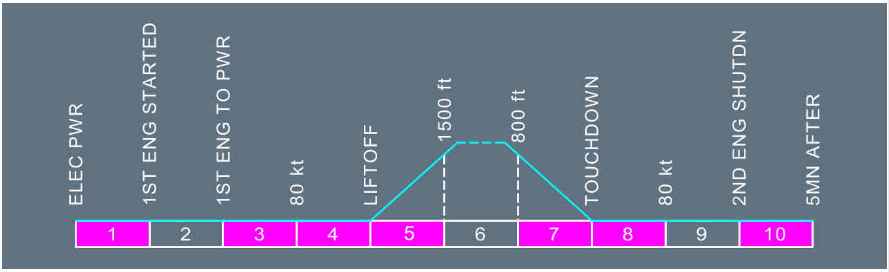
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine 1(2) is running, the engine 1(2) bleed valve fails to close, and:

- The engine 1(2) bleed air pressure is above 57 PSI (+3/-0), or
- The engine 1(2) bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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8
9
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Ident.: PRO-ABN-AIR-T-00017607.0003001 / 02 MAY 16

33

ENG BLEED (AFFECTED)..OFF
AFT CRG HOT AIR ◁❄ ....OFF
PACK (AFFECTED)..OFF
X BLEED...SHUT
WING ANTI ICE..OFF
AVOID ICING CONDITIONS

- **If engine 1 bleed is affected:**
  APU BLEED...OFF

Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)
BLEED NOT CLOSED

Ident.: PRO-ABN-AIR-T-00015887.0001001 / 05 MAY 22

34

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**
  MIN SPD..VLS +10 / G DOT
  MANEUVER WITH CARE
  LDG DIST PROC...APPLY

INOP SYS

ENG 1(2) BLEED
PACK 1(2)
WING A. ICE
APU BLEED

AIR ENG 1(2) BLEED FAULT
BLEED NOT CLOSED

Applicable to: MSN 11531

Ident.: PRO-ABN-AIR-T-00018049.0002001 / 02 MAY 16

35

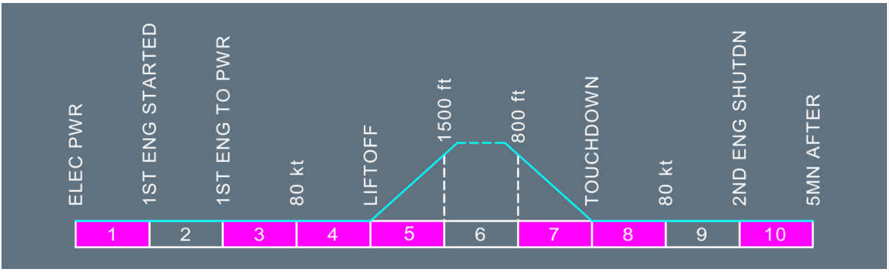
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine 1(2) is running, the engine 1(2) bleed valve fails to close, and:

- The engine 1(2) bleed air pressure is above 57 PSI (+3/-0), or
- The engine 1(2) bleed air temperature is above:
  - 257 °C for more than 55 s
  - 270 °C for more than 15 s
  - 290 °C for more than 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-AIR-T-00017607.0003001 / 02 MAY 16

36

ENG BLEED (AFFECTED)..OFF
AFT CRG HOT AIR ✻ ....OFF
PACK (AFFECTED)..OFF
X BLEED..SHUT
WING ANTI ICE..OFF
AVOID ICING CONDITIONS

- **If engine 1 bleed is affected:**

  APU BLEED..OFF

Continued on the following page

AIR ENG 1(2) BLEED FAULT (Cont'd)

BLEED NOT CLOSED

Ident.: PRO-ABN-AIR-T-00015887.0028001 / 05 MAY 22

37

STATUS

	INOP SYS
AVOID ICING CONDITIONS	ENG 1(2) BLEED PACK 1(2) WING A. ICE APU BLEED
ONE PACK ONLY IF WAI ON	

AIR ENG 1+2 BLEED FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-07098

Ident.: PRO-ABN-AIR-R-00017092.0001001 / 21 MAR 16

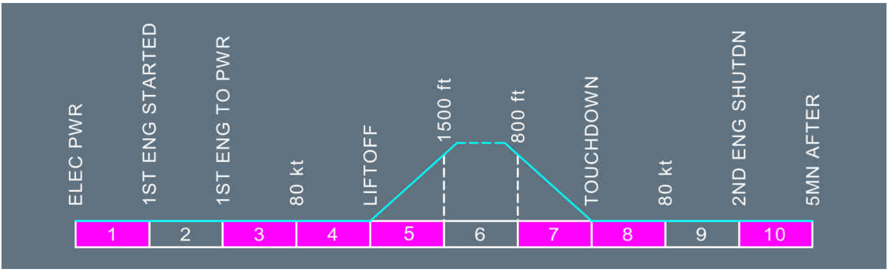
38

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleed supply systems are lost without wing leak or pylon leak on any side.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1+2 BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-R-00017556.0001001 / 21 MAR 17

39

X BLEED....AUTO
WING ANTI ICE....OFF
AVOID ICING CONDITIONS

- **If APU Bleed is ON and fails:**

  APU BLEED....OFF

L2 *Recall in the case of failure of the APU Bleed.*

L1 ENG 1 BLEED....OFF THEN ON
ENG 2 BLEED....OFF THEN ON

- **IF UNSUCCESSFUL:**

  ENG 1 BLEED....OFF
  ENG 2 BLEED....OFF

  DES TO FL 100/MEA-MORA
  BLEED 1+2 PROC....APPLY

  Refer to procedure.

Ident.: PRO-ABN-AIR-R-00015836.0001001 / 17 MAR 17

STATUS

	INOP SYS
AVOID ICING CONDITIONS ● **IF SEVERE ICE ACCRETION:** MIN SPD....VLS +10 / G DOT MANEUVER WITH CARE LDG DIST PROC....APPLY	WING A. ICE ENG 1 BLEED ENG 2 BLEED APU BLEED PACK 1+2

AIR ENG 1+2 BLEED FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-AIR-R-00017092.0001001 / 21 MAR 16

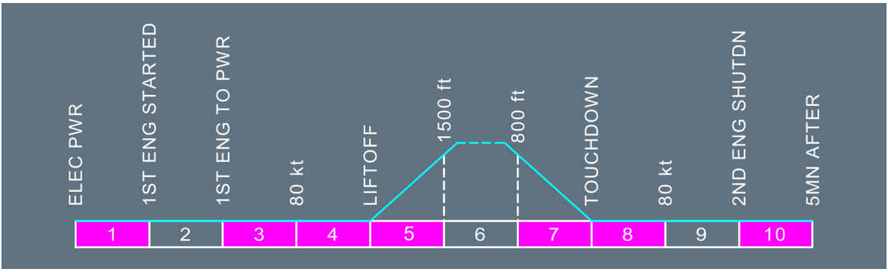
40

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleed supply systems are lost without wing leak or pylon leak on any side.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1+2 BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-R-00017556.0001001 / 21 MAR 17

41

X BLEED.......AUTO
WING ANTI ICE.......OFF
AVOID ICING CONDITIONS

- **If APU Bleed is ON and fails:**
  APU BLEED.......OFF

L2 *Recall in the case of failure of the APU Bleed.*

L1 ENG 1 BLEED.......OFF THEN ON
ENG 2 BLEED.......OFF THEN ON

- **IF UNSUCCESSFUL:**
  ENG 1 BLEED.......OFF
  ENG 2 BLEED.......OFF
  DES TO FL 100/MEA-MORA
  BLEED 1+2 PROC.......APPLY
  Refer to procedure.

Ident.: PRO-ABN-AIR-R-00015836.0002001 / 17 MAR 17

42

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETIONS:**
  MIN SPD.......VLS + 10 / G DOT
  MANEUVER WITH CARE
  LDG DIST PROC.......APPLY

INOP SYS

WING A. ICE
ENG 1 BLEED
ENG 2 BLEED
APU BLEED
BMC 1+2 (1)
PACK 1+2

(1) *(If dual BMC fault)*

AIR ENG 1+2 BLEED FAULT
LEFT LEAK

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-AIR-Y-00017094.0001001 / 21 MAR 16

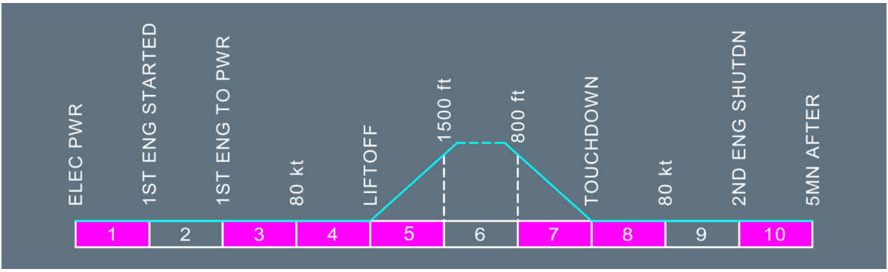
43

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleed supply systems are lost with a left wing leak or a pylon leak on side 1.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1+2 BLEED FAULT (Cont'd)

LEFT LEAK

Ident.: PRO-ABN-AIR-Y-00017557.0001001 / 21 MAR 17

44

X BLEED....................SHUT
WING ANTI ICE....................OFF
AVOID ICING CONDITIONS

- **If APU bleed is ON:**
  APU BLEED....................OFF

ENG 2 BLEED....................OFF THEN ON

- **IF UNSUCCESSFUL:**
  ENG 1 BLEED....................OFF
  ENG 2 BLEED....................OFF
  DES TO FL 100/MEA-MORA
  BLEED 1+2 PROC....................APPLY
  Refer to procedure.

Ident.: PRO-ABN-AIR-Y-00015880.0001001 / 17 MAR 17

45

STATUS

AVOID ICING CONDITIONS	**INOP SYS**
● **IF SEVERE ICE ACCRETION:**	WING A. ICE
MIN SPD....................VLS +10 / G DOT	ENG 1 BLEED
MANEUVER WITH CARE	ENG 2 BLEED
LDG DIST PROC....................APPLY	APU BLEED
	PACK 1+2

AIR ENG 1+2 BLEED FAULT
RIGHT LEAK

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-AIR-X-00017093.0001001 / 21 MAR 16

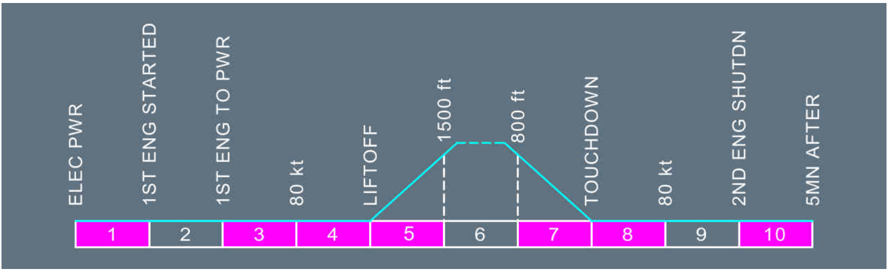
46

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleed supply systems are lost with a right wing leak or a pylon leak on side 2.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1+2 BLEED FAULT (Cont'd)
RIGHT LEAK

Ident.: PRO-ABN-AIR-X-00017558.0001001 / 21 MAR 17

47

X BLEED....................SHUT
WING ANTI ICE....................OFF
AVOID ICING CONDITIONS

- **If APU bleed is ON and fails:**

  APU BLEED....................OFF

L2 *Recall in the case of failure of the APU Bleed.*

L1 ENG 1 BLEED....................OFF THEN ON

- **IF UNSUCCESSFUL:**

  ENG 1 BLEED....................OFF
  ENG 2 BLEED....................OFF

  DES TO FL 100/MEA-MORA
  BLEED 1+2 PROC....................APPLY

  Refer to procedure.

Ident.: PRO-ABN-AIR-X-00015882.0001001 / 17 MAR 17

48

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**

  MIN SPD....................VLS +10 / G DOT

  MANEUVER WITH CARE
  LDG DIST PROC....................APPLY

INOP SYS

WING A. ICE
ENG 1 BLEED
ENG 2 BLEED
APU BLEED
PACK 1+2

AIR ENG 1+2 BLEED FAULT
LEFT LEAK AND RIGHT LEAK

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-AIR-W-00017095.0001001 / 21 MAR 16

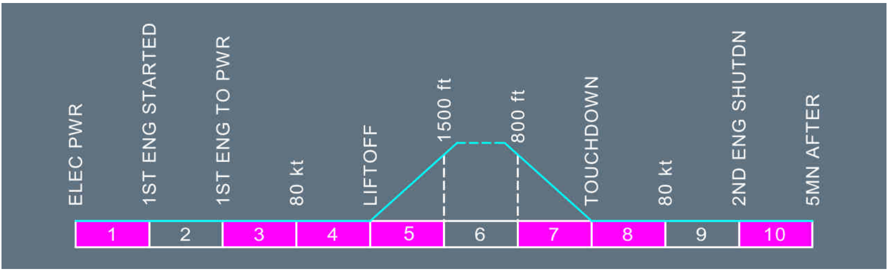
49

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleed supply systems are lost with a wing leak or a pylon leak on both sides.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-AIR-W-00017559.0001001 / 21 MAR 17

50

X BLEED......SHUT
WING ANTI ICE......OFF
AVOID ICING CONDITIONS

- **If APU bleed is ON:**
  APU BLEED......OFF

ENG 1 BLEED......OFF
ENG 2 BLEED......OFF
DES TO FL 100/MEA-MORA
BLEED 1+2 PROC......APPLY

Refer to procedure.

Continued on the following page

AIR ENG 1+2 BLEED FAULT (Cont'd)
LEFT LEAK AND RIGHT LEAK

Ident.: PRO-ABN-AIR-W-00015884.0001001 / 17 MAR 17

51

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A. ICE
● **IF SEVERE ICE ACCRETION:**	ENG 1 BLEED
MIN SPD...VLS +10 / G DOT	ENG 2 BLEED
MANEUVER WITH CARE	APU BLEED
LDG DIST PROC...APPLY	PACK 1+2

AIR ENG 1(2) BLEED LO TEMP
(OPPOSITE BLEED AVAILABLE)

Applicable to: ALL

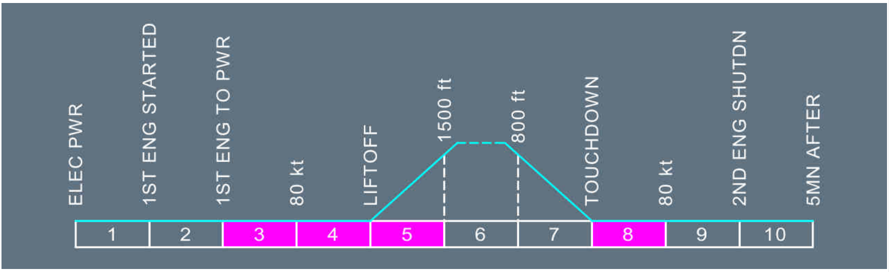
Ident.: PRO-ABN-AIR-M-00017379.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the associated engine bleed supplies bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED LO TEMP (Cont'd)
(OPPOSITE BLEED AVAILABLE)

Ident.: PRO-ABN-AIR-M-00017560.0001001 / 21 MAR 16

A/THR..OFF
THR LEVER (AFFECTED ENGINE)..........................ADVANCE

L2 *The thrust lever of the affected engine must be advanced, with the autothrust OFF.*
Low bleed temperature may be due to low outside air temperature. Therefore, increasing engine thrust may increase bleed temperature and clear the ECAM caution.

L1 ● **IF UNSUCCESSFUL:**

X BLEED..OPEN
ENG BLEED (AFFECTED)..OFF
ASSOCIATED PACK (IF OPPOSITE PACK ON)..................OFF

L2 *One pack must be closed, when the flight crew uses wing anti-ice, due to precooler performance.*

Ident.: PRO-ABN-AIR-M-00011115.0001001 / 21 AUG 15

STATUS

INOP SYS

ENG 1(2) BLEED
PACK 1(2) (If selected OFF)

AIR ENG 1(2) BLEED LO TEMP
(OPPOSITE BLEED NOT AVAILABLE)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

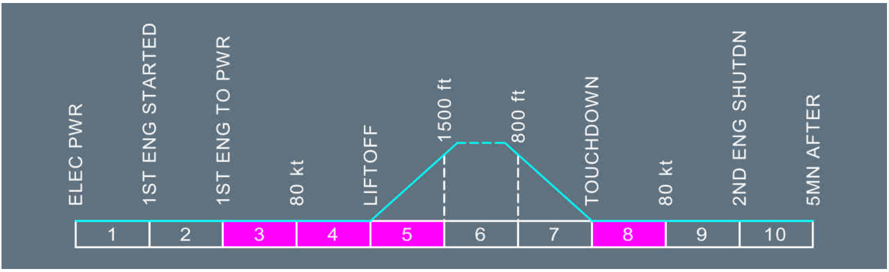
Ident.: PRO-ABN-AIR-N-00018208.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the associated engine bleed supplies bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:



Ident.: PRO-ABN-AIR-N-00017561.0002001 / 21 MAR 16

52

A/THR...OFF
THR LEVER (AFFECTED ENGINE)..ADVANCE

L2 *The thrust lever of the affected engine must be advanced, with the autothrust OFF.*
Low bleed temperature may be due to low outside air temperature. Therefore, increasing engine thrust may increase bleed temperature and clear the ECAM caution.

L1 ● **IF UNSUCCESSFUL:**
WING ANTI ICE...OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR ENG 1(2) BLEED LO TEMP (Cont'd)
(OPPOSITE BLEED NOT AVAILABLE)

Ident.: PRO-ABN-AIR-N-00011117.0003001 / 17 MAR 17

53

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**
  MIN SPD....................VLS +10 / G DOT
  MANEUVER WITH CARE
  LDG DIST PROC....................APPLY

INOP SYS

WING A. ICE

AIR ENG 1(2) BLEED LO TEMP
(OPPOSITE BLEED NOT AVAILABLE)

Applicable to: MSN 01251

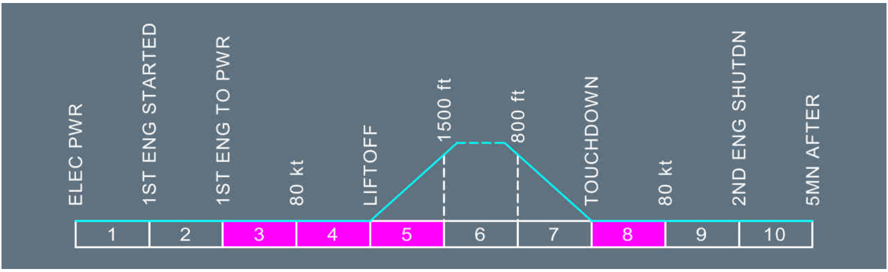
Ident.: PRO-ABN-AIR-N-00018208.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the associated engine bleed supplies bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED LO TEMP (Cont'd)
(OPPOSITE BLEED NOT AVAILABLE)

Ident.: PRO-ABN-AIR-N-00017561.0001001 / 21 MAR 16

A/THR.. OFF
THR LEVER (AFFECTED ENGINE)..ADVANCE

L2 *The thrust lever of the affected engine must be advanced, with the autothrust OFF.*
Low bleed temperature may be due to low outside air temperature. Therefore, increasing engine thrust may increase bleed temperature and clear the ECAM caution.

L1 ● **IF UNSUCCESSFUL:**
WING A. ICE... OFF
AVOID ICING CONDITIONS

Ident.: PRO-ABN-AIR-N-00011117.0001001 / 05 AUG 10

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A. ICE

AIR ENG 1(2) BLEED LO TEMP
(OPPOSITE BLEED NOT AVAILABLE)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

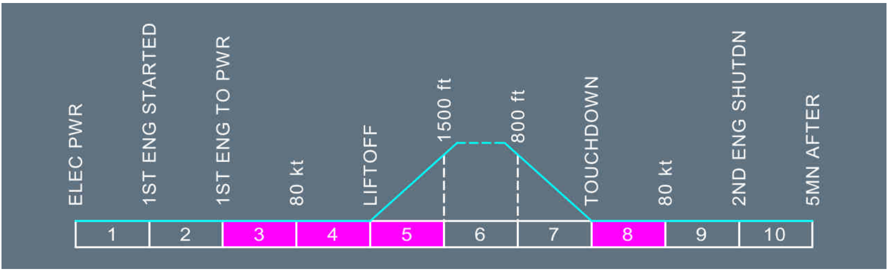
Ident.: PRO-ABN-AIR-N-00018208.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the associated engine bleed supplies bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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AIR ENG 1(2) BLEED LO TEMP
(OPPOSITE BLEED NOT AVAILABLE)

Applicable to: MSN 02014, 06561

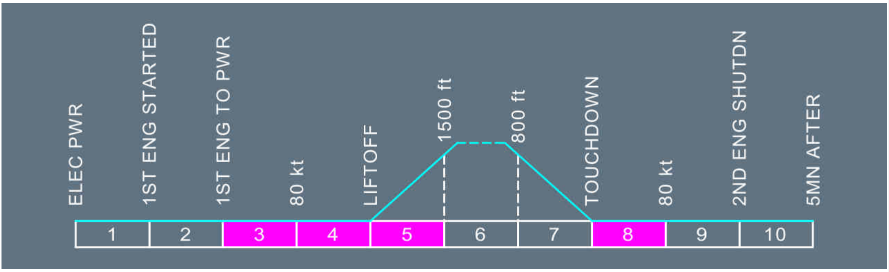
Ident.: PRO-ABN-AIR-N-00018208.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the associated engine bleed supplies bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-N-00017561.0001001 / 21 MAR 16

A/THR..OFF
THR LEVER (AFFECTED ENGINE)..ADVANCE

L2 *The thrust lever of the affected engine must be advanced, with the autothrust OFF.*
Low bleed temperature may be due to low outside air temperature. Therefore, increasing engine thrust may increase bleed temperature and clear the ECAM caution.

L1 ● **IF UNSUCCESSFUL:**

WING A. ICE..OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR ENG 1(2) BLEED LO TEMP (Cont'd)
(OPPOSITE BLEED NOT AVAILABLE)

Ident.: PRO-ABN-AIR-N-00011117.0003001 / 17 MAR 17

54

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**
  MIN SPD....................VLS +10 / G DOT
  MANEUVER WITH CARE
  LDG DIST PROC....................APPLY

INOP SYS

WING A. ICE

AIR ENG 1+2 BLEED LO TEMP

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

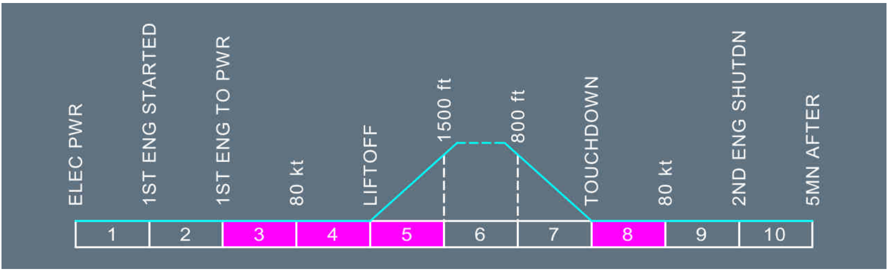
Ident.: PRO-ABN-AIR-O-00017381.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleeds supply bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1+2 BLEED LO TEMP (Cont'd)

Ident.: PRO-ABN-AIR-O-00011118.0002001 / 21 AUG 15

55

A/THR ....OFF
THR LEVERS..ADVANCE

L2 *The thrust lever of the affected engine must be advanced, with the autothrust OFF.*
Low bleed temperature may be due to low outside air temperature. Therefore, increasing engine thrust may increase bleed temperature and clear the ECAM caution.

L1 ● **IF UNSUCCESSFUL:**

WING ANTI ICE..OFF
AVOID ICING CONDITIONS

Ident.: PRO-ABN-AIR-O-00011119.0003001 / 17 MAR 17

56

STATUS

	INOP SYS
AVOID ICING CONDITIONS ● **IF SEVERE ICE ACCRETION:** MIN SPD...VLS +10 / G DOT MANEUVER WITH CARE LDG DIST PROC...APPLY	WING A. ICE

AIR ENG 1+2 BLEED LO TEMP

Applicable to: MSN 01251

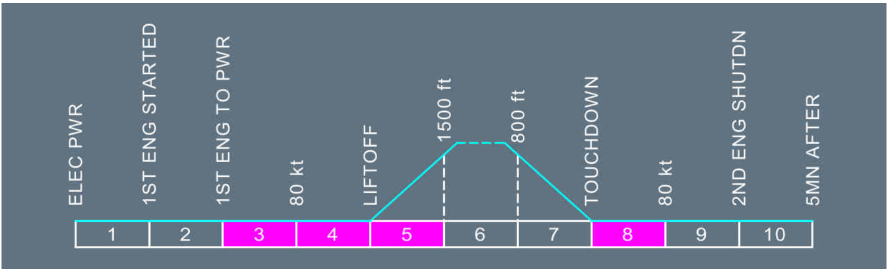
Ident.: PRO-ABN-AIR-O-00017381.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleeds supply bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-O-00011118.0001001 / 05 AUG 10

A/THR ....OFF
THR LEVERS..ADVANCE

L2 *The thrust lever of the affected engine must be advanced, with the autothrust OFF.*
Low bleed temperature may be due to low outside air temperature. Therefore, increasing engine thrust may increase bleed temperature and clear the ECAM caution.

L1 ● **IF UNSUCCESSFUL:**
WING A. ICE..OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR ENG 1+2 BLEED LO TEMP (Cont'd)

Ident.: PRO-ABN-AIR-O-00011119.0001001 / 21 AUG 15

STATUS

AVOID ICING CONDITIONS

INOP SYS

WING A. ICE

AIR ENG 1+2 BLEED LO TEMP

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

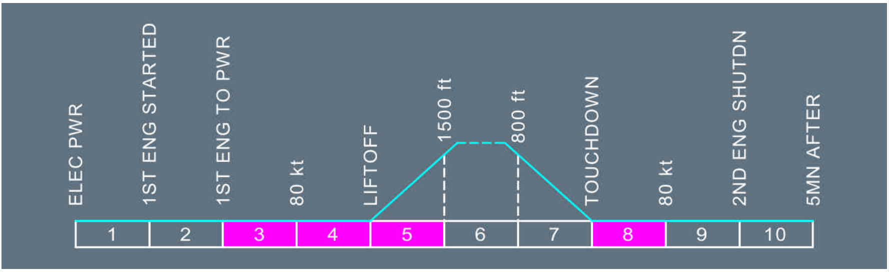
Ident.: PRO-ABN-AIR-O-00017381.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleeds supply bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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AIR ENG 1+2 BLEED LO TEMP

Applicable to: MSN 02014, 06561

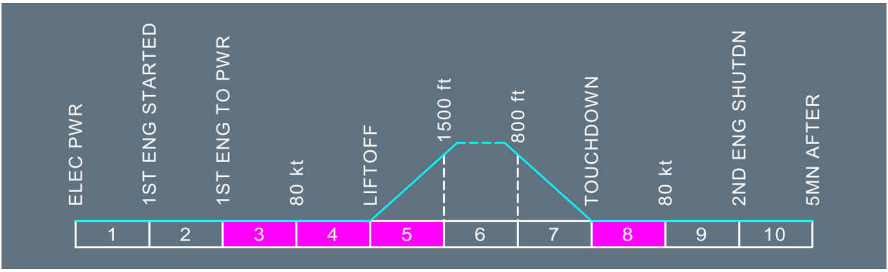
Ident.: PRO-ABN-AIR-O-00017381.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both engine bleeds supply bleed air at a temperature below 150 °C in flight and the WING A-ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-O-00011118.0001001 / 05 AUG 10

A/THR .... OFF
THR LEVERS .... ADVANCE

L2 *The thrust lever of the affected engine must be advanced, with the autothrust OFF.*
Low bleed temperature may be due to low outside air temperature. Therefore, increasing engine thrust may increase bleed temperature and clear the ECAM caution.

L1 ● **IF UNSUCCESSFUL:**

WING A. ICE .... OFF

AVOID ICING CONDITIONS

Continued on the following page

AIR ENG 1+2 BLEED LO TEMP (Cont'd)

Ident.: PRO-ABN-AIR-O-00011119.0003001 / 17 MAR 17

57

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**

  MIN SPD..VLS +10 / G DOT

  MANEUVER WITH CARE

  LDG DIST PROC...APPLY

INOP SYS

WING A. ICE

AIR ENG 1(2) BLEED HI TEMP

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

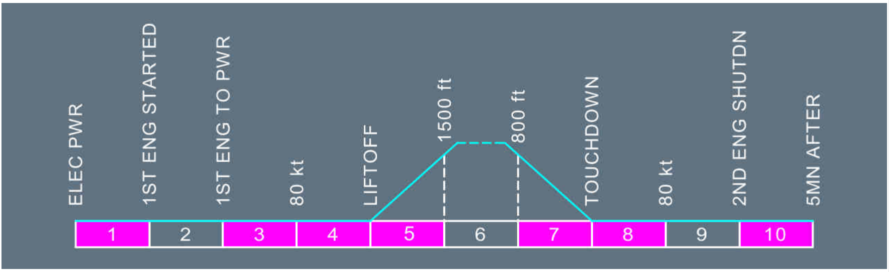
Ident.: PRO-ABN-AIR-P-00017391.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the precooler outlet temperature is above 240 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED HI TEMP (Cont'd)

Ident.: PRO-ABN-AIR-P-00014306.0001001 / 21 AUG 15

- **If wing anti-ice off:**
  PACK 2 (1).......... OFF
- **If wing anti-ice on and opposite pack off:**

  Note: *If Wing Anti-Ice is required (icing conditions) while operating with one PACK, consider switching OFF the remaining pack, if aircraft's altitude permits.*

  PACK 1 (2) OR WAI.......... OFF
- **If wing anti-ice on and affected pack off:**
  PACK 2 (1) OR WAI.......... OFF

Ident.: PRO-ABN-AIR-P-00014307.0005001 / 17 MAR 17

58

L12

STATUS

AVOID ICING CONDITIONS

● **IF SEVERE ICE ACCRETION:**

MIN SPD.......... VLS+10/G DOT

Note: *In the case of severe ice accretion, with wing anti-ice failed, the Angle-of-Attack (AOA) protections remain efficient.*

MANEUVER WITH CARE

LDG DIST PROC.......... APPLY

INOP SYS

WING A. ICE

AIR ENG 1(2) BLEED HI TEMP

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

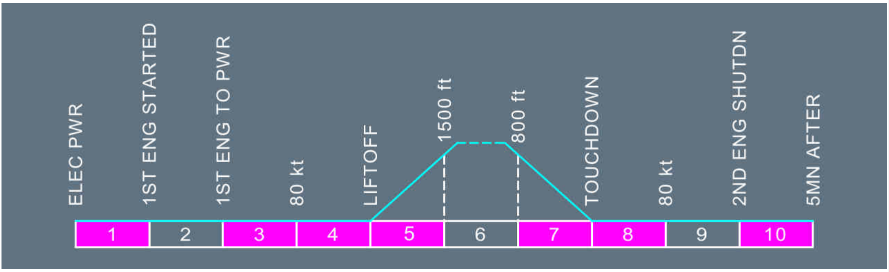
Ident.: PRO-ABN-AIR-P-00017391.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the precooler outlet temperature is above 240 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-P-00014306.0004001 / 21 AUG 15

59 AFT CRG HOT AIR ....OFF

- **If wing anti-ice off:**

  PACK 2 (1).. OFF

- **If wing anti-ice on and opposite pack off:**

  Note: *If Wing Anti-Ice is required (icing conditions) while operating with one PACK, consider switching OFF the remaining pack, if aircraft's altitude permits.*

  PACK 1 (2) OR WAI..OFF

- **If wing anti-ice on and affected pack off:**

  PACK 2 (1) OR WAI..OFF

Continued on the following page

AIR ENG 1(2) BLEED HI TEMP (Cont'd)

Ident.: PRO-ABN-AIR-P-00014307.0005001 / 17 MAR 17

60

L12

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**

  MIN SPD.. VLS+10/G DOT

  Note: *In the case of severe ice accretion, with wing anti-ice failed, the Angle-of-Attack (AOA) protections remain efficient.*

  MANEUVER WITH CARE

  LDG DIST PROC...APPLY

INOP SYS

WING A. ICE

AIR ENG 1(2) BLEED HI TEMP

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-AIR-P-00017391.0003001 / 03 JUN 16

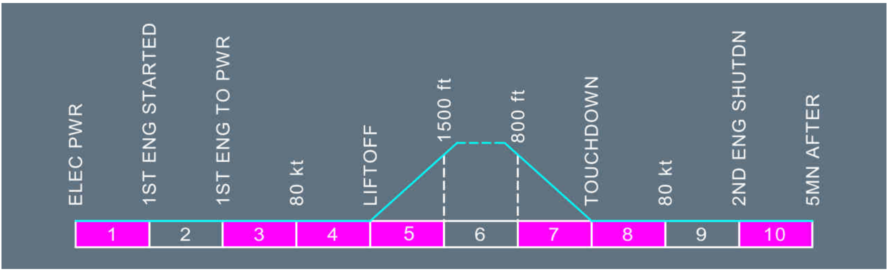
61

ANNUNCIATIONS

Triggering Conditions:

This alert triggers when the precooler outlet temperature is above 245 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED HI TEMP (Cont'd)

Ident.: PRO-ABN-AIR-P-00014306.0004001 / 21 AUG 15

62

AFT CRG HOT AIR ❄ ....OFF

- **If wing anti-ice off:**

  PACK 2 (1)..OFF

- **If wing anti-ice on and opposite pack off:**

  Note: *If Wing Anti-Ice is required (icing conditions) while operating with one PACK, consider switching OFF the remaining pack, if aircraft's altitude permits.*

  PACK 1 (2) OR WAI...OFF

- **If wing anti-ice on and affected pack off:**

  PACK 2 (1) OR WAI...OFF

Ident.: PRO-ABN-AIR-P-00014307.0005001 / 17 MAR 17

63

L12

STATUS

AVOID ICING CONDITIONS

● **IF SEVERE ICE ACCRETION:**

MIN SPD.............................. VLS+10/G DOT

Note: *In the case of severe ice accretion, with wing anti-ice failed, the Angle-of-Attack (AOA) protections remain efficient.*

MANEUVER WITH CARE

LDG DIST PROC..............................APPLY

INOP SYS

WING A. ICE

AIR ENG 1(2) BLEED LEAK

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

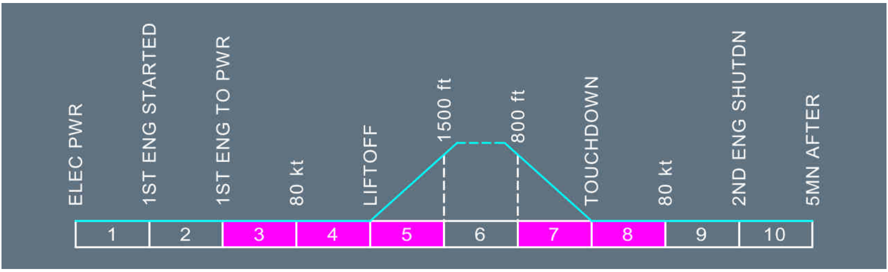
Ident.: PRO-ABN-AIR-K-00022402.0001001 / 04 JUN 19

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR ENG 1(2) BLEED LEAK alert triggers when the pylon bleed leak detection loop detects a temperature above 204 °C and engine 1(2) is running.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-K-00022403.0001001 / 04 NOV 20

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1 ● **If** AIR ENG 1 BLEED LEAK**:**
APU BLEED (IF NOT CLOSED)..OFF

X BLEED (IF NOT CLOSED)..SHUT
WING ANTI-ICE..OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR ENG 1(2) BLEED LEAK (Cont'd)

Ident.: PRO-ABN-AIR-K-00022404.0002001 / 04 JUN 19

64

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**
  MIN SPD...VLS +10 / G DOT
  MANEUVER WITH CARE
  LDG DIST PROC..APPLY

INOP SYS

WING A.ICE
ENG 1(2) BLEED
PACK 1(2)

AIR ENG 1(2) BLEED LEAK

Applicable to: MSN 01251

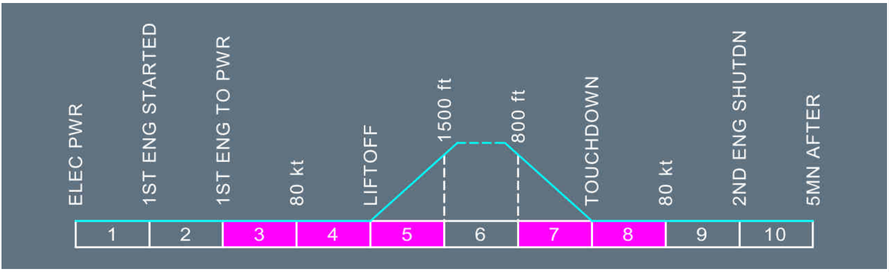
Ident.: PRO-ABN-AIR-K-00022402.0001001 / 04 JUN 19

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR ENG 1(2) BLEED LEAK alert triggers when the pylon bleed leak detection loop detects a temperature above 204 °C and engine 1(2) is running.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED LEAK (Cont'd)

Ident.: PRO-ABN-AIR-K-00022403.0001001 / 04 NOV 20

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)....................OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1 ● **If** AIR ENG 1 BLEED LEAK**:**
APU BLEED (IF NOT CLOSED)....................OFF

X BLEED (IF NOT CLOSED)....................SHUT
WING ANTI-ICE....................OFF
AVOID ICING CONDITIONS

Ident.: PRO-ABN-AIR-K-00022404.0001001 / 04 JUN 19

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A.ICE ENG 1(2) BLEED PACK 1(2)

AIR ENG 1(2) BLEED LEAK

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-AIR-K-00022402.0004001 / 04 JUN 19

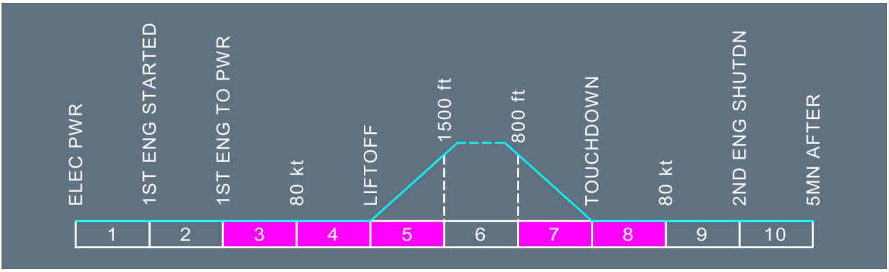
65

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR ENG 1(2) BLEED LEAK alert triggers when both pylon bleed leak detection loops detect a temperature above 204 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-K-00022403.0001001 / 04 NOV 20

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1 ● **If AIR ENG 1 BLEED LEAK:**
APU BLEED (IF NOT CLOSED)..OFF

X BLEED (IF NOT CLOSED)...SHUT
WING ANTI-ICE...OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR ENG 1(2) BLEED LEAK (Cont'd)

Ident.: PRO-ABN-AIR-K-00022404.0002001 / 04 JUN 19

66

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**
  MIN SPD...VLS +10 / G DOT
  MANEUVER WITH CARE
  LDG DIST PROC..APPLY

INOP SYS

WING A.ICE
ENG 1(2) BLEED
PACK 1(2)

AIR ENG 1(2) BLEED LEAK

Applicable to: MSN 08635

Ident.: PRO-ABN-AIR-K-00022402.0004001 / 04 JUN 19

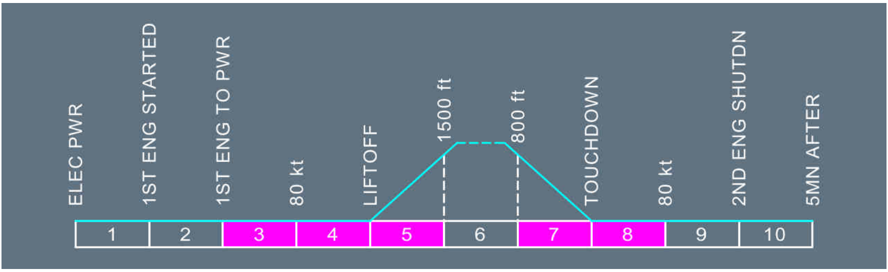
67

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR ENG 1(2) BLEED LEAK alert triggers when both pylon bleed leak detection loops detect a temperature above 204 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED LEAK (Cont'd)

Ident.: PRO-ABN-AIR-K-00022403.0002001 / 04 NOV 20

ENG BLEED (AFFECTED).. OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1
- **If AIR ENG 1 BLEED LEAK:**
  APU BLEED (IF NOT CLOSED).. OFF

X BLEED (IF NOT CLOSED).. SHUT
WING ANTI-ICE.. OFF
AVOID ICING CONDITIONS

Ident.: PRO-ABN-AIR-K-00022404.0002001 / 04 JUN 19

68

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A.ICE ENG 1(2) BLEED PACK 1(2)
● **IF SEVERE ICE ACCRETION:** MIN SPD........................ VLS +10 / G DOT MANEUVER WITH CARE LDG DIST PROC........................ APPLY	

AIR ENG 1(2) BLEED LEAK

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-AIR-K-00022402.0004001 / 04 JUN 19

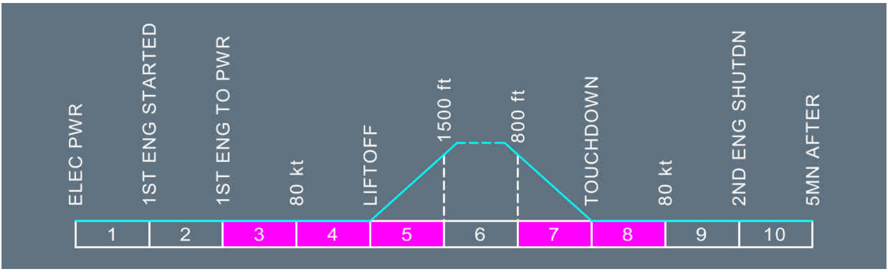
69

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR ENG 1(2) BLEED LEAK alert triggers when both pylon bleed leak detection loops detect a temperature above 204 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-K-00022403.0003001 / 18 NOV 21

70

ENG BLEED (AFFECTED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1
- **If** AIR ENG 1 BLEED LEAK**:**
  APU BLEED (IF NOT CLOSED)..OFF

X BLEED..SHUT
WING ANTI-ICE..OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR ENG 1(2) BLEED LEAK (Cont'd)

Ident.: PRO-ABN-AIR-K-00022404.0002001 / 04 JUN 19

71

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION:**
  MIN SPD...VLS +10 / G DOT
  MANEUVER WITH CARE
  LDG DIST PROC...APPLY

INOP SYS

WING A.ICE
ENG 1(2) BLEED
PACK 1(2)

AIR ENG 1(2) BLEED NOT CLSD

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Ident.: PRO-ABN-AIR-A-00017372.0001001 / 21 MAR 16

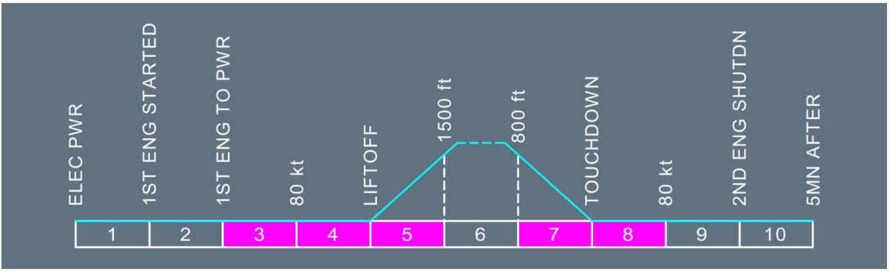
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the engine bleed valve fails to close:
- During engine start or when APU BLEED pb-sw is set to ON
- At engine shutdown or when APU BLEED pb-sw is set to OFF with engine not running.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR ENG 1(2) BLEED NOT CLSD (Cont'd)

Ident.: PRO-ABN-AIR-A-00017562.0001001 / 21 MAR 16

ENG BLEED (AFFECTED).. OFF

L2 Note: *The warning may be triggered due to residual pressure between the HP or IP valves and the engine bleed valve after:*
- *Engine shutdown, or*
- *APU BLEED pb-sw is selected OFF with engine not running.*

Ident.: PRO-ABN-AIR-A-00011087.0001001 / 05 AUG 10

STATUS

	INOP SYS
ONE PACK ONLY IF WAI ON	ENG 1(2) BLEED

AIR ENG 1(2) BLEED NOT CLSD

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

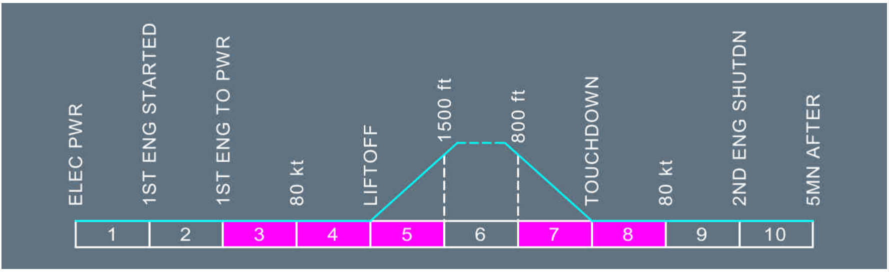
Ident.: PRO-ABN-AIR-A-00017372.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine bleed valve fails to close:
- During engine start or when APU BLEED pb-sw is set to ON
- At engine shutdown or when APU BLEED pb-sw is set to OFF with engine not running.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-A-00017562.0001001 / 21 MAR 16

ENG BLEED (AFFECTED).. OFF

L2 *Note:* *The warning may be triggered due to residual pressure between the HP or IP valves and the engine bleed valve after:*
- *Engine shutdown, or*
- *APU BLEED pb-sw is selected OFF with engine not running.*

AIR ENG 1(2) BLEED NOT CLSD

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-AIR-A-00017372.0001001 / 21 MAR 16

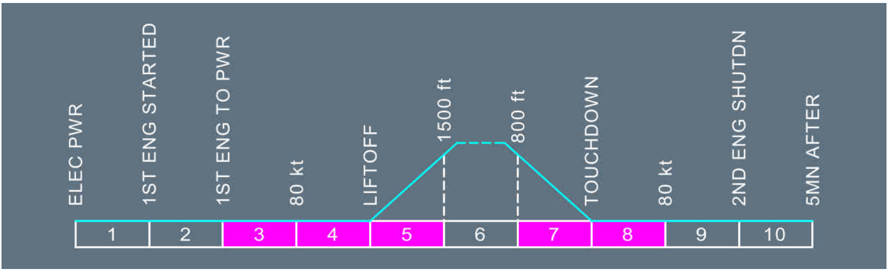
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine bleed valve fails to close:

- During engine start or when APU BLEED pb-sw is set to ON
- At engine shutdown or when APU BLEED pb-sw is set to OFF with engine not running.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-A-00017562.0001001 / 21 MAR 16

ENG BLEED (AFFECTED).. OFF

L2 Note: *The warning may be triggered due to residual pressure between the HP or IP valves and the engine bleed valve after:*

- *Engine shutdown, or*
- *APU BLEED pb-sw is selected OFF with engine not running.*

Ident.: PRO-ABN-AIR-A-00011087.0002001 / 17 SEP 15

72

STATUS

INOP SYS

ENG 1(2) BLEED

AIR ENG 1(2) HP VALVE FAULT

Applicable to: ALL

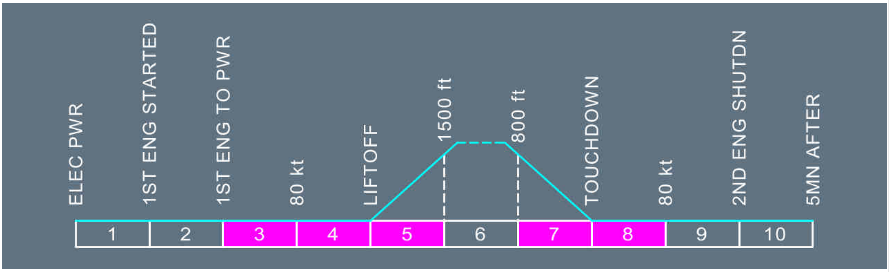
Ident.: PRO-ABN-AIR-H-00017384.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the HP valve is abnormally closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-H-00011103.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-AIR-H-00011104.0001001 / 05 AUG 10

STATUS

AIR PRESS LOW AT IDLE

AIR ENG 1(2) LEAK DET FAULT

Applicable to: MSN 04163-05987, 06097, 06121, 06139-07098

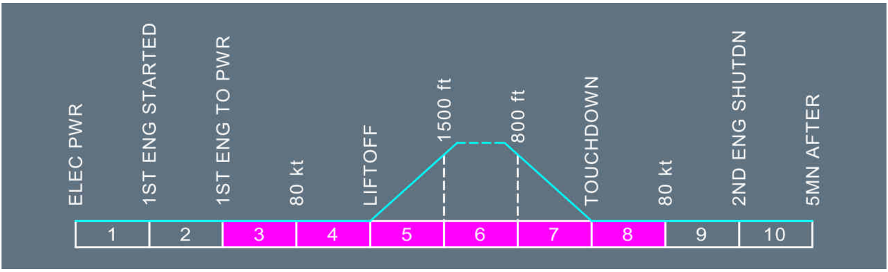
Ident.: PRO-ABN-AIR-I-00017389.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pylon bleed leak detection loop is inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-I-00011105.0004001 / 25 FEB 14

73

Crew awareness.

Ident.: PRO-ABN-AIR-I-00011106.0004001 / 17 MAR 11

74

STATUS

INOP SYS

ENG 1(2) LK DET

AIR ENG 1(2) LEAK DET FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-AIR-I-00017389.0003001 / 21 MAR 16

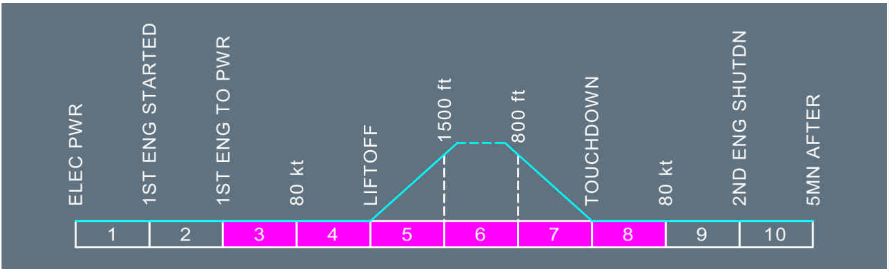
75

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both pylon bleed leak detection loops are inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-I-00011105.0004001 / 25 FEB 14

76

Crew awareness.

Ident.: PRO-ABN-AIR-I-00011106.0004001 / 17 MAR 11

77

STATUS

INOP SYS

ENG 1(2) LK DET

AIR FWD(AFT) CRG VENT FAULT

Applicable to: ALL

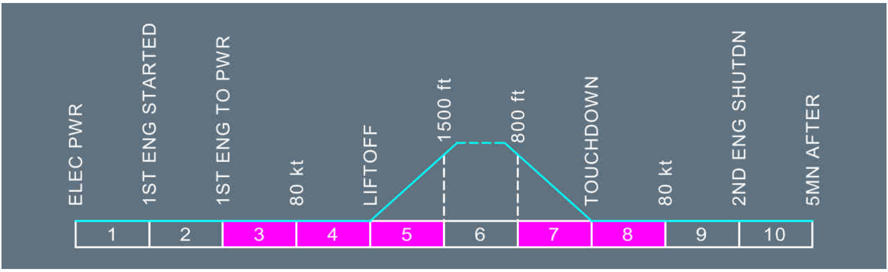
Ident.: PRO-ABN-AIR-AE-00017337.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the forward(aft) cargo ventilation fan is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-AE-00017933.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-AIR-AE-00017934.0001001 / 21 MAR 16

STATUS

INOP SYS

FWD(AFT) CRG HEAT
FWD(AFT) CRG VENT

AIR L(R) WING LEAK

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

Ident.: PRO-ABN-AIR-D-00017370.0001001 / 04 JUN 19

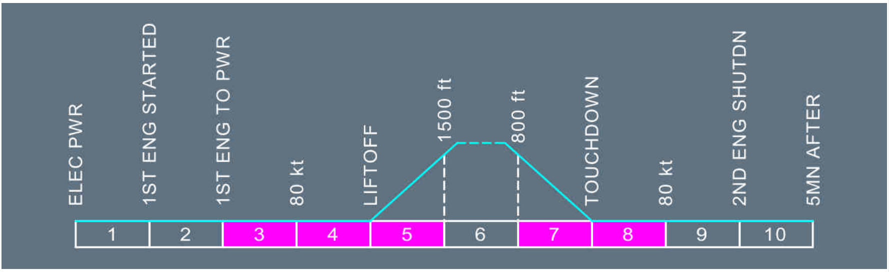
78

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR L(R) WING LEAK alert triggers when both wing bleed leak detection loops detect a temperature above 124 °C .

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-D-00017563.0001001 / 04 NOV 20

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1 ● **If AIR L WING LEAK:**
APU BLEED (IF NOT CLOSED)...OFF

X BLEED (IF NOT CLOSED)..SHUT
WING ANTI-ICE...OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR L(R) WING LEAK (Cont'd)

Ident.: PRO-ABN-AIR-D-00011096.0003001 / 04 JUN 19

79

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A.ICE ENG 1(2) BLEED PACK 1(2)
● **IF SEVERE ICE ACCRETION:** MIN SPD......VLS +10 / G DOT MANEUVER WITH CARE LDG DIST PROC......APPLY	

AIR L(R) WING LEAK

Applicable to: MSN 01251

Ident.: PRO-ABN-AIR-D-00017370.0001001 / 04 JUN 19

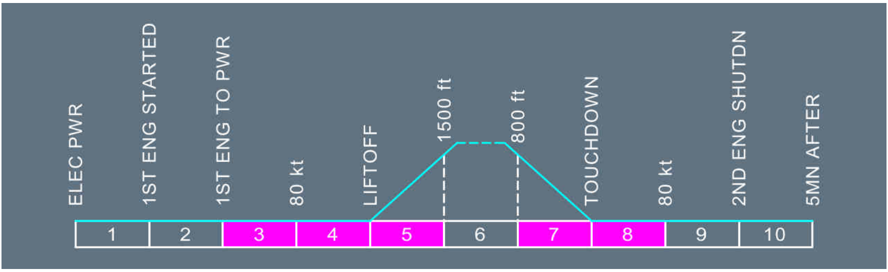
80

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR L(R) WING LEAK alert triggers when both wing bleed leak detection loops detect a temperature above 124 °C .

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR L(R) WING LEAK (Cont'd)

Ident.: PRO-ABN-AIR-D-00017563.0001001 / 04 NOV 20

ENG BLEED (AFFECTED, IF NOT AUTOMATICALLY CLOSED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1 ● **If** AIR L WING LEAK**:**
APU BLEED (IF NOT CLOSED)..OFF

X BLEED (IF NOT CLOSED)..SHUT
WING ANTI-ICE..OFF
AVOID ICING CONDITIONS

Ident.: PRO-ABN-AIR-D-00011096.0001001 / 04 JUN 19

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A.ICE ENG 1(2) BLEED PACK 1(2)

AIR L(R) WING LEAK

Applicable to: MSN 08635

Ident.: PRO-ABN-AIR-D-00017370.0001001 / 04 JUN 19

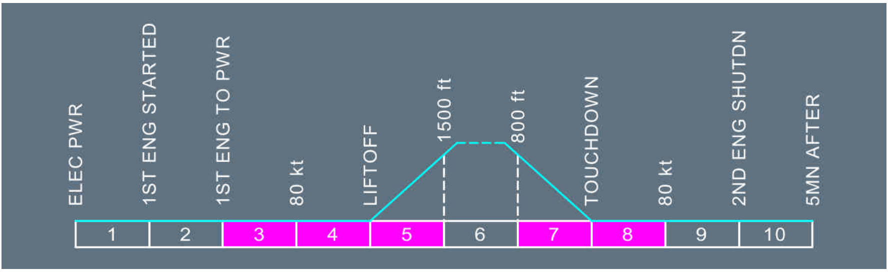
81

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR L(R) WING LEAK alert triggers when both wing bleed leak detection loops detect a temperature above 124 °C .

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-D-00017563.0002001 / 04 NOV 20

ENG BLEED (AFFECTED)..OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1
- **If AIR L WING LEAK:**
  APU BLEED (IF NOT CLOSED)..OFF

X BLEED (IF NOT CLOSED)..SHUT
WING ANTI-ICE...OFF
AVOID ICING CONDITIONS

Continued on the following page

AIR L(R) WING LEAK (Cont'd)

Ident.: PRO-ABN-AIR-D-00011096.0003001 / 04 JUN 19

82

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A.ICE ENG 1(2) BLEED PACK 1(2)
● **IF SEVERE ICE ACCRETION:** MIN SPD....................VLS +10 / G DOT MANEUVER WITH CARE LDG DIST PROC....................APPLY	

AIR L(R) WING LEAK

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-AIR-D-00017370.0001001 / 04 JUN 19

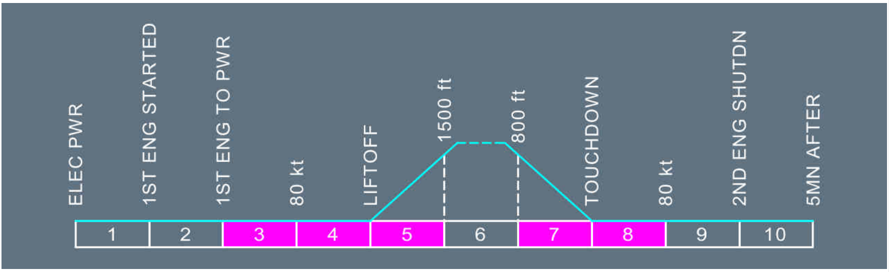
83

ANNUNCIATIONS

Triggering Conditions:

L2 The AIR L(R) WING LEAK alert triggers when both wing bleed leak detection loops detect a temperature above 124 °C .

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR L(R) WING LEAK (Cont'd)

Ident.: PRO-ABN-AIR-D-00017563.0003001 / 18 NOV 21

84

ENG BLEED (AFFECTED).. OFF

L2 *When the ENG BLEED pb-sw is ON, the FAULT light remains on.*
When the ENG BLEED pb-sw is OFF, the FAULT light goes off when the overheat disappears.

L1 ● **If** AIR L WING LEAK**:**
APU BLEED (IF NOT CLOSED).. OFF

X BLEED.. SHUT
WING ANTI-ICE.. OFF
AVOID ICING CONDITIONS

Ident.: PRO-ABN-AIR-D-00011096.0003001 / 04 JUN 19

85

STATUS

AVOID ICING CONDITIONS

● **IF SEVERE ICE ACCRETION:**
MIN SPD.. VLS +10 / G DOT
MANEUVER WITH CARE
LDG DIST PROC.. APPLY

INOP SYS

WING A.ICE
ENG 1(2) BLEED
PACK 1(2)

AIR L(R) WNG LEAK DET FAULT

Applicable to: ALL

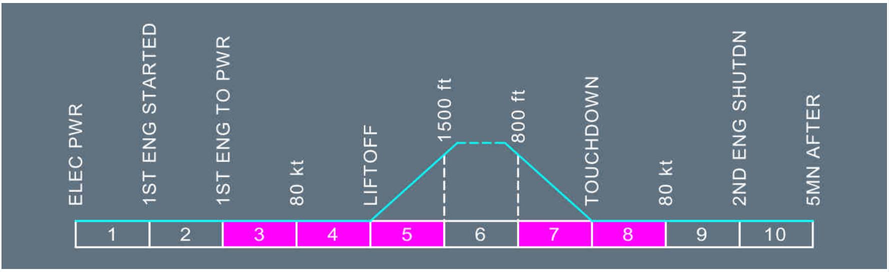
Ident.: PRO-ABN-AIR-J-00017387.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both wing bleed leak detection loops are inoperative in one wing.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-J-00011107.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-AIR-J-00011108.0005001 / 17 MAR 11

STATUS

INOP SYS

L(R) WNG LK DET

AIR PACK 1(2) FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

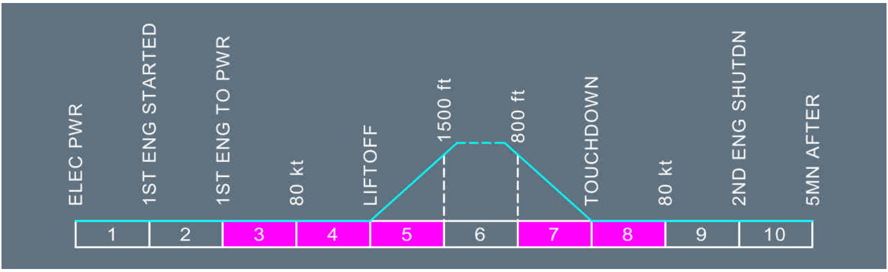
Ident.: PRO-ABN-AIR-AF-00017290.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The position of the pack flow control valve disagrees with the commanded position, or
- The pack compressor outlet temperature rises above 230 °C four times during the same flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-AF-00010712.0001001 / 05 AUG 10

PACK (AFFECTED).. OFF

Ident.: PRO-ABN-AIR-AF-00010713.0001001 / 05 AUG 10

STATUS

INOP SYS

PACK 1(2)

AIR PACK 1(2) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-AIR-AF-00010712.0001001 / 05 AUG 10

PACK (AFFECTED).. OFF

AIR PACK 1(2) FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-AIR-AF-00017290.0002001 / 21 MAR 16

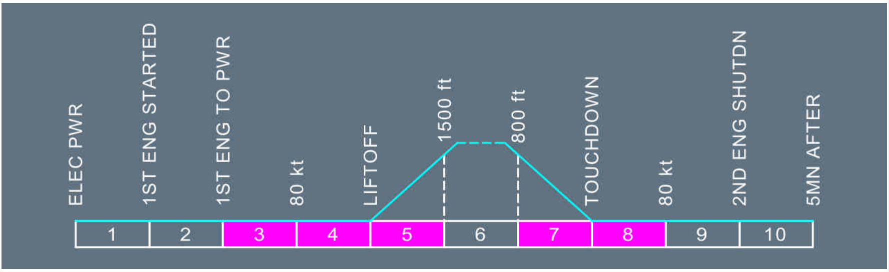
86

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The position of the pack flow control valve disagrees with the commanded position, or
- The pack valve is closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-AF-00010712.0001001 / 05 AUG 10

PACK (AFFECTED).. OFF

Continued on the following page

AIR PACK 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AF-00010713.0002001 / 16 NOV 11

87

STATUS

- **If ACSC 1 failed:**
  CKPT AT FIXED TEMP
- **If ACSC 2 failed:**
  CAB AT FIXED TEMP

INOP SYS

PACK 1(2)
COND CTL 1(2)
FWD CRG HEAT ⊲ (If ACSC 1 failed)

AIR PACK 1+2 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

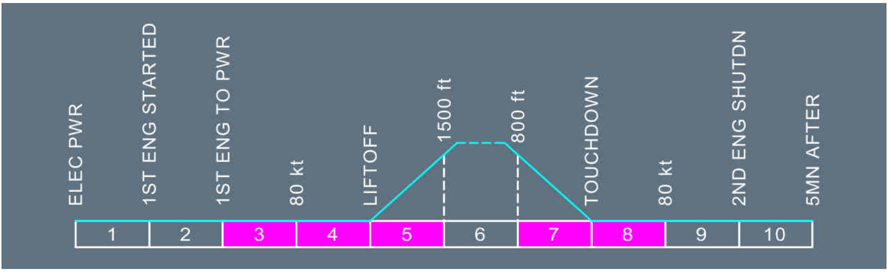
Ident.: PRO-ABN-AIR-AG-00017292.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one pack is off, and the other is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR PACK 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AG-00017935.0002001 / 21 MAR 16

PACK 1 .... OFF
PACK 2 .... OFF

L2 *The fault light goes off, when the failure disappears.*

Note: *The rate at which the cabin altitude increases may be minimized by closing the FWD CARGO ISOL VALVE ⊲, if the cargo freight permits.*

L1 DESCENT TO FL 100/MEA-MORA.

L2 *Descend to FL 100, or MEA-MORA, whichever is higher.*

L1
- **WHEN DIFF PR < 1 PSI AND FL BELOW 100:**
  RAM AIR .... ON
  MAX FL 100/MEA-MORA
- **If FAULT was due to an overheat:**

ASSOCIATED PROCEDURES

AIR PACK 1 (2) OVHT
- **WHEN PACK OVHT OUT:**
  PACK (AFFECTED) .... ON

Ident.: PRO-ABN-AIR-AG-00017936.0006001 / 17 MAR 17

STATUS

- **If packs not recovered:**
  MAX FL 100/MEA-MORA
  - **If FAULT was due to an overheat:**
    - **WHEN PACK OVHT OUT:**
      PACK (AFFECTED) .... ON

INOP SYS

PACK 1+2
FWD CRG HEAT ⊲

AIR PACK 1+2 FAULT

Applicable to: MSN 01251, 02014

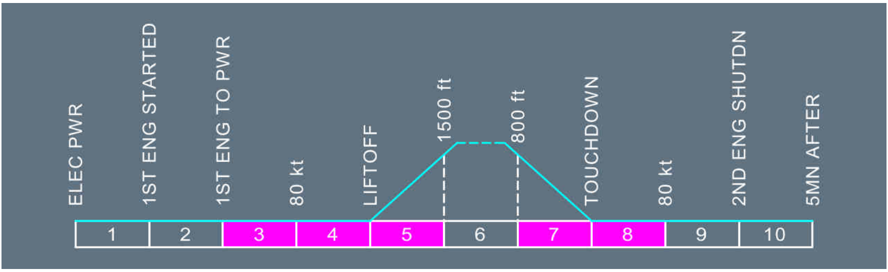
Ident.: PRO-ABN-AIR-AG-00017292.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one pack is off, and the other is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR PACK 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AG-00017935.0001001 / 21 MAR 16

PACK (AFFECTED).. OFF

L2 *The fault light goes off, when the failure disappears.*

Note: *The rate at which the cabin altitude increases may be minimized by closing the FWD CARGO ISOL VALVE ◁ , if the cargo freight permits.*

L1 DESCENT TO FL 100/MEA.

L2 *Descend to FL 100, or MEA, whichever is higher.*

L1
- **WHEN DIFF PR < 1 PSI AND FL BELOW 100:**
  RAM AIR..ON
  MAX FL.. 100/MEA
- **If FAULT was due to an overheat:**

ASSOCIATED PROCEDURES

AIR PACK 1 (2) OVHT

- **WHEN PACK OVHT OUT:**
  PACK (AFFECTED)..ON

Ident.: PRO-ABN-AIR-AG-00017936.0001001 / 17 MAR 17

STATUS

- **If packs not recovered:**
  MAX FL..100/MEA
  - **If FAULT was due to an overheat:**
    - **WHEN PACK OVHT OUT:**
      PACK (AFFECTED).......................................ON

INOP SYS

PACK 1 + 2
FWD CRG HEAT ◁

AIR PACK 1+2 FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-08596, 09190-09324

Ident.: PRO-ABN-AIR-AG-00017292.0002001 / 21 MAR 16

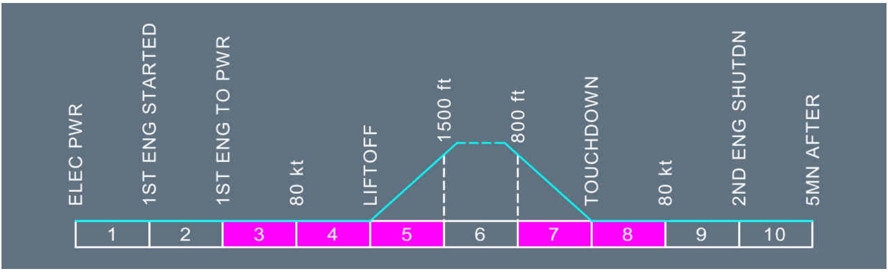
88

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both ACSCs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR PACK 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AG-00017935.0002001 / 21 MAR 16

PACK 1 .... OFF
PACK 2 .... OFF

L2 *The fault light goes off, when the failure disappears.*

Note: *The rate at which the cabin altitude increases may be minimized by closing the FWD CARGO ISOL VALVE ◁ , if the cargo freight permits.*

L1 DESCENT TO FL 100/MEA-MORA.

L2 *Descend to FL 100, or MEA-MORA, whichever is higher.*

L1
- **WHEN DIFF PR < 1 PSI AND FL BELOW 100:**

  RAM AIR .... ON
  MAX FL 100/MEA-MORA

- **If FAULT was due to an overheat:**

ASSOCIATED PROCEDURES

AIR PACK 1 (2) OVHT

- **WHEN PACK OVHT OUT:**

  PACK (AFFECTED) .... ON

Ident.: PRO-ABN-AIR-AG-00017936.0005001 / 17 MAR 17

89

STATUS

- **If packs not recovered:**

  MAX FL 100/MEA-MORA
  CKPT AT FIXED TEMP
  CAB AT FIXED TEMP

  - **If FAULT was due to an overheat:**
    - **WHEN PACK OVHT OUT:**

      PACK (AFFECTED) .... ON

INOP SYS

PACK 1 + 2
COND CTL 1
COND CTL 2
FWD CRG HEAT ◁

AIR PACK 1+2 FAULT

Applicable to: MSN 06561

Ident.: PRO-ABN-AIR-AG-00017292.0002001 / 21 MAR 16

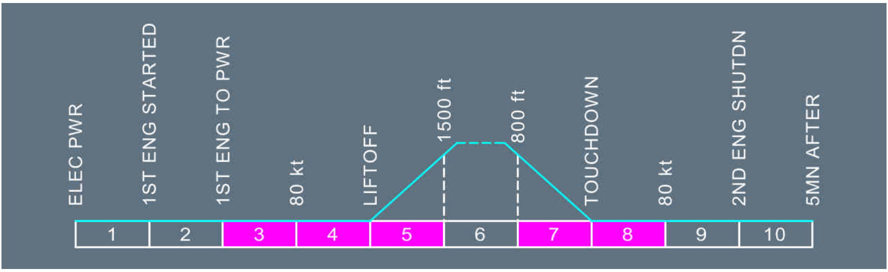
90

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both ACSCs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR PACK 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AG-00017935.0001001 / 21 MAR 16

PACK (AFFECTED)..OFF

L2 *The fault light goes off, when the failure disappears.*

Note: The rate at which the cabin altitude increases may be minimized by closing the FWD CARGO ISOL VALVE ◁ , if the cargo freight permits.

L1 DESCENT TO FL 100/MEA.

L2 *Descend to FL 100, or MEA, whichever is higher.*

L1 ● **WHEN DIFF PR < 1 PSI AND FL BELOW 100:**

RAM AIR..ON
MAX FL..100/MEA

● **If FAULT was due to an overheat:**

ASSOCIATED PROCEDURES

AIR PACK 1 (2) OVHT

● **WHEN PACK OVHT OUT:**

PACK (AFFECTED)..ON

Ident.: PRO-ABN-AIR-AG-00017936.0002001 / 17 MAR 17

STATUS

● **If packs not recovered:**

MAX FL..100/MEA
CKPT AT FIXED TEMP
CAB AT FIXED TEMP

● **If FAULT was due to an overheat:**

● **WHEN PACK OVHT OUT:**

PACK (AFFECTED)..ON

INOP SYS

PACK 1 + 2
COND CTL 1
COND CTL 2
FWD CRG HEAT ◁

AIR PACK 1+2 FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-AIR-AG-00017292.0002001 / 21 MAR 16

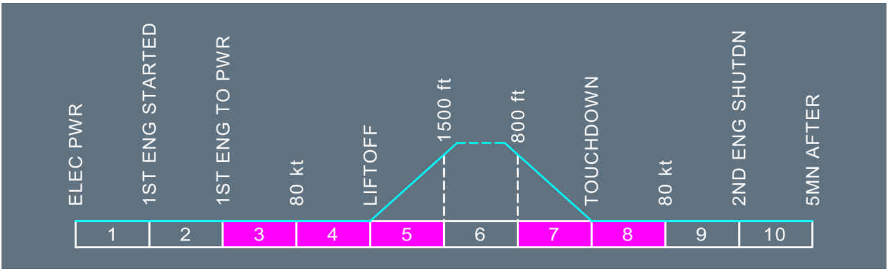
91

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both ACSCs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR PACK 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AG-00017935.0005001 / 27 FEB 18

92

- **If PACK 1(2) was previously set to OFF due to a failure of the associated ENG BLEED:**

  PACK 2(1).......................................OFF
  PACK 1(2).......................................ON

L2 *When PACK 1(2) is ON, AIR PACK 1+2 FAULT is replaced by AIR PACK 2(1) FAULT.*

L1
- **In all other cases:**

  PACK 1.......................................OFF
  PACK 2.......................................OFF

L2 *The fault light goes off, when the failure disappears.*

Note: The rate at which the cabin altitude increases may be minimized by closing the FWD CARGO ISOL VALVE ❄ , if the cargo freight permits.

L1 DESCENT TO FL 100/MEA-MORA.

L2 *Descend to FL 100, or MEA-MORA, whichever is higher.*

L1
- **WHEN DIFF PR < 1 PSI AND FL BELOW 100:**

  RAM AIR.......................................ON
  MAX FL.......................................100/MEA-MORA

- **If FAULT was due to an overheat:**

ASSOCIATED PROCEDURES

AIR PACK 1 (2) OVHT

- **WHEN PACK OVHT OUT:**

  PACK (AFFECTED).......................................ON

Continued on the following page

AIR PACK 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AG-00017936.0005001 / 17 MAR 17

93

STATUS

- **If packs not recovered:**
  MAX FL...100/MEA-MORA
  CKPT AT FIXED TEMP
  CAB AT FIXED TEMP
  - **If FAULT was due to an overheat:**
    - **WHEN PACK OVHT OUT:**
      PACK (AFFECTED)..ON

INOP SYS

PACK 1 + 2
COND CTL 1
COND CTL 2
FWD CRG HEAT ❄

AIR PACK 1(2) OFF

Applicable to: ALL

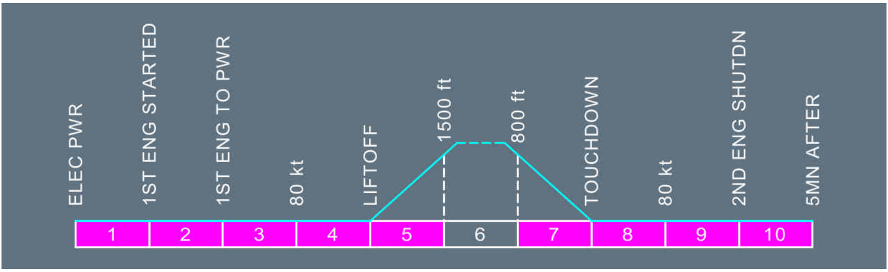
Ident.: PRO-ABN-AIR-AJ-00017294.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the PACK 1(2) pb-sw is set to OFF and no failure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR PACK 1(2) OFF (Cont'd)

Ident.: PRO-ABN-AIR-AJ-00017941.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-AIR-AJ-00010715.0001001 / 05 AUG 10

STATUS

INOP SYS

PACK 1(2)

AIR PACK 1(2) OVHT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

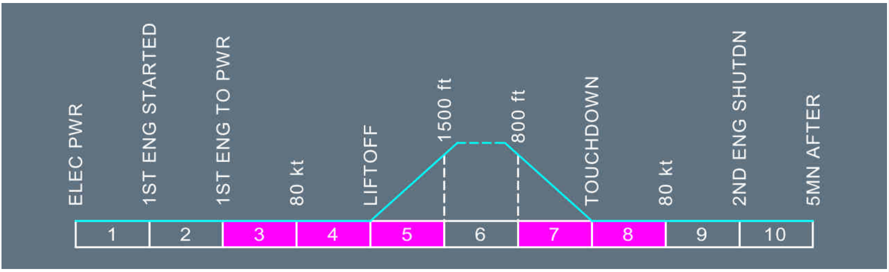
Ident.: PRO-ABN-AIR-AK-00017284.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The pack compressor outlet temperature rises above 260 °C, or
- The pack compressor outlet temperature rises above 230 °C four times during the same flight, or
- The pack outlet temperature rises above 95 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AIR PACK 1(2) OVHT (Cont'd)

Ident.: PRO-ABN-AIR-AK-00017942.0001001 / 21 MAR 16

PACK (AFFECTED).. OFF

L2 *High flow is automatically selected on the remaining pack.*
Fault light goes off, when the overheat disappears.

L1 ● **WHEN PACK OVHT OUT:**
PACK (AFFECTED).. ON

Ident.: PRO-ABN-AIR-AK-00010711.0001001 / 10 JAN 11

STATUS

	INOP SYS
● **WHEN PACK OVHT OUT:** PACK (AFFECTED)........................ ON	PACK 1(2) (1)

(1) *(If pack not recovered)*

AIR PACK 1(2) OVHT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-AIR-AK-00017942.0001001 / 21 MAR 16

PACK (AFFECTED).. OFF

L2 *High flow is automatically selected on the remaining pack.*
Fault light goes off, when the overheat disappears.

L1 ● **WHEN PACK OVHT OUT:**
PACK (AFFECTED).. ON

Ident.: PRO-ABN-AIR-AK-00010711.0001001 / 10 JAN 11

STATUS

	INOP SYS
● **WHEN PACK OVHT OUT:** PACK (AFFECTED)........................ ON	PACK 1(2) (1)

(1) *(If pack not recovered)*

AIR PACK 1(2) OVHT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-AIR-AK-00017284.0002001 / 21 MAR 16

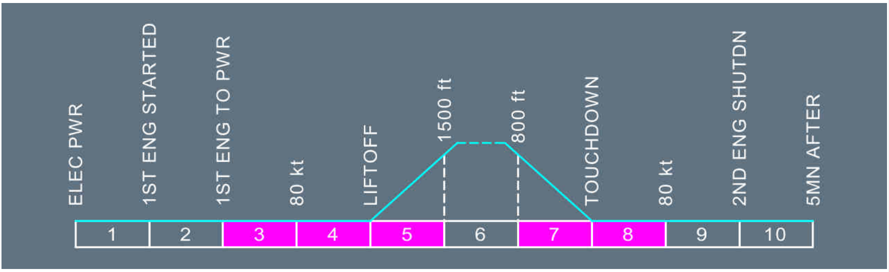
94

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pack compressor outlet temperature rises above 260 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-AK-00017942.0001001 / 21 MAR 16

PACK (AFFECTED).. OFF

L2 *High flow is automatically selected on the remaining pack.*
Fault light goes off, when the overheat disappears.

L1
- **WHEN PACK OVHT OUT:**
  PACK (AFFECTED)..ON

Ident.: PRO-ABN-AIR-AK-00010711.0001001 / 10 JAN 11

STATUS

- **WHEN PACK OVHT OUT:**
  PACK (AFFECTED).. ON

INOP SYS

PACK 1(2) (1)

(1) *(If pack not recovered)*

AIR PACK 1(2) REGUL FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-AIR-AL-00017298.0001001 / 21 MAR 16

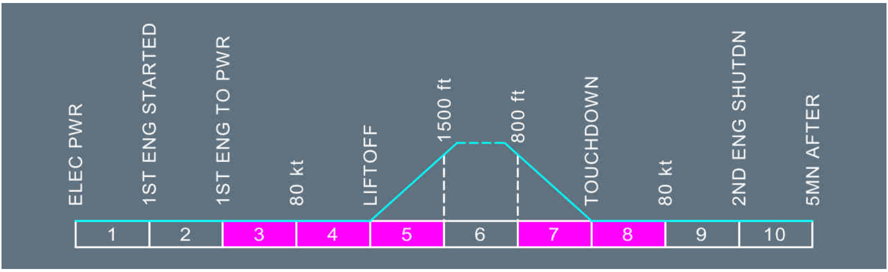
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The pack main channel is failed, or
- The pack main and secondary channels are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-AL-00018089.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

AIR PACK 1(2) REGUL FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AL-00010719.0002001 / 10 JAN 11

L12

STATUS

- **If the primary channel fails:**

  The pack air inlet flap fully opens; pack flow is fixed at the previous setting.

- **If the primary and secondary channels fail:**

  PACK 1(2) AT FIXED TEMP

  The pack outlet temperature is controlled by the pack anti-ice valve and is stabilized to a temperature between 5 °C (41 °F) and 30 °C (86 °F) within a maximum of 6 min.

INOP SYS

PACK 1(2) REGUL

AIR PACK 1(2) REGUL FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

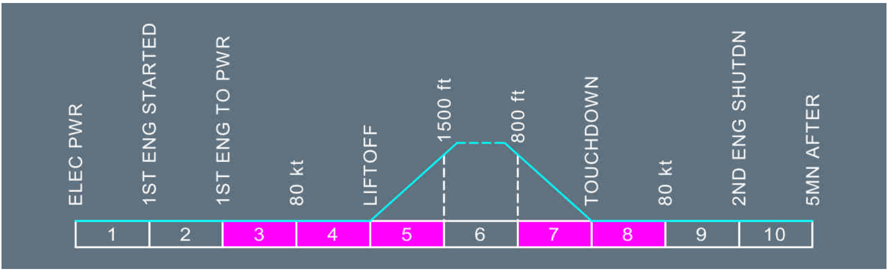
Ident.: PRO-ABN-AIR-AL-00017298.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the temperature regulation performance is degraded.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-AL-00018089.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-AIR-AL-00010719.0003001 / 10 JAN 11

STATUS

INOP SYS

PACK 1(2) REGUL (1)
HOT AIR (2)

(1) *(In case of By Pass Valve or RAM Air Inlet failure)*
(2) *(In case of Flow Control Valve in backup mode)*

AIR PACK 1(2) REGUL FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-AIR-AL-00017298.0005001 / 09 APR 18

95

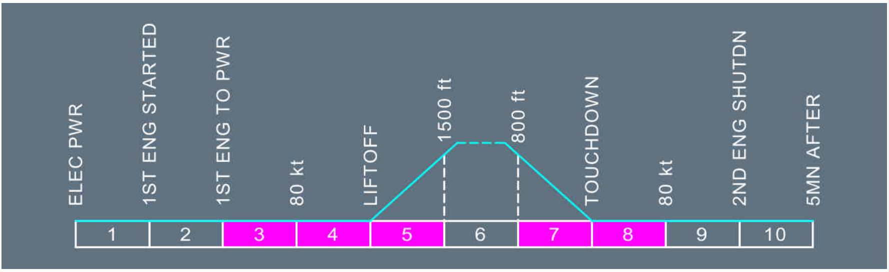
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The temperature regulation performance is degraded, or
- An inconsistency is detected between air flow taken on the engine computed by EIU and pack flow computed by ACSC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-AL-00018089.0005001 / 09 APR 18

96

- **If the alert triggers when the temperature regulation performance is degraded:**

  Crew awareness.

- **If the alert triggers when an inconsistency is detected between air flow taken on the engine computed by EIU and pack flow computed by ACSC:**
  - **On ground:**

    PACK 1(2).. OFF

Continued on the following page

AIR PACK 1(2) REGUL FAULT (Cont'd)

Ident.: PRO-ABN-AIR-AL-00010719.0006001 / 09 APR 18

97

L12

STATUS

- **In case of an inconsistency is detected between air flow taken on the engine computed by EIU and pack flow computed by ACSC:**
  PACK 1(2) AVAIL IN FLT
  This status information is inhibited when the associated pack is already on in flight.

INOP SYS

PACK 1(2) REGUL (1)
HOT AIR (2)

(1) *(In case of By Pass Valve or RAM Air Inlet failure)*
(2) *(In case of Flow Control Valve in backup mode)*

AIR X BLEED FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

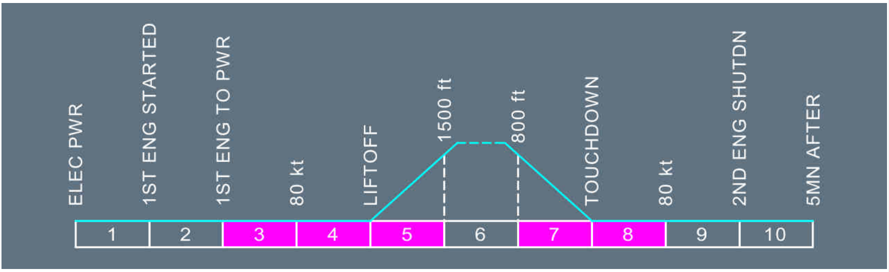
Ident.: PRO-ABN-AIR-E-00017383.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the crossbleed valve position disagrees with the X-BLEED selector position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-AIR-E-00011097.0001001 / 05 AUG 10

X BLEED.. MAN CTL

L2 *Select OPEN, when the APU BLEED pb-sw is ON, or for engine start, or when WING ANTI-ICE pb-sw is ON and one bleed is inoperative.*
Select SHUT in other cases.

L1 ● **If manual opening inoperative, and only one bleed available:**

WING ANTI ICE..OFF

AVOID ICING CONDITIONS

Continued on the following page

AIR X BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-E-00017612.0002001 / 21 MAR 16

98

STATUS

- **If manual opening inoperative, and only one bleed available:**
  AVOID ICING CONDITIONS
  - **IF SEVERE ICE ACCRETION:**
    MIN SPD.................................... VLS +10 / G DOT
    MANEUVER WITH CARE

  LDG DIST PROC...APPLY

X BLEED MAN CTL

INOP SYS

WING A.ICE
X BLEED

AIR X BLEED FAULT

Applicable to: MSN 01251

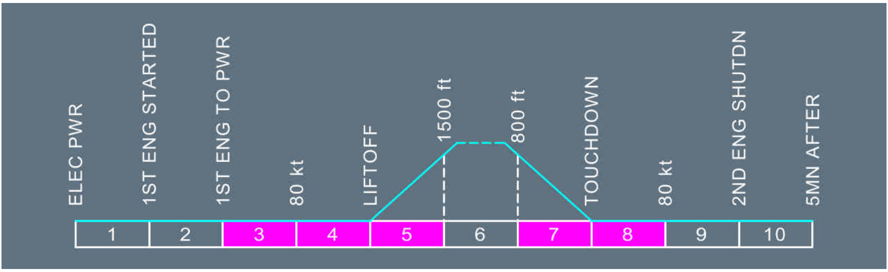
Ident.: PRO-ABN-AIR-E-00017383.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the crossbleed valve position disagrees with the X-BLEED selector position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

AIR X BLEED FAULT (Cont'd)

Ident.: PRO-ABN-AIR-E-00011097.0001001 / 05 AUG 10

X BLEED.. MAN CTL

L2 *Select OPEN, when the APU BLEED pb-sw is ON, or for engine start, or when WING ANTI-ICE pb-sw is ON and one bleed is inoperative.*
Select SHUT in other cases.

L1 ● **If manual opening inoperative, and only one bleed available:**

WING ANTI ICE..OFF

AVOID ICING CONDITIONS

Ident.: PRO-ABN-AIR-E-00017612.0003001 / 22 MAR 17

STATUS

	INOP SYS
● **If manual opening inoperative, and only one bleed available:** AVOID ICING CONDITIONS X BLEED MAN CTL	WING A. ICE X BLEED

AIR X BLEED FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

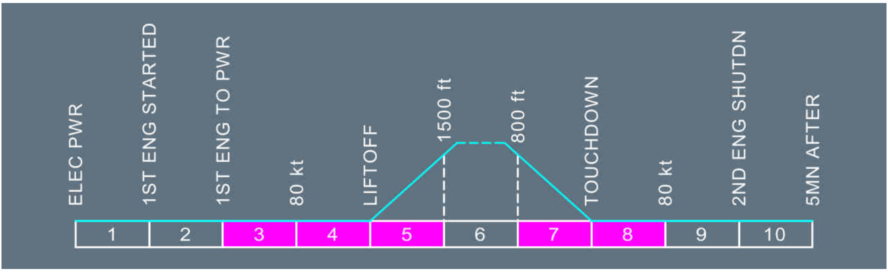
Ident.: PRO-ABN-AIR-E-00017383.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the crossbleed valve position disagrees with the X-BLEED selector position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AIR-E-00011097.0001001 / 05 AUG 10

X BLEED.. MAN CTL

L2 *Select OPEN, when the APU BLEED pb-sw is ON, or for engine start, or when WING ANTI-ICE pb-sw is ON and one bleed is inoperative.*
Select SHUT in other cases.

L1 ● **If manual opening inoperative, and only one bleed available:**

WING ANTI ICE..OFF

AVOID ICING CONDITIONS

Intentionally left blank

APU AUTO (EMER) SHUT DOWN

Applicable to: ALL

Ident.: PRO-ABN-APU-A-00016876.0001001 / 21 MAR 16

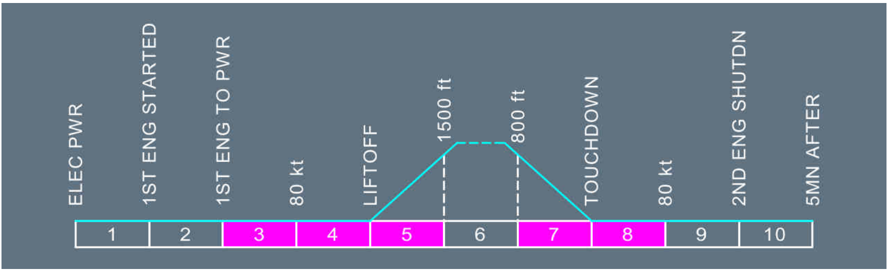
ANNUNCIATIONS

Triggering Conditions:

L2 The APU AUTO SHUT DOWN alert triggers when an automatic shutdown of the APU occurs for a reason other than a fire.
The APU EMER SHUT DOWN triggers when:

- The APU SHUT OFF sw on the External Power Panel is pushed or,
- The APU FIRE pb is pushed or,
- An APU fire on ground is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-APU-A-00018193.0001001 / 05 MAY 22

MASTER SW..OFF

L2 *In the case of APU auto shut down, APU restart can be considered. After three consecutive APU start attempts, the flight crew must wait 60 min before a new start attempt.*

Continued on the following page

APU AUTO (EMER) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-APU-A-00010106.0001001 / 05 AUG 10

STATUS

INOP SYS

APU

APU FIRE DET FAULT

Applicable to: ALL

Ident.: PRO-ABN-APU-D-00021359.0001001 / 02 MAY 23

1

ANNUNCIATIONS

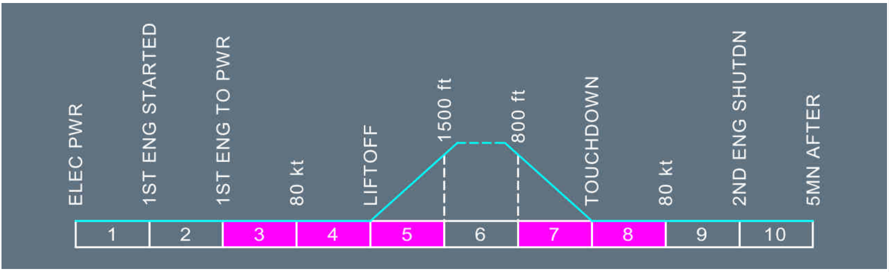
Triggering Conditions:

L2

This alert triggers when:

- Both loops fail with more than 5 s between both failures, or
- The FDU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-APU-D-00021360.0001001 / 17 MAR 17

Crew awareness.

Continued on the following page

APU FIRE DET FAULT (Cont'd)

Ident.: PRO-ABN-APU-D-00021361.0001001 / 17 MAR 17

STATUS

INOP SYS

APU FIRE DET

APU FIRE LOOP A(B) FAULT

Applicable to: ALL

Ident.: PRO-ABN-APU-B-00021362.0001001 / 02 MAY 23

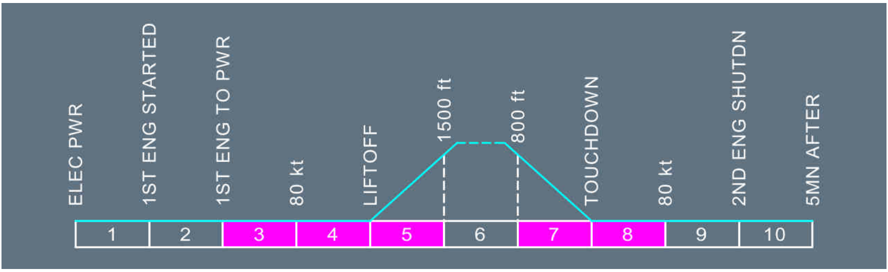
2

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one loop is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-APU-B-00021363.0001001 / 17 MAR 17

L2 Crew awareness.

Continued on the following page

APU FIRE LOOP A(B) FAULT (Cont'd)

Ident.: PRO-ABN-APU-B-00021364.0001001 / 17 MAR 17

STATUS

INOP SYS

APU LOOP A(B)

APU FIRE

Applicable to: ALL

Ident.: PRO-ABN-APUF-C-00017402.0001001 / 21 MAR 16

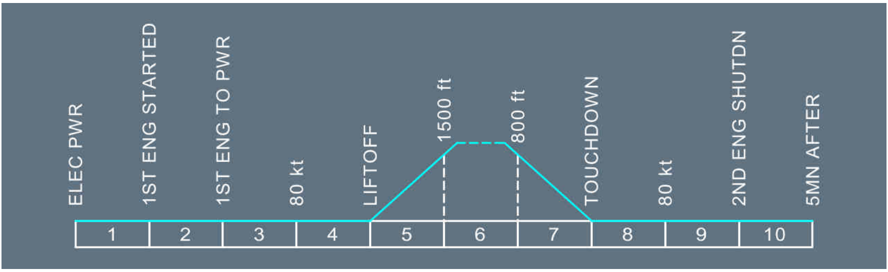
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- Fire is detected by both loops, or
- Fire is detected by one loop when the other loop is faulty, or
- A rupture occurs in both loops within 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-APUF-C-00017925.0001001 / 21 MAR 16

LAND ASAP

APU FIRE P/B...PUSH

L2 *APU LP valve closes.*
Aural warning stops.
APU FIRE pb-sw remains on, as long as a fire is detected.

L1 AGENT AFTER 10 S...DISCH

L2 *The 10 s delay allows the airflow to decrease, which increases the effect of the agent.*
Automatic countdown on the ECAM.

L1 MASTER SW...OFF

L2 *Do not attempt to restart the APU.*

Continued on the following page

APU FIRE (Cont'd)

Ident.: PRO-ABN-APUF-C-00012211.0001001 / 16 NOV 11

STATUS

INOP SYS

APU

AUTO FLT A/THR LIMITED

Applicable to: ALL

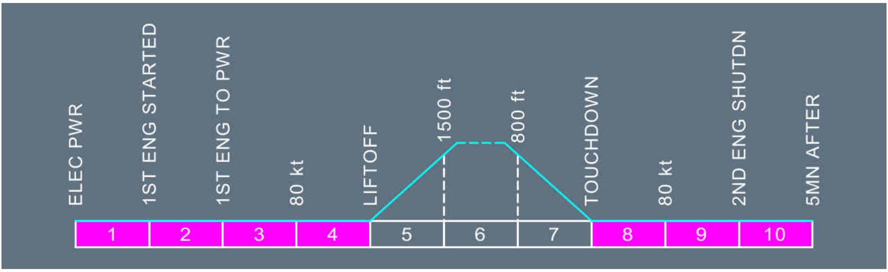
Ident.: PRO-ABN-AUTO_FLT-S-00016943.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when A/THR is active but thrust levers are set below CL detent (2 engines), or MCT detent (1 engine).
This caution is repeated every 5 s as long as the thrust lever are not moved.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-S-00018689.0001001 / 21 MAR 16

THR LEVERS.....MOVE

L2 *Thrust lever must be set in the relevant detent.*

AUTO FLT A/THR OFF

Applicable to: ALL

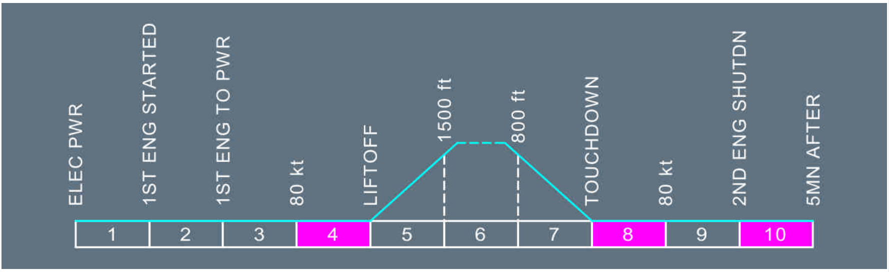
Ident.: PRO-ABN-AUTO_FLT-L-00016941.0002001 / 20 APR 17

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when this warning is displayed only for involuntary disconnection. The amber A/THR OFF and ENG THRUST LOCKED messages are displayed in the left lower part of ECAM upper DU.
For voluntary disconnection, an amber A/THR OFF message is displayed on the right lower part of ECAM upper DU.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-L-00018694.0002001 / 21 MAR 16

L2 If the A/THR is failed, the flight crew may recover it by engaging the other AP, and then trying to re-engage the A/THR.

Note: *If the A/THR is recovered with AP 2, A/THR will be lost again at AP 2 disengagement.*

L1 THR LEVERS..MOVE

L2 *If the thrust levers are not moved within 5 s, the "ENG THRUST LOCKED" warning is displayed (Refer to PRO-ABN-ENG ENG THRUST LOCKED).*

Continued on the following page

AUTO FLT A/THR OFF (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-L-00010469.0001001 / 05 AUG 10

	STATUS
	INOP SYS
CAT 2 ONLY	A/THR CAT 3

AUTO FLT AP OFF

Applicable to: ALL

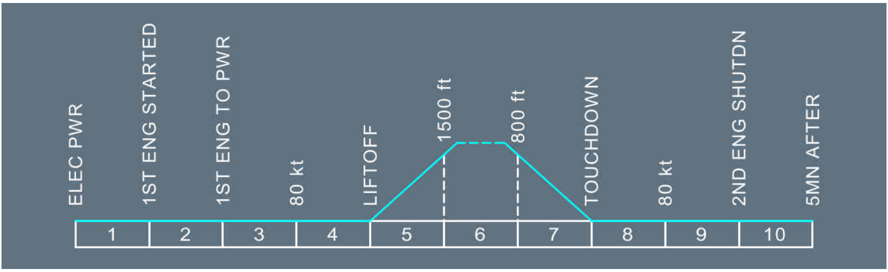
Ident.: PRO-ABN-AUTO_FLT-K-00016947.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when this warning is displayed only for involuntary disconnection.
For voluntary disconnection, a red AP OFF message is displayed in the right lower part of ECAM upper DU.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-K-00018695.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

AUTO FLT AP OFF (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-K-00017453.0002001 / 21 MAR 16

STATUS

INOP SYS

AP (Affected)
CAT 2 (1)
GLS AUTOLAND ⊲✻ (1)

(1) *(If both AP lost)*

AUTO FLT FAC 1(2) FAULT

Applicable to: ALL

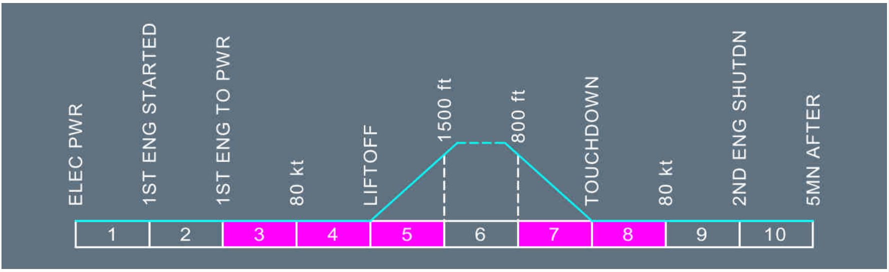
Ident.: PRO-ABN-AUTO_FLT-G-00016911.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one FAC computer is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-G-00010457.0001001 / 05 AUG 10

FAC (AFFECTED).. OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC (AFFECTED).. OFF

L2 *All functions are performed by the remaining FAC.*

Ident.: PRO-ABN-AUTO_FLT-G-00017506.0001001 / 21 MAR 16

L12

STATUS

BOTH PFD ON SAME FAC
See (1)
CAT 3 SINGLE ONLY

INOP SYS

CAT 3 DUAL
FAC 1(2)

(1) *Characteristic speeds, displayed on the two PFDs, are computed by the same FAC.*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 01143-01246, 01376-01459, 02014, 02734, 02924-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05240

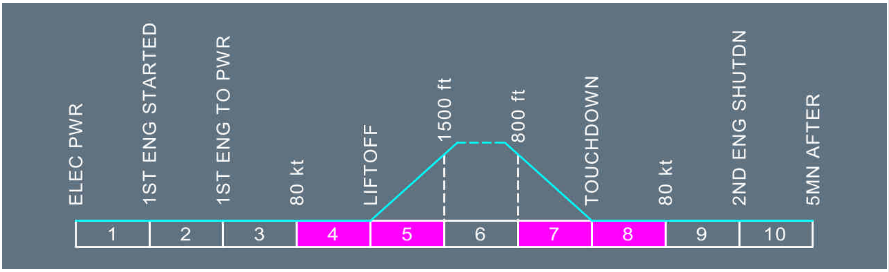
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017454.0002001 / 22 MAR 17

RUD WITH CARE ABV 160 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt.*
At slats' extension, full rudder travel authority is recovered.

L1 FAC 1 .... OFF THEN ON
FAC 2.................... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 1 + 2.................... OFF

L2 *With FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

F/CTL normal laws are lost. All protections, except maneuver protections, are lost.

L1 MAX SPEED.................... 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0006001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT
RUD WITH CARE ABV 160 KT

APPR PROC

FOR LDG.. USE FLAP 3
This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.
GPWS LDG FLAP 3.. ON
Displayed, when flaps in CONF 3.
APPR SPD... VREF + 10 KT
LDG DIST PROC... APPLY

ALTN LAW : PROT LOST
WHEN L/G DN : DIRECT LAW
See (2)

INOP SYS

WNDSHEAR DET [1]
REAC W/S DET [1]
F/CTL PROT
FAC 1 + 2
AP 1 + 2
A/THR
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
ROW/ROP ◁

[1] *(The REAC W/S DET inop sys replaces the WNDSHEAR DET inop sys on aircraft equipped with the PWS ◁)*
(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 01251

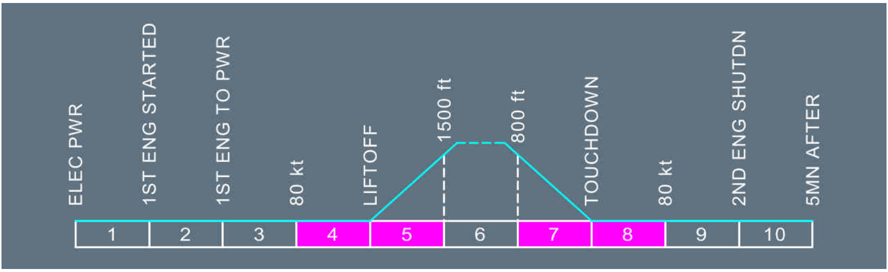
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017454.0002001 / 22 MAR 17

RUD WITH CARE ABV 160 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt.*
At slats' extension, full rudder travel authority is recovered.

L1 FAC 1 .... OFF THEN ON
FAC 2.................... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 1 + 2.................... OFF

L2 *With FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

F/CTL normal laws are lost. All protections, except maneuver protections, are lost.

L1 MAX SPEED.................... 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0004001 / 22 MAR 17

L12

STATUS

MAX SPEED... 320 KT
RUD WITH CARE ABV 160 KT

APPR PROC

FOR LDG.. USE FLAP 3
GPWS LDG FLAP 3..ON

Displayed, when flaps in CONF 3.

APPR SPD... VREF + 10 KT
LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST
WHEN L/G DN : DIRECT LAW

See (2)

INOP SYS

WNDSHEAR DET (1)
REAC W/S DET (1)
F/CTL PROT
FAC 1 + 2
AP 1 + 2
A/THR
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

---

(1) *(The REAC W/S DET inop sys replaces the WNDSHEAR DET inop sys on aircraft equipped with the PWS ◁)*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

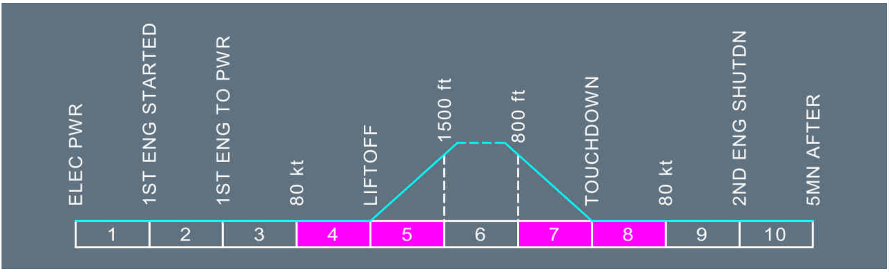
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017454.0002001 / 22 MAR 17

RUD WITH CARE ABV 160 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt.*
At slats' extension, full rudder travel authority is recovered.

L1 FAC 1 .... OFF THEN ON
FAC 2.......... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 1 + 2.......... OFF

L2 *With FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

F/CTL normal laws are lost. All protections, except maneuver protections, are lost.

L1 MAX SPEED.......... 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0011001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT
RUD WITH CARE ABV 160 KT

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Displayed, when flaps in CONF 3.

APPR SPD... VREF + 15 KT
LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST
WHEN L/G DN : DIRECT LAW

See (2)

INOP SYS

WNDSHEAR DET (1)
REAC W/S DET (1)
F/CTL PROT
FAC 1 + 2
AP 1 + 2
A/THR
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
ROW/ROP ◁

---

(1) *(The REAC W/S DET inop sys replaces the WNDSHEAR DET inop sys on aircraft equipped with the PWS ◁)*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

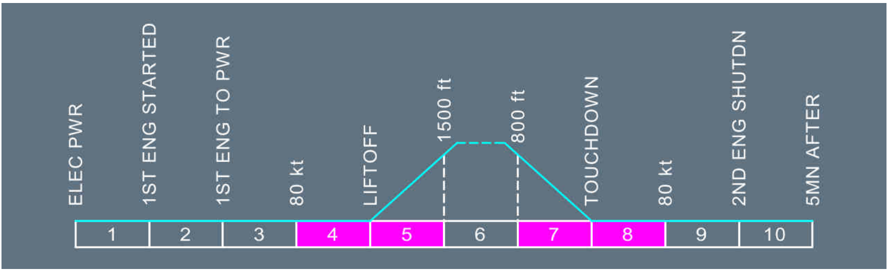
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

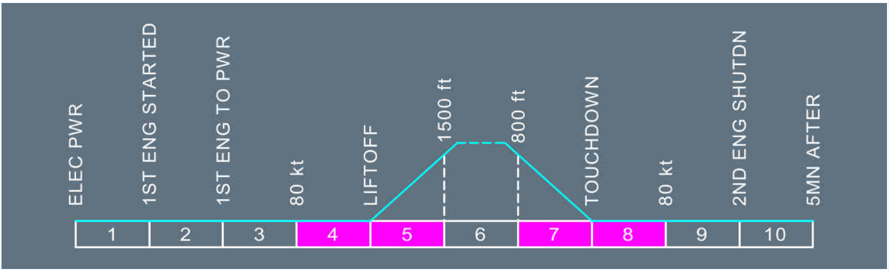
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017454.0003001 / 22 MAR 17

RUD WITH CARE ABV 140 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 140 kt.*
At slats' extension, full rudder travel authority is recovered.

L1 FAC 1 .... OFF THEN ON
FAC 2 .... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 1 + 2 .... OFF

L2 *With FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

F/CTL normal laws are lost. All protections, except maneuver protections, are lost.

L1 MAX SPEED .... 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0018001 / 22 MAR 17

L12

STATUS

MAX SPEED...320 KT
RUD WITH CARE ABV 140 KT

APPR PROC

FOR LDG..USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Displayed, when flaps in CONF 3.

APPR SPD..VREF + 10 KT
LDG DIST PROC..APPLY

ALTN LAW : PROT LOST
WHEN L/G DN : DIRECT LAW

See (2)

INOP SYS

WNDSHEAR DET (1)
REAC W/S DET (1)
F/CTL PROT
FAC 1 + 2
AP 1 + 2
A/THR
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
ROW/ROP ◁

---

(1) *(The REAC W/S DET inop sys replaces the WNDSHEAR DET inop sys on aircraft equipped with the PWS ◁)*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-07098

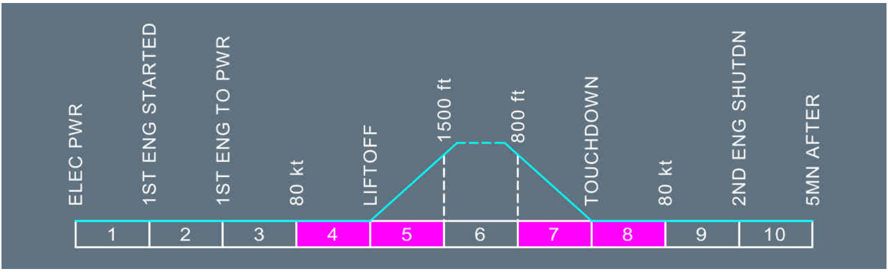
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017454.0006001 / 04 NOV 20

RUD WITH CARE ABV 160 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt.*

At slats' extension, full rudder travel authority is recovered.

L1 FAC 1 .... OFF THEN ON
FAC 2.................... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 1 + 2.................... OFF

L2 *With FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.

L1 MAX SPEED.................... 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0008001 / 04 NOV 20

L12

STATUS

MAX SPEED... 320 KT
RUD WITH CARE ABV 160 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Displayed, when flaps in CONF 3.

APPR SPD...VREF + 10 KT
LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

See (2)

INOP SYS

WNDSHEAR DET (1)
REAC W/S DET (1)
F/CTL PROT
FAC 1 + 2
AP 1 + 2
A/THR
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
ROW/ROP ◁

---

(1) *(The REAC W/S DET inop sys replaces the WNDSHEAR DET inop sys on aircraft equipped with the PWS ◁)*

(2) Note: *For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 08495-08596, 09190-09324

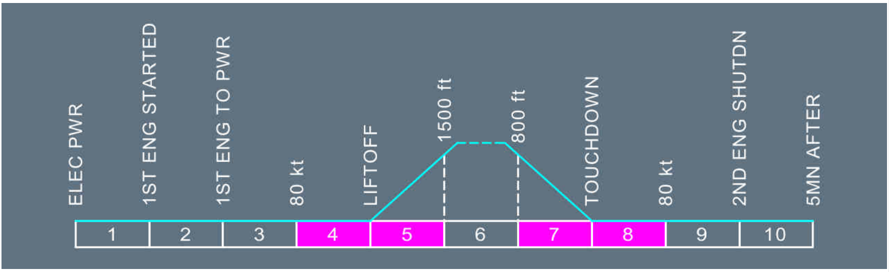
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017454.0004001 / 04 NOV 20

1

RUD WITH CARE ABV 140 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 140 kt.*
At slats' extension, full rudder travel authority is recovered.

L1 FAC 1 .... OFF THEN ON
FAC 2 .... OFF THEN ON

- **IF UNSUCCESSFUL:**
  FAC 1 + 2 .... OFF

L2 *With FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.

L1 MAX SPEED .... 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0021001 / 04 NOV 20

L12

STATUS

MAX SPEED.. 320 KT
RUD WITH CARE ABV 140 KT
GA THR: TOGA ONLY

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Displayed, when flaps in CONF 3.

APPR SPD ....VREF + 15 KT
LDG DIST PROC ....APPLY

ALTN LAW: PROT LOST

See (2)

INOP SYS

WNDSHEAR DET (1)
REAC W/S DET (1)
F/CTL PROT
STEEP APPR ◁
FAC 1 + 2
AP 1 + 2
A/THR
CAT 2
GLS AUTOLAND ◁
GA SOFT
ROW/ROP ◁

(1) *(The REAC W/S DET inop sys replaces the WNDSHEAR DET inop sys on aircraft equipped with the PWS ◁)*

(2) *Note: For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 08635

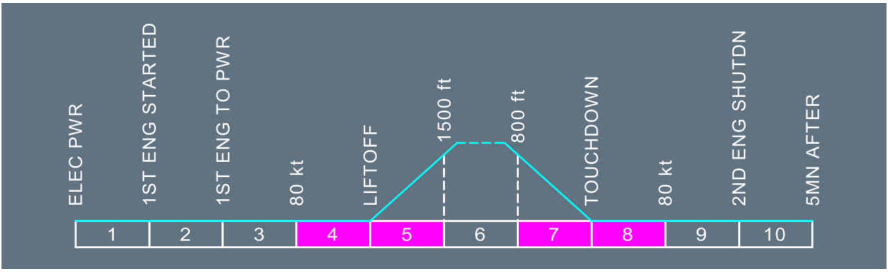
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017454.0004001 / 04 NOV 20

2

RUD WITH CARE ABV 140 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 140 kt.*
At slats' extension, full rudder travel authority is recovered.

L1 FAC 1 .... OFF THEN ON
FAC 2 .... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 1 + 2 .... OFF

L2 *With FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.

L1 MAX SPEED .... 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0024001 / 04 NOV 20

L12

STATUS

MAX SPEED.. 320 KT
RUD WITH CARE ABV 140 KT
GA THR TOGA: ONLY

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD ....VREF + 15 KT
LDG DIST PROC ....APPLY

ALTN LAW: PROT LOST

See (2)

INOP SYS

WNDSHEAR DET (1)
REAC W/S DET (1)
F/CTL PROT
STEEP APPR ◁✳
FAC 1+2
AP 1+2
A/THR
CAT 2
GLS AUTOLAND ◁✳
GA SOFT
ROW/ROP ◁✳

(1) *(The REAC W/S DET inop sys replaces the WNDSHEAR DET inop sys on aircraft equipped with PWS ◁✳)*

(2) *Note:* *For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

AUTO FLT FAC 1 + 2 FAULT

Applicable to: MSN 10949-11597

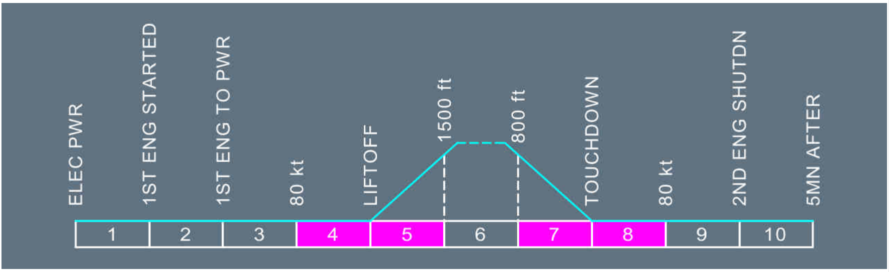
Ident.: PRO-ABN-AUTO_FLT-H-00016926.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two FAC computers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FAC 1 + 2 FAULT (Cont'd)

3 Ident.: PRO-ABN-AUTO_FLT-H-00017454.0030001 / 03 NOV 22

RUD WITH CARE ABV 140 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care when the speed is above 140 kt.*
At slats extension, full rudder travel authority is recovered.

L1 FAC 1.. OFF THEN ON
FAC 2.. OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 1 + 2..OFF

L2 *When FAC 1 + 2 inoperative, the rudder travel limit system, rudder trim control, yaw damper and PFD characteristic speeds are lost.*

L1 SPD BRK.. DO NOT USE

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

L1 MAX SPEED.. 320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

Continued on the following page

Ident.: PRO-ABN-AUTO_FLT-H-00017456.0038001 / 18 NOV 21

4

L12

STATUS

MAX SPEED.. 320 KT
SPD BRK...DO NOT USE
RUD WITH CARE ABV 140 KT
GA THR TOGA: ONLY

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD ....VREF + 15 KT
LDG DIST PROC ....APPLY

ALTN LAW: PROT LOST

See (2)

INOP SYS

WNDSHEAR DET (1)
REAC W/S DET (1)
F/CTL PROT
STEEP APPR ◁
FAC 1+2
BKUP SPD
AP 1+2
A/THR
CAT 2
GLS AUTOLAND ◁
GA SOFT
ROW/ROP ◁

(1) *(REAC W/S DET replaces WNDSHEAR DET on aircraft equipped with PWS ◁)*

(2) *Note: For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

AUTO FLT FAC VERSIONS DISAGREE

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-AUTO_FLT-U-00024825.0002001 / 18 NOV 21

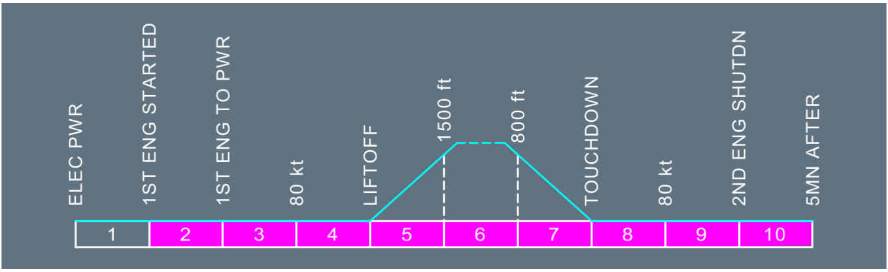
5

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FAC1 and FAC2 software versions are not compatible.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-AUTO_FLT-U-00024826.0002001 / 18 NOV 21

6

Crew awareness.

AUTO FLT FCU 1(2) FAULT

Applicable to: ALL

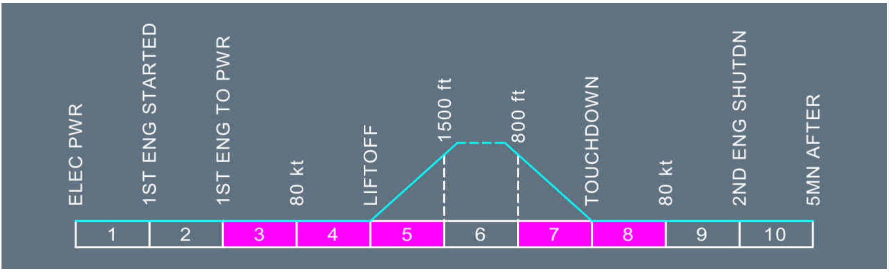
Ident.: PRO-ABN-AUTO_FLT-J-00016923.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when only one FCU channel remain operative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-J-00010464.0001001 / 05 AUG 10

BARO REF....................X CHECK

L2 *One FCU channel is lost:*
Therefore, crosscheck the barometric reference settings on the FCU and PFDs.

Ident.: PRO-ABN-AUTO_FLT-J-00010465.0001001 / 05 AUG 10

STATUS

	INOP SYS
	FCU 1(2)

AUTO FLT FCU 1 + 2 FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05883, 06097, 06121, 06139-06632, 06658-06813, 06876-07005, 08495-09324

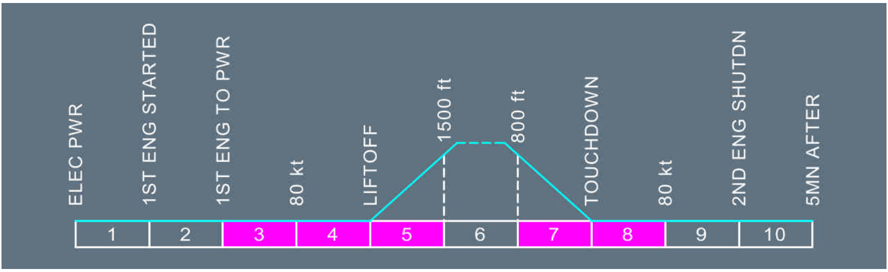
Ident.: PRO-ABN-AUTO_FLT-I-00016946.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FCU is completely loss.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FCU 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-I-00017463.0001001 / 21 MAR 16

7

PFD BARO REF: STD ONLY

L2 *With both FCU channels failed, the barometer reference automatically goes to 1 013 hPa.*
Use standby altimeter, and change this to the actual barometer setting.
Do not insert the MDA (MDH) value on the MCDU PERF APPR Page (because the PFD altitude is referenced to STD, and not to the correct barometric value).
The PM must then perform the standard callouts ("HUNDRED ABOVE"and "MINIMUM"), using the STBY altimeter.

In addition:

- *All FCU controls are inoperative.*
- *A/THR, AP 1 + 2, and FD 1 + 2 are not available.*
  (Except in LAND or GO AROUND mode where only A/THR is lost).
- *On PFD:*
  - *Altitude alert is inoperative.*
  - *ILS/GLS ◁ /MLS ◁ deviation scales are displayed.*
  - *Flight path vector is displayed.*
  - *Mach indication is inoperative.*
  - *FMA is lost except in LAND or GA mode.*
- *On ND:*
  - *ROSE NAV mode with map (80 NM range) is displayed.*
  - *VOR/ADF needles:*
    Needle 1 is related to VOR1 only.
    Needle 2 is related to ADF2 only (ADF1 if ADF2 not installed).
    (VOR selection on DDRMI ◁ is not affected)
    (ADF selection on DDRMI ◁ (if available) is not affected).
  - *The weather radar image may be lost. If the image remains displayed it must be disregarded. In all cases, red "WXR RNG" message is displayed.*

Continued on the following page

AUTO FLT FCU 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-I-00017512.0002001 / 21 MAR 16

STATUS

PFD BARO REF : STD ONLY

- **If in LAND or GA:**
  CAT 2 ONLY

INOP SYS

FCU 1 + 2
AP 1 + 2 (1)
A/THR
CAT 3 (2)
CAT 2 (1)
GPWS TERR

(1) *(If not LAND or GA)*
(2) *(If in LAND or GA mode)*

AUTO FLT FCU 1 + 2 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

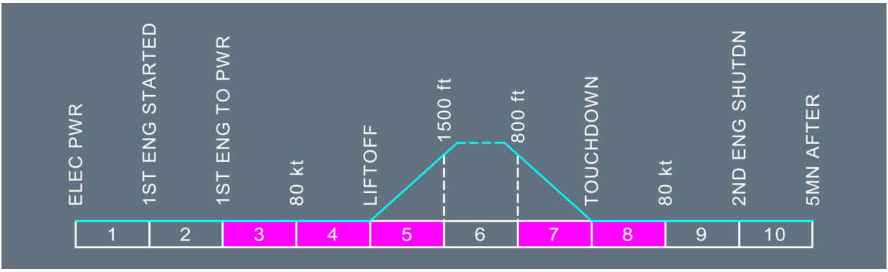
Ident.: PRO-ABN-AUTO_FLT-I-00016946.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FCU is completely loss.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FCU 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-I-00017512.0002001 / 21 MAR 16

STATUS

PFD BARO REF : STD ONLY
- **If in LAND or GA:**
  CAT 2 ONLY

INOP SYS

FCU 1 + 2
AP 1 + 2 [(1)]
A/THR
CAT 3 [(2)]
CAT 2 [(1)]
GPWS TERR

(1) *(If not LAND or GA)*
(2) *(If in LAND or GA mode)*

AUTO FLT FCU 1 + 2 FAULT

Applicable to: MSN 02734, 02896, 04827-04860, 05947-05987, 06634, 06871, 07081-07098, 10949-11597

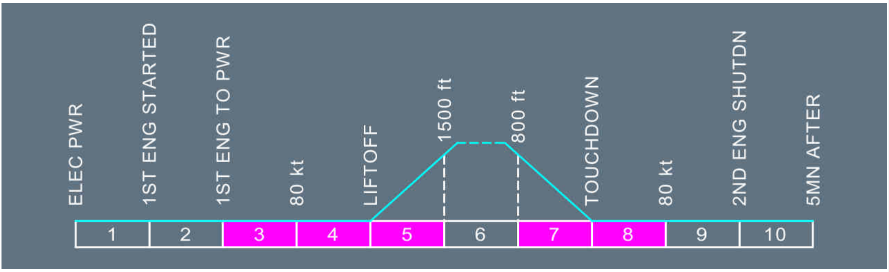
Ident.: PRO-ABN-AUTO_FLT-I-00016946.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FCU is completely loss.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FCU 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-I-00017463.0002001 / 18 JUL 17

8

PFD BARO REF: STD ONLY

L2 *With both FCU channels failed, the barometer reference automatically goes to 1 013 hPa.*
Use standby altimeter, and change this to the actual barometer setting.
Do not insert the MDA (MDH) value on the MCDU PERF APPR Page (because the PFD altitude is referenced to STD, and not to the correct barometric value).
The PM must then perform the standard callouts ("HUNDRED ABOVE"and "MINIMUM"), using the STBY altimeter.

In addition:

- *All FCU controls are inoperative.*
- *A/THR, AP 1 + 2, and FD 1 + 2 are not available.*
  (Except in LAND or GO AROUND mode where only A/THR is lost).
- *On PFD:*
  - *Altitude alert is inoperative.*
  - *ILS/GLS /MLS deviation scales are displayed.*
  - *Flight path vector is displayed.*
  - *Mach indication is inoperative.*
  - *FMA is lost except in LAND or GA mode.*
- *On ND:*
  - *ARC mode with map (20 NM range) is displayed.*
  - *VOR/ADF needles:*
    Needle 1 is related to VOR1 only.
    Needle 2 is related to ADF2 only (ADF1 if ADF2 not installed).
    (VOR selection on DDRMI is not affected)
    (ADF selection on DDRMI (if available) is not affected).
  - *The weather radar image may be lost. If the image remains displayed it must be disregarded.*
    In all cases, red "WXR RNG" message is displayed.

Continued on the following page

AUTO FLT FCU 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-I-00017512.0002001 / 21 MAR 16

STATUS

PFD BARO REF : STD ONLY

- **If in LAND or GA:**

  CAT 2 ONLY

INOP SYS

FCU 1 + 2
AP 1 + 2 (1)
A/THR
CAT 3 (2)
CAT 2 (1)
GPWS TERR

(1) *(If not LAND or GA)*
(2) *(If in LAND or GA mode)*

AUTO FLT FMGC VERSIONS DISAGREE

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-AUTO_FLT-V-00024827.0004001 / 18 NOV 21

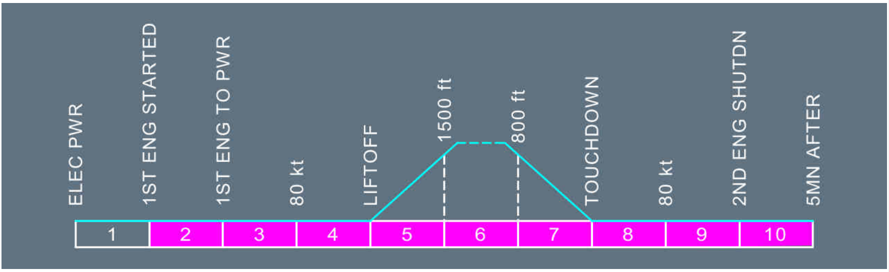
9

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FG1 and FG2 software versions are not compatible.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT FMGC VERSIONS DISAGREE (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-V-00024828.0004001 / 18 NOV 21

10

Crew awareness.

AUTO FLT REAC W/S DET FAULT

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-AUTO_FLT-N-00017473.0001001 / 21 MAR 16

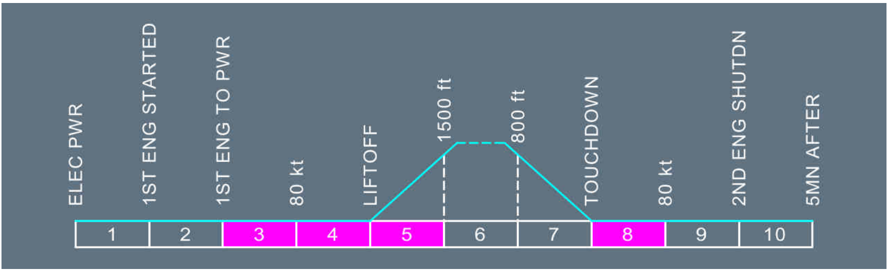
11

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reactive windshear function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-N-00017479.0001001 / 21 MAR 16

12

Crew awareness.

Ident.: PRO-ABN-AUTO_FLT-N-00017480.0001001 / 05 JUN 18

13

STATUS

INOP SYS

REAC W/S DET

AUTO FLT RUD TRIM 1(2) FAULT

Applicable to: ALL

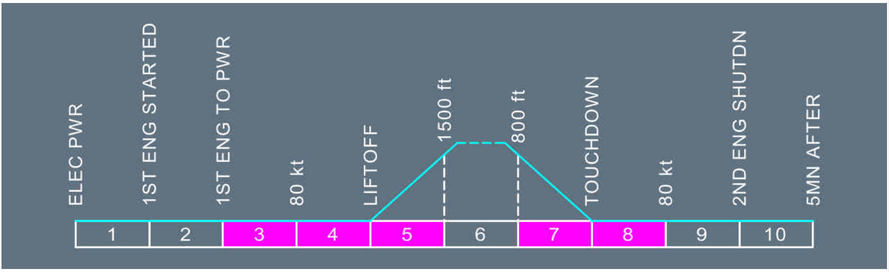
Ident.: PRO-ABN-AUTO_FLT-C-00016921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one rudder trim actuator is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-C-00010449.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-AUTO_FLT-C-00017513.0001001 / 21 MAR 16

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	CAT 3 DUAL RUD TRIM 1(2)

AUTO FLT RUD TRIM SYS

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

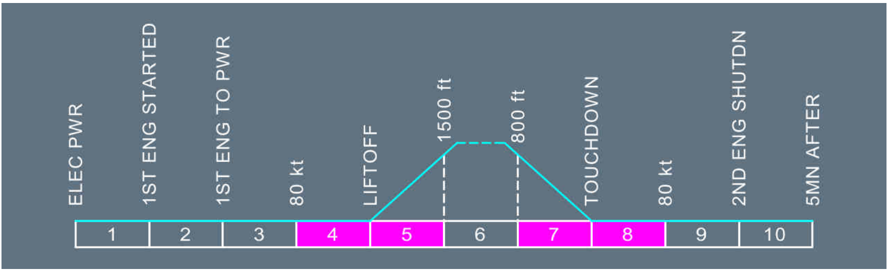
Ident.: PRO-ABN-AUTO_FLT-D-00016928.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder trim system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-D-00010451.0002001 / 05 AUG 10

FAC 1 .... OFF THEN ON
FAC 2 .... OFF THEN ON

Ident.: PRO-ABN-AUTO_FLT-D-00017464.0002001 / 21 MAR 16

STATUS

INOP SYS

RUD TRIM
AP 1 + 2
CAT 2
GLS AUTOLAND

AUTO FLT RUD TRIM SYS

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

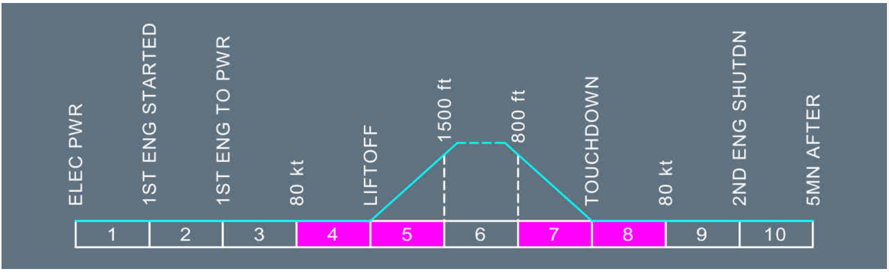
Ident.: PRO-ABN-AUTO_FLT-D-00016928.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder trim system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-D-00017464.0002001 / 21 MAR 16

STATUS

INOP SYS

RUD TRIM
AP 1 + 2
CAT 2
GLS AUTOLAND

AUTO FLT RUD TRIM SYS

Applicable to: MSN 08635, 10949-11597

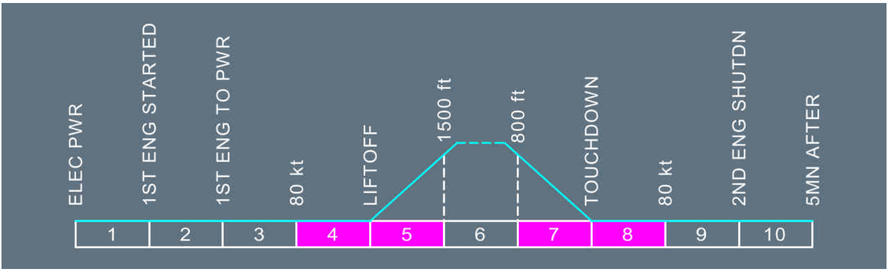
Ident.: PRO-ABN-AUTO_FLT-D-00016928.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder trim system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-D-00010451.0003001 / 03 MAR 20

14 FAC 1 .... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 2 .... OFF THEN ON

Ident.: PRO-ABN-AUTO_FLT-D-00017464.0002001 / 21 MAR 16

STATUS

INOP SYS

RUD TRIM
AP 1 + 2
CAT 2
GLS AUTOLAND ⊲

AUTO FLT RUD TRV LIM 1(2)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

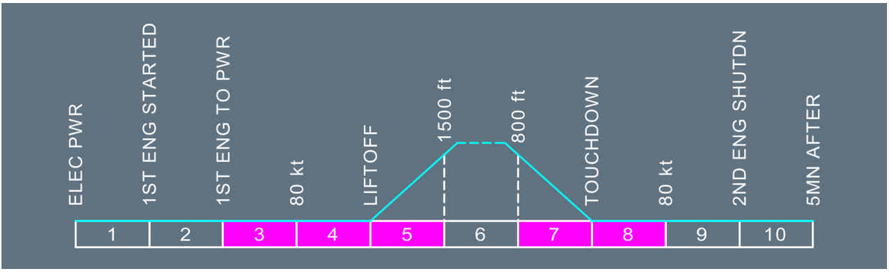
Ident.: PRO-ABN-AUTO_FLT-E-00016922.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one rudder travel limitation actuator is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-E-00010453.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-AUTO_FLT-E-00010454.0001001 / 05 AUG 10

STATUS

INOP SYS

RUD TRV LIM 1(2)

AUTO FLT RUD TRV LIM 1(2)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

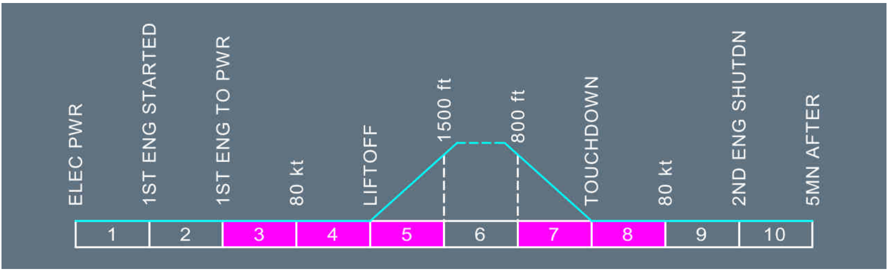
Ident.: PRO-ABN-AUTO_FLT-E-00016922.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one rudder travel limitation actuator is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-E-00010454.0001001 / 05 AUG 10

STATUS

INOP SYS

RUD TRV LIM 1(2)

AUTO FLT RUD TRV LIM 1(2)

Applicable to: MSN 08635, 10949-11597

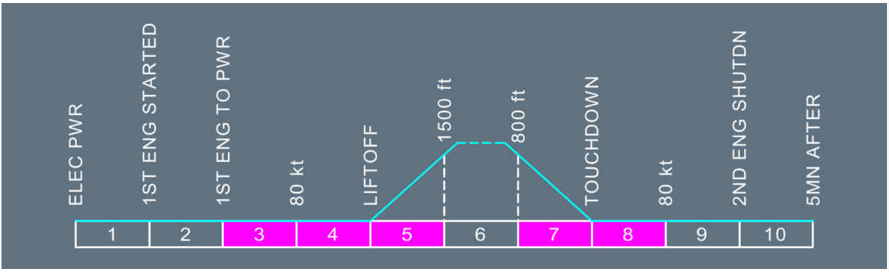
Ident.: PRO-ABN-AUTO_FLT-E-00016922.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one rudder travel limitation actuator is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-E-00010453.0002001 / 09 APR 18

15

FAC 1 .... OFF THEN ON
FAC 2 .... OFF THEN ON

L2 The reset of both FACs enables to recover the AP function.

Ident.: PRO-ABN-AUTO_FLT-E-00010454.0001001 / 05 AUG 10

STATUS

INOP SYS

RUD TRV LIM 1(2)

AUTO FLT RUD TRV LIM SYS

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-07098

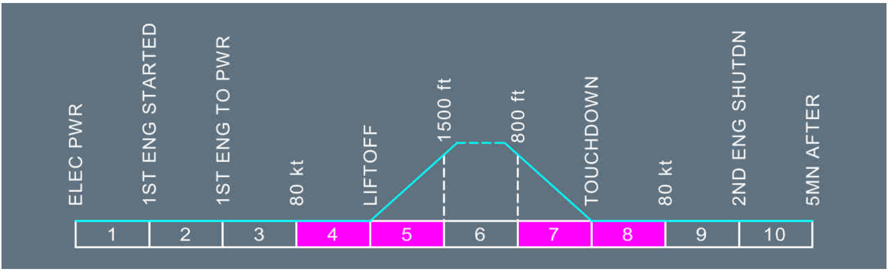
Ident.: PRO-ABN-AUTO_FLT-F-00016929.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder travel limitation system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT RUD TRV LIM SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-F-00017465.0003001 / 22 MAR 17

RUD WITH CARE ABV 160 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is greater than 160 kt.*
At slats' extension, full rudder travel authority can be recovered.

L1 FAC 1.. OFF THEN ON
FAC 2.. OFF THEN ON

- **If TLU (rudder or pedals) remains locked at high speed after slat extension:**

  MAX X WIND FOR LDG 15 KT
  AUTO BRK..DO NOT USE

L2 *Do not use the autobrake, so as not to delay the application of differential braking at landing roll.*

L1
- **AT LDG ROLL:**

  DIFF BRAKING.. AS RQRD

Ident.: PRO-ABN-AUTO_FLT-F-00017467.0003001 / 28 MAY 20

L12

STATUS

	INOP SYS
RUD WITH CARE ABV 160 KT ● **If TLU (rudder or pedals) remains locked at high speed after slat extension:** MAX X WIND FOR LDG 15 KT AUTO BRK.................... DO NOT USE *Do not use the autobrake, so as not to delay the application of differential braking at landing roll.* ● **AT LDG ROLL:** DIFF BRAKING.................... AS RQRD	RUD TRV LIM

AUTO FLT RUD TRV LIM SYS

Applicable to: MSN 01251

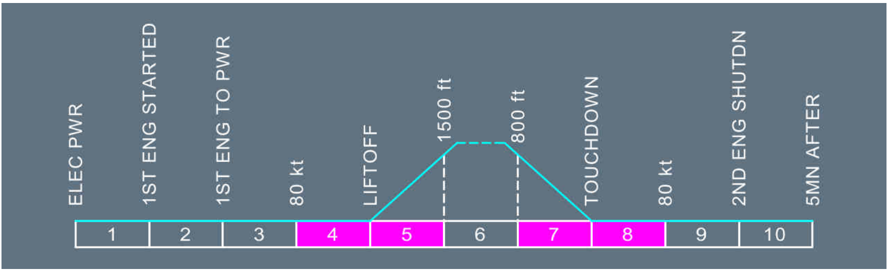
Ident.: PRO-ABN-AUTO_FLT-F-00016929.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder travel limitation system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-F-00017465.0002001 / 21 MAR 16

RUD WITH CARE ABV 160 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is greater than 160 kt.*
At slats' extension, full rudder travel authority can be recovered.

L1 FAC 1.. OFF THEN ON
FAC 2.. OFF THEN ON

- **AT LDG ROLL:**
  DIFF BRAKING.. AS RQRD

Continued on the following page

AUTO FLT RUD TRV LIM SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-F-00017467.0002001 / 28 MAY 20

STATUS

RUD WITH CARE ABV 160 KT

● **AT LDG ROLL:**
DIFF BRAKING...AS RQRD

INOP SYS

RUD TRV LIM

AUTO FLT RUD TRV LIM SYS

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

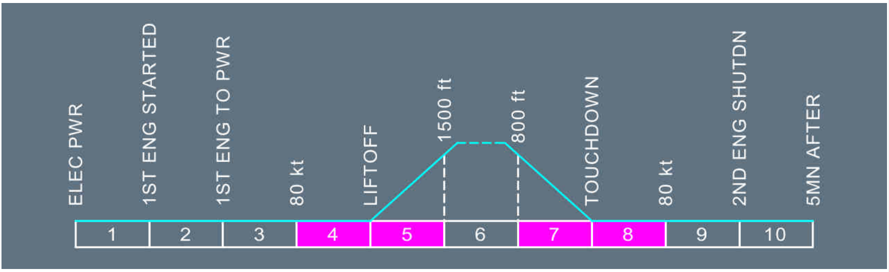
Ident.: PRO-ABN-AUTO_FLT-F-00016929.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder travel limitation system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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AUTO FLT RUD TRV LIM SYS

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

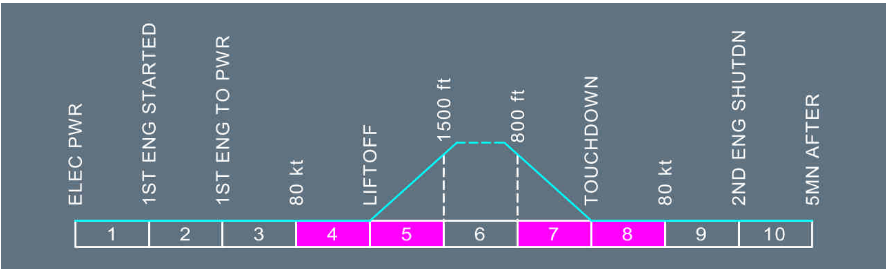
Ident.: PRO-ABN-AUTO_FLT-F-00016929.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder travel limitation system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT RUD TRV LIM SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-F-00017465.0006001 / 22 MAR 17

RUD WITH CARE ABV 140 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is greater than 140 kt.*
At slats' extension, full rudder travel authority can be recovered.

L1 FAC 1.......... OFF THEN ON
FAC 2.......... OFF THEN ON

- **If TLU (rudder or pedals) remains locked at high speed after slat extension:**
  MAX X WIND FOR LDG 15 KT
  AUTO BRK.......... DO NOT USE

L2 *Do not use the autobrake, so as not to delay the application of differential braking at landing roll.*

L1
- **AT LDG ROLL:**
  DIFF BRAKING.......... AS RQRD

Ident.: PRO-ABN-AUTO_FLT-F-00017467.0006001 / 28 MAY 20

L12

STATUS

RUD WITH CARE ABV 140 KT

- **If TLU (rudder or pedals) remains locked at high speed after slat extension:**
  MAX X WIND FOR LDG 15 KT
  AUTO BRK.......... DO NOT USE
  Do not use the autobrake, so as not to delay the application of differential braking at landing roll.
  - **AT LDG ROLL:**
    DIFF BRAKING.......... AS RQRD

INOP SYS

RUD TRV LIM

AUTO FLT RUD TRV LIM SYS

Applicable to: MSN 08495-08596, 09190-09324

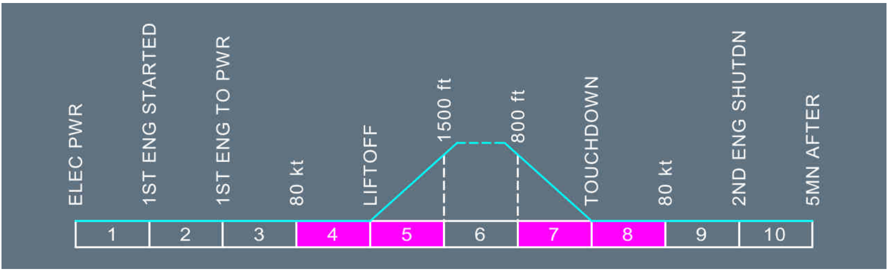
Ident.: PRO-ABN-AUTO_FLT-F-00016929.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the rudder travel limitation system is failed.

Flight Phase Inhibition:



Ident.: PRO-ABN-AUTO_FLT-F-00017465.0004001 / 21 MAR 16

RUD WITH CARE ABV 140 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is greater than 140 kt.*
At slats' extension, full rudder travel authority can be recovered.

L1 FAC 1.. OFF THEN ON
FAC 2.. OFF THEN ON

- **If TLU (rudder or pedals) remains locked at high speed after slat extension:**

  MAX X WIND FOR LDG 15 KT
  AUTO BRK..DO NOT USE

L2 *Do not use the autobrake, so as not to delay the application of differential braking at landing roll.*

L1
- **AT LDG ROLL:**

  DIFF BRAKING.. AS RQRD

Continued on the following page

AUTO FLT RUD TRV LIM SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-F-00017467.0004001 / 28 MAY 20

16

L12

STATUS

RUD WITH CARE ABV 140 KT

- **If TLU (rudder or pedals) remains locked at high speed after slat extension:**

  MAX X WIND FOR LDG 15 KT

  AUTO BRK.. DO NOT USE

  Do not use the autobrake, so as not to delay the application of differential braking at landing roll.

  - **AT LDG ROLL:**

    DIFF BRAKING... AS RQRD

INOP SYS

RUD TRV LIM

AUTO FLT RUD TRV LIM SYS

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-AUTO_FLT-F-00016929.0002001 / 21 MAR 16

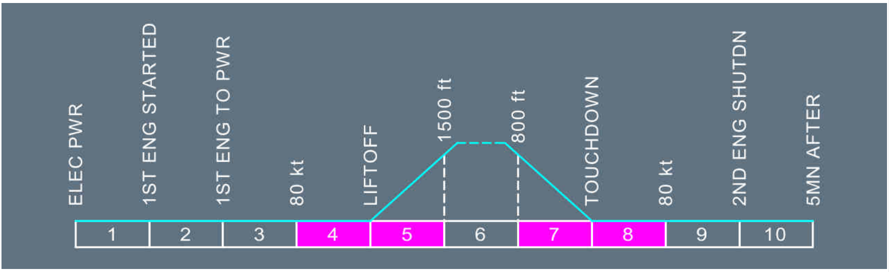
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the rudder travel limitation system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

AUTO FLT RUD TRV LIM SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-F-00017465.0008001 / 03 MAR 20

17

RUD WITH CARE ABV 140 KT

L2 *Depending on when the failure occurs, the rudder travel limiter system may not be in the correct position for the flight speed. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is greater than 140 kt.*
At slats' extension, full rudder travel authority can be recovered.

L1 FAC 1 .... OFF THEN ON

- **IF UNSUCCESSFUL:**
  FAC 2 .... OFF THEN ON
- **If TLU (rudder or pedals) remains locked at high speed after slat extension:**
  MAX X WIND FOR LDG 15 KT
  AUTO BRK .... DO NOT USE

L2 *Do not use the autobrake, so as not to delay the application of differential braking at landing roll.*

L1
- **AT LDG ROLL:**
  DIFF BRAKING .... AS RQRD

Ident.: PRO-ABN-AUTO_FLT-F-00017467.0004001 / 28 MAY 20

18

L12

STATUS

	INOP SYS
RUD WITH CARE ABV 140 KT ● **If TLU (rudder or pedals) remains locked at high speed after slat extension:** MAX X WIND FOR LDG 15 KT AUTO BRK .... DO NOT USE *Do not use the autobrake, so as not to delay the application of differential braking at landing roll.* ● **AT LDG ROLL:** DIFF BRAKING .... AS RQRD	RUD TRV LIM

AUTO FLT TCAS MODE FAULT

Applicable to: MSN 01459, 08495-09324, 10949-11597

Ident.: PRO-ABN-AUTO_FLT-R-00016998.0001001 / 21 MAR 16

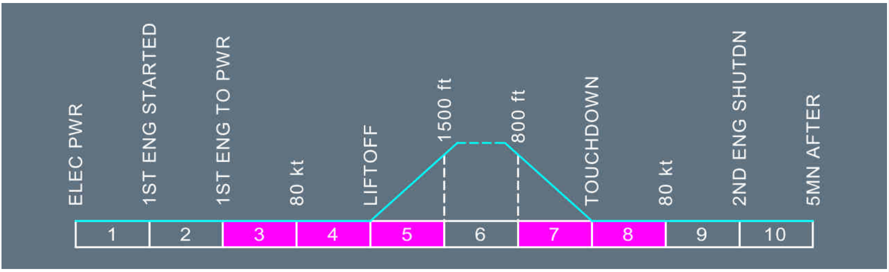
19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the TCAS flight guidance mode is inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-R-00014408.0001001 / 07 NOV 13

20

- **FOR TCAS ALERT**

AP+FD..........OFF

FLY MANUALLY TCAS ORDER

Ident.: PRO-ABN-AUTO_FLT-R-00014409.0001001 / 07 NOV 13

21

STATUS

INOP SYS

AP/FD TCAS

AUTO FLT YAW DAMPER 1(2)

Applicable to: ALL

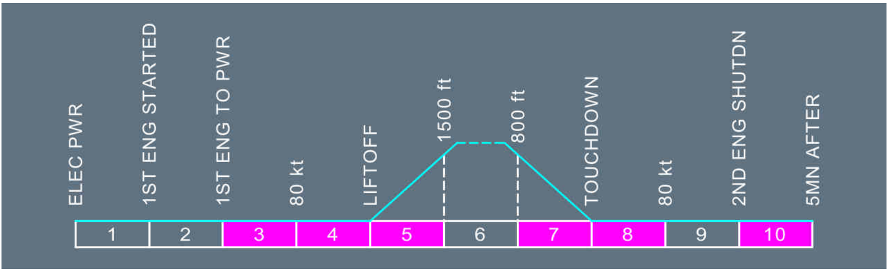
Ident.: PRO-ABN-AUTO_FLT-A-00016912.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one yaw damper actuator is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-A-00010444.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-AUTO_FLT-A-00017515.0001001 / 21 MAR 16

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	CAT 3 DUAL YAW DAMPER 1(2)

AUTO FLT YAW DAMPER SYS

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05240, 05345

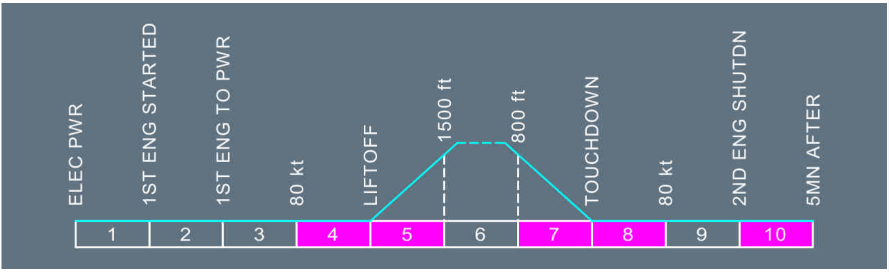
Ident.: PRO-ABN-AUTO_FLT-B-00016927.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yaw damper system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-B-00017469.0002001 / 22 MAR 17

L2 Loss of yaw dampers 1 + 2.

L1 FAC 1 .... OFF THEN ON

FAC 2 .... OFF THEN ON

- **If fault remains:**

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

F/CTL normal laws are lost. All protections, except maneuver protections, are lost.

MAX SPEED .... 320 KT

Continued on the following page

AUTO FLT YAW DAMPER SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-B-00017470.0003001 / 02 MAY 23

L12

22

STATUS

MAX SPEED........................ 320 KT

Speed is limited, due to the loss of high-speed protections.

APPR PROC

FOR LDG........................ USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3........................ON

This line is displayed when flaps are in CONF 3.

APPR SPD........................VREF + 10 KT

LDG DIST PROC........................ APPLY

ALTN LAW : PROT LOST
WHEN L/G DN : DIRECT LAW

INOP SYS

F/CTL PROT
YAW DAMPER
AP 1 + 2
CAT 2
STEEP APPR
GLS AUTOLAND

Note: At landing gear extension, control reverts to direct law in pitch, as well as in roll, Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

AUTO FLT YAW DAMPER SYS

Applicable to: MSN 01251

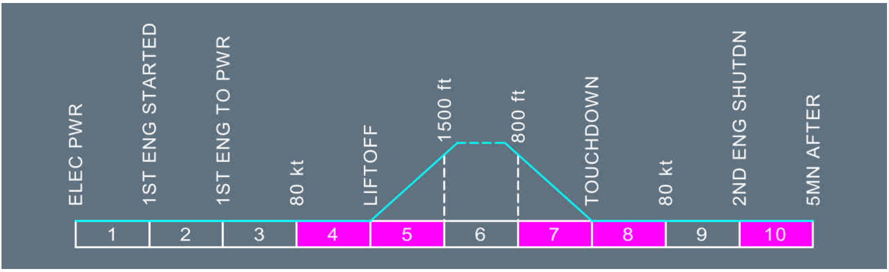
Ident.: PRO-ABN-AUTO_FLT-B-00016927.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yaw damper system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-B-00017469.0002001 / 22 MAR 17

L2 Loss of yaw dampers 1 + 2.

L1 FAC 1 .... OFF THEN ON

FAC 2 .... OFF THEN ON

- **If fault remains:**

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

F/CTL normal laws are lost. All protections, except maneuver protections, are lost.

MAX SPEED .... 320 KT

Continued on the following page

AUTO FLT YAW DAMPER SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-B-00017470.0002001 / 02 MAY 23

L12

23

STATUS

MAX SPEED.. 320 KT

Speed is limited, due to the loss of high-speed protections.

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. VREF + 10 KT

LDG DIST PROC... APPLY

ALTN LAW : PROT LOST
WHEN L/G DN : DIRECT LAW

INOP SYS

F/CTL PROT
YAW DAMPER
AP 1 + 2
CAT 2
STEEP APPR ◁
GLS AUTOLAND ◁

Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll, Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

AUTO FLT YAW DAMPER SYS

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

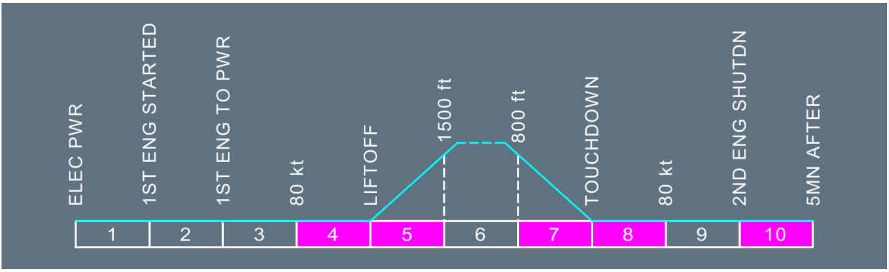
Ident.: PRO-ABN-AUTO_FLT-B-00016927.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yaw damper system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-B-00017469.0002001 / 22 MAR 17

L2 Loss of yaw dampers 1 + 2.

L1 FAC 1 .... OFF THEN ON
FAC 2 .... OFF THEN ON

- **If fault remains:**

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

F/CTL normal laws are lost. All protections, except maneuver protections, are lost.

MAX SPEED .... 320 KT

Continued on the following page

AUTO FLT YAW DAMPER SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-B-00017470.0006001 / 02 MAY 23

L12

24

STATUS

MAX SPEED... 320 KT

Speed is limited, due to the loss of high-speed protections.

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST
WHEN L/G DN : DIRECT LAW

INOP SYS

F/CTL PROT
YAW DAMPER
AP 1 + 2
CAT 2

Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll, Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

AUTO FLT YAW DAMPER SYS

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

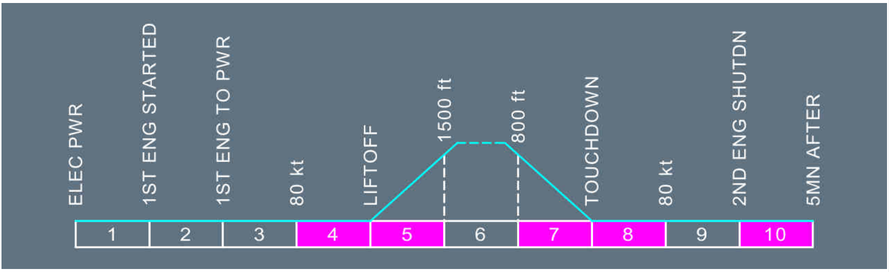
Ident.: PRO-ABN-AUTO_FLT-B-00016927.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yaw damper system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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AUTO FLT YAW DAMPER SYS

Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-07098

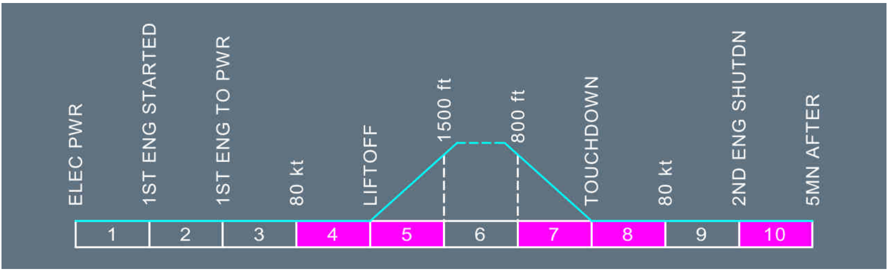
Ident.: PRO-ABN-AUTO_FLT-B-00016927.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yaw damper system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-B-00017469.0004001 / 04 NOV 20

L2 Loss of yaw dampers 1 + 2.

L1 FAC 1 .... OFF THEN ON

FAC 2 .... OFF THEN ON

- **If fault remains:**

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

L1 MAX SPEED .... 320 KT

Continued on the following page

AUTO FLT YAW DAMPER SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-B-00017470.0014001 / 02 MAY 23

L12

25

STATUS

MAX SPEED... 320 KT

Speed is limited, due to the loss of high-speed protections.

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD... VREF + 10 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

INOP SYS

F/CTL PROT
YAW DAMPER
AP 1 + 2
CAT 2
GLS AUTOLAND ⊲

Note: For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.

AUTO FLT YAW DAMPER SYS

Applicable to: MSN 08495-08596, 09190-09324

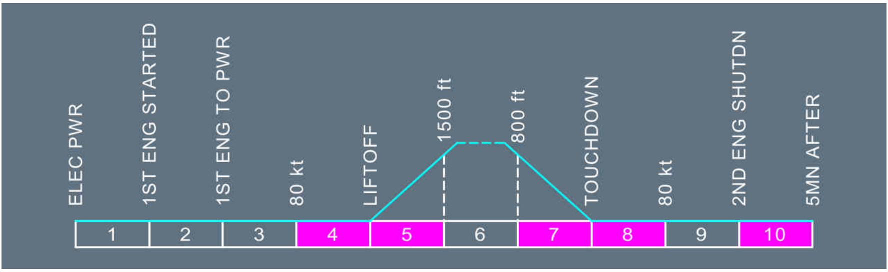
Ident.: PRO-ABN-AUTO_FLT-B-00016927.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yaw damper system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-B-00017469.0004001 / 04 NOV 20

L2 Loss of yaw dampers 1 + 2.

L1 FAC 1 .... OFF THEN ON
FAC 2 .... OFF THEN ON

- **If fault remains:**

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

L1 MAX SPEED .... 320 KT

Continued on the following page

AUTO FLT YAW DAMPER SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-B-00017470.0010001 / 04 NOV 20

L12

STATUS

MAX SPEED.. 320 KT

Speed is limited, due to the loss of high-speed protections.

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Will be displayed, when flaps in CONF 3.

APPR SPD.. VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

INOP SYS

F/CTL PROT
YAW DAMPER
AP 1 + 2
CAT 2
GLS AUTOLAND ◁

Note: For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.

AUTO FLT YAW DAMPER SYS

Applicable to: MSN 08635, 10949-11597

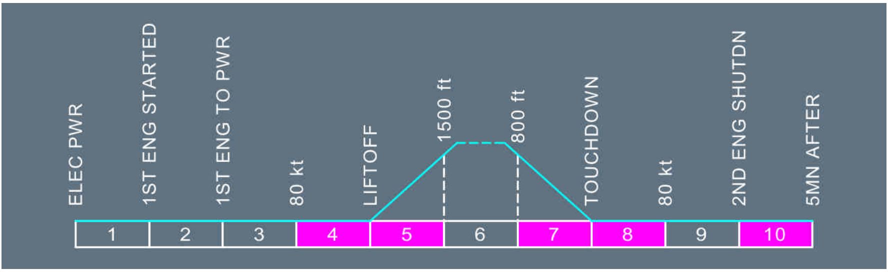
Ident.: PRO-ABN-AUTO_FLT-B-00016927.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yaw damper system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AUTO_FLT-B-00017469.0007001 / 04 NOV 20

26

L2 Loss of yaw dampers 1 + 2.

L1 FAC 1 .... OFF THEN ON

- **IF UNSUCCESSFUL:**

  FAC 2 .... OFF THEN ON

- **If fault remains:**

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.

MAX SPEED .... 320 KT

Continued on the following page

AUTO FLT YAW DAMPER SYS (Cont'd)

Ident.: PRO-ABN-AUTO_FLT-B-00017470.0015001 / 03 NOV 21

27

L12

STATUS

MAX SPEED.. 320 KT

Speed is limited due to the loss of high-speed protections.

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

APPR SPD...VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

INOP SYS

F/CTL PROT
YAW DAMPER
AP 1+2
CAT 2
GLS AUTOLAND

Note: *For the characteristics of the alternate law, Refer to DSC-27-20-20 Flight Controls Law Reconfiguration.*

AVIONICS SMOKE

Applicable to: ALL

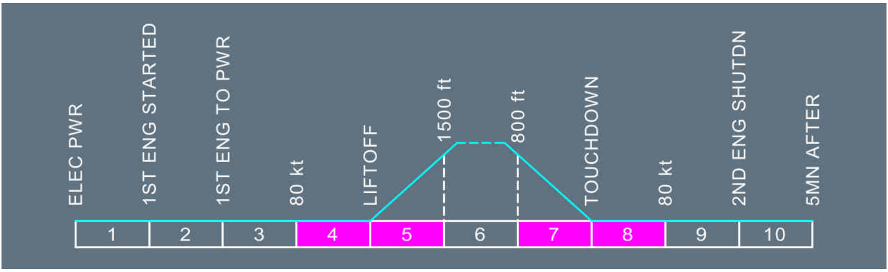
Ident.: PRO-ABN-AVNCS-M-00017405.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the ventilation extraction duct is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-AVNCS-M-00014922.0001001 / 22 MAR 17

L2 The description of this procedure is included in the SMOKE/FUMES/AVNCS SMOKE procedure (*Refer to procedure*)

Intentionally left blank

BLEED MONITORING FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

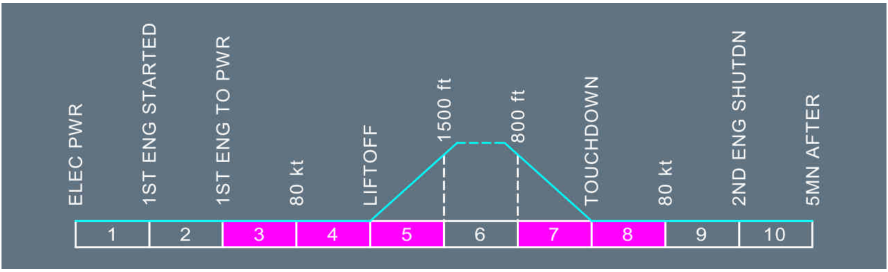
Ident.: PRO-ABN-BLEED-L-00017385.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both BMC are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-BLEED-L-00011111.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-BLEED-L-00011112.0001001 / 05 AUG 10

STATUS

INOP SYS

BMC 1 + 2

BLEED MONIT SYS 1(2) FAULT

Applicable to: MSN 04163-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BLEED-K-00017388.0002001 / 21 MAR 16

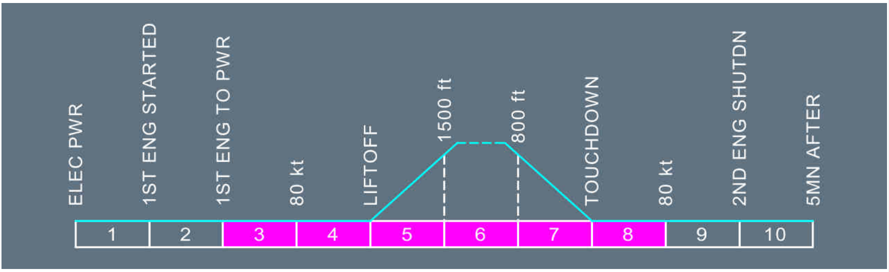
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the BMC 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-BLEED-K-00011109.0004001 / 25 FEB 14

2

Crew awareness.

Ident.: PRO-ABN-BLEED-K-00011110.0004001 / 17 MAR 11

3

STATUS

INOP SYS

BMC 1(2)

[MEM] LOSS OF BRAKING

Ident.: PRO-ABN-BRAKES-00011315.0002001 / 05 JUN 18

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

- **If no braking:**

  REV....................MAX

  L2 *If needed, the flight crew may keep maximum reverse thrust until full aircraft stop.*

  L1 BRAKE PEDALS....................RELEASE

  L2 *When the flight crew sets the A/SKID & N/W STRG sw to OFF, the control of the braking system is transferred from the BSCU to the ABCU, and the alternate braking mode is activated. Consequently the PF should release the brake pedals before the PM selects the A/SKID off.*
  This action avoids brutal braking application.
  For information on the alternate braking mode, Refer to DSC-32-30-10 Braking Modes - Alternate Braking without Anti-Skid.

  L1 A/SKID OFF....................ORDER

  L2 *The PF orders the PM to set the A/SKID & N/W STRG sw to OFF.*

  L1 A/SKID & N/W STRG....................OFF
  BRAKE PEDALS....................PRESS
  MAX BRK PR....................1000 PSI

  L2 *The ABCU automatically limits the brake pressure to 1 000 PSI. Monitor brake pressure on the BRAKES PRESS indicator.*

  L1
  - **If still no braking:**

    PARK BRAKE....................USE

    Use short successive parking brake applications to stop the aircraft.
    L2 *For more information on the parking brake, Refer to DSC-32-30-10 Braking Modes - Parking Brake.*

[MEM] LOSS OF BRAKING

Ident.: PRO-ABN-BRAKES-00011315.0001001 / 05 JUN 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

- **If no braking:**

REV..MAX

L2 *If needed, the flight crew may keep maximum reverse thrust until full aircraft stop.*

L1 BRAKE PEDALS..RELEASE

L2 *When the flight crew sets the A/SKID & N/W STRG sw to OFF, the alternate braking mode is activated. Consequently the PF should release the brake pedals before the PM selects the A/SKID off. This action avoids brutal braking application.*
For information on the alternate braking mode, Refer to DSC-32-30-10 Braking Modes - Alternate Braking without Anti-Skid.

L1 A/SKID OFF..ORDER

L2 *The PF orders the PM to set the A/SKID & N/W STRG sw to OFF.*

L1 A/SKID & N/W STRG..OFF
BRAKE PEDALS..PRESS
MAX BRK PR..1000 PSI

L2 *Limit brake pressure to approximately 1 000 PSI. Monitor brake pressure on the BRAKES PRESS indicator.*

L1
  - **If still no braking:**

    PARK BRAKE..USE

    Use short successive parking brake applications to stop the aircraft.

L2 *For more information on the parking brake, Refer to DSC-32-30-10 Braking Modes - Parking Brake.*

[QRH] ASYMMETRIC BRAKING

Ident.: PRO-ABN-BRAKES-00011331.0001001 / 17 MAR 17
2 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Apply this procedure when all brakes of one gear are released.

AVOID XWIND > 10 KT FROM SIDE OF AVAILABLE BRAKE
APPLY BRAKE PROGRESSIVELY ON AVAILABLE SIDE
USE RUDDER TO COUNTER LATERAL DEVIATION

- **If reverser inoperative on same side as inoperative brakes:** DO NOT USE REVERSERS

LDG DIST PROC..........APPLY

[QRH] RESIDUAL BRAKING

Ident.: PRO-ABN-BRAKES-00011318.0001001 / 17 MAR 17
Applicable to: ALL

- **In flight:**
  BRAKE PEDALS..........PRESS SEVERAL TIMES
  Press the brake pedals several times. This could zero a residual pressure on the alternate system.
  - **If residual pressure remains:**
    A/SKID & N/W STRG sel..........KEEP ON
    - **For landing:**
      AUTO/BRK..........MED
      Using MED mode gives immediate priority to normal braking upon landing gear touchdown, which cancels residual alternate pressure.
      - **If autobrake not available:**
        APPLY BRAKING JUST AFTER TOUCHDOWN

    POSSIBLE BRAKING ASYMMETRY

  Note: *If tire damage is suspected after landing, Refer to LIM-LG Taxi with Deflated or Damaged Tires.*

BRAKES A/SKID N/WS FAULT OR A/SKID N/WS OFF

Applicable to: ALL

Ident.: PRO-ABN-BRAKES-J-00017807.0002001 / 04 DEC 18

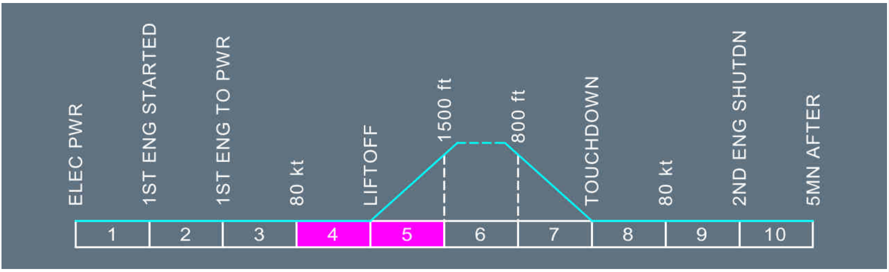
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- There is a loss of normal brake system associated with Y HYD SYS LO PRESS, or
- Both BSCU channels are failed, or
- The A/SKID & N/W STRG sw is set to OFF.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-BRAKES-J-00018571.0001001 / 05 MAR 19

MAX BRK PR.. 1000 PSI

L2 *Monitor brake pressure on the BRAKES PRESS indicator. Limit brake pressure to approximately 1 000 PSI and, at low ground speed, adjust brake pressure as required. Avoid landing on a runway covered with ice (cold & dry).*

Continued on the following page

BRAKES A/SKID N/WS FAULT OR A/SKID N/WS OFF (Cont'd)

Ident.: PRO-ABN-BRAKES-J-00018670.0003001 / 21 MAR 16

L12

STATUS

MAX BRK PR..1000 PSI

LDG DIST PROC.. APPLY

- **If Y SYS LO PR:**
  BRK Y ACCU PR ONLY

CAT 3 SINGLE ONLY

See (1)

INOP SYS

CAT 3 DUAL
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK

(1) *Note:* *Automatic rollout is not permitted as specified in QRH (Refer to QRH/OPS Required Equipment for CAT2 and CAT3).*

BRAKES ALTN BRK FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BRAKES-R-00017816.0001001 / 21 MAR 16

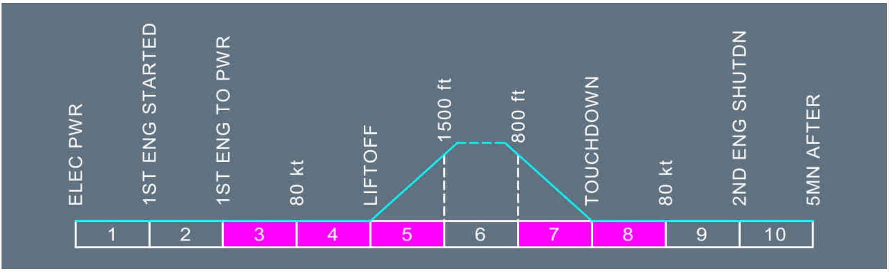
3

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the alternate braking function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-BRAKES-R-00018357.0001001 / 21 MAR 16

4

Crew awareness.

Ident.: PRO-ABN-BRAKES-R-00011328.0001001 / 05 AUG 10

5

STATUS

INOP SYS

ALTN BRK

BRAKES ALTN L(R) RELEASED

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BRAKES-S-00017817.0001001 / 21 MAR 16

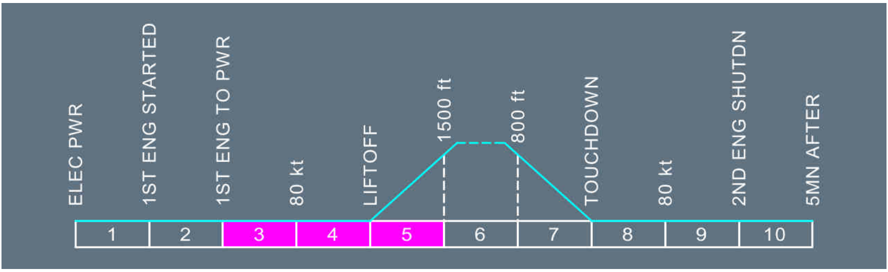
6

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the brakes of one gear is released.
It is detected when the landing gear is downlocked, at least one engine is running, and alternate braking is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-BRAKES-S-00011329.0001001 / 05 AUG 10

7

L2 As long as the normal braking system is available, braking is normal. In alternate braking mode, braking of all wheels on one gear is lost.

L1
- **If normal braking is lost:**
  ASYM BRK PROC.. APPLY

Ident.: PRO-ABN-BRAKES-S-00011330.0001001 / 11 MAY 12

8

STATUS

	INOP SYS
● **If normal braking is lost:** LDG DIST PROC..................APPLY	ALTN L(R) BRK

BRAKES AUTO BRK FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 11531

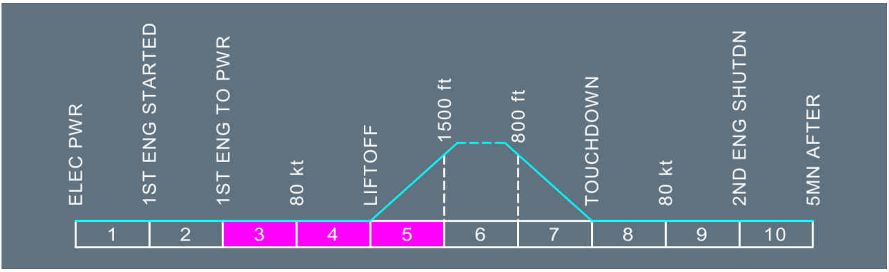
Ident.: PRO-ABN-BRAKES-N-00017806.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the autobrake is failed, after being armed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-BRAKES-N-00018672.0001001 / 26 NOV 19

9

L2 The AUTO BRK FAULT alert may be due to a failure of the autobrake mode itself, or to a brake released condition. The flight crew should, therefore, be prepared to counter a possible slight lateral drift at landing, via the rudder.

L1
- **If one brake released on one gear, or one brake released on each gear:**
  BRAKE RELEASED

Continued on the following page

BRAKES AUTO BRK FAULT (Cont'd)

Ident.: PRO-ABN-BRAKES-N-00011314.0001001 / 21 NOV 17

10

STATUS

LDG DIST PROC.. APPLY

CAT 3 SINGLE ONLY

INOP SYS

CAT 3 DUAL
AUTO BRK
NORM BRK (1)

---

(1) *(NORM BRK is inoperative in case of failure causing the AUTO BRK FAULT caution to trigger with a switch to alternate braking (failures affecting the BSCU, the Normal Selector Valve, the Normal Servo Valve, or brake pedal transmitter unit).)*

BRAKES AUTO BRK FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

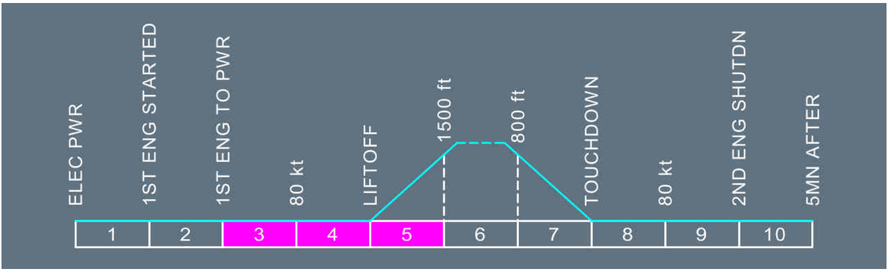
Ident.: PRO-ABN-BRAKES-N-00017806.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the autobrake is failed, after being armed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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8
9
10

BRAKES AUTO BRK FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597

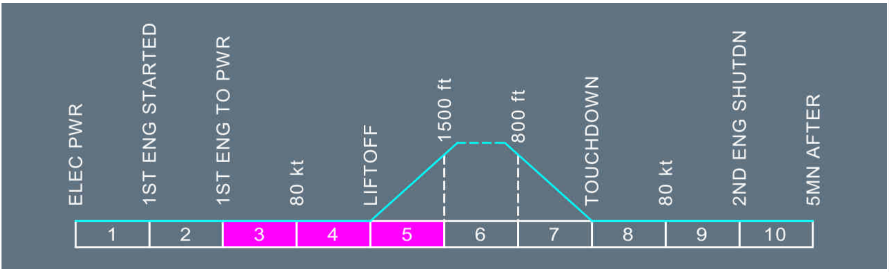
Ident.: PRO-ABN-BRAKES-N-00017806.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the autobrake is failed, after being armed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-BRAKES-N-00018672.0004001 / 21 MAR 16

11

Crew awareness.

Ident.: PRO-ABN-BRAKES-N-00011314.0004001 / 21 NOV 17

12

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	CAT 3 DUAL AUTO BRK

BRAKES BRK Y ACCU LO PR

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BRAKES-T-00017820.0001001 / 21 MAR 16

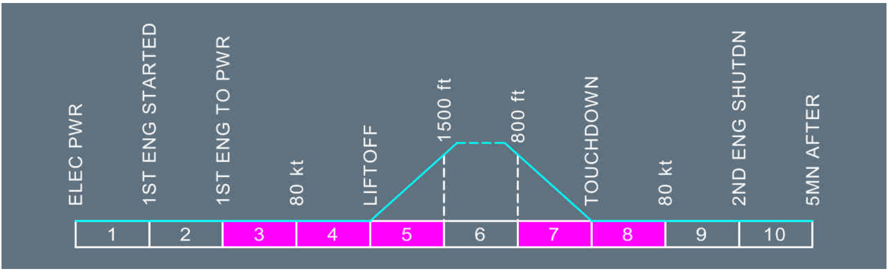
13

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the yellow accumulator is in low pressure.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-BRAKES-T-00011332.0002001 / 05 AUG 10

14

L2 The yellow electrical pump can be used to pressurize the accumulator. If the accumulator pressure is still low, chocks are required before Engine 1 shut down. This message is replaced on ground by BRAKES PARK BRK LO PR if parking brake is on and yellow hydraulic system pressure is low.

L1
- **On ground:**
  - **BEFORE ENG SHUT DOWN:**
    CHOCKS CONSIDER

Ident.: PRO-ABN-BRAKES-T-00011333.0001001 / 05 AUG 10

15

STATUS

- **If Y SYS LO PR**
  NORM BRK ONLY

INOP SYS

BRK Y ACCU

BRAKES HOT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

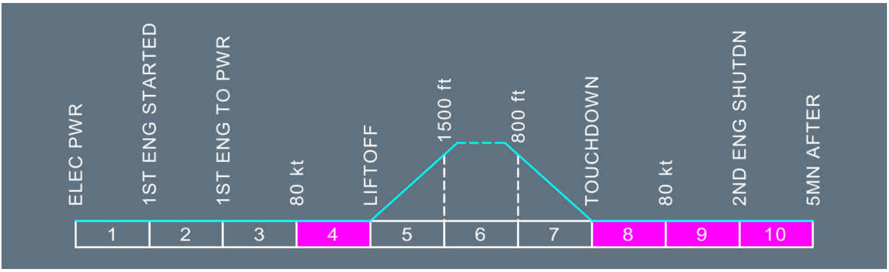
Ident.: PRO-ABN-BRAKES-M-00017786.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one brake temperature is above 300 °C. The alert disappears when the highest brake temperature is below 290 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

BRAKES HOT (Cont'd)

Ident.: PRO-ABN-BRAKES-M-00018675.0008001 / 21 MAR 17

16

- **On ground:**

  PARK BRK: PREFER CHOCKS

L2 *If the BRAKES HOT alert is still on when the aircraft is parked, the flight crew should not set the PARKING BRK ON.*

L1 BRK FAN ✻ ....ON

L2 *Note: Before they select the brake fans ✻ at the gate, the flight crew should first warn the ground personnel in order to avoid blowing carbon brake dust on them.*

L1 DELAY T.O. FOR COOL

L2
- *Delay takeoff, until the brake temperature is below 300 °C with the brake fans OFF, and 150 °C with the brake fans ✻ ON*
- *Refer to PRO-NOR-SOP-21 After Landing - Brake Temperature for brake temperature limitations requiring maintenance actions.*

L1
- **In flight:**
  - **IF PERF PERMITS:**

    MAX SPEED..250/.60

    L/G..DN FOR COOL

L2 *If performance permits, the landing gear should be extended or, if already extended, it should remain so, to improve brake cooling.*

L1
  - **FOR L/G RETRACTION:**

    MAX SPEED..220/.54

L2 *Reduce speed for landing gear retraction, when the brake temperature is within limits.*

Continued on the following page

BRAKES HOT (Cont'd)

Ident.: PRO-ABN-BRAKES-M-00011312.0001001 / 05 AUG 10

L12

STATUS

MAX SPEED... 280/.67

See (1)

(1) *As long as the landing gear is extended, limit the speed to 280 kt/M 0.67. For landing gear retraction when the brake temperature is within limits, reduce the speed to 220 kt.*

BRAKES HOT

Applicable to: MSN 01251

Ident.: PRO-ABN-BRAKES-M-00017786.0002001 / 21 MAR 16

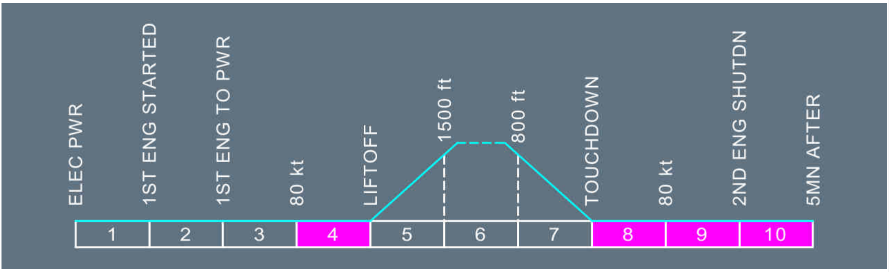
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when one brake temperature is above 300 °C. The alert disappears when the highest brake temperature is below 290 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

BRAKES HOT (Cont'd)

Ident.: PRO-ABN-BRAKES-M-00018675.0005001 / 21 MAR 17

- **On ground:**

  PARK BRK: PREFER CHOCKS

  L2 *If the BRAKES HOT alert is still on when the aircraft is parked, the flight crew should not set the PARKING BRK ON.*

  L1 BRK FAN ....ON

  L2 *Note: Before they select the brake fans at the gate, the flight crew should first warn the ground personnel in order to avoid blowing carbon brake dust on them.*

  L1 DELAY T.O. FOR COOL

  L2
  - *Delay takeoff, until the brake temperature is below 300 °C with the brake fans OFF, and 150 °C with the brake fans ON*
  - *Refer to PRO-NOR-SOP-21 After Landing - Brake Temperature for brake temperature limitations requiring maintenance actions.*

L1
- **In flight:**
  - **IF PERF PERMITS:**

    L/G..DN FOR COOL
    MAX SPEED..250/.60

    L2 *If performance permits, the landing gear should be extended or, if already extended, it should remain so, to improve brake cooling.*

  L1
  - **FOR L/G RETRACTION:**

    MAX SPEED..220/.52

    L2 *Reduce speed for landing gear retraction, when the brake temperature is within limits.*

Continued on the following page

BRAKES HOT (Cont'd)

Ident.: PRO-ABN-BRAKES-M-00011312.0001001 / 05 AUG 10

L12

STATUS

MAX SPEED.. 280/.67

See [(1)]

(1) *As long as the landing gear is extended, limit the speed to 280 kt/M 0.67.*
For landing gear retraction when the brake temperature is within limits, reduce the speed to 220 kt.

BRAKES HOT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-BRAKES-M-00017786.0002001 / 21 MAR 16

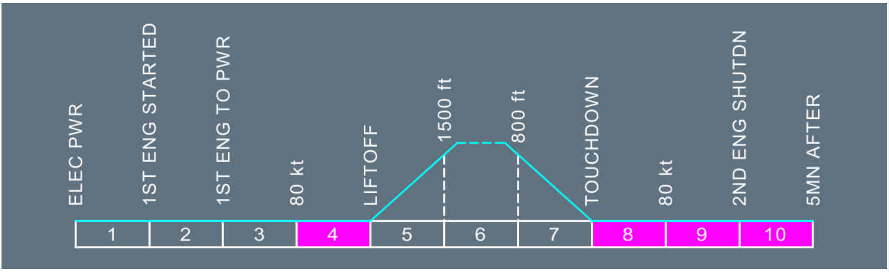
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when one brake temperature is above 300 °C. The alert disappears when the highest brake temperature is below 290 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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4
5
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8
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Continued on the following page

BRAKES HOT (Cont'd)

Ident.: PRO-ABN-BRAKES-M-00011312.0001001 / 05 AUG 10

L12

STATUS

MAX SPEED.. 280/.67

See (1)

(1) *As long as the landing gear is extended, limit the speed to 280 kt/M 0.67.*
For landing gear retraction when the brake temperature is within limits, reduce the speed to 220 kt.

BRAKES NORM + ALTN FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BRAKES-Q-00017819.0001001 / 21 MAR 16

17

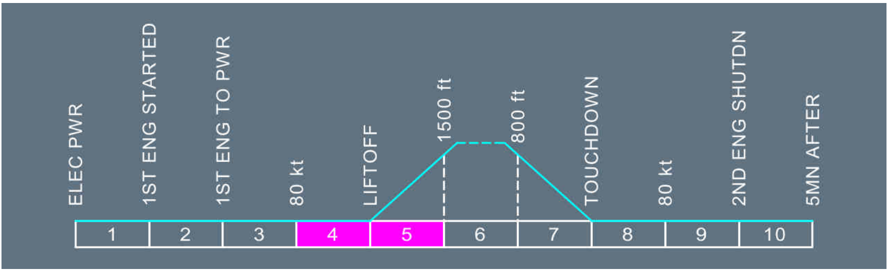
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the normal and alternate braking functions are lost. The parking brake is still available.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-BRAKES-Q-00018358.0001001 / 21 MAR 16

18

PARK BRK ONLY

Continued on the following page

BRAKES NORM + ALTN FAULT (Cont'd)

Ident.: PRO-ABN-BRAKES-Q-00011325.0001001 / 02 MAY 23

19

20

STATUS

PARK BRK ONLY

LDG DIST PROC.. APPLY

CAT 3 SINGLE ONLY

INOP SYS

CAT 3 DUAL
ANTI SKID
N/W STRG [1]
NORM BRK
AUTO BRK
ALTN BRK

[1] *(If antiskid off or faulty and if yellow ACCU low pressure)*

BRAKES NORM BRK FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324

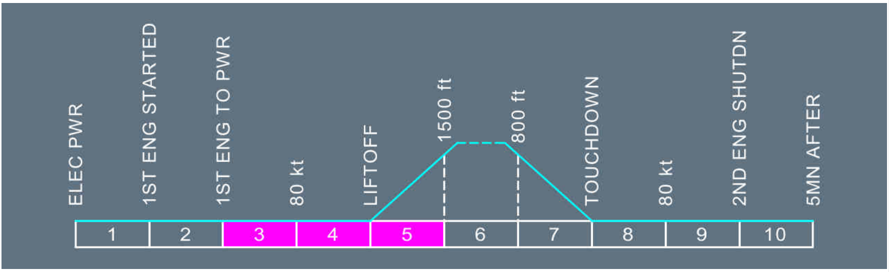
Ident.: PRO-ABN-BRAKES-O-00017814.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the normal braking function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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4
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6
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8
9
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Continued on the following page

BRAKES NORM BRK FAULT (Cont'd)

Ident.: PRO-ABN-BRAKES-O-00018679.0001001 / 21 MAR 16

21

Crew awareness.

Ident.: PRO-ABN-BRAKES-O-00011321.0001001 / 09 NOV 17

22

STATUS

LDG DIST PROC.. APPLY

ALTN Y BRK WITH A/SKID
CAT 3 SINGLE ONLY

INOP SYS

CAT 3 DUAL
NORM BRK
AUTO BRK

BRAKES NORM BRK FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-BRAKES-O-00017814.0002001 / 09 NOV 21

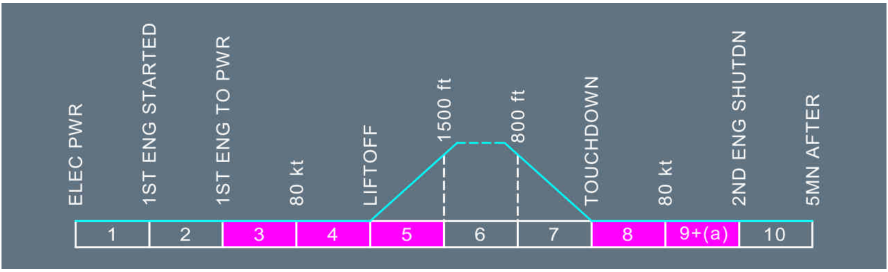
23

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the normal braking function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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6
7
8
9+(a)
10

Note: *(a) Alert inhibited during the first 60 s of the flight phase 9.*

Continued on the following page

BRAKES NORM BRK FAULT (Cont'd)

Ident.: PRO-ABN-BRAKES-O-00018679.0001001 / 21 MAR 16

24

Crew awareness.

Ident.: PRO-ABN-BRAKES-O-00011321.0001001 / 09 NOV 17

25

STATUS

LDG DIST PROC.. APPLY

ALTN Y BRK WITH A/SKID
CAT 3 SINGLE ONLY

INOP SYS

CAT 3 DUAL
NORM BRK
AUTO BRK

BRAKES PARK BRK FAULT ◁

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BRAKES-X-00017823.0001001 / 21 MAR 16

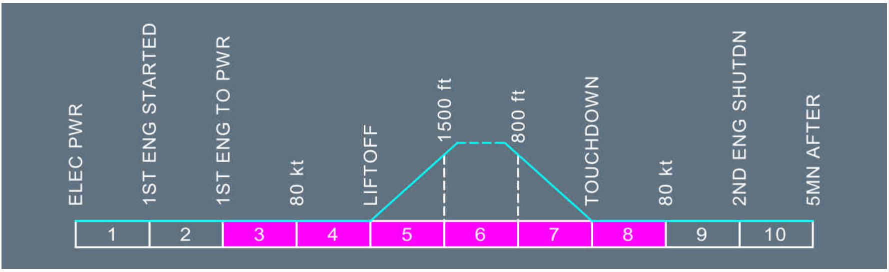
26

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a discrepancy between the position of the parking brake handle and the applied parking brake pressure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

BRAKES PARK BRK FAULT ◁ (Cont'd)

Ident.: PRO-ABN-BRAKES-X-00018359.0002001 / 20 MAY 16

27

- **On ground:**
  - **If PARKING BRK handle is OFF and parking brake pressure is still applied:**
    BRK PRESS STILL APPLIED
  - **If PARKING BRK handle is ON and no parking brake pressure is applied:**
    BRK PRESS RELEASED
    PARK BRK.. OFF
    - **BEFORE ENG SHUT DOWN:**
      CHOCKS.. CONSIDER

BRAKES PARK BRK LO PR

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BRAKES-U-00017821.0003001 / 21 MAR 16

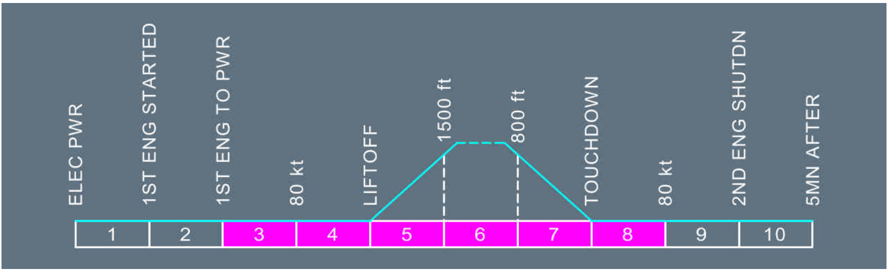
28

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure in the yellow accumulator and hydraulic system is low and the parking brake is on.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

BRAKES PARK BRK LO PR (Cont'd)

Ident.: PRO-ABN-BRAKES-U-00018572.0003001 / 21 MAR 16

29

L2 Chocks are required before Engine 1 shut down.

L1
- **On ground:**
  - **BEFORE ENG SHUT DOWN:**

    CHOCKS CONSIDER

Ident.: PRO-ABN-BRAKES-U-00011335.0003001 / 05 AUG 10

30

STATUS

	INOP SYS
NORM BRK ONLY	BRK Y ACCU

BRAKES PARK BRK ON

Applicable to: ALL

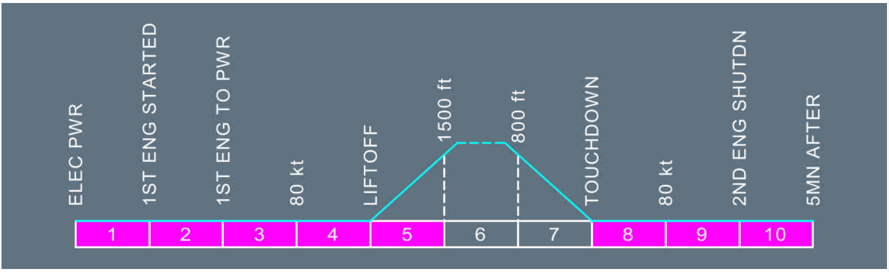
Ident.: PRO-ABN-BRAKES-Y-00017815.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the parking brake is ON in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

BRAKES PARK BRK ON (Cont'd)

Ident.: PRO-ABN-BRAKES-Y-00018360.0001001 / 21 MAR 16

PARK BRK.. OFF

BRAKES RELEASED

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-BRAKES-P-00017813.0001001 / 21 MAR 16

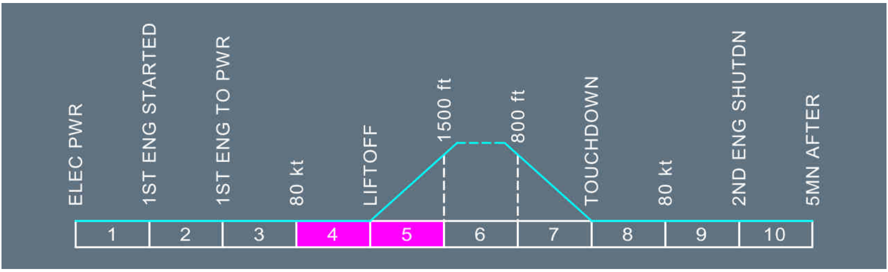
31

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the brake of one wheel is released. It is detected when the landing gear is downlocked, at least one engine is running, and normal braking is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-BRAKES-P-00018663.0001001 / 21 MAR 16

32

Crew awareness.

Continued on the following page

BRAKES RELEASED (Cont'd)

Ident.: PRO-ABN-BRAKES-P-00011323.0001001 / 21 NOV 17

33

STATUS

LDG DIST PROC.. APPLY

CAT 2 ONLY

INOP SYS

CAT 3
AUTO BRK

BRAKES SYS 1(2) FAULT

Applicable to: ALL

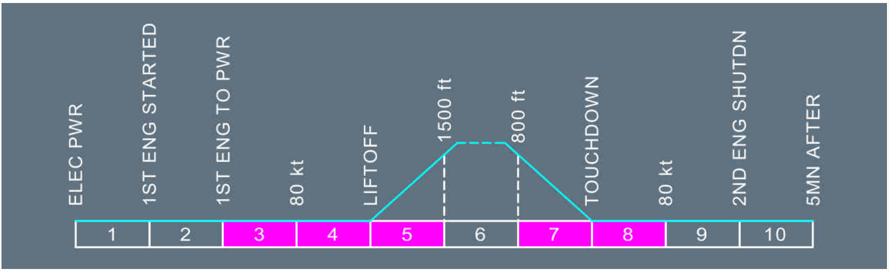
Ident.: PRO-ABN-BRAKES-L-00017812.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one BSCU channel is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-BRAKES-L-00011309.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

BRAKES SYS 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-BRAKES-L-00011310.0001001 / 05 AUG 10

STATUS

INOP SYS

BRK SYS 1(2)

Intentionally left blank

BRAKES-N/WS MINOR FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NWS-W-00017730.0001001 / 21 MAR 16

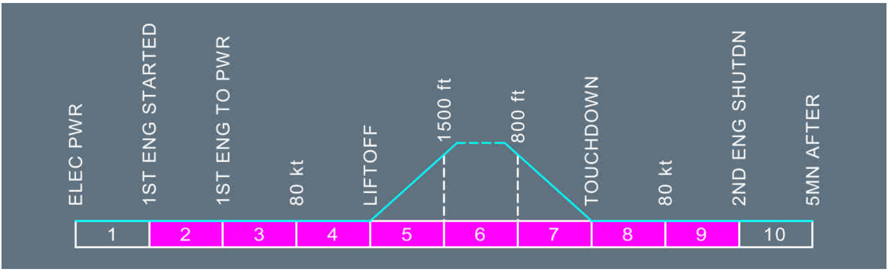
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a minor fault of the nose wheel steering system is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NWS-W-00011326.0001001 / 25 FEB 14

2

Crew awareness.

Intentionally left blank

[QRH] CABIN OVERPRESSURE

Ident.: PRO-ABN-CAB_PR-00010761.0001001 / 17 MAR 17
Applicable to: ALL

Apply the following procedure (not displayed on ECAM) in case of total loss of cabin pressure control leading to overpressure.

PACK 1 OR 2...OFF
VENTILATION BLOWER...OVRD
VENTILATION EXTRACT...OVRD

Cabin air is extracted overboard

ΔP...FREQUENTLY MONITOR

- **If ΔP > 9 PSI:**
  LAND ASAP

  PACK 1...OFF
  PACK 2...OFF

- **10 min before landing:**
  PACK 1...OFF
  PACK 2...OFF
  VENTILATION BLOWER...AUTO
  VENTILATION EXTRACT...AUTO

- **Before door opening:** CHECK ΔP ZERO

CAB PR EXCESS CAB ALT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-CAB_PR-T-00017316.0005001 / 21 MAR 16

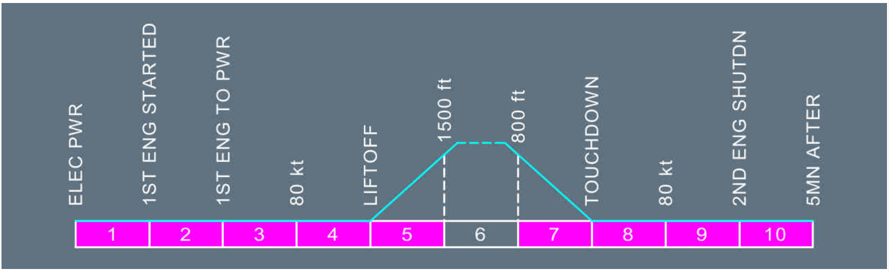
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- In climb or descent, the cabin altitude is above the higher of:
  - 9 550 ft, or
  - 1 000 ft above the airfield pressure altitude.
- In cruise, the cabin altitude is above 9 550 ft.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

CAB PR EXCESS CAB ALT (Cont'd)

Ident.: PRO-ABN-CAB_PR-T-00018066.0005001 / 20 DEC 16

1

Rely on the CAB PR EXCESS CAB ALT warning even if not confirmed on the CAB PRESS SD page. The warning can be triggered by a cabin pressure sensor different from the one used to control the pressure and display the cabin altitude on the SD.

- **If above FL 100:**
  CREW OXY MASKS .... USE
  - **If below FL 160:**
    DESCENT .... INITIATE
    CABIN CREW .... ADVISE
    MAX FL 100/MEA-MORA
  - **If above FL 160:**
    SIGNS .... ON
    EMER DESCENT:
    DESCENT .... INITIATE
    - **If A/THR is not active:**
      THR LEVERS .... IDLE

L2 *If the A/THR is active, check A/THR is at IDLE on the ED.*

L1 SPD BRK .... FULL

L2 *Extension of speedbrakes will significantly increase VLS.*
In order to avoid autopilot disconnection and automatic retraction of speedbrakes due to possible activation of angle of attack protection, allow the speed to increase before starting to use speedbrakes.

L1 SPD .... MAX/APPROPRIATE

L2 *Descend at maximum appropriate speed. However, if structural damage is suspected use the flight controls with care and reduce speed as appropriate. The landing gear may be extended. In this case, speed must be reduced to VLO/VLE.*

L1 ENG MODE SEL .... IGN
ATC .... NOTIFY

L2 *Notify ATC of the nature of the emergency, and state intention. The flight crew can communicate with the ATC using voice, or CPDLC when the voice contact cannot be established or has a poor quality.*

L1 EMER DESCENT (PA) .... ANNOUNCE

L2 *The flight crew must inform the cabin of emergency descent on the PA system.*

Continued on the following page

CAB PR EXCESS CAB ALT (Cont'd)

L1 XPDR 7700.....................CONSIDER

L2 *Squawk 7700 unless otherwise specified by ATC.*

Note: To save oxygen, set the oxygen diluter selector to N position.
With the oxygen diluter left to 100 %, oxygen quantity may not be sufficient for the entire descent profile.
Ensure crew communication is established with oxygen masks. Avoid continuous use of the interphone to minimize the interference from the oxygen mask breathing noise.

L1 MAX FL.....................100/MEA-MORA

- **IF CAB ALT > 14 000 FT:**

PAX OXY MASKS.....................MAN ON

L2 *This action confirms that the passenger oxygen masks are released.*

Note: When descent is established and if time permits, check that the OUTFLOW VALVE is closed on the CAB PRESS SD page. If it is not closed and ΔP is positive, select the other CPC. If the OUTFLOW VALVE is still not closing set the cabin pressure MODE SEL pb to MAN and the V/S CTL sw to full down.
Notify the cabin crew when the aircraft reaches a safe flight level, and when cabin oxygen is no more necessary.

Ident.: PRO-ABN-CAB_PR-T-00010755.0002001 / 22 DEC 14

2

STATUS

MAX FL.....................100/MEA-MORA

CAB PR EXCESS CAB ALT

Applicable to: MSN 01251

Ident.: PRO-ABN-CAB_PR-T-00017316.0005001 / 21 MAR 16

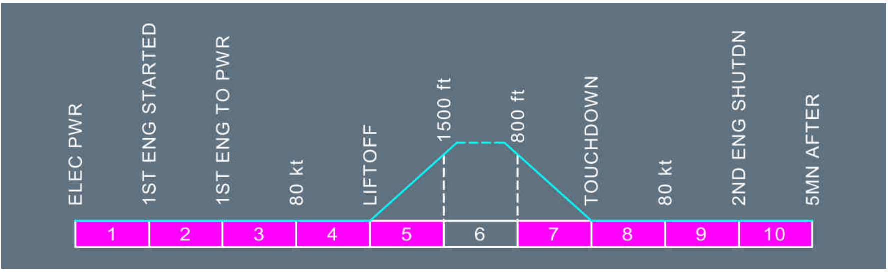
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- In climb or descent, the cabin altitude is above the higher of:
  - 9 550 ft, or
  - 1 000 ft above the airfield pressure altitude.
- In cruise, the cabin altitude is above 9 550 ft.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

CAB PR EXCESS CAB ALT (Cont'd)

Ident.: PRO-ABN-CAB_PR-T-00018066.0002001 / 20 DEC 16

Rely on the CAB PR EXCESS CAB ALT warning even if not confirmed on the CAB PRESS SD page. The warning can be triggered by a cabin pressure sensor different from the one used to control the pressure and display the cabin altitude on the SD.

- **If above FL 100:**
  CREW OXY MASK....................ON

DESCENT....................INITIATE
EMER DESCENT FL 100/MEA (OR MINIMUM OBSTACLE CLEARANCE ALTITUDE)

- **If A/THR is not active:**
  THR LEVERS....................IDLE

L2 *If the A/THR is active, check A/THR is at IDLE on the ED.*

L1 SPD BRK....................FULL

L2 *Extension of speedbrakes will significantly increase VLS.*
In order to avoid autopilot disconnection and automatic retraction of speedbrakes due to possible activation of angle of attack protection, allow the speed to increase before starting to use speedbrakes.

L1 SPD....................MAX/APPROPRIATE

L2 *Descend at maximum appropriate speed. However, if structural damage is suspected use the flight controls with care and reduce speed as appropriate. The landing gear may be extended. In this case, speed must be reduced to VLO/VLE.*

L1 SIGNS....................ON
ENG MODE....................IGN
ATC....................NOTIFY

L2 *Notify ATC of the nature of the emergency, and state intention. The flight crew can communicate with the ATC using voice, or CPDLC when the voice contact cannot be established or has a poor quality.*
Squawk 7700 unless otherwise specified by ATC.

L12

Note: *To save oxygen, set the oxygen diluter selector to N position.*
With the oxygen diluter left to 100 %, oxygen quantity may not be sufficient for the entire descent profile.

Continued on the following page

CAB PR EXCESS CAB ALT (Cont'd)

Ensure that the flight crew can communicate wearing oxygen masks. Avoid the continuous use of the interphone position to minimize the interference from the noise of the oxygen mask.

L1 ● **IF CAB ALT > 14 000 FT:**

PAX OXY MASKS...MAN ON

L2 *This action confirms that the passenger oxygen masks are released.*

Note: *When descent is established and if time permits, check that the OUTFLOW VALVE is closed on the CAB PRESS SD page. If it is not closed and ΔP is positive, select the other CPC. If the OUTFLOW VALVE is still not closing set the cabin pressure MODE SEL pb to MAN and the V/S CTL sw to full down.*
Notify the cabin crew when the aircraft reaches a safe flight level, and when cabin oxygen is no more necessary.

CAB PR EXCESS CAB ALT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-CAB_PR-T-00017316.0005001 / 21 MAR 16

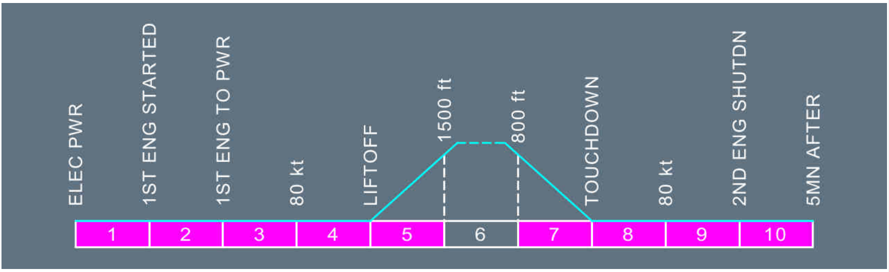
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- In climb or descent, the cabin altitude is above the higher of:
  - 9 550 ft, or
  - 1 000 ft above the airfield pressure altitude.
- In cruise, the cabin altitude is above 9 550 ft.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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CAB PR EXCESS CAB ALT

Applicable to: MSN 02014, 06561

Ident.: PRO-ABN-CAB_PR-T-00017316.0005001 / 21 MAR 16

ANNUNCIATIONS

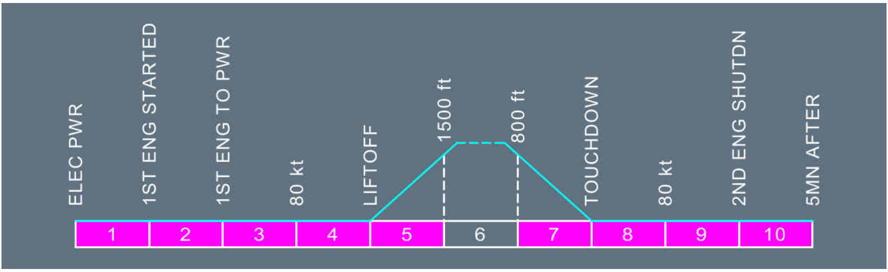
Triggering Conditions:

L2

This alert triggers when:

- In climb or descent, the cabin altitude is above the higher of:
  - 9 550 ft, or
  - 1 000 ft above the airfield pressure altitude.
- In cruise, the cabin altitude is above 9 550 ft.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

CAB PR EXCESS CAB ALT (Cont'd)

Ident.: PRO-ABN-CAB_PR-T-00018066.0004001 / 20 DEC 16

Rely on the CAB PR EXCESS CAB ALT warning even if not confirmed on the CAB PRESS SD page. The warning can be triggered by a cabin pressure sensor different from the one used to control the pressure and display the cabin altitude on the SD.

- **If above FL 100:**

  CREW OXY MASK.....USE

  - **If below FL 160:**

    DESCENT.....INITIATE
    MAX FL.....100/MEA

  - **If above FL 160:**

    SIGNS.....ON
    EMER DESCENT:
    DESCENT.....INITIATE

    - **If A/THR is not active:**

      THR LEVERS.....IDLE

      L2 *If the A/THR is active, check A/THR is at IDLE on the ED.*

    L1 SPD BRK.....FULL

    L2 *Extension of speedbrakes will significantly increase VLS.*
    In order to avoid autopilot disconnection and automatic retraction of speedbrakes due to possible activation of angle of attack protection, allow the speed to increase before starting to use speedbrakes.

    L1 SPD.....MAX/APPROPRIATE

    L2 *Descend at maximum appropriate speed. However, if structural damage is suspected use the flight controls with care and reduce speed as appropriate. The landing gear may be extended. In this case, speed must be reduced to VLO/VLE.*

    L1 ENG MODE SEL.....IGN
    ATC.....NOTIFY

    L2 *Notify ATC of the nature of the emergency, and state intention. The flight crew can communicate with the ATC using voice, or CPDLC when the voice contact cannot be established or has a poor quality.*
    Squawk 7700 unless otherwise specified by ATC.

    L12

    Note: To save oxygen, set the oxygen diluter selector to N position.

Continued on the following page

CAB PR EXCESS CAB ALT (Cont'd)

With the oxygen diluter left to 100 %, oxygen quantity may not be sufficient for the entire descent profile.
Ensure that the flight crew can communicate wearing oxygen masks. Avoid the continuous use of the interphone position to minimize the interference from the noise of the oxygen mask.

L1 MAX FL.......... 100/MEA

- **IF CAB ALT > 14 000 FT:**

PAX OXY MASKS.......... MAN ON

L2 *This action confirms that the passenger oxygen masks are released.*

Note: *When descent is established and if time permits, check that the OUTFLOW VALVE is closed on the CAB PRESS SD page. If it is not closed and ΔP is positive, select the other CPC. If the OUTFLOW VALVE is still not closing set the cabin pressure MODE SEL pb to MAN and the V/S CTL sw to full down.*
Notify the cabin crew when the aircraft reaches a safe flight level, and when cabin oxygen is no longer necessary.

Ident.: PRO-ABN-CAB_PR-T-00010755.0001001 / 05 AUG 10

STATUS

MAX FL.......... 100/MEA

CAB PR EXCES RESIDUAL PR

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-CAB_PR-AE-00017328.0001001 / 21 MAR 16

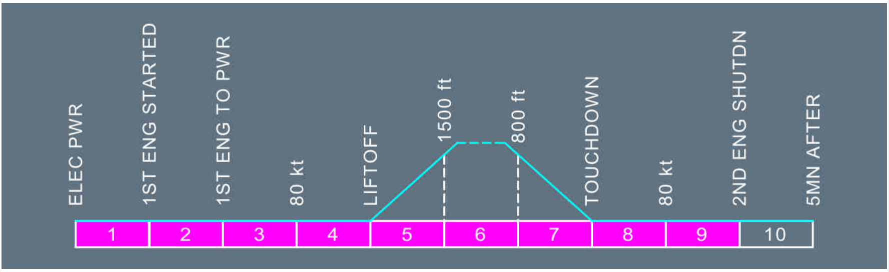
3

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the differential pressure is still above 2.5 hPa (0.036 PSI) 12 s after the last engine shutdown.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-AE-00018790.0002001 / 21 MAR 16

4

PACK 1....................OFF
PACK 2....................OFF
CABIN CREW....................ALERT

CAB PR LDG ELEV FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

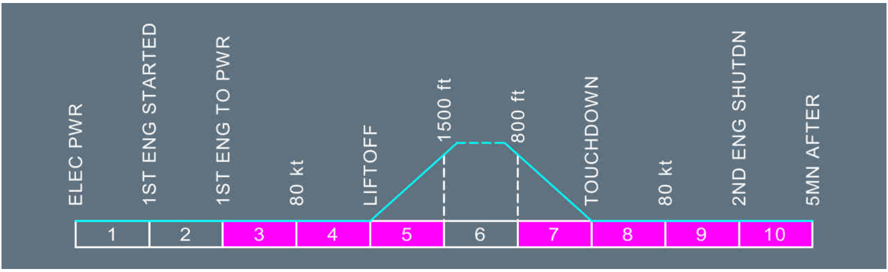
Ident.: PRO-ABN-CAB_PR-AF-00017325.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the LDG ELEV selector is set to AUTO and the landing field elevation of the FMGS is not available.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-AF-00018936.0002001 / 21 MAR 16

5

LDG ELEV.. ADJUST

L2 *The flight crew must select the landing field elevation manually with the LDG ELEV selector. Refer to the LDG ELEV indication on the CRUISE page on the CAB PRESS SD page to adjust the required landing field elevation.*

Note: If the landing is performed on QFE, set 0 ft on LDG ELEV selector.

CAB PR LDG ELEV FAULT

Applicable to: MSN 01251

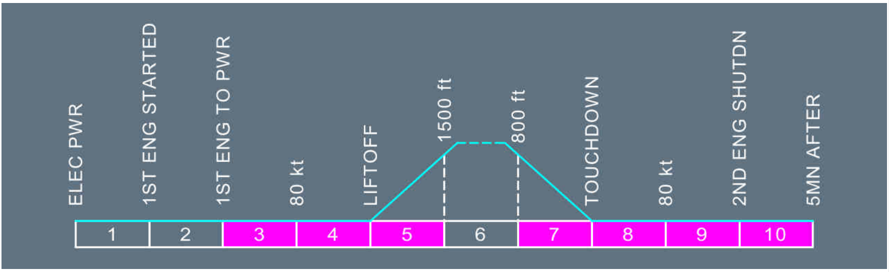
Ident.: PRO-ABN-CAB_PR-AF-00017325.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the LDG ELEV selector is set to AUTO and the landing field elevation of the FMGS is not available.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-AF-00018936.0001001 / 21 MAR 16

LDG ELEV...MAN ADJUST

L2 *The flight crew must select the landing field elevation manually with the LDG ELEV selector. Refer to the LDG ELEV indication on the CRUISE page on the CAB PRESS SD page to adjust the required landing field elevation.*

Note: If the landing is performed on QFE, set 0 ft on LDG ELEV selector.

CAB PR LDG ELEV FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

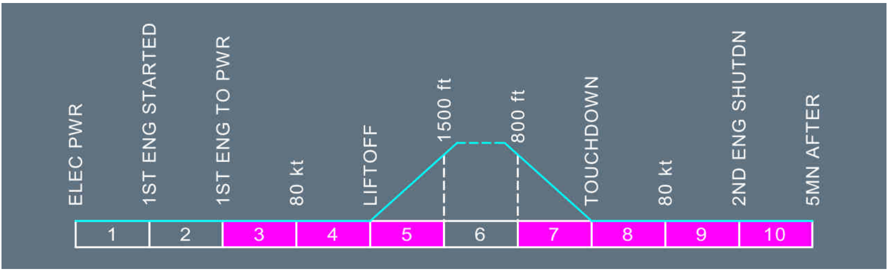
Ident.: PRO-ABN-CAB_PR-AF-00017325.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the LDG ELEV selector is set to AUTO and the landing field elevation of the FMGS is not available.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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CAB PR LO DIFF PR

Applicable to: ALL

Ident.: PRO-ABN-CAB_PR-AG-00017320.0001001 / 21 MAR 16

ANNUNCIATIONS

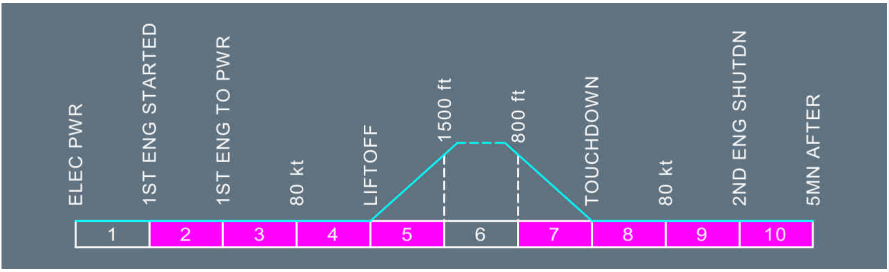
Triggering Conditions:

L2 This alert triggers when:

- The time to reach ΔP = 0 is less than 1.5 min, and
- The time to reach ΔP = 0 is less than the time for CAB ALT to reach landing field elevation +30 s, and
- The aircraft is at least 3 000 ft above the landing field elevation.

Note: *The alert remains, when the aircraft descends within 3 000 ft of the landing field elevation.*

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-AG-00010762.0002001 / 05 AUG 10

EXPECT HI CAB RATE
A/C V/S..REDUCE

L2 *This line is not displayed in case of Emergency Descent due to Excessive Cabin Altitude.*

CAB PR OFV NOT OPEN

Applicable to: ALL

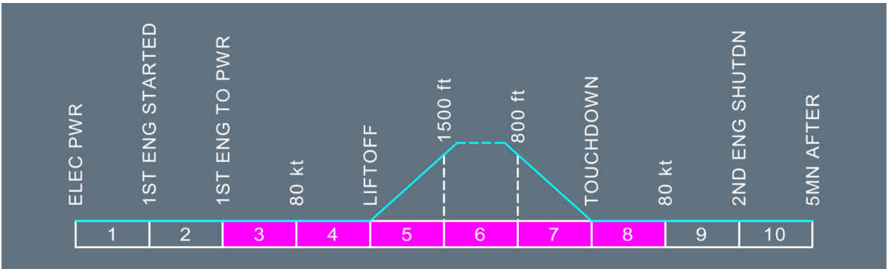
Ident.: PRO-ABN-CAB_PR-AH-00017323.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers, on ground, when the outflow valve is not fully open (time delay 70 s).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-AH-00018802.0001001 / 21 MAR 16

MODE SEL..MAN
MAN V/S CTL..FULL UP

L2 *It may take 10 s in manual mode before the crew notices a change of the outflow valve position.*

L1 ● **IF UNSUCCESSFUL :**

PACK 1..OFF
PACK 2..OFF

CAB PR SAFETY VALVE OPEN

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

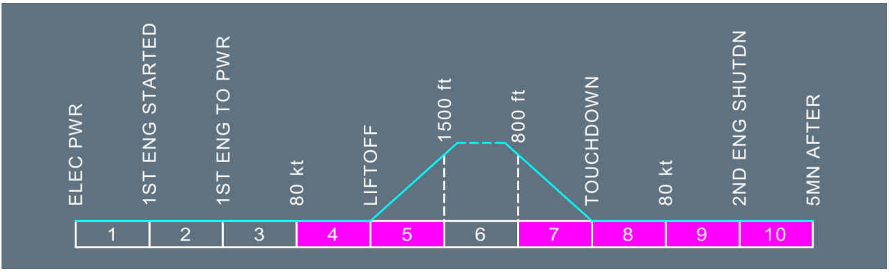
Ident.: PRO-ABN-CAB_PR-W-00017324.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers:
- On ground, if the safety valve is not fully closed, or
- In flight, if the safety valve is not fully closed for more than 1 min.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-W-00018092.0002001 / 21 MAR 16

■ **IF DIFF PR ABV 8 PSI:**

MODE SEL...MAN
MAN V/S CTL...AS RQRD

L2 *If overpressure is confirmed, reduce cabin ΔP.*
It may take 10 s in manual mode before the flight crew notices a change of the outflow valve position.

L1 ● **IF UNSUCCESSFUL:**

A/C FL... REDUCE

■ **IF DIFF PR BELOW 0 PSI:**

EXPECT HI CAB RATE
A/C V/S... REDUCE

Continued on the following page

CAB PR SAFETY VALVE OPEN (Cont'd)

Ident.: PRO-ABN-CAB_PR-W-00018093.0003001 / 28 MAY 20

6

STATUS

MAN CAB PR CTL
TGT V/S: CLIMB 500 FT/MIN
TGT V/S: DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	7 000
300	5 500
250	3 000
< 200	0

- **DURING FINAL APPR :**

  MAN V/S CTL..FULL UP

  Note: *When on intermediate approach (below airfield pressure altitude +2 500 ft), adjust ΔP = 0.*

CAUTION	Check that ΔP is zero before opening the doors.

CAB PR SAFETY VALVE OPEN

Applicable to: MSN 01251

Ident.: PRO-ABN-CAB_PR-W-00017324.0001001 / 21 MAR 16

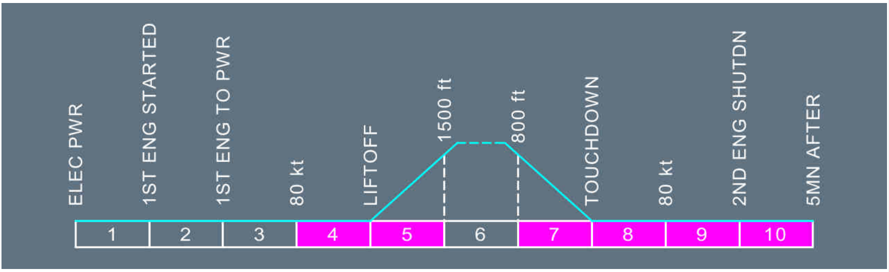
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers:
- On ground, if the safety valve is not fully closed, or
- In flight, if the safety valve is not fully closed for more than 1 min.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-W-00018092.0002001 / 21 MAR 16

- **IF DIFF PR ABV 8 PSI:**

  MODE SEL....................MAN

  MAN V/S CTL....................AS RQRD

  L2 *If overpressure is confirmed, reduce cabin ΔP.*
  It may take 10 s in manual mode before the flight crew notices a change of the outflow valve position.

  L1
  - **IF UNSUCCESSFUL:**

    A/C FL.................... REDUCE

- **IF DIFF PR BELOW 0 PSI:**

  EXPECT HI CAB RATE

  A/C V/S.................... REDUCE

Continued on the following page

CAB PR SAFETY VALVE OPEN (Cont'd)

Ident.: PRO-ABN-CAB_PR-W-00018093.0002001 / 28 MAY 20

STATUS

MAN CAB PR CTL
TGT V/S: CLIMB 500 FT/MIN
TGT V/S: DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	6 500
300	5 000
250	2 500
< 200	0

- **DURING FINAL APPR :**

  MAN V/S CTL..FULL UP

  Note: *When on intermediate approach (below airfield pressure altitude +2 500 ft), adjust ΔP = 0.*

CAUTION	Check that ΔP is zero before opening the doors.

CAB PR SAFETY VALVE OPEN

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

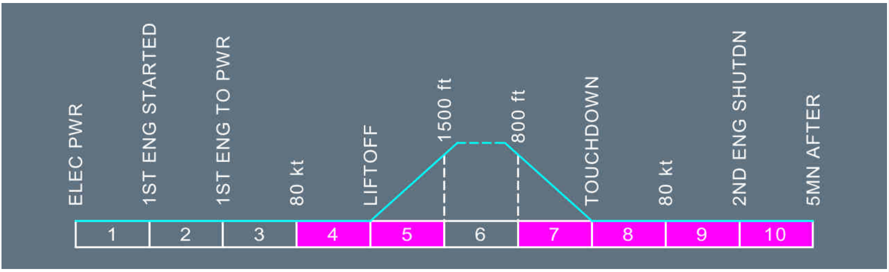
Ident.: PRO-ABN-CAB_PR-W-00017324.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers:
- On ground, if the safety valve is not fully closed, or
- In flight, if the safety valve is not fully closed for more than 1 min.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
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7
8
9
10

Ident.: PRO-ABN-CAB_PR-W-00018092.0002001 / 21 MAR 16

■ **IF DIFF PR ABV 8 PSI:**

MODE SEL..........MAN
MAN V/S CTL..........AS RQRD

L2 *If overpressure is confirmed, reduce cabin ΔP.*
It may take 10 s in manual mode before the flight crew notices a change of the outflow valve position.

L1 ● **IF UNSUCCESSFUL:**

A/C FL.......... REDUCE

■ **IF DIFF PR BELOW 0 PSI:**

EXPECT HI CAB RATE
A/C V/S.......... REDUCE

CAB PR SYS 1(2) FAULT

Applicable to: ALL

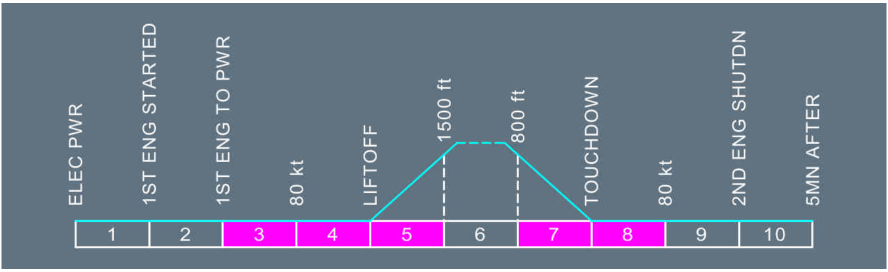
Ident.: PRO-ABN-CAB_PR-U-00017326.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the cabin pressure controller is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-U-00010756.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-CAB_PR-U-00010758.0001001 / 05 AUG 10

STATUS

INOP SYS

CAB PR 1 (2)

CAB PR SYS 1+2 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

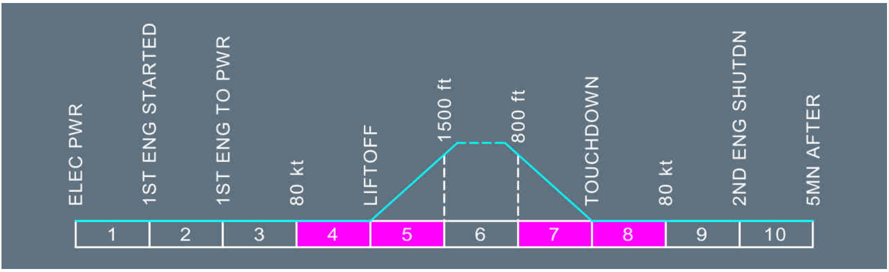
Ident.: PRO-ABN-CAB_PR-V-00017319.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both cabin pressure controllers are failed.

Flight Phase Inhibition:



Ident.: PRO-ABN-CAB_PR-V-00010759.0001001 / 05 AUG 10

L2 Due to the slow closure of the outflow valve in manual pressurization mode and depending on the failure, the following procedure may not avoid the depressurization.

L1 MODE SEL...MAN
MAN V/S CTL...AS RQRD

L2
- *It may take 10 s in manual mode before the crew notices a change of the outflow valve position. Use the cabin V/S indication to confirm the outflow valve operation.*
- *Monitor cabin V/S and CAB ALT frequently and adjust as necessary. Maintain aircraft altitude at or above cabin altitude.*
- *The two safety valves limit ΔP to 8.6 PSI.*

Continued on the following page

CAB PR SYS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-CAB_PR-V-00018107.0003001 / 21 MAR 16

7

L12

STATUS

MAN CAB PR CTL
TGT V/S : CLIMB 500 FT/MIN
TGT V/S : DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	7 000
300	5 500
250	3 000
< 200	0

- **DURING FINAL APPR :**

  V/S CTL...FULL UP

  When on intermediate approach (below airfield pressure altitude +2 500 ft), adjust ΔP = 0.

CAUTION	Check that ΔP is zero before opening the doors.

INOP SYS

CAB PR 1+2

CAB PR SYS 1+2 FAULT

Applicable to: MSN 01251

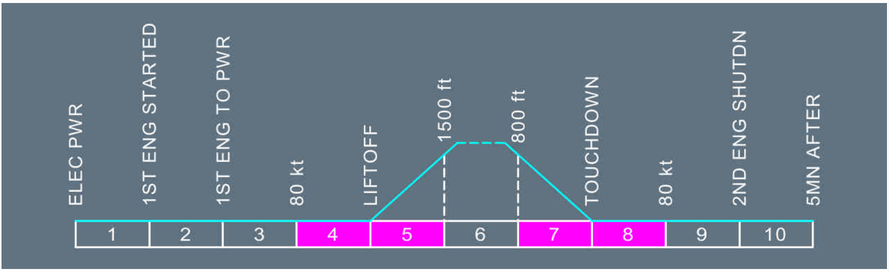
Ident.: PRO-ABN-CAB_PR-V-00017319.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both cabin pressure controllers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-V-00010759.0001001 / 05 AUG 10

L2 Due to the slow closure of the outflow valve in manual pressurization mode and depending on the failure, the following procedure may not avoid the depressurization.

L1 MODE SEL.. MAN
MAN V/S CTL.. AS RQRD

L2
- *It may take 10 s in manual mode before the crew notices a change of the outflow valve position. Use the cabin V/S indication to confirm the outflow valve operation.*
- *Monitor cabin V/S and CAB ALT frequently and adjust as necessary. Maintain aircraft altitude at or above cabin altitude.*
- *The two safety valves limit ΔP to 8.6 PSI.*

Continued on the following page

CAB PR SYS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-CAB_PR-V-00018107.0002001 / 21 MAR 16

L12

STATUS

MAN CAB PR CTL
TGT V/S : CLIMB 500 FT/MIN
TGT V/S : DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	6 500
300	5 000
250	2 500
< 200	0

- **DURING FINAL APPR :**

  MAN V/S CTL...FULL UP

  When on intermediate approach (below airfield pressure altitude +2 500 ft), adjust ΔP = 0.

CAUTION	Check that ΔP is zero before opening the doors.

INOP SYS

CAB PR 1+2

CAB PR SYS 1+2 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

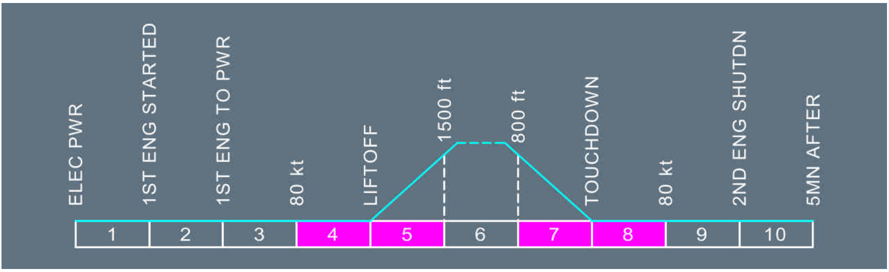
Ident.: PRO-ABN-CAB_PR-V-00017319.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both cabin pressure controllers are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CAB_PR-V-00010759.0001001 / 05 AUG 10

L2 Due to the slow closure of the outflow valve in manual pressurization mode and depending on the failure, the following procedure may not avoid the depressurization.

L1 MODE SEL.. MAN
MAN V/S CTL.. AS RQRD

L2
- *It may take 10 s in manual mode before the crew notices a change of the outflow valve position. Use the cabin V/S indication to confirm the outflow valve operation.*
- *Monitor cabin V/S and CAB ALT frequently and adjust as necessary. Maintain aircraft altitude at or above cabin altitude.*
- *The two safety valves limit ΔP to 8.6 PSI.*

CARGO SMOKE FWD(AFT) BTL SQUIB FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

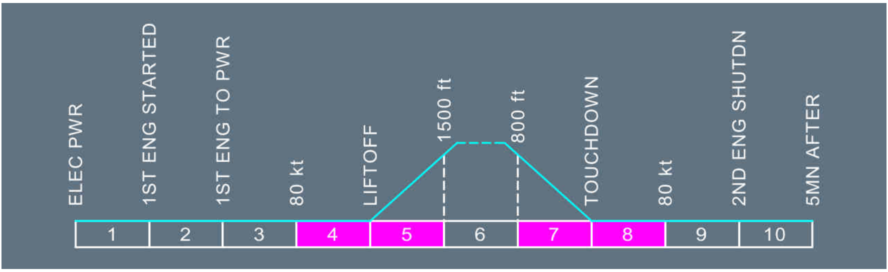
Ident.: PRO-ABN-CRG_SMOKE-I-00017415.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when FWD or AFT bottle squib is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CRG_SMOKE-I-00018442.0001001 / 21 MAR 16

Crew awareness.

Intentionally left blank

C/B TRIPPED

Applicable to: ALL

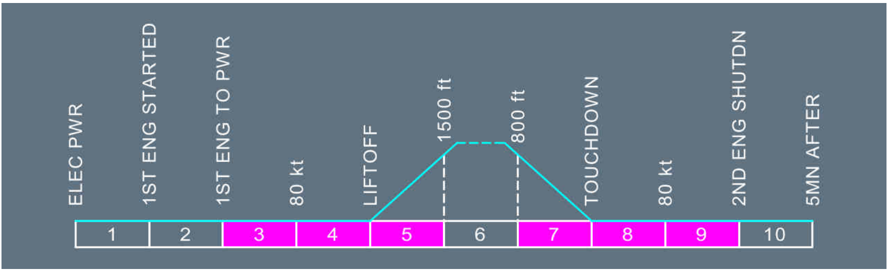
Ident.: PRO-ABN-C_B-Y-00017390.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one C/B is tripped in the designated zone.

Flight Phase Inhibition:



Ident.: PRO-ABN-C_B-Y-00012551.0001001 / 25 FEB 14

Crew awareness.

- **If one green circuit breaker (C/B) is tripped, one of the following messages appears after one minute, depending on the location of the affected C/B:**
  C/B TRIPPED ON OVHD PNL
  C/B TRIPPED ON L(R) ELEC BAY
  C/B TRIPPED REAR PNL J-M OR N-R OR S-V OR W-Z

L2 *Note:* *In flight, do not reengage a C/B that has tripped by itself, unless the Captain judges it necessary to do so for the safe continuation of the flight. This procedure should be adopted only as a last resort, and only one reengagement should be attempted.*
On ground, do not reengage the C/B of the fuel pump(s) of any tank. For all other C/Bs, if the flight crew coordinates the action with maintenance, the flight crew may reengage a tripped C/B, provided that the cause of the tripped C/B is identified.

Intentionally left blank

COM ACARS FAULT

Applicable to: ALL

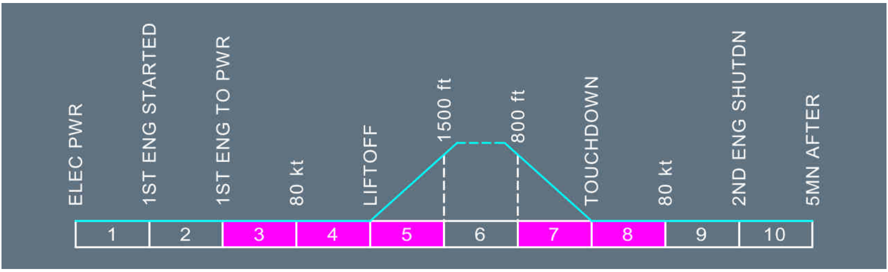
Ident.: PRO-ABN-COM-B-00016895.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ACARS.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COM-B-00017538.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-COM-B-00010037.0001001 / 05 AUG 10

STATUS

INOP SYS

ACARS

COM AMU PART FAULT

Applicable to: MSN 11482-11597

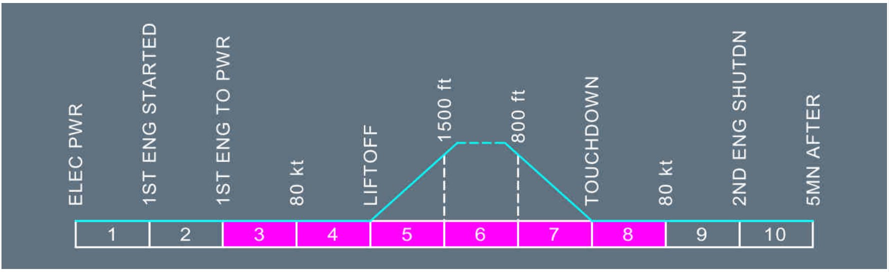
1 Ident.: PRO-ABN-COM-J-00024200.0001001 / 25 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one AMU side is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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2 Ident.: PRO-ABN-COM-J-00024201.0001001 / 25 MAY 20

Crew awareness.

COM CAPT(F/O)(3RD OCC)(4TH OCC ◁) PTT STUCK

Applicable to: MSN 11482-11597

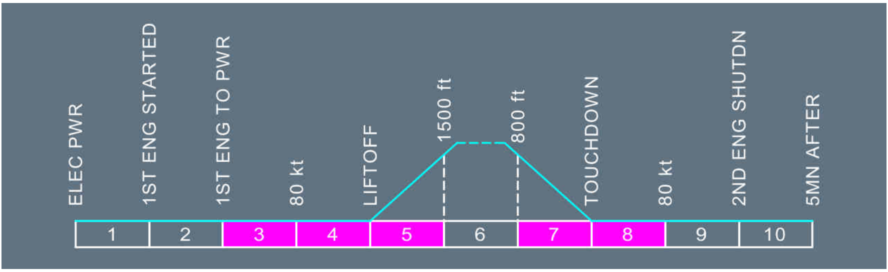
3 Ident.: PRO-ABN-COM-K-00022695.0001001 / 25 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when PTT is active on CAPT(F/O)(3RD OCC)(4TH OCC ◁) side for more than 40 s and no transmission key is selected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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4 Ident.: PRO-ABN-COM-K-00022696.0001001 / 25 MAY 20

Crew awareness.

5 Ident.: PRO-ABN-COM-K-00022697.0001001 / 25 MAY 20

STATUS

INOP SYS

CAPT(F/O)(3RD OCC)(4TH OCC ◁) PTT

COM CIDS 1 + 2 FAULT

Applicable to: ALL

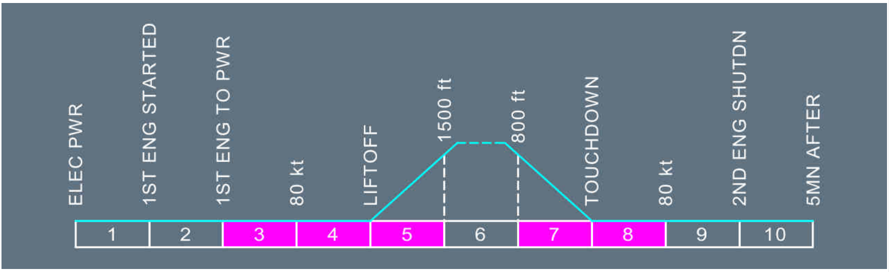
Ident.: PRO-ABN-COM-A-00016887.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a total loss of CIDS.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COM-A-00010033.0001001 / 25 FEB 14

L2 Passenger address, cabin and service interphone, and passenger signs are inoperative.

L1 Crew awareness.

Ident.: PRO-ABN-COM-A-00010034.0001001 / 05 AUG 10

STATUS

	INOP SYS
	CIDS

COM HF 1(2) DATA FAULT ⩤

Applicable to: ALL

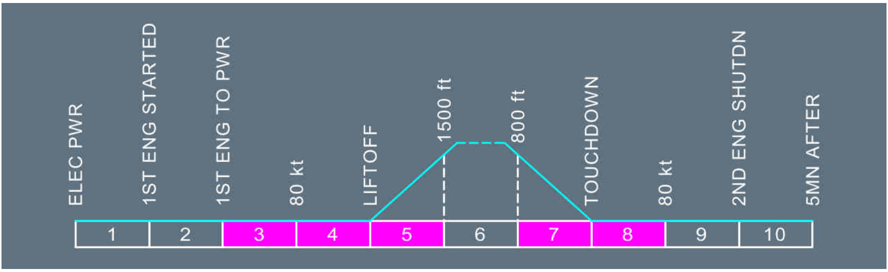
Ident.: PRO-ABN-COM-F-00016896.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when data communications via HF 1(2) are inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COM-F-00017499.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-COM-F-00010045.0001001 / 17 MAR 11

STATUS

INOP SYS

HF 1(2) DATA

COM RMP 1(2)(3) FAULT

Applicable to: MSN 11482-11597

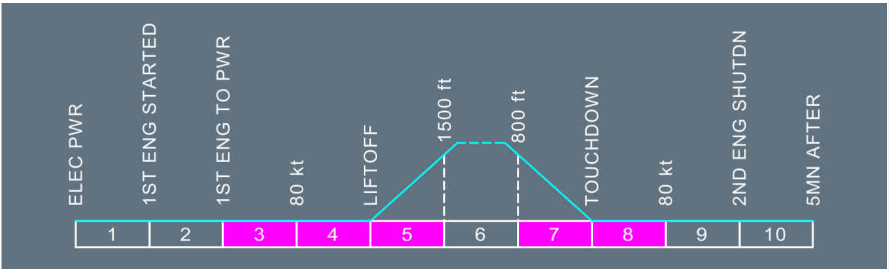
6 Ident.: PRO-ABN-COM-M-00022698.0001001 / 25 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when RMP 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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7 Ident.: PRO-ABN-COM-M-00022699.0001001 / 05 MAY 22

RMP (AFFECTED).. OFF

Note: *When COM RMP 3 FAULT, the communication between the cockpit and the ground is lost.*

- **If** COM RMP 1 FAULT
  CAPT RMP 3..USE
  CAPT BOOMSET.. USE
- **If** COM RMP 2 FAULT**:**
  F/O RMP 3.. USE
  F/O BOOMSET...USE

Continued on the following page

COM RMP 1(2)(3) FAULT (Cont'd)

8 Ident.: PRO-ABN-COM-M-00022700.0001001 / 25 MAY 20

STATUS

- **If** COM RMP 1(2) FAULT**:**
  CAPT(F/O) BOOMSET ONLY
- **If** COM RMP 1(2) FAULT**:**
  L(R) SPEAKER NOT AVAIL
  CAPT(F/O) HANDMIC NOT AVAIL

INOP SYS

RMP 1(2)(3)

COM RMP 1+2(1+3)(2+3) FAULT

Applicable to: MSN 11482-11597

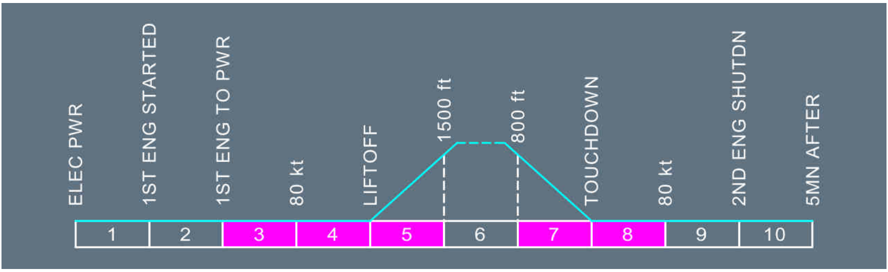
9 Ident.: PRO-ABN-COM-O-00024184.0001001 / 25 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two RMPs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

COM RMP 1+2(1+3)(2+3) FAULT (Cont'd)

10 Ident.: PRO-ABN-COM-O-00024185.0001001 / 05 MAY 22

RMP (AFFECTED).. OFF

Note: *When COM RMP 3 FAULT, the communication between the cockpit and the ground is lost.*

■ **If** COM RMP 1+2 FAULT**:**

CAPT+F/O RMP 3..USE
CAPT+F/O BOOMSET.. USE

■ **If** COM RMP 1+3(2+3) FAULT**:**

CAPT(F/O) RMP 2(1)... USE
CAPT(F/O) BOOMSET..USE

11 Ident.: PRO-ABN-COM-O-00024187.0001001 / 25 MAY 20

STATUS

	INOP SYS
● **If** COM RMP 1+2 FAULT**:** CAPT+F/O BOOMSET ONLY ● **If** COM RMP 1+3(2+3) FAULT**:** CAPT(F/O) BOOMSET ONLY ● **If** COM RMP 1+2 FAULT**:** L+R SPEAKER NOT AVAIL CAPT HANDMIC NOT AVAIL F/O HANDMIC NOT AVAIL ● **If** COM RMP 1+3(2+3) FAULT: L(R) SPEAKER NOT AVAIL CAPT(F/O) HANDMIC NOT AVAIL	RMP 1 (1) RMP 2 (2) RMP 3 (3)

(1) *(If COM RMP 1+2(1+3) FAULT)*
(2) *(If COM RMP 1+2(2+3) FAULT)*
(3) *(If COM RMP 1+3(2+3) FAULT)*

COM RMP 1+2+3 FAULT

Applicable to: MSN 11482-11597

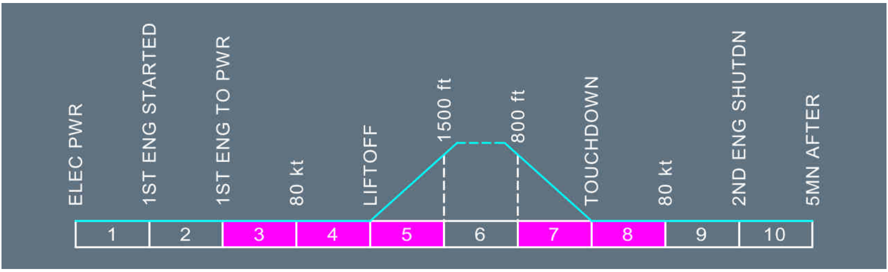
12 Ident.: PRO-ABN-COM-P-00024191.0001001 / 25 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when all RMPs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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13 Ident.: PRO-ABN-COM-P-00024192.0001001 / 05 MAY 22

RMP 1..OFF
RMP 2..OFF
RMP 3..OFF

Note: When COM RMP 3 FAULT, the communication between the cockpit and the ground is lost.

AUDIOS NOT AVAIL

- **If data communication via SATCOM ⪡ is available:**
  SATCOM DATA AVAIL
- **If data communication via SATCOM ⪡ is not available:**
  SATCOM DATA NOT AVAIL

Continued on the following page

COM RMP 1+2+3 FAULT (Cont'd)

14 Ident.: PRO-ABN-COM-P-00024193.0001001 / 25 MAY 20

STATUS

AUDIOS NOT AVAIL:
ALTITUDE ALERT
AUTO CALLOUT
AURAL ATTENTION-GETTERS

- **If the data communication via SATCOM ◁ is not available:**
  SATCOM DATA NOT AVAIL

- **If the data communication via SATCOM ◁ is available:**
  SATCOM DATA AVAIL

XPDR 7600 ACTIVE

INOP SYS

RMP 1
RMP 2
RMP 3
SATCOM ◁ (1)
SATCOM DATA ◁ (2)

(1) *(If the data and voice communications via SATCOM ◁ are not available)*
(2) *(If the data communication via SATCOM ◁ is not available)*

COM RMP 1(2)(3) OFF

Applicable to: MSN 11482-11597

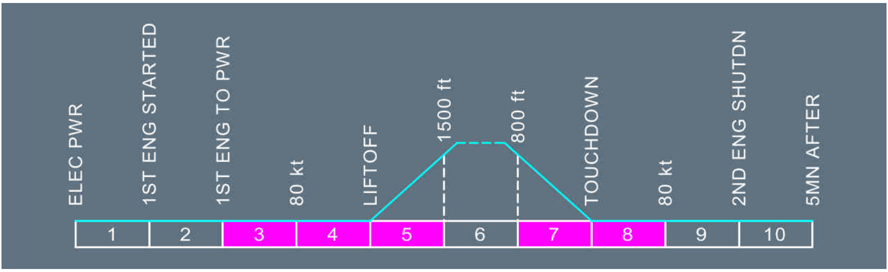
15 Ident.: PRO-ABN-COM-R-00024197.0001001 / 25 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when RMP 1(2)(3) is OFF.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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16 Ident.: PRO-ABN-COM-R-00024198.0001001 / 25 MAY 20

- **If RMP 1(2) is OFF:**
  CAPT(F/O) RMP 3 .... USE
  CAPT(F/O) BOOMSET .... USE
- **If all RMPs are OFF:**
  AUDIOS NOT AVAIL
  - **If data communication via SATCOM ⋞ is available:**
    SATCOM DATA AVAIL
  - **If data communication via SATCOM ⋞ is not available:**
    SATCOM DATA NOT AVAIL

Continued on the following page

COM RMP 1(2)(3) OFF (Cont'd)

17 Ident.: PRO-ABN-COM-R-00024199.0001001 / 25 MAY 20

STATUS

- **If all RMPs are OFF:**
  AUDIOS NOT AVAIL:
  ALTITUDE ALERT
  AUTO CALLOUT
  AURAL ATTENTION-GETTERS
- **If the data communication via SATCOM ◁ is not available:**
  SATCOM DATA NOT AVAIL
- **If RMP 1(2) is OFF:**
  CAPT(F/O) BOOMSET ONLY
- **If RMP 1 and RMP 2 are OFF:**
  CAPT+F/O BOOMSET ONLY

- **If RMP 1(2) is OFF:**
  L(R) SPEAKER NOT AVAIL
  CAPT(F/O) HANDMIC NOT AVAIL
- **If RMP 1 and RMP 2 are OFF:**
  L+R SPEAKER NOT AVAIL
  CAPT HANDMIC NOT AVAIL
  F/O HANDMIC NOT AVAIL
- **If the data communication via SATCOM ◁ is available:**
  SATCOM DATA AVAIL
- **If all RMPs are OFF:**
  XPDR 7600 ACTIVE

INOP SYS

SATCOM ◁ (1)
SATCOM DATA ◁ (2)

(1) *(If the data and voice communications via SATCOM ◁ are not available)*
(2) *(If the data communication via SATCOM ◁ is not available)*

COM SATCOM DATA FAULT

Applicable to: ALL

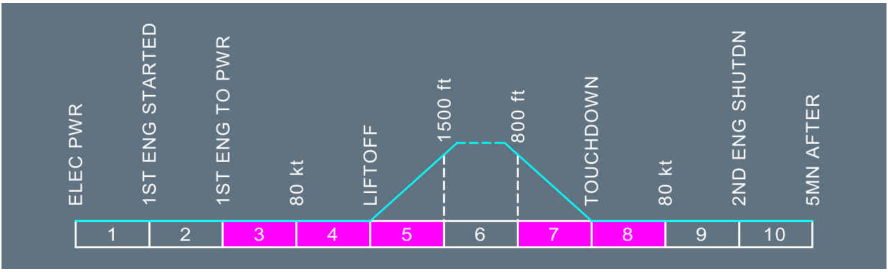
Ident.: PRO-ABN-COM-D-00016899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ACARS transmissions via SATCOM are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COM-D-00017548.0001001 / 21 MAR 16

L2 Telephone transmissions are still available. ACARS communications are inoperative.

L1 Crew awareness.

Ident.: PRO-ABN-COM-D-00010041.0001001 / 21 MAR 16

STATUS

INOP SYS

SATCOM DATA

COM SATCOM FAULT ◁

Applicable to: ALL

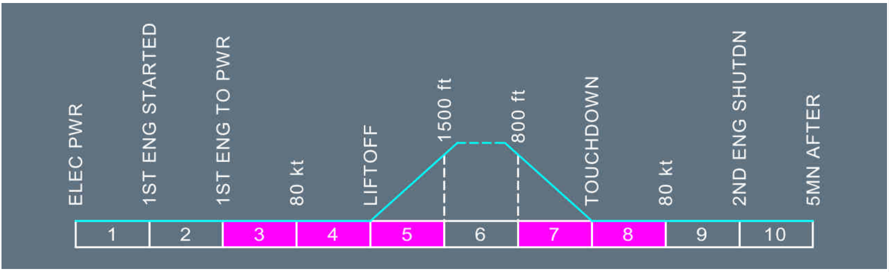
Ident.: PRO-ABN-COM-C-00016894.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the telephone and the ACARS ◁ transmission are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COM-C-00017500.0001001 / 21 MAR 16

L2 ACARS ◁ and telephone communications are inoperative.

L1 Crew awareness.

Ident.: PRO-ABN-COM-C-00017502.0001001 / 21 MAR 16

STATUS

INOP SYS

SATCOM

COM SINGLE PTT STUCK

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

Ident.: PRO-ABN-COM-G-00016902.0001001 / 21 MAR 16

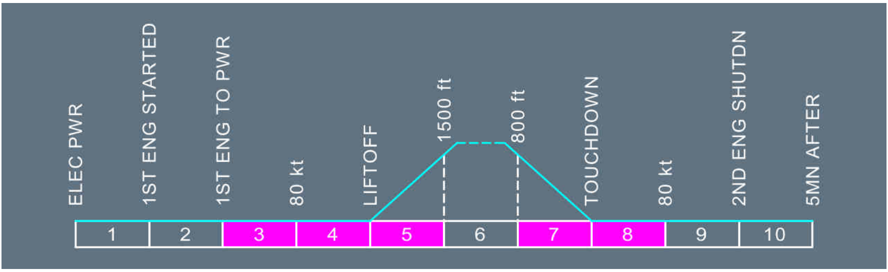
18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when any PTT transmission selector is jammed in the transmit position for more than 40 s (VHF) or for more than 180 s (HF).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

COM SINGLE PTT STUCK ⩤ (Cont'd)

Ident.: PRO-ABN-COM-G-00017503.0001001 / 21 MAR 16

ACP1 VHF 1(2)(3) TX........DESELECT
ACP1 HF 1(2) TX........DESELECT

- **IF UNSUCCESSFUL:**
  ACP2 VHF 1(2)(3) TX........DESELECT
  ACP2 HF 1(2) TX........DESELECT

- **IF UNSUCCESSFUL:**
  ACP3 VHF 1(2)(3) TX........DESELECT
  ACP3 HF 1(2) TX........DESELECT

When the ACP linked to the faulty PTT is detected, the previous ECAM actions are replaced by the following ones:

AUDIO SWTG........DO NOT USE

- **ON AFFECTED ACP:**
  ALL TX KEYS........DO NOT USE

- **ON ALL OTHER ACP:**
  VHF 1(2)(3) TX........RESELECT
  HF 1(2) TX........RESELECT

Ident.: PRO-ABN-COM-G-00014765.0001001 / 26 NOV 12

19

STATUS

	INOP SYS
AUDIO SWTG........DO NOT USE	SINGLE PTT

COM SINGLE PTT STUCK

Applicable to: MSN 08635, 10949-11293

Ident.: PRO-ABN-COM-G-00016902.0001001 / 21 MAR 16

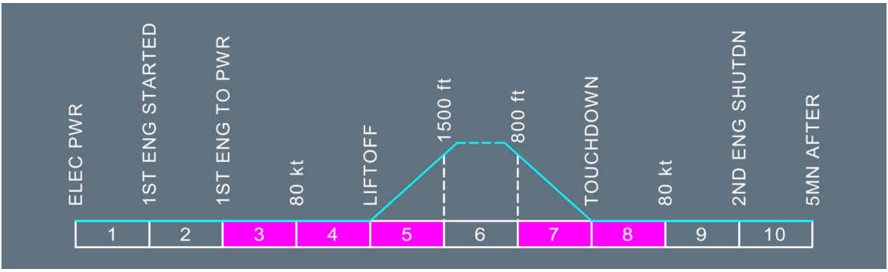
20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when any PTT transmission selector is jammed in the transmit position for more than 40 s (VHF) or for more than 180 s (HF).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

COM SINGLE PTT STUCK ◁ (Cont'd)

Ident.: PRO-ABN-COM-G-00017503.0003001 / 03 APR 18

21

- **WITHIN 20 s:**

  ALL PTT..CHECK RELEASED

ACP1 VHF 1(2)(3) TX..DESELECT
ACP1 HF 1(2) TX..DESELECT

- **IF UNSUCCESSFUL:**

  ACP2 VHF 1(2)(3) TX..DESELECT
  ACP2 HF 1(2) TX..DESELECT

- **IF UNSUCCESSFUL:**

  ACP3 VHF 1(2)(3) TX..DESELECT
  ACP3 HF 1(2) TX..DESELECT

When the ACP linked to the faulty PTT is detected, the previous ECAM actions are replaced by the following ones:

AUDIO SWTG..DO NOT USE

- **ON AFFECTED ACP:**

  ALL TX KEYS..DO NOT USE

- **ON ALL OTHER ACP:**

  ALL TX KEYS..AS RQRD

Ident.: PRO-ABN-COM-G-00014765.0001001 / 26 NOV 12

22

STATUS

AUDIO SWTG..DO NOT USE

INOP SYS

SINGLE PTT

COM VHF 1(2)(3) /HF 1(2) EMITTING ◁

Applicable to: ALL

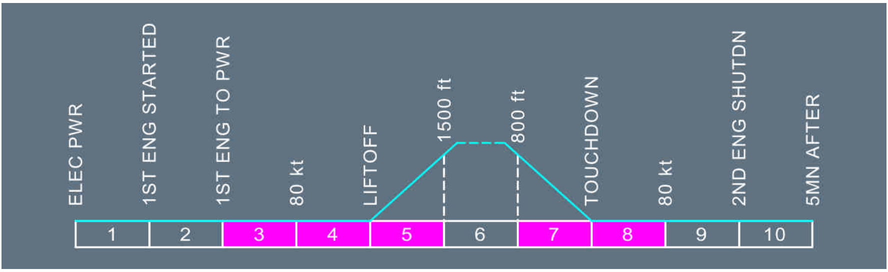
Ident.: PRO-ABN-COM-I-00016892.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 For VHF 1(2)(3) EMITTING, the alert triggers when the transmitter emits more than 30 s or 60 s depending on aircraft configuration.
For HF 1(2) EMITTING, the alert triggers when the transmitter emits more than 60 s.

Flight Phase Inhibition:



Ident.: PRO-ABN-COM-I-00017549.0001001 / 21 MAR 16

L2 1. If any Push To Talk (PTT) transmission selector (sidestick PTT ◁ , hand mike PTT ◁ , or ACP PTT switch ◁) is jammed in the transmit position, try to release it in order to remove the caution.
2. If unsuccessful, deselect the identified failed VHF/HF transmission keys on the associated Audio Control Panel (ACP) to remove the caution. This ACP should only be used in reception mode. The associated PTT transmission selectors must not be used.

   Note: *In this case, the ACP of the unaffected side may be used to recover the deselected VHF/HF channel.*

3. If no transmission key on the ACP is found in the “transmit” position, pull the affected VHF/HF C/B associated to the ECAM message : COM\HF1 C/B HA 14 on 49 VU, COM NAV\HF2 C/B L13 on 121 VU, COM\VHF\1 C/B G09 on 49 VU, COM NAV\VHF\2 C/B L04 on 121 VU, COM \VHF\3 C/B L05 on 121 VU.

COM VHF 3 DATA FAULT

Applicable to: ALL

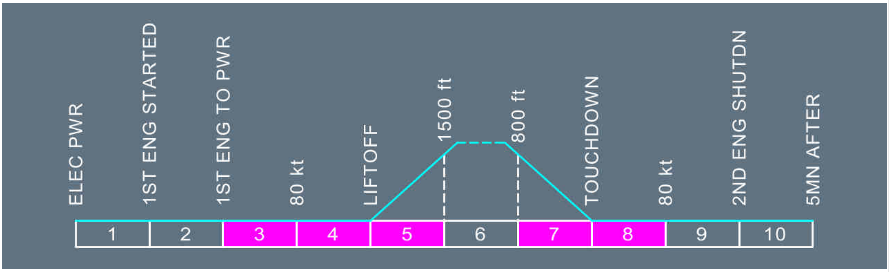
Ident.: PRO-ABN-COM-E-00016897.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when data communication via VHF 3 are inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COM-E-00017550.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-COM-E-00010043.0001001 / 17 MAR 11

STATUS

INOP SYS

VHF 3 DATA

[QRH] TOO HOT COCKPIT AND CABIN TEMPERATURE IN FLIGHT

Ident.: PRO-ABN-COND-00010753.0002001 / 04 NOV 20
Applicable to: ALL

Apply the procedure if the cockpit and cabin temperature becomes too hot with the temperature selector at its maximum cold selection:

PACKS OUTLET TEMP [BLEED SD page].. CHECK

- **If difference between both packs at or above 10 °C:**

  PACK WITH THE HIGHEST OUTLET TEMP...OFF

  A difference between both packs of 10 °C or greater than 10 °C may reflect a contamination of packs resulting in too hot cabin and cockpit air temperature. The situation may be alleviated by switching OFF the pack discharging the hottest air.

COND FWD CAB/AFT CAB/CKPT DUCT OVHT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

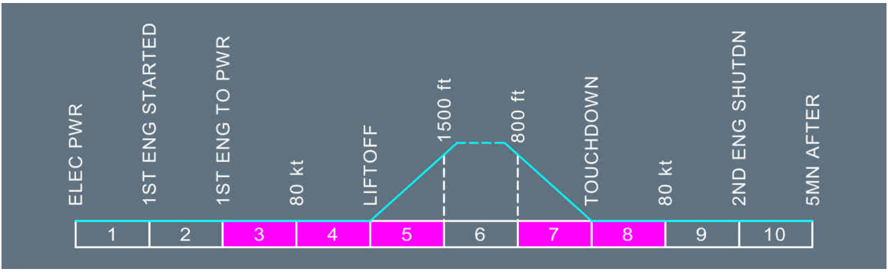
Ident.: PRO-ABN-COND-F-00017295.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the duct temperature rises above 88 °C.

Flight Phase Inhibition:



Continued on the following page

COND FWD CAB/AFT CAB/CKPT DUCT OVHT (Cont'd)

Ident.: PRO-ABN-COND-F-00010720.0002001 / 22 APR 16

1

- **WHEN DUCT TEMP < 70 DEG C (158 DEG F):**

  HOT AIR..OFF THEN ON

L2 *Hot air pressure regulating valve reopens.*

Ident.: PRO-ABN-COND-F-00018037.0001001 / 21 MAR 16

L12

STATUS

- **If system not recovered:**

  CAB TEMP BY PACK ONLY

  Basic temperature regulation is by packs only (remains automatic).

INOP SYS

HOT AIR
FWD CRG HEAT ⊲

COND FWD CAB/AFT CAB/CKPT DUCT OVHT

Applicable to: MSN 01251, 02014

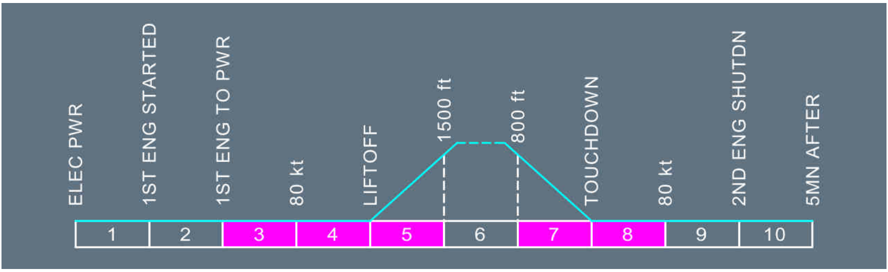
Ident.: PRO-ABN-COND-F-00017295.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the duct temperature rises above 88 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-F-00010720.0001001 / 05 AUG 10

- **WHEN DUCT TEMP < 70 DEG C:**
  HOT AIR....................OFF THEN ON
  L2 *Hot air pressure regulating valve reopens.*

Ident.: PRO-ABN-COND-F-00018037.0001001 / 21 MAR 16

L12

STATUS

- **If system not recovered:**
  CAB TEMP BY PACK ONLY
  Basic temperature regulation is by packs only (remains automatic).

INOP SYS

HOT AIR
FWD CRG HEAT ✱

COND FWD CAB/AFT CAB/CKPT DUCT OVHT - FWSPAGE

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-COND-F-00018037.0001001 / 21 MAR 16

L12

STATUS

● **If system not recovered:**
CAB TEMP BY PACK ONLY

Basic temperature regulation is by packs only (remains automatic).

INOP SYS

HOT AIR
FWD CRG HEAT ◁✻

COND FWD CAB/AFT CAB/CKPT DUCT OVHT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-COND-F-00017295.0002001 / 21 MAR 16

2

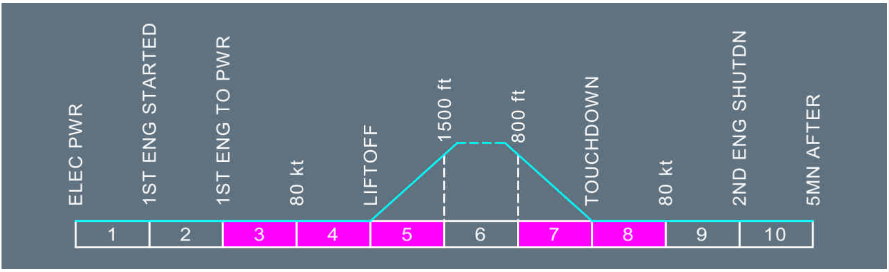
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The duct temperature rises above 88 °C, or
- The duct temperature rises above 80 °C four times during the same flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

COND FWD CAB/AFT CAB/CKPT DUCT OVHT (Cont'd)

Ident.: PRO-ABN-COND-F-00010720.0002001 / 22 APR 16

3

- **WHEN DUCT TEMP < 70 DEG C (158 DEG F):**
  HOT AIR...OFF THEN ON

L2 *Hot air pressure regulating valve reopens.*

Ident.: PRO-ABN-COND-F-00018037.0001001 / 21 MAR 16

L12

STATUS

- **If system not recovered:**
  CAB TEMP BY PACK ONLY
  Basic temperature regulation is by packs only (remains automatic).

INOP SYS

HOT AIR
FWD CRG HEAT ⊲

COND FWD CAB/AFT CAB/CKPT DUCT OVHT

Applicable to: MSN 06561

Ident.: PRO-ABN-COND-F-00017295.0002001 / 21 MAR 16

4

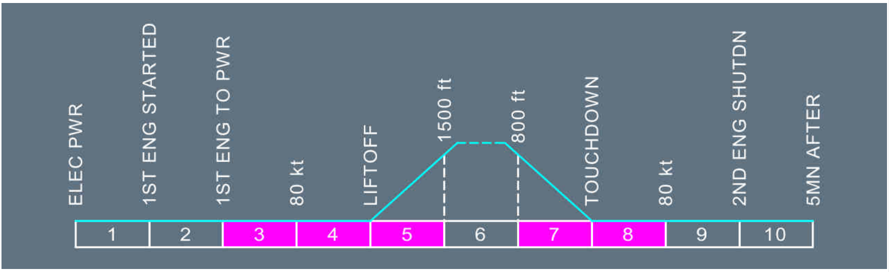
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The duct temperature rises above 88 °C, or
- The duct temperature rises above 80 °C four times during the same flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-F-00010720.0001001 / 05 AUG 10

- **WHEN DUCT TEMP < 70 DEG C:**

  HOT AIR..OFF THEN ON

L2

Hot air pressure regulating valve reopens.

Ident.: PRO-ABN-COND-F-00018037.0001001 / 21 MAR 16

L12

STATUS

	INOP SYS
● **If system not recovered:** CAB TEMP BY PACK ONLY *Basic temperature regulation is by packs only (remains automatic).*	HOT AIR FWD CRG HEAT ◁❄

COND FWD(AFT) CARGO DUCT OVHT ⩤

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

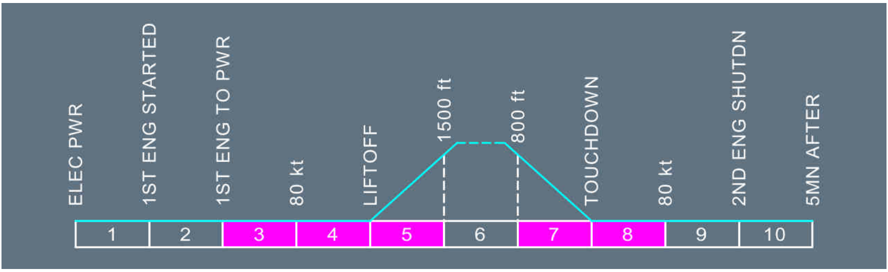
Ident.: PRO-ABN-COND-G-00017339.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the duct temperature in the forward(aft) cargo compartment rises above 88 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-G-00018038.0002001 / 22 APR 16

5

- **WHEN DUCT TEMP < 70 DEG C (158 DEG F):**

  HOT AIR...OFF THEN ON

  L2 *Hot air pressure regulating valve reopens.*

Ident.: PRO-ABN-COND-G-00018039.0001001 / 21 MAR 16

L12

STATUS

	INOP SYS
● **If system not recovered:** CAB TEMP BY PACK ONLY *Basic temperature regulation is by packs only (remains automatic).*	FWD(AFT) CRG HEAT

COND FWD(AFT) CARGO DUCT OVHT ⊲

Applicable to: MSN 01251, 02014, 06561

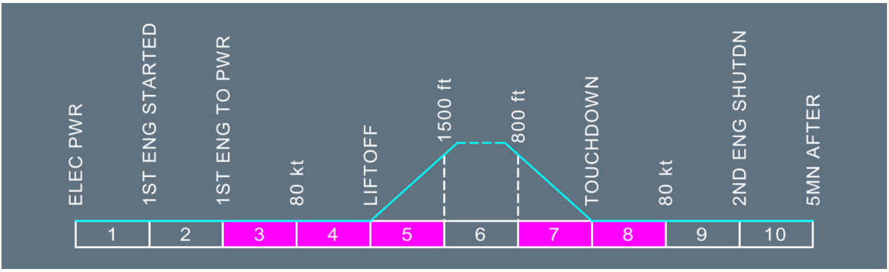
Ident.: PRO-ABN-COND-G-00017339.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the duct temperature in the forward(aft) cargo compartment rises above 88 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-G-00018038.0001001 / 21 MAR 16

- **WHEN DUCT TEMP < 70 DEG C:**

  HOT AIR.......................................OFF THEN ON

  L2 *Hot air pressure regulating valve reopens.*

Ident.: PRO-ABN-COND-G-00018039.0001001 / 21 MAR 16

L12

STATUS

- **If system not recovered:**

  CAB TEMP BY PACK ONLY

  Basic temperature regulation is by packs only (remains automatic).

INOP SYS

FWD(AFT) CRG HEAT

COND FWD(AFT) CARGO DUCT OVHT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

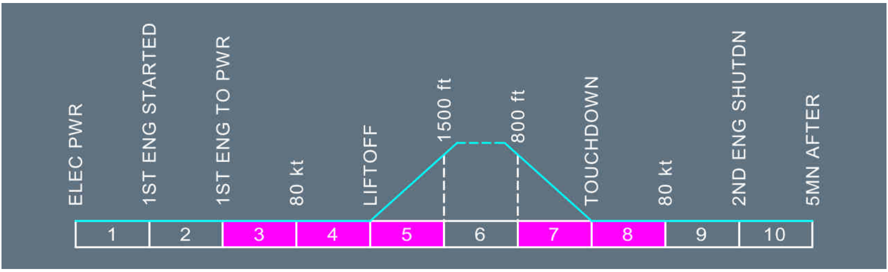
Ident.: PRO-ABN-COND-G-00017339.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the duct temperature in the forward(aft) cargo compartment rises above 88 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-G-00018039.0001001 / 21 MAR 16

L12

STATUS

- **If system not recovered:**
  CAB TEMP BY PACK ONLY
  Basic temperature regulation is by packs only (remains automatic).

INOP SYS

FWD(AFT) CRG HEAT

COND FWD(AFT) CRG HEAT FAULT ⊲

Applicable to: ALL

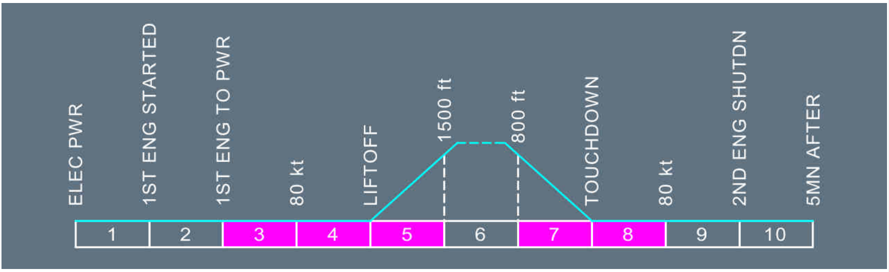
Ident.: PRO-ABN-COND-N-00017341.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers if the heating controller of the forward(aft) cargo compartment is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
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TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-N-00018040.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-COND-N-00018041.0001001 / 21 MAR 16

STATUS

INOP SYS

FWD(AFT) CRG HEAT

COND FWD(AFT) CRG ISOL VALVE

Applicable to: ALL

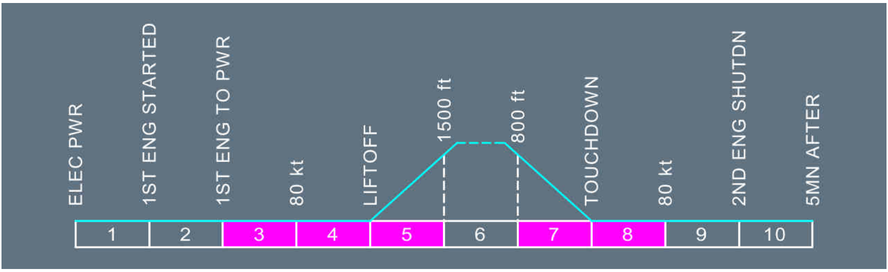
Ident.: PRO-ABN-COND-M-00017335.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers if the forward(aft) cargo isolation valve disagrees with the selected position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
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TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-M-00018042.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-COND-M-00018043.0001001 / 21 MAR 16

STATUS

INOP SYS

FWD(AFT) CRG HEAT
FWD(AFT) CRG VENT

COND HOT AIR FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-COND-I-00017296.0001001 / 03 NOV 22

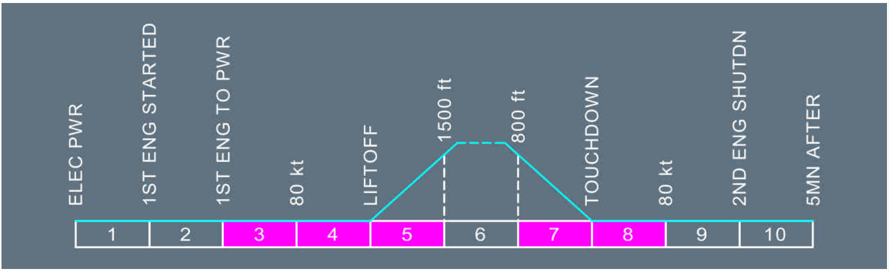
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The position of the hot air pressure regulating valve disagrees with the commanded position, or
- A duct overheat persists.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
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TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

COND HOT AIR FAULT (Cont'd)

Ident.: PRO-ABN-COND-I-00018940.0002001 / 03 NOV 22

6

- **If HOT AIR not closed:**
  HOT AIR.. OFF
- **If a duct overheat persists:**
  - **IF HOT AIR STILL OPEN:**
    PACK 1.. OFF
    PACK 2.. OFF

    DES TO FL 100/MEA-MORA

    L2 *Descend to FL 100, or MEA-MORA, whichever is higher.*

    L1
    - **WHEN DIFF PR < 1 PSI AND FL BELOW 100:**
      RAM AIR.. ON
      MAX FL.. 100/MEA-MORA

Ident.: PRO-ABN-COND-I-00018044.0001001 / 21 MAR 16

L12

STATUS

- **If HOT AIR closed only:**
  CAB TEMP BY PACK ONLY

  Basic temperature regulation by packs only (remains automatic).

INOP SYS

PACK 1+2 (If PACKS OFF)
HOT AIR
FWD CRG HEAT

COND HOT AIR FAULT

Applicable to: MSN 01251, 02014, 06561

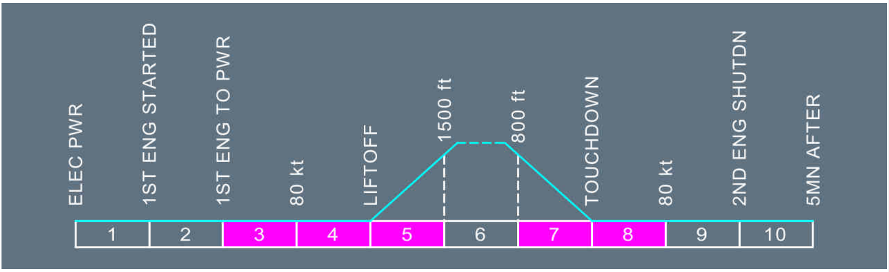
Ident.: PRO-ABN-COND-I-00017296.0001001 / 03 NOV 22

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The position of the hot air pressure regulating valve disagrees with the commanded position, or
- A duct overheat persists.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-I-00018940.0001001 / 03 NOV 22

- **If HOT AIR not closed:**
  HOT AIR.................... OFF
- **If a duct overheat persists:**
  - **IF HOT AIR STILL OPEN:**
    PACK 1.................... OFF
    PACK 2.................... OFF
    DES TO FL 100/MEA
    L2 *Descend to FL 100, or MEA, whichever is higher.*
    - L1 **WHEN DIFF PR < 1 PSI AND FL BELOW 100:**
      RAM AIR.................... ON
      MAX FL.................... 100/MEA

Continued on the following page

COND HOT AIR FAULT (Cont'd)

Ident.: PRO-ABN-COND-I-00018044.0001001 / 21 MAR 16

L12

STATUS

- **If HOT AIR closed only:**
  CAB TEMP BY PACK ONLY
  Basic temperature regulation by packs only (remains automatic).

INOP SYS

PACK 1+2 (If PACKS OFF)
HOT AIR
FWD CRG HEAT

COND HOT AIR FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-COND-I-00017296.0001001 / 03 NOV 22

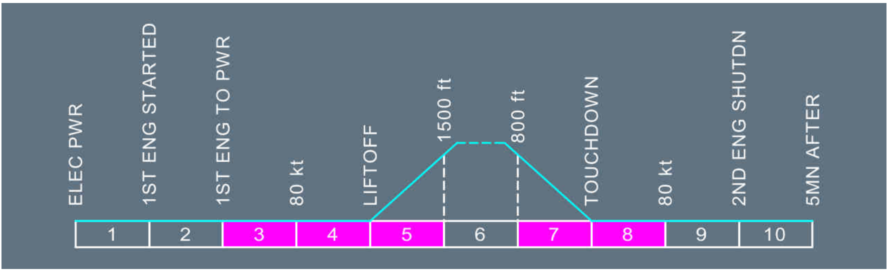
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The position of the hot air pressure regulating valve disagrees with the commanded position, or
- A duct overheat persists.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

COND HOT AIR FAULT (Cont'd)

Ident.: PRO-ABN-COND-I-00018044.0001001 / 21 MAR 16

L12

STATUS

- **If HOT AIR closed only:**
  CAB TEMP BY PACK ONLY
  Basic temperature regulation by packs only (remains automatic).

INOP SYS

PACK 1+2 (If PACKS OFF)
HOT AIR
FWD CRG HEAT

COND L+R CAB FAN FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597

Ident.: PRO-ABN-COND-R-00017297.0001001 / 21 MAR 16

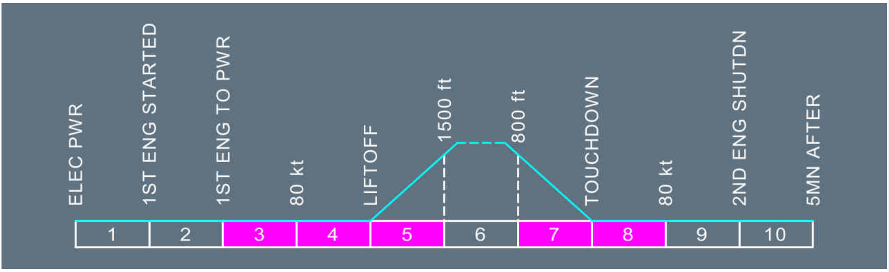
L2

ANNUNCIATIONS

Triggering Conditions:

This alert triggers if both recirculation fans are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-R-00018045.0001001 / 22 MAR 17

7

PACK FLOW...HI

Continued on the following page

COND L+R CAB FAN FAULT (Cont'd)

Ident.: PRO-ABN-COND-R-00018046.0001001 / 21 MAR 16

STATUS

INOP SYS

L+R CAB FAN

COND L+R CAB FAN FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

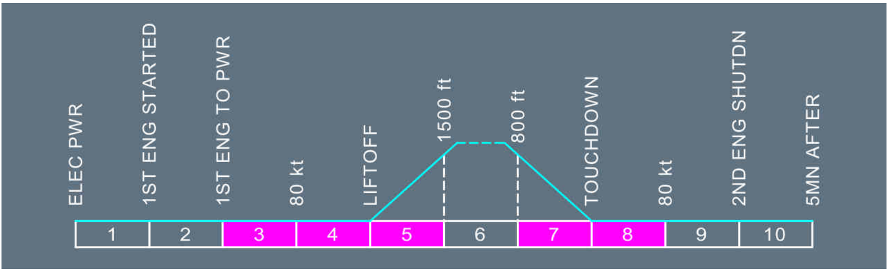
Ident.: PRO-ABN-COND-R-00017297.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers if both recirculation fans are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-R-00018046.0001001 / 21 MAR 16

STATUS

INOP SYS

L+R CAB FAN

COND L+R CAB FAN FAULT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

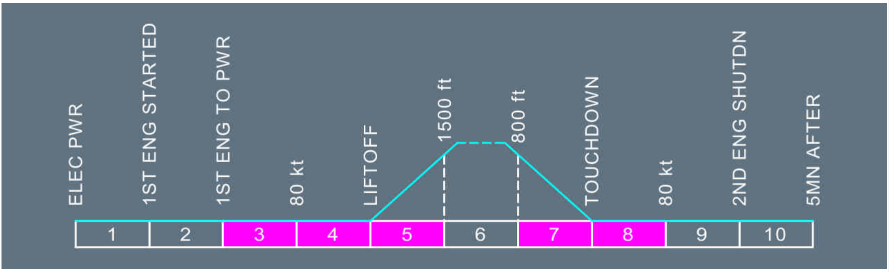
Ident.: PRO-ABN-COND-R-00017297.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers if both recirculation fans are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-R-00018045.0002001 / 22 MAR 17

ECON FLOW..NORM

Ident.: PRO-ABN-COND-R-00018046.0001001 / 21 MAR 16

STATUS

INOP SYS

L+R CAB FAN

COND LAV + GALLEY FAN FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

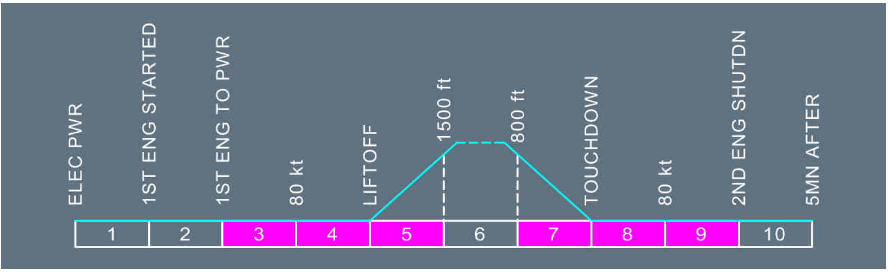
Ident.: PRO-ABN-COND-S-00017300.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers if the extraction fan of the lavatory and galley is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-S-00010751.0002001 / 25 FEB 14

L2 Cabin zone temperature sensors are normally ventilated by the air extracted by the fan. Therefore, cabin zone temperature regulation is lost.

L1 Crew awareness.

Ident.: PRO-ABN-COND-S-00010752.0002001 / 05 AUG 10

L12

STATUS

	INOP SYS
CAB ZONE AT FIXED TEMP *See* (1)	GALLEY FAN

(1)

- *Cabin zone inlet duct temperature is constant (15 °C or 59 °F).*
- *Cockpit temperature regulation is normal.*

COND LAV + GALLEY FAN FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

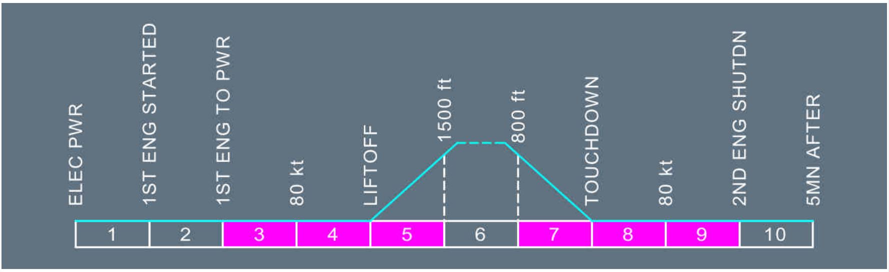
Ident.: PRO-ABN-COND-S-00017300.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers if the extraction fan of the lavatory and galley is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-S-00010751.0002001 / 25 FEB 14

L2 Cabin zone temperature sensors are normally ventilated by the air extracted by the fan. Therefore, cabin zone temperature regulation is lost.

L1 Crew awareness.

COND LAV + GALLEY FAN FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

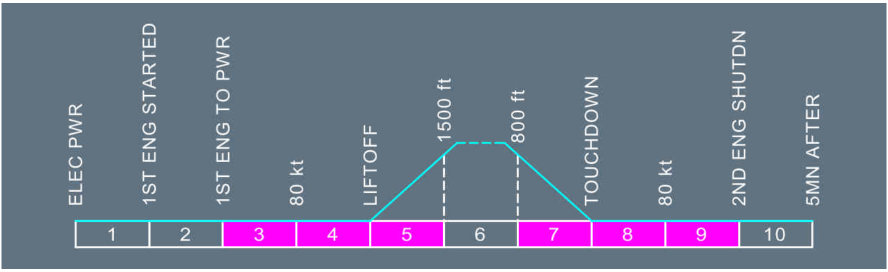
Ident.: PRO-ABN-COND-S-00017300.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers if the extraction fan of the lavatory and galley is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-S-00010751.0002001 / 25 FEB 14

L2 Cabin zone temperature sensors are normally ventilated by the air extracted by the fan. Therefore, cabin zone temperature regulation is lost.

L1 Crew awareness.

Continued on the following page

COND LAV + GALLEY FAN FAULT (Cont'd)

Ident.: PRO-ABN-COND-S-00010752.0011001 / 05 AUG 10

8

L12

STATUS

- **If ACSC 2 is operative:**
  CAB TEMP CKPT CTL ONLY
  - *To adjust the cabin zone temperature, use the FWD CABIN and AFT CABIN zone temperature selectors (overhead panel). The selectors control the cabin duct temperature directly.*
  - *Cockpit temperature regulation is normal.*
- **If ACSC 2 is inoperative:**
  CAB AT FIXED TEMP
  - *FWD CABIN and AFT CABIN zone temperature selectors are inoperative.*
  - *To adjust the cabin zone temperature, use the COCKPIT zone temperature selector (overhead panel). Cabin duct temperature is the same as cockpit duct temperature.*
  - *Cockpit temperature regulation is normal.*

INOP SYS

GALLEY FAN
PACK 2 (1)
COND CTL 2 (1)

(1) (If ACSC 2 is inoperative)

COND TRIM AIR SYS FAULT

Applicable to: ALL

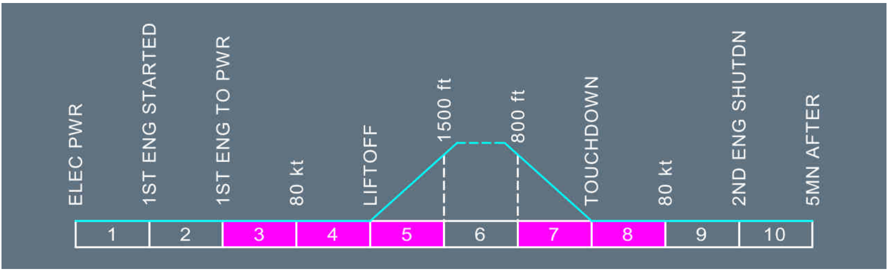
Ident.: PRO-ABN-COND-AI-00017305.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- One trim air valve is failed, or
- There is an overpressure downstream of the hot air valve.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-AI-00010730.0001001 / 05 AUG 10

- **One trim valve failed:**

  A message corresponding to the affected valve is displayed:

  AFT CAB TRIM VALVE
  FWD CAB TRIM VALVE
  CKPT TRIM VALVE

- **High pressure detected downstream of the hot air pressure regulating valve:**
  TRIM AIR HI PR

L2 Note: *If the warning and the TRIM AIR HI PR message are triggered when all trim air valves are closed (during the first 30 s after the packs are selected on, or in flight, if all zone heating demands are fulfilled), disregard them.*

COND ZONE REGUL FAULT
(PRIMARY CHANNEL FAILED)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

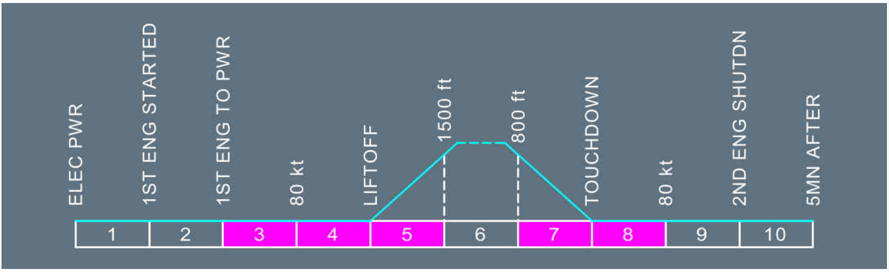
Ident.: PRO-ABN-COND-P-00017309.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the primary channel of the zone controller is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-COND-P-00010744.0001001 / 25 FEB 14

L2 The hot air pressure regulating valve and trim air valves close.

L1 Crew awareness.

Continued on the following page

COND ZONE REGUL FAULT (Cont'd)
(PRIMARY CHANNEL FAILED)

Ident.: PRO-ABN-COND-P-00018078.0001001 / 21 MAR 16

L12

STATUS

CAB ZONE AT FIXED TEMP

See (1)

INOP SYS

FWD CRG HEAT

(1) *The packs control zones to 24 °C (75 °F) via the zone controller secondary channel:*
- *Pack 1 controls the cockpit*
- *Pack 2 controls the cabin.*

COND ZONE REGUL FAULT
(PRIMARY AND SECONDARY CHANNELS FAILED)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

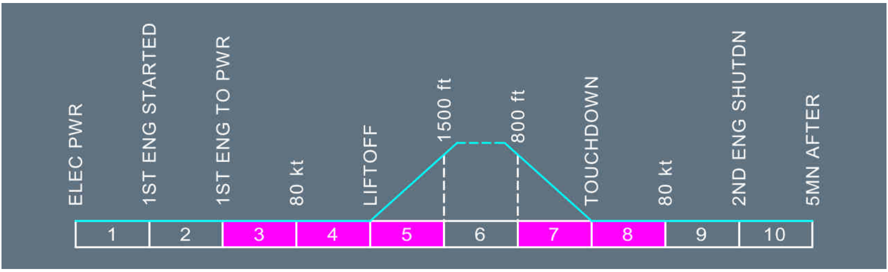
Ident.: PRO-ABN-COND-Q-00018304.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the primary and secondary channels of the zone controller are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

COND ZONE REGUL FAULT (Cont'd)
(PRIMARY AND SECONDARY CHANNELS FAILED)

Ident.: PRO-ABN-COND-Q-00010746.0001001 / 25 FEB 14

L2 The hot air pressure regulating valve and trim air valves close.

L1 Crew awareness.

Ident.: PRO-ABN-COND-Q-00018081.0001001 / 21 MAR 16

L12

STATUS

ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY
See (1)
PACKS AT FIXED TEMP
See (2)

INOP SYS

ZONE REGUL
FWD CRG HEAT

(1) *As the FADEC no longer receives a bleed demand correction, only approach idle can be selected.*

(2) *The packs are controlled to deliver a fixed temperature of 20 °C (68 °F) for pack 1, and 10 °C (50 °F) for pack 2.*

CONFIG L(R) SIDESTICK FAULT
(BY TAKE OVER)

Applicable to: ALL

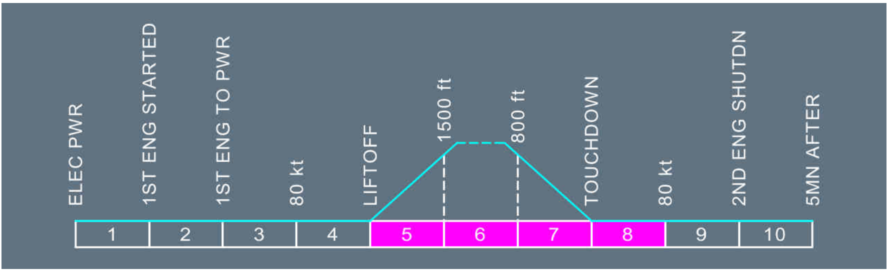
Ident.: PRO-ABN-CONFIG-AA-00018894.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L or R sidestick is inoperative (takeover pb pressed more than 30 s) and when thrust levers are set at TO, or Flex TO, or when pressing T.O CONFIG pb.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CONFIG-AA-00018411.0001001 / 21 MAR 16

L(R) TAKEOVER ....DEPRESS

L2 *The affected stick becomes operative.*

CONFIG PARK BRK ON

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-CONFIG-Z-00017858.0002001 / 21 MAR 16

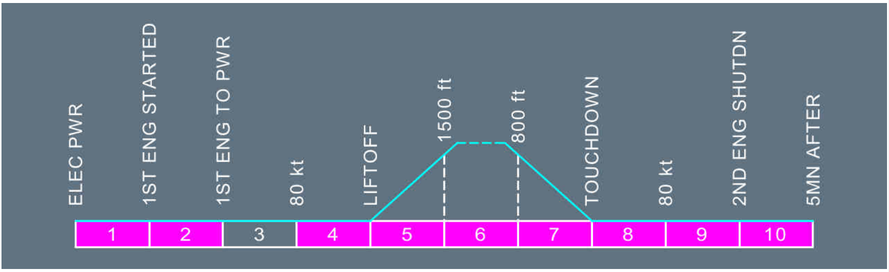
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the parking brake is on and thrust levers are set at TO or FLXTO power position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CONFIG-Z-00011302.0001001 / 05 AUG 10

L2 Check that the parking brake handle is in the OFF position. If warning stays on, check that the brake pressure is at zero on the BRAKES PRESSURE indicator.

CONFIG PARK BRK ON

Applicable to: MSN 01251

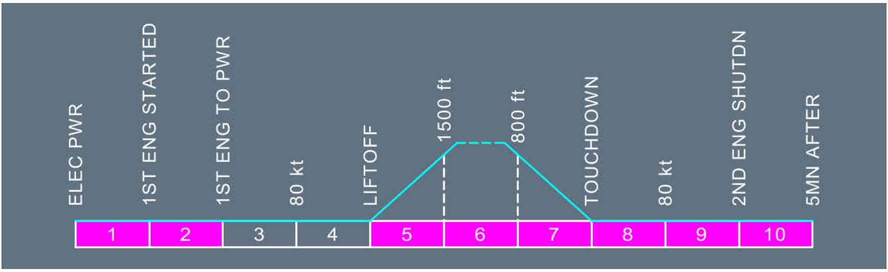
Ident.: PRO-ABN-CONFIG-Z-00017858.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the parking brake is on and thrust levers are set at TO or FLXTO power position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CONFIG-Z-00011302.0001001 / 05 AUG 10

L2 Check that the parking brake handle is in the OFF position. If warning stays on, check that the brake pressure is at zero on the BRAKES PRESSURE indicator.

CONFIG PARK BRK ON

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-CONFIG-Z-00011302.0001001 / 05 AUG 10

L2 Check that the parking brake handle is in the OFF position. If warning stays on, check that the brake pressure is at zero on the BRAKES PRESSURE indicator.

CONFIG PITCH TRIM NOT IN T.O RANGE

Applicable to: ALL

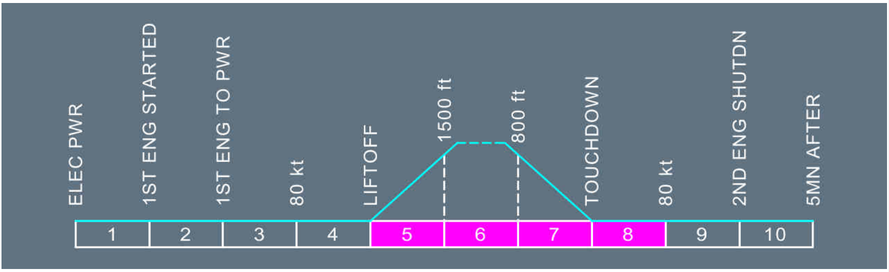
Ident.: PRO-ABN-CONFIG-AB-00018895.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 If the PITCH TRIM is not in TO configuration, this alert triggers:
- when thrust levers are set at TO, or Flex TO, or
- when pressing T.O CONFIG pb.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CONFIG-AB-00011773.0001001 / 25 FEB 14

Crew awareness.

CONFIG RUD TRIM NOT IN T.O RANGE

Applicable to: ALL

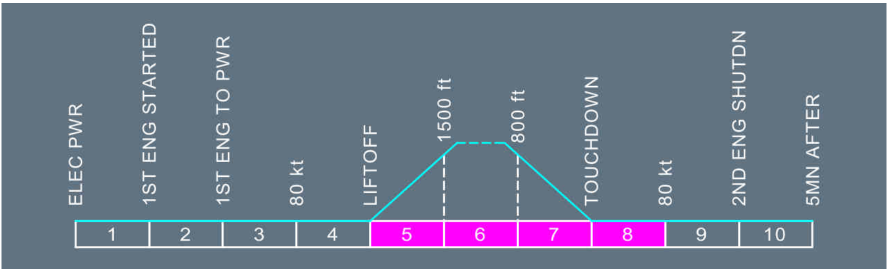
Ident.: PRO-ABN-CONFIG-AC-00018896.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 If the RUD TRIM is not in TO configuration, this alert triggers:
- when thrust levers are set at TO, or Flex TO, or
- when pressing T.O CONFIG pb.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CONFIG-AC-00011776.0001001 / 25 FEB 14

Crew awareness.

CONFIG SLATS (FLAPS) NOT IN T.O CONFIG

Applicable to: ALL

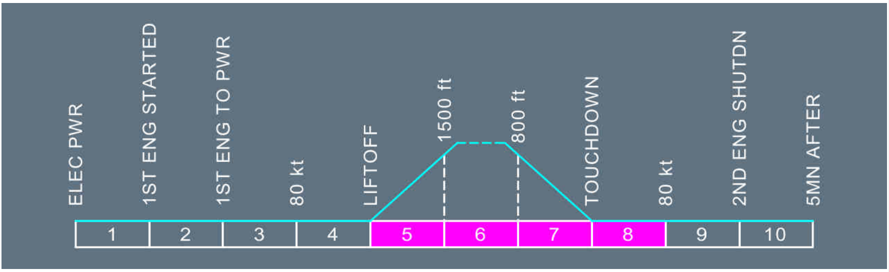
Ident.: PRO-ABN-CONFIG-AD-00018897.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 If the slats or flaps are not in TO configuration, this alert triggers:
- when thrust levers are set at TO, or Flex TO, or
- when pressing T.O CONFIG pb.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CONFIG-AD-00011758.0001001 / 25 FEB 14

Crew awareness.

CONFIG SPD BRK NOT RETRACTED

Applicable to: ALL

Ident.: PRO-ABN-CONFIG-AE-00018898.0001001 / 21 MAR 16

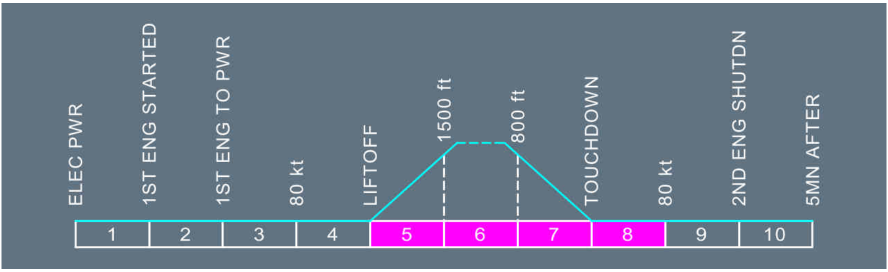
ANNUNCIATIONS

Triggering Conditions:

L2

If the speed brakes are not retracted, this alert triggers:
- when thrust levers are set at TO, or Flex TO, or
- when pressing T.O CONFIG pb.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-CONFIG-AE-00011766.0001001 / 09 FEB 16

Crew awareness.

Intentionally left blank

DATALINK ATC FAULT

Applicable to: MSN 04827-04974

Ident.: PRO-ABN-DATALINK-B-00017149.0001001 / 21 MAR 16

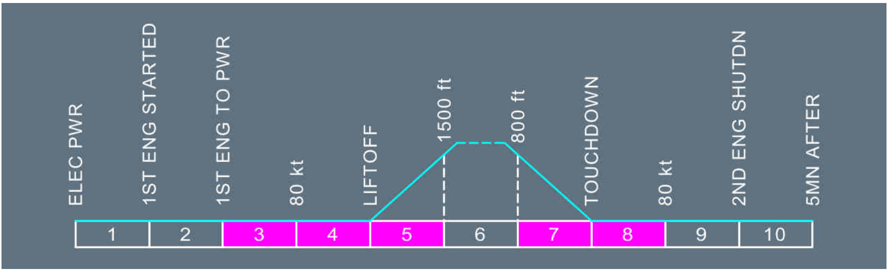
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The ATC datalink communications is failed, or
- The ATC datalink application is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DATALINK-B-00018460.0001001 / 21 MAR 16

Crew awareness.

ATC COM VOICE ONLY

Ident.: PRO-ABN-DATALINK-B-00018461.0001001 / 21 MAR 16

STATUS

	INOP SYS
ATC COM VOICE ONLY	DATALINK ATC

DATALINK ATSU FAULT

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-DATALINK-A-00017150.0001001 / 21 MAR 16

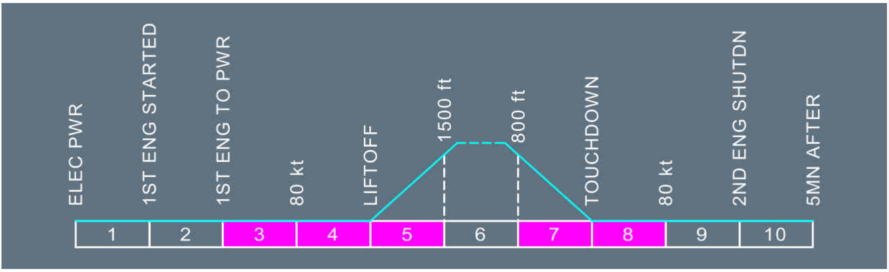
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure in ATSU initialization associated with ATSU INIT FAULT ECAM message.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-DATALINK-A-00018462.0001001 / 21 MAR 17

2

Crew awareness.

ATSU INIT FAULT

L2 *Displayed, in case of failure upon ATSU initialization.* *Refer to DSC-46-10-50 How to Initialize.*

Ident.: PRO-ABN-DATALINK-A-00018463.0001001 / 21 MAR 16

3

STATUS

INOP SYS

ATSU
DATA COMPANY

DATALINK ATSU FAULT

Applicable to: MSN 04827-04974

Ident.: PRO-ABN-DATALINK-A-00017150.0001001 / 21 MAR 16

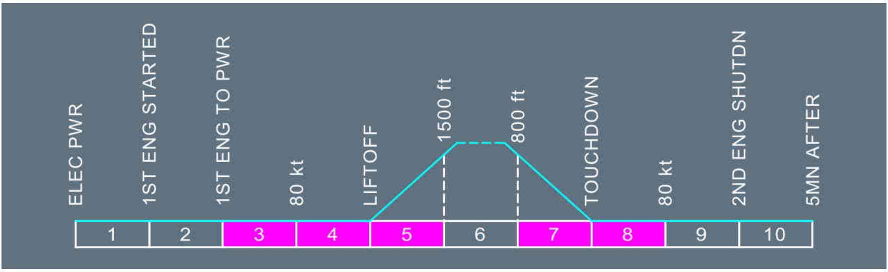
4

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure in ATSU initialization associated with ATSU INIT FAULT ECAM message.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DATALINK-A-00018462.0001001 / 21 MAR 17

5

Crew awareness.

ATSU INIT FAULT

L2 *Displayed, in case of failure upon ATSU initialization.* *Refer to DSC-46-10-50 How to Initialize.*

Ident.: PRO-ABN-DATALINK-A-00018463.0002001 / 21 MAR 16

STATUS

	INOP SYS
ATC COM VOICE ONLY	ATSU DATALINK ATC DATA COMPANY

DATALINK COMPANY FAULT

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-DATALINK-C-00017151.0001001 / 21 MAR 16

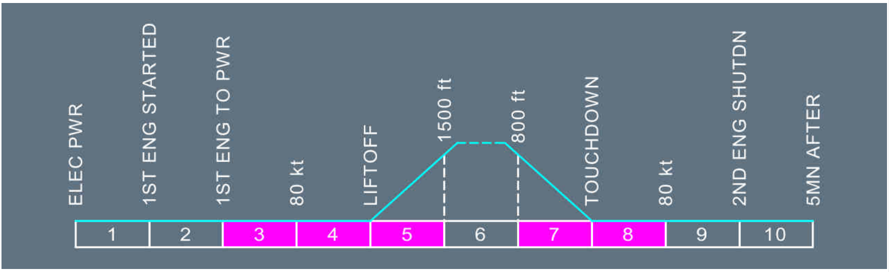
6

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure in the AOC datalink communications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DATALINK-C-00018458.0001001 / 21 MAR 16

7

Crew awareness.

Ident.: PRO-ABN-DATALINK-C-00018459.0001001 / 21 MAR 16

8

STATUS

INOP SYS

DATA COMPANY

[QRH] COCKPIT DOOR FAULT

Ident.: PRO-ABN-DOOR-00009968.0001001 / 17 MAR 17
Applicable to: MSN 01376

CKPT DOOR CONT [OVHD PANEL] .... CHECK

- **If two or more STRIKE status lights on:**
  COCKPIT DOOR .... OPEN
  COCKPIT DOOR sw .... UNLOCK 10 s THEN NORM
  - **If reset unsuccessful:** the cockpit door is not intrusion proof.
- **If two CHAN status light on:**

  Automatic latch release is not available, in case of cockpit decompression.
- **If no status light on:**

  TO UNLOCK THE DOOR: COCKPIT DOOR HANDLE AVAIL

[QRH] COCKPIT DOOR FAULT

Ident.: PRO-ABN-DOOR-00009968.0003001 / 17 MAR 17
1 **Applicable to: MSN 01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

CKPT DOOR CONT [OVHD PANEL] .... CHECK

- **If one or more STRIKE status light on:**
  COCKPIT DOOR .... OPEN
  COCKPIT DOOR sw .... UNLOCK 10 s THEN NORM
  - **If two or more STRIKE status lights on:**

    COCKPIT DOOR NOT INTRUSION PROOF.
- **If two CHAN status lights on:**

  Automatic latch release is not available, in case of cockpit decompression.
- **If no status light on:**

  TO UNLOCK THE DOOR: COCKPIT DOOR HANDLE AVAIL

DOOR L(R)(FWD)(AFT) AVIONICS
(IN FLIGHT)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

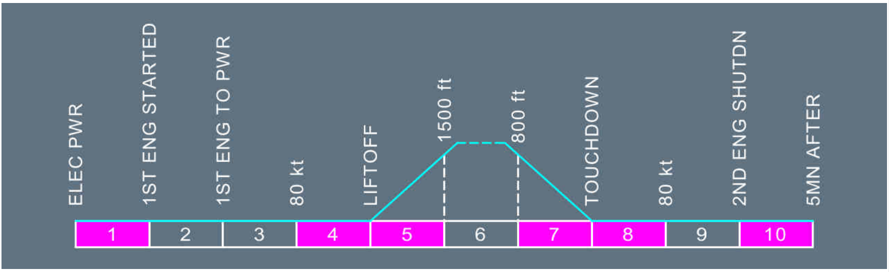
Ident.: PRO-ABN-DOOR-A-00016888.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R)(FWD)(AFT) avionics door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-A-00018945.0004001 / 21 MAR 16

2

L2 No crew action required as long as cabin pressure is normal.

L1 ● **IF ABN CAB V/S:**

MAX FL...100/MEA-MORA

L2 *Limit maximum flight level to FL 100, MEA-MORA, or minimum obstacle clearance altitude. Avionics doors are of plug type. Therefore full depressurization is not recommended.*

Ident.: PRO-ABN-DOOR-A-00018944.0003001 / 21 MAR 16

3

STATUS

● **IF ABN CAB V/S:**

MAX FL.. 100/MEA-MORA

DOOR L(R)(FWD)(AFT) AVIONICS
(IN FLIGHT)

Applicable to: MSN 01251

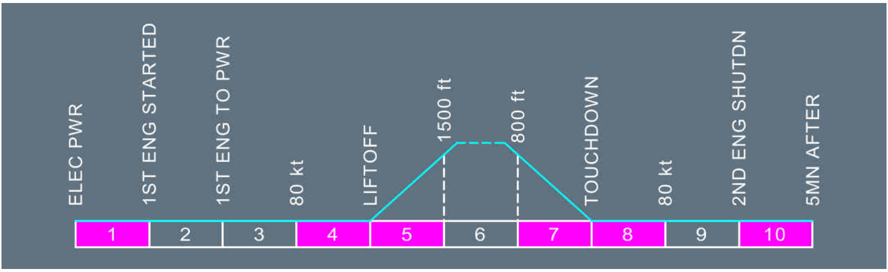
Ident.: PRO-ABN-DOOR-A-00016888.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R)(FWD)(AFT) avionics door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-A-00018945.0001001 / 21 MAR 16

L2 No crew action required as long as cabin pressure is normal.

L1 ● **IF ABN CAB V/S:**

MAX FL.. 100/MEA

L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude. Avionics doors are of plug type. Therefore full depressurization is not recommended.*

Ident.: PRO-ABN-DOOR-A-00018944.0001001 / 21 MAR 16

STATUS

MAX FL.. 100/MEA

DOOR L(R)(FWD)(AFT) AVIONICS
(IN FLIGHT)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

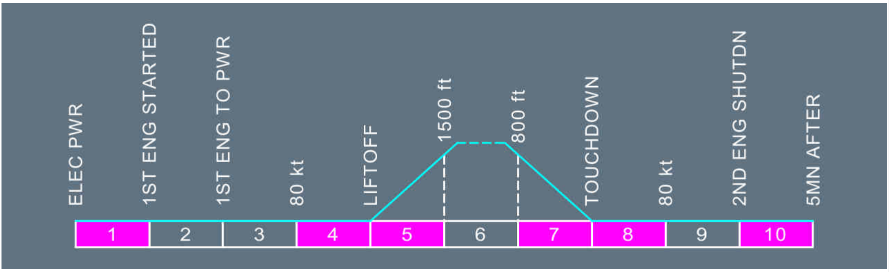
Ident.: PRO-ABN-DOOR-A-00016888.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R)(FWD)(AFT) avionics door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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DOOR L(R)(FWD)(AFT) AVIONICS
(IN FLIGHT)

Applicable to: MSN 02014, 06561

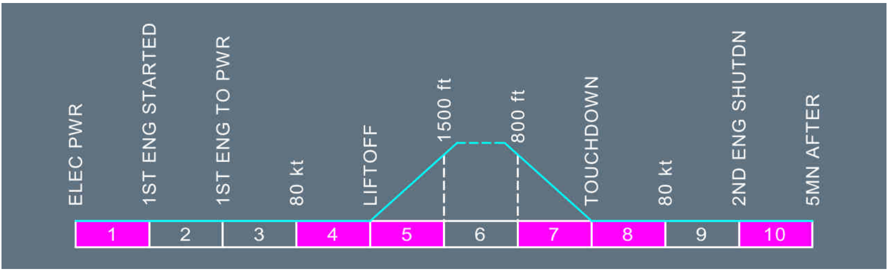
Ident.: PRO-ABN-DOOR-A-00016888.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R)(FWD)(AFT) avionics door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-A-00018945.0001001 / 21 MAR 16

L2 No crew action required as long as cabin pressure is normal.

L1
- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA

L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude. Avionics doors are of plug type. Therefore full depressurization is not recommended.*

Ident.: PRO-ABN-DOOR-A-00018944.0002001 / 21 MAR 16

STATUS

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA

DOOR L(R)(FWD)(AFT) AVIONICS
(ON GROUND)

Applicable to: ALL

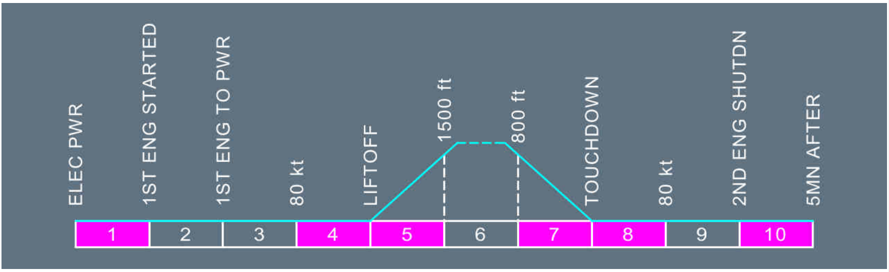
Ident.: PRO-ABN-DOOR-C-00019100.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R)(FWD)(AFT) avionics door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-C-00019096.0001001 / 21 MAR 16

Crew awareness.

DOOR L(R) FWD(AFT) CABIN
(IN FLIGHT)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

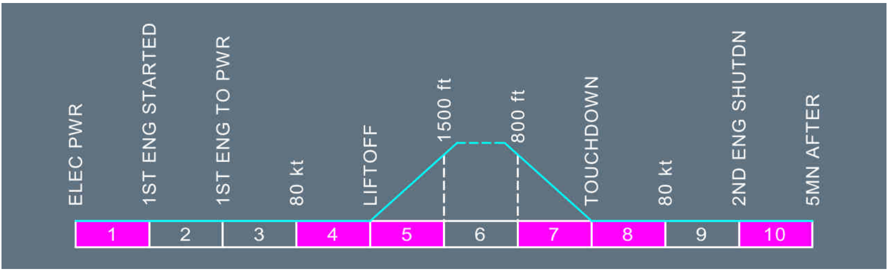
Ident.: PRO-ABN-DOOR-D-00019103.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) cabin door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-D-00019101.0002001 / 21 MAR 16

4

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL..100/MEA-MORA

  L2 *Limit maximum flight level to FL 100, MEA-MORA, or minimum obstacle clearance altitude.*
  If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Ident.: PRO-ABN-DOOR-D-00019104.0003001 / 21 MAR 16

5

STATUS

- **IF ABN CAB V/S:**

  MAX FL... 100/MEA-MORA

DOOR L(R) FWD(AFT) CABIN
(IN FLIGHT)

Applicable to: MSN 01251

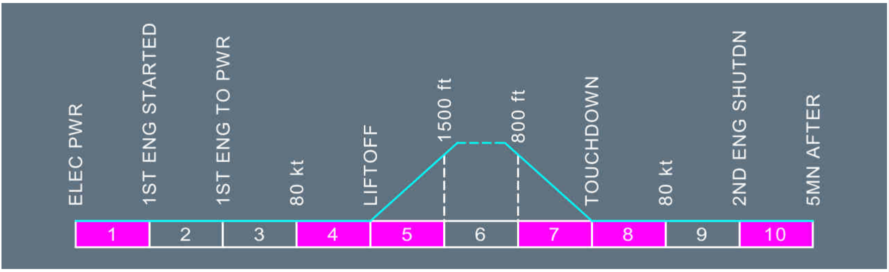
Ident.: PRO-ABN-DOOR-D-00019103.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) cabin door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-D-00019101.0001001 / 21 MAR 16

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA

  L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude.*
  If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Ident.: PRO-ABN-DOOR-D-00019104.0001001 / 21 MAR 16

STATUS

MAX FL.. 100/MEA

DOOR L(R) FWD(AFT) CABIN
(IN FLIGHT)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

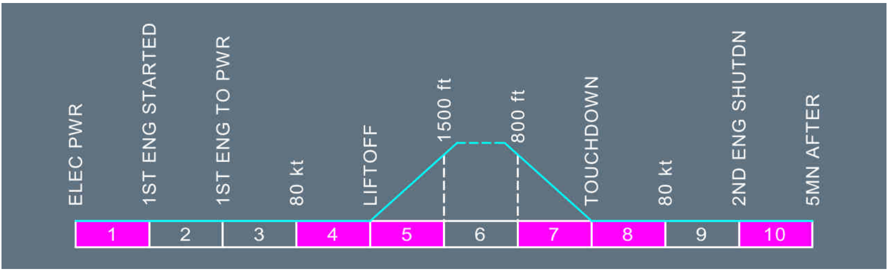
Ident.: PRO-ABN-DOOR-D-00019103.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) cabin door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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DOOR L(R) FWD(AFT) CABIN
(IN FLIGHT)

Applicable to: MSN 02014, 06561

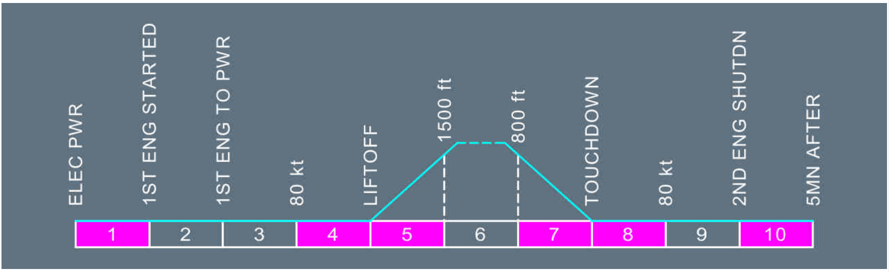
Ident.: PRO-ABN-DOOR-D-00019103.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) cabin door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-D-00019101.0001001 / 21 MAR 16

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**
  MAX FL.. 100/MEA

  L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude.*
  If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Ident.: PRO-ABN-DOOR-D-00019104.0002001 / 21 MAR 16

STATUS

- **IF ABN CAB V/S:**
  MAX FL.................................... 100/MEA

DOOR L(R) FWD(AFT) CABIN
(ON GROUND)

Applicable to: ALL

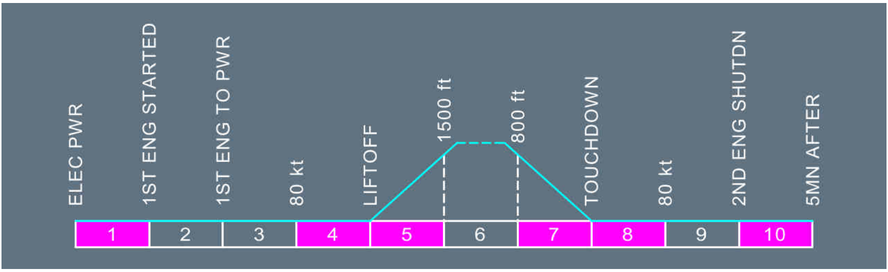
Ident.: PRO-ABN-DOOR-E-00019106.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) cabin door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-E-00019102.0001001 / 21 MAR 16

L2 The crew may confirm a cabin door warning by checking the visual indicator on the door.

L1 Crew awareness.

DOOR L(R) FWD(AFT) EMER EXIT
(IN FLIGHT)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01825, 01832, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-DOOR-F-00019121.0001001 / 21 MAR 16

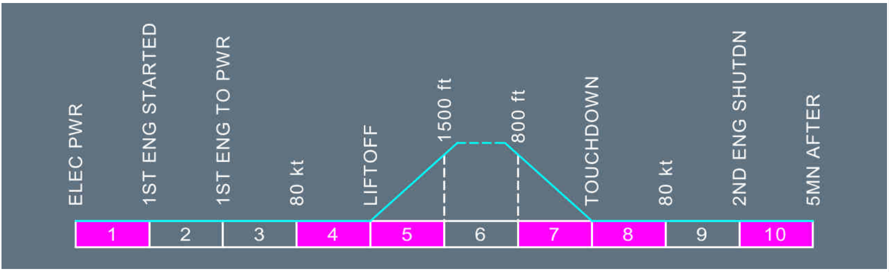
6

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:



Ident.: PRO-ABN-DOOR-F-00019120.0003001 / 21 MAR 16

7

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL..100/MEA-MORA

L2 *Limit maximum flight level to FL 100, MEA-MORA, or minimum obstacle clearance altitude. If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.*

Continued on the following page

DOOR L(R) FWD(AFT) EMER EXIT (Cont'd)
(IN FLIGHT)

Ident.: PRO-ABN-DOOR-F-00019122.0009001 / 21 MAR 16

8

STATUS

- **IF ABN CAB V/S:**
  MAX FL.. 100/MEA-MORA

DOOR L(R) FWD(AFT) EMER EXIT
(IN FLIGHT)

Applicable to: MSN 01251

Ident.: PRO-ABN-DOOR-F-00019121.0001001 / 21 MAR 16

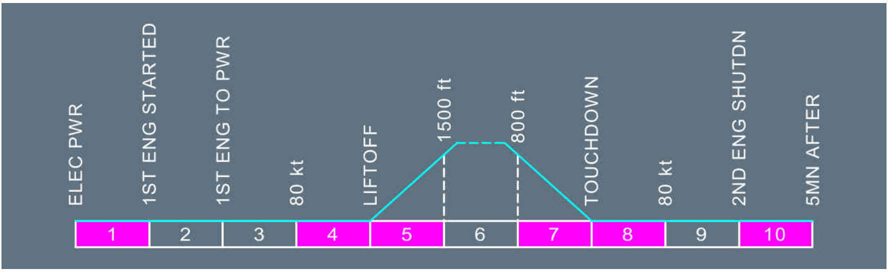
9

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

DOOR L(R) FWD(AFT) EMER EXIT (Cont'd)
(IN FLIGHT)

Ident.: PRO-ABN-DOOR-F-00019120.0001001 / 21 MAR 16

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA

L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude.*
If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Ident.: PRO-ABN-DOOR-F-00019122.0001001 / 21 MAR 16

STATUS

MAX FL.. 100/MEA

DOOR L(R) EMER EXIT
(IN FLIGHT)

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

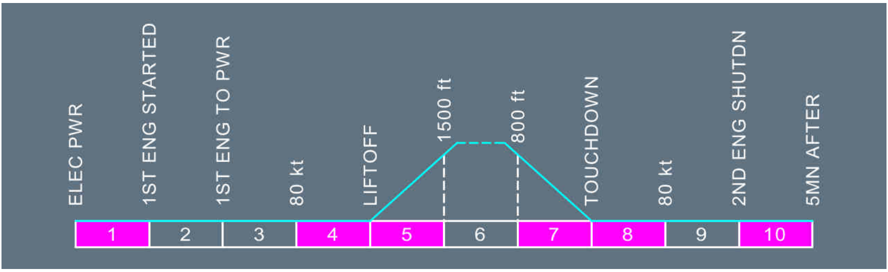
Ident.: PRO-ABN-DOOR-F-00019113.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-F-00019112.0003001 / 21 MAR 16

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL..100/MEA-MORA

L2 *Limit maximum flight level to FL 100, MEA-MORA, or minimum obstacle clearance altitude. If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.*

Ident.: PRO-ABN-DOOR-F-00019114.0009001 / 21 MAR 16

STATUS

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA-MORA

DOOR L(R) FWD(AFT) EMER EXIT
(IN FLIGHT)

Applicable to: MSN 02014, 06561

Ident.: PRO-ABN-DOOR-F-00019121.0001001 / 21 MAR 16

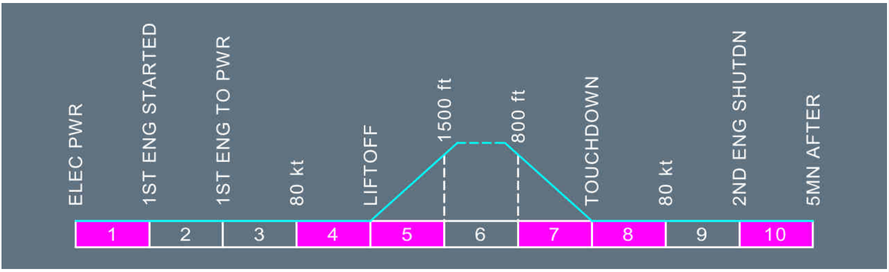
10

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-F-00019120.0001001 / 21 MAR 16

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**
  MAX FL.. 100/MEA

L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude.*
If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Ident.: PRO-ABN-DOOR-F-00019122.0004001 / 21 MAR 16

STATUS

- **IF ABN CAB V/S:**
  MAX FL.................................... 100/MEA

DOOR L(R) AFT EMER EXIT
(IN FLIGHT)

Applicable to: MSN 11531

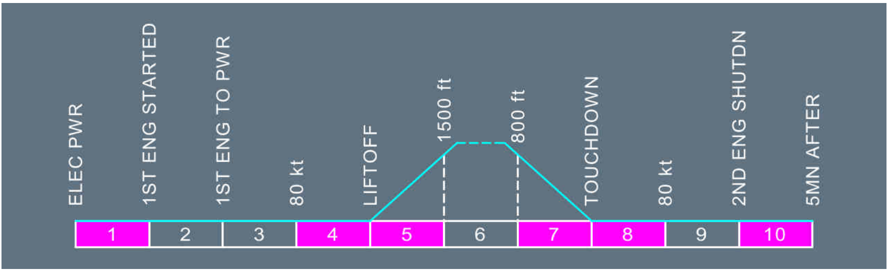
11 Ident.: PRO-ABN-DOOR-F-00022239.0001001 / 12 MAR 18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) AFT emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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12 Ident.: PRO-ABN-DOOR-F-00022240.0001001 / 27 FEB 18

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL...100/MEA-MORA

  L2 *Limit maximum flight level to FL 100, MEA-MORA, or minimum obstacle clearance altitude.*
  If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Continued on the following page

DOOR L(R) AFT EMER EXIT (Cont'd)
(IN FLIGHT)

13 Ident.: PRO-ABN-DOOR-F-00022241.0001001 / 27 FEB 18

STATUS

- **IF ABN CAB V/S:**
  MAX FL.. 100/MEA-MORA

DOOR L(R) FWD(AFT) EMER EXIT
(ON GROUND)

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597

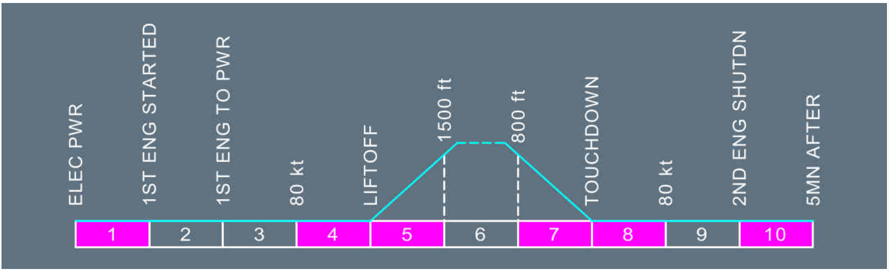
14 Ident.: PRO-ABN-DOOR-G-00019125.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) FWD(AFT) emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

DOOR L(R) FWD(AFT) EMER EXIT (Cont'd)
(ON GROUND)

Ident.: PRO-ABN-DOOR-G-00019124.0001001 / 21 MAR 16

15

L2 The crew may confirm an emergency exit door warning by checking the visual indicator on the door.

L1 Crew awareness.

DOOR L(R) EMER EXIT
(ON GROUND)

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

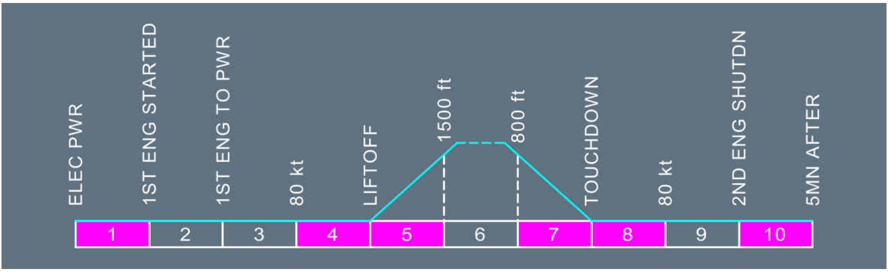
Ident.: PRO-ABN-DOOR-G-00019117.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-G-00019116.0002001 / 21 MAR 16

L2 The crew may confirm an emergency exit door warning by checking the visual indicator on the door.

L1 Crew awareness.

DOOR L(R) AFT EMER EXIT
(ON GROUND)

Applicable to: MSN 11531

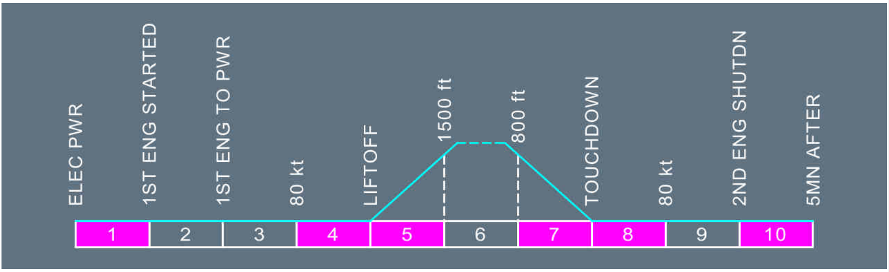
16 Ident.: PRO-ABN-DOOR-G-00022242.0001001 / 12 MAR 18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) AFT emergency exit door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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17 Ident.: PRO-ABN-DOOR-G-00022243.0001001 / 27 FEB 18

L2 The crew may confirm an emergency exit door warning by checking the visual indicator on the door.

L1 Crew awareness.

DOOR L(R) OVERWNG EXIT
(IN FLIGHT)

Applicable to: MSN 11531

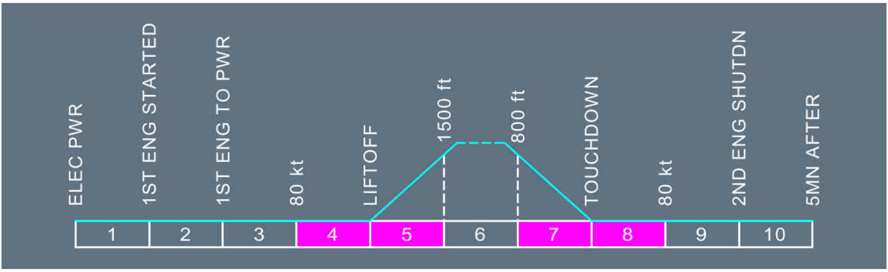
18 Ident.: PRO-ABN-DOOR-I-00022218.0002001 / 27 FEB 18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) overwing exit is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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19 Ident.: PRO-ABN-DOOR-I-00022219.0002001 / 27 FEB 18

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL...100/MEA-MORA

  L2 *Limit maximum flight level to FL 100, MEA-MORA, or minimum obstacle clearance altitude.*
  If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

20 Ident.: PRO-ABN-DOOR-I-00022220.0002001 / 27 FEB 18

STATUS

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA-MORA

DOOR L(R) OVERWNG EXIT
(ON GROUND)

Applicable to: MSN 11531

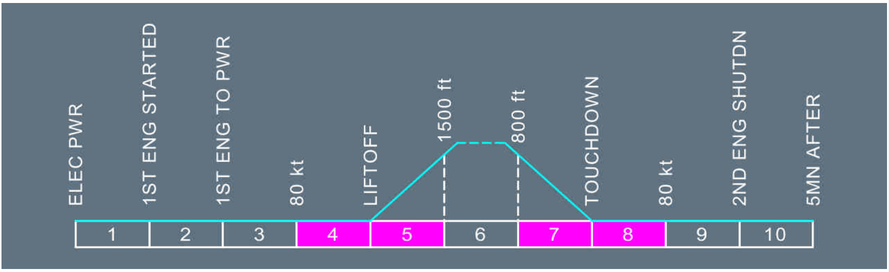
21 Ident.: PRO-ABN-DOOR-J-00022223.0002001 / 27 FEB 18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the L(R) overwing exit is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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22 Ident.: PRO-ABN-DOOR-J-00022224.0002001 / 27 FEB 18

L2 The crew may confirm an overwing exit warning by checking the visual indicator on the door.

L1 Crew awareness.

DOOR L(R) OVERWNG FAULT

Applicable to: MSN 11531

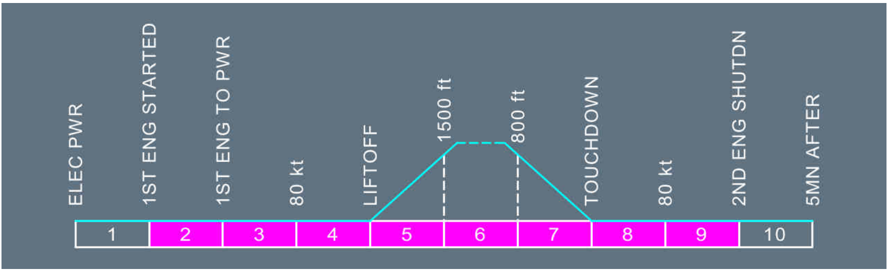
23 Ident.: PRO-ABN-DOOR-K-00022228.0002001 / 27 FEB 18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the flight lock actuator of the L(R) overwing exit is failed, or detected in the wrong position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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24 Ident.: PRO-ABN-DOOR-K-00022229.0002001 / 27 FEB 18

- **If the flight lock actuator is detected failed in locked position:**
  FLIGHT LOCK ENGAGED

  L2 The affected overwing exit is not usable for evacuation.

- L1 **If the flight lock actuator is detected failed in unlocked position:**
  FLIGHT LOCK NOT AVAIL

- **If the flight lock actuator is not commanded active in flight:**
  FLIGHT LOCK CTL FAULT

CABIN CREW...ADVISE

Continued on the following page

DOOR L(R) OVERWNG FAULT (Cont'd)

25 Ident.: PRO-ABN-DOOR-K-00022230.0002001 / 27 FEB 18

STATUS

INOP SYS

OVERWNG DOOR (1)
OVERWNG LOCK (2)

(1) *(If the flight lock actuator is failed locked)*
(2) *(If the flight lock actuator is failed unlocked or cannot be activated)*

DOOR FWD(AFT)(BULK) CARGO
(IN FLIGHT)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

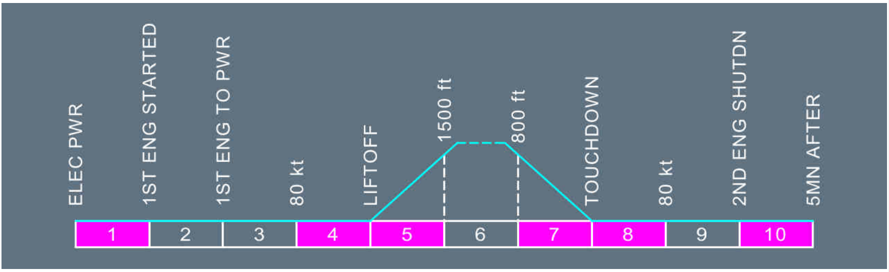
Ident.: PRO-ABN-DOOR-B-00016890.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FWD(AFT)(BULK) cargo door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

DOOR FWD(AFT)(BULK) CARGO (Cont'd)
(IN FLIGHT)

Ident.: PRO-ABN-DOOR-B-00019126.0002001 / 21 MAR 16

26

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL..100/MEA-MORA

L2 *Limit maximum flight level to FL 100, MEA-MORA, or minimum obstacle clearance altitude.*
If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ∆P and altitude by descending.

Ident.: PRO-ABN-DOOR-B-00018946.0003001 / 21 MAR 16

27

STATUS

- **IF ABN CAB V/S:**

  MAX FL..100/MEA-MORA

DOOR FWD(AFT)(BULK) CARGO
(IN FLIGHT)

Applicable to: MSN 01251

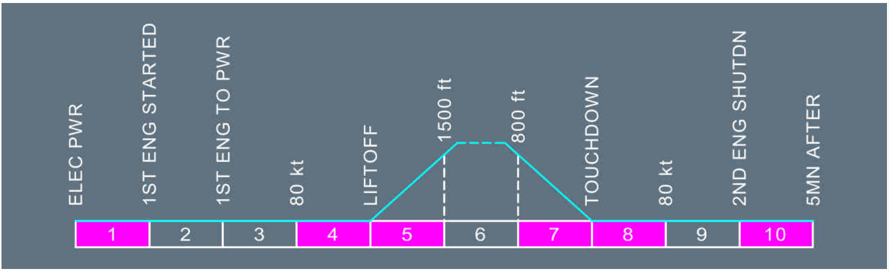
Ident.: PRO-ABN-DOOR-B-00016890.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FWD(AFT)(BULK) cargo door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-B-00019126.0001001 / 21 MAR 16

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA

  L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude.*
  If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Ident.: PRO-ABN-DOOR-B-00018946.0001001 / 21 MAR 16

STATUS

MAX FL.. 100/MEA

DOOR FWD(AFT)(BULK) CARGO
(IN FLIGHT)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

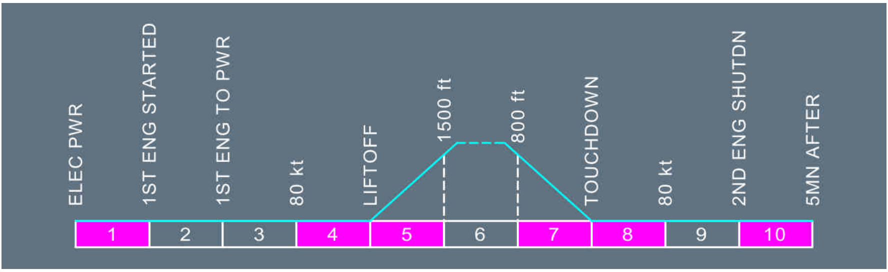
Ident.: PRO-ABN-DOOR-B-00016890.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FWD(AFT)(BULK) cargo door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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DOOR FWD(AFT)(BULK) CARGO
(IN FLIGHT)

Applicable to: MSN 02014, 06561

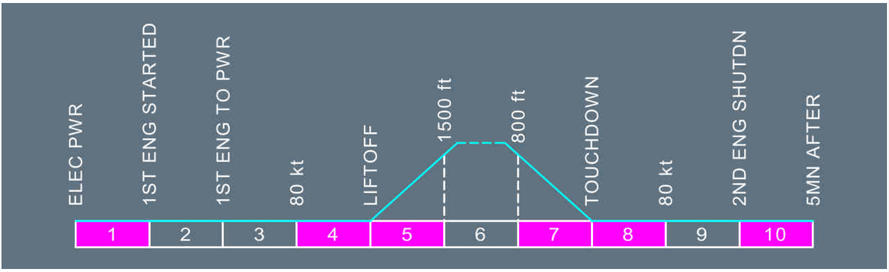
Ident.: PRO-ABN-DOOR-B-00016890.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FWD(AFT)(BULK) cargo door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-B-00019126.0001001 / 21 MAR 16

No crew action required as long as cabin pressure is normal.

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA

  L2 *Limit maximum flight level to FL 100, or MEA, or minimum obstacle clearance altitude.*
  If door warning is accompanied by abnormal increase of cabin altitude, flight crew must reduce cabin ΔP and altitude by descending.

Ident.: PRO-ABN-DOOR-B-00018946.0002001 / 21 MAR 16

STATUS

- **IF ABN CAB V/S:**

  MAX FL.. 100/MEA

DOOR FWD(AFT)(BULK) CARGO
(ON GROUND)

Applicable to: ALL

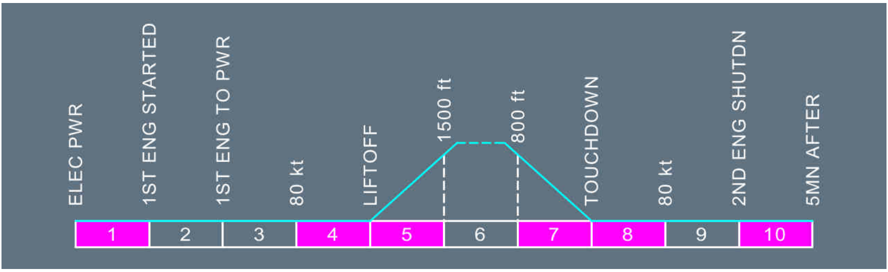
Ident.: PRO-ABN-DOOR-H-00019129.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FWD(AFT)(BULK) cargo door is not detected closed by the proximity sensors.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-DOOR-H-00018947.0002001 / 21 MAR 16

L2 The crew may confirm a cargo door warning by checking the indication on the cargo door.
L1 Crew awareness.

Intentionally left blank

[QRH] DISPLAY UNIT FAILURE

Ident.: PRO-ABN-EIS-00021170.0005001 / 28 MAY 20

1 **Applicable to: MSN 05528-05987, 06097, 06121, 06139-09324, 10949-11597**

- **If DU flashes:**

  This phenomenon may be due to Intermittent Electrical Power Supply Interruptions. One or a combination of the following occurs:
  - Flashing of PFD, ND, ECAM DUs (blank screen or INVALID DATA message),
  - Flashing of MCDU,
  - Intermittent flight control law reversion.

  - **If captain PFD, ND, ECAM DUs or MCDU 1 affected:**

    GEN 1..OFF

    - **If DUs flash continues :**

      GEN 1..ON

    - **If DUs flash stops :**

      KEEP GEN 1 OFF

      Keep the generator OFF for the rest of the flight.

      RUD TRIM..CHECK/RESET

      Use the sideslip indication to reset the rudder trim if necessary. Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.

      APU START..CONSIDER

  - **If first officer PFD, ND, lower ECAM or MCDU 2 affected:**

    GEN 2..OFF

    - **If DUs flash continues:**

      GEN 2..ON

    - **If DUs flash stops:**

      KEEP GEN 2 OFF

      Keep the generator OFF for the rest of the flight.

      RUD TRIM..CHECK/RESET

      Use the sideslip indication to reset the rudder trim if necessary. Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.

      APU START..CONSIDER

- **If DU blank (with or without large F), or distorted, or brightness reduced to minimum:**

  DU brightness knob (affected DU)..OFF THEN ON

Continued on the following page

[QRH] DISPLAY UNIT FAILURE (Cont'd)

Display recovers after 10 s.

- **If unsuccessful:**

  DU brightness knob (affected DU).......... AS RQRD

  The DU can be switched off.

  CONSIDER ECAM/ND XFR

  CONSIDER PFD/ND XFR

■ **If INVALID DISPLAY UNIT message displayed:**

This may be caused by a DU failure.

WAIT AT LEAST 40 s FOR AUTOMATIC DU RECOVERY

- **If DU not recovered:**

  DU brightness knob (affected DU).......... AS RQRD

  The DU can be switched off.

■ **If INVALID DATA message displayed (not on all DUs):**

CONSIDER EIS DMC SWITHCHING

- **If unsuccessful:**

  DU brightness knob (affected DU).......... OFF THEN ON

  Note: The ND display may disappear if too many waypoints and associated information are displayed. Reduce ND range, or deselect WPT or CSTR, and the ND display may automatically recover, after about 30 s.

■ **If INVALID DATA message displayed on all DUs:**

AP, A/THR AND MCDU NAVIGATION DATA AVAILABLE

WAIT AT LEAST 40 s FOR AUTOMATIC DU RECOVERY

- **If one or more DUs not recovered:**

  DUs brightness knob (all affected DUs).......... OFF

  WAIT AT LEAST 40 s

  DUs brightness knob (one by one).......... ON

  - **If INVALID DATA message displayed on all DUs, when switching a given DU back ON:**

    FAULTY DU brightness knob.......... OFF AND KEEP OFF

    REPEAT PROCEDURE

    Repeat the procedure starting at: If INVALID DATA message displayed on all DUs.

Continued on the following page

[QRH] DISPLAY UNIT FAILURE (Cont'd)

- **If inversion of E/WD and SD:**

  ECAM UPPER DISPLAY brightness knob..OFF THEN ON

  The same action on the ECAM LOWER DISPLAY brightness knob produces the same effect.

[QRH] DISPLAY UNIT FAILURE

Ident.: PRO-ABN-EIS-00021170.0002001 / 28 MAY 20
Applicable to: MSN 02734-03710, 03733-05345

■ **If DU flashes:**

This phenomenon may be due to Intermittent Electrical Power Supply Interruptions. One or a combination of the following occurs:
- Flashing of PFD, ND, ECAM DUs (blank screen or INVALID DATA message),
- Flashing of MCDU,
- Intermittent flight control law reversion.

■ **If captain PFD, ND, ECAM DUs or MCDU 1 affected:**
GEN 1 .... OFF

■ **If DUs flash continues :**
GEN 1 .... ON

■ **If DUs flash stops :**
KEEP GEN 1 OFF

Keep the generator OFF for the rest of the flight.

RUD TRIM .... CHECK/RESET

Use the sideslip indication to reset the rudder trim if necessary. Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.

APU START .... CONSIDER

■ **If first officer PFD, ND, lower ECAM or MCDU 2 affected:**
GEN 2 .... OFF

■ **If DUs flash continues:**
GEN 2 .... ON

■ **If DUs flash stops:**
KEEP GEN 2 OFF

Keep the generator OFF for the rest of the flight.

RUD TRIM .... CHECK/RESET

Use the sideslip indication to reset the rudder trim if necessary. Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.

APU START .... CONSIDER

■ **If DU blank (with or without large F), or distorted:**
DU brightness knob (affected DU) .... AS RQRD

Continued on the following page

[QRH] DISPLAY UNIT FAILURE (Cont'd)

The DU can be switched off.

CONSIDER ECAM/ND XFR

CONSIDER PFD/ND XFR

- **If INVALID DISPLAY UNIT message displayed:**
  This may be caused by a DU failure.

  WAIT AT LEAST 40 s FOR AUTOMATIC DU RECOVERY

  - **If DU not recovered:**
    DU brightness knob.......AS RQRD

    The DU can be switched off.

- **If INVALID DATA message displayed (not on all DUs):**

  CONSIDER EIS DMC SWITCHING

  - **If unsuccessful:**
    DU brightness knob (affected DU).......OFF THEN ON

    Note: *The ND display may disappear if too many waypoints and associated information are displayed. Reduce ND range, or deselect WPT or CSTR, and the ND display may automatically recover, after about 30 s.*

- **If INVALID DATA message displayed on all DUs:**

  AP, A/THR AND MCDU NAVIGATION DATA AVAILABLE

  WAIT AT LEAST 40 s FOR AUTOMATIC DU RECOVERY

  - **If one or more DUs not recovered:**
    DUs brightness knob (all affected DUs).......OFF

    WAIT AT LEAST 40 s
    DUs brightness knob (one by one).......ON

    - **If INVALID DATA message displayed on all DUs, when switching a given DU back ON:**
      FAULTY DU brightness knob.......OFF AND KEEP OFF

      REPEAT PROCEDURE

      Repeat the procedure starting at: If INVALID DATA message displayed on all DUs.

- **If inversion of E/WD and SD:**
  ECAM UPPER DISPLAY brightness knob.......OFF THEN ON

  The same action on the ECAM LOWER DISPLAY brightness knob produces the same effect.

[QRH] DISPLAY UNIT FAILURE

Ident.: PRO-ABN-EIS-00021170.0001001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

■ **If DU flashes:**

This phenomenon may be due to Intermittent Electrical Power Supply Interruptions. One or a combination of the following occurs:

- Flashing of PFD, ND, ECAM DUs (blank screen or diagonal line),
- Flashing of MCDU,
- Intermittent flight control law reversion.

■ **If captain PFD, ND, Upper ECAM or MCDU 1 affected:**

GEN 1...OFF

■ **If DUs flash continues :**

GEN 1...ON

■ **If DUs flash stops :**

KEEP GEN 1 OFF

Keep the generator OFF for the rest of the flight.

RUD TRIM...CHECK/RESET

Use the sideslip indication to reset the rudder trim if necessary. Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.

APU START...CONSIDER

■ **If first officer PFD, ND, lower ECAM or MCDU 2 affected:**

GEN 2...OFF

■ **If DUs flash continues :**

GEN 2...ON

■ **If DUs flash stops :**

KEEP GEN 2 OFF

Keep the generator OFF for the rest of the flight.

RUD TRIM...CHECK/RESET

Use the sideslip indication to reset the rudder trim if necessary. Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.

APU START...CONSIDER

■ **If DU blank or distorted:**

DU brightness knob (affected DU)...AS RQRD

Continued on the following page

[QRH] DISPLAY UNIT FAILURE (Cont'd)

The DU can be switched off.

CONSIDER ECAM/ND XFR

CONSIDER PFD/ND XFR

■ **If diagonal line on affected DU:**

This failure may be caused by a DMC FAULT, or a communication interruption between the DMC and DU.

CONSIDER EIS DMC SWITCHING

● **If unsuccessful:**

DU brightness knob (affected DU).. OFF THEN ON

Note: The ND display may disappear if too many waypoints and associated information are displayed. Reduce ND range, or deselect WPT or CSTR, and the ND display may automatically recover, after about 30 s.

■ **If inversion of E/WD and SD:**

ECAM UPPER DISPLAY brightness knob...OFF THEN ON

The same action on the ECAM LOWER DISPLAY brightness knob produces the same effect.

EIS DMC 1(2)(3) FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-EIS-F-00017307.0002001 / 21 MAR 16

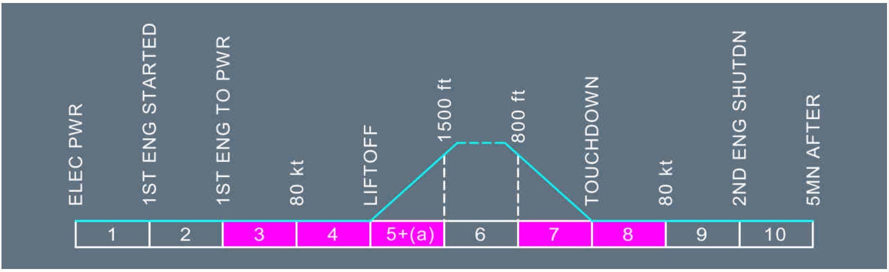
2

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when DMC 1, or DMC 2, or DMC 3 is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

L1 *Note:* *(a) Inhibited only during first 15 s of Flight Phase 5.*

Ident.: PRO-ABN-EIS-F-00010057.0002001 / 10 AUG 10

- **DMC 1**

  EIS DMC SWITCH .... CAPT 3

  L2 *DMC 3 replaces DMC 1.*

- L1 **DMC 2**

  EIS DMC SWITCH.. F/O 3

  L2 *DMC 3 replaces DMC 2.*

- L1 **DMC 3**

  Crew awareness.

Continued on the following page

EIS DMC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-EIS-F-00010058.0001001 / 10 AUG 10

STATUS

INOP SYS

DMC 1(2)(3)

EIS DMC 1(2)(3) FAULT

Applicable to: MSN 01251

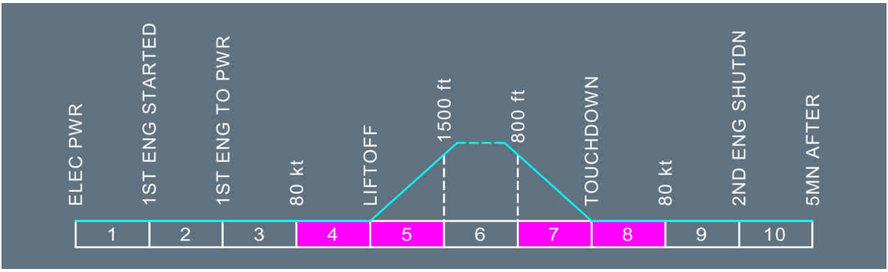
Ident.: PRO-ABN-EIS-F-00017307.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when DMC 1, or DMC 2, or DMC 3 is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

EIS DMC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-EIS-F-00010057.0002001 / 10 AUG 10

- **DMC 1**

  EIS DMC SWITCH .... CAPT 3

  L2 *DMC 3 replaces DMC 1.*

- L1 **DMC 2**

  EIS DMC SWITCH .... F/O 3

  L2 *DMC 3 replaces DMC 2.*

- L1 **DMC 3**

  Crew awareness.

Ident.: PRO-ABN-EIS-F-00010058.0001001 / 10 AUG 10

STATUS

INOP SYS

DMC 1(2)(3)

EIS DMC 1(2)(3) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-EIS-F-00010057.0002001 / 10 AUG 10

- **DMC 1**

  EIS DMC SWITCH .... CAPT 3

  L2 *DMC 3 replaces DMC 1.*

- L1 **DMC 2**

  EIS DMC SWITCH .... F/O 3

  L2 *DMC 3 replaces DMC 2.*

- L1 **DMC 3**

  Crew awareness.

Continued on the following page

EIS DMC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-EIS-F-00010058.0001001 / 10 AUG 10

STATUS

INOP SYS

DMC 1(2)(3)

EIS DMC/FWC COM FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-EIS-I-00017317.0002001 / 21 MAR 16

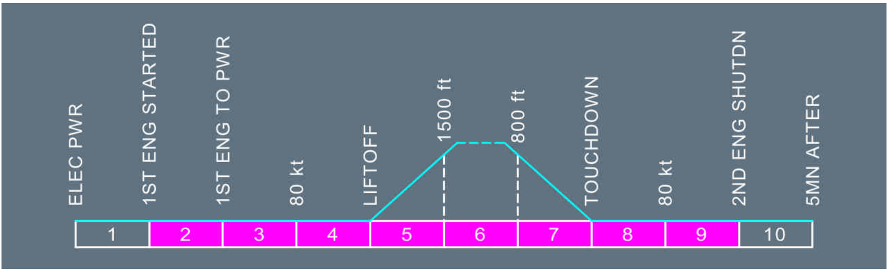
3

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when at least one of the FWC detects the loss of both DMC1/3 and DMC2/3 busses.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-EIS-I-00014308.0001001 / 25 FEB 14

4

Crew awareness.

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[QRH] C/B TRIPPED

Ident.: PRO-ABN-ELEC-00012643.0001001 / 17 MAR 17
Applicable to: ALL

- **On ground:**
  Do not reengage the circuit breaker (C/B) of the fuel pump(s) of any tank. For all other C/B, if the flight crew coordinates the action with maintenance, the flight crew may reengage a tripped C/B, provided that the cause is identified.
- **In flight:**
  Do not reengage a circuit breaker (C/B), unless the captain judges it necessary to do so for the safe continuation of the flight. Only one reengagement should be attempted.

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 01143, 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0002001 / 17 MAR 17

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	NORM	Closure Inop	Closure Inop
	PACK VALVE 2	Closure Inop	Closure Inop	Closure Inop(a)
	AVIONIC VENT	NORM	NORM	Partial

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

Continued on the following page

Continued from the previous page

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

2

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

3

FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

Continued on the following page

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0001001 / 17 MAR 17

L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0002001 / 17 MAR 17

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁*	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	STBY HORIZON	NORM	NORM	NORM
	STBY COMP (LT)	NORM	NORM	NORM
	STBY ALTI (VIB)	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

[a] *Restored, when speed is below 100 kt.*

[b] *Crew supply solenoid valve inoperative.*

[c] *Lost, when the speed is below 50 kt.*

[d] *Lost, 30 s after the last engine shutdown.*

[e] *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

[f] *For APU start only.*

[g] *Not available for 45 s, after the loss of both engine generators.*

[h] *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 01158, 01251

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0002001 / 17 MAR 17

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	NORM	Closure Inop	Closure Inop
	PACK VALVE 2	Closure Inop	Closure Inop	Closure Inop(a)
	AVIONIC VENT	NORM	NORM	Partial

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND
Ident.: PRO-ABN-ELEC-S-00012525.0002001 / 17 MAR 17				
FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP *(a)*
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	Bottle 1 only	Bottle 1 only	Bottle 1 only
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP *(a)*
	APU AUTO EXT.	INOP	INOP	INOP *(a)*
Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17				
FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 *(d)*
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM *(c)*
Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17				
FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP
Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17				
HYD	FIRE VALVES	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17				
ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM *(c)*
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0001001 / 17 MAR 17

L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0002001 / 17 MAR 17

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✻	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	STBY HORIZON	NORM	NORM	NORM
	STBY COMP (LT)	NORM	NORM	NORM
	STBY ALTI (VIB)	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

Continued on the following page

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND
Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17				
APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17				
PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17				
MISC	MECH HORN	NORM	NORM	NORM

[a] *Restored, when speed is below 100 kt.*

[b] *Crew supply solenoid valve inoperative.*

[c] *Lost, when the speed is below 50 kt.*

[d] *Lost, 30 s after the last engine shutdown.*

[e] *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

[f] *For APU start only.*

[g] *Not available for 45 s, after the loss of both engine generators.*

[h] *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (a)	NORM (a)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (c)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (b)

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(b)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT ◁ (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND
Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17				
EIS	PFD 1	NORM	NORM	NORM (b)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (b)
	DMC 1 or 3	NORM	NORM	NORM (b)
	SDAC 1, FWC 1	NORM	NORM	NORM (b)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17				
LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17				
PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP (d)
	X BLEED (MAN CTL)	NORM	INOP	INOP
Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17				
APU	ECB-STARTER	NORM (e)	NORM (f)	INOP (d)
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17				
PWR PLT	FADEC	A+B (g)	A+B (g)	A+B (g)
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17				
MISC	MECH HORN	NORM	NORM	NORM

(a) *Crew supply solenoid valve inoperative.*

(b) *Lost, when the speed is below 50 kt.*

(c) *Lost, 30 s after the last engine shutdown.*

(d) *Restored, when speed is below 100 kt.*

(e) *For APU start only.*

(f) *Not available for 45 s, after the loss of both engine generators.*

(g) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 02014

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0008001 / 17 MAR 17

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP[a]
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	NORM	Closure Inop	Closure Inop
	PACK VALVE 2	Closure Inop	Closure Inop	Closure Inop[a]
	AVIONIC VENT	NORM	NORM	Partial
	AFT CRG ISOL VALVES	NORM	INOP	INOP
	AFT CRG HEAT	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

6

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM [b]	NORM [b]
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00012525.0002001 / 17 MAR 17

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	Bottle 1 only	Bottle 1 only	Bottle 1 only
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

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FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0001001 / 17 MAR 17

L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

8

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF ◁✳	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✳	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM(f)	NORM(g)	INOP(a)
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B [(h)]	A+B [(h)]	A+B [(h)]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

(a) *Restored, when speed is below 100 kt.*

(b) *Crew supply solenoid valve inoperative.*

(c) *Lost, when the speed is below 50 kt.*

(d) *Lost, 30 s after the last engine shutdown.*

(e) *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

(f) *For APU start only.*

(g) *Not available for 45 s, after the loss of both engine generators.*

(h) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 02321

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0003001 / 17 MAR 17

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	NORM	Closure Inop	Closure Inop
	PACK VALVE 2	Closure Inop	Closure Inop	Closure Inop (a)
	AVIONIC VENT	NORM	NORM	Partial
	AFT CRG ISOL VALVES	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

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COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

10

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

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FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0001001 / 17 MAR 17

L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0002001 / 17 MAR 17

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✳	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	STBY HORIZON	NORM	NORM	NORM
	STBY COMP (LT)	NORM	NORM	NORM
	STBY ALTI (VIB)	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

[a] *Restored, when speed is below 100 kt.*

[b] *Crew supply solenoid valve inoperative.*

[c] *Lost, when the speed is below 50 kt.*

[d] *Lost, 30 s after the last engine shutdown.*

[e] *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

[f] *For APU start only.*

[g] *Not available for 45 s, after the loss of both engine generators.*

[h] *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 02734, 03032

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0015001 / 05 MAY 22

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP(a)
	AVIONIC VENT	NORM	NORM	Partial
	AFT CRG ISOL VALVES	NORM	INOP	INOP
	AFT CRG HEAT	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

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COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

13

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

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FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT ◁✱ (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

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L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

16

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP (a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**
Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17				
APU	ECB-STARTER	NORM(f)	NORM(g)	INOP(a)
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17				
PWR PLT	FADEC	A+B (h)	A+B (h)	A+B (h)
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17				
MISC	MECH HORN	NORM	NORM	NORM

(a) *Restored, when speed is below 100 kt.*

(b) *Crew supply solenoid valve inoperative.*

(c) *Lost, when the speed is below 50 kt.*

(d) *Lost, 30 s after the last engine shutdown.*

(e) *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

(f) *For APU start only.*

(g) *Not available for 45 s, after the loss of both engine generators.*

(h) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 02887, 04563, 05005, 05097, 08495-09324, 10949-11293

ELEC EMER CONFIG SYS REMAINING	EMER GEN RUNNING	BAT ONLY	
		IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0013001 / 05 MAY 22

17

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP(a)
	AVIONIC VENT	NORM	NORM	Partial
	AFT CRG ISOL VALVES	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

18

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

19

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

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FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT ◁ (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND
Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17				
EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17				
21 L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17				
LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17				
22 NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADF ◁✳	N°1 only	INOP	INOP
	ADR	N°1 only	N°1 only	N°1 only
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✳	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17				
PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY IN FLIGHT	BAT ONLY ON THE GROUND
Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17				
APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17				
PWR PLT	FADEC	A+B (h)	A+B (h)	A+B (h)
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17				
MISC	MECH HORN	NORM	NORM	NORM

(a) *Restored, when speed is below 100 kt.*

(b) *Crew supply solenoid valve inoperative.*

(c) *Lost, when the speed is below 50 kt.*

(d) *Lost, 30 s after the last engine shutdown.*

(e) *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

(f) *For APU start only.*

(g) *Not available for 45 s, after the loss of both engine generators.*

(h) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 02896-03002, 03058, 03180-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04544, 04734-04773, 05066, 05101-05345, 05591-05883

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND
Ident.: PRO-ABN-ELEC-S-00018562.0012001 / 05 MAY 22				
AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP(a)
	AVIONIC VENT	NORM	NORM	Partial
Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17				
FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only
Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17				
23 COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17				
EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

24

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

25

FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

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L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

27

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF ◁*	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁*	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM(f)	NORM(g)	INOP(a)
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B (h)	A+B (h)	A+B (h)
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

(a) *Restored, when speed is below 100 kt.*

(b) *Crew supply solenoid valve inoperative.*

(c) *Lost, when the speed is below 50 kt.*

(d) *Lost, 30 s after the last engine shutdown.*

(e) *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

(f) *For APU start only.*

(g) *Not available for 45 s, after the loss of both engine generators.*

(h) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 03035-03047, 03111, 04953-04974

ELEC EMER CONFIG SYS REMAINING	EMER GEN RUNNING	BAT ONLY	
		IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0012001 / 05 MAY 22

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP(a)
	AVIONIC VENT	NORM	NORM	Partial

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

28

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00012525.0002001 / 17 MAR 17

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP[(a)]
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	Bottle 1 only	Bottle 1 only	Bottle 1 only
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP[(a)]
	APU AUTO EXT.	INOP	INOP	INOP[(a)]

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 [(d)]
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM [(c)]

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

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FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM[(c)]
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT ◁✳ (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

30 L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

31 NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF ◁✳	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✳	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

[a] *Restored, when speed is below 100 kt.*

[b] *Crew supply solenoid valve inoperative.*

[c] *Lost, when the speed is below 50 kt.*

[d] *Lost, 30 s after the last engine shutdown.*

[e] *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

[f] *For APU start only.*

[g] *Not available for 45 s, after the loss of both engine generators.*

[h] *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098

ELEC EMER CONFIG SYS REMAINING	**EMER GEN RUNNING**	**BAT ONLY**	
		IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018562.0012001 / 05 MAY 22

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP(a)
	AVIONIC VENT	NORM	NORM	Partial

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

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COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

33 FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP[a]
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP[a]
	APU AUTO EXT.	INOP	INOP	INOP[a]

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 [d]
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM [c]

Ident.: PRO-ABN-ELEC-S-00018018.0002001 / 17 MAR 17

34 FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM[c]
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

35 L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

36 NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF ◁✱	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✱	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

[a] *Restored, when speed is below 100 kt.*

[b] *Crew supply solenoid valve inoperative.*

[c] *Lost, when the speed is below 50 kt.*

[d] *Lost, 30 s after the last engine shutdown.*

[e] *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

[f] *For APU start only.*

[g] *Not available for 45 s, after the loss of both engine generators.*

[h] *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 04827-04860

ELEC EMER CONFIG SYS REMAINING	EMER GEN RUNNING	BAT ONLY	
		IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0015001 / 05 MAY 22

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP(a)
	AVIONIC VENT	NORM	NORM	Partial
	AFT CRG ISOL VALVES	NORM	INOP	INOP
	AFT CRG HEAT	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

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COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00012525.0002001 / 17 MAR 17

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	Bottle 1 only	Bottle 1 only	Bottle 1 only
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

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FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

39

L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

40

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF ◁✳	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✳	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

[a] *Restored, when speed is below 100 kt.*

[b] *Crew supply solenoid valve inoperative.*

[c] *Lost, when the speed is below 50 kt.*

[d] *Lost, 30 s after the last engine shutdown.*

[e] *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

[f] *For APU start only.*

[g] *Not available for 45 s, after the loss of both engine generators.*

[h] *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0014001 / 05 MAY 22

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP[a]
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP[a]
	AVIONIC VENT	NORM	NORM	Partial
	FWD CRG ISOL VALVES	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

41

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM [b]	NORM [b]
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00012525.0002001 / 17 MAR 17

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	Bottle 1 only	Bottle 1 only	Bottle 1 only
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

42

FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

43

L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

44

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF ◁	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP (a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND
Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17				
APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17				
PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17				
MISC	MECH HORN	NORM	NORM	NORM

[a] *Restored, when speed is below 100 kt.*

[b] *Crew supply solenoid valve inoperative.*

[c] *Lost, when the speed is below 50 kt.*

[d] *Lost, 30 s after the last engine shutdown.*

[e] *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

[f] *For APU start only.*

[g] *Not available for 45 s, after the loss of both engine generators.*

[h] *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 06895

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0012001 / 05 MAY 22

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP(a)
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP(a)
	AVIONIC VENT	NORM	NORM	Partial

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

Ident.: PRO-ABN-ELEC-S-00018533.0002001 / 17 MAR 17

45

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1	NORM	NORM	NORM
	ACP (CAPT, F/O)	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	INTERPHONE	NORM	NORM	NORM
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (b)	NORM (b)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**
Ident.: PRO-ABN-ELEC-S-00012525.0002001 / 17 MAR 17				
FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	Bottle 1 only	Bottle 1 only	Bottle 1 only
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)
Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17				
FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (d)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (c)
Ident.: PRO-ABN-ELEC-S-00018018.0002001 / 17 MAR 17				
46 FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17				
HYD	FIRE VALVES	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17				
ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(c)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT ◁✳ (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (c)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (c)
	DMC 1 or 3	NORM	NORM	NORM (c)
	SDAC 1, FWC 1	NORM	NORM	NORM (c)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

47

L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

48

NAV	IR	N°1 only (e)	N°1 only (e)	N°1 only (e)
	ADR	N°1 only	N°1 only	N°1 only
	ADF ◁✳	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (c)
	MMR	N°1 only	N°1 only	N°1 only (c)
	DME	N°1 only	INOP	INOP
	DDRMI ◁✳	NORM	NORM	NORM (c)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP(a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**
Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17				
APU	ECB-STARTER	NORM[f]	NORM[g]	INOP[a]
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17				
PWR PLT	FADEC	A+B [h]	A+B [h]	A+B [h]
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM
Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17				
MISC	MECH HORN	NORM	NORM	NORM

(a) *Restored, when speed is below 100 kt.*

(b) *Crew supply solenoid valve inoperative.*

(c) *Lost, when the speed is below 50 kt.*

(d) *Lost, 30 s after the last engine shutdown.*

(e) *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

(f) *For APU start only.*

(g) *Not available for 45 s, after the loss of both engine generators.*

(h) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 11482-11522, 11572-11597

ELEC EMER CONFIG SYS REMAINING	EMER GEN RUNNING	BAT ONLY	
		IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0013001 / 05 MAY 22

49

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP[a]
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP[a]
	AVIONIC VENT	NORM	NORM	Partial
	AFT CRG ISOL VALVES	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

50 Ident.: PRO-ABN-ELEC-S-00018533.0004001 / 05 MAY 22

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1 and RMP 2	NORM	NORM	NORM
	Third occupant ACP or RMP 3 ◁✳	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	CABIN INTERPHONE	NORM	NORM	NORM
	FLIGHT INTERPHONE	NORM	NORM	NORM[b]
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM
	LOUDSPEAKER 2	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM (c)	NORM (c)
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

51

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (e)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (d)

Ident.: PRO-ABN-ELEC-S-00018018.0001001 / 17 MAR 17

52

FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP
	INTERTANK TRANSFER VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(d)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM (d)
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM (d)
	DMC 1 or 3	NORM	NORM	NORM (d)
	SDAC 1, FWC 1	NORM	NORM	NORM (d)
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

53 L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

54 NAV	IR	N°1 only (f)	N°1 only (f)	N°1 only (f)
	ADR	N°1 only	N°1 only	N°1 only
	ADF	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only (d)
	MMR	N°1 only	N°1 only	N°1 only (d)
	DME	N°1 only	INOP	INOP
	DDRMI	NORM	NORM	NORM (d)
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP (a)
	X BLEED (MAN CTL)	NORM	INOP	INOP

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM(g)	NORM(h)	INOP(a)
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B (i)	A+B (i)	A+B (i)
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

(a) *Restored, when speed is below 100 kt.*

(b) *The communication between the cockpit and the ground is lost.*

(c) *Crew supply solenoid valve inoperative.*

(d) *Lost, when the speed is below 50 kt.*

(e) *Lost, 30 s after the last engine shutdown.*

(f) *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

(g) *For APU start only.*

(h) *Not available for 45 s, after the loss of both engine generators.*

(i) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

[QRH] ELEC EMER CONFIG SYS REMAINING

Applicable to: MSN 11531

ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018562.0013001 / 05 MAY 22

55

AIR COND PRESS	PRESS AUTO SYS 1	NORM	NORM	NORM
	MAN PRESS CTL	INOP	INOP	INOP[a]
	RAM AIR	NORM	NORM	NORM
	PACK VALVE 1	Closure INOP	Closure INOP	Closure INOP
	PACK VALVE 2	Closure INOP	Closure INOP	Closure INOP[a]
	AVIONIC VENT	NORM	NORM	Partial
	AFT CRG ISOL VALVES	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012522.0001001 / 17 MAR 17

FMGS	FMGC (NAV FUNCTION)	N°1 only	Inop	Inop
	MCDU	N°1 only	Inop	Inop
	FAC	N°1 only	Inop	Inop
	FCU	ch 1 only	ch 1 only	ch 1 only

56 Ident.: PRO-ABN-ELEC-S-00018533.0004001 / 05 MAY 22

COM	VHF 1	NORM	NORM	NORM
	HF 1	NORM	INOP	INOP
	RMP 1 and RMP 2	NORM	NORM	NORM
	Third occupant ACP or RMP 3 ✳	NORM	NORM	NORM
	CIDS	NORM	NORM	NORM
	CABIN INTERPHONE	NORM	NORM	NORM
	FLIGHT INTERPHONE	NORM	NORM	NORM[b]
	CVR	NORM	INOP	INOP
	LOUDSPEAKER 1	NORM	NORM	NORM
	LOUDSPEAKER 2	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012524.0001001 / 17 MAR 17

EMER EQPT	CREW OXY	NORM	NORM [c]	NORM [c]
	PAX OXY mask release (auto + man)	NORM	INOP	INOP
	SLIDES ARM/WARN	NORM	NORM	NORM

Continued on the following page

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00012525.0003001 / 17 MAR 17

57

FIRE	ENG 1 LOOP	A only	A only	A only
	ENG 2 LOOP	B only	B only	B only
	APU LOOP	INOP	INOP	INOP(a)
	CARGO SMOKE DET	ch 1 only	INOP	INOP
	ENG FIRE EXT.	NORM	NORM	NORM
	APU FIRE EXT.	Squib A only	Squib A only	Squib A only
	CARGO FIRE EXT.	INOP	INOP	INOP(a)
	APU AUTO EXT.	INOP	INOP	INOP(a)

Ident.: PRO-ABN-ELEC-S-00018017.0001001 / 17 MAR 17

FLT CTL	ELAC	N°1 only	N°1 + N°2	N°1 + N°2 (e)
	SEC	N°1 only	N°1 only	N°1 only
	FCDC	N°1 only	INOP	INOP
	SFCC	N°1 only	N°1 only	N°1 only
	Flaps pos ind	NORM	NORM	NORM (d)

Ident.: PRO-ABN-ELEC-S-00018018.0002001 / 17 MAR 17

58

FUEL	LP VALVE	NORM	NORM	NORM
	FQI channel 1	NORM	INOP	INOP
	X FEED VALVE	NORM	INOP	INOP

Ident.: PRO-ABN-ELEC-S-00012528.0001001 / 17 MAR 17

HYD	FIRE VALVES	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018539.0002001 / 17 MAR 17

ICE-RAIN	WING A.ICE	NORM	INOP	INOP
	ENG A.ICE VALVE	OPEN	OPEN	OPEN
	CAPT PITOT	NORM	NORM	NORM(d)
	CAPT AOA	NORM	INOP	INOP
	RAIN REPELLENT (CAPT)	NORM	NORM	NORM

Continued on the following page

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ELEC EMER CONFIG SYS REMAINING		**EMER GEN RUNNING**	**BAT ONLY**	
			IN FLIGHT	**ON THE GROUND**

Ident.: PRO-ABN-ELEC-S-00018538.0002001 / 17 MAR 17

EIS	PFD 1	NORM	NORM	NORM $^{(d)}$
	ND 1	NORM	INOP	INOP
	ECAM upper disp.	NORM	NORM	NORM $^{(d)}$
	DMC 1 or 3	NORM	NORM	NORM $^{(d)}$
	SDAC 1, FWC 1	NORM	NORM	NORM $^{(d)}$
	ECAM CONT. panel	NORM	NORM	NORM
FLT INS	CLOCKS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018537.0002001 / 17 MAR 17

59 L/G	LGCIU SYS 1	NORM	NORM	NORM
	BRK PRESS IND	NORM	NORM	NORM
	PARK BRK	NORM	NORM	NORM
	ABCU	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012532.0001001 / 17 MAR 17

LIGHTS	EMER CKPT	NORM	NORM	NORM
	EMER CAB	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018550.0005001 / 17 MAR 17

60 NAV	IR	N°1 only $^{(f)}$	N°1 only $^{(f)}$	N°1 only $^{(f)}$
	ADR	N°1 only	N°1 only	N°1 only
	ADF	N°1 only	INOP	INOP
	VOR	N°1 only	N°1 only	N°1 only $^{(d)}$
	MMR	N°1 only	N°1 only	N°1 only $^{(d)}$
	DME	N°1 only	INOP	INOP
	DDRMI	NORM	NORM	NORM $^{(d)}$
	ATC	N°1 only	INOP	INOP
	ISIS	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018541.0002001 / 17 MAR 17

PNEU	ENG 1 BLEED	NORM	BMC 1 INOP	BMC 1 INOP
	ENG 2 BLEED	BMC 2 INOP	BMC 2 INOP	BMC 2 INOP
	APU BLEED	INOP	INOP	INOP $^{(a)}$
	X BLEED (MAN CTL)	NORM	INOP	INOP

Continued on the following page

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ELEC EMER CONFIG SYS REMAINING		EMER GEN RUNNING	BAT ONLY	
			IN FLIGHT	ON THE GROUND

Ident.: PRO-ABN-ELEC-S-00018019.0002001 / 17 MAR 17

APU	ECB-STARTER	NORM(g)	NORM(h)	INOP(a)
	FUEL LP VALVE	NORM	NORM	NORM
	FUEL PUMP	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00018540.0002001 / 17 MAR 17

PWR PLT	FADEC	A+B (i)	A+B (i)	A+B (i)
	IGNITION	A only	A only	A only
	HP FUEL VALVE closure	NORM	NORM	NORM

Ident.: PRO-ABN-ELEC-S-00012537.0001001 / 17 MAR 17

MISC	MECH HORN	NORM	NORM	NORM

(a) *Restored, when speed is below 100 kt.*

(b) *The communication between the cockpit and the ground is lost.*

(c) *Crew supply solenoid valve inoperative.*

(d) *Lost, when the speed is below 50 kt.*

(e) *Lost, 30 s after the last engine shutdown.*

(f) *IR 2 and IR 3 are lost 5 min after failure of main generators but if IR 3 replaces IR 1 (ATT-HDG selector at CAPT 3), IR 3 remains supplied.*

(g) *For APU start only.*

(h) *Not available for 45 s, after the loss of both engine generators.*

(i) *Channels A and B are self powered above 10 % N2 for IAE or PW engines, 12 % N2 for CFM56 engines, or 8 % N2 for CFM LEAP-1A engines. If N2 is below these values, only Channel A is powered.*

ELEC AC BUS 1 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014

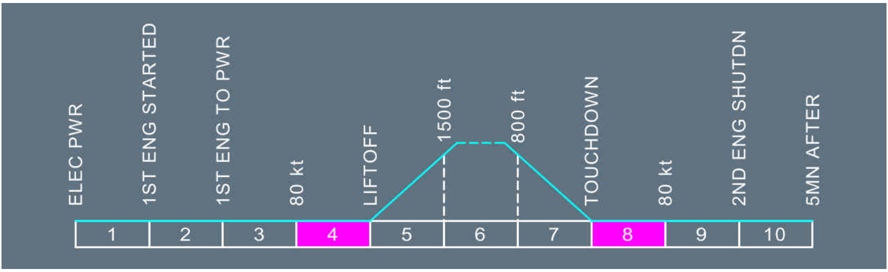
Ident.: PRO-ABN-ELEC-I-00017346.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017853.0003001 / 01 MAR 18

61

L2 AC BUS 1 normally supplies the AC ESS BUS and, through TR1, the DC ESS BUS. In the case of an AC BUS 1 FAULT, both the AC and DC ESS BUS will be lost and therefore the AC ESS BUS FAULT and the DC ESS BUS FAULT will be displayed on the ECAM.
However, for aircraft equipped with AC ESS FEED Auto Switching ⊲ , the AC ESS BUS and the DC ESS BUS will automatically recover, due to the fact that the AC BUS 2 will automatically supply the AC ESS BUS.
The flight crew can manually recover the AC ESS BUS and the DC ESS BUS by setting the AC ESS FEED pb-sw to ALTN, as requested by the AC ESS BUS FAULT ECAM procedure

L1 BLOWER.. OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

WHEEL N.W. STEER FAULT

ASSOCIATED PROCEDURES

ENG 1 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

- * AVNCS VENT
- * HYD
- * FUEL
- * F/CTL

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017867.0021001 / 02 MAY 23

L12

62

STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

CAB ZONE AT FIXED TEMP

See (3)

SLATS SLOW

CAT 2 ONLY

INOP SYS

See below

INOP SYS

BLUE HYD
RA 1
L WNDW HEAT
CTR TK PUMP 1 ◁
CRG HEAT (if both FWD and aft crg heat installed) ◁
FWD CRG HEAT ◁
GND COOL ◁
B ELEC PUMP
TCAS
PACK 1 REGUL
STEEP APPR ◁

SPLR 3
CAPT TAT
CAT 3
VENT BLOWER
CRG vent (if both FWD and aft crg heat installed) ◁
AFT CRG VENT ◁
N/W STRG
BRK SYS 1/BSCU CH 1
GPWS
REVERSER 1

ADR 3
L WSHLD HEAT
L+R TK PUMP 1
GALLEY FAN
AFT CRG HEAT ◁
FWD CRG VENT ◁
MAIN GALLEY
DMC 3
LAV DET
GPWS TERR ◁

Other INOP SYS

Left cabin fan
ADF 1 ◁
HUD ◁

Radar 1
ACARS ◁ /ATSU ◁
MCDU 3 ◁

Stby Pitot/AOA
Brake fans 5, 6, 7 and 8 ◁
Engine 1 ignition B

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

- EVMU eng 1 and eng 2
- Hydraulic quantity indication
- Printer
- Partial galley
- Zone controller prim channel
- PVI ◁✳

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

(3) *Due to the loss of the galley fan, the pack 1 controller, and the primary zone controller channel. (See associated procedures).*

ELEC AC BUS 1 FAULT

Applicable to: MSN 01251

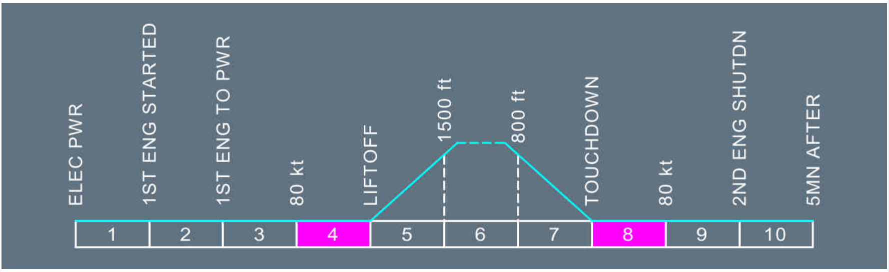
Ident.: PRO-ABN-ELEC-I-00017346.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 busbar is not supplied.

Flight Phase Inhibition:



Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017853.0001001 / 01 MAR 18

L2 AC BUS 1 normally supplies the AC ESS BUS and, through TR1, the DC ESS BUS. In the case of an AC BUS 1 FAULT, both the AC and DC ESS BUS will be lost and therefore the AC ESS BUS FAULT and the DC ESS BUS FAULT will be displayed on the ECAM.
However, for aircraft equipped with AC ESS FEED Auto Switching , the AC ESS BUS and the DC ESS BUS will automatically recover, due to the fact that the AC BUS 2 will automatically supply the AC ESS BUS.
The flight crew can manually recover the AC ESS BUS and the DC ESS BUS by setting the AC ESS FEED pb-sw to ALTN, as requested by the AC ESS BUS FAULT ECAM procedure

L1 BLOWER..OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1

ASSOCIATED PROCEDURES

WHEEL N.W. STEER FAULT

ASSOCIATED PROCEDURES

ENG 1 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

* AVNCS VENT
* HYD
* FUEL
* F/CTL

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017867.0007001 / 02 MAY 23

L12

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STATUS

LDG DIST PROC.. APPLY

CAB ZONE AT FIXED TEMP
See (1)
SLATS SLOW
CAT 2 ONLY

INOP SYS

See below

INOP SYS

BLUE HYD
RA 1
L WNDW HEAT
CTR TK PUMP 1 ◁
CRG HEAT (if both FWD and aft crg heat installed) ◁
FWD CRG HEAT ◁
GND COOL ◁
B ELEC PUMP
GPWS
REVERSER 1

SPLR 3
CAPT TAT
CAT 3
VENT BLOWER
CRG vent (if both FWD and aft crg heat installed) ◁
AFT CRG VENT ◁
N/W STRG
BRK SYS 1/BSCU CH 1
LAV DET
GPWS TERR ◁

ADR 3
L WSHLD HEAT
L+R TK PUMP 1
GALLEY FAN
AFT CRG HEAT ◁
FWD CRG VENT ◁
MAIN GALLEY
DMC 3
PACK 1 REGUL

Other INOP SYS

Left cabin fan
ADF 1 ◁
HUD ◁
EVMU eng 1 and eng 2
Hydraulic quantity indication
TCAS ◁

Radar 1
ACARS ◁ /ATSU ◁
MCDU 3 ◁
Printer
Partial galley

Stby Pitot/AOA
Brake fans 5, 6, 7 and 8 ◁
Engine 1 ignition B
Zone controller prim channel
PVI ◁

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Note: The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

(1) Due to the loss of the galley fan, the Pack 1 controller, and the primary zone controller channel. (See associated procedures).

ELEC AC BUS 1 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

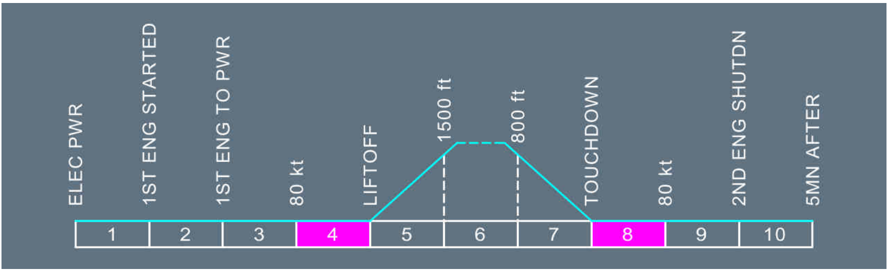
Ident.: PRO-ABN-ELEC-I-00017346.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ELEC AC BUS 1 FAULT

Applicable to: MSN 02321

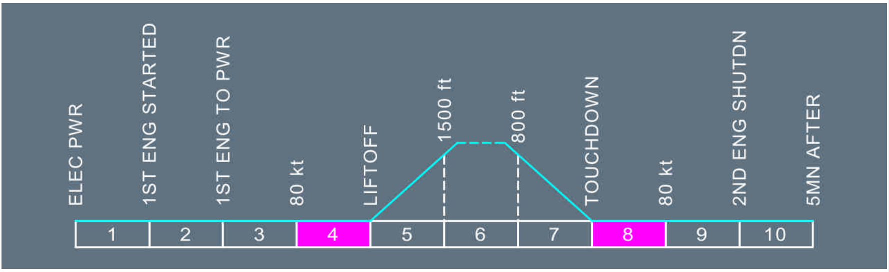
Ident.: PRO-ABN-ELEC-I-00017346.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017853.0003001 / 01 MAR 18

64

L2 AC BUS 1 normally supplies the AC ESS BUS and, through TR1, the DC ESS BUS. In the case of an AC BUS 1 FAULT, both the AC and DC ESS BUS will be lost and therefore the AC ESS BUS FAULT and the DC ESS BUS FAULT will be displayed on the ECAM.
However, for aircraft equipped with AC ESS FEED Auto Switching ⧏ , the AC ESS BUS and the DC ESS BUS will automatically recover, due to the fact that the AC BUS 2 will automatically supply the AC ESS BUS.
The flight crew can manually recover the AC ESS BUS and the DC ESS BUS by setting the AC ESS FEED pb-sw to ALTN, as requested by the AC ESS BUS FAULT ECAM procedure

L1 BLOWER.. OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

WHEEL N.W. STEER FAULT

ASSOCIATED PROCEDURES

ENG 1 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

* AVNCS VENT
* HYD
* FUEL
* F/CTL

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017867.0023001 / 02 MAY 23

L12

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STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

CAB ZONE AT FIXED TEMP

See (3)

SLATS SLOW

CAT 2 ONLY

INOP SYS

See below

INOP SYS

BLUE HYD
RA 1
L WNDW HEAT
CTR TK PUMP 1 ◁✱
CRG HEAT (if both FWD and aft crg heat installed) ◁✱
FWD CRG HEAT ◁✱
GND COOL ◁✱
BRK SYS 1/BSCU CH 1
GPWS
REVERSER 1

SPLR 3
CAPT TAT
CAT 3
VENT BLOWER
CRG vent (if both FWD and aft crg heat installed) ◁✱
AFT CRG VENT ◁✱
MAIN GALLEY
DMC 3
LAV DET
GPWS TERR ◁✱

ADR 3
L WSHLD HEAT
L+R TK PUMP 1
GALLEY FAN
AFT CRG HEAT ◁✱
FWD CRG VENT ◁✱
B ELEC PUMP
TCAS
PACK 1 REGUL
STEEP APPR ◁✱

Other INOP SYS

Left cabin fan
ADF 1 ◁✱
HUD ◁✱
EVMU eng 1 and eng 2

Radar 1
ACARS ◁✱ /ATSU ◁✱
MCDU 3 ◁✱
Printer

Stby Pitot/AOA
Brake fans 5, 6, 7 and 8 ◁✱
Engine 1 ignition B
Zone controller prim channel

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Hydraulic quantity indication	Partial galley	PVI ◁✱

Note: The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

(3) *Due to the loss of the galley fan, the pack 1 controller, and the primary zone controller channel. (See associated procedures).*

ELEC AC BUS 1 FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

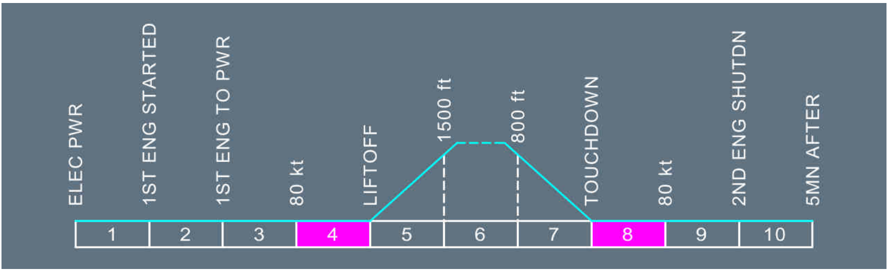
Ident.: PRO-ABN-ELEC-I-00017346.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 busbar is not supplied.

Flight Phase Inhibition:



Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017853.0004001 / 01 MAR 18
66

L2 AC BUS 1 normally supplies the AC ESS BUS and, through TR1, the DC ESS BUS. In the case of an AC BUS 1 FAULT, both the AC and DC ESS BUS will be lost and therefore the AC ESS BUS FAULT and the DC ESS BUS FAULT will be displayed on the ECAM.
However, for aircraft equipped with AC ESS FEED Auto Switching ◁ , the AC ESS BUS and the DC ESS BUS will automatically recover, due to the fact that the AC BUS 2 will automatically supply the AC ESS BUS.
The flight crew can manually recover the AC ESS BUS and the DC ESS BUS by setting the AC ESS FEED pb-sw to ALTN, as requested by the AC ESS BUS FAULT ECAM procedure

L1 BLOWER.. OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

ENG 1 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

* AVNCS VENT
* HYD
* FUEL
* F/CTL

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017867.0028001 / 02 MAY 23

L12

67

STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS SLOW

CAT 2 ONLY

INOP SYS

See below

INOP SYS

- BLUE HYD
- RA 1
- L WNDW HEAT
- CTR TK PUMP 1 ◁
- CRG HEAT (if both FWD and aft crg heat installed) ◁
- FWD CRG HEAT ◁
- GND COOL ◁
- BRK SYS 1/BSCU CH 1
- GPWS
- GPWS TERR ◁
- SPLR 3
- CAPT TAT
- CAT 3
- VENT BLOWER
- CRG vent (if both FWD and aft crg heat installed) ◁
- AFT CRG VENT ◁
- MAIN GALLEY
- DMC 3
- LAV DET
- STEEP APPR ◁
- ADR 3
- L WSHLD HEAT
- L+R TK PUMP 1
- GALLEY FAN
- AFT CRG HEAT ◁
- FWD CRG VENT ◁
- B ELEC PUMP
- TCAS
- REVERSER 1

Other INOP SYS

- Left cabin fan
- ADF 1 ◁
- HUD ◁
- EVMU eng 1 and eng 2
- Hydraulic quantity indication
- Radar 1
- ACARS ◁ /ATSU ◁
- MCDU 3 ◁
- Printer
- Partial galley
- Stby Pitot/AOA
- Brake fans 5, 6, 7 and 8 ◁
- Engine 1 ignition B
- COND Controller Lane A
- PVI ◁

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC AC BUS 1 FAULT

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597

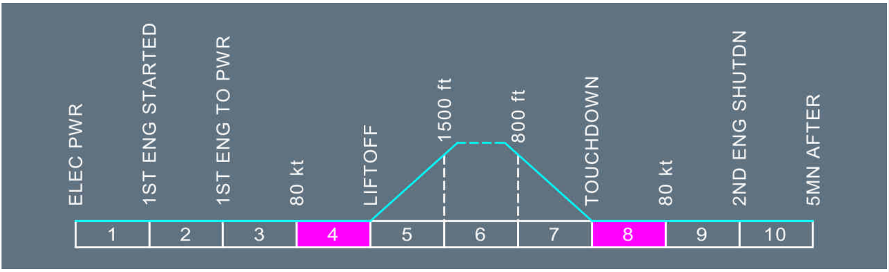
Ident.: PRO-ABN-ELEC-I-00017346.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017853.0004001 / 01 MAR 18

68

L2 AC BUS 1 normally supplies the AC ESS BUS and, through TR1, the DC ESS BUS. In the case of an AC BUS 1 FAULT, both the AC and DC ESS BUS will be lost and therefore the AC ESS BUS FAULT and the DC ESS BUS FAULT will be displayed on the ECAM.
However, for aircraft equipped with AC ESS FEED Auto Switching ◁ , the AC ESS BUS and the DC ESS BUS will automatically recover, due to the fact that the AC BUS 2 will automatically supply the AC ESS BUS.
The flight crew can manually recover the AC ESS BUS and the DC ESS BUS by setting the AC ESS FEED pb-sw to ALTN, as requested by the AC ESS BUS FAULT ECAM procedure

L1 BLOWER.. OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

ENG 1 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

* AVNCS VENT
* HYD
* FUEL
* F/CTL

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-I-00017867.0035001 / 02 MAY 23

69
L12
70

STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD
See [(1)]
FMS PRED UNRELIABLE
See [(2)]
SLATS SLOW
CAT 2 ONLY

INOP SYS

See below

INOP SYS

BLUE HYD
RA 1
L WNDW HEAT
VENT BLOWER

CRG vent (if both FWD and aft crg heat installed) ◁
AFT CRG VENT ◁
MAIN GALLEY
DMC 3
LAV DET
STEEP APPR ◁

SPLR 3
CAPT TAT
CAT 3
GALLEY FAN

AFT CRG HEAT ◁

FWD CRG VENT ◁
B ELEC PUMP
TCAS
REVERSER 1

ADR 3
L WSHLD HEAT
L+R TK PUMP 1
CRG HEAT (if both FWD and aft crg heat installed) ◁
FWD CRG HEAT ◁

GND COOL ◁
BRK SYS 1/BSCU CH 1
GPWS
GPWS TERR ◁

Other INOP SYS

Left cabin fan
ADF 1 ◁
HUD ◁
EVMU eng 1 and eng 2
Hydraulic quantity indication

Radar 1
ACARS ◁ /ATSU ◁
MCDU 3 ◁
Printer
Partial galley

Stby Pitot/AOA
Brake fans 5, 6, 7 and 8 ◁
Engine 1 ignition B
COND Controller Lane A
PVI ◁

Continued on the following page

ELEC AC BUS 1 FAULT (Cont'd)

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC AC BUS 2 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

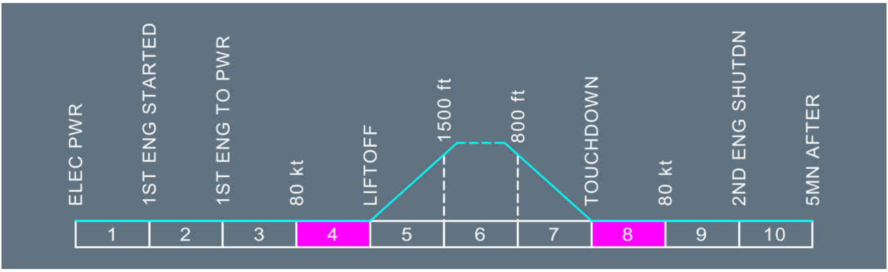
Ident.: PRO-ABN-ELEC-J-00017348.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017877.0002001 / 01 MAR 18

71

EXTRACT...OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1 ATC/XPDR...SYS 1

ASSOCIATED PROCEDURES

L/G LGCIU 2 FAULT

ASSOCIATED PROCEDURES

ENG 2 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

* AVNCS VENT
* FUEL

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017878.0004001 / 04 JUN 19

L12

STATUS

ENG 2 APPR IDLE ONLY
PACK 2 AT FIXED TEMP
See (1)
FLS ◁ : F-APP+RAW ONLY

INOP SYS

See below

INOP SYS

- ADR 2
- FWC 2
- R WSHLD HEAT
- F/O PITOT
- R WNDW HEAT
- REVERSER 2
- PACK 2 REGUL
- RUD TRIM 2
- ACT PUMP ◁
- GPS 2 ◁
- ROW/ROP ◁
- Y ELEC PUMP
- DMC 2
- LGCIU 2
- F/O AOA
- L+R TK PUMP 2
- VENT EXTRACT
- MAIN GALLEY
- CAT 2
- BRK SYS 2 /BSCU CH 2
- ATC 2 or ATC/XPDR 2
- SDAC 2
- RECORDER SYS (OR FDIU)
- RA 2
- F/O TAT
- RUD TRV LIM 2
- GND COOL ◁
- YAW DAMPER 2
- CTR TK PUMP 2 ◁
- ILS 2 (OR LS 2 for aircraft equipped with MLS ◁ /GLS ◁ /FLS ◁)
- GLS AUTOLAND ◁

Other INOP SYS

- Right cabin fan
- DME 2
- MCDU 2
- F/O PFD and ND
- HF 2 ◁
- Brake fans 1, 2, 3 and 4 ◁
- RADAR 2 ◁
- ENG 2 ignition B
- QAR
- ADF 2 ◁
- WXR 2 ◁
- VOR 2
- ECAM lower DU

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

(1) *Due to the loss of Pack 2 controller, the pack outlet temperature is controlled by the pack anti-ice valve and is stabilized to a temperature between 5 °C (41 °F) and 30 °C (86 °F) within a maximum of 6 min.*

ELEC AC BUS 2 FAULT

Applicable to: MSN 01251

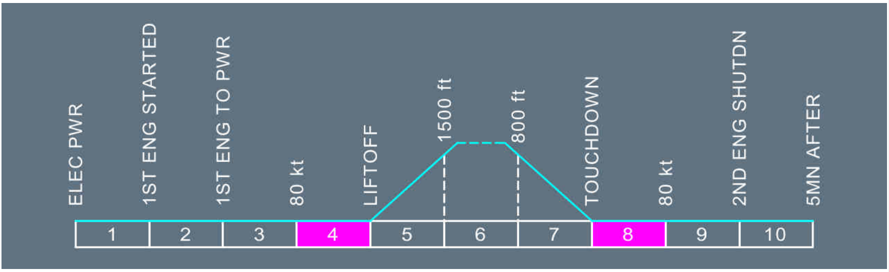
Ident.: PRO-ABN-ELEC-J-00017348.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017877.0001001 / 01 MAR 18

EXTRACT..OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1

ASSOCIATED PROCEDURES

L/G LGCIU 2 FAULT

ASSOCIATED PROCEDURES

ENG 2 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

* AVNCS VENT
* FUEL

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017878.0004001 / 04 JUN 19

L12

STATUS

ENG 2 APPR IDLE ONLY
PACK 2 AT FIXED TEMP
See (1)
FLS ◁ : F-APP+RAW ONLY

INOP SYS

See below

INOP SYS

ADR 2
FWC 2
R WSHLD HEAT
F/O PITOT
R WNDW HEAT
REVERSER 2
PACK 2 REGUL
RUD TRIM 2
ACT PUMP ◁
GPS 2 ◁
ROW/ROP ◁

Y ELEC PUMP
DMC 2
LGCIU 2
F/O AOA
L+R TK PUMP 2
VENT EXTRACT
MAIN GALLEY
CAT 2
BRK SYS 2 /BSCU CH 2
ATC 2 or ATC/XPDR 2

SDAC 2
RECORDER SYS (OR FDIU)
RA 2
F/O TAT
RUD TRV LIM 2
GND COOL ◁
YAW DAMPER 2
CTR TK PUMP 2 ◁
ILS 2 (OR LS 2 for aircraft equipped with MLS ◁ /GLS ◁ /FLS ◁)
GLS AUTOLAND ◁

Other INOP SYS

Right cabin fan
DME 2
MCDU 2
F/O PFD and ND
HF 2 ◁

Brake fans 1, 2, 3 and 4 ◁
RADAR 2 ◁
ENG 2 ignition B
QAR

ADF 2 ◁
WXR 2 ◁
VOR 2
ECAM lower DU

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

(1) *Due to the loss of Pack 2 controller, the pack outlet temperature is controlled by the pack anti-ice valve and is stabilized to a temperature between 5 °C (41 °F) and 30 °C (86 °F) within a maximum of 6 min.*

ELEC AC BUS 2 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

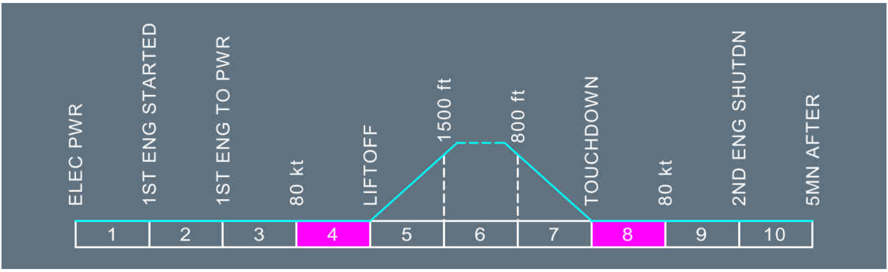
Ident.: PRO-ABN-ELEC-J-00017348.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ELEC AC BUS 2 FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

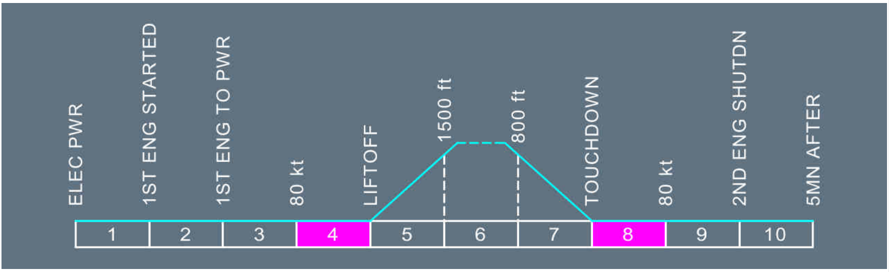
Ident.: PRO-ABN-ELEC-J-00017348.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017877.0002001 / 01 MAR 18

72

EXTRACT...OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1 ATC/XPDR...SYS 1

ASSOCIATED PROCEDURES

L/G LGCIU 2 FAULT

ASSOCIATED PROCEDURES

ENG 2 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

- * AVNCS VENT
- * FUEL

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017878.0005001 / 04 JUN 19

73

L12

STATUS

ENG 2 APPR IDLE ONLY
FLS ◁ : F-APP+RAW ONLY

INOP SYS

See below

INOP SYS

- ADR 2
- FWC 2
- R WSHLD HEAT
- F/O PITOT
- R WNDW HEAT
- REVERSER 2
- PACK 2 REGUL
- RUD TRIM 2
- ACT PUMP ◁
- GPS 2 ◁
- ROW/ROP ◁

- Y ELEC PUMP
- DMC 2
- LGCIU 2
- F/O AOA
- L+R TK PUMP 2
- VENT EXTRACT
- MAIN GALLEY
- CAT 2
- BRK SYS 2 /BSCU CH 2
- ATC 2 or ATC/XPDR 2

- SDAC 2
- RECORDER SYS (OR FDIU)
- RA 2
- F/O TAT
- RUD TRV LIM 2
- GND COOL ◁
- YAW DAMPER 2
- CTR TK PUMP 2 ◁
- ILS 2 (OR LS 2 for aircraft equipped with MLS ◁ /GLS ◁ /FLS ◁)
- GLS AUTOLAND ◁

Other INOP SYS

- Right cabin fan
- DME 2
- MCDU 2
- F/O PFD and ND
- HF 2 ◁

- Brake fans 1, 2, 3 and 4 ◁
- RADAR 2 ◁
- ENG 2 ignition B
- QAR

- ADF 2 ◁
- WXR 2 ◁
- VOR 2
- ECAM lower DU

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC AC BUS 2 FAULT

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

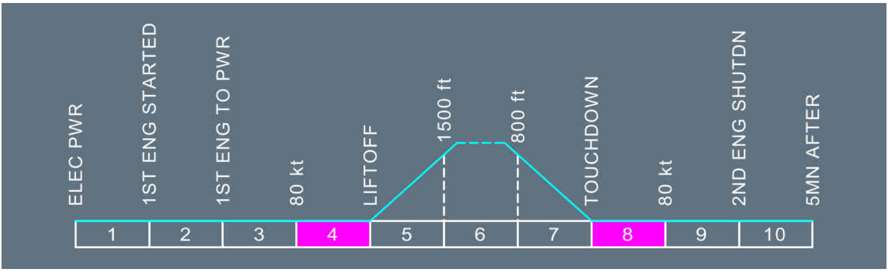
Ident.: PRO-ABN-ELEC-J-00017348.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017877.0002001 / 01 MAR 18

74

EXTRACT..OVRD

L2 *The avionics ventilation system is in the closed circuit configuration.*
Air conditioning is added to the ventilation air.

L1 ATC/XPDR..SYS 1

ASSOCIATED PROCEDURES

L/G LGCIU 2 FAULT

ASSOCIATED PROCEDURES

ENG 2 EPR MODE FAULT

This associated procedure is only applicable to aircraft equipped with IAE engines.

SECONDARY FAILURES

* AVNCS VENT
* FUEL

Continued on the following page

ELEC AC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-J-00017878.0007001 / 05 MAY 22

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L12

STATUS

ENG 2 APPR IDLE ONLY
FLS ◁ : F-APP+RAW ONLY

INOP SYS

See below

INOP SYS

ADR 2
FWC 2
R WSHLD HEAT
F/O PITOT
R WNDW HEAT
REVERSER 2
MAIN GALLEY
CAT 2
ILS 2 (OR LS 2 for aircraft equipped with MLS ◁ /GLS ◁ /FLS ◁)
GLS AUTOLAND ◁

Y ELEC PUMP
DMC 2
LGCIU 2
F/O AOA
L+R TK PUMP 2
VENT EXTRACT
YAW DAMPER 2
ACT PUMP ◁
GPS 2 ◁
ROW/ROP ◁

SDAC 2
RECORDER SYS (OR FDIU)
RA 2
F/O TAT
RUD TRV LIM 2
GND COOL ◁
RUD TRIM 2
BRK SYS 2 /BSCU CH 2
ATC 2 or ATC/XPDR 2

Other INOP SYS

Right cabin fan
DME 2
MCDU 2
F/O PFD and ND
HF 2 ◁

Brake fans 1, 2, 3 and 4 ◁
RADAR 2 ◁
ENG 2 ignition B
QAR

ADF 2 ◁
WXR 2 ◁
VOR 2
ECAM lower DU

The alert may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

ELEC AC ESS BUS ALTN

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-ELEC-Z-00017356.0001001 / 21 MAR 16

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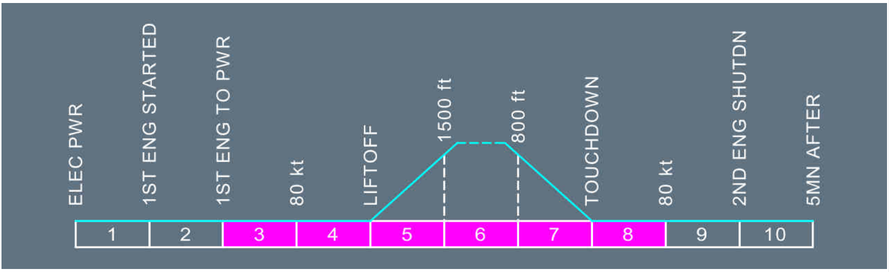
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC ESS busbar is supplied from the AC 2 busbar although the AC ESS FEED pb-sw is set to normal.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-Z-00017893.0001001 / 21 MAR 16

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Crew awareness.

ELEC AC ESS BUS FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

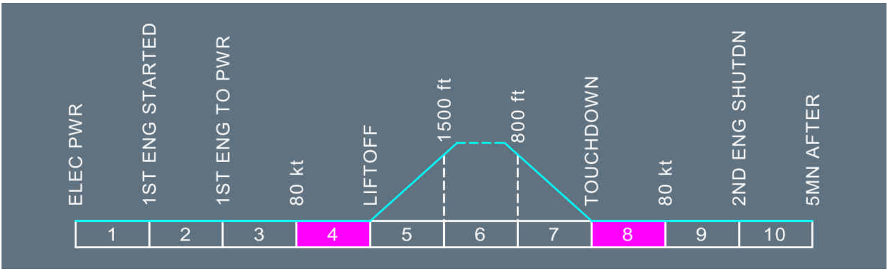
Ident.: PRO-ABN-ELEC-K-00017357.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-K-00012502.0002001 / 24 MAR 11

78

AC ESS FEED.. ALTN

L2 *AC BUS 2 supplies AC ESS BUS.*

L1 ATC/XPDR.. SYS 2

Continued on the following page

ELEC AC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-K-00018552.0014001 / 02 MAY 23

79

STATUS

INOP SYS

See below

INOP SYS

- ADR 1
- CAPT PITOT
- SDAC 1
- GPWS
- RUD TRIM 1
- ATC 1 or ATC/XPDR 1
- LS 1
- CAPT AOA
- FWC 1
- GPWS terr
- RUD TRV LIM 1
- GPS 1
- CAT 2
- DMC 1
- YAW DAMPER 1
- GLS AUTOLAND ◁✳

Other INOP SYS

- RMP's lighting (RMP's still operative)
- CVR
- CAPT PFD
- DDRMI ◁✳
- VOR 1
- ECAM upper display
- DME 1
- HF 1
- MCDU 1
- CAPT ND
- APU fuel pump
- Passenger oxygen masks (auto + manual)

Note: *The warning may be caused by a sub BUS failure. As a result, only a part of the above-listed systems may be lost.*

ELEC AC ESS BUS FAULT

Applicable to: MSN 01251

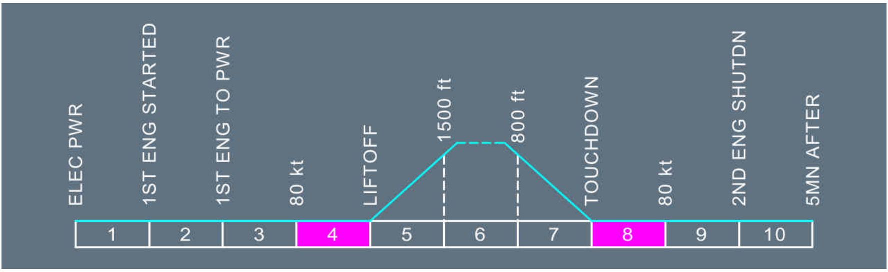
Ident.: PRO-ABN-ELEC-K-00017357.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-K-00012502.0001001 / 05 MAR 13

AC ESS FEED... ALTN

L2 *AC BUS 2 supplies AC ESS BUS.*

L1 ATC... SYS 2

ASSOCIATED PROCEDURES

AUTO FLT YAW DAMPER 1

ASSOCIATED PROCEDURES

AUTO FLT RUD TRIM 1 FAULT

ASSOCIATED PROCEDURES

AUTO FLT RUD TRV LIM 1

Continued on the following page

ELEC AC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-K-00018552.0014001 / 02 MAY 23

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STATUS

INOP SYS

See below

INOP SYS

ADR 1
CAPT PITOT
SDAC 1
GPWS
RUD TRIM 1
ATC 1 or ATC/XPDR 1

LS 1
CAPT AOA
FWC 1
GPWS terr
RUD TRV LIM 1

GPS 1
CAT 2
DMC 1
YAW DAMPER 1
GLS AUTOLAND ◁

Other INOP SYS

RMP's lighting (RMP's still operative)
CVR
CAPT PFD
DDRMI ◁

VOR 1
ECAM upper display
DME 1
HF 1

MCDU 1
CAPT ND
APU fuel pump
Passenger oxygen masks (auto + manual)

Note: The warning may be caused by a sub BUS failure. As a result, only a part of the above-listed systems may be lost.

ELEC AC ESS BUS FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

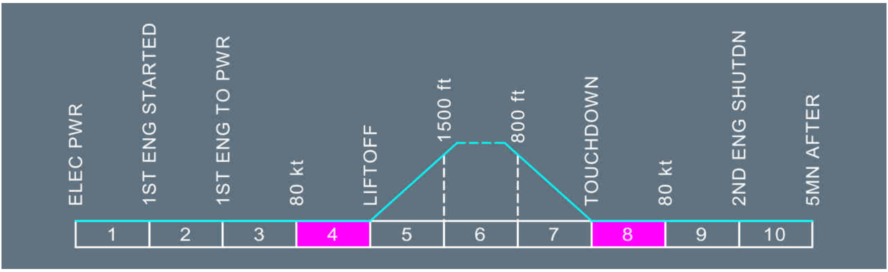
Ident.: PRO-ABN-ELEC-K-00017357.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC AC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-K-00018552.0014001 / 02 MAY 23

81

STATUS

INOP SYS

See below

INOP SYS

- ADR 1
- CAPT PITOT
- SDAC 1
- GPWS
- RUD TRIM 1
- ATC 1 or ATC/XPDR 1
- LS 1
- CAPT AOA
- FWC 1
- GPWS terr
- RUD TRV LIM 1
- GPS 1
- CAT 2
- DMC 1
- YAW DAMPER 1
- GLS AUTOLAND ◁✳

Other INOP SYS

- RMP's lighting (RMP's still operative)
- CVR
- CAPT PFD
- DDRMI ◁✳
- VOR 1
- ECAM upper display
- DME 1
- HF 1
- MCDU 1
- CAPT ND
- APU fuel pump
- Passenger oxygen masks (auto + manual)

Note: *The warning may be caused by a sub BUS failure. As a result, only a part of the above-listed systems may be lost.*

ELEC AC ESS BUS SHED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

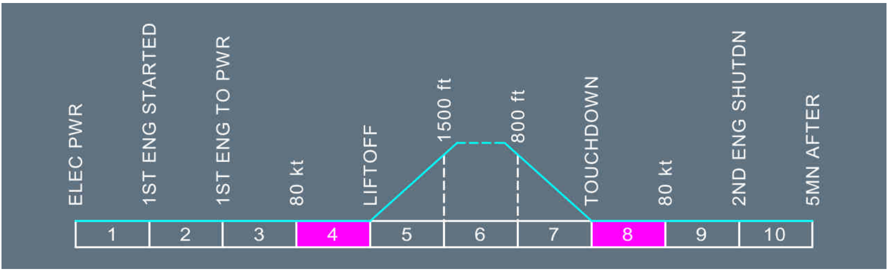
Ident.: PRO-ABN-ELEC-L-00017349.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC SHED ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
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Ident.: PRO-ABN-ELEC-L-00012504.0002001 / 03 DEC 13

82 ATC/XPDR.. SYS 2

Continued on the following page

ELEC AC ESS BUS SHED (Cont'd)

Ident.: PRO-ABN-ELEC-L-00018554.0004001 / 21 MAR 16

L12

STATUS

INOP SYS

CAPT AOA
ATC 1 or ATC/XPDR 1
See below

Other INOP SYS

MCDU 1
CVR
Passenger oxygen masks (auto + manual)
DME 1
CAPT AOA heat
APU fuel pump
CAPT ND
HF 1

Note: *The warning may be caused by a failure in a sub BUS. Consequently only a part of the systems listed above may be lost.*

ELEC AC ESS BUS SHED

Applicable to: MSN 01251

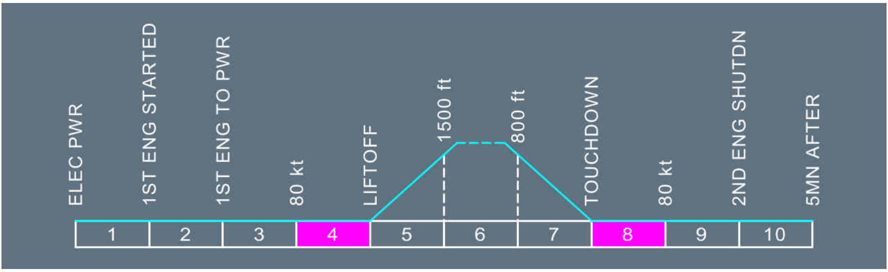
Ident.: PRO-ABN-ELEC-L-00017349.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC SHED ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
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6
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8
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Ident.: PRO-ABN-ELEC-L-00012504.0001001 / 19 AUG 10

ATC... SYS 2

Continued on the following page

ELEC AC ESS BUS SHED (Cont'd)

Ident.: PRO-ABN-ELEC-L-00018554.0004001 / 21 MAR 16

L12

STATUS

INOP SYS

CAPT AOA
ATC 1 or ATC/XPDR 1
See below

Other INOP SYS

MCDU 1
CVR
Passenger oxygen masks (auto + manual)
DME 1
CAPT AOA heat
APU fuel pump
CAPT ND
HF 1

Note: *The warning may be caused by a failure in a sub BUS. Consequently only a part of the systems listed above may be lost.*

ELEC AC ESS BUS SHED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

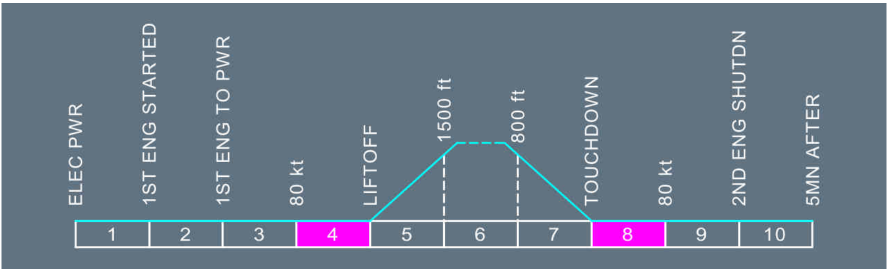
Ident.: PRO-ABN-ELEC-L-00017349.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC SHED ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
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Continued on the following page

ELEC AC ESS BUS SHED (Cont'd)

Ident.: PRO-ABN-ELEC-L-00018554.0004001 / 21 MAR 16

L12

STATUS

INOP SYS

CAPT AOA
ATC 1 or ATC/XPDR 1
See below

Other INOP SYS

MCDU 1
CVR
Passenger oxygen masks (auto + manual)
DME 1
CAPT AOA heat
APU fuel pump
CAPT ND
HF 1

Note: *The warning may be caused by a failure in a sub BUS. Consequently only a part of the systems listed above may be lost.*

ELEC APU GEN FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-ELEC-E-00017362.0001001 / 21 MAR 16

ANNUNCIATIONS

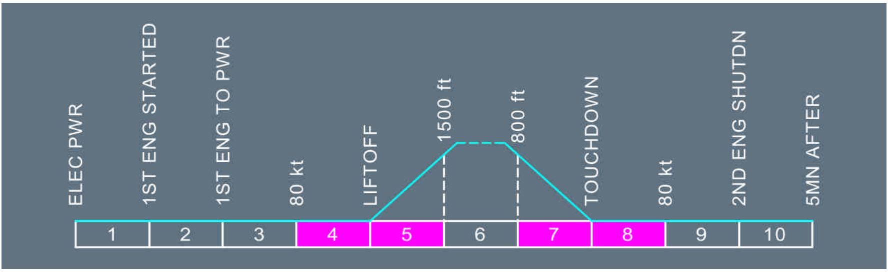
Triggering Conditions:

L2

This alert triggers when:

- The protection trip is initiated by the associated GCU, or
- The line contactor is open with APU GEN pb-sw set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
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Ident.: PRO-ABN-ELEC-E-00012490.0002001 / 18 MAR 11

APU GEN.. OFF THEN ON

- **IF UNSUCCESSFUL:**

  APU GEN..OFF

Continued on the following page

ELEC APU GEN FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-E-00012491.0001001 / 18 MAR 11

83

STATUS

INOP SYS

MAIN GALLEY [(1)]
APU GEN

(1) *(When only one GEN operating)*

ELEC APU GEN FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ELEC-E-00017362.0001001 / 21 MAR 16

ANNUNCIATIONS

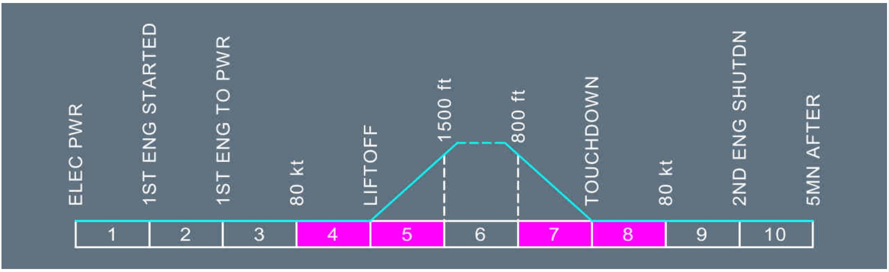
Triggering Conditions:

L2

This alert triggers when:

- The protection trip is initiated by the associated GCU, or
- The line contactor is open with APU GEN pb-sw set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ELEC APU GEN FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-E-00012490.0002001 / 18 MAR 11

APU GEN.. OFF THEN ON

- **IF UNSUCCESSFUL:**

  APU GEN..OFF

ELEC APU GEN FAULT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

Ident.: PRO-ABN-ELEC-E-00017362.0001001 / 21 MAR 16

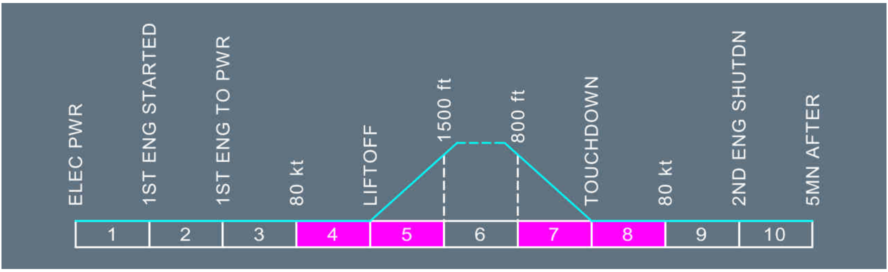
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The protection trip is initiated by the associated GCU, or
- The line contactor is open with APU GEN pb-sw set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
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Ident.: PRO-ABN-ELEC-E-00012490.0002001 / 18 MAR 11

APU GEN.. OFF THEN ON

- **IF UNSUCCESSFUL:**

  APU GEN..OFF

Continued on the following page

ELEC APU GEN FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-E-00012491.0008001 / 18 MAR 11

84

STATUS

INOP SYS

MAIN GALLEY (1)
APU GEN

(1) *(when only one GEN operating, all the galleys are shed)*

ELEC BAT 1(2) FAULT

Applicable to: ALL

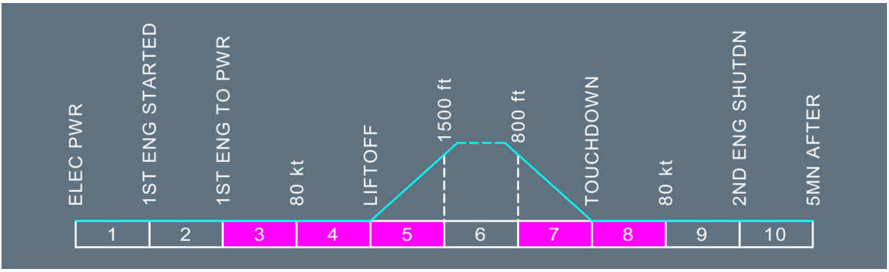
Ident.: PRO-ABN-ELEC-F-00017367.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the charging current increases at an abnormal rate.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-F-00017894.0001001 / 21 MAR 16

L2 Battery contactor is opened automatically by the battery charge limiter.

L1 Crew awareness.

Continued on the following page

ELEC BAT 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-F-00017895.0001001 / 21 MAR 16

STATUS	
	INOP SYS
APU BAT START NOT AVAIL	BAT 1(2)

ELEC BAT 1(2) OFF

Applicable to: ALL

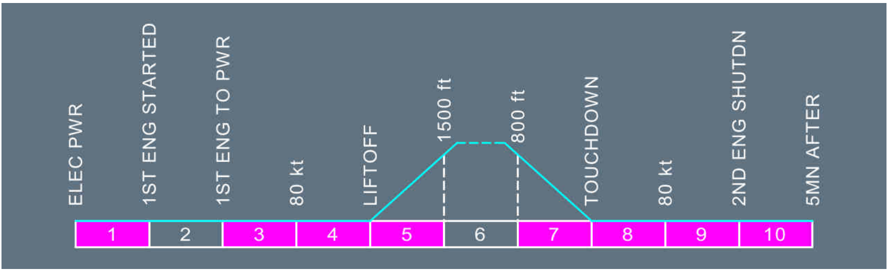
Ident.: PRO-ABN-ELEC-G-00017371.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the BAT 1(2) pb-sw is set to OFF and no failure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-G-00018943.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

ELEC BAT 1(2) OFF (Cont'd)

Ident.: PRO-ABN-ELEC-G-00012495.0001001 / 19 AUG 10

STATUS

APU BAT START NOT AVAIL

ELEC BCL 1(2) FAULT

Applicable to: ALL

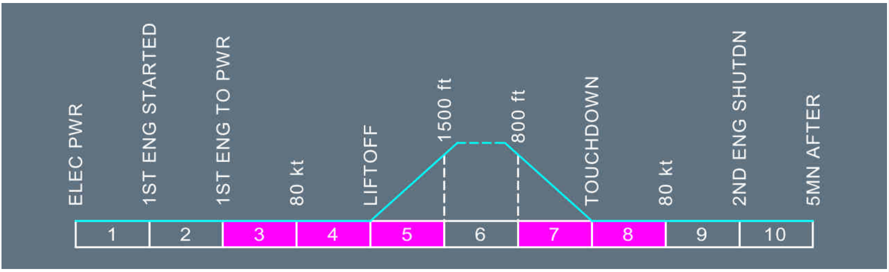
Ident.: PRO-ABN-ELEC-H-00017377.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the battery charge limiter 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-H-00012496.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

ELEC BCL 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-H-00012497.0001001 / 19 AUG 10

STATUS

	INOP SYS
APU BAT START NOT AVAIL	BCL 1(2)

ELEC DC BAT BUS FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02896-03002, 03035-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

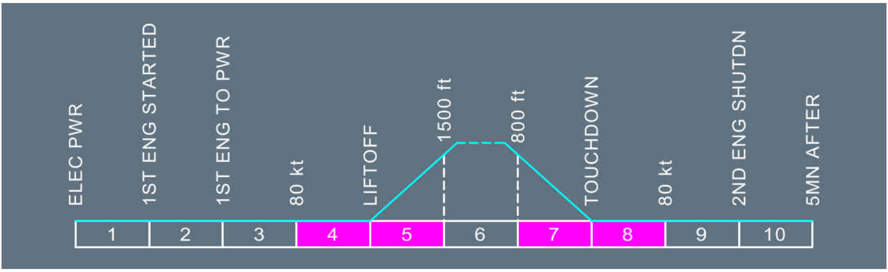
Ident.: PRO-ABN-ELEC-W-00017358.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC BAT busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-W-00012545.0001001 / 22 MAR 16

85

Crew awareness.

Continued on the following page

ELEC DC BAT BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-W-00012546.0002001 / 21 MAR 16

L12

STATUS

APU BAT START NOT AVAIL

ECB is no longer supplied

INOP SYS

APU FIRE DET

Other INOP SYS

APU ECB
Stick and rudder pedals lock *(by AP)*
Forward (aft) cargo fire extinguishing ◁✳
Forward (aft) cargo heat controller ◁✳
Forward (aft) cargo isolation valves ◁✳
APU fuel LP valve
Manual pressure control

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BAT BUS FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

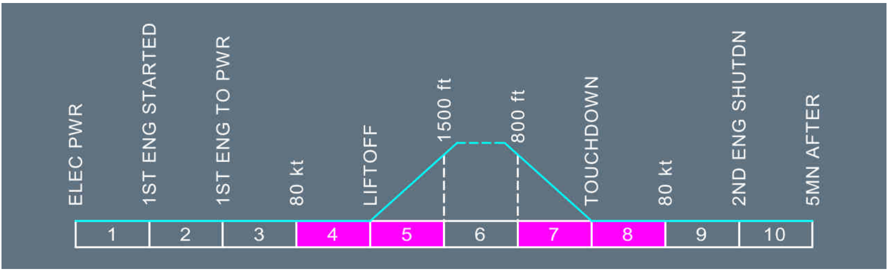
Ident.: PRO-ABN-ELEC-W-00017358.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC BAT busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ELEC DC BAT BUS FAULT

Applicable to: MSN 02014, 02734, 03032, 04827-04860

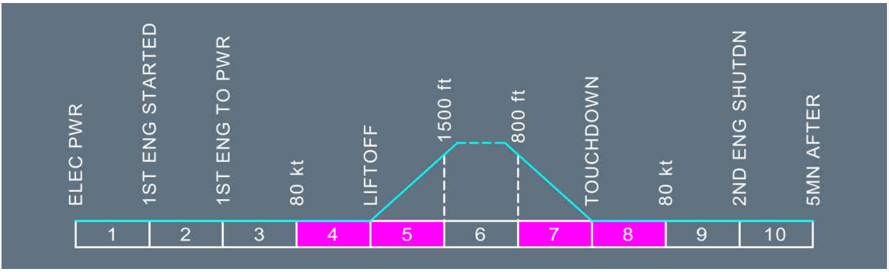
Ident.: PRO-ABN-ELEC-W-00017358.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC BAT busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ELEC-W-00012545.0001001 / 22 MAR 16

86

Crew awareness.

Continued on the following page

ELEC DC BAT BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-W-00012546.0009001 / 21 MAR 16

L12

STATUS

APU BAT START NOT AVAIL

ECB is no longer supplied

INOP SYS

APU FIRE DET

Other INOP SYS

APU ECB
Stick and rudder pedals lock
(by AP)
Forward (aft) cargo fire extinguishing
Fwd cargo heat controller
Fwd cargo isol valves
APU fuel LP valve
Manual pressure control

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BAT BUS FAULT

Applicable to: MSN 02321, 02887, 04563, 05005, 05097, 08495-09324, 10949-11293

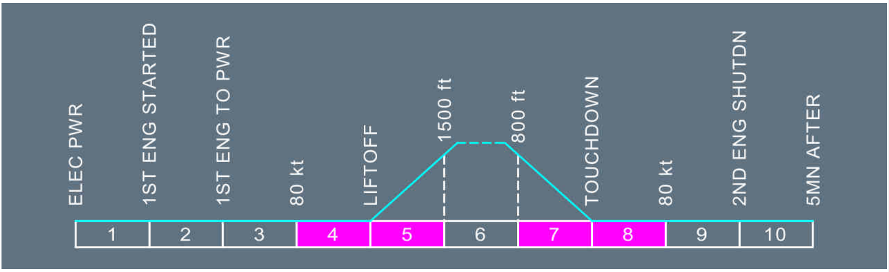
Ident.: PRO-ABN-ELEC-W-00017358.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC BAT busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-W-00012545.0001001 / 22 MAR 16

87

Crew awareness.

Continued on the following page

ELEC DC BAT BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-W-00012546.0006001 / 21 MAR 16

88

L12

STATUS

APU BAT START NOT AVAIL

ECB is no longer supplied

INOP SYS

APU FIRE DET

Other INOP SYS

APU ECB
Stick and rudder pedals lock *(by AP)*
Forward (aft) cargo fire extinguishing ◁✳
Forward (aft) cargo heat controller ◁✳
Fwd cargo isol valves ◁✳
APU fuel LP valve
Manual pressure control

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BAT BUS FAULT

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

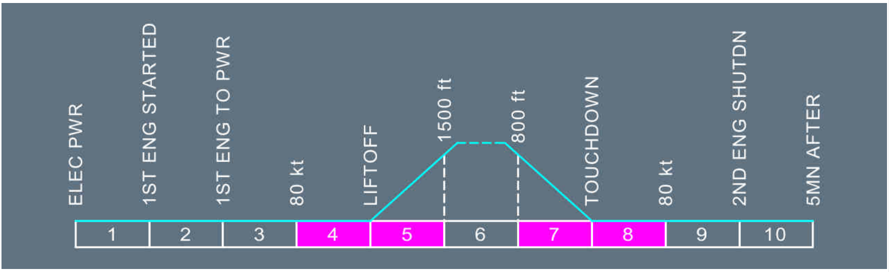
Ident.: PRO-ABN-ELEC-W-00017358.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC BAT busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-W-00012545.0001001 / 22 MAR 16

89 Crew awareness.

Continued on the following page

ELEC DC BAT BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-W-00012546.0021001 / 21 MAR 16

L12

STATUS

APU BAT START NOT AVAIL

ECB is no longer supplied

INOP SYS

APU FIRE DET

Other INOP SYS

APU ECB
Stick and rudder pedals lock *(by AP)*
Forward (aft) cargo fire extinguishing ◁
Forward (aft) cargo heat controller ◁
AFT Cargo isol valves ◁
APU fuel LP valve
Manual pressure control

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BAT BUS FAULT

Applicable to: MSN 11482-11597

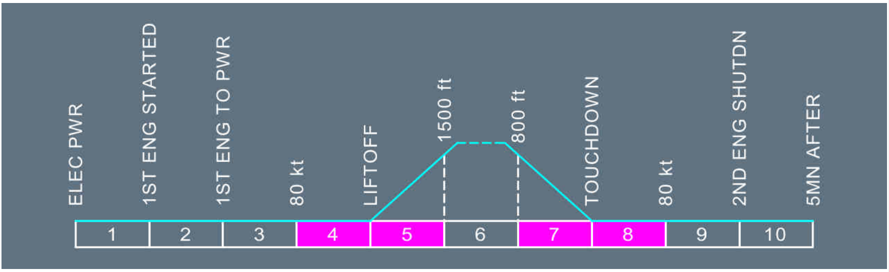
Ident.: PRO-ABN-ELEC-W-00017358.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC BAT busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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90 Ident.: PRO-ABN-ELEC-W-00012545.0003001 / 03 NOV 22

- **If COM RMP 1+3(2+3) FAULT:**
  CAPT(F/O) RMP 2(1)........................ USE
  CAPT(F/O) BOOMSET........................ USE
- **If ELEC DC ESS BUS FAULT and COM RMP 3 FAULT:**
  CAPT RMP 2........................ USE
  CAPT BOOMSET........................ USE
- **If ELEC DC ESS BUS FAULT:**
  CAPT RMP 3........................ USE
  CAPT BOOMSET........................ USE
- **If ELEC DC BUS 2 FAULT and COM RMP 1(2):**
  CAPT(F/O) RMP 2(1)........................ USE
  CAPT(F/O) BOOMSET........................ USE

Continued on the following page

ELEC DC BAT BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-W-00012546.0006001 / 21 MAR 16

91

L12

STATUS

APU BAT START NOT AVAIL
ECB is no longer supplied

INOP SYS

APU FIRE DET

Other INOP SYS

APU ECB
Stick and rudder pedals lock
(by AP)
Forward (aft) cargo fire extinguishing ◁
Forward (aft) cargo heat controller ◁
Fwd cargo isol valves ◁
APU fuel LP valve
Manual pressure control

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BUS 1 FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

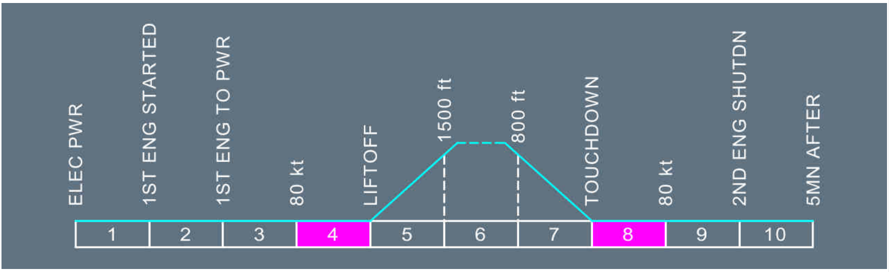
Ident.: PRO-ABN-ELEC-M-00017350.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-M-00012507.0001001 / 15 DEC 15

BLOWER..OVRD
EXTRACT..OVRD

L2 *The Air conditioning system provides ventilation to the avionics. This ventilation air is exhausted overboard.*

L1

SECONDARY FAILURES

*AVNCS VENT

Continued on the following page

ELEC DC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-M-00018555.0011001 / 22 MAR 17

L12

STATUS

CAB ZONE AT FIXED TEMP
See (1)
CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

ACP 3
L. WSHLD HEAT
AVNCS VENT
REVERSER 1
PACK 1 REGUL
CAPT STAT heat
L. WNDW HEAT
GALLEY FAN
BRAKES SYS 1
CAT 3 DUAL
STBY STAT heat
CTR TK PUMP 1 ◁
GND COOL ◁
LAV DET

Other INOP SYS

Left cab fan
CFDIU
L CTR TK XFR valve ◁
Eng 1 oil press and qty ind.
Zone controller primary channel
VHF 3 ◁
Hot air
TPIS ◁
Sel cal
RMP 3 ◁
Capt wiper
Brake temps ind.

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Due to the loss of the galley fan, the Pack 1 controller, and the primary zone controller channel. (See associated procedures).*

ELEC DC BUS 1 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

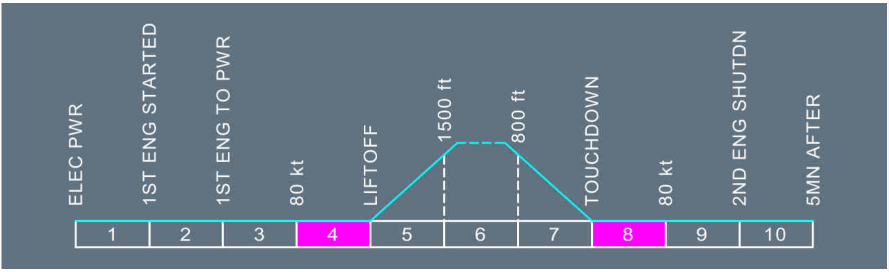
Ident.: PRO-ABN-ELEC-M-00017350.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
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9
10

Ident.: PRO-ABN-ELEC-M-00012507.0001001 / 15 DEC 15

BLOWER.. OVRD
EXTRACT.. OVRD

L2 *The Air conditioning system provides ventilation to the avionics. This ventilation air is exhausted overboard.*

L1

SECONDARY FAILURES

*AVNCS VENT

ELEC DC BUS 1 FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11228-11293

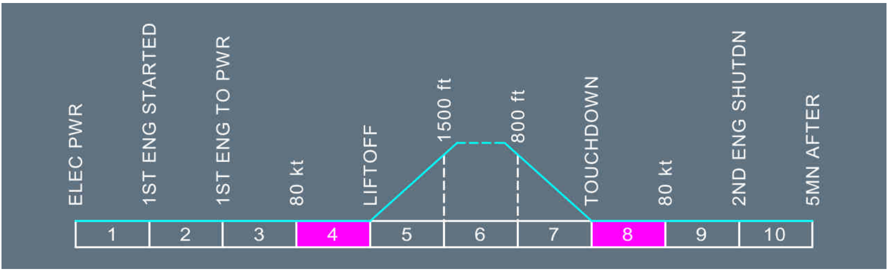
Ident.: PRO-ABN-ELEC-M-00017350.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-M-00012507.0001001 / 15 DEC 15

BLOWER...OVRD
EXTRACT..OVRD

L2 *The Air conditioning system provides ventilation to the avionics. This ventilation air is exhausted overboard.*

L1

SECONDARY FAILURES

*AVNCS VENT

Continued on the following page

ELEC DC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-M-00018555.0012001 / 02 MAY 23

92

93

STATUS

CAB TEMP CKPT CTL ONLY
CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

- ACP 3
- L. WSHLD HEAT
- AVNCS VENT
- REVERSER 1
- CAT 3 DUAL
- CAPT STAT heat
- L. WNDW HEAT
- GALLEY FAN
- BRAKES SYS 1
- STBY STAT heat
- CTR TK PUMP 1 ◁✳
- GND COOL ◁✳
- LAV DET

Other INOP SYS

- Left cab fan
- CFDIU
- L CTR TK XFR valve ◁✳
- Eng 1 oil press and qty ind.
- COND controller lane A
- VHF 3 ◁✳
- Hot air
- TPIS ◁✳
- Sel cal
- RMP 3 ◁✳
- Capt wiper
- Brake temps ind.

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BUS 1 FAULT

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

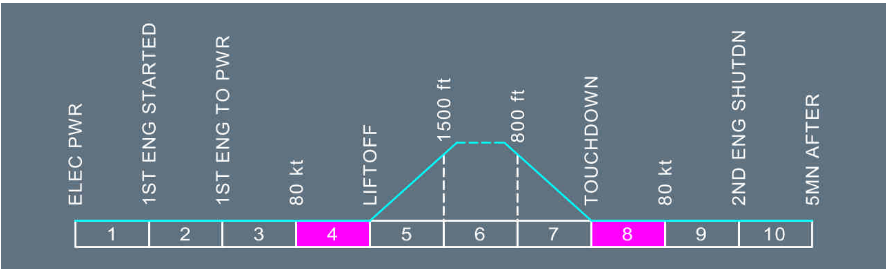
Ident.: PRO-ABN-ELEC-M-00017350.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-M-00012507.0001001 / 15 DEC 15

BLOWER..OVRD
EXTRACT..OVRD

L2 *The Air conditioning system provides ventilation to the avionics. This ventilation air is exhausted overboard.*

L1

SECONDARY FAILURES

*AVNCS VENT

Continued on the following page

ELEC DC BUS 1 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-M-00018555.0014001 / 02 MAY 23

94

STATUS

CAB TEMP CKPT CTL ONLY
CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

ACP 3
L. WSHLD HEAT
GALLEY FAN
BRAKES SYS 1
CAPT STAT heat
L. WNDW HEAT
GND COOL ◁✳
LAV DET
STBY STAT heat
AVNCS VENT
REVERSER 1
CAT 3 DUAL

Other INOP SYS

Left cab fan
CFDIU
L CTR TK XFR valve
Eng 1 oil press and qty ind.
COND controller lane A
VHF 3 ◁✳
Hot air
TPIS ◁✳
Sel cal
RMP 3 ◁✳
Capt wiper
Brake temps ind.

Note: The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

ELEC DC BUS 1 FAULT

Applicable to: MSN 11482-11522, 11572-11597

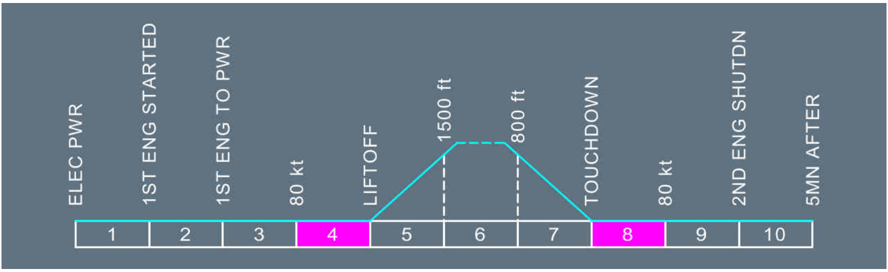
Ident.: PRO-ABN-ELEC-M-00017350.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-M-00012507.0001001 / 15 DEC 15

BLOWER.......... OVRD
EXTRACT.......... OVRD

L2 *The Air conditioning system provides ventilation to the avionics. This ventilation air is exhausted overboard.*

L1

SECONDARY FAILURES

*AVNCS VENT

Continued on the following page

ELEC DC BUS 1 FAULT (Cont'd)

95 Ident.: PRO-ABN-ELEC-M-00018555.0020001 / 18 NOV 21

STATUS

CAB TEMP CKPT CTL ONLY
CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

ACP 3 ◁
L. WSHLD HEAT
GALLEY FAN
BRAKES SYS 1
CAPT STAT heat
L. WNDW HEAT
GND COOL ◁
LAV DET
STBY STAT heat
AVNCS VENT
REVERSER 1
CAT 3 DUAL

Other INOP SYS

Left cab fan
CFDIU
Hot air
TPIS ◁
COND controller lane A
VHF 3 ◁
Capt wiper
Brake temps ind.
Sel cal
L CTR TK XFR valve
Eng 1 oil press and qty ind.

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BUS 1 FAULT

Applicable to: MSN 11531

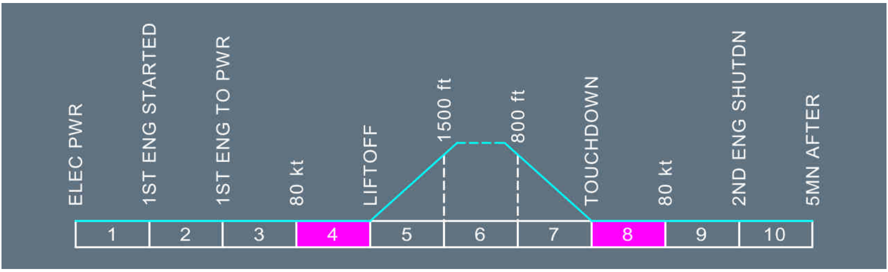
Ident.: PRO-ABN-ELEC-M-00017350.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-M-00012507.0001001 / 15 DEC 15

BLOWER...OVRD
EXTRACT...OVRD

L2 *The Air conditioning system provides ventilation to the avionics. This ventilation air is exhausted overboard.*

L1

SECONDARY FAILURES

*AVNCS VENT

Continued on the following page

ELEC DC BUS 1 FAULT (Cont'd)

96 Ident.: PRO-ABN-ELEC-M-00018555.0019001 / 18 NOV 21

STATUS

CAB TEMP CKPT CTL ONLY
CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

ACP 3 ◁
L. WSHLD HEAT
AVNCS VENT
REVERSER 1
CAT 3 DUAL

CAPT STAT heat
L. WNDW HEAT
GALLEY FAN
BRAKES SYS 1

STBY STAT heat
CTR TK PUMP 1 ◁
GND COOL ◁
LAV DET

Other INOP SYS

Left cab fan
CFDIU
Hot air
TPIS ◁

COND controller lane A
VHF 3 ◁
Capt wiper
Brake temps ind.

Sel cal
L CTR TK XFR valve ◁
Eng 1 oil press and qty ind.

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

ELEC DC BUS 2 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

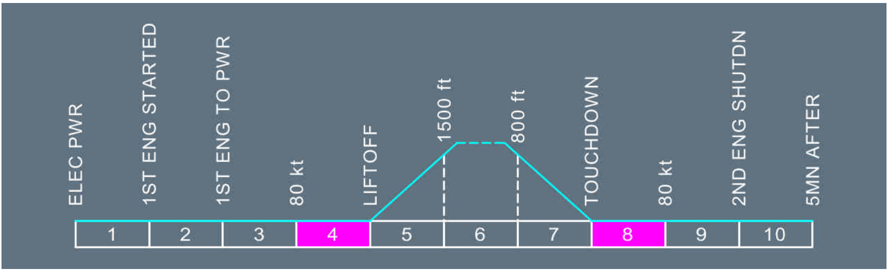
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-N-00017898.0004001 / 21 MAR 16

AIR DATA SWTG..F/O3
BARO REF..CHECK

L2 *Since one FCU channel is lost, crosscheck the barometer reference settings on the FCU and PFD.*

L1
- **If DC ESS BUS is failed:**

  L/G..GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

* CAB PRESS
* FUEL
* WHEEL
* F/CTL

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-N-00017899.0012001 / 02 MAY 23

L12

97

STATUS

- **If DC ESS BUS is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

PACK 2 AT FIXED TEMP

- **If DC ESS BUS is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
R WNDW HEAT
CAT 3 DUAL
R TK PUMP 2
LGCIU 2
MAIN GALLEY
ENG 1 LOOP B
FCDC 2

ELAC 2 (1)
F/O STAT
AP 2
FAC 2
CTR TK PUMP 2 ◁
REVERSER 2
Y ELEC PUMP (if selected ON)
ENG 2 LOOP A
LGCIU 1 (2)

SEC 2+3
R WSLHD HEAT
FCU 2
L TK PUMP 2
AUTO BRK
CAB PR 2
BRK SYS 2
PACK 2 REGUL

Other INOP SYS

SFCC 2
R cabin fan
F/O wiper

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

F/O rain rplnt
Bleed X feed auto control
zone controller sec channel
Brake fan ◁✻
Rudder trim ind

Eng 1 and 2 fire ext btl 2
RMP 2
CTR TK XFR valve R ◁✻
Eng 2 oil low press and qty ind
FMGC 2

BMC 2
FQI channel 2
SDCU 2 or CIDS ◁✻ 2 SMOKE DETECT
R loudspeaker
CDLS ◁✻

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but recovered at landing gear extension.*
(2) *(If DC ESS BUS is failed)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 2 FAULT

Applicable to: MSN 01251

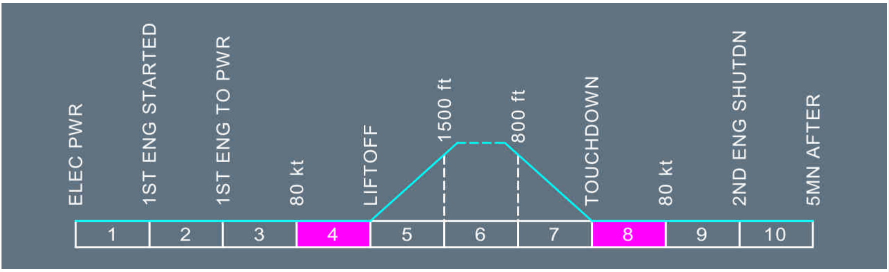
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-N-00017898.0002001 / 21 MAR 16

AIR DATA SWTG...F/O3
BARO REF...CHECK

L2 *Since one FCU channel is lost, crosscheck the barometer reference settings on the FCU and PFD.*

L1

SECONDARY FAILURES

* CAB PRESS
* FUEL
* WHEEL
* F/CTL

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-N-00017899.0004001 / 22 MAR 17

L12

STATUS

MAX FL.. 100/MEA

LDG DIST PROC.. APPLY

ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC
PACK 2 AT FIXED TEMP
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
R WNDW HEAT
CAT 3 DUAL
R TK PUMP 2
REVERSER 2
Y ELEC PUMP (if selected ON)
ENG 2 LOOP A

ELAC 2(1)
F/O STAT
AP 2
FAC 2
CTR TK PUMP 2 ◁
CAB PR 2
BRK SYS 2
PACK 2 REGUL

SEC 2+3
R WSLHD HEAT
FCU 2
L TK PUMP 2
LGCIU 2
MAIN GALLEY
ENG 1 LOOP B
FCDC 2

Other INOP SYS

SFCC 2
F/O rain rplnt
BMC 2
FQI channel 2
SDCU 2 or CIDS ◁ 2 SMOKE DETECT
R loudspeaker
CDLS ◁

R cabin fan
Eng 1 and 2 fire ext btl 2
Bleed X feed auto control
zone controller sec channel
Brake fan ◁
rudder trim ind

F/O wiper
Autobrake (due to loss of 2 SECs)
RMP 2
CTR TK XFR valve R ◁
Eng 2 oil low press and qty ind
FMGC 2

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Note:
- *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*
- *The flight crew must monitor the CAB V/S, because the proximity sensor of the bulk cargo door is no longer electrically supplied.*

(1) *Lost after 30 s, but recovered at landing gear extension.*

ELEC DC BUS 2 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

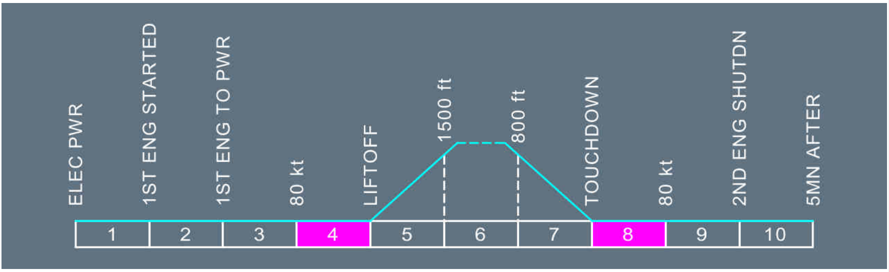
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ELEC DC BUS 2 FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

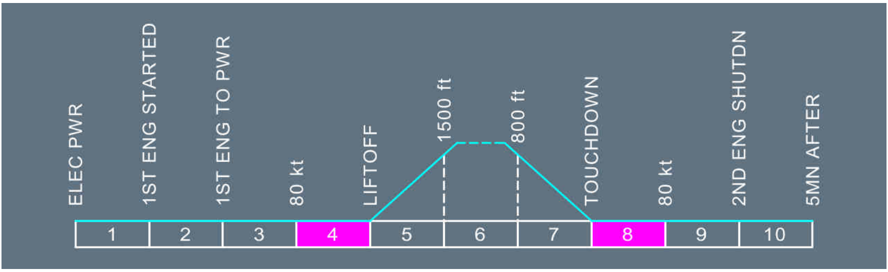
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-N-00017898.0004001 / 21 MAR 16

AIR DATA SWTG...F/O3
BARO REF...CHECK

L2 *Since one FCU channel is lost, crosscheck the barometer reference settings on the FCU and PFD.*

L1 ● **If DC ESS BUS is failed:**

L/G... GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

- * CAB PRESS
- * FUEL
- * WHEEL
- * F/CTL

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-N-00017899.0013001 / 02 MAY 23

L12

98

STATUS

- **If DC ESS BUS is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC ESS BUS is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
R WNDW HEAT
CAT 3 DUAL
R TK PUMP 2
LGCIU 2
MAIN GALLEY
ENG 1 LOOP B
LGCIU 1 (2)

ELAC 2(1)
F/O STAT
AP 2
FAC 2
CTR TK PUMP 2 ❄
REVERSER 2
Y ELEC PUMP (if selected ON)
ENG 2 LOOP A

SEC 2+3
R WSLHD HEAT
FCU 2
L TK PUMP 2
AUTO BRK
CAB PR 2
BRK SYS 2
FCDC 2

Other INOP SYS

SFCC 2
F/O rain rplnt

R cabin fan
Eng 1 and 2 fire ext btl 2

F/O wiper
BMC 2

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Bleed X feed auto control
CTR TK XFR valve R ◁✻
Eng 2 oil low press and qty ind
FMGC 2

RMP 2
SDCU 2 or CIDS ◁✻ 2 SMOKE DETECT
R loudspeaker
CDLS ◁✻

FQI channel 2
Brake fan ◁✻
Rudder trim ind

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but recovered at landing gear extension.*
(2) *(If DC ESS BUS is failed)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 2 FAULT

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324

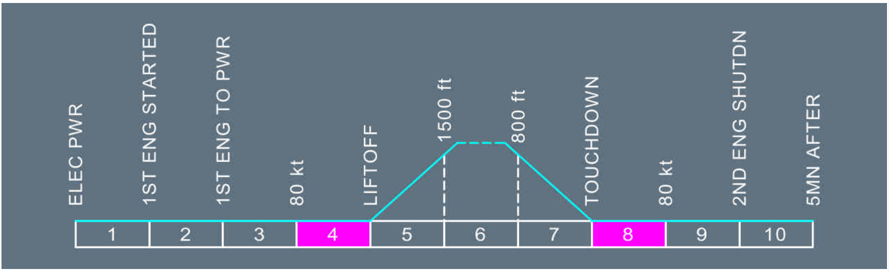
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-N-00017898.0004001 / 21 MAR 16

AIR DATA SWTG..F/O3
BARO REF..CHECK

L2 *Since one FCU channel is lost, crosscheck the barometer reference settings on the FCU and PFD.*

L1
- **If DC ESS BUS is failed:**
  L/G..GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

* CAB PRESS
* FUEL
* WHEEL
* F/CTL

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-N-00017899.0015001 / 02 MAY 23

99

L12

100

STATUS

STATUS	INOP SYS
● **If DC ESS BUS is failed:** L/G........................GRVTY EXTN LDG DIST PROC........................APPLY FUEL CONSUMPT INCRSD *See* (3) FMS PRED UNRELIABLE *See* (4) ENG 2 APPR IDLE ONLY BOTH PFD ON SAME FAC ● **If DC ESS BUS is failed:** L/G CONTROL NOT AVAIL SLATS/FLAPS SLOW CAT 3 SINGLE ONLY	*See below*

INOP SYS

SPLR 1+2+5
VHF 2
R WNDW HEAT
CAT 3 DUAL
R TK PUMP 2
REVERSER 2
Y ELEC PUMP (if selected ON)
ENG 2 LOOP A

ELAC 2(1)
F/O STAT
AP 2
FAC 2
AUTO BRK
CAB PR 2
BRK SYS 2
FCDC 2

SEC 2+3
R WSLHD HEAT
FCU 2
L TK PUMP 2
LGCIU 2
MAIN GALLEY
ENG 1 LOOP B
LGCIU 1 (2)

Other INOP SYS

SFCC 2
F/O rain rplnt
Bleed X feed auto control

R cabin fan
Eng 1 and 2 fire ext btl 2
RMP 2

F/O wiper
BMC 2
FQI channel 2

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

CTR TK XFR valve R

Eng 2 oil low press and qty ind

FMGC 2

SDCU 2 or CIDS ◁✳ 2 SMOKE DETECT

R loudspeaker

CDLS ◁✳

Brake fan ◁✳

Rudder trim ind

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but recovered at landing gear extension.*
(2) *(If DC ESS BUS is failed)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 2 FAULT

Applicable to: MSN 10949-11293

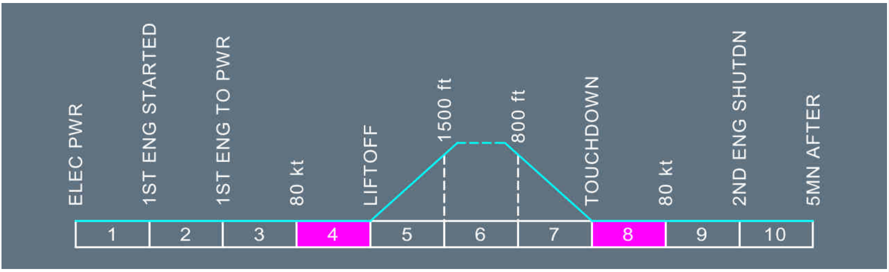
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-N-00017898.0010001 / 09 NOV 21

101

■ **If ADR 3 available:**

AIR DATA SWTG.. F/O 3

L2 *Select ADR 3 to F/O side if ADR 3 is reliable and not in use.*

L1 ■ **In all other cases:**

AIR DATA SWTG.. AS RQRD

BARO REF.. CHECK

L2 *Since one FCU channel is lost, crosscheck the barometer reference settings on the FCU and PFD.*

L1 ● **If DC ESS BUS is failed:**

L/G GRVTY PROC.. APPLY

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

* CAB PRESS
* FUEL
* WHEEL
* F/CTL

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-N-00017899.0015001 / 02 MAY 23

102

L12

103

STATUS

- **If DC ESS BUS is failed:**
  L/G...GRVTY EXTN

LDG DIST PROC.. APPLY

FULL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC ESS BUS is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
R WNDW HEAT
CAT 3 DUAL
R TK PUMP 2
REVERSER 2
Y ELEC PUMP (if selected ON)
ENG 2 LOOP A

ELAC 2(1)
F/O STAT
AP 2
FAC 2
AUTO BRK
CAB PR 2
BRK SYS 2
FCDC 2

SEC 2+3
R WSLHD HEAT
FCU 2
L TK PUMP 2
LGCIU 2
MAIN GALLEY
ENG 1 LOOP B
LGCIU 1 (2)

Other INOP SYS

SFCC 2
F/O rain rplnt
Bleed X feed auto control

R cabin fan
Eng 1 and 2 fire ext btl 2
RMP 2

F/O wiper
BMC 2
FQI channel 2

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

CTR TK XFR valve R

Eng 2 oil low press and qty ind

FMGC 2

SDCU 2 or CIDS ◁✻ 2 SMOKE DETECT

R loudspeaker

CDLS ◁✻

Brake fan ◁✻

Rudder trim ind

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but recovered at landing gear extension.*
(2) *(If DC ESS BUS is failed)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 2 FAULT

Applicable to: MSN 11482-11522, 11572-11597

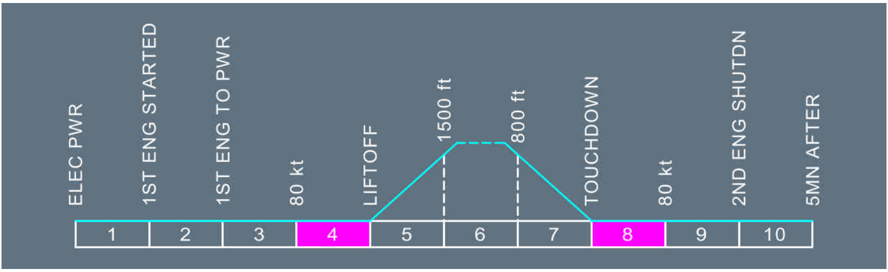
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

04 Ident.: PRO-ABN-ELEC-N-00017898.0012001 / 09 NOV 21

- **If ADR 3 available:**
  AIR DATA SWTG.......................................F/O 3
  L2 *Select ADR 3 to F/O side if ADR 3 is reliable and not in use.*

L1
- **In all other cases:**
  AIR DATA SWTG.......................................AS RQRD

BARO REF.......................................CHECK
L2 *Since one FCU channel is lost, crosscheck the barometer reference settings on the FCU and PFD.*

L1
● **If DC ESS BUS is failed:**
  AUDIOS NOT AVAIL
  XPDR 1 ON RMP 1 ONLY
  L/G GRVTY PROC.......................................APPLY
  L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

* CAB PRESS
* FUEL
* WHEEL
* F/CTL

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

05 Ident.: PRO-ABN-ELEC-N-00017899.0017001 / 18 NOV 21

L12

STATUS

- **If DC ESS BUS is failed:**
  AUDIO NOT AVAIL:
  ALTITUDE ALERT
  AUTO CALLOUT
  AURAL ATTENTION-GETTERS

- **If DC ESS BUS is failed:**
  L/G...GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC ESS BUS is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
R WNDW HEAT
CAT 3 DUAL
R TK PUMP 2
REVERSER 2
Y ELEC PUMP (if selected ON)
ENG 2 LOOP A
RMP 2 (2)

ELAC 2(1)
F/O STAT
AP 2
FAC 2
AUTO BRK
CAB PR 2
BRK SYS 2
FCDC 2

SEC 2+3
R WSLHD HEAT
FCU 2
L TK PUMP 2
LGCIU 2
MAIN GALLEY
ENG 1 LOOP B
LGCIU 1 (2)

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Other INOP SYS

SFCC 2
F/O rain rplnt
Bleed X feed auto control
SDCU 2 or CIDS ◁✻ 2 SMOKE DETECT
R loudspeaker
CDLS ◁✻

R cabin fan
Eng 1 and 2 fire ext btl 2
FQI channel 2
Brake fan ◁✻
Rudder trim ind

F/O wiper
BMC 2
CTR TK XFR valve R
Eng 2 oil low press and qty ind
FMGC 2

Note: The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

(1) *Lost after 30 s, but recovered at landing gear extension.*
(2) *(If DC ESS BUS is failed)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 2 FAULT

Applicable to: MSN 11531

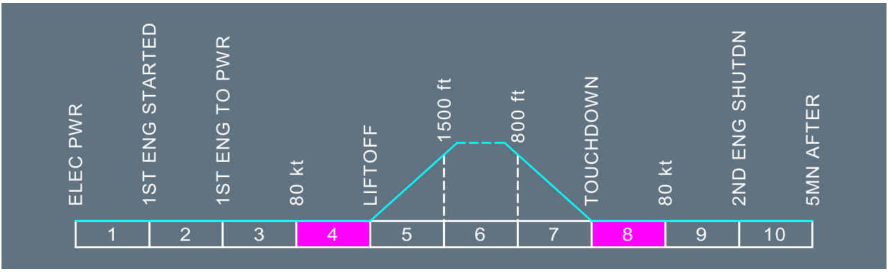
Ident.: PRO-ABN-ELEC-N-00017352.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 2 busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

06 Ident.: PRO-ABN-ELEC-N-00017898.0012001 / 09 NOV 21

■ **If ADR 3 available:**
AIR DATA SWTG.. F/O 3

L2 *Select ADR 3 to F/O side if ADR 3 is reliable and not in use.*

L1 ■ **In all other cases:**
AIR DATA SWTG..AS RQRD

BARO REF..CHECK

L2 *Since one FCU channel is lost, crosscheck the barometer reference settings on the FCU and PFD.*

L1 ● **If DC ESS BUS is failed:**

AUDIOS NOT AVAIL

XPDR 1 ON RMP 1 ONLY
L/G GRVTY PROC...APPLY

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

* CAB PRESS
* FUEL
* WHEEL
* F/CTL

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

07 Ident.: PRO-ABN-ELEC-N-00017899.0016001 / 18 NOV 21

L12

STATUS

INOP SYS

See below

- **If DC ESS BUS is failed:**
  AUDIO NOT AVAIL:
  ALTITUDE ALERT
  AUTO CALLOUT
  AURAL ATTENTION-GETTERS

- **If DC ESS BUS is failed:**
  L/G...GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC ESS BUS is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

SPLR 1+2+5
VHF 2
R WNDW HEAT
CAT 3 DUAL
R TK PUMP 2
LGCIU 2
MAIN GALLEY
ENG 1 LOOP B
LGCIU 1 (2)

ELAC 2(1)
F/O STAT
AP 2
FAC 2
CTR TK PUMP 2
REVERSER 2
Y ELEC PUMP (if selected ON)
ENG 2 LOOP A
RMP 2 (2)

SEC 2+3
R WSLHD HEAT
FCU 2
L TK PUMP 2
AUTO BRK
CAB PR 2
BRK SYS 2
FCDC 2

Continued on the following page

ELEC DC BUS 2 FAULT (Cont'd)

Other INOP SYS

SFCC 2
F/O rain rplnt
Bleed X feed auto control
SDCU 2 or CIDS ◁✳ 2 SMOKE DETECT
R loudspeaker
CDLS ◁✳

R cabin fan
Eng 1 and 2 fire ext btl 2
FQI channel 2
Brake fan ◁✳
Rudder trim ind

F/O wiper
BMC 2
CTR TK XFR valve R ◁✳
Eng 2 oil low press and qty ind
FMGC 2

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but recovered at landing gear extension.*
(2) *(If DC ESS BUS is failed)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

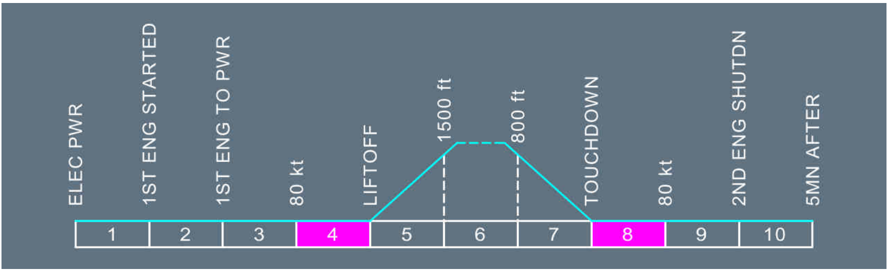
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018565.0004001 / 21 MAR 16

108

BLOWER..OVRD
EXTRACT..OVRD
BARO REF..CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
MAX BRK PR..1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC **DC BAT BUS FAULT**

SECONDARY FAILURES

- * CAB PRESS
- * FUEL
- * AIR COND
- * BRAKES
- * F/CTL

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018566.0017001 / 02 MAY 23

L12

109

STATUS

MAX BRK PR....................1000 PSI

LDG DIST PROC.................... APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC
CTR TK FUEL UNUSABLE
APU BAT START NOT AVAIL
CAB ZONE AT FIXED TEMP
PACKS AT FIXED TEMP
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY
FLS ◁ LIMITED TO F-APP+RAW

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
F/O STAT heat
WNDW HEAT
CAT 3 DUAL
ANTI SKID
AUTO BRK
CAB PRESS 2
CRG HEAT ◁
Y ELEC PUMP
LAV DET
PACK 1 REGUL
CTR TK PUMPS

ELAC 2(1)
ACP 3
STBY STAT heat
AP 2
FAC 2
N/W STRG
LGCIU 2
AVNCS VENT
GND COOL ◁
Brk sys 1+2
ENG 1 LOOP B
PACK 2 REGUL
L TK PUMP 2

SEC 2+3
CAPT STAT heat
WSHLD HEAT
FCU 2
SDCU
NORM BRK
REVERSER 1+2
GALLEY FAN
MAIN GALLEY
APU FIRE DET
ENG 2 LOOP A
FCDC 2
R TK PUMP 2

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Other INOP SYS

Selcal

TPIS ◁✳

Forward (aft) cargo isolation valves ◁✳

RMP 2

Right loudspeakers

Forward (aft) cargo heat controller ◁✳

Rudder trim indication

Eng 1 and 2 fire ext btl 2

Forward (aft) cargo fire extinguishing ◁✳

Brake temp indication

Capt and F/O wipers

Manual pressure control

RMP 3 ◁✳

SFCC 2

CDLS ◁✳

BMC 2

X Bleed auto and manual control

SDCU 2 or CIDS ◁✳ 2 SMOKE DETECT

Brake fans ◁✳

Eng 1 and 2 oil pressure and quantity indication

VHF 3 ◁✳

CFDIU

APU ECB

FMGC 2

FQI channel 2

Stick and rudder pedals lock (by AP)

Note: The warning may be caused by a failure in a sub BUS. Consequently, only a part of the above-listed systems may be lost.

(1) *Lost after 30 s, but is recovered at landing gear extension.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 01251

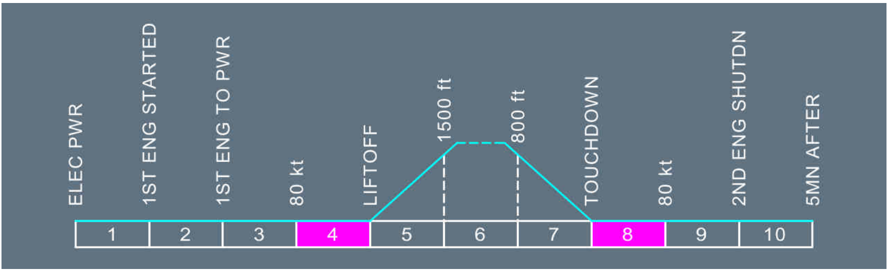
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
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Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018565.0002001 / 21 MAR 16

BLOWER..OVRD
EXTRACT..OVRD
BARO REF..CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 MAX BRK PR..1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

- * CAB PRESS
- * FUEL
- * AIR COND
- * BRAKES
- * F/CTL

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018566.0010001 / 02 MAY 23

110

STATUS

MAX BRK PR...1000 PSI

LDG DIST PROC.. APPLY

ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC
CTR TK FUEL UNUSABLE
APU BAT START NOT AVAIL
CAB ZONE AT FIXED TEMP
PACKS AT FIXED TEMP
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY
FLS ◁ LIMITED TO F-APP+RAW

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
F/O STAT heat
WNDW HEAT
CAT 3 DUAL
ANTI SKID
REVERSER 1+2
GALLEY FAN
MAIN GALLEY
APU FIRE DET
ENG 2 LOOP A
FCDC 2
R TK PUMP 2

ELAC 2(1)
ACP 3
STBY STAT heat
AP 2
FAC 2
N/W STRG
CAB PRESS 2
CRG HEAT ◁
Y ELEC PUMP
LAV DET
PACK 1 REGUL
CTR TK PUMPS

SEC 2+3
CAPT STAT heat
WSHLD HEAT
FCU 2
SDCU
LGCIU 2
AVNCS VENT
GND COOL ◁
Brk sys 1+2
ENG 1 LOOP B
PACK 2 REGUL
L TK PUMP 2

Other INOP SYS

Selcal
Brake temp indication
Brake fans ◁

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

TPIS ◁✳

AUTO BRK

VHF 3 ◁✳

CFDIU

APU ECB

FMGC 2

FQI channel 2

Stick and rudder pedals lock (by AP)

Capt and F/O wipers

Forward (aft) cargo isolation valves ◁✳

RMP 2

Right loudspeakers

Forward (aft) cargo heat controller ◁✳

Rudder trim indication

Eng 1 and 2 fire ext btl 2

Forward (aft) cargo fire extinguishing ◁✳

Eng 1 and 2 oil pressure and quantity indication

Manual pressure control

RMP 3 ◁✳

SFCC 2

CDLS ◁✳

BMC 2

X Bleed auto and manual control

SDCU 2 or CIDS ◁✳ 2 SMOKE DETECT

Note: *The warning may be caused by a failure in a sub BUS. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but is recovered at landing gear extension.*

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

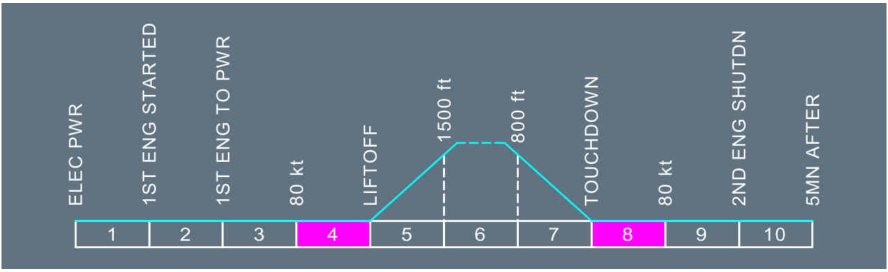
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

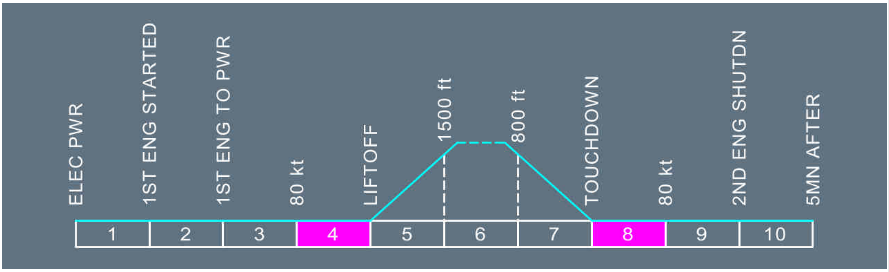
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018565.0004001 / 21 MAR 16

111

BLOWER....................OVRD
EXTRACT....................OVRD
BARO REF....................CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
MAX BRK PR....................1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC **DC BAT BUS FAULT**

SECONDARY FAILURES

* CAB PRESS
* FUEL
* AIR COND
* BRAKES
* F/CTL

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018566.0018001 / 02 MAY 23

L12

112

STATUS

MAX BRK PR..1000 PSI

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC
CTR TK FUEL UNUSABLE
APU BAT START NOT AVAIL
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY
FLS ◁ LIMITED TO F-APP+RAW

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
F/O STAT heat
WNDW HEAT
CAT 3 DUAL
ANTI SKID
AUTO BRK
CAB PRESS 2
CRG HEAT ◁
Y ELEC PUMP
LAV DET
PACK 2
L TK PUMP 2

ELAC 2(1)
ACP 3
STBY STAT heat
AP 2
FAC 2
N/W STRG
LGCIU 2
AVNCS VENT
GND COOL ◁
Brk sys 1+2
ENG 1 LOOP B
FCDC 2
R TK PUMP 2

SEC 2+3
CAPT STAT heat
WSHLD HEAT
FCU 2
SDCU
NORM BRK
REVERSER 1+2
GALLEY FAN
MAIN GALLEY
APU FIRE DET
ENG 2 LOOP A
CTR TK PUMPS

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Other INOP SYS

- Selcal
- TPIS ◁✳
- Forward (aft) cargo isolation valves ◁✳
- RMP 2
- Right loudspeakers
- Forward (aft) cargo heat controller ◁✳
- Rudder trim indication
- Eng 1 and 2 fire ext btl 2
- Forward (aft) cargo fire extinguishing ◁✳
- Brake temp indication
- Capt and F/O wipers
- Manual pressure control
- RMP 3 ◁✳
- SFCC 2
- CDLS ◁✳
- BMC 2
- X Bleed auto and manual control
- SDCU 2 or CIDS ◁✳ 2 SMOKE DETECT
- Brake fans ◁✳
- Eng 1 and 2 oil pressure and quantity indication
- VHF 3 ◁✳
- CFDIU
- APU ECB
- FMGC 2
- FQI channel 2
- Stick and rudder pedals lock (by AP)

Note: *The warning may be caused by a failure in a sub BUS. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but is recovered at landing gear extension.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

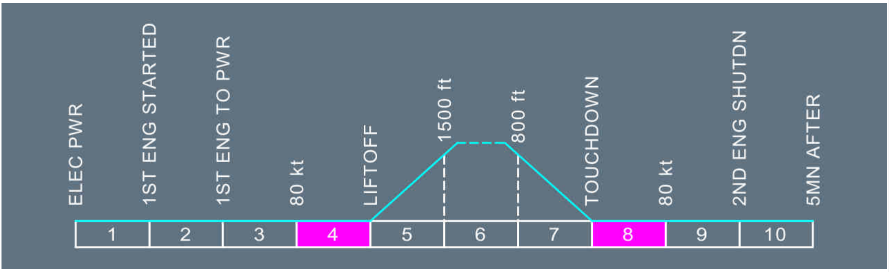
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
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Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018565.0004001 / 21 MAR 16

113

BLOWER...OVRD
EXTRACT...OVRD
BARO REF...CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
MAX BRK PR...1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

- * CAB PRESS
- * FUEL
- * AIR COND
- * BRAKES
- * F/CTL

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018566.0030001 / 02 MAY 23

L12

114

STATUS

MAX BRK PR..1000 PSI

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

CTR TK FUEL USABLE BY GRAVITY

CTR TK FUEL: 2 T UNUSABLE

APU BAT START NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

FLS ◁ LIMITED TO F-APP+RAW

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
F/O STAT heat
WNDW HEAT
CAT 3 DUAL
ANTI SKID
AUTO BRK
CAB PRESS 2
CRG HEAT ◁
Y ELEC PUMP
LAV DET
PACK 2
R TK PUMP 2

ELAC 2(1)
ACP 3
STBY STAT heat
AP 2
FAC 2
N/W STRG
LGCIU 2
AVNCS VENT
GND COOL ◁
Brk sys 1+2
ENG 1 LOOP B
FCDC 2

SEC 2+3
CAPT STAT heat
WSHLD HEAT
FCU 2
SDCU
NORM BRK
REVERSER 1+2
GALLEY FAN
MAIN GALLEY
APU FIRE DET
ENG 2 LOOP A
L TK PUMP 2

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Other INOP SYS

Selcal

TPIS ◁✻

Forward (aft) cargo isolation valves ◁✻

RMP 2

Right loudspeakers

APU ECB

FMGC 2

FQI channel 2

Stick and rudder pedals lock (by AP)

Brake temp indication

Capt and F/O wipers

Manual pressure control

RMP 3 ◁✻

SFCC 2

Forward (aft) cargo heat controller ◁✻

Rudder trim indication

Eng 1 and 2 fire ext btl 2

Forward (aft) cargo fire extinguishing ◁✻

Brake fans ◁✻

Eng 1 and 2 oil pressure and quantity indication

VHF 3 ◁✻

CFDIU

CTR TK XFR valves

CDLS ◁✻

BMC 2

X Bleed auto and manual control

SDCU 2 or CIDS ◁✻ 2 SMOKE DETECT

Note: The warning may be caused by a failure in a sub BUS. Consequently, only a part of the above-listed systems may be lost.

(1) *Lost after 30 s, but is recovered at landing gear extension.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11293

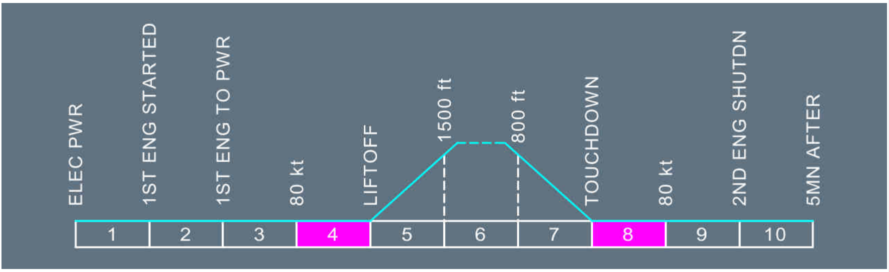
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018565.0004001 / 21 MAR 16

115

BLOWER..OVRD
EXTRACT..OVRD
BARO REF..CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
MAX BRK PR..1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

* CAB PRESS
* FUEL
* AIR COND
* BRAKES
* F/CTL

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018566.0020001 / 18 NOV 21

116

L12

STATUS

MAX BRK PR..1000 PSI

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

CTR TK FUEL USABLE BY GRAVITY

CTR TK FUEL: 2 T UNUSABLE

APU BAT START NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

FLS ◁ LIMITED TO F-APP+RAW

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
F/O STAT heat
WNDW HEAT
CAT 3 DUAL
ANTI SKID
AUTO BRK
CAB PRESS 2
CRG HEAT ◁
Y ELEC PUMP
LAV DET
PACK 2
R TK PUMP 2

ELAC 2(1)
ACP 3
STBY STAT heat
AP 2
FAC 2
N/W STRG
LGCIU 2
AVNCS VENT
GND COOL ◁
Brk sys 1+2
ENG 1 LOOP B
FCDC 2

SEC 2+3
CAPT STAT heat
WSHLD HEAT
FCU 2
SDCU
NORM BRK
REVERSER 1+2
GALLEY FAN
MAIN GALLEY
APU FIRE DET
ENG 2 LOOP A
L TK PUMP 2

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Other INOP SYS

- Selcal
- TPIS ◁
- Forward (aft) cargo isolation valves ◁
- RMP 2
- Right loudspeakers
- APU ECB
- FMGC 2
- FQI channel 2
- Stick and rudder pedals lock (by AP)

- Brake temp indication
- Capt and F/O wipers
- Manual pressure control
- RMP 3 ◁
- SFCC 2
- Forward (aft) cargo heat controller ◁
- Rudder trim indication
- Eng 1 and 2 fire ext btl 2
- Forward (aft) cargo fire extinguishing ◁

- Brake fans ◁
- Eng 1 and 2 oil pressure and quantity indication
- VHF 3 ◁
- CFDIU
- CTR TK XFR valves
- CDLS ◁
- BMC 2
- X Bleed auto and manual control
- SDCU 2 or CIDS ◁ 2 SMOKE DETECT

Note: The warning may be caused by a failure in a sub BUS. Consequently, only a part of the above-listed systems may be lost.

(1) *Lost after 30 s, but is recovered at landing gear extension.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 11482-11522, 11572-11597

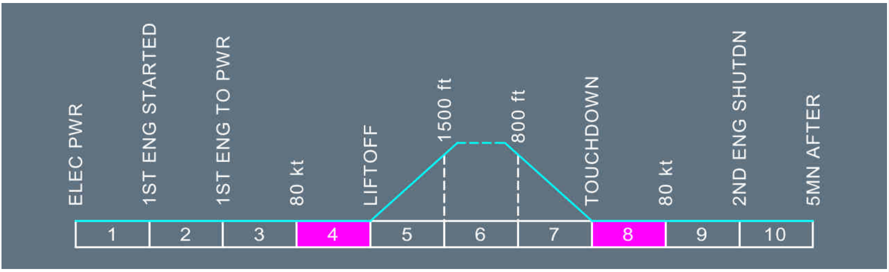
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018565.0004001 / 21 MAR 16

117

BLOWER.....OVRD
EXTRACT.....OVRD
BARO REF.....CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
MAX BRK PR.....1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

- * CAB PRESS
- * FUEL
- * AIR COND
- * BRAKES
- * F/CTL

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

18 Ident.: PRO-ABN-ELEC-Q-00018566.0035001 / 18 NOV 21

L12

STATUS

MAX BRK PR..1000 PSI

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)
FMS PRED UNRELIABLE

See (3)
ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC
CTR TK FUEL USABLE BY GRAVITY
CTR TK FUEL: 2 T UNUSABLE
APU BAT START NOT AVAIL
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY
FLS ◁ LIMITED TO F-APP+RAW

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
F/O STAT heat
WNDW HEAT
CAT 3 DUAL
ANTI SKID
AUTO BRK
CAB PRESS 2
CRG HEAT ◁
Y ELEC PUMP
LAV DET
PACK 2
R TK PUMP 2

ELAC 2(1)
ACP 3 ◁
STBY STAT heat
AP 2
FAC 2
N/W STRG
LGCIU 2
AVNCS VENT
GND COOL ◁
Brk sys 1+2
ENG 1 LOOP B
FCDC 2
RMP 3 ◁

SEC 2+3
CAPT STAT heat
WSHLD HEAT
FCU 2
SDCU
NORM BRK
REVERSER 1+2
GALLEY FAN
MAIN GALLEY
APU FIRE DET
ENG 2 LOOP A
L TK PUMP 2

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Other INOP SYS

Selcal
TPIS ◁✻
Forward (aft) cargo isolation valves ◁✻
CFDIU
CTR TK XFR valves
CDLS ◁✻
BMC 2
X Bleed auto and manual control
SDCU 2 or CIDS ◁✻ 2 SMOKE DETECT

Brake temp indication
Capt and F/O wipers
Manual pressure control
Right loudspeakers
APU ECB
FMGC 2
FQI channel 2
Stick and rudder pedals lock (by AP)

Brake fans ◁✻
Eng 1 and 2 oil pressure and quantity indication
VHF 3 ◁✻
SFCC 2
Forward (aft) cargo heat controller ◁✻
Rudder trim indication
Eng 1 and 2 fire ext btl 2
Forward (aft) cargo fire extinguishing ◁✻

Note: *The warning may be caused by a failure in a sub BUS. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but is recovered at landing gear extension.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC BUS 1+2 FAULT

Applicable to: MSN 11531

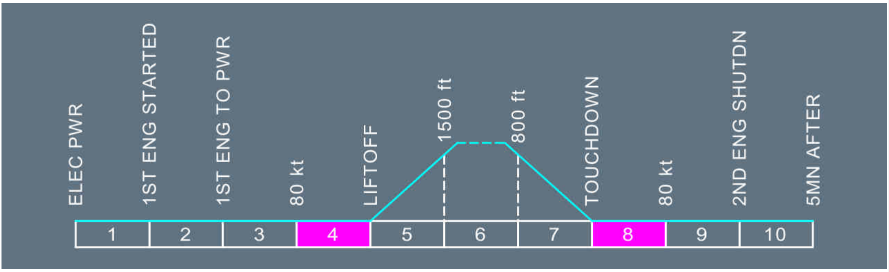
Ident.: PRO-ABN-ELEC-Q-00017353.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1 and DC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-Q-00018565.0004001 / 21 MAR 16

119

BLOWER....................OVRD
EXTRACT....................OVRD
BARO REF....................CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
MAX BRK PR....................1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

- * CAB PRESS
- * FUEL
- * AIR COND
- * BRAKES
- * F/CTL

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

20 Ident.: PRO-ABN-ELEC-Q-00018566.0036001 / 18 NOV 21

L12

STATUS

MAX BRK PR..1000 PSI

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See [(2)]

FMS PRED UNRELIABLE

See [(3)]

ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC
CTR TK FUEL USABLE BY GRAVITY
CTR TK FUEL: 2 T UNUSABLE
APU BAT START NOT AVAIL
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY
FLS ◁ LIMITED TO F-APP+RAW

INOP SYS

See below

INOP SYS

SPLR 1+2+5
VHF 2
F/O STAT heat
WNDW HEAT
CAT 3 DUAL
ANTI SKID
AUTO BRK
CAB PRESS 2
CRG HEAT ◁
Y ELEC PUMP
LAV DET
PACK 2
R TK PUMP 2

ELAC 2[(1)]
ACP 3 ◁
STBY STAT heat
AP 2
FAC 2
N/W STRG
LGCIU 2
AVNCS VENT
GND COOL ◁
Brk sys 1+2
ENG 1 LOOP B
FCDC 2
RMP 3 ◁

SEC 2+3
CAPT STAT heat
WSHLD HEAT
FCU 2
SDCU
NORM BRK
REVERSER 1+2
GALLEY FAN
MAIN GALLEY
APU FIRE DET
ENG 2 LOOP A
L TK PUMP 2

Continued on the following page

ELEC DC BUS 1+2 FAULT (Cont'd)

Other INOP SYS

Selcal

TPIS ◁

Forward (aft) cargo isolation valves ◁

CFDIU

CTR TK XFR valves

CDLS ◁

BMC 2

X Bleed auto and manual control

SDCU 2 or CIDS ◁ 2 SMOKE DETECT

Brake temp indication

Capt and F/O wipers

Manual pressure control

Right loudspeakers

APU ECB

FMGC 2

FQI channel 2

Stick and rudder pedals lock (by AP)

Brake fans ◁

Eng 1 and 2 oil pressure and quantity indication

VHF 3 ◁

SFCC 2

Forward (aft) cargo heat controller ◁

Rudder trim indication

Eng 1 and 2 fire ext btl 2

Forward (aft) cargo fire extinguishing ◁

Note: *The warning may be caused by a failure in a sub BUS. Consequently, only a part of the above-listed systems may be lost.*

(1) *Lost after 30 s, but is recovered at landing gear extension.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC EMER CONFIG

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

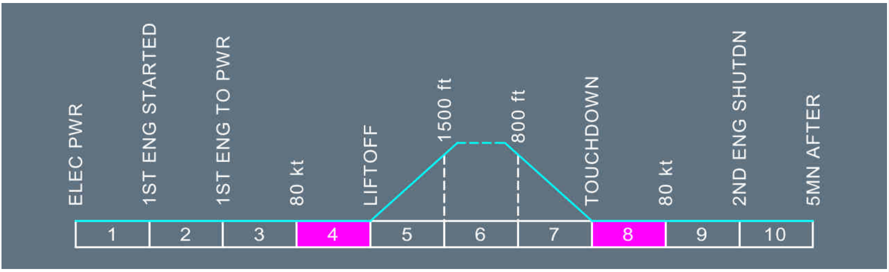
Ident.: PRO-ABN-ELEC-X-00017359.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1, DC 2 and DC ESS busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-X-00018557.0006001 / 21 MAR 16

LAND ASAP

EMER ELEC PWR...MAN ON

L2 *The emergency generator supplies DC ESS BUS.*
But, DC BUS 1, DC BUS 2, and DC BAT BUS are still not supplied.

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

ELEC DC BUS 1 + 2 FAULT

BLOWER...OVRD
EXTRACT...OVRD
BARO REF...CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 MAX BRK PR...1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

- * CAB PRESS
- * HYD
- * FUEL
- * AIR COND
- * BRAKES
- * WHEEL
- * F/CTL

Continued on the following page

ELEC DC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-X-00018558.0004001 / 22 MAR 18

L12

STATUS

MIN RAT SPEED.. 140 KT
PROC: GRVTY FUEL FEEDING
MAX BRK PR... 1 000 PSI
FUEL GRVTY FEED

LDG DIST PROC.. APPLY

Refer to the list of STATUS INFO of the ELEC DC BUS 1+2 BUS FAULT ECAM alert

See (1)

INOP SYS

Refer to the list of INOP SYS ON ECAM of the ELEC DC BUS 1+2 FAULT ECAM alert

Note: *To verify the other INOP SYS not displayed on the ECAM, Refer to PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE and Refer to PRO-ABN-ELEC ELEC DC BAT BUS FAULT - FWSPAGE.*

---

(1) *Note:* *DC ESS BUS is lost when speed is below 100 kt.*
Therefore, all means of communication are lost because all ACPs are lost.
To verify the list of STATUS INFO, Refer to PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE.

ELEC DC EMER CONFIG

Applicable to: MSN 01251

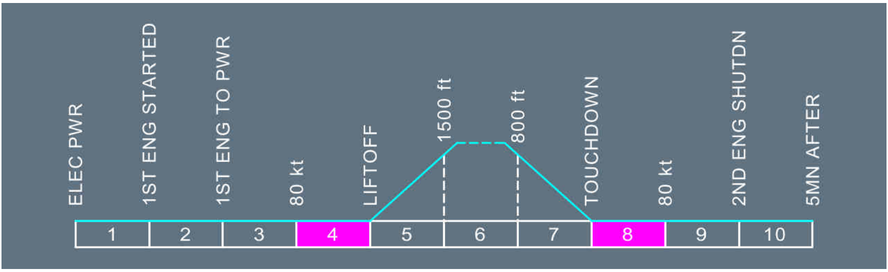
Ident.: PRO-ABN-ELEC-X-00017359.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1, DC 2 and DC ESS busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-X-00018557.0003001 / 21 MAR 16

LAND ASAP

EMER ELEC PWR.....MAN ON

L2 *The emergency generator supplies DC ESS BUS.*
But, DC BUS 1, DC BUS 2, and DC BAT BUS are still not supplied.

L1

ASSOCIATED PROCEDURES

ELEC DC BUS 1 + 2 FAULT

BLOWER.....OVRD
EXTRACT.....OVRD
BARO REF.....CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 MAX BRK PR.....1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

- * CAB PRESS
- * HYD
- * FUEL
- * AIR COND
- * BRAKES
- * WHEEL
- * F/CTL

Continued on the following page

ELEC DC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-X-00018558.0004001 / 22 MAR 18

L12

STATUS

MIN RAT SPEED.. 140 KT
PROC: GRVTY FUEL FEEDING
MAX BRK PR.. 1 000 PSI
FUEL GRVTY FEED

LDG DIST PROC.. APPLY

Refer to the list of STATUS INFO of the ELEC DC BUS 1+2 BUS FAULT ECAM alert

See (1)

INOP SYS

Refer to the list of INOP SYS ON ECAM of the ELEC DC BUS 1+2 FAULT ECAM alert

Note: *To verify the other INOP SYS not displayed on the ECAM,Refer to PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE and Refer to PRO-ABN-ELEC ELEC DC BAT BUS FAULT - FWSPAGE.*

(1) *Note:* *DC ESS BUS is lost when speed is below 100 kt.*
Therefore, all means of communication are lost because all ACPs are lost.
To verify the list of STATUS INFO, Refer to PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE.

ELEC DC EMER CONFIG

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

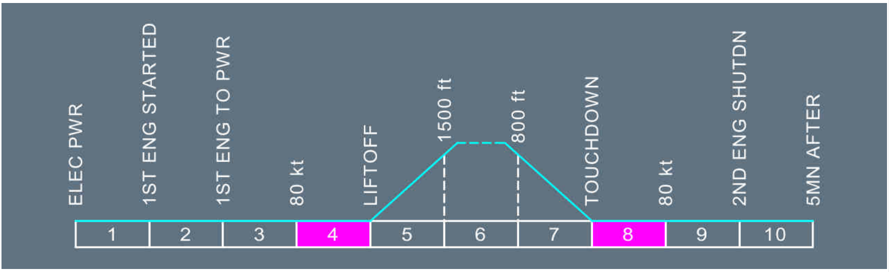
Ident.: PRO-ABN-ELEC-X-00017359.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1, DC 2 and DC ESS busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ELEC DC EMER CONFIG

Applicable to: MSN 08635, 10949-11597

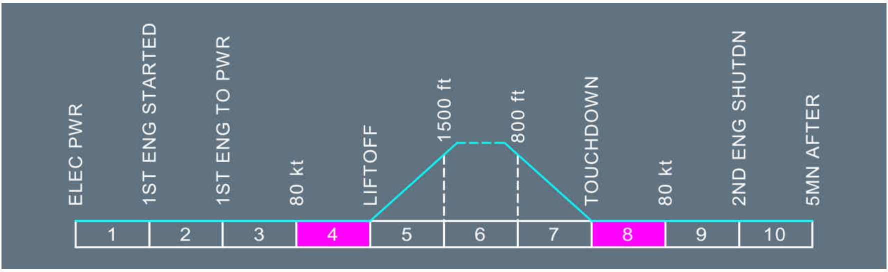
Ident.: PRO-ABN-ELEC-X-00017359.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC 1, DC 2 and DC ESS busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-X-00018557.0007001 / 18 MAR 20

121

LAND ASAP

EMER ELEC PWR....................MAN ON

L2 *The emergency generator supplies DC ESS BUS.*
But, DC BUS 1, DC BUS 2, and DC BAT BUS are still not supplied.

L1 AVOID ICING CONDITIONS

L2 *Windows, windshields heat, and static ports heat are lost.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

ELEC DC BUS 1 + 2 FAULT

BLOWER....................OVRD
EXTRACT....................OVRD
BARO REF....................CHECK

L2 *Crosscheck the barometer reference settings on the FCU and PFDs.*

L1 MAX BRK PR....................1 000 PSI

L2 *Brake pressure must be limited to approximately 1 000 PSI, since antiskid is lost.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

ELEC DC BAT BUS FAULT

SECONDARY FAILURES

* CAB PRESS
* HYD
* FUEL
* AIR COND
* BRAKES
* WHEEL
* F/CTL

Continued on the following page

ELEC DC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-X-00018558.0008001 / 18 MAR 20

122

L12

STATUS

MIN RAT SPEED.. 140 KT
PROC: GRVTY FUEL FEEDING
MAX BRK PR.. 1 000 PSI
AVOID ICING CONDITIONS
FUEL GRVTY FEED

- **IF SEVERE ICE ACCRETION:**

  MIN SPD.. VLS+10/G DOT

  Note: *In the case of severe ice accretion, with wing anti-ice failed, the Angle-of-Attack (AOA) protections remain efficient.*

LDG DIST PROC.. APPLY

Refer to the list of STATUS INFO of the ELEC DC BUS 1+2 BUS FAULT ECAM alert

See (1)

INOP SYS

WING A. ICE

Refer to the list of INOP SYS ON ECAM of the ELEC DC BUS 1+2 FAULT ECAM alert

Note: *To verify the other INOP SYS not displayed on the ECAM, Refer to PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE and Refer to PRO-ABN-ELEC ELEC DC BAT BUS FAULT - FWSPAGE.*

(1) Note: *DC ESS BUS is lost when speed is below 100 kt.*
Therefore, all means of communication are lost because all ACPs are lost.
To verify the list of STATUS INFO, Refer to PRO-ABN-ELEC ELEC DC BUS 1+2 FAULT - FWSPAGE.

ELEC DC ESS BUS FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014

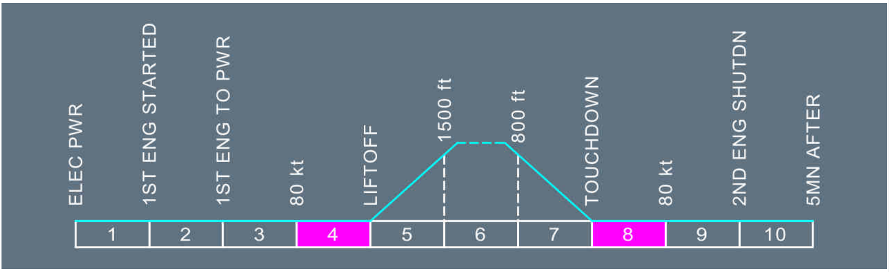
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0005001 / 05 MAR 13

VHF 2 OR 3..USE
AUDIO SWTG..SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF...CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS SYS...OFF

- **If DC BUS 2 is failed:**

  L/G...GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT

GPWS...OFF

L2 *Note: To shut down the engines on ground, use the ENG FIRE pb-sw.*

L1

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0021001 / 02 MAY 23

L12

123

STATUS

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 1 APPR IDLE ONLY

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 2 ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
A/THR
L TK PUMP 1
ENG 2 START
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP ◁

SPLR 3
WING A. ICE
FCU 1
R TK PUMP 1
CAB PR 1
B ELEC PUMP
FCDC 1

VHF 1
AP 1
FAC 1
REV 2
STEEP APPR ◁
ENG 1 LOOP A
CAT 3

Other INOP SYS

BRK PRESS indicator
Capt rain repellent ◁

Flight interphone
Avionics air cond valve

EIU 2 (1)
Standby compass light

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

HP fuel shutoff valves
Hyd fire valves Eng 1 and 2
Left loudspeaker
SFCC 1
Ram air inlet
DC SHED ESS BUS
RMP 1
ECAM Control Panel

Note: The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

(1) *Autothrust, eng start and reverser inop.*
(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 01251

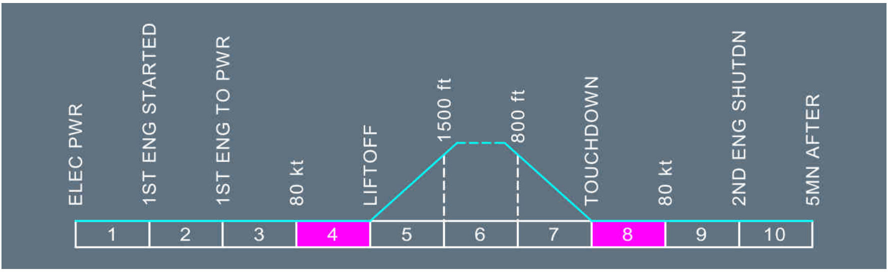
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0001001 / 05 MAR 13

VHF 2 OR 3......USE
AUDIO SWTG......SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF......CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS......OFF

ASSOCIATED PROCEDURES

NAV GPWS FAULT
GPWS......OFF

L2 *Note: To shut down the engines on ground, use the ENG FIRE pb-sw.*

L1

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0015001 / 02 MAY 23

124

STATUS

LDG DIST PROC.. APPLY

ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC
SLATS/FLAPS SLOW
CAT 2 ONLY

INOP SYS

See below

INOP SYS

- B HYD
- ACP 1+2
- A/THR
- L TK PUMP 1
- ENG 2 START
- B ELEC PUMP
- FCDC 1
- SPLR 3
- WING A. ICE
- FCU 1
- R TK PUMP 1
- CAB PR 1
- ENG 1 LOOP A
- CAT 3
- VHF 1
- AP 1
- FAC 1
- REV 2
- VENT EXTRACT
- ENG 2 LOOP B

Other INOP SYS

- BRK PRESS indicator
- Capt rain repellent
- HP fuel shutoff valves
- Hyd fire valves Eng 1 and 2
- Left loudspeaker
- Flight interphone
- Avionics air cond valve
- SFCC 1
- Ram air inlet
- DC SHED ESS BUS
- EIU 2 (1)
- Standby compass light
- RMP 1
- ECAM Control Panel

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Autothrust, eng start and reverser inop.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

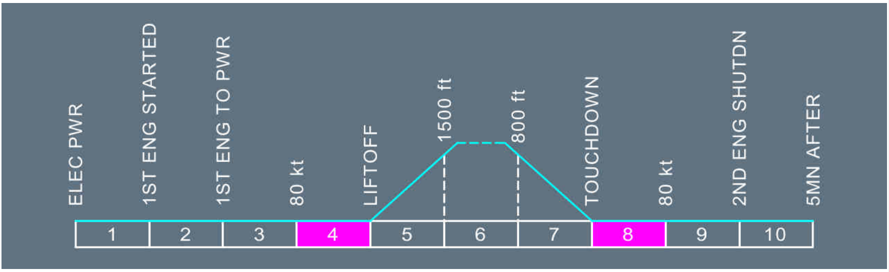
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ELEC DC ESS BUS FAULT

Applicable to: MSN 02321

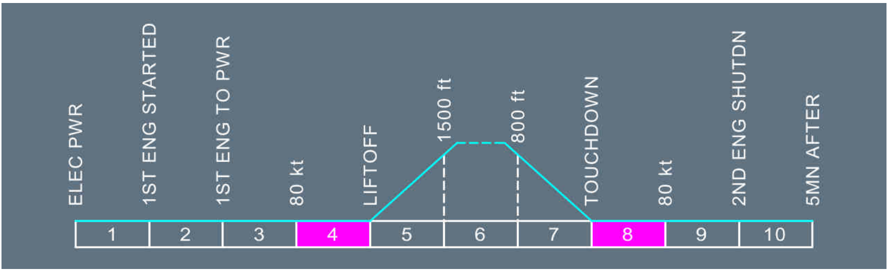
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0018001 / 10 MAY 21

VHF 2 OR 3 .... USE

L2 *The audio cards of the AMU are lost. Since all cockpit mikes and headsets are connected to the AMU, all audio means of communication (VHF, HF ◁ and SATCOM ◁)are lost.*
The use of VHF 2 or 3 does not allow the recovery of communications.

L1 AUDIO SWTG .... SELECT
BARO REF .... CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS SYS .... OFF

- **If DC BUS 2 is failed:**
  L/G .... GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT
GPWS .... OFF

L2 *To shut down the engines on ground, use the ENG FIRE pb-sw.*

L1

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0021001 / 02 MAY 23

L12

125

STATUS

- **If DC BUS 2 is failed:**
  - L/G...GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  - L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW
CAT 2 ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
A/THR
L TK PUMP 1
ENG 2 START
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP ◁

SPLR 3
WING A. ICE
FCU 1
R TK PUMP 1
CAB PR 1
B ELEC PUMP
FCDC 1

VHF 1
AP 1
FAC 1
REV 2
STEEP APPR ◁
ENG 1 LOOP A
CAT 3

Other INOP SYS

BRK PRESS indicator
Capt rain repellent ◁

Flight interphone
Avionics air cond valve

EIU 2 (1)
Standby compass light

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

HP fuel shutoff valves
Hyd fire valves Eng 1 and 2
Left loudspeaker
SFCC 1
Ram air inlet
DC SHED ESS BUS
RMP 1
ECAM Control Panel

Note: The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

(1) *Autothrust, eng start and reverser inop.*
(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 02734-02904, 03032

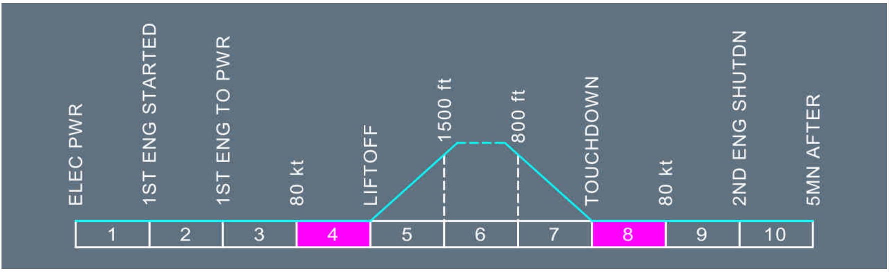
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0018001 / 10 MAY 21

VHF 2 OR 3....................USE

L2 *The audio cards of the AMU are lost. Since all cockpit mikes and headsets are connected to the AMU, all audio means of communication (VHF, HF and SATCOM)are lost.*
The use of VHF 2 or 3 does not allow the recovery of communications.

L1 AUDIO SWTG....................SELECT
BARO REF....................CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS SYS....................OFF

- **If DC BUS 2 is failed:**
  L/G....................GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT
GPWS....................OFF

L2 *To shut down the engines on ground, use the ENG FIRE pb-sw.*

L1

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0023001 / 02 MAY 23

L12

126

STATUS

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 1 APPR IDLE ONLY

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 2 ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
A/THR
L TK PUMP 1
ENG 2 START
VENT EXTRACT
ENG 2 LOOP B
ALTN BRK

SPLR 3
WING A. ICE
FCU 1
R TK PUMP 1
CAB PR 1
B ELEC PUMP
FCDC 1
ROW/ROP ◁

VHF 1
AP 1
FAC 1
REV 2
STEEP APPR ◁
ENG 1 LOOP A
CAT 3

Other INOP SYS

BRK PRESS indicator
Capt rain repellent ◁

Flight interphone
Avionics air cond valve

EIU 2 (1)
Standby compass light

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

HP fuel shutoff valves
Hyd fire valves Eng 1 and 2
Left loudspeaker
SFCC 1
Ram air inlet
DC SHED ESS BUS
RMP 1
ECAM Control Panel

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Autothrust, eng start and reverser inop.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 02924-03002, 03035-03111

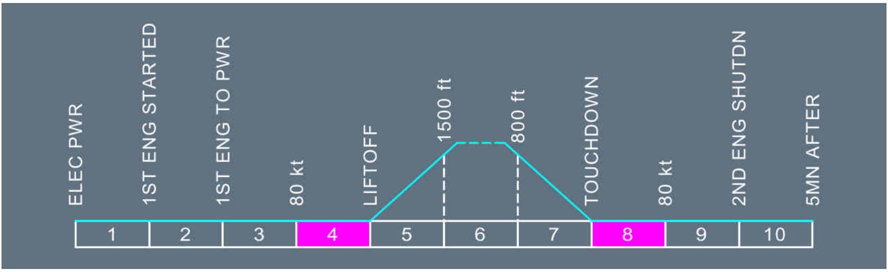
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

VHF 2 OR 3..USE

L2 *The audio cards of the AMU are lost. Since all cockpit mikes and headsets are connected to the AMU, all audio means of communication (VHF, HF and SATCOM)are lost.*
The use of VHF 2 or 3 does not allow the recovery of communications.

L1 AUDIO SWTG..SELECT
BARO REF..CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS SYS..OFF

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT

GPWS..OFF

L2 *To shut down the engines on ground, use the ENG FIRE pb-sw.*

L1

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0011001 / 02 MAY 23

L12

127

STATUS

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 1 APPR IDLE ONLY

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
A/THR
L TK PUMP 1
ENG 2 START
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP ◁

SPLR 3
WING A. ICE
FCU 1
R TK PUMP 1
CAB PR 1
B ELEC PUMP
FCDC 1

VHF 1
AP 1
FAC 1
REV 2
STEEP APPR ◁
ENG 1 LOOP A
ALTN BRK

Other INOP SYS

BRK PRESS indicator
Capt rain repellent ◁

Flight interphone
Avionics air cond valve

EIU 2 (1)
Standby compass light

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

HP fuel shutoff valves
Hyd fire valves Eng 1 and 2
Left loudspeaker
SFCC 1
Ram air inlet
DC SHED ESS BUS
RMP 1
ECAM Control Panel

Note: *1. The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*
2. Even if the ECAM Status page displays CAT 3 SINGLE ONLY, the real landing capability of the aircraft is CAT 2, due to the inoperative A/THR (Refer to QRH/OPS Required Equipment for CAT2 and CAT3). Once the approach mode is armed, the FMA displays the correct landing capability CAT 2.

(1) *Autothrust, eng start and reverser inop.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 03180-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

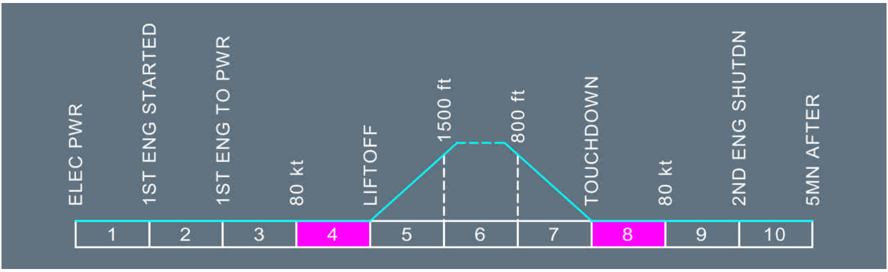
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0005001 / 05 MAR 13

VHF 2 OR 3..USE
AUDIO SWTG..SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF..CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS SYS..OFF

- **If DC BUS 2 is failed:**

  L/G..GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT

GPWS..OFF

L2 *Note: To shut down the engines on ground, use the ENG FIRE pb-sw.*

L1

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0011001 / 02 MAY 23

L12

128

STATUS

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 1 APPR IDLE ONLY

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
A/THR
L TK PUMP 1
ENG 2 START
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP

SPLR 3
WING A. ICE
FCU 1
R TK PUMP 1
CAB PR 1
B ELEC PUMP
FCDC 1

VHF 1
AP 1
FAC 1
REV 2
STEEP APPR
ENG 1 LOOP A
ALTN BRK

Other INOP SYS

BRK PRESS indicator
Capt rain repellent

Flight interphone
Avionics air cond valve

EIU 2 (1)
Standby compass light

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

HP fuel shutoff valves
Hyd fire valves Eng 1 and 2
Left loudspeaker
SFCC 1
Ram air inlet
DC SHED ESS BUS
RMP 1
ECAM Control Panel

Note: 1. *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*
2. *Even if the ECAM Status page displays CAT 3 SINGLE ONLY, the real landing capability of the aircraft is CAT 2, due to the inoperative A/THR (Refer to QRH/OPS Required Equipment for CAT2 and CAT3). Once the approach mode is armed, the FMA displays the correct landing capability CAT 2.*

(1) *Autothrust, eng start and reverser inop.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

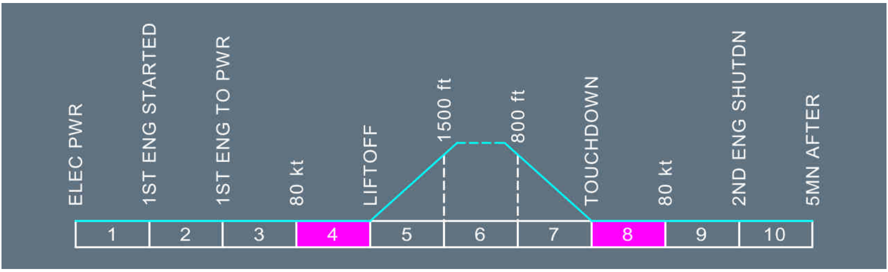
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0005001 / 05 MAR 13

VHF 2 OR 3....................USE
AUDIO SWTG....................SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF....................CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS SYS....................OFF

- **If DC BUS 2 is failed:**

  L/G....................GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT

GPWS....................OFF

L2 *Note: To shut down the engines on ground, use the ENG FIRE pb-sw.*

L1

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0023001 / 02 MAY 23

L12

129

STATUS

- **If DC BUS 2 is failed:**
  L/G...GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 1 APPR IDLE ONLY

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 2 ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
A/THR
L TK PUMP 1
ENG 2 START
VENT EXTRACT
ENG 2 LOOP B
ALTN BRK

SPLR 3
WING A. ICE
FCU 1
R TK PUMP 1
CAB PR 1
B ELEC PUMP
FCDC 1
ROW/ROP ◁

VHF 1
AP 1
FAC 1
REV 2
STEEP APPR ◁
ENG 1 LOOP A
CAT 3

Other INOP SYS

BRK PRESS indicator
Capt rain repellent ◁

Flight interphone
Avionics air cond valve

EIU 2 (1)
Standby compass light

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

HP fuel shutoff valves
Hyd fire valves Eng 1 and 2
Left loudspeaker
SFCC 1
Ram air inlet
DC SHED ESS BUS
RMP 1
ECAM Control Panel

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *Autothrust, eng start and reverser inop.*
(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 08495-08596, 09190-09324

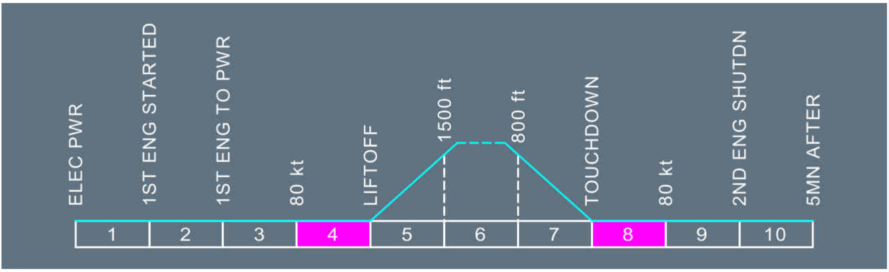
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0029001 / 03 NOV 21

VHF 2 OR 3..USE
AUDIO SWTG..SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF..CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 GPWS SYS..OFF

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT
GPWS..OFF

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0030001 / 02 MAY 23

L12

130

STATUS

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

ENG 1 APPR IDLE ONLY

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
FCU 1
R TK PUMP 1
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP ◁✻

SPLR 3
WING A. ICE
FAC 1
CAB PR 1
B ELEC PUMP
FCDC 1

VHF 1
AP 1
L TK PUMP 1
STEEP APPR ◁✻
ENG 1 LOOP A
ALTN BRK

Other INOP SYS

BRK PRESS indicator
Avionics air cond valve
SFCC 1

Flight interphone
Standby compass light
RMP 1

Capt rain repellent ◁✻
HP fuel shutoff valves
Hyd fire valves Eng 1 and 2

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ram air inlet DC SHED ESS BUS	ECAM Control Panel	Left loudspeaker

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 08635

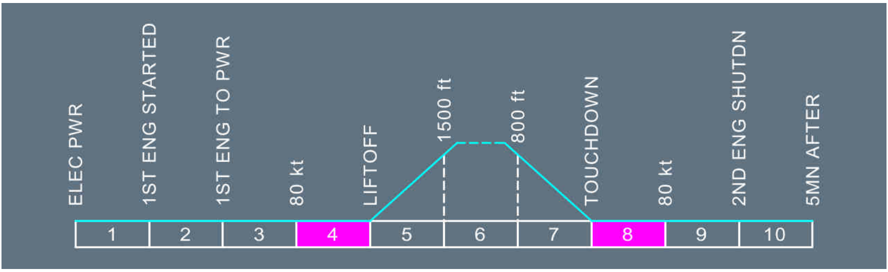
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0031001 / 03 NOV 21

VHF 2 OR 3....................USE
AUDIO SWTG....................SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF....................CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1
- **If DC BUS 2 is failed:**

  L/G....................GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS....................OFF
GALY & CAB....................OFF
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT
GPWS....................OFF

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0030001 / 02 MAY 23

L12

131

STATUS

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD
See (1)
FMS PRED UNRELIABLE
See (2)
ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY
BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
FCU 1
R TK PUMP 1
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP ◁

SPLR 3
WING A. ICE
FAC 1
CAB PR 1
B ELEC PUMP
FCDC 1

VHF 1
AP 1
L TK PUMP 1
STEEP APPR ◁
ENG 1 LOOP A
ALTN BRK

Other INOP SYS

BRK PRESS indicator
Avionics air cond valve
SFCC 1

Flight interphone
Standby compass light
RMP 1

Capt rain repellent ◁
HP fuel shutoff valves
Hyd fire valves Eng 1 and 2

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ram air inlet
DC SHED ESS BUS
ECAM Control Panel
Left loudspeaker

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 10949-11139

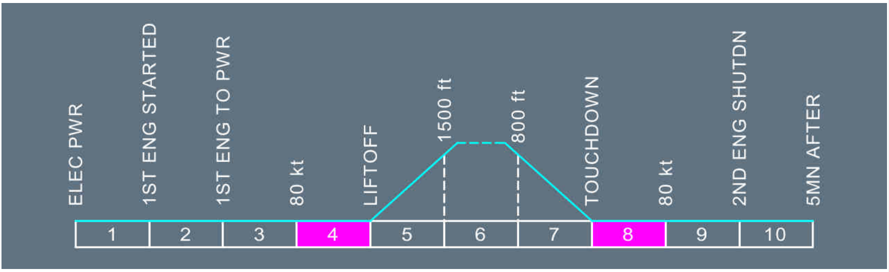
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0034001 / 03 NOV 21

132

VHF 2 OR 3 .... USE
AUDIO SWTG .... SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF .... CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 ● **If DC BUS 2 is failed:**

L/G GRVTY PROC .... APPLY

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS .... OFF
GALY & CAB .... OFF
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT

GPWS .... OFF

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00018671.0030001 / 02 MAY 23

L12

133

STATUS

- **If DC BUS 2 is failed:**
  L/G..GRVTY EXTN

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

ENG 1 APPR IDLE ONLY

ENG 2 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

B HYD
ACP 1+2
FCU 1
R TK PUMP 1
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP

SPLR 3
WING A. ICE
FAC 1
CAB PR 1
B ELEC PUMP
FCDC 1

VHF 1
AP 1
L TK PUMP 1
STEEP APPR
ENG 1 LOOP A
ALTN BRK

Other INOP SYS

BRK PRESS indicator
Avionics air cond valve
SFCC 1

Flight interphone
Standby compass light
RMP 1

Capt rain repellent
HP fuel shutoff valves
Hyd fire valves Eng 1 and 2

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ram air inlet DC SHED ESS BUS	ECAM Control Panel	Left loudspeaker

Note: The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS FAULT

Applicable to: MSN 11228-11293

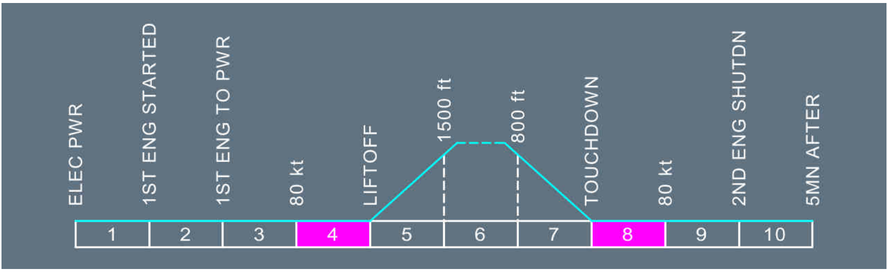
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-O-00012511.0034001 / 03 NOV 21

134

VHF 2 OR 3...USE
AUDIO SWTG...SELECT

L2 *ACP 1 and 2 are lost. Therefore, set the AUDIO SWTG rotary selector to CAPT 3 or F/O 3 to recover communications.*

L1 BARO REF...CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 ● **If DC BUS 2 is failed:**
L/G GRVTY PROC...APPLY

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS...OFF
GALY & CAB...OFF
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT
GPWS...OFF

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

ELEC DC ESS BUS FAULT

Applicable to: MSN 11482-11597

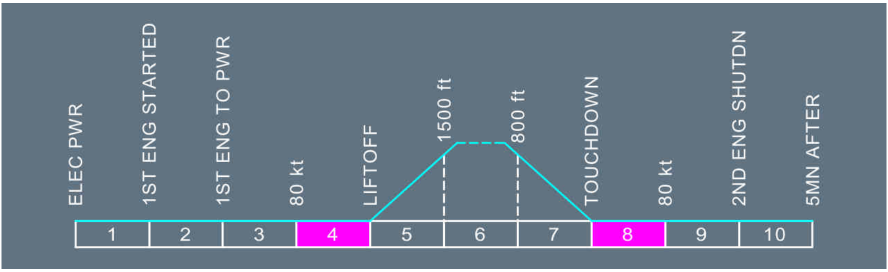
Ident.: PRO-ABN-ELEC-O-00017354.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

35 Ident.: PRO-ABN-ELEC-O-00012511.0040001 / 03 NOV 21

VHF 2 OR 3...USE
BARO REF...CHECK

L2 *Crosscheck the barometer reference settings on the FCU and the PFD.*

L1 ● **If DC BUS 2 is failed:**

AUDIOS NOT AVAIL

XPDR 1 ON RMP 1 ONLY
L/G GRVTY PROC...APPLY

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS...OFF
GALY & CAB...OFF
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

NAV GPWS FAULT
GPWS...OFF

SECONDARY FAILURES

* CAB PRESS
* HYD
* F/CTL

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

36 Ident.: PRO-ABN-ELEC-O-00018671.0035001 / 03 NOV 22

L12

STATUS

- **If DC BUS 2 is failed:**
  AUDIO NOT AVAIL:
  ALTITUDE ALERT
  AUTO CALLOUT
  AURAL ATTENTION-GETTERS

- **If DC BUS 2 is failed:**
  L/G....................GRVTY EXTN

LDG DIST PROC....................APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ENG 1 APPR IDLE ONLY

BOTH PFD ON SAME FAC

- **If DC BUS 2 is failed:**
  L/G CONTROL NOT AVAIL

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

See below

INOP SYS

B HYD
WING A. ICE
FAC 1
CAB PR 1
B ELEC PUMP
FCDC 1
RMP 2 (1)

SPLR 3
AP 1
L TK PUMP 1
STEEP APPR ◁
ENG 1 LOOP A
ALTN BRK

VHF 1
FCU 1
R TK PUMP 1
VENT EXTRACT
ENG 2 LOOP B
ROW/ROP ◁

Continued on the following page

ELEC DC ESS BUS FAULT (Cont'd)

Other INOP SYS

BRK PRESS indicator
Avionics air cond valve
SFCC 1
ECAM Control Panel

Flight interphone
Standby compass light
Hyd fire valves Eng 1 and 2
Left loudspeaker

Capt rain repellent ◁
HP fuel shutoff valves
Ram air inlet
DC SHED ESS BUS

Note: *The warning may be caused by a sub BUS failure. Consequently, only a part of the above-listed systems may be lost.*

(1) *(If DC BUS 2 is failed)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

ELEC DC ESS BUS SHED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

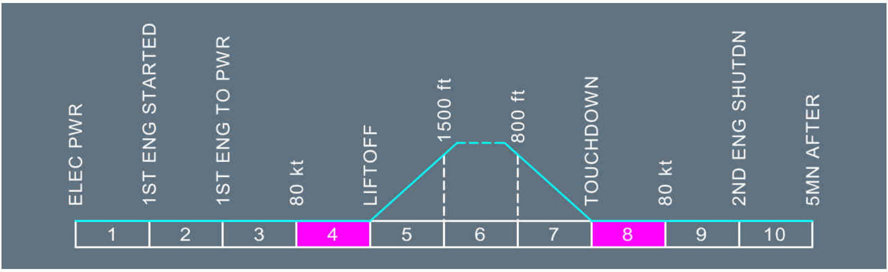
Ident.: PRO-ABN-ELEC-P-00017355.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC SHED ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-P-00012513.0001001 / 30 MAR 12

EXTRACT..OVRD

L2 *Cooling air is supplied by the air conditioning system, without overboard extraction.*

L1 AVOID ICING CONDITIONS

SECONDARY FAILURES

*AVNCS VENT

Continued on the following page

ELEC DC ESS BUS SHED (Cont'd)

Ident.: PRO-ABN-ELEC-P-00018561.0005001 / 17 MAR 17

137

L12

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION**
  MIN SPD...VLS + 10/G DOT
  MANEUVER WITH CARE
  LDG DIST PROC...APPLY

BOTH PFD ON SAME FAC
CAT 3 SINGLE ONLY

INOP SYS

WING A. ICE
AP 1
CAT 3 DUAL
FAC 1
VENT EXTRACT
AFT CRG HEAT ◁✳
FWD CRG HEAT ◁✳
AFT CRG VENT ◁✳
FWD CRG VENT ◁✳
FCDC 1
ROW/ROP ◁✳

See below

Other INOP SYS

Passenger oxygen mask (auto drop out)
X BLEED valve man ctl
FMGC 1
STBY ALTI vib
FQ1 channel 1
BMC 1
SDCU 1 or CIDS ◁✳ 1 SMOKE DETECT

Note: *The warning may be caused by a failure in a sub BUS. Consequently only a part of the systems listed above may be lost.*

Continued on the following page

ELEC DC ESS BUS SHED

Applicable to: MSN 01251

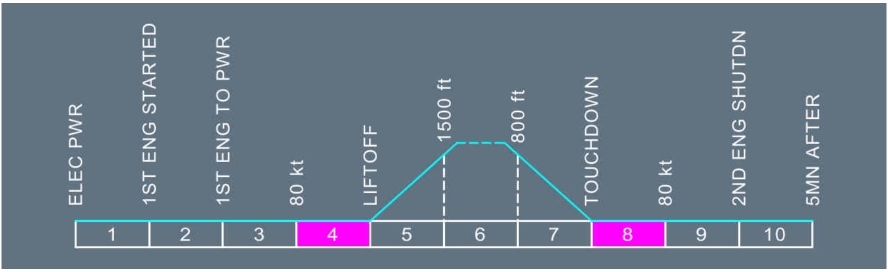
Ident.: PRO-ABN-ELEC-P-00017355.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC SHED ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-P-00012513.0001001 / 30 MAR 12

EXTRACT..OVRD

L2 *Cooling air is supplied by the air conditioning system, without overboard extraction.*

L1 AVOID ICING CONDITIONS

SECONDARY FAILURES

*AVNCS VENT

Continued on the following page

ELEC DC ESS BUS SHED (Cont'd)

Ident.: PRO-ABN-ELEC-P-00018561.0002001 / 21 MAR 16

L12

AVOID ICING CONDITIONS

BOTH PFD ON SAME FAC
CAT 3 SINGLE ONLY

STATUS

INOP SYS

WING A. ICE
AP 1
CAT 3 DUAL
FAC 1
VENT EXTRACT
AFT CRG HEAT ◁*
FWD CRG HEAT ◁*
AFT CRG VENT ◁*
FWD CRG VENT ◁*
FCDC 1

See below

Other INOP SYS

Passenger oxygen mask (auto drop out)
X BLEED valve man ctl
FMGC 1
STBY ALTI vib
FQ1 channel 1
BMC 1
SDCU 1 or CIDS ◁* 1 SMOKE DETECT

Note: *The warning may be caused by a failure in a sub BUS. Consequently only a part of the systems listed above may be lost.*

ELEC DC ESS BUS SHED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

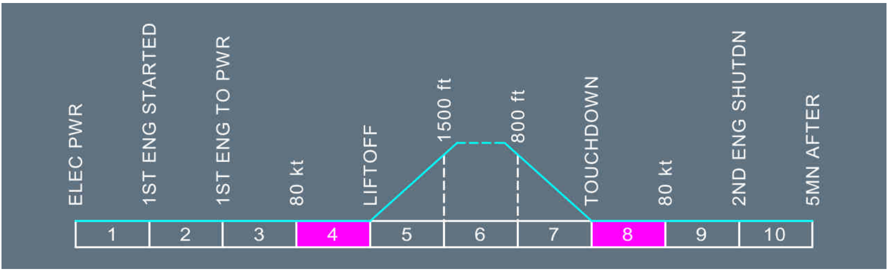
Ident.: PRO-ABN-ELEC-P-00017355.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC SHED ESS busbar is not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-P-00012513.0001001 / 30 MAR 12

EXTRACT..OVRD

L2 *Cooling air is supplied by the air conditioning system, without overboard extraction.*

L1 AVOID ICING CONDITIONS

SECONDARY FAILURES

*AVNCS VENT

ELEC EMER CONFIG

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

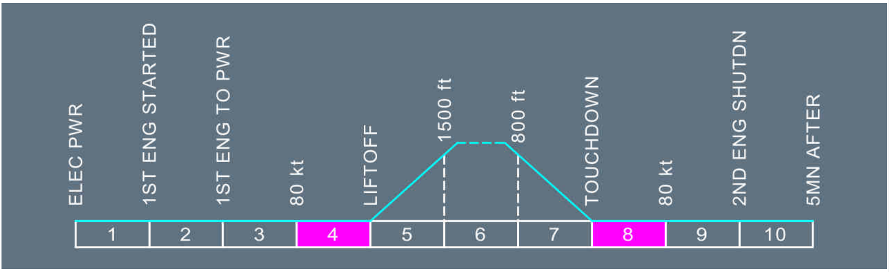
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018642.0006001 / 03 NOV 21

138

LAND ASAP

MIN RAT SPEED............140 KT

CAUTION	*The RAT is capable of supplying the EMER GEN down to 125 kt, except during flare.*

GEN 1 + 2............OFF THEN ON

Note: *Turn off then on all generators one after the other.*

- **IF UNSUCCESSFUL:**

  BUS TIE............OFF

  L2 *Setting BUS TIE pb-sw to OFF segregates both generator channels.*

  L1 GEN 1 + 2............OFF THEN ON

  Note:
  - *Turn off then on all generators one after the other*
  - *If any generator reset is successful, reset both FACs.*

  EMER ELEC PWR (IF EMER GEN NOT IN LINE)............MAN ON

  ENG MODE SEL............IGN

  L2 *Engines are fed by gravity only.*

L1 VHF1/HF1 ◁ /ATC1............USE

L2 *Only VHF 1, HF 1 and ATC 1 are supplied in the electrical emergency configuration.*

L1 *Note:* *The flight crew can recover FMGC 1, which is lost temporarily, through the MCDU MENU page.*

FUEL GRVTY FEED

L2 *Engines are fed by gravity only. Avoid negative Gs.*

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEEDING procedure (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 FAC 1............OFF THEN ON

L2 *The rudder trim is recovered, although no indication is available.*

L1 BUS TIE............AUTO

L2 *Setting BUS TIE pb-sw to AUTO enables the APU to take an available electrical channel.*

L1 APU (IF AVAIL)............START

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L2 *APU start is not available for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.*
If the APU is available, the APU may be started when below FL 250.

L1 BLOWER + EXTRACT..........OVRD

L2 *Cooling air is supplied by the air conditioning system and exhausted overboard through the extract valve.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Note: *On IAE powered aircraft, the ENG 1(2) EPR MODE FAULT N1 DEGRADED MODE alert is displayed.*

ASSOCIATED PROCEDURES

FLT CTL ALTN LAW
(PROT LOST)
MAX SPEED..........320 KT

L2 *Speed limited due to loss of flight control normal laws.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018643.0023001 / 17 MAY 21

L12

STATUS

MIN RAT SPEED .... 140 KT
MAX SPEED .... 320 KT
MAX BRK PR .... 1 000 PSI
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

Note: *If there are discrepancies between airspeed indications on the Captain's PFD and on the STBY indicator, disregard the STBY indication (probe not deiced).*

APPR PROC

FOR LDG .... USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

APPR SPD .... VREF +10/140 KT

The approach speed must be at least minimum RAT speed (140 kt).

LDG DIST PROC .... APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
SLATS/FLAPS SLOW
FLS ◁ LIMITED TO F-APP + RAW

See (4)

INOP SYS

F/CTL PROT
REVERSER 1+2
ADR 2+3
IR 2+3
RA 1+2
SPLR 1+2+5
ELAC 2
SEC 2+3
A/CALL OUT
AP 1+2
A/THR
FUEL PUMPS
ANTI SKID
N/W STRG
CAT 2
STEEP APPR ◁

See (1)

(1) *For other systems' status: Refer to the "ELEC EMER CONFIG SYS REMAINING" table.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(4) *Note: In ELEC EMER configuration, the center tank fuel is unusable.*

ELEC EMER CONFIG

Applicable to: MSN 01251

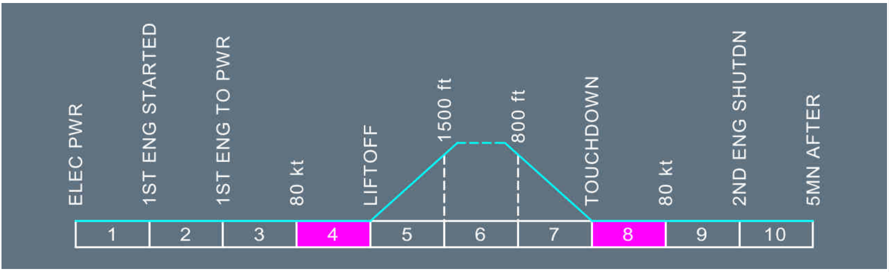
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018642.0003001 / 03 NOV 21

LAND ASAP

MIN RAT SPEED....................140 KT

CAUTION	*The RAT is capable of supplying the EMER GEN down to 125 kt, except during flare.*

GEN 1 + 2....................OFF THEN ON

Note: Turn off then on all generators one after the other.

- **IF UNSUCCESSFUL:**

  BUS TIE....................OFF

  L2 *Setting BUS TIE pb-sw to OFF segregates both generator channels.*

  L1 GEN 1 + 2....................OFF THEN ON

  Note:
  - *Turn off then on all generators one after the other*
  - *If any generator reset is successful, reset both FACs.*

  EMER ELEC PWR (IF EMER GEN NOT IN LINE)....................MAN ON

  ENG MODE SEL....................IGN

  L2 *Engines are fed by gravity only.*

L1 VHF1/HF1 /ATC1....................USE

L2 *Only VHF 1, HF 1 and ATC 1 are supplied in the electrical emergency configuration.*

L1 *Note: The flight crew can recover FMGC 1, which is lost temporarily, through the MCDU MENU page.*

FUEL GRVTY FEED

L2 *Engines are fed by gravity only. Avoid negative Gs.*

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEEDING procedure (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 FAC 1....................OFF THEN ON

L2 *The rudder trim is recovered, although no indication is available.*

L1 BUS TIE....................AUTO

L2 *Setting BUS TIE pb-sw to AUTO enables the APU to take an available electrical channel.*

L1 APU (IF AVAIL)....................START

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L2 *APU start is not available for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.*
If the APU is available, the APU may be started when below FL 250.

L1 BLOWER + EXTRACT.......OVRD

L2 *Cooling air is supplied by the air conditioning system and exhausted overboard through the extract valve.*

L1 *Note:* *On IAE powered aircraft, the ENG 1(2) EPR MODE FAULT N1 DEGRADED MODE alert is displayed.*

ASSOCIATED PROCEDURES

FLT CTL ALTN LAW
(PROT LOST)
MAX SPEED.......320 KT

L2 *Speed limited due to loss of flight control normal laws.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018643.0011001 / 03 DEC 19

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED.. 320 KT
MAX BRK PR.. 1 000 PSI
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

Note: *If there are discrepancies between airspeed indications on the Captain's PFD and on the STBY indicator, disregard the STBY indication (probe not deiced).*

APPR PROC

FOR LDG.. USE FLAP 3
APPR SPD.. VREF +10/140 KT

The approach speed must be at least minimum RAT speed (140 kt).

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
SLATS/FLAPS SLOW
FLS ◁ LIMITED TO F-APP + RAW
See (2)

INOP SYS

F/CTL PROT
REVERSER 1+2
ADR 2+3
IR 2+3
RA 1+2
SPLR 1+2+5
ELAC 2
SEC 2+3
A/CALL OUT
AP 1+2
A/THR
FUEL PUMPS
ANTI SKID
N/W STRG
CAT 2
See (1)

(1) *For other systems' status: Refer to the "ELEC EMER CONFIG SYS REMAINING" table.*

(2) *Note:*
- *For A319/A320 aircraft, in ELEC EMER configuration, the center tank fuel is unusable.*
- *For A321 aircraft, in ELEC EMER configuration, the center tank fuel can be transferred to the wing tanks through the jet pumps by gravity, except the last two tons.*

ELEC EMER CONFIG

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

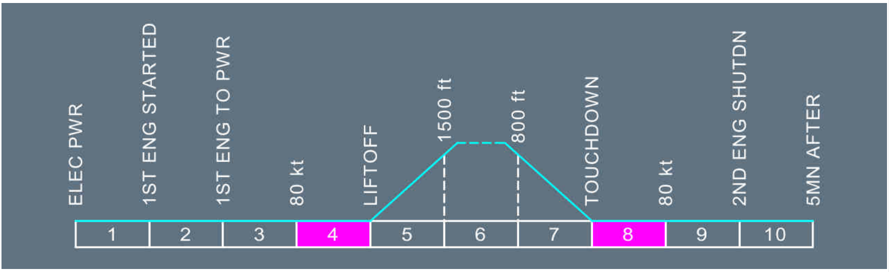
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ELEC EMER CONFIG (Cont'd)

139

LAND ASAP

MIN RAT SPEED..140 KT

CAUTION	*The RAT is capable of supplying the EMER GEN down to 125 kt, except during flare.*

GEN 1 + 2..OFF THEN ON

Note: Turn off then on all generators one after the other.

- **IF UNSUCCESSFUL:**

  BUS TIE...OFF

L2 *Setting BUS TIE pb-sw to OFF segregates both generator channels.*

L1 GEN 1 + 2..OFF THEN ON

Note:
- Turn off then on all generators one after the other
- If any generator reset is successful, reset both FACs.

EMER ELEC PWR (IF EMER GEN NOT IN LINE)...................................MAN ON
ENG MODE SEL..IGN

L2 *Engines are fed by gravity only.*

L1 VHF1/HF1 ◁ /ATC1..USE

L2 *Only VHF 1, HF 1 and ATC 1 are supplied in the electrical emergency configuration.*

L1 *Note: The flight crew can recover FMGC 1, which is lost temporarily, through the MCDU MENU page.*

FUEL GRVTY FEED

L2 *Engines are fed by gravity only. Avoid negative Gs.*

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEEDING procedure (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 FAC 1...OFF THEN ON

L2 *The rudder trim is recovered, although no indication is available.*

L1 BUS TIE...AUTO

L2 *Setting BUS TIE pb-sw to AUTO enables the APU to take an available electrical channel.*

L1 APU (IF AVAIL)...START

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L2 *APU start is not available for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.*
If the APU is available, the APU may be started when below FL 250.

L1 BLOWER + EXTRACT..OVRD

L2 *Cooling air is supplied by the air conditioning system and exhausted overboard through the extract valve.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Note: *On IAE powered aircraft, the ENG 1(2) EPR MODE FAULT N1 DEGRADED MODE alert is displayed.*

ASSOCIATED PROCEDURES

FLT CTL ALTN LAW
(PROT LOST)
MAX SPEED..320 KT

L2 *Speed limited due to loss of flight control normal laws.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018643.0026001 / 17 MAY 21

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED... 320 KT
MAX BRK PR.. 1 000 PSI
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

Note: *If there are discrepancies between airspeed indications on the Captain’s PFD and on the STBY indicator, disregard the STBY indication (probe not deiced).*

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

APPR SPD... VREF +15/140 KT

The approach speed must be at least minimum RAT speed (140 kt).

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
SLATS/FLAPS SLOW
FLS ◁ LIMITED TO F-APP + RAW

See (4)

INOP SYS

F/CTL PROT
REVERSER 1+2
ADR 2+3
IR 2+3
RA 1+2
SPLR 1+2+5
ELAC 2
SEC 2+3
A/CALL OUT
AP 1+2
A/THR
FUEL PUMPS
ANTI SKID
N/W STRG
CAT 2

See (1)

(1) *For other systems’ status: Refer to the “ELEC EMER CONFIG SYS REMAINING” table.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(4) *Note: In ELEC EMER configuration, the center tank fuel is unusable.*

ELEC EMER CONFIG

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

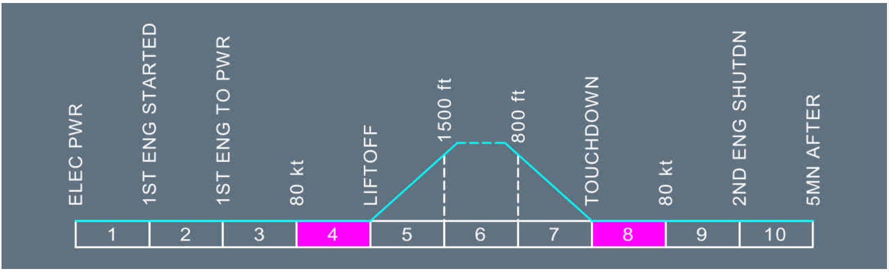
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
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ELEC EMER CONFIG

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

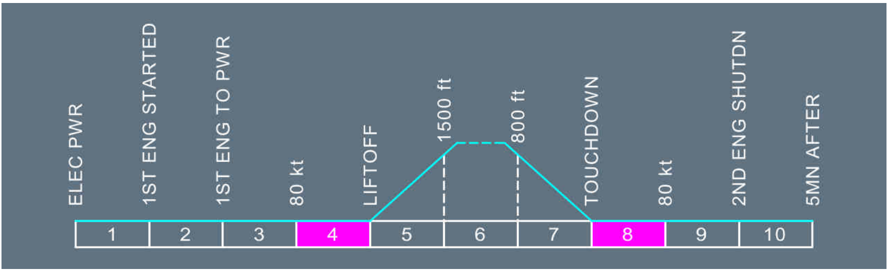
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018642.0006001 / 03 NOV 21

140

LAND ASAP

MIN RAT SPEED..140 KT

CAUTION	*The RAT is capable of supplying the EMER GEN down to 125 kt, except during flare.*

GEN 1 + 2..OFF THEN ON

Note: Turn off then on all generators one after the other.

- **IF UNSUCCESSFUL:**

  BUS TIE..OFF

  L2 *Setting BUS TIE pb-sw to OFF segregates both generator channels.*

  L1 GEN 1 + 2..OFF THEN ON

  Note:
  - *Turn off then on all generators one after the other*
  - *If any generator reset is successful, reset both FACs.*

  EMER ELEC PWR (IF EMER GEN NOT IN LINE).. MAN ON

  ENG MODE SEL..IGN

  L2 *Engines are fed by gravity only.*

L1 VHF1/HF1 /ATC1..USE

L2 *Only VHF 1, HF 1 and ATC 1 are supplied in the electrical emergency configuration.*

L1 *Note: The flight crew can recover FMGC 1, which is lost temporarily, through the MCDU MENU page.*

FUEL GRVTY FEED

L2 *Engines are fed by gravity only. Avoid negative Gs.*

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEEDING procedure (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 FAC 1.. OFF THEN ON

L2 *The rudder trim is recovered, although no indication is available.*

L1 BUS TIE..AUTO

L2 *Setting BUS TIE pb-sw to AUTO enables the APU to take an available electrical channel.*

L1 APU (IF AVAIL).. START

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L2 *APU start is not available for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.*
If the APU is available, the APU may be started when below FL 250.

L1 BLOWER + EXTRACT........OVRD

L2 *Cooling air is supplied by the air conditioning system and exhausted overboard through the extract valve.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Note: On IAE powered aircraft, the ENG 1(2) EPR MODE FAULT N1 DEGRADED MODE alert is displayed.

ASSOCIATED PROCEDURES

FLT CTL ALTN LAW
(PROT LOST)
MAX SPEED........320 KT

L2 *Speed limited due to loss of flight control normal laws.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED... 320 KT
MAX BRK PR... 1 000 PSI
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

Note: *If there are discrepancies between airspeed indications on the Captain's PFD and on the STBY indicator, disregard the STBY indication (probe not deiced).*

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

APPR SPD... VREF +10/140 KT

The approach speed must be at least minimum RAT speed (140 kt).

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See [2]

FMS PRED UNRELIABLE

See [3]

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
SLATS/FLAPS SLOW
FLS ◁ LIMITED TO F-APP + RAW

See [4]

INOP SYS

F/CTL PROT
REVERSER 1+2
ADR 2+3
IR 2+3
RA 1+2
SPLR 1+2+5
ELAC 2
SEC 2+3
A/CALL OUT
AP 1+2
A/THR
FUEL PUMPS
ANTI SKID
N/W STRG
CAT 2
STEEP APPR ◁

See [1]

[1] *For other systems' status: Refer to the "ELEC EMER CONFIG SYS REMAINING" table.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(4) *Note: In ELEC EMER configuration, the center tank fuel can be transferred to the wing tanks through the jet pumps by gravity, except the last two tons.*

ELEC EMER CONFIG

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876

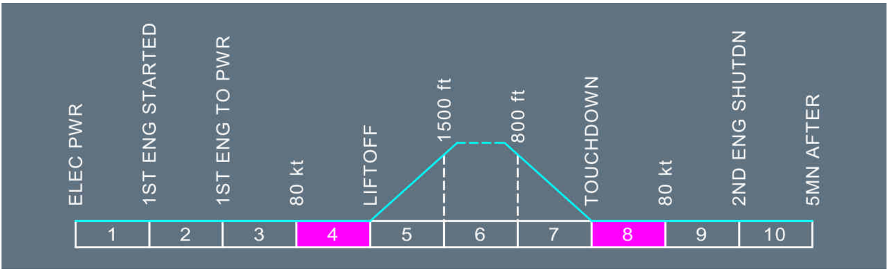
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018642.0006001 / 03 NOV 21

141

LAND ASAP

MIN RAT SPEED....................140 KT

CAUTION *The RAT is capable of supplying the EMER GEN down to 125 kt, except during flare.*

GEN 1 + 2....................OFF THEN ON

Note: *Turn off then on all generators one after the other.*

- **IF UNSUCCESSFUL:**

  BUS TIE....................OFF

L2 *Setting BUS TIE pb-sw to OFF segregates both generator channels.*

L1 GEN 1 + 2....................OFF THEN ON

Note:
- *Turn off then on all generators one after the other*
- *If any generator reset is successful, reset both FACs.*

EMER ELEC PWR (IF EMER GEN NOT IN LINE).................... MAN ON

ENG MODE SEL.................... IGN

L2 *Engines are fed by gravity only.*

L1 VHF1/HF1 ◁ /ATC1....................USE

L2 *Only VHF 1, HF 1 and ATC 1 are supplied in the electrical emergency configuration.*

L1 *Note:* *The flight crew can recover FMGC 1, which is lost temporarily, through the MCDU MENU page.*

FUEL GRVTY FEED

L2 *Engines are fed by gravity only. Avoid negative Gs.*

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEEDING procedure (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 FAC 1.................... OFF THEN ON

L2 *The rudder trim is recovered, although no indication is available.*

L1 BUS TIE....................AUTO

L2 *Setting BUS TIE pb-sw to AUTO enables the APU to take an available electrical channel.*

L1 APU (IF AVAIL).................... START

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L2 *APU start is not available for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.*
If the APU is available, the APU may be started when below FL 250.

L1 BLOWER + EXTRACT.....OVRD

L2 *Cooling air is supplied by the air conditioning system and exhausted overboard through the extract valve.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Note: On IAE powered aircraft, the ENG 1(2) EPR MODE FAULT N1 DEGRADED MODE alert is displayed.

ASSOCIATED PROCEDURES

FLT CTL ALTN LAW
(PROT LOST)
MAX SPEED.....320 KT

L2 *Speed limited due to loss of flight control normal laws.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018643.0025001 / 17 MAY 21

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED... 320 KT
MAX BRK PR.. 1 000 PSI
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

Note: *If there are discrepancies between airspeed indications on the Captain’s PFD and on the STBY indicator, disregard the STBY indication (probe not deiced).*

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

APPR SPD.................................... VREF +10/140 KT

The approach speed must be at least minimum RAT speed (140 kt).

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
SLATS/FLAPS SLOW
FLS ◁ LIMITED TO F-APP + RAW

See (4)

INOP SYS

F/CTL PROT
REVERSER 1+2
ADR 2+3
IR 2+3
RA 1+2
SPLR 1+2+5
ELAC 2
SEC 2+3
A/CALL OUT
AP 1+2
A/THR
FUEL PUMPS
ANTI SKID
N/W STRG
CAT 2

See (1)

(1) *For other systems’ status: Refer to the “ELEC EMER CONFIG SYS REMAINING” table.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(4) *Note: In ELEC EMER configuration, the center tank fuel can be transferred to the wing tanks through the jet pumps by gravity, except the last two tons.*

ELEC EMER CONFIG

Applicable to: MSN 08495-08596, 09190-09324

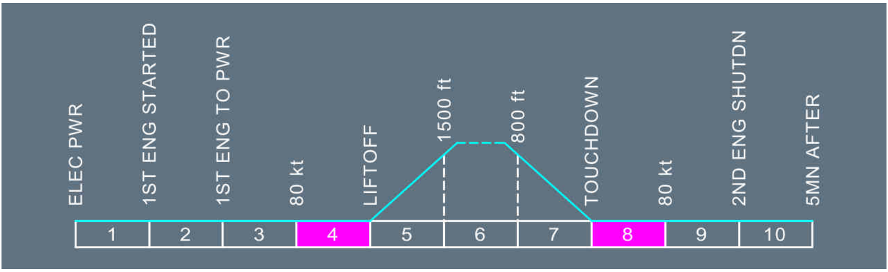
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018642.0006001 / 03 NOV 21

142

LAND ASAP

MIN RAT SPEED..140 KT

CAUTION	*The RAT is capable of supplying the EMER GEN down to 125 kt, except during flare.*

GEN 1 + 2..OFF THEN ON

Note: *Turn off then on all generators one after the other.*

- **IF UNSUCCESSFUL:**

  BUS TIE..OFF

L2 *Setting BUS TIE pb-sw to OFF segregates both generator channels.*

L1 GEN 1 + 2..OFF THEN ON

Note: - *Turn off then on all generators one after the other*
- *If any generator reset is successful, reset both FACs.*

EMER ELEC PWR (IF EMER GEN NOT IN LINE)..............................MAN ON
ENG MODE SEL..IGN

L2 *Engines are fed by gravity only.*

L1 VHF1/HF1 ◁✳ /ATC1..USE

L2 *Only VHF 1, HF 1 and ATC 1 are supplied in the electrical emergency configuration.*

L1 *Note:* *The flight crew can recover FMGC 1, which is lost temporarily, through the MCDU MENU page.*

FUEL GRVTY FEED

L2 *Engines are fed by gravity only. Avoid negative Gs.*

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEEDING procedure (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 FAC 1..OFF THEN ON

L2 *The rudder trim is recovered, although no indication is available.*

L1 BUS TIE..AUTO

L2 *Setting BUS TIE pb-sw to AUTO enables the APU to take an available electrical channel.*

L1 APU (IF AVAIL)..START

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L2 *APU start is not available for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.*
If the APU is available, the APU may be started when below FL 250.

L1 BLOWER + EXTRACT..OVRD

L2 *Cooling air is supplied by the air conditioning system and exhausted overboard through the extract valve.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Note: On IAE powered aircraft, the ENG 1(2) EPR MODE FAULT N1 DEGRADED MODE alert is displayed.

ASSOCIATED PROCEDURES

FLT CTL ALTN LAW
(PROT LOST)
MAX SPEED..320 KT

L2 *Speed limited due to loss of flight control normal laws.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018643.0027001 / 17 MAY 21

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED... 320 KT
MAX BRK PR.. 1 000 PSI
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

Note: *If there are discrepancies between airspeed indications on the Captain's PFD and on the STBY indicator, disregard the STBY indication (probe not deiced).*

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

APPR SPD... VREF +15/140 KT

The approach speed must be at least minimum RAT speed (140 kt).

LDG DIST PROC... APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
SLATS/FLAPS SLOW
FLS ◁ LIMITED TO F-APP + RAW

See (4)

INOP SYS

F/CTL PROT
REVERSER 1+2
ADR 2+3
IR 2+3
RA 1+2
SPLR 1+2+5
ELAC 2
SEC 2+3
A/CALL OUT
AP 1+2
A/THR
FUEL PUMPS
ANTI SKID
N/W STRG
CAT 2

See (1)

(1) *For other systems' status: Refer to the "ELEC EMER CONFIG SYS REMAINING" table.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(4) *Note: In ELEC EMER configuration, the center tank fuel can be transferred to the wing tanks through the jet pumps by gravity, except the last two tons.*

ELEC EMER CONFIG

Applicable to: MSN 08635, 10949-11597

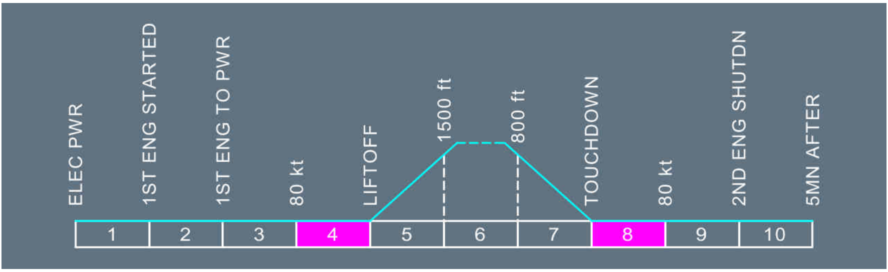
Ident.: PRO-ABN-ELEC-R-00018283.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AC 1 and AC 2 busbars are not supplied.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018642.0006001 / 03 NOV 21
143

LAND ASAP

MIN RAT SPEED....................140 KT

CAUTION	*The RAT is capable of supplying the EMER GEN down to 125 kt, except during flare.*

GEN 1 + 2....................OFF THEN ON

Note: Turn off then on all generators one after the other.

- **IF UNSUCCESSFUL:**

  BUS TIE....................OFF

L2 *Setting BUS TIE pb-sw to OFF segregates both generator channels.*

L1 GEN 1 + 2....................OFF THEN ON

Note:
- *Turn off then on all generators one after the other*
- *If any generator reset is successful, reset both FACs.*

EMER ELEC PWR (IF EMER GEN NOT IN LINE).................... MAN ON
ENG MODE SEL....................IGN

L2 *Engines are fed by gravity only.*

L1 VHF1/HF1 ◁ /ATC1....................USE

L2 *Only VHF 1, HF 1 and ATC 1 are supplied in the electrical emergency configuration.*

L1 *Note: The flight crew can recover FMGC 1, which is lost temporarily, through the MCDU MENU page.*

FUEL GRVTY FEED

L2 *Engines are fed by gravity only. Avoid negative Gs.*

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEEDING procedure (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 FAC 1.................... OFF THEN ON

L2 *The rudder trim is recovered, although no indication is available.*

L1 BUS TIE....................AUTO

L2 *Setting BUS TIE pb-sw to AUTO enables the APU to take an available electrical channel.*

L1 APU (IF AVAIL).................... START

Continued on the following page

ELEC EMER CONFIG (Cont'd)

L2 *APU start is not available for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.*
If the APU is available, the APU may be started when below FL 250.

L1 BLOWER + EXTRACT......................................OVRD

L2 *Cooling air is supplied by the air conditioning system and exhausted overboard through the extract valve.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Note: On IAE powered aircraft, the ENG 1(2) EPR MODE FAULT N1 DEGRADED MODE alert is displayed.

ASSOCIATED PROCEDURES

FLT CTL ALTN LAW
(PROT LOST)
MAX SPEED......................................320 KT

L2 *Speed limited due to loss of flight control normal laws.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

Ident.: PRO-ABN-ELEC-R-00018643.0032001 / 17 MAY 21

144

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED.. 320 KT
MAX BRK PR.. 1 000 PSI
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

Note: *In the case of discrepancies between airspeed indications on CM1 PFD and on STBY indicator, disregard the STBY indication (probe not de-iced).*

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

APPR SPD... VREF +15/140 KT

The approach speed must be at least equal to the minimum RAT speed (140 kt).

LDG DIST PROC... APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (4)

SLATS/FLAPS SLOW
FLS ◁ LIMITED TO F-APP + RAW

See (5)

INOP SYS

F/CTL PROT
REVERSER 1+2
ADR 2+3
IR 2+3
RA 1+2
SPLR 1+2+5
ELAC 2
SEC 2+3
A/CALL OUT
AP 1+2
A/THR
FUEL PUMPS
ANTI SKID
N/W STRG
CAT 2

See (1)

(1) *For other systems' status: Refer to the "ELEC EMER CONFIG SYS REMAINING" table.*

Continued on the following page

ELEC EMER CONFIG (Cont'd)

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Note:* *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(4) *Note:* *At landing gear extension, flight controls revert to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(5) *Note:* *In ELEC EMER configuration, the center tank fuel can be transferred to the wing tanks through the jet pumps by gravity, except the last two tons.*

ELEC EMER GEN 1 LINE OFF

Applicable to: ALL

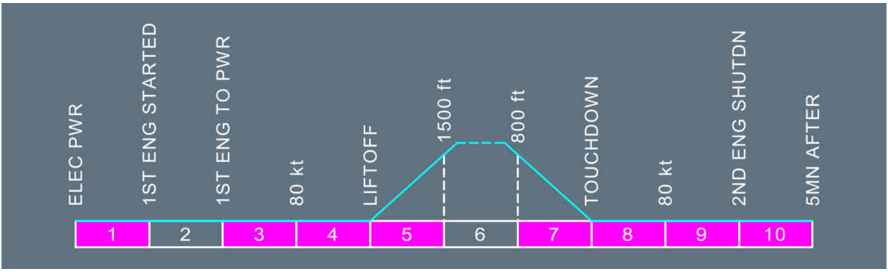
Ident.: PRO-ABN-ELEC-AB-00017382.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the GEN 1 LINE pb-sw is abnormally set to OFF position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ELEC EMER GEN 1 LINE OFF (Cont'd)

Ident.: PRO-ABN-ELEC-AB-00012550.0001001 / 25 FEB 14

L2 With the GEN 1 LINE pb-sw (on the EMER ELEC PWR panel) in the OFF position, the GEN 1 line contactor is open and GEN 2 supplies the AC BUS 1 channel.

L1 Crew awareness.

L2 Set the GEN 1 LINE pb-sw to ON.

ELEC ESS BUSES ON BAT

Applicable to: ALL

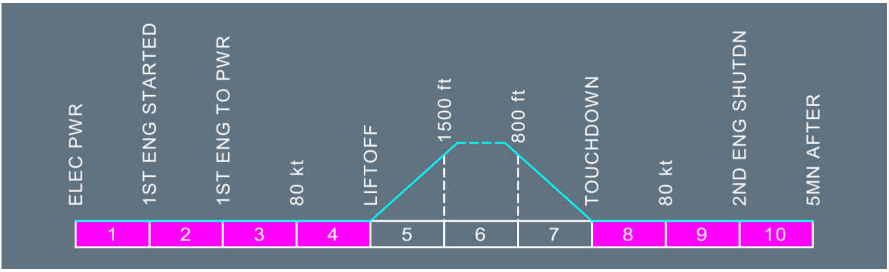
Ident.: PRO-ABN-ELEC-AA-00018284.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DC ESS and AC ESS busbars are supplied by the batteries.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ELEC ESS BUSES ON BAT (Cont'd)

Ident.: PRO-ABN-ELEC-AA-00018021.0002001 / 21 MAR 16

L2 AC ESS BUS is supplied via the static inverter.

L1 **LAND ASAP**

MIN RAT SPEED.......140 KT

L2 *Displayed, if the RAT is extended.*

L1 EMER ELEC PWR.......MAN ON

L2 *ESS BUSES are supplied by the emergency generator*

ELEC GEN 1(2) OR APU GEN OVERLOAD

Applicable to: ALL

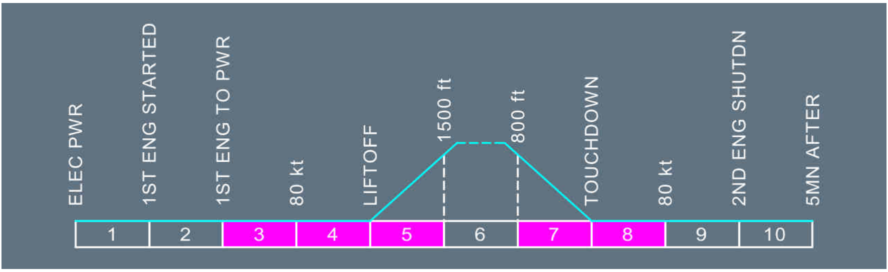
Ident.: PRO-ABN-ELEC-T-00017363.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the load of one generator is above 100% of rated output.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-T-00018023.0002001 / 21 MAR 16

GALY/CAB.......OFF

Continued on the following page

ELEC GEN 1(2) OR APU GEN OVERLOAD (Cont'd)

Ident.: PRO-ABN-ELEC-T-00018024.0002001 / 21 MAR 16

STATUS

INOP SYS

GALY/CAB

ELEC GEN 1(2) FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-ELEC-B-00017360.0001001 / 21 MAR 16

ANNUNCIATIONS

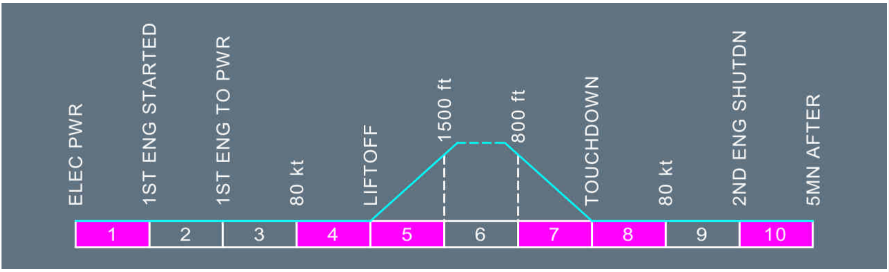
Triggering Conditions:

L2

This alert triggers when:.

- The protection trip is initiated by the associated GCU, or
- The line contactor is open with the associated GEN pb-sw set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ELEC GEN 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-B-00018025.0001001 / 21 MAR 16

GEN (AFFECTED)..OFF THEN ON

- **IF UNSUCCESSFUL:**

  GEN (AFFECTED)..OFF

Ident.: PRO-ABN-ELEC-B-00018026.0001001 / 21 MAR 16

145

L12

STATUS

Note: If available, the APU may be started, and the APU GEN used.

CAT 3 SINGLE ONLY

INOP SYS

MAIN GALLEY [1]
GEN 1(2)
CAT 3 DUAL

---

[1] *(only if APU GEN is not online)*

ELEC GEN 1(2) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ELEC-B-00017360.0001001 / 21 MAR 16

ANNUNCIATIONS

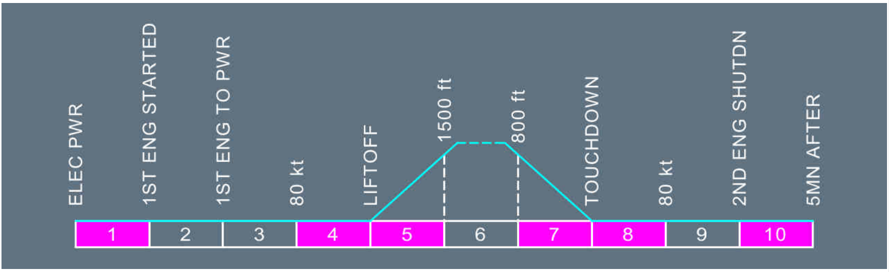
Triggering Conditions:

L2

This alert triggers when:.

- The protection trip is initiated by the associated GCU, or
- The line contactor is open with the associated GEN pb-sw set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-B-00018025.0001001 / 21 MAR 16

GEN (AFFECTED)..OFF THEN ON

- **IF UNSUCCESSFUL:**

  GEN (AFFECTED)..OFF

ELEC GEN 1(2) FAULT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

Ident.: PRO-ABN-ELEC-B-00017360.0001001 / 21 MAR 16

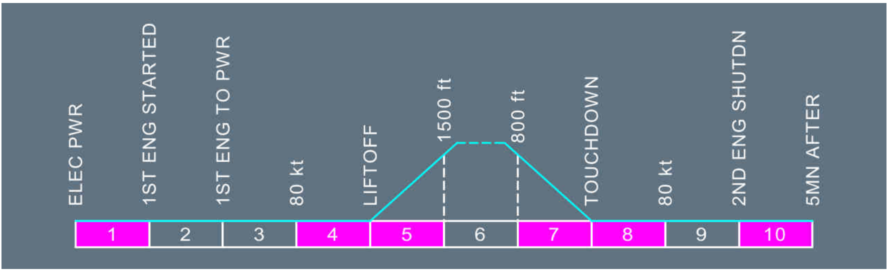
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:.

- The protection trip is initiated by the associated GCU, or
- The line contactor is open with the associated GEN pb-sw set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-B-00018025.0001001 / 21 MAR 16

GEN (AFFECTED)....................OFF THEN ON

- **IF UNSUCCESSFUL:**

  GEN (AFFECTED)....................OFF

Continued on the following page

ELEC GEN 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-ELEC-B-00018026.0002001 / 21 MAR 16

146

L12

STATUS

Note: *If available, the APU may be started, and the APU GEN used.*

CAT 3 SINGLE ONLY

INOP SYS

MAIN GALLEY (1)
GEN 1(2)
CAT 3 DUAL

(1) *(only if APU GEN is not online: In this case, all the galleys are shed)*

ELEC GEN 1(2) OFF

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-ELEC-C-00017361.0002001 / 22 APR 16

147

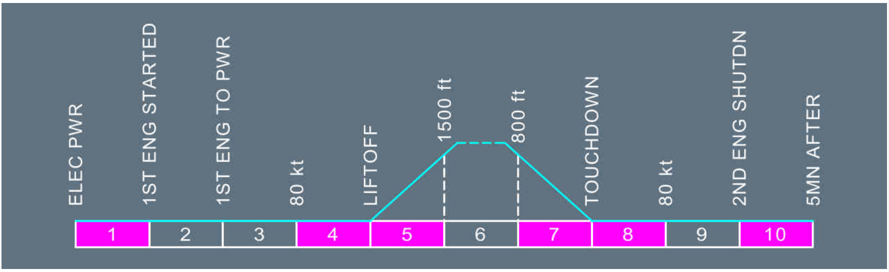
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the GEN 1(2) pb-sw is set to OFF and no failure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ELEC GEN 1(2) OFF (Cont'd)

Ident.: PRO-ABN-ELEC-C-00018027.0001001 / 21 MAR 16

L2 Turn the affected GEN ON.

L1 Crew awareness.

Ident.: PRO-ABN-ELEC-C-00018028.0001001 / 21 MAR 16

148

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	MAIN GALLEY (1) GEN 1(2) CAT 3 DUAL

(1) *(only if APU GEN is not online)*

ELEC GEN 1(2) OFF

Applicable to: MSN 01251, 02014, 06561

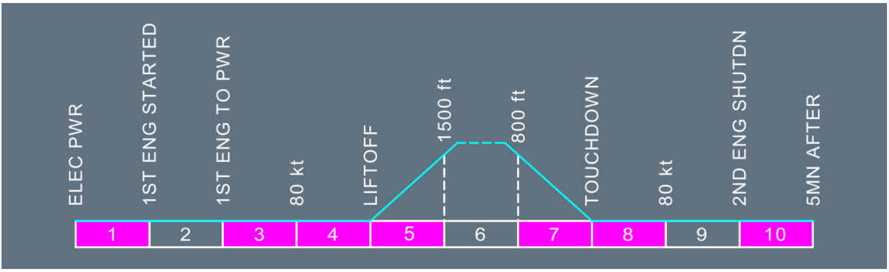
Ident.: PRO-ABN-ELEC-C-00017361.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the GEN 1(2) pb-sw is set to OFF and no failure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-C-00018027.0001001 / 21 MAR 16

L2 Turn the affected GEN ON.

L1 Crew awareness.

Ident.: PRO-ABN-ELEC-C-00018028.0001001 / 21 MAR 16

149

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	MAIN GALLEY (1) GEN 1(2) CAT 3 DUAL

(1) *(only if APU GEN is not online)*

ELEC GEN 1(2) OFF

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ELEC-C-00018027.0001001 / 21 MAR 16

L2 Turn the affected GEN ON.

L1 Crew awareness.

ELEC GEN 1(2) OFF

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

Ident.: PRO-ABN-ELEC-C-00017361.0002001 / 22 APR 16

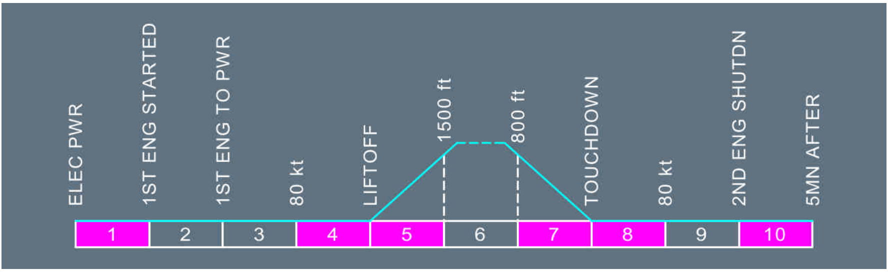
150

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the GEN 1(2) pb-sw is set to OFF and no failure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-C-00018027.0001001 / 21 MAR 16

L2 Turn the affected GEN ON.

L1 Crew awareness.

Continued on the following page

ELEC GEN 1(2) OFF (Cont'd)

Ident.: PRO-ABN-ELEC-C-00018028.0003001 / 21 MAR 16

151

STATUS

CAT 3 SINGLE ONLY

INOP SYS

MAIN GALLEY [(1)]
GEN 1(2)
CAT 3 DUAL

(1) *(only if APU GEN is not online: In this case, all the galleys are shed)*

ELEC IDG 1(2) DISCONNECTED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-08596, 09190-09324

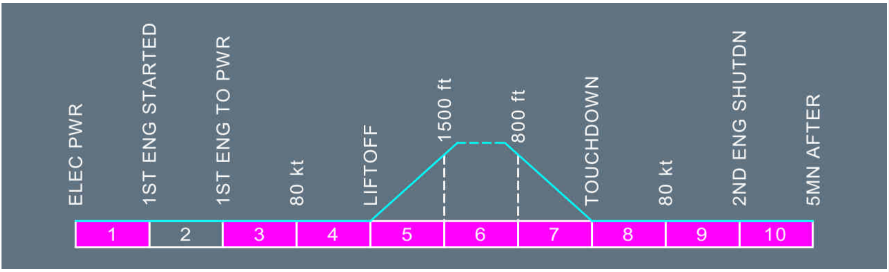
Ident.: PRO-ABN-ELEC-D-00017366.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IDG 1(2) is disconnected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ELEC IDG 1(2) DISCONNECTED (Cont'd)

Ident.: PRO-ABN-ELEC-D-00018029.0001001 / 21 MAR 16

152

Crew awareness.

Ident.: PRO-ABN-ELEC-D-00018030.0001001 / 21 MAR 16

153

L12

STATUS

Note: If available, the APU may be started, and the APU GEN used.

CAT 3 SINGLE ONLY

INOP SYS

MAIN GALLEY (1)
GEN 1(2)
CAT 3 DUAL

(1) *(only if APU GEN is not online)*

ELEC IDG 1(2) DISCONNECTED

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

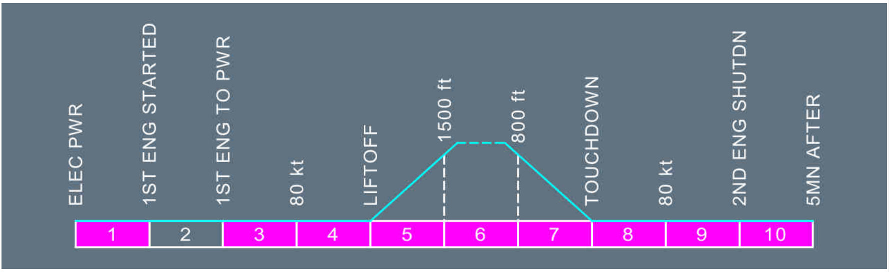
Ident.: PRO-ABN-ELEC-D-00017366.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IDG 1(2) is disconnected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ELEC-D-00018029.0001001 / 21 MAR 16

154 Crew awareness.

Ident.: PRO-ABN-ELEC-D-00018030.0003001 / 21 MAR 16

155 L12

STATUS

	INOP SYS
Note: If available, the APU may be started, and the APU GEN used.	MAIN GALLEY [1] GEN 1(2) CAT 3 DUAL
CAT 3 SINGLE ONLY	

[1] *(only if APU GEN is not online: in this case, all the galleys are shed)*

ELEC IDG 1(2) DISCONNECTED

Applicable to: MSN 08635, 10949-11522, 11572-11597

Ident.: PRO-ABN-ELEC-D-00017366.0002001 / 24 MAR 20

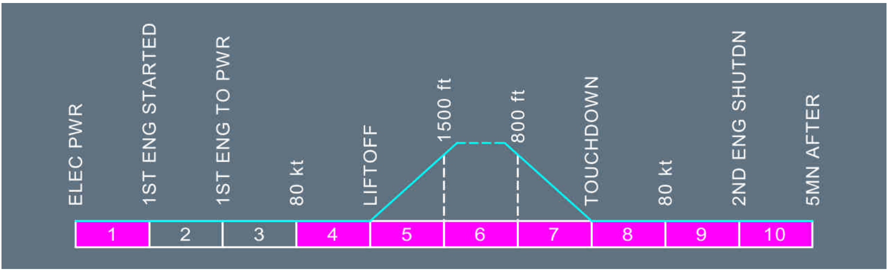
156

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IDG 1(2) is disconnected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-D-00018029.0001001 / 21 MAR 16

157

Crew awareness.

Ident.: PRO-ABN-ELEC-D-00018030.0001001 / 21 MAR 16

158

L12

STATUS

Note: *If available, the APU may be started, and the APU GEN used.*

CAT 3 SINGLE ONLY

INOP SYS

MAIN GALLEY (1)
GEN 1(2)
CAT 3 DUAL

(1) *(only if APU GEN is not online)*

ELEC IDG 1(2) DISCONNECTED

Applicable to: MSN 11531

Ident.: PRO-ABN-ELEC-D-00017366.0002001 / 24 MAR 20

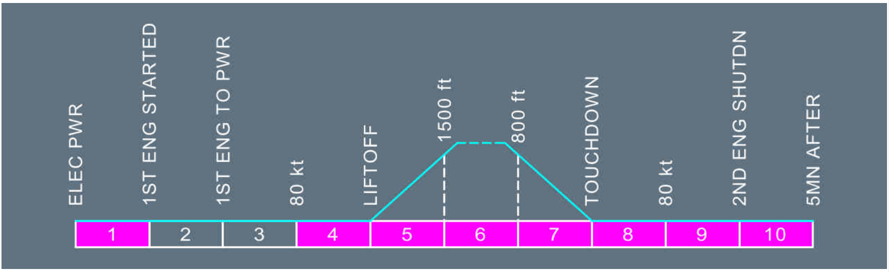
159

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IDG 1(2) is disconnected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-D-00018029.0001001 / 21 MAR 16

160

Crew awareness.

Ident.: PRO-ABN-ELEC-D-00018030.0003001 / 21 MAR 16

161

L12

STATUS

Note: *If available, the APU may be started, and the APU GEN used.*

CAT 3 SINGLE ONLY

INOP SYS

MAIN GALLEY [(1)]
GEN 1(2)
CAT 3 DUAL

---

(1) (only if APU GEN is not online: in this case, all the galleys are shed)

ELEC IDG 1(2) FILTER CLOG

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ELEC-AD-00018937.0001001 / 21 MAR 16

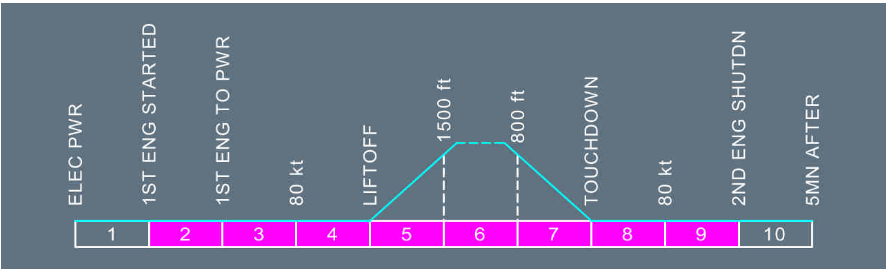
162

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the IDG 1(2) oil filter is clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-AD-00015561.0001001 / 05 NOV 15

163

Crew awareness.

ELEC IDG 1(2) OIL LO LVL

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ELEC-AE-00018939.0001001 / 21 MAR 16

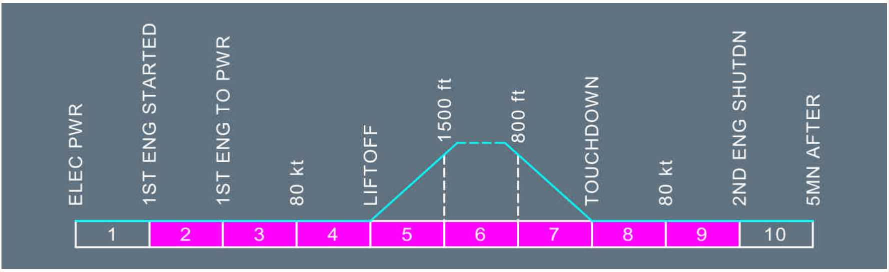
164

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IDG 1(2) oil level is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-AE-00015560.0001001 / 05 NOV 15

165

Crew awareness.

ELEC IDG 1(2) OIL LO PR/OVHT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

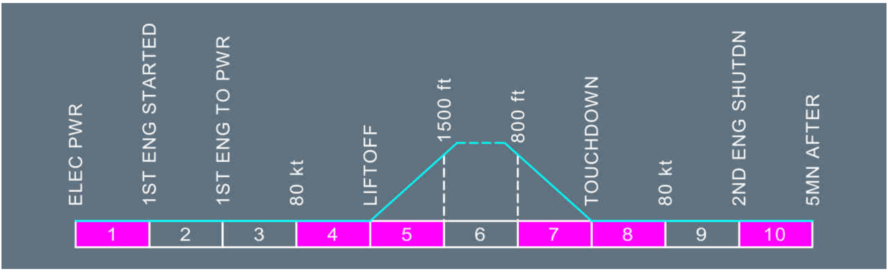
Ident.: PRO-ABN-ELEC-A-00018285.0001001 / 25 SEP 17

ANNUNCIATIONS

Triggering Conditions:

L2 The alert ELEC IDG 1(2) OIL LO PR triggers when the IDG 1(2) oil pressure is low.
The alert ELEC IDG 1(2) OIL OVHT triggers when the IDG 1(2) outlet oil temperature rises above 180 °C.

Flight Phase Inhibition:



Ident.: PRO-ABN-ELEC-A-00018031.0001001 / 21 MAR 16

IDG (AFFECTED)...OFF

L2 *If the associated engine is running, the IDG (integrated drive generator) must be disconnected from the engine at, or above, idle to prevent damage to the disconnect mechanism.*
Press the IDG pb-sw until the GEN FAULT light comes on. However, do not press for more than 3 s, to avoid damage to the disengage solenoid
The IDG FAULT light goes off, when the IDG is disconnected.

Continued on the following page

ELEC IDG 1(2) OIL LO PR/OVHT (Cont'd)

Ident.: PRO-ABN-ELEC-A-00018032.0001001 / 21 MAR 16

166

L12

STATUS

Note: If available, the APU may be started and the APU GEN used.

CAT 3 SINGLE ONLY

INOP SYS

MAIN GALLEY [(1)]
GEN 1(2)
CAT 3 DUAL

(1) *(only if APU GEN is not online)*

ELEC IDG 1(2) OIL LO PR/OVHT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ELEC-A-00018285.0001001 / 25 SEP 17

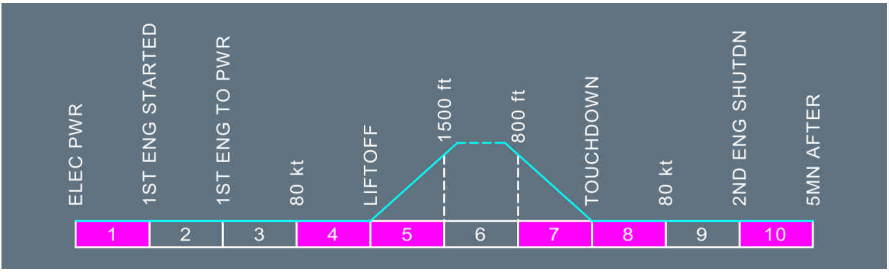
ANNUNCIATIONS

Triggering Conditions:

L2

The alert ELEC IDG 1(2) OIL LO PR triggers when the IDG 1(2) oil pressure is low.
The alert ELEC IDG 1(2) OIL OVHT triggers when the IDG 1(2) outlet oil temperature rises above 180 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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8
9
10

Continued on the following page

ELEC IDG 1(2) OIL LO PR/OVHT (Cont'd)

Ident.: PRO-ABN-ELEC-A-00018031.0001001 / 21 MAR 16

IDG (AFFECTED)..OFF

L2 *If the associated engine is running, the IDG (integrated drive generator) must be disconnected from the engine at, or above, idle to prevent damage to the disconnect mechanism.*
Press the IDG pb-sw until the GEN FAULT light comes on. However, do not press for more than 3 s, to avoid damage to the disengage solenoid
The IDG FAULT light goes off, when the IDG is disconnected.

ELEC IDG 1(2) OIL LO PR/OVHT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

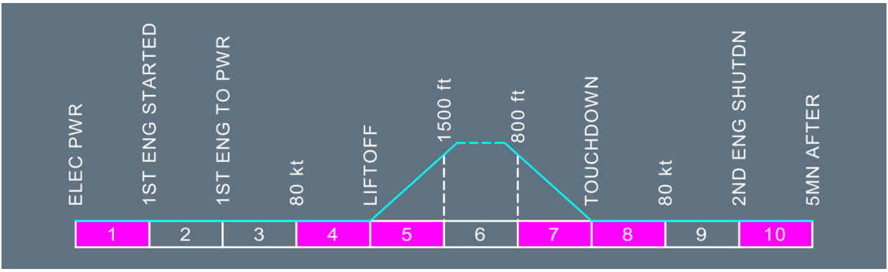
Ident.: PRO-ABN-ELEC-A-00018285.0001001 / 25 SEP 17

ANNUNCIATIONS

Triggering Conditions:

L2 The alert ELEC IDG 1(2) OIL LO PR triggers when the IDG 1(2) oil pressure is low.
The alert ELEC IDG 1(2) OIL OVHT triggers when the IDG 1(2) outlet oil temperature rises above 180 °C.

Flight Phase Inhibition:



Continued on the following page

ELEC IDG 1(2) OIL LO PR/OVHT (Cont'd)

Ident.: PRO-ABN-ELEC-A-00018031.0001001 / 21 MAR 16

IDG (AFFECTED)...OFF

L2 *If the associated engine is running, the IDG (integrated drive generator) must be disconnected from the engine at, or above, idle to prevent damage to the disconnect mechanism.*

Press the IDG pb-sw until the GEN FAULT light comes on. However, do not press for more than 3 s, to avoid damage to the disengage solenoid

The IDG FAULT light goes off, when the IDG is disconnected.

Ident.: PRO-ABN-ELEC-A-00018032.0002001 / 21 MAR 16

167

L12

STATUS

	INOP SYS
Note: *If available, the APU may be started and the APU GEN used.*	MAIN GALLEY (1)
CAT 3 SINGLE ONLY	GEN 1(2)
	CAT 3 DUAL

(1) *(only if APU GEN is not online: In this case, all the galleys are shed)*

ELEC STATIC INV FAULT

Applicable to: ALL

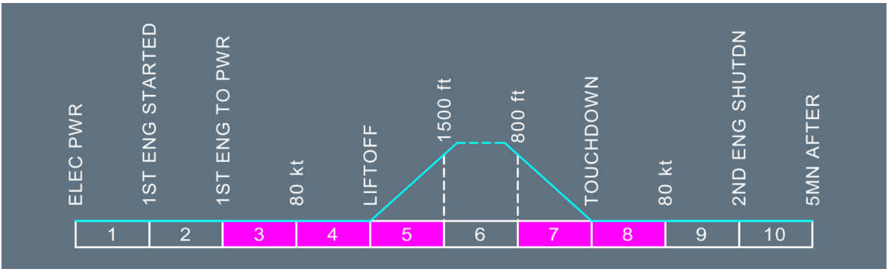
Ident.: PRO-ABN-ELEC-AC-00017380.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the static inverter is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-AC-00012549.0001001 / 25 FEB 14

Crew awareness.

ELEC TR 1(2) FAULT

Applicable to: ALL

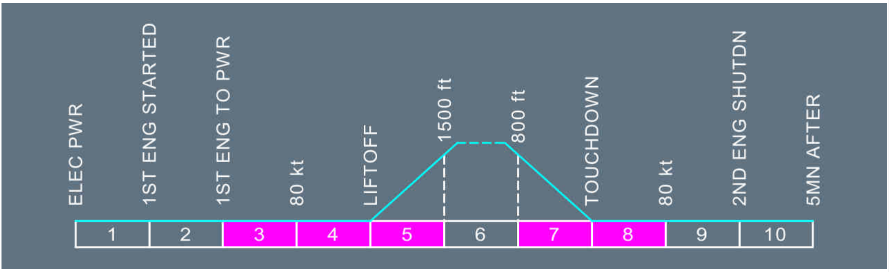
Ident.: PRO-ABN-ELEC-U-00017373.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the TR 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ELEC-U-00012541.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-ELEC-U-00018531.0001001 / 21 MAR 16

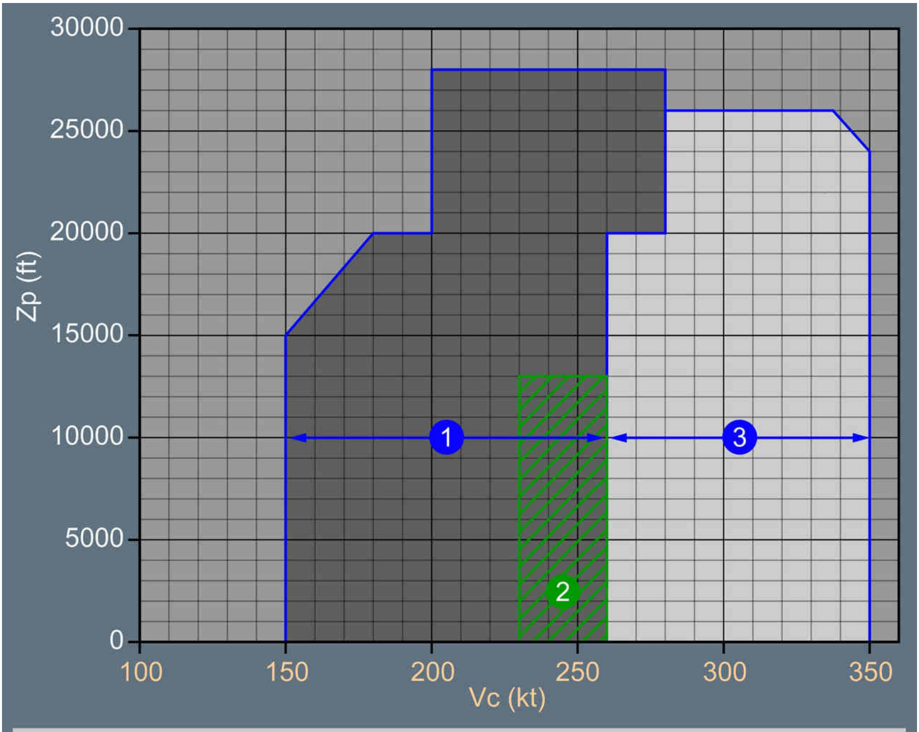
STATUS

	INOP SYS
CAT 3 SINGLE ONLY	TR 1(2) CAT 3 DUAL

[QRH] ENG RELIGHT
IN FLIGHT

Ident.: PRO-ABN-ENG-00012594.0040001 / 13 DEC 17

1 **Applicable to: MSN 08495-09324, 10949-11597**



Caption:
① STARTER ASSISTED RELIGHT
② WINDMILL QUICK RELIGHT T < 20 s N2 > 15%
③ STABILIZED WINDMILL RELIGHT N2 > 8.5%

No attempt should be made to restart an engine, if there are indications of engine damage, if the engine had been shut down because of an engine fire, or if there is a recognizable possibility that an attempted relight may result in fire.

ENG MASTER (affected engine).. OFF
THR LEVER (affected engine)...Check IDLE

Continued on the following page

[QRH] ENG RELIGHT (Cont'd)

IN FLIGHT

ENG MODE sel...IGN
X BLEED...OPEN

If outside the windmilling start envelope, the FADEC will open the starter valve.

WING ANTI ICE (for starter assist)...OFF
ENG MASTER (affected engine)...ON
ENG PARAMETERS (N2, EGT)...MONITOR

Engine light up should be achieved within 30 s after fuel flow increases.

AUTOMATIC START ABORT NOT AVAIL

Be aware that, contrary to an autostart on ground, the flight crew must take appropriate action in case of an abnormal start.
During engine relight, a rapid EGT increase below the EGT limit may occur. In this case, do not abort the engine relight unless the EGT exceeds the red line indication.

● **If ENG 1(2) START FAULT - ENG STALL triggers, and ENG parameters normal:**
DISREGARD ECAM ALERT

■ **When idle reached (ENG AVAIL):**
ENG MODE sel...NORM
TCAS MODE sel...TA/RA

Check that the selector is at TA/RA since, if the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN) has been applied, the TCAS mode selector may have been set to the TA position.

X BLEED...AUTO
Affected SYS...RESTORE

■ **If no relight:**
ENG MASTER (affected engine)...OFF

Wait 30 s before attempting a new start (to drain the engine).
During the relight attempt, if the N2 did not increase, consider increasing speed for windmill relight.

Note: *For an in-flight restart, the FADEC decides whether the rotor speed is sufficient to perform a windmill relight or needs assistance from the starter in view of the current engine parameters and the flight environment parameters. Within the windmill quick relight envelope, if the crew is using the Quick Windmill Relight procedure, the FADEC will restart*

Continued on the following page

[QRH] ENG RELIGHT (Cont'd)

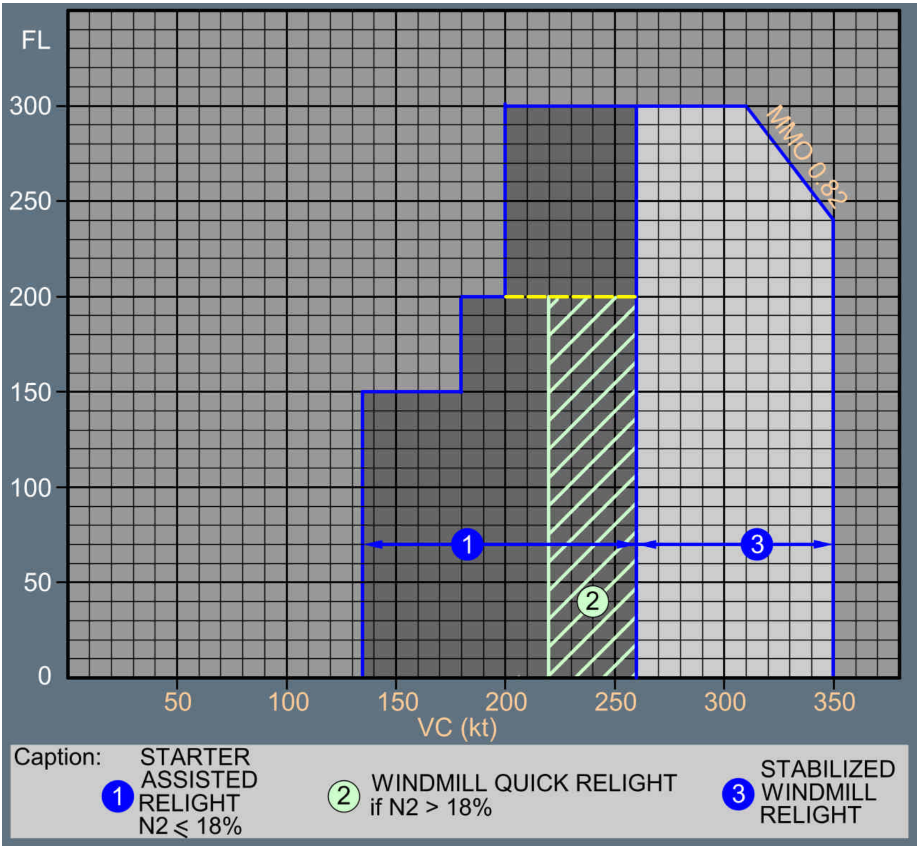
IN FLIGHT

the engine after the flight crew cycles the ENG MASTER lever from "ON" to "OFF" then back to "ON".

[QRH] ENG RELIGHT
IN FLIGHT

Ident.: PRO-ABN-ENG-00012594.0002001 / 05 MAR 19
Applicable to: MSN 02321, 02887

Engine Relight Envelope



No attempt should be made to restart an engine, if there are indications of engine damage, if the engine had been shut down because of an engine fire, or if there is a recognizable possibility that an attempted relight may result in fire.

ENG MASTER (affected engine)..OFF

Continued on the following page

[QRH] ENG RELIGHT (Cont'd)
IN FLIGHT

THR LEVER (affected engine)........Check IDLE
ENG MODE sel........IGN
X BLEED........OPEN

If outside the windmilling start envelope, the FADEC will open the starter valve.

WING ANTI ICE (for starter assist)........OFF
ENG MASTER (affected engine)........ON
ENG PARAMETERS (N2, EGT)........MONITOR

Engine light up should be achieved within 30 s after fuel flow increases.

AUTOMATIC START ABORT NOT AVAIL
Be aware that, unlike the procedure for auto start on ground, the crew must take appropriate action in case of an abnormal start.
Monitor N2. If uncertain about successful relight, move the thrust lever forward and check engine response.

- **When idle reached:**

  ENG MODE sel........NORM
  TCAS MODE sel ....TA/RA

  Check that the selector is at TA/RA since, if the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN) has been applied, the TCAS mode selector may have been set to the TA position.

  X BLEED........AUTO
  Affected SYS........RESTORE

- **If no relight:**

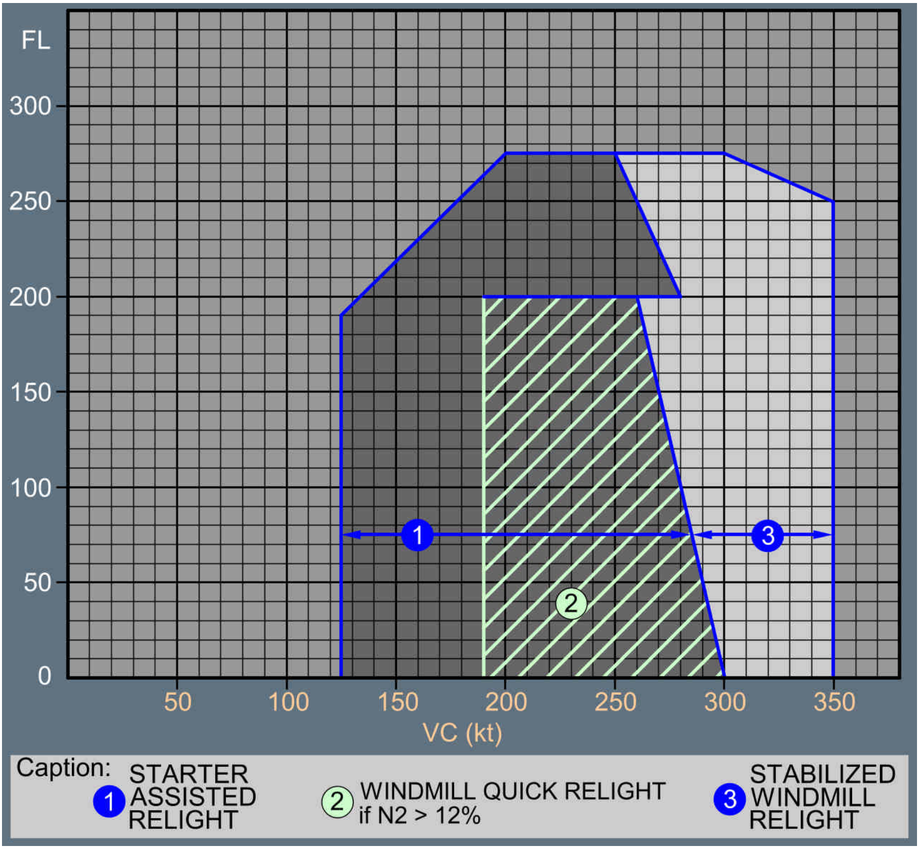
  ENG MASTER (engine affected)........OFF

  Wait 30 s before attempting a new start (to drain the engine).

[QRH] ENG RELIGHT
IN FLIGHT

Ident.: PRO-ABN-ENG-00012594.0015001 / 17 MAR 17
Applicable to: MSN 02924-03002, 03035-03211

Engine Relight Envelope



ENG MASTER (affected engine)........ OFF
THR LEVER (affected engine)........ Check IDLE
ENG MODE sel........ IGN
X BLEED........ OPEN

Continued on the following page

[QRH] ENG RELIGHT (Cont'd)
IN FLIGHT

If outside the windmilling start envelope, the FADEC will open the starter valve.

WING ANTI. ICE (for starter assist)........OFF
ENG MASTER (affected engine)........ON
ENG PARAMETERS (N2, EGT)........MONITOR

Engine light up should be achieved within 30 s after fuel flow increases.

AUTOMATIC START ABORT NOT AVAIL

Be aware that, unlike the procedure for auto start on ground, the crew must take appropriate action in case of an abnormal start.
Monitor N2. If uncertain about successful relight, move the thrust lever forward and check engine response.

● **If ENG 1(2) START FAULT - ENG STALL triggers, and ENG parameters normal:**
DISREGARD ECAM ALERT

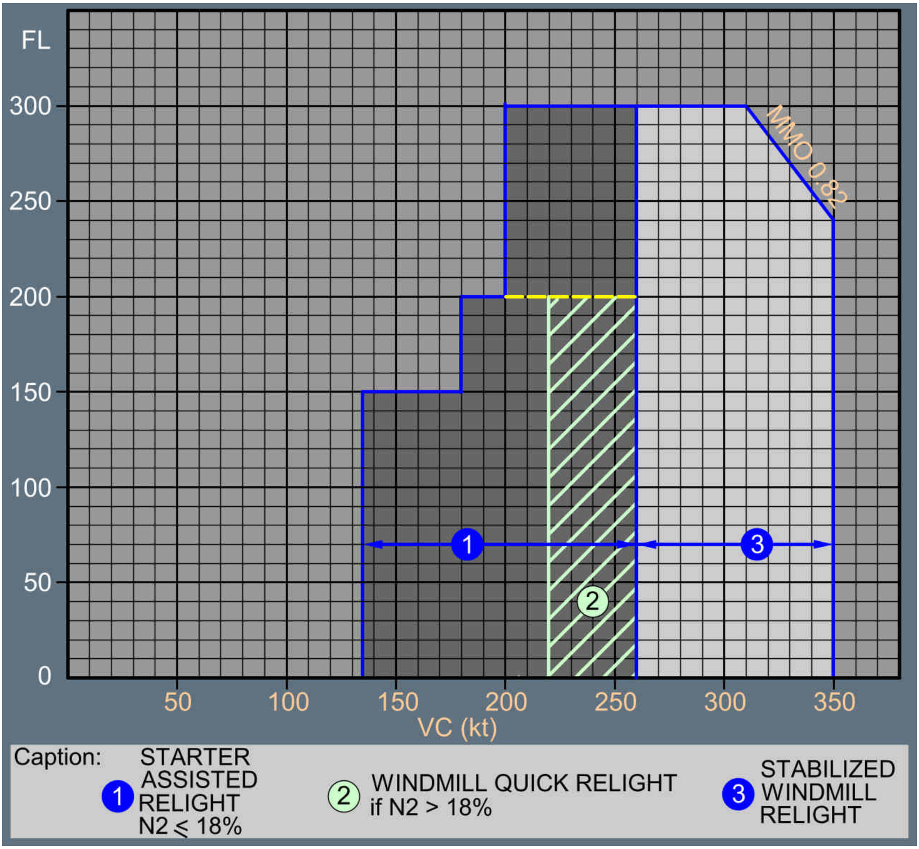
■ **When idle reached (ENG AVAIL):**
ENG MODE sel........NORM
TCAS MODE sel ◁ ....TA/RA
Check that the selector is at TA/RA since, if the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN) has been applied, the TCAS mode selector may have been set to the TA position.
X BLEED........AUTO
Affected SYS........RESTORE

■ **If no relight:**
ENG MASTER (affected engine)........OFF
Wait 30 s before attempting a new start (to drain the engine).

[QRH] ENG RELIGHT
IN FLIGHT

Ident.: PRO-ABN-ENG-00012594.0014001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Engine Relight Envelope



No attempt should be made to restart an engine, if there are indications of engine damage, if the engine had been shut down because of an engine fire, or if there is a recognizable possibility that an attempted relight may result in fire.

Continued on the following page

[QRH] ENG RELIGHT (Cont'd)
IN FLIGHT

ENG MASTER (affected engine)..OFF
THR LEVER (affected engine)..Check IDLE
ENG MODE sel..IGN
X BLEED..OPEN

If outside the windmilling start envelope, the FADEC will open the starter valve.

WING ANTI ICE (for starter assist)..OFF
ENG MASTER (affected engine)..ON
ENG PARAMETERS (N2, EGT)..MONITOR

Engine light up should be achieved within 30 s after fuel flow increases.

AUTOMATIC START ABORT NOT AVAIL

Be aware that, unlike the procedure for auto start on ground, the crew must take appropriate action in case of an abnormal start.
Monitor N2. If uncertain about successful relight, move the thrust lever forward and check engine response.

- **When idle reached (ENG AVAIL):**

  ENG MODE sel..NORM
  TCAS MODE sel ....TA/RA

  Check that the selector is at TA/RA since, if the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN) has been applied, the TCAS mode selector may have been set to the TA position.

  X BLEED..AUTO
  Affected SYS..RESTORE

- **If no relight:**

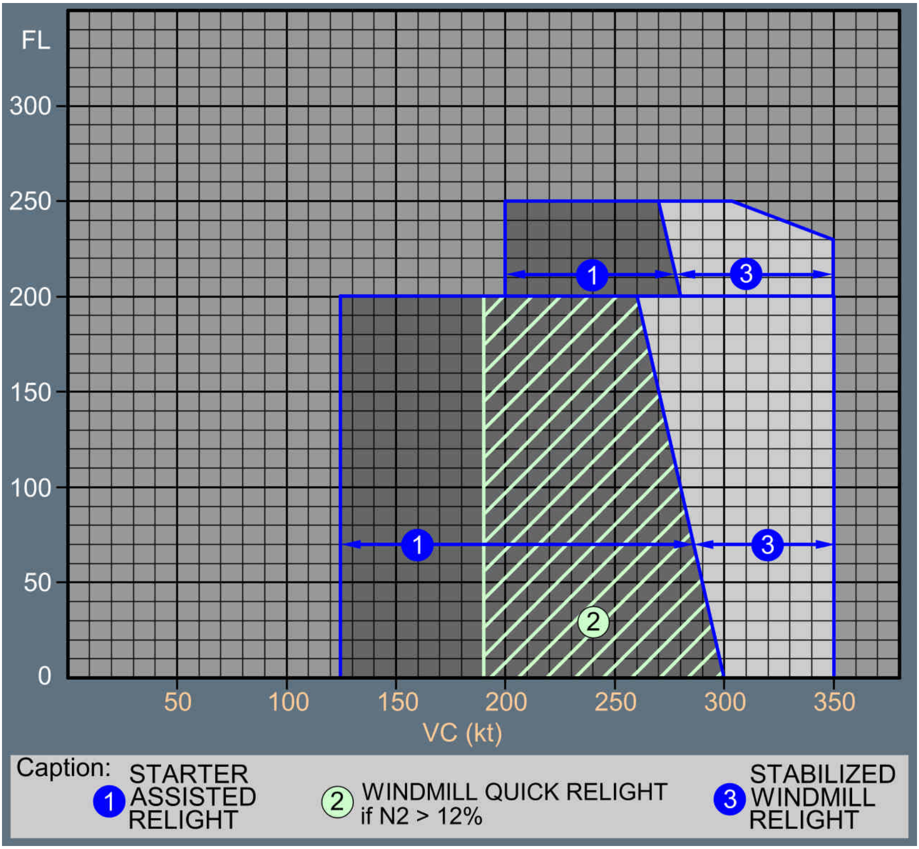
  ENG MASTER (affected engine)..OFF

  Wait 30 s before attempting a new start (to drain the engine).

[QRH] ENG RELIGHT
IN FLIGHT

Ident.: PRO-ABN-ENG-00012594.0026001 / 17 MAR 17
Applicable to: MSN 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Engine Relight Envelope



ENG MASTER (affected engine)....................OFF
THR LEVER (affected engine)....................Check IDLE
ENG MODE sel....................IGN

Continued on the following page

[QRH] ENG RELIGHT (Cont'd)
IN FLIGHT

X BLEED...OPEN

If outside the windmilling start envelope, the FADEC will open the starter valve.

WING ANTI ICE (for starter assist)...OFF
ENG MASTER (affected engine)..ON
ENG PARAMETERS (N2, EGT)...MONITOR

Engine light up should be achieved within 30 s after fuel flow increases.

AUTOMATIC START ABORT NOT AVAIL

Be aware that, unlike the procedure for auto start on ground, the crew must take appropriate action in case of an abnormal start.
Monitor N2. If uncertain about successful relight, move the thrust lever forward and check engine response.

- **When idle reached (ENG AVAIL):**
  ENG MODE sel...NORM
  TCAS MODE sel ◁ ....TA/RA
  Check that the selector is at TA/RA since, if the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN) has been applied, the TCAS mode selector may have been set to the TA position.
  X BLEED...AUTO
  Affected SYS...RESTORE

- **If no relight:**
  ENG MASTER (affected engine)..OFF
  Wait 30 s before attempting a new start (to drain the engine).

[QRH] ALL ENG FAIL

Applicable to: MSN 01143, 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

Ident.: PRO-ABN-ENG-AT-00017524.0004001 / 17 MAR 17

2

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:

- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:

- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb....................PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD....................280/0.77

Ident.: PRO-ABN-ENG-AT-00017540.0002001 / 04 NOV 15

L2 *Note:* *In the case of an "ENG ALL ENGINES FAILURE" during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017541.0003001 / 17 MAR 17

3

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 50 000 kg / 110 000 lb	-2.5
60 000 kg / 132 000 lb	-1.5
70 000 kg / 154 000 lb	-0.5

Ident.: PRO-ABN-ENG-AT-00017543.0004001 / 21 MAR 17

APU (below FL 250)........................START
THR LEVERS........................IDLE
FAC 1........................OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 280 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION........................INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1........................USE
ATC........................NOTIFY
CABIN CREW........................NOTIFY
SIGNS........................ON
CREW OXY MASK (FL > 100)........................USE
FUEL QUANTITY........................CHECK

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

4

- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0001001 / 31 AUG 17

- **If engine relight can be attempted:**
  ENG MODE sel..IGN
  - **Approaching or below FL 300: Windmill Relight**
    ALL ENG MASTERS..OFF 30 S THEN ON
    ENGs RELIGHT..TRY REGULARLY

    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

    L1 APU (below FL 250)..START
    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**
      ALL ENG MASTERS..OFF
      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

      L1 WING ANTI ICE..OFF
      APU BLEED..ON
      ENG MASTER (one at a time)..ON

      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR..ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

  L1 BARO REF (if avail)..SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁✳ .... OFF
GALLEY ◁✳ .... OFF
GALY & CAB ◁✳ .... OFF
ELT ◁✳ (when conditions permit).................... ON
ENGs RELIGHT.................... TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250) .... START
  WING ANTI ICE .... OFF
  APU BLEED (below FL 200) .... ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**
    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR .... ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail) .... SET
    COMMERCIAL ◁✻ .... OFF
    GALLEY ◁✻ .... OFF
    GALY & CAB ◁✻ .... OFF
    ELT ◁✻ (when conditions permit) .... ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

6

- **If ditching anticipated:**

  MIN RAT SPEED: 140 kt
  GPWS SYS...OFF
  GPWS TERR...OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 KEEP LANDING GEAR UP
    VAPP...DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW...NOTIFY FOR DITCHING
    DITCHING pb...ON

    L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

  L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT...ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS...OFF
    APU MASTER SW...OFF

  - **After ditching:**

    ATC (VHF 1)...NOTIFY
    ALL FIRE pb (ENGs & APU)...PUSH
    ALL AGENT (ENGs & APU)...DISCH
    EVACUATION...INITIATE

    L2 *Make a short and precise announcement to order the emergency evacuation.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Press the EVAC COMMAND pb .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0002001 / 31 AUG 17

7

- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.6 NM / 1000 FT (600 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS....................OFF

  GPWS TERR....................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **When in CONF 2 and VAPP:**

    GRAVITY GEAR EXTN handcrank....................PULL AND TURN

    L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

    L1 MAN PITCH TRIM NOT AVAILABLE

    L2 *Disregard the˝USE MAN PITCH TRIM˝ message on the PFD.*

    L1
    - **When L/G downlocked:**

      L/G lever....................DOWN

      APPROACH SPEED....................ADJUST

      L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

  L1 SPLRs....................ARM

  MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW....................NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**
  BRACE FOR IMPACT.......ORDER
- **At touchdown:**
  ALL ENG MASTERS.......OFF
  APU MASTER SW.......OFF

  BRACES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK.......ON
  ATC (VHF 1).......NOTIFY
  ALL FIRE pb (ENGs & APU).......PUSH
  ALL AGENT (ENGs & APU).......DISCH

L2 *Engine agent 2 is not available.*

L1 ■ **If evacuation required:**
EVACUATION.......INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb .

L1 ■ **If evacuation not required:**
CABIN CREW and PASSENGERS (PA).......NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 01158

Ident.: PRO-ABN-ENG-AT-00017524.0004001 / 17 MAR 17

8

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb....................PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD....................280/0.77

Ident.: PRO-ABN-ENG-AT-00017540.0002001 / 04 NOV 15

L2 *Note:* *In the case of an "ENG ALL ENGINES FAILURE" during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017541.0003001 / 17 MAR 17

9

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 50 000 kg / 110 000 lb	-2.5
60 000 kg / 132 000 lb	-1.5
70 000 kg / 154 000 lb	-0.5

Ident.: PRO-ABN-ENG-AT-00017543.0004001 / 21 MAR 17

APU (below FL 250)....................START
THR LEVERS....................IDLE
FAC 1....................OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 280 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION....................INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1....................USE
ATC....................NOTIFY
CABIN CREW....................NOTIFY
SIGNS....................ON
CREW OXY MASK (FL > 100)....................USE
FUEL QUANTITY....................CHECK

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0001001 / 31 AUG 17

- **If engine relight can be attempted:**
  ENG MODE sel.......... IGN
  - **Approaching or below FL 300: Windmill Relight**
    ALL ENG MASTERS.......... OFF 30 S THEN ON
    ENGs RELIGHT.......... TRY REGULARLY

    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

    L1 APU (below FL 250).......... START
    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**
      ALL ENG MASTERS.......... OFF
      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

      L1 WING ANTI ICE.......... OFF
      APU BLEED.......... ON
      ENG MASTER (one at a time).......... ON

      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR.......... ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

  L1 BARO REF (if avail).......... SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit)................................ ON
ENGs RELIGHT.................................... TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

11

- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250)....................START
  WING ANTI ICE....................OFF
  APU BLEED (below FL 200)....................ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**

    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR....................ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail)....................SET
    COMMERCIAL ◁ ....OFF
    GALLEY ◁ ....OFF
    GALY & CAB ◁ ....OFF
    ELT ◁ (when conditions permit)....................ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0002001 / 31 AUG 17

- **If ditching anticipated:**

MIN RAT SPEED: 140 KT
GPWS SYS....................OFF
GPWS TERR....................OFF

L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

L1
- **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching.**

FOR LANDING : USE FLAP 2

L2 *Only slats extend, and slowly.*

L1 KEEP LANDING GEAR UP
VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

- **At 2 000 ft AGL:**

CABIN CREW....................NOTIFY FOR DITCHING
DITCHING pb....................ON

L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

L1
- **At 500 ft AGL:**

BRACE FOR IMPACT....................ORDER

TOUCH DOWN AT MIN V/S

TARGET PITCH ATT 11 °

- **At touchdown:**

ALL ENG MASTERS....................OFF
APU MASTER SW....................OFF

- **After ditching:**

ATC (VHF 1)....................NOTIFY
ALL FIRE pb (ENGs & APU)....................PUSH
ALL AGENT (ENGs & APU)....................DISCH

L2 *Engine agent 2 is not available.*

L1 EVACUATION....................INITIATE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

L2

Make a short and precise announcement to order the emergency evacuation.
Press the EVAC COMMAND pb ◁ .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0002001 / 31 AUG 17

12

- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.6 NM / 1000 FT (600 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS...OFF

  GPWS TERR...OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP... DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

    - **When in CONF 2 and VAPP:**

      GRAVITY GEAR EXTN handcrank...PULL AND TURN

      L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

      L1 MAN PITCH TRIM NOT AVAILABLE

      L2 *Disregard the ″USE MAN PITCH TRIM″ message on the PFD.*

      L1
      - **When L/G downlocked:**

        L/G lever...DOWN

        APPROACH SPEED... ADJUST

        L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

    L1 SPLRs...ARM

    MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW... NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**

  BRACE FOR IMPACT....................ORDER

- **At touchdown:**

  ALL ENG MASTERS....................OFF
  APU MASTER SW....................OFF

  BRAKES ON ACCU ONLY

- **When aircraft stopped:**

  PARKING BRK....................ON
  ATC (VHF 1)....................NOTIFY
  ALL FIRE pb (ENGs & APU)....................PUSH
  ALL AGENT (ENGs & APU)....................DISCH

  L2 *Engine agent 2 is not available.*

  L1 ■ **If evacuation required:**

  EVACUATION....................INITIATE

  L2 *Make a short and precise announcement to order the emergency evacuation.*
  Press the EVAC COMMAND pb ✳ .

  L1 ■ **If evacuation not required:**

  CABIN CREW and PASSENGERS (PA)....................NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 02924-03002, 03058, 03180-03211

Ident.: PRO-ABN-ENG-AT-00017524.0005001 / 17 MAR 17

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb....................PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD....................300/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0005001 / 17 MAR 17

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 50 000 kg / 110 000 lb	-4.5
60 000 kg / 132 000 lb	-3.5
70 000 kg / 154 000 lb	-2.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0005001 / 21 MAR 17

APU (below FL 250)....................START
THR LEVERS....................IDLE
FAC 1....................OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 300 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	**FL 200**	**FL 300**	**FL 400**
Distance (NM)	40	60	80

DIVERSION....................INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1....................USE
ATC....................NOTIFY
CABIN CREW....................NOTIFY
SIGNS....................ON
CREW OXY MASK (FL > 100)....................USE
FUEL QUANTITY....................CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

13

- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0010001 / 31 AUG 17

- **If engine relight can be attempted:**
  ENG MODE sel.......... IGN
  - **Approaching or below FL 270: Windmill Relight**
    ALL ENG MASTERS.......... OFF 30 S THEN ON
    ENGs RELIGHT.......... TRY REGULARLY

L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

L1 APU (below FL 250).......... START

- **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**
  ALL ENG MASTERS.......... OFF
  OPTIMUM SPEED: GREEN DOT (Refer to QRH/OPS Operating Speeds)

L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

L1 WING ANTI ICE.......... OFF
APU BLEED.......... ON
ENG MASTER (one at a time).......... ON

L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT

L2
- *Secure loose equipment*
- *Prepare survival equipment*
- *Fasten belts and shoulder harnesses.*

L1 RAM AIR.......... ON

L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

L1 BARO REF (if avail).......... SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ⪡ .... OFF
GALLEY ⪡ .... OFF
GALY & CAB ⪡ .... OFF
ELT ⪡ (when conditions permit).. ON
ENGs RELIGHT.. TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

14

- **If engine relight cannot be attempted:**

(It includes the cases of no fuel remaining or engine damage)

OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

APU (below FL 250)..START
WING ANTI ICE..OFF
APU BLEED (below FL 200)..ON

SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**

  PREPARE CABIN AND COCKPIT

L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

L1 RAM AIR..ON

L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

L1 BARO REF (if avail)..SET
COMMERCIAL ◁ ....OFF
GALLEY ◁ ....OFF
GALY & CAB ◁ ....OFF
ELT ◁ (when conditions permit)..ON

USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0005001 / 10 MAY 21

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- **If ditching anticipated:**

  MIN RAT SPEED: 140 kt
  GPWS SYS.......OFF
  GPWS TERR.......OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 KEEP LANDING GEAR UP
    VAPP.......DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW.......NOTIFY FOR DITCHING
    DITCHING pb.......ON

    L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

    L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT.......ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS.......OFF
    APU MASTER SW.......OFF

  - **After ditching:**

    ATC (VHF 1).......NOTIFY
    ALL FIRE pb (ENGs & APU).......PUSH
    ALL AGENT (ENGs & APU).......DISCH
    EVACUATION.......INITIATE

    L2 *Make a short and precise announcement to order the emergency evacuation.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Press the EVAC COMMAND pb ◁ .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0002001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.6 NM / 1000 FT (600 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS.......................................OFF

  GPWS TERR.......................................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP....................................... DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **When in CONF 2 and VAPP:**

    GRAVITY GEAR EXTN handcrank.......................................PULL AND TURN

    L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

    L1 MAN PITCH TRIM NOT AVAILABLE

    L2 *Disregard the ″USE MAN PITCH TRIM″ message on the PFD.*

    L1
    - **When L/G downlocked:**

      L/G lever.......................................DOWN

      APPROACH SPEED....................................... ADJUST

      L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

  L1 SPLRs.......................................ARM

  MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW....................................... NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**

  BRACE FOR IMPACT.......ORDER

- **At touchdown:**

  ALL ENG MASTERS.......OFF
  APU MASTER SW.......OFF

  BRAKES ON ACCU ONLY

- **When aircraft stopped:**

  PARKING BRK.......ON
  ATC (VHF 1).......NOTIFY
  ALL FIRE pb (ENGs & APU).......PUSH
  ALL AGENT (ENGs & APU).......DISCH

L2 *Engine agent 2 is not available.*

L1
  - ■ **If evacuation required:**

    EVACUATION.......INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb ◁ *.*

L1
  - ■ **If evacuation not required:**

    CABIN CREW and PASSENGERS (PA).......NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 03035-03047, 03111

Ident.: PRO-ABN-ENG-AT-00017524.0005001 / 17 MAR 17

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb..PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD..300/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0005001 / 17 MAR 17

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 50 000 kg / 110 000 lb	-4.5
60 000 kg / 132 000 lb	-3.5
70 000 kg / 154 000 lb	-2.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0005001 / 21 MAR 17

APU (below FL 250)...START
THR LEVERS...IDLE
FAC 1...OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 300 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION...INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁✳ /ATC1...USE
ATC...NOTIFY
CABIN CREW...NOTIFY
SIGNS...ON
CREW OXY MASK (FL > 100)...USE
FUEL QUANTITY...CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0010001 / 31 AUG 17

- **If engine relight can be attempted:**
  ENG MODE sel...IGN
  - **Approaching or below FL 270: Windmill Relight**
    ALL ENG MASTERS.......................................OFF 30 S THEN ON
    ENGs RELIGHT.......................................TRY REGULARLY
    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*
    L1 APU (below FL 250).......................................START
    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**
      ALL ENG MASTERS.......................................OFF
      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)
      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*
      L1 WING ANTI ICE.......................................OFF
      APU BLEED.......................................ON
      ENG MASTER (one at a time).......................................ON
      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR.......................................ON
  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*
  L1 BARO REF (if avail).......................................SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit).. ON
ENGs RELIGHT.. TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250)..START
  WING ANTI ICE..OFF
  APU BLEED (below FL 200)..ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**

    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR..ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail)..SET
    COMMERCIAL ◁ ....OFF
    GALLEY ◁ ....OFF
    GALY & CAB ◁ ....OFF
    ELT ◁ (when conditions permit)..ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0002001 / 31 AUG 17

- **If ditching anticipated:**

  MIN RAT SPEED: 140 KT
  GPWS SYS......OFF
  GPWS TERR......OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching.**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 KEEP LANDING GEAR UP
    VAPP......DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW......NOTIFY FOR DITCHING
    DITCHING pb......ON

    L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

  L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT......ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS......OFF
    APU MASTER SW......OFF

  - **After ditching:**

    ATC (VHF 1)......NOTIFY
    ALL FIRE pb (ENGs & APU)......PUSH
    ALL AGENT (ENGs & APU)......DISCH

    L2 *Engine agent 2 is not available.*

    L1 EVACUATION......INITIATE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

L2

Make a short and precise announcement to order the emergency evacuation.
Press the EVAC COMMAND pb ◁ *.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0002001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.6 NM / 1000 FT (600 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS....................OFF

  GPWS TERR....................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **When in CONF 2 and VAPP:**

    GRAVITY GEAR EXTN handcrank....................PULL AND TURN

    L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

    L1 MAN PITCH TRIM NOT AVAILABLE

    L2 *Disregard the "USE MAN PITCH TRIM" message on the PFD.*

    L1
    - **When L/G downlocked:**

      L/G lever....................DOWN

      APPROACH SPEED....................ADJUST

      L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

    L1 SPLRs....................ARM

    MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW....................NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**

  BRACE FOR IMPACT...ORDER

- **At touchdown:**

  ALL ENG MASTERS...OFF
  APU MASTER SW...OFF

  BRAKES ON ACCU ONLY

- **When aircraft stopped:**

  PARKING BRK...ON
  ATC (VHF 1)...NOTIFY
  ALL FIRE pb (ENGs & APU)...PUSH
  ALL AGENT (ENGs & APU)...DISCH

L2 *Engine agent 2 is not available.*

L1 **■ If evacuation required:**

EVACUATION...INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb .

L1 **■ If evacuation not required:**

CABIN CREW and PASSENGERS (PA)...NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ENG-AT-00017524.0004001 / 17 MAR 17

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L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb..PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD..280/0.77

Ident.: PRO-ABN-ENG-AT-00017540.0002001 / 04 NOV 15

L2 *Note:* *In the case of an "ENG ALL ENGINES FAILURE" during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017541.0004001 / 17 MAR 17

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L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 60 000 kg / 132 000 lb	-2.5
70 000 kg / 154 000 lb	-1.5
80 000 kg / 176 000 lb	-0.5

Ident.: PRO-ABN-ENG-AT-00017543.0004001 / 21 MAR 17

APU (below FL 250)...START
THR LEVERS...IDLE
FAC 1...OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 280 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION...INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1...USE
ATC...NOTIFY
CABIN CREW...NOTIFY
SIGNS...ON
CREW OXY MASK (FL > 100)...USE
FUEL QUANTITY...CHECK

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

22

- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0001001 / 31 AUG 17

- **If engine relight can be attempted:**

  ENG MODE sel .... IGN

  - **Approaching or below FL 300: Windmill Relight**

    ALL ENG MASTERS .... OFF 30 S THEN ON

    ENGs RELIGHT .... TRY REGULARLY

    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

    L1 APU (below FL 250) .... START

    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**

      ALL ENG MASTERS .... OFF

      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

      L1 WING ANTI ICE .... OFF

      APU BLEED .... ON

      ENG MASTER (one at a time) .... ON

      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1

- **When below 10 000 ft AGL:**

  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR .... ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

  L1 BARO REF (if avail) .... SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁✱ .... OFF
GALLEY ◁✱ .... OFF
GALY & CAB ◁✱ .... OFF
ELT ◁✱ (when conditions permit).......... ON
ENGs RELIGHT.......... TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

23

- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250)....................START
  WING ANTI ICE....................OFF
  APU BLEED (below FL 200)....................ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**
    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR....................ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail)....................SET
    COMMERCIAL ◁✻ ....OFF
    GALLEY ◁✻ ....OFF
    GALY & CAB ◁✻ ....OFF
    ELT ◁✻ (when conditions permit)....................ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0005001 / 10 MAY 21

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- **If ditching anticipated:**

MIN RAT SPEED: 140 kt
GPWS SYS.....OFF
GPWS TERR.....OFF

L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

L1

- **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching:**

FOR LANDING : USE FLAP 2

L2 *Only slats extend, and slowly.*

L1 KEEP LANDING GEAR UP
VAPP.....DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

- **At 2 000 ft AGL:**

CABIN CREW.....NOTIFY FOR DITCHING
DITCHING pb.....ON

L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

L1

- **At 500 ft AGL:**

BRACE FOR IMPACT.....ORDER

TOUCH DOWN AT MIN V/S

TARGET PITCH ATT 11 °

- **At touchdown:**

ALL ENG MASTERS.....OFF
APU MASTER SW.....OFF

- **After ditching:**

ATC (VHF 1).....NOTIFY
ALL FIRE pb (ENGs & APU).....PUSH
ALL AGENT (ENGs & APU).....DISCH
EVACUATION.....INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Press the EVAC COMMAND pb ◁* .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0003001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.5 NM / 1000 FT (650 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS...OFF

  GPWS TERR...OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1

  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP...DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

    - **When in CONF 2 and VAPP:**

      GRAVITY GEAR EXTN handcrank...PULL AND TURN

      L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

      L1

      MAN PITCH TRIM NOT AVAILABLE

      L2 *Disregard the ˝USE MAN PITCH TRIM˝ message on the PFD.*

      L1

      - **When L/G downlocked:**

        L/G lever...DOWN

        APPROACH SPEED...ADJUST

        L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

    L1 SPLRs...ARM

    MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW...NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**

  BRACE FOR IMPACT.......ORDER

- **At touchdown:**

  ALL ENG MASTERS.......OFF
  APU MASTER SW.......OFF

  BRAKES ON ACCU ONLY

- **When aircraft stopped:**

  PARKING BRK.......ON
  ATC (VHF 1).......NOTIFY
  ALL FIRE pb (ENGs & APU).......PUSH
  ALL AGENT (ENGs & APU).......DISCH

L2 *Engine agent 2 is not available.*

L1
- ■ **If evacuation required:**

  EVACUATION.......INITIATE

  L2 *Make a short and precise announcement to order the emergency evacuation.*
  Press the EVAC COMMAND pb ⊲ .

L1
- ■ **If evacuation not required:**

  CABIN CREW and PASSENGERS (PA).......NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 05005-05342, 05591-05883

Ident.: PRO-ABN-ENG-AT-00017524.0005001 / 17 MAR 17

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb..PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD..300/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0005001 / 17 MAR 17

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE

Gross Weight	Pitch (°)
At or below 50 000 kg / 110 000 lb	-4.5
60 000 kg / 132 000 lb	-3.5
70 000 kg / 154 000 lb	-2.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0005001 / 21 MAR 17

APU (below FL 250)..START
THR LEVERS..IDLE
FAC 1..OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 300 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION..INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1..USE
ATC..NOTIFY
CABIN CREW..NOTIFY
SIGNS..ON
CREW OXY MASK (FL > 100)..USE
FUEL QUANTITY..CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0012001 / 31 AUG 17

- **If engine relight can be attempted:**
  ENG MODE sel...IGN
  - **Approaching or below FL 250: Windmill Relight**
    APU...START
    ALL ENG MASTERS...OFF 30 S THEN ON
    ENGs RELIGHT...TRY REGULARLY
    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*
    - L1 **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**
      ALL ENG MASTERS...OFF
      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)
      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*
      L1 WING ANTI ICE...OFF
      APU BLEED...ON
      ENG MASTER (one at a time)...ON
      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

- L1 **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT
  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR...ON
  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*
  L1 BARO REF (if avail)...SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit).. ON
ENGs RELIGHT.. TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

APU (below FL 250)..START
WING ANTI ICE..OFF
APU BLEED (below FL 200)..ON

SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**

  PREPARE CABIN AND COCKPIT

L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

L1 RAM AIR..ON

L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

L1 BARO REF (if avail)..SET
COMMERCIAL ◁✳ ....OFF
GALLEY ◁✳ ....OFF
GALY & CAB ◁✳ ....OFF
ELT ◁✳ (when conditions permit)..ON

USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

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- **If ditching anticipated:**

  MIN RAT SPEED: 140 kt
  GPWS SYS....................OFF
  GPWS TERR....................OFF

L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching:**

    FOR LANDING : USE FLAP 2

L2 *Only slats extend, and slowly.*

L1 KEEP LANDING GEAR UP
VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW....................NOTIFY FOR DITCHING
    DITCHING pb....................ON

L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT....................ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS....................OFF
    APU MASTER SW....................OFF

  - **After ditching:**

    ATC (VHF 1)....................NOTIFY
    ALL FIRE pb (ENGs & APU)....................PUSH
    ALL AGENT (ENGs & APU)....................DISCH
    EVACUATION....................INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Press the EVAC COMMAND pb ◁ .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0002001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.6 NM / 1000 FT (600 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS....................OFF

  GPWS TERR....................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

- **When in CONF 2 and VAPP:**

  GRAVITY GEAR EXTN handcrank....................PULL AND TURN

  L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

  L1 MAN PITCH TRIM NOT AVAILABLE

  L2 *Disregard the″USE MAN PITCH TRIM″ message on the PFD.*

  L1
  - **When L/G downlocked:**

    L/G lever....................DOWN

    APPROACH SPEED....................ADJUST

    L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

L1 SPLRs....................ARM

MAX BRK PR : 1 000 PSI

- **At 2 000 ft AGL:**

  CABIN CREW....................NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**
  BRACE FOR IMPACT.........ORDER
- **At touchdown:**
  ALL ENG MASTERS.........OFF
  APU MASTER SW.........OFF
  BRAKES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK.........ON
  ATC (VHF 1).........NOTIFY
  ALL FIRE pb (ENGs & APU).........PUSH
  ALL AGENT (ENGs & APU).........DISCH

L2 *Engine agent 2 is not available.*

L1
  - **If evacuation required:**
    EVACUATION.........INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb ◁ .

L1
  - **If evacuation not required:**
    CABIN CREW and PASSENGERS (PA).........NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 04827-04974, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-ENG-AT-00017524.0005001 / 17 MAR 17

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb....................PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD....................300/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0005001 / 17 MAR 17

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 50 000 kg / 110 000 lb	-4.5
60 000 kg / 132 000 lb	-3.5
70 000 kg / 154 000 lb	-2.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0005001 / 21 MAR 17

APU (below FL 250)....................START
THR LEVERS....................IDLE
FAC 1....................OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 300 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION....................INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1....................USE
ATC....................NOTIFY
CABIN CREW....................NOTIFY
SIGNS....................ON
CREW OXY MASK (FL > 100)....................USE
FUEL QUANTITY....................CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0012001 / 31 AUG 17

- **If engine relight can be attempted:**

  ENG MODE sel..IGN

  - **Approaching or below FL 250: Windmill Relight**

    APU..START
    ALL ENG MASTERS..OFF 30 S THEN ON
    ENGs RELIGHT..TRY REGULARLY

    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

    L1
    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**

      ALL ENG MASTERS..OFF

      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

      L1 WING ANTI ICE..OFF
      APU BLEED..ON
      ENG MASTER (one at a time)..ON

      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**

  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR..ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

  L1 BARO REF (if avail)..SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit).. ON
ENGs RELIGHT.. TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250)..START
  WING ANTI ICE..OFF
  APU BLEED (below FL 200)..ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**
    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR..ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail)..SET
    COMMERCIAL ◁✻ ....OFF
    GALLEY ◁✻ ....OFF
    GALY & CAB ◁✻ ....OFF
    ELT ◁✻ (when conditions permit)..ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0002001 / 31 AUG 17

- **If ditching anticipated:**

  MIN RAT SPEED: 140 KT
  GPWS SYS....................OFF
  GPWS TERR....................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching.**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 KEEP LANDING GEAR UP
    VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW....................NOTIFY FOR DITCHING
    DITCHING pb....................ON

    L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

  L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT....................ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS....................OFF
    APU MASTER SW....................OFF

  - **After ditching:**

    ATC (VHF 1)....................NOTIFY
    ALL FIRE pb (ENGs & APU)....................PUSH
    ALL AGENT (ENGs & APU)....................DISCH

    L2 *Engine agent 2 is not available.*

    L1 EVACUATION....................INITIATE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

L2

Make a short and precise announcement to order the emergency evacuation.
Press the EVAC COMMAND pb ◁* .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0002001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.6 NM / 1000 FT (600 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS.....OFF

  GPWS TERR.....OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1

  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP.....DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **When in CONF 2 and VAPP:**

    GRAVITY GEAR EXTN handcrank.....PULL AND TURN

    L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

    L1 MAN PITCH TRIM NOT AVAILABLE

    L2 *Disregard the˝USE MAN PITCH TRIM˝ message on the PFD.*

    L1

    - **When L/G downlocked:**

      L/G lever.....DOWN

      APPROACH SPEED.....ADJUST

      L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

  L1 SPLRs.....ARM

  MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW.....NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**
  BRACE FOR IMPACT........ORDER
- **At touchdown:**
  ALL ENG MASTERS........OFF
  APU MASTER SW........OFF
  BRAKES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK........ON
  ATC (VHF 1)........NOTIFY
  ALL FIRE pb (ENGs & APU)........PUSH
  ALL AGENT (ENGs & APU)........DISCH

L2 *Engine agent 2 is not available.*

L1 ■ **If evacuation required:**
EVACUATION........INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb ◁ .

L1 ■ **If evacuation not required:**
CABIN CREW and PASSENGERS (PA)........NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-07098

Ident.: PRO-ABN-ENG-AT-00017524.0005001 / 17 MAR 17

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb..........PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD..........300/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0006001 / 17 MAR 17

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 60 000 kg / 132 000 lb	-4.5
70 000 kg / 154 000 lb	-3.5
80 000 kg / 176 000 lb	-2.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0005001 / 21 MAR 17

APU (below FL 250)..START
THR LEVERS..IDLE
FAC 1..OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 300 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION..INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1..USE
ATC..NOTIFY
CABIN CREW..NOTIFY
SIGNS..ON
CREW OXY MASK (FL > 100)..USE
FUEL QUANTITY..CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0012001 / 31 AUG 17

- **If engine relight can be attempted:**
  ENG MODE sel.. IGN
  - **Approaching or below FL 250: Windmill Relight**
    APU.. START
    ALL ENG MASTERS.. OFF 30 S THEN ON
    ENGs RELIGHT.. TRY REGULARLY

    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

    L1
    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**
      ALL ENG MASTERS.. OFF
      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

      L1 WING ANTI ICE.. OFF
      APU BLEED.. ON
      ENG MASTER (one at a time).. ON

      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR.. ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

  L1 BARO REF (if avail).. SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit).......... ON
ENGs RELIGHT.......... TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

APU (below FL 250)..START
WING ANTI ICE..OFF
APU BLEED (below FL 200)..ON

SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT

L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

L1 RAM AIR..ON

L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

L1 BARO REF (if avail)..SET
COMMERCIAL ◁✳ ....OFF
GALLEY ◁✳ ....OFF
GALY & CAB ◁✳ ....OFF
ELT ◁✳ (when conditions permit)..ON

USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0005001 / 10 MAY 21

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- **If ditching anticipated:**

  MIN RAT SPEED: 140 kt
  GPWS SYS....................OFF
  GPWS TERR....................OFF

L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

L1
- **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching:**

  FOR LANDING : USE FLAP 2

L2 *Only slats extend, and slowly.*

L1 KEEP LANDING GEAR UP
VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

- **At 2 000 ft AGL:**

  CABIN CREW....................NOTIFY FOR DITCHING
  DITCHING pb....................ON

L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

L1
- **At 500 ft AGL:**

  BRACE FOR IMPACT....................ORDER

  TOUCH DOWN AT MIN V/S

  TARGET PITCH ATT 11 °

- **At touchdown:**

  ALL ENG MASTERS....................OFF
  APU MASTER SW....................OFF

- **After ditching:**

  ATC (VHF 1)....................NOTIFY
  ALL FIRE pb (ENGs & APU)....................PUSH
  ALL AGENT (ENGs & APU)....................DISCH
  EVACUATION....................INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Press the EVAC COMMAND pb .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0003001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.5 NM / 1000 FT (650 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS..OFF

  GPWS TERR..OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP..DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

    - **When in CONF 2 and VAPP:**

      GRAVITY GEAR EXTN handcrank..PULL AND TURN

      L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

      L1 MAN PITCH TRIM NOT AVAILABLE

      L2 *Disregard the "USE MAN PITCH TRIM" message on the PFD.*

      L1
      - **When L/G downlocked:**

        L/G lever..DOWN

        APPROACH SPEED..ADJUST

        L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

    L1 SPLRs..ARM

    MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW..NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**

  BRACE FOR IMPACT........ORDER

- **At touchdown:**

  ALL ENG MASTERS........OFF
  APU MASTER SW........OFF

  BRAKES ON ACCU ONLY

- **When aircraft stopped:**

  PARKING BRK........ON
  ATC (VHF 1)........NOTIFY
  ALL FIRE pb (ENGs & APU)........PUSH
  ALL AGENT (ENGs & APU)........DISCH

L2 *Engine agent 2 is not available.*

L1
  - **If evacuation required:**

    EVACUATION........INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb ◁ .

L1
  - **If evacuation not required:**

    CABIN CREW and PASSENGERS (PA)........NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 06895

Ident.: PRO-ABN-ENG-AT-00017524.0005001 / 17 MAR 17

L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb.......................................PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD.......................................300/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0006001 / 17 MAR 17

L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 60 000 kg / 132 000 lb	-4.5
70 000 kg / 154 000 lb	-3.5
80 000 kg / 176 000 lb	-2.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0005001 / 21 MAR 17

APU (below FL 250)....................START
THR LEVERS....................IDLE
FAC 1....................OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLIDING DISTANCE : 2 NM / 1000 FT

AT 300 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION....................INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1....................USE
ATC....................NOTIFY
CABIN CREW....................NOTIFY
SIGNS....................ON
CREW OXY MASK (FL > 100)....................USE
FUEL QUANTITY....................CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0012001 / 31 AUG 17

- **If engine relight can be attempted:**

  ENG MODE sel.......... IGN

  - **Approaching or below FL 250: Windmill Relight**

    APU.......... START
    ALL ENG MASTERS.......... OFF 30 S THEN ON
    ENGs RELIGHT.......... TRY REGULARLY

    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

    L1
    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**

      ALL ENG MASTERS.......... OFF

      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

      L1 WING ANTI ICE.......... OFF
      APU BLEED.......... ON
      ENG MASTER (one at a time).......... ON

      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**

  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR.......... ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

  L1 BARO REF (if avail).......... SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit).. ON
ENGs RELIGHT.. TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250)..START
  WING ANTI ICE..OFF
  APU BLEED (below FL 200)..ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**

    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR..ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail)..SET
    COMMERCIAL ◁ ....OFF
    GALLEY ◁ ....OFF
    GALY & CAB ◁ ....OFF
    ELT ◁ (when conditions permit)..ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0002001 / 31 AUG 17

- **If ditching anticipated:**

  MIN RAT SPEED: 140 KT
  GPWS SYS....OFF
  GPWS TERR....OFF

L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching.**

    FOR LANDING : USE FLAP 2

L2 *Only slats extend, and slowly.*

L1
    KEEP LANDING GEAR UP
    VAPP....DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW....NOTIFY FOR DITCHING
    DITCHING pb....ON

L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT....ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS....OFF
    APU MASTER SW....OFF

  - **After ditching:**

    ATC (VHF 1)....NOTIFY
    ALL FIRE pb (ENGs & APU)....PUSH
    ALL AGENT (ENGs & APU)....DISCH

L2 *Engine agent 2 is not available.*

L1 EVACUATION....INITIATE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

L2

Make a short and precise announcement to order the emergency evacuation.
Press the EVAC COMMAND pb ◁ .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0003001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.5 NM / 1000 FT (650 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS.....OFF

  GPWS TERR.....OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP.....DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

    - **When in CONF 2 and VAPP:**

      GRAVITY GEAR EXTN handcrank.....PULL AND TURN

      L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

      L1 MAN PITCH TRIM NOT AVAILABLE

      L2 *Disregard the "USE MAN PITCH TRIM" message on the PFD.*

      L1
      - **When L/G downlocked:**

        L/G lever.....DOWN

        APPROACH SPEED.....ADJUST

        L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

    L1 SPLRs.....ARM

    MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW.....NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**
  BRACE FOR IMPACT....................ORDER
- **At touchdown:**
  ALL ENG MASTERS....................OFF
  APU MASTER SW....................OFF

  BRAKES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK....................ON
  ATC (VHF 1)....................NOTIFY
  ALL FIRE pb (ENGs & APU)....................PUSH
  ALL AGENT (ENGs & APU)....................DISCH

L2 *Engine agent 2 is not available.*

L1
- **If evacuation required:**
  EVACUATION....................INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb .

L1
- **If evacuation not required:**
  CABIN CREW and PASSENGERS (PA)....................NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-ENG-AT-00017524.0004001 / 17 MAR 17

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L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb..PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD..280/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0003001 / 17 MAR 17

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L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE	
Gross Weight	**Pitch (°)**
At or below 50 000 kg / 110 000 lb	-2.5
60 000 kg / 132 000 lb	-1.5
70 000 kg / 154 000 lb	-0.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0007001 / 17 MAR 17

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APU (below FL 250)........START
THR LEVERS........IDLE
GLIDING DISTANCE : 2 NM / 1000 FT

AT 280 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION........INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁ /ATC1........USE
ATC........NOTIFY
CABIN CREW........NOTIFY
SIGNS........ON
CREW OXY MASK (FL > 100)........USE
FUEL QUANTITY........CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0015001 / 07 DEC 17

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- **If engine relight can be attempted:**

  ENG MODE sel...IGN

  - **Approaching or below FL 260 : Windmill Relight**

    ALL ENG MASTERS.......................................OFF 30 S THEN ON

    ENGs RELIGHT.......................................TRY REGULARLY

    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*

    L1 APU (below FL 250).......................................START

    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**

      ALL ENG MASTERS.......................................OFF

      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*

      L1 WING ANTI ICE.......................................OFF

      APU BLEED.......................................ON

      ENG MASTER (one at a time).......................................ON

      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**

  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR.......................................ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

  L1 BARO REF (if avail).......................................SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit).......... ON
ENGs RELIGHT.......... TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250) .... START
  WING ANTI ICE .... OFF
  APU BLEED (below FL 200) .... ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**

    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR .... ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail) .... SET
    COMMERCIAL ⊲ .... OFF
    GALLEY ⊲ .... OFF
    GALY & CAB ⊲ .... OFF
    ELT ⊲ (when conditions permit) .... ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

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- **If ditching anticipated:**

  MIN RAT SPEED: 140 kt
  GPWS SYS.....OFF
  GPWS TERR.....OFF

L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching:**

    FOR LANDING : USE FLAP 2

L2 *Only slats extend, and slowly.*

L1 KEEP LANDING GEAR UP
VAPP.....DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW.....NOTIFY FOR DITCHING
    DITCHING pb.....ON

L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT.....ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS.....OFF
    APU MASTER SW.....OFF

  - **After ditching:**

    ATC (VHF 1).....NOTIFY
    ALL FIRE pb (ENGs & APU).....PUSH
    ALL AGENT (ENGs & APU).....DISCH
    EVACUATION.....INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Press the EVAC COMMAND pb ◁ .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.6 NM / 1000 FT (600 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS....................OFF

  GPWS TERR....................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP....................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

- **When in CONF 2 and VAPP:**

  GRAVITY GEAR EXTN handcrank....................PULL AND TURN

  L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

  L1 MAN PITCH TRIM NOT AVAILABLE

  L2 *Disregard the ″USE MAN PITCH TRIM″ message on the PFD.*

  L1
  - **When L/G downlocked:**

    L/G lever....................DOWN

    APPROACH SPEED....................ADJUST

    L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

L1 SPLRs....................ARM

MAX BRK PR : 1 000 PSI

- **At 2 000 ft AGL:**

  CABIN CREW....................NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**
  BRACE FOR IMPACT....................ORDER
- **At touchdown:**
  ALL ENG MASTERS....................OFF
  APU MASTER SW....................OFF

  BRAKES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK....................ON
  ATC (VHF 1)....................NOTIFY
  ALL FIRE pb (ENGs & APU)....................PUSH
  ALL AGENT (ENGs & APU)....................DISCH

  L2 *Engine agent 2 is not available.*

  L1 ■ **If evacuation required:**
  EVACUATION....................INITIATE

  L2 *Make a short and precise announcement to order the emergency evacuation.*
  Press the EVAC COMMAND pb ◁ .

  L1 ■ **If evacuation not required:**
  CABIN CREW and PASSENGERS (PA)....................NOTIFY

[QRH] ALL ENG FAIL

Applicable to: MSN 11531

Ident.: PRO-ABN-ENG-AT-00017524.0004001 / 17 MAR 17

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L2 The flight crew must apply this paper procedure when required by the ENG ALL ENGINES FAILURE ECAM alert.

During the application of the ALL ENGINES FAILURE paper procedure:
- If one or more engines relight, apply the corresponding ECAM procedure instead, or
- If none of the engines relights, continue to apply the ALL ENGINES FAILURE paper procedure. If there is sufficient time, clear both the ECAM alerts and the ECAM STATUS page.

The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator.

The ALL ENGINES FAILURE paper procedure includes a fuel quantity check to determine if either of the following applies:
- Engine relight can be attempted, or
- Engine relight cannot be attempted.

If engine relight can be attempted, the flight crew can attempt successive engine relights. First without the APU bleed (windmill start), then with the APU bleed, if available.
If engine relight cannot be attempted, the flight crew must apply the procedure for forced landing or ditching.

L1 First apply the following actions of the ENG ALL ENGINES FAILURE ECAM procedure (if not already applied):

LAND ASAP

EMER ELEC PWR MAN ON pb....................PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD....................280/0.77

Ident.: PRO-ABN-ENG-AT-00017541.0004001 / 17 MAR 17

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L2

PITCH TARGET IN CASE OF SPEED INDICATION FAILURE

Gross Weight	**Pitch (°)**
At or below 60 000 kg / 132 000 lb	-2.5
70 000 kg / 154 000 lb	-1.5
80 000 kg / 176 000 lb	-0.5

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017543.0007001 / 17 MAR 17

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APU (below FL 250).....START
THR LEVERS.....IDLE
GLIDING DISTANCE : 2 NM / 1000 FT

AT 280 KT: 2 NM / 1000 FT (500 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*40*	*60*	*80*

DIVERSION.....INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 Then, as long as none of the engines relights, apply the following paper procedure. If there is sufficient time, clear all ECAM alerts, and clear the ECAM STATUS page.

VHF1/HF1 ◁✱ /ATC1.....USE
ATC.....NOTIFY
CABIN CREW.....NOTIFY
SIGNS.....ON
CREW OXY MASK (FL > 100).....USE
FUEL QUANTITY.....CHECK

Ident.: PRO-ABN-ENG-AT-00021154.0001001 / 17 MAR 17

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- **If engine relight can be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight can be attempted.

- **If engine relight cannot be attempted:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If engine relight cannot be attempted.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017544.0015001 / 07 DEC 17

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- **If engine relight can be attempted:**
  ENG MODE sel.. IGN
  - **Approaching or below FL 260 : Windmill Relight**
    ALL ENG MASTERS.. OFF 30 S THEN ON
    ENGs RELIGHT.. TRY REGULARLY
    L2 *Windmill relight attempts can be repeated until successful, or until the APU bleed is available.*
    L1 APU (below FL 250).. START
    - **If APU available and windmill relight unsuccessful : Starter Assisted Relight below FL 200**
      ALL ENG MASTERS.. OFF
      OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)
      L2 *Green dot speed is the optimum speed for starter-assisted relight with the APU bleed.*
      L1 WING ANTI ICE.. OFF
      APU BLEED.. ON
      ENG MASTER (one at a time).. ON
      L2 *Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.*

L1 SPEED BRAKES AVAILABLE

L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

L1
- **When below 10 000 ft AGL:**
  PREPARE CABIN AND COCKPIT

  L2
  - *Secure loose equipment*
  - *Prepare survival equipment*
  - *Fasten belts and shoulder harnesses.*

  L1 RAM AIR.. ON
  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*
  L1 BARO REF (if avail).. SET

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

COMMERCIAL ◁ .... OFF
GALLEY ◁ .... OFF
GALY & CAB ◁ .... OFF
ELT ◁ (when conditions permit).................... ON
ENGs RELIGHT.................... TRY REGULARLY

USE RUDDER WITH CARE

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00021158.0001001 / 31 AUG 17

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- **If engine relight cannot be attempted:**

  (It includes the cases of no fuel remaining or engine damage)

  OPTIMUM SPEED: GREEN DOT (*Refer to QRH/OPS Operating Speeds*)

  L2 *Green dot speed is the optimum speed to glide as far as possible, in the event of an all engines failure.*

  L1 GLIDING DISTANCE : 2.5 NM / 1000 FT

GLIDING DISTANCE AT GREEN DOT: 2.5 NM / 1000 FT (400 FT/NM) NO WIND			
Flight Level	***FL 200***	***FL 300***	***FL 400***
Distance (NM)	*50*	*75*	*100*

  APU (below FL 250) .... START
  WING ANTI ICE .... OFF
  APU BLEED (below FL 200) .... ON

  SPEED BRAKES AVAILABLE

  L2 *Speed brakes remain available. If necessary, extend the speed brakes to increase the descent rate.*

  L1
  - **When below 10 000 ft AGL:**

    PREPARE CABIN AND COCKPIT

    L2
    - *Secure loose equipment*
    - *Prepare survival equipment*
    - *Fasten belts and shoulder harnesses.*

    L1 RAM AIR .... ON

    L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft and to provide fresh air to the cabin. There is fresh air ventilation in the cockpit and cabin only when the differential pressure is below 1 PSI.*

    L1 BARO REF (if avail) .... SET
    COMMERCIAL ◁✳ .... OFF
    GALLEY ◁✳ .... OFF
    GALY & CAB ◁✳ .... OFF
    ELT ◁✳ (when conditions permit) .... ON

    USE RUDDER WITH CARE

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **If ditching anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated.

- **If forced landing anticipated:**

  Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated.

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017529.0005001 / 10 MAY 21

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- **If ditching anticipated:**

  MIN RAT SPEED: 140 kt
  GPWS SYS........................OFF
  GPWS TERR........................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for ditching:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 KEEP LANDING GEAR UP
    VAPP........................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

  - **At 2 000 ft AGL:**

    CABIN CREW........................NOTIFY FOR DITCHING
    DITCHING pb........................ON

    L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

  L1
  - **At 500 ft AGL:**

    BRACE FOR IMPACT........................ORDER

    TOUCH DOWN AT MIN V/S

    TARGET PITCH ATT 11 °

  - **At touchdown:**

    ALL ENG MASTERS........................OFF
    APU MASTER SW........................OFF

  - **After ditching:**

    ATC (VHF 1)........................NOTIFY
    ALL FIRE pb (ENGs & APU)........................PUSH
    ALL AGENT (ENGs & APU)........................DISCH
    EVACUATION........................INITIATE

    L2 *Make a short and precise announcement to order the emergency evacuation.*

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Press the EVAC COMMAND pb .

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

Ident.: PRO-ABN-ENG-AT-00017530.0003001 / 31 AUG 17

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- **If forced landing anticipated:**

  DESCENT SLOPE (CONF 2, L/G DOWN) : 1.5 NM / 1000 FT (650 FT/NM)

  MIN RAT SPEED: 140 KT

  GPWS SYS.......................................OFF

  GPWS TERR.......................................OFF

  L2 *Set the SYS pb-sw and the TERR pb-sw to off in order to avoid nuisance warnings.*

  L1
  - **At appropriate altitude (above 3 000 ft AGL), configure aircraft for landing:**

    FOR LANDING : USE FLAP 2

    L2 *Only slats extend, and slowly.*

    L1 VAPP.......................................DETERMINE

Gross Weight	*40 t / 90 klb*	*50 t / 110 klb*	*60 t / 130 klb*	*70 t / 155 klb*	*80 t / 175 klb*	*90 t / 200 klb*	*95 t / 210 klb*
VAPP (kt)	*150 kt*	*150 kt*	*163 kt*	*173 kt*	*183 kt*	*193 kt*	*198 kt*

    - **When in CONF 2 and VAPP:**

      GRAVITY GEAR EXTN handcrank.......................................PULL AND TURN

      L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP.*

      L1 MAN PITCH TRIM NOT AVAILABLE

      L2 *Disregard the "USE MAN PITCH TRIM" message on the PFD.*

      L1
      - **When L/G downlocked:**

        L/G lever.......................................DOWN

        APPROACH SPEED.......................................ADJUST

        L2 *Adjust the speed to the above-mentioned VAPP. However, to reach the landing field or runway, it is possible to increase the approach speed.*

    L1 SPLRs.......................................ARM

    MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW.......................................NOTIFY FOR LANDING

Continued on the following page

[QRH] ALL ENG FAIL (Cont'd)

- **At 500 ft AGL:**

  BRACE FOR IMPACT..........ORDER

- **At touchdown:**

  ALL ENG MASTERS..........OFF
  APU MASTER SW..........OFF

  BRAKES ON ACCU ONLY

- **When aircraft stopped:**

  PARKING BRK..........ON
  ATC (VHF 1)..........NOTIFY
  ALL FIRE pb (ENGs & APU)..........PUSH
  ALL AGENT (ENGs & APU)..........DISCH

  L2 *Engine agent 2 is not available.*

  L1 ■ **If evacuation required:**

  EVACUATION..........INITIATE

  L2 *Make a short and precise announcement to order the emergency evacuation.*
  Press the EVAC COMMAND pb ◁ .

  L1 ■ **If evacuation not required:**

  CABIN CREW and PASSENGERS (PA)..........NOTIFY

[QRH] ENG DUAL FAILURE - FUEL REMAINING

Applicable to: MSN 02014

Ident.: PRO-ABN-ENG-X-00012309.0159001 / 17 MAR 17

As long as none of the engines recover, the flight crew must apply this paper procedure when required by the ECAM ENG DUAL FAILURE procedure. If time permits, clear ECAM alerts, and check the ECAM STATUS page.

LAND ASAP

OPTIMUM RELIGHT SPD.......... 280 kt

PITCH TARGET In case of speed indication failure:	
Gross Weight	***Pitch (°)***
At or below 50 000 kg/110 000 lb	*-2.5*
60 000 kg/132 000 lb	*-1.5*
70 000 kg/154 000 lb	*-0.5*

AVERAGE GLIDING DISTANCE : 2.2 NM / 1000 FT (280kt NO WIND)

DETERMINE LANDING STRATEGY

VHF1/HF1 ◁ /ATC1.......... USE

ATC.......... NOTIFY

Notify air traffic control of the nature of the emergency, and state intentions. Switch to code A7700, or transmit a distress message on one of the following frequencies: VHF frequency 121.5 MHz, HF 2 182 kHz or 8 364 kHz.

- **If no relight after 30 s:**

  ENG MASTERS.......... OFF 30 S / ON

  Unassisted start attempts can be repeated until successful, or until APU bleed is available.

- **If unsuccessful:**

  CREW OXY MASKS (above FL 100).......... ON

  Cabin altitude will increase, due to the lack of engine bleed: The EXCESS CAB ALT warning could be triggered. Depending on the situation, to gain gliding distance, the flight crew may disregard the ECAM emergency descent requirement, because passengers will be provided with oxygen for a sufficient period of time.

  APU (IF AVAIL).......... START

  If APU is available, APU may be started when below FL 250 and APU BLEED may be used for engine start below FL 200.

  WING ANTI ICE.......... OFF

  APU BLEED.......... ON

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

- **In sequence:**

  ENG MASTERS (all non running engines)....OFF

  After 30 s

  ENG MASTERS (one at a time)....ON

  Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-X-00012310.0131001 / 17 MAR 17

- **When APU bleed is available or if engine restart is definitively considered impossible:**

OPTIMUM SPEED WITH ALL ENGINES INOPERATIVE (KNOTS)			
Gross Weight (1 000 kg)	At or below FL 200	FL 300	FL 400
78	236	246	256
76	232	242	252
72	224	234	244
68	216	226	236
64	208	218	228
60	200	210	220
56	192	202	212
52	184	194	204
48	176	186	196
44	168	178	188
40	160	170	180

AVERAGE GLIDING DISTANCE: 2.5 NM / 1000 FT (NO WIND)

AVERAGE RATE OF DESCENT: 1 600 FT/MIN

PREPARE CABIN AND COCKPIT

- *Loose equipment secured.*
- *Survival equipments prepared.*
- *Belts and shoulder harnesses locked.*

SIGNS...ON
COMMERCIAL...OFF

USE RUDDER WITH CARE

As hydraulic power is only available from the RAT, avoid large and rapid rudder deflection.

- **When below FL 150:**

RAM AIR...ON

Ident.: PRO-ABN-ENG-X-00012311.0001001 / 17 MAR 17

BARO REF..SET
CREW MASKS/OXY SUPPLY (below FL 100)..OFF
ELT ◁ (when conditions permit)..ON

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

- **If forced landing anticipated:**

  AVERAGE GLIDING DISTANCE 1.2NM / 1000FT (CONF3, L/G DOWN, NO WIND)

  - **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP.. DETERMINE

Gross Weight (1 000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*154*	*159*	*163*	*167*	*171*	*172*

  - **At a suitable altitude (not below 3 000 ft AGL):**
    - **When in CONF 3 and VAPP:**
      GRAVITY GEAR EXTN handcrank.. PULL AND TURN

      FLT CTL DIRECT LAW

      MAN PITCH TRIM NOT AVAILABLE

    - **When L/G downlocked:**
      L/G lever...DOWN
      APPROACH SPEED... ADJUST

      MAX SPEED : 200 kt

      ADJUST SPEED TO REACH LANDING FIELD
      SPLRs..ARM

      MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**
    CABIN CREW... NOTIFY FOR LANDING

  - **At 500 ft AGL:**
    BRACE FOR IMPACT...ORDER

  - **At touchdown:**
    ENG MASTERS.. OFF
    APU MASTER SW...OFF

    BRAKES ON ACCU ONLY

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

- **When aircraft stopped:**

  PARKING BRK.....ON
  ATC.....NOTIFY
  FIRE pb (ENGs & APU).....PUSH
  AGENT (ENGs & APU).....DISCH

  - **If evacuation required:**

    EVACUATION.....INITIATE

    Make a short and precise announcement to order the emergency evacuation.
    Press the EVAC COMMAND pb ◁ .

    ELT ◁ .....CHECK EMITTING

    If not, switch on the transmitter.

  - **If evacuation not required:**

    CABIN CREW and PASSENGERS (PA).....NOTIFY

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-X-00012313.0090001 / 17 MAR 17

- **If ditching anticipated:**
  - **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP..DETERMINE

Gross Weight (1 000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*154*	*159*	*163*	*167*	*171*	*172*

  - **At a suitable altitude (not below 3 000 ft AGL):**

    KEEP LANDING GEAR UP

    FOR FLARE: TARGET PITCH 11 ° & MIN V/S

    Note: *Prefer ditching parallel to the swell. If that causes a strong crosswind, ditch into the wind.*

  - **At 2 000 ft AGL:**
    CABIN CREW..NOTIFY FOR DITCHING
    DITCHING pb..ON
  - **At 500 ft AGL:**
    BRACE FOR IMPACT..ORDER
  - **At touchdown:**
    ENG MASTERS..OFF
    APU MASTER SW..OFF
  - **After ditching:**
    ATC (VHF 1)..NOTIFY
    FIRE pb (ENGs & APU)..PUSH
    AGENTs (ENGs & APU)..DISCH
    EVACUATION..INITIATE
    ELT ....CHECK EMITTING
    If not, switch on the transmitter.

[QRH] ENG DUAL FAILURE - FUEL REMAINING

Applicable to: MSN 06561

Ident.: PRO-ABN-ENG-X-00012309.0061001 / 17 MAR 17

As long as none of the engines recover, the flight crew must apply this paper procedure when required by the ECAM ENG DUAL FAILURE procedure. If time permits, clear ECAM alerts, and check the ECAM STATUS page.

LAND ASAP

OPTIMUM RELIGHT SPD.. 300 kt

PITCH TARGET In case of speed indication failure:	
Gross Weight	***Pitch (°)***
At or below 50 000 kg/110 000 lb	*-4.5*
60 000 kg/132 000 lb	*-3.5*
70 000 kg/154 000 lb	*-2.5*

AVERAGE GLIDING DISTANCE : 2 NM / 1000 FT (300kt NO WIND)

DETERMINE LANDING STRATEGY
VHF1/HF1 ◁ /ATC1..USE
ATC..NOTIFY
TRANSPONDER..SELECT A7700

Notify air traffic control of the nature of the emergency, and state intentions. If there is no contact with air traffic control Switch to code A7700, or transmit a distress message on one of the following frequencies: VHF frequency 121.5 MHz, HF 2 182 kHz or 8 364 kHz.

- **If no relight after 30 s:**
  ENG MASTERS..OFF 30 S / ON
  Unassisted start attempts can be repeated until successful, or until APU bleed is available.
- **If unsuccessful:**
  CREW OXY MASKS (above FL 100)..ON
  Cabin altitude will increase, due to the lack of engine bleed: The EXCESS CAB ALT warning could be triggered. Depending on the situation, to gain gliding distance, the flight crew may disregard the ECAM emergency descent requirement, because passengers will be provided with oxygen for a sufficient period of time.
  APU (IF AVAIL)..START
  If the APU is available, it may be started when below FL 250 and the APU BLEED may be used for engine start below FL 200.
  WING ANTI ICE..OFF

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

APU BLEED...ON

- **In sequence:**

  ENG MASTERS (all non running engines)...OFF

  After 30 s

  ENG MASTERS (one at a time)...ON

  Between each attempt to relight the same engine, wait at least 30 s with the associated ENG MASTER lever set to OFF.

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-X-00012310.0041001 / 17 MAR 17

- **When APU bleed is available or if engine restart is definitively considered impossible:**

OPTIMUM SPEED WITH ALL ENGINES INOPERATIVE (KNOTS)			
Gross Weight (1 000 kg)	**At or below FL 200**	**FL 300**	**FL 400**
78	241	251	261
76	237	247	257
72	229	239	249
68	221	231	241
64	213	223	233
60	205	215	225
56	197	207	217
52	189	199	209
48	181	191	201
44	173	183	193
40	165	175	185

AVERAGE GLIDING DISTANCE: 2.5 NM / 1000 FT (NO WIND)

AVERAGE RATE OF DESCENT: 1 600 FT/MIN

PREPARE CABIN AND COCKPIT

- *Loose equipment secured.*
- *Survival equipments prepared.*
- *Belts and shoulder harnesses locked.*

SIGNS...ON
COMMERCIAL...OFF

USE RUDDER WITH CARE

As hydraulic power is only available from the RAT, avoid large and rapid rudder deflection.

- **When below FL 150:**

RAM AIR...ON

Ident.: PRO-ABN-ENG-X-00012311.0001001 / 17 MAR 17

BARO REF...SET
CREW MASKS/OXY SUPPLY (below FL 100)...OFF
ELT ◁✳ (when conditions permit)..ON

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-X-00012312.0065001 / 09 MAY 17

- **If forced landing anticipated:**

  AVERAGE GLIDING DISTANCE 1.2NM / 1000FT (CONF3, L/G DOWN, NO WIND)

  - **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP.. DETERMINE

Gross Weight (1 000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*155*	*159*	*163*	*167*	*171*	*173*

  - **At a suitable altitude (not below 3 000 ft AGL):**
    - **When in CONF 3 and VAPP:**
      GRAVITY GEAR EXTN handcrank.................... PULL AND TURN

      FLT CTL DIRECT LAW

      MAN PITCH TRIM NOT AVAILABLE

    - **When L/G downlocked:**
      L/G lever..DOWN
      APPROACH SPEED.. ADJUST

      MAX SPEED : 200 kt

      ADJUST SPEED TO REACH LANDING FIELD
      SPLRs..ARM

      MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**
    CABIN CREW.................................... NOTIFY FOR LANDING

  - **At 500 ft AGL:**
    BRACE FOR IMPACT...ORDER

  - **At touchdown:**
    ENG MASTERS.. OFF
    APU MASTER SW...OFF

    BRAKES ON ACCU ONLY

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

- **When aircraft stopped:**

  PARKING BRK..........ON
  ATC..........NOTIFY
  FIRE pb (ENGs & APU)..........PUSH
  AGENT (ENGs & APU)..........DISCH

  - **If evacuation required:**

    EVACUATION..........INITIATE

    Make a short and precise announcement to order the emergency evacuation.
    Press the EVAC COMMAND pb ◁ .

    ELT ◁ ....CHECK EMITTING

    If not, switch on the transmitter.

  - **If evacuation not required:**

    CABIN CREW and PASSENGERS (PA)..........NOTIFY

Continued on the following page

[QRH] ENG DUAL FAILURE - FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-X-00012313.0065001 / 17 MAR 17

- **If ditching anticipated:**
  - **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP.. DETERMINE

Gross Weight (1 000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*155*	*159*	*163*	*167*	*171*	*173*

- **At a suitable altitude (not below 3 000 ft AGL):**

  KEEP LANDING GEAR UP

  FOR FLARE: TARGET PITCH 11 ° & MIN V/S

  Note: Prefer ditching parallel to the swell. If that causes a strong crosswind, ditch into the wind.

- **At 2 000 ft AGL:**

  CABIN CREW.. NOTIFY FOR DITCHING
  DITCHING pb.. ON

- **At 500 ft AGL:**

  BRACE FOR IMPACT.. ORDER

- **At touchdown:**

  ENG MASTERS.. OFF
  APU MASTER SW.. OFF

- **After ditching:**

  ATC (VHF 1).. NOTIFY
  FIRE pb (ENGs & APU).. PUSH
  AGENTs (ENGs & APU).. DISCH
  EVACUATION.. INITIATE
  ELT .... CHECK EMITTING

  If not, switch on the transmitter.

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING

Applicable to: MSN 02014

Ident.: PRO-ABN-ENG-Y-00012602.0132001 / 17 MAR 17

The flight crew must apply this paper procedure when required by the ENG DUAL FAILURE procedure. If time permits, clear ECAM alerts, and check the ECAM STATUS page.

OPTIMUM SPEED.. 220 kt / GREEN DOT

Initially, fly 220 kt, because the PFD may not display the correct green dot speed. Then fly the green dot speed according to the following table:

GREEN DOT SPEED WITH ALL ENGINES INOPERATIVE (KNOTS)			
Gross Weight (1000 kg)	***At or below FL 200***	***FL 300***	***FL 400***
68	*216*	*226*	*236*
64	*208*	*218*	*228*
60	*200*	*210*	*220*
56	*192*	*202*	*212*
52	*184*	*194*	*204*
48	*176*	*186*	*196*
44	*168*	*178*	*188*
40	*160*	*170*	*180*

AVERAGE GLIDING DISTANCE: 2.5 NM / 1000 FT (GREEN DOT NO WIND)
AVERAGE RATE OF DESCENT: 1600 FT/MIN

DETERMINE LANDING STRATEGY
VHF1/HF1 ⊲ /ATC1...USE
ATC...NOTIFY
TRANSPONDER...SELECT A7700

Notify air traffic control of the nature of the emergency, and state intentions. Switch to code A7700, or transmit a distress message on one of the following frequencies: VHF frequency 121.5 MHz, HF 2 182 kHz or 8 364 kHz.

CREW OXY MASKS (above FL 100)...ON

Cabin altitude will increase due to the lack of engine bleed: The EXCESS CAB ALT warning could be triggered. Depending on the situation, to gain gliding distance, the flight crew may disregard the ECAM emergency descent requirement, because passengers will be provided with oxygen for a sufficient period of time.

PREPARE CABIN AND COCKPIT

- *Loose equipment secured.*

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

- *Survival equipments prepared.*
- *Belts and shoulder harnesses locked.*

SIGNS.......................................ON
COMMERCIAL.......................................OFF
USE RUDDER WITH CARE

As hydraulic power is only available from the RAT, avoid large and rapid rudder deflection.

● **When below FL 150:**

RAM AIR.......................................ON

Switch ON the RAM AIR to ensure complete depressurization.

Ident.: PRO-ABN-ENG-Y-00012317.0001001 / 17 MAR 17

BARO REF.......................................SET
CREW MASKS/OXY SUPPLY (below FL 100).......................................OFF
ELT (when conditions permit).......................................ON

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-Y-00012318.0089001 / 09 MAY 17

- **If forced landing anticipated:**

  AVERAGE GLIDING DISTANCE 1.2NM / 1000FT (CONF3, L/G DOWN, NO WIND)

  - **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP.. DETERMINE

Gross Weight (1000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*154*	*159*	*163*	*167*	*171*	*172*

    - **At a suitable altitude (not below 3 000 ft AGL):**
      - **When in CONF 3 and VAPP :**

        GRAVITY GEAR EXTN handcrank........................ PULL AND TURN

        FLT CTL DIRECT LAW

        MAN PITCH TRIM NOT AVAILABLE

      - **When L/G downlocked :**

        L/G lever..DOWN
        APPROACH SPEED... ADJUST

        ADJUST SPEED TO REACH LANDING FIELD

        MAX SPEED : 200 kt
        SPLRs..ARM

        MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW.. NOTIFY FOR LANDING

  - **At 500 ft AGL:**

    BRACE FOR IMPACT...ORDER

  - **At touchdown:**

    ENG MASTERS... OFF
    BRAKES ON ACCU ONLY

  - **When aircraft stopped:**

    PARKING BRK...ON

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

ATC..NOTIFY

- **If evacuation required:**

  EVACUATION..INITIATE

  Make a short and precise announcement to order the emergency evacuation.
  Press the EVAC COMMAND pb ◁ .

  ELT ◁ ....CHECK EMITTING

  If not, switch on the transmitter

- **If evacuation not required:**

  CABIN CREW and PASSENGERS (PA)..........................NOTIFY

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-Y-00012319.0092001 / 17 MAR 17

- **If ditching anticipated:**
  - **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP...DETERMINE

Gross Weight (1 000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*154*	*159*	*163*	*167*	*171*	*172*

  - **At a suitable altitude (not below 3 000 ft AGL):**

    KEEP LANDING GEAR UP

    FOR FLARE: TARGET PITCH 11 ° & MIN V/S

    Note: *Prefer ditching parallel to the swell. If that causes a strong crosswind, ditch into the wind.*

  - **At 2 000 ft AGL:**

    CABIN CREW...NOTIFY FOR DITCHING
    DITCHING pb...ON

  - **At 500 ft AGL:**

    BRACE FOR IMPACT...ORDER

  - **At touchdown:**

    ENG MASTERS...OFF

  - **After ditching:**

    ATC (VHF 1)...NOTIFY
    EVACUATION...INITIATE
    ELT ....CHECK EMITTING

    If not, switch on the transmitter.

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING

Applicable to: MSN 06561

Ident.: PRO-ABN-ENG-Y-00012602.0108001 / 17 MAR 17

The flight crew must apply this paper procedure when required by the ENG DUAL FAILURE procedure. If time permits, clear ECAM alerts, and check the ECAM STATUS page.

OPTIMUM SPEED.. 220 kt / GREEN DOT

Initially, fly 220 kt, because the PFD may not display the correct green dot speed. Then fly the green dot speed according to the following table:

GREEN DOT SPEED WITH ALL ENGINES INOPERATIVE (KNOTS)			
Gross Weight (1000 kg)	***At or below FL 200***	***FL 300***	***FL 400***
68	*221*	*231*	*241*
64	*213*	*223*	*233*
60	*205*	*215*	*225*
56	*197*	*207*	*217*
52	*189*	*199*	*209*
48	*181*	*191*	*201*
44	*173*	*183*	*193*
40	*165*	*175*	*185*

AVERAGE GLIDING DISTANCE: 2.5 NM / 1000 FT (GREEN DOT NO WIND)
AVERAGE RATE OF DESCENT: 1600 FT/MIN

DETERMINE LANDING STRATEGY
VHF1/HF1 ◁ /ATC1..USE
ATC...NOTIFY
TRANSPONDER..SELECT A7700

Notify air traffic control of the nature of the emergency, and state intentions. Switch to code A7700, or transmit a distress message on one of the following frequencies: VHF frequency 121.5 MHz, HF 2 182 kHz or 8 364 kHz.

CREW OXY MASKS (above FL 100)..ON

Cabin altitude will increase due to the lack of engine bleed: The EXCESS CAB ALT warning could be triggered. Depending on the situation, to gain gliding distance, the flight crew may disregard the ECAM emergency descent requirement, because passengers will be provided with oxygen for a sufficient period of time.

PREPARE CABIN AND COCKPIT

- *Loose equipment secured.*

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

- *Survival equipments prepared.*
- *Belts and shoulder harnesses locked.*

SIGNS.....ON
COMMERCIAL.....OFF
USE RUDDER WITH CARE

As hydraulic power is only available from the RAT, avoid large and rapid rudder deflection.

- **When below FL 150:**

  RAM AIR.....ON

  Switch ON the RAM AIR to ensure complete depressurization.

Ident.: PRO-ABN-ENG-Y-00012317.0001001 / 17 MAR 17

BARO REF.....SET
CREW MASKS/OXY SUPPLY (below FL 100).....OFF
ELT ◁ (when conditions permit).....ON

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-Y-00012318.0065001 / 09 MAY 17

- **If forced landing anticipated:**

  AVERAGE GLIDING DISTANCE 1.2NM / 1000FT (CONF3, L/G DOWN, NO WIND)

  - **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP.. DETERMINE

Gross Weight (1000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*155*	*159*	*163*	*167*	*171*	*173*

    - **At a suitable altitude (not below 3 000 ft AGL):**
      - **When in CONF 3 and VAPP :**

        GRAVITY GEAR EXTN handcrank.. PULL AND TURN

        FLT CTL DIRECT LAW

        MAN PITCH TRIM NOT AVAILABLE

      - **When L/G downlocked :**

        L/G lever..DOWN
        APPROACH SPEED... ADJUST

        ADJUST SPEED TO REACH LANDING FIELD

        MAX SPEED : 200 kt
        SPLRs..ARM

        MAX BRK PR : 1 000 PSI

  - **At 2 000 ft AGL:**

    CABIN CREW.. NOTIFY FOR LANDING

  - **At 500 ft AGL:**

    BRACE FOR IMPACT...ORDER

  - **At touchdown:**

    ENG MASTERS... OFF
    BRAKES ON ACCU ONLY

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

● **When aircraft stopped:**

PARKING BRK...ON
ATC...NOTIFY

■ **If evacuation required:**

EVACUATION... INITIATE

Make a short and precise announcement to order the emergency evacuation.
Press the EVAC COMMAND pb ◁ .

ELT ◁ ....CHECK EMITTING

If not, switch on the transmitter

■ **If evacuation not required:**

CABIN CREW and PASSENGERS (PA)..NOTIFY

Continued on the following page

[QRH] ENG DUAL FAILURE - NO FUEL REMAINING (Cont'd)

Ident.: PRO-ABN-ENG-Y-00012319.0065001 / 17 MAR 17

- ● **If ditching anticipated:**
  - ● **For approach:**

    FOR LANDING : USE FLAP 3

    SLATS AVAIL ONLY

    MIN APPR SPEED : 150 kt
    VAPP.. DETERMINE

Gross Weight (1 000 kg)	*40*	*44*	*48*	*52*	*56*	*60*	*64*	*68*	*72*	*76*	*78*
VAPP	*150*	*150*	*150*	*150*	*150*	*155*	*159*	*163*	*167*	*171*	*173*

  - ● **At a suitable altitude (not below 3 000 ft AGL):**

    KEEP LANDING GEAR UP

    FOR FLARE: TARGET PITCH 11 ° & MIN V/S

    Note: *Prefer ditching parallel to the swell. If that causes a strong crosswind, ditch into the wind.*

  - ● **At 2 000 ft AGL:**
    CABIN CREW.. NOTIFY FOR DITCHING
    DITCHING pb..ON

  - ● **At 500 ft AGL:**
    BRACE FOR IMPACT...ORDER

  - ● **At touchdown:**
    ENG MASTERS.. OFF

  - ● **After ditching:**
    ATC (VHF 1).. NOTIFY
    EVACUATION...INITIATE
    ELT .... CHECK EMITTING
    If not, switch on the transmitter.

[QRH] ENG 1(2) STALL

Ident.: PRO-ABN-ENG-00015730.0002001 / 05 MAR 19

56 **Applicable to: MSN 08495-09324, 10949-11597**

This crew must apply this procedure when instructed by ECAM, or if they detect an engine stall before FADEC:

- **On Ground:**
  THR LEVER (affected engine)....IDLE
  ENG MASTER (effected engine)....OFF
- **In Flight:**
  THR LEVER (affected engine)....IDLE
  ENG PARAMETERS (affected engine)....CHECK
  - **If abnormal ENG parameters:**
    ENG MASTER (affected engine).... OFF
    ENG 1(2) SHUT DOWN
    Apply the ENG SHUT DOWN ECAM procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN). Engine restart at crew discretion.
  - **If normal ENG parameters:**
    WING ANTI ICE....ON
    Operation of ENG and WING ANTI ICE will increase the stall margin but EGT increases accordingly.
    THR LEVER (affected engine)....SLOWLY MOVE FORWARD
    - **If stall recurs:**
      THR LEVER (affected engine)....MOVE BACKWARD
      Reduce thrust and operate below the thrust threshold where stall recurs.
    - **If stall does not recur:**
      CONTINUE NORMAL ENGINE OPERATION

[QRH] ENG 1(2) STALL

Ident.: PRO-ABN-ENG-00015730.0001001 / 05 MAR 19

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-07098

This crew must apply this procedure when instructed by ECAM, or if they detect an engine stall before FADEC:

- **On Ground:**
  THR LEVER (affected engine)....IDLE
  ENG MASTER (affected engine)....OFF
- **In Flight:**
  THR LEVER (affected engine)....IDLE
  ENG PARAMETERS (affected engine)....CHECK
  - **If abnormal ENG parameters:**
    ENG MASTER (AFFECTED ENGINE)....OFF
    ENG 1(2) SHUT DOWN
    Apply the ENG SHUT DOWN ECAM procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN). Engine restart at crew discretion.
  - **If normal ENG parameters:**
    ENG ANTI ICE (affected engine)....ON
    Operation of ENG and WING ANTI ICE will increase the stall margin but EGT increases accordingly.
    THR LEVER (affected engine)....SLOWLY MOVE FORWARD
    - **If stall recurs:**
      THR LEVER (affected engine)....MOVE BACKWARD
      Reduce thrust and operate below the thrust threshold where stall recurs.
    - **If stall does not recur:**
      CONTINUE NORMAL ENGINE OPERATION

[QRH] ENGINE TAILPIPE FIRE

Ident.: PRO-ABN-ENG-00017781.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Internal engine fire may be encountered during engine start or engine shutdown.
Internal engine fire may be seen by the ground crew, or the EGT may fail to decrease after the ENG MASTER lever is set to OFF.

CAUTION	External fire agents can cause severe corrosive damage. Consider the use of external fire agents only if the following procedure does not stop engine tailpipe fire.

ENG MASTER (affected engine) .... OFF

Note: *Do not press the engine fire pushbutton, since this would cut off the FADEC power supply, which would prevent motoring sequence.*

ENG MAN START pb (affected engine) .... OFF
ESTABLISH AIR BLEED PRESS

Select the APU, or opposite BLEED, to motor the engine.
If APU BLEED is not available, and the opposite engine is shut down, connect external pneumatic power (if readily available).

BEACON .... ON
ENG MODE sel .... CRANK
ENG MAN START pb (affected engine) .... ON

For aircraft equipped with IAE or PW6000 engines, the start valve automatically reopens, when N2 is below 10 %.
For aircraft equipped with CFM 56-5A/5B engines, the start valve automatically reopens, when N2 is below 20 %
For aircraft equipped with CFM LEAP-1A engines, the start valve automatically reopens, when N2 is below approximately 60 %

- **When fire stopped:**
  ENG MAN START pb (affected engine) .... OFF
  ENG MODE sel .... NORM

  Maintenance action is due.

[QRH] ENGINE TAILPIPE FIRE

Ident.: PRO-ABN-ENG-00017781.0002001 / 17 MAR 17

57 **Applicable to: MSN 08495-09324, 10949-11597**

Internal engine fire may be encountered during engine start or engine shutdown.
Internal engine fire may be seen by the ground crew, or the EGT may fail to decrease after the ENG MASTER lever is set to OFF.

CAUTION	External fire agents can cause severe corrosive damage. Consider the use of external fire agents only if the following procedure does not stop engine tailpipe fire.

ENG MASTER (affected engine) .... OFF

Note: *Do not press the engine fire pushbutton, since this would cut off the FADEC power supply, which would prevent motoring sequence.*

ENG MAN START pb (affected engine).......... OFF
ESTABLISH AIR BLEED PRESS

Select the APU, or opposite BLEED, to motor the engine.
If APU BLEED is not available, and the opposite engine is shut down, connect external pneumatic power (if readily available).

BEACON .... ON
ENG MODE sel.......... CRANK
ENG MAN START pb (affected engine).......... ON

The start valve automatically reopens, when N2 is below 15 %.

- **When fire stopped:**
  ENG MAN START pb (affected engine).......... OFF
  ENG MODE sel.......... NORM

  Maintenance action is due.

[QRH] HIGH ENGINE VIBRATION

Ident.: PRO-ABN-ENG-00012294.0006001 / 19 SEP 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

The VIB advisory on ECAM (N1 ≥ 6 units, N2 ≥ 4.3 units) is mainly a guideline for the flight crew to monitor engine parameters more closely.
The ECAM vibration advisory alone does not require engine shut down.

Note: 1. *High engine vibration may be accompanied by cockpit and cabin smoke and/or the smell of burning. This may be due only to compressor blade tip contact with associated abradable seals.*
2. *High N1 vibration are generally accompanied by perceivable airframe vibrations. High N2 vibration can occur without perceivable airframe vibrations.*

ENG PARAMETERS .... CHECK

Check engine parameters and especially EGT; crosscheck with other engine. Report in maintenance log.

- **If icing suspected:**

  An increase of engine vibration in icing conditions with or without engine anti-ice may be due to fan blades and/or spinner icing. Icing may be suspected if N1 vibration occurs without other engine parameters variation.

  A/THR .... OFF
  THRUST (one engine at a time).......... IDLE THEN INCREASE N1 > 80 %

  Reduce thrust to idle if flight conditions permit.
  If ENG ANTI ICE is off, switch it ON ***at idle fan speed,*** *one engine after the other with approximately 30 s interval.*
  To shed ice, it may be necessary to perform several thrust variations between idle and a thrust compatible with the flight phase. For efficient ice shedding, thrust should be increased to at least 80% N1 if flight conditions permit.
  After each thrust variation, vibrations should decrease, indicating the progress of the ice shedding.
  When the ice is shed, vibrations should return to normal and the flight crew can resume normal engine operation.

- **If icing not suspected:**
  - **If above vibration advisory and flight conditions permit:**
    THRUST (affected engine).......... REDUCE BELOW ADVISORY THRESHOLD

- **After landing, if vibrations continue :** SHUT DOWN ENGINE WHEN POSSIBLE

Continued on the following page

[QRH] HIGH ENGINE VIBRATION (Cont'd)

[QRH] HIGH ENGINE VIBRATION

Ident.: PRO-ABN-ENG-00012294.0001001 / 19 SEP 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The VIB advisory on ECAM (N1 ≥ 5 units, N2 ≥ 5 units) is mainly a guideline for the flight crew to monitor engine parameters more closely.

■ **On ground, during ENG start if N2 VIB > 6.5:**

ENG MASTER (affected engine)..........OFF

A maximum of three new start attempts can be performed. Each start attempt must be initiated after the engine has completely spooled down.

● **If still N2 VIB after third new start attempt:** REQUEST MAINTENANCE ACTION

Report in log book any N2 vibration above 5.

■ **In all other cases of high N1 or N2 vibrations:**

The ECAM vibration advisory alone does not require engine shut down.

Note: 1. *High engine vibration may be accompanied by cockpit and cabin smoke and/or the smell of burning. This may be due only to compressor blade tip contact with associated abradable seals.*
2. *High N1 vibration are generally accompanied by perceivable airframe vibrations. High N2 vibration can occur without perceivable airframe vibrations.*

ENG PARAMETERS ....CHECK

Check engine parameters and especially EGT; crosscheck with other engine. Report in maintenance log.

■ **If icing suspected:**

An increase of engine vibration in icing conditions with or without engine anti-ice may be due to fan blades and/or spinner icing. Icing may be suspected if N1 vibration occurs without other engine parameters variation.

A/THR ....OFF
THRUST (one engine at a time)..........IDLE THEN INCREASE N1 > 90 %

Reduce thrust to idle if flight conditions permit.
*If ENG ANTI ICE is off, switch it ON **at idle fan speed,** one engine after the other with approximately 30 s interval.*

Continued on the following page

[QRH] HIGH ENGINE VIBRATION (Cont'd)

To shed ice, it may be necessary to perform several thrust variations between idle and a thrust compatible with the flight phase. If VIB are still above the advisory at idle, set thrust temporarily to 90% N1 if flight conditions permit.
After each thrust variation, vibrations should decrease, indicating the progress of the ice shedding.
When the ice is shed, vibrations should return to normal and the flight crew can resume normal engine operation.

- ■ **If icing not suspected:**
  - ● **If above vibration advisory and flight conditions permit:**
    THRUST (affected engine)............................. REDUCE BELOW ADVISORY THRESHOLD
- ● **After landing, if vibrations continue :** SHUT DOWN ENGINE WHEN POSSIBLE

[QRH] HIGH ENGINE VIBRATION

Ident.: PRO-ABN-ENG-00012294.0010001 / 17 MAY 21

58 **Applicable to: MSN 08495-09324, 10949-11597**

The flight crew must apply this procedure when instructed by ECAM, or if they detect high engine vibration.
The triggering of the ENG 1(2) HIGH VIB alert is mainly a guideline for the flight crew to monitor engine parameters more closely: The triggering of the ECAM alert alone does not require engine shut down

Note: 1. *High engine vibration may be accompanied by cockpit and cabin smoke and/or the smell of burning. This may be due only to compressor blade tip contact with associated abradable seals.*
2. *High N1 vibrations are generally accompanied by perceivable airframe vibrations. High N2 vibrations can occur without perceivable airframe vibrations.*

■ **On ground, during ENG start if N2 VIB> 5:**

ENG MASTER (affected engine)........OFF

REQUEST MAINTENANCE ACTION

Report in log book any N2 vibrations above 5.

■ **In all other cases of high N1 or N2 vibrations:**

ENG PARAMETERS ....CHECK

Check engine parameters and especially EGT; crosscheck with other engine. Report in maintenance log.

■ **If icing suspected:**

An increase of engine vibration in icing conditions with or without engine anti-ice may be due to fan blades and/or spinner icing. Icing may be suspected if N1 vibration occurs without other engine parameters variation.

A/THR ....OFF
THRUST (one engine at a time)........IDLE THEN INCREASE N1 > 80 %

Reduce thrust to idle if flight conditions permit.
If ENG ANTI ICE is off, switch it ON ***at idle fan speed,*** *one engine after the other with approximately 30 s interval.*
To shed ice, it may be necessary to perform several thrust variations between idle and a thrust compatible with the flight phase. For efficient ice shedding, thrust should be increased to at least 80% N1 if flight conditions permit.
After each thrust variation, vibrations should decrease, indicating the progress of the ice shedding.

Continued on the following page

[QRH] HIGH ENGINE VIBRATION (Cont'd)

When the ice is shed, vibrations should return to normal and the flight crew can resume normal engine operation.

- ■ **If icing not suspected:**
  - ● **If VIB indication(s) amber:**

    THRUST (affected engine).. REDUCE

    If flight conditions permit, reduce thrust to maintain vibration level below the amber threshold. If the VIB indication does not decrease following thrust reduction, this may indicate other problems on the engine.
    Transient high N2 vibrations have been reported, mostly in climb with all other engine parameters normal. They may occur several times in one flight. When the vibration level is stabilized below the amber threshold, thrust may be increased again while monitoring the VIB indication.

- ● **After landing, if vibrations continue:** SHUT DOWN ENGINE WHEN POSSIBLE

[QRH] ON GROUND - NON ENG SHUTDOWN AFTER ENG MASTER OFF

Ident.: PRO-ABN-ENG-00020795.0001001 / 30 MAR 18
Applicable to: ALL

The normal procedure to shut down an engine is to set the ENG MASTER lever to OFF. In the case where the engine does not shut down as expected, use the following procedure:

ECAM FUEL PAGE..SELECT
LP FUEL VALVE POSITION (affected engine)..CHECK

- ■ **If LP fuel valve closed (cross line amber):**

  NO CREW ACTION

- ■ **If LP fuel valve open:**

  ENG FIRE pb-sw (affected engine)..PRESS

  Using the ENG FIRE pb-sw will force the LP fuel valve to close. The engine will shut down after a time delay.

GROUND CREW..NOTIFY

IN BOTH CASES, ENGINE WILL SHUT DOWN AFTER A TIME DELAY UP TO 2 MIN 30 S
The engine shuts down when the remaining fuel between the LP fuel valve and the nozzles is burned. The time delay for engine shutdown depends on airport altitude and fuel recirculation system operation.

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

59 Ident.: PRO-ABN-ENG-00010682.0091001 / 21 MAR 17
Applicable to: MSN 11531

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 kg)								
OAT (°C)	**AIRPORT ELEVATION (feet)**							
	0	**2 000**	**4 000**	**6 000**	**8 000**	**10 000**	**12 000**	**15 000**
0	95	92	87	82	76	72	68	58
5	95	92	87	82	76	72	66	56
10	95	92	87	82	76	69	64	54
15	95	92	87	80	73	67	61	52
20	95	92	85	77	70	64	59	
25	95	89	81	74	67	61	56	
30	93	86	78	71	64	58	53	
35	90	82	75	68	61	55		
40	86	79	72	65				
45	82	75	68					
50	78	71						
55	74							

● **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

FOR LANDING: USE FLAP 3

CONF 3 is preferred, to minimize a configuration change in short final.

GPWS LDG FLAP 3..ON

Note:
- *If circling below 750 ft RA, "L/G GEAR NOT DOWN" alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
- *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR" aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0086001 / 17 MAR 17

60 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)								
OAT (°C)	**AIRPORT ELEVATION (feet)**							
	0	**2 000**	**4 000**	**6 000**	**8 000**	**10 000**	**12 000**	**14 000**
0	80.0	80.0	79.0	77.0	74.0	72.0	69.0	63.0
5	80.0	80.0	79.0	77.0	75.0	72.0	67.0	61.0
10	80.0	80.0	79.0	77.0	74.0	69.0	64.0	59.0
15	80.0	80.0	79.0	75.0	71.0	66.0	61.0	56.0
20	80.0	80.0	77.0	72.0	67.0	63.0	59.0	53.0
25	80.0	78.0	73.0	68.0	64.0	60.0	56.0	51.0
30	79.0	74.0	69.0	65.0	61.0	56.0	52.0	
35	75.0	70.0	66.0	61.0	57.0	53.0		
40	72.0	67.0	63.0	58.0				
45	68.0	63.0	59.0					
50	65.0	60.0						
55	62.0							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3..ON

  Note: - *If circling below 750 ft RA, "L/G GEAR NOT DOWN" alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
  - *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR" aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0072001 / 17 MAR 17
Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)								
OAT (°C)	**AIRPORT ELEVATION (feet)**							
	0	**2 000**	**4 000**	**6 000**	**8 000**	**10 000**	**12 000**	**14 000**
0	78.0	74.0	66.0	64.0	54.0	51.0	48.0	41.0
5	78.0	74.0	66.0	64.0	54.0	51.0	48.0	41.0
10	78.0	74.0	66.0	64.0	54.0	51.0	48.0	41.0
15	78.0	74.0	66.0	64.0	54.0	51.0	48.0	41.0
20	78.0	74.0	66.0	64.0	54.0	51.0	48.0	41.0
25	78.0	74.0	66.0	64.0	54.0	51.0	48.0	41.0
30	78.0	74.0	66.0	64.0	54.0	51.0	48.0	
35	76.0	71.0	66.0	62.0	54.0	51.0		
40	73.0	69.0	65.0	60.0				
45	71.0	67.0	62.0					
50	68.0	64.0						
55	66.0							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3..ON

  Note: - *If circling below 750 ft RA, “L/G GEAR NOT DOWN” alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
  - *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR” aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0071001 / 17 MAR 17

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)								
OAT (°C)	AIRPORT ELEVATION (feet)							
	0	2 000	4 000	6 000	8 000	10 000	12 000	14 000
0	91	87	82	79	74	70	67	62
5	91	87	82	79	74	70	65	60
10	91	87	82	79	74	68	63	58
15	91	86	82	77	71	66	61	56
20	90	86	80	74	68	63	58	53
25	90	83	77	71	66	60	56	
30	86	80	73	68	63	58	53	
35	83	76	70	65	60	55		
40	78	73	67	62				
45	75	69	64					
50	72	69						
55	69							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3..ON

  Note: - *If circling below 750 ft RA, "L/G GEAR NOT DOWN" alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
  - *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR" aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0067001 / 17 MAR 17

Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)

OAT (°C)	AIRPORT ELEVATION (feet)							
	0	**2 000**	**4 000**	**6 000**	**8 000**	**10 000**	**12 000**	**14 000**
0	80	77	74	71	67	64	60	56
5	80	77	74	71	67	64	59	54
10	80	77	74	71	67	62	57	52
15	80	77	74	70	64	59	54	
20	80	77	72	67	61	56	52	
25	80	74	69	64	59	54		
30	76	71	66	61	56	52		
35	72	68	64	59	55			
40	69	65	62	57				
45	65	62	59					
50	62	59						
55	59							

● **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

FOR LANDING: USE FLAP 3

CONF 3 is preferred, to minimize a configuration change in short final.

GPWS LDG FLAP 3..ON

Note: - *If circling below 750 ft RA, “L/G GEAR NOT DOWN” alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
- *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR” aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0004001 / 17 MAR 17

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)								
OAT (°C)	AIRPORT ELEVATION (feet)							
	0	2 000	4 000	6 000	8 000	10 000	12 000	14 000
0	77	76	69	63	58	53	48	45
5	77	76	69	63	58	53	48	45
10	77	76	69	63	58	53	48	45
15	77	76	69	63	58	53	48	45
20	77	76	69	63	58	53	48	45
25	77	75	69	63	58	53	48	45
30	77	72	68	63	58	53	48	
35	74	70	66	63	56	51		
40	71	67	63	59				
45	69	65	61					
50	67	63						
55	64							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3..ON

  Note:
  - *If circling below 750 ft RA, "L/G GEAR NOT DOWN" alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
  - *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR" aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0005001 / 17 MAR 17
Applicable to: MSN 03733, 04734-04756, 05005, 05097

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)

OAT (°C)	AIRPORT ELEVATION (feet)							
	0	**2 000**	**4 000**	**6 000**	**8 000**	**10 000**	**12 000**	**14 000**
0	74	72	69	67	64	62	59	55
5	74	72	69	67	64	62	58	53
10	74	72	69	67	64	59	55	50
15	74	72	69	66	61	57	52	48
20	74	72	68	63	59	54	50	46
25	74	70	66	61	56	52	48	43
30	72	68	63	58	54	49	45	
35	71	66	61	56	52	48		
40	68	63	59	54				
45	66	61	56					
50	63	58						
55	61							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3...ON

  Note: - *If circling below 750 ft RA, "L/G GEAR NOT DOWN" alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
  - *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR" aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0015001 / 17 MAR 17

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)								
OAT (°C)	**AIRPORT ELEVATION (feet)**							
	0	**2 000**	**4 000**	**6 000**	**8 000**	**10 000**	**12 000**	**14 000**
0	65	64	63	62	62	62	60	57
5	65	64	63	62	62	62	59	55
10	65	64	63	62	61	60	57	52
15	65	64	63	61	59	58	55	50
20	65	64	62	59	57	55	52	48
25	65	62	60	58	55	53	50	46
30	63	60	58	56	53	50	47	
35	60	58	56	53	50	48		
40	59	56	54	51				
45	56	54	51					
50	53	51						
55	50							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3...ON

Note: - *If circling below 750 ft RA, “L/G GEAR NOT DOWN” alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
- *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR” aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0011001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)

OAT (°C)	**AIRPORT ELEVATION (feet)**							
	0	**2 000**	**4 000**	**6 000**	**8 000**	**10 000**	**12 000**	**14 000**
0	70	69	68	67	65	64	62	57
5	70	69	68	67	65	64	60	55
10	70	69	68	67	65	61	57	52
15	70	69	68	66	63	59	54	50
20	70	69	66	64	61	56	52	48
25	70	67	64	62	58	54	50	46
30	67	65	63	60	56	51	47	
35	65	62	60	57	53	49		
40	62	60	58	54				
45	59	57	55					
50	56	54						
55	53							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3..ON

  Note: - *If circling below 750 ft RA, "L/G GEAR NOT DOWN" alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
  - *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR" aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - CIRCLING APPROACH

Ident.: PRO-ABN-ENG-00010682.0012001 / 17 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662

MAXIMUM WEIGHT FOR CIRCLING IN CONF 3 WITH GEAR DOWN (1000 KG)								
OAT (°C)	AIRPORT ELEVATION (feet)							
	0	2 000	4 000	6 000	8 000	10 000	12 000	14 000
0	76	74	71	68	64	61	58	54
5	76	74	71	68	64	61	56	52
10	76	74	71	68	64	59	54	
15	76	74	71	67	61	57	52	
20	76	74	69	64	59	54		
25	76	71	66	61	56			
30	73	68	64	59	54			
35	69	65	61	57	52			
40	66	62	59	55				
45	63	60	57					
50	60	57						
55	57							

- **If aircraft weight above maximum weight for circling in CONF 3 with gear down:**

  DELAY GEAR EXTENSION TO MAINTAIN LEVEL FLIGHT

  The aircraft cannot maintain level flight, in CONF 3 and with the landing gear down.

  FOR LANDING: USE FLAP 3

  CONF 3 is preferred, to minimize a configuration change in short final.

  GPWS LDG FLAP 3..ON

  Note: - *If circling below 750 ft RA, "L/G GEAR NOT DOWN" alert will trigger. The pilot can cancel the aural warning by pressing the EMER CANC pb.*
  - *If the landing gear is not downlocked at 500 ft RA, GPWS "TOO LOW GEAR" aural alert will trigger.*

[QRH] ONE ENGINE INOPERATIVE - STRAIGHT-IN APPROACH

Ident.: PRO-ABN-ENG-00010681.0001001 / 17 MAR 17
Applicable to: ALL

- **If NO level off expected during final approach:**
  DELAY CONF FULL UNTILL ESTABLISHED ON FINAL DESCENT
- **If level off expected during final approach:**
  FOR LANDING: USE CONF 3

ENG ALL ENGINES FAILURE

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02321, 02734-02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ENG-AS-00017096.0001001 / 29 JUN 16

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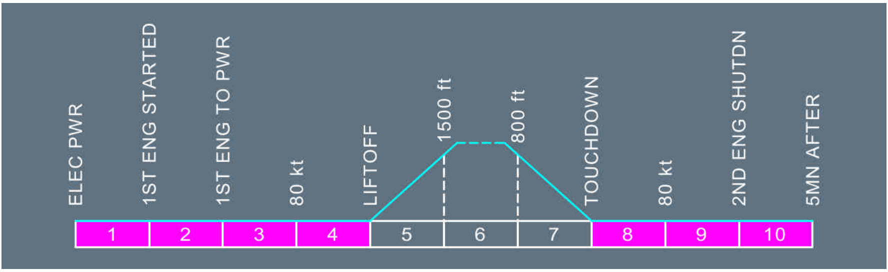
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when all engines are failed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00015739.0004001 / 21 MAR 17

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L2 The ENG ALL ENGINES FAILURE ECAM alert inhibits the ELEC EMER CONFIG ECAM alert, and provides the flight crew with an associated procedure to immediately apply in the case of a failure of all engines. The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator. Then, the ENG ALL ENGINES FAILURE ECAM procedure specifies that the flight crew must apply the ALL ENGINES FAILURE QRH procedure.

L1 **LAND ASAP**

EMER ELEC PWR MAN ON PB.. PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD.. 280/0.77

L2 *In the case of a speed indication failure due to volcanic ash, the pitch altitude for optimum relight is provided in the QRH procedure.*

Ident.: PRO-ABN-ENG-AS-00017522.0002001 / 04 NOV 15

L2 *Note:* *In the case of an "ENG ALL ENGINES FAILURE" during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.*

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00017523.0004001 / 21 MAR 17

APU (BELOW FL 250).. START
THR LEVERS.. IDLE
FAC 1.. OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLDG DIST: 2NM/1000FT
DIVERSION..INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 ALL ENG FAIL PROC.. APPLY

L2 *Refer to PRO-ABN-ENG [QRH] ECAM - OPT Relight SPD.*
The QRH procedure provides the landing configuration and the approach speed for a ditching and a forced landing.

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00019673.0022001 / 03 NOV 22

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED 320/0.77
MAX BRK PR.. 1000 PSI
MANEUVER WITH CARE
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

APPR PROC

FOR LDG... USE FLAP 2

- **WHEN CONF 2 AND VAPP:**

  L/G GRVTY EXTN.. AS RQRD

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP before selecting the gear down enables the aircraft to be trimmed for approach.

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
SLATS SLOW
FLS ◁ LIMITED TO F-APP + RAW

INOP SYS

See below

INOP SYS

G+Y HYD
R AIL
IR 2+3
ELAC 2
YAW DAMPER
A/THR

F/CTL PROT
REVERSER 1+2
RA 1+2
SEC 2+3
A/CALL OUT
FUEL PUMPS

STABILIZER
ADR 2+3
SPLR 1+2+4+5
FLAPS
AP 1+2
ANTI SKID

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

N/W. STEER
GLS AUTOLAND
PACK 1+2
AUTO BRK
L/G RETRACT
CAT 2
CAB PR 1+2

(1) *At landing gear extension, control reverts to direct law in pitch as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

ENG ALL ENGINES FAILURE

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

Ident.: PRO-ABN-ENG-AS-00017096.0001001 / 29 JUN 16

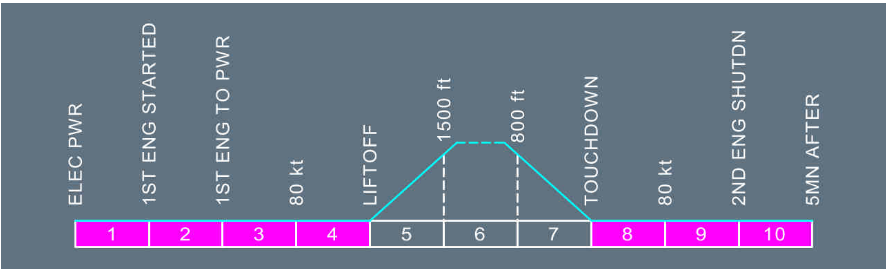
63

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when all engines are failed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00015739.0004001 / 21 MAR 17

64

L2 The ENG ALL ENGINES FAILURE ECAM alert inhibits the ELEC EMER CONFIG ECAM alert, and provides the flight crew with an associated procedure to immediately apply in the case of a failure of all engines. The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator. Then, the ENG ALL ENGINES FAILURE ECAM procedure specifies that the flight crew must apply the ALL ENGINES FAILURE QRH procedure.

L1 **LAND ASAP**

EMER ELEC PWR MAN ON PB.. PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD.. 280/0.77

L2 *In the case of a speed indication failure due to volcanic ash, the pitch altitude for optimum relight is provided in the QRH procedure.*

Ident.: PRO-ABN-ENG-AS-00017522.0002001 / 04 NOV 15

L2 *Note: In the case of an "ENG ALL ENGINES FAILURE" during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.*

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00017523.0004001 / 21 MAR 17

APU (BELOW FL 250).. START
THR LEVERS.. IDLE
FAC 1.. OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLDG DIST: 2NM/1000FT
DIVERSION..INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 ALL ENG FAIL PROC.. APPLY

L2 *Refer to PRO-ABN-ENG [QRH] ECAM - OPT Relight SPD.*
The QRH procedure provides the landing configuration and the approach speed for a ditching and a forced landing.

ENG ALL ENGINES FAILURE

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-06536, 06592-07098

Ident.: PRO-ABN-ENG-AS-00017096.0001001 / 29 JUN 16

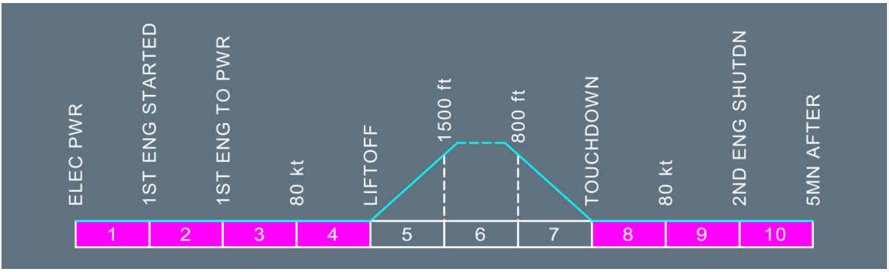
65

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when all engines are failed in flight.

Flight Phase Inhibition:



Ident.: PRO-ABN-ENG-AS-00015739.0005001 / 21 MAR 17

L2 The ENG ALL ENGINES FAILURE ECAM alert inhibits the ELEC EMER CONFIG ECAM alert, and provides the flight crew with an associated procedure to immediately apply in the case of a failure of all engines. The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator. Then, the ENG ALL ENGINES FAILURE ECAM procedure specifies that the flight crew must apply the ALL ENGINES FAILURE QRH procedure.

L1 **LAND ASAP**

EMER ELEC PWR MAN ON PB.. PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD.. 300/0.77

L2 *In the case of a speed indication failure due to volcanic ash, the pitch altitude for optimum relight is provided in the QRH procedure.*

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00017523.0004001 / 21 MAR 17

APU (BELOW FL 250).. START
THR LEVERS.. IDLE
FAC 1.. OFF THEN ON

L2 *FAC 1 reset enables the recovery of characteristics speed displayed on the PFD. FAC 1 reset enables also rudder trim recovery, even if no indication is available.*

L1 GLDG DIST: 2NM/1000FT
DIVERSION..INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 ALL ENG FAIL PROC.. APPLY

L2 *Refer to PRO-ABN-ENG [QRH] ECAM - OPT Relight SPD.*
The QRH procedure provides the landing configuration and the approach speed for a ditching and a forced landing.

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00019673.0022001 / 03 NOV 22

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED 320/0.77
MAX BRK PR.. 1000 PSI
MANEUVER WITH CARE
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

APPR PROC

FOR LDG.. USE FLAP 2

- **WHEN CONF 2 AND VAPP:**

  L/G GRVTY EXTN.. AS RQRD

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP before selecting the gear down enables the aircraft to be trimmed for approach.

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
SLATS SLOW
FLS ◁ LIMITED TO F-APP + RAW

INOP SYS

See below

INOP SYS

G+Y HYD
R AIL
IR 2+3
ELAC 2
YAW DAMPER
A/THR
F/CTL PROT
REVERSER 1+2
RA 1+2
SEC 2+3
A/CALL OUT
FUEL PUMPS
STABILIZER
ADR 2+3
SPLR 1+2+4+5
FLAPS
AP 1+2
ANTI SKID

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

N/W. STEER
GLS AUTOLAND
PACK 1+2

AUTO BRK
L/G RETRACT

CAT 2
CAB PR 1+2

(1) *At landing gear extension, control reverts to direct law in pitch as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

ENG ALL ENGINES FAILURE

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-AS-00017096.0001001 / 29 JUN 16

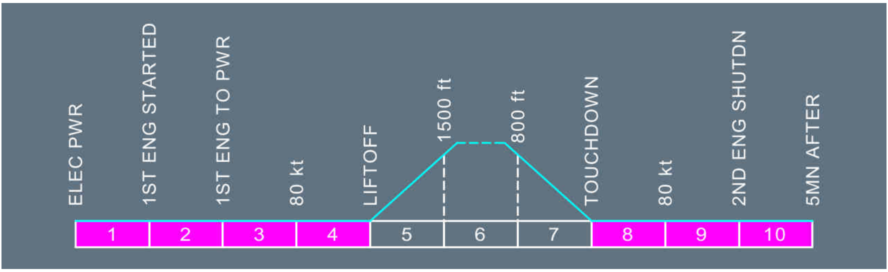
66

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when all engines are failed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00015739.0004001 / 21 MAR 17

67

L2 The ENG ALL ENGINES FAILURE ECAM alert inhibits the ELEC EMER CONFIG ECAM alert, and provides the flight crew with an associated procedure to immediately apply in the case of a failure of all engines. The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator. Then, the ENG ALL ENGINES FAILURE ECAM procedure specifies that the flight crew must apply the ALL ENGINES FAILURE QRH procedure.

L1 **LAND ASAP**

EMER ELEC PWR MAN ON PB.......................................PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD.......................................280/0.77

L2 *In the case of a speed indication failure due to volcanic ash, the pitch altitude for optimum relight is provided in the QRH procedure.*

Ident.: PRO-ABN-ENG-AS-00017523.0003001 / 21 MAR 17

68

APU (BELOW FL 250).......................................START
THR LEVERS.......................................IDLE
GLDG DIST: 2NM/1000FT
DIVERSION.......................................INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 ALL ENG FAIL PROC.......................................APPLY

L2 *Refer to PRO-ABN-ENG [QRH] ECAM - OPT Relight SPD.*
The QRH procedure provides the landing configuration and the approach speed for a ditching and a forced landing.

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00019673.0022001 / 03 NOV 22

L12

STATUS

MIN RAT SPEED...140 KT
MAX SPEED 320/0.77
MAX BRK PR...1000 PSI
MANEUVER WITH CARE
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

APPR PROC

FOR LDG..USE FLAP 2

- **WHEN CONF 2 AND VAPP:**
  L/G GRVTY EXTN...AS RQRD
  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP before selecting the gear down enables the aircraft to be trimmed for approach.

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
SLATS SLOW
FLS ◁ LIMITED TO F-APP + RAW

INOP SYS

See below

INOP SYS

G+Y HYD
R AIL
IR 2+3
ELAC 2
YAW DAMPER
A/THR
F/CTL PROT
REVERSER 1+2
RA 1+2
SEC 2+3
A/CALL OUT
FUEL PUMPS
STABILIZER
ADR 2+3
SPLR 1+2+4+5
FLAPS
AP 1+2
ANTI SKID

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

N/W. STEER
GLS AUTOLAND
PACK 1+2
AUTO BRK
L/G RETRACT
CAT 2
CAB PR 1+2

(1) *At landing gear extension, control reverts to direct law in pitch as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

ENG ALL ENGINES FAILURE

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-AS-00017096.0001001 / 29 JUN 16

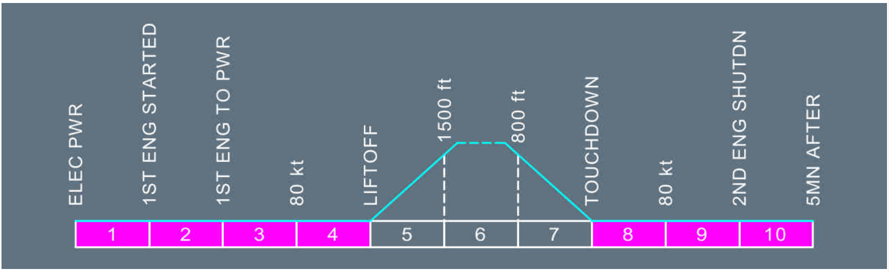
69

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when all engines are failed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00015739.0004001 / 21 MAR 17

70

L2 The ENG ALL ENGINES FAILURE ECAM alert inhibits the ELEC EMER CONFIG ECAM alert, and provides the flight crew with an associated procedure to immediately apply in the case of a failure of all engines. The purpose of the ENG ALL ENGINES FAILURE ECAM procedure is to secure both the automatic extension of the RAT and the automatic connection of the emergency generator. Then, the ENG ALL ENGINES FAILURE ECAM procedure specifies that the flight crew must apply the ALL ENGINES FAILURE QRH procedure.

L1 **LAND ASAP**

EMER ELEC PWR MAN ON PB..PRESS

L2 *Set the EMER ELEC PWR pb to MAN ON to enable both the RAT extension and the emergency generator connection.*

L1 OPT RELIGHT SPD..280/0.77

L2 *In the case of a speed indication failure due to volcanic ash, the pitch altitude for optimum relight is provided in the QRH procedure.*

Ident.: PRO-ABN-ENG-AS-00017523.0003001 / 21 MAR 17

71

APU (BELOW FL 250)..START
THR LEVERS..IDLE
GLDG DIST: 2NM/1000FT
DIVERSION..INITIATE

L2 *Check if there is an accessible runway, or determine the most appropriate area for a forced landing or ditching.*

L1 ALL ENG FAIL PROC..APPLY

L2 *Refer to PRO-ABN-ENG [QRH] ECAM - OPT Relight SPD.*
The QRH procedure provides the landing configuration and the approach speed for a ditching and a forced landing.

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-AS-00019673.0034001 / 03 NOV 22

72

L12

STATUS

MIN RAT SPEED........................140 KT
MAX SPEED........................320/0.77
MAX BRK PR........................1000 PSI
MANEUVER WITH CARE
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

APPR PROC

FOR LDG........................FLAP LVR 2

This line is replaced by "FOR LDG : FLAP LVR 2" when CONF 2 is selected, as a reminder.

- **WHEN CONF 2 AND VAPP:**

  L/G GRVTY EXTN........................AS RQRD

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP before selecting the gear down enables the aircraft to be trimmed for approach.

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

BRK Y ACCU PR ONLY

See (2)

SLATS SLOW
FLS ◁ LIMITED TO F-APP + RAW

INOP SYS

See below

INOP SYS

G+Y HYD
R AIL
IR 2+3
ELAC 2
F/CTL PROT
REVERSER 1+2
RA 1+2
SEC 2+3
STABILIZER
ADR 2+3
SPLR 1+2+4+5
FLAPS

Continued on the following page

ENG ALL ENGINES FAILURE (Cont'd)

YAW DAMPER
A/THR
N/W. STEER
GLS AUTOLAND
PACK 1+2

A/CALL OUT
FUEL PUMPS
AUTO BRK
L/G RETRACT

AP 1+2
ANTI SKID
CAT 2
CAB PR 1+2

(1) *At landing gear extension, control reverts to direct law in pitch as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

ENG FUEL CONTAMINATED

Applicable to: MSN 08635

Ident.: PRO-ABN-ENG-DX-00023769.0006001 / 25 FEB 20

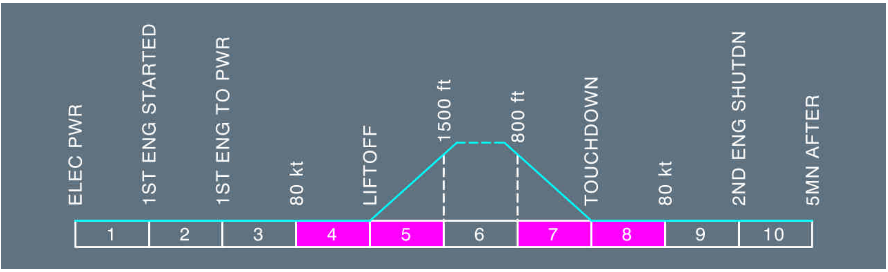
ANNUNCIATIONS

Triggering Conditions:

L2 10 s after the following combination of alerts triggers, the ENG FUEL CONTAMINATED alert triggers and appears instead:

- Both ENG 1 FUEL FILTER CLOG and ENG 2 FUEL FILTER CLOG alerts, or
- Both ENG 1 FUEL FILTER CLOG and ENG 2 FUEL FILTER - PARTLY CLOG alerts, or
- Both ENG 1 FUEL FILTER - PARTLY CLOG and ENG 2 FUEL FILTER CLOG alerts.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ENG FUEL CONTAMINATED (Cont'd)

Ident.: PRO-ABN-ENG-DX-00023770.0005001 / 25 FEB 20

73

LAND ASAP

- **On ground:**
  - THR LEVERS....IDLE
- **In flight:**
  - **If autothrust on:**
    - A/THR....OFF
  - FUEL MODE SEL....MAN
  - **If fuel X feed ON:**
    - FUEL X FEED....OFF
  - CTR TK L XFR....OFF
  - CTR TK R XFR....OFF
  - X FEED....DO NOT OPEN
  - CTR TK UNUSABLE
  - A/THR....DO NOT USE
  - AVOID RAPID THRUST CHANGES
  - MOVE THR LVR ONE BY ONE

Ident.: PRO-ABN-ENG-DX-00023771.0003001 / 25 FEB 20

74

STATUS

- **In flight:**
  - X FEED....DO NOT OPEN
  - A/THR....DO NOT USE
- **In flight or after landing:**
  - AVOID RAPID THRUST CHANGES
  - MOVE THR LVR ONE BY ONE

CTR TANK FUEL UNUSABLE
ACT ◁ UNUSABLE

ENG FUEL CONTAMINATED

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-ENG-DX-00023769.0009001 / 18 NOV 21

75

ANNUNCIATIONS

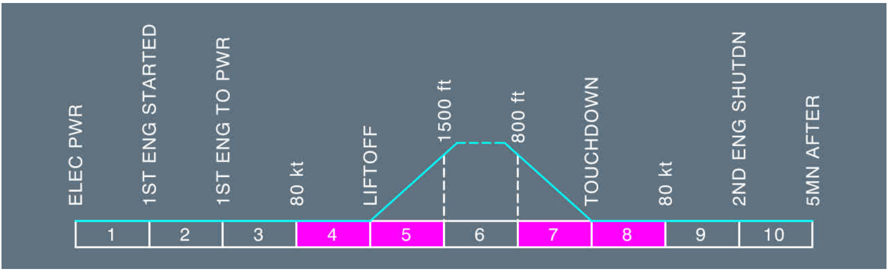
Triggering Conditions:

L2

The ENG FUEL CONTAMINATED alert triggers 10 s after the following combination of alerts:
- Both ENG 1 FUEL FILTER CLOG and ENG 2 FUEL FILTER CLOG alerts, or
- Both ENG 1 FUEL FILTER CLOG and ENG 2 FUEL FILTER - PARTLY CLOG alerts, or
- Both ENG 1 FUEL FILTER - PARTLY CLOG and ENG 2 FUEL FILTER CLOG alerts, or
- Both ENG 1 HEAT EXCHGR CLOG and ENG 2 HEAT EXCHGR CLOG alerts, or
- Both ENG 1 FUEL CTL FAULT and ENG 2 FUEL CTL FAULT alerts.

Note: Except for the combination of alerts ENG 1 FUEL CTL FAULT and ENG 2 FUEL CTL FAULT, the above combination of alerts is inhibited as soon as ENG FUEL CONTAMINATED triggers.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG FUEL CONTAMINATED (Cont'd)

Ident.: PRO-ABN-ENG-DX-00023770.0005001 / 25 FEB 20

76

LAND ASAP

- **On ground:**
  THR LEVERS....................IDLE
- **In flight:**
  - **If autothrust on:**
    A/THR....................OFF

  FUEL MODE SEL....................MAN
  - **If fuel X feed ON:**
    FUEL X FEED....................OFF

  CTR TK L XFR....................OFF
  CTR TK R XFR....................OFF
  X FEED....................DO NOT OPEN
  CTR TK UNUSABLE
  A/THR....................DO NOT USE
  AVOID RAPID THRUST CHANGES
  MOVE THR LVR ONE BY ONE

Ident.: PRO-ABN-ENG-DX-00023771.0003001 / 25 FEB 20

77

STATUS

- **In flight:**
  X FEED....................DO NOT OPEN
  A/THR....................DO NOT USE
- **In flight or after landing:**
  AVOID RAPID THRUST CHANGES
  MOVE THR LVR ONE BY ONE

CTR TANK FUEL UNUSABLE
ACT ⊲ UNUSABLE

ENG 1(2) A/C FADEC SUPPLY

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ENG-U-00017960.0001001 / 21 MAR 16

ANNUNCIATIONS

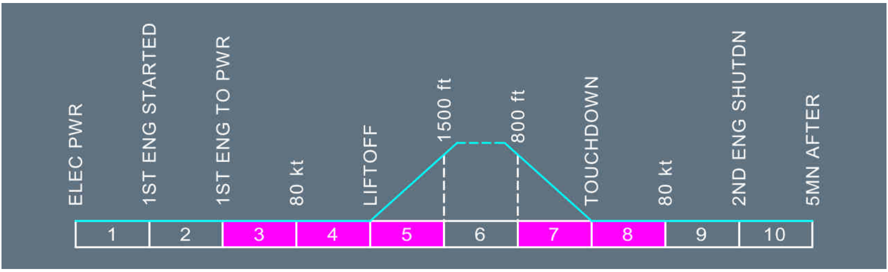
Triggering Conditions:

L2

This alert triggers when:

- On ground, the aircraft 28 V supply of either EEC channel is lost, or
- In flight, the aircraft 28 V supply is lost for:
  - Both EEC channels, or
  - One EEC channel without switching to the other channel.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-U-00018706.0001001 / 21 MAR 16

78

Crew Awareness.

Continued on the following page

ENG 1(2) A/C FADEC SUPPLY (Cont'd)

Ident.: PRO-ABN-ENG-U-00012297.0002001 / 17 AUG 10

L12

STATUS

The ECAM only displays these inoperative systems, if there is:

- A loss of aircraft 28 V supply of both EEC channels, or
- A loss of aircraft 28 V supply of one EEC channel without switching to the other channel.

INOP SYS

REVERSER 1(2)
ENG 1(2) START

ENG 1(2) A/C FADEC SUPPLY

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-U-00017960.0002001 / 21 MAR 16

79

ANNUNCIATIONS

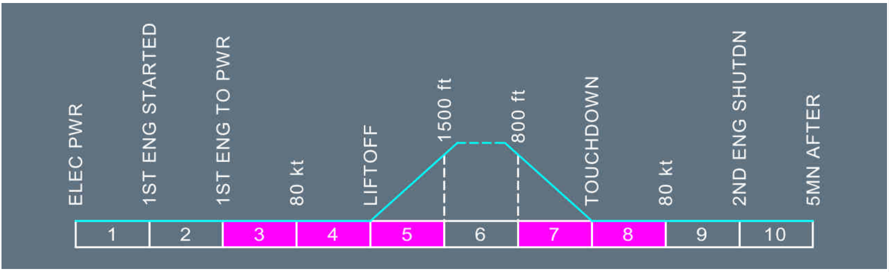
Triggering Conditions:

L2

This alert triggers when the aircraft 28 V supply is lost for:

- Both EEC channels, or
- One EEC channel without switching to the other channel.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) A/C FADEC SUPPLY (Cont'd)

Ident.: PRO-ABN-ENG-U-00018706.0001001 / 21 MAR 16

80 Crew Awareness.

Ident.: PRO-ABN-ENG-U-00012297.0001001 / 17 AUG 10

81

STATUS

INOP SYS

REVERSER 1(2)
ENG 1(2) START

ENG 1(2) AIR EXCHGR FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

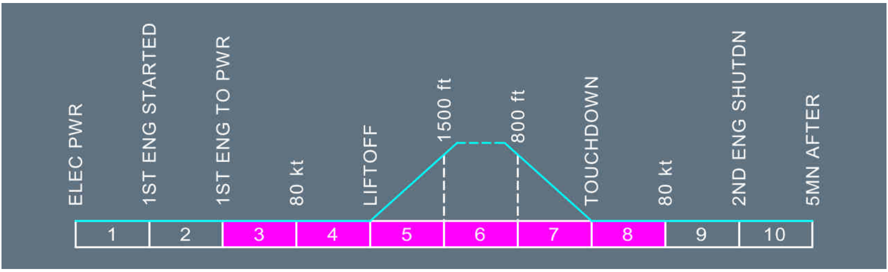
Ident.: PRO-ABN-ENG-AU-00017961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when air/oil heat exchanger valve is failed on ground.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) AIR EXCHGR FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AU-00017654.0001001 / 21 MAR 16

L2 Depending of the failure one of the following messages is displayed:

L1 AIR VALVE OPEN

L2 *Refer to MMEL/ME-70 ENG 1(2) AIR EXCHANGR FAULT [AIR VALVE OPEN].*

L1 AIR VALVE CLOSED

ENG 1(2) AIR MINOR FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-AE-00018154.0001001 / 21 MAR 16

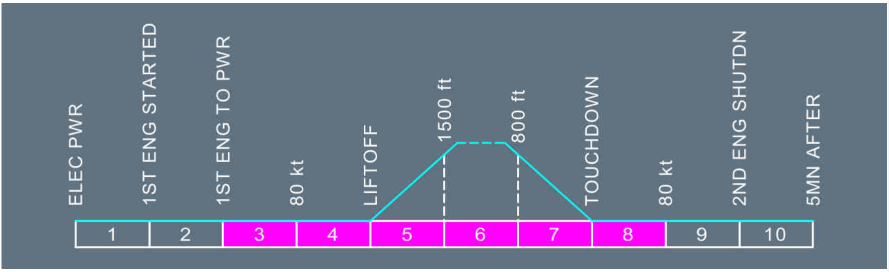
82

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the buffer air check valve is failed (in open position).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
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Ident.: PRO-ABN-ENG-AE-00015569.0004001 / 04 JUN 19

83

Crew awareness.

ENG 1(2) AIR SYS FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-AC-00018155.0001001 / 22 MAR 18

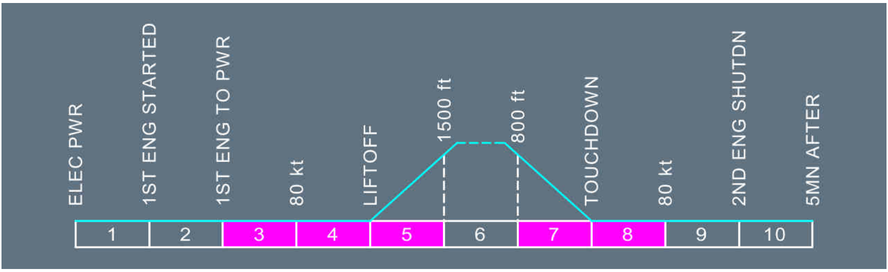
84

ANNUNCIATIONS

Triggering Conditions:

L2 The buffer air system (Buffer Air Shut Off Valve (BASOV) or Buffer Air Check Valve (BACV)) ensures engine bearing cooling, sealing, and pressurization. This alert triggers when the BASOV is detected failed open or failed closed, or when the BACV is detected failed closed. This alert also triggers when the active High Pressure Compressor (HPC) bleed valve is failed closed.

Flight Phase Inhibition:



Ident.: PRO-ABN-ENG-AC-00015563.0005001 / 22 MAR 18

- **If the BASOV is detected failed open or the HPC bleed valve is detected failed closed:**
  - **On ground:**

    THR LVR 1(2) NOT ABOVE IDLE
- **If the BASOV or the BACV is detected failed closed:**

  L2 The purpose of the following actions is to prevent potential engine oil smell from entering into the air conditioning system.

  L1 ENG 1(2) BLEED.......OFF
  PACK 1(2).......OFF
  X BLEED.......OPEN

Continued on the following page

ENG 1(2) AIR SYS FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AC-00015630.0002001 / 10 MAY 16

STATUS

- **On ground:**
  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) AIR SYS FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-AC-00018155.0001001 / 22 MAR 18

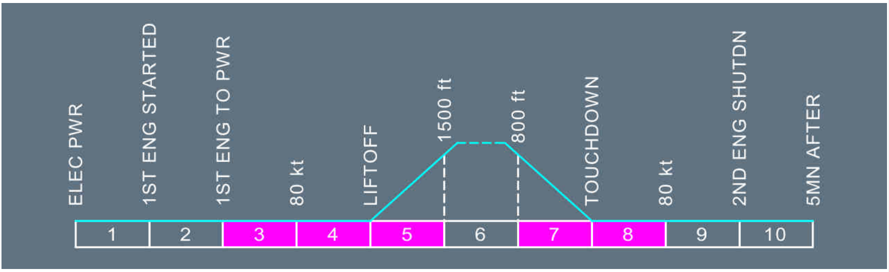
85

ANNUNCIATIONS

Triggering Conditions:

L2 The buffer air system (Buffer Air Shut Off Valve (BASOV) or Buffer Air Check Valve (BACV)) ensures engine bearing cooling, sealing, and pressurization. This alert triggers when the BASOV is detected failed open or failed closed, or when the BACV is detected failed closed. This alert also triggers when the active High Pressure Compressor (HPC) bleed valve is failed closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) AIR SYS FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AC-00015563.0007001 / 30 MAR 18

86

■ **If the BASOV is detected failed open or the HPC bleed valve is detected failed closed:**

- **On ground:**
  THR LEVER 1(2)....................IDLE

■ **If the BASOV or the BACV is detected failed closed:**

L2 The purpose of the following actions is to prevent potential engine oil smell from entering into the air conditioning system.

L1 ENG 1(2) BLEED....................OFF
PACK 1(2)....................OFF
X BLEED....................OPEN

ENG 1(2) AIR VALVE

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-AV-00018156.0001001 / 21 MAR 16

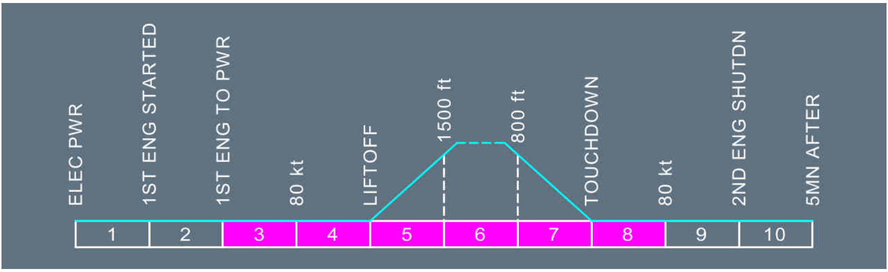
87

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the air system corresponding to start bleed valve is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) AIR VALVE (Cont'd)

Ident.: PRO-ABN-ENG-AV-00015566.0001001 / 18 AUG 14

88

Crew awareness.

L2 Maintenance action is due.

ENG 1(2) BEARING 4 OIL SYS

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

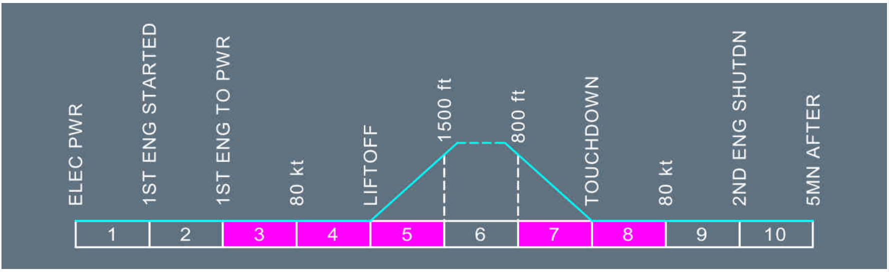
Ident.: PRO-ABN-ENG-AW-00017962.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- A discrepancy of the scavenge valve position is detected, or
- A high pressure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) BEARING 4 OIL SYS (Cont'd)

Ident.: PRO-ABN-ENG-AW-00012298.0002001 / 12 JAN 11

L2 One of the two following messages is displayed:

L1 SCAVENGE VALVE FAULT

L2 N° 4 bearing scavenge valve stuck open.

L1 HI PRESS

L2 N° 4 bearing carbon seal is failed or due to scavenge valve stuck closed or due to a clogged scavenge valve restrictor.
Maintenance action is due.

ENG 1(2) BLEED STATUS FAULT
(IN FLIGHT)

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: PRO-ABN-ENG-W-00017963.0001001 / 21 MAR 16

ANNUNCIATIONS

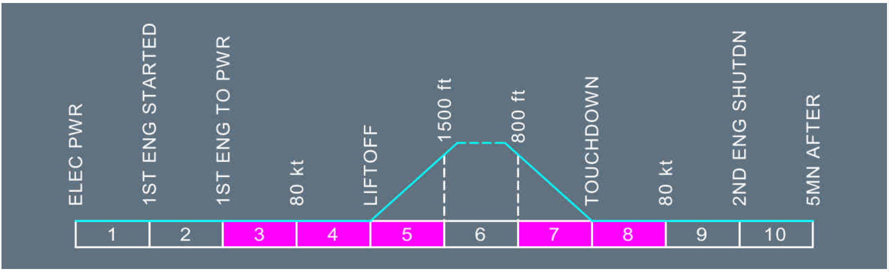
Triggering Conditions:

L2

This alert triggers when the status of one of the following valves is not received by the FADEC active channel:

- Bleed valves, or
- Pack valves, or
- Wing and engine anti ice valves, or
- Cross-bleed valve.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-W-00018707.0001001 / 21 MAR 16

- **If ENG ANTI ICE on:**

  ENG MODE SEL..IGN

Ident.: PRO-ABN-ENG-W-00012303.0001001 / 17 AUG 10

STATUS

ENG 1(2) HI GND IDLE

ENG 1(2) BLEED STATUS FAULT
(ON GROUND)

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: PRO-ABN-ENG-V-00017965.0001001 / 21 MAR 16

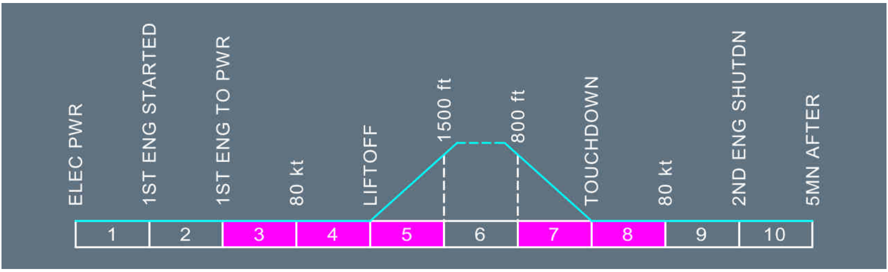
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the status of one of the following valves is not received by the FADEC active channel:

- Bleed valves, or
- Pack valves, or
- Wing and engine anti ice valves, or
- Cross-bleed valve.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) BLEED STATUS FAULT (Cont'd)
(ON GROUND)

Ident.: PRO-ABN-ENG-V-00018708.0001001 / 28 MAY 20

HI GND IDLE

L2 *FADEC increases minimum idle as if valves were opened.*

L1 ● **If ENG ANTI ICE ON:**

ENG MODE SEL...IGN

L2 *When ENG anti ice is ON, there is no automatic selection of continuous relight since FADEC does not know position of engine anti ice valves position.*

L1 ● **BEFORE T.O.:**

PACK (ASSOCIATED SIDE)..OFF

L2 *Associated pack must be closed to reduce risk of excessive EGT.*

Ident.: PRO-ABN-ENG-V-00012301.0001001 / 28 MAY 20

STATUS

ENG (AFFECTED) HI GND IDLE

ENG 1(2) BOWED ROTOR
PROTECTION FAULT

Applicable to: MSN 08495-09324

Ident.: PRO-ABN-ENG-DL-00020041.0001001 / 21 OCT 16

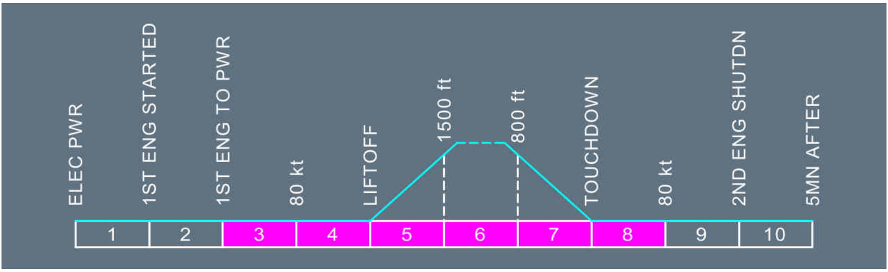
89

ANNUNCIATIONS

Triggering Conditions:

L2 This alert is triggered when the bowed rotor protection (engine cooling) fails.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-DL-00020042.0003001 / 10 JAN 17

ENG MASTER (AFFECTED)...OFF

L2 *This action line is only displayed if the affected engine is commanded to start (ENG MASTER lever set to ON).*

L1 MAN START (IF MAN START PERFORMED)..OFF

DUAL COOLING... OFF

Do not attempt a new engine start. Maintenance action is due.

ENG 1(2) BOWED ROTOR PROTECTION FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-ENG-DL-00020041.0001001 / 21 OCT 16

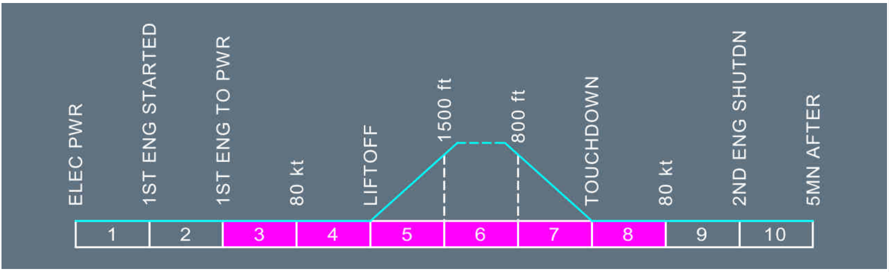
90

ANNUNCIATIONS

Triggering Conditions:

L2 This alert is triggered when the bowed rotor protection (engine cooling) fails.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-DL-00020042.0006001 / 18 NOV 21

91

- **If ENG MASTER lever set to ON:**
  ENG MASTER (AFFECTED) .... OFF
- **If ENG MASTER lever set to OFF:**
  ENG MASTER (AFFECTED) ....KEEP OFF

MAN START (IF MAN START PERFORMED)..OFF
DUAL COOLING.. OFF

Do not attempt a new engine start. Maintenance action is due.

ENG 1(2) COLD FUEL

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-DI-00019521.0002001 / 13 MAY 16

92

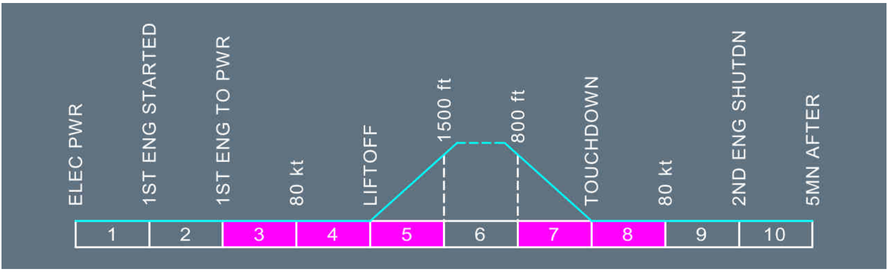
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the FADEC detects a fuel temperature lower than:
- 0 °C, if IDG 1(2) is connected, or
- 1 °C, if IDG 1(2) is disconnected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-DI-00019523.0002001 / 13 MAY 16

93

- **On ground:**

  DELAY T.O

- **In flight:**

  TAT.. INCREASE

ENG 1+2 COMPRESSOR VANE

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-ENG-CY-00017907.0003001 / 31 AUG 17

94

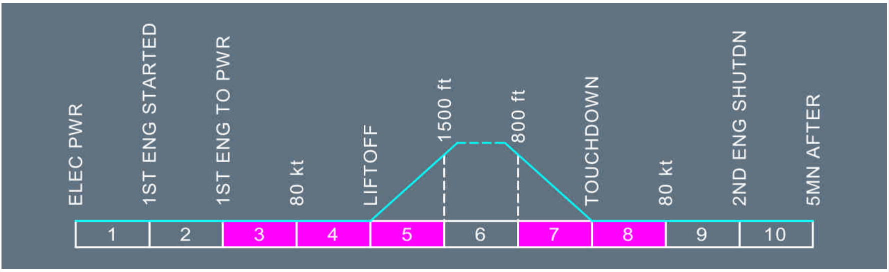
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when there is a loss of the redundancy (i.e. one channel is detected faulty) of the compressor vane (i.e. VBV, VSV) control system on both engines. The control of the compressor vane is still fully operative on both engines.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CY-00017757.0002001 / 31 AUG 17

95

Crew awareness.

ENG COMPRESSOR VANE

Applicable to: MSN 01251, 02014, 06561

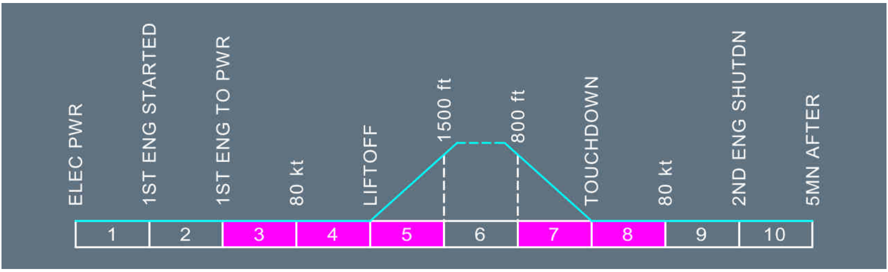
Ident.: PRO-ABN-ENG-CY-00017907.0001001 / 31 AUG 17

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of the redundancy (i.e. one channel is detected faulty) of the compressor vane (i.e. VBV, VSV) control system on both engines. The control of the compressor vane is still fully operative on both engines.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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6
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Ident.: PRO-ABN-ENG-CY-00017757.0001001 / 21 MAR 16

Crew awareness.

ENG 1(2) COMPRESSOR VANE

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

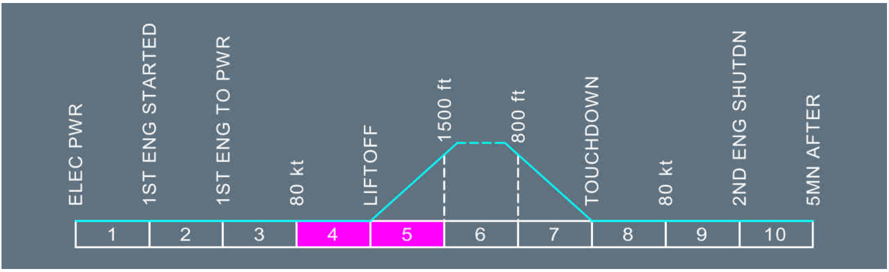
Ident.: PRO-ABN-ENG-N-00017966.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the Low Pressure Compressor Bleed Valve (LPCBV) or Variable Stator Vane (VSV) is failed.

Flight Phase Inhibition:



Ident.: PRO-ABN-ENG-N-00017655.0005001 / 21 MAR 16

- **On ground:**
  THR LEVER (AFFECTED)..IDLE
  ENG MASTER (AFFECTED)..OFF

AVOID THR CHANGES (not displayed if LPCBV goes to open position).

L2 *If A/THR engaged, adjust the thrust levers to align thrust lever commands with actual EPR and disconnect A/THR.*

L1 AVOID RAPID THRUST CHANGES (displayed when the VSV position disagrees with the command).

L2 *Engine stall may occur at any rapid thrust change.*

Continued on the following page

ENG 1(2) COMPRESSOR VANE (Cont'd)

Ident.: PRO-ABN-ENG-N-00012155.0002001 / 17 AUG 10

STATUS

AVOID THR CHANGES

ENG 1(2) COMPRESSOR VANE

Applicable to: MSN 01251

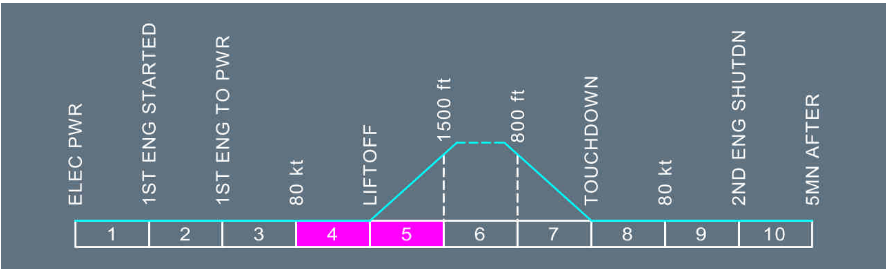
Ident.: PRO-ABN-ENG-N-00017966.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the Low Pressure Compressor Bleed Valve (LPCBV) or Variable Stator Vane (VSV) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) COMPRESSOR VANE (Cont'd)

Ident.: PRO-ABN-ENG-N-00017655.0004001 / 21 MAR 16

AVOID THR CHANGES (not displayed if LPCBV goes to open position).

L2 *If A/THR engaged, adjust the thrust levers to align thrust lever commands with actual EPR and disconnect A/THR.*

L1 AVOID RAPID THRUST CHANGES (displayed when the VSV position disagrees with the command).

L2 *Engine stall may occur at any rapid thrust change.*

L1
- **IF ENG STALL:**
  THR LEVER 1(2).. IDLE
  ENG MASTER 1(2)..OFF
- **On ground:**
  THR LEVER 1(2).. IDLE
  ENG MASTER 1(2)..OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

L2 *Apply after ENG SHUT DOWN procedure (Refer to PRO-ABN-70 ENG 1(2) SHUT DOWN).*

Ident.: PRO-ABN-ENG-N-00012155.0002001 / 17 AUG 10

STATUS

AVOID THR CHANGES

ENG 1(2) COMPRESSOR VANE

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

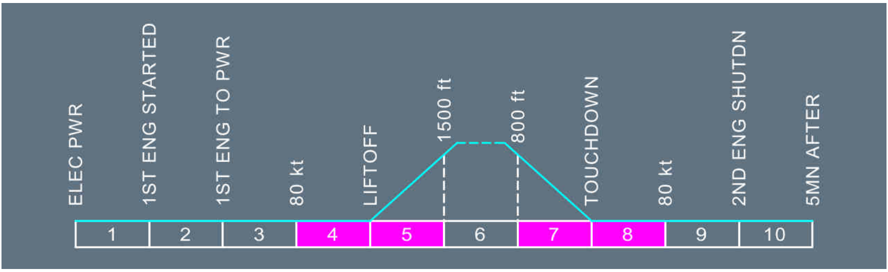
Ident.: PRO-ABN-ENG-N-00017966.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when either Variable Bleed Valve (VBV) or Variable Stator Vane (VSV) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-N-00017655.0003001 / 21 MAR 17

- **On ground:**

  THR LEVERS (AFFECTED)..IDLE
  ENG MASTER (AFFECTED)..OFF

Depending on the type of failure, one of the following two messages is displayed:

AVOID RAPID THR CHANGES or

If the A/THR is engaged, adjust the thrust levers to align the thrust lever commands with actual N1 and disconnect A/THR.

ENG (AFFECTED) SLOW RESPONSE

Continued on the following page

ENG 1(2) COMPRESSOR VANE (Cont'd)

Ident.: PRO-ABN-ENG-N-00012155.0001001 / 17 AUG 10

STATUS

AVOID RAPID THR CHANGES

ENG (affected) SLOW RESPONSE

ENG 1(2) COMPRESSOR VANE

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-N-00017966.0004001 / 21 MAR 16

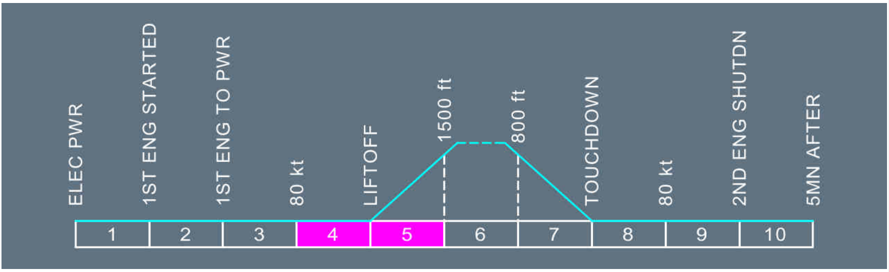
96

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the LPC Stator Actuator, HPC Stator Actuator or LPC 2.5 Valve is partially or fully lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) COMPRESSOR VANE (Cont'd)

Ident.: PRO-ABN-ENG-N-00017655.0006001 / 21 MAR 17

97

- **On ground:**
  THR LEVER (AFFECTED).. IDLE
  ENG MASTER (AFFECTED)..OFF

AVOID RAPID THR CHANGES

L2 *If A/THR is engaged, adjust the thrust levers to align the thrust lever commands with actual N1 and disconnect A/THR.*

L1 Depending on the type of failure, one of the following ECAM messages is displayed:

THRUST LIMITED
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Ident.: PRO-ABN-ENG-N-00012155.0005001 / 17 MAR 17

98

L12

STATUS

AVOID RAPID THR CHANGES

THRUST LIMITED
See (1)
FUEL CONSUMPT INCRSD
See (2)
FMS PRED UNRELIABLE
See (3)

(1) *This message is triggered depending on the type of failure.*

(2) *This message is triggered in the case of failure of the LPC 2.5 bleed valve open.*

(3) *This message is triggered in the case of failure of the LPC 2.5 bleed valve open. Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

ENG 1(2) CTL SYS FAULT

Applicable to: MSN 08495-08596, 09190-09324

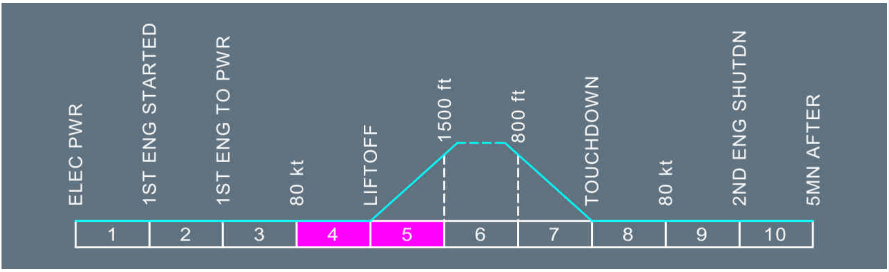
Ident.: PRO-ABN-ENG-AX-00018157.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a failure preventing the EEC from satisfactorily controlling the engine is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-AX-00015571.0001001 / 21 MAR 17

THR LEVER 1(2) .... IDLE
ENG 1(2) MASTER .... OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) CTL SYS FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-AX-00018157.0003001 / 09 APR 18

99

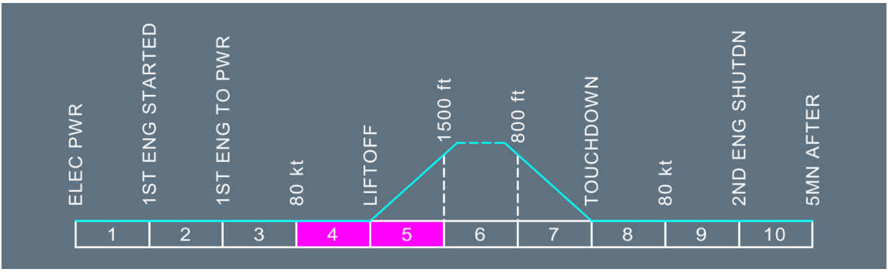
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- A failure preventing the EEC from satisfactorily controlling the engine is detected, or
- TCM is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-AX-00015571.0003001 / 09 APR 18

100

- **On the ground:**

  THR LEVER 1(2)..IDLE

  ENG MASTER 1(2)..OFF

- **In flight:**

  - **In case of TCM:**

    L2 If takeoff power is applied or in go-around or if AUTOLAND warning is triggered the following procedures would not be displayed.

    L1 ENG 1(2) THRUST FROZEN

    ENG 1(2) N1 PARAM..CHECK

    - **FOR APPR & LDG:**

      THR LEVER 1(2)..IDLE

      ENG MASTER 1(2)..OFF

Continued on the following page

ENG 1(2) CTL SYS FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AX-00022268.0003001 / 09 APR 18

101

STATUS

- **In case of TCM:**
  ENG 1(2) THRUST FROZEN

APPR PROC

THR LEVER 1(2).. IDLE
ENG MASTER 1(2)..OFF

ENG 1(2) CTL VALVE FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

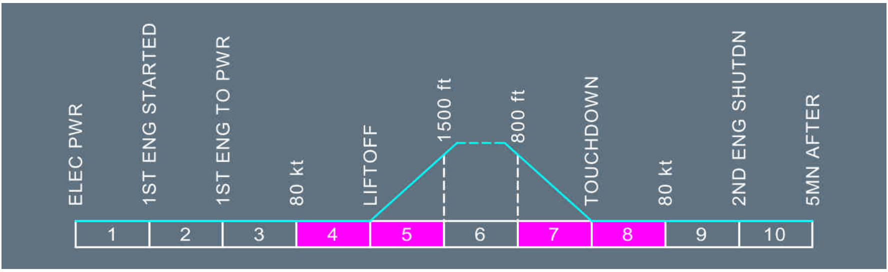
02 Ident.: PRO-ABN-ENG-Q-00017967.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The Burner Staging Valve (BSV) is failed, or
- The HP Turbine Clearance (HPTC) system is failed, or
- The Rotor Active Clearance Control (RACC) system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-Q-00018709.0001001 / 21 MAR 16

MAX N2..96 %

L2 *Retard associated thrust lever to limit N2 to 96 %.*

Ident.: PRO-ABN-ENG-Q-00012233.0001001 / 17 AUG 10

STATUS

MAX ENG (AFFECTED) N2..96 %

ENG DUAL COOLING
NOT AVAIL

Applicable to: MSN 08495-08596, 09190-09324

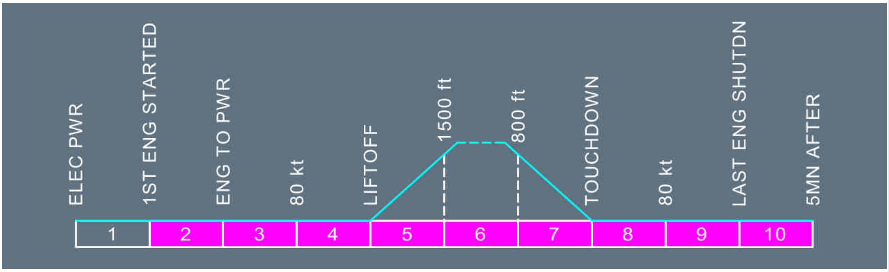
Ident.: PRO-ABN-ENG-DK-00020038.0001001 / 21 OCT 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers on ground with the dual cooling function armed but not available, i.e. when out of the dual cooling envelope.*Refer to DSC-70-80-40 Automatic Engine Start with Dual Cooling - Envelope*

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-DK-00020039.0001001 / 21 OCT 16

DUAL COOLING.. OFF

ENG DUAL COOLING
NOT AVAIL

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-DK-00020038.0003001 / 09 APR 18

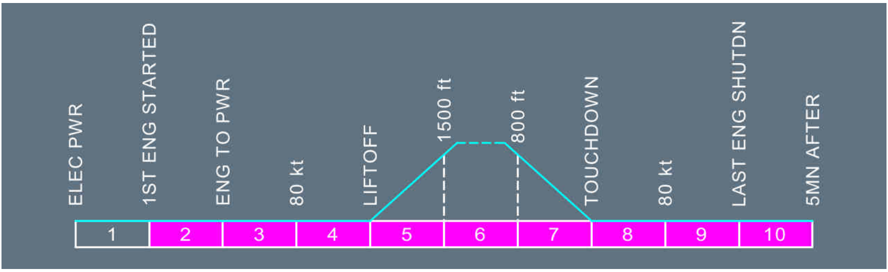
103

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers on ground with the dual cooling function armed but not available, i.e. when out of the dual cooling envelope or with low starter air pressure. *Refer to DSC-70-80-40 Automatic Engine Start with Dual Cooling - Envelope*

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-DK-00020039.0003001 / 09 APR 18

104

NOT AVAIL

DUAL COOLING.. OFF

ENG DUAL FAILURE

Applicable to: MSN 01251

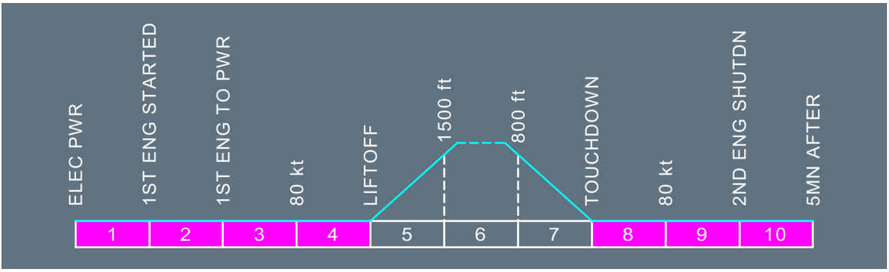
Ident.: PRO-ABN-ENG-S-00017909.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two engines are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG DUAL FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-S-00012282.0291001 / 21 MAR 17

L2 The ENG DUAL FAILURE warning inhibits the ELEC EMER CONFIG warning.
The FCOM Procedure includes all steps of the ECAM ENG DUAL FAILURE procedure.

However, to facilitate handling of all the ECAM procedures associated with a dual engine failure, it is recommended using the ENG DUAL FAILURE QRH procedure that also includes the DITCHING and FORCED LANDING procedures. When applying the ENG DUAL FAILURE QRH procedure:
- If one or more engines are recovered, apply the corresponding ECAM procedure instead
- If no engines are recovered, continue to apply the ENG DUAL FAILURE QRH procedure. If time permits, clear ECAM alerts, and check the ECAM STATUS page.

L1 **LAND ASAP**

ENG MODE SEL...IGN

L2 *An immediate relight attempt is made.*

L1 THR LEVERS...IDLE

OPTIMUM RELIGHT SPD...280 KT

L2 *The optimum airspeed to allow an effective windmilling start attempt is 280 kt.*

Note: *In the case of an “ENG DUAL FAILURE” during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.*

In case of a speed indication failure (volcanic ash), the pitch attitude for optimum relight speed is 2.5 ° down. For weight above 50 000 kg/110 000 lb, raise the nose by 1 ° for every additional 10 000 kg/22 000 lb (e.g. if weight is 60 000 kg/132 000 lb pitch is 1.5 ° down).

At 280 kt, the aircraft can fly up to about:
- *2.2 NM per 1 000 ft at 50 000 kg/110 000 lb*
- *2.5 NM per 1 000 ft at 60 000 kg/132 000 lb*
- *2.7 NM per 1 000 ft at 70 000 kg/154 000 lb*

L1 EMER ELEC PWR (IF EMER GEN NOT IN LINE)...MAN ON

L2 *Pressing EMER ELEC PWR MAN ON pb allows extension of RAT and emer gen coupling.*

L1 VHF 1/HF 1 /ATC 1...USE

L2 - *In Elec emer configuration only VHF 1, HF 1 and ATC 1 are supplied.*

L2 - *Notify traffic control of the nature of the emergency and state intention.*
If there is no contact with air traffic control switch to code A7700 or transmit a distress message on one of the following frequencies, VHF frequency 121.5 MHz, HF 2 182 kHz or 8 364 kHz.

Continued on the following page

ENG DUAL FAILURE (Cont'd)

L1 FAC 1 .... OFF THEN ON

L2 *Aircraft is out of trim due to right aileron up float.*
Resetting FAC 1 permits to recover rudder trim even if no indication is available.

L1
- **IF NO RELIGHT AFTER 30 S:**

  ENG MASTERS .... OFF 30 S/ON

L2 *Engine masters must be left OFF for 30 s to allow ventilation of combustion chamber.*

L1
  - **If UNSUCCESSFUL:**

    APU (IF AVAIL) .... START

L2 *If the APU is available, APU may be started when below FL 250, and APU BLEED may be used for engine start below FL 200 if the speed is ≥ 180 kt , or below FL 150 if the speed is < 150 kt.*
APU start is unavailable for 45 s after the loss of both engine generators. This 45 s delay prevents any interference with emergency generator coupling.

L1 WING ANTI ICE .... OFF
APU BLEED .... ON
ENG MASTERS .... OFF 30 S/ON

L2 *Start one engine at a time.*

L1 OPTIMUM SPEED .... G DOT

L2 *Green dot is displayed on the Captain’s PFD. It represents the best lift-to-drag ratio.*

L1
- **EARLY IN APPR:**

  CAB SECURE .... ORDER

  USE RUDDER WITH CARE

  FOR LDG .... USE FLAP 3

L2 *As only blue hydraulic power is available, only the slats will extend and operating times are noticeably increased.*

L1
- **AT 5000 FEET AGL:**

  L/G .... GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 TARGET SPEED .... 150 KT

- **AT TOUCHDOWN:**

  ENG MASTERS .... OFF

L2 *LP and HP valves close.*

Continued on the following page

ENG DUAL FAILURE (Cont'd)

L1 APU MASTER SW....................OFF

L2 *APU LP valve closes.*

L1 EVAC....................INITIATE

BAT 1+2 (IF TIME PERMITS BEFORE LEAVING AIRCRAFT)....................OFF

L2 *Batteries are left ON, until the flight crew leaves the aircraft, to ensure cabin communications.*

Note: Keep batteries on for at least 10 s after switching the ENG MASTERS to OFF, to allow complete closure of fuel LP valves

L1

ASSOCIATED PROCEDURES

HYD G+Y SYS LO PR

Continued on the following page

ENG DUAL FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-S-00012283.0044001 / 21 MAR 16

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED 320/0.77
MAX BRK PR... 1000 PSI
MANEUVER WITH CARE
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

APPR PROC

- **IF HYD NOT RECOVERED:**
  FOR LDG...USE FLAP 3
- **WHEN CONF 3 AND VAPP:**
  L/G ....GRVTY EXTN
  (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION). Being stabilized at VAPP before selecting the gear down enables the aircraft to be trimmed for approach.
  APPR SPD..VREF +25 KT
  Approach speed must be increased, due to the loss of flaps.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
SLATS SLOW

INOP SYS

See below

INOP SYS

G+Y HYD	F/CTL PROT	STABILIZER

Continued on the following page

ENG DUAL FAILURE (Cont'd)

R AIL
IR 2+3
ELAC 2
YAW DAMPER
A/THR
N/W. STEER
L/G RETRACT
REVERSER 1+2
RA 1+2
SEC 2+3
A/CALL OUT
FUEL PUMPS
AUTO BRK
CAB PR 1+2
ADR 2+3
SPLR 1+2+4+5
FLAPS
AP 1+2
ANTI SKID
CAT 2
PACK 1+2

(1) *At landing gear extension, control reverts to direct law in pitch as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

ENG DUAL FAILURE

Applicable to: MSN 02014

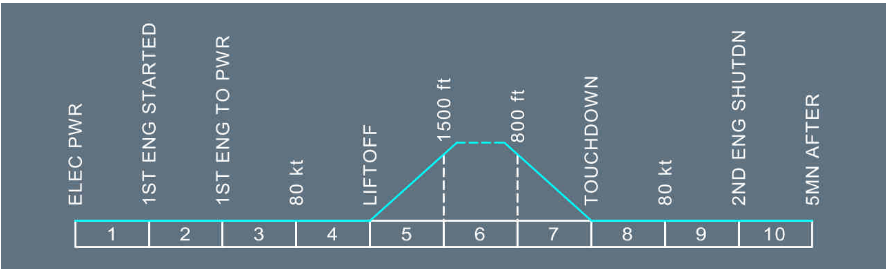
Ident.: PRO-ABN-ENG-S-00017909.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two engines are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG DUAL FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-S-00012282.0380001 / 21 MAR 17

L2 This warning inhibits the ELEC EMER CONFIG warning, and provides the flight crew with the immediate actions to take in the case of a dual engine failure. This procedure then directs the flight crew to apply the applicable QRH procedure, depending on if there is fuel or not.

When applying the ENG DUAL FAILURE QRH procedure:
- If one or more engines are recovered, apply the corresponding ECAM procedure instead
- If no engines are recovered, continue to apply the ENG DUAL FAILURE QRH procedure. If time permits, clear ECAM alerts, and check the ECAM STATUS page.

L1 **LAND ASAP**

EMER ELEC PWR (IF EMER GEN NOT IN LINE)........MAN ON

L2 *Pressing EMER ELEC PWR MAN ON pb allows extension of RAT and emergency generator coupling.*

L1 THR LEVERS........IDLE
FAC 1........OFF THEN ON

L2 *Resetting FAC 1 enables the recovery of characteristics speed displayed on the PFD.*
Resetting FAC 1 also enables rudder trim recovery, even if no indication is available.
When the hydraulic power is lost, the right aileron is lost, and is in the upfloat position.
Rudder trim may be used to compensate for this upfloating aileron.

L1 ■ **IF NO FUEL:**

OPT SPD........220 KT/GREEN DOT

L2 *If there is no fuel remaining, the optimum speed is the green dot speed.*
Initially fly 220 kt then refer to the QRH procedure to get the accurate green dot speed.

L1 ENG/NO FUEL PROC........APPLY

L2 *Refer to procedure.*

L1 ■ **IF FUEL REMAINS:**

ENG MODE SEL........IGN
OPT RELIGHT SPD........280 KT

L2 *If there is fuel remaining, the optimum speed is the optimum relight speed.*

Note: *In the case of an "ENG DUAL FAILURE" during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.*

Continued on the following page

ENG DUAL FAILURE (Cont'd)

The ECAM provides reference to an envelope speed. In case of speed indication failure (volcanic ash), pitch attitude for optimum relight is provided in the QRH procedure.

L1 ENG/FUEL PROC.. APPLY

L2 *Refer to procedure.*

Continued on the following page

ENG DUAL FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-S-00012283.0044001 / 21 MAR 16

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED 320/0.77
MAX BRK PR... 1000 PSI
MANEUVER WITH CARE
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

APPR PROC

- **IF HYD NOT RECOVERED:**
  FOR LDG...USE FLAP 3
- **WHEN CONF 3 AND VAPP:**
  L/G ....GRVTY EXTN
  (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION). Being stabilized at VAPP before selecting the gear down enables the aircraft to be trimmed for approach.
  APPR SPD..VREF +25 KT
  Approach speed must be increased, due to the loss of flaps.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See [(1)]
BRK Y ACCU PR ONLY
See [(2)]
SLATS SLOW

INOP SYS

See below

INOP SYS

G+Y HYD	F/CTL PROT	STABILIZER

Continued on the following page

ENG DUAL FAILURE (Cont'd)

R AIL
IR 2+3
ELAC 2
YAW DAMPER
A/THR
N/W. STEER
L/G RETRACT
REVERSER 1+2
RA 1+2
SEC 2+3
A/CALL OUT
FUEL PUMPS
AUTO BRK
CAB PR 1+2
ADR 2+3
SPLR 1+2+4+5
FLAPS
AP 1+2
ANTI SKID
CAT 2
PACK 1+2

(1) *At landing gear extension, control reverts to direct law in pitch as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

ENG DUAL FAILURE

Applicable to: MSN 06561

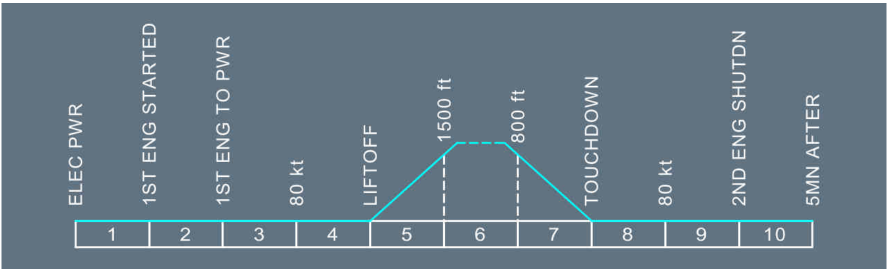
Ident.: PRO-ABN-ENG-S-00017909.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the two engines are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG DUAL FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-S-00012282.0370001 / 21 MAR 17

L2 This warning inhibits the ELEC EMER CONFIG warning, and provides the flight crew with the immediate actions to take in the case of a dual engine failure. This procedure then directs the flight crew to apply the applicable QRH procedure, depending on if there is fuel or not.

When applying the ENG DUAL FAILURE QRH procedure:

- If one or more engines are recovered, apply the corresponding ECAM procedure instead
- If no engines are recovered, continue to apply the ENG DUAL FAILURE QRH procedure. If time permits, clear ECAM alerts, and check the ECAM STATUS page.

L1 **LAND ASAP**

EMER ELEC PWR (IF EMER GEN NOT IN LINE)........MAN ON

L2 *Pressing EMER ELEC PWR MAN ON pb allows extension of RAT and emergency generator coupling.*

L1 THR LEVERS........IDLE
FAC 1........OFF THEN ON

L2 *Resetting FAC 1 enables the recovery of characteristics speed displayed on the PFD.*
Resetting FAC 1 also enables rudder trim recovery, even if no indication is available.
When the hydraulic power is lost, the right aileron is lost, and is in the upfloat position.
Rudder trim may be used to compensate for this upfloating aileron.

L1 ■ **IF NO FUEL:**

OPT SPD........220 KT/GREEN DOT

L2 *If there is no fuel remaining, the optimum speed is the green dot speed.*
Initially fly 220 kt then refer to the QRH procedure to get the accurate green dot speed.

L1 ENG/NO FUEL PROC........APPLY

L2 *Refer to procedure.*

L1 ■ **IF FUEL REMAINS:**

ENG MODE SEL........IGN
OPT RELIGHT SPD........300 KT

L2 *If there is fuel remaining, the optimum speed is the optimum relight speed.*
The ECAM provides reference to an envelope speed. In case of speed indication failure (volcanic ash), pitch attitude for optimum relight is provided in the QRH procedure.

L1 ENG/FUEL PROC........APPLY

L2 *Refer to procedure.*

Continued on the following page

ENG DUAL FAILURE (Cont'd)

Ident.: PRO-ABN-ENG-S-00012283.0044001 / 21 MAR 16

L12

STATUS

MIN RAT SPEED..140 KT
MAX SPEED 320/0.77
MAX BRK PR...1000 PSI
MANEUVER WITH CARE
FUEL GRVTY FEED
AVOID NEGATIVE G FACTOR

APPR PROC

- **IF HYD NOT RECOVERED:**

  FOR LDG...USE FLAP 3

- **WHEN CONF 3 AND VAPP:**

  L/G ....GRVTY EXTN

  (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION). Being stabilized at VAPP before selecting the gear down enables the aircraft to be trimmed for approach.

  APPR SPD...VREF +25 KT

  Approach speed must be increased, due to the loss of flaps.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
SLATS SLOW

INOP SYS

See below

INOP SYS

G+Y HYD	F/CTL PROT	STABILIZER

Continued on the following page

ENG DUAL FAILURE (Cont'd)

R AIL
IR 2+3
ELAC 2
YAW DAMPER
A/THR
N/W. STEER
L/G RETRACT
REVERSER 1+2
RA 1+2
SEC 2+3
A/CALL OUT
FUEL PUMPS
AUTO BRK
CAB PR 1+2
ADR 2+3
SPLR 1+2+4+5
FLAPS
AP 1+2
ANTI SKID
CAT 2
PACK 1+2

(1) *At landing gear extension, control reverts to direct law in pitch as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

ENG 1(2) EGT EXCEEDED DURING AIR START

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-AY-00017968.0001001 / 21 MAR 16

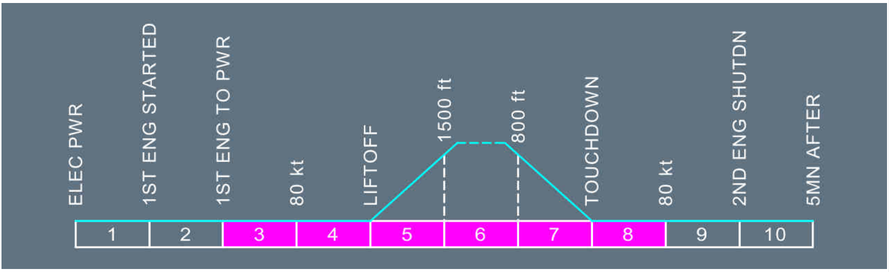
105

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the EGT limit is exceeded during engine relight in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) EGT EXCEEDED DURING AIR START (Cont'd)

Ident.: PRO-ABN-ENG-AY-00012124.0001001 / 21 MAR 16

106

L2 Report in maintenance log.

L1 Crew awareness.

ENG 1(2) EIU FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

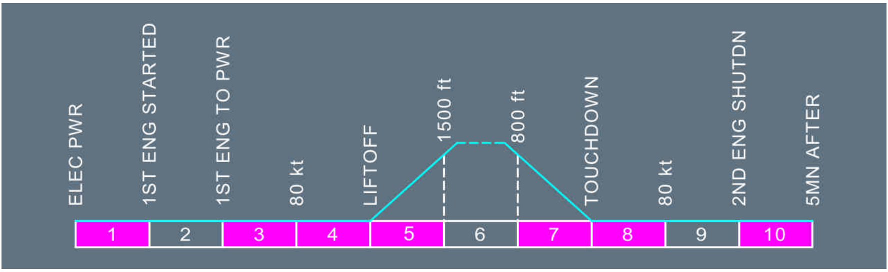
Ident.: PRO-ABN-ENG-B-00017970.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the data bus between the EIU and ECU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) EIU FAULT (Cont'd)

Ident.: PRO-ABN-ENG-B-00017658.0003001 / 21 MAR 16

Crew awareness.

L2 The following consequences affect the aircraft when this alert is triggered:

- Affected engine start is lost
- Autothrust control is lost
- Thrust reverser on the affected engine is lost
- When idle is selected, only approach idle is available
- Bleed corrections on EPR limit are lost
- Continuous ignition is on.

Ident.: PRO-ABN-ENG-B-00017659.0002001 / 03 DEC 19

L12

STATUS

	INOP SYS
ENG 1(2) APPR IDLE ONLY *Minimum idle is lost.* CAT 2 ONLY	A/THR CAT 3 REVERSER 1(2) ENG 1(2) START

ENG 1(2) EIU FAULT

Applicable to: MSN 01251, 02014

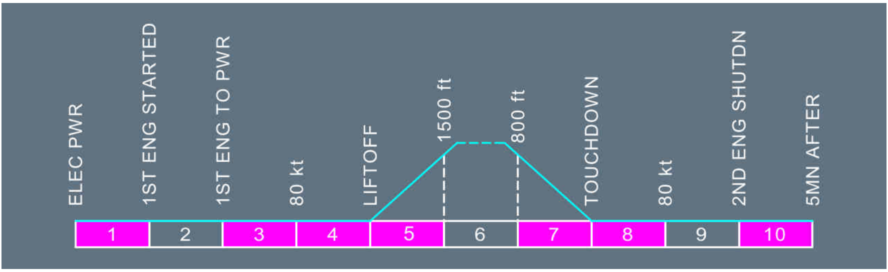
Ident.: PRO-ABN-ENG-B-00017970.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the data bus between the EIU and ECU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-B-00017658.0003001 / 21 MAR 16

Crew awareness.

L2 The following consequences affect the aircraft when this alert is triggered:
- Affected engine start is lost
- Autothrust control is lost
- Thrust reverser on the affected engine is lost
- When idle is selected, only approach idle is available
- Bleed corrections on EPR limit are lost
- Continuous ignition is on.

Continued on the following page

ENG 1(2) EIU FAULT (Cont'd)

Ident.: PRO-ABN-ENG-B-00017659.0001001 / 03 DEC 19

L12

STATUS

ENG 1(2) APPR IDLE ONLY

Minimum idle is lost.

INOP SYS

A/THR
REVERSER 1(2)
ENG 1(2) START

ENG 1(2) EIU FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: PRO-ABN-ENG-B-00017970.0001001 / 21 MAR 16

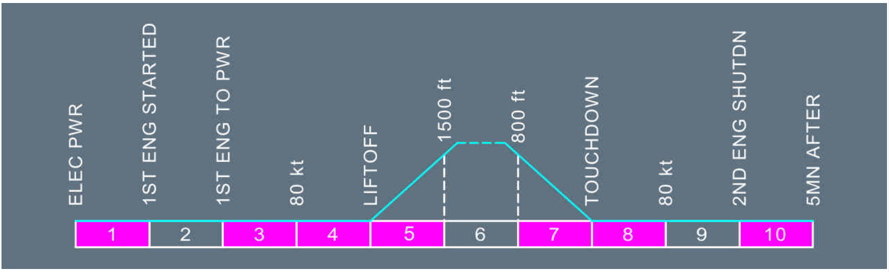
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the data bus between the EIU and ECU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
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Continued on the following page

ENG 1(2) EIU FAULT (Cont'd)

Ident.: PRO-ABN-ENG-B-00017658.0002001 / 01 MAR 18

Crew awareness.

L2 The following consequences affect the aircraft when this alert is triggered:
- Affected engine start is lost
- Autothrust control is lost
- Thrust reverser on the affected engine is lost
- When idle is selected, only approach idle is available
- Bleed corrections on N1 limit are lost.

Ident.: PRO-ABN-ENG-B-00017659.0001001 / 03 DEC 19

L12

STATUS

ENG 1(2) APPR IDLE ONLY

Minimum idle is lost.

INOP SYS

A/THR
REVERSER 1(2)
ENG 1(2) START

ENG 1(2) EIU FAULT

Applicable to: MSN 08495-08596, 09190-09324

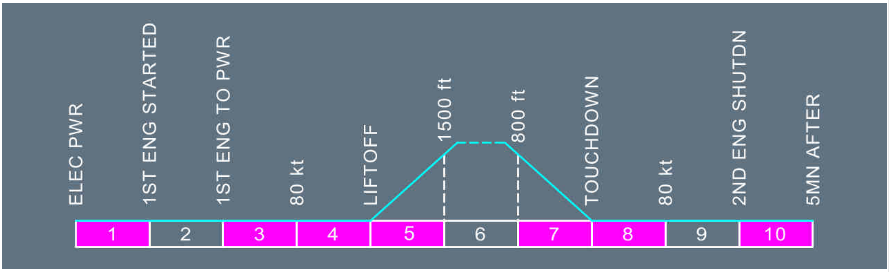
Ident.: PRO-ABN-ENG-B-00017970.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the data bus between the EIU and ECU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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5
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Ident.: PRO-ABN-ENG-B-00017658.0001001 / 21 MAR 16

107

Crew awareness.

L2 The following consequences affect the aircraft when this alert is triggered:
- Affected engine start is lost
- Autothrust control is lost
- Thrust reverser on the affected engine is lost
- When idle is selected, only approach idle is available
- Bleed corrections on N1 limit are lost
- Continuous ignition is on (in flight).

Continued on the following page

ENG 1(2) EIU FAULT (Cont'd)

Ident.: PRO-ABN-ENG-B-00017659.0003001 / 03 DEC 19

108

L12

STATUS

GA THR: TOGA ONLY

ENG 1(2) APPR IDLE ONLY

Minimum idle is lost.

CAT 2 ONLY

INOP SYS

A/THR
CAT 3
REVERSER 1(2)
ENG 1(2) START
GA SOFT

ENG 1(2) EIU FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-B-00017970.0002001 / 30 MAR 18

109

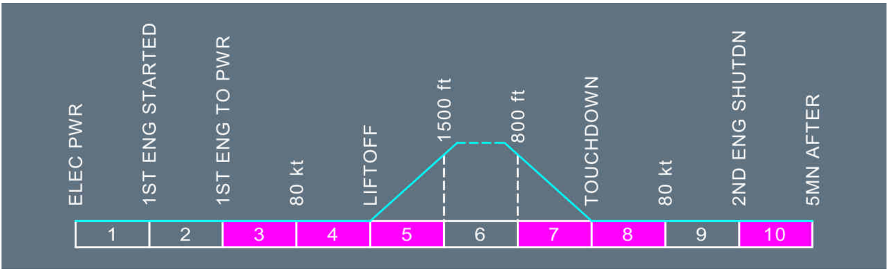
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the data bus between the EIU and ECU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) EIU FAULT (Cont'd)

Ident.: PRO-ABN-ENG-B-00017658.0001001 / 21 MAR 16

110

Crew awareness.

L2 The following consequences affect the aircraft when this alert is triggered:
- Affected engine start is lost
- Autothrust control is lost
- Thrust reverser on the affected engine is lost
- When idle is selected, only approach idle is available
- Bleed corrections on N1 limit are lost
- Continuous ignition is on (in flight).

Ident.: PRO-ABN-ENG-B-00017659.0003001 / 03 DEC 19

111

L12

STATUS

	INOP SYS
GA THR: TOGA ONLY	A/THR
ENG 1(2) APPR IDLE ONLY	CAT 3
Minimum idle is lost.	REVERSER 1(2)
CAT 2 ONLY	ENG 1(2) START
	GA SOFT

ENG 1(2) EPR MODE FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

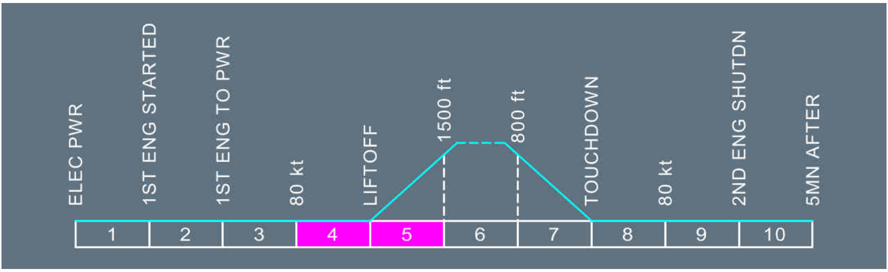
Ident.: PRO-ABN-ENG-H-00017971.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the EEC is reverted to N1 MODE.
The Autothrust control is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) EPR MODE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-H-00017728.0004001 / 24 AUG 18

- **On ground if degraded N1 MODE is active:**

  N1 DEGRADED MODE.
  THR LVR 1(2) NOT ABOVE IDLE.

- **In flight if degraded N1 MODE is active:**

  L2 Loss of these upper ECAM indications: Max N1, N1 mode, N1 rating limit.

  L1 N1 DEGRADED MODE.
  ENG 1 N1 MODE ....ON
  ENG 2 N1 MODE ....ON

  L2 *N1 mode is confirmed on the affected engine.*
  The other engine must be reverted to the rated N1 mode to ease thrust setting.

  L1 NOT EXCEED N1 LIMIT.

  L2 *As there is no N1 limit, an overboost can occur at full forward thrust lever position.*

  L1 MAN THR....................ADJUST

  L2 *Align the N1 of the affected engine on the N1 of the other engine. Refer to EFB-THR-N1 N1 MODE THRUST CONTROL, for power management tables.*

- L1 **In flight if rated N1 MODE is active:**

  T.O THRUST LIMITED (ON GROUND)

  L2 *When dispatching in rated N1 mode, apply thrust penalties provided in the MMEL.*

  L1 ENG 1 N1 MODE....................ON
  ENG 2 N1 MODE....................ON
  MAN THR....................ADJUST

  L2 *Refer to EFB-THR-N1 N1 MODE THRUST CONTROL, for power management tables.*

Ident.: PRO-ABN-ENG-H-00017729.0003001 / 21 MAR 16

L2 Note: *Recovery of EPR MODE on both engines may be attempted by switching off both ENG N1 MODE pb-sw.*

Continued on the following page

ENG 1(2) EPR MODE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-H-00017660.0003001 / 21 MAR 16

STATUS

- **On ground, if rated N1 MODE is active:**
  T.O THRUST LIMITED
- **If degraded N1 MODE is active:**
  ENG 1(2) N1 DEGRADED MODE
  CAT 2 ONLY

INOP SYS

A/THR
CAT 3

ENG 1(2) EPR MODE FAULT

Applicable to: MSN 01251

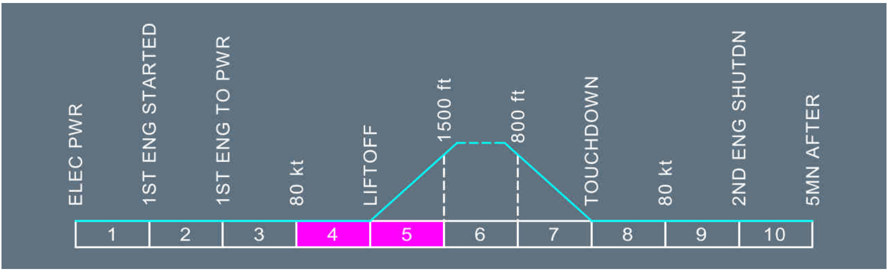
Ident.: PRO-ABN-ENG-H-00017971.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the EEC is reverted to N1 MODE.
The Autothrust control is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) EPR MODE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-H-00017728.0002001 / 24 AUG 18

- **If degraded N1 MODE is active:**

L2 Loss of these upper ECAM indications: Max N1, N1 mode, N1 rating limit.

L1 N1 DEGRADED MODE.
ENG 1 N1 MODE ....ON
ENG 2 N1 MODE ....ON

L2 *N1 mode is confirmed on the affected engine.*
The other engine must be reverted to the rated N1 mode to ease thrust setting.

L1 NOT EXCEED N1 LIMIT.

L2 *As there is no N1 limit, an overboost can occur at full forward thrust lever position.*

L1 MAN THR....................ADJUST

L2 *Align the N1 of the affected engine on the N1 of the other engine. Refer to EFB-THR-N1 N1 MODE THRUST CONTROL, for power management tables.*

L1
- **If rated N1 MODE is active:**

ENG 1 N1 MODE....................ON
ENG 2 N1 MODE....................ON
MAN THR....................ADJUST

L2 *Refer to EFB-THR-N1 N1 MODE THRUST CONTROL, for power management tables.*

Ident.: PRO-ABN-ENG-H-00017729.0003001 / 21 MAR 16

L2 *Note:* *Recovery of EPR MODE on both engines may be attempted by switching off both ENG N1 MODE pb-sw.*

Ident.: PRO-ABN-ENG-H-00017660.0001001 / 21 MAR 16

STATUS

	INOP SYS
- **If degraded N1 MODE is active:** ENG 1(2) N1 DEGRADED MODE CAT 2 only	A/THR CAT 3

ENG 1(2) FADEC A(B) FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

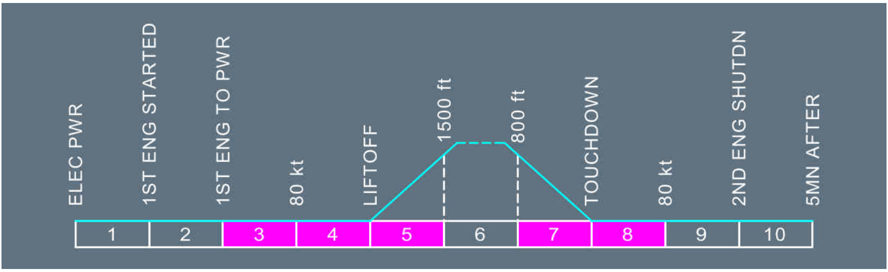
Ident.: PRO-ABN-ENG-AZ-00017972.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the associated FADEC channel is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-AZ-00017661.0001001 / 07 NOV 22

Crew awareness.

- **For aircraft equipped with CFM engines:**

  Note: *Some cases of spurious FADEC fault have been experienced at engine start on ground. The flight crew can consider the alert as spurious if it disappears after the application of the reset procedure. (Refer to PRO-ABN-ABN-RESET System Reset Table - ENG).*

ENG 1(2) FADEC ALTERNATOR

Applicable to: ALL

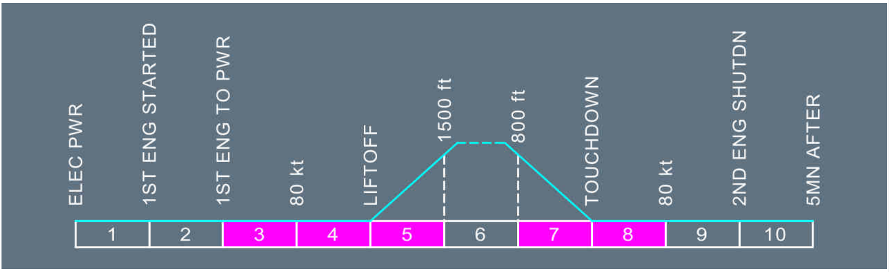
Ident.: PRO-ABN-ENG-BA-00017974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the electrical auto supply for the FADEC system is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-BA-00017662.0001001 / 21 MAR 16

Crew awareness.

ENG 1(2) FADEC FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

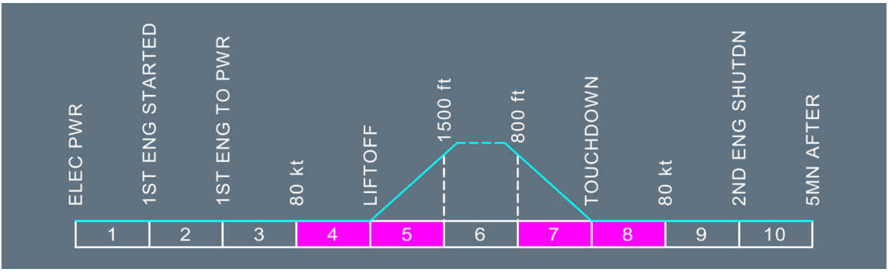
Ident.: PRO-ABN-ENG-BC-00017975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FADEC channels are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC FAULT (Cont'd)

Ident.: PRO-ABN-ENG-BC-00017663.0006001 / 21 MAR 17

- **On ground:**

  THR LVR (AFFECTED) NOT ABOVE IDLE
  ENG (AFFECTED) PARAMETERS....................CHECK

L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

L1
  - **IF ABNORMAL:**

    ENG MASTER (AFFECTED)....................OFF

- **In flight:**

  ENG (AFFECTED) PARAMETERS....................CHECK

L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

L1
  - **IF ABNORMAL:**

    THR LEVER (AFFECTED)....................IDLE
    ENG MASTER (AFFECTED)....................OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

Ident.: PRO-ABN-ENG-BC-00019553.0001001 / 13 MAY 16

STATUS

- **On ground:**

  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) FADEC FAULT

Applicable to: MSN 01251

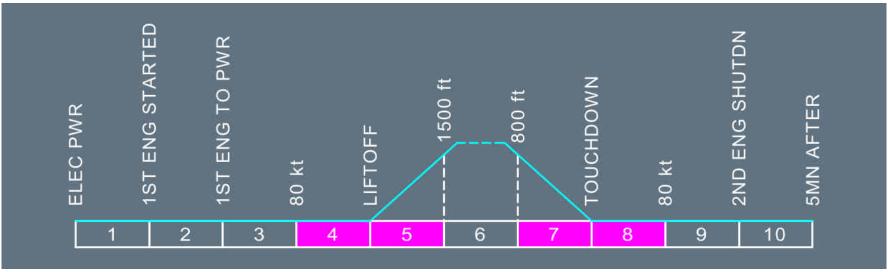
Ident.: PRO-ABN-ENG-BC-00017975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FADEC channels are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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6
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Ident.: PRO-ABN-ENG-BC-00017663.0003001 / 21 MAR 17

ENG INDICATIONS.. CHECK

L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

L1 ● **IF ENG FAIL CONFIRMED:**

THR LEVER (AFFECTED).. IDLE

ENG MASTER (AFFECTED)..OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) FADEC FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

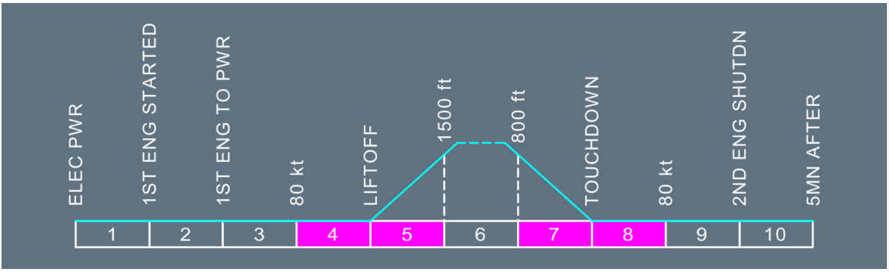
Ident.: PRO-ABN-ENG-BC-00017975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FADEC channels are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ENG 1(2) FADEC FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

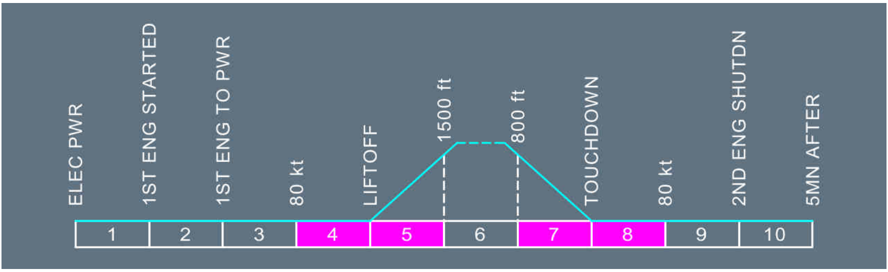
Ident.: PRO-ABN-ENG-BC-00017975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FADEC channels are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC FAULT (Cont'd)

Ident.: PRO-ABN-ENG-BC-00017663.0005001 / 21 MAR 17

- **On ground:**

  THR LVR (AFFECTED) NOT ABOVE IDLE
  ENG (AFFECTED) PARAMETERS..........CHECK

  L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

  L1 ● **IF ABN ENG OPERATION:**
  ENG MASTER (AFFECTED)..........OFF

- **In flight:**

  THR LEVER (AFFECTED).......... IDLE
  ENG (AFFECTED) PARAMETERS..........CHECK

  L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

  L1 ● **IF ABN ENG OPERATION:**
  ENG MASTER (AFFECTED)..........OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

Ident.: PRO-ABN-ENG-BC-00019553.0001001 / 13 MAY 16

STATUS

● **On ground:**
THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) FADEC FAULT

Applicable to: MSN 08495-08596, 09190-09324

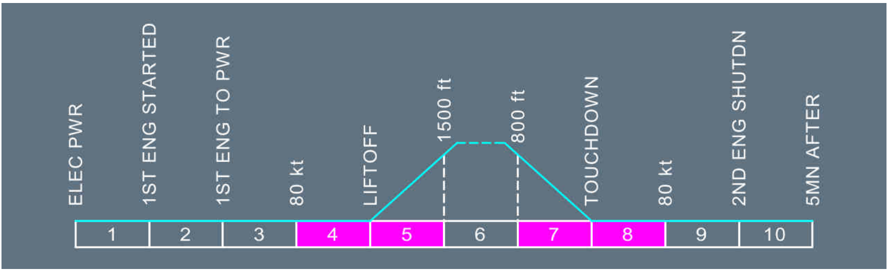
Ident.: PRO-ABN-ENG-BC-00017975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FADEC channels are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC FAULT (Cont'd)

Ident.: PRO-ABN-ENG-BC-00017663.0004001 / 21 MAR 17

- **On ground:**

  THR LVR (AFFECTED ENGINE) NOT ABOVE IDLE

  ENG (AFFECTED ENGINE) PARAMETERS.....CHECK

  - **IF ABN ENG OPERATION:**

    ENG MASTER (AFFECTED ENGINE).....OFF

- **In flight:**

  ENG (AFFECTED) PARAMETERS.....CHECK

  L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

  L1
  - **IF ABN ENG OPERATION:**

    THR LEVER (AFFECTED ENGINE).....IDLE

    ENG MASTER (AFFECTED ENGINE).....OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

Ident.: PRO-ABN-ENG-BC-00019553.0001001 / 13 MAY 16

STATUS

- **On ground:**

  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) FADEC FAULT

Applicable to: MSN 08635, 10949-11597

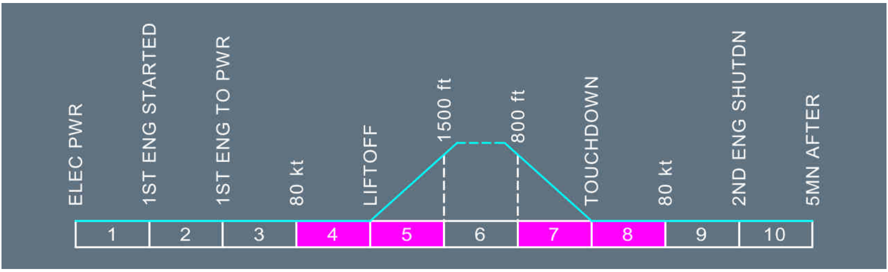
Ident.: PRO-ABN-ENG-BC-00017975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FADEC channels are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC FAULT (Cont'd)

Ident.: PRO-ABN-ENG-BC-00017663.0007001 / 30 MAR 18

112

- **On ground:**

  THR LEVER (AFFECTED)........ IDLE

  ENG (AFFECTED) PARAMETERS........CHECK

  L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

  L1 ● **IF ABN ENG OPERATION:**

    ENG MASTER (AFFECTED)........ OFF

- **In flight:**

  ENG (AFFECTED) PARAMETERS........CHECK

  L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to check engine status.*

  L1 ● **IF ABN ENG OPERATION:**

    THR LEVER (AFFECTED)........IDLE

    ENG MASTER (AFFECTED)........ OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) FADEC HI TEMP

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

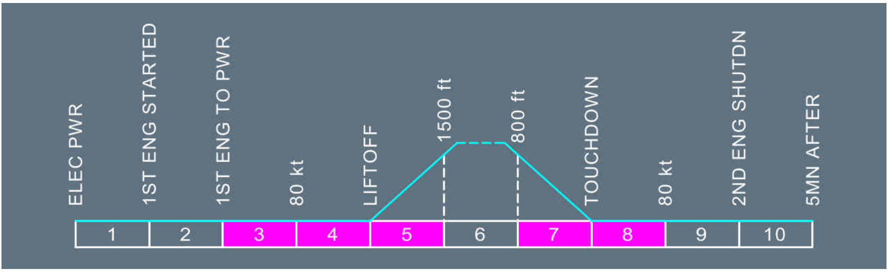
Ident.: PRO-ABN-ENG-BD-00017976.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when high temperature is detected by one or both channels.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC HI TEMP (Cont'd)

Ident.: PRO-ABN-ENG-BD-00017664.0004001 / 21 MAR 17

- **If the ECU TEMP is above 105 °C:**

  FADEC OVHT

  L2 *Reducing engine power should decrease temperature in the ECU area.*
  If overheating is severe enough, ECU failure could result in a significant loss of engine functions.

L1 ■ **On the ground:**

THR LEVER (AFFECTED).. IDLE
ENG MASTER (ASSOCIATED ENGINE)..OFF
ENG MODE SEL..NORM
FADEC GND PWR.. CHECK OFF

■ **In flight:**

ENG (AFFECTED) PARAMETERS..CHECK

- **IF ABN ENG OPERATION:**

  THR LEVER (AFFECTED)..IDLE
  ENG MASTER (ASSOCIATED ENGINE)..OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) FADEC IDENT FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-BE-00018158.0001001 / 21 MAR 16

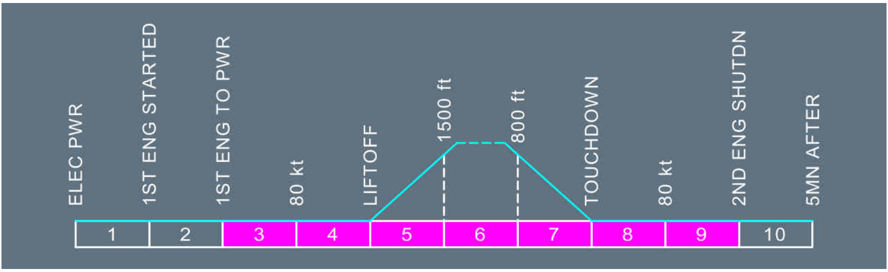
113

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine Data Storage Unit (DSU) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BE-00015573.0001001 / 18 AUG 14

114

Crew awareness.

L2 Maintenance action is due.

ENG 1(2) FADEC OVHT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ENG-BF-00017978.0001001 / 21 MAR 16

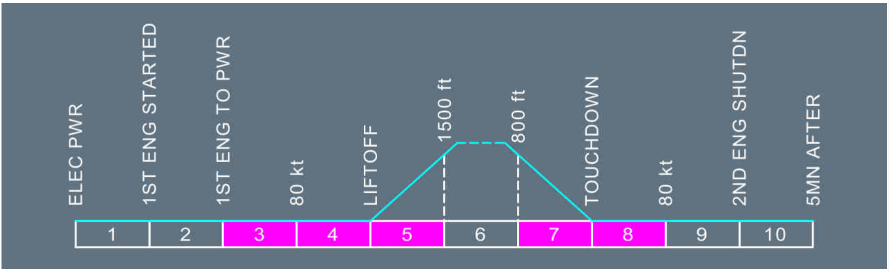
115

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FADEC is in overheat condition.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC OVHT (Cont'd)

Ident.: PRO-ABN-ENG-BF-00017665.0005001 / 21 MAR 17

- **On the ground:**
  THR LEVER (AFFECTED)....................IDLE
  ENG MASTER (AFFECTED)....................OFF
- **In flight**

L2 Reducing engine power should decrease temperature in the area of the ECU.

If overheating is severe enough, an EEC failure could result with the subsequent loss of engine function.

L1 ENG (AFFECTED) PARAMETERS....................CHECK

- **IF ABN ENG OPERATION:**
  THR LEVER (AFFECTED)....................IDLE
  ENG MASTER (AFFECTED)....................OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) FADEC OVHT

Applicable to: MSN 01251

Ident.: PRO-ABN-ENG-BF-00017978.0001001 / 21 MAR 16

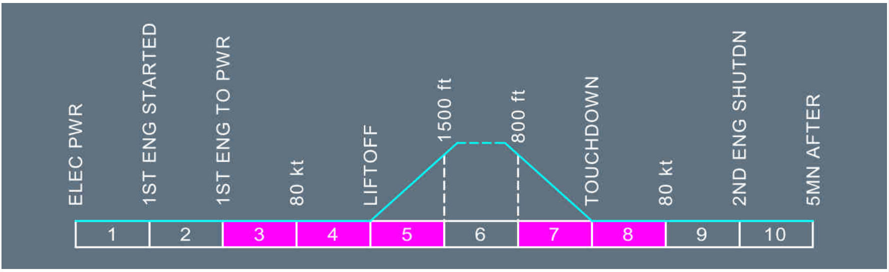
116

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FADEC is in overheat condition.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC OVHT (Cont'd)

Ident.: PRO-ABN-ENG-BF-00017665.0004001 / 21 MAR 17

- **On the ground:**

  THR LEVER (AFFECTED)..IDLE
  ENG MASTER (ASSOCIATED ENGINE)..OFF
  ENG MODE SEL..NORM
  FADEC GND PWR ....CHECK OFF

- **In flight:**

L2 Reducing engine power should decrease temperature in the area of the ECU.
If overheating is severe enough, an EEC failure could result with the subsequent loss of engine function.

L1 ENG INDICATIONS..CHECK

- ● **IF ABN ENG OPERATION:**

  THR LEVER (AFFECTED)..IDLE
  ENG MASTER (AFFECTED)..OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) FADEC OVHT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-BF-00017978.0001001 / 21 MAR 16

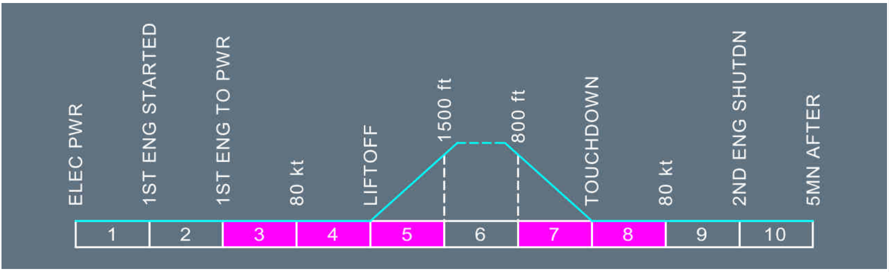
117

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FADEC is in overheat condition.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FADEC OVHT (Cont'd)

Ident.: PRO-ABN-ENG-BF-00017665.0006001 / 21 MAR 17

118

- **On the ground:**
  THR LEVER (AFFECTED)...IDLE
  ENG MASTER (AFFECTED)...OFF
- **In flight**
  ENG (AFFECTED) PARAMETERS...CHECK

L2 *Due to the fact that engine indications are lost, other system pages such as HYD SD page, ELEC SD page or BLEED SD page must be used to confirm engine status.*

L1
- **IF ABN ENG OPERATION:**
  THR LEVER (AFFECTED)...IDLE
  ENG MASTER (AFFECTED)...OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

(Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) FADEC PLUG FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

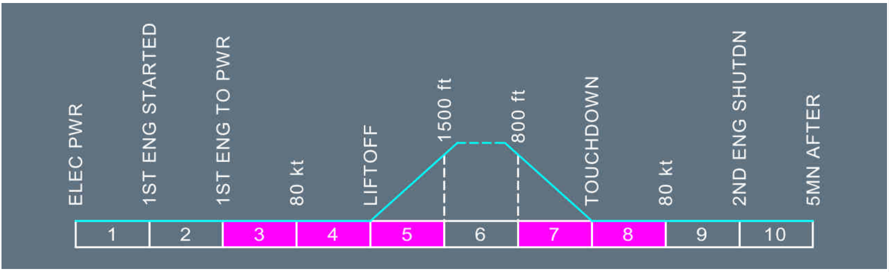
Ident.: PRO-ABN-ENG-BG-00017979.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FADEC plug is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BG-00012295.0001001 / 25 FEB 14

Crew awareness.

L2 Maintenance action is due.

ENG 1(2) FADEC SYS FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-BH-00018159.0001001 / 21 MAR 16

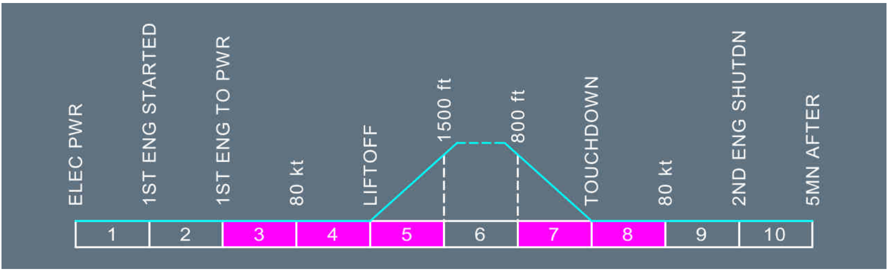
119

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FADEC system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BH-00015570.0001001 / 18 AUG 14

- **On ground:**
  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) FADEC SYS FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-BH-00018159.0001001 / 21 MAR 16

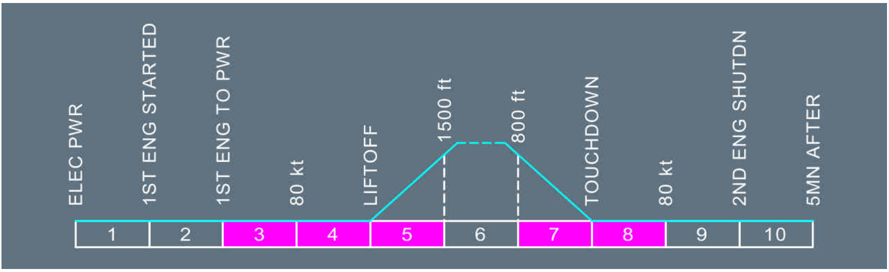
120

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FADEC system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BH-00015570.0004001 / 25 FEB 20

121

- **If shaft shear protection malfunction:**
  SHAFT PROT FAILURE
- **On ground:**
  THR LEVER (AFFECTED).. IDLE

ENG 1(2) FAN COWL NOT CLSD

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-BI-00018160.0001001 / 21 MAR 16

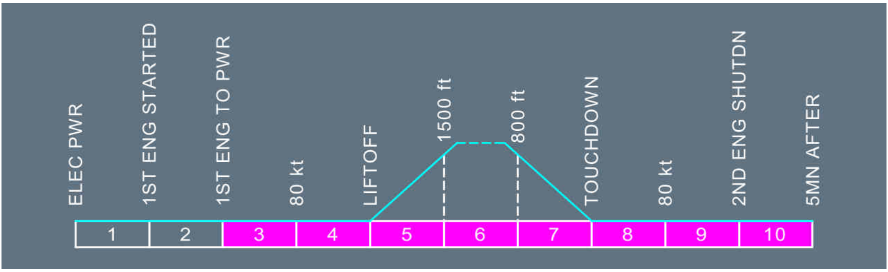
122

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine fan cowl is not closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BI-00015580.0001001 / 18 AUG 14

123

Crew awareness.

ENG 1(2) FAIL

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

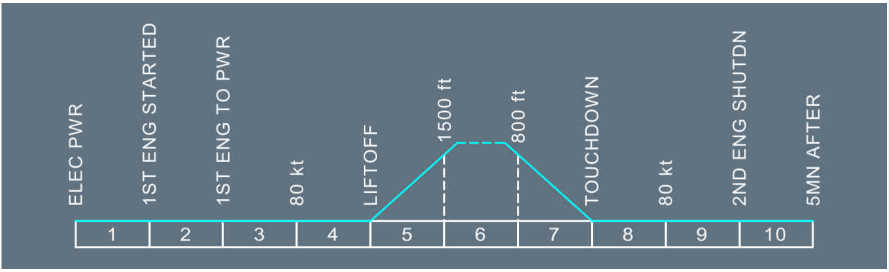
Ident.: PRO-ABN-ENG-BJ-00017982.0002001 / 06 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine core speed is below idle, with the ENG MASTER lever set to ON, and ENG FIRE pb not pushed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FAIL (Cont'd)

Ident.: PRO-ABN-ENG-BJ-00017667.0003001 / 04 JUN 19

L2 An engine flame-out may be recognized by a rapid decrease in EGT, N2, FF, followed by decrease in N1 for CFM engines, or EPR for IAE engines.

The flight crew can suspect an engine damage if the flight crew observes two or more of the following symptoms:

- Rapid increase of EGT above the red line
- Important mismatch of the rotor speeds, or absence of rotation
- Significant increase of aircraft vibrations and/or buffeting
- Hydraulic system loss
- Repeated or uncontrollable engine stalls

L1 **LAND ASAP**

■ **Before takeoff or after landing:**

THR LEVER (AFFECTED ENGINE)........ IDLE
ENG MASTER (AFFECTED ENGINE)........OFF

■ **IF DAMAGE:**

ENG FIRE P/B (AFFECTED ENGINE)........ PUSH
AGENT 1........ DISCH

■ **IF NO DAMAGE:**

L2 For CFM engines, if conditions permit, do not restart the engine. A new engine start would erase FADEC troubleshooting data.

L1 ENG (AFFECTED) RELIGHT........CONSIDER

L2 *If no damage, a new start sequence may be initiated.*

L12

ASSOCIATED PROCEDURES

ENG 1(2) **SHUT DOWN**

*Apply the ENG SHUT DOWN procedure (*Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN*), if damage or if engine relight is unsuccessful.*

L1 ■ **In flight:**

ENG MODE SEL........ IGN

L2 *Selection of continuous ignition confirms the immediate relight attempt made by the FADEC.*

L1 THR LEVER (AFFECTED ENGINE)........ IDLE

Continued on the following page

ENG 1(2) FAIL (Cont'd)

L2 *Note: In case of GPWS (EGPWS) alerts, reduce speed with care below VLS with flaps extended (at light weights VMCA may be reached before αMax) when applying the GPWS (EGPWS) procedure.*

L1 ● **IF NO ENG RELIGHT AFTER 30 S:**

L2 The 30 s countdown starts as soon as the ENG 1(2) FAIL alert is triggered.

L1 ENG MASTER (AFFECTED ENGINE)..OFF

■ **IF DAMAGE:**

ENG FIRE P/B (AFFECTED ENGINE)..PUSH

AGENT 1 (AFTER 10 SECONDS IN FLIGHT)..DISCH

L12

ASSOCIATED PROCEDURES

ENG 1(2) **SHUT DOWN**

L2 *Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN), if damage or if engine relight is unsuccessful.*

If high vibration occurs and continues after engine shutdown, reduce airspeed and descent to a safe altitude.

Attempt to determine and use a practical airspeed and altitude for minimum vibrations.

L1 ■ **IF NO DAMAGE:**

ENG (AFFECTED) RELIGHT..CONSIDER

L2 *Apply ENG RELIGHT (in flight) procedure (Refer to PRO-ABN-ENG [QRH] ENG RELIGHT IN FLIGHT).*

ENG 1(2) FAIL

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

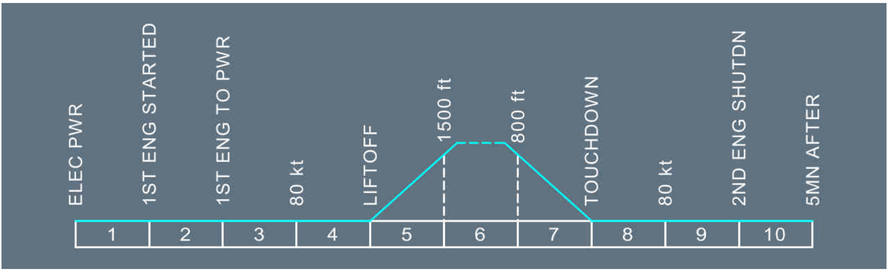
Ident.: PRO-ABN-ENG-BJ-00017982.0002001 / 06 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine core speed is below idle, with the ENG MASTER lever set to ON, and ENG FIRE pb not pushed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ENG 1(2) FAIL

Applicable to: MSN 08495-08596, 09190-09324

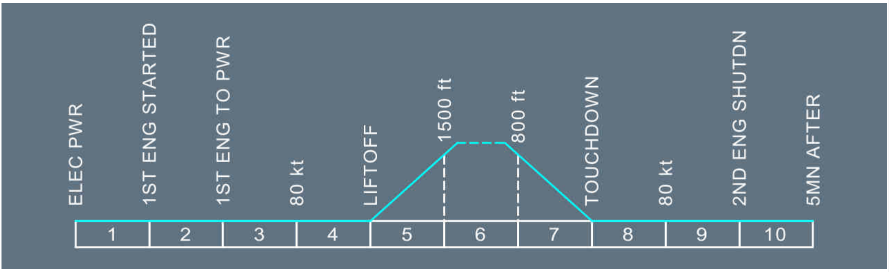
Ident.: PRO-ABN-ENG-BJ-00017982.0002001 / 06 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine core speed is below idle, with the ENG MASTER lever set to ON, and ENG FIRE pb not pushed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FAIL (Cont'd)

Ident.: PRO-ABN-ENG-BJ-00017667.0004001 / 04 JUN 19

L2 An engine flame-out may be recognized by a rapid decrease in EGT, N2, FF, followed by decrease in N1.

The flight crew can suspect an engine damage if the flight crew observes two or more of the following symptoms:
- Rapid increase of EGT above the red line
- Important mismatch of the rotor speeds, or absence of rotation
- Significant increase of aircraft vibrations and/or buffeting
- Hydraulic system loss
- Repeated or uncontrollable engine stalls

L1

LAND ASAP

■ **If shaft shear detected:**

SHAFT FAILURE

■ **In case of a thrust malfunction:**

THRUST MALFUNCTION

L2 *On ground, an overthrust condition is detected by the FADEC, which automatically shuts down the engine.*

L1 ENG MASTER (AFFECTED ENGINE)....................OFF

■ **Before takeoff or after landing:**

THR LEVER (AFFECTED ENGINE).................... IDLE
ENG MASTER (AFFECTED ENGINE)....................OFF

■ **IF DAMAGE:**

ENG FIRE P/B (AFFECTED ENGINE).................... PUSH
AGENT 1.................... DISCH

■ **IF NO DAMAGE:**

ENG (AFFECTED) RELIGHT....................CONSIDER

L2 *If no damage, a new start sequence may be initiated.*

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN), if damage or if engine relight is unsuccessful.

Continued on the following page

ENG 1(2) FAIL (Cont'd)

L1 ■ **In flight:**

ENG MODE SEL..IGN

L2 *Selection of continuous ignition confirms the immediate relight attempt made by the FADEC.*

L1 THR LEVER (AFFECTED ENGINE)..IDLE

L2 *Note: In case of GPWS (EGPWS ◁) alerts, reduce speed with care below VLS with flaps extended (at light weights VMCA may be reached before αMax) when applying the GPWS (EGPWS ◁) procedure.*

L1 ● **IF NO ENG RELIGHT AFTER 30 S:**

L2 The 30 s countdown starts as soon as the ENG 1(2) FAIL alert is triggered.

L1 ENG MASTER (AFFECTED ENGINE)..OFF

■ **IF DAMAGE:**

ENG FIRE P/B (AFFECTED ENGINE)..PUSH
AGENT 1 (AFTER 10 SECONDS IN FLIGHT)..DISCH

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

L2 *Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN), if damage or if engine relight is unsuccessful.*
If high vibration occurs and continues after engine shutdown, reduce airspeed and descent to a safe altitude.
Attempt to determine and use a practical airspeed and altitude for minimum vibrations.

L1 ■ **IF NO DAMAGE:**

ENG (AFFECTED) RELIGHT..CONSIDER

L2 *Apply ENG RELIGHT (in flight) procedure (Refer to PRO-ABN-ENG [QRH] ENG RELIGHT IN FLIGHT).*

ENG 1(2) FAIL

Applicable to: MSN 08635

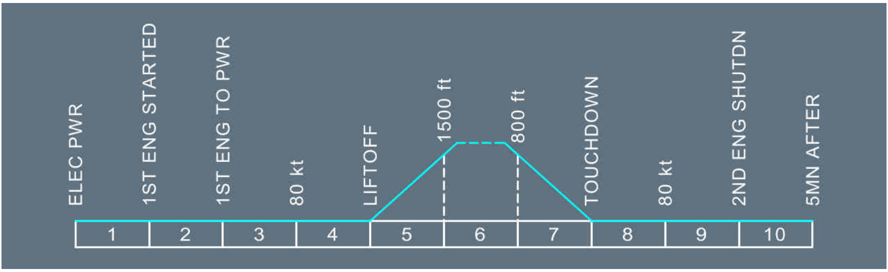
Ident.: PRO-ABN-ENG-BJ-00017982.0002001 / 06 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine core speed is below idle, with the ENG MASTER lever set to ON, and ENG FIRE pb not pushed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FAIL (Cont'd)

L2 An engine flame-out may be recognized by a rapid decrease in EGT, N2, FF, followed by decrease in N1.

The flight crew can suspect an engine damage if the flight crew observes two or more of the following symptoms:

- Rapid increase of EGT above the red line
- Important mismatch of the rotor speeds, or absence of rotation
- Significant increase of aircraft vibrations and/or buffeting
- Hydraulic system loss
- Repeated or uncontrollable engine stalls

L1 **LAND ASAP**

- **In case of shaft failure:**

  SHAFT FAILURE

  L2 *The FADEC automatically shuts down the engine.*

  L1 THR LEVER (AFFECTED ENGINE)....................IDLE
  ENG MASTER (AFFECTED ENGINE)....................OFF
  ENG FIRE P/B (AFFECTED ENGINE)....................PUSH
  AGENT 1 (AFTER 10 SECONDS)....................DISCH

- **In case of a thrust malfunction:**

  THRUST MALFUNCTION

  L2 *On ground, an overthrust condition is detected by the FADEC, which automatically shuts down the engine.*

  L1 ENG MASTER (AFFECTED ENGINE)....................OFF

- **Before takeoff or after landing:**

  THR LEVER (AFFECTED ENGINE)....................IDLE
  ENG MASTER (AFFECTED ENGINE)....................OFF

  - **IF DAMAGE:**

    ENG FIRE P/B (AFFECTED ENGINE)....................PUSH
    AGENT 1....................DISCH

  - **IF NO DAMAGE:**

    ENG (AFFECTED) RELIGHT....................CONSIDER

    L2 *If no damage, a new start sequence may be initiated.*

Continued on the following page

ENG 1(2) FAIL (Cont'd)

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN), if damage or if engine relight is unsuccessful.

L1 ■ **In flight:**

ENG MODE SEL.................... IGN

L2 *Selection of continuous ignition confirms the immediate relight attempt made by the FADEC.*

L1 THR LEVER (AFFECTED ENGINE).................... IDLE

L2 *Note:* *In case of GPWS (EGPWS) alerts, reduce speed with care below VLS with flaps extended (at light weights VMCA may be reached before αMax) when applying the GPWS (EGPWS) procedure.*

L1 ● **IF NO ENG RELIGHT AFTER 30 S:**

L2 The 30 s countdown starts as soon as the ENG 1(2) FAIL alert is triggered.

L1 ● **IF NO RELIGHT:**

ENG MASTER (AFFECTED ENGINE).................... OFF

■ **IF DAMAGE:**

ENG FIRE P/B (AFFECTED ENGINE).................... PUSH

AGENT 1 (AFTER 10 SECONDS IN FLIGHT).................... DISCH

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

L2 *Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN), if damage or if engine relight is unsuccessful.*
If high vibration occurs and continues after engine shutdown, reduce airspeed and descent to a safe altitude.
Attempt to determine and use a practical airspeed and altitude for minimum vibrations.

L1 ■ **IF NO DAMAGE:**

ENG (AFFECTED) RELIGHT.................... CONSIDER

Continued on the following page

ENG 1(2) FAIL (Cont'd)

L2 *Apply ENG RELIGHT (in flight) procedure (Refer to PRO-ABN-ENG [QRH] ENG RELIGHT IN FLIGHT).*

ENG 1(2) FAIL

Applicable to: MSN 10949-11597

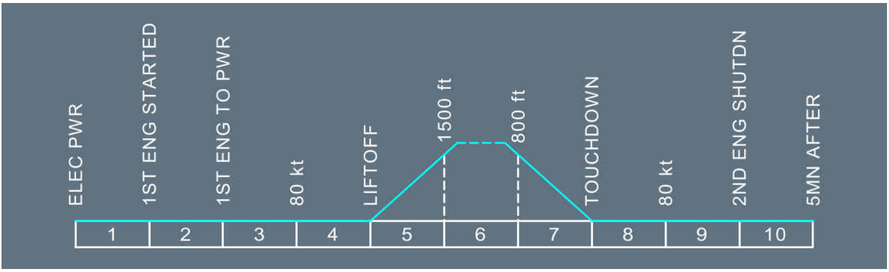
Ident.: PRO-ABN-ENG-BJ-00017982.0002001 / 06 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine core speed is below idle, with the ENG MASTER lever set to ON, and ENG FIRE pb not pushed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ENG 1(2) FAIL (Cont'd)

Ident.: PRO-ABN-ENG-BJ-00017667.0011001 / 18 NOV 21

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L2 An engine flame-out may be recognized by a rapid decrease in EGT, N2, FF, followed by decrease in N1.

The flight crew can suspect an engine damage if the flight crew observes two or more of the following symptoms:
- Rapid increase of EGT above the red line
- Important mismatch of the rotor speeds, or absence of rotation
- Significant increase of aircraft vibrations and/or buffeting
- Hydraulic system loss
- Repeated or uncontrollable engine stalls.

L1 **LAND ASAP**

- **In case of shaft failure:**

  SHAFT FAILURE

L2 *The FADEC automatically shuts down the engine.*

L1 THR LEVER (AFFECTED ENGINE).............................IDLE
ENG MASTER (AFFECTED ENGINE).............................OFF
ENG FIRE P/B (AFFECTED ENGINE).............................PUSH
AGENT 1 (AFTER 10 SECONDS).............................DISCH

- **In case of a thrust malfunction:**

  THRUST MALFUNCTION

L2 *On ground, an overthrust condition is detected by the FADEC, which automatically shuts down the engine.*

L1 ENG MASTER (AFFECTED ENGINE).............................OFF

- **Before takeoff or after landing:**

  THR LEVER (AFFECTED ENGINE).............................IDLE
  ENG MASTER (AFFECTED ENGINE).............................OFF

  - **IF DAMAGE:**

    ENG FIRE P/B (AFFECTED ENGINE).............................PUSH
    AGENT 1.............................DISCH

  - **IF NO DAMAGE:**

    ENG (AFFECTED) RELIGHT.............................CONSIDER

L2 *If no damage, a new start sequence may be initiated.*

Continued on the following page

ENG 1(2) FAIL (Cont'd)

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN), if damage or if engine relight is unsuccessful.

L1 ■ **In flight:**

ENG MODE SEL..IGN

L2 *Selection of continuous ignition confirms the immediate relight attempt made by the FADEC.*

L1 ● **During initial climb:**

L/G..UP

THR LEVER (AFFECTED ENGINE)..IDLE

L2 *In the case of GPWS (EGPWS ⊲✻) alerts, reduce speed with care below VLS with flaps extended (at light weights VMCA may be reached before αMax) when applying the GPWS (EGPWS ⊲✻) procedure.*

L1 ● **IF NO ENG RELIGHT AFTER 30 S:**

L2 The 30 s countdown starts as soon as the ENG 1(2) FAIL alert is triggered.

L1 ● **IF NO RELIGHT:**

ENG MASTER (AFFECTED ENGINE)..OFF

■ **IF DAMAGE:**

ENG FIRE P/B (AFFECTED ENGINE)..PUSH
AGENT 1 (AFTER 10 SECONDS IN FLIGHT)..DISCH

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

L2 *Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN), if damage or if engine relight is unsuccessful.*
If high vibration occurs and continues after engine shutdown, reduce airspeed and descent to a safe altitude.
Attempt to determine and use a practical airspeed and altitude for minimum vibrations.

Continued on the following page

ENG 1(2) FAIL (Cont'd)

L1

■ **IF NO DAMAGE:**

ENG (AFFECTED) RELIGHT...CONSIDER

L2

Apply ENG RELIGHT (in flight) procedure (Refer to PRO-ABN-ENG [QRH] ENG RELIGHT IN FLIGHT).

ENG 1(2) FIRE
(IN FLIGHT)

Applicable to: ALL

Ident.: PRO-ABN-ENG-DQ-00017401.0001001 / 21 MAR 16

ANNUNCIATIONS

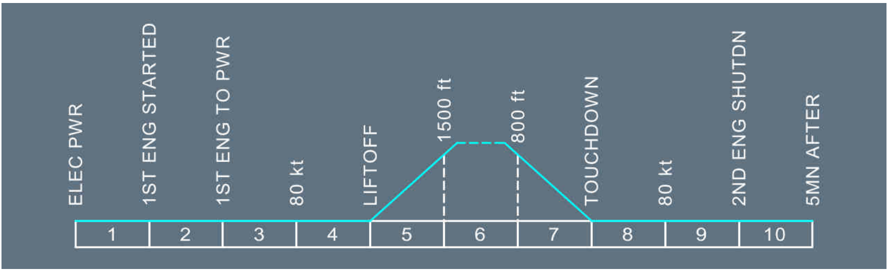
Triggering Conditions:

L2

This alert triggers when:

- Fire is detected by both loops, or
- Fire is detected by one loop when the other loop is faulty, or
- A rupture occurs in both loops within 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FIRE (Cont'd)
(IN FLIGHT)

Ident.: PRO-ABN-ENG-DQ-00018190.0002001 / 21 MAR 17

LAND ASAP

THR LEVER (AFFECTED)...IDLE
ENG MASTER (AFFECTED)...OFF

L2 *LP and HP valves close.*

L1 ENG FIRE P/B (AFFECTED)...PUSH

L2 *When pushed:*
- *Aural warning stops*
- *The light remains on, until the fire is extinguished, regardless of the position of the ENG FIRE pb-sw*
- *FADEC is no longer supplied.*

L1 AGENT 1 AFTER 10 S...DISCH

L2 *The 10 s delay allows N1 to decrease, reducing nacelle ventilation, and thereby increasing the effect of the agent.*
Automatic countdown on the ECAM.

L1 ATC...NOTIFY

L2 *Notify ATC of the nature of the emergency, and state intentions*

L1 ● **IF FIRE AFTER 30 S:**
AGENT 2...DISCH

L2 *Discharge the second agent, if the fire warning remains 30 s after the discharge of the first agent.*

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUTDOWN

Do not attempt to restart the engine.
For the ENG SHUTDOWN procedure, see the ENG section (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) FIRE
(ON GROUND)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-ENG-DR-00018553.0001001 / 21 MAR 16

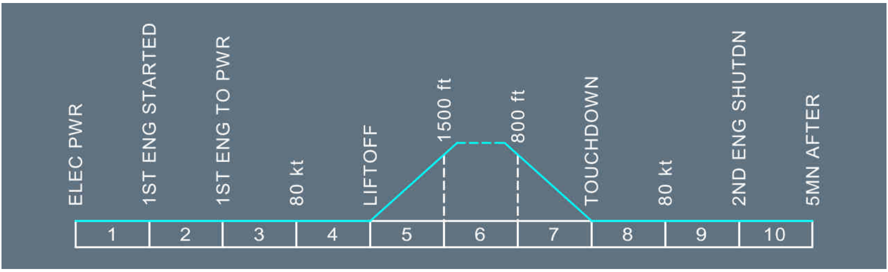
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- Fire is detected by both loops, or
- Fire is detected by one loop when the other loop is faulty, or
- A rupture occurs in both loops within 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FIRE (Cont'd)
(ON GROUND)

Ident.: PRO-ABN-ENG-DR-00018192.0004001 / 14 FEB 17

125

THR LEVERS.. IDLE

L2 *Full reverse may be used to stop the aircraft.*

L1 ● **WHEN A/C IS STOPPED:**

PARKING BRK.. ON

ATC (VHF 1).. NOTIFY

L2 *Notify ATC of the nature of the emergency, and state intensions.*
Only VHF 1 is available on batteries.

L1 CABIN CREW (PA).. ALERT

ENG MASTER (AFFECTED).. OFF

L2 *Associated LP and HP valves close.*

L1 ENG FIRE P/B (AFFECTED).. PUSH

L2 *When pushed:*
- *Aural warning stops*
- *The light remains on, until the fire is extinguished, regardless of the position of the ENG FIRE pb-sw*
- *FADEC is no longer supplied.*

L1 AGENT 1+2.. DISCH

EMER EVAC PROC.. APPLY

L2 *Refer to PRO-ABN-MISC [QRH] EMER EVAC* or *Refer to QRH/ABN-25 EMER EVAC*

ENG 1(2) FIRE
(ON GROUND)

Applicable to: MSN 01251

Ident.: PRO-ABN-ENG-DR-00018553.0001001 / 21 MAR 16

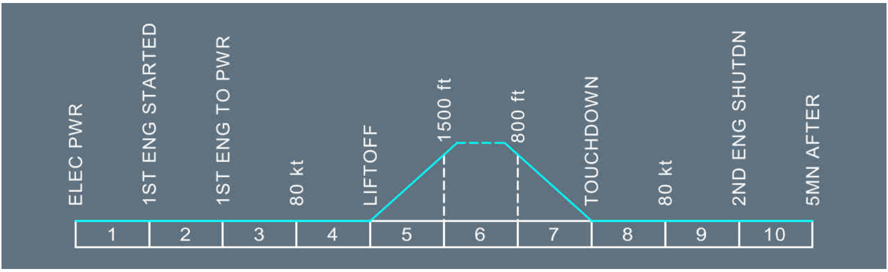
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- Fire is detected by both loops, or
- Fire is detected by one loop when the other loop is faulty, or
- A rupture occurs in both loops within 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FIRE (Cont'd)
(ON GROUND)

Ident.: PRO-ABN-ENG-DR-00018192.0002001 / 09 MAY 17

THR LEVERS... IDLE

L2 *Full reverse may be used to stop the aircraft.*

L1 ● **WHEN A/C IS STOPPED:**

PARKING BRK... ON
ENG MASTER (AFFECTED)...OFF

L2 *Associated LP and HP valves close.*

L1 ENG FIRE P/B (AFFECTED)...PUSH

L2 *When pushed:*
- *Aural warning stops*
- *The light remains on, until the fire is extinguished, regardless of the position of the ENG FIRE pb-sw*
- *FADEC is no longer supplied.*

L1 AGENT 1+2...DISCH
ENG MASTER (OPPOSITE SIDE)...OFF

The following items are not displayed on the ECAM, if the APU is not running:

ATC (VHF 1)...NOTIFY

L2 *Notify ATC of the nature of the emergency, and state intensions.*
Only VHF 1 is available on batteries.

L1 CABIN CREW (PA)...ALERT

● **IF EVAC RQRD:**

EVAC COMMAND...ON

This action line is displayed even if the EVAC COMMAND pb is not installed.
Make a short and precise announcement to order the emergency evacuation.

APU MASTER SW...OFF

ENG 1(2) FIRE
(ON GROUND)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ENG-DR-00018553.0001001 / 21 MAR 16

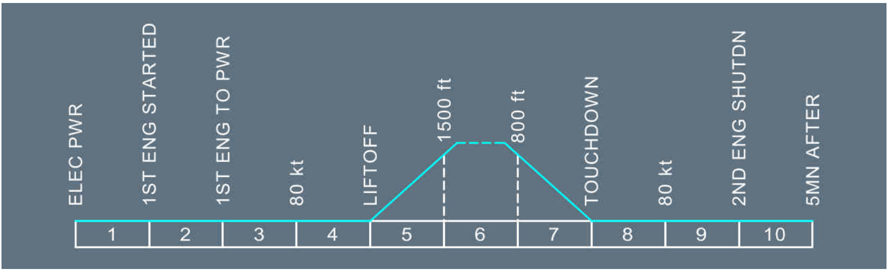
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- Fire is detected by both loops, or
- Fire is detected by one loop when the other loop is faulty, or
- A rupture occurs in both loops within 5 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ENG 1(2) FIRE DET FAULT

Applicable to: ALL

Ident.: PRO-ABN-ENG-DO-00020838.0001001 / 03 NOV 21

ANNUNCIATIONS

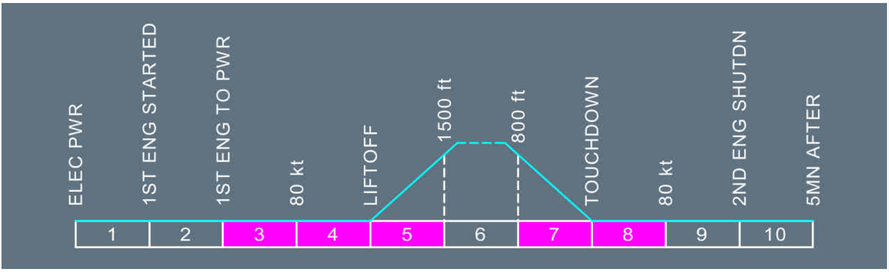
Triggering Conditions:

L2

This alert triggers when:

- Both loops fail with more than 5 s between both failures, or
- The FDU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-DO-00020837.0001001 / 17 MAR 17

Crew awareness.

Ident.: PRO-ABN-ENG-DO-00020839.0001001 / 17 MAR 17

STATUS

INOP SYS

FIRE DET 1(2)

ENG 1(2) FIRE LOOP A(B) FAULT

Applicable to: ALL

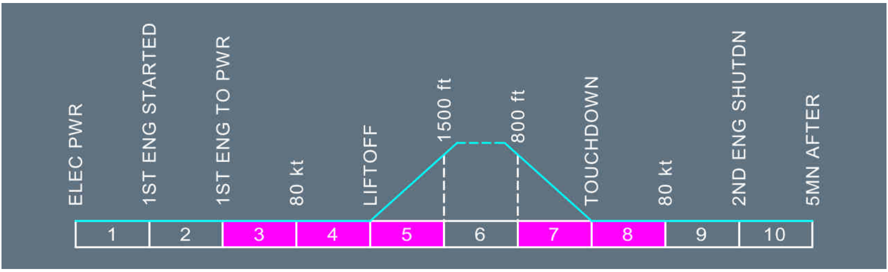
Ident.: PRO-ABN-ENG-DP-00020841.0001001 / 03 NOV 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one loop is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-DP-00020840.0001001 / 17 MAR 17

L2 Crew awareness.

Ident.: PRO-ABN-ENG-DP-00020842.0001001 / 17 MAR 17

STATUS

INOP SYS

ENG 1(2) LOOP A(B)

ENG 1(2) FUEL CTL FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ENG-O-00017983.0001001 / 21 MAR 16

ANNUNCIATIONS

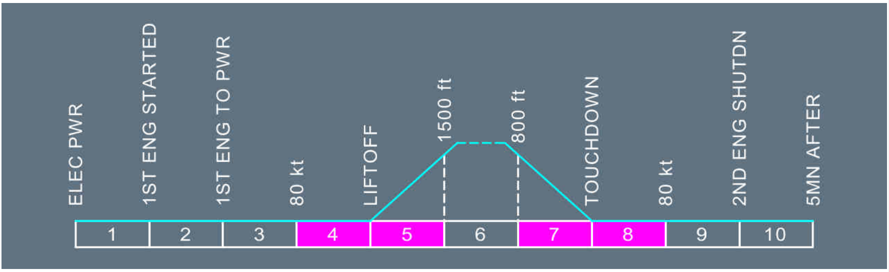
Triggering Conditions:

L2

This alert triggers when:

- The Fuel Metering Valve (FMV) position is failed, or
- The FMV command is failed, or
- The FMV position feedback is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FUEL CTL FAULT (Cont'd)

Ident.: PRO-ABN-ENG-O-00017679.0004001 / 21 MAR 16

L2 ■ **FMV position disagreement:**

Crew awareness.

Fuel Metering Valve position disagreement between the commanded position and the real one.

L1 ■ **Failure of FMV command or FMV position feedback:**

ENG 1(2) MIN FUEL FLOW.

L2 *FADEC is no longer able to control the fuel flow. It automatically sets a fail safe minimum fuel flow corresponding to idle or sub-idle fuel flow which may result in an engine shut-down.*

L1 THR LEVER (AFFECTED).. IDLE

- ■ **In flight:**
  - ● **IF ENG (affected) NOT AT IDLE:**
    ENG MASTER (AFFECTED)..OFF
- ■ **On the ground:**
  ENG MASTER (AFFECTED)..OFF

Ident.: PRO-ABN-ENG-O-00017681.0003001 / 21 MAR 16

STATUS

APPR PROC

REV (AFFECTED).............................. DO NOT USE

● **AFTER TOUCH DOWN:**
THR LEVER (AFFECTED)..............................IDLE
ENG MASTER (AFFECTED) ....OFF

ENG (affected) MIN FUEL FLOW.

ENG 1(2) FUEL CTL FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ENG-O-00017983.0001001 / 21 MAR 16

ANNUNCIATIONS

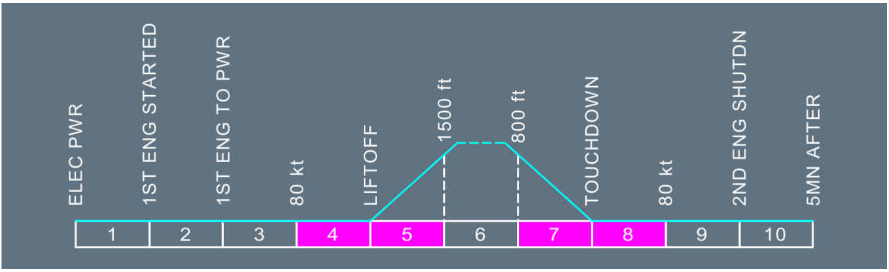
Triggering Conditions:

L2

This alert triggers when:

- The Fuel Metering Valve (FMV) position is failed, or
- The FMV command is failed, or
- The FMV position feedback is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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ENG 1(2) FUEL CTL FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: PRO-ABN-ENG-O-00017983.0001001 / 21 MAR 16

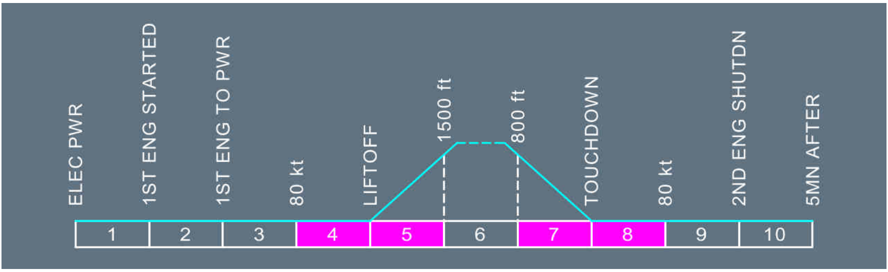
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The Fuel Metering Valve (FMV) position is failed, or
- The FMV command is failed, or
- The FMV position feedback is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-O-00017679.0003001 / 05 JUN 18

- **On ground:**
  THR LEVER (AFFECTED).. IDLE
  ENG MASTER (AFFECTED)..OFF

AVOID RAPID THR CHANGES, or

L2 *If the A/THR is engaged, adjust the thrust levers to align the thrust lever commands with actual N1 and disconnect A/THR.*

L1 ENG (AFFECTED) SLOW RESPONSE

L2 Depending on the type of failure, one of the above two messages is displayed.

Continued on the following page

ENG 1(2) FUEL CTL FAULT (Cont'd)

Ident.: PRO-ABN-ENG-O-00017681.0001001 / 21 MAR 16

STATUS

AVOID RAPID THR CHANGES or

ENG (affected) SLOW RESPONSE

ENG 1(2) FUEL CTL FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-O-00017983.0001001 / 21 MAR 16

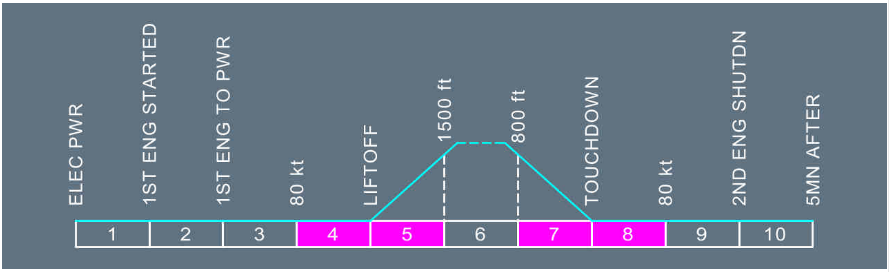
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The Fuel Metering Valve (FMV) position is failed, or
- The FMV command is failed, or
- The FMV position feedback is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FUEL CTL FAULT (Cont'd)

Ident.: PRO-ABN-ENG-O-00017679.0005001 / 05 JUN 18

126

L2 The Fuel Metering Valve (FMV) position cannot be controlled.

L1 THR LEVERS (AFFECTED)....................IDLE

- **For aircraft equipped with PW1100G engines:**
  AVOID RAPID THR CHANGES

L2 *If the A/THR is engaged, adjust the thrust levers to align the thrust lever commands with actual N1 and disconnect A/THR.*

L1 ■ **On ground:**
ENG MASTER (AFFECTED)....................OFF

■ **In flight:**

- **IF ENG (affected) NOT AT IDLE:**
  ENG MASTER (AFFECTED)....................OFF

Ident.: PRO-ABN-ENG-O-00017681.0004001 / 21 MAR 16

127

STATUS

- **For aircraft equipped with PW1100G engines:**
  AVOID RAPID THR CHANGES

APPR PROC

REV (AFFECTED).................... DO NOT USE

- **AFTER TOUCH DOWN:**
  THR LEVER (AFFECTED)....................IDLE
  ENG MASTER (AFFECTED) .... OFF

ENG (affected) MIN FUEL FLOW.

ENG 1(2) FUEL FILTER CLOG

Applicable to: ALL

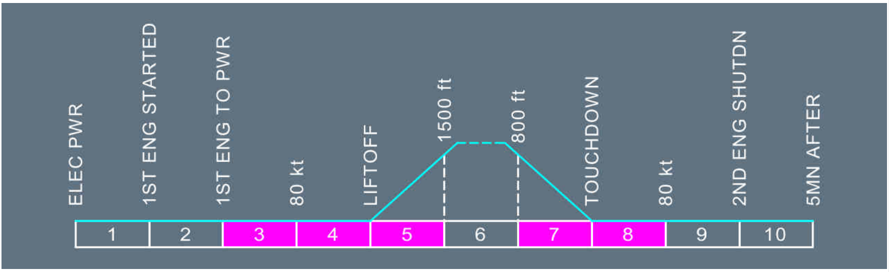
Ident.: PRO-ABN-ENG-BK-00017984.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel filter is clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BK-00012068.0001001 / 16 JAN 18

Crew awareness.

L2 Maintenance action is due. The fuel filter is bypassed and short term engine operation is not affected. Dual fuel filter clog is likely an indication of Fuel contamination.

ENG 1(2) FUEL FILTER - PARTLY CLOGGED

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-DV-00022281.0003001 / 28 MAY 20

128

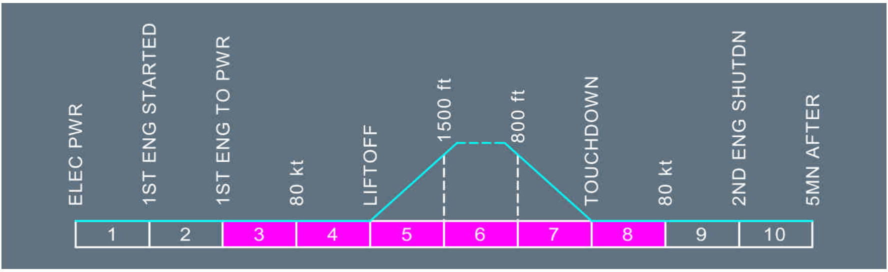
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when an impending bypass is detected on the fuel filter.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-DV-00022282.0003001 / 09 APR 18

129

PARTLY CLOGGED

ENG 1+2 FUEL FILTER CLOG

Applicable to: MSN 08495-08596, 09190-09324

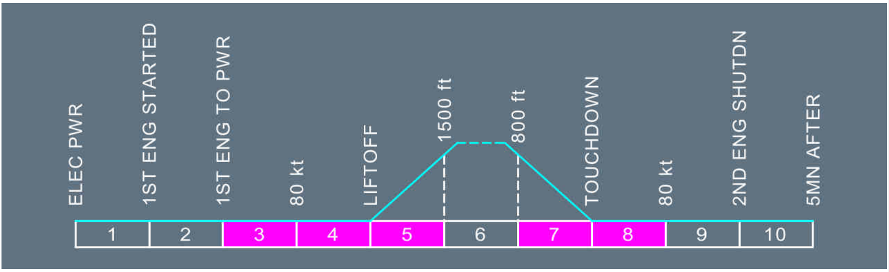
Ident.: PRO-ABN-ENG-BL-00018173.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when actual bypass is detected on both fuel filters.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BL-00015600.0001001 / 05 NOV 15

LAND ASAP

- **On ground:**
  THR LVR 1 NOT ABOVE IDLE
  THR LVR 2 NOT ABOVE IDLE

ENG 1(2) FUEL FILTER DEGRAD

Applicable to: MSN 08495-08596, 09190-09324

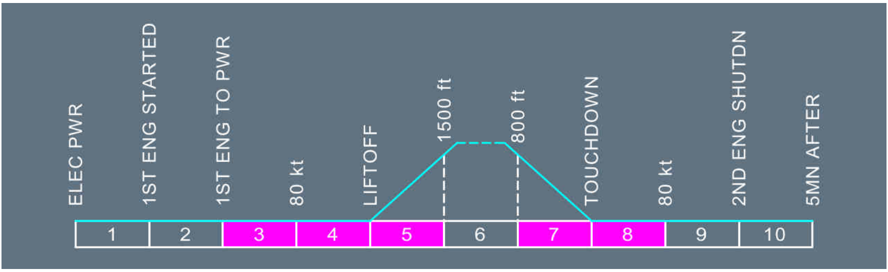
Ident.: PRO-ABN-ENG-BM-00018161.0001001 / 28 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an impending bypass is detected on the fuel filter.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BM-00015592.0001001 / 05 NOV 15

Crew awareness.

ENG 1(2) FUEL HEAT SYS

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-BN-00017985.0001001 / 21 MAR 16

130

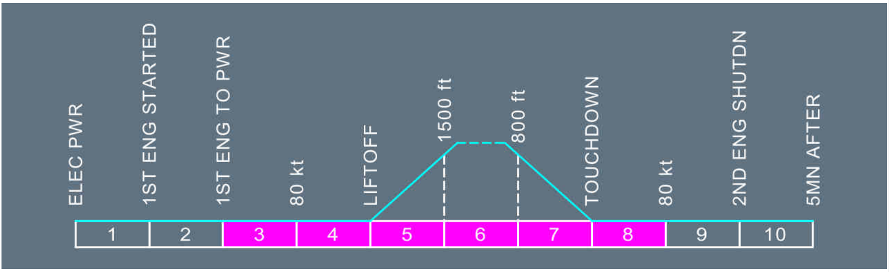
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The Fuel Diverter Valve is failed, or
- The Fuel or Oil temperature sensors are failed, or
- The Fuel Return Valve is failed in open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BN-00017684.0001001 / 13 MAY 16

131

FUEL RETURN VALVE OPEN.

- **For aircraft equipped with IAE engines:**
  FUEL DIVERTER VALVE.
- **For aircraft equipped with IAE, or PW6000 engines:**
  TEMP SENSORS

L2 *Maintenance action is due.*

ENG 1(2) FUEL LEAK

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-BO-00018162.0001001 / 21 MAR 16

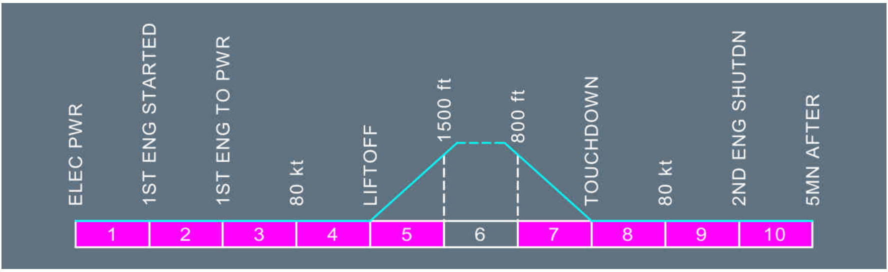
132

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an abnormal difference among the engines is detected, either in fuel flow or in fuel used.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BO-00018720.0001001 / 28 MAY 20

133

L2 This alert could indicate a fuel leak downstream of the Fuel Metering Valve (FMV). In such a case, the FUEL F. USED/FOB DISAGREE alert will not be triggered. A low N1 indication may indicate a fuel leak. The flight crew should check fuel parameters to confirm the leak. Check parameters like FOB, FU, fuel flow, fuel distribution, fuel imbalance to confirm the leak.

L1 ● **IF LEAK CONFIRMED:**

THR LEVER (AFFECTED ENGINE)... IDLE
ENG MASTER (AFFECTED ENGINE)...OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

L2 *Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN*

ENG 1(2) FUEL RETURN VALVE

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

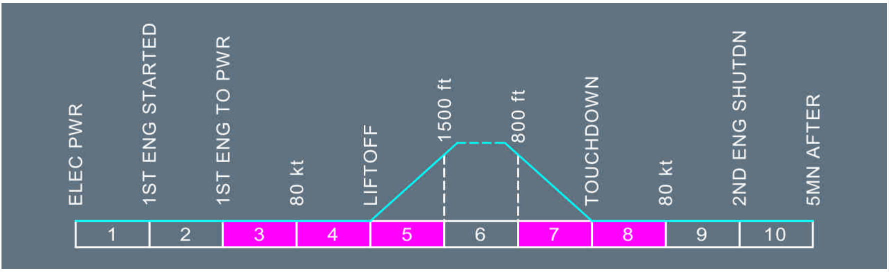
Ident.: PRO-ABN-ENG-BP-00017986.0001001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel return valve is failed in closed, or in open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BP-00012277.0001001 / 25 FEB 14

■ VALVE NOT OPEN

L2 The valve is failed closed.

L1 Crew awareness.

■ VALVE NOT CLOSED

L2 The valve is failed open.

L1 Crew awareness.

ENG 1(2) FUEL SENSOR FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-BQ-00018163.0001001 / 13 MAY 16

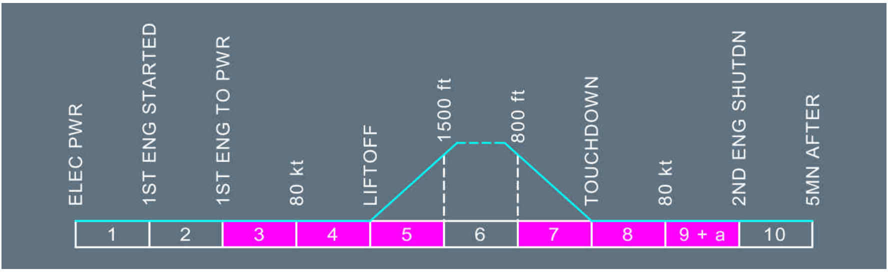
134

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel system monitoring and the fuel filter of IDG Fuel/Oil cooler sensing are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Note: *(a) Alert inhibited during the first 60 seconds of the flight phase 9.*

Ident.: PRO-ABN-ENG-BQ-00017687.0001001 / 21 MAR 16

135

FUEL FILTER SENSOR

- **For aircraft equipped with PW1100G engines:**
  IDG FOC SENSOR
- **For aircraft equipped with CFM LEAP engines:**
  TEMP SENSORS
  FUEL STRAINER SENSOR

Crew awareness.

L2 Maintenance action is due.

ENG 1(2) FUEL VALVE FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-BS-00017988.0001001 / 21 MAR 16

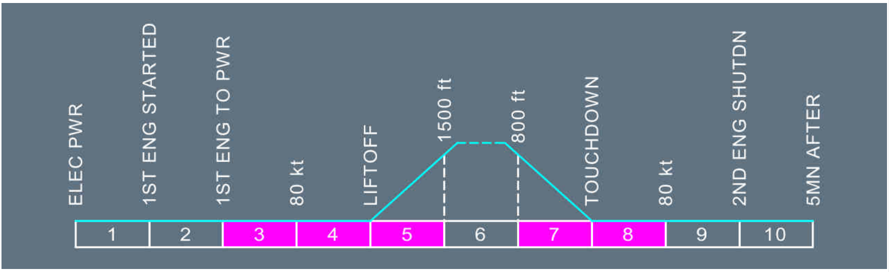
136

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the HP fuel valve is failed in closed, or in open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FUEL VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-BS-00012102.0004001 / 29 MAR 12

- **Associated engine at or below idle:**
  FUEL VALVE NOT OPEN.
  - **On ground:**
    - **IF NO ENG LIGHT UP (fuel valve is failed in the closed position):**
      - **If the EGT does not increase, the warning is confirmed:**
        MAN START (IF MANUAL START PERFORMED)..OFF
        ENG MASTER (AFFECTED)...OFF
- **Associated engine above idle:**
  - **Failure of fuel valve position feedback:**
    FUEL SWITCH FAULT.
  - **Failure of fuel valve in open position:**
    FUEL VALVE NOT CLOSED.

L2 *Due to the fuel quantity between the LP valve and nozzles, the engine shuts down after approximately 2 min and 30 s.*

ENG 1(2) FUEL VALVE FAULT

Applicable to: MSN 01251

Ident.: PRO-ABN-ENG-BS-00017988.0001001 / 21 MAR 16

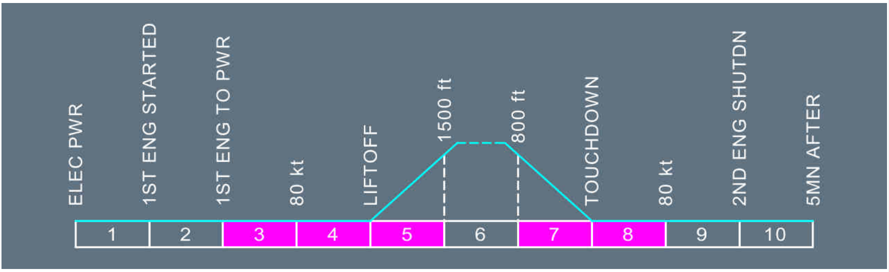
137

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the HP fuel valve is failed in closed, or in open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FUEL VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-BS-00012102.0001001 / 12 JAN 11

- **Associated engine at or below idle:**
  FUEL VALVE NOT OPEN.
  - **On the ground:**
    - **IF NO ENG LIGHT UP (HP fuel valve is failed in the closed position):**
      - **if no EGT rise, warning is confirmed:**
        MAN START (IF MAN START PERFORMED)....OFF
        ENG MASTER (AFFECTED)....OFF
- **Associated engine above idle:**
  - **Failure of HP fuel valve position switch:**
    FUEL SWITCH FAULT.
  - **Failure of HP fuel valve in open position:**
    FUEL VALVE OPEN.

    ENG (affected) SHUT BY FIRE P/B.

    L2 *Due to the fact that the HP fuel valve is failed in the open position, the engine can only be shut down by pressing the ENG FIRE PB. This will close the LP fuel valve. Due to fuel quantity between LP valve and nozzles, the engine will shut down after approximately 1 min.*

ENG 1(2) FUEL VALVE FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-BS-00017988.0001001 / 21 MAR 16

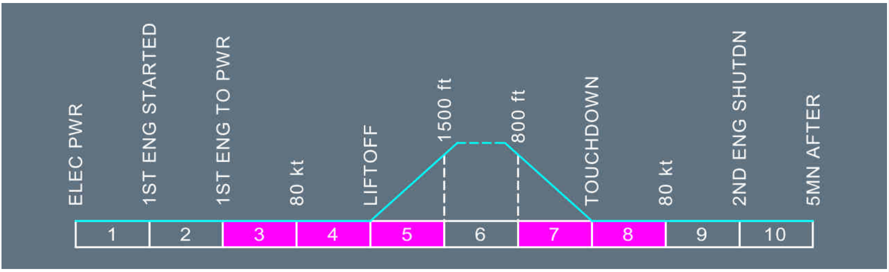
138

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the HP fuel valve is failed in closed, or in open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) FUEL VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-BS-00012102.0007001 / 30 MAR 18

139

- **Failure of fuel valve position feedback:**
  FUEL SWITCH FAULT
  - **On ground**
    - **IF NO ENG LIGHT UP:**
      MAN START (IF MANUAL START PERFORMED)........ OFF
      ENG MASTER (AFFECTED)........ OFF
- **Failure of fuel valve in the closed position**
  FUEL VALVE NOT OPEN
  - **On ground**
    - **IF NO ENG LIGHT UP:**
      MAN START (IF MANUAL START PERFORMED)........ OFF
      ENG MASTER (AFFECTED)........ OFF
- **Failure of fuel valve in open position:**
  FUEL VALVE NOT CLOSED

L2 *Due to the fuel quantity between the LP valve and nozzles, the engine shuts down after approximately 2 min and 30 s.*

L1
- **Failure of Fuel Metering Valve**
  FUEL METERING VALVE
  - **On ground**
    - **IF NO ENG LIGHT UP:**
      MAN START (IF MANUAL START PERFORMED)........ OFF
      ENG MASTER (AFFECTED)........ OFF

ENG GA SOFT FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-DJ-00019563.0001001 / 28 MAY 20

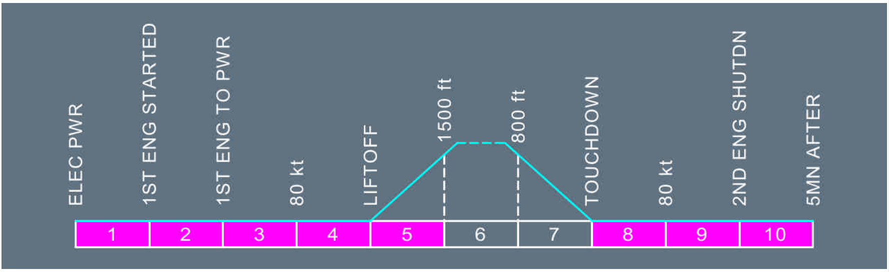
140

ANNUNCIATIONS

Triggering Conditions:

L2 The soft go-around function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-DJ-00019564.0001001 / 04 DEC 17

141

L2 The flight crew must set the thrust levers to the TOGA detent during the go-around to ensure the airport missed approach gradient.

L1 Crew awareness.

Ident.: PRO-ABN-ENG-DJ-00019565.0001001 / 04 DEC 17

142

STATUS

GA THR: TOGA ONLY

INOP SYS

GA SOFT

ENG 1(2) HEAT EXCHGR CLOG

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-BT-00018164.0001001 / 21 MAR 16

143

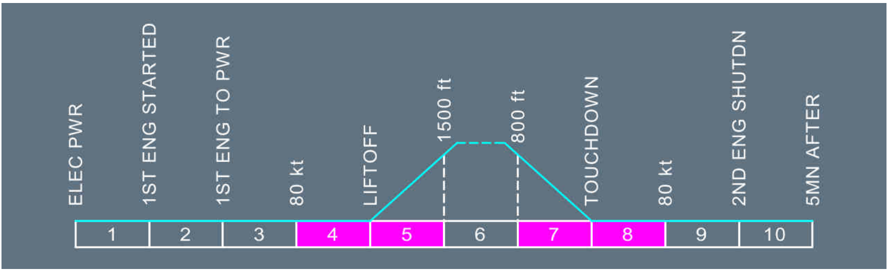
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the Integrated Drive Generator (IDG) oil/fuel exchanger is detected clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BT-00015590.0001001 / 18 AUG 14

- **On ground:**
  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) HEAT EXCHGR CLOG

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-BT-00018164.0001001 / 21 MAR 16

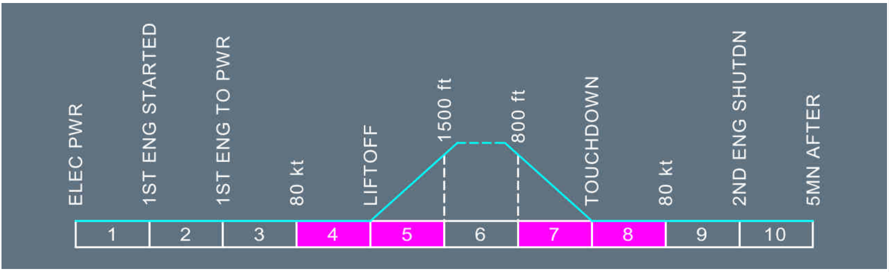
144

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the Integrated Drive Generator (IDG) oil/fuel exchanger is detected clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BT-00015590.0003001 / 30 MAR 18

145

- **On ground:**
  THR LEVER 1(2).. IDLE

ENG 1+2 HEAT EXCHGR CLOG

Applicable to: MSN 08495-08596, 09190-09324

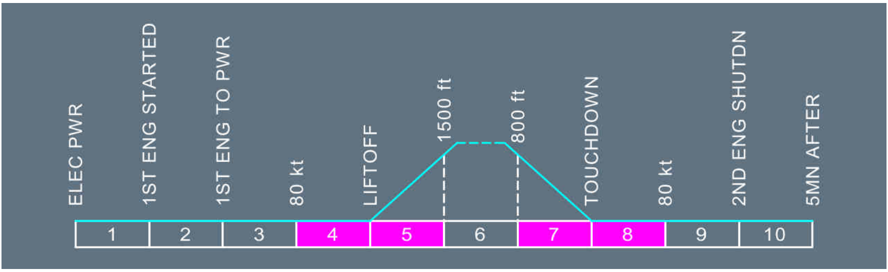
Ident.: PRO-ABN-ENG-AG-00018174.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both Integrated Drive Generator (IDG) oil/fuel exchangers are detected clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-AG-00015591.0001001 / 18 AUG 14

LAND ASAP

- **On ground:**
  THR LVR 1 NOT ABOVE IDLE
  THR LVR 2 NOT ABOVE IDLE
- **In flight:**
  A/THR..OFF
  AVOID RAPID THR CHANGES

Continued on the following page

ENG 1+2 HEAT EXCHGR CLOG (Cont'd)

Ident.: PRO-ABN-ENG-AG-00015747.0001001 / 18 AUG 14

STATUS

THR LVR 1 NOT ABOVE IDLE
THR LVR 2 NOT ABOVE IDLE
AVOID RAPID THR CHANGES

ENG 1+2 HEAT EXCHGR CLOG

Applicable to: MSN 08635

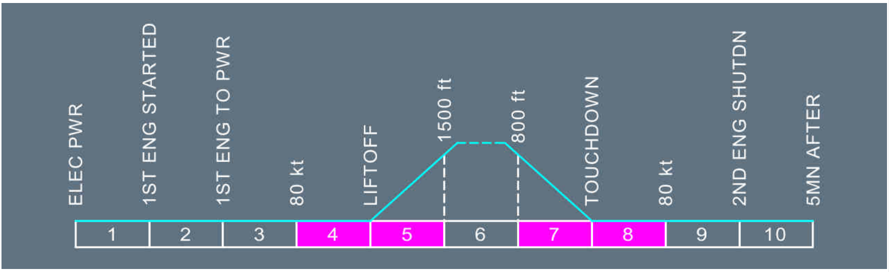
Ident.: PRO-ABN-ENG-AG-00018174.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both Integrated Drive Generator (IDG) oil/fuel exchangers are detected clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1+2 HEAT EXCHGR CLOG (Cont'd)

Ident.: PRO-ABN-ENG-AG-00015591.0003001 / 30 MAR 18

LAND ASAP

- **On ground:**
  THR LEVER 1..IDLE
  THR LEVER 2..IDLE
- **In flight:**
  A/THR..OFF
  AVOID RAPID THR CHANGES

Ident.: PRO-ABN-ENG-AG-00015747.0003001 / 30 MAR 18

STATUS

AVOID RAPID THR CHANGES

ENG 1(2) HEAT SYS DEGRADED

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-BU-00018165.0001001 / 21 MAR 16

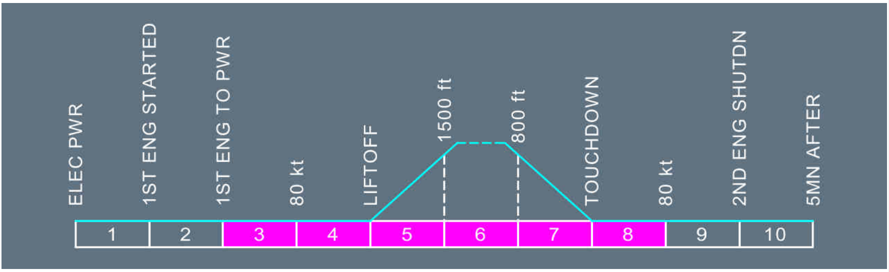
146

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a minor failure of the heat management system is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BU-00018721.0001001 / 21 MAR 16

147

Crew awareness.

ENG 1(2) HEAT SYS FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-BV-00018166.0001001 / 21 MAR 16

148

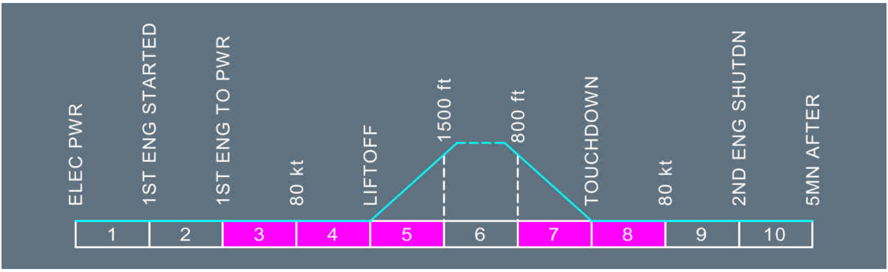
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the heat management system is failed (fuel/oil cooling bypass valve is failed, FMV fuel or oil temperature sensor is lost).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BV-00015557.0001001 / 18 AUG 14

- **On ground:**
  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) HEAT SYS FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-BV-00018166.0001001 / 21 MAR 16

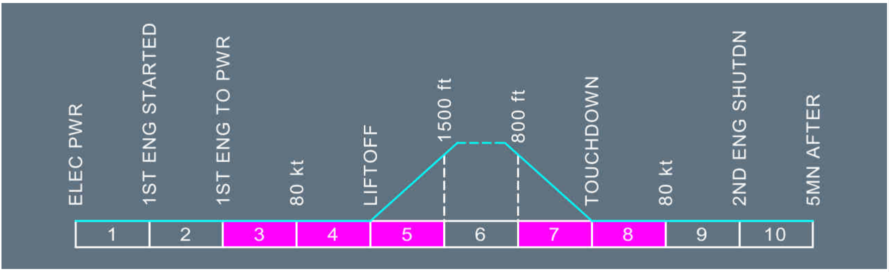
149

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the heat management system is failed (fuel/oil cooling bypass valve is failed, FMV fuel or oil temperature sensor is lost).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BV-00015557.0002001 / 30 MAR 18

150

- **On ground**
  THR LVR 1(2)....................IDLE

ENG 1(2) HIGH VIBRATION

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-BW-00018167.0001001 / 14 MAR 17

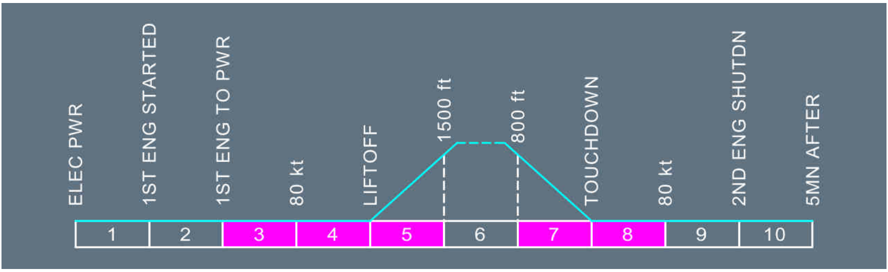
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- N1 vibrations are above 5 units, or
- N2 vibrations are above 5 units.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BW-00018722.0001001 / 21 MAR 16

HI ENG VIB PROC .... APPLY

ENG 1(2) HIGH VIBRATION

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-BW-00018167.0004001 / 25 FEB 20

151

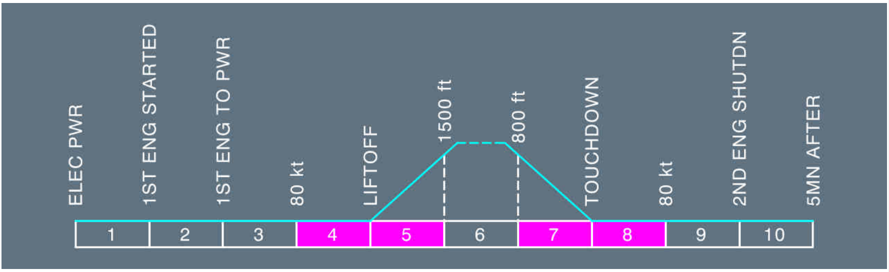
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- N1 vibrations are above 5 units, or
- N2 vibrations are above 5 units.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BW-00018722.0002001 / 25 FEB 20

152

- **At takeoff:**

  Crew awareness.

- **In all other flight phases:**

  HI ENG VIB PROC.. APPLY

ENG 1(2) HOT AIR DET FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-BX-00018168.0001001 / 21 MAR 16

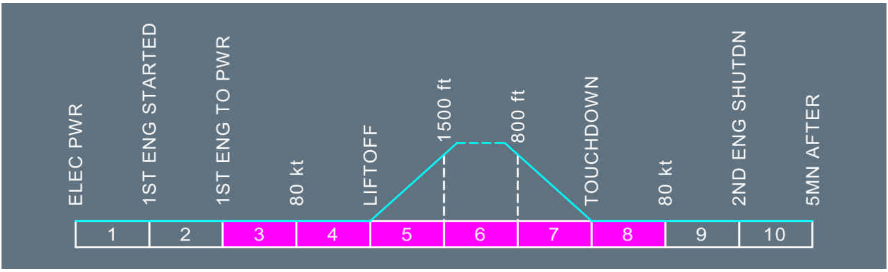
153

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the hot air leak detection is failed (burst duct).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BX-00015581.0001001 / 18 AUG 14

- **On ground:**

  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) HOT AIR DET FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-BX-00018168.0001001 / 21 MAR 16

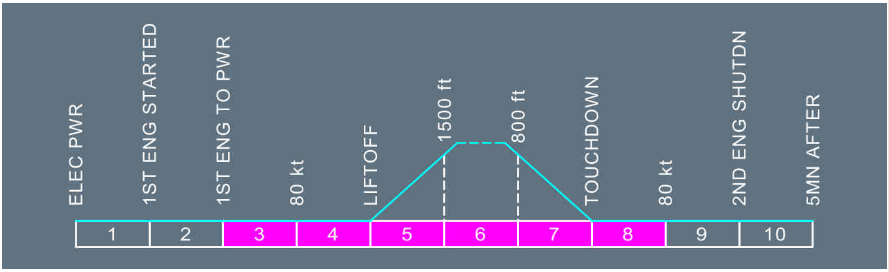
154

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the hot air leak detection is failed (burst duct).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-BX-00015581.0002001 / 30 MAR 18

155

- **On ground:**
  THR LEVER 1(2).. IDLE

ENG 1(2) HOT AIR LEAK

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-AB-00018169.0001001 / 21 MAR 16

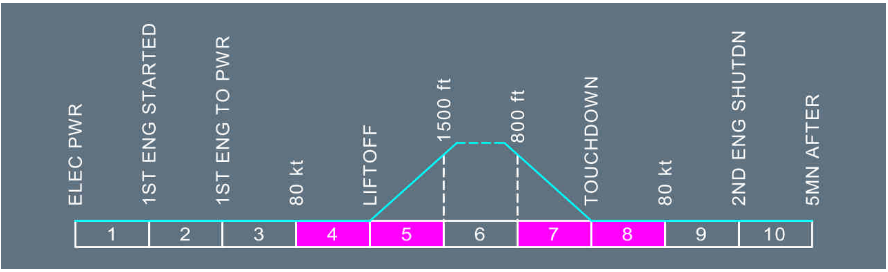
156

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a hot air leak (burst duct) is detected in engine compartment.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-AB-00015584.0001001 / 05 NOV 15

- **If the NAI valves are detected closed:**

  ENG 1(2) A.ICE VALVE CLOSED

  ENG 1(2) ANTI ICE..OFF

  AVOID ICING CONDITIONS

  - **On ground:**

    THR LVR 1(2) NOT ABOVE IDLE

Continued on the following page

ENG 1(2) HOT AIR LEAK (Cont'd)

Ident.: PRO-ABN-ENG-AB-00015585.0001001 / 18 AUG 14

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION**
  MIN SPD...VLS + 10/G DOT
  MANEUVER WITH CARE
  THR LVR 1(2) NOT ABOVE IDLE

INOP SYS

ENG 1(2) A.ICE

ENG 1(2) HOT AIR LEAK

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-AB-00018169.0001001 / 21 MAR 16

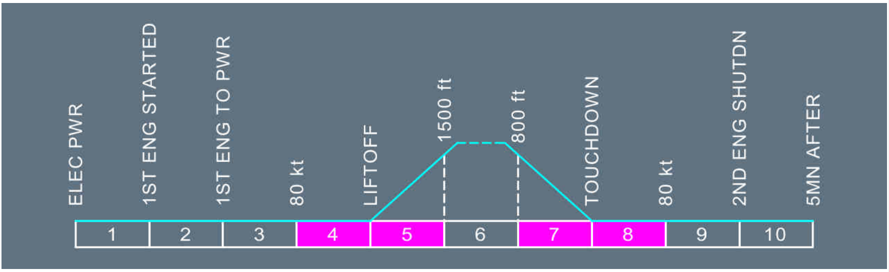
157

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a hot air leak (burst duct) is detected in engine compartment.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ENG 1(2) HOT AIR LEAK (Cont'd)

Ident.: PRO-ABN-ENG-AB-00015584.0004001 / 30 MAR 18

158

- **If the NAI valves are detected closed:**

  ENG 1(2) A.ICE VALVE CLOSED

  ENG 1(2) ANTI ICE....................OFF

  AVOID ICING CONDITIONS

  - **On ground:**

    THR LEVER 1(2)....................IDLE

Ident.: PRO-ABN-ENG-AB-00015585.0004001 / 30 MAR 18

159

STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION**

  MIN SPD....................VLS + 10/G DOT

  MANEUVER WITH CARE

INOP SYS

ENG 1(2) A.ICE

ENG 1(2) HOT FUEL

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-P-00017953.0001001 / 21 MAR 16

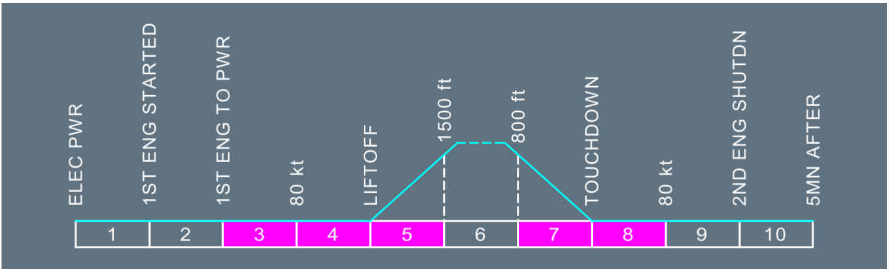
160

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when hot fuel is detected by the FADEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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5
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Ident.: PRO-ABN-ENG-P-00012173.0001001 / 17 AUG 10

161

GEN 1(2).. OFF

Ident.: PRO-ABN-ENG-P-00017693.0001001 / 21 MAR 16

162

STATUS

CAT 3 SINGLE ONLY.

INOP SYS

GEN 1(2)
MAIN GALLEY [(1)]
CAT 3 DUAL

(1) *(Only if APU GEN not in line)*

ENG 1(2) HP FUEL VALVE

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

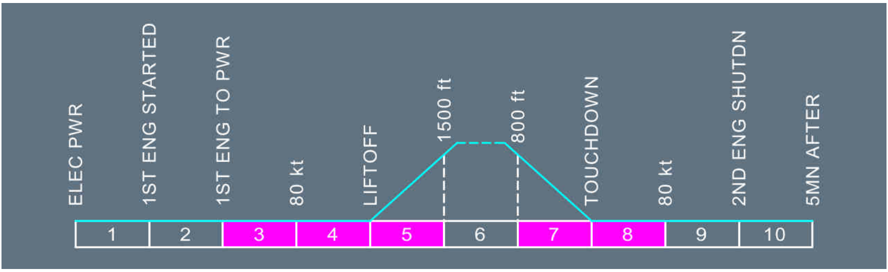
Ident.: PRO-ABN-ENG-BY-00017955.0001001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when HP fuel valve is failed in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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5
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Ident.: PRO-ABN-ENG-BY-00012096.0001001 / 13 MAY 16

- **HP fuel valve failed closed, and associated engine below idle:**
  HP FUEL VALVE NOT OPEN
  - **On the ground:**
    MAN START (IF MAN START PERFORMED).....OFF
    ENG MASTER (AFFECTED).....OFF
- **HP fuel valve failed open, and associated engine below idle**
  or
  HP fuel valve failed closed, and associated engine at or above idle:
  HP FUEL POS SWT FAULT

ENG 1(2) IGN FAULT (IGN A OR B FAULT)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-ENG-J-00017956.0002001 / 20 APR 17

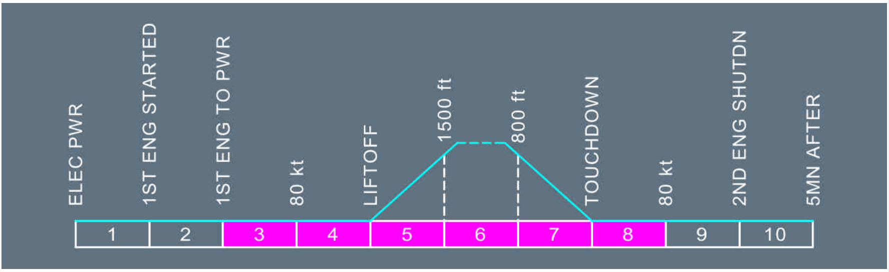
163

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ignition circuit A or B is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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6
7
8
9
10

Ident.: PRO-ABN-ENG-J-00012134.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-ENG-J-00012136.0001001 / 17 AUG 10

STATUS

INOP SYS

ENG 1(2) IGN A (B)

ENG 1(2) IGN FAULT (IGN A OR B FAULT)

Applicable to: MSN 01251

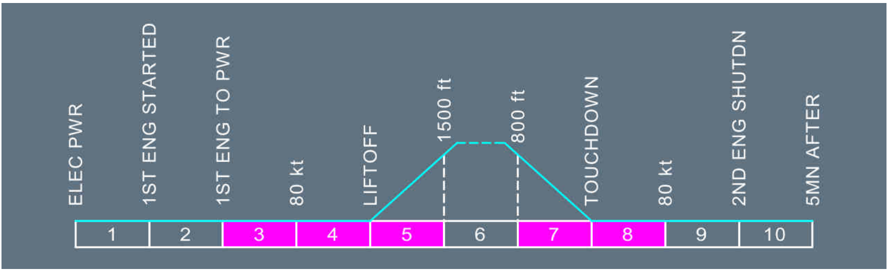
Ident.: PRO-ABN-ENG-J-00017956.0001001 / 20 APR 17

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ignition circuit A or B is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-J-00012134.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-ENG-J-00012136.0001001 / 17 AUG 10

STATUS

INOP SYS

ENG 1(2) IGN A (B)

ENG 1(2) IGN FAULT (IGN A OR B FAULT)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ENG-J-00012134.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

ENG 1(2) IGN FAULT (IGN A OR B FAULT) (Cont'd)

Ident.: PRO-ABN-ENG-J-00012136.0001001 / 17 AUG 10

STATUS

INOP SYS

ENG 1(2) IGN A (B)

ENG 1(2) IGN FAULT (IGN A+B FAULT)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

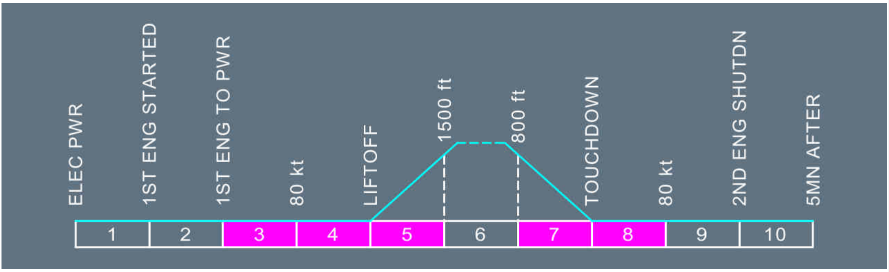
Ident.: PRO-ABN-ENG-K-00017957.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both ignition circuits are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-K-00012139.0001001 / 12 JAN 11

AVOID ADVERSE CONDITIONS

Continued on the following page

ENG 1(2) IGN FAULT (IGN A+B FAULT) (Cont'd)

Ident.: PRO-ABN-ENG-K-00012141.0002001 / 12 JAN 11

STATUS

INOP SYS

ENG 1(2) IGN (If EIU is failed)
ENG 1(2) START (If EIU is failed)

ENG 1(2) IGN FAULT (IGN A+B FAULT)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

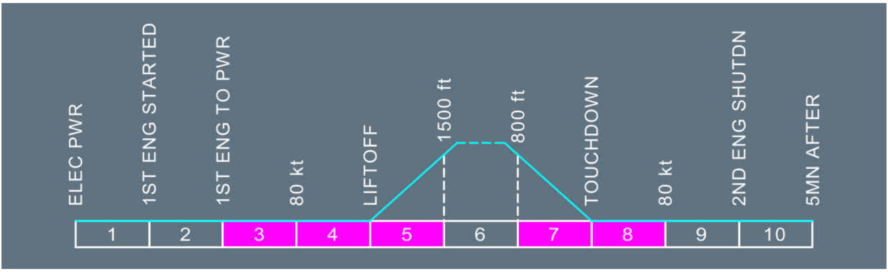
Ident.: PRO-ABN-ENG-K-00017957.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both ignition circuits are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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5
6
7
8
9
10

Ident.: PRO-ABN-ENG-K-00012139.0001001 / 12 JAN 11

AVOID ADVERSE CONDITIONS

ENG 1(2) IGN FAULT (IGN A+B FAULT)

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597

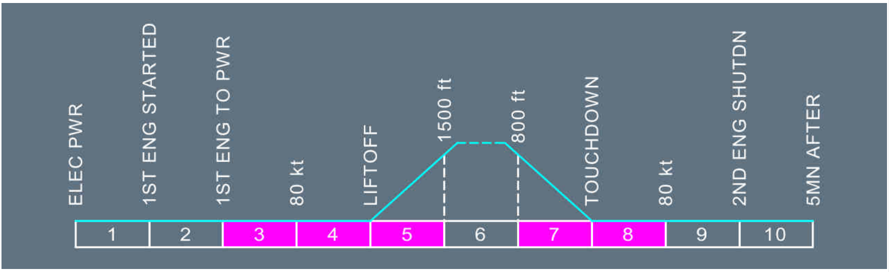
Ident.: PRO-ABN-ENG-K-00017957.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both ignition circuits are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-K-00012139.0001001 / 12 JAN 11

AVOID ADVERSE CONDITIONS

Ident.: PRO-ABN-ENG-K-00012141.0001001 / 12 JAN 11

164

STATUS

INOP SYS

ENG 1(2) IGN

ENG 1(2) LO START AIR PRESS

Applicable to: MSN 08495-08596, 09190-09324

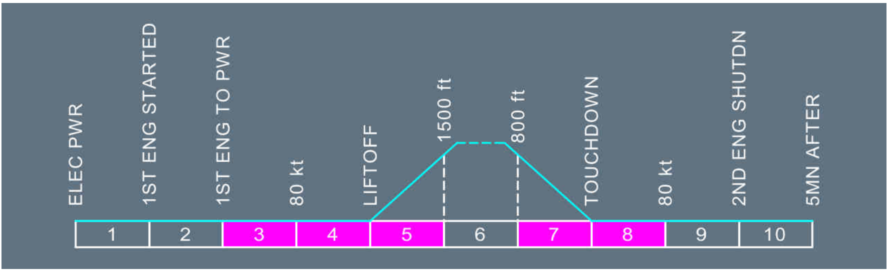
Ident.: PRO-ABN-ENG-DH-00019230.0003001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when engine start is failed due to low start air pressure.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DH-00019232.0003001 / 13 MAY 16

165 BLEED AIR SUPPLY...CHECK

- **In flight:**
  - **IF UNSUCCESSFUL:**
    WINDMILL START ONLY

ENG 1(2) LO START AIR PRESS

Applicable to: MSN 08635

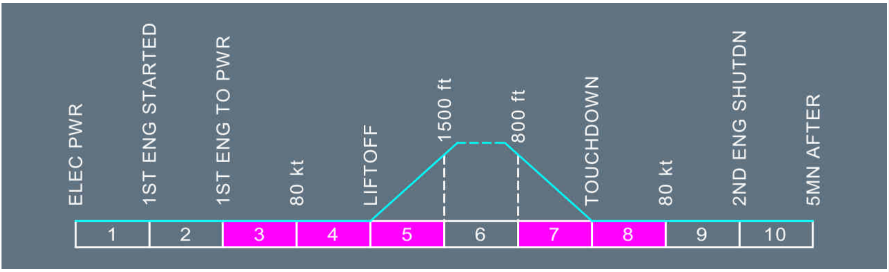
Ident.: PRO-ABN-ENG-DH-00019230.0005001 / 09 APR 18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is low bleed air pressure during engine start or during engine cooling.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DH-00019232.0003001 / 13 MAY 16

166 BLEED AIR SUPPLY...CHECK

- **In flight:**
  - **IF UNSUCCESSFUL:**
    WINDMILL START ONLY

ENG 1(2) LO START AIR PRESS

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-ENG-DH-00019230.0006001 / 18 NOV 21

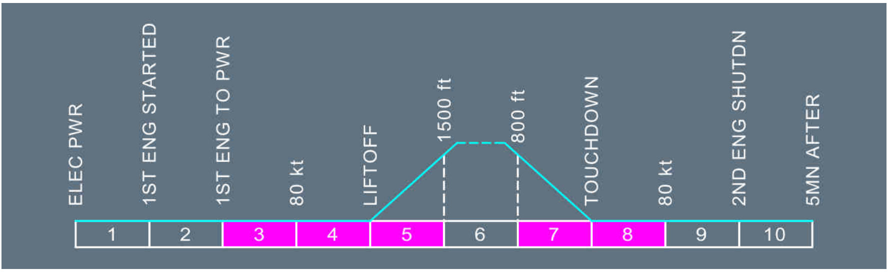
167

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is low bleed air pressure during engine start or during engine cooling.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
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Other Inhibition:

This alert is inhibited if iCARE function is available.

Ident.: PRO-ABN-ENG-DH-00019232.0003001 / 13 MAY 16

168

BLEED AIR SUPPLY.....CHECK

- **In flight:**
  - **IF UNSUCCESSFUL:**
    WINDMILL START ONLY

ENG 1(2) LOW N1 (ON GROUND)

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-06536, 06592-07098

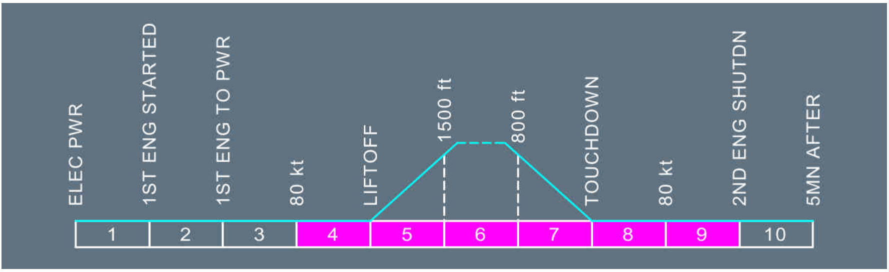
Ident.: PRO-ABN-ENG-CA-00017958.0003001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when N1 rotation is failed during start.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CA-00012101.0004001 / 16 NOV 11

L2 No N1 rotation during start.

L1 ● **IF CONFIRMED:**

THR LEVER (AFFECTED).. IDLE
ENG MASTER (AFFECTED)...OFF

ENG 1(2) LOW N1 (ON GROUND)

Applicable to: MSN 06561

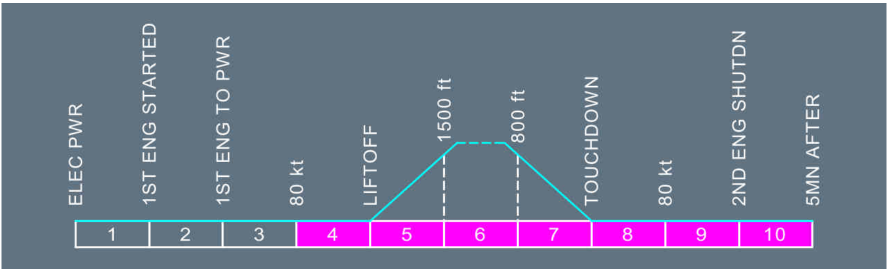
Ident.: PRO-ABN-ENG-CA-00017958.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when N1 rotation is failed during start.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CA-00012101.0004001 / 16 NOV 11

L2 No N1 rotation during start.

L1 ● **IF CONFIRMED:**

THR LEVER (AFFECTED).. IDLE
ENG MASTER (AFFECTED)..OFF

ENG 1(2) MINOR FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CB-00018170.0001001 / 21 MAR 16

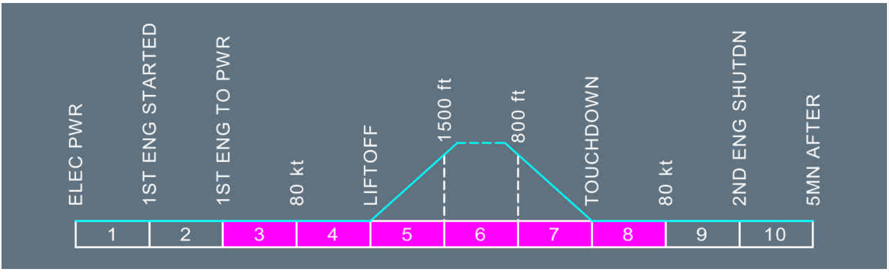
169

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a minor engine failure is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-CB-00015572.0001001 / 22 FEB 16

170

Crew awareness.

ENG 1(2) EPR OR N1 OR N2 OR EGT OR FF DISCREPANCY

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

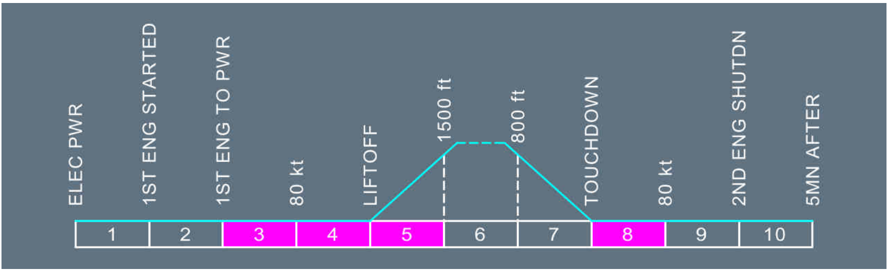
Ident.: PRO-ABN-ENG-CC-00017959.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a discrepancy between real and displayed values is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CC-00017696.0001001 / 21 MAR 16

L2 The upper ECAM upper displays a CHECK (or CHK) message below the affected indication.
Normal indication may be recovered by switching from DMC 1 to DMC 3.
If unsuccessful, and if both thrust levers are at the same position, crosscheck with the opposite parameter.

L1 Crew awareness.

ENG 1(2) N1 OR N2 OR EGT OR FF DISCREPANCY

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ENG-CC-00017696.0001001 / 21 MAR 16

L2 The upper ECAM upper displays a CHECK (or CHK) message below the affected indication.
Normal indication may be recovered by switching from DMC 1 to DMC 3.
If unsuccessful, and if both thrust levers are at the same position, crosscheck with the opposite parameter.

L1 Crew awareness.

ENG 1(2) N1 OR N2 OR EGT OR FF DISCREPANCY

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597

Ident.: PRO-ABN-ENG-CC-00017959.0001001 / 21 MAR 16

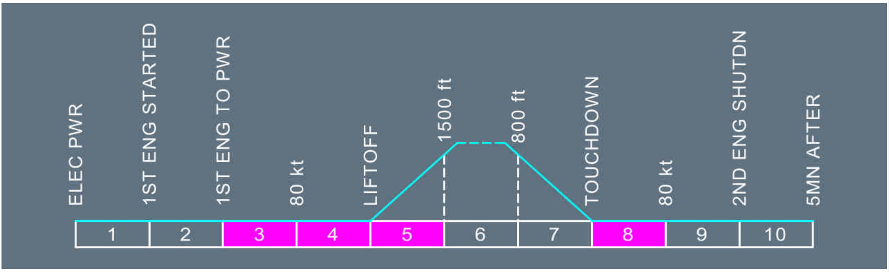
171

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a discrepancy between real and displayed values is detected.

Flight Phase Inhibition:



Continued on the following page

ENG 1(2) N1 OR N2 OR EGT OR FF DISCREPANCY (Cont'd)

Ident.: PRO-ABN-ENG-CC-00017696.0001001 / 21 MAR 16

L2 The upper ECAM upper displays a CHECK (or CHK) message below the affected indication.
Normal indication may be recovered by switching from DMC 1 to DMC 3.
If unsuccessful, and if both thrust levers are at the same position, crosscheck with the opposite parameter.

L1 Crew awareness.

ENG 1(2) N1/N2/EGT OVER LIMIT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

Ident.: PRO-ABN-ENG-CD-00018006.0003001 / 21 MAR 16

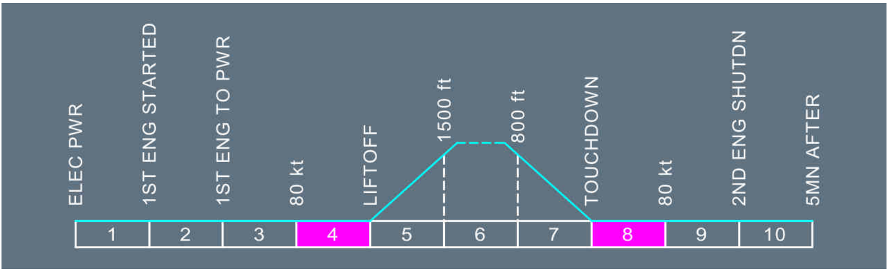
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- N1 is above 100 %, or
- N2 is above 100 %, or
- EGT is above 635 °C during start, or above 635 °C when the thrust levers are at TOGA or FLX/MCT position, or 610 °C in the other cases.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) N1/N2/EGT OVER LIMIT (Cont'd)

Ident.: PRO-ABN-ENG-CD-00012079.0014001 / 21 MAR 17

- **Max pointer indication:**

L2 EGT 635 °C or above, or EGT between 610 °C and 635 °C (except during takeoff, alpha floor protection, or reverse selected), or

N1 between 100 % and 109.4 %, or

N2 between 100 % and 105.7 %

L1 THR LEVER (OF AFFECTED ENGINE)... BELOW LIMIT

L2 *Normal operation may be resumed and maintained until next landing.*
Report the observed maximum value and time spent above limit in the logbook.
If EGT OVER LIMIT caution persists after the thrust lever is in IDLE position, CONSIDER ENGINE SHUTDOWN.
If conditions do not permit to shutdown the engine, land ASAP using the minimum required thrust to ensure the safe flight.

L1
- **Max pointer indication:**

L2 N1 109.4 % or above, or

N2 105.7 % or above

FADEC automatically reduces the engine power below idle.

Engine shutdown must be performed.

L1 THR LEVER (OF AFFECTED ENGINE).. IDLE
ENG MASTER (OF AFFECTED ENGINE).. OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) N1/N2/EGT OVER LIMIT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: PRO-ABN-ENG-CD-00018006.0002001 / 21 MAR 16

ANNUNCIATIONS

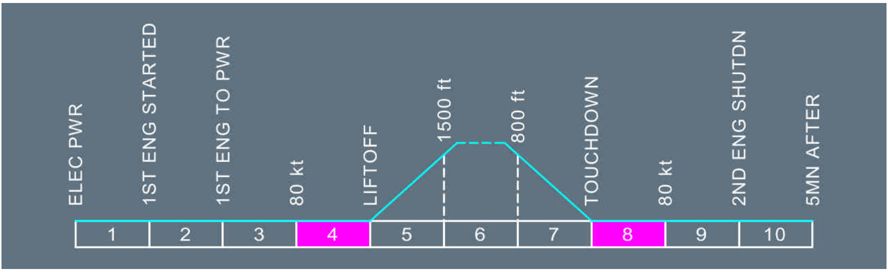
Triggering Conditions:

L2

This alert triggers when:

- N1 is above 104 %, or
- N2 is above 105 %, or
- EGT is above 725 °C during start, or above 950 °C when the thrust levers are at TOGA or FLX/MCT position, or 915 °C in the other cases.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) N1/N2/EGT OVER LIMIT (Cont'd)

Ident.: PRO-ABN-ENG-CD-00012079.0013001 / 21 MAR 17

■ Max pointer indication:

L2 EGT between 915 °C and 950 °C (except during takeoff, alpha floor activation, or reverse selected), or EGT between 950 °C and 970 °C, or

N1 between 104.0 % and 105.8 % or

N2 between 105.0 % and 105.8 %

L1 THR LEVER (OF AFFECTED ENGINE).. BELOW LIMIT

L2 *Normal operation may be resumed and maintained until next landing. Report in maintenance log.*

L1 ■ Max pointer indication:

L2 EGT above 970 °C or

N1 above 105.8 % or

N2 above 105.8 %

L1 THR LEVER (OF AFFECTED ENGINE).. IDLE
ENG MASTER (OF AFFECTED ENGINE).. OFF

L2 *If conditions do not permit engine shutdown land ASAP using the minimum thrust required to sustain safe flight.*

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) N1/N2/EGT OVER LIMIT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ENG-CD-00018006.0004001 / 21 MAR 16

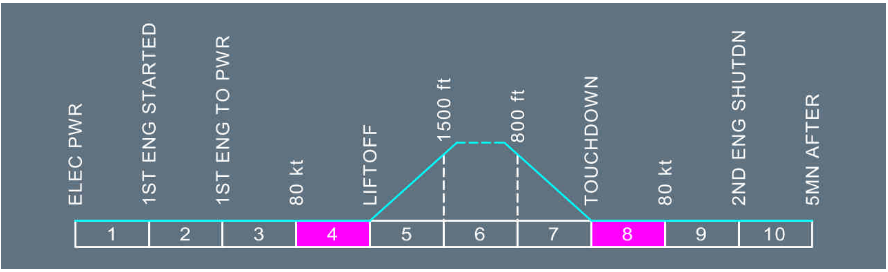
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- N1 is above 100 %, or
- N2 is above 100 %, or
- EGT is above 635 °C during start, or above 650 °C when the thrust levers are at TOGA or FLX/MCT position, or 610 °C in the other cases.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) N1/N2/EGT OVER LIMIT (Cont'd)

Ident.: PRO-ABN-ENG-CD-00012079.0012001 / 21 MAR 17

- **Max pointer indication:**

L2 EGT 650 °C or above, or EGT between 610 °C and 650 °C (except during takeoff, alpha floor protection or reverse selected), or

N1 between 100 % and 109.4 %, or

N2 between 100 % and 105.7 %

L1 THR LEVER (OF AFFECTED ENGINE).. BELOW LIMIT

L2 *Normal operation may be resumed and maintained until next landing.*
Report the observed maximum value and time spent above limit in the logbook.
If EGT OVER LIMIT caution persists after the thrust lever is in IDLE position, CONSIDER ENGINE SHUTDOWN.
If conditions do not permit to shutdown the engine, land ASAP using the minimum required thrust to ensure the safe flight.

L1
- **Max pointer indication:**

L2 N1 109.4 % or above, or

N2 105.7 % or above

FADEC automatically reduces the engine power below idle.

Engine shutdown must be performed.

L1 THR LEVER (OF AFFECTED ENGINE).. IDLE
ENG MASTER (OF AFFECTED ENGINE).. OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) N1/N2/EGT OVER LIMIT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CD-00018006.0018001 / 16 MAY 18

172

ANNUNCIATIONS

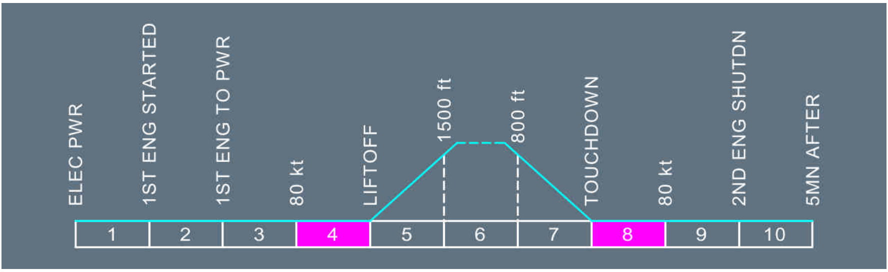
Triggering Conditions:

L2

This alert triggers when:

- N1 is above 100 %, or
- N2 is above 100 %, or
- EGT is above 1 083 °C during engine start, engine relight, takeoff, go around, or above 1 043 °C in the other cases.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CD-00012079.0025001 / 21 MAR 17

173

THR LEVER (OF AFFECTED ENGINE)...BELOW LIMIT

- **IF UNSUCCESSFUL:**
  ENG MASTER (OF AFFECTED ENGINE).. OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) OIL CHIP DETECTED

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CE-00018171.0001001 / 21 MAR 16

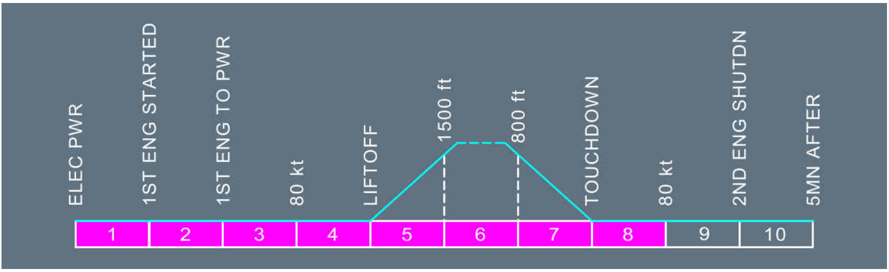
174

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a chip is detected by the EEC in the engine oil system.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CE-00015577.0001001 / 18 AUG 14

175

Crew awareness.

ENG 1(2) OIL FILTER CLOG

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

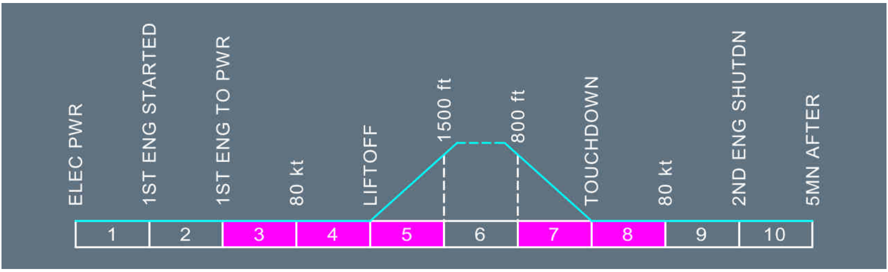
Ident.: PRO-ABN-ENG-CF-00017964.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil filter is clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CF-00012078.0001001 / 18 AUG 14

Crew awareness.

L2 If message appears during cold engine start with low engine oil temp, temporarily run engine at idle for 5 min. If message disappears, no maintenance is required.

ENG 1(2) OIL FILTER CLOG

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

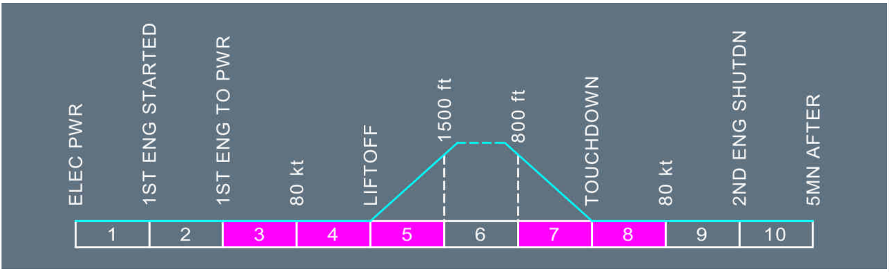
Ident.: PRO-ABN-ENG-CF-00017964.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil filter is clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
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9
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ENG 1(2) OIL FILTER CLOG

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

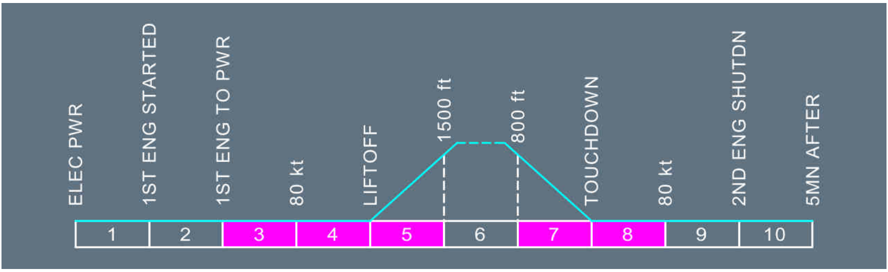
Ident.: PRO-ABN-ENG-CF-00017964.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil filter is clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CF-00012078.0003001 / 18 AUG 14

Crew awareness.

L2 Maintenance action is due, except if the caution is temporarily displayed during cold engine start with engine oil temperature lower than 40 °C.

ENG 1(2) OIL FILTER CLOG

Applicable to: MSN 08495-08596, 09190-09324

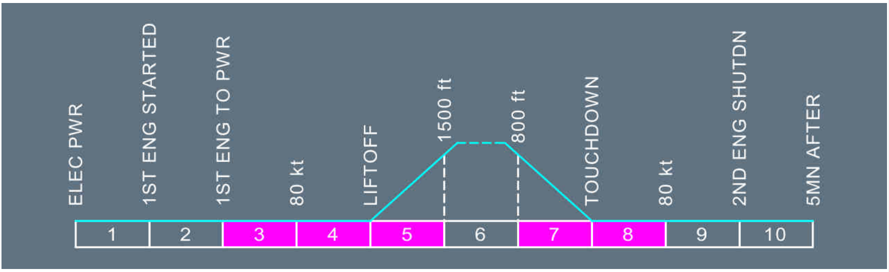
Ident.: PRO-ABN-ENG-CF-00017964.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil filter is clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CF-00012078.0004001 / 18 AUG 14

Crew awareness.

L2 If the caution appears during or shortly after engine start, and disappears when the oil temperature rises, maintenance action is required within one day.

ENG 1(2) OIL FILTER CLOG

Applicable to: MSN 08635, 10949-11597

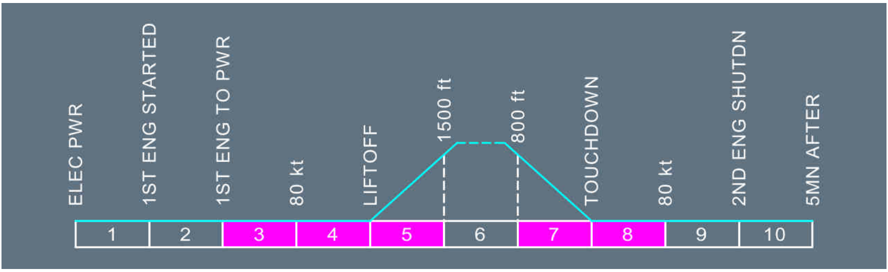
Ident.: PRO-ABN-ENG-CF-00017964.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil filter is clogged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-CF-00012078.0006001 / 30 MAR 18

176

OIL PARAMETERS.. MONITOR

L2 If the caution appears during or shortly after engine start, and disappears when the oil temperature rises, maintenance action is required within one day.

ENG 1(2) OIL FILTER - PARTLY CLOGGED

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-DW-00022283.0003001 / 28 MAY 20

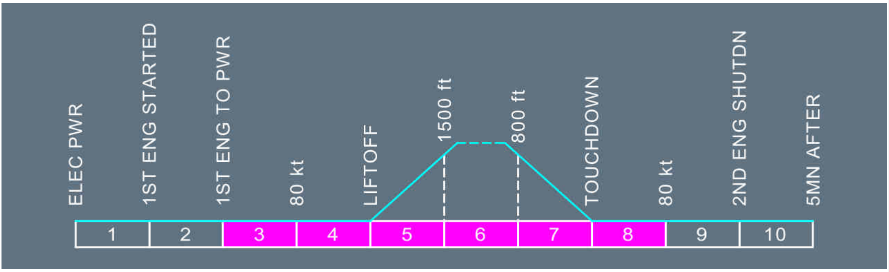
177

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an impending bypass is detected on the oil filter.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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8
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Ident.: PRO-ABN-ENG-DW-00022284.0003001 / 09 APR 18

178

PARTLY CLOGGED

ENG 1(2) OIL FILTER DEGRAD

Applicable to: MSN 08495-08596, 09190-09324

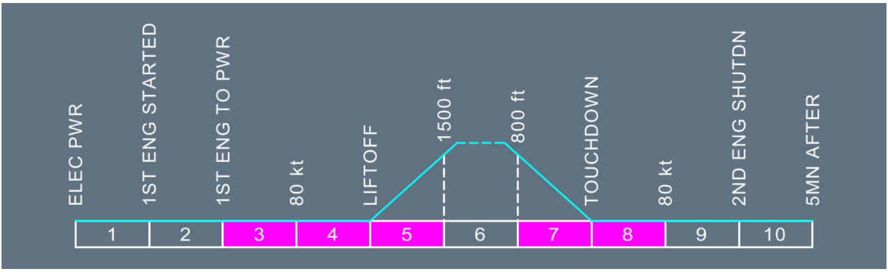
Ident.: PRO-ABN-ENG-CG-00018176.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an impending bypass is detected on the oil filter.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CG-00015593.0001001 / 05 NOV 15

Crew awareness.

ENG 1(2) OIL HI TEMP

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

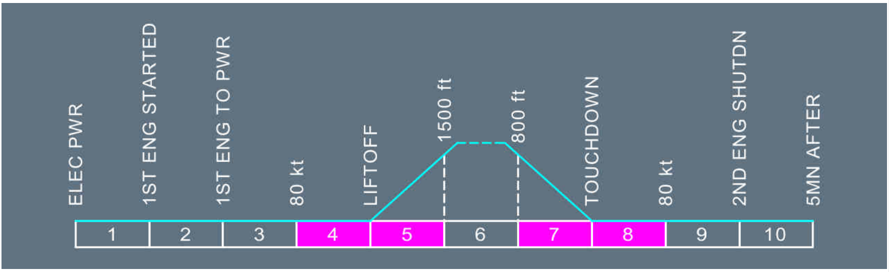
Ident.: PRO-ABN-ENG-CH-00017969.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil temperature is:
- Between 155 °C and 165 °C for more than 15 min, or
- Above 165 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-CH-00017822.0002001 / 26 NOV 19

THR LEVER (AFFECTED ENGINE)....................IDLE
ENG MASTER (AFFECTED ENGINE)....................OFF

L2 *Operation above the maximum temperature requires engine shutdown.*

L12

ASSOCIATED PROCEDURES

ENG 1 (2) SHUT DOWN

Apply the ENG 1(2) SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) OIL HI TEMP

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

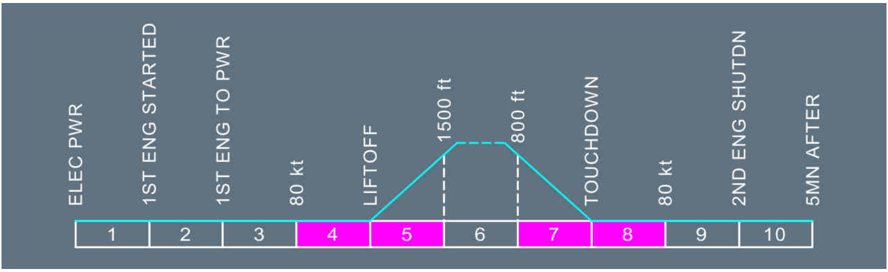
Ident.: PRO-ABN-ENG-CH-00017969.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil temperature is:
- Between 140 °C and 155 °C for more than 15 min, or
- Above 155 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-ENG-CH-00017822.0002001 / 26 NOV 19

THR LEVER (AFFECTED ENGINE)..IDLE
ENG MASTER (AFFECTED ENGINE)..OFF

L2 *Operation above the maximum temperature requires engine shutdown.*

L12

ASSOCIATED PROCEDURES

ENG 1 (2) SHUT DOWN

Apply the ENG 1(2) SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) OIL HI TEMP

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CH-00017969.0004001 / 21 MAR 16

179

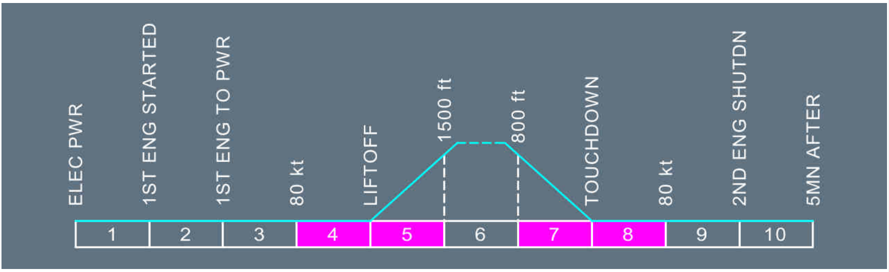
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil temperature is above the caution threshold.

Note: Engine main oil temperature caution threshold varies with engine power level. The caution threshold decreases from 152 °C at idle, to 146 °C at cruise thrust, to 141 °C at high thrust.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CH-00017822.0004001 / 21 MAR 17

180

THR LEVER (AFFECTED ENGINE)....................BELOW LIMIT

- **IF UNSUCCESSFUL:**

  ENG MASTER (AFFECTED ENGINE)....................OFF

L2 *Operation above the maximum temperature require engine shutdown.*

L12

ASSOCIATED PROCEDURES

ENG 1 (2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) OIL LO PR

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

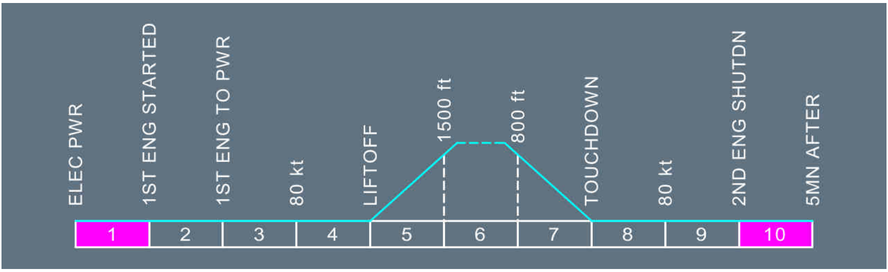
Ident.: PRO-ABN-ENG-CI-00018002.0007001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when oil pressure is below 60 PSI.

Flight Phase Inhibition:



Ident.: PRO-ABN-ENG-CI-00018796.0002001 / 26 NOV 19

L2 Check oil pressure indication on ENG SD page.

L1 ● **IF OIL PR < 60 PSI :**

THR LEVER (OF AFFECTED ENGINE).. IDLE
ENG MASTER (OF AFFECTED ENGINE)... OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG 1(2) SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

Note: If oil pressure is indicated red on ENG SD page without the ENG 1(2) OIL LO PR alert, it can be assumed that the oil pressure transducer is faulty. Flight crew may continue engine operation while monitoring other engine parameters.

ENG 1(2) OIL LO PR

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

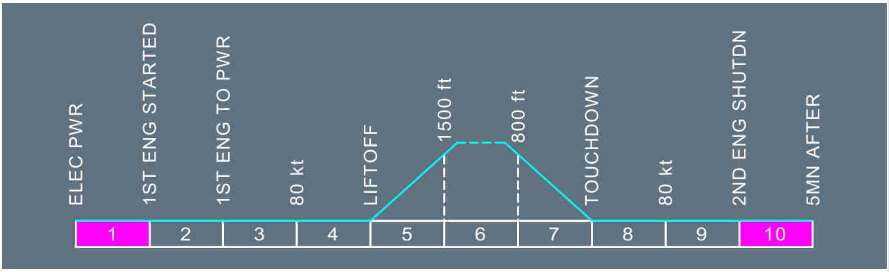
Ident.: PRO-ABN-ENG-CI-00018002.0006001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when oil pressure is below 13 PSI.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CI-00018796.0001001 / 26 NOV 19

L2 Check oil pressure indication on ENG SD page.

L1 ● **IF OIL PR < 13 PSI**

THR LEVER (OF AFFECTED ENGINE).. IDLE
ENG MASTER (OF AFFECTED ENGINE).. OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply ENG 1(2) SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

Note: If oil pressure is indicated red on ENG SD page without the ENG 1(2) OIL LO PR alert, it can be assumed that the oil pressure transducer is faulty. Flight crew may continue engine operation while monitoring other engine parameters.

ENG 1(2) OIL LO PR

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CI-00018002.0004001 / 21 MAR 16

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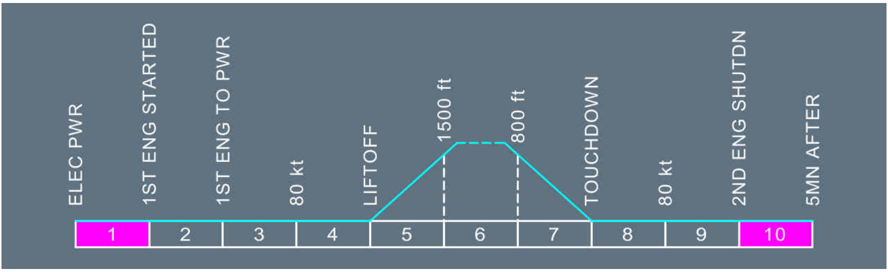
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when oil pressure is below the upper red threshold.
The upper red threshold varies with N2, and increases from 65 PSI at idle, to 176 PSI at high thrust.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-ENG-CI-00018796.0004001 / 03 NOV 21

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L2 Check oil pressure indication on ENG SD page.

L1 THR LEVER (OF AFFECTED ENGINE)....................IDLE
ENG MASTER (OF AFFECTED ENGINE)....................OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

Note: If oil pressure is indicated red only on ENG SD page without the ENG OIL LO PR red warning, flight crew may continue normal engine operation while monitoring other engine parameters.

ENG 1(2) OIL LO PR

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

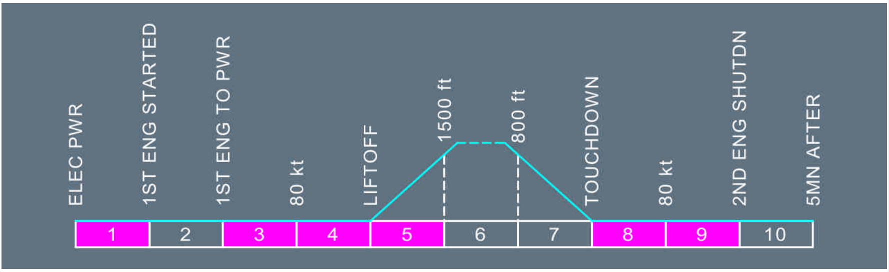
Ident.: PRO-ABN-ENG-CV-00018004.0004001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when oil pressure is between 60 PSI and 80 PSI.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
6
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8
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10

Ident.: PRO-ABN-ENG-CV-00018795.0001001 / 21 MAR 16

183

L2 Only the ECAM amber caution title is displayed.

L1 Crew awareness.

ENG 1(2) OIL LO PR

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CV-00018004.0003001 / 21 MAR 16

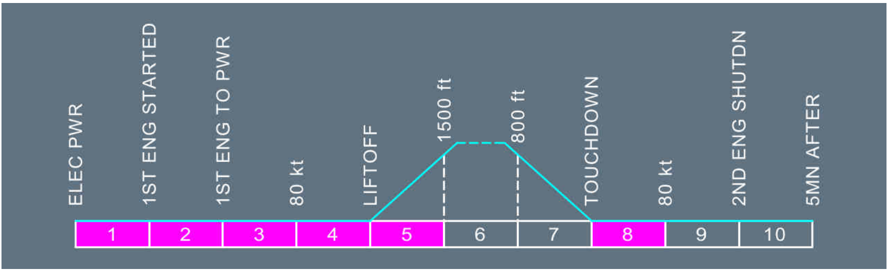
184

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when oil pressure is between the upper red threshold and the upper amber threshold.
The upper amber threshold varies with N2, and increases from 75 PSI at idle, to 186 PSI at high thrust.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CV-00018795.0001001 / 21 MAR 16

185

L2 Only the ECAM amber caution title is displayed.
L1 Crew awareness.

ENG 1(2) OIL LO TEMP

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-ENG-CJ-00017973.0001001 / 22 MAR 17

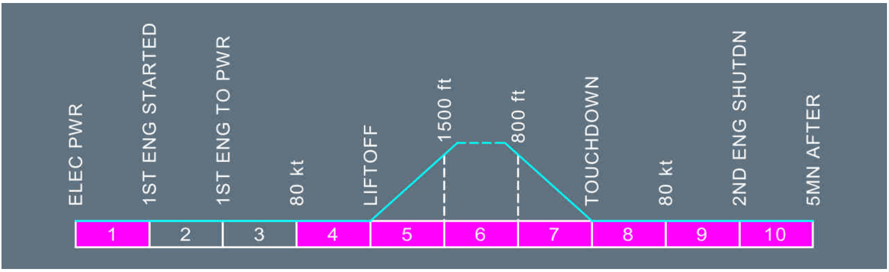
186

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil temperature is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CJ-00012077.0001001 / 12 JAN 11

DELAY T.O

L2 *The engine should be warmed up until oil temp is at, or above, 50 °C prior to takeoff.*

L1 ● **If temperature is below -10 °C:**

AVOID HI POWER

L2 *The engine should be warmed up until oil temp is at, or above, -10 °C prior to accelerating the engine above idle.*

ENG 1(2) OIL LO TEMP

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-CJ-00017973.0001001 / 22 MAR 17

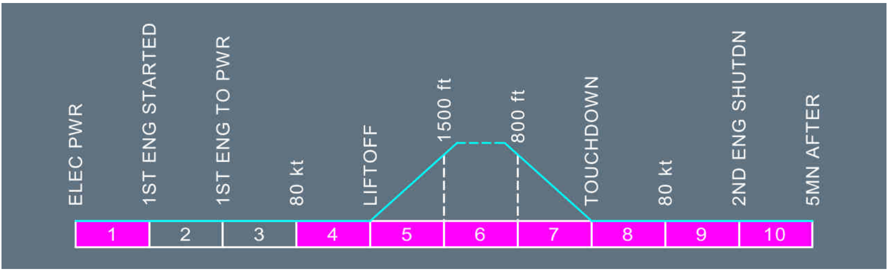
187

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil temperature is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CJ-00012077.0003001 / 15 DEC 15

DELAY T.O

L2 *The engine should be warmed up until oil temp is at, or above, 52 °C prior to takeoff.*

L1
- **If temperature is below -8 °C:**

  AVOID HI POWER

L2 *The engine should be warmed up until oil temp is at, or above, -8 °C prior to accelerating the engine above idle.*

ENG 1(2) OIL LO TEMP

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-CJ-00017973.0001001 / 22 MAR 17

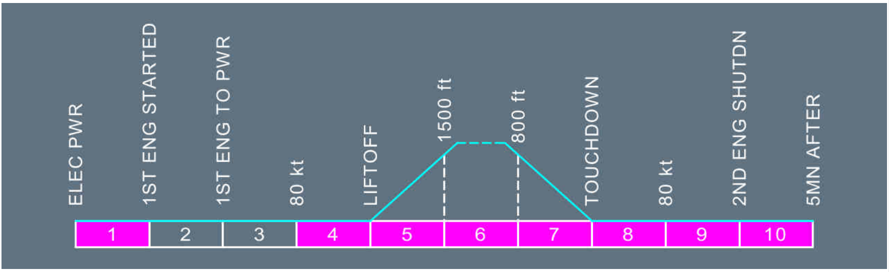
188

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil temperature is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CJ-00012077.0014001 / 03 NOV 21

189

DELAY T.O

L2 *The engine must be warmed up until oil temperature is at, or above, 52 °C prior to takeoff.*

ENG 1(2) OIL SENSOR FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CK-00018177.0001001 / 21 MAR 16

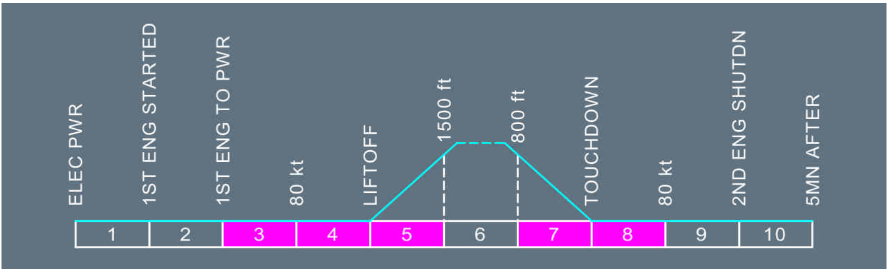
190

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil system monitoring is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CK-00015576.0001001 / 18 AUG 14

191

Crew awareness.

L2 Maintenance action is due.

ENG 1(2) OIL SYS FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-CL-00018178.0001001 / 21 MAR 16

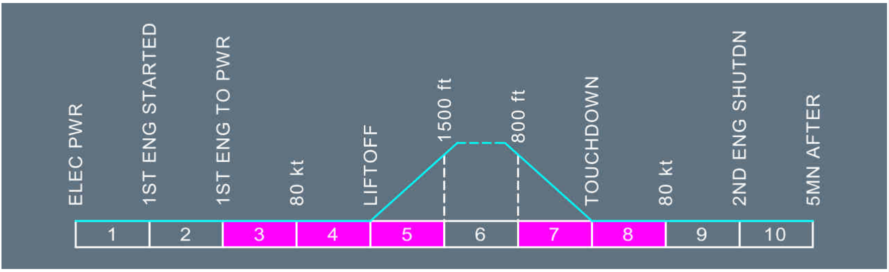
192

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CL-00015567.0001001 / 18 AUG 14

- **On ground:**

  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) OIL SYS FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-CL-00018178.0001001 / 21 MAR 16

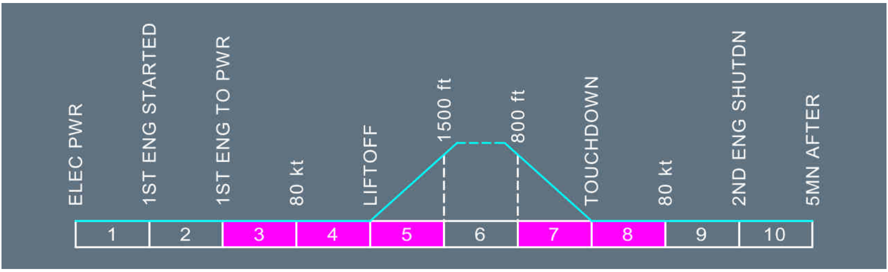
193

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the oil system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CL-00015567.0003001 / 30 MAR 18

194

- **On ground:**
  THR LEVER 1(2).. IDLE

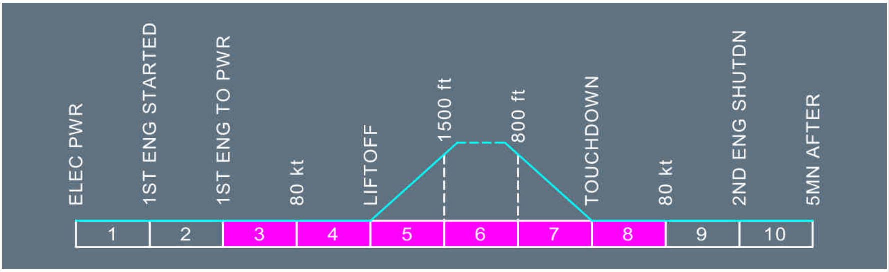
ENG 1(2) ONE TLA FAULT

Applicable to: ALL

Ident.: PRO-ABN-ENG-CM-00017977.0001001 / 21 MAR 16

ANNUNCIATIONS

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CM-00012144.0001001 / 25 FEB 14

Crew awareness.

ENG 1(2) OVSPD PROT FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

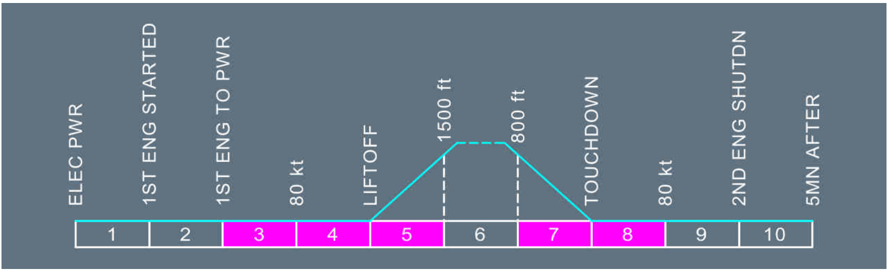
Ident.: PRO-ABN-ENG-CN-00017980.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the overspeed protection is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CN-00012166.0006001 / 06 JUN 17

Crew awareness.

ENG 1(2) OVSPD PROT FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

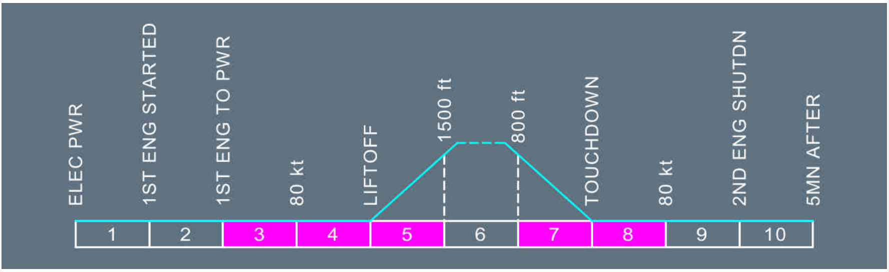
Ident.: PRO-ABN-ENG-CN-00017980.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the overspeed protection is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CN-00012166.0001001 / 25 FEB 14

Crew awareness.

L12

Note: *If the warning appears during engine start, shut down the engine. Restart the engine. If the warning still appears, maintenance action is due.*

ENG 1(2) OVTHR PROT FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-C-00018005.0001001 / 21 MAR 16

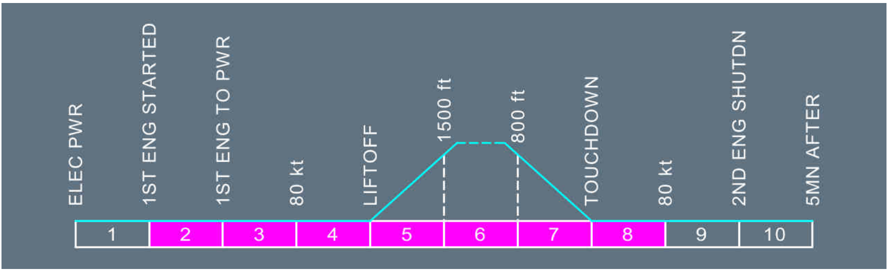
195

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the Thrust Control Malfunction (TCM) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-C-00017700.0001001 / 21 MAR 16

196

Crew awareness.

Ident.: PRO-ABN-ENG-C-00017701.0001001 / 21 MAR 16

197

STATUS

INOP SYS

OVTHR PROT (affected side)

ENG 1(2) PROBES FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-06536, 06592-07098

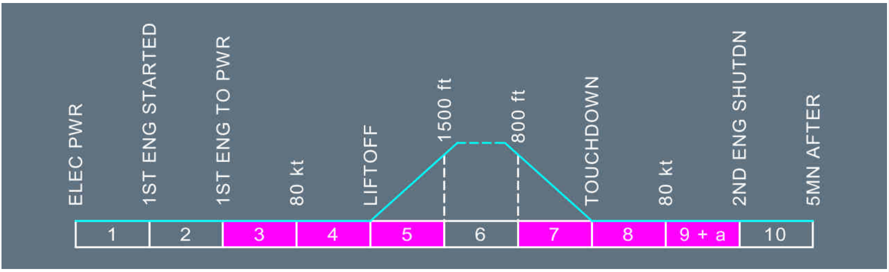
Ident.: PRO-ABN-ENG-CO-00017981.0003001 / 06 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when T12, P0, or PT2 data are unavailable on both channels.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9 + a
10

Note: (a) Alert inhibited during the first 60 seconds of the flight phase 9.

Ident.: PRO-ABN-ENG-CO-00018734.0001001 / 21 MAR 16

Crew awareness.

ENG 1(2) PROBES FAULT

Applicable to: MSN 06561

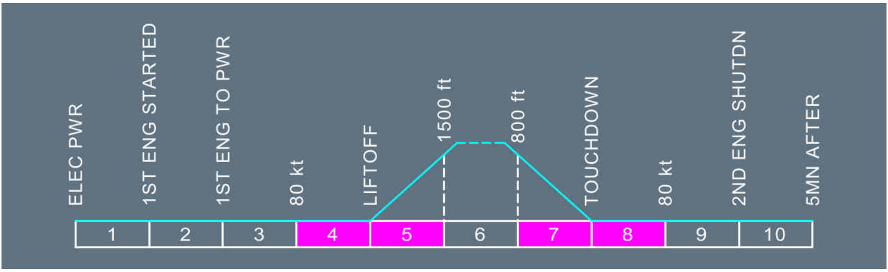
Ident.: PRO-ABN-ENG-CO-00017981.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when T12, PO or PT2 data are unavailable on both channels.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CO-00018734.0001001 / 21 MAR 16

Crew awareness.

ENG 1(2) REV INHIBITED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-ENG-G-00017987.0004001 / 21 MAR 16

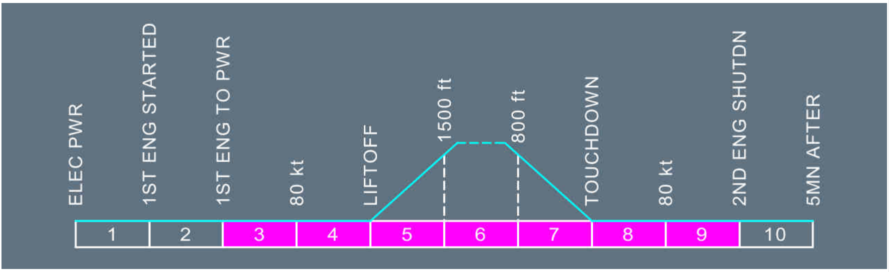
198

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reverser is inhibited by maintenance action.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-G-00012111.0001001 / 25 FEB 14

199

L2 Reverse is inhibited by maintenance action.

L1 Crew awareness.

Ident.: PRO-ABN-ENG-G-00012113.0001001 / 30 MAR 12

200

STATUS

INOP SYS

REVERSER 1(2)

ENG 1(2) REV ISOL FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

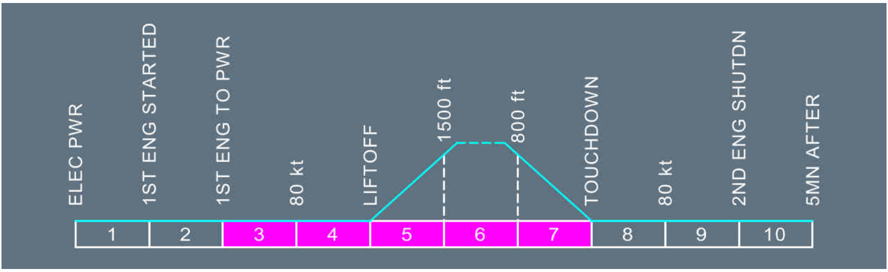
Ident.: PRO-ABN-ENG-CP-00017989.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the thrust reverser shut off valve is failed in open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CP-00018735.0001001 / 21 MAR 16

Crew awareness.

ENG 1(2) REV LOCKED (ON GROUND)

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-F-00017990.0001001 / 21 MAR 16

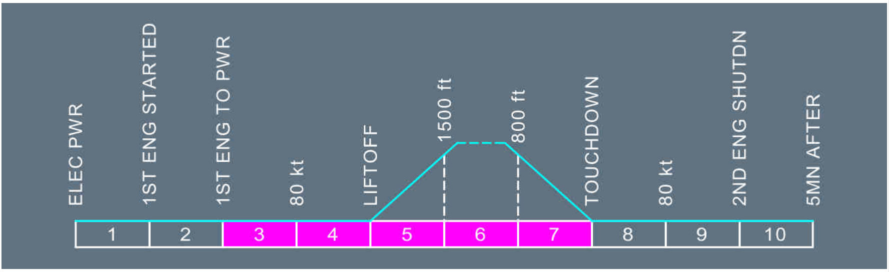
201

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reverser system is failed in stowed position..

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-F-00018736.0001001 / 21 MAR 16

202

Crew awareness.

Ident.: PRO-ABN-ENG-F-00012110.0001001 / 12 JAN 11

203

STATUS

INOP SYS

REVERSER 1(2)

ENG 1(2) REV MINOR FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CQ-00017991.0002001 / 13 MAY 16

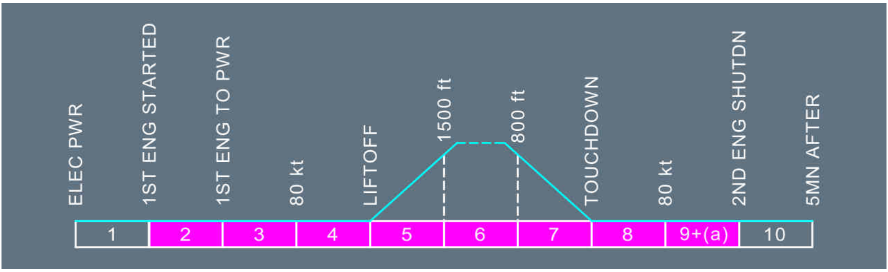
204

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a failure is detected and the reverser is not unlocked and not inhibited.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9+(a)
10

Note: *(a) Alert inhibited during the first 60 seconds of the flight phase 9.*

Ident.: PRO-ABN-ENG-CQ-00012085.0001001 / 25 FEB 14

205

Crew awareness.

ENG 1(2) REV PRESSURIZED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

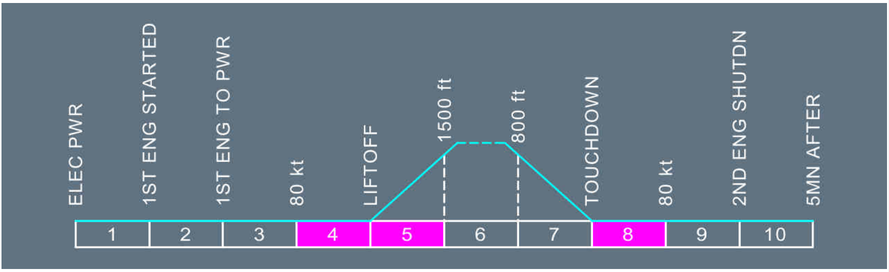
Ident.: PRO-ABN-ENG-CR-00017992.0001001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when thrust reverser system is pressurized while:
- For CFM engines: The reverser doors are stowed and locked, or
- For IAE and PW engines: There is no reverse deployment order.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CR-00017702.0002001 / 21 MAR 16

- **In flight:**

  THR LEVER 1(2).. IDLE

  L2 *If flight conditions permit, reduce the thrust of the affected engine to IDLE as a precautionary measure.*

- L1 **On ground:**

  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) REV PRESSURIZED

Applicable to: MSN 01251

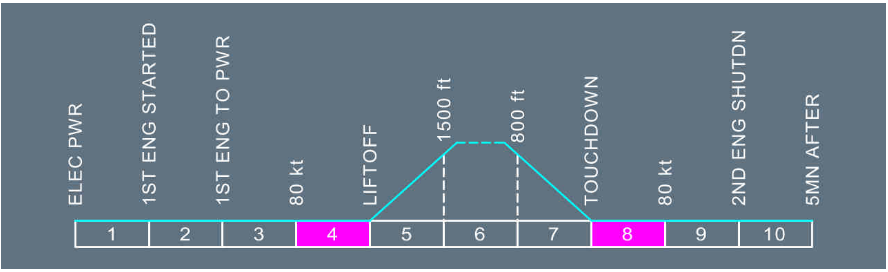
Ident.: PRO-ABN-ENG-CR-00017992.0003001 / 02 AUG 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when thrust reverser system is pressurized while there is no reverse deployment order.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CR-00017702.0001001 / 21 MAR 16

THR LEVER 1(2)..IDLE

L2 *If flight conditions permit, reduce the thrust of the affected engine to IDLE as a precautionary measure.*

ENG 1(2) REV PRESSURIZED

Applicable to: MSN 02014

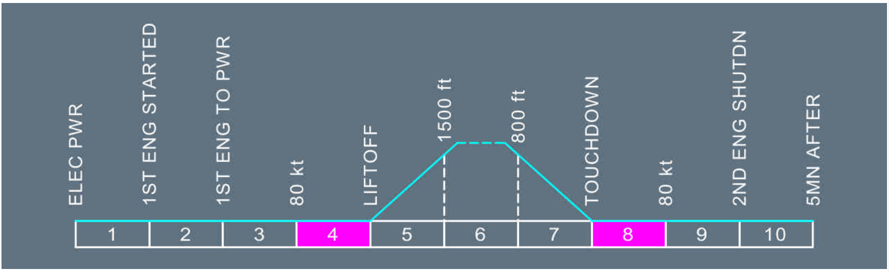
Ident.: PRO-ABN-ENG-CR-00017992.0003001 / 02 AUG 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when thrust reverser system is pressurized while there is no reverse deployment order.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CR-00017702.0002001 / 21 MAR 16

- **In flight:**

  THR LEVER 1(2).. IDLE

  L2 *If flight conditions permit, reduce the thrust of the affected engine to IDLE as a precautionary measure.*

- L1 **On ground:**

  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) REV PRESSURIZED

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-CR-00017992.0004001 / 13 MAY 16

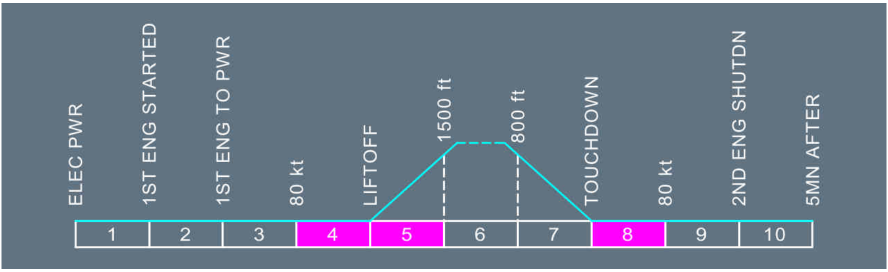
206

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the EEC detects that the thrust reverser system is pressurized while the thrust reverser is not selected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CR-00017702.0002001 / 21 MAR 16

- **In flight:**

  THR LEVER 1(2).. IDLE

  L2 *If flight conditions permit, reduce the thrust of the affected engine to IDLE as a precautionary measure.*

- L1 **On ground:**

  THR LVR 1(2) NOT ABOVE IDLE

ENG 1(2) REV PRESSURIZED

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-CR-00017992.0004001 / 13 MAY 16

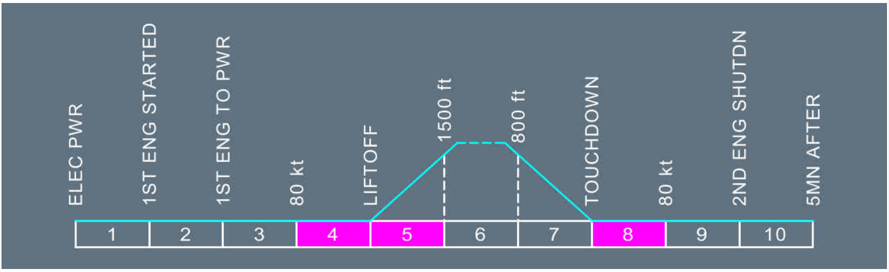
207

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the EEC detects that the thrust reverser system is pressurized while the thrust reverser is not selected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CR-00017702.0003001 / 30 MAR 18

208

THR LEVER 1(2)..IDLE

L2 *If flight conditions permit, reduce the thrust of the affected engine to IDLE as a precautionary measure.*

ENG REV SET

Applicable to: ALL

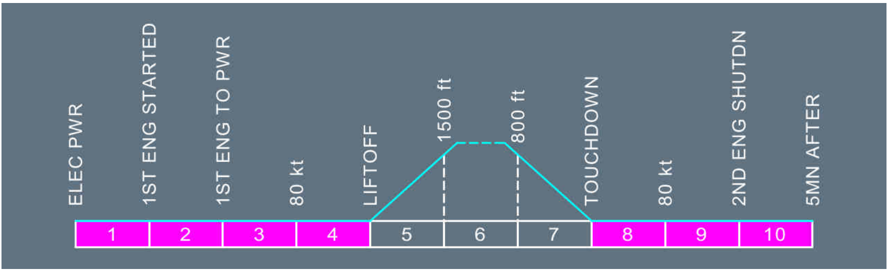
Ident.: PRO-ABN-ENG-DA-00017905.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reverse thrust is selected in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DA-00017776.0001001 / 21 MAR 16

THR LEVER (AFFECTED ENGINE).. FWD THR

ENG 1(2) REV SWITCH FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

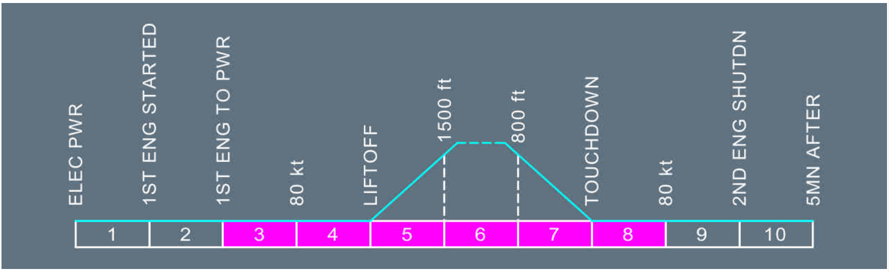
Ident.: PRO-ABN-ENG-CS-00017870.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reverser permission switch is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CS-00012098.0001001 / 25 FEB 14

Crew awareness.

ENG 1(2) REVERSE UNLOCKED

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

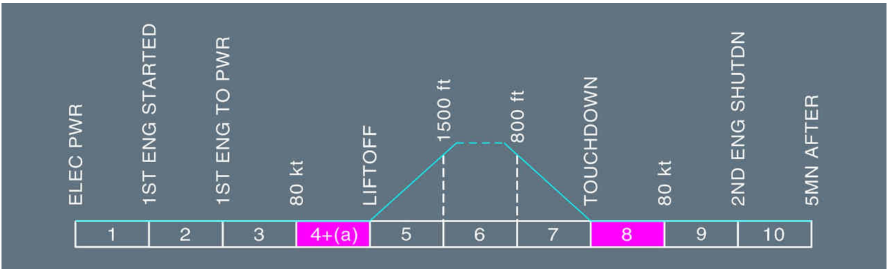
Ident.: PRO-ABN-ENG-CT-00017871.0001001 / 26 NOV 19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one or more reverser doors are not locked in stowed position in flight, or on ground with no deploy order.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4+(a)
5
6
7
8
9
10

Other Inhibition:

(a) The alert is inhibited in the flight phase 4, except if the engine thrust is automatically set to idle.

Continued on the following page

ENG 1(2) REVERSE UNLOCKED (Cont'd)

Ident.: PRO-ABN-ENG-CT-00012084.0009001 / 09 JAN 18

L2 The FADEC may automatically set the engine at idle.

L1 ■ **On ground:**

L2 *Note: On V2527 or V2530 engines, disregard the warning at landing, if momentarily displayed during reverser stowing.*

L1 ENG 1(2) AT IDLE

L2 *Only displayed, if engine is automatically set at idle.*

L1 THR LEVER (AFFECTED ENGINE IF IDLE NOT AUTOMATICALLY SELECTED)............. IDLE
ENG MASTER (AFFECTED ENGINE)....................OFF

■ **In flight:**

LAND ASAP

ENG 1(2) AT IDLE

L2 *Only displayed, if the engine is automatically set at idle.*

L1 THR LEVER (AFFECTED ENGINE).................... IDLE
MAX SPEED.................... 300/.78

● **IF BUFFET:**

MAX SPEED .... 240 KT
ENG MASTER (AFFECTED ENGINE).................... OFF

● **If reverser is actually deployed:**

RUD TRIM ....FULL R (L)
CONTROL HDG WITH ROLL

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) REVERSE UNLOCKED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

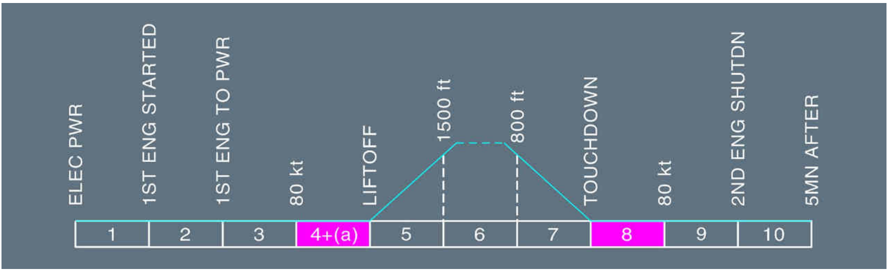
Ident.: PRO-ABN-ENG-CT-00017871.0001001 / 26 NOV 19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one or more reverser doors are not locked in stowed position in flight, or on ground with no deploy order.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4+(a)
5
6
7
8
9
10

Other Inhibition:

(a) The alert is inhibited in the flight phase 4, except if the engine thrust is automatically set to idle.

ENG 1(2) REVERSE UNLOCKED

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

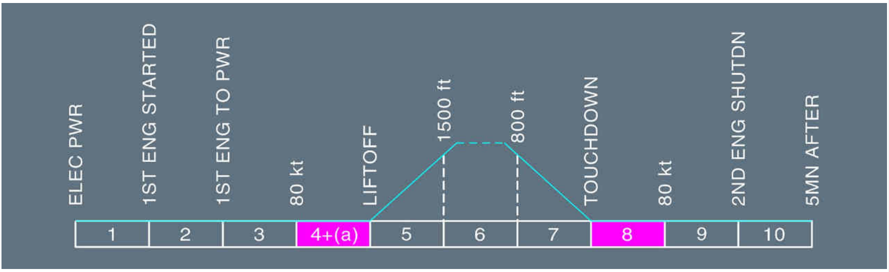
Ident.: PRO-ABN-ENG-CT-00017871.0001001 / 26 NOV 19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one or more reverser doors are not locked in stowed position in flight, or on ground with no deploy order.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4+(a)
5
6
7
8
9
10

Other Inhibition:

(a) The alert is inhibited in the flight phase 4, except if the engine thrust is automatically set to idle.

Continued on the following page

ENG 1(2) REVERSE UNLOCKED (Cont'd)

Ident.: PRO-ABN-ENG-CT-00012084.0007001 / 09 JAN 18

L2 One or more reverser doors are not stowed.
If N1 is above 70 %, the auto-restow function is inhibited in flight and on ground.

L1
- **On ground:**

  ENG 1(2) AT IDLE

  L2 *Only displayed, if the FADEC automatically sets the engine at idle (i.e. when 4 reverser doors are not stowed, or 1, 2, or 3 reverser doors are not stowed with the reverser pressurized).*

  L1 THR LEVER (AFFECTED ENGINE).. IDLE
  ENG MASTER (AFFECTED ENGINE)..OFF

- **In flight:**

  LAND ASAP

  ENG 1(2) AT IDLE

  L2 *Only displayed, if the engine is automatically set at idle.*

  L1 THR LEVER (AFFECTED ENGINE).. IDLE
  MAX SPEED.. 300/.78

  - **IF BUFFET:**

    MAX SPEED .... 240 KT
    ENG MASTER (AFFECTED ENGINE)..OFF

    - **If reverser is actually deployed:**

      RUD TRIM ....FULL R (L)
      CONTROL HDG WITH ROLL

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) REVERSE UNLOCKED

Applicable to: MSN 08495-09324, 10949-11597

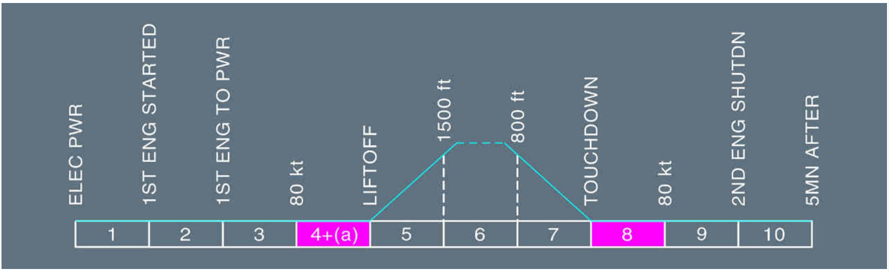
Ident.: PRO-ABN-ENG-CT-00017871.0001001 / 26 NOV 19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one or more reverser doors are not locked in stowed position in flight, or on ground with no deploy order.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4+(a)
5
6
7
8
9
10

Other Inhibition:

(a) The alert is inhibited in the flight phase 4, except if the engine thrust is automatically set to idle.

Continued on the following page

ENG 1(2) REVERSE UNLOCKED (Cont'd)

Ident.: PRO-ABN-ENG-CT-00012084.0010001 / 21 MAR 17

209

L2 The FADEC may automatically set the engine at idle.

L1
- **On ground:**

  ENG 1(2) AT IDLE
  THR LEVER (AFFECTED ENGINE)........................ IDLE
  ENG MASTER (AFFECTED ENGINE)........................OFF

- **In flight:**

  LAND ASAP

  ENG 1(2) AT IDLE
  THR LEVER (AFFECTED ENGINE)........................ IDLE
  MAX SPEED........................ 300/.78

  - **IF BUFFET:**

    MAX SPEED .... 240 KT
    ENG MASTER (AFFECTED ENGINE)........................OFF

    - **If reverser is actually deployed:**

      RUD TRIM ....FULL R (L)
      CONTROL HDG WITH ROLL

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

ENG 1(2) REVERSER CTL FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-AA-00018179.0001001 / 21 MAR 16

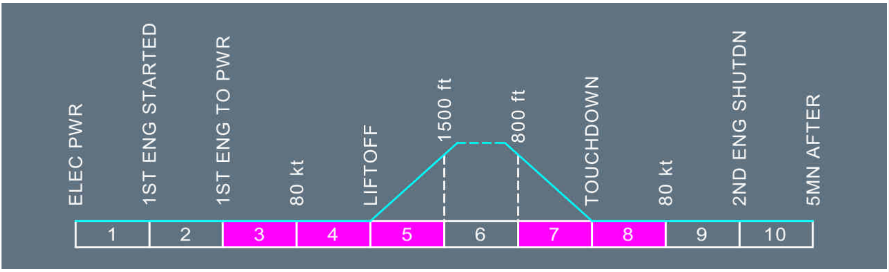
210

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the thrust reverser system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-AA-00015578.0001001 / 18 AUG 14

211

Crew awareness.

Ident.: PRO-ABN-ENG-AA-00015579.0001001 / 18 AUG 14

212

STATUS

INOP SYS

REVERSER 1(2)

ENG 1(2) REVERSER FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

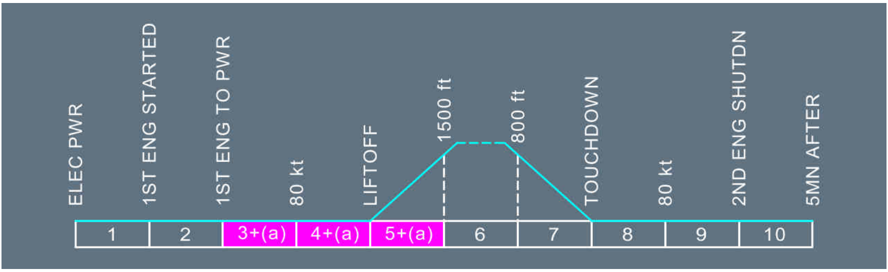
Ident.: PRO-ABN-ENG-A-00017872.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the thrust reverser on one engine is failed (due to system components or inputs).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4+(a)
5+(a)
6
7
8
9
10

Note: *(a) Alert not inhibited in the flight phases 3, 4, 5, if engine thrust is automatically set to idle.*

Ident.: PRO-ABN-ENG-A-00017703.0003001 / 21 MAR 16

- **If reverser position fault with reverser pressurized:**

LAND ASAP

ENG 1(2) AT IDLE

L2 *Thrust of the affected engine is locked at idle.*

L1 THR LEVER 1(2).. IDLE

L2 *Set thrust lever of affected engine at idle.*

Continued on the following page

ENG 1(2) REVERSER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-A-00012070.0001001 / 17 AUG 10

STATUS

INOP SYS

REVERSER 1(2)

ENG 1(2) REVERSER FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

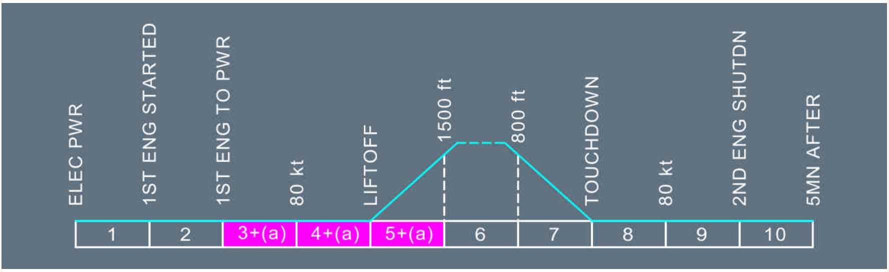
Ident.: PRO-ABN-ENG-A-00017872.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the thrust reverser on one engine is failed (due to system components or inputs).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4+(a)
5+(a)
6
7
8
9
10

Note: (a) Alert not inhibited in the flight phases 3, 4, 5, if engine thrust is automatically set to idle.

Continued on the following page

ENG 1(2) REVERSER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-A-00017703.0003001 / 21 MAR 16

- **If reverser position fault with reverser pressurized:**

LAND ASAP

ENG 1(2) AT IDLE

L2 *Thrust of the affected engine is locked at idle.*

L1 THR LEVER 1(2).. IDLE

L2 *Set thrust lever of affected engine at idle.*

ENG 1(2) REVERSER FAULT

Applicable to: MSN 08495-09324, 10949-11597

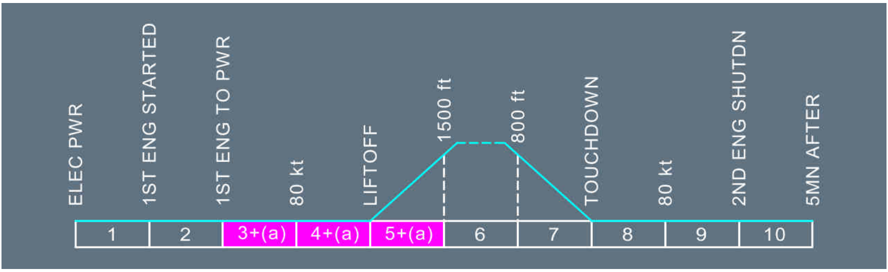
Ident.: PRO-ABN-ENG-A-00017872.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the thrust reverser on one engine is failed (due to system components or inputs).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4+(a)
5+(a)
6
7
8
9
10

Note: *(a) Alert not inhibited in the flight phases 3, 4, 5, if engine thrust is automatically set to idle.*

Continued on the following page

ENG 1(2) REVERSER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-A-00017703.0003001 / 21 MAR 16

- **If reverser position fault with reverser pressurized:**

LAND ASAP

ENG 1(2) AT IDLE

L2 *Thrust of the affected engine is locked at idle.*

L1 THR LEVER 1(2).. IDLE

L2 *Set thrust lever of affected engine at idle.*

Ident.: PRO-ABN-ENG-A-00012070.0002001 / 04 DEC 17

213

STATUS

	INOP SYS
GA THR: TOGA ONLY	REVERSER 1(2) GA SOFT

ENG SAT ABOVE FLEX TEMP

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597

Ident.: PRO-ABN-ENG-DB-00017904.0001001 / 21 MAR 16

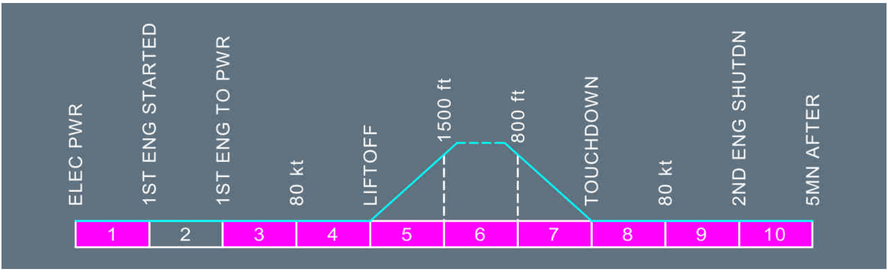
214

ANNUNCIATIONS

Triggering Conditions:

L2 This alert is triggered when the SAT is above the FLEX TEMP.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DB-00014243.0004001 / 30 MAR 12

215

T.O DATA..CHECK

ENG 1(2) SENSOR FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

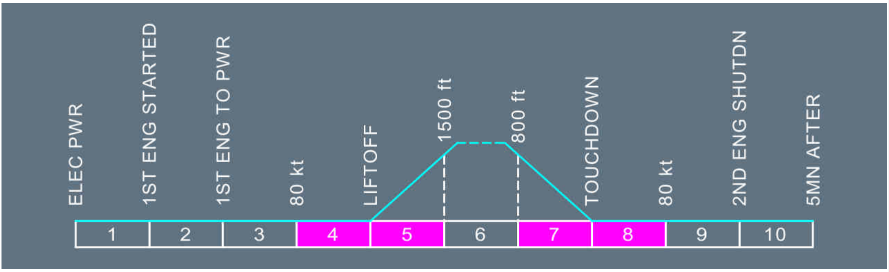
Ident.: PRO-ABN-ENG-R-00017873.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the engine parameters sensor is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-R-00012235.0004001 / 05 JUN 18

L2 N1 or N2 or fuel metering valve position disagree between both EEC channels or Loss of N1 or N2 sensors.

L1 AVOID RAPID THR CHANGES

L2 *If the A/THR is engaged, adjust the thrust levers to align the thrust lever commands with actual EPR and disconnect A/THR.*

L1
- **On ground:**
  THR LEVER (AFFECTED).. IDLE
  ENG MASTER (AFFECTED)..OFF

Ident.: PRO-ABN-ENG-R-00017707.0001001 / 21 MAR 16

STATUS

AVOID RAPID THR CHANGES.

ENG 1(2) SENSOR FAULT - FWSPAGE

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-ENG-R-00017707.0001001 / 21 MAR 16

STATUS

AVOID RAPID THR CHANGES.

ENG 1(2) SENSOR FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

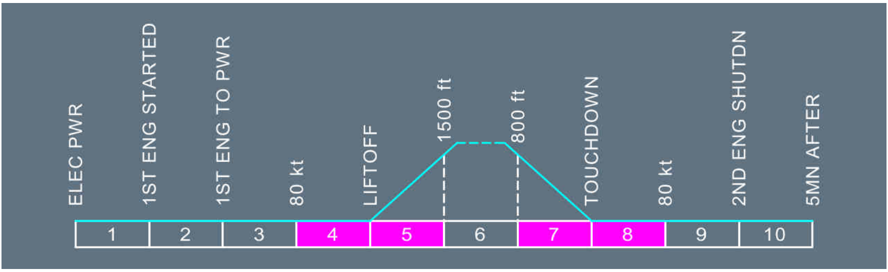
Ident.: PRO-ABN-ENG-R-00017873.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when PS3 or T25 or T3 or N1 or N2 data is unavailable on both channels.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ENG 1(2) SENSOR FAULT (Cont'd)

Ident.: PRO-ABN-ENG-R-00012235.0003001 / 05 JUN 18

L2 PS3, T25, T3, N1, N2 data not available on both ECU channels.

L1
- **On ground:**
  THR LEVER (AFFECTED)........................ IDLE
  ENG MASTER (AFFECTED)........................OFF
- **In flight:**
  AVOID RAPID THR CHANGES.

L2 *If the A/THR is engaged, adjust the thrust levers to align the thrust lever commands with actual N1 and disconnect A/THR.*

Ident.: PRO-ABN-ENG-R-00017707.0001001 / 21 MAR 16

STATUS

AVOID RAPID THR CHANGES.

ENG 1(2) SENSOR FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-R-00017873.0003001 / 21 MAR 16

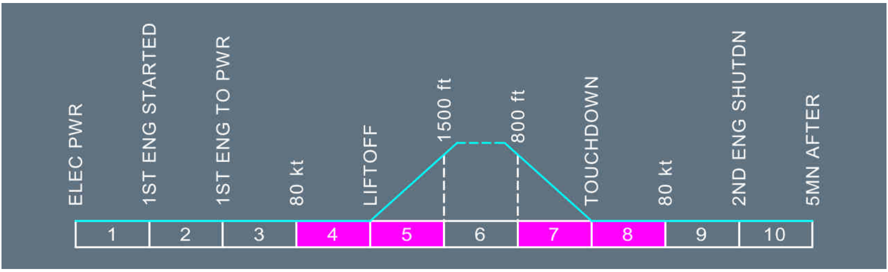
216

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when N1 or N2 or T2 or P2 or burner pressure or ambient pressure engine sensors is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-R-00012235.0009001 / 17 NOV 20

217

L2 Loss of engine control sensors (N1 or N2 or T2 or P2, etc).

L1 N1 DEGRADED MODE

NOT EXCEED N1 LIMIT.

L2 *There is no N1 limit. Therefore an overboost can occur if the thrust lever is moved fully forward.*

L1 MAN THR.. ADJUST

L2 *Align the N1 of the affected engine with the N1 of the other engine.*

L1
- **On ground:**

  THR LEVER (AFFECTED).. IDLE
  ENG MASTER (AFFECTED)..OFF

- **In flight:**

  AVOID RAPID THR CHANGES.

Continued on the following page

ENG 1(2) SENSOR FAULT (Cont'd)

Ident.: PRO-ABN-ENG-R-00017707.0001001 / 21 MAR 16

STATUS

AVOID RAPID THR CHANGES.

ENG 1(2) SHUT DOWN

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

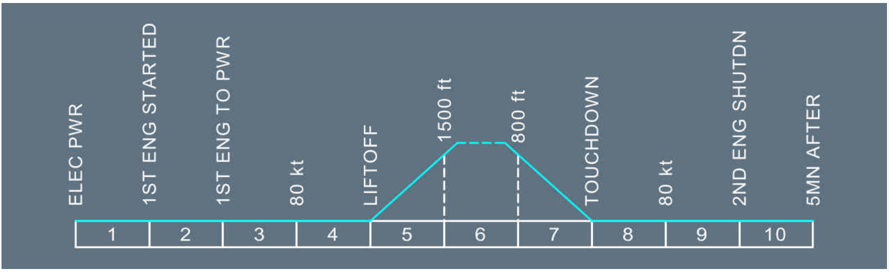
Ident.: PRO-ABN-ENG-I-00017874.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ENG master is at off in phases 3 to 8, or ENG FIRE pb is pushed in phases 1, 2, 9 and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017837.0006001 / 20 MAR 17

LAND ASAP

- **If wing anti-ice ON:**
  - **If Elec Emer Config:**
    PACK 1 .... OFF
    L2 *In Elec Emer config, only Pack 1 pb-sw can be set to off.*
  - L1 **If not Elec Emer Config:**
    PACK (AFFECTED SIDE) .... OFF
    L2 *One pack must be closed when wing anti-ice is in use due to precooler performance.*
  - L1 **If ENG FIRE pb not pushed:**
    X BLEED (IF ENG FIRE PB NOT PUSHED) .... OPEN
    L2 *X BLEED selector must be opened to have symmetrical wing anti-icing.*

L1 ENG MODE SEL .... IGN

L2 *Continuous ignition is selected, in order to protect the remaining engine.*

- L1 **IF NO FUEL LEAK:**
  IMBALANCE .... MONITOR

TCAS MODE SEL ⊲ .... TA

- **If REV unlocked:**
  - **IF BUFFET:**
    MAX SPEED .... 240 KT
- **If ENG FIRE pb-sw pushed:**
  X BLEED .... SHUT
  WING ANTI ICE .... OFF

AVOID ICING CONDITIONS

SECONDARY FAILURES

* HYD
* ELEC
* AIR BLEED

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

L2

Note: *In some conditions, with full asymmetric power, the aircraft may be control-limited before reaching the protection system limit. Therefore, in extreme conditions, where low speed may be advantageous (GPWS, WINDSHEAR, etc.), reduce speed with care below VLS and respect the minimum control speed.*

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017852.0005001 / 17 NOV 20

L12

STATUS

- **If ENG 1(2) FIRE pb-sw pushed:**

  AVOID ICING CONDITIONS

  - **IF SEVERE ICE ACCRETION:**

    MIN SPD.. VLS + 10/G DOT

    MANEUVER WITH CARE

    LDG DIST PROC.. APPLY

- **If REV unlocked:**

  MAX SPEED..300/0.78

APPR PROC

- **If REV unlocked:**
  - ■ **4 doors not stowed (CFM) or reverser deployed (IAE/PW):**
    - **IF BUFFET:**

      FOR LDG.......................................USE FLAP 1

      This line is replaced by "FOR LDG : USE FLAP 1" when CONF 1 is selected, as a reminder.

      APPR SPD..................................VREF + 55 KT

      RUD TRIM.......................................5 DEG R(L)

      When committed to land, set 5 ° rudder trim towards live engine.

      A/THR.. OFF

      GPWS FLAP MODE.................................... OFF

    - **WHEN LDG ASSURED:**

      L/G...DOWN

    - **AT 800 FT AGL:**

      TARGET SPD...............................VREF + 40 KT

      LDG DIST PROC.....................................APPLY

INOP SYS

CAT 3 DUAL
ENG 1(2) BLEED
PACK 1(2)
MAIN GALLEY
GEN 1(2)
G ENG 1 PUMP or
Y ENG 2 PUMP
WING A. ICE (1)
AFT CRG HEAT ◁
STEEP APPR ◁

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

- ■ **1, 2, or 3 doors not stowed (CFM), or reverse detected unlocked (IAE/PW):**
  - ● **IF BUFFET:**

    FOR LDG.......................................USE FLAP 3

    This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3..................................... ON
    APPR SPD...................................VREF + 10 KT
    LDG DIST PROC....................................APPLY

- ● **If WING A/ICE off and ENG 1(2) FIRE pb-sw not pressed:**
  - ● **IF PERF PERMITS:**

    X BLEED..OPEN

    If no obstacle constraint exists, open the XBLEED. To determine the single engine gross ceiling, use the performance application of the EFB.

  - ● **For A321 aircraft:**

    ECON FLOW...ON
    AFT CRG HOT AIR ◁✳ ....OFF

    The ECON FLOW must be selected ON, and the aft cargo heat ◁✳ must be selected OFF, due to precooler performance.

- ● **IF NO ENG 1(2) DAMAGE:**

  CONSIDER ENG 1(2) RELIGHT

CAT 3 SINGLE ONLY
ONE PACK ONLY IF WAI ON

See (2)

(1) *(if affected ENG FIRE pb-sw pushed)*

(2) *Note:* - *If available, the APU may be started and the APU GEN used*
- *If the ENG 1 FIRE pb-sw is pushed, APU bleed must not be used.*
If ENG 2 FIRE pb-sw is pushed, APU bleed may be used, provided the X BLEED rotary selector is set at SHUT.

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

- *After landing, the Fuel Used value of the engine, shutdown in flight, becomes incorrect.*

ENG 1(2) SHUT DOWN

Applicable to: MSN 01251

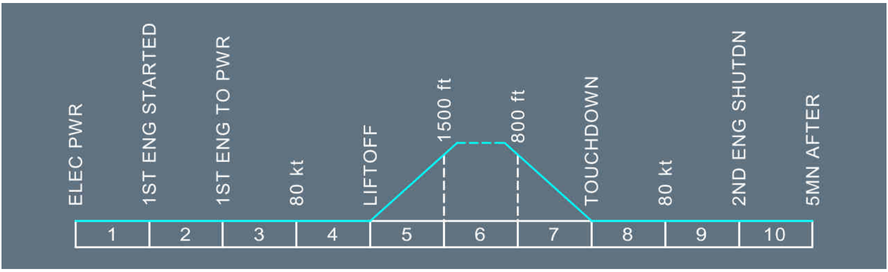
Ident.: PRO-ABN-ENG-I-00017874.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ENG master is at off in phases 3 to 8, or ENG FIRE pb is pushed in phases 1, 2, 9 and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017837.0006001 / 20 MAR 17

LAND ASAP

- **If wing anti-ice ON:**
  - **If Elec Emer Config:**

    PACK 1 .... OFF

    L2 *In Elec Emer config, only Pack 1 pb-sw can be set to off.*

    L1
  - **If not Elec Emer Config:**

    PACK (AFFECTED SIDE) .... OFF

    L2 *One pack must be closed when wing anti-ice is in use due to precooler performance.*

    L1
  - **If ENG FIRE pb not pushed:**

    X BLEED (IF ENG FIRE PB NOT PUSHED) .... OPEN

    L2 *X BLEED selector must be opened to have symmetrical wing anti-icing.*

L1 ENG MODE SEL .... IGN

L2 *Continuous ignition is selected, in order to protect the remaining engine.*

L1
- **IF NO FUEL LEAK:**

  IMBALANCE .... MONITOR

TCAS MODE SEL .... TA

- **If REV unlocked:**
  - **IF BUFFET:**

    MAX SPEED .... 240 KT
- **If ENG FIRE pb-sw pushed:**

  X BLEED .... SHUT

  WING ANTI ICE .... OFF

  AVOID ICING CONDITIONS

SECONDARY FAILURES

* HYD
* ELEC
* AIR BLEED

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

L2

Note: *In some conditions, with full asymmetric power, the aircraft may be control-limited before reaching the protection system limit. Therefore, in extreme conditions, where low speed may be advantageous (GPWS, WINDSHEAR, etc.), reduce speed with care below VLS and respect the minimum control speed.*

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017852.0017001 / 17 NOV 20

L12

STATUS

- **If ENG 1(2) FIRE pb-sw pushed:**
  AVOID ICING CONDITIONS
- **If REV unlocked:**
  MAX SPEED...300/0.78

APPR PROC

- **If REV unlocked:**
  - **4 doors not stowed (CFM) or reverser deployed (IAE/PW):**
    - **IF BUFFET:**
      FOR LDG.......................................USE FLAP 1
      APPR SPD..................................VREF + 55 KT
      RUD TRIM.......................................5 DEG R(L)
      When committed to land, set 5 ° rudder trim towards live engine.
      A/THR...OFF
      GPWS FLAP MODE.................................. OFF
    - **WHEN LDG ASSURED:**
      L/G...DOWN
    - **AT 800 FT AGL:**
      TARGET SPD..............................VREF + 40 KT
      LDG DIST PROC....................................APPLY
  - **1, 2, or 3 doors not stowed (CFM), or reverse detected unlocked (IAE/PW):**
    - **IF BUFFET:**
      FOR LDG.......................................USE FLAP 3
      GPWS LDG FLAP 3...................................... ON
      APPR SPD..................................VREF + 10 KT

INOP SYS

CAT 3 DUAL
ENG 1(2) BLEED
PACK 1(2)
MAIN GALLEY
GEN 1(2)
G ENG 1 PUMP or
Y ENG 2 PUMP
WING A. ICE [1]
AFT CRG HEAT ◁
STEEP APPR ◁

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

LDG DIST PROC....................................APPLY

- **If WING A/ICE off and ENG 1(2) FIRE pb-sw not pressed:**
  - **IF PERF PERMITS:**

    X BLEED..OPEN

    If no obstacle constraint exists, open the X BLEED. To determine the single engine gross ceiling, use the performance application of the EFB..
- **IF NO ENG 1(2) DAMAGE:**

  CONSIDER ENG 1(2) RELIGHT

CAT 3 SINGLE ONLY
ONE PACK ONLY IF WAI ON

See (2)

(1) *(if affected ENG FIRE pb-sw pushed)*

(2) *Note:*
- *If available, the APU may be started and the APU GEN used*
- *If the ENG 1 FIRE pb-sw is pushed, APU bleed must not be used.*
  If the ENG 2 FIRE pb-sw is pushed, APU bleed may be used, provided the X BLEED rotary selector is set at SHUT.
- *After landing, the Fuel Used value of the engine shutdown in flight becomes incorrect.*

ENG 1(2) SHUT DOWN

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

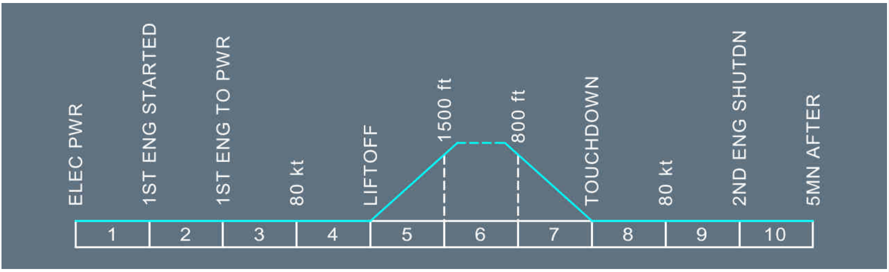
Ident.: PRO-ABN-ENG-I-00017874.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ENG master is at off in phases 3 to 8, or ENG FIRE pb is pushed in phases 1, 2, 9 and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017837.0006001 / 20 MAR 17

LAND ASAP

- **If wing anti-ice ON:**
  - **If Elec Emer Config:**

    PACK 1 .... OFF

    L2 *In Elec Emer config, only Pack 1 pb-sw can be set to off.*
  - L1 **If not Elec Emer Config:**

    PACK (AFFECTED SIDE) .... OFF

    L2 *One pack must be closed when wing anti-ice is in use due to precooler performance.*
  - L1 **If ENG FIRE pb not pushed:**

    X BLEED (IF ENG FIRE PB NOT PUSHED) .... OPEN

    L2 *X BLEED selector must be opened to have symmetrical wing anti-icing.*

L1 ENG MODE SEL .... IGN

L2 *Continuous ignition is selected, in order to protect the remaining engine.*

- L1 **IF NO FUEL LEAK:**

  IMBALANCE .... MONITOR

TCAS MODE SEL ⊲ .... TA

- **If REV unlocked:**
  - **IF BUFFET:**

    MAX SPEED .... 240 KT
- **If ENG FIRE pb-sw pushed:**

  X BLEED .... SHUT

  WING ANTI ICE .... OFF

  AVOID ICING CONDITIONS

SECONDARY FAILURES

* HYD
* ELEC
* AIR BLEED

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

L2

Note: *In some conditions, with full asymmetric power, the aircraft may be control-limited before reaching the protection system limit. Therefore, in extreme conditions, where low speed may be advantageous (GPWS, WINDSHEAR, etc.), reduce speed with care below VLS and respect the minimum control speed.*

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017852.0008001 / 17 NOV 20

L12

STATUS

- **If ENG 1(2) FIRE pb-sw pushed:**
  AVOID ICING CONDITIONS
  - **IF SEVERE ICE ACCRETION:**
    MIN SPD.. VLS + 10/G DOT
    MANEUVER WITH CARE
    LDG DIST PROC.. APPLY
- **If REV unlocked:**
  MAX SPEED...300/0.78

APPR PROC

- **If REV unlocked:**
  - **4 doors not stowed (CFM) or reverser deployed (IAE/PW):**
    - **IF BUFFET:**
      FOR LDG.......................................USE FLAP 1
      This line is replaced by "FOR LDG : USE FLAP 1" when CONF 1 is selected, as a reminder.
      APPR SPD..................................VREF + 60 KT
      RUD TRIM.......................................5 DEG R(L)
      When committed to land, set 5 ° rudder trim towards live engine.
      A/THR.. OFF
      GPWS FLAP MODE.................................... OFF
    - **WHEN LDG ASSURED:**
      L/G...DOWN
    - **AT 800 FT AGL:**
      TARGET SPD..............................VREF + 45 KT
      LDG DIST PROC....................................APPLY

INOP SYS

CAT 3 DUAL
ENG 1(2) BLEED
PACK 1(2)
MAIN GALLEY
GEN 1(2)
G ENG 1 PUMP or
Y ENG 2 PUMP
WING A. ICE (1)
AFT CRG HEAT ⊲✳

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

- ■ **1, 2, or 3 doors not stowed (CFM), or reverse detected unlocked (IAE/PW):**
  - ● **IF BUFFET:**

    FOR LDG.......................................USE FLAP 3

    This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3..................................... ON
    APPR SPD...................................VREF + 15 KT
    LDG DIST PROC....................................APPLY

- ● **If WING A/ICE off and ENG 1(2) FIRE pb-sw not pressed:**
  - ● **IF PERF PERMITS:**

    X BLEED...OPEN

    If no obstacle constraint exists, open the XBLEED. To determine the single engine gross ceiling, use the performance application of the EFB.

- ● **IF NO ENG 1(2) DAMAGE:**

  CONSIDER ENG 1(2) RELIGHT

CAT 3 SINGLE ONLY
ONE PACK ONLY IF WAI ON

See (2)

(1) *(if affected ENG FIRE pb-sw pushed)*

(2) *Note:*
- *If available, the APU may be started and the APU GEN used*
- *If the ENG 1 FIRE pb-sw is pushed, APU bleed must not be used. If ENG 2 FIRE pb-sw is pushed, APU bleed may be used, provided the X BLEED rotary selector is set at SHUT.*
- *After landing, the Fuel Used value of the engine, shutdown in flight, becomes incorrect.*

ENG 1(2) SHUT DOWN

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

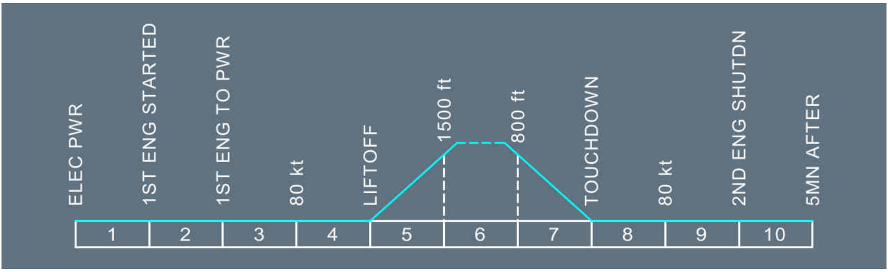
Ident.: PRO-ABN-ENG-I-00017874.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ENG master is at off in phases 3 to 8, or ENG FIRE pb is pushed in phases 1, 2, 9 and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
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ENG 1(2) SHUT DOWN

Applicable to: MSN 08495-08596, 09190-09324

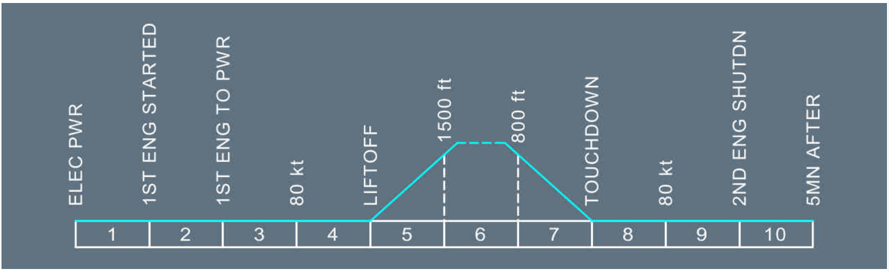
Ident.: PRO-ABN-ENG-I-00017874.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ENG master is at off in phases 3 to 8, or ENG FIRE pb is pushed in phases 1, 2, 9 and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017837.0009001 / 21 MAR 16

LAND ASAP

- **If Elec Emer Config:**

  PACK 1 .... OFF

L2 *In Elec Emer config, only Pack 1 pb-sw can be controlled off.*

L1
- **If not Elec Emer Config:**

  PACK (AFFECTED SIDE) .... OFF

- **If wing anti-ice ON:**
  - **If ENG FIRE pb not pushed:**

    X BLEED (IF ENG FIRE PB NOT PUSHED) .... OPEN

L2 *X BLEED selector must be opened to have symmetrical wing anti-icing.*

L1 ENG MODE SEL .... IGN

L2 *Continuous ignition is selected, in order to protect the remaining engine.*

L1
- **IF NO FUEL LEAK:**

  IMBALANCE .... MONITOR

TCAS MODE SEL ◁* .... TA

- **If REV unlocked:**
  - **IF BUFFET:**

    MAX SPEED .... 240 KT

- **If ENG FIRE pb-sw pushed:**

  X BLEED .... SHUT

  WING ANTI ICE .... OFF

  AVOID ICING CONDITIONS

SECONDARY FAILURES

* HYD
* ELEC
* AIR BLEED

L2 Note: *In some conditions, with full asymmetric power, the aircraft may be control-limited before reaching the protection system limit. Therefore, in extreme conditions, where low speed*

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

may be advantageous (GPWS, WINDSHEAR, etc.), reduce speed with care below VLS and respect the minimum control speed.

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017852.0019001 / 17 NOV 20

L12

STATUS

- **If ENG 1(2) FIRE pb-sw pushed:**
  AVOID ICING CONDITIONS
  - **IF SEVERE ICE ACCRETION:**
    MIN SPD.. VLS + 10/G DOT
    MANEUVER WITH CARE
    LDG DIST PROC.. APPLY
- **If REV unlocked:**
  MAX SPEED..300/0.78

GA THR: TOGA ONLY

APPR PROC

- **If REV unlocked:**
  - **Reverser deployed:**
    - **IF BUFFET:**
      FOR LDG.......................................USE FLAP 1
      This line is replaced by "FOR LDG : USE FLAP 1" when CONF 1 is selected, as a reminder.
      APPR SPD...................................VREF + 55 KT
      RUD TRIM......................................5 DEG R(L)
      When committed to land, set 5 ° rudder trim towards live engine.
      A/THR...OFF
      GPWS FLAP MODE.................................... OFF
    - **WHEN LDG ASSURED:**
      L/G...DOWN
    - **AT 800 FT AGL:**
      TARGET SPD...............................VREF + 40 KT
      LDG DIST PROC....................................APPLY

INOP SYS

CAT 3 DUAL
ENG 1(2) BLEED
PACK 1(2)
MAIN GALLEY
GEN 1(2)
G ENG 1 PUMP or
Y ENG 2 PUMP
WING A. ICE (1)
GA SOFT
AFT CRG HEAT ◁

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

■ **Reverse detected unlocked:**

- **IF BUFFET:**

  FOR LDG.......................................USE FLAP 3

  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3....................................... ON
  APPR SPD.....................................VREF + 15 KT
  LDG DIST PROC......................................APPLY

- **If WING A/ICE off and ENG 1(2) FIRE pb-sw not pressed:**

  - **IF PERF PERMITS:**

    X BLEED...OPEN

    If no obstacle constraint exists, open the XBLEED. To determine the single engine gross ceiling, use the performance application of the EFB.

    - **For A321 aircraft:**

      PACK FLOW..LO

      The PACK FLOW selector must be set to LO, due to precooler performance.

    AFT CRG HOT AIR ◁ ....OFF

    The aft cargo heat ◁ must be selected off, due to precooler performance.

- **IF NO ENG 1(2) DAMAGE:**

  CONSIDER ENG 1(2) RELIGHT

CAT 3 SINGLE ONLY

See [(2)]

(1) *(if affected ENG FIRE pb-sw pushed)*

(2) *Note:*
- *If available, the APU may be started and the APU GEN used.*
- *If the ENG 1 FIRE pb-sw is pushed, the APU bleed must not be used.*
  If the ENG 2 FIRE pb-sw is pushed, the APU bleed may be used, provided the X BLEED rotary selector is set at SHUT.

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

- *After landing, the Fuel Used value of the engine shutdown in flight becomes incorrect.*

ENG 1(2) SHUT DOWN

Applicable to: MSN 08635

Ident.: PRO-ABN-ENG-I-00017874.0001001 / 21 MAR 16

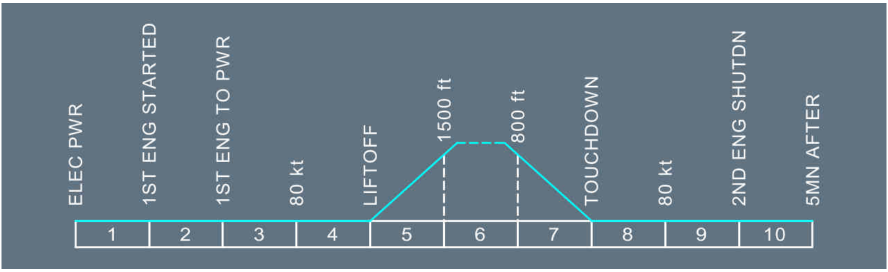
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when ENG master is at off in phases 3 to 8, or ENG FIRE pb is pushed in phases 1, 2, 9 and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017837.0009001 / 21 MAR 16

LAND ASAP

■ **If Elec Emer Config:**

PACK 1 .... OFF

L2 *In Elec Emer config, only Pack 1 pb-sw can be controlled off.*

L1 ■ **If not Elec Emer Config:**

PACK (AFFECTED SIDE) .... OFF

● **If wing anti-ice ON:**

● **If ENG FIRE pb not pushed:**

X BLEED (IF ENG FIRE PB NOT PUSHED) .... OPEN

L2 *X BLEED selector must be opened to have symmetrical wing anti-icing.*

L1 ENG MODE SEL .... IGN

L2 *Continuous ignition is selected, in order to protect the remaining engine.*

L1 ● **IF NO FUEL LEAK:**

IMBALANCE .... MONITOR

TCAS MODE SEL ◁ .... TA

● **If REV unlocked:**

● **IF BUFFET:**

MAX SPEED .... 240 KT

● **If ENG FIRE pb-sw pushed:**

X BLEED .... SHUT

WING ANTI ICE .... OFF

AVOID ICING CONDITIONS

SECONDARY FAILURES

* HYD
* ELEC
* AIR BLEED

L2 *Note:* *In some conditions, with full asymmetric power, the aircraft may be control-limited before reaching the protection system limit. Therefore, in extreme conditions, where low speed*

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

may be advantageous (GPWS, WINDSHEAR, etc.), reduce speed with care below VLS and respect the minimum control speed.

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017852.0020001 / 17 NOV 20

218

L12

STATUS

- **If ENG 1(2) FIRE pb-sw pushed:**

  AVOID ICING CONDITIONS

  - **IF SEVERE ICE ACCRETION:**

    MIN SPD.. VLS + 10/G DOT

    MANEUVER WITH CARE

    LDG DIST PROC... APPLY

- **If REV unlocked:**

  MAX SPEED..300/0.78

GA THR: TOGA ONLY

APPR PROC

- **If REV unlocked:**
  - **Reverser deployed:**
    - **IF BUFFET:**

      FOR LDG....................................... FLAP LVR 1

      This line is replaced by "FOR LDG : FLAP LVR 1" when CONF 1 is selected, as a reminder.

      APPR SPD...................................VREF + 55 KT

      RUD TRIM.......................................5 DEG R(L)

      When committed to land, set 5 ° rudder trim towards the engine running.

      A/THR.. OFF

      GPWS FLAP MODE.................................... OFF

    - **WHEN LDG ASSURED:**

      L/G...DOWN

    - **AT 800 FT AGL:**

      TARGET SPD...............................VREF + 40 KT

      LDG DIST PROC.....................................APPLY

INOP SYS

CAT 3 DUAL
ENG 1(2) BLEED
PACK 1(2)
MAIN GALLEY
GEN 1(2)
G ENG 1 PUMP or
Y ENG 2 PUMP
WING A. ICE (1)
GA SOFT
AFT CRG HEAT ◁

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

- ■ **Reverser detected unlocked:**
  - **IF BUFFET:**
    FOR LDG.. FLAP LVR 3

    This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3...................................... ON

    This line is displayed when flaps are in CONF 3.

    APPR SPD..................................VREF + 15 KT
    LDG DIST PROC....................................APPLY

- **If WING A/ICE off and ENG 1(2) FIRE pb-sw not pressed:**
  - **IF PERF PERMITS:**
    X BLEED..OPEN

    If no obstacle constraint exists, open the XBLEED. To determine the single engine gross ceiling, use the performance application of the EFB.

    - **For A321 aircraft:**
      PACK FLOW...LO

      The PACK FLOW selector must be set to LO, due to precooler performance.

    AFT CRG HOT AIR ❄ ....OFF

    The AFT Cargo Heating ❄ must be selected off, due to precooler performance.

- **IF NO ENG 1(2) DAMAGE:**
  CONSIDER ENG 1(2) RELIGHT

CAT 3 SINGLE ONLY

See (2)

(1) *(if affected ENG FIRE pb-sw pushed)*

(2) *Note:* 1. *If available, the APU may be started and the APU GEN used.*
2. *If the ENG 1 FIRE pb-sw is pushed, the APU bleed must not be used.*
3. *If the ENG 2 FIRE pb-sw is pushed, the APU bleed may be used, provided the X BLEED rotary selector is set to SHUT.*

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

4. After landing, the Fuel Used value of the engine shut down in flight becomes incorrect.

ENG 1(2) SHUT DOWN

Applicable to: MSN 10949-11597

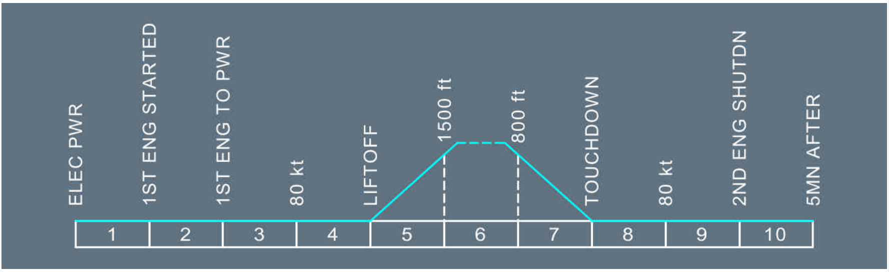
Ident.: PRO-ABN-ENG-I-00017874.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ENG master is at off in phases 3 to 8, or ENG FIRE pb is pushed in phases 1, 2, 9 and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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8
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10

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017837.0012001 / 18 NOV 21

219

LAND ASAP

- ■ **If ELEC EMER CONFIG:**
  PACK 1 .... OFF
  L2 *In ELEC EMER CONFIG, only PACK 1 pb-sw can be controlled off.*
- L1 ■ **If not ELEC EMER CONFIG:**
  PACK (AFFECTED SIDE) .... OFF
- ● **If wing anti-ice ON:**
  - ● **If ENG FIRE pb not pushed:**
    X BLEED (IF ENG FIRE PB NOT PUSHED) .... OPEN
    L2 *X BLEED selector must be opened to have symmetrical wing anti-icing.*

L1 ENG MODE SEL .... IGN

L2 *Continuous ignition is selected, in order to protect the remaining engine.*

- L1 ● **During initial climb:**
  L/G .... UP
- ● **IF NO FUEL LEAK:**
  IMBALANCE .... MONITOR

TCAS MODE SEL .... TA

- ● **If REV unlocked:**
  - ● **IF BUFFET:**
    MAX SPEED .... 240 KT
- ● **If ENG FIRE pb-sw pushed:**
  X BLEED .... SHUT
  WING ANTI ICE .... OFF
  AVOID ICING CONDITIONS

SECONDARY FAILURES

* HYD
* ELEC
* AIR BLEED

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Note: *In some conditions, with full asymmetric power, the aircraft may be control-limited before reaching the protection system limit. Therefore, in extreme conditions, where low speed may be advantageous (GPWS, WINDSHEAR, etc.), reduce speed with care below VLS and respect the minimum control speed.*

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

Ident.: PRO-ABN-ENG-I-00017852.0020001 / 17 NOV 20

220

L12

STATUS

- **If ENG 1(2) FIRE pb-sw pushed:**
  AVOID ICING CONDITIONS
  - **IF SEVERE ICE ACCRETION:**
    MIN SPD.. VLS + 10/G DOT
    MANEUVER WITH CARE
    LDG DIST PROC.. APPLY
- **If REV unlocked:**
  MAX SPEED...300/0.78

GA THR: TOGA ONLY

APPR PROC

- **If REV unlocked:**
  - **Reverser deployed:**
    - **IF BUFFET:**
      FOR LDG.. FLAP LVR 1
      This line is replaced by "FOR LDG : FLAP LVR 1" when CONF 1 is selected, as a reminder.
      APPR SPD..................................VREF + 55 KT
      RUD TRIM......................................5 DEG R(L)
      When committed to land, set 5 ° rudder trim towards the engine running.
      A/THR... OFF
      GPWS FLAP MODE.................................... OFF
    - **WHEN LDG ASSURED:**
      L/G...DOWN
    - **AT 800 FT AGL:**
      TARGET SPD...............................VREF + 40 KT
      LDG DIST PROC....................................APPLY

INOP SYS

CAT 3 DUAL
ENG 1(2) BLEED
PACK 1(2)
MAIN GALLEY
GEN 1(2)
G ENG 1 PUMP or
Y ENG 2 PUMP
WING A. ICE (1)
GA SOFT
AFT CRG HEAT

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

- ■ **Reverser detected unlocked:**
  - ● **IF BUFFET:**

    FOR LDG.. FLAP LVR 3

    This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3...................................... ON

    This line is displayed when flaps are in CONF 3.

    APPR SPD...................................VREF + 15 KT
    LDG DIST PROC....................................APPLY

- ● **If WING A/ICE off and ENG 1(2) FIRE pb-sw not pressed:**
  - ● **IF PERF PERMITS:**

    X BLEED...OPEN

    If no obstacle constraint exists, open the XBLEED. To determine the single engine gross ceiling, use the performance application of the EFB.

    - ● **For A321 aircraft:**

      PACK FLOW..LO

      The PACK FLOW selector must be set to LO, due to precooler performance.

    AFT CRG HOT AIR ◁ ....OFF

    The AFT Cargo Heating ◁ must be selected off, due to precooler performance.

- ● **IF NO ENG 1(2) DAMAGE:**

  CONSIDER ENG 1(2) RELIGHT

CAT 3 SINGLE ONLY

See (2)

(1) *(if affected ENG FIRE pb-sw pushed)*

(2) *Note:* *1. If available, the APU may be started and the APU GEN used.*
2. If the ENG 1 FIRE pb-sw is pushed, the APU bleed must not be used.
3. If the ENG 2 FIRE pb-sw is pushed, the APU bleed may be used, provided the X BLEED rotary selector is set to SHUT.

Continued on the following page

ENG 1(2) SHUT DOWN (Cont'd)

4. After landing, the Fuel Used value of the engine shut down in flight becomes incorrect.

ENG 1(2) STALL

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

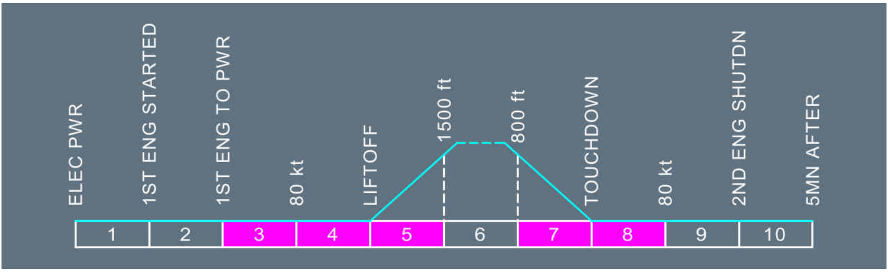
Ident.: PRO-ABN-ENG-Z-00017876.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an engine stall is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) STALL (Cont'd)

Ident.: PRO-ABN-ENG-Z-00017749.0005001 / 17 MAR 17

221

This alert is triggered when FADEC detects an engine stall. Indications of an engine stall include varying degrees of abnormal engine noises/bangs, accompanied by flame from the engine exhaust (and possibly from the engine inlet in severe case), fluctuating performance parameters, vibration, sluggish or no thrust lever response, high EGT and/or a rapid EGT rise when thrust lever is advanced. Engine stalls must be reported for maintenance action.

- **On Ground:**
  THR LEVER (AFFECTED ENGINE)........ IDLE
  ENG MASTER (AFFECTED ENGINE)........OFF
- **In Flight:**
  THR LEVER (AFFECTED ENGINE)........ IDLE
  ENG PARAMETERS (AFFECTED ENGINE)........CHECK
  ENG 1(2) STALL PROC........ APPLY

Ident.: PRO-ABN-ENG-Z-00017748.0001001 / 21 MAR 16

222

STATUS

CONSIDER ENG 1(2) RELIGHT

ENG 1(2) STALL

Applicable to: MSN 01251

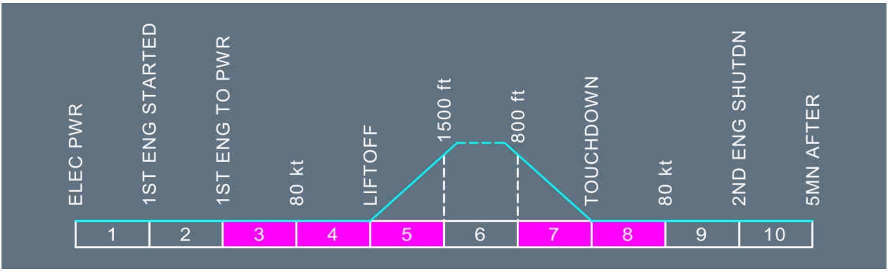
Ident.: PRO-ABN-ENG-Z-00017876.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an engine stall is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

ENG 1(2) STALL (Cont'd)

Ident.: PRO-ABN-ENG-Z-00017749.0004001 / 28 MAY 20

L2 A stall may be indicated by varying degrees of abnormal engine noises, accompanied by flame from the engine exhaust (and possibly from the engine inlet in severe case), fluctuating performance parameters, sluggish or no thrust lever response, high EGT and/or a rapid EGT rise when thrust lever is advanced. Engine stalls must be reported for maintenance action.

L1
- ■ **On ground:**

  THR LEVER (AFFECTED ENGINE).. IDLE
  ENG MASTER (AFFECTED ENGINE)..OFF

- ■ **In flight:**

  THR LEVER (AFFECTED ENGINE).. IDLE
  ENG PARAMETERS (AFFECTED ENGINE)..CHECK

  - ■ **If abnormal ENG parameters:**

    ENG MASTER (AFFECTED ENGINE).. OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) SHUT DOWN

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

  - ■ **If normal ENG parameters:**

    ENG ANTI ICE (AFFECTED ENGINE).. ON
    WING ANTI ICE..ON

    L2 *Operation of ENG and WING ANTI ICE will increase the stall margin but EGT increases accordingly.*

    L1 THR LEVER (AFFECTED ENGINE)..SLOWLY MOVE FORWARD

    - ● **If stall recurs:**

      THR LEVER (AFFECTED ENGINE)..MOVE BACKWARD

      L2 *Reduce thrust and operate below the stall threshold where stall recurs.*

    - L1 ● **If stall does not recur:**

      CONTINUE NORMAL ENGINE OPERATION

ENG 1(2) STALL

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

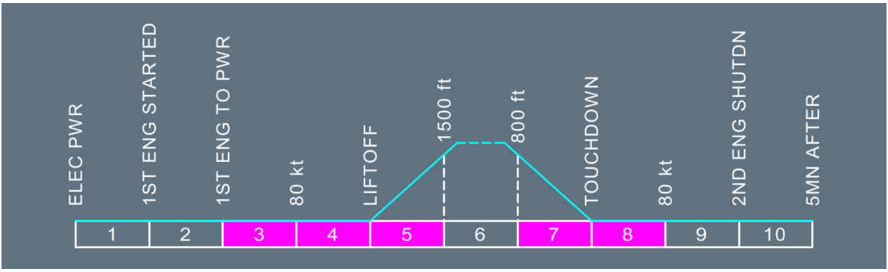
Ident.: PRO-ABN-ENG-Z-00017876.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an engine stall is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

ENG 1(2) STALL

Applicable to: MSN 02014, 06561

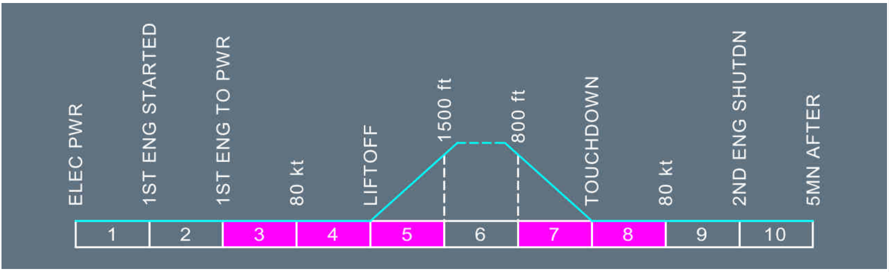
Ident.: PRO-ABN-ENG-Z-00017876.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an engine stall is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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8
9
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Continued on the following page

ENG 1(2) STALL (Cont'd)

Ident.: PRO-ABN-ENG-Z-00017749.0004001 / 28 MAY 20

L2 A stall may be indicated by varying degrees of abnormal engine noises, accompanied by flame from the engine exhaust (and possibly from the engine inlet in severe case), fluctuating performance parameters, sluggish or no thrust lever response, high EGT and/or a rapid EGT rise when thrust lever is advanced. Engine stalls must be reported for maintenance action.

L1
- ■ **On ground:**
  THR LEVER (AFFECTED ENGINE).......... IDLE
  ENG MASTER (AFFECTED ENGINE).......... OFF
- ■ **In flight:**
  THR LEVER (AFFECTED ENGINE).......... IDLE
  ENG PARAMETERS (AFFECTED ENGINE).......... CHECK
  - ■ **If abnormal ENG parameters:**
    ENG MASTER (AFFECTED ENGINE).......... OFF

L12

ASSOCIATED PROCEDURES

ENG 1(2) **SHUT DOWN**

Apply the ENG SHUT DOWN procedure (Refer to PRO-ABN-ENG ENG 1(2) SHUT DOWN).

  - ■ **If normal ENG parameters:**
    ENG ANTI ICE (AFFECTED ENGINE).......... ON
    WING ANTI ICE.......... ON

L2 *Operation of ENG and WING ANTI ICE will increase the stall margin but EGT increases accordingly.*

L1 THR LEVER (AFFECTED ENGINE).......... SLOWLY MOVE FORWARD
    - ● **If stall recurs:**
      THR LEVER (AFFECTED ENGINE).......... MOVE BACKWARD

L2 *Reduce thrust and operate below the stall threshold where stall recurs.*

L1
    - ● **If stall does not recur:**
      CONTINUE NORMAL ENGINE OPERATION

Continued on the following page

ENG 1(2) STALL (Cont'd)

Ident.: PRO-ABN-ENG-Z-00017748.0001001 / 21 MAR 16

223

STATUS

CONSIDER ENG 1(2) RELIGHT

ENG 1(2) START FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

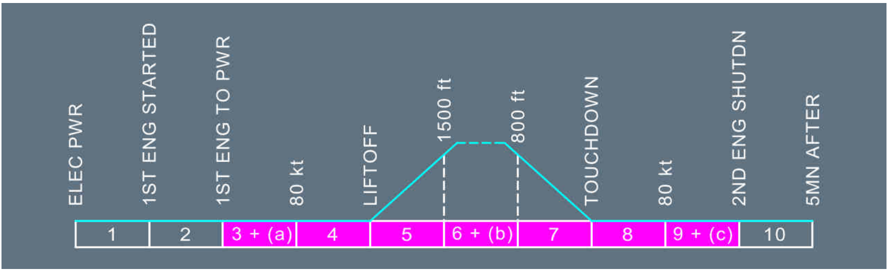
Ident.: PRO-ABN-ENG-AD-00017995.0002001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when start fault due to:
- No light up, or
- Engine stall, or
- Engine overtemperature, or
- Hung start, or
- No N1 rotation, or
- Low start air pressure, or
- Thrust lever not at idle.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3 + (a)
4
5
6 + (b)
7
8
9 + (c)
10

Note: *(a) Alert inhibited in the flight phase 3, only if it is due to:*
- *No light up, or*
- *Engine stall, or*
- *Engine overtemperature, or*
- *Hung start, or*
- *Low start air pressure.*

(b) Alert inhibited in the flight phase 6, only if it is due to thrust lever not at idle.
(c) Alert inhibited in the flight phase 9, only if it is due to no N1 rotation.

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

■ ENG 1(2) IGNITION FAULT:

L2 The engine does not start within the 20 s (30 s in flight) that follow the ignition start.

L1 ■ NO N1 ROTATION:

or

STALL

or

EGT OVERLIMIT

or

HUNG START:

- **In flight:**

  ENG MASTER (AFFECTED)........OFF

  L2 *Wait 30 s before attempting a new start (to drain the engine).*

- L1 **On ground (auto start):**

  L2 If the engine does not start or in case of detected stall, potential EGT overheat or hung start, the FADEC will immediately shut off fuel and turn off ignition. After any start attempt that is not successful, a dry crank automatically occurs. At the end of the dry crank sequence, the start valve is closed. The ECAM displays the following message:

  L1 AUTO CRANK IN PROGRESS.

  - **When dry crank process is completed:**

    ENG MASTER (AFFECTED)........OFF

    L2 *Setting ENG MASTER to OFF confirms automatic start abort.*
    After the starter cools, and for any subsequent attempt to start the engine, the flight crew must perform a manual start, or must report the “no start condition” to maintenance for appropriate action.

    Note: With engine above idle, if EGT limit is exceeded ECAM requires to set engine master lever at OFF.

- L1 **On ground (manual start):**

  ENG MASTER (AFFECTED)........OFF
  MAN START (AFFECTED)........OFF
  MODE SEL........CRANK
  MAN START (AFFECTED)........ON

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

L2 *Note:* *ECAM does not display the last two lines of the above procedure.*
Dry crank the engine for 30 s. The start valve automatically reopens when N2 is below 10 %.
After the starter cools, and for any subsequent attempt to start the engine, the flight crew must perform a manual start, or must report the “no start condition” to maintenance for appropriate action.

L1
- ■ **LO START AIR PRESS:**
  BLEED AIR SUPPLY..CHECK
- ■ **THR LEVER NOT AT IDLE:**
  THR LEVER..IDLE

ENG 1(2) START FAULT

Applicable to: MSN 01251

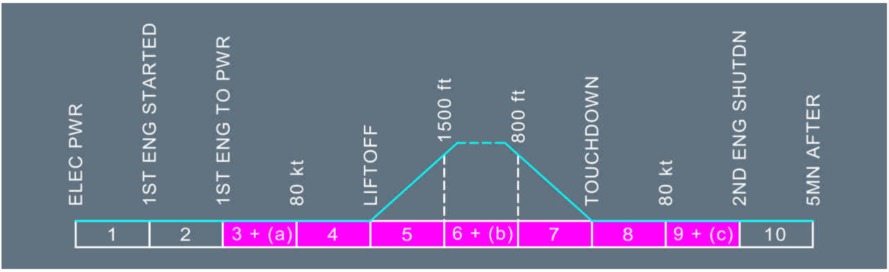
Ident.: PRO-ABN-ENG-AD-00017995.0002001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when start fault due to:
- No light up, or
- Engine stall, or
- Engine overtemperature, or
- Hung start, or
- No N1 rotation, or
- Low start air pressure, or
- Thrust lever not at idle.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3 + (a)
4
5
6 + (b)
7
8
9 + (c)
10

Note: *(a) Alert inhibited in the flight phase 3, only if it is due to:*
- *No light up, or*
- *Engine stall, or*
- *Engine overtemperature, or*
- *Hung start, or*
- *Low start air pressure.*

(b) Alert inhibited in the flight phase 6, only if it is due to thrust lever not at idle.
(c) Alert inhibited in the flight phase 9, only if it is due to no N1 rotation.

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AD-00012100.0002001 / 23 JUN 15

■ ENG 1(2) IGNITION FAULT:

L2 The engine does not start within the 20 s (30 s in flight) that follow the ignition start.

L1 ■ NO N1 ROTATION:

or

STALL

or

EGT OVERLIMIT

or

HUNG START:

- **In flight:**

  ENG MASTER (AFFECTED)..OFF

  L2 *Wait 30 s before attempting a new start (to drain the engine).*

- L1 **On ground (auto start):**

  L2 If the engine does not start, the FADEC can attempt an additional engine restart. After any start attempt that is not successful, a dry crank phase automatically occurs. The ECAM displays the following message:

  L1 AUTO CRANK IN PROGRESS.

  - **When dry crank process is completed:**

    ENG MASTER (AFFECTED)..OFF

    L2 *Setting ENG MASTER to OFF confirms automatic start abort.*
    After the starter cools, and for any subsequent attempt to start the engine, the flight crew must perform a manual start, or must report the “no start condition” to maintenance for appropriate action.

    Note: With engine above idle, if EGT limit is exceeded ECAM requires to set engine master at OFF.

- L1 **On ground (manual start):**

  MAN START (AFFECTED)..OFF
  ENG MASTER (AFFECTED)..OFF
  MODE SEL..CRANK
  MAN START (AFFECTED)..ON

  L2 *Note: ECAM does not display the last two lines of the above procedure.*

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

Dry crank the engine for 30 s. The start valve automatically reopens when N2 is below 10 %.
After the starter cools, and for any subsequent attempt to start the engine, the flight crew must perform a manual start, or must report the “no start condition” to maintenance for appropriate action.

L1

- ■ **LO START AIR PRESS:**
  BLEED AIR SUPPLY.. CHECK
- ■ **THR LEVER NOT AT IDLE:**
  THR LEVER.. IDLE

ENG 1(2) START FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: PRO-ABN-ENG-AD-00017995.0001001 / 13 MAY 16

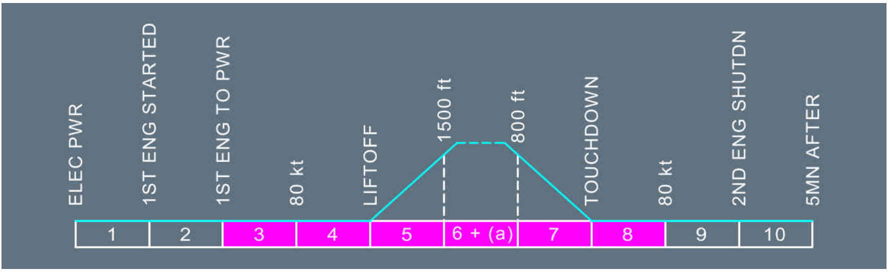
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when start fault due to:
- No light up, or
- Engine stall, or
- Engine overtemperature (above 725 °C), or
- Starter time exceeded, or
- Low start air pressure, or
- Thrust lever not at idle.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6 + (a)
7
8
9
10

Note: Alert inhibited in the flight phase 6, only if it is due to thrust lever not at idle.

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AD-00012100.0005001 / 05 MAR 19

■ ENG 1(2) IGNITION FAULT:

L2 The engine does not start within the 18 s that follow the ignition start.

L1
- **In flight:**
  ENG MASTER (AFFECTED)........OFF

  L2 *Wait 30 s before attempting a new start (to drain the engine).*

L1
- **On the ground (auto start) :**
  L2 If the engine does not start, the FADEC can attempt an additional engine restart. After any start attempt that is not successful, a dry crank phase automatically occurs. The ECAM displays the following message:

  L1 NEW START IN PROGRESS

  - **When the final dry cranking process is finished:**
    ENG MASTER (AFFECTED)........OFF

    L2 *Following starter cooldown, the pilot must decide whether to attempt auto or manual start, or to report the no start condition for appropriate maintenance action.*

L1
- **On the ground (manual start):**
  ENG MASTER (AFFECTED)........OFF
  MAN START (AFFECTED)........OFF
  MODE SEL........CRANK
  MAN START (AFFECTED)........ON

  L2 *Note:* *ECAM does not display the last two lines of the above procedure.*
  Dry crank the engine for 30 s. The start valve automatically reopens when N2 is below 20 %.
  After the starter cools, and for any subsequent attempt to start the engine, the flight crew must perform a manual start, or must report the “no start condition” to maintenance for appropriate action.

L1
■ ENG 1(2) STALL, ENG 1(2) EGT OVERLIMIT:

- **In flight:**
  ENG MASTER (AFFECTED)........OFF

  L2 *Wait 30 s before attempting a new start (to drain the engine).*

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

L1 ● **On ground (auto start):**

L2 If the FADEC detects a stall or a potential EGT overheat, the FADEC will reduce the fuel schedule in stages, if necessary, to achieve a normal condition. The following message will be displayed on the ECAM:

L1 NEW START IN PROGRESS

● **If restart not possible:**

L2 If normal conditions cannot be achieved, the FADEC shuts off fuel and turn off ignition.

L1 ENG MASTER (AFFECTED)..OFF

L2
- *The fuel metering valve and starter air valve are automatically closed. Both igniters are turned off*
- *Setting ENG MASTER to OFF confirms automatic start abort*
- *In case of ENG STALL, consider making a XBLEED start, if pressure is low.*

L1 ● **On ground (manual start):**

ENG MASTER (AFFECTED)..OFF
MAN START (AFFECTED)..OFF
MODE SEL..CRANK
MAN START (AFFECTED)..ON

L2 Note: *ECAM does not display the last two lines of the above procedure.*
Dry crank the engine for 30 s. The start valve automatically reopens when N2 is below 20 %.
After the starter cools, and for any subsequent attempt to start the engine, the flight crew must perform a manual start, or must report the “no start condition” to maintenance for appropriate action.

L1 ■ **STARTER TIME EXCEEDED:**
MAN START (IF MANUAL START IS PERFORMED)..OFF
ENG MASTER (AFFECTED)..OFF

■ **LO START AIR PRESS:**
BLEED AIR SUPPLY..CHECK

■ **THR LEVER NOT AT IDLE:**
THR LEVER..IDLE

ENG 1(2) START FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-AD-00017995.0007001 / 21 OCT 16

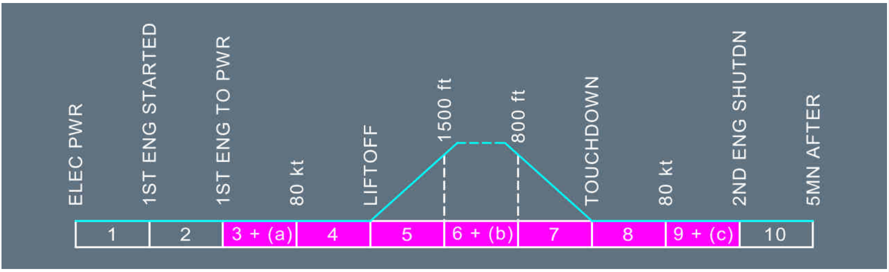
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when engine start is failed due to the following conditions:
- No light up, or
- Engine stall, or
- Engine overtemperature, or
- Hung start, or
- No N1 rotation, or
- Starter time exceeded, or
- Thrust lever not at idle, or
- Hot start, or
- Starter shaft shear.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3 + (a)
4
5
6 + (b)
7
8
9 + (c)
10

Note: *(a) Alert inhibited in the flight phase 3, only if it is due to:*
- *No light up, or*
- *Engine stall, or*
- *Engine overtemperature, or*
- *Hung start, or*
- *Starter time exceeded.*

(b) Alert inhibited in the flight phase 6, only if it is due to Thrust lever not at idle.
(c) Alert inhibited in the flight phase 9, only if it is due to no N1 rotation.

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AD-00012100.0013001 / 10 JAN 17

224

■ **ENG (AFFECTED) IGNITION FAULT**
or
ENG (AFFECTED) STALL
or
ENG (AFFECTED) EGT OVERLIMIT
or
HUNG START:

- **In flight:**
  ENG MASTER (AFFECTED)............OFF
  L2 *Wait 30 s before attempting a new start (to drain the engine).*

L1
- **On ground (auto start):**
  L2 If the FADEC detects no engine light up, stall, hung start, or EGT overlimit, the FADEC will immediately shut off fuel and turn off ignition. Then a dry crank phase is automatically performed. The ECAM displays the following messages:

  L1 AUTOCRANK IN PROGRESS
  NEW START IN PROGRESS

  - **If restart not possible:**
    ENG MASTER (AFFECTED)............OFF
    L2 *The Fuel Metering Valve (FMV) and the starter air valve close automatically. Both igniters automatically go off.*
    Following starter cooldown, the flight crew must decide whether to attempt a manual start or must report the start failure to maintenance for appropriate action.

L1
- **On the ground (manual start):**
  ENG MASTER (AFFECTED)............OFF
  MAN START (AFFECTED)............OFF
  L2 *Following starter cooldown, the flight crew must decide whether to attempt a manual start or must report the start failure to maintenance for appropriate action.*

L1 ■ **STARTER TIME EXCEEDED:**
ENG MASTER (AFFECTED)............OFF
L2 *The engine starter time limit is exceeded.*
L1 MAN START (AFFECTED)............OFF

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

■ **NO N1 ROTATION:**

AUTOCRANK IN PROGRESS
ENG MASTER (AFFECTED)........OFF
MAN START (AFFECTED)........OFF

■ **THR LEVER NOT AT IDLE:**

THR LEVER........IDLE

■ **HOT START:**

NEW START IN PROGRESS

■ **STARTER SHAFT SHEAR:**

- ■ **On ground:**
  ENG MASTER (AFFECTED)........OFF
  MAN START (AFFECTED)........OFF

  Do not attempt a new engine start. Maintenance action is due.

- ■ **In flight:**
  WINDMILL START ONLY

Ident.: PRO-ABN-ENG-AD-00015583.0001001 / 05 NOV 15

225

STATUS

● **STARTER SHAFT SHEAR**
ENG (AFFECTED) WINDMILL START ONLY

ENG 1(2) START FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-ENG-AD-00017995.0010001 / 09 APR 18

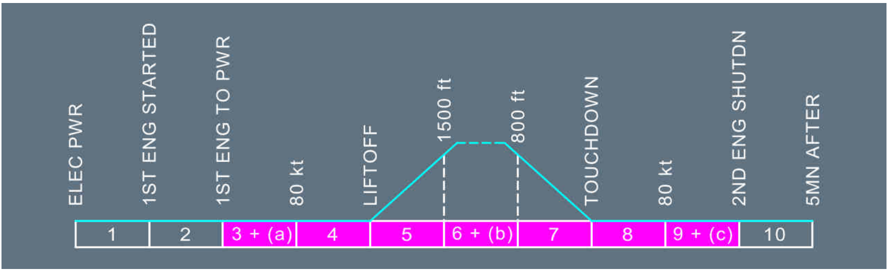
226

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when engine start is failed due to the following conditions:
- No light up, or
- Engine stall, or
- Engine overtemperature, or
- Hung start, or
- No N1 rotation, or
- Starter time exceeded, or
- Thrust lever not at idle, or
- Hot start, or
- Starter shaft shear.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3 + (a)
4
5
6 + (b)
7
8
9 + (c)
10

Note: *(a) Alert inhibited in the flight phase 3, only if it is due to:*
- *No light up, or*
- *Engine stall, or*
- *Engine overtemperature, or*
- *Hung start, or*
- *Starter time exceeded.*

(b) Alert inhibited in the flight phase 6, only if it is due to:
- *Thrust lever not at idle, or*

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

- *Fuel depulse.*

(c) Alert inhibited in the flight phase 9, only if it is due to no N1 rotation.

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

Ident.: PRO-ABN-ENG-AD-00012100.0013001 / 10 JAN 17

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■ ENG (AFFECTED) IGNITION FAULT
or
ENG (AFFECTED) STALL
or
ENG (AFFECTED) EGT OVERLIMIT
or
HUNG START:

- **In flight:**

  ENG MASTER (AFFECTED)........................OFF

  L2 *Wait 30 s before attempting a new start (to drain the engine).*

L1
- **On ground (auto start):**

  L2 If the FADEC detects no engine light up, stall, hung start, or EGT overlimit, the FADEC will immediately shut off fuel and turn off ignition. Then a dry crank phase is automatically performed. The ECAM displays the following messages:

  L1 AUTOCRANK IN PROGRESS
  NEW START IN PROGRESS

  - **If restart not possible:**

    ENG MASTER (AFFECTED)........................OFF

    L2 *The Fuel Metering Valve (FMV) and the starter air valve close automatically. Both igniters automatically go off.*
    Following starter cooldown, the flight crew must decide whether to attempt a manual start or must report the start failure to maintenance for appropriate action.

L1
- **On the ground (manual start):**

  ENG MASTER (AFFECTED)........................OFF
  MAN START (AFFECTED)........................OFF

  L2 *Following starter cooldown, the flight crew must decide whether to attempt a manual start or must report the start failure to maintenance for appropriate action.*

L1
■ STARTER TIME EXCEEDED:

ENG MASTER (AFFECTED)........................OFF

L2 *The engine starter time limit is exceeded.*

L1 MAN START (AFFECTED)........................OFF

Continued on the following page

ENG 1(2) START FAULT (Cont'd)

- NO N1 ROTATION:
  AUTOCRANK IN PROGRESS
  ENG MASTER (AFFECTED)....................OFF
  MAN START (AFFECTED)....................OFF
- THR LEVER NOT AT IDLE:
  THR LEVER....................IDLE
- HOT START:
  NEW START IN PROGRESS
- STARTER SHAFT SHEAR:
  - **On ground:**
    ENG MASTER (AFFECTED)....................OFF
    MAN START (AFFECTED)....................OFF

    Do not attempt a new engine start. Maintenance action is due.
  - **In flight:**
    WINDMILL START ONLY

Ident.: PRO-ABN-ENG-AD-00015583.0001001 / 05 NOV 15

228

STATUS

- STARTER SHAFT SHEAR
  ENG (AFFECTED) WINDMILL START ONLY

ENG 1(2) START VALVE FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

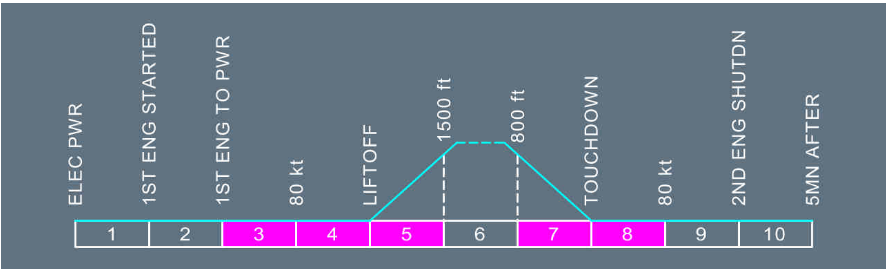
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-D-00018010.0003001 / 10 MAY 21

■ START VALVE NOT CLOSED

L2 Remove all bleed sources supplying the faulty start valve.

L1 APU BLEED (IF ENG 1 AFFECTED).. OFF
X BLEED.. SHUT

L2 *This action line is only displayed if ENG 2 is affected or if ENG 1 is affected with ENG 2 supplying bleed through the X BLEED.*

L1
- **In flight:**
  ENG BLEED (AFFECTED).. OFF
  MAN START (IF MAN START PERFORMED)..OFF
  WING ANTI ICE.. OFF

  AVOID ICING CONDITIONS

- **On ground:**
  MAN START (IF MAN START PERFORMED)..OFF
  ENG MASTER (AFFECTED).. OFF

L2 *On ground, consider application of "START VALVE MANUAL OPERATION" procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

L1 ■ START VALVE NOT OPEN

- **If opposite engine running:**
  X BLEED.. OPEN

- **If APU AVAIL below FL 200:**
  APU BLEED.. ON

- **IF UNSUCCESSFUL:**
  MAN START (IF MAN START PERFORMED)..OFF
  ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)..OFF

L2 *MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.*
On ground, consider application of “START VALVE MANUAL OPERATION” procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).

L1 ■ EEC control of start valve failed (for IAE or PW engines):

- **On ground:**
  START VALVE MAN ONLY

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

- **In flight:**
  WINDMILL START ONLY.

L2 *Windmilling start only is available since EEC cannot control the start valve.*

Ident.: PRO-ABN-ENG-D-00012091.0003001 / 17 MAR 17

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STATUS

AVOID ICING CONDITIONS

- **IF SEVERE ICE ACCRETION**
  MIN SPD...VLS + 10/G DOT
  MANEUVER WITH CARE
  - **In flight:**
    LDG DIST PROC... APPLY
- **If EEC control of start valve failed:**
  ENG 1(2) WINDMILL START ONLY.

INOP SYS

WING A.ICE (In flight)

ENG 1(2) START VALVE FAULT

Applicable to: MSN 01251

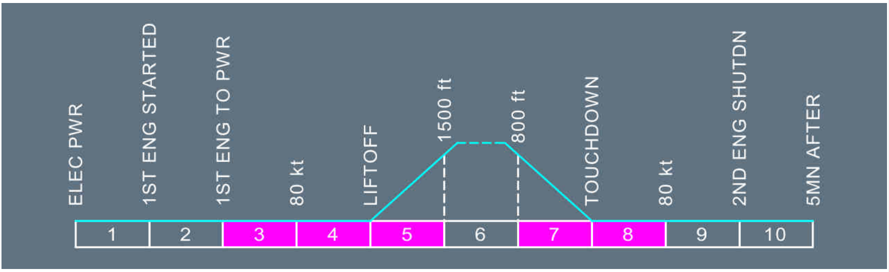
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
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6
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Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-D-00018010.0001001 / 10 MAY 21

■ START VALVE NOT CLOSED

L2 Remove all bleed sources supplying the faulty start valve.

L1 APU BLEED (IF ENG 1 AFFECTED).................... OFF
X BLEED.................... SHUT

L2 *This action line is only displayed if ENG 2 is affected or if ENG 1 is affected with ENG 2 supplying bleed through the X BLEED.*

L1
- **In flight:**
  ENG BLEED (AFFECTED SIDE)....................OFF
- **On the ground:**
  MAN START (IF MAN START PERFORMED)....................OFF
  ENG MASTER (AFFECTED SIDE).................... OFF

L2 *On the ground, consider application of "START VALVE MANUAL OPERATION" procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

L1 ■ START VALVE NOT OPEN

- **If opposite engine running:**
  X BLEED....................ON
- **If APU AVAIL below FL 200:**
  APU BLEED....................ON
- **If UNSUCCESSFUL:**
  MAN START (IF MAN START PERFORMED)....................OFF
  ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)....................OFF

L2 *MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.*
On the ground, consider application of "START VALVE MANUAL OPERATION" procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).

L1
- **EEC control of start valve failed (for IAE or PW 6000 engines):**
  - **On the ground:**
    START VALVE MAN ONLY

L2 *Start valve must be manually opened (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

L1 - **In flight:**
  WINDMILL START ONLY.

L2 *Windmilling start only is available since EEC cannot control the start valve.*

Ident.: PRO-ABN-ENG-D-00012091.0001001 / 17 AUG 10

STATUS

ENG 1(2) WINDMILL START ONLY.

ENG 1(2) START VALVE FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

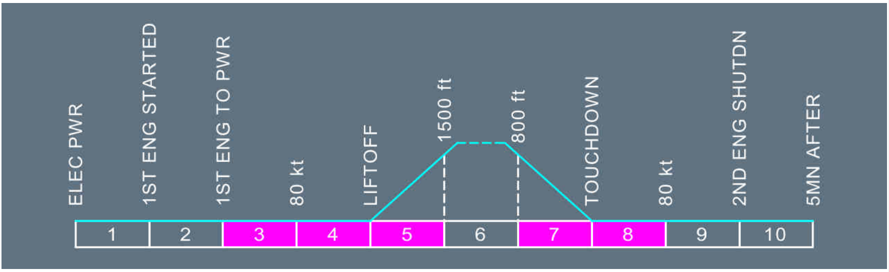
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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ENG 1(2) START VALVE FAULT

Applicable to: MSN 02014

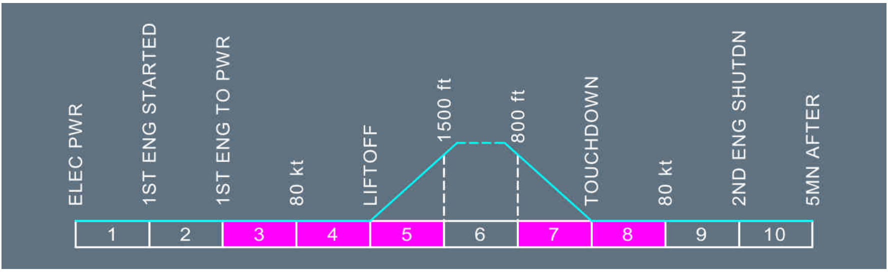
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-D-00018010.0002001 / 10 MAY 21

■ START VALVE NOT CLOSED

L2 Remove all bleed sources supplying the faulty start valve.

L1 APU BLEED (IF ENG 1 AFFECTED).. OFF
X BLEED.. SHUT

L2 *This action line is only displayed if ENG 2 is affected or if ENG 1 is affected with ENG 2 supplying bleed through the X BLEED.*

L1
- **In flight:**
  ENG BLEED (AFFECTED SIDE)..OFF
- **On the ground:**
  MAN START (IF MAN START PERFORMED)..OFF
  ENG MASTER (AFFECTED SIDE).. OFF

L2 *On the ground, consider application of “START VALVE MANUAL OPERATION” procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

L1 ■ START VALVE NOT OPEN

- **If opposite engine running:**
  X BLEED.. OPEN
- **If APU AVAIL below FL 200:**
  APU BLEED.. ON
- **If UNSUCCESSFUL:**
  MAN START (IF MAN START PERFORMED)..OFF
  ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)..OFF

L2 *MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.*
On the ground, consider application of “START VALVE MANUAL OPERATION” procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).

L1
- **EEC control of start valve failed (for IAE or PW 6000 engines):**
  - **On the ground:**
    START VALVE MAN ONLY

L2 *Start valve must be manually opened (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

L1

- **In flight:**
  WINDMILL START ONLY.

L2 *Windmilling start only is available since EEC cannot control the start valve.*

Ident.: PRO-ABN-ENG-D-00012091.0001001 / 17 AUG 10

STATUS

ENG 1(2) WINDMILL START ONLY.

ENG 1(2) START VALVE FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-06536, 06592-07098

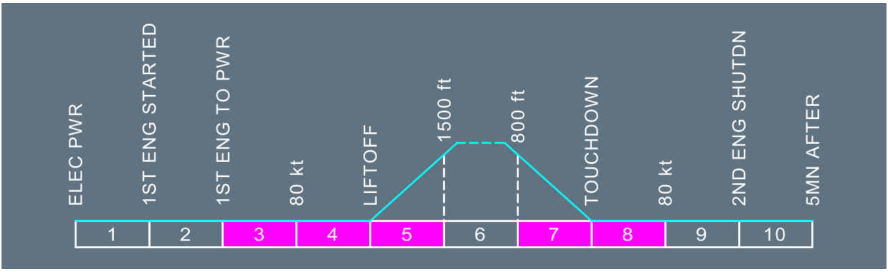
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-D-00018010.0003001 / 10 MAY 21

■ START VALVE NOT CLOSED

L2 Remove all bleed sources supplying the faulty start valve.

L1 APU BLEED (IF ENG 1 AFFECTED).................... OFF
X BLEED.................... SHUT

L2 *This action line is only displayed if ENG 2 is affected or if ENG 1 is affected with ENG 2 supplying bleed through the X BLEED.*

L1
- **In flight:**
  ENG BLEED (AFFECTED).................... OFF
  MAN START (IF MAN START PERFORMED)....................OFF
  WING ANTI ICE.................... OFF

  AVOID ICING CONDITIONS
- **On ground:**
  MAN START (IF MAN START PERFORMED)....................OFF
  ENG MASTER (AFFECTED).................... OFF

L2 *On ground, consider application of "START VALVE MANUAL OPERATION" procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

L1 ■ START VALVE NOT OPEN

- **If opposite engine running:**
  X BLEED.................... OPEN
- **If APU AVAIL below FL 200:**
  APU BLEED.................... ON
- **IF UNSUCCESSFUL:**
  MAN START (IF MAN START PERFORMED)....................OFF
  ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)....................OFF

L2 *MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.*
On ground, consider application of "START VALVE MANUAL OPERATION" procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).

L1 ■ **EEC control of start valve failed (for IAE or PW engines):**

- **On ground:**
  START VALVE MAN ONLY

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

- **In flight:**
  WINDMILL START ONLY.

L2 *Windmilling start only is available since EEC cannot control the start valve.*

Ident.: PRO-ABN-ENG-D-00012091.0002001 / 17 MAR 17

STATUS

	INOP SYS
AVOID ICING CONDITIONS ● **IF SEVERE ICE ACCRETION** MIN SPD....................VLS + 10/G DOT MANEUVER WITH CARE ● **In flight:** LDG DIST PROC.................... APPLY	WING A.ICE (In flight)

ENG 1(2) START VALVE FAULT

Applicable to: MSN 06561

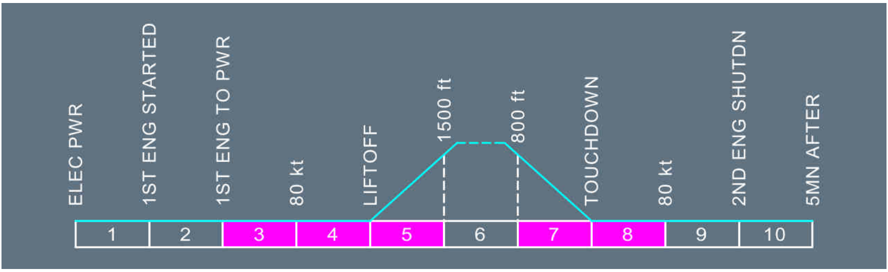
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-D-00018010.0002001 / 10 MAY 21

■ START VALVE NOT CLOSED

L2 Remove all bleed sources supplying the faulty start valve.

L1 APU BLEED (IF ENG 1 AFFECTED).. OFF
X BLEED.. SHUT

L2 *This action line is only displayed if ENG 2 is affected or if ENG 1 is affected with ENG 2 supplying bleed through the X BLEED.*

L1
- **In flight:**
  ENG BLEED (AFFECTED SIDE)..OFF
- **On the ground:**
  MAN START (IF MAN START PERFORMED)..........................OFF
  ENG MASTER (AFFECTED SIDE).. OFF

L2 *On the ground, consider application of “START VALVE MANUAL OPERATION” procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

L1 ■ START VALVE NOT OPEN

- **If opposite engine running:**
  X BLEED.. OPEN
- **If APU AVAIL below FL 200:**
  APU BLEED.. ON
- **If UNSUCCESSFUL:**
  MAN START (IF MAN START PERFORMED)..........................OFF
  ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)..........OFF

L2 *MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.*
On the ground, consider application of “START VALVE MANUAL OPERATION” procedure (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).

L1
- **EEC control of start valve failed (for IAE or PW 6000 engines):**
  - **On the ground:**
    START VALVE MAN ONLY

L2 *Start valve must be manually opened (Refer to PRO-NOR-SUP-ENG Engine Start Valve Manual Operation).*

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

L1 ● **In flight:**

WINDMILL START ONLY.

L2 *Windmilling start only is available since EEC cannot control the start valve.*

ENG 1(2) START VALVE FAULT

Applicable to: MSN 08495-09324

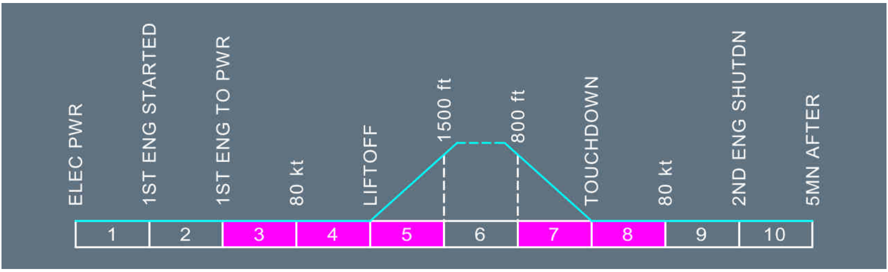
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-D-00018010.0005001 / 10 MAY 21

■ START VALVE NOT CLOSED

L2 Remove all bleed sources supplying the faulty start valve.

L1 APU BLEED (IF ENG 1 AFFECTED)........ OFF
X BLEED........ SHUT

L2 *This action line is only displayed if ENG 2 is affected or if ENG 1 is affected with ENG 2 supplying bleed through the X BLEED.*

L1
- ● **In flight:**
  ENG BLEED (AFFECTED)........ OFF
  MAN START (IF MAN START PERFORMED)........ OFF
  WING ANTI ICE........ OFF

  AVOID ICING CONDITIONS
- ● **On ground:**
  MAN START (IF MAN START PERFORMED)........ OFF
  ENG MASTER (AFFECTED)........ OFF

  L2 *This action line is only displayed if the affected engine is running or commanded to start (ENG MASTER lever set to ON).*

  L1 DUAL COOLING........ OFF

■ START VALVE NOT OPEN

- ● **If opposite engine running:**
  X BLEED........ OPEN
- ● **If APU AVAIL below FL 200:**
  APU BLEED........ ON
- ● **IF UNSUCCESSFUL:**
  MAN START (IF MAN START PERFORMED)........ OFF
  ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)........ OFF

  L2 *This action line is only displayed if the affected engine is running or commanded to start (ENG MASTER lever set to ON).*
  MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.

  L1
  - ● **On ground:**
    DUAL COOLING........ OFF

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

- **EEC control of start valve failed (for IAE or PW engines):**
  - **On ground:**
    START VALVE MAN ONLY
  - **In flight:**
    WINDMILL START ONLY.

L2 *Windmilling start only is available since EEC cannot control the start valve.*

Ident.: PRO-ABN-ENG-D-00012091.0003001 / 17 MAR 17

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STATUS

	INOP SYS
AVOID ICING CONDITIONS ● **IF SEVERE ICE ACCRETION** MIN SPD....................VLS + 10/G DOT MANEUVER WITH CARE ● **In flight:** LDG DIST PROC....................APPLY ● **If EEC control of start valve failed:** ENG 1(2) WINDMILL START ONLY.	WING A.ICE (In flight)

ENG 1(2) START VALVE FAULT

Applicable to: MSN 10949-11597

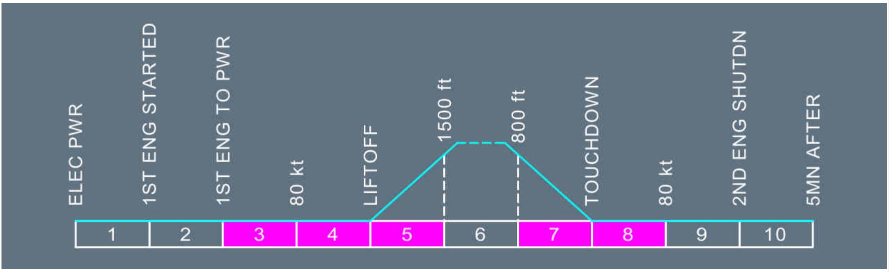
Ident.: PRO-ABN-ENG-D-00017932.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the start valve is stuck in closed or open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

Ident.: PRO-ABN-ENG-D-00018010.0013001 / 18 NOV 21

231

START VALVE NOT CLOSED

L2 Remove all bleed sources supplying the faulty start valve.

L1 APU BLEED (IF ENG 1 AFFECTED)........ OFF
X BLEED........ SHUT

L2 *This action line is only displayed if ENG 2 is affected or if ENG 1 is affected with ENG 2 supplying bleed through the X BLEED.*

L1
- **In flight:**
  ENG BLEED (AFFECTED)........ OFF
  MAN START (IF MAN START PERFORMED)........ OFF
  WING ANTI ICE........ OFF

  AVOID ICING CONDITIONS
- **On ground:**
  MAN START (IF MAN START PERFORMED)........ OFF
  ENG MASTER (AFFECTED)........ OFF
  DUAL COOLING........ OFF

START VALVE NOT OPEN

- **If opposite engine running:**
  X BLEED........ OPEN
- **If APU AVAIL below FL 200:**
  APU BLEED........ ON
- **IF UNSUCCESSFUL:**
  - **On ground:**
    MAN START (IF MAN START PERFORMED)........ OFF
    ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)........ OFF

    L2 *MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.*

    L1 DUAL COOLING........ OFF
  - **In flight:**
    WINDMILL START ONLY

Continued on the following page

ENG 1(2) START VALVE FAULT (Cont'd)

- ■ **EEC control of start valve failed:**
  - ■ **On ground:**
    START VALVE MAN ONLY
    MAN START (IF MAN START PERFORMED)........OFF
    ENG MASTER (AFFECTED) (IF AUTO START PERFORMED)........OFF
    L2 *MAN START procedure is useless since in both cases, the start valve is controlled by FADEC.*
    L1 DUAL COOLING........OFF
  - ■ **In flight:**
    WINDMILL START ONLY
    L2 *Windmilling start is only available since EEC cannot control the start valve.*

Ident.: PRO-ABN-ENG-D-00012091.0003001 / 17 MAR 17

232

STATUS

	INOP SYS
AVOID ICING CONDITIONS	WING A.ICE (In flight)

- ● **IF SEVERE ICE ACCRETION**
  MIN SPD........VLS + 10/G DOT
  MANEUVER WITH CARE
  - ● **In flight:**
    LDG DIST PROC........APPLY
- ● **If EEC control of start valve failed:**
  ENG 1(2) WINDMILL START ONLY.

ENG 1(2) SYSTEM FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

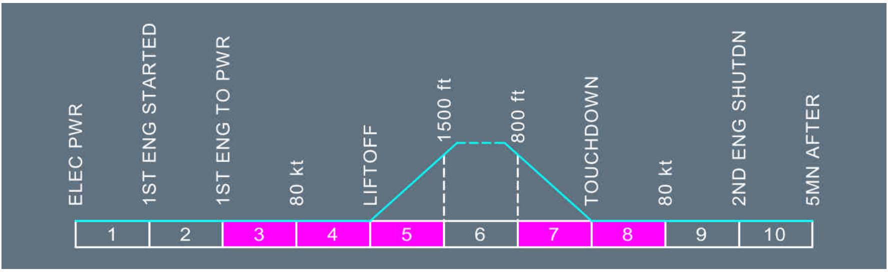
Ident.: PRO-ABN-ENG-E-00017915.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the internal engine bleed or the engine probe heat is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-E-00017753.0003001 / 21 MAR 16

- **On ground:**
  THR LEVER 1(2) .... IDLE
  ENG MASTER 1(2) .... OFF
- **In flight:**
  RISK OF HI EGT.

L2 *Continue normal operation.*

ENG 1(2) SYSTEM FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-ENG-E-00017915.0003001 / 17 JAN 18

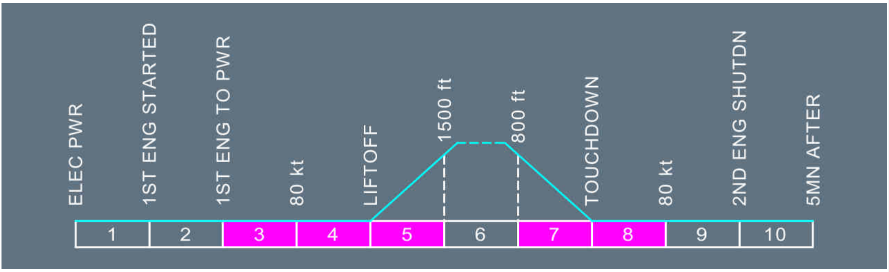
233

ANNUNCIATIONS

Triggering Conditions:

This alert triggers when the closure of the 6th stage bleed valves or Turbine Case Cooling (TCC) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-E-00017753.0005001 / 26 NOV 19

- **On ground:**
  THR LVR (AFFECTED ENGINE) NOT ABOVE IDLE
- **In flight:**
  RISK OF HI EGT.
  THR LEVER 1(2).. IDLE

Ident.: PRO-ABN-ENG-E-00012105.0001001 / 17 AUG 10

234

STATUS

RISK OF ENG (affected) HI EGT

ENG 1(2) SYSTEM FAULT

Applicable to: MSN 08635, 10949-11293

Ident.: PRO-ABN-ENG-E-00017915.0003001 / 17 JAN 18

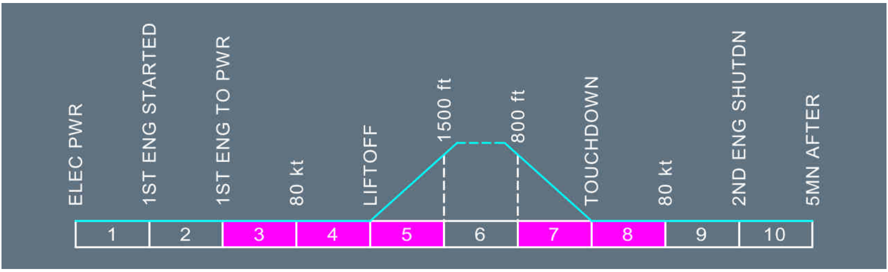
235

ANNUNCIATIONS

Triggering Conditions:

This alert triggers when the closure of the 6th stage bleed valves or Turbine Case Cooling (TCC) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-E-00017753.0007001 / 26 NOV 19

236

- **On ground:**
  THR LEVER 1(2).. IDLE
- **In flight:**
  RISK OF HI EGT.
  THR LEVER 1(2).. IDLE

Ident.: PRO-ABN-ENG-E-00012105.0001001 / 17 AUG 10

237

STATUS

RISK OF ENG (affected) HI EGT

ENG 1(2) SYSTEM FAULT

Applicable to: MSN 11482-1597

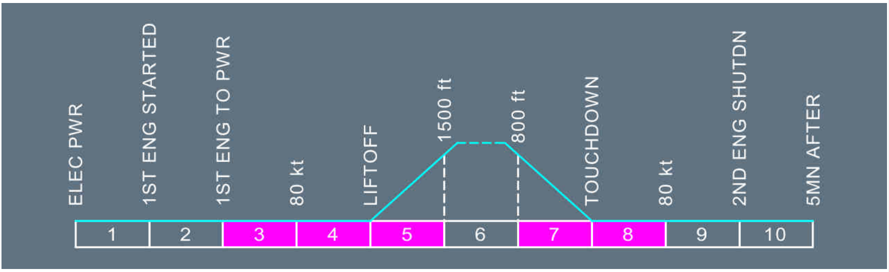
238 Ident.: PRO-ABN-ENG-E-00017915.0004001 / 30 NOV 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the closure of the 6th stage bleed valves is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-E-00017753.0007001 / 26 NOV 19

239

- **On ground:**
  THR LEVER 1(2).. IDLE
- **In flight:**
  RISK OF HI EGT.
  THR LEVER 1(2).. IDLE

Ident.: PRO-ABN-ENG-E-00012105.0001001 / 17 AUG 10

240

STATUS

RISK OF ENG (affected) HI EGT

ENG 1(2) THR LEVER ABV IDLE

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-ENG-CW-00017922.0002001 / 21 MAR 16

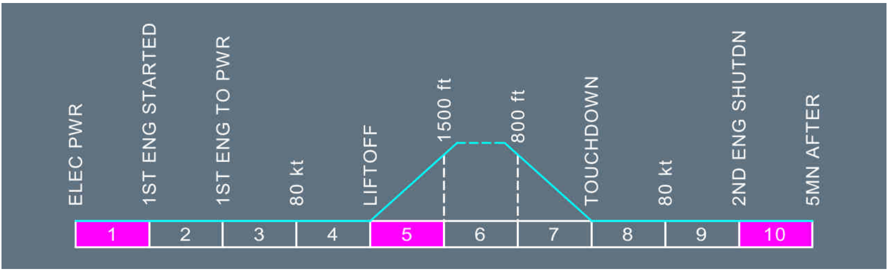
241

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- One thrust lever is above idle while the other thrust lever is in the reverse detent at landing.
- One thrust lever is above idle while the other thrust lever is at idle, at reverser deselection during landing roll.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CW-00018748.0002001 / 21 MAR 16

242

L2 The repetitive "RETARD-RETARD" synthetic voice is triggered at landing.

L1 THR LEVER (AFFECTED ENGINE)..IDLE

ENG 1(2) THR LEVER ABV IDLE

Applicable to: MSN 01251

Ident.: PRO-ABN-ENG-CW-00017922.0001001 / 21 MAR 16

ANNUNCIATIONS

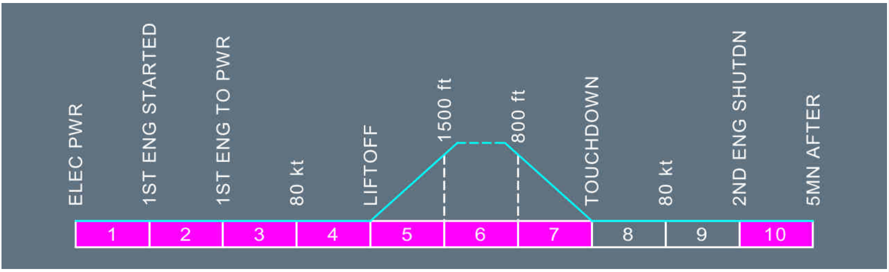
Triggering Conditions:

L2

This alert triggers when:

- One thrust lever is above idle while the other thrust lever is in the reverse detent at landing.
- One thrust lever is above idle while the other thrust lever is at idle, at reverser deselection during landing roll.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-CW-00018748.0001001 / 21 MAR 16

THR LEVER (AFFECTED ENGINE)..IDLE

ENG 1(2) THR LEVER DISAGREE

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

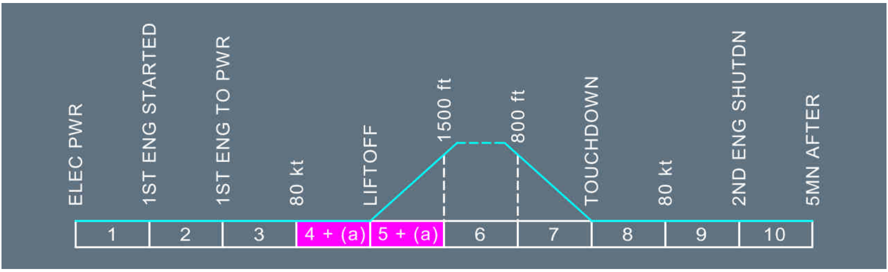
Ident.: PRO-ABN-ENG-L-00017999.0004001 / 06 SEP 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a discrepancy between both resolvers of a thrust lever is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4 + (a)
5 + (a)
6
7
8
9
10

Note: *(a) Alert not inhibited in the flight phases 4 and 5, if the FADEC automatically selects IDLE thrust.*

Continued on the following page

ENG 1(2) THR LEVER DISAGREE (Cont'd)

Ident.: PRO-ABN-ENG-L-00012146.0017001 / 02 MAY 17

L2 Both Thrust Lever Angle (TLA) sensors not in agreement on one engine.

L1 LAND ASAP

- **On ground (if both TLA not at TOGA or FLX/MCT or if only one TLA is at TOGA or FLX/MCT and the other is below IDLE):**
  ENG (AFFECTED) IDLE POWER ONLY.

L2 *In that situation, the FADEC automatically selects IDLE.*

L1 THR LEVER (AFFECTED).. IDLE

- **During take-off (if both TLA are above IDLE):**
  ENG (AFFECTED) TO, FLX, OR DRT TO ◁

L2 *If both TLA are above IDLE, the FADEC automatically selects TO, FLX TO, or DRT TO ◁ thrust until thrust reduction, after which the maximum available thrust is CLB.*

L1
- **In cruise (with slats retracted):**
  AVAIL MAX POWER : CLB

L2 *In flight, if the failure occurs while the thrust lever is between idle and MCT, and if the slats are not extended, (or when MN > 0.55, if the onside EIU is failed) the FADEC selects the larger TLA power limited to CLB.*

L1 A/THR (IF ENGAGED) .... KEEP ON
A/THR (IF NOT ENGAGED AND IF SLATS ARE NOT EXTENDED) .... ON

L2 *With A/THR engaged, thrust is automatically managed between IDLE and higher TLA position.*

L1
- **In approach (with slats extended):**
  ENG (AFFECTED) AT IDLE (WHEN SLATS ARE EXTENDED FOR APPROACH)..

L2 *If TLA at, or below, MCT and if the slats are extended for approach, (or when MN < 0.47, if the onside EIU is failed).*

L1 THR LEVER (AFFECTED).. IDLE

Continued on the following page

ENG 1(2) THR LEVER DISAGREE (Cont'd)

Ident.: PRO-ABN-ENG-L-00018067.0013001 / 28 MAY 20

L12

STATUS

- **If TLA at, or below MCT:**
  - **If EIU of affected engine is failed:**
    - **WHEN MN < 0.47:**
      ENG 1(2) AT IDLE
      For any case of thrust lever disagree (TO, FLEX, or between Idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
  - **If EIU of affected engine is operative:**
    - **If slats not extended:**
      - **WHEN SLATS OUT:**
        ENG 1(2) AT IDLE
        For any case of thrust lever disagree (TO, FLEX, or between Idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
- **In flight, if the TLA is at, or below MCT and if the approach phase is not selected:**
  ENG 1(2) AVAIL MAX PWR: CLB
- **In flight, if the TLA is at, or below MCT:**
  ON GND ENG 1(2) MAX PWR: IDLE
  At aircraft touchdown, the FADEC automatically selects IDLE thrust.

INOP SYS

ENG 1(2) THR

ENG 1(2) THR LEVER DISAGREE

Applicable to: MSN 01251

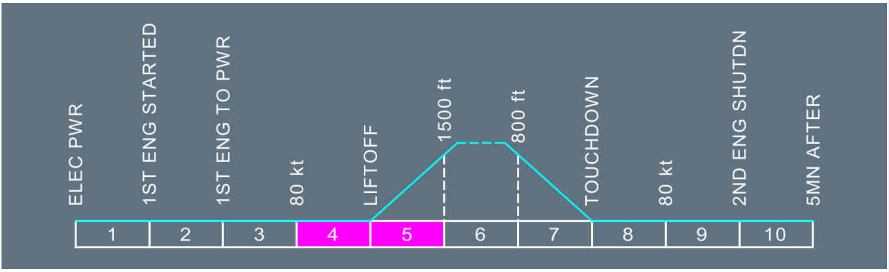
Ident.: PRO-ABN-ENG-L-00017999.0002001 / 06 SEP 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a discrepancy between both resolvers of a thrust lever is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ENG 1(2) THR LEVER DISAGREE (Cont'd)

Ident.: PRO-ABN-ENG-L-00012146.0017001 / 02 MAY 17

L2 Both Thrust Lever Angle (TLA) sensors not in agreement on one engine.

L1 **LAND ASAP**

- **On ground (if both TLA not at TOGA or FLX/MCT or if only one TLA is at TOGA or FLX/MCT and the other is below IDLE):**

  ENG (AFFECTED) IDLE POWER ONLY.

L2 *In that situation, the FADEC automatically selects IDLE.*

L1 THR LEVER (AFFECTED).. IDLE

- **During take-off (if both TLA are above IDLE):**

  ENG (AFFECTED) TO, FLX, OR DRT TO ◁✳

L2 *If both TLA are above IDLE, the FADEC automatically selects TO, FLX TO, or DRT TO ◁✳ thrust until thrust reduction, after which the maximum available thrust is CLB.*

L1
- **In cruise (with slats retracted):**

  AVAIL MAX POWER : CLB

L2 *In flight, if the failure occurs while the thrust lever is between idle and MCT, and if the slats are not extended, (or when MN > 0.55, if the onside EIU is failed) the FADEC selects the larger TLA power limited to CLB.*

L1 A/THR (IF ENGAGED) .... KEEP ON

A/THR (IF NOT ENGAGED AND IF SLATS ARE NOT EXTENDED) .... ON

L2 *With A/THR engaged, thrust is automatically managed between IDLE and higher TLA position.*

L1
- **In approach (with slats extended):**

  ENG (AFFECTED) AT IDLE (WHEN SLATS ARE EXTENDED FOR APPROACH)..

L2 *If TLA at, or below, MCT and if the slats are extended for approach, (or when MN < 0.47, if the onside EIU is failed).*

L1 THR LEVER (AFFECTED).. IDLE

Continued on the following page

ENG 1(2) THR LEVER DISAGREE (Cont'd)

Ident.: PRO-ABN-ENG-L-00018067.0013001 / 28 MAY 20

L12

STATUS

- **If TLA at, or below MCT:**
  - **If EIU of affected engine is failed:**
    - **WHEN MN < 0.47:**
      ENG 1(2) AT IDLE
      For any case of thrust lever disagree (TO, FLEX, or between Idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
  - **If EIU of affected engine is operative:**
    - **If slats not extended:**
      - **WHEN SLATS OUT:**
        ENG 1(2) AT IDLE
        For any case of thrust lever disagree (TO, FLEX, or between Idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
- **In flight, if the TLA is at, or below MCT and if the approach phase is not selected:**
  ENG 1(2) AVAIL MAX PWR: CLB
- **In flight, if the TLA is at, or below MCT:**
  ON GND ENG 1(2) MAX PWR: IDLE
  At aircraft touchdown, the FADEC automatically selects IDLE thrust.

INOP SYS

ENG 1(2) THR

ENG 1(2) THR LEVER DISAGREE

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-L-00017999.0001001 / 21 MAR 16

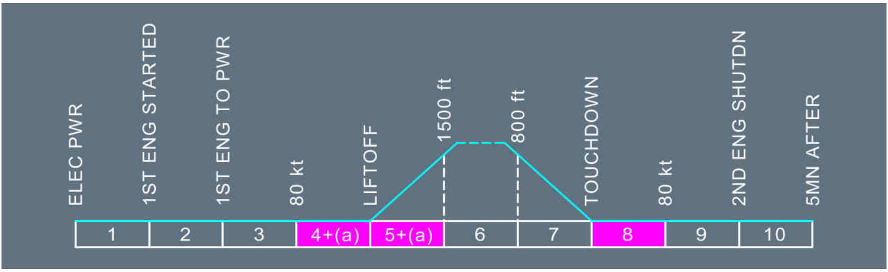
243

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a discrepancy between both resolvers of a thrust lever is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4+(a)
5+(a)
6
7
8
9
10

Note: *(a) Alert not inhibited in the flight phases 4 and 5, if the FADEC automatically selects IDLE thrust.*

Continued on the following page

ENG 1(2) THR LEVER DISAGREE (Cont'd)

Ident.: PRO-ABN-ENG-L-00012146.0018001 / 12 JAN 11

244

L2 Both Thrust Lever Angle (TLA) sensors are not in agreement on one engine.

L1 LAND ASAP

- **On ground, if TLA at, or above IDLE position:**

  ENG (AFFECTED) AT IDLE

  L2 *The FADEC automatically selects IDLE thrust (even after liftoff).*

  L1 THR LEVER (AFFECTED).................... IDLE

- **In flight, if TLA at, or above FLEX:**

  The FADEC maintains the takeoff thrust (TO, FLEX TO, or DRT TO) until thrust reduction, after which the maximum available thrust is CLB.

- **In flight, if TLA at, or below MCT:**
  - **If approach phase not selected:**

    AVAIL MAX POWER : CLB

    L2 *The FADEC selects the thrust that corresponds to the highest TLA sensors position, limited to CLB.*

    L1 A/THR (IF ENGAGED)....................KEEP ON
    A/THR (IF NOT ENGAGED)....................ON

    L2 *If the A/THR is engaged, the thrust is automatically managed between IDLE and the highest TLS sensors position.*

  - L1 **If approach phase selected:**

    ENG (AFFECTED) AT IDLE

    L2 *The FADEC automatically selects IDLE thrust.*

    L1 THR LEVER (AFFECTED) ....IDLE

    L2 *The approach phase is selected:*
    - *If the slats/flaps are extended, or*
    - *If the associated EIU is failed, and MN is below 0.47.*

Continued on the following page

ENG 1(2) THR LEVER DISAGREE (Cont'd)

Ident.: PRO-ABN-ENG-L-00018067.0023001 / 28 MAY 20

245

L12

STATUS

GA THR: TOGA ONLY

- **If TLA at, or below MCT:**
  - **If EIU of affected engine is failed:**
    - **WHEN MN < 0.47:**

      ENG 1(2) AT IDLE

      For any case of thrust lever disagree (TO, FLEX, or between Idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
  - **If EIU of affected engine is operative:**
    - **If slats not extended:**
      - **WHEN SLATS OUT:**

        ENG 1(2) AT IDLE

        For any case of thrust lever disagree (TO, FLEX, or between Idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
- **In flight, if the TLA is at, or below MCT and if the approach phase is not selected:**

  ENG 1(2) AVAIL MAX PWR: CLB
- **In flight, if the TLA is at, or below MCT:**

  ON GND ENG 1(2) MAX PWR: IDLE

  At aircraft touchdown, the FADEC automatically selects IDLE thrust.

INOP SYS

ENG 1(2) THR
GA SOFT

ENG 1(2) THR LEVER FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

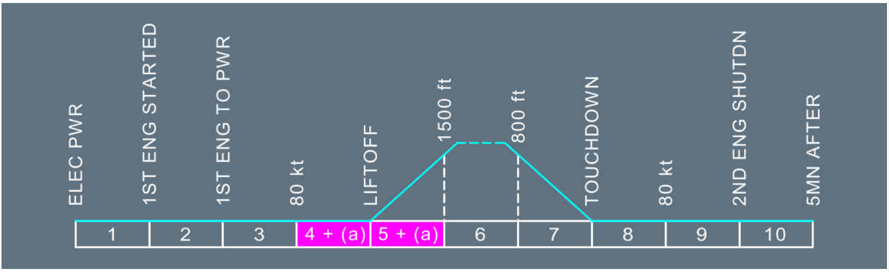
Ident.: PRO-ABN-ENG-M-00018000.0003001 / 01 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both resolvers on one thrust lever are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4 + (a)
5 + (a)
6
7
8
9
10

Note: *(a) Alert not inhibited in flight phases 4 and 5 if the FADEC automatically selects IDLE thrust.*

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-M-00018069.0006001 / 21 MAR 16

LAND ASAP

- **On the ground:**

  ENG (AFFECTED) IDLE POWER ONLY.

  L2 *Idle power is automatically selected by FADEC.*
  If associated thrust reverser is already deployed, FADEC commands restow.

  L1 THR LEVER (AFFECTED).. IDLE

- **In flight:**

  L2 If the selected thrust lever position at the time of fault detection is:
  TO or FLEX: FADEC freezes TO or FLEX TO thrust until slat retraction. At slat retraction it selects MCT thrust.
  Between IDLE and MCT: in manual thrust setting mode, engine rating freezes at MCT, or IDLE with slats extended (or MN < 0.47 if the FADEC no longer receives the slats position due to EIU failure). It is possible to activate autothrust. If selected, autothrust mode manages thrust between idle and MCT.

  L1 ENG (AFFECTED) AT IDLE

  L2 *For any case of thrust lever fault (TO, FLEX or between IDLE and MCT) the FADEC will command idle thrust for the approach when slats are extended (or when MN < 0.47 if associated EIU is failed). It is independant of the autothrust condition. Thrust of affected engine remains definitively at idle even for go around.*

  L1 THR LEVER (AFFECTED) .... IDLE

  L2 *When slats are extended or MN < 0.47, if on side EIU is failed.*

  L1
  - **A/THR engaged:**

    A/THR.. KEEP ON

  - **A/THR not engaged:**

    ENG (AFFECTED) HI PWR IN MAN THR.

    L2 *Inhibited when the FADEC commands the affected engine at IDLE*

    L1
    - **BEFORE SLATS IN:**

      A/THR .... ON

      HI PWR ONLY

      L2 *If thrust lever angle failed in TO or flex position.*

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-M-00012152.0002001 / 04 NOV 21

L12

STATUS

- **If TLA at, or below MCT:**
  - **If EIU of affected engine is failed:**
    - **WHEN MN < 0.47:**
      ENG 1(2) AT IDLE

      For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
  - **If EIU of affected engine is operative:**
    - **If slats not extended:**
      - **WHEN SLATS OUT:**
        ENG 1(2) AT IDLE

        For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
- **In flight, if the TLA is at, or below MCT:**
  ON GND ENG 1(2) MAX PWR: IDLE

  At aircraft touchdown, the FADEC automatically selects IDLE thrust.

INOP SYS

REVERSER 1(2)
ENG 1(2) THR

ENG 1(2) THR LEVER FAULT

Applicable to: MSN 01251

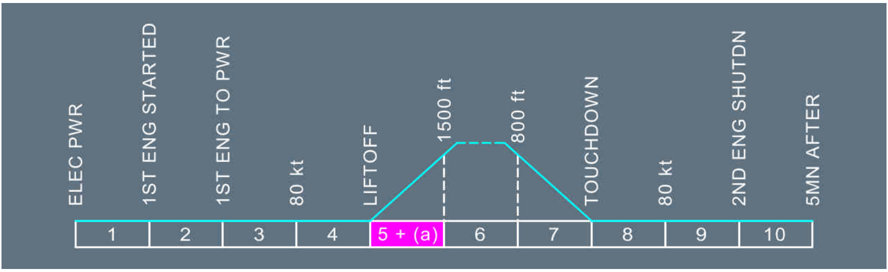
Ident.: PRO-ABN-ENG-M-00018000.0002001 / 13 MAY 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both resolvers on one thrust lever are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5 + (a)
6
7
8
9
10

Note: (a) Alert not inhibited in flight phase 5 if the FADEC automatically selects IDLE thrust.

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-M-00018069.0006001 / 21 MAR 16

LAND ASAP

- **On the ground:**

  ENG (AFFECTED) IDLE POWER ONLY.

  L2 *Idle power is automatically selected by FADEC.*
  If associated thrust reverser is already deployed, FADEC commands restow.

  L1 THR LEVER (AFFECTED).. IDLE

- **In flight:**

  L2 If the selected thrust lever position at the time of fault detection is:
  TO or FLEX: FADEC freezes TO or FLEX TO thrust until slat retraction. At slat retraction it selects MCT thrust.
  Between IDLE and MCT: in manual thrust setting mode, engine rating freezes at MCT, or IDLE with slats extended (or MN < 0.47 if the FADEC no longer receives the slats position due to EIU failure). It is possible to activate autothrust. If selected, autothrust mode manages thrust between idle and MCT.

  L1 ENG (AFFECTED) AT IDLE

  L2 *For any case of thrust lever fault (TO, FLEX or between IDLE and MCT) the FADEC will command idle thrust for the approach when slats are extended (or when MN < 0.47 if associated EIU is failed). It is independant of the autothrust condition. Thrust of affected engine remains definitively at idle even for go around.*

  L1 THR LEVER (AFFECTED) .... IDLE

  L2 *When slats are extended or MN < 0.47, if on side EIU is failed.*

  L1
  - **A/THR engaged:**

    A/THR.. KEEP ON

  - **A/THR not engaged:**

    ENG (AFFECTED) HI PWR IN MAN THR.

    L2 *Inhibited when the FADEC commands the affected engine at IDLE*

    L1
    - **BEFORE SLATS IN:**

      A/THR .... ON

      HI PWR ONLY

      L2 *If thrust lever angle failed in TO or flex position.*

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-M-00012152.0002001 / 04 NOV 21

L12

STATUS

- **If TLA at, or below MCT:**
  - **If EIU of affected engine is failed:**
    - **WHEN MN < 0.47:**
      ENG 1(2) AT IDLE
      For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
  - **If EIU of affected engine is operative:**
    - **If slats not extended:**
      - **WHEN SLATS OUT:**
        ENG 1(2) AT IDLE
        For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
- **In flight, if the TLA is at, or below MCT:**
  ON GND ENG 1(2) MAX PWR: IDLE
  At aircraft touchdown, the FADEC automatically selects IDLE thrust.

INOP SYS

REVERSER 1(2)
ENG 1(2) THR

ENG 1(2) THR LEVER FAULT

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

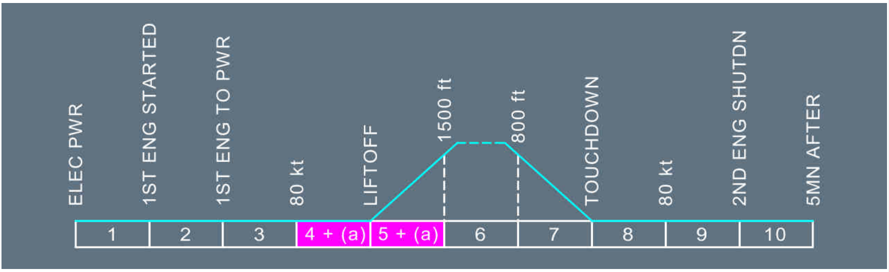
Ident.: PRO-ABN-ENG-M-00018000.0003001 / 01 JUN 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both resolvers on one thrust lever are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4 + (a)
5 + (a)
6
7
8
9
10

Note: *(a) Alert not inhibited in flight phases 4 and 5 if the FADEC automatically selects IDLE thrust.*

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-M-00018069.0009001 / 21 MAR 16

LAND ASAP

- **On the ground:**

  ENG (AFFECTED) IDLE POWER ONLY.

L2 *Idle power is automatically selected by FADEC.*
If associated thrust reverser is already deployed, FADEC commands restow.

L1 THR LEVER (AFFECTED)... IDLE

- **In flight:**

L2 If the selected thrust lever position at the time of fault detection is:

TO or FLEX: FADEC freezes TO or FLEX TO thrust until slat retraction. At slat retraction it selects CLB thrust.

Between IDLE and MCT: in manual thrust setting mode, engine rating freezes at CLB, or IDLE with slats extended (or MN < 0.47 if the FADEC no longer receives the slats position due to EIU failure). It is possible to activate autothrust. If selected, autothrust mode manages thrust between idle and CLB.

L1 ENG (AFFECTED) AT IDLE

L2 *For any case of thrust lever fault (TO, FLEX or between IDLE and MCT) the FADEC will command idle thrust for the approach when slats are extended (or when MN < 0.47 if associated EIU is failed). It is independant of the autothrust condition. Thrust of affected engine remains definitively at idle even for go around.*

L1 THR LEVER (AFFECTED) .... IDLE

L2 *When slats are extended or MN < 0.47, if on side EIU is failed.*

L1
  - **A/THR engaged:**

    A/THR... KEEP ON

  - **A/THR not engaged:**

    ENG (AFFECTED) HI PWR IN MAN THR.

L2 *Inhibited when the FADEC commands the affected engine at IDLE.*

L1
    - **BEFORE SLATS IN:**

      A/THR .... ON

      HI PWR ONLY

L2 *If thrust lever angle failed in TO or flex position.*

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-M-00012152.0002001 / 04 NOV 21

L12

STATUS

- **If TLA at, or below MCT:**
  - **If EIU of affected engine is failed:**
    - **WHEN MN < 0.47:**

      ENG 1(2) AT IDLE

      For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
  - **If EIU of affected engine is operative:**
    - **If slats not extended:**
      - **WHEN SLATS OUT:**

        ENG 1(2) AT IDLE

        For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
- **In flight, if the TLA is at, or below MCT:**

  ON GND ENG 1(2) MAX PWR: IDLE

  At aircraft touchdown, the FADEC automatically selects IDLE thrust.

INOP SYS

REVERSER 1(2)
ENG 1(2) THR

ENG 1(2) THR LEVER FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-M-00018000.0001001 / 21 MAR 16

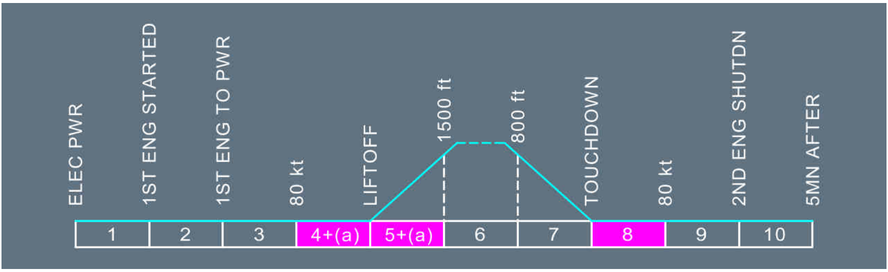
246

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both resolvers on one thrust lever are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4+(a)
5+(a)
6
7
8
9
10

Note: *(a) Alert not inhibited in flight phases 4 and 5 if the FADEC automatically selects IDLE thrust.*

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

Ident.: PRO-ABN-ENG-M-00018069.0007001 / 21 MAR 16

247

L2 Both Thrust Lever Angle (TLA) sensors are not valid on one engine. If automatically commanded by the FADEC, IDLE thrust is frozen until next FADEC reset.

L1 LAND ASAP

- **On ground, if TLA at, or above IDLE position:**

  ENG (AFFECTED) AT IDLE

  L2 *The FADEC automatically selects IDLE thrust (even after liftoff). Reversers are inhibited.*

  L1 THR LEVER (AFFECTED).. IDLE

- **In flight, if TLA at, or above FLEX:**

  ENG (AFFECTED) HI PWR IN MAN THR

  L2 *The FADEC maintains the takeoff thrust (TO, FLEX TO, or DRT TO) until slats/flaps retraction, after which the maximum available thrust is CLB. Disappears at the next slats/flaps extension, when the FADEC automatically selects IDLE thrust.*

  L1 HI PWR ONLY

  L2 *If onside EIU is failed.*
  In this case, the FADEC maintains the takeoff thrust (TO, FLEX TO, or DRT TO).

L1
- **In flight, if TLA at, or below MCT:**
  - **If approach phase not selected**

    ENG (AFFECTED) HI PWR IN MAN THR

    L2 *If A/THR is not engaged, the FADEC selects CLB thrust.*

    L1 A/THR (IF ENGAGED) .... KEEP ON

    L2 *If A/THR is engaged, the thrust is automatically managed between IDLE and CLB.*

    L1
    - ● **BEFORE SLATS IN (if SLATS extended):**

      A/THR (IF NOT ENGAGED) ....ON
  - **If approach phase selected:**

    ENG (AFFECTED) AT IDLE

    L2 *FADEC selects IDLE thrust and freezes it (even for go around) until next FADEC reset.*

    L1 THR LEVER (AFFECTED).. IDLE

    L2 *The approach phase is selected:*
    - *If the slats/flaps are extended, or*

Continued on the following page

ENG 1(2) THR LEVER FAULT (Cont'd)

- *If the associated EIU is failed, and MN is below 0.47.*

Ident.: PRO-ABN-ENG-M-00012152.0013001 / 04 NOV 21

248

L12

STATUS

GA THR: TOGA ONLY

- **If TLA at, or below MCT:**
  - **If EIU of affected engine is failed:**
    - **WHEN MN < 0.47:**
      ENG 1(2) AT IDLE
      For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
  - **If EIU of affected engine is operative:**
    - **If slats not extended:**
      - **WHEN SLATS OUT:**
        ENG 1(2) AT IDLE
        For any case of thrust lever fault (TO, FLEX, or between idle and MCT), the FADEC will command idle thrust for the approach. It is independent of the autothrust condition. The affected engine's thrust remains definitively at idle, even for go-around.
- **In flight, if the TLA is at, or below MCT:**
  ON GND ENG 1(2) MAX PWR: IDLE
  At aircraft touchdown, the FADEC automatically selects IDLE thrust.

INOP SYS

REVERSER 1(2)
ENG 1(2) THR
GA SOFT

ENG T.O. THRUST DISAGREE

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-DC-00018282.0001001 / 13 MAY 16

249

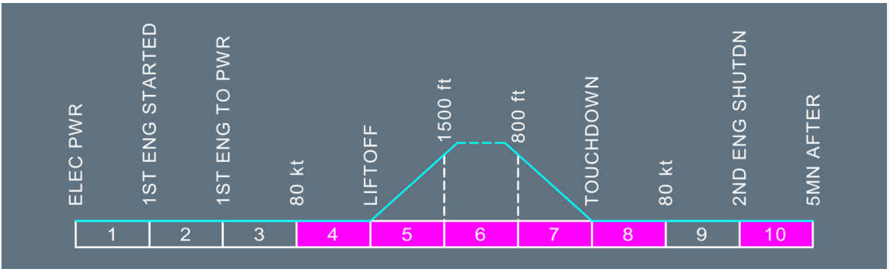
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The derated takeoff ◁ function and/or the thrust bump ◁ function are installed, and
- A rating discrepancy between two engines is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DC-00017779.0001001 / 21 MAR 16

250

Crew awareness.

ENG 1(2) TURB COOL FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-CX-00017908.0003001 / 13 MAY 16

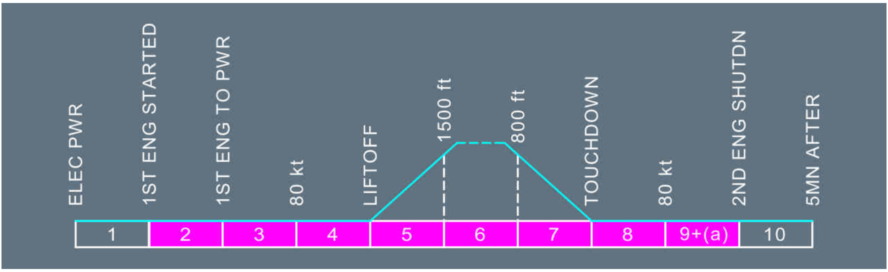
251

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the turbine Active Clearance Control (ACC) valve is failed in the closed position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9+(a)
10

Note: *(a) Alert inhibited during the first 60 seconds of the flight phase 9.*

Ident.: PRO-ABN-ENG-CX-00012292.0002001 / 06 DEC 16

252

Crew awareness.

ENG THR LEVERS NOT SET

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

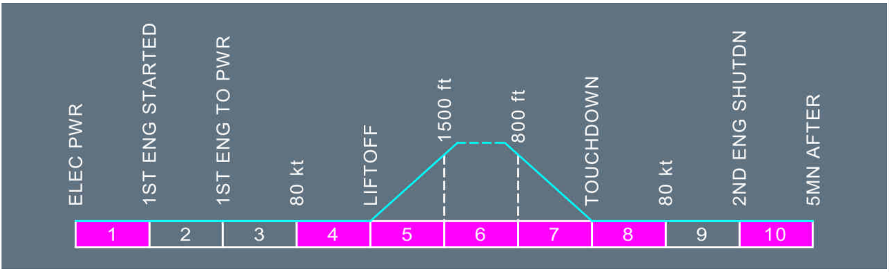
Ident.: PRO-ABN-ENG-DD-00017892.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the levers position does not correspond to TO power mode.

Flight Phase Inhibition:



Ident.: PRO-ABN-ENG-DD-00017863.0003001 / 21 MAR 16

L2 At least one FADEC engaged a takeoff thrust mode that is not in accordance with the position of the thrust levers.

Note: *1. The takeoff thrust mode is engaged when the flight crew sets the thrust levers above the CL position.*
2. The flex takeoff thrust mode is armed only if the flight crew entered a FLEX TO TEMP on the MCDU that is above the OAT.

L1 ■ **If the flex mode is not armed, and the flight crew sets the thrust levers below or at the MCT/FLX position:**
THR LEVERS.. TO/GA

■ **If the flex mode is armed, and the flight crew sets the thrust levers below the MCT/FLX position:**
THR LEVERS .... MCT/FLX

ENG THR LEVERS NOT SET

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

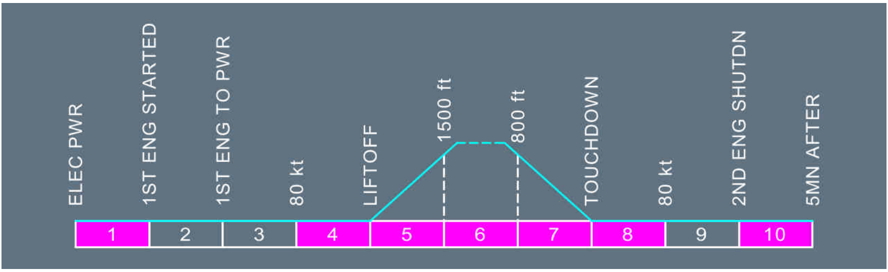
Ident.: PRO-ABN-ENG-DD-00017892.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the levers position does not correspond to TO power mode.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ENG THR LEVERS NOT SET (Cont'd)

Ident.: PRO-ABN-ENG-DD-00017863.0007001 / 05 MAY 22

L2 At least one FADEC engaged a takeoff thrust mode that is not in accordance with the position of the thrust levers.

Note: *1. The takeoff thrust mode is engaged when the flight crew sets the thrust levers above the CL position.*
2. The flex takeoff thrust mode is armed only if the flight crew entered a FLEX TO TEMP on the MCDU that is above the OAT.

L1 ■ **If the flex mode is not armed, and the flight crew sets the thrust levers at or below the MCT/FLX position:**

THR LEVERS.. TOGA

L2 *If the THR levers are in the MCT/FLX position and the flight crew does not set the THR levers to the TOGA position within 8 s, the FADEC automatically selects TOGA thrust.*

L1 ■ **If the flex mode is armed, and the flight crew sets the thrust levers below the MCT/FLX position:**

THR LEVERS .... MCT/FLX

ENG THR LEVERS NOT SET (ON GROUND)

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-DS-00022038.0001001 / 04 DEC 17

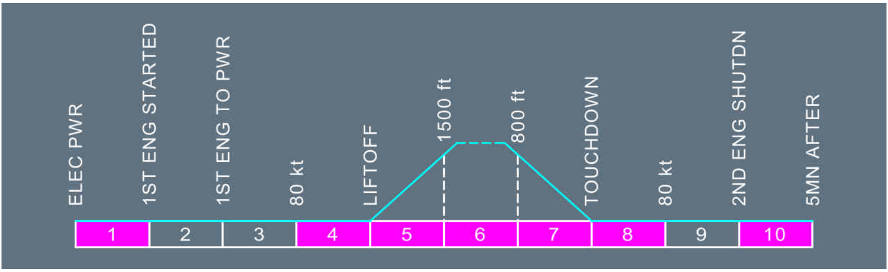
253

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the levers position does not correspond to TO power mode.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

ENG THR LEVERS NOT SET (ON GROUND) (Cont'd)

Ident.: PRO-ABN-ENG-DS-00022039.0001001 / 05 MAY 22

254

L2 At least one FADEC engaged a takeoff thrust mode that is not in accordance with the position of the thrust levers.

Note:
1. *The takeoff thrust mode is engaged when the flight crew sets the thrust levers above the CL position.*
2. *The flex takeoff thrust mode is armed only if the flight crew entered a FLEX TO TEMP on the MCDU that is above the OAT.*
3. *The derated thrust mode is armed only if the flight crew entered a DERATE level on the MCDU.*

L1

- **If the flex mode is not armed, and the flight crew sets the thrust levers at or below the MCT/FLX position:**

  THR LEVERS.......... TOGA

L2 *If the THR levers are in the MCT/FLX position and the flight crew does not set the THR levers to the TOGA position within 8 s, the FADEC automatically selects TOGA thrust.*

L1

- **If the flex mode is armed, and the flight crew sets the thrust levers below the FLX//MCT position:**

  THR LEVERS .... MCT/FLX

- **If the derated mode is not armed, and the flight crew sets the thrust levers at or below the MCT/FLX position:**

  THR LEVERS.......... TOGA

- **If the derated mode is armed, and the flight crew sets the thrust levers at any position except the MCT/FLX position:**

  THR LEVERS.......... MCT/FLX

ENG THR LEVERS NOT SET (AT GO-AROUND)

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-ENG-DT-00022040.0001001 / 04 DEC 17

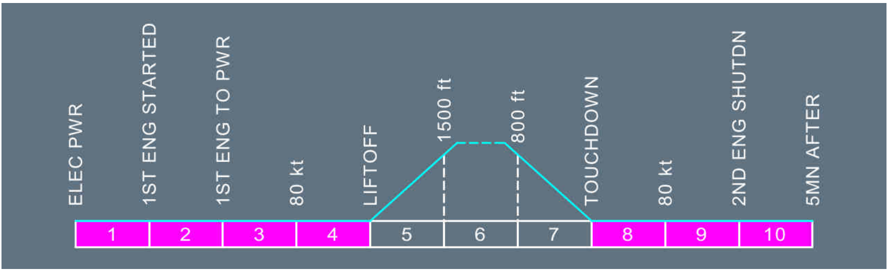
255

ANNUNCIATIONS

Triggering Conditions:

L2 During go-around initiation with the soft go-around technique, the soft go-around function is lost or not available. Consequently, the thrust levers are not set at the right detent.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DT-00022041.0001001 / 04 DEC 17

256

THR LEVERS..TOGA

L2 *If the soft go-around function is lost or not available (associated with ENG GA SOFT FAULT alert), the thrust levers must be set to TOGA.*

ENG THRUST LOCKED

Applicable to: ALL

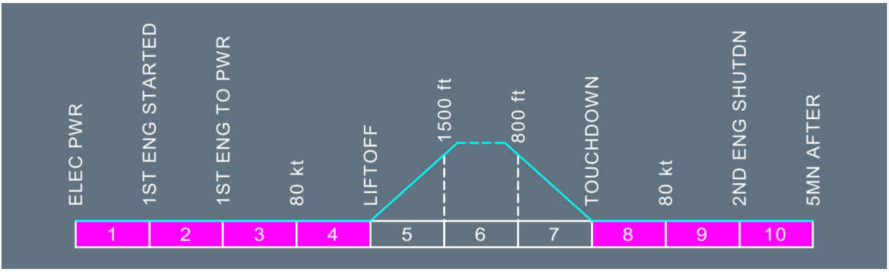
Ident.: PRO-ABN-ENG-DE-00017888.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when thrust levers are not moved within 5 s, following an unvoluntary disconnection of the A/THR (or disconnection through the FCU pb).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DE-00017865.0002001 / 21 MAR 16

THR LEVERS...MOVE

ENG TYPE DISAGREE

Applicable to: ALL

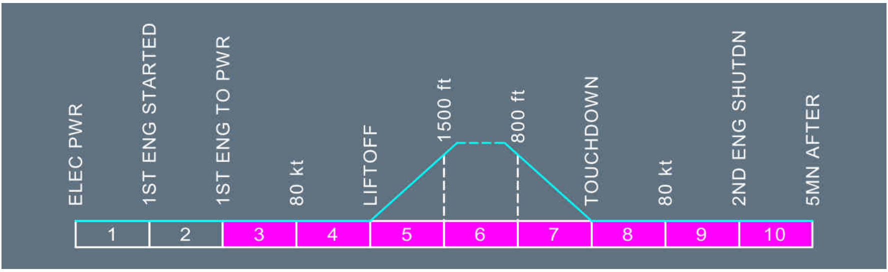
Ident.: PRO-ABN-ENG-DF-00017881.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a rating discrepancy between two engines is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DF-00017868.0001001 / 21 MAR 16

Crew awareness.

ENG VIB SYS FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

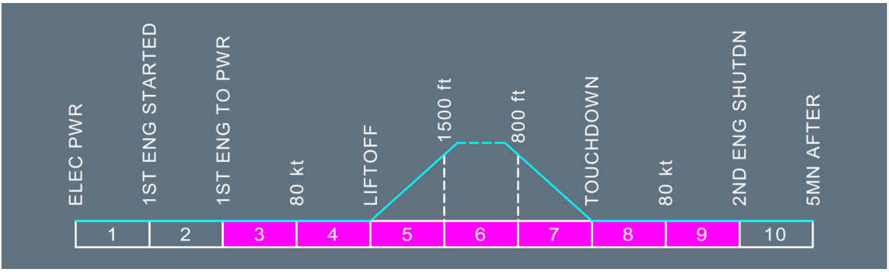
Ident.: PRO-ABN-ENG-DG-00017879.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the vibration detection system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-ENG-DG-00012074.0001001 / 25 FEB 14

Crew awareness.

[QRH] LANDING WITH SLATS OR FLAPS JAMMED

Ident.: PRO-ABN-F_CTL-00010683.0001001 / 29 NOV 19

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

LDG DIST PROC..........APPLY

Determine flap lever position for landing

- **Repeat the following until landing configuration is reached:**

  SPD SEL..........VFE NEXT - 5 kt

  AT VFE NEXT: SELECT FLAPS LEVER ONE STEP DOWN

  Note:
  - *OVERSPEED alert, and VLS displayed on the PFD, are computed according to the actual flaps/slats position*
  - *VFE and VFE NEXT are displayed on the PFD according to the FLAPS lever position. If not displayed, use the placard speeds*
  - *In some cases, the recommended speed for go around requested by the procedure might be slightly above the VFE displayed on PFD as the VFE is linked to the S/F lever position. The Overspeed Warning will not be triggered as it takes into account the actual slat/flap position.*
  - *If VLS is greater than VFE NEXT (overweight landing case), the FLAPS lever can be set in the required next position, while the speed is reduced to follow VLS reduction as surfaces extend. The VFE warning threshold should not be triggered. In this case, disconnect the A/THR. A/THR can be re-engaged when the landing configuration is established.*

- **When in landing CONF and in final approach:**

  DECELERATE TO CALCULATED VAPP

  AP BELOW 500 ft AGL : DO NOT USE

- **For Go-around:**

	MAX SPEED				
Flaps Slats	F = 0	0 < F ≤ 1	1 < F ≤ 2	2 < F ≤ 3	F > 3
S = 0	NO LIMITATION	215 kt	200 kt	185 kt	177 kt (Not allowed)
0 < S < 1	230 kt				
S = 1					177 kt
1 < S ≤ 3	200 kt		200 kt	185 kt	
S > 3	177 kt		177 kt	177 kt	177 kt

Continued on the following page

[QRH] LANDING WITH SLATS OR FLAPS JAMMED (Cont'd)

- ■ **If SLATS FAULT:**
  - ● **For circuit:**

    MAINTAIN SLATS/FLAPS CONFIGURATION

    Recommended speed: MAX SPEED - 10 kt
  - ● **For diversion:**

    SELECT CLEAN CONFIGURATION

    Recommended speed for flaps retraction: between MAX SPEED - 10 kt and MAX SPEED.

    Recommended diversion speed: MAX SPEED - 10 kt.

    INCREASED FUEL CONSUMPTION
- ■ **If FLAPS FAULT:**
  - ● **For circuit:**

    MAINTAIN SLATS/FLAPS CONFIGURATION

    Recommended speed: MAX SPEED - 10 kt
    - ● **If HYD G+Y SYS LO PR:**

      Maintain speed close to VAPP
  - ● **For diversion:**
    - ■ **If FLAPS jammed at 0:**

      SELECT CLEAN CONFIGURATION

      Recommended speed for slats retraction: between MAX SPEED - 10 kt and MAX SPEED

      USE NORMAL OPERATING SPEEDS
      - ● **If HYD G+Y SYS LO PR:**

        Maintain at least the higher of VAPP or VLS
    - ■ **If FLAPS jammed > 0:**

      MAINTAIN SLAT/FLAP CONFIGURATION

      Recommended speed for diversion: MAX SPEED - 10 kt

      Note: In the case of go-around with CONF FULL selected, the L/G NOT DOWN warning is triggered at landing gear retraction.

Continued on the following page

[QRH] LANDING WITH SLATS OR FLAPS JAMMED (Cont'd)

- **If HYD G+Y SYS LO PR:**
  Maintain speed close to VAPP

INCREASED FUEL CONSUMPTION

CAUTION	For flight with SLATS or FLAPS extended, fuel consumption is increased. Refer to the fuel flow indication. As a guideline, determine the fuel consumption in clean configuration at the same altitude without airspeed limitation (e.g. From ALTERNATE FLIGHT PLANNING tables) and multiply this result by the applicable Fuel Penalty Factor provided in the QRH, to obtain the fuel penalty required to reach the destination in the current configuration. *Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*.

[QRH] LANDING WITH SLATS OR FLAPS JAMMED

2 Ident.: PRO-ABN-F_CTL-00010683.0105001 / 29 NOV 19
Applicable to: MSN 11531

LDG DIST PROC....................APPLY

Determine flap lever position for landing

- **Repeat the following until landing configuration is reached:**

  SPD SEL....................VFE NEXT - 5 kt

  AT VFE NEXT: SELECT FLAPS LEVER ONE STEP DOWN

  Note:
  - *OVERSPEED alert, and VLS displayed on the PFD, are computed according to the actual flaps/slats position*
  - *VFE and VFE NEXT are displayed on the PFD according to the FLAPS lever position. If not displayed, use the placard speeds*
  - *In some cases, the recommended speed for go around requested by the procedure might be slightly above the VFE displayed on PFD as the VFE is linked to the S/F lever position. The Overspeed Warning will not be triggered as it takes into account the actual slat/flap position.*
  - *If VLS is greater than VFE NEXT (overweight landing case), the FLAPS lever can be set in the required next position, while the speed is reduced to follow VLS reduction as surfaces extend. The VFE warning threshold should not be triggered. In this case, disconnect the A/THR. A/THR can be re-engaged when the landing configuration is established.*

- **When in landing CONF and in final approach:**

  DECELERATE TO CALCULATED VAPP

  AP BELOW 500 ft AGL : DO NOT USE

- **For Go-around:**

MAX SPEED					
Flaps Slats	F = 0	0 < F ≤ 1	1 < F ≤ 2	2 < F ≤ 3	F > 3
S = 0	NO LIMITATION	225 kt	215 kt	195 kt	186 kt (Not allowed)
0 < S < 1	243 kt				
S = 1					186 kt
1 < S ≤ 3	215 kt		215 kt	195 kt	
S > 3	186 kt		186 kt	186 kt	186 kt

Continued on the following page

[QRH] LANDING WITH SLATS OR FLAPS JAMMED (Cont'd)

- **If SLATS FAULT:**
  - **For circuit:**
    MAINTAIN SLATS/FLAPS CONFIGURATION
    Recommended speed: MAX SPEED - 10 kt

    Note: *In the case of go-around with CONF FULL selected, the L/G NOT DOWN warning is triggered at landing gear retraction.*
  - **For diversion:**
    SELECT CLEAN CONFIGURATION
    Recommended flaps retraction speed: between MAX SPEED - 10 kt and MAX SPEED.
    Recommended diversion speed: MAX SPEED - 10 kt.

    INCREASED FUEL CONSUMPTION
- **If FLAPS FAULT:**
  - **For circuit:**
    MAINTAIN SLATS/FLAPS CONFIGURATION
    Recommended speed: MAX SPEED - 10 kt
    - **If HYD G+Y SYS LO PR:**
      Maintain speed close to VAPP
  - **For diversion:**
    - **If FLAPS jammed at 0:**
      SELECT CLEAN CONFIGURATION
      Recommended speed for slats retraction: between MAX SPEED - 10 kt and MAX SPEED
      USE NORMAL OPERATING SPEEDS
      - **If HYD G+Y SYS LO PR:**
        Maintain at least the higher of VAPP or VLS
    - **If FLAPS jammed > 0:**
      MAINTAIN SLAT/FLAP CONFIGURATION
      Recommended speed for diversion: MAX SPEED - 10 kt
      - **If HYD G+Y SYS LO PR:**
        Maintain speed close to VAPP

Continued on the following page

[QRH] LANDING WITH SLATS OR FLAPS JAMMED (Cont'd)

INCREASED FUEL CONSUMPTION

CAUTION	For flight with SLATS or FLAPS extended, fuel consumption is increased. Refer to the fuel flow indication. As a guideline, determine the fuel consumption in clean configuration at the same altitude without airspeed limitation (e.g. From ALTERNATE FLIGHT PLANNING tables) and multiply this result by the applicable Fuel Penalty Factor provided in the QRH, to obtain the fuel penalty required to reach the destination in the current configuration. *Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*.

[QRH] LANDING WITH SLATS OR FLAPS JAMMED

Ident.: PRO-ABN-F_CTL-00010683.0050001 / 29 NOV 19
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

LDG DIST PROC...APPLY

Determine flap lever position for landing

- **Repeat the following until landing configuration is reached:**

  SPD SEL...VFE NEXT - 5 kt

  AT VFE NEXT: SELECT FLAPS LEVER ONE STEP DOWN

  Note:
  - *OVERSPEED alert, and VLS displayed on the PFD, are computed according to the actual flaps/slats position*
  - *VFE and VFE NEXT are displayed on the PFD according to the FLAPS lever position. If not displayed, use the placard speeds*
  - *In some cases, the recommended speed for go around requested by the procedure might be slightly above the VFE displayed on PFD as the VFE is linked to the S/F lever position. The Overspeed Warning will not be triggered as it takes into account the actual slat/flap position.*
  - *If VLS is greater than VFE NEXT (overweight landing case), the FLAPS lever can be set in the required next position, while the speed is reduced to follow VLS reduction as surfaces extend. The VFE warning threshold should not be triggered. In this case, disconnect the A/THR. A/THR can be re-engaged when the landing configuration is established.*

- **When in landing CONF and in final approach:**

  DECELERATE TO CALCULATED VAPP

  AP BELOW 500 ft AGL : DO NOT USE

- **For Go-around:**

MAX SPEED

Flaps Slats	F = 0	0 < F ≤ 1	1 < F ≤ 2	2 < F ≤ 3	F > 3
S = 0	NO LIMITATION	225 kt	215 kt	195 kt	190 kt (Not allowed)
0 < S < 1	235 kt				
S = 1					190 kt
1 < S ≤ 3	215 kt		215 kt	195 kt	
S > 3	190 kt		190 kt	190 kt	190 kt

Continued on the following page

[QRH] LANDING WITH SLATS OR FLAPS JAMMED (Cont'd)

- **If SLATS FAULT:**
  - **For circuit:**

    MAINTAIN SLATS/FLAPS CONFIGURATION

    Recommended speed: MAX SPEED - 10 kt
  - **For diversion:**

    SELECT CLEAN CONFIGURATION

    Recommended speed for flaps retraction: between MAX SPEED - 10 kt and MAX SPEED.

    Recommended diversion speed: MAX SPEED - 10 kt.

    INCREASED FUEL CONSUMPTION
- **If FLAPS FAULT:**
  - **For circuit:**

    MAINTAIN SLATS/FLAPS CONFIGURATION

    Recommended speed: MAX SPEED - 10 kt
    - **If HYD G+Y SYS LO PR:**

      Maintain speed close to VAPP
  - **For diversion:**
    - **If FLAPS jammed at 0:**

      SELECT CLEAN CONFIGURATION

      Recommended speed for slats retraction: between MAX SPEED - 10 kt and MAX SPEED.

      USE NORMAL OPERATING SPEEDS
      - **If HYD G+Y SYS LO PR:**

        Maintain at least the higher of VAPP or VLS
    - **If FLAPS jammed > 0:**

      MAINTAIN SLAT/FLAP CONFIGURATION

      Recommended speed for diversion: MAX SPEED -10 kt

      Note: In the case of go-around with CONF FULL selected, the L/G NOT DOWN warning is triggered at landing gear retraction.

Continued on the following page

[QRH] LANDING WITH SLATS OR FLAPS JAMMED (Cont'd)

- **If HYD G+Y SYS LO PR:**

  Maintain speed close to VAPP

INCREASED FUEL CONSUMPTION

CAUTION	For flight with SLATS or FLAPS extended, fuel consumption is increased. Refer to the fuel flow indication. As a guideline, determine the fuel consumption in clean configuration at the same altitude without airspeed limitation (e.g. From ALTERNATE FLIGHT PLANNING tables) and multiply this result by the applicable Fuel Penalty Factor provided in the QRH, to obtain the fuel penalty required to reach the destination in the current configuration. *Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*.

[QRH] RUDDER JAM

Ident.: PRO-ABN-F_CTL-00011807.0001001 / 26 NOV 19
Applicable to: ALL

L2 Rudder jamming may be detected by undue (and adverse) pedal movement during rolling maneuvers.

This is because the yaw damper orders can no longer be sent to the rudder, but are fed back to the pedals.

Use F/CTL SD page for a visual check of the rudder position.

L1 LDG DIST PROC...APPLY

- **For approach:**

  AVOID LANDING WITH CROSSWIND FROM THE SIDE WHERE THE RUDDER IS DEFLECTED

  MAX CROSSWIND FOR LDG: 15 kt
  AUTO BRK...DO NOT USE

  L2 *Do not use the autobrake, so as not to delay the application of differential braking at landing roll.*

  L1 FOR LANDING...USE NORMAL CONF
  SPEED AND TRAJECTORY...STABILIZE ASAP

- **For landing:**
  DIFFERENTIAL BRAKING...USE ASAP

  REVERSER: SYMMETRIC USE ONLY

  L2 *Use nosewheel steering handle below 70 kt.*

[QRH] STABILIZER JAM

Ident.: PRO-ABN-F_CTL-00011806.0001001 / 17 MAR 17
Applicable to: ALL

L2 The ELACs may not detect a stabilizer jam when the pitch trim wheel is jammed.
The flight control normal law remains active in this case and there is no ECAM warning.
Apply the following procedure.

L1 AP...OFF
MAN PITCH TRIM...CHECK

L2 *The pitch trim wheel may not be fully jammed, the force needed may be higher than pre-takeoff manual setting.*

L1
- **If MAN PITCH TRIM available:**

  TRIM FOR NEUTRAL ELEV

  L2 *If manual pitch trim is available, trim to maintain the elevator at the zero position (indications on F/CTL SD page).*

L1
- **If MAN PITCH TRIM not available:**

  FOR LANDING: USE FLAP 3

  L2 *Do not select configuration full so as not to degrade the handling qualities.*

  L1 GPWS LDG FLAP 3...ON

CAT 1 ONLY

F/CTL AIL SERVO FAULT

Applicable to: ALL

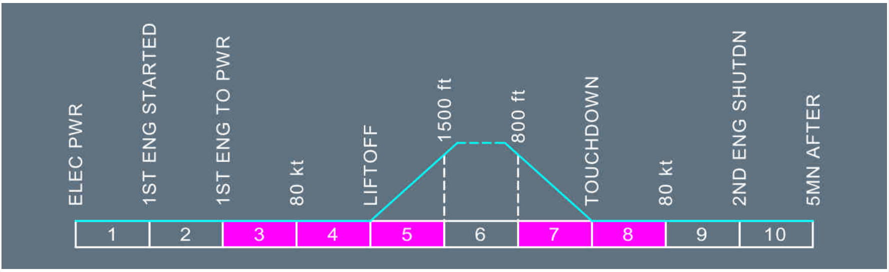
Ident.: PRO-ABN-F_CTL-AF-00016986.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of one servojack on one aileron, or loss of one or both ELAC 1 rudder pedal transducers.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-AF-00018412.0001001 / 21 MAR 16

Crew awareness.

F/CTL ALTN LAW

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05240, 05345

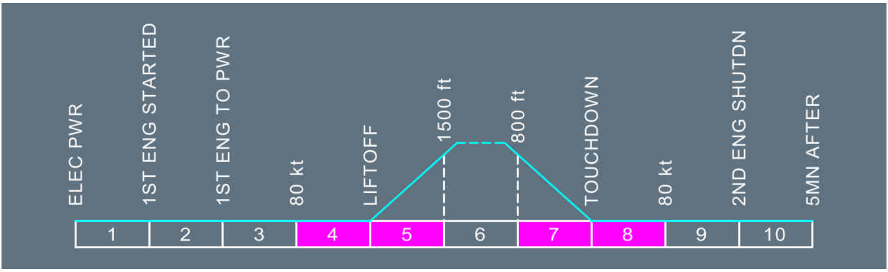
Ident.: PRO-ABN-F_CTL-K-00016965.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when alternate laws are active.

Flight Phase Inhibition:



Ident.: PRO-ABN-F_CTL-K-00018413.0001001 / 22 MAR 17

L2 *Refer to DSC-27-20-20 General* for flight characteristics.
With autopilot engaged the FMGC (AP mode) controls the aircraft.

L1 (PROT LOST)

L2 *All protections, except maneuver protections, are lost. Depending on the failure, static stability may be introduced.*

L1 *Note:* *In case of GPWS (EGPWS) alerts, since protections are lost, respect stall warnings when applying the GPWS (EGPWS) procedure.*

MAX SPEED..320 KT

L2 *(320/.77 if dual hydraulic system low pressure). Speed is limited to 320 /.82 or 320/.77 for dual hydraulic failure, due to the loss of high-speed protection.*

L1 SPD BRK (IF L OR R ELEVATOR FAULT) ....DO NOT USE

Continued on the following page

F/CTL ALTN LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-K-00018414.0003001 / 22 MAR 17

L12

STATUS

MAX SPEED... 320 KT

(320/.77, if dual hydraulic system low pressure).

SPD BRK (IF L OR R ELEVATOR FAULT)....... DO NOT USE

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3 ....ON
APPR SPD .... VREF+10
LDG DIST PROC .... APPLY

- **If no AP engaged:**

  WHEN L/G DN: DIRECT LAW

  At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

- **If AP engaged:**

  WHEN L/G DN AND AP OFF: DIRECT LAW

If the autopilot is disengaged:

- *Before landing gear extension, flight control alternate law is active.*
- *After landing gear extension, flight control direct law is active. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

ALTN LAW: PROT LOST

INOP SYS

F/CTL PROT
STEEP APPR

F/CTL ALTN LAW

Applicable to: MSN 01251

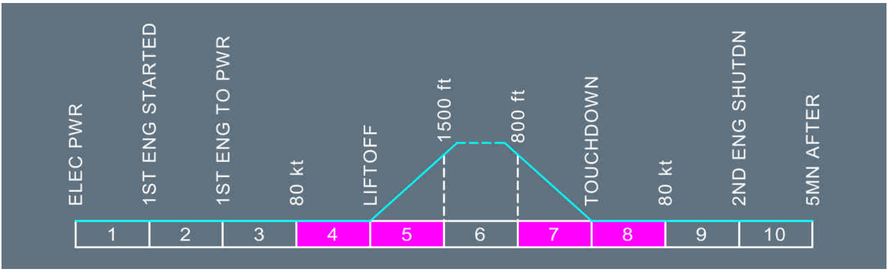
Ident.: PRO-ABN-F_CTL-K-00016965.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when alternate laws are active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-K-00018413.0001001 / 22 MAR 17

L2 *Refer to DSC-27-20-20 General* for flight characteristics.
With autopilot engaged the FMGC (AP mode) controls the aircraft.

L1 (PROT LOST)

L2 *All protections, except maneuver protections, are lost. Depending on the failure, static stability may be introduced.*

L1 *Note:* *In case of GPWS (EGPWS) alerts, since protections are lost, respect stall warnings when applying the GPWS (EGPWS) procedure.*

MAX SPEED...320 KT

L2 *(320/.77 if dual hydraulic system low pressure). Speed is limited to 320 /.82 or 320/.77 for dual hydraulic failure, due to the loss of high-speed protection.*

L1 SPD BRK (IF L OR R ELEVATOR FAULT) ....DO NOT USE

Continued on the following page

F/CTL ALTN LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-K-00018414.0001001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

(320/.77, if dual hydraulic system low pressure).

SPD BRK (IF L OR R ELEVATOR FAULT)....... DO NOT USE

APPR PROC

FOR LDG... USE FLAP 3
GPWS LDG FLAP 3 ....ON
APPR SPD .... VREF+10
LDG DIST PROC .... APPLY

- **If no AP engaged:**

  WHEN L/G DN: DIRECT LAW

  At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

- **If AP engaged:**

  WHEN L/G DN AND AP OFF: DIRECT LAW

If the autopilot is disengaged:

- *Before landing gear extension, flight control alternate law is active.*
- *After landing gear extension, flight control direct law is active. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

ALTN LAW: PROT LOST

INOP SYS

F/CTL PROT
STEEP APPR ⊲

F/CTL ALTN LAW

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

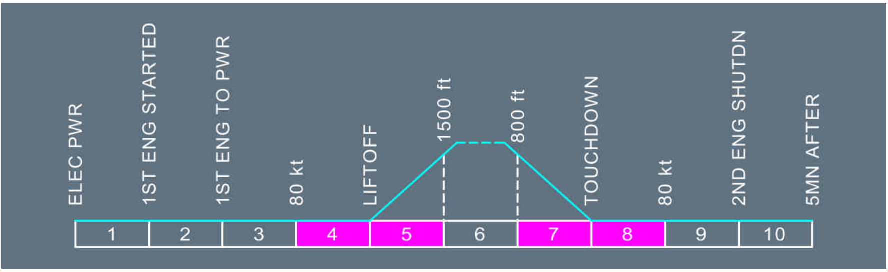
Ident.: PRO-ABN-F_CTL-K-00016965.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when alternate laws are active.

Flight Phase Inhibition:



Ident.: PRO-ABN-F_CTL-K-00018413.0001001 / 22 MAR 17

L2 *Refer to DSC-27-20-20 General* for flight characteristics.
With autopilot engaged the FMGC (AP mode) controls the aircraft.

L1 (PROT LOST)

L2 *All protections, except maneuver protections, are lost. Depending on the failure, static stability may be introduced.*

L1 *Note:* *In case of GPWS (EGPWS) alerts, since protections are lost, respect stall warnings when applying the GPWS (EGPWS) procedure.*

MAX SPEED..320 KT

L2 *(320/.77 if dual hydraulic system low pressure). Speed is limited to 320 /.82 or 320/.77 for dual hydraulic failure, due to the loss of high-speed protection.*

L1 SPD BRK (IF L OR R ELEVATOR FAULT) ....DO NOT USE

Continued on the following page

F/CTL ALTN LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-K-00018414.0006001 / 21 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

(320/.77, if dual hydraulic system low pressure).

SPD BRK (IF L OR R ELEVATOR FAULT)....... DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3 ....ON

APPR SPD .... VREF+15 KT

LDG DIST PROC .... APPLY

- **If no AP engaged:**

  WHEN L/G DN: DIRECT LAW

  At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

- **If AP engaged:**

  WHEN L/G DN AND AP OFF: DIRECT LAW

If the autopilot is disengaged:

- *Before landing gear extension, flight control alternate law is active.*
- *After landing gear extension, flight control direct law is active. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

ALTN LAW: PROT LOST

INOP SYS

F/CTL PROT

STEEP APPR ⊲

F/CTL ALTN LAW

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

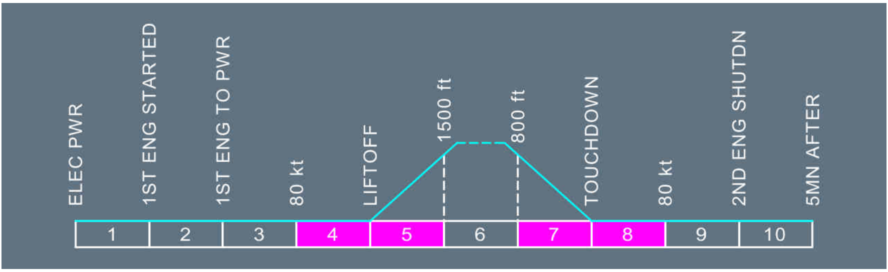
Ident.: PRO-ABN-F_CTL-K-00016965.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when alternate laws are active.

Flight Phase Inhibition:



Ident.: PRO-ABN-F_CTL-K-00018413.0001001 / 22 MAR 17

L2 *Refer to DSC-27-20-20 General* for flight characteristics.
With autopilot engaged the FMGC (AP mode) controls the aircraft.

L1 (PROT LOST)

L2 *All protections, except maneuver protections, are lost. Depending on the failure, static stability may be introduced.*

L1 *Note:* *In case of GPWS (EGPWS) alerts, since protections are lost, respect stall warnings when applying the GPWS (EGPWS) procedure.*

MAX SPEED..320 KT

L2 *(320/.77 if dual hydraulic system low pressure). Speed is limited to 320 /.82 or 320/.77 for dual hydraulic failure, due to the loss of high-speed protection.*

L1 SPD BRK (IF L OR R ELEVATOR FAULT) ....DO NOT USE

F/CTL ALTN LAW

Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-07098

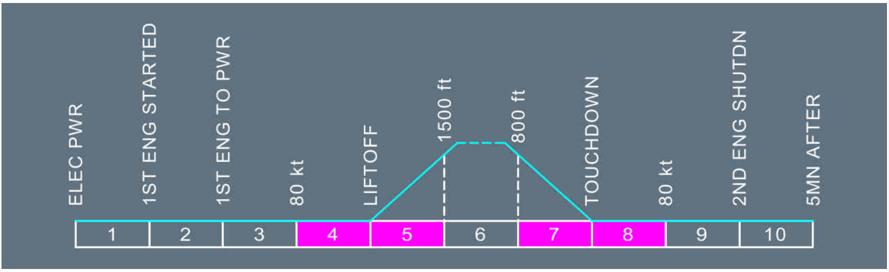
Ident.: PRO-ABN-F_CTL-K-00016965.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when alternate laws are active.

Flight Phase Inhibition:



Ident.: PRO-ABN-F_CTL-K-00018413.0001001 / 22 MAR 17

L2 *Refer to DSC-27-20-20 General* for flight characteristics.
With autopilot engaged the FMGC (AP mode) controls the aircraft.

L1 (PROT LOST)

L2 *All protections, except maneuver protections, are lost. Depending on the failure, static stability may be introduced.*

L1 *Note:* *In case of GPWS (EGPWS) alerts, since protections are lost, respect stall warnings when applying the GPWS (EGPWS) procedure.*

MAX SPEED..320 KT

L2 *(320/.77 if dual hydraulic system low pressure). Speed is limited to 320 /.82 or 320/.77 for dual hydraulic failure, due to the loss of high-speed protection.*

L1 SPD BRK (IF L OR R ELEVATOR FAULT) ....DO NOT USE

Continued on the following page

F/CTL ALTN LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-K-00018414.0004001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

(320/.77, if dual hydraulic system low pressure).

SPD BRK (IF L OR R ELEVATOR FAULT)....... DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3 ....ON
APPR SPD .... VREF+10
LDG DIST PROC .... APPLY

- **If no AP engaged:**

  WHEN L/G DN: DIRECT LAW

  At landing gear extension, control reverts to direct law in pitch, as well as in roll (except for the Yaw Damper loss where the controls remain in alternate law). Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

- **If AP engaged:**

  WHEN L/G DN AND AP OFF: DIRECT LAW

If the autopilot is disengaged:

- *Before landing gear extension, flight control alternate law is active.*
- *After landing gear extension, flight control direct law is active (except for the Yaw Damper loss where the controls remain in alternate law). Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

ALTN LAW: PROT LOST

INOP SYS

F/CTL PROT
STEEP APPR ◁*

F/CTL ALTN LAW

Applicable to: MSN 08495-08596, 09190-09324

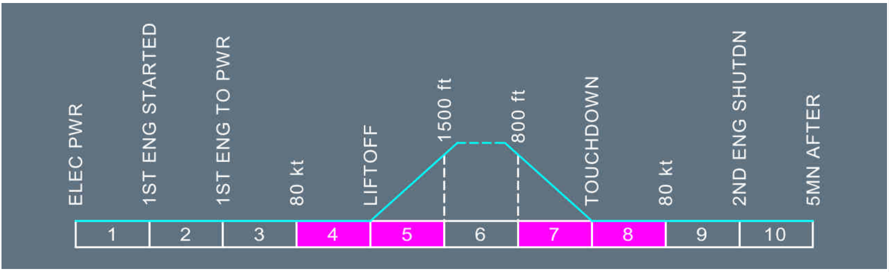
Ident.: PRO-ABN-F_CTL-K-00016965.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when alternate laws are active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-K-00018413.0001001 / 22 MAR 17

L2 *Refer to DSC-27-20-20 General* for flight characteristics.
With autopilot engaged the FMGC (AP mode) controls the aircraft.

L1 (PROT LOST)

L2 *All protections, except maneuver protections, are lost. Depending on the failure, static stability may be introduced.*

L1 *Note:* *In case of GPWS (EGPWS ◁) alerts, since protections are lost, respect stall warnings when applying the GPWS (EGPWS ◁) procedure.*

MAX SPEED....................................320 KT

L2 *(320/.77 if dual hydraulic system low pressure). Speed is limited to 320 /.82 or 320/.77 for dual hydraulic failure, due to the loss of high-speed protection.*

L1 SPD BRK (IF L OR R ELEVATOR FAULT) ....DO NOT USE

Continued on the following page

F/CTL ALTN LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-K-00018414.0014001 / 04 DEC 17

L12

STATUS

MAX SPEED.. 320 KT

(320/.77, if dual hydraulic system low pressure).

- **If L or R elevator fault:**

  SPD BRK ....DO NOT USE
- **If ADR disagree in flight:**

  GA THR: TOGA ONLY

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3 ....ON
APPR SPD ....VREF + 15 KT
LDG DIST PROC .... APPLY

ALTN LAW: PROT LOST

- **If AP OFF:**

  WHEN L/G DN: DIRECT LAW

  At landing gear extension, control reverts to direct law in pitch, as well as in roll (except for the Yaw Damper loss where the controls remain in alternate law for A320/A321 aircraft). Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.
- **If one AP engaged:**

  WHEN L/G DN AND AP OFF:
  DIRECT LAW

If the autopilot is disengaged:

- *Before landing gear extension, flight control alternate law is active.*
- *After landing gear extension, flight control direct law is active (except for the Yaw Damper loss where the controls*

INOP SYS

F/CTL PROT
STEEP APPR ◁
GA SOFT $^{(1)}$

Continued on the following page

F/CTL ALTN LAW (Cont'd)

remain in alternate law for A320/A321 aircraft). Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

(1) *(If ADR disagree in flight)*

F/CTL ALTN LAW

Applicable to: MSN 08635, 10949-11597

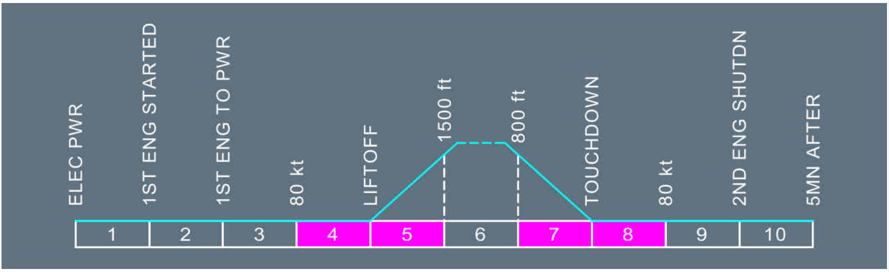
Ident.: PRO-ABN-F_CTL-K-00016965.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when alternate laws are active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ALTN LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-K-00018413.0001001 / 22 MAR 17

L2 *Refer to DSC-27-20-20 General* for flight characteristics.
With autopilot engaged the FMGC (AP mode) controls the aircraft.

L1 (PROT LOST)

L2 *All protections, except maneuver protections, are lost. Depending on the failure, static stability may be introduced.*

L1 *Note: In case of GPWS (EGPWS ◁) alerts, since protections are lost, respect stall warnings when applying the GPWS (EGPWS ◁) procedure.*

MAX SPEED...320 KT

L2 *(320/.77 if dual hydraulic system low pressure). Speed is limited to 320 /.82 or 320/.77 for dual hydraulic failure, due to the loss of high-speed protection.*

L1 SPD BRK (IF L OR R ELEVATOR FAULT) ....DO NOT USE

Continued on the following page

F/CTL ALTN LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-K-00018414.0016001 / 24 MAR 20

3

L12

STATUS

- **If dual hydraulic system low pressure:**
  MAX SPEED..320/.77
- **In all other cases:**
  MAX SPEED..320 KT
- **If L or R elevator fault:**
  SPD BRK ....DO NOT USE
- **If ADR disagree in flight:**
  GA THR: TOGA ONLY

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3 ....ON

This line is displayed when flaps are in CONF 3.

APPR SPD ....VREF + 15 KT
LDG DIST PROC .... APPLY

ALTN LAW: PROT LOST

- **If AP engaged:**
  WHEN L/G DN AND AP OFF: DIRECT LAW
- **If no AP engaged:**
  WHEN L/G DN: DIRECT LAW

See (2)

INOP SYS

F/CTL PROT
STEEP APPR
GA SOFT (1)

---

(1) *(If ADR disagree in flight)*

(2) *Note:* *At landing gear extension, control reverts to direct law in pitch, as well as in roll (except for the Yaw Damper loss where the controls remain in alternate law for A320/A321 aircraft). Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL DIRECT LAW

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

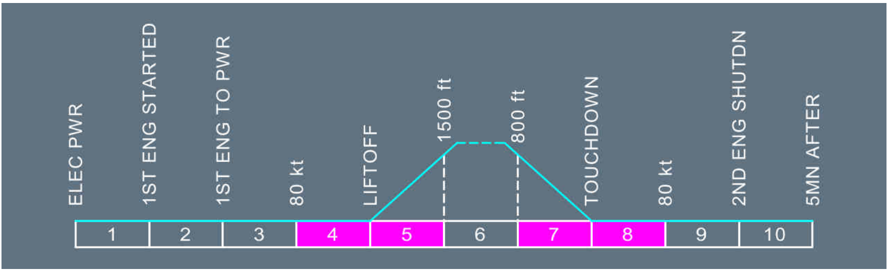
Ident.: PRO-ABN-F_CTL-J-00016964.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when direct law is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018420.0001001 / 22 MAR 17

4

L2 PFD displays « USE MAN PITCH TRIM » in amber. *Refer to DSC-27-20-10-70 Aircraft Trimming*

L1 (PROT LOST)

L2 Note: *In case of GPWS (EGPWS ◁) alerts, since protections are lost, respect stall warning when applying the GPWS (EGPWS ◁) procedure.*

L1 MAX SPEED..320/.77

L2 *Speed is limited, due to the loss of high-speed protection. Do not exceed M 0.77, so as not to degrade handling qualities.*

L1 MAN PITCH TRIM (EXCEPT IF HYD Y + G SYS LO PR).. USE

L2 *Automatic trim is inoperative in direct law.*

L1 MANEUVER WITH CARE

L2 *Use small control inputs at high speed, since in direct law the controls are powerful. Use of manual thrust is recommended. Avoid large thrust changes.*

L1 USE SPD BRK WITH CARE

L2 *At high Mach numbers, use speed brakes with care to avoid too strong nose up changes.*

Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018422.0003001 / 22 MAR 17

L12

STATUS

MAX SPEED... 320/.77
MANEUVER WITH CARE
USE SPD BRK WITH CARE

APPR PROC

FOR LDG...USE FLAPS 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON
MAN PITCH TRIM...USE
APPR SPD... VREF+10
LDG DIST PROC.. APPLY

DIRECT LAW

INOP SYS

F/CTL PROT
STEEP APPR ◁

F/CTL DIRECT LAW

Applicable to: MSN 01251

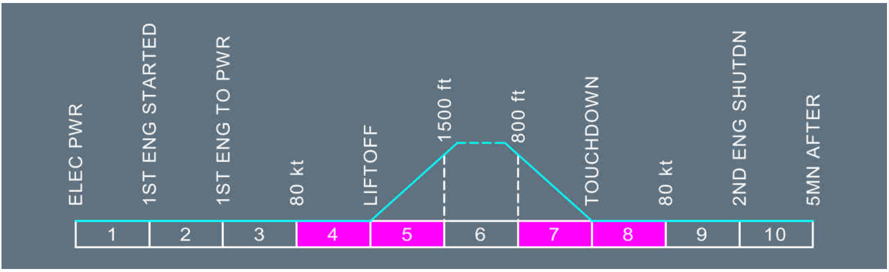
Ident.: PRO-ABN-F_CTL-J-00016964.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when direct law is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018420.0001001 / 22 MAR 17

5

L2 PFD displays « USE MAN PITCH TRIM » in amber. *Refer to DSC-27-20-10-70 Aircraft Trimming*

L1 (PROT LOST)

L2 Note: *In case of GPWS (EGPWS ◁) alerts, since protections are lost, respect stall warning when applying the GPWS (EGPWS ◁) procedure.*

L1 MAX SPEED..320/.77

L2 *Speed is limited, due to the loss of high-speed protection. Do not exceed M 0.77, so as not to degrade handling qualities.*

L1 MAN PITCH TRIM (EXCEPT IF HYD Y + G SYS LO PR)........................ USE

L2 *Automatic trim is inoperative in direct law.*

L1 MANEUVER WITH CARE

L2 *Use small control inputs at high speed, since in direct law the controls are powerful. Use of manual thrust is recommended. Avoid large thrust changes.*

L1 USE SPD BRK WITH CARE

L2 *At high Mach numbers, use speed brakes with care to avoid too strong nose up changes.*

Ident.: PRO-ABN-F_CTL-J-00018422.0001001 / 22 MAR 17

STATUS

MAX SPEED..320/.77
MANEUVER WITH CARE
USE SPD BRK WITH CARE

APPR PROC

FOR LDG..USE FLAPS 3
GPWS LDG FLAP 3..ON
MAN PITCH TRIM..USE
APPR SPD..VREF+10
LDG DIST PROC..APPLY

DIRECT LAW

INOP SYS

F/CTL PROT
STEEP APPR ◁

F/CTL DIRECT LAW

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

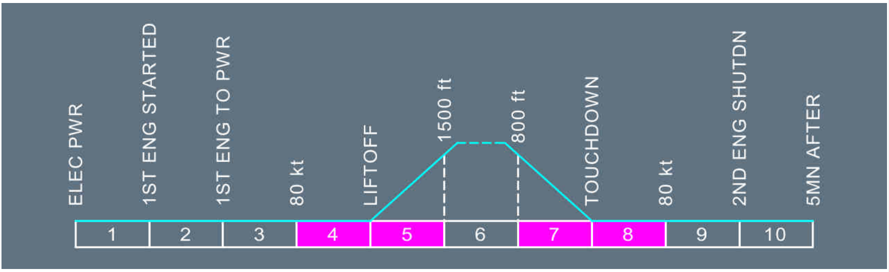
Ident.: PRO-ABN-F_CTL-J-00016964.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when direct law is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018420.0002001 / 21 MAR 16

L2 PFD displays « USE MAN PITCH TRIM » in amber. *Refer to DSC-27-20-10-70 Aircraft Trimming*

L1 (PROT LOST)

L2 *Note:* *In case of GPWS (EGPWS) alerts, since protections are lost, respect stall warning when applying the GPWS (EGPWS) procedure.*

L1 MAX SPEED..320/.77

L2 *Speed is limited, due to the loss of high-speed protection. Do not exceed M 0.77, so as not to degrade handling qualities.*

L1 MAN PITCH TRIM.. USE

L2 *Appears except in case of HYD G + Y failure or STABILIZER JAM.*
Automatic trim is inoperative in direct law.

L1 MANEUVER WITH CARE

L2 *Use small control inputs at high speed, since in direct law the controls are powerful. Use of manual thrust is recommended. Avoid large thrust changes.*

L1 USE SPD BRK WITH CARE

L2 *At high Mach numbers, use speed brakes with care to avoid too strong nose up changes.*

Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018422.0004001 / 21 MAR 16

L12

STATUS

MAX SPEED.. 320/.77
MANEUVER WITH CARE
USE SPD BRK WITH CARE

APPR PROC

FOR LDG...USE FLAPS 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON
MAN PITCH TRIM...USE
APPR SPD...VREF+15 KT
LDG DIST PROC.. APPLY

DIRECT LAW

INOP SYS

F/CTL PROT
ELAC PITCH
STEEP APPR ⊲

F/CTL DIRECT LAW

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

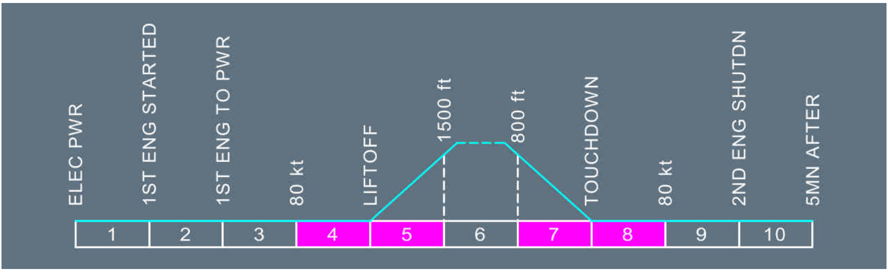
Ident.: PRO-ABN-F_CTL-J-00016964.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when direct law is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL DIRECT LAW

Applicable to: MSN 08495-08596, 09190-09324

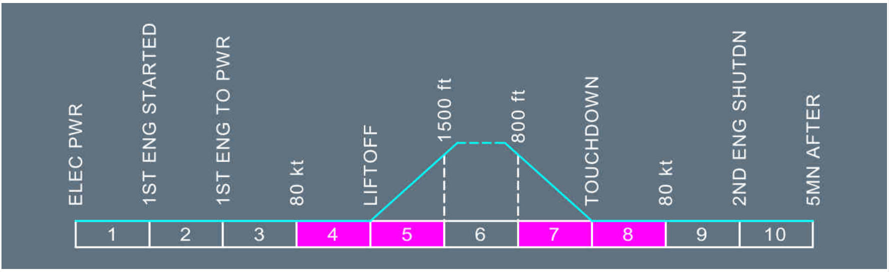
Ident.: PRO-ABN-F_CTL-J-00016964.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when direct law is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018420.0001001 / 22 MAR 17

6

L2 PFD displays « USE MAN PITCH TRIM » in amber. *Refer to DSC-27-20-10-70 Aircraft Trimming*

L1 (PROT LOST)

L2 *Note:* *In case of GPWS (EGPWS) alerts, since protections are lost, respect stall warning when applying the GPWS (EGPWS) procedure.*

L1 MAX SPEED..320/.77

L2 *Speed is limited, due to the loss of high-speed protection. Do not exceed M 0.77, so as not to degrade handling qualities.*

L1 MAN PITCH TRIM (EXCEPT IF HYD Y + G SYS LO PR)........................ USE

L2 *Automatic trim is inoperative in direct law.*

L1 MANEUVER WITH CARE

L2 *Use small control inputs at high speed, since in direct law the controls are powerful. Use of manual thrust is recommended. Avoid large thrust changes.*

L1 USE SPD BRK WITH CARE

L2 *At high Mach numbers, use speed brakes with care to avoid too strong nose up changes.*

Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018422.0005001 / 08 NOV 16

L12

STATUS

MAX SPEED.. 320/.77
MANEUVER WITH CARE
USE SPD BRK WITH CARE

APPR PROC

FOR LDG...USE FLAPS 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON
MAN PITCH TRIM...USE
APPR SPD.. VREF+15
LDG DIST PROC.. APPLY

DIRECT LAW

INOP SYS

F/CTL PROT

F/CTL DIRECT LAW

Applicable to: MSN 08635, 10949-11597

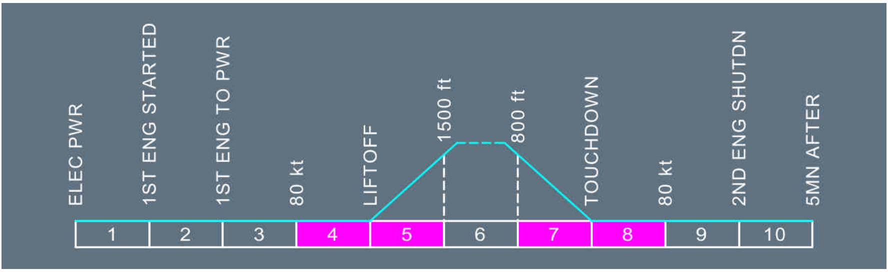
Ident.: PRO-ABN-F_CTL-J-00016964.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when direct law is active.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018420.0001001 / 22 MAR 17

7

L2 PFD displays « USE MAN PITCH TRIM » in amber. *Refer to DSC-27-20-10-70 Aircraft Trimming*

L1 (PROT LOST)

L2 Note: *In case of GPWS (EGPWS ◁) alerts, since protections are lost, respect stall warning when applying the GPWS (EGPWS ◁) procedure.*

L1 MAX SPEED..320/.77

L2 *Speed is limited, due to the loss of high-speed protection. Do not exceed M 0.77, so as not to degrade handling qualities.*

L1 MAN PITCH TRIM (EXCEPT IF HYD Y + G SYS LO PR).............................. USE

L2 *Automatic trim is inoperative in direct law.*

L1 MANEUVER WITH CARE

L2 *Use small control inputs at high speed, since in direct law the controls are powerful. Use of manual thrust is recommended. Avoid large thrust changes.*

L1 USE SPD BRK WITH CARE

L2 *At high Mach numbers, use speed brakes with care to avoid too strong nose up changes.*

Continued on the following page

F/CTL DIRECT LAW (Cont'd)

Ident.: PRO-ABN-F_CTL-J-00018422.0010001 / 24 MAR 20

8

L12

STATUS

MAX SPEED... 320/.77
MANEUVER WITH CARE
USE SPD BRK WITH CARE

APPR PROC

FOR LDG... FLAPS LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

MAN PITCH TRIM...USE
APPR SPD... VREF + 15 KT
LDG DIST PROC... APPLY

DIRECT LAW

INOP SYS

F/CTL PROT

F/CTL ELAC 1(2) FAULT
(ONE COMPUTER FAILED)

Applicable to: MSN 01143-01246

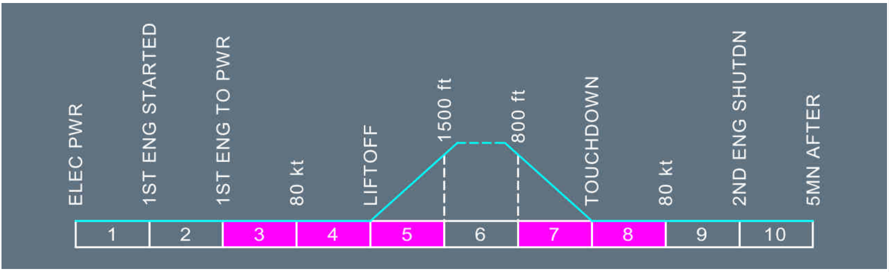
Ident.: PRO-ABN-F_CTL-F-00016960.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(ONE COMPUTER FAILED)

Ident.: PRO-ABN-F_CTL-F-00018425.0011001 / 10 MAY 16

ELAC (AFFECTED)..OFF THEN ON

L2 *Note:*
1. *In some sidestick transducer failure cases, ELAC 1(2) FAULT is triggered without the procedure, and FAULT lt on associated pb does not come on.*
2. *ELAC FAULT may be triggered during engine start, due to the electrical transient. To recover the affected ELAC on the ground, if the reset was unsuccessful, switch OFF the G,Y and B HYD PUMPS (PARK BRK handle ON), wait 1 min, then reset the ELAC pb. After 8 s (end of power up test indicated by the disappearance of the ELAC FAULT warning), switch the G, Y and B HYD PUMPS to ON/AUTO.*
3. *If the ELAC 1 computer is reset on ground the pitch trim returns to the ground setting position (0 °).*

L1 ● **IF UNSUCCESSFUL:**

ELAC (AFFECTED)..OFF

L2 *Functions are performed by the other ELAC.*

L1 FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

Ident.: PRO-ABN-F_CTL-F-00018426.0003001 / 17 MAY 21

9

L12

STATUS

	INOP SYS
CAT 3 SINGLE ONLY FUEL CONSUMPT INCRSD *See* (1) FMS PRED UNRELIABLE *See* (2)	ELAC 1(2) CAT 3 DUAL

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(ONE COMPUTER FAILED)

Applicable to: MSN 01251

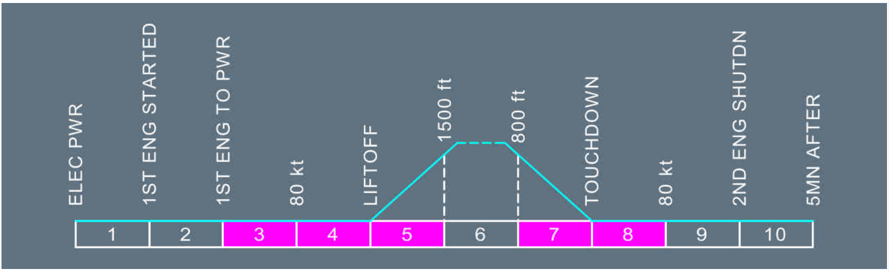
Ident.: PRO-ABN-F_CTL-F-00016960.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(ONE COMPUTER FAILED)

Ident.: PRO-ABN-F_CTL-F-00018425.0007001 / 10 MAY 16

ELAC (AFFECTED)...OFF THEN ON

Note:
1. *In some sidestick transducer failure cases, ELAC 1(2) FAULT is triggered without the proc, and FAULT lt on associated pb does not come on.*
2. *ELAC FAULT may be triggered during engine start, due to the electrical transient. To recover the affected ELAC on the ground, if the reset was unsuccessful, switch OFF the G,Y and B HYD PUMPS (PARK BRK handle ON), wait 1 min, then reset the ELAC pb. After 8 s (end of power up test indicated by the disappearance of the ELAC FAULT warning), switch the G, Y and B HYD PUMPS to ON/AUTO.*
3. *If the ELAC 1 computer is reset on ground the pitch trim returns to the ground setting position (0 °).*

- **IF UNSUCCESSFUL:**

  ELAC (AFFECTED)..OFF

L2 *Functions are performed by the other ELAC.*

Ident.: PRO-ABN-F_CTL-F-00018426.0001001 / 21 MAR 16

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	ELAC 1(2) CAT 3 DUAL

F/CTL ELAC 1(2) FAULT
(ONE COMPUTER FAILED)

Applicable to: MSN 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

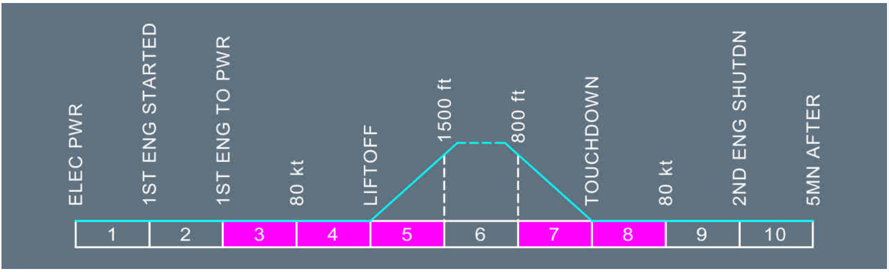
Ident.: PRO-ABN-F_CTL-F-00016960.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-F-00018425.0006001 / 21 MAR 16

10

ELAC (AFFECTED)..OFF THEN ON

L2 *Note:* 1. *In some sidestick transducer failure cases, ELAC 1(2) FAULT is triggered without the procedure, and FAULT lt on associated pb does not come on.*
2. *If the ELAC 1 computer is reset on ground the pitch trim returns to the ground setting position (0 °).*

L1 ● **IF UNSUCCESSFUL:**
ELAC (AFFECTED)..OFF

L2 *Functions are performed by other ELAC.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(ONE COMPUTER FAILED)

Ident.: PRO-ABN-F_CTL-F-00018426.0003001 / 17 MAY 21

11

L12

STATUS

	INOP SYS
CAT 3 SINGLE ONLY FUEL CONSUMPT INCRSD *See* (1) FMS PRED UNRELIABLE *See* (2)	ELAC 1(2) CAT 3 DUAL

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(ONE COMPUTER FAILED)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

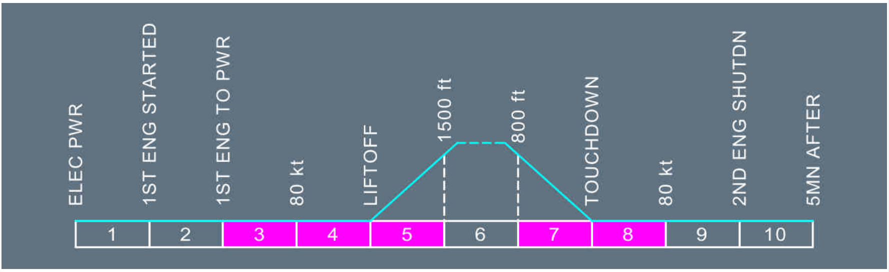
Ident.: PRO-ABN-F_CTL-F-00016960.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 01143-01246, 01376-01459, 02014, 02734, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883

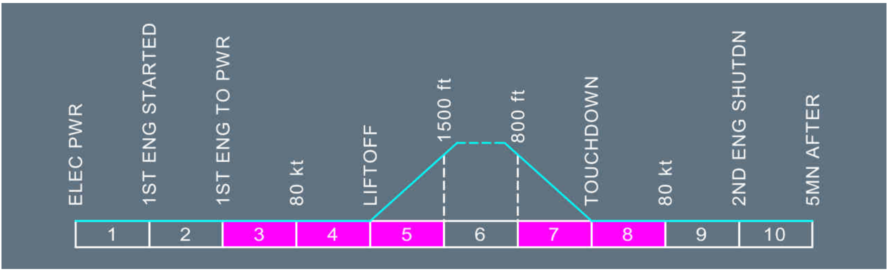
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0009001 / 05 MAY 22

12

ELAC 1....................OFF THEN ON

Note: *If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

ELAC 2....................OFF THEN ON

- **If both ELAC FAULT remain:**
  ELAC 1....................OFF
  ELAC 2....................OFF

L2

The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost. LAF is degraded and uses spoilers only.

L1 MAX SPEED....................320 KT

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0004001 / 17 MAY 21

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Will be displayed when flaps in CONF 3

APPR SPD..VREF+10 KT
LDG DIST PROC... APPLY

ALTN LAW: PROT LOST
WHEN L/G DOWN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1+2
AP 1+2
CAT 2
STEEP APPR

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 01251

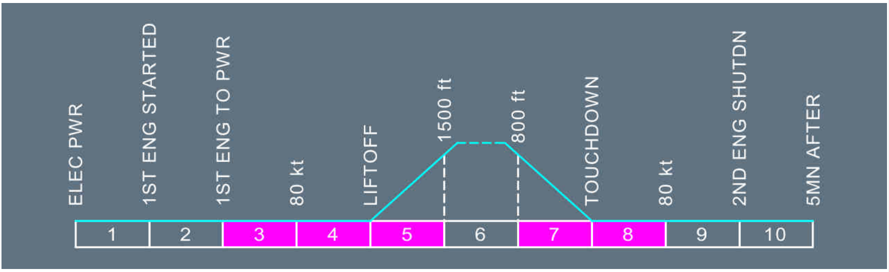
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)

(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0008001 / 05 MAY 22

ELAC 1.. OFF THEN ON

Note: *If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

ELAC 2.. OFF THEN ON

- **If both ELAC FAULT remain:**
  ELAC 1..OFF
  ELAC 2..OFF

L2

The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

L2 Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost. LAF is degraded and uses spoilers only.

L1 MAX SPEED.. 320 KT

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0002001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Will be displayed when flaps in CONF 3

APPR SPD...VREF+10 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DOWN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1+2
AP 1+2
CAT 2
STEEP APPR ◁

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

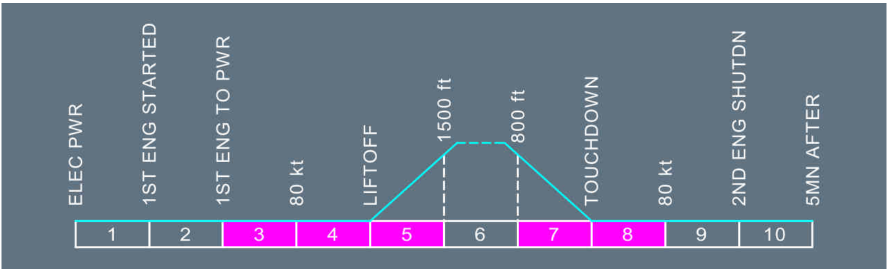
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0009001 / 05 MAY 22

13

ELAC 1 .... OFF THEN ON

Note: *If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

ELAC 2 .... OFF THEN ON

- **If both ELAC FAULT remain:**
  ELAC 1 .... OFF
  ELAC 2 .... OFF

L2 The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost. LAF is degraded and uses spoilers only.

L1 MAX SPEED .... 320 KT

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0007001 / 17 MAY 21

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Will be displayed when flaps in CONF 3

APPR SPD..VREF+15 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST

WHEN L/G DOWN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1+2
AP 1+2
CAT 2
STEEP APPR ◁

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

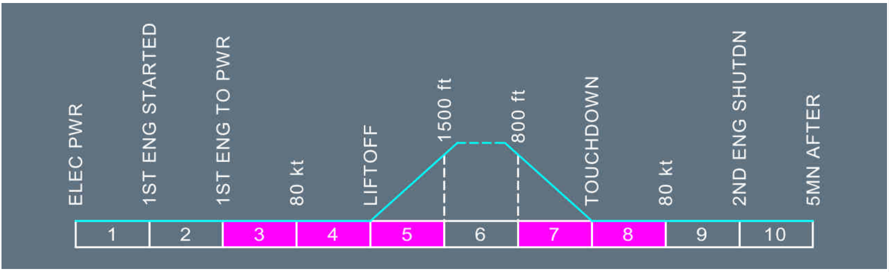
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

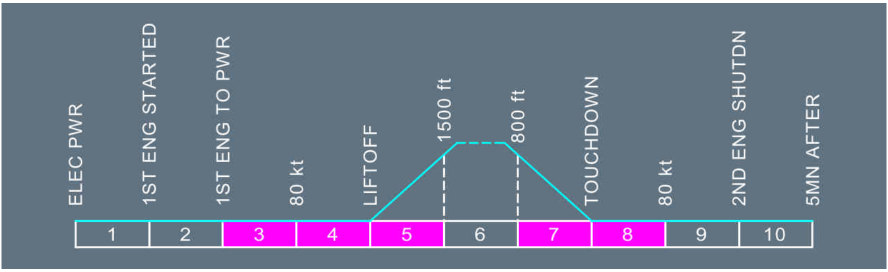
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0003001 / 05 MAY 22

14

ELAC 1 .... OFF THEN ON

Note: *If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

ELAC 2 .... OFF THEN ON

- **If both ELAC FAULT remain:**
  ELAC 1 .... OFF
  ELAC 2 .... OFF

L2 The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost.

L1 MAX SPEED .... 320 KT

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0004001 / 17 MAY 21

L12

STATUS

MAX SPEED...320 KT

APPR PROC

FOR LDG...USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed when flaps in CONF 3

APPR SPD...VREF+10 KT

LDG DIST PROC...APPLY

ALTN LAW: PROT LOST
WHEN L/G DOWN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1+2
AP 1+2
CAT 2
STEEP APPR ◁

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

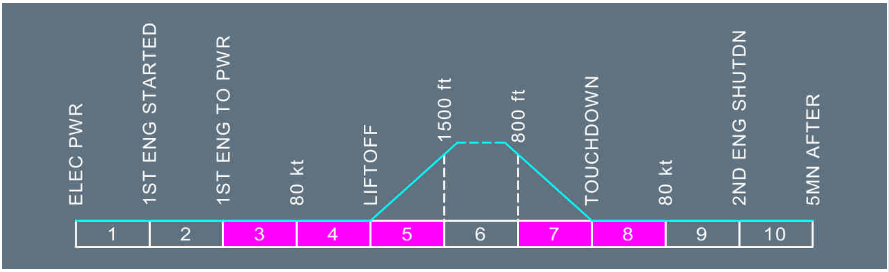
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0004001 / 05 MAY 22

ELAC 1 .... OFF THEN ON

Note: If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).

ELAC 2 .... OFF THEN ON

- **If both ELAC FAULT remain:**

  ELAC 1 .... OFF
  ELAC 2 .... OFF

L2

The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost. LAF is lost.

L1 MAX SPEED .... 320 KT

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0004001 / 17 MAY 21

L12

STATUS

MAX SPEED.......... 320 KT

APPR PROC

FOR LDG.......... USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3.......... ON

Will be displayed when flaps in CONF 3

APPR SPD..........VREF+10 KT
LDG DIST PROC.......... APPLY

ALTN LAW: PROT LOST
WHEN L/G DOWN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1+2
AP 1+2
CAT 2
STEEP APPR

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 08495-08596, 09190-09324

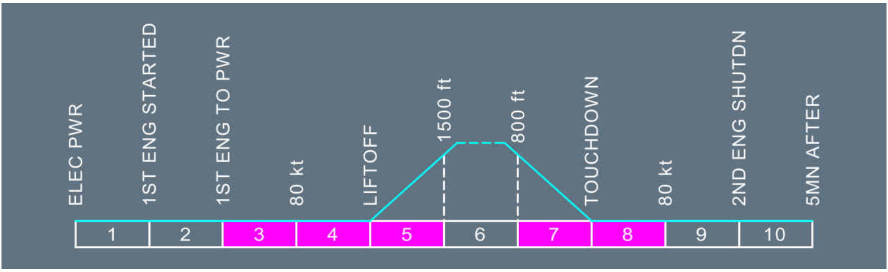
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0009001 / 05 MAY 22

15

ELAC 1 .... OFF THEN ON

Note: *If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

ELAC 2 .... OFF THEN ON

- **If both ELAC FAULT remain:**

  ELAC 1 .... OFF
  ELAC 2 .... OFF

L2

The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost. LAF is degraded and uses spoilers only.

L1 MAX SPEED .... 320 KT

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0008001 / 17 MAY 21

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Will be displayed when flaps in CONF 3

APPR SPD...VREF+15 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DOWN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1+2
AP 1+2
CAT 2

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 08635, 10949-11522, 11572-11597

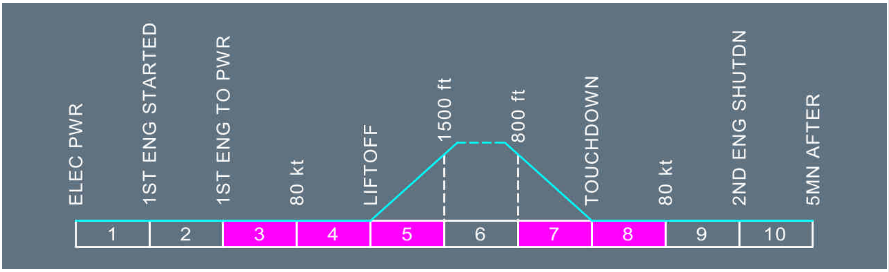
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0009001 / 05 MAY 22

16

ELAC 1 .... OFF THEN ON

Note: *If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

ELAC 2 .... OFF THEN ON

- **If both ELAC FAULT remain:**

  ELAC 1 .... OFF
  ELAC 2 .... OFF

L2

The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2

Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost. LAF is degraded and uses spoilers only.

L1

MAX SPEED .... 320 KT

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0011001 / 17 MAY 21

17

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

APPR SPD..VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST

WHEN L/G DOWN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1
ELAC 2
AP 1+2
CAT 2

(1) *Note: At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Note: Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) FAULT
(BOTH COMPUTERS FAILED)

Applicable to: MSN 11531

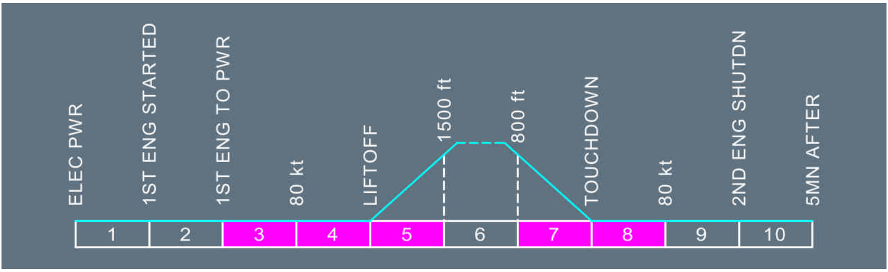
Ident.: PRO-ABN-F_CTL-G-00018899.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of ELAC (FAULT lt on ELAC pb), or when one sidestick transducer is faulty.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
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Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018433.0003001 / 05 MAY 22

18

ELAC 1 .... OFF THEN ON

Note: *If the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

ELAC 2 .... OFF THEN ON

- **If both ELAC FAULT remain:**
  ELAC 1 .... OFF
  ELAC 2 .... OFF

L2 The steering handwheel remains available to steer the aircraft during taxi.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Pitch and roll normal laws are lost: *Refer to PRO-ABN-F_CTL F/CTL ALTN LAW*. THS motor 1 and both ailerons are lost.

L1 MAX SPEED .... 320 KT

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL ELAC 1(2) FAULT (Cont'd)
(BOTH COMPUTERS FAILED)

Ident.: PRO-ABN-F_CTL-G-00018434.0011001 / 17 MAY 21

19

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

APPR SPD...VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DOWN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

F/CTL PROT
L+R AIL
ELAC 1
ELAC 2
AP 1+2
CAT 2

(1) *Note: At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Note: Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL ELAC 1(2) PITCH FAULT
(ONE COMPUTER FAILED)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

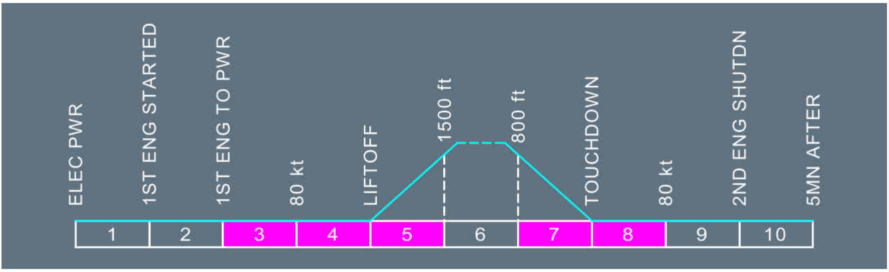
Ident.: PRO-ABN-F_CTL-H-00016977.0001001 / 28 NOV 19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of pitch channel in ELAC 1(2).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-H-00018447.0001001 / 28 NOV 19

Crew awareness.

Ident.: PRO-ABN-F_CTL-H-00018448.0001001 / 28 NOV 19

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	ELAC PITCH (1) CAT 3 DUAL

(1) *(If ELAC 1 and 2 PITCH FAULT)*

F/CTL ELAC 1(2) PITCH FAULT
(ONE COMPUTER FAILED)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

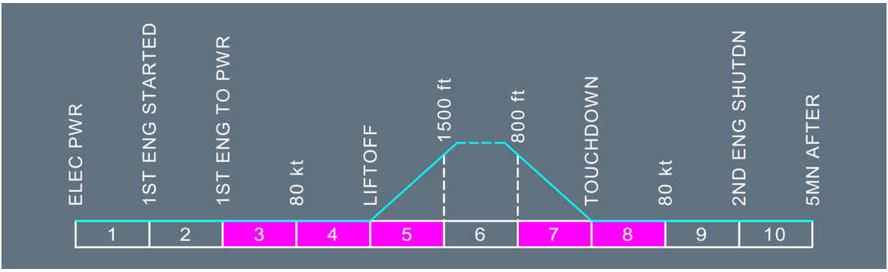
Ident.: PRO-ABN-F_CTL-H-00016977.0001001 / 28 NOV 19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of pitch channel in ELAC 1(2).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-H-00018447.0001001 / 28 NOV 19

Crew awareness.

F/CTL ELAC 1(2) PITCH FAULT
(ONE COMPUTER FAILED)

Applicable to: MSN 10949-11597

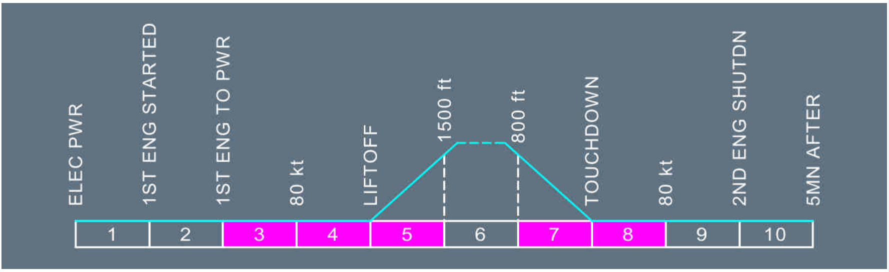
Ident.: PRO-ABN-F_CTL-H-00016977.0001001 / 28 NOV 19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of pitch channel in ELAC 1(2).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-H-00018447.0001001 / 28 NOV 19

Crew awareness.

Ident.: PRO-ABN-F_CTL-H-00018448.0002001 / 18 NOV 21

20

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	ELAC 1(2) PITCH CAT 3 DUAL

F/CTL ELAC 1(2) PITCH FAULT
(BOTH COMPUTER FAILED)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

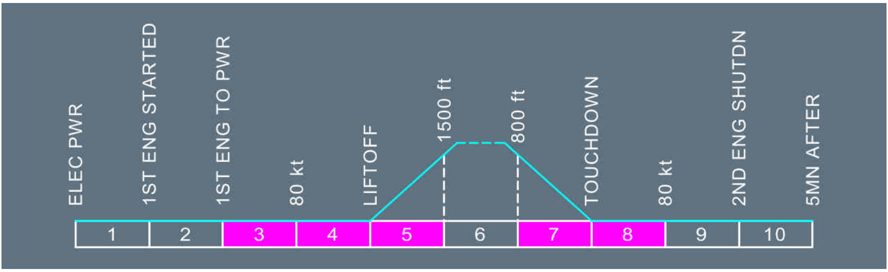
Ident.: PRO-ABN-F_CTL-AR-00023245.0001001 / 28 NOV 19

ANNUNCIATIONS

Triggering Conditions:

This triggers when there is a failure of pitch channel in ELAC 1(2).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-AR-00023244.0001001 / 28 NOV 19

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

Note: *Pitch normal law is lost: Refer to PRO-ABN-F_CTL F/CTL ALTN LAW.*

MAX SPEED..320 KT

Continued on the following page

F/CTL ELAC 1(2) PITCH FAULT (Cont'd)
(BOTH COMPUTER FAILED)

Ident.: PRO-ABN-F_CTL-AR-00023243.0001001 / 28 NOV 19

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	ELAC PITCH [1] CAT 3 DUAL

[1] *(If ELAC 1 and 2 PITCH FAULT)*

F/CTL ELAC PITCH FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-F_CTL-AT-00024839.0001001 / 18 NOV 21

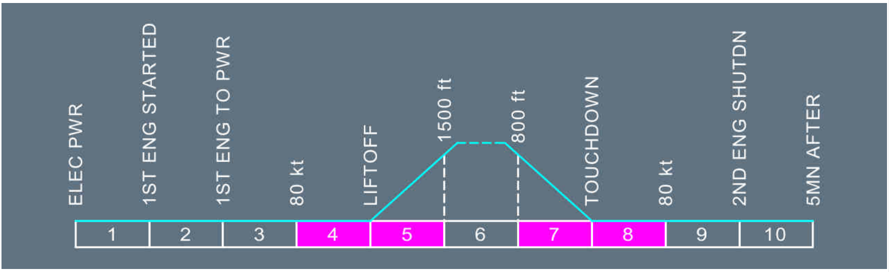
21

ANNUNCIATIONS

Triggering Conditions:

L2 This triggers when there is a failure of pitch channel in ELAC 1 and 2.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL ELAC PITCH FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-AT-00024843.0001001 / 18 NOV 21

22

L12

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

Pitch normal law is lost, Refer to PRO-ABN-F_CTL F/CTL ALTN LAW.

MAX SPEED....320 KT

Ident.: PRO-ABN-F_CTL-AT-00024845.0001001 / 18 NOV 21

23

L12

STATUS

APPR PROC

FOR LDG....FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3....ON

This line is displayed when flaps are in CONF 3.

LDG DIST PROC.... APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
ELAC PITCH
AP 1+2
A/THR
CAT 2

(1) *Note: At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

F/CTL ELEV REDUND DEGRDD

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-F_CTL-AS-00023753.0001001 / 03 MAR 20

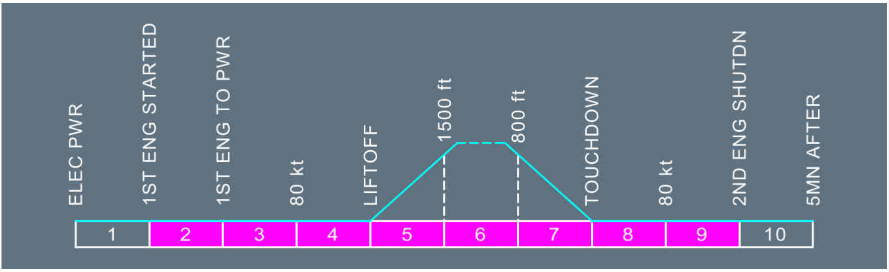
24

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an elevator control of SEC 1 or SEC 2 is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-AS-00023754.0001001 / 03 MAR 20

25

L2 Maintenance action is due.
L1 Crew awareness.

F/CTL ELEV SERVO FAULT

Applicable to: ALL

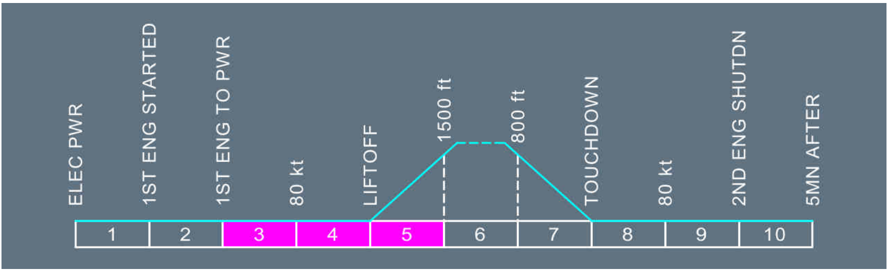
Ident.: PRO-ABN-F_CTL-P-00016979.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of one servojack on one elevator.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-P-00018449.0001001 / 21 MAR 16

Crew awareness.

CAUTION	Do not use speedbrakes above 350 kt/M 0.82 (VMO/MMO).

Ident.: PRO-ABN-F_CTL-P-00018450.0001001 / 21 MAR 16

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	CAT 3 DUAL

F/CTL FCDC 1(2) FAULT

Applicable to: ALL

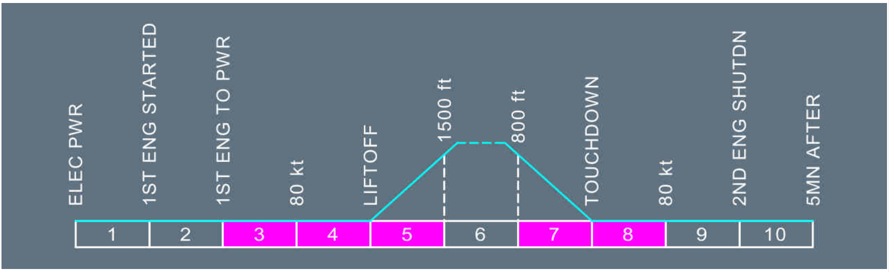
Ident.: PRO-ABN-F_CTL-L-00016981.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one FCDC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-L-00011777.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-F_CTL-L-00011778.0001001 / 18 AUG 10

STATUS

INOP SYS

FCDC 1(2)

F/CTL FCDC 1+2 FAULT

Applicable to: ALL

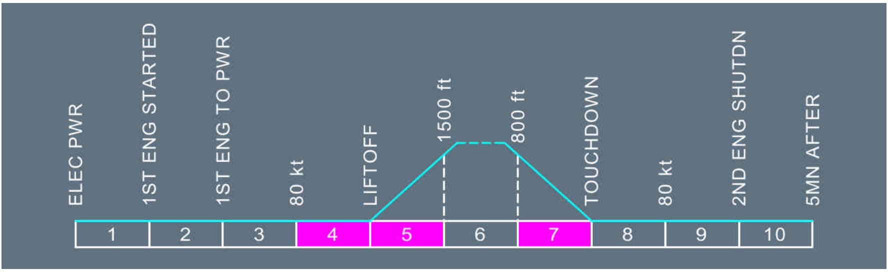
Ident.: PRO-ABN-F_CTL-M-00016963.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of both FCDCs.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-M-00011779.0001001 / 18 AUG 10

MONITOR F/CTL OVHD PNL

L2 *F/CTL data on ECAM is lost.*
Control laws remains normal.

Note: *When both FCDCs fails:*
- *F/CTL warning are not available on the ECAM.*
- *Stall warning may be triggered as in alternate or direct law (it may occur at speeds greater than Vα max).*
- *Bank and pitch limits are no longer displayed on the PFD.*
- *Vα prot, Vα max are lost on the PFD.*
- *Vsw, displayed on the PFD, corresponds to the stall warning of the alternate or direct law.*

Continued on the following page

F/CTL FCDC 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-M-00018451.0001001 / 21 MAR 16

STATUS

F/CTL INDICATIONS LOST

INOP SYS

FCDC 1 + 2
STEEP APPR ◁

F/CTL FLAP ATTACH SENSOR

Applicable to: ALL

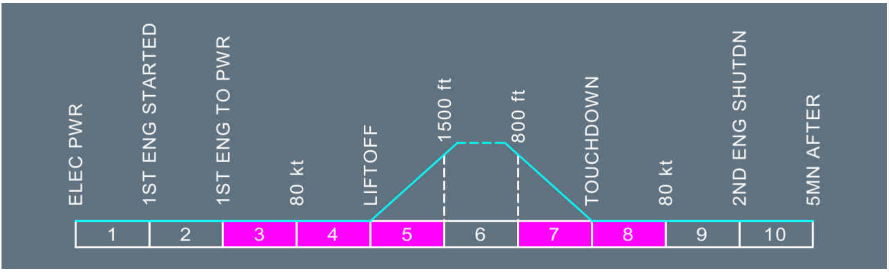
Ident.: PRO-ABN-F_CTL-AH-00016989.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is failure of flap attachment's failure detection sensor.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-AH-00018453.0001001 / 21 MAR 16

Crew awareness.

F/CTL FLAPS FAULT/LOCKED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

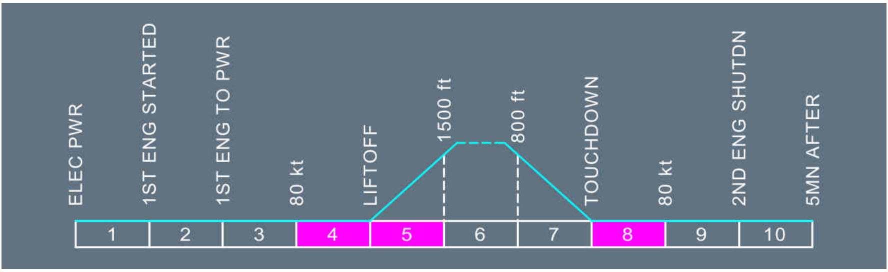
Ident.: PRO-ABN-F_CTL-A-00022643.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The FLAPS FAULT alert triggers when both flaps channels fail.
The FLAPS LOCKED alert triggers when the flaps wing tip brakes activate.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL FLAPS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-A-00011744.0002001 / 10 MAY 21

26

- **If flaps locked:**

  WING TIP BRK ON OR ALIGNMENT FAULT

  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

L2 *Limit speed to the VFE corresponding to the next flap position*

L1
- **If flaps not locked:**

  FLAPS LEVER.. RECYCLE

L2 *Return to the previous selection, then back to the desired position.*

L1
- **If flaps extended:**

  FUEL CONSUMPT INCRSD

  FMS PRED UNRELIABLE

L2
- **If unsuccessful:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

  The autopilot may be used down to 500 ft AGL. As it is not tuned for abnormal configurations, its behavior can be less than optimum and must be monitored.

Continued on the following page

F/CTL FLAPS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-A-00018456.0004001 / 17 MAY 21

L12

STATUS

APPR PROC

FOR LDG (IF FLAPS ≤ 3).................................USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder

FLAPS (IF FLAPS>3)...............................KEEP CONF FULL

GPWS FLAP MODE (IF FLAPS < 3)...............................OFF

GPWS LDG FLAP 3 (IF FLAPS ≥ 3)................................ON

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

LDG DIST PROC.. APPLY

ENG 1 APPR IDLE ONLY (Only in case of FLAPS FAULT)

ENG 2 APPR IDLE ONLY (Only in case of FLAPS FAULT)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

INOP SYS

FLAPS

AP 1+2 (1)

A/THR (1)

Moreover, both FDs are lost (1)

CAT 2 (1)

GLS AUTOLAND ◁✳

STEEP APPR ◁✳

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(1) *(If both flap channels fault.)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and* *Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table* *in order to find the applicable Fuel Penalty Factor.*

F/CTL FLAPS FAULT/LOCKED

Applicable to: MSN 01251

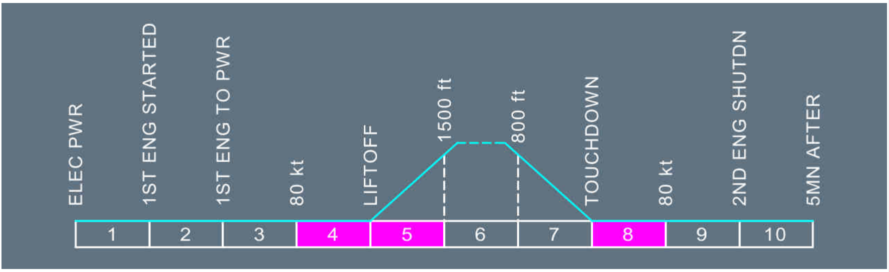
Ident.: PRO-ABN-F_CTL-A-00022643.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The FLAPS FAULT alert triggers when both flaps channels fail.
The FLAPS LOCKED alert triggers when the flaps wing tip brakes activate.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-A-00011744.0001001 / 10 MAY 21

- **If flaps locked:**

  WING TIP BRK ON OR ALIGNMENT FAULT

  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

  L2 *Limit speed to the VFE corresponding to the next flap position*

  L1 FLAPS LEVER (IF FLAPS NOT LOCKED)..RECYCLE

  L2 *Return to the previous selection, then back to the desired position.*

- **If unsuccessful:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

  The autopilot may be used down to 500 ft AGL. As it is not tuned for abnormal configurations, its behavior can be less than optimum and must be monitored.

Continued on the following page

F/CTL FLAPS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-A-00018456.0002001 / 17 MAY 21

L12

STATUS

APPR PROC

FOR LDG (IF FLAPS ≤ 3)..................................USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

FLAPS (IF FLAPS>3)...............................KEEP CONF FULL
GPWS FLAP MODE (IF FLAPS < 3)...............................OFF
GPWS LDG FLAP 3 (IF FLAPS ≥ 3)................................ON
APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*
LDG DIST PROC.. APPLY

ENG 1 APPR IDLE ONLY (Only in case of FLAPS FAULT)
ENG 2 APPR IDLE ONLY (Only in case of FLAPS FAULT)
INCREASED FUEL CONSUMP (*Refer to PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*)

INOP SYS

FLAPS
AP 1+2 (1)
A/THR (1)
Moreover, both FDs are lost (1)
CAT 2 (1)
GLS AUTOLAND ◁✻
STEEP APPR ◁✻

(1) *(If both flap channels fault.)*

F/CTL FLAPS FAULT/LOCKED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-F_CTL-A-00022643.0001001 / 05 MAR 19

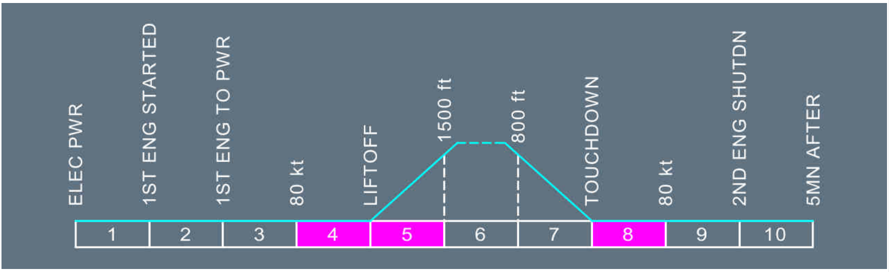
ANNUNCIATIONS

Triggering Conditions:

L2

The FLAPS FAULT alert triggers when both flaps channels fail.
The FLAPS LOCKED alert triggers when the flaps wing tip brakes activate.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL FLAPS FAULT/LOCKED

Applicable to: MSN 08635, 10949-11597

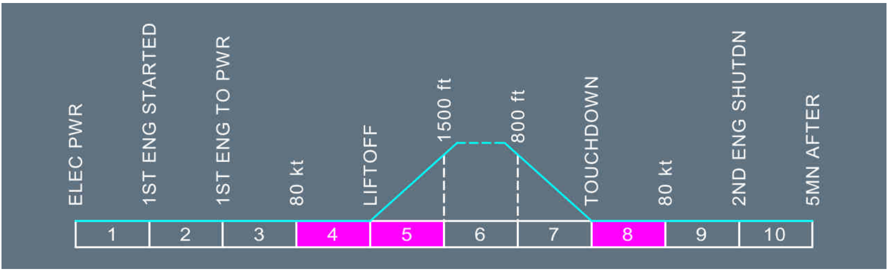
Ident.: PRO-ABN-F_CTL-A-00022643.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The FLAPS FAULT alert triggers when both flaps channels fail.
The FLAPS LOCKED alert triggers when the flaps wing tip brakes activate.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL FLAPS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-A-00011744.0002001 / 10 MAY 21

27

- **If flaps locked:**

  WING TIP BRK ON OR ALIGNMENT FAULT

  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

  L2 *Limit speed to the VFE corresponding to the next flap position*

L1
- **If flaps not locked:**

  FLAPS LEVER.. RECYCLE

  L2 *Return to the previous selection, then back to the desired position.*

L1
- **If flaps extended:**

  FUEL CONSUMPT INCRSD

  FMS PRED UNRELIABLE

L2
- **If unsuccessful:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

  The autopilot may be used down to 500 ft AGL. As it is not tuned for abnormal configurations, its behavior can be less than optimum and must be monitored.

Continued on the following page

F/CTL FLAPS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-A-00018456.0006001 / 17 MAY 21

28

L12

STATUS

APPR PROC

S/F JAMMED PROC.. APPLY

- **If flaps are in CONF FULL:**
  FLAPS..KEEP CONF FULL
- **In all other flaps configurations:**
  FOR LDG ....FLAP LVR 3
  This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.
- **If flaps position < 3:**
  GPWS FLAP MODE .... OFF
- **If flaps position ≥ 3:**
  GPWS LDG FLAP 3.. ON

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*
LDG DIST PROC.. APPLY

- **In the case of FLAPS FAULT only:**
  ENG 1 APPR IDLE ONLY
  ENG 2 APPR IDLE ONLY

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

FLAPS
AP 1+2 (1)
A/THR (1)
CAT 2 (1)
GLS AUTOLAND ◁
STEEP APPR ◁
FD 1+2 (2)

(1) *(If both flap channels fault.)*
(2) *(If both flap channels fault. Not displayed on ECAM.)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

Continued on the following page

F/CTL FLAPS FAULT/LOCKED (Cont'd)

(4)

Note: *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL FLAP LVR NOT ZERO

Applicable to: ALL

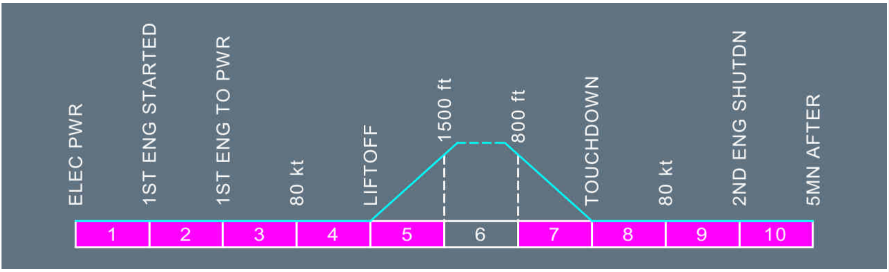
Ident.: PRO-ABN-F_CTL-AI-00018902.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FLAP lever is not in the zero position, and the aircraft is above 22 000 ft.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-AI-00018454.0001001 / 21 MAR 16

Crew awareness.

F/CTL FLAP SYS 1(2) FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

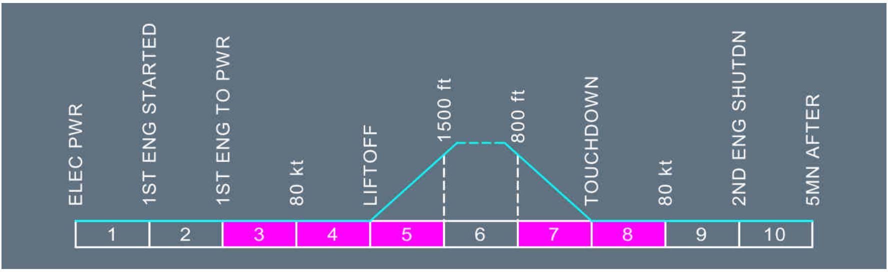
Ident.: PRO-ABN-F_CTL-E-00016990.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is failure of flap channel in one SFCC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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8
9
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Ident.: PRO-ABN-F_CTL-E-00011753.0002001 / 25 FEB 14

29 Crew awareness.

Ident.: PRO-ABN-F_CTL-E-00011754.0002001 / 30 MAR 12

30 L12

STATUS

APPR PROC

- **In case of FLAP SYS 1 FAULT:**
  GPWS FLAP MODE...OFF
  Flap position signal to GPWS is lost.

ENG 1(2) APPR IDLE ONLY
FLAPS SLOW

F/CTL FLAP SYS 1(2) FAULT

Applicable to: MSN 01251

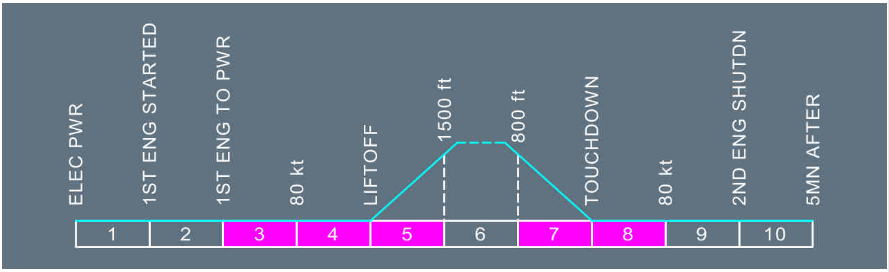
Ident.: PRO-ABN-F_CTL-E-00016990.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is failure of flap channel in one SFCC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-E-00011753.0001001 / 18 AUG 10

- **If FLAP sys 1 fault:**
  GPWS FLAP MODE..OFF

Ident.: PRO-ABN-F_CTL-E-00011754.0001001 / 18 AUG 10

STATUS

ENG 1(2) APPR IDLE ONLY
FLAPS SLOW

F/CTL FLAP SYS 1(2) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

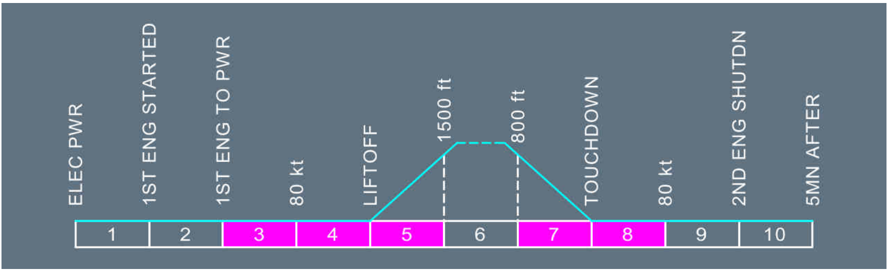
Ident.: PRO-ABN-F_CTL-E-00016990.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is failure of flap channel in one SFCC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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F/CTL FLAP/MCDU DISAGREE

Applicable to: MSN 04827-04860, 10949-11597

Ident.: PRO-ABN-F_CTL-AG-00016987.0001001 / 21 MAR 16

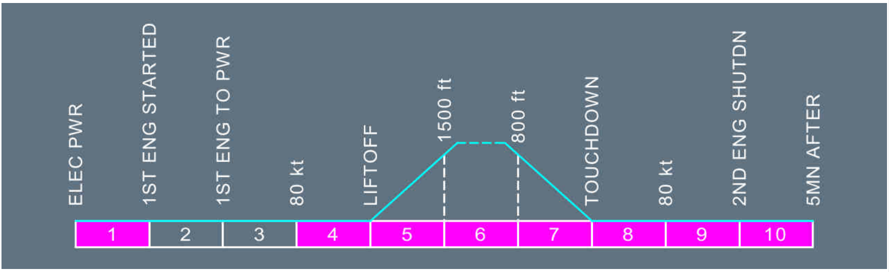
31

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers at phase 2 when T.O CONFIG TEST pb is pressed, or at phase 3, if the FLAPS lever position and the FLAPS position entered in the FMS are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-AG-00018452.0011001 / 21 MAR 16

32

Crew awareness.

F/CTL FLAPS/SLATS FAULT/LOCKED

33 Ident.: PRO-ABN-F_CTL-00018457.0024001 / 17 NOV 20
Applicable to: MSN 11531

MAX SPEED

Slats[1] \ Flaps[1]	F = 0	0 < F ≤ 1	1 < F ≤ 2	2 < F ≤ 3	F > 3
S = 0	NO LIMITATION	225 kt	215 kt	195 kt	186 kt (Not allowed)
0 < S < 1	243 kt				
S = 1					186 kt
1 < S ≤ 3	215 kt		215 kt	195 kt	
S > 3	186 kt		186 kt	186 kt	186 kt

(1) *Slats/Flaps position displayed on the upper ECAM display.*

APPR SPD

Slats[1] \ Flaps[1]	F = 0	0 < F <1	1 ≤ F < 2	2 ≤ F < 3	F ≥ 3
S = 0	VREF +70 (Appr) VREF +60 (Touch Down)	VREF +50	VREF +30	VREF +25	(FLAPS > 3 not allowed) VREF +25
0 < S < 1					
1 ≤ S ≤ 3	VREF +35		VREF +15	VREF +10	VREF +10
S > 3	VREF +35		VREF +15	VREF +10	VREF +5

(1) *Slats/Flaps position displayed on the upper ECAM display.*

CAUTION	For flight with SLATS or FLAPS extended, fuel consumption is increased. Refer to the fuel flow indication. As a guideline, determine the fuel consumption in clean configuration, at the same altitude without airspeed limitation (e.g. from the in-flight performance application (IN-FLT PERF) of EFB), and multiply this result by the applicable Fuel Penalty Factor provided in the QRH (*Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*) to obtain the fuel penalty required to reach the destination in the current configuration.

F/CTL FLAPS/SLATS FAULT/LOCKED

Ident.: PRO-ABN-F_CTL-00018457.0001001 / 17 NOV 20

Applicable to: MSN 01143-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

<table>
<tr><th colspan="6">MAX SPEED</th></tr>
<tr><th>Flaps(1)
Slats(1)</th><th>F = 0</th><th>0 < F ≤ 1</th><th>1 < F ≤ 2</th><th>2 < F ≤ 3</th><th>F > 3</th></tr>
<tr><td>S = 0</td><td>NO LIMITATION</td><td rowspan="3">215 kt</td><td rowspan="4">200 kt</td><td rowspan="4">185 kt</td><td rowspan="2">Not allowed
(177 kt)</td></tr>
<tr><td>0 < S <1</td><td rowspan="2">230 kt</td></tr>
<tr><td>S = 1</td><td rowspan="2"></td></tr>
<tr><td>1 < S ≤ 3</td><td colspan="2">200 kt</td></tr>
<tr><td>S > 3</td><td colspan="5">177 kt</td></tr>
</table>

(1) *Slats/Flaps position displayed on the upper ECAM display.*

<table>
<tr><th colspan="6">APPR SPD</th></tr>
<tr><th>Flaps(1)
Slats(1)</th><th>F = 0</th><th>0 < F < 1</th><th>1 ≤ F < 2</th><th>2 ≤ F < 3</th><th>F ≥ 3</th></tr>
<tr><td>S = 0</td><td>VREF +60 (Appr)
VREF +50 (Touch Down)</td><td></td><td rowspan="2">VREF +30</td><td rowspan="2">VREF +25</td><td rowspan="2">(FLAPS > 3 not allowed)
VREF +25</td></tr>
<tr><td>0 < S < 1</td><td colspan="2">VREF +45</td></tr>
<tr><td>1 ≤ S ≤ 3</td><td colspan="2" rowspan="2">VREF +25</td><td rowspan="2">VREF +15</td><td rowspan="2">VREF +10</td><td>VREF +10</td></tr>
<tr><td>S > 3</td><td>VREF +5</td></tr>
</table>

(1) *Slats/Flaps position displayed on the upper ECAM display.*

CAUTION	For flight with SLATS or FLAPS extended, fuel consumption is increased. Refer to the fuel flow indication. As a guideline, determine the fuel consumption in clean configuration, at the same altitude without airspeed limitation (e.g. from the in-flight performance application (IN-FLT PERF) of EFB), and multiply this result by the applicable Fuel Penalty Factor provided in the QRH (*Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*) to obtain the fuel penalty required to reach the destination in the current configuration.

F/CTL FLAPS/SLATS FAULT/LOCKED

Ident.: PRO-ABN-F_CTL-00018457.0016001 / 17 NOV 20
Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

MAX SPEED					
Flaps[1] Slats [1]	F = 0	0 < F ≤ 1	1 < F ≤ 2	2 < F ≤ 3	F > 3
S = 0	NO LIMITATION	215 kt	200 kt	185 kt	Not allowed (177 kt)
0 < S <1	230 kt				177 kt
S = 1					
1 < S ≤ 3	200 kt				
S > 3					

(1) *Slats/Flaps position displayed on the upper ECAM display.*

APPR SPD					
Flaps[1] Slats[1]	F = 0	0 < F < 1	1 ≤ F < 2	2 ≤ F < 3	F ≥ 3
S = 0	VREF +65 (Appr) VREF +55 (Touch Down)	VREF +50	VREF +35	VREF +30	(FLAPS > 3 not allowed) VREF +30
0 < S < 1					
1 ≤ S ≤ 3	VREF +30		VREF +20	VREF +15	VREF +15
S > 3					VREF +10

(1) *Slats/Flaps position displayed on the upper ECAM display.*

CAUTION	For flight with SLATS or FLAPS extended, fuel consumption is increased. Refer to the fuel flow indication. As a guideline, determine the fuel consumption in clean configuration, at the same altitude without airspeed limitation (e.g. from the in-flight performance application (IN-FLT PERF) of EFB), and multiply this result by the applicable Fuel Penalty Factor provided in the QRH (*Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*) to obtain the fuel penalty required to reach the destination in the current configuration.

F/CTL FLAPS/SLATS FAULT/LOCKED

Ident.: PRO-ABN-F_CTL-00018457.0017001 / 17 NOV 20
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

MAX SPEED

Flaps(1) Slats(1)	F = 0	0 < F ≤ 1	1 < F ≤ 2	2 < F ≤ 3	F > 3
S = 0	NO LIMITATION	225 kt	215 kt	195 kt	190 kt (Not allowed)
0 < S < 1	235 kt				
S = 1					190 kt
1 < S ≤ 3	215 kt		215 kt	195 kt	
S > 3	190 kt		190 kt	190 kt	190 kt

(1) *Slats/Flaps position displayed on the upper ECAM display.*

APPR SPD

Flaps(1) Slats(1)	F = 0	0 < F <1	1 ≤ F < 2	2 ≤ F < 3	F ≥ 3
S = 0	VREF +60 (Appr) VREF +50 (Touch Down)		VREF +30	VREF +25	(FLAPS > 3 not allowed) VREF +25
0 < S < 1		VREF +45			
1 ≤ S ≤ 3	VREF + 30		VREF +15	VREF +10	VREF +10
S > 3	VREF + 30		VREF +15	VREF +10	VREF +5

(1) *Slats/Flaps position displayed on the upper ECAM display.*

CAUTION For flight with SLATS or FLAPS extended, fuel consumption is increased.
Refer to the fuel flow indication.
As a guideline, determine the fuel consumption in clean configuration, at the same altitude without airspeed limitation (e.g. from the in-flight performance application (IN-FLT PERF) of EFB), and multiply this result by the applicable Fuel Penalty Factor provided in the QRH (*Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*) to obtain the fuel penalty required to reach the destination in the current configuration.

F/CTL FLAPS/SLATS FAULT/LOCKED

Ident.: PRO-ABN-F_CTL-00018457.0020001 / 17 NOV 20

34 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

<table>
<tr><th colspan="6">MAX SPEED</th></tr>
<tr><th>Flaps(1)
Slats(1)</th><th>F = 0</th><th>0 < F ≤ 1</th><th>1 < F ≤ 2</th><th>2 < F ≤ 3</th><th>F > 3</th></tr>
<tr><td>S = 0</td><td>NO LIMITATION</td><td rowspan="3">215 kt</td><td rowspan="4">200 kt</td><td rowspan="4">185 kt</td><td rowspan="2">Not allowed (177 kt)</td></tr>
<tr><td>0 < S <1</td><td rowspan="2">230 kt</td></tr>
<tr><td>S = 1</td><td rowspan="3">177 kt</td></tr>
<tr><td>1 < S ≤ 3</td><td colspan="2">200 kt</td></tr>
<tr><td>S > 3</td><td colspan="4"></td></tr>
</table>

(1) *Slats/Flaps position displayed on the upper ECAM display.*

<table>
<tr><th colspan="6">APPR SPD</th></tr>
<tr><th>Flaps(1)
Slats(1)</th><th>F = 0</th><th>0 < F < 1</th><th>1 ≤ F < 2</th><th>2 ≤ F < 3</th><th>F ≥ 3</th></tr>
<tr><td>S = 0</td><td>VREF +65 (Appr)
VREF +55 (Touch Down)</td><td></td><td rowspan="2">VREF +30</td><td rowspan="2">VREF +25</td><td rowspan="2">(FLAPS > 3 not allowed)
VREF +25</td></tr>
<tr><td>0 < S < 1</td><td colspan="2">VREF +50</td></tr>
<tr><td>1 ≤ S ≤ 3</td><td colspan="2" rowspan="2">VREF +30</td><td rowspan="2">VREF +15</td><td rowspan="2">VREF +10</td><td>VREF +10</td></tr>
<tr><td>S > 3</td><td>VREF +5</td></tr>
</table>

(1) *Slats/Flaps position displayed on the upper ECAM display.*

CAUTION For flight with SLATS or FLAPS extended, fuel consumption is increased. Refer to the fuel flow indication.
As a guideline, determine the fuel consumption in clean configuration, at the same altitude without airspeed limitation (e.g. from the in-flight performance application (IN-FLT PERF) of EFB), and multiply this result by the applicable Fuel Penalty Factor provided in the QRH (*Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table*) to obtain the fuel penalty required to reach the destination in the current configuration.

F/CTL GND SPLR 5 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-F_CTL-Z-00016967.0001001 / 21 MAR 16

35

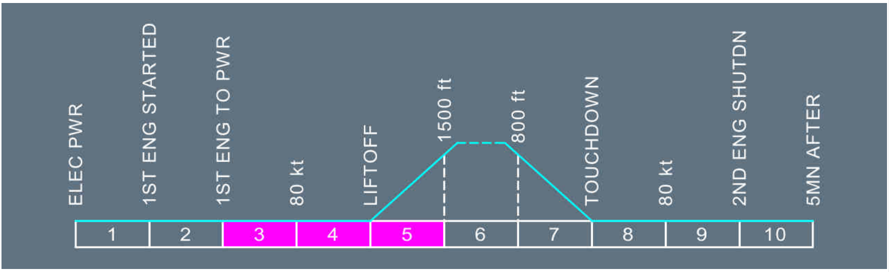
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when there is a loss of ground spoiler function in SEC 2.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-Z-00018903.0001001 / 21 MAR 16

36

Crew awareness.

Ident.: PRO-ABN-F_CTL-Z-00014253.0001001 / 23 MAY 12

37

L12

STATUS

	INOP SYS
LDG DIST PROC.. APPLY .	GND SPLR 5

F/CTL GND SPLR / 1+2 / 3+4 / FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-F_CTL-S-00016968.0001001 / 21 MAR 16

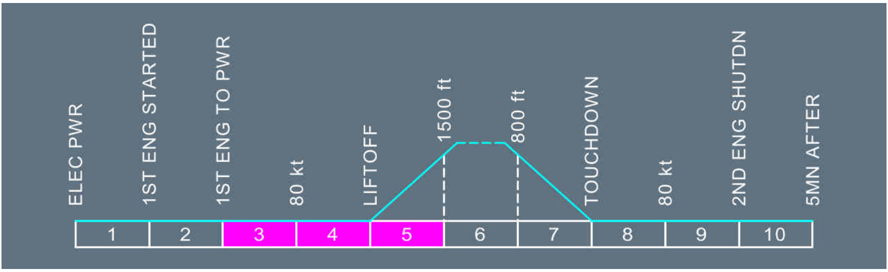
ANNUNCIATIONS

Triggering Conditions:

L2

- GND SPLR FAULT :
  Loss of ground spoiler function in SEC 1+3, or 1+2, or 2+3, or 1+2+3.
  If ground spoiler function is lost in SEC (1+2) or (1+3), one reverser is inoperative.
  If ground spoiler function is lost in SEC (1+2+3), both reversers are inoperative.
  In any case, the autobrake function is lost.
- GND SPLR 1+2(3+4) FAULT:
  Loss of ground spoiler function in SEC 3 (or 1).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-S-00018466.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

F/CTL GND SPLR / 1+2 / 3+4 / FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-S-00011793.0002001 / 04 NOV 20

38

STATUS

LDG DIST PROC.. APPLY

INOP SYS

GND SPLR (Affected)
AUTO BRK (1)

(1) *(If F/CTL GND SPLR FAULT is triggered)*

F/CTL GND SPLR / 1+2 / 3+4 / FAULT

Applicable to: MSN 01251

Ident.: PRO-ABN-F_CTL-S-00016968.0001001 / 21 MAR 16

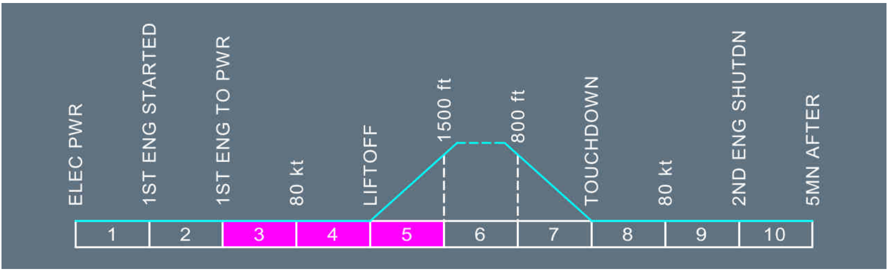
ANNUNCIATIONS

Triggering Conditions:

L2

- GND SPLR FAULT :
  Loss of ground spoiler function in SEC 1+3, or 1+2, or 2+3, or 1+2+3.
  If ground spoiler function is lost in SEC (1+2) or (1+3), one reverser is inoperative.
  If ground spoiler function is lost in SEC (1+2+3), both reversers are inoperative.
  In any case, the autobrake function is lost.
- GND SPLR 1+2(3+4) FAULT:
  Loss of ground spoiler function in SEC 3 (or 1).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-S-00018466.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-F_CTL-S-00011793.0001001 / 11 MAY 12

STATUS

LDG DIST PROC.. APPLY

INOP SYS

GND SPLR (affected)

F/CTL GND SPLR / 1+2 / 3+4 / FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-F_CTL-S-00016968.0001001 / 21 MAR 16

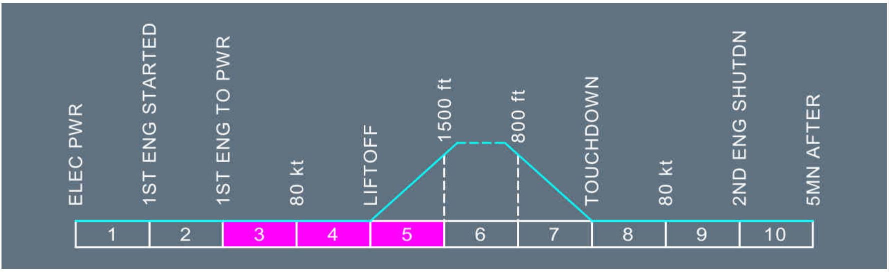
ANNUNCIATIONS

Triggering Conditions:

L2

- GND SPLR FAULT :
  Loss of ground spoiler function in SEC 1+3, or 1+2, or 2+3, or 1+2+3.
  If ground spoiler function is lost in SEC (1+2) or (1+3), one reverser is inoperative.
  If ground spoiler function is lost in SEC (1+2+3), both reversers are inoperative.
  In any case, the autobrake function is lost.
- GND SPLR 1+2(3+4) FAULT:
  Loss of ground spoiler function in SEC 3 (or 1).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-S-00018466.0001001 / 21 MAR 16

Crew awareness.

F/CTL GND SPLR NOT ARMED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-F_CTL-AJ-00016966.0001001 / 21 MAR 16

39

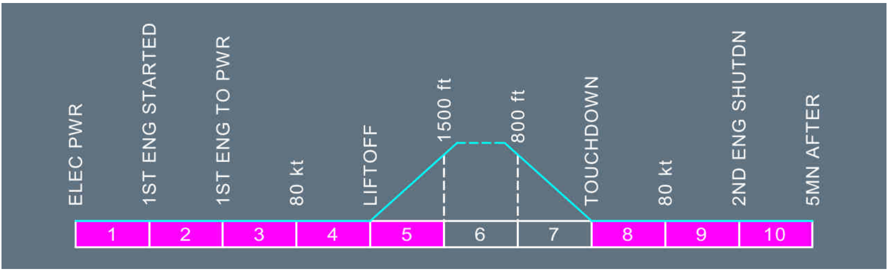
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when ground spoilers are not armed before landing.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-AJ-00018905.0001001 / 21 MAR 16

40

Crew awareness.

F/CTL L(R) AIL FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

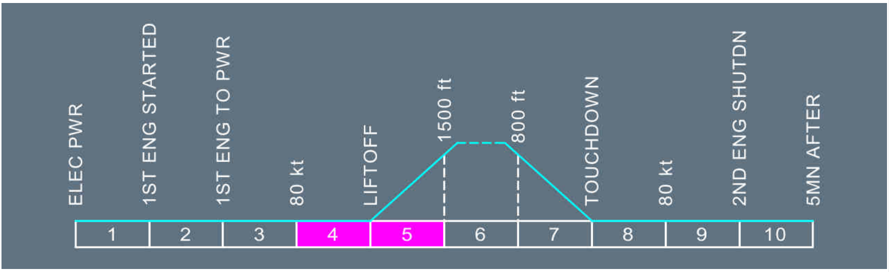
Ident.: PRO-ABN-F_CTL-N-00016975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one aileron.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
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Ident.: PRO-ABN-F_CTL-N-00018474.0002001 / 21 MAR 16

41

Crew awareness.

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL L(R) AIL FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-N-00011783.0003001 / 17 MAY 21

42

L12

STATUS

	INOP SYS
FUEL CONSUMPT INCRSD *See* [(1)] FMS PRED UNRELIABLE *See* [(2)]	L (R) AIL

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL L(R) AIL FAULT

Applicable to: MSN 01251

Ident.: PRO-ABN-F_CTL-N-00016975.0001001 / 21 MAR 16

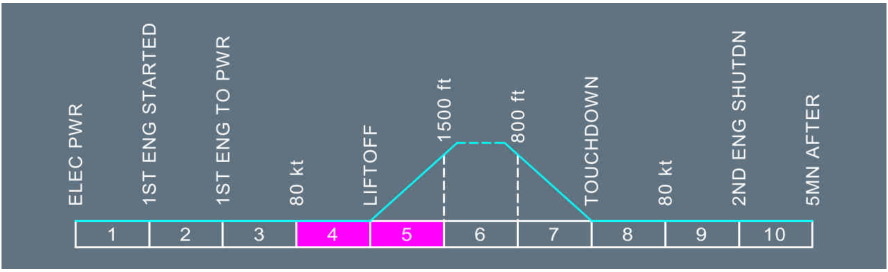
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when there is a loss of both servojacks on one aileron.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL L(R) AIL FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-N-00018474.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-F_CTL-N-00011783.0001001 / 17 MAY 21

L12

STATUS

INOP SYS

L (R) AIL

Note: With one or both aileron fault(s), fuel consumption is increased. Disregard FMS predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

F/CTL L(R) AIL FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

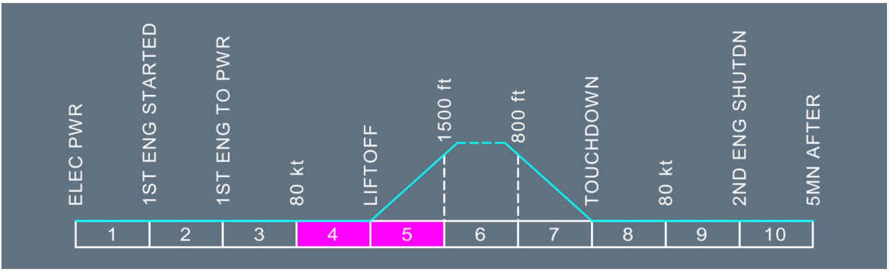
Ident.: PRO-ABN-F_CTL-N-00016975.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one aileron.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL L(R) ELEV FAULT

Applicable to: MSN 01143-01246, 01376-01459, 02734, 02924-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-06536, 06592-07098

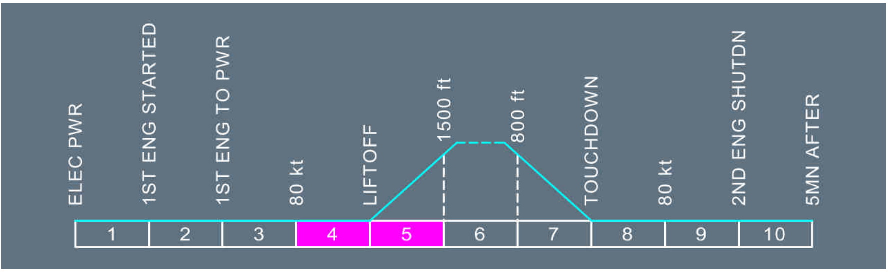
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:



Ident.: PRO-ABN-F_CTL-Q-00018484.0003001 / 22 MAR 17

MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Note:* *If the L(R) elevator fails, the ELACs lose pitch control through the elevator. Therefore, the SECs control pitch in alternate law. This is not the case, if the right elevator is lost, due to the failure of B+Y hydraulic circuits. Pitch normal law remains active in ELAC.*

L1 MAX SPEED...320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

L1 SPD BRK...DO NOT USE

Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018490.0007001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT
MANEUVER WITH CARE
SPD BRK..DO NOT USE
FOR GA: MAX PITCH 15 DEG

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Will be displayed, when flaps in CONF 3.

APPR SPD..VREF+10 KT
LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L (R) ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND
STEEP APPR

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL L(R) ELEV FAULT

Applicable to: MSN 01251

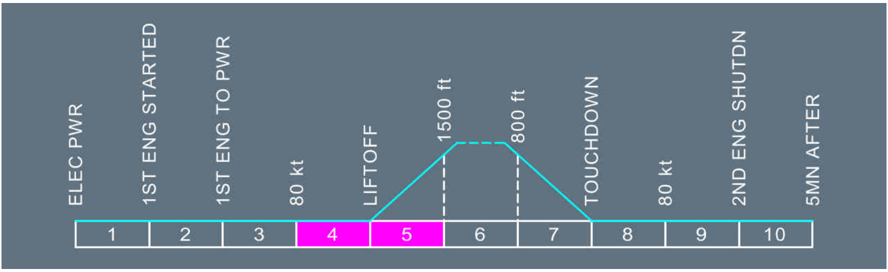
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-Q-00018484.0001001 / 22 MAR 17

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Note:* *If the L(R) elevator fails, the ELACs loose pitch control through the elevator. Therefore, the SECs control pitch in alternate law. This is not the case, if the right elevator is lost, due to the failure of B+Y hydraulic circuits. Pitch normal law remains active in ELAC.*

L1 MAX SPEED..320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

L1 SPD BRK..DO NOT USE

Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018490.0002001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT
SPD BRK...DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3...ON

Will be displayed, when flaps in CONF 3.

APPR SPD...VREF+10 KT
LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L (R) ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND ◁*
STEEP APPR ◁*

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll.Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL L(R) ELEV FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

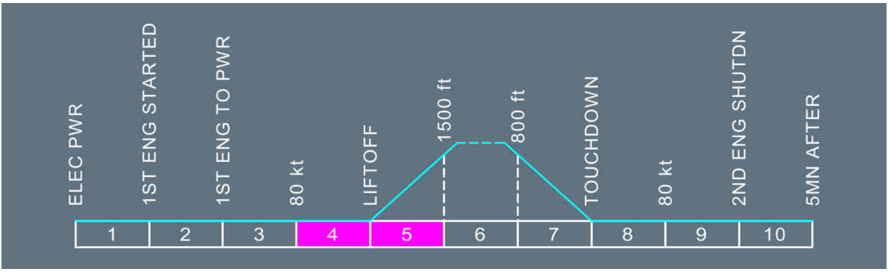
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-Q-00018484.0003001 / 22 MAR 17

MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Note: *If the L(R) elevator fails, the ELACs lose pitch control through the elevator. Therefore, the SECs control pitch in alternate law. This is not the case, if the right elevator is lost, due to the failure of B+Y hydraulic circuits. Pitch normal law remains active in ELAC.*

L1 MAX SPEED.......................................320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

L1 SPD BRK.......................................DO NOT USE

Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018490.0008001 / 21 MAR 17

L12

STATUS

MAX SPEED.. 320 KT
MANEUVER WITH CARE
SPD BRK..DO NOT USE
FOR GA: MAX PITCH 15 DEG

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed, when flaps in CONF 3.

APPR SPD..VREF+15 KT
LDG DIST PROC... APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L (R) ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND ⊲✻
STEEP APPR ⊲✻

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll.Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL L(R) ELEV FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

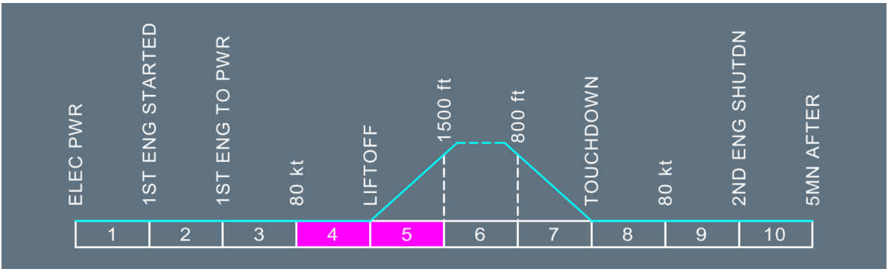
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL L(R) ELEV FAULT

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

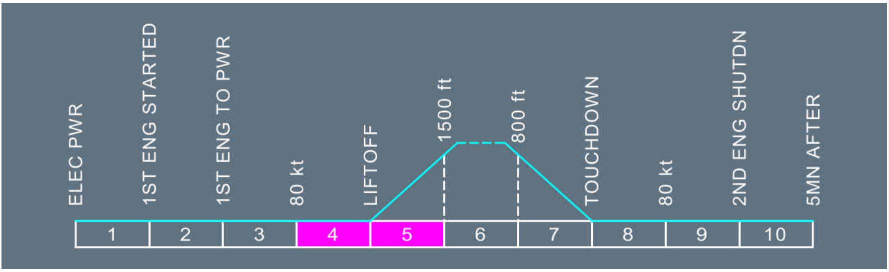
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:



Ident.: PRO-ABN-F_CTL-Q-00018484.0003001 / 22 MAR 17

MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Note:* *If the L(R) elevator fails, the ELACs lose pitch control through the elevator. Therefore, the SECs control pitch in alternate law. This is not the case, if the right elevator is lost, due to the failure of B+Y hydraulic circuits. Pitch normal law remains active in ELAC.*

L1 MAX SPEED....................320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

L1 SPD BRK....................DO NOT USE

Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018490.0012001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT
MANEUVER WITH CARE
SPD BRK..DO NOT USE
FOR GA: MAX PITCH 15 DEG

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed, when flaps in CONF 3.

APPR SPD...VREF+15 KT
LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L (R) ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL L(R) ELEV FAULT

Applicable to: MSN 02014, 06561

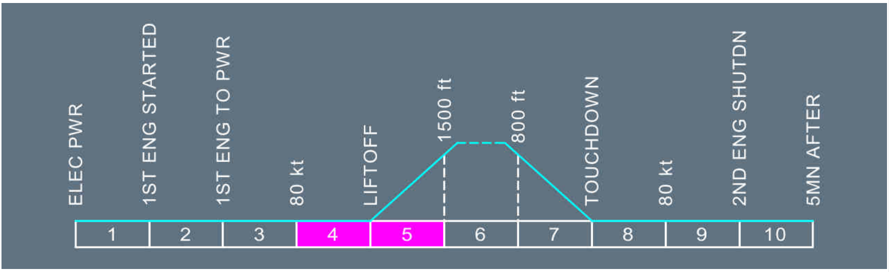
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-Q-00018484.0001001 / 22 MAR 17

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Note:* *If the L(R) elevator fails, the ELACs loose pitch control through the elevator. Therefore, the SECs control pitch in alternate law. This is not the case, if the right elevator is lost, due to the failure of B+Y hydraulic circuits. Pitch normal law remains active in ELAC.*

L1 MAX SPEED....................320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

L1 SPD BRK....................DO NOT USE

Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018490.0003001 / 22 MAR 17

L12

STATUS

MAX SPEED... 320 KT
SPD BRK...DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed, when flaps in CONF 3.

APPR SPD...VREF+10 KT
LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L (R) ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND
STEEP APPR

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL L(R) ELEV FAULT

Applicable to: MSN 08495-08596, 09190-09324

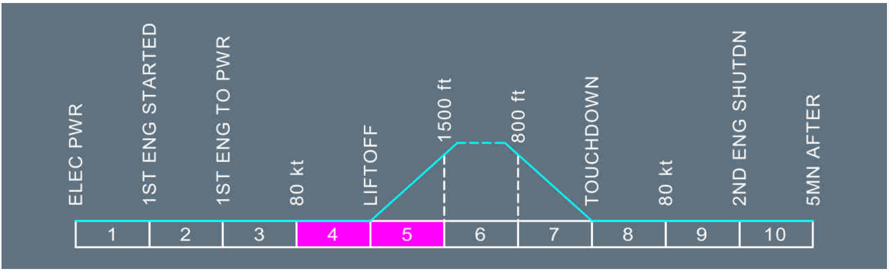
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-Q-00018484.0002001 / 21 MAR 16

MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Note:* *If the L(R) elevator fails, the ELACs loose pitch control through the elevator. Therefore, the SECs control pitch in alternate law. This is not the case, if the right elevator is lost, due to the failure of B+Y hydraulic circuits. Pitch normal law remains active in ELAC.*

L1 MAX SPEED...320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

L1 SPD BRK...DO NOT USE

Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018490.0006001 / 21 MAR 17

L12

STATUS

MAX SPEED.......................... 320 KT
MANEUVER WITH CARE
SPD BRK..........................DO NOT USE
FOR GA: MAX PITCH 15 DEG

APPR PROC

FOR LDG.......................... USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..........................ON

Will be displayed, when flaps in CONF 3.

APPR SPD..........................VREF+25 KT
LDG DIST PROC.......................... APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L (R) ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND
STEEP APPR

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL L(R) ELEV FAULT

Applicable to: MSN 08635, 10949-11597

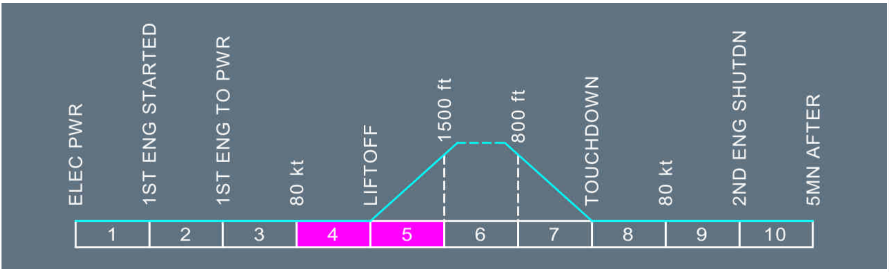
Ident.: PRO-ABN-F_CTL-Q-00016974.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of both servojacks on one elevator, or activation of elevator flutter protection in ELAC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018484.0006001 / 19 APR 19

43

MANEUVER WITH CARE

- **FOR GO-AROUND**

  MAX PITCH 15 DEG

  THR LVR.. TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Note: *If the L(R) elevator fails, the ELACs loose pitch control through the elevator. Therefore, the SECs control pitch in alternate law. This is not the case, if the right elevator is lost, due to the failure of B+Y hydraulic circuits. Pitch normal law remains active in ELAC.*

L1 MAX SPEED..320 KT

L2 *Speed is limited, due to the loss of high-speed protection.*

L1 SPD BRK...DO NOT USE

Continued on the following page

F/CTL L(R) ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-Q-00018490.0025001 / 03 MAR 20

44

L12

STATUS

MAX SPEED.. 320 KT
MANEUVER WITH CARE
SPD BRK...DO NOT USE

- **FOR GO-AROUND**
  MAX PITCH 15 DEG

THR LVR...TOGA THEN MCT

This line is not displayed if one engine is inoperative.

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by “FOR LDG : FLAP LVR 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed, when flaps in CONF 3.

APPR SPD...VREF+25 KT
LDG DIST PROC... APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
L (R) ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND ◁✳
STEEP APPR ◁✳

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll.Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

F/CTL L+R ELEV FAULT

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

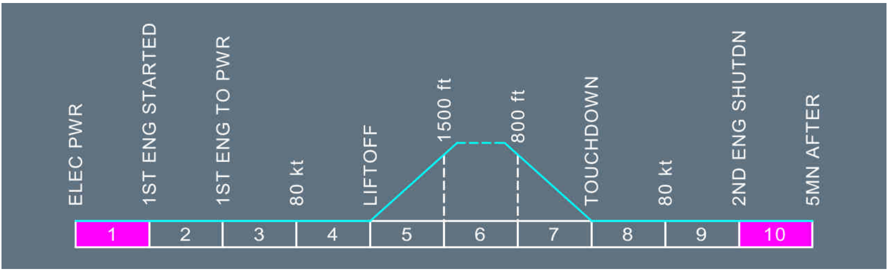
Ident.: PRO-ABN-F_CTL-O-00016958.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both elevators are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-O-00018491.0001001 / 22 MAR 17

MAX SPEED....................320/.77

L2 *Due to loss of high speed protections.*

L1 MAN PITCH TRIM....................USE

L2 *Only manual trim is available for pitch control.*

L1 SPD BRK....................DO NOT USE

L2 *Do not use speed brakes, because it is difficult to control the induced pitch moment with manual pitch trim only.*

Continued on the following page

F/CTL L+R ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-O-00018492.0006001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320/.77
SPD BRK..DO NOT USE

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder

GPWS LDG FLAP 3...ON

Will be displayed when flaps in CONF 3.

MAN PITCH TRIM...USE
APPR SPD.. VREF+10
LDG DIST PROC.. APPLY

PITCH MECH BACK UP
ROLL DIRECT LAW

INOP SYS

L+R ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND ◁*
STEEP APPR ◁*

F/CTL L+R ELEV FAULT

Applicable to: MSN 01251

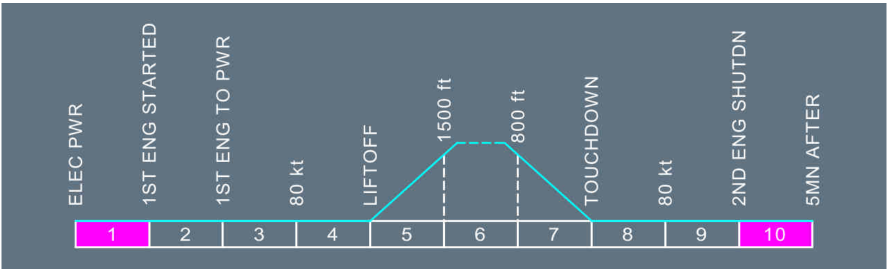
Ident.: PRO-ABN-F_CTL-O-00016958.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both elevators are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-O-00018491.0001001 / 22 MAR 17

MAX SPEED....................320/.77

L2 *Due to loss of high speed protections.*

L1 MAN PITCH TRIM.................... USE

L2 *Only manual trim is available for pitch control.*

L1 SPD BRK....................DO NOT USE

L2 *Do not use speed brakes, because it is difficult to control the induced pitch moment with manual pitch trim only.*

Continued on the following page

F/CTL L+R ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-O-00018492.0002001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320/.77
SPD BRK..DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Will be displayed when flaps in CONF 3.

MAN PITCH TRIM..USE
APPR SPD.. VREF+10
LDG DIST PROC.. APPLY

PITCH MECH BACK UP
ROLL DIRECT LAW

INOP SYS

L + R ELEV
ELAC PITCH
AP 1 + 2
CAT 2
GLS AUTOLAND
STEEP APPR

F/CTL L+R ELEV FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904, 08495-08596, 09190-09324

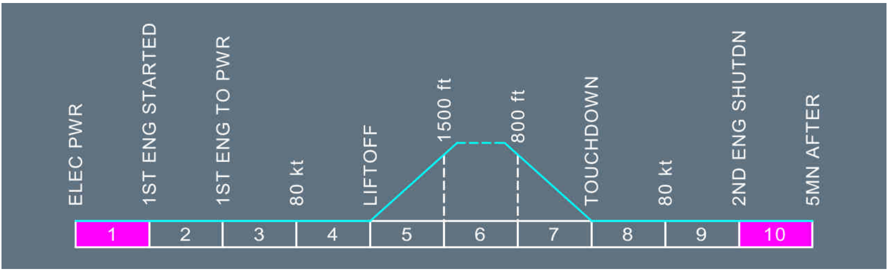
Ident.: PRO-ABN-F_CTL-O-00016958.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both elevators are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-O-00018491.0001001 / 22 MAR 17

MAX SPEED..320/.77

L2 *Due to loss of high speed protections.*

L1 MAN PITCH TRIM.. USE

L2 *Only manual trim is available for pitch control.*

L1 SPD BRK..DO NOT USE

L2 *Do not use speed brakes, because it is difficult to control the induced pitch moment with manual pitch trim only.*

Continued on the following page

F/CTL L+R ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-O-00018492.0014001 / 21 MAR 16

L12

STATUS

MAX SPEED.. 320/.77
SPD BRK...DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed when flaps in CONF 3.

MAN PITCH TRIM... USE
APPR SPD..VREF+15 KT
LDG DIST PROC... APPLY

PITCH MECH BACK UP
ROLL DIRECT LAW

INOP SYS

L+R ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND
STEEP APPR

F/CTL L+R ELEV FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

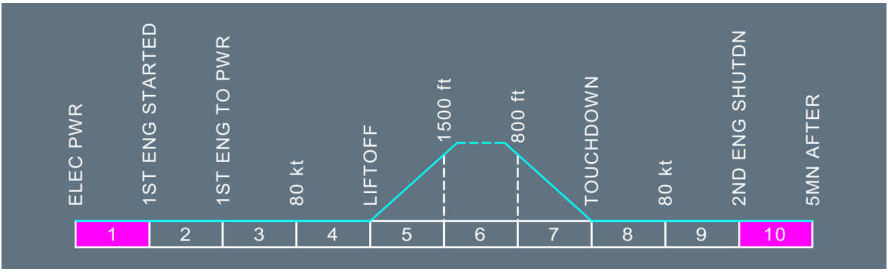
Ident.: PRO-ABN-F_CTL-O-00016958.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both elevators are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-O-00018491.0001001 / 22 MAR 17

MAX SPEED..320/.77

L2 *Due to loss of high speed protections.*

L1 MAN PITCH TRIM...USE

L2 *Only manual trim is available for pitch control.*

L1 SPD BRK...DO NOT USE

L2 *Do not use speed brakes, because it is difficult to control the induced pitch moment with manual pitch trim only.*

F/CTL L+R ELEV FAULT

Applicable to: MSN 08635, 10949-11597

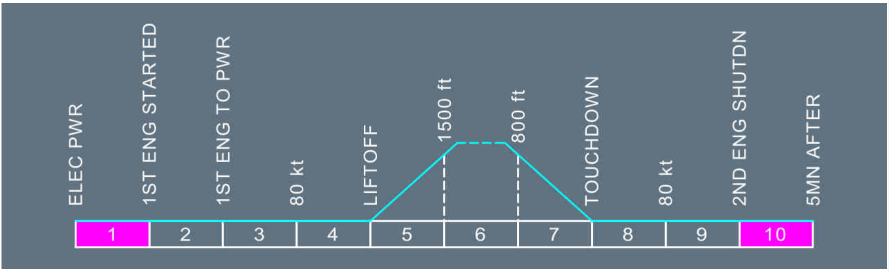
Ident.: PRO-ABN-F_CTL-O-00016958.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both elevators are lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-O-00018491.0001001 / 22 MAR 17

MAX SPEED....................320/.77

L2 *Due to loss of high speed protections.*

L1 MAN PITCH TRIM....................USE

L2 *Only manual trim is available for pitch control.*

L1 SPD BRK....................DO NOT USE

L2 *Do not use speed brakes, because it is difficult to control the induced pitch moment with manual pitch trim only.*

Continued on the following page

F/CTL L+R ELEV FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-O-00018492.0027001 / 24 MAR 20

45

L12

STATUS

MAX SPEED... 320/.77
SPD BRK...DO NOT USE

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

MAN PITCH TRIM..USE
APPR SPD..VREF + 15 KT
LDG DIST PROC... APPLY

PITCH MECH BACK UP
ROLL DIRECT LAW

INOP SYS

L+R ELEV
ELAC PITCH
AP 1+2
CAT 2
GLS AUTOLAND
STEEP APPR

F/CTL L(R) SIDESTICK FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

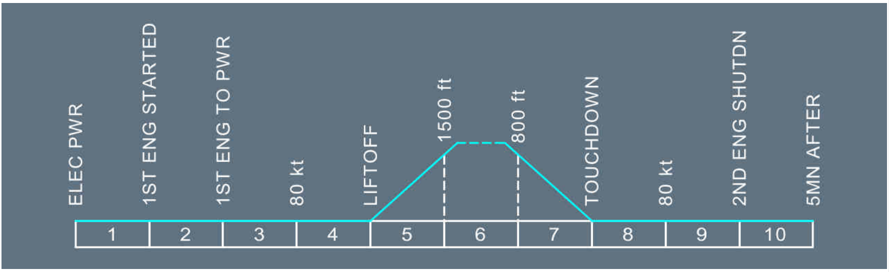
Ident.: PRO-ABN-F_CTL-Y-00016959.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when transducers, on pitch or roll axis, are failed on one sidestick.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-Y-00011756.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-F_CTL-Y-00014250.0001001 / 30 MAR 12

46

STATUS

INOP SYS

L(R) SIDESTICK

F/CTL L(R) SIDESTICK FAULT

Applicable to: MSN 01251, 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

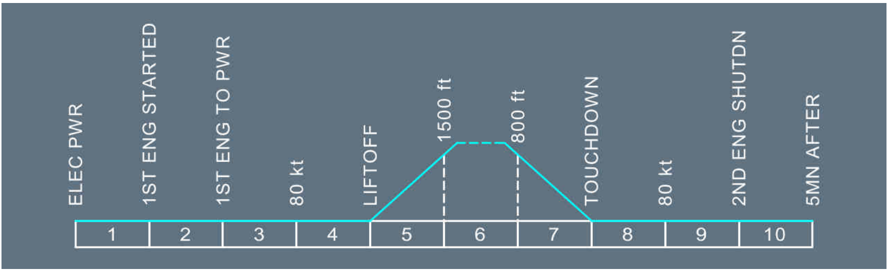
Ident.: PRO-ABN-F_CTL-Y-00016959.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when transducers, on pitch or roll axis, are failed on one sidestick.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-Y-00011756.0001001 / 25 FEB 14

Crew awareness.

F/CTL PITCH TRIM/MCDU/CG DISAGREE

Applicable to: MSN 01143-01246, 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014

Ident.: PRO-ABN-F_CTL-AL-00016956.0001001 / 28 MAY 20

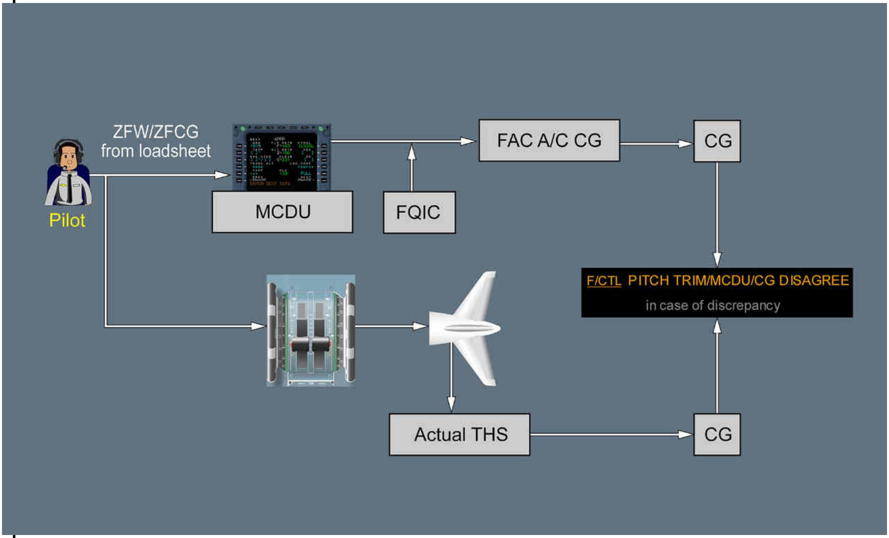
47

ANNUNCIATIONS

Triggering Conditions:

L2 When the TO CONFIG pb on the ECP is pressed, or when the thrust levers are set to FLEX or TOGA, there is a discrepancy between:
- The actual pitch trim value from THSA
- The pitch trim value calculated by the FAC, based on the CG.

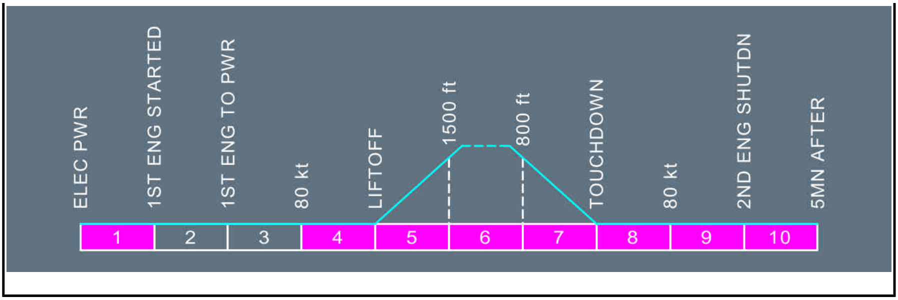
Pitch Trim / MCDU / CG Disagree


ZFW/ZFCG
from loadsheet
Pilot
MCDU
FQIC
FAC A/C CG
CG
F/CTL PITCH TRIM/MCDU/CG DISAGREE
in case of discrepancy
Actual THS
CG

Flight Phase Inhibition:

Continued on the following page

F/CTL PITCH TRIM/MCDU/CG DISAGREE (Cont'd)


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-AL-00018906.0025001 / 06 AUG 18

48

Crew awareness.

L2 The flight crew checks the LOADSHEET data, the FMS entries and the trim setting.

F/CTL PITCH TRIM/MCDU/CG DISAGREE

Applicable to: MSN 01459, 02321

Ident.: PRO-ABN-F_CTL-AL-00016956.0002001 / 28 MAY 20

49

ANNUNCIATIONS

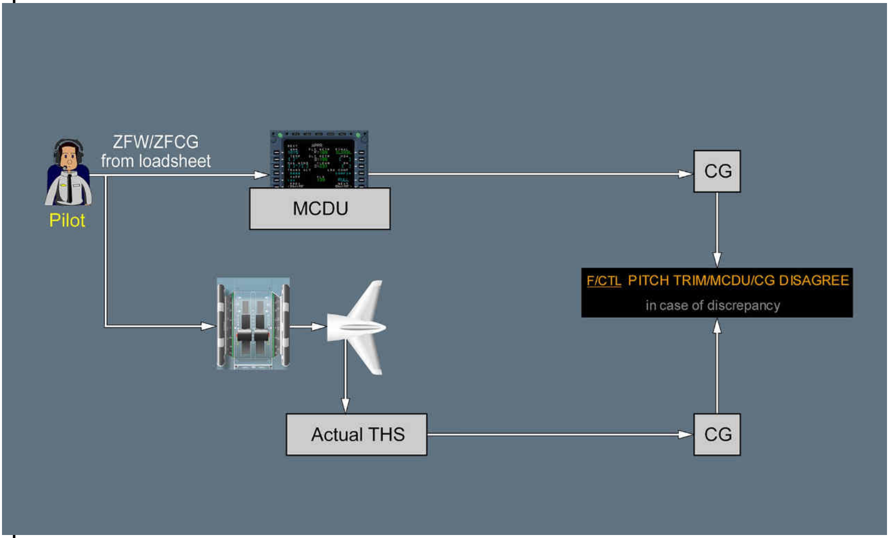
Triggering Conditions:

L2

When the TO CONFIG pb on the ECP is pressed, or when the thrust levers are set to FLEX or TOGA, there is a discrepancy between:

- The actual pitch trim value from THSA
- The pitch trim value entered by crew in the MCDU.

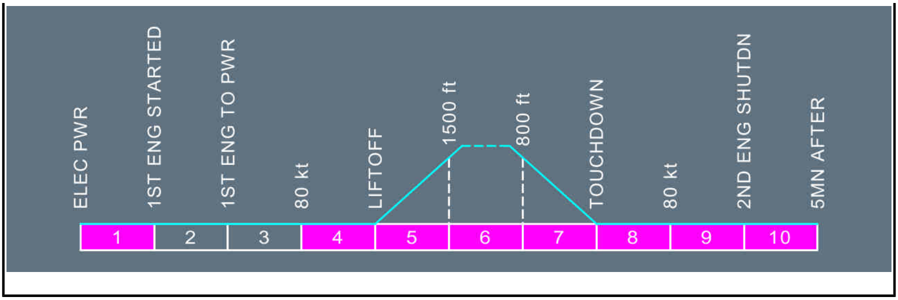
Pitch Trim / MCDU / CG Disagree


ZFW/ZFCG
from loadsheet
Pilot
MCDU
CG
F/CTL PITCH TRIM/MCDU/CG DISAGREE
in case of discrepancy
Actual THS
CG

Flight Phase Inhibition:

Continued on the following page

F/CTL PITCH TRIM/MCDU/CG DISAGREE (Cont'd)


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-AL-00018906.0025001 / 06 AUG 18

50

Crew awareness.

L2 The flight crew checks the LOADSHEET data, the FMS entries and the trim setting.

F/CTL PITCH TRIM/MCDU/CG DISAGREE

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-F_CTL-AL-00016956.0003001 / 28 MAY 20

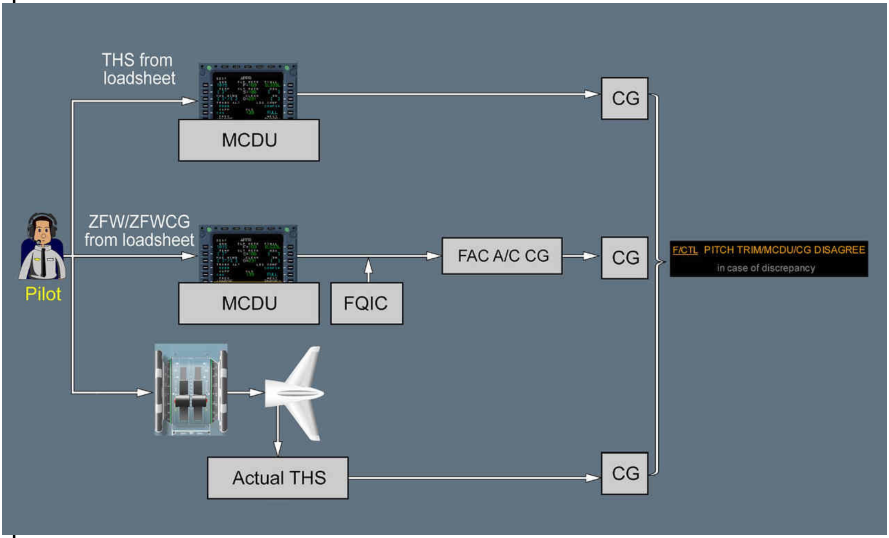
51

ANNUNCIATIONS

Triggering Conditions:

L2 When the TO CONFIG pb on the ECP is pressed, or when the thrust levers are set to FLEX or TOGA, there is a discrepancy between:
- The actual pitch trim value from THSA
- The pitch trim value calculated by the FAC, based on the CG
- The pitch trim value entered by crew in the MCDU.

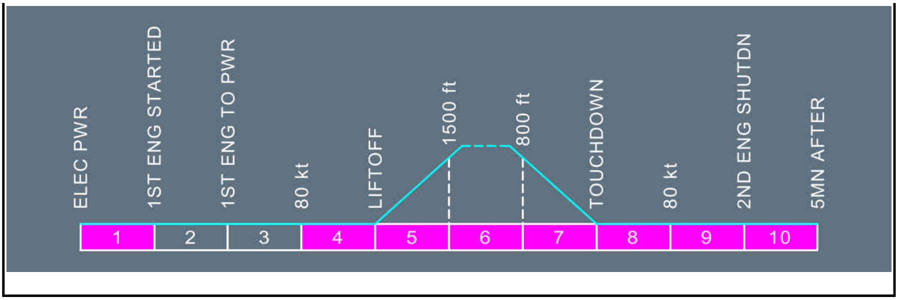
Pitch Trim / MCDU /CG Disagree


THS from loadsheet
MCDU
CG
ZFW/ZFWCG from loadsheet
Pilot
MCDU
FQIC
FAC A/C CG
CG
F/CTL PITCH TRIM/MCDU/CG DISAGREE
in case of discrepancy
Actual THS
CG

Flight Phase Inhibition:

Continued on the following page

F/CTL PITCH TRIM/MCDU/CG DISAGREE (Cont'd)


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
6
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8
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10

Ident.: PRO-ABN-F_CTL-AL-00018906.0025001 / 06 AUG 18

52

Crew awareness.

L2 The flight crew checks the LOADSHEET data, the FMS entries and the trim setting.

F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 01143-01246, 01376-01459, 02014, 02734, 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

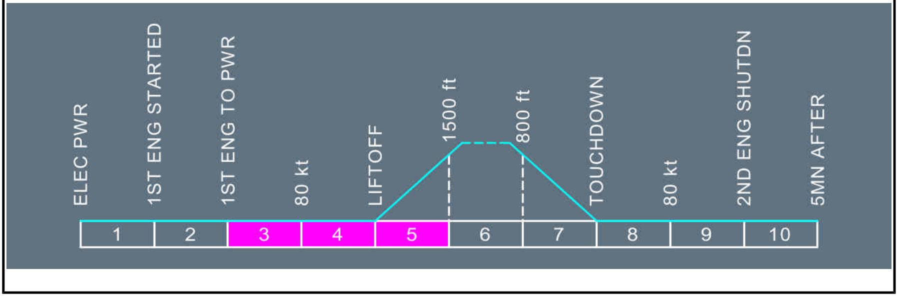
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
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Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018502.0002001 / 21 MAR 16

53

SEC (AFFECTED)....................OFF THEN ON

- **IF UNSUCCESSFUL:**

  SEC (AFFECTED)....................OFF

L2 *Associated spoilers are lost.*
If all spoilers are inoperative (3 SECs failed), roll direct law and pitch alternate law become active.

L1 SPD BRK (IF SEC 1 AFFECTED)....................DO NOT USE

L2 *VLS would not be corrected, if speed brakes 2 extend (no speed brake position sent to FACs).*

L1
- **If SEC 1 + 2 + 3 fail**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
PROT LOST

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018504.0004001 / 18 NOV 21

L12

STATUS

SPD BRK..DO NOT USE

If SEC 1 is affected.

- **If SEC 1 + 2 + 3 fail:**

  FOR LDG...USE FLAP 3

  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

  APPR SPD...VREF + 10KT

LDG DIST PROC...APPLY

- **If SEC 1 + 2 + 3 fail:**

  ALTN LAW: PROT LOST

  CAT 3 SINGLE ONLY

- **If no AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN: DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.

- **If AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN AND AP OFF: DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.

INOP SYS

F/CTL PROT (1)
SPLR (associated)
SEC (affected)
REVERSER 1(2) (2)
AUTO BRK (3)
STEEP APPR ◁ (4)
CAT 3 DUAL (5)

---

(1) *(If SEC 1 + 2 + 3 fail.)*

(2) *(If SEC 1 + 2 fail, reverser 1 is not available for landing. If SEC 1 + 3 fail, reverser 2 is not available for landing.)*

(3) *(If at least 2 SECs fail.)*

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

(4) *(If at least SEC 1 fails.)*
(5) *(If SEC 1+2+3 fail.)*

F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 01251

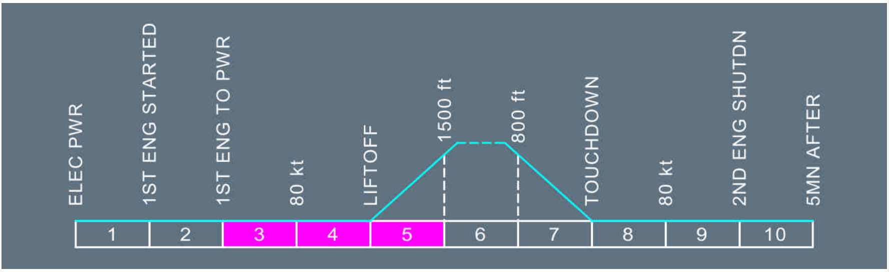
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
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Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018502.0002001 / 21 MAR 16

54

SEC (AFFECTED)..OFF THEN ON

- **IF UNSUCCESSFUL:**

  SEC (AFFECTED)..OFF

  L2 *Associated spoilers are lost.*
  If all spoilers are inoperative (3 SECs failed), roll direct law and pitch alternate law become active.

  L1 SPD BRK (IF SEC 1 AFFECTED)..DO NOT USE

  L2 *VLS would not be corrected, if speed brakes 2 extend (no speed brake position sent to FACs).*

L1
- **If SEC 1 + 2 + 3 fail**

  ASSOCIATED PROCEDURES

  F/CTL ALTN LAW
  PROT LOST

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018504.0002001 / 18 NOV 21

L12

STATUS

SPD BRK...DO NOT USE

If SEC 1 is affected.

- **If SEC 1 + 2 + 3 fail:**

  FOR LDG...USE FLAP 3

  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

  APPR SPD...VREF + 10KT

LDG DIST PROC... APPLY

For A319/A320/A321 aircraft, this line is not displayed if only SEC 2 is affected.

- **If SEC 1 + 2 + 3 fail:**

  ALTN LAW: PROT LOST

  CAT 3 SINGLE ONLY

- **If no AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN: DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition "slats and flaps in CONF 2", instead of "landing gear down".

- **If AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN AND AP OFF: DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition "slats and flaps in CONF 2", instead of "landing gear down".

INOP SYS

F/CTL PROT (1)
SPLR (associated)
SEC (affected)
REVERSER 1(2) (2)
AUTO BRK (3)
STEEP APPR (4)
CAT 3 DUAL (5)

---

(1) *(If SEC 1 + 2 + 3 fail.)*

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

(2) *(If SEC 1 + 2 fail, reverser 1 is not available for landing. If SEC 1 + 3 fail, reverser 2 is not available for landing.)*

(3) *(If at least 2 SECs fail.)*

(4) *(If at least SEC 1 fails.)*

(5) *(If SEC 1+2+3 fail.)*

F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

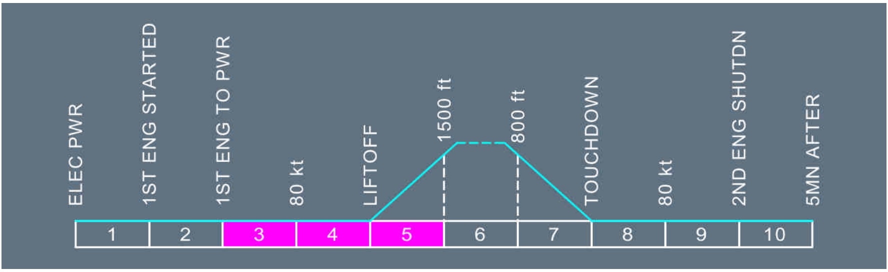
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
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Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018502.0002001 / 21 MAR 16

55

SEC (AFFECTED)...OFF THEN ON

● **IF UNSUCCESSFUL:**

SEC (AFFECTED).. OFF

L2 *Associated spoilers are lost.*
If all spoilers are inoperative (3 SECs failed), roll direct law and pitch alternate law become active.

L1 SPD BRK (IF SEC 1 AFFECTED)..DO NOT USE

L2 *VLS would not be corrected, if speed brakes 2 extend (no speed brake position sent to FACs).*

L1 ● **If SEC 1 + 2 + 3 fail**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
PROT LOST

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018504.0010001 / 18 NOV 21

L12

STATUS

SPD BRK..DO NOT USE

If SEC 1 is affected.

- **If SEC 1 + 2 + 3 fail:**

  FOR LDG..USE FLAP 3

  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

  APPR SPD.. VREF+15KT

LDG DIST PROC.. APPLY

- **If SEC 1 + 2 + 3 fail:**

  ALTN LAW: PROT LOST

  CAT 3 SINGLE ONLY
- **If no AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN : DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.
- **If AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN AND AP OFF : DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.

INOP SYS

F/CTL PROT (1)
SPLR (associated)
SEC (affected)
REVERSER 1(2) (2)
AUTO BRK (3)
STEEP APPR (4)
CAT 3 DUAL (5)

---

(1) *(If SEC 1 + 2 + 3 fail.)*

(2) *(If SEC 1 + 2 fail, reverser 1 is not available for landing. If SEC 1 + 3 fail, reverser 2 is not available for landing.)*

(3) *(If at least 2 SECs fail.)*

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

(4) *(If at least SEC 1 fails.)*
(5) *(If SEC 1+2+3 fail.)*

F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

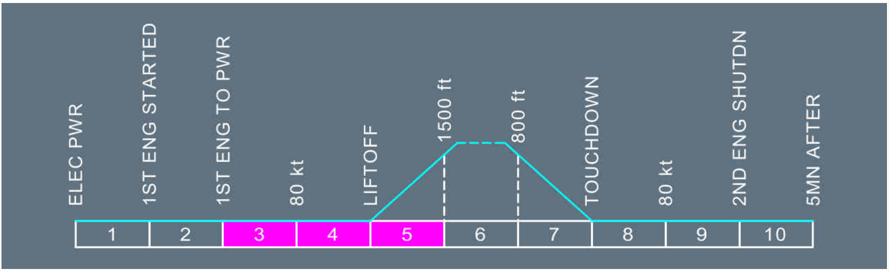
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

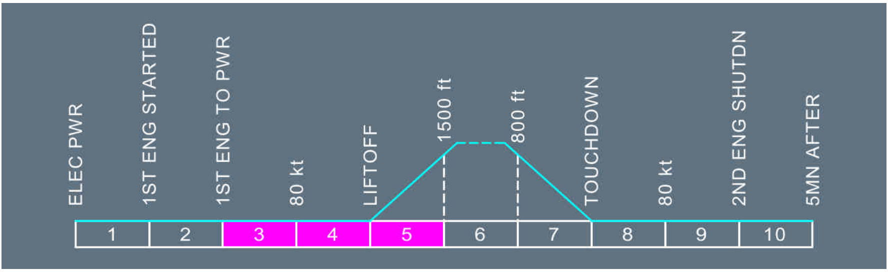
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018502.0001001 / 21 MAR 16

56

SEC (AFFECTED)..OFF THEN ON

- **IF UNSUCCESSFUL:**

  SEC (AFFECTED)..OFF

  L2 *Associated spoilers are lost. If SEC 1 or 2 fails, LAF is degraded (A320 with LAF only).*
  If all spoilers are inoperative (3 SECs failed), roll direct law and pitch alternate law become active.

  L1 SPD BRK (IF SEC 1 AFFECTED)..DO NOT USE

  L2 *VLS would not be corrected, if speed brakes 2 extend (no speed brake position sent to FACs).*

- L1 **If SEC 1 + 2 + 3 fail.**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018504.0004001 / 18 NOV 21

L12

STATUS

SPD BRK..DO NOT USE

If SEC 1 is affected.

- **If SEC 1 + 2 + 3 fail:**

  FOR LDG..USE FLAP 3

  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

  APPR SPD..VREF + 10KT

LDG DIST PROC.. APPLY

- **If SEC 1 + 2 + 3 fail:**

  ALTN LAW: PROT LOST

  CAT 3 SINGLE ONLY

- **If no AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN: DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.

- **If AP engaged and SEC 1 + 2 + 3 fail:**

  WHEN L/G DN AND AP OFF: DIRECT LAW

  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.

INOP SYS

F/CTL PROT (1)
SPLR (associated)
SEC (affected)
REVERSER 1(2) (2)
AUTO BRK (3)
STEEP APPR ◁ (4)
CAT 3 DUAL (5)

---

(1) *(If SEC 1 + 2 + 3 fail.)*

(2) *(If SEC 1 + 2 fail, reverser 1 is not available for landing. If SEC 1 + 3 fail, reverser 2 is not available for landing.)*

(3) *(If at least 2 SECs fail.)*

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

(4) *(If at least SEC 1 fails.)*
(5) *(If SEC 1+2+3 fail.)*

F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 08495-08596, 09190-09324

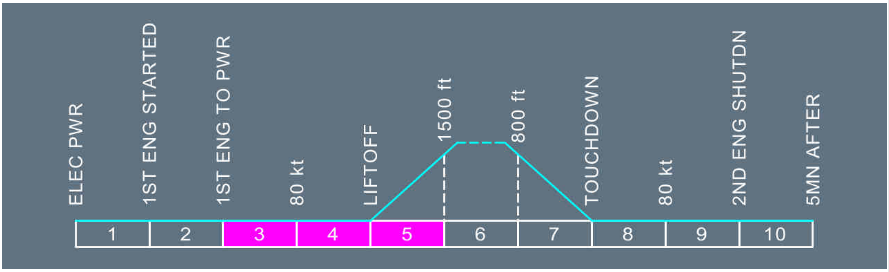
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018502.0002001 / 21 MAR 16

57

SEC (AFFECTED)..OFF THEN ON

- **IF UNSUCCESSFUL:**

  SEC (AFFECTED)..OFF

L2 *Associated spoilers are lost.*
If all spoilers are inoperative (3 SECs failed), roll direct law and pitch alternate law become active.

L1 SPD BRK (IF SEC 1 AFFECTED)..DO NOT USE

L2 *VLS would not be corrected, if speed brakes 2 extend (no speed brake position sent to FACs).*

L1
- **If SEC 1 + 2 + 3 fail**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
PROT LOST

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018504.0011001 / 18 NOV 21

L12

STATUS

SPD BRK....................DO NOT USE

If SEC 1 is affected.

- **If SEC 1 + 2 + 3 fail:**
  FOR LDG....................USE FLAP 3
  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.
  APPR SPD....................VREF + 15KT

LDG DIST PROC.................... APPLY

- **If SEC 1 + 2 + 3 fail:**
  ALTN LAW: PROT LOST
  CAT 3 SINGLE ONLY
- **If no AP engaged and SEC 1 + 2 + 3 fail:**
  WHEN L/G DN: DIRECT LAW
  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.
- **If AP engaged and SEC 1 + 2 + 3 fail:**
  WHEN L/G DN AND AP OFF: DIRECT LAW
  If SEC 1 + 2 + 3 fail. In such a case, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2”, instead of “landing gear down”.

INOP SYS

F/CTL PROT (1)
SPLR (associated)
SEC (affected)
REVERSER 1(2) (2)
AUTO BRK (3)
CAT 3 DUAL (4)

---

(1) *(If SEC 1 + 2 + 3 fail.)*
(2) *(If SEC 1 + 2 fail, reverser 1 is not available for landing. If SEC 1 + 3 fail, reverser 2 is not available for landing.)*
(3) *(If at least 2 SECs fail.)*

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

(4) *(If SEC 1+2+3 fail.)*

F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 08635, 10949-11522, 11572-11597

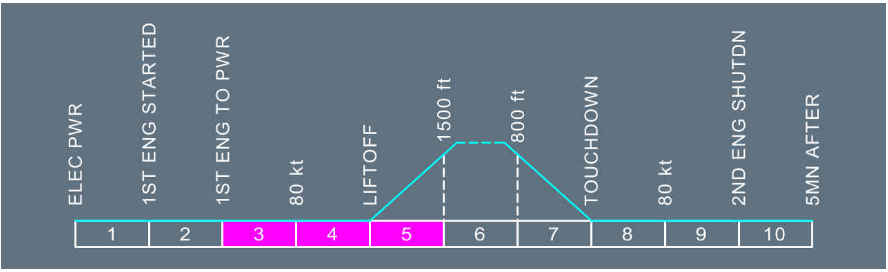
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018502.0002001 / 21 MAR 16

58

SEC (AFFECTED)..OFF THEN ON

- **IF UNSUCCESSFUL:**

  SEC (AFFECTED)..OFF

L2 *Associated spoilers are lost.*
If all spoilers are inoperative (3 SECs failed), roll direct law and pitch alternate law become active.

L1 SPD BRK (IF SEC 1 AFFECTED)..DO NOT USE

L2 *VLS would not be corrected, if speed brakes 2 extend (no speed brake position sent to FACs).*

L1
- **If SEC 1 + 2 + 3 fail**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
PROT LOST

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018504.0014001 / 18 NOV 21

59

L12

STATUS

- **If SEC 1 is affected:**
  SPD BRK.......................................DO NOT USE
- **If SEC 1+2+3 fail:**
  FOR LDG.......................................FLAP LVR 3
  This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.
  APPR SPD.......................................VREF + 15KT

LDG DIST PROC.......................................APPLY

If SEC 1+2+3 fail:
ALTN LAW: PROT LOST
CAT 3 SINGLE ONLY

- **If AP engaged:**
  WHEN L/G DN AND AP OFF: DIRECT LAW
- **If no AP engaged:**
  WHEN L/G DN: DIRECT LAW

See (5)

INOP SYS

F/CTL PROT (1)
SPLR (associated)
SEC (affected)
REVERSER 1(2) (2)
AUTO BRK (3)
STEEP APPR (4)
CAT 3 DUAL (1)

(1) *(If SEC 1+2+3 fail.)*
(2) *(If SEC 1+2(1+3) fail, reverser 1(2) is not available for landing.)*
(3) *(If at least 2 SECs fail.)*
(4) *(If F/CTL SEC 1 FAULT.)*
(5) *Note:* *If SEC 1+2+3 fail, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition “slats and flaps in CONF 2” instead of “landing gear down”.*

F/CTL SEC 1(2)(3) FAULT

Applicable to: MSN 11531

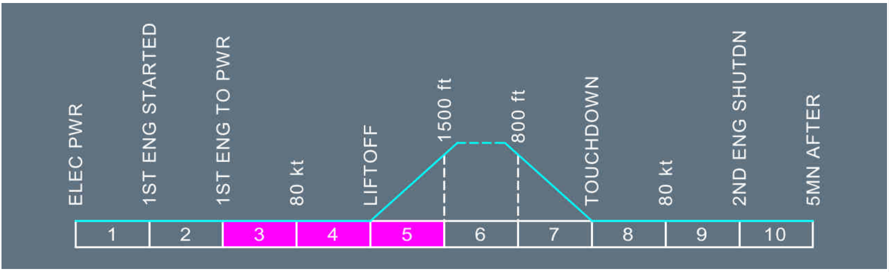
Ident.: PRO-ABN-F_CTL-I-00016961.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a failure of one SEC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-I-00018502.0001001 / 21 MAR 16

60

SEC (AFFECTED)..OFF THEN ON

- **IF UNSUCCESSFUL:**

  SEC (AFFECTED)..OFF

  L2 *Associated spoilers are lost. If SEC 1 or 2 fails, LAF is degraded (A320 with LAF only).*
  If all spoilers are inoperative (3 SECs failed), roll direct law and pitch alternate law become active.

  L1 SPD BRK (IF SEC 1 AFFECTED)..DO NOT USE

  L2 *VLS would not be corrected, if speed brakes 2 extend (no speed brake position sent to FACs).*

L1
- **If SEC 1 + 2 + 3 fail.**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

Continued on the following page

F/CTL SEC 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-I-00018504.0014001 / 18 NOV 21

61

L12

STATUS

- **If SEC 1 is affected:**
  SPD BRK.. DO NOT USE
- **If SEC 1+2+3 fail:**
  FOR LDG.. FLAP LVR 3
  This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.
  APPR SPD.. VREF + 15KT

LDG DIST PROC.. APPLY

If SEC 1+2+3 fail:
ALTN LAW: PROT LOST
CAT 3 SINGLE ONLY

- **If AP engaged:**
  WHEN L/G DN AND AP OFF: DIRECT LAW
- **If no AP engaged:**
  WHEN L/G DN: DIRECT LAW

See (5)

INOP SYS

F/CTL PROT (1)
SPLR (associated)
SEC (affected)
REVERSER 1(2) (2)
AUTO BRK (3)
STEEP APPR ◁✳ (4)
CAT 3 DUAL (1)

(1) *(If SEC 1+2+3 fail.)*
(2) *(If SEC 1+2(1+3) fail, reverser 1(2) is not available for landing.)*
(3) *(If at least 2 SECs fail.)*
(4) *(If F/CTL SEC 1 FAULT.)*
(5) *Note:* *If SEC 1+2+3 fail, the LGCIU information can no longer be sent to the ELAC. For the activation of DIRECT law, the ELAC uses the condition "slats and flaps in CONF 2" instead of "landing gear down".*

F/CTL SIDESTICK PRIORITY

Applicable to: ALL

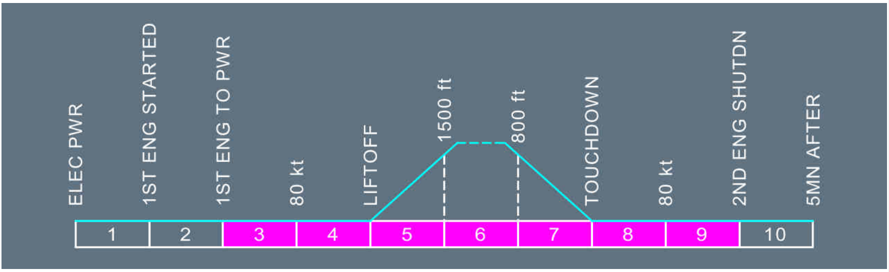
Ident.: PRO-ABN-F_CTL-AM-00016983.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is failure in a sidestick priority logic circuit.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SIDESTICK PRIORITY (Cont'd)

Ident.: PRO-ABN-F_CTL-AM-00018509.0001001 / 21 MAR 16

CHECK PRIORITY LOGIC

L2 Check the integrity of flight control priority, as follows (not displayed on ECAM) :

L1 ELAC 1 .... OFF THEN ON

L2 *Note:* *When the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*

L1 ELAC 2 .... OFF THEN ON

L2
- **If the warning disappears:**

  CAPT TAKE OVER pb .... PRESS (at least 3 seconds)

  Check that the :
  - *Aural "priority left" message is activated.*
  - *F/O red arrow light is on.*

  CAPT TAKE OVER pb .... RELEASE
  F/O TAKE OVER pb .... PRESS (at least 3 seconds)

  Check that the:
  - *Aural "priority right" message is activated*
  - *CAPT red arrow light is on.*

  F/O TAKE OVER pb .... RELEASE

  Check that the warning does not reappear.

  Note: *There is no need to move the sidestick for the check.*

- **If the warning does not disappear, or if the warning reappears after the above check:**

  Maintenance action is due.

F/CTL SLAT(FLAP) TIP BRK FAULT

Applicable to: ALL

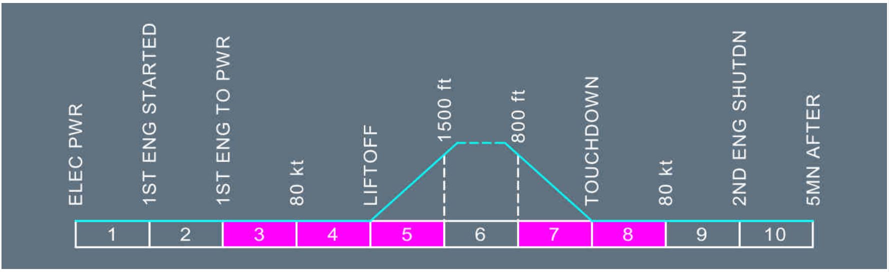
Ident.: PRO-ABN-F_CTL-AN-00016996.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is failure of one wing tip brake on slats or flaps, or failure of one wing tip brake solenoid on slats, or flaps.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-F_CTL-AN-00018510.0001001 / 21 MAR 16

Crew awareness.

F/CTL SLATS AND FLAPS FAULT IN CONF 0

Applicable to: MSN 01143-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

Ident.: PRO-ABN-F_CTL-C-00018511.0001001 / 22 MAR 17

FLAPS LEVER..RECYCLE

- **If both slat channels fail:**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED..320 KT

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

Ident.: PRO-ABN-F_CTL-C-00018512.0002001 / 22 MAR 17

L12

STATUS

MAX SPEED..320 KT

ALTN LAW: PROT LOST

APPR PROC

FOR LDG..USE FLAP 1

With FLAPS lever set at 1, AP/FD GO AROUND mode is available.

CTR TK PUMPS..OFF

GPWS FLAP MODE..OFF

APPR SPD..VREF +60 KT

Approach with A/THR in selected mode is recommended.

- **If both slat channels fail:**
  WHEN L/G DN: DIRECT LAW
- **AT 300 FT AGL:**
  TARGET SPD..VREF +50 KT
  Reduce speed between 500 ft and 300 ft to reach VREF +50 kt at runway threshold, and disconnect A/THR, as the target speed may be below VLS.
  LDG DIST PROC..APPLY
- **Only in case of FLAPS FAULT:**
  ENG 1 APPR IDLE ONLY
  ENG 2 APPR IDLE ONLY

INOP SYS

F/CTL PROT (1)
SLATS
FLAPS
AP 1+2 (2)
A/THR (2)
Moreover, both FDs are lost (2)
CAT 2 (2)
STEEP APPR

(1) *(If both slat channels fail.)*
(2) *(If both slat or flap channels fail.)*

F/CTL SLATS AND FLAPS FAULT IN CONF 0

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

Ident.: PRO-ABN-F_CTL-C-00018511.0001001 / 22 MAR 17

FLAPS LEVER...RECYCLE

- **If both slat channels fail:**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED...320 KT

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

Ident.: PRO-ABN-F_CTL-C-00018512.0004001 / 21 MAR 16

L12

STATUS

- **If both slat channels fails:**
  MAX SPEED....................320 KT

ALTN LAW: PROT LOST

APPR PROC

FOR LDG....................USE FLAP 1

With FLAPS lever set at 1, AP/FD GO AROUND mode is available.

CTR TK PUMPS....................OFF
GPWS FLAP MODE....................OFF

APPR SPD....................VREF +65 KT

Approach with A/THR in selected mode is recommended.

- **If both slat channels fail:**
  WHEN L/G DN: DIRECT LAW
- **AT 300 FT AGL:**
  TARGET SPD....................VREF +55 KT
  Reduce speed between 500 ft and 300 ft to reach VREF +55 kt at runway threshold, and disconnect A/THR, as the target speed may be below VLS.
  LDG DIST PROC....................APPLY
- **Only in case of FLAPS FAULT:**
  ENG 1 APPR IDLE ONLY
  ENG 2 APPR IDLE ONLY

INOP SYS

F/CTL (1)
SLATS
FLAPS
AP 1 + 2 (2)
A/THR (2)
Moreover, both FDs are lost (2)
CAT 2 (2)
STEEP APPR

---

(1) *(If both slat channels fail.)*
(2) *(If both slat or flap channels fail.)*

F/CTL SLATS AND FLAPS FAULT IN CONF 0

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-F_CTL-C-00018511.0001001 / 22 MAR 17

FLAPS LEVER....................RECYCLE

- **If both slat channels fail:**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.................... 320 KT

F/CTL SLATS AND FLAPS FAULT IN CONF 0

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-07098

Ident.: PRO-ABN-F_CTL-C-00018511.0001001 / 22 MAR 17

FLAPS LEVER....................RECYCLE

- **If both slat channels fail:**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.................... 320 KT

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

Ident.: PRO-ABN-F_CTL-C-00018512.0003001 / 25 JAN 17

L12

STATUS

- **If both slat channels fail:**
  MAX SPEED...320 KT

ALTN LAW: PROT LOST

APPR PROC

FOR LDG... USE FLAP 1

With FLAPS lever set at 1, AP/FD GO AROUND mode is available.

GPWS FLAP MODE... OFF

APPR SPD.. VREF +60 KT

Approach with A/THR in selected mode is recommended.

- **If both slat channels fail:**
  WHEN L/G DN: DIRECT LAW

- **AT 300 FT AGL:**
  TARGET SPD.. VREF +50 KT
  Reduce speed between 500 ft and 300 ft to reach VREF +50 kt at runway threshold and disconnect A/THR, as the target speed may be below VLS.
  LDG DIST PROC...APPLY

- **Only in case of FLAPS FAULT:**
  ENG 1 APPR IDLE ONLY
  ENG 2 APPR IDLE ONLY

INOP SYS

F/CTL PROT (1)
SLATS
FLAPS
AP 1+2 (2)
A/THR (2)
Moreover, both FDs are lost (2)
CAT 2 (2)
STEEP APPR

(1) *(If both slat channels fail.)*
(2) *(If both slat or flap channels fail.)*

F/CTL SLATS AND FLAPS FAULT IN CONF 0

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-F_CTL-C-00018511.0001001 / 22 MAR 17

FLAPS LEVER....................RECYCLE

- **If both slat channels fail:**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.................... 320 KT

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

Ident.: PRO-ABN-F_CTL-C-00018512.0005001 / 21 MAR 16

L12

STATUS

- **If both slat channels fail:**
  MAX SPEED..........320 KT

ALTN LAW: PROT LOST

APPR PROC

FOR LDG..........USE FLAP 1

With FLAPS lever set at 1, AP/FD GO AROUND mode is available.

GPWS FLAP MODE..........OFF

APPR SPD..........VREF +65 KT

Approach with A/THR in selected mode is recommended.

- **If both slat channels fail:**
  WHEN L/G DN: DIRECT LAW
- **AT 300 FT AGL:**
  TARGET SPD..........VREF +55 KT
  Reduce speed between 500 ft and 300 ft to reach VREF +55 kt at runway threshold and disconnect A/THR, as the target speed may be below VLS.
  LDG DIST PROC..........APPLY
- **Only in case of FLAPS FAULT:**
  ENG 1 APPR IDLE ONLY
  ENG 2 APPR IDLE ONLY

INOP SYS

F/CTL PROT (1)
SLATS
FLAPS
AP 1+2 (2)
A/THR (2)
Moreover, both FDs are lost (2)
CAT 2 (2)
STEEP APPR ◁✳

---

(1) *(If both slat channels fail.)*
(2) *(If both slat or flap channels fail.)*

F/CTL SLATS AND FLAPS FAULT IN CONF 0

Applicable to: MSN 08635, 10949-11522, 11572-11597

Ident.: PRO-ABN-F_CTL-C-00018511.0001001 / 22 MAR 17

FLAPS LEVER....................RECYCLE

- **If both slat channels fail:**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.................... 320 KT

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

Ident.: PRO-ABN-F_CTL-C-00018512.0016001 / 24 MAR 20

62

L12

STATUS

- **If both slat channels fail:**
  MAX SPEED..320 KT

ALTN LAW: PROT LOST

APPR PROC

FOR LDG..FLAP LVR 1

Note: *With FLAPS lever set at 1, AP/FD GO AROUND mode is available.*
This line is replaced by "FOR LDG : FLAP LVR 1" when CONF 1 is selected, as a reminder.

GPWS FLAP MODE..OFF

APPR SPD..VREF + 65 KT

Note: *Approach with A/THR in selected mode is recommended.*

- **If both slat channels fail:**
  WHEN L/G DN: DIRECT LAW

  Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

- **AT 300 FT AGL:**
  TARGET SPD..VREF + 55 KT

  Note: *Reduce speed between 500 ft and 300 ft to reach VREF +55 kt at runway threshold and disconnect A/THR, as the target speed may be below VLS.*

  LDG DIST PROC..APPLY

- **Only in case of FLAPS FAULT:**

INOP SYS

F/CTL PROT (1)
SLATS
FLAPS
AP 1+2 (2)
A/THR (2)
CAT 2 (2)
STEEP APPR ◁
FD 1+2 (3)

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY

(1) *(If both slat channels fail.)*
(2) *(If both slat or flap channels fail.)*
(3) *(If both slat or flap channels fail. Not displayed on ECAM.)*

F/CTL SLATS AND FLAPS FAULT IN CONF 0

Applicable to: MSN 11531

Ident.: PRO-ABN-F_CTL-C-00018511.0001001 / 22 MAR 17

FLAPS LEVER....................RECYCLE

- **If both slat channels fail:**

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED....................320 KT

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

63 Ident.: PRO-ABN-F_CTL-C-00018512.0017001 / 24 MAR 20

L12

STATUS

- **If both slat channels fail:**
  MAX SPEED..320 KT

ALTN LAW: PROT LOST

APPR PROC

FOR LDG..FLAP LVR 1

Note: *With FLAPS lever set at 1, AP/FD GO AROUND mode is available. This line is replaced by "FOR LDG : FLAP LVR 1" when CONF 1 is selected, as a reminder.*

GPWS FLAP MODE..OFF

APPR SPD..VREF + 70 KT

Note: *Approach with A/THR in selected mode is recommended.*

- **If both slat channels fail:**
  WHEN L/G DN: DIRECT LAW

  Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

- **AT 300 FT AGL:**
  TARGET SPD..VREF + 60 KT

  Note: *Reduce speed between 500 ft and 300 ft to reach VREF +60 kt at runway threshold and disconnect A/THR, as the target speed may be below VLS.*

  LDG DIST PROC..APPLY

INOP SYS

F/CTL PROT (1)
SLATS
FLAPS
AP 1+2 (2)
A/THR (2)
CAT 2 (2)
FD 1+2 (3)

Continued on the following page

F/CTL SLATS AND FLAPS FAULT IN CONF 0 (Cont'd)

- **Only in case of FLAPS FAULT:**
  ENG 1 APPR IDLE ONLY
  ENG 2 APPR IDLE ONLY

(1) *(If both slat channels fail.)*
(2) *(If both slat or flap channels fail.)*
(3) *(If both slat or flap channels fail. Not displayed on ECAM.)*

F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173

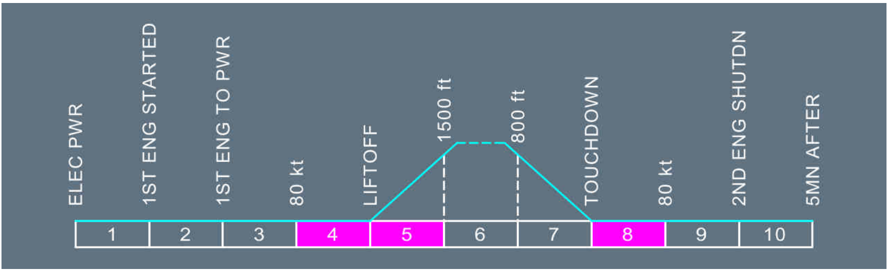
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018517.0006001 / 10 MAY 21

- **If slats locked:**

  WING TIP BRK ON

  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

L2 *Speed is limited to the VFE corresponding to the next slat position.*

L1
- **If slats not locked:**

  FLAPS LEVER...RECYCLE

L2 *Return to the previous selection, then back to the desired position.*

L1
- **If slats extended:**

  FUEL CONSUMPT INCRSD

  FMS PRED UNRELIABLE

- **If unsuccessful:**

L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*

The autopilot may be used down to 500 ft AGL. As it is not tuned for the abnormal configurations, its behavior could be less than optimum and must be monitored.

L1 L2

Note: *If there is a SLATS FAULT after both slat channels fail, alternate law becomes active (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*

  - **If slats not at zero:**

    FUEL MODE SEL...MAN

L2 *To allow CTR TK feeding.*

L1 CTR TK PUMPS...AS RQRD

L2 *Set CTR TK PUMPS pb to OFF when CTR TK is empty or during approach.*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018518.0004001 / 03 NOV 21

L12

STATUS

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

CTR TK PUMPS.. OFF
GPWS LDG FLAP 3.. ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*
LDG DIST PROC.. APPLY

CTR TK FEED: MAN ONLY

- **If both slat channels fail, or for A318 and A319 if slats are locked in clean configuration and flaps are at, or above, CONF 2:**

  ALTN LAW: PROT LOST
  WHEN L/G DN: DIRECT LAW

  Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

F/CTL PROT (1)
SLATS
AP 1+2 (1)
A/THR (1)
FD 1+2 (2)
CAT 2 (1)
STEEP APPR ◁ (1)
GLS AUTOLAND ◁

---

(1) *(If both slat channels fail.)*

(2) *(If both slat channels fail. Not displayed on ECAM.)*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

(4) *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 01251

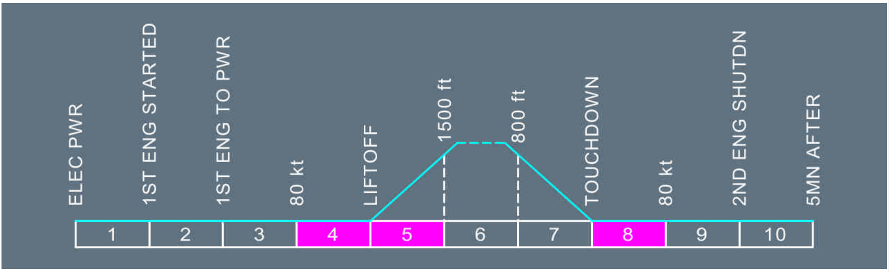
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018517.0004001 / 10 MAY 21

WING TIP BRK ON

L2 *(If slats locked)*

L1 MAX SPEED........................ *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

L2 *Speed is limited to the VFE corresponding to the next slat position.*

L1 FLAPS LEVER (IF SLATS NOT LOCKED).. RECYCLE

L2 *Return to the previous selection, then back to the desired position.*

L1 - **If unsuccessful:**

L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*

The autopilot may be used down to 500 ft AGL. As it is not tuned for the abnormal configurations, its behavior could be less than optimum and must be monitored.

L12

Note: *If there is a SLATS FAULT after both slat channels fail, alternate law becomes active (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*

- **If slats not at zero:**

  FUEL MODE SEL...MAN

  L2 *To allow CTR TK feeding.*

  L1 CTR TK PUMPS...AS RQRD

  L2 *Set CTR TK PUMPS pb to OFF when CTR TK is empty or during approach.*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018518.0002001 / 10 MAY 21

L12

STATUS

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities. This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

CTR TK PUMPS.. OFF

GPWS LDG FLAP 3.. ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

LDG DIST PROC.. APPLY

CTR TK FEED: MAN ONLY

- **If both slat channels fail, or for A318 and A319 if slats locked in clean configuration and flaps are at, or above, CONF 2:**

  ALTN LAW: PROT LOST

  WHEN L/G DN: DIRECT LAW

  Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

INCREASED FUEL CONSUMP

Note: *Refer to PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED.*

INOP SYS

F/CTL PROT (1)
SLATS
AP 1+2 (1)
A/THR (1)
CAT 2 (1)
FD 1+2 (2)
GLS AUTOLAND
STEEP APPR (1)

---

(1) *(If both slat channels fail.)*

(2) *(If both slat channels fail. Not displayed on ECAM.)*

F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

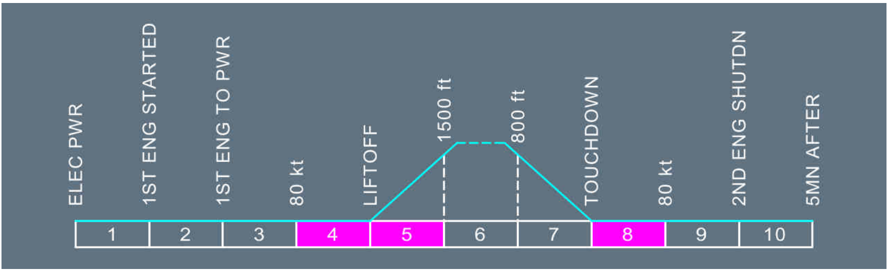
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

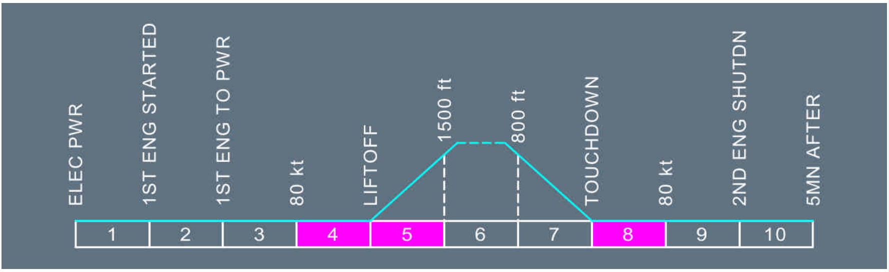
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018517.0002001 / 10 MAY 21

- **If slats locked:**

  WING TIP BRK ON

  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

  L2 *Speed is limited to the VFE corresponding to the next slat position.*

- L1 **If slats not locked:**

  FLAPS LEVER..RECYCLE

  L2 *Return to the previous selection, then back to the desired position.*

- L1 **If slats extended:**

  FUEL CONSUMPT INCRSD

  FMS PRED UNRELIABLE

- **If unsuccessful:**

  L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*

  The autopilot may be used down to 500 ft AGL. As it is not tuned for the abnormal configurations, its behavior could be less than optimum and must be monitored.

  L1 L12

  Note: *1. If there is a SLATS FAULT after both slat channels fail, alternate law becomes active (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*

  2. If the slats are locked in clean configuration (<18 °), alternate law without protection is selected once the flaps are at or above CONF 2.

  - **If slats not at zero:**

    FUEL MODE SEL...MAN

    L2 *To allow CTR TK feeding.*

    L1 CTR TK PUMPS...AS RQRD

    L2 *Set CTR TK PUMPS pb to OFF when CTR TK is empty or during approach.*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018518.0004001 / 03 NOV 21

L12

STATUS

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by “FOR LDG: USE FLAP 3” when CONF 3 is selected, as a reminder.

CTR TK PUMPS.. OFF

GPWS LDG FLAP 3.. ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

LDG DIST PROC.. APPLY

CTR TK FEED: MAN ONLY

- **If both slat channels fail, or for A318 and A319 if slats are locked in clean configuration and flaps are at, or above, CONF 2:**

  ALTN LAW: PROT LOST

  WHEN L/G DN: DIRECT LAW

  Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

F/CTL PROT (1)
SLATS
AP 1+2 (1)
A/THR (1)
FD 1+2 (2)
CAT 2 (1)
STEEP APPR ◁ (1)
GLS AUTOLAND ◁

---

(1) *(If both slat channels fail.)*

(2) *(If both slat channels fail. Not displayed on ECAM.)*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

(4) *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

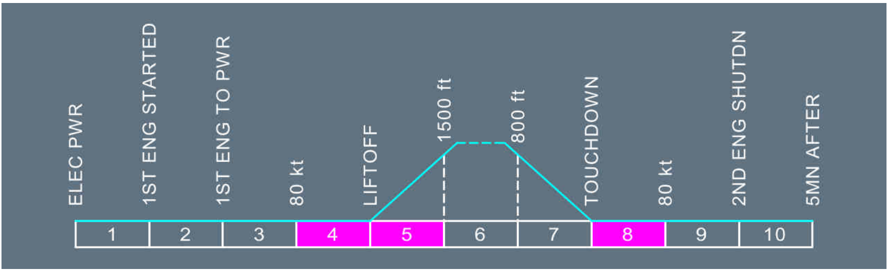
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018517.0007001 / 10 MAY 21

64

- **If slats locked:**

  WING TIP BRK ON

  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

  L2 *Speed is limited to the VFE corresponding to the next slat position.*

- L1 **If slats not locked:**

  FLAPS LEVER.. RECYCLE

  L2 *Return to the previous selection, then back to the desired position.*

- L1 **If slats extended:**

  FUEL CONSUMPT INCRSD

  FMS PRED UNRELIABLE

- **If unsuccessful:**

  L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*

  The autopilot may be used down to 500 ft AGL. As it is not tuned for the abnormal configurations, its behavior could be less than optimum and must be monitored.

L1 L2 *Note:* 1. *If there is a SLATS FAULT after both slat channels fail, alternate law becomes active (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*
2. *If the slats are locked in clean configuration (< 18 °), alternate law without protection is selected once the flaps are at or above CONF 2 (> 13 °).*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018518.0008001 / 03 NOV 21

L12

STATUS

APPR PROC

FOR LDG...USE FLAP 3

This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

LDG DIST PROC.. APPLY

- **If both slat channels fail, or slats are locked in clean configuration and flaps are at, or above, CONF 2:**
  ALTN LAW: PROT LOST
  WHEN L/G DN: DIRECT LAW

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

F/CTL PROT (1)
SLATS
AP 1+2 (1)
A/THR (1)
FD 1+2 (2)
CAT 2 (1)
STEEP APPR ◁✳ (1)
GLS AUTOLAND ◁✳

---

(1) *(If both slat channels fail.)*

(2) *(If both slat channels fail. Not displayed on ECAM.)*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and refer to Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-08596, 09190-09324

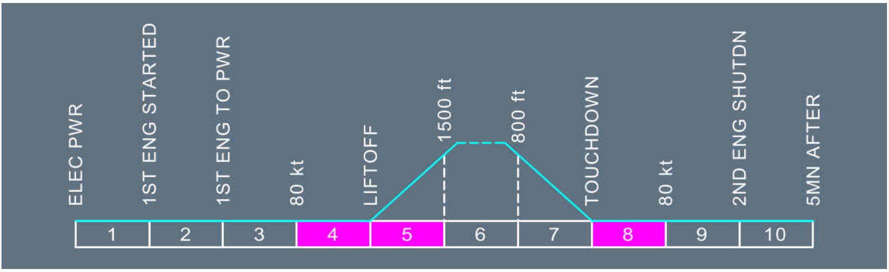
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018517.0008001 / 10 MAY 21

65

- **If slats locked:**
  WING TIP BRK ON
  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

L2 *Speed is limited to the VFE corresponding to the next slat position.*

L1
- **If slats not locked:**
  FLAPS LEVER..RECYCLE

L2 *Return to the previous selection, then back to the desired position.*

L1
- **If slats extended:**
  FUEL CONSUMPT INCRSD
  FMS PRED UNRELIABLE
- **If unsuccessful:**

L2

Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

The autopilot may be used down to 500 ft AGL. As it is not tuned for the abnormal configurations, its behavior could be less than optimum and must be monitored.

L1
L12

Note: *If there is a SLATS FAULT after both slat channels fail, alternate law becomes active (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018518.0005001 / 03 NOV 21

L12

STATUS

APPR PROC

FOR LDG...USE FLAP 3

This line is replaced by “FOR LDG: USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

LDG DIST PROC.. APPLY

- **If both slat channels fail, or for A318 and A319 if slats are locked in clean configuration and flaps are at, or above, CONF 2:**

  ALTN LAW : PROT LOST
  WHEN L/G DN : DIRECT LAW

  Note: At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

F/CTL PROT (1)
SLATS
AP 1+2 (1)
A/THR (1)
CAT 2 (1)
FD 1+2 (2)
GLS AUTOLAND ◁
STEEP APPR ◁

---

(1) *(If both slat channels fail.)*

(2) *(If both slat channels fail. Not displayed on ECAM.)*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 08635, 10949-11522, 11572-11597

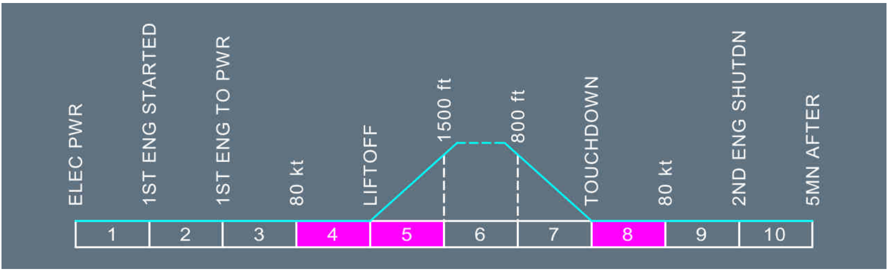
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018517.0008001 / 10 MAY 21

66

- **If slats locked:**

  WING TIP BRK ON

  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

  L2 *Speed is limited to the VFE corresponding to the next slat position.*

- L1 **If slats not locked:**

  FLAPS LEVER...RECYCLE

  L2 *Return to the previous selection, then back to the desired position.*

- L1 **If slats extended:**

  FUEL CONSUMPT INCRSD

  FMS PRED UNRELIABLE

- **If unsuccessful:**

  L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*

  The autopilot may be used down to 500 ft AGL. As it is not tuned for the abnormal configurations, its behavior could be less than optimum and must be monitored.

L1 L12

Note: *If there is a SLATS FAULT after both slat channels fail, alternate law becomes active (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018518.0014001 / 10 MAY 21

67

L12

STATUS

APPR PROC

S/F JAMMED PROC.. APPLY
FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*
LDG DIST PROC.. APPLY

- **If both slat channels fail, or for A319 and A321 if slats are locked in clean configuration and flaps are at, or above, CONF 2:**

  ALTN LAW: PROT LOST
  WHEN L/G DN: DIRECT LAW

  Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

F/CTL PROT (1)
SLATS
AP 1+2 (1)
A/THR (1)
CAT 2 (1)
STEEP APPR (1)
GLS AUTOLAND
FD 1+2 (2)

(1) *(If both slat channels fail.)*
(2) *(If both slat channels fail. Not displayed on ECAM.)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

(4) *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

F/CTL SLATS FAULT/LOCKED

Applicable to: MSN 11531

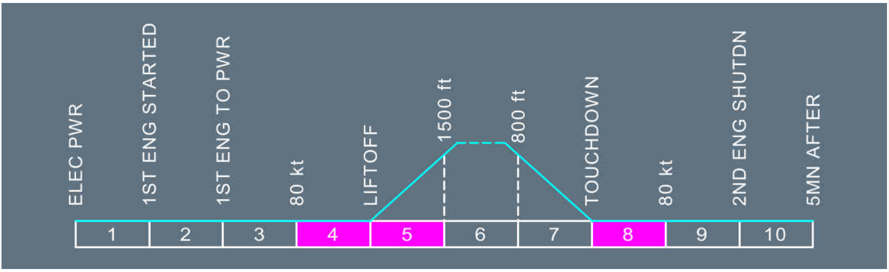
Ident.: PRO-ABN-F_CTL-B-00022652.0001001 / 05 MAR 19

ANNUNCIATIONS

Triggering Conditions:

L2 The SLATS FAULT alert triggers when there is a failure of both slats channels.
The SLATS LOCKED alert triggers when the slats wing tip brakes are activated.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
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Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018517.0007001 / 10 MAY 21

68

- **If slats locked:**
  WING TIP BRK ON
  MAX SPEED.................. *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*

L2 *Speed is limited to the VFE corresponding to the next slat position.*

L1
- **If slats not locked:**
  FLAPS LEVER...RECYCLE

L2 *Return to the previous selection, then back to the desired position.*

L1
- **If slats extended:**
  FUEL CONSUMPT INCRSD
  FMS PRED UNRELIABLE

- **If unsuccessful:**

L2

Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

The autopilot may be used down to 500 ft AGL. As it is not tuned for the abnormal configurations, its behavior could be less than optimum and must be monitored.

L1
L2

Note: 1. *If there is a SLATS FAULT after both slat channels fail, alternate law becomes active (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*
2. *If the slats are locked in clean configuration (< 18 °), alternate law without protection is selected once the flaps are at or above CONF 2 (> 13 °).*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

Ident.: PRO-ABN-F_CTL-B-00018518.0014001 / 10 MAY 21

69

L12

STATUS

APPR PROC

S/F JAMMED PROC.. APPLY
FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD... *REFER TO PRO-ABN-F_CTL F/CTL FLAPS/SLATS FAULT/LOCKED*
LDG DIST PROC.. APPLY

- **If both slat channels fail, or for A319 and A321 if slats are locked in clean configuration and flaps are at, or above, CONF 2:**
  ALTN LAW: PROT LOST
  WHEN L/G DN: DIRECT LAW

  Note: *At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.*

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

F/CTL PROT (1)
SLATS
AP 1+2 (1)
A/THR (1)
CAT 2 (1)
STEEP APPR ◁ (1)
GLS AUTOLAND ◁
FD 1+2 (2)

---

(1) *(If both slat channels fail.)*

(2) *(If both slat channels fail. Not displayed on ECAM.)*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

Continued on the following page

F/CTL SLATS FAULT/LOCKED (Cont'd)

(4) *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable fuel penalty factor.*

F/CTL SLAT SYS 1(2) FAULT

Applicable to: ALL

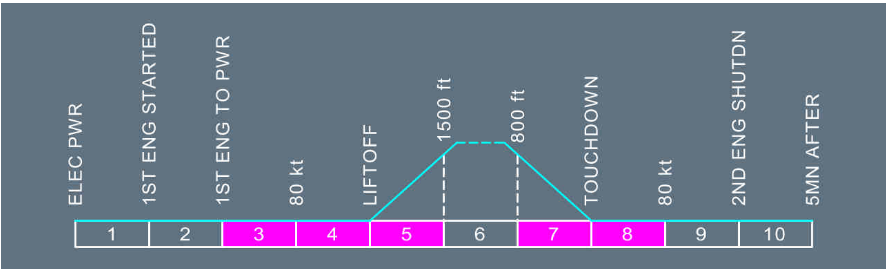
Ident.: PRO-ABN-F_CTL-D-00016995.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is failure of slat channel in one SFCC.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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Ident.: PRO-ABN-F_CTL-D-00011751.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-F_CTL-D-00011752.0001001 / 18 AUG 10

STATUS

SLATS SLOW

F/CTL SPD BRK 2 (3+4) FAULT

Applicable to: ALL

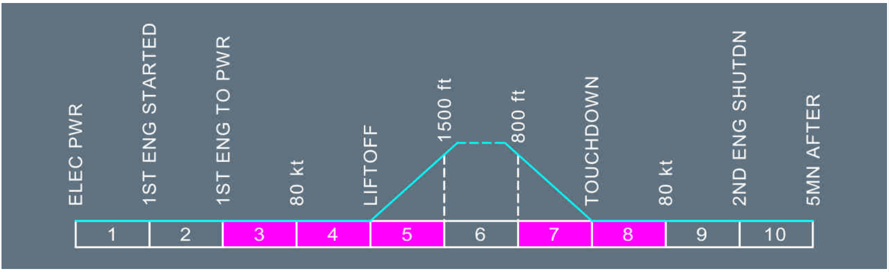
Ident.: PRO-ABN-F_CTL-W-00016980.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when speedbrake lever transducers to SEC 3 (1) failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
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Ident.: PRO-ABN-F_CTL-W-00018519.0001001 / 21 MAR 16

- **If SPD BRK 3+4 affected:**
  SPD BRK.. DO NOT USE
  L2 *Do not use speedbrakes since it is not efficient to use only surfaces n° 2, and would active the SPD BRK DISAGREE caution.*

Ident.: PRO-ABN-F_CTL-W-00018520.0001001 / 21 MAR 16

STATUS

- **If SPD BRK 3+4 affected:**
  SPD BRK... DO NOT USE

LDG DIST PROC.. APPLY

INOP SYS

SPD BRK (affected)
STEEP APPR ⊲ (1)

(1) *(if SPD BRK 3 and 4 are affected)*

F/CTL SPD BRK DISAGREE
(SURFACES 3+4 AFFECTED)

Applicable to: ALL

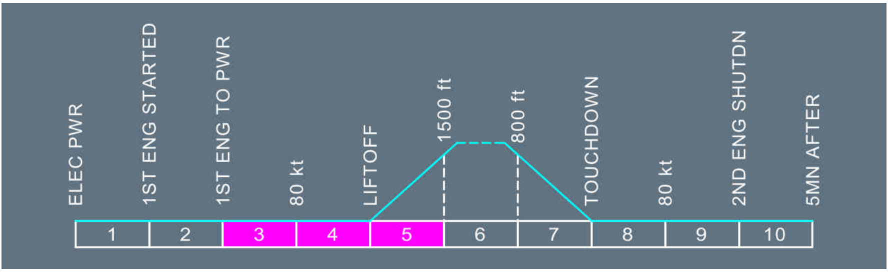
Ident.: PRO-ABN-F_CTL-T-00016970.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a position disagree between surfaces and lever position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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Ident.: PRO-ABN-F_CTL-T-00018521.0001001 / 21 MAR 16

SPD BRK LEVER....................RETRACT
SPD BRK....................DO NOT USE

Ident.: PRO-ABN-F_CTL-T-00018522.0001001 / 21 MAR 16

STATUS

	INOP SYS
SPD BRK....................DO NOT USE	SPD BRK 3+4 STEEP APPR ⊲

F/CTL SPD BRK DISAGREE
(SURFACES 2+3+4 AFFECTED)

Applicable to: ALL

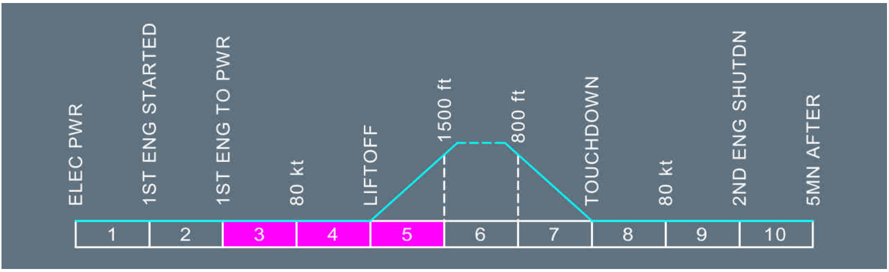
Ident.: PRO-ABN-F_CTL-U-00018907.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a position disagree between surfaces and lever position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
10

Ident.: PRO-ABN-F_CTL-U-00018523.0001001 / 21 MAR 16

SPD BRK LEVER..RETRACT

F/CTL SPD BRK FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11597

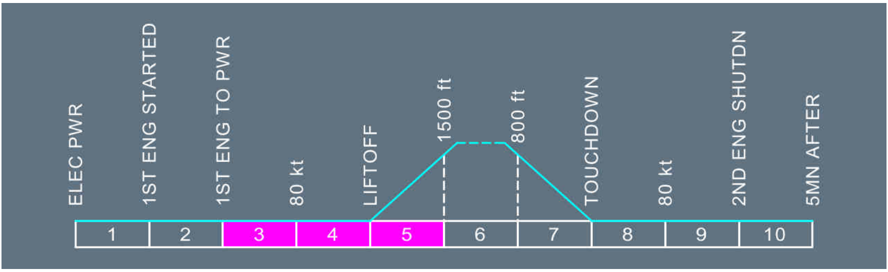
Ident.: PRO-ABN-F_CTL-V-00016971.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when speedbrake lever transducers to SEC 1 and 3 failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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Ident.: PRO-ABN-F_CTL-V-00018534.0001001 / 21 MAR 16

L2 In addition, associated ground spoilers are available only through reverse selection.
L1 Crew awareness.

Ident.: PRO-ABN-F_CTL-V-00018535.0002001 / 22 MAR 17

70

STATUS

	INOP SYS
SPD BRK...DO NOT USE	STEEP APPR ⊲ (1)

(1) *(if SPD BRK 3 or 4 are affected)*

F/CTL SPD BRK FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

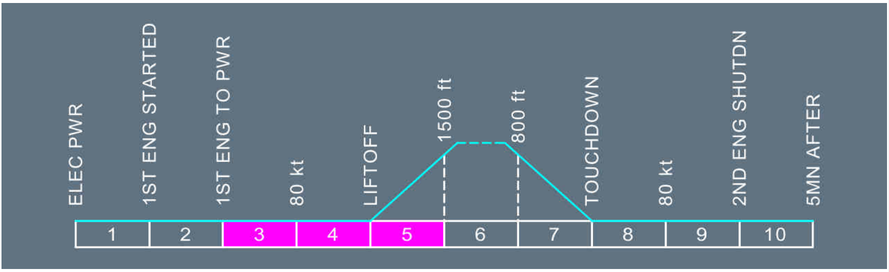
Ident.: PRO-ABN-F_CTL-V-00016971.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when speedbrake lever transducers to SEC 1 and 3 failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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Ident.: PRO-ABN-F_CTL-V-00018534.0001001 / 21 MAR 16

L2 In addition, associated ground spoilers are available only through reverse selection.
L1 Crew awareness.

F/CTL SPD BRK FAULT

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

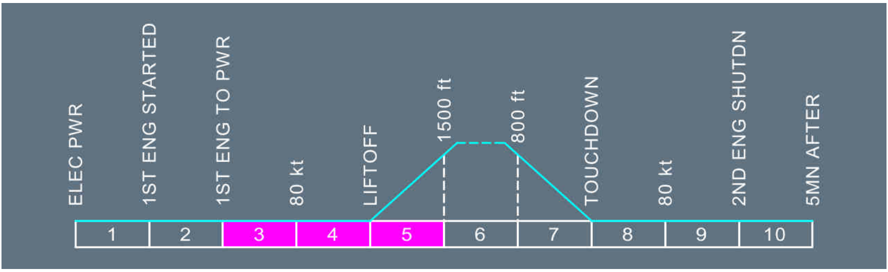
Ident.: PRO-ABN-F_CTL-V-00016971.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when speedbrake lever transducers to SEC 1 and 3 failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-V-00018534.0001001 / 21 MAR 16

L2 In addition, associated ground spoilers are available only through reverse selection.
L1 Crew awareness.

Ident.: PRO-ABN-F_CTL-V-00018535.0001001 / 22 MAR 17

STATUS

LDG DIST PROC.. APPLY

INOP SYS

SPD BRK
STEEP APPR (1)

(1) *(if SPD BRK 3 or 4 are affected)*

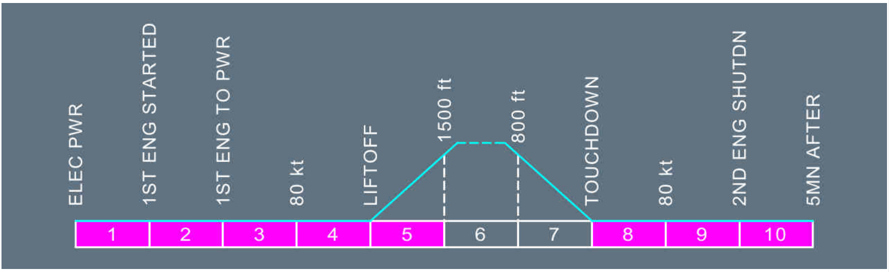
F/CTL SPD BRK STILL OUT

Applicable to: ALL

Ident.: PRO-ABN-F_CTL-AO-00016972.0002001 / 21 MAR 16

ANNUNCIATIONS

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-F_CTL-AO-00011810.0014001 / 25 FEB 14

Crew awareness.

F/CTL SPLR FAULT

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

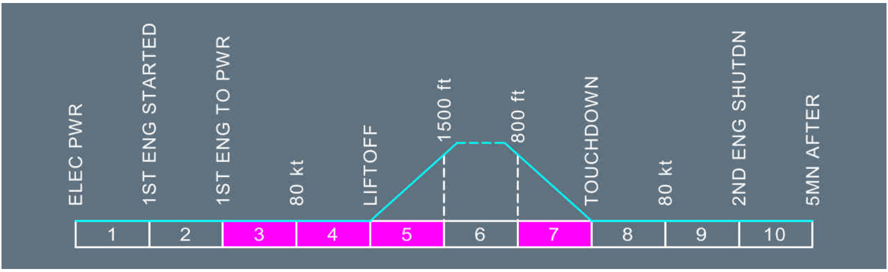
Ident.: PRO-ABN-F_CTL-R-00016976.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of one or more spoilers.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

F/CTL SPLR FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-R-00018536.0003001 / 22 MAR 17

71

L2 Note: *If heavy vibrations are felt, CONF 3 may be used for landing in order to reduce the buffeting.*

L1 ● **If one or more spoilers are fully extended:**

Current Flight Level (FL) may not be maintained due to increased drag. Maintain a cruise FL as high as possible.

OPT SPD..G DOT+10KT

L2 *Whenever possible, target green dot speed +10 kt to minimize fuel consumption. However, if buffet is encountered at GDOT speed +10 kt, increase speed to fly out of buffet condition.*

L1 AP..DO NOT USE

L2 *Depending on the failed spoiler position, the AP may not have enough authority to counteract the roll induced by spoiler runaway.*

L1 SPD BRK (IF SPOILERS 3+4 AFFECTED)..............................DO NOT USE

L2 *Do not use speedbrakes, since using only surfaces N° 2 is not efficient and would activate the SPD BRK DISAGREE caution.*

L1 ● **If one or more spoilers are extended:**

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL SPLR FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-R-00018544.0004001 / 17 MAY 21

L12

STATUS

- **If one or more spoilers are fully extended:**

  AP... DO NOT USE
- **If spoilers 3+4 affected:**

  SPD BRK.. DO NOT USE

APPR PROC

- **If one or more spoilers are fully extended:**

  In clean configuration, if VLS is above VFE_{NEXT}, the flight crew should deselect A/THR, decelerate to VFE_{NEXT}, and select CONF 1 when below VFE_{NEXT}. When established at CONF 1, the flight crew can reengage the A/THR and use managed speed again.

  FOR LDG..USE FLAP 3

  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3 .... ON

  APPR SPD : VREF + 10 KT

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

SPLR (affected)

SPD BRK (1)

STEEP APPR ◁✳ (2)

---

(1) *(If spoilers 2+3+4 affected)*

(2) *(if spoilers 3 and/or 4 affected)*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL SPLR FAULT

Applicable to: MSN 01251

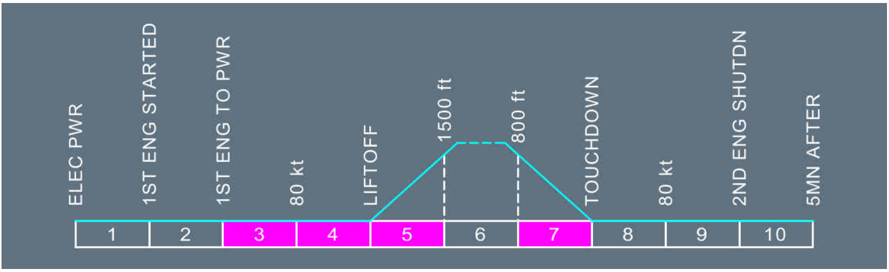
Ident.: PRO-ABN-F_CTL-R-00016976.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of one or more spoilers.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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6
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Ident.: PRO-ABN-F_CTL-R-00018536.0002001 / 21 MAR 16

L2 *Note:* *If heavy vibrations are felt, CONF 3 may be used for landing in order to reduce the buffeting.*

L1 SPD BRK (IF SPOILERS 3+4 AFFECTED)..DO NOT USE

L2 *Do not use speedbrakes, since using only surfaces N° 2 is not efficient and would activate the SPD BRK DISAGREE caution.*

Continued on the following page

F/CTL SPLR FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-R-00018544.0001001 / 21 MAR 16

STATUS

- **If spoilers 3+4 affected:**
  SPD BRK...DO NOT USE

LDG DIST PROC... APPLY

INOP SYS

SPLR (affected)
SPD BRK (1)
STEEP APPR ◁✳ (2)

(1) *(if spoilers 2+3+4 affected)*
(2) *(if spoilers 3 and/or 4 affected)*

F/CTL SPLR FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904, 08495-08596, 09190-09324

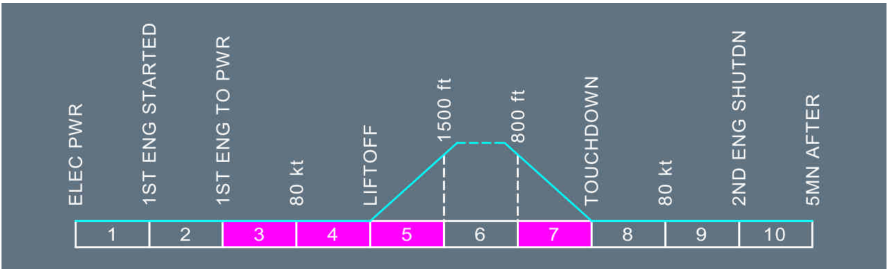
Ident.: PRO-ABN-F_CTL-R-00016976.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of one or more spoilers.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SPLR FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-R-00018536.0003001 / 22 MAR 17

72

L2 Note: *If heavy vibrations are felt, CONF 3 may be used for landing in order to reduce the buffeting.*

L1 ● **If one or more spoilers are fully extended:**

Current Flight Level (FL) may not be maintained due to increased drag. Maintain a cruise FL as high as possible.

OPT SPD....................G DOT+10KT

L2 *Whenever possible, target green dot speed +10 kt to minimize fuel consumption. However, if buffet is encountered at GDOT speed +10 kt, increase speed to fly out of buffet condition.*

L1 AP....................DO NOT USE

L2 *Depending on the failed spoiler position, the AP may not have enough authority to counteract the roll induced by spoiler runaway.*

L1 SPD BRK (IF SPOILERS 3+4 AFFECTED)....................DO NOT USE

L2 *Do not use speedbrakes, since using only surfaces N° 2 is not efficient and would activate the SPD BRK DISAGREE caution.*

L1 ● **If one or more spoilers are extended:**

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL SPLR FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-R-00018544.0006001 / 17 MAY 21

L12

STATUS

- **If one or more spoilers are fully extended:**
  AP..DO NOT USE
- **If spoilers 3+4 affected:**
  SPD BRK..DO NOT USE

APPR PROC

- **If one or more spoilers are fully extended:**

  In clean configuration, if VLS is above VFE_{NEXT}, the flight crew should deselect A/THR, decelerate to VFE_{NEXT}, and select CONF 1 when below VFE_{NEXT}. When established at CONF 1, the flight crew can reengage the A/THR and use managed speed again.

  FOR LDG..USE FLAP 3

  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3 ....ON
  APPR SPD : VREF + 15 KT

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD
See (3)
FMS PRED UNRELIABLE
See (4)

INOP SYS

SPLR (affected)
SPD BRK (1)
STEEP APPR ◁✳ (2)

---

(1) *(If spoilers 2+3+4 affected)*
(2) *(if spoilers 3 and/or 4 affected)*
(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*
(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL SPLR FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

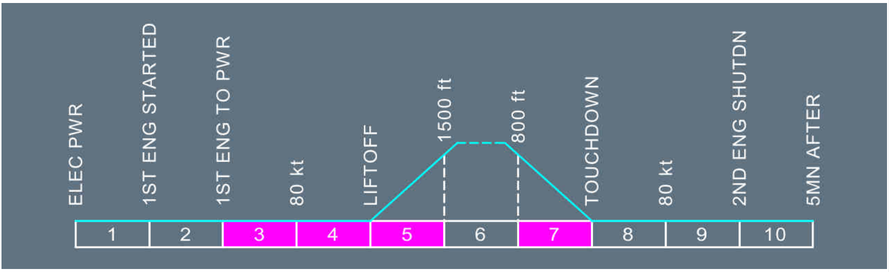
Ident.: PRO-ABN-F_CTL-R-00016976.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of one or more spoilers.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL SPLR FAULT

Applicable to: MSN 08635, 10949-11597

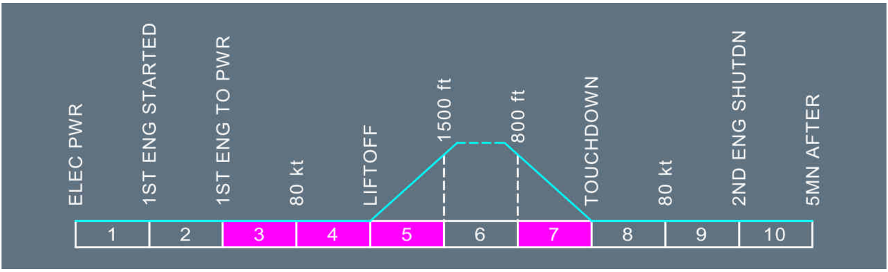
Ident.: PRO-ABN-F_CTL-R-00016976.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of one or more spoilers.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL SPLR FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-R-00018536.0003001 / 22 MAR 17

73

L2 Note: *If heavy vibrations are felt, CONF 3 may be used for landing in order to reduce the buffeting.*

L1 ● **If one or more spoilers are fully extended:**

Current Flight Level (FL) may not be maintained due to increased drag. Maintain a cruise FL as high as possible.

OPT SPD...G DOT+10KT

L2 *Whenever possible, target green dot speed +10 kt to minimize fuel consumption. However, if buffet is encountered at GDOT speed +10 kt, increase speed to fly out of buffet condition.*

L1 AP...DO NOT USE

L2 *Depending on the failed spoiler position, the AP may not have enough authority to counteract the roll induced by spoiler runaway.*

L1 SPD BRK (IF SPOILERS 3+4 AFFECTED)...DO NOT USE

L2 *Do not use speedbrakes, since using only surfaces N° 2 is not efficient and would activate the SPD BRK DISAGREE caution.*

L1 ● **If one or more spoilers are extended:**

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

F/CTL SPLR FAULT (Cont'd)

Ident.: PRO-ABN-F_CTL-R-00018544.0007001 / 17 MAY 21

74

L12

STATUS

- **If one or more spoilers are fully extended:**

  AP..DO NOT USE
- **If spoilers 3+4 affected:**

  SPD BRK...DO NOT USE

APPR PROC

- **If one or more spoilers are fully extended:**

  In clean configuration, if VLS is above VFE_{NEXT}, the flight crew should deselect A/THR, decelerate to VFE_{NEXT}, and select CONF 1 when below VFE_{NEXT}. When established at CONF 1, the flight crew can reengage the A/THR and use managed speed again.

  FOR LDG...FLAP LVR 3

  This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3 ....ON

  This line is displayed when flaps are in CONF 3.

  APPR SPD...VREF + 15 KT

LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

INOP SYS

SPLR (affected)

SPD BRK (1)

STEEP APPR ◁ (2)

---

(1) *(If spoilers 2+3+4 affected)*

(2) *(if spoilers 3 and/or 4 affected)*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

Continued on the following page

F/CTL SPLR FAULT (Cont'd)

(4)

Note: *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

F/CTL STABILIZER JAM

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

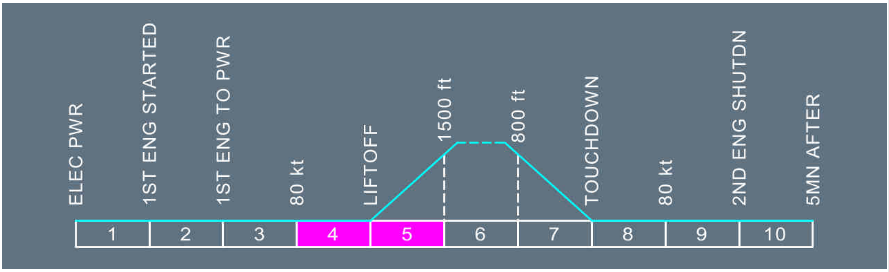
Ident.: PRO-ABN-F_CTL-X-00016973.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of the electrical control of the stabilizer (with or without jamming of the stabilizer).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

Ident.: PRO-ABN-F_CTL-X-00018545.0001001 / 22 MAR 17

L2 When the Flight Control Computers detect a loss of electrical control of the stabilizer, pitch control law reverts to alternate law. Depending on the type of failure, the MAN PITCH TRIM may still be available.

L1 MAN PITCH TRIM.. CHECK

L2 *The force needed on the PITCH TRIM wheel may be higher than during pre-takeoff manual setting.*

L1
- **IF MAN TRIM AVAIL:**

  TRIM FOR NEUTRAL ELEV

L2 *If manual pitch trim is available, trim to maintain the elevator at the zero position (indications on F/CTL SD page).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

MAX SPEED..320 KT

Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

Ident.: PRO-ABN-F_CTL-X-00018546.0003001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC:

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3... ON

Will be displayed when flaps in CONF 3

- **IF MAN TRIM NOT AVAIL:**
  - **WHEN CONF 3 AND VAPP:**

    L/G.. DN

    Landing gear extension is delayed, in order to delay the switching to direct law.

APPR SPD:... VREF + 10 KT

LDG DIST PROC... APPLY

ALTN LAW: PROT LOST

WHEN L/G DN: DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

INOP SYS

F/CTL PROT
STABILIZER
ELAC PITCH
AP 1 + 2
CAT 2
GLS AUTOLAND ⊲
STEEP APPR ⊲

F/CTL STABILIZER JAM

Applicable to: MSN 01251

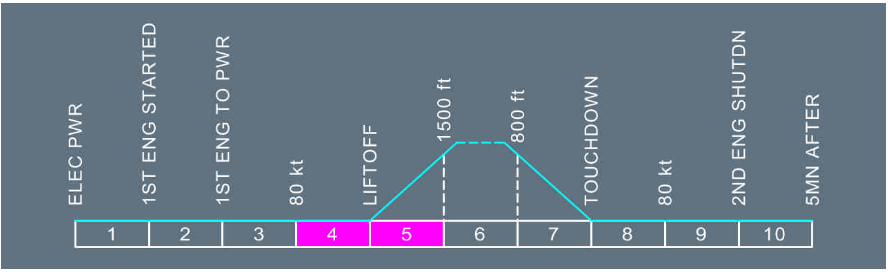
Ident.: PRO-ABN-F_CTL-X-00016973.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of the electrical control of the stabilizer (with or without jamming of the stabilizer).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

Ident.: PRO-ABN-F_CTL-X-00018545.0001001 / 22 MAR 17

L2 When the Flight Control Computers detect a loss of electrical control of the stabilizer, pitch control law reverts to alternate law. Depending on the type of failure, the MAN PITCH TRIM may still be available.

L1 MAN PITCH TRIM.. CHECK

L2 *The force needed on the PITCH TRIM wheel may be higher than during pre-takeoff manual setting.*

L1
- **IF MAN TRIM AVAIL:**

  TRIM FOR NEUTRAL ELEV

L2 *If manual pitch trim is available, trim to maintain the elevator at the zero position (indications on F/CTL SD page).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED..320 KT

Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

Ident.: PRO-ABN-F_CTL-X-00018546.0002001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC:

FOR LDG... USE FLAP 3

Do not select configuration FULL, so as not to degrade the handling qualities.

GPWS LDG FLAP 3.. ON

Will be displayed when flaps in CONF 3

- **IF MAN TRIM NOT AVAIL:**
  - **WHEN CONF 3 AND VAPP:**

    L/G.. DN

    Landing gear extension is delayed, in order to delay the switching to direct law.

APPR SPD:... VREF + 10 KT

LDG DIST PROC... APPLY

ALTN LAW: PROT LOST

WHEN L/G DN: DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

INOP SYS

F/CTL PROT
STABILIZER
ELAC PITCH
AP 1 + 2
CAT 2
GLS AUTOLAND
STEEP APPR

F/CTL STABILIZER JAM

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904, 08495-08596, 09190-09324

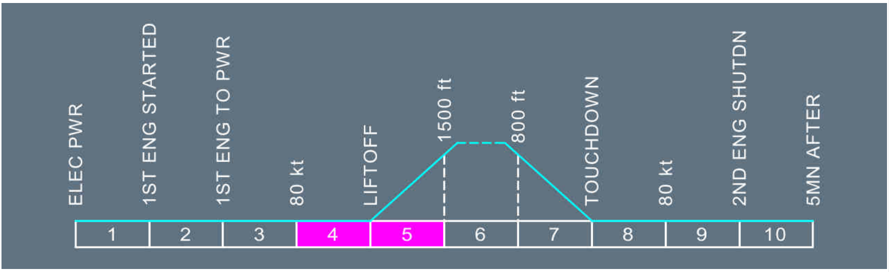
Ident.: PRO-ABN-F_CTL-X-00016973.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of the electrical control of the stabilizer (with or without jamming of the stabilizer).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

Ident.: PRO-ABN-F_CTL-X-00018545.0001001 / 22 MAR 17

L2 When the Flight Control Computers detect a loss of electrical control of the stabilizer, pitch control law reverts to alternate law. Depending on the type of failure, the MAN PITCH TRIM may still be available.

L1 MAN PITCH TRIM.. CHECK

L2 *The force needed on the PITCH TRIM wheel may be higher than during pre-takeoff manual setting.*

L1 ● **IF MAN TRIM AVAIL:**

TRIM FOR NEUTRAL ELEV

L2 *If manual pitch trim is available, trim to maintain the elevator at the zero position (indications on F/CTL SD page).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

MAX SPEED.. 320 KT

Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

Ident.: PRO-ABN-F_CTL-X-00018546.0005001 / 21 MAR 16

L12

STATUS

MAX SPEED...320 KT

APPR PROC:

FOR LDG...USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed when flaps in CONF 3

- **IF MAN TRIM NOT AVAIL:**
  - **WHEN CONF 3 AND VAPP:**

    L/G..DN

    Landing gear extension is delayed, in order to delay the switching to direct law.

APPR SPD...VREF + 15 KT
LDG DIST PROC...APPLY
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

INOP SYS

F/CTL PROT
STABILIZER
ELAC PITCH
AP 1 + 2
CAT 2
GLS AUTOLAND ⊲
STEEP APPR ⊲

F/CTL STABILIZER JAM

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

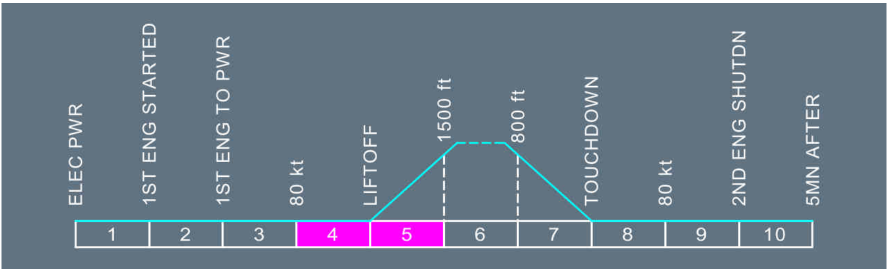
Ident.: PRO-ABN-F_CTL-X-00016973.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of the electrical control of the stabilizer (with or without jamming of the stabilizer).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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F/CTL STABILIZER JAM

Applicable to: MSN 08635, 10949-11597

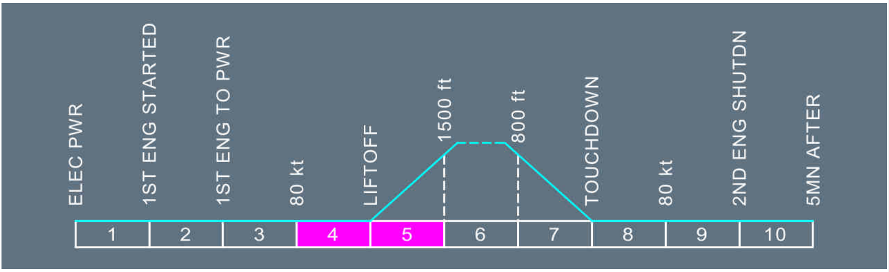
Ident.: PRO-ABN-F_CTL-X-00016973.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a loss of the electrical control of the stabilizer (with or without jamming of the stabilizer).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

Ident.: PRO-ABN-F_CTL-X-00018545.0003001 / 19 APR 19

75

L2 When the Flight Control Computers detect a loss of electrical control of the stabilizer, pitch control law reverts to alternate law. Depending on the type of failure, the MAN PITCH TRIM may still be available.

L1 MAN PITCH TRIM.. CHECK

L2 *The force needed on the PITCH TRIM wheel may be higher than during pre-takeoff manual setting.*

L1 ● **IF MAN TRIM AVAIL:**

TRIM FOR NEUTRAL ELEV

L2 *If manual pitch trim is available, trim to maintain the elevator at the zero position (indications on F/CTL SD page).*

L1 MANEUVER WITH CARE

● **FOR GO-AROUND**

MAX PITCH 15 DEG

THR LVR... TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

MAX SPEED.. 320 KT

Continued on the following page

F/CTL STABILIZER JAM (Cont'd)

76

L12

STATUS

MAX SPEED.. 320 KT
MANEUVER WITH CARE

- **FOR GO-AROUND**

  MAX PITCH 15 DEG

THR LVR..TOGA THEN MCT

This line is not displayed if one engine is inoperative.

APPR PROC:

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will be displayed when flaps in CONF 3

- **IF MAN TRIM NOT AVAIL:**
  - **WHEN CONF 3 AND VAPP:**

    L/G.. DN

    Landing gear extension is delayed, in order to delay the switching to direct law.

APPR SPD.. VREF + 15 KT
LDG DIST PROC... APPLY
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll. Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW.

INOP SYS

F/CTL PROT
STABILIZER
ELAC PITCH
AP 1 + 2
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

[QRH] ACT SYSTEM FAULT

1 Ident.: PRO-ABN-FUEL-00011274.0005001 / 04 SEP 18
Applicable to: MSN 11531

ACT XFR.......OFF
ACT XFR MODE SEL.......MAN
CTR TK L XFR.......OFF
CTR TK R XFR.......OFF
USE ONLY WING TANK FUEL TO KEEP CG WITHIN LIMITS

CAUTION Disregard FMS fuel predictions as usable fuel is limited to wings only.
After failure detection, land before the maximum flight time allowed by the table.

	Number of refuelled ACTs at dispatch		
	1	2	3
FWD ACT XFR failed	-	-	120 min
AFT2 ACT XFR failed	-	120 min	170 min
AFT1 ACT XFR failed	120 min	170 min	200 min

[QRH] ACT XFR FAULT

2 Ident.: PRO-ABN-FUEL-00011268.0005001 / 03 NOV 21
Applicable to: MSN 11531

DO NOT APPLY THIS PROCEDURE IN ELEC EMER CONFIG

- **At ANY TIME of the procedure, If FUEL ACT SYSTEM FAULT alert or no ACT transfer:**

  ACT SYSTEM FAULT PROC.......APPLY

  Refer to PRO-ABN-FUEL [QRH] ACT SYSTEM FAULT

ALL ACT pb ....CHECK NOT ISOL
ACT XFR rotary sel.......APPROPRIATE ACT

Select the ACT to be transferred in sequence FWD - AFT2 - AFT1. On the FUEL SD page, disregard any pulsing indication of the fuel quantity during the application of the procedure.

ACT XFR MODE SEL pb.......MAN
ACT FUEL TRANSFER.......MONITOR

Note: *When an ACT contains less than 150 kg (330 lb) of fuel, continue the manual transfer of this ACT for 5 min. After 5 min, consider this ACT as transferred, and select the next ACT in the sequence FWD - AFT2 - AFT1, until all ACTs have transferred. Up to 150 kg (330 lb) of fuel may remain in any ACT after manual transfer, a total of 450 kg (990 lb) of fuel may be considered as unusable.*

- **When all ACTs have transferred:**

  ACT XFR rotary sel.......OFF
  ACT XFR MODE SEL pb.......AUTO

  Disregard any amber transfer line indication from an ACT that may still be displayed on the FUEL SD page.

[QRH] FUEL IMBALANCE

Ident.: PRO-ABN-FUEL-00011257.0002001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

FOB.. CHECK

Note: *Compare the FOB + FU, with the FOB at departure.*
If the difference is significant, or if the FOB + FU decreases, suspect a fuel leak.

CAUTION	A fuel imbalance may indicate a fuel leak. Do not apply this procedure, if a fuel leak is suspected. *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*.

FUEL X FEED.. ON
CTR TK PUMP 1.. OFF
CTR TK PUMP 2.. OFF

- **On lighter side:**
  FUEL PUMPS.. OFF
- **When fuel balanced:**
  ALL FUEL PUMPS.. ON
  FUEL X FEED.. OFF

Note: *There is no requirement to correct an imbalance, until the ECAM fuel advisory is displayed.*

[QRH] FUEL IMBALANCE

Ident.: PRO-ABN-FUEL-00011257.0003001 / 17 MAR 17

3 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597**

FOB...CHECK

Compare the FOB + FU, with the FOB at departure.
If the difference is significant, or if the FOB + FU decreases, suspect a fuel leak.

CAUTION	A fuel imbalance may indicate a fuel leak. Do not apply this procedure, if a fuel leak is suspected. *Refer to PRO-ABN-FUEL [QRH] FUEL LEAK*.

FUEL X FEED...ON
CTR TK L XFR...OFF
CTR TK R XFR...OFF

- **On lighter side:**
  FUEL PUMPS...OFF

- **When fuel balanced:**
  FUEL PUMPS...ON
  CTR TK L XFR...ON
  CTR TK R XFR...ON
  FUEL X FEED...OFF

Note: *There is no requirement to correct an imbalance, until the ECAM fuel advisory is displayed.*

[QRH] FUEL LEAK

Ident.: PRO-ABN-FUEL-00018665.0003001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

A fuel leak may be detected, if:
- The sum of FOB and FU is significantly less than FOB at engine start or is decreasing, or
- A passenger observes fuel spray from engine/pylon or wingtip/sharklet, or
- The total fuel quantity is decreasing at an abnormal rate, or
- A fuel imbalance is developing, or
- Fuel quantity in a tank is decreasing too fast (leak from engine/pylon, or hole in a tank), or
- The Fuel flow is excessive, N1 is low (leak from engine), or
- Fuel is smelt in the cabin, or
- The destination EFOB turns to amber on the F-PLN (or on the FUEL PRED) page, or
- "DEST EFOB BELOW MIN" appears on the MCDU scratchpad.

If visibility permits, leak source may be identified by a visual check from the cabin.

WHEN A LEAK IS CONFIRMED

LAND ASAP

■ **Leak from engine/pylon confirmed by excessive fuel flow, low N1, or visual check:**

THR LEVER (affected engine)..IDLE
ENG MASTER (affected engine)..OFF
FUEL X FEED..AS RQRD

If the leak stops, the crossfeed valve can now be opened to re-balance fuel quantity, or to enable use of fuel from both wings.

DO NOT RESTART AFFECTED ENGINE

■ **Leak from engine/pylon not confirmed or leak not located:**

Stop any fuel transfer, and then monitor the depletion rate of each inner tank, to determine if the leak is from an engine or a wing, or from the Center tank, or the APU feeding line.

FUEL X FEED..MAINTAIN CLOSED

The crossfeed valve must remain closed to prevent the leak from affecting both sides.

CTR TK PUMP 1..OFF
CTR TK PUMP 2..OFF

Each engine is fed via its associated inner tank only.

INNER TANK FUEL QUANTITIES..MONITOR

Monitor the depletion rate of each inner tank.

Continued on the following page

[QRH] FUEL LEAK (Cont'd)

- ■ **If one inner tank depletes faster than other by at least 300 kg (660 lb) in less than 30 min:**

  An engine leak may still be suspected. Therefore:

  THR LEVER (engine on leaking side)........IDLE
  ENG MASTER (engine on leaking side)........OFF
  CTR TK PUMP 1........ON
  CTR TK PUMP 2........ON
  FUEL LEAK........MONITOR

  - ■ **If leak stops:**

    ENGINE LEAK CONFIRMED

    FUEL X FEED........AS RQRD

    DO NOT RESTART AFFECTED ENGINE

  - ■ **If leak continues (after engine shutdown):**

    WING LEAK SUSPECTED

    ENGINE RESTART........CONSIDER

CAUTION	Do not apply the FUEL IMBALANCE procedure. Approach and landing can be done, even with one full wing/one empty wing.

- ■ **If both inner tanks deplete at a similar rate:**

  LEAK FROM CENTER TANK OR APU FEEDING LINE SUSPECTED

  - ● **If fuel smell in cabin:**
    APU........OFF

    This prevents additional fuel loss through the APU feeding line.

  - ● **When fuel quantity in one inner tank less than 3 000 kg (6 600 lb):**
    CTR TK PUMP 1........ON
    CTR TK PUMP 2........ON

- ● **For landing:** DO NOT USE REVERSERS

[QRH] FUEL LEAK

Ident.: PRO-ABN-FUEL-00018665.0006001 / 28 MAY 20

4 **Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

A fuel leak may be detected, if:

- The sum of FOB and FU is significantly less than FOB at engine start or is decreasing, or
- A passenger observes fuel spray from engine/pylon or wingtip/sharklet, or
- The total fuel quantity is decreasing at an abnormal rate, or
- A fuel imbalance is developing, or
- Fuel quantity in a tank is decreasing too fast (leak from engine/pylon, or hole in a tank), or
- A tank is overflowing (due to pipe rupture in a tank), or
- The Fuel flow is excessive, N1 is low (leak from engine), or
- Fuel is smelt in the cabin, or
- The destination EFOB turns to amber on the F-PLN (or on the FUEL PRED) page, or
- “DEST EFOB BELOW MIN” appears on the MCDU scratchpad.

If visibility permits, leak source may be identified by a visual check from the cabin.

WHEN A LEAK IS CONFIRMED

LAND ASAP

■ **Leak from engine/pylon confirmed by excessive fuel flow, low N1, or visual check:**

THR LEVER (affected engine)........................IDLE
ENG MASTER (affected engine)........................OFF
FUEL X FEED........................AS RQRD

If the leak stops, the crossfeed valve can now be opened to re-balance fuel quantity, or to enable use of fuel from both wings.

DO NOT RESTART AFFECTED ENGINE

■ **Leak from engine/pylon not confirmed or leak not located:**

Stop any fuel transfer, and then monitor the depletion rate of each inner tank, to determine if the leak is from an engine or a wing, or from the Center tank, or the APU feeding line.

FUEL X FEED........................MAINTAIN CLOSED

The crossfeed valve must remain closed to prevent the leak from affecting both sides.

CTR TK L XFR........................OFF
CTR TK R XFR........................OFF

Each engine is fed via its associated inner tank only.

INNER TANK FUEL QUANTITIES........................MONITOR

Continued on the following page

[QRH] FUEL LEAK (Cont'd)

Monitor the depletion rate of each inner tank.

■ **If one inner tank depletes faster than other by at least 300 kg (660 lb) in less than 30 min :**

An engine leak may still be suspected. Therefore:

THR LEVER (engine on leaking side)........................ IDLE
ENG MASTER (engine on leaking side)........................ OFF
FUEL LEAK........................ MONITOR

■ **If leak stops:**

ENGINE LEAK CONFIRMED

CTR TK L XFR........................ ON
CTR TK R XFR........................ ON
FUEL X FEED........................ AS RQRD

DO NOT RESTART AFFECTED ENGINE

■ **If leak continues (after engine shutdown):**

WING LEAK SUSPECTED

ENGINE RESTART........................ CONSIDER
CTR TK XFR (non-leaking side)........................ ON

CAUTION	Do not apply the FUEL IMBALANCE procedure. Approach and landing can be done, even with one full wing/one empty wing.

■ **If both inner tanks deplete at a similar rate:**

LEAK FROM CENTER TANK OR APU FEEDING LINE SUSPECTED

● **If fuel smell in cabin:**
APU........................ OFF
This prevents additional fuel loss through the APU feeding line.

● **When fuel quantity in one inner tank less than 3 000 kg (6 600 lb):**
CTR TK L XFR........................ ON
CTR TK R XFR........................ ON

● **For landing:** DO NOT USE REVERSERS

[QRH] FUEL LEAK

Ident.: PRO-ABN-FUEL-00018665.0015001 / 28 MAY 20

5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

A fuel leak may be detected, if:
- The sum of FOB and FU is significantly less than FOB at engine start or is decreasing, or
- A passenger observes fuel spray from engine/pylon or wingtip/sharklet, or
- The total fuel quantity is decreasing at an abnormal rate, or
- A fuel imbalance is developing, or
- Fuel quantity in a tank is decreasing too fast (leak from engine/pylon, or hole in a tank), or
- A tank is overflowing (due to pipe rupture in a tank), or
- The Fuel flow is excessive, N1 is low (leak from engine), or
- Fuel is smelt in the cabin, or
- The destination EFOB turns to amber on the F-PLN (or on the FUEL PRED) page, or
- ”DEST EFOB BELOW MIN” appears on the MCDU scratchpad.

If visibility permits, leak source may be identified by a visual check from the cabin.

WHEN A LEAK IS CONFIRMED

LAND ASAP

■ **Leak from engine/pylon confirmed by excessive fuel flow, low N1, or visual check:**

THR LEVER (affected engine)....................IDLE
ENG MASTER (affected engine)....................OFF
FUEL X FEED....................AS RQRD

If the leak stops, the crossfeed valve can now be opened to re-balance fuel quantity, or to enable use of fuel from both wings.

DO NOT RESTART AFFECTED ENGINE

■ **Leak from engine/pylon not confirmed or leak not located:**

Stop any fuel transfer, and then monitor the depletion rate of each wing tank, to determine if the leak is from an engine or a wing, or from the Center tank, or the APU feeding line.

FUEL X FEED....................MAINTAIN CLOSED

The crossfeed valve must remain closed to prevent the leak from affecting both sides.

CTR TK L XFR....................OFF
CTR TK R XFR....................OFF

Each engine is fed via its associated wing tank only.

WING TANK FUEL QUANTITIES....................MONITOR

Continued on the following page

[QRH] FUEL LEAK (Cont'd)

Monitor the depletion rate of each wing tank.

- ■ **If one wing tank depletes faster than other by at least 300 kg (660 lb) in less than 30 min:**

  An engine leak may still be suspected. Therefore:

  THR LEVER (engine on leaking side)........ IDLE
  ENG MASTER (engine on leaking side)........ OFF
  FUEL LEAK........ MONITOR

  - ■ **If leak stops:**

    ENGINE LEAK CONFIRMED

    CTR TK L XFR........ ON
    CTR TK R XFR........ ON
    FUEL X FEED........ AS RQRD

    DO NOT RESTART AFFECTED ENGINE

  - ■ **If leak continues (after engine shutdown):**

    WING LEAK SUSPECTED

    ENGINE RESTART........ CONSIDER
    CTR TK XFR (non-leaking side)........ ON

CAUTION	Do not apply the FUEL IMBALANCE procedure. Approach and landing can be done, even with one full wing/one empty wing.

- ■ **If both wing tanks deplete at a similar rate:**

  LEAK FROM CENTER TANK OR APU FEEDING LINE SUSPECTED

  - ● **If fuel smell in cabin:**
    APU........ OFF
    This prevents additional fuel loss through the APU feeding line.

  - ● **When fuel quantity in one wing tank less than 3 000 kg (6 600 lb):**
    CTR TK L XFR........ ON
    CTR TK R XFR........ ON

- ● **For landing:** DO NOT USE REVERSERS

[QRH] FUEL OVERREAD

Ident.: PRO-ABN-FUEL-00022322.0003001 / 05 MAR 19
Applicable to: ALL

FOB / F. USED...CHECK

- **If discrepancy confirmed:**

  FUEL QTY UNRELIABLE

  L2 *FOB must be considered unreliable even if the indication is not displayed with two dashes across the two last digits on the FUEL SD page.*

  L1 DISREGARD FMS FUEL PREDICTIONS
  COMPUTE FOB FROM INITIAL FOB - F. USED

FUEL LO LVL ALERTS REMAIN RELIABLE

L2 *Fuel low level alerts remain reliable as they are computed using independent sensors.*

L1 Maintenance action is due before next flight.

[QRH] FWD ACT ISOLATED

6 Ident.: PRO-ABN-FUEL-00011279.0005001 / 04 SEP 18

Applicable to: MSN 11531

DO NOT APPLY THIS PROCEDURE IN ELEC EMER CONFIG

- **If no ENG 1(2) FAIL alert:**

  FWD ACT.. OVRD

  FWD ACT was isolated due to spurious damage detection.

- **If ENG 1(2) FAIL alert and FWD ACT not empty:**

  ACT XFR.. OFF
  ACT XFR MODE SEL.. MAN
  CTR TK L XFR.. OFF
  CTR TK R XFR.. OFF

  USE ONLY WING TANK FUEL TO KEEP CG WITHIN LIMITS

CAUTION	Disregard FMS fuel predictions as usable fuel is limited to wings only. After failure detection, land before the maximum flight time allowed.

  Maximum Flight Time : 120 min

- **If ENG 1(2) FAIL alert and FWD ACT empty or not installed:**

  CONTROL ACT TRANSFER MANUALLY

[QRH] GRAVITY FUEL FEEDING

Ident.: PRO-ABN-FUEL-00011261.0002001 / 17 MAR 17

7 **Applicable to: MSN 08495-09324, 10949-11597**

ENG MODE SEL....................IGN
AVOID NEGATIVE G FACTOR
MAX FL: GRAVITY FEED CEILING

- *Current FL if flight time above FL 300 > 30 min.*
- *FL 280 if flight time above FL 300 < 30 min.*
- *FL 150 if FL 300 never exceeded.*

● **When reaching gravity feed ceiling:**

FUEL X FEED....................OFF

● **If no fuel leak and with one engine running (fed by gravity):**

FUEL X FEED....................ON
BANK ANGLE....................1° WING DOWN ON LIVE ENG SIDE

The fuel from the wing tank on the engine running side is used.

RUDDER TRIM....................USE

Use rudder trim to maintain constant course and neutral stick.

● **When fuel imbalance reaches 1 000 kg (2 200 lb):**

BANK ANGLE....................2° or 3° WING DOWN ON LIVE ENG SIDE

Use fuel from the opposite wing tank, until fuel imbalance is reduced to 0.

[QRH] GRAVITY FUEL FEEDING

Ident.: PRO-ABN-FUEL-00011261.0001001 / 17 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

ENG MODE SEL....................IGN

AVOID NEGATIVE G FACTOR

MAX FL: GRAVITY FEED CEILING

- *Current FL if flight time above FL 300 > 30 min.*
- *FL 300 if flight time above FL 300 < 30 min.*
- *Highest of FL 150 or 7 000 ft above takeoff airport if FL 300 never exceeded.*
- *FL 100 for JET B.*

● **When reaching gravity feed ceiling:**

FUEL X FEED....................OFF

● **If no fuel leak and with one engine running (fed by gravity):**

FUEL X FEED....................ON

BANK ANGLE....................1° WING DOWN ON LIVE ENG SIDE

The fuel from the wing tank on the engine running side is used.

RUDDER TRIM....................USE

Use rudder trim to maintain constant course and neutral stick.

● **When fuel imbalance reaches 1 000 kg (2 200 lb):**

BANK ANGLE....................2° or 3° WING DOWN ON LIVE ENG SIDE

Use fuel from the opposite wing tank, until fuel imbalance is reduced to 0.

FUEL ACT PUMP LO PR

Applicable to: MSN 11531

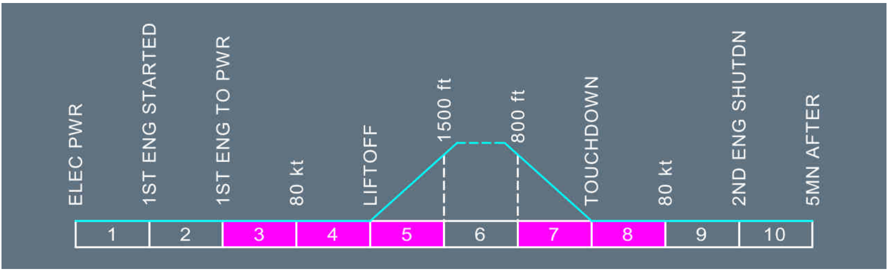
8 Ident.: PRO-ABN-FUEL-T-00018189.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ACT pump is in low pressure.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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9 Ident.: PRO-ABN-FUEL-T-00011276.0001001 / 13 AUG 10

SELECTED ACT LO LVL

ACT...AUTO

L2 *The pump does not operate in flight. However the PUMP LO PR warning will be displayed when the FUEL MODE SEL pb-sw is selected to MAN and the selected ACT is empty. The ACT pb-sw must be set to AUTO so that the normal automatic sequence restarts.*

10 Ident.: PRO-ABN-FUEL-T-00011277.0001001 / 13 AUG 10

STATUS

INOP SYS

ACT PUMP

FUEL ACT SYSTEM FAULT

Applicable to: MSN 11531

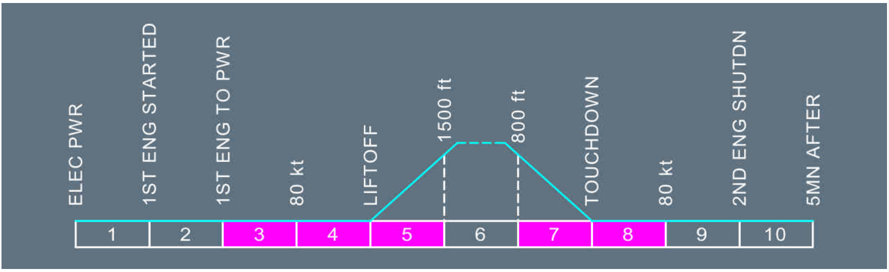
11 Ident.: PRO-ABN-FUEL-BA-00016812.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when, in MAN mode, any of the valves are in the incorrect position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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12 Ident.: PRO-ABN-FUEL-BA-00018838.0001001 / 21 MAR 16

PROC.. APPLY

L2 *Refer to PRO-ABN-FUEL [QRH] ACT SYSTEM FAULT which is not indicated on ECAM.*

FUEL ACT XFR FAULT ⩤

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-R-00016820.0001001 / 21 MAR 16

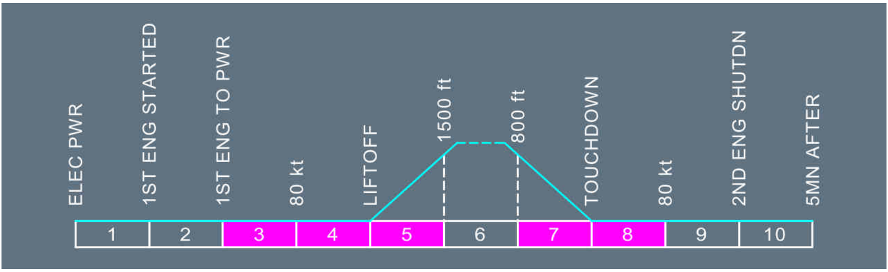
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The ACT quantity > 250 kg (550 lb) and
- The CTR TK quantity < 3 000 kg (6 600 lb).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL ACT XFR FAULT ⩤ (Cont'd)

Ident.: PRO-ABN-FUEL-R-00017614.0001001 / 21 MAR 16

13

ACT..FWD

- **IF NECESSARY:**

  DESCEND TO FL270

L2 *Note:*
- *ACT transfer rate depends on altitude and on remaining ACT fuel quantity.*
- *If ACT transfer is uncertain, set the ACT pb to AUTO to avoid pump dry running.*
- *ACT pb can be set back to FWD at lower Flight Level to recover remaining ACT fuel.*

L1
- **WHEN ACT EMPTY:**

  ACT..AUTO

  - **For A321 aircraft equipped with 1 ACT ⩤ :**

    ACT UNUSABLE (IF AUTOMATIC AND MANUAL MODES ARE FAILED)

- **For aircraft equipped with 2 ACTs ⩤ :**
  - **IF NO XFR:**

    ACT UNUSABLE
    PROC..APPLY

Ident.: PRO-ABN-FUEL-R-00011267.0001001 / 13 AUG 10

14

STATUS

	INOP SYS
● **If automatic and manual mode are failed:** ACT UNUSABLE	ACT XFR

FUEL ACT XFR FAULT ⩤

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

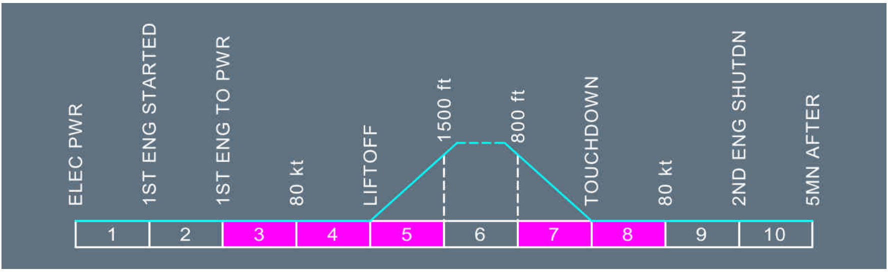
Ident.: PRO-ABN-FUEL-R-00016820.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The ACT quantity > 250 kg (550 lb) and
- The CTR TK quantity < 3 000 kg (6 600 lb).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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FUEL ACT XFR FAULT ⩤

Applicable to: MSN 11531

Ident.: PRO-ABN-FUEL-R-00016820.0001001 / 21 MAR 16

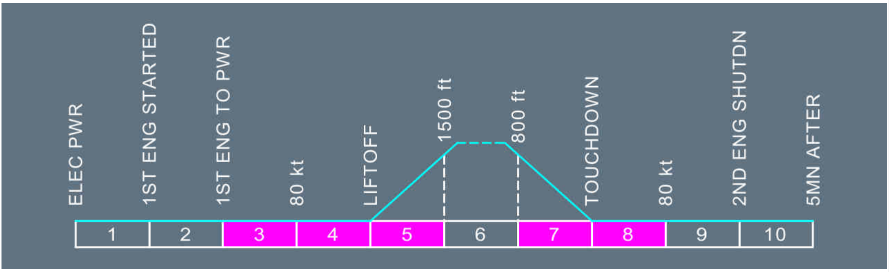
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The ACT quantity > 250 kg (550 lb) and
- The CTR TK quantity < 3 000 kg (6 600 lb).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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15 Ident.: PRO-ABN-FUEL-R-00017614.0003001 / 30 MAR 18

L2 Automatic sequencing is not working.

This warning is triggered when:
a. The center tank quantity is less than 3 000 kg and there is still fuel in one or more ACTs, or
b. Any ACT is not full and there is still fuel in the previous ACT.

Thus, if a transfer failure occurs, the warning may not be displayed immediately. It will be displayed only when one of the above conditions is present.

L1 PROC.. APPLY

L2 *Refer to PRO-ABN-FUEL [QRH] ACT XFR FAULT which is not indicated on ECAM.*

FUEL ACT PUMP LO PR ⋖

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-BB-00016811.0001001 / 21 MAR 16

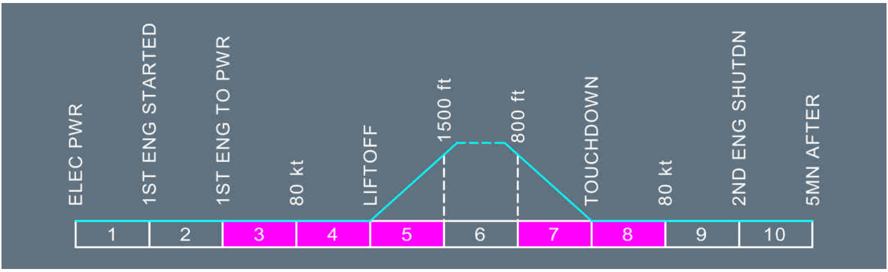
16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ACT pump is in low pressure.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-BB-00018877.0001001 / 21 MAR 16

17

ACT LO LVL

L2 *Note:* *Displayed if ACT is empty.*

L1 ACT...OFF

FUEL APU LP VALVE FAULT

Applicable to: ALL

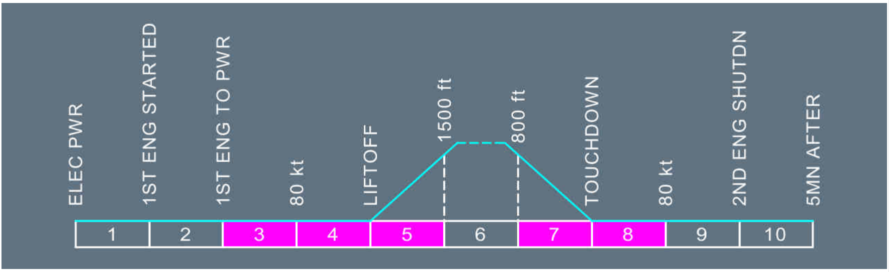
Ident.: PRO-ABN-FUEL-BC-00016826.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve position disagrees with the selected position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-BC-00017633.0002001 / 21 MAR 16

Crew awareness.

FUEL AUTO FEED FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

Ident.: PRO-ABN-FUEL-Q-00016698.0001001 / 21 MAR 16

ANNUNCIATIONS

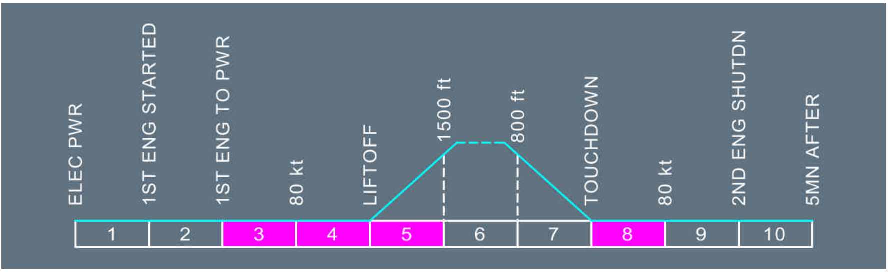
Triggering Conditions:

L2

This alert triggers when:

- CTR TK quantity > 250 kg (550 lb) and left or right wing tanks quantity < 5 000 kg (11 000 lb), or
- CTR TK pumps do not stop after slat extension or CTR TK level is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL AUTO FEED FAULT (Cont'd)

Ident.: PRO-ABN-FUEL-Q-00017666.0001001 / 21 MAR 16

FUEL MODE SEL..MAN

L2 *The center tank pumps will run and feed the engines.*

L1 ■ **Fuel in one wing tank < 5 000 kg (11 000 lb) and in center tank > 250 kg (550 lb):**

CTR TK PUMP 1..ON
CTR TK PUMP 2..ON

L2 *When the center tank is empty, CTR TK PUMP LO PR alert will come on.*
For aircraft equipped with CFM engines only: If the center tank is not empty at slat extension, CTR TK PUMPs should be switched OFF. This action will prevent a possible wing tank overflow on ground, due to IDG fuel recirculation.

L1 ■ **CTR TK PUMPS running after slat extension, or LO LVL in center tank:**

CTR TK PUMP 1..OFF
CTR TK PUMP 2..OFF

Ident.: PRO-ABN-FUEL-Q-00018882.0001001 / 21 MAR 16

STATUS

CTR TK FEED : MAN ONLY

FUEL AUTO TRANSFER FAULT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597

Ident.: PRO-ABN-FUEL-O-00016830.0001001 / 21 MAR 16

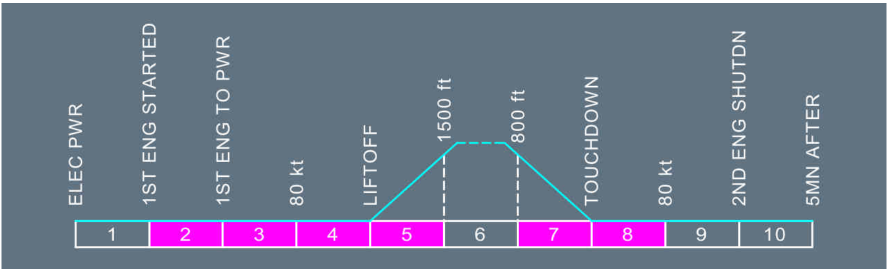
18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- the CTR TK quantity > 250 kg (550 lb) and
- Left or right wing tanks quantity < 5 000 kg (11 000 lb).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-O-00011223.0001001 / 31 AUG 17

19

FUEL MODE SEL..MAN

L2 *The center tank transfer valves open.*

L1 CTR TK L XFR..ON

CTR TK R XFR..ON

L2 *The flight crew should select the CTR TK L+R XFR pb-switches OFF when the center tank is empty, and/or when the wing tanks are full to prevent overflow.*

Ident.: PRO-ABN-FUEL-O-00011225.0001001 / 13 NOV 13

20

STATUS

CTR TK FEED : MAN ONLY

FUEL CTR L(R) XFR FAULT

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597

Ident.: PRO-ABN-FUEL-X-00016835.0001001 / 07 NOV 22

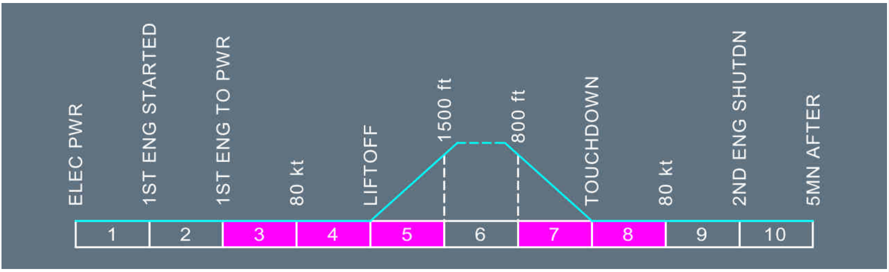
21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when either center transfer valve is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL CTR L(R) XFR FAULT (Cont'd)

Ident.: PRO-ABN-FUEL-X-00018886.0001001 / 07 NOV 22

22

- **If valve not fully closed:**

  CTR TK L(R) XFR.. OFF

  - **IF UNSUCCESSFUL and if the center tank is not empty:**

    FUEL X FEED.. ON
    L(R) TK PUMP 1.. OFF
    L(R) TK PUMP 2.. OFF

    L2 *Since fuel does not transfer from the center tank to L(R) inner/wing tank, both engines are fed by R(L) inner/wing tank.*

    L1 *Note: FUEL L(R) TK PUMP 1 + 2 LO PR triggers.*

    - **When the center tank is empty (automatic recall of the warning):**

      L(R) TK PUMP 1.. ON
      L(R) TK PUMP 2.. ON
      FUEL X FEED.. OFF

- **If valve not fully open:**

  FUEL MODE SEL.. MAN

  - **IF UNSUCCESSFUL and if the center tank is not empty:**

    FUEL X FEED.. ON
    L(R) TK PUMP 1.. OFF
    L(R) TK PUMP 2.. OFF

    L2 *Since fuel does not transfer from the center tank to L(R) inner/wing tank, both engines are fed by R(L) inner/wing tank.*

    L1 *Note: FUEL L(R) TK PUMP 1 + 2 LO PR triggers.*

    - **When the center tank is empty (automatic recall of the warning):**

      L (R) TK PUMP 1.. ON
      L (R) TK PUMP 2.. ON
      FUEL X FEED.. OFF

Continued on the following page

FUEL CTR L(R) XFR FAULT (Cont'd)

Ident.: PRO-ABN-FUEL-X-00014902.0008001 / 07 NOV 22

23

STATUS

INOP SYS

CTR TK L(R) XFR

FUEL CTR L + R XFR FAULT
(VALVES NOT FULLY CLOSED)

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597

Ident.: PRO-ABN-FUEL-Z-00016838.0001001 / 28 JUL 16

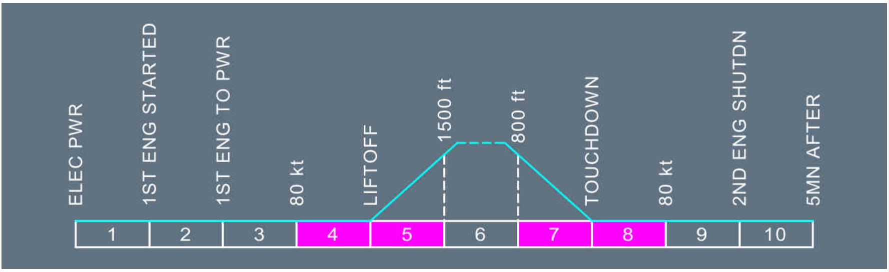
24

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both center transfer valves are failed in open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-Z-00014908.0008001 / 13 NOV 13

25

CTR TK L XFR..OFF
CTR TK R XFR..OFF

Continued on the following page

FUEL CTR L + R XFR FAULT (Cont'd)
(VALVES NOT FULLY CLOSED)

Ident.: PRO-ABN-FUEL-Z-00014907.0008001 / 13 NOV 13

26

STATUS

INOP SYS

CTR TK XFR

FUEL CTR L + R XFR FAULT
(VALVES NOT FULLY OPEN)

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597

Ident.: PRO-ABN-FUEL-AA-00018051.0003001 / 28 JUL 16

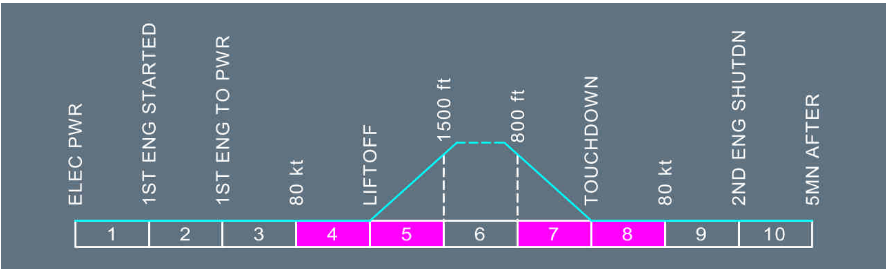
27

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both center transfer valves are failed in closed position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

FUEL CTR L + R XFR FAULT (Cont'd)
(VALVES NOT FULLY OPEN)

Ident.: PRO-ABN-FUEL-AA-00014903.0012001 / 13 NOV 13

28

FUEL MODE SEL...MAN

- **IF UNSUCCESSFUL:**

  CTR AVAIL BY GRAVITY

L2 *If the center tank transfer valves are not fully open, the center tank fuel may be used by gravity.*

L1 2 T (4400 LBS) UNUSABLE

Ident.: PRO-ABN-FUEL-AA-00014904.0011001 / 13 NOV 13

29

STATUS

	INOP SYS
CTR TK USABLE BY GRAVITY CTR TK FUEL: 2 T (4400 LBS) UNUSABLE	CTR TK XFR

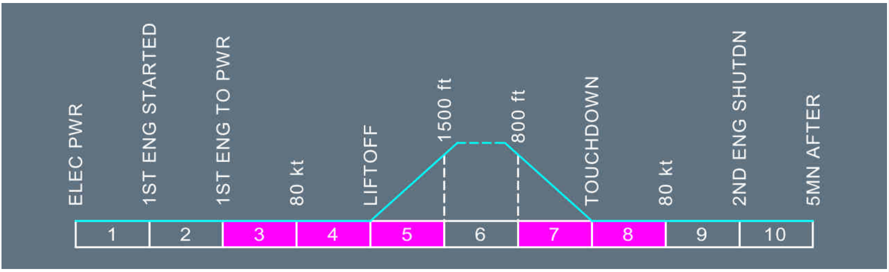
FUEL CTR TK PUMP 1(2) LO PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

Ident.: PRO-ABN-FUEL-M-00016843.0001001 / 21 MAR 16

ANNUNCIATIONS

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

FUEL CTR TK PUMP 1(2) LO PR (Cont'd)

Ident.: PRO-ABN-FUEL-M-00018914.0003001 / 21 MAR 16

● **IF NO FUEL LEAK:**

FUEL X FEED..ON

CTR TK PUMP (AFFECTED)..OFF

L2 *A fuel imbalance may occur, if the performance of the pumps of one wing is different from that of the other wing, and the CTR TK PUMP that is not affected stops automatically because:*
- *The L(R) INR TK is full, or*
- *The CTR TK is empty.*

In this case, apply the FUEL IMBALANCE procedure, as required.

L1 ● **WHEN CTR TK EMPTY:**

FUEL X FEED..OFF

L2 *When the CTR TK is empty, the X FEED pb-sw must be turned off, to avoid a possible fuel imbalance.*

Ident.: PRO-ABN-FUEL-M-00018918.0002001 / 21 MAR 16

STATUS

	INOP SYS
● **WHEN CTR TK EMPTY:** FUEL X FEED........................OFF	CTR TK PUMP 1(2)

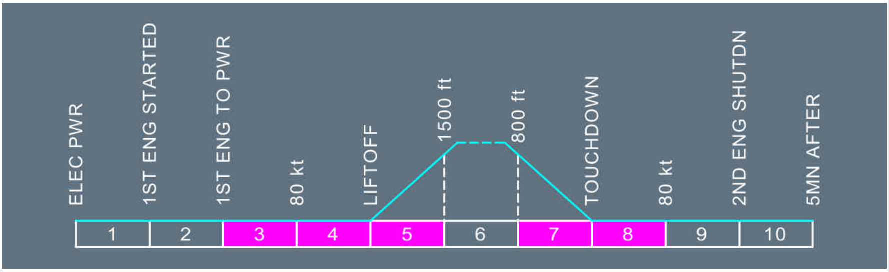
FUEL CTR TK PUMP 1(2) LO PR

Applicable to: MSN 01251

Ident.: PRO-ABN-FUEL-M-00016843.0001001 / 21 MAR 16

ANNUNCIATIONS

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-M-00018914.0002001 / 21 MAR 16

- **IF NO FUEL LEAK:**
  FUEL X FEED..ON

CTR TK PUMP (AFFECTED)..OFF

L2 *A fuel imbalance may occur, if the performance of the pumps of one wing is different from that of the other wing, and the CTR TK PUMP that is not affected stops automatically because:*
- *The L(R) INR TK is full, or*
- *The CTR TK is empty.*

In this case, apply the FUEL IMBALANCE procedure, as required. When the CTR TK is empty, the X FEED pb-sw may be turned off, to avoid a possible fuel imbalance.

Ident.: PRO-ABN-FUEL-M-00018918.0001001 / 21 MAR 16

STATUS

INOP SYS

CTR TK PUMP 1(2)

FUEL CTR TK PUMPS LO PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

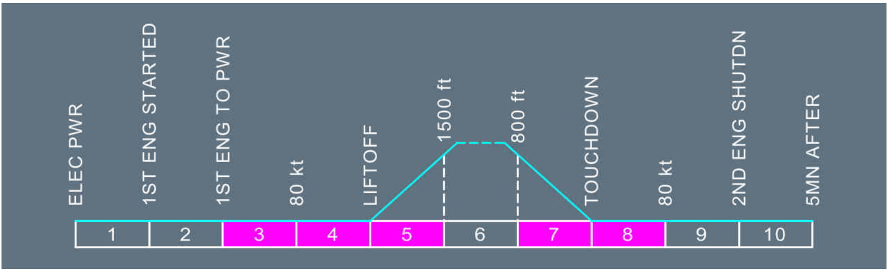
Ident.: PRO-ABN-FUEL-N-00016845.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of the CTR TK pumps is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-N-00011221.0003001 / 30 MAR 12

L2 Set FUEL MODE SEL pb-sw to MAN, to avoid the possible triggering of the FUEL CTR TK PUMPS OFF ECAM caution.

L1 CTR TK PUMP 1..OFF
CTR TK PUMP 2..OFF
FUEL X FEED..OFF
CTR TK UNUSABLE

L2 *Gravity feeding from the center tank is not possible (no by-pass valve fitted on the center tank pumps).*

Continued on the following page

FUEL CTR TK PUMPS LO PR (Cont'd)

Ident.: PRO-ABN-FUEL-N-00011222.0001001 / 13 AUG 10

STATUS

	INOP SYS
CTR TK FUEL UNUSABLE	CTR TK PUMPS

FUEL CTR TK PUMPS LO PR

Applicable to: MSN 01251

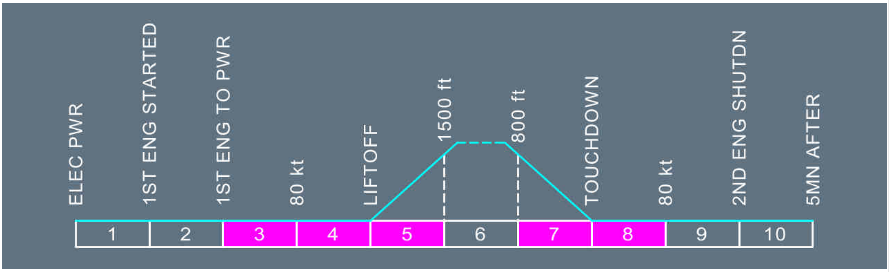
Ident.: PRO-ABN-FUEL-N-00016845.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of the CTR TK pumps is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

FUEL CTR TK PUMPS LO PR (Cont'd)

Ident.: PRO-ABN-FUEL-N-00011221.0001001 / 13 AUG 10

L2 Set FUEL MODE SEL pb-sw to MAN, to avoid the possible triggering of the FUEL CTR TK PUMPS OFF ECAM caution.

L1 CTR TK PUMP 1 .... OFF
CTR TK PUMP 2 .... OFF
CTR TK UNUSABLE

L2 *Gravity feeding from the center tank is not possible (no by-pass valve fitted on the center tank pumps).*

Ident.: PRO-ABN-FUEL-N-00011222.0001001 / 13 AUG 10

STATUS

	INOP SYS
CTR TK FUEL UNUSABLE	CTR TK PUMPS

FUEL CTR TK PUMPS OFF

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

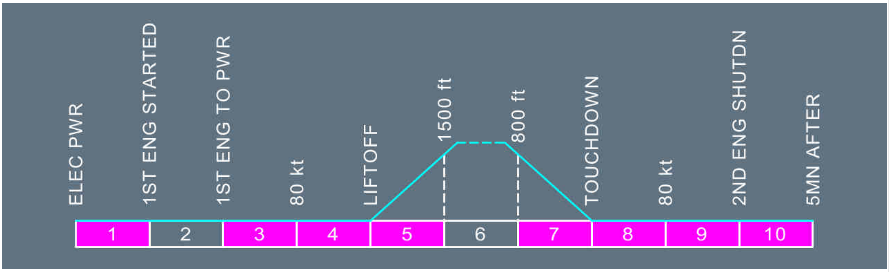
Ident.: PRO-ABN-FUEL-BE-00016846.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both CTR TK PUMP 1 pb-sw and CTR TK PUMP 2 pb-sw are at OFF with no failure.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BE-00011260.0002001 / 10 JAN 11

L2 The center tank pumps pushbuttons are OFF, with slats retracted.

L1 CTR TK PUMP 1 .... ON

CTR TK PUMP 2 .... ON

FUEL CTR TK XFR OFF

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11597

Ident.: PRO-ABN-FUEL-BF-00016847.0001001 / 21 MAR 16

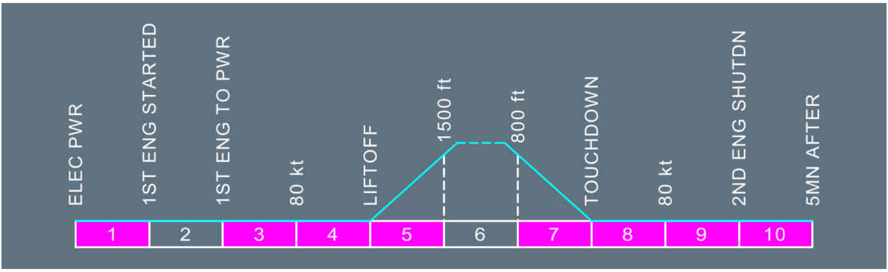
30

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both CTR TK L XFR pb-sw and CTR TK R XFR pb-sw at OFF when the system is in automatic mode.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BF-00011239.0001001 / 13 AUG 10

31

L2 Center tank transfer valves pushbuttons at off.

L1 CTR TK L XFR...ON

CTR TK R XFR...ON

FUEL ENG 1(2) LP VALVE FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-FUEL-BT-00024813.0001001 / 19 NOV 21

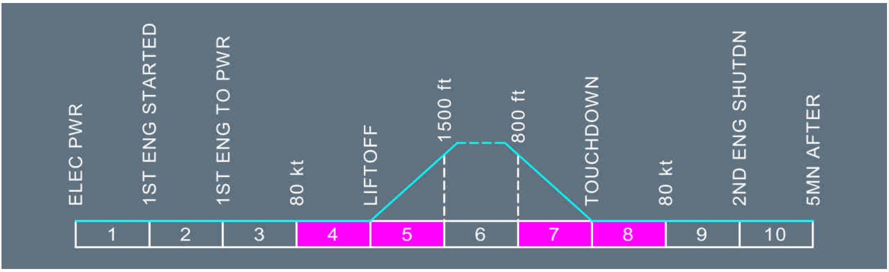
32

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve position disagrees with the selected position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BT-00024818.0001001 / 19 NOV 21

33

Crew awareness.

FUEL ENG 1(2) LP VALVE OPEN

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

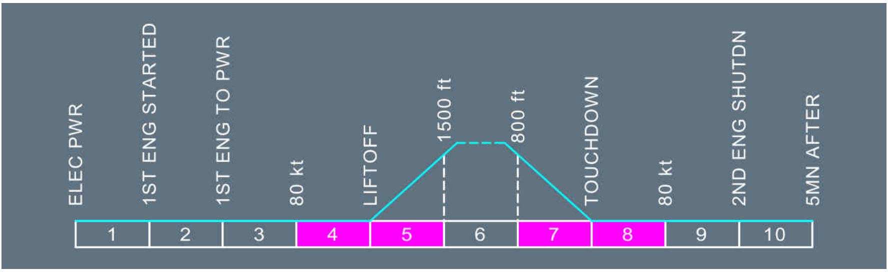
Ident.: PRO-ABN-FUEL-BG-00016814.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve remains in the open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BG-00011217.0001001 / 25 FEB 14

Crew awareness.

FUEL F. USED/FOB DISAGREE

Applicable to: MSN 04827-04860, 05528, 05947-05987, 06097, 06121, 06139-08596, 09190-09324

Ident.: PRO-ABN-FUEL-BH-00016816.0002001 / 21 MAR 16

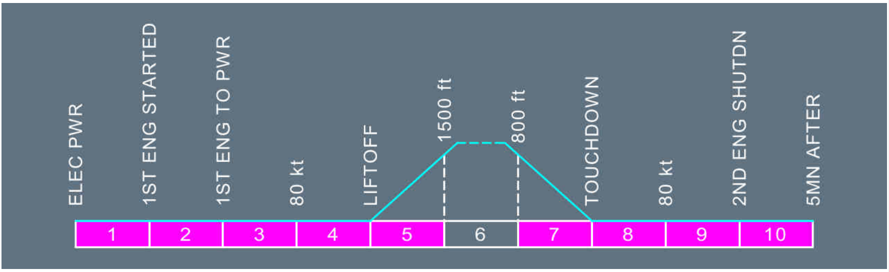
34

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the initial FOB and the actual FOB + fuel used is significant.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BH-00017634.0001001 / 21 MAR 16

FUEL LEAK PROC.. APPLY

FUEL F. USED/FOB DISAGREE

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-FUEL-BH-00016816.0002001 / 21 MAR 16

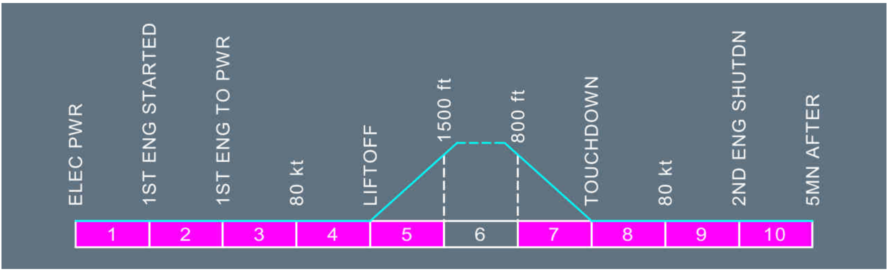
35

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the initial FOB and the actual FOB + fuel used is significant.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BH-00017634.0005001 / 30 MAR 18

36

- **If current FOB + FUEL USED is more than initial FOB:**
  OVERREAD PROC...APPLY
- **If current FOB + FUEL USED is less than initial FOB:**
  FUEL LEAK PROC...APPLY

FUEL FQI CH 1(2) FAULT

Applicable to: ALL

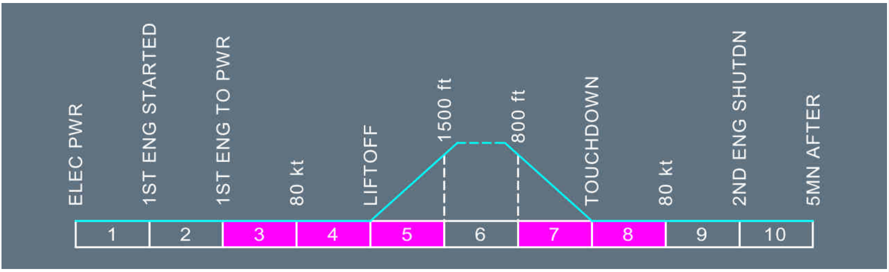
Ident.: PRO-ABN-FUEL-BI-00016817.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when a FQI channel is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BI-00011216.0001001 / 25 FEB 14

Crew awareness.

FUEL FQI CH 1+2 FAULT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-FUEL-BW-00023773.0001001 / 09 APR 20

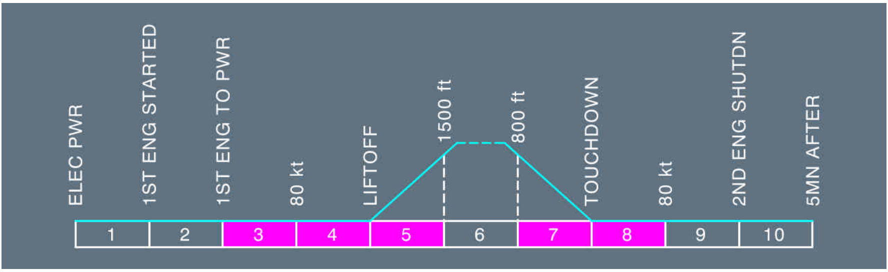
37

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FQI channels are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BW-00023774.0001001 / 09 APR 20

38

FQI 1+2...RESET

Refer to PRO-ABN-ABN-RESET System Reset Table - FUEL.

FUEL FWD ACT ISOLATED

Applicable to: MSN 11531

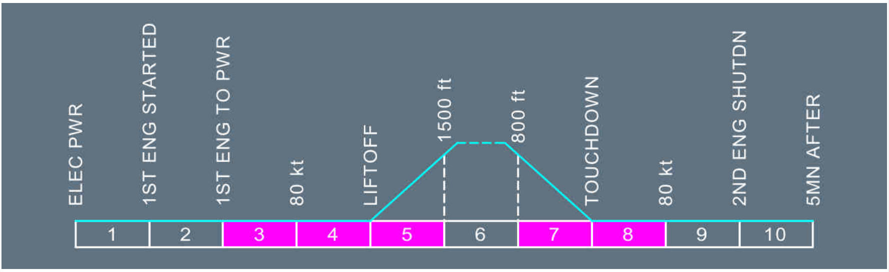
39 Ident.: PRO-ABN-FUEL-BJ-00016819.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when forward ACT are automatically isolated due to damage that is detected during the forward ACT transfer.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

40 Ident.: PRO-ABN-FUEL-BJ-00017635.0001001 / 21 MAR 16

PROC.. APPLY

L2 *Apply the FWD ACT ISOLATED procedure (Refer to PRO-ABN-FUEL [QRH] FWD ACT ISOLATED) which is not indicated on ECAM.*

FUEL FWD ACT LINE FAULT

Applicable to: MSN 11531

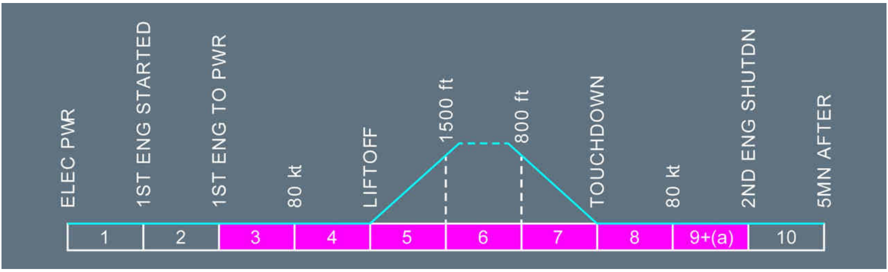
41 Ident.: PRO-ABN-FUEL-BS-00022249.0001001 / 28 MAY 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers on ground when the FWD ACT isolation valve or FWD ACT inlet valve is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9+(a)
10

Note: *(a) Alert inhibited only for the first 60 s in flight phase 9.*

42 Ident.: PRO-ABN-FUEL-BS-00022250.0001001 / 30 MAR 18

- **If FWD ACT isolation valve or FWD ACT inlet valve is failed open :**
  FWD ACT VALVE OPEN
- **If FWD ACT isolation valve is failed closed and FWD ACT inlet valve is NOT failed open :**
  FWD ACT VALVE CLOSED

FUEL IDG 1(2) COOL FAULT

Applicable to: MSN 06528-06561, 06598-09324, 10949-11597

Ident.: PRO-ABN-FUEL-BK-00016821.0001001 / 21 MAR 17

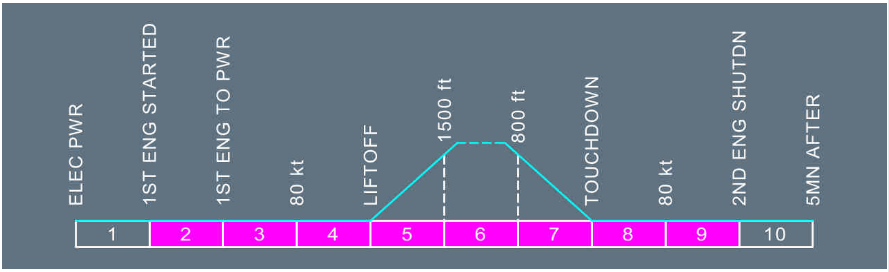
43

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when equipment related to the fuel recirculation command is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-BK-00011262.0001001 / 25 FEB 14

44

L2 Maintenance action is due.

L1 Crew awareness.

FUEL FUEL INERTING SYS FAULT

Applicable to: MSN 01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734-03032, 03058, 03180-03710, 03761-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-FUEL-U-00016823.0001001 / 21 MAR 16

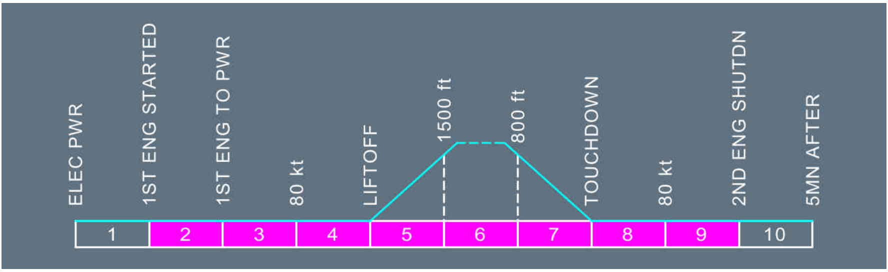
45

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel inerting system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-U-00014390.0002001 / 25 FEB 14

46

Crew awareness.

Ident.: PRO-ABN-FUEL-U-00014391.0002001 / 30 MAR 12

47

STATUS

INOP SYS

FUEL INERT

FUEL L (R) OUTER (INNER) TK HI TEMP

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

Ident.: PRO-ABN-FUEL-BL-00016825.0002001 / 21 MAR 16

48

ANNUNCIATIONS

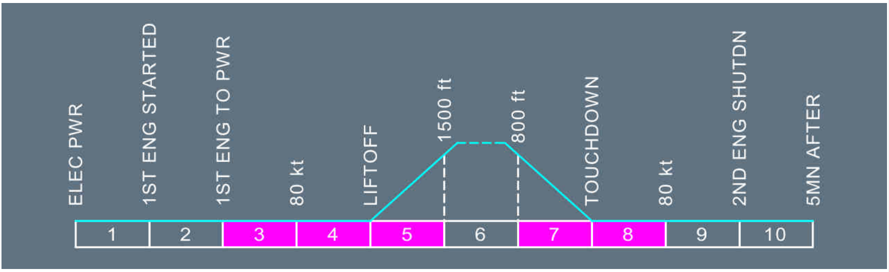
Triggering Conditions:

L2

This alert triggers when the fuel temperature:

- In outer cell, is above 60 °C
- In inner cell, is above 54 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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10

Continued on the following page

FUEL L (R) OUTER (INNER) TK HI TEMP (Cont'd)

Ident.: PRO-ABN-FUEL-BL-00011214.0002001 / 26 NOV 19

This caution may spuriously trigger due to interference from communication equipment. Therefore, the flight crew should wait 2 min while the fuel temperature measurement is updated. After 2 min, if the ECAM caution has not disappeared, the flight crew must apply the following procedure:

GEN (AFFECTED SIDE)....................OFF

- **On the ground:**
  - DELAY T.O.
  - ENG MASTER (AFFECTED SIDE)....................OFF
- **In flight:**
  - ENG F. FLOW (AFFECTED SIDE)....................INCREASE

L2 *Disconnect autothrust. Adjust the thrust lever to increase fuel flow through the IDG oil heat exchanger and decrease the temperature of the fuel returning to the outer cell.*

L1
- **IF TEMP ABV 65 DEG C in outer cell or 57 DEG C in inner cell:**
  - APU....................AS RQRD

L2 *APU if available may be started and APU GEN used to allow IDG disconnection.*

L1
  - **If opposite GEN avail:**
    - IDG (AFFECTED SIDE)....................OFF

FUEL L (R) OUTER (INNER) TK HI TEMP

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173

Ident.: PRO-ABN-FUEL-BL-00016825.0001001 / 21 MAR 16

ANNUNCIATIONS

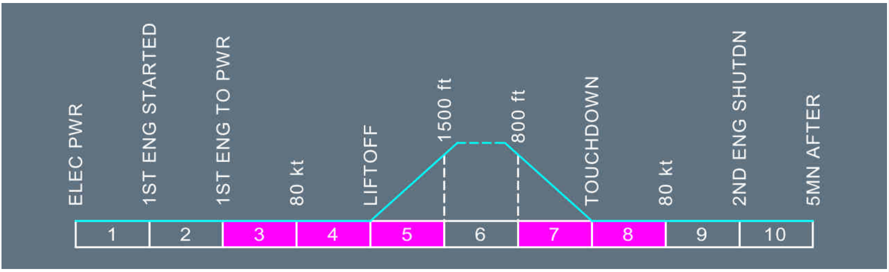
Triggering Conditions:

L2

This alert triggers when the fuel temperature:

- In outer cell, is above 55 °C on ground
- In outer cell, is above 60 °C in flight
- In inner cell, is above 45 °C on ground
- In inner cell, is above 54 °C in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) OUTER (INNER) TK HI TEMP (Cont'd)

Ident.: PRO-ABN-FUEL-BL-00011214.0001001 / 10 MAY 21

This caution may spuriously trigger due to interference from communication equipment. Therefore, the flight crew should wait 2 min while the fuel temperature measurement is updated. After 2 min, if the ECAM caution has not disappeared, the flight crew must apply the following procedure:

GALLEY..OFF

L2 *Reducing electrical loads reduce heat emitted by IDG.*

L1
- **On the ground:**
  - **If the fuel temperature reaches 55° C in outer tank or 45° C in inner tank:**

    LIMITED TAXI TIME

    Note: Monitor fuel temperature. Takeoff may be performed until the fuel temperature reaches 60°C in the outer tank or 54°C in the inner tank.
  - **If the fuel temperature reaches 60° C in outer tank or 54° C in inner tank:**

    DELAY T.O.
    ENG MASTER (AFFECTED SIDE).. OFF
- **In flight:**

  ENG F. FLOW (AFFECTED SIDE)..INCREASE

  L2 *Disconnect autothrust. Adjust the thrust lever to increase fuel flow through the IDG oil heat exchanger and decrease the temperature of the fuel returning to the outer cell.*

  L1
  - ● **IF TEMP ABV 65° C in outer cell or 57° C in inner cell:**

    APU..AS RQRD

    L2 *APU if available may be started and APU GEN used to allow IDG disconnection.*

    L1
    - ● **If opposite GEN avail:**

      IDG (AFFECTED SIDE)..OFF

FUEL L (R) OUTER (INNER) TK HI TEMP

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-FUEL-BL-00016825.0001001 / 21 MAR 16

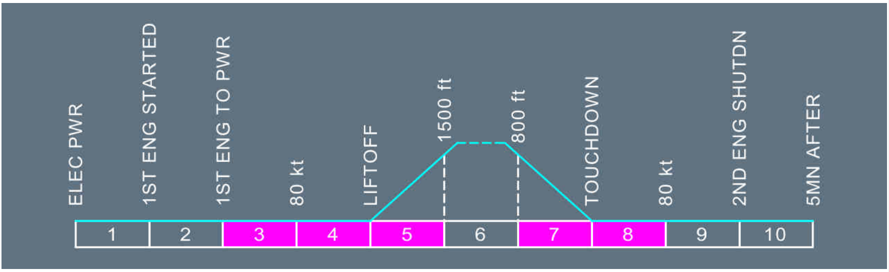
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel temperature:

- In outer cell, is above 55 °C on ground
- In outer cell, is above 60 °C in flight
- In inner cell, is above 45 °C on ground
- In inner cell, is above 54 °C in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) OUTER (INNER) TK HI TEMP (Cont'd)

Ident.: PRO-ABN-FUEL-BL-00011214.0005001 / 10 MAY 21

GALLEY..OFF

L2 *Reducing electrical loads reduce heat emitted by IDG.*

L1
- **On the ground:**
  - **If the fuel temperature reaches 55° C in outer tank or 45° C in inner tank:**

    LIMITED TAXI TIME

    Note: Monitor fuel temperature. Takeoff may be performed until the fuel temperature reaches 60° C in the outer tank or 54° C in the inner tank.
  - **If the fuel temperature reaches 60° C in outer tank or 54° C in inner tank:**

    DELAY T.O.
    ENG MASTER (AFFECTED SIDE)..............................OFF
- **In flight:**

  ENG F. FLOW (AFFECTED SIDE)..............................INCREASE

  L2 *Disconnect autothrust. Adjust the thrust lever to increase fuel flow through the IDG oil heat exchanger and decrease the temperature of the fuel returning to the outer cell.*

  L1
  - **IF TEMP ABV 65° C in outer cell or 57° C in inner cell:**

    APU..............................AS RQRD

    L2 *APU if available may be started and APU GEN used to allow IDG disconnection.*

    L1
    - **If opposite GEN avail:**

      IDG (AFFECTED SIDE)..............................OFF

FUEL L (R) OUTER (INNER) TK HI TEMP

Applicable to: MSN 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-BL-00016825.0002001 / 21 MAR 16

49

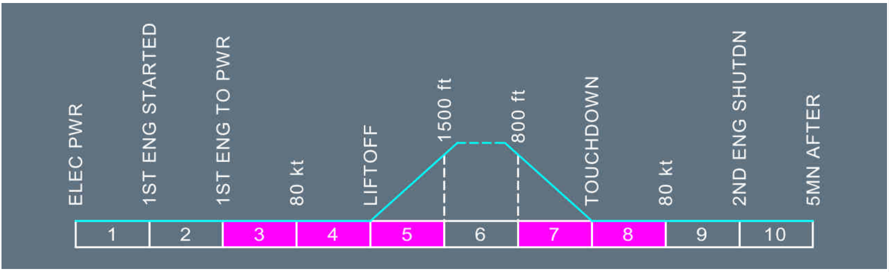
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel temperature:

- In outer cell, is above 60 °C
- In inner cell, is above 54 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) OUTER (INNER) TK HI TEMP (Cont'd)

Ident.: PRO-ABN-FUEL-BL-00011214.0006001 / 26 NOV 19

50

GEN (AFFECTED SIDE)....................OFF

- **On the ground:**

  DELAY T.O.
  ENG MASTER (AFFECTED SIDE)....................OFF

- **In flight:**

  ENG F. FLOW (AFFECTED SIDE)....................INCREASE

  L2 *Disconnect autothrust. Adjust the thrust lever to increase fuel flow through the IDG oil heat exchanger and decrease the temperature of the fuel returning to the outer cell.*

  L1 ● **IF TEMP ABV 65 DEG C in outer cell or 57 DEG C in inner cell:**

    APU....................AS RQRD

    L2 *APU if available may be started and APU GEN used to allow IDG disconnection.*

    L1 ● **If opposite GEN avail:**

      IDG (AFFECTED SIDE)....................OFF

FUEL L (R) OUTER (INNER) TK LO TEMP

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-BM-00016827.0001001 / 21 MAR 16

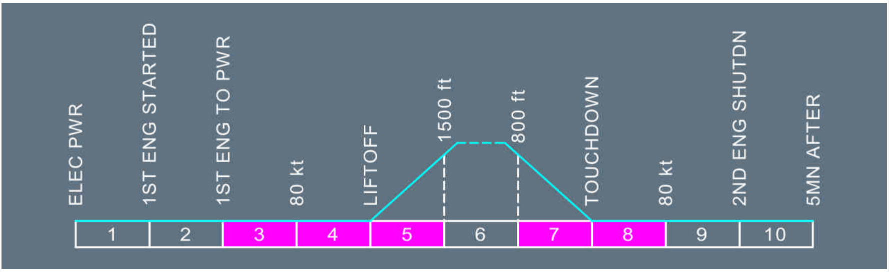
51

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel temperature is approximately below -43 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-BM-00011208.0001001 / 25 FEB 14

52

- **On the ground before takeoff:**

  DELAY T.O

  L2 *Do not takeoff until temperatures are within limits.*

- L1 **In flight:**

  Crew awareness.

  L2 Consider descending to a lower altitude and/or increasing Mach to increase TAT.

FUEL L (R) OUTER XFR CLOSED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-V-00016829.0001001 / 21 MAR 16

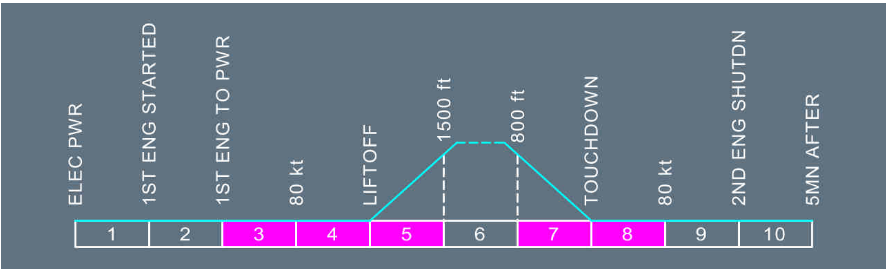
53

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both transfer valves remain closed after inner tank reaches the low level.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-V-00014879.0006001 / 07 MAR 13

54

Note: *When fuel quantity in affected wing reaches low level, corresponding FUEL WING TK LO LVL warning is triggered.*

L (R) OUTER TK UNUSABLE

Ident.: PRO-ABN-FUEL-V-00014881.0006001 / 07 MAR 13

55

STATUS

L (R) OUTER TK UNUSABLE

FUEL L (R) OUTER XFR OPEN

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-W-00016831.0001001 / 21 MAR 16

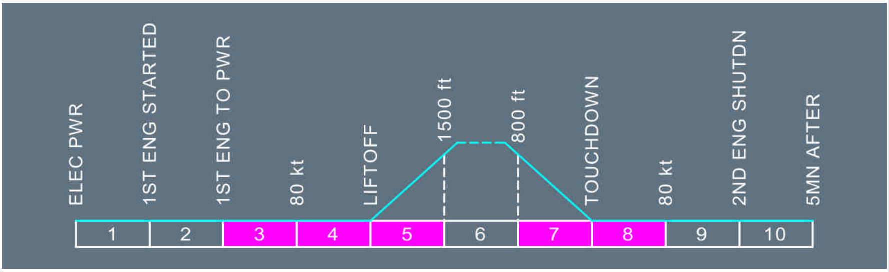
56

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when either transfer valve opens before inner tank reaches low level.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-W-00014882.0006001 / 25 FEB 14

57

Crew awareness.

Ident.: PRO-ABN-FUEL-W-00014883.0006001 / 07 MAR 13

58

STATUS

INOP SYS

L (R) CELL VALVE

FUEL L (R) TK PUMP 1(2) LO PR

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

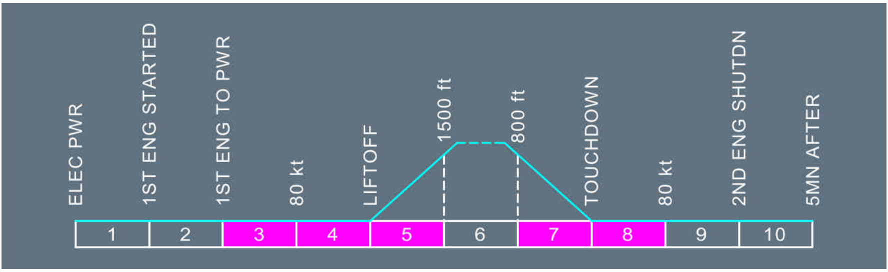
Ident.: PRO-ABN-FUEL-D-00016832.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of one tank pump is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-D-00011177.0002001 / 13 AUG 10

TK PUMP (AFFECTED)..OFF

L2 Note: *Aircraft altitude must be limited to 35 000 ft if a single fuel pump feeds both engines with hot JET B (JP4) fuel (fuel temperature above 30 °C).*

Ident.: PRO-ABN-FUEL-D-00011178.0001001 / 13 AUG 10

STATUS

INOP SYS

TK PUMP (affected)

FUEL L (R) TK PUMP 1(2) LO PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

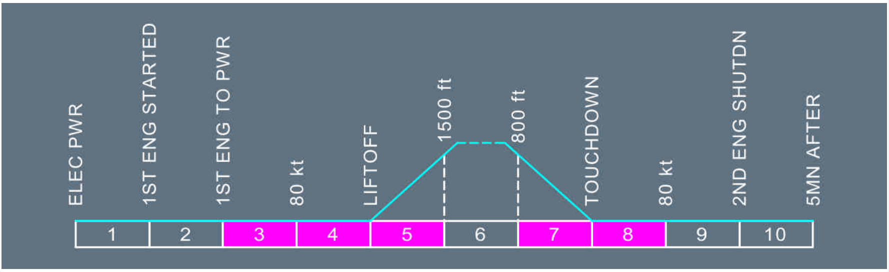
Ident.: PRO-ABN-FUEL-D-00016832.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of one tank pump is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-D-00011178.0001001 / 13 AUG 10

STATUS

INOP SYS

TK PUMP (affected)

FUEL L (R) TK PUMP 1(2) LO PR

Applicable to: MSN 08495-09324, 10949-11597

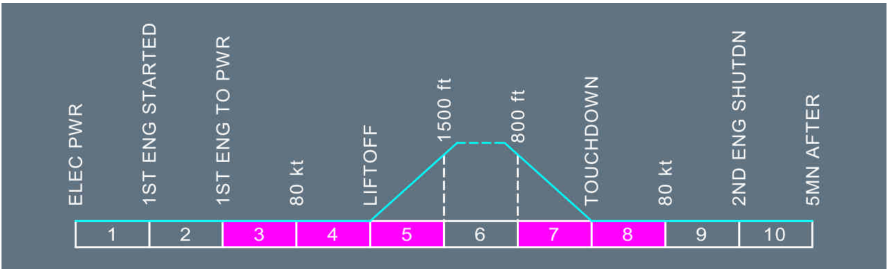
Ident.: PRO-ABN-FUEL-D-00016832.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of one tank pump is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-D-00011177.0001001 / 13 AUG 10

59 TK PUMP (AFFECTED)..OFF

Ident.: PRO-ABN-FUEL-D-00011178.0001001 / 13 AUG 10

STATUS

INOP SYS

TK PUMP (affected)

FUEL L (R) TK PUMP 1 + 2 LO PR

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324

Ident.: PRO-ABN-FUEL-A-00016833.0001001 / 21 MAR 16

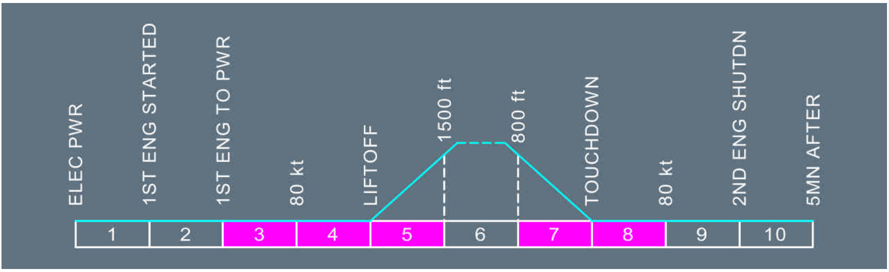
60

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of the tank pumps is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) TK PUMP 1 + 2 LO PR (Cont'd)

Ident.: PRO-ABN-FUEL-A-00017636.0001001 / 21 MAR 16

- **IF NO FUEL LEAK:**
  FUEL X FEED (IF ABOVE FL150)........ ON

ENG MODE SEL........IGN

L2 *The selection of continuous relight protects against flame-out, caused by possible fuel supply surging.*

L1 TK PUMP 1 (AFFECTED)........OFF
TK PUMP 2 (AFFECTED)........OFF

- **WHEN TK (affected) FUEL RQRD:**
  TK (AFFECTED) FEED........GRVTY ONLY

L2 *Apply the GRVTY FUEL FEEDING procedure, (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*
Fuel from the affected tank may be used immediately if there is no ceiling limitation for gravity fuel feeding.

L1 FUEL X FEED (IF BELOW FL150)........OFF

- **If FUEL X FEED off:**

L2 As long as fuel X feed is closed, associated engine is fed by gravity only.

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply the GRVTY FUEL FEEDING procedure, (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 AVOID NEGATIVE G FACTOR

L2 *Avoiding negative g will prevent fuel surging and therefore reduce the risk of engine malfunction.*

Ident.: PRO-ABN-FUEL-A-00018926.0001001 / 21 MAR 16

STATUS

	INOP SYS
● **If FUEL X FEED off:** PROC: GRVTY FUEL FEEDING AVOID NEGATIVE G FACTOR TK (AFFECTED) GRVTY FEED ONLY	TK PUMPS (affected)

FUEL L (R) TK PUMP 1 + 2 LO PR

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-FUEL-A-00016833.0001001 / 21 MAR 16

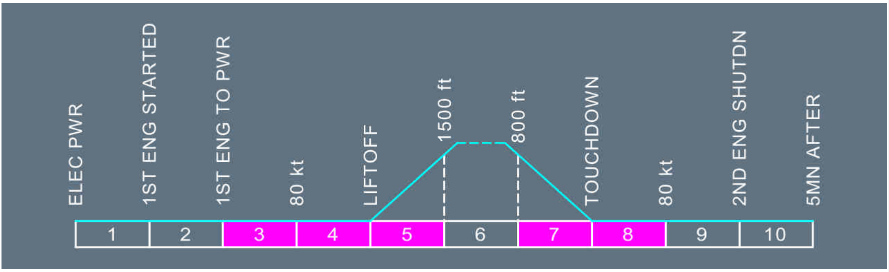
61

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of the tank pumps is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) TK PUMP 1 + 2 LO PR (Cont'd)

Ident.: PRO-ABN-FUEL-A-00017636.0002001 / 19 NOV 21

62

- **IF NO FUEL LEAK:**
  FUEL X FEED (IF ABOVE FL150)........................ ON

ENG MODE selector .... IGN

L2 *The selection of continuous relight protects against flame-out, caused by possible fuel supply surging.*

L1 TK PUMP 1 (AFFECTED)........................OFF
TK PUMP 2 (AFFECTED)........................OFF

- **WHEN TK (affected) FUEL RQRD:**
  TK (AFFECTED) FEED........................GRVTY ONLY

L2 *Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING.*
Fuel from the affected tank may be used immediately if there is no ceiling limitation for gravity fuel feeding.

L1 FUEL X FEED (IF BELOW FL150)........................OFF

- **If FUEL X FEED off:**

L2 As long as fuel X feed is closed, associated engine is fed by gravity only.

L1 PROC: GRVTY FUEL FEEDING

L2 *Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING.*

L1 AVOID NEG G LOAD

L2 *Avoiding negative g load will prevent fuel surging and therefore reduce the risk of engine malfunction.*

Ident.: PRO-ABN-FUEL-A-00018926.0002001 / 19 NOV 21

63

STATUS

	INOP SYS
● **If FUEL X FEED off:** PROC: GRVTY FUEL FEEDING AVOID NEG G LOAD TK (AFFECTED) GRVTY FEED ONLY	TK PUMPS (affected)

FUEL L (R) TK PUMP 1 + 2 LO PR
(CENTER TANK EMPTY)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

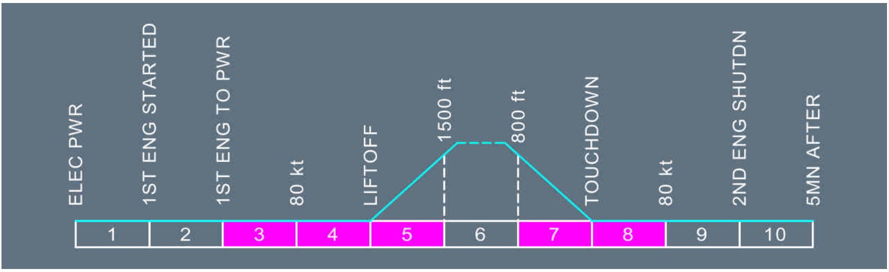
Ident.: PRO-ABN-FUEL-C-00018184.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of the tank pumps is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) TK PUMP 1 + 2 LO PR (Cont'd)
(CENTER TANK EMPTY)

Ident.: PRO-ABN-FUEL-C-00017648.0004001 / 21 MAR 16

- **IF NO FUEL LEAK:**
  FUEL X FEED (IF ABOVE FL150)........ ON

ENG MODE SEL........IGN

L2 *The selection of continuous relight protects against flame-out, caused by possible fuel supply surging.*

L1 TK PUMP 1 (AFFECTED)........OFF
TK PUMP 2 (AFFECTED)........OFF

- **WHEN TK (affected) FUEL RQRD:**
  TK (AFFECTED) FEED........GRVTY ONLY

L2 *Apply GRVTY FUEL FEED procedure, (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*
Fuel from the affected tank may be used immediately if there is no ceiling limitation for gravity fuel feeding.

L1 FUEL X FEED (IF BELOW FL150)........OFF

- **If FUEL X FEED off:**

L2 As long as fuel X feed is closed, associated engine is fed by gravity only.

L1 PROC: GRVTY FUEL FEEDING

L2 *Apply GRVTY FUEL FEED procedure, (Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING).*

L1 AVOID NEGATIVE G FACTOR

L2 *Avoiding negative g will prevent fuel surging and therefore reduce the risk of engine malfunction.*

Ident.: PRO-ABN-FUEL-C-00011175.0001001 / 13 AUG 10

STATUS

	INOP SYS
● **If FUEL X FEED off:** PROC:GRVTY FUEL FEEDING AVOID NEGATIVE G FACTOR TK (AFFECTED) GRVTY FEED ONLY	TK PUMPS (affected)

FUEL L (R) TK PUMP 1 + 2 LO PR
(CENTER TANK NOT EMPTY)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

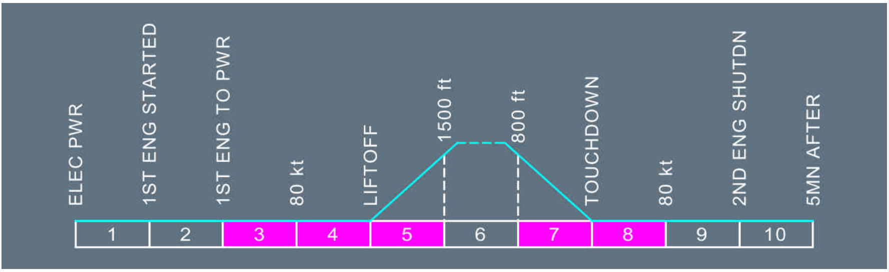
Ident.: PRO-ABN-FUEL-B-00018196.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of the tank pumps is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-B-00011170.0001001 / 13 AUG 10

FUEL MODE SEL (IF CTR TK NOT FEEDING)....................MAN

L2 *Setting FUEL MODE SEL pb-sw to MAN will allow center tank pumps to run.*

L1 TK PUMP 1 (AFFECTED)....................OFF

TK PUMP 2 (AFFECTED)....................OFF

- **WHEN TK (affected) FUEL RQRD:**

  L2 Apply the GRVTY FUEL FEEDING procedure, (*Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING*).

  L1 TK (AFFECTED) FEED....................GRVTY ONLY

  PROC: GRVTY FUEL FEEDING

Continued on the following page

FUEL L (R) TK PUMP 1 + 2 LO PR (Cont'd)
(CENTER TANK NOT EMPTY)

Ident.: PRO-ABN-FUEL-B-00011171.0001001 / 13 AUG 10

STATUS

	INOP SYS
PROC:GRVTY FUEL FEEDING	TK PUMPS (affected)
TK (AFFECTED) GRVTY FEED ONLY	
CTR TK FEED: MAN ONLY	

FUEL L (R) TK PUMP 1 + 2 LO PR
(CENTER TANK NOT EMPTY)

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173

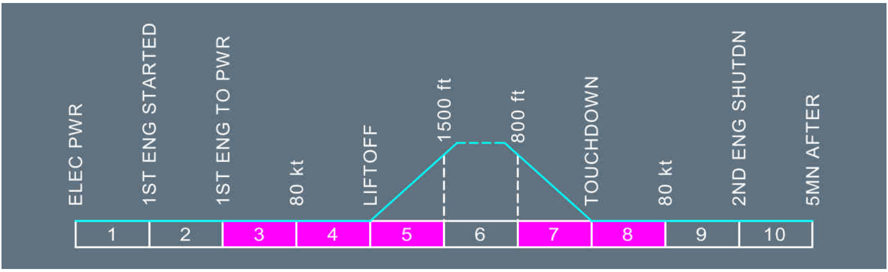
Ident.: PRO-ABN-FUEL-B-00018196.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pressure of the tank pumps is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) TK PUMP 1 + 2 LO PR (Cont'd)
(CENTER TANK NOT EMPTY)

Ident.: PRO-ABN-FUEL-B-00011170.0003001 / 26 JUL 12

FUEL MODE SEL (IF CTR TK NOT FEEDING)....................MAN

L2 *Setting FUEL MODE SEL pb-sw to MAN will allow center tank pumps to run.
If the center tank is not empty at slat extension, CTR TK PUMPs should be switched OFF. This action will prevent a possible wing tank overflow on ground, due to IDG fuel recirculation.*

L1 TK PUMP 1 (AFFECTED)....................OFF
TK PUMP 2 (AFFECTED)....................OFF

- **WHEN TK (affected) FUEL RQRD:**

L2 Apply the GRVTY FUEL FEEDING procedure, (*Refer to PRO-ABN-FUEL [QRH] GRAVITY FUEL FEEDING*).

L1 TK (AFFECTED) FEED....................GRVTY ONLY
PROC: GRVTY FUEL FEEDING

Ident.: PRO-ABN-FUEL-B-00011171.0001001 / 13 AUG 10

STATUS

	INOP SYS
PROC:GRVTY FUEL FEEDING	TK PUMPS (affected)
TK (AFFECTED) GRVTY FEED ONLY	
CTR TK FEED: MAN ONLY	

FUEL L (R) WING TK HI TEMP

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

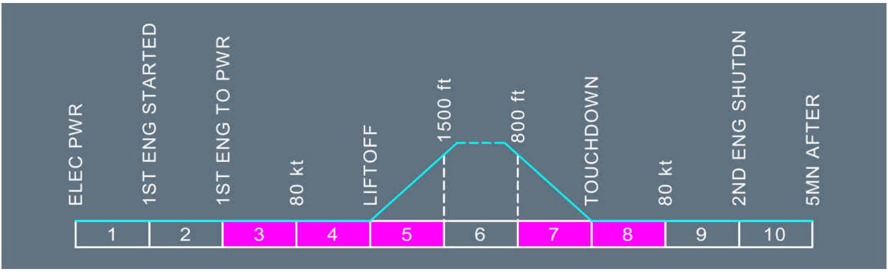
Ident.: PRO-ABN-FUEL-BN-00016834.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel temperature is above 54 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-BN-00011215.0004001 / 16 NOV 11

64

GEN (AFFECTED SIDE)....................OFF

- **On the ground:**

  DELAY T.O.
  ENG MASTER (AFFECTED SIDE)....................OFF

- **In flight:**

  ENG. F. FLOW (AFFECTED SIDE)....................INCREASE

  L2 *Disconnect autothrust. Adjust the thrust lever to increase fuel flow through the IDG oil heat exchanger and decrease the temperature of the fuel returning to the wing tank.*

  L1 ● **IF TEMP ABV 57 DEG C:**

  APU....................AS RQRD

  L2 *APU if available may be started and APU GEN used allow IDG disconnection.*

  L1 ● **If opposite GEN avail:**

  IDG (AFFECTED SIDE)....................OFF

FUEL L (R) WING TK HI TEMP

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: PRO-ABN-FUEL-BN-00016834.0002001 / 21 MAR 16

65

ANNUNCIATIONS

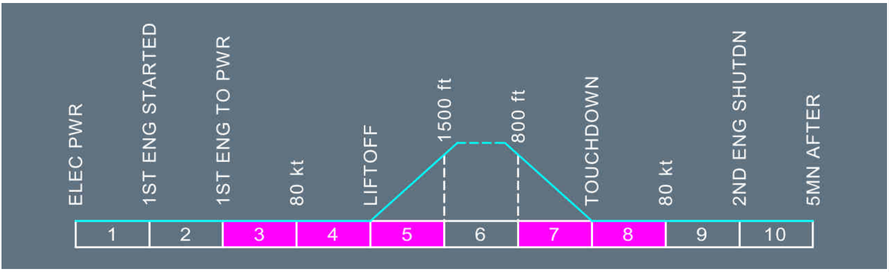
Triggering Conditions:

L2

This alert triggers when the fuel temperature is above :

- 45 °C on ground
- 54 °C in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) WING TK HI TEMP (Cont'd)

Ident.: PRO-ABN-FUEL-BN-00011215.0003001 / 10 MAY 21

GALLEY...OFF

L2 *Reducing electrical loads reduces heat emitted by IDG.*

L1 ■ **On the ground:**

- ■ **If the fuel temperature reaches 45° C:**

  LIMITED TAXI TIME

  Note: *Monitor fuel temperature. Takeoff may be performed until the fuel temperature reaches 55° C.*

- ■ **If the fuel temperature reaches 55° C:**

  DELAY T.O.
  ENG MASTER (AFFECTED SIDE)..............................OFF

■ **In flight:**

ENG F. FLOW (AFFECTED SIDE)..............................INCREASE

L2 *Disconnect autothrust. Adjust the thrust lever to increase fuel flow through the IDG oil heat exchanger and decrease the temperature of the fuel returning to the wing tank.*

L1 ● **IF TEMP ABV 57° C:**

APU..AS RQRD

L2 *APU if available may be started and APU GEN used to allow IDG disconnection.*

L1 ● **If opposite GEN avail:**

IDG (AFFECTED SIDE)......................................OFF

FUEL L (R) WING TK HI TEMP

Applicable to: MSN 11531

Ident.: PRO-ABN-FUEL-BN-00016834.0002001 / 21 MAR 16

66

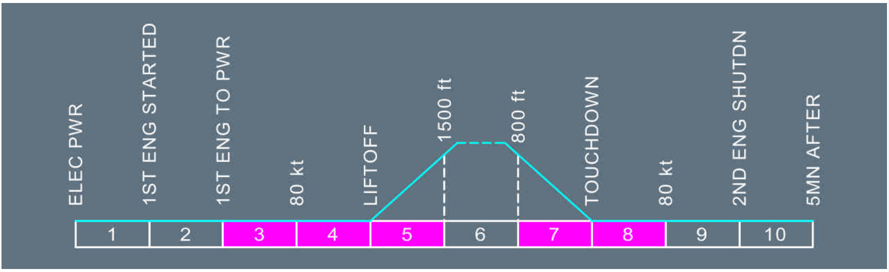
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel temperature is above :

- 45 °C on ground
- 54 °C in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) WING TK HI TEMP (Cont'd)

Ident.: PRO-ABN-FUEL-BN-00011215.0004001 / 16 NOV 11

67

GEN (AFFECTED SIDE)....................OFF

- **On the ground:**

  DELAY T.O.

  ENG MASTER (AFFECTED SIDE)....................OFF

- **In flight:**

  ENG. F. FLOW (AFFECTED SIDE)....................INCREASE

  L2 *Disconnect autothrust. Adjust the thrust lever to increase fuel flow through the IDG oil heat exchanger and decrease the temperature of the fuel returning to the wing tank.*

  L1 ● **IF TEMP ABV 57 DEG C:**

    APU....................AS RQRD

    L2 *APU if available may be started and APU GEN used allow IDG disconnection.*

    L1 ● **If opposite GEN avail:**

      IDG (AFFECTED SIDE)....................OFF

FUEL L (R) WING TK LO LVL

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

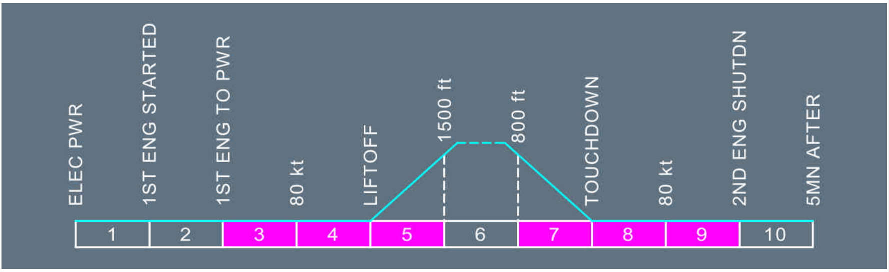
Ident.: PRO-ABN-FUEL-E-00016837.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when left or right wing tanks quantity is below 750 kg (1 650 lb). This alert is triggered by sensors getting dry and is independent from the fuel quantity indications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-E-00018927.0002001 / 21 MAR 16

- **If center tank not empty:**
  FUEL MODE SEL..MAN
- **IF NO FUEL LEAK AND FUEL IMBALANCE:**
  FUEL X FEED..ON
  TK PUMP 1 (ON SIDE WITH LO LVL)..OFF
  TK PUMP 2 (ON SIDE WITH LO LVL)..OFF

L2 *Note:* *TK PUMP 1+2 (on side with LO LVL) LO PR warning will be triggered.*

Continued on the following page

FUEL L (R) WING TK LO LVL (Cont'd)

Ident.: PRO-ABN-FUEL-E-00018928.0001001 / 21 MAR 16

STATUS

- **If center tank not empty:**
  CTR TK FEED: MAN ONLY

INOP SYS

TK PUMPS

FUEL L (R) WING TK LO LVL

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

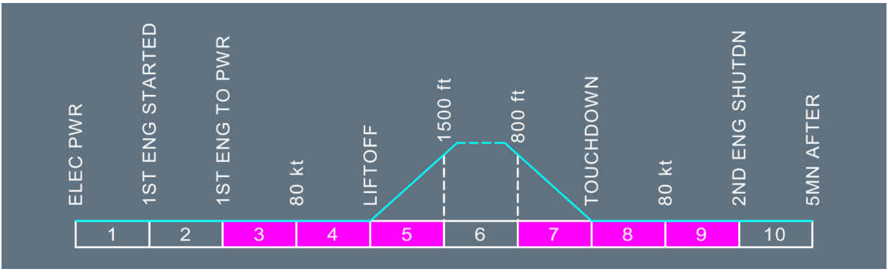
Ident.: PRO-ABN-FUEL-E-00016837.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when left or right wing tanks quantity is below 750 kg (1 650 lb). This alert is triggered by sensors getting dry and is independent from the fuel quantity indications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-E-00018928.0001001 / 21 MAR 16

STATUS

- **If center tank not empty:**
  CTR TK FEED: MAN ONLY

INOP SYS

TK PUMPS

FUEL L (R) WING TK LO LVL

Applicable to: MSN 08635, 10949-11597

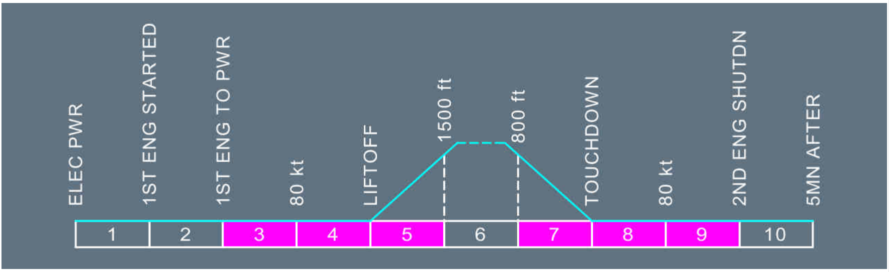
Ident.: PRO-ABN-FUEL-E-00016837.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when left or right wing tanks quantity is below 750 kg (1 650 lb). This alert is triggered by sensors getting dry and is independent from the fuel quantity indications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-E-00018927.0003001 / 30 MAR 18

68

- **If center tank not empty:**
  FUEL MODE SEL...MAN
- **IF NO FUEL LEAK:**
  FUEL X FEED...ON
  TK PUMP 1 (ON SIDE WITH LO LVL)...OFF
  TK PUMP 2 (ON SIDE WITH LO LVL)...OFF

L2 *Note:* *TK PUMP 1+2 LO PR warning will be triggered on side with LO LVL.*

Continued on the following page

FUEL L (R) WING TK LO LVL (Cont'd)

Ident.: PRO-ABN-FUEL-E-00018928.0001001 / 21 MAR 16

STATUS

- **If center tank not empty:**
  CTR TK FEED: MAN ONLY

INOP SYS

TK PUMPS

FUEL L + R WING TK LO LVL

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

Ident.: PRO-ABN-FUEL-BO-00016810.0001001 / 21 MAR 16

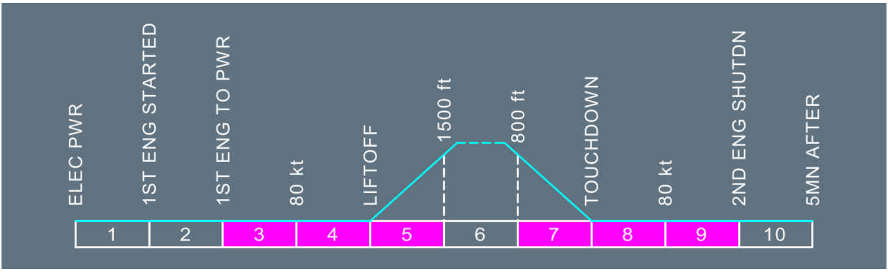
69

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the low level is detected in both wing inner tanks. The alert is triggered by sensors getting dry and is independent from the fuel quantity indications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L + R WING TK LO LVL (Cont'd)

Ident.: PRO-ABN-FUEL-BO-00018673.0003001 / 21 MAR 16

LAND ASAP

FUEL MODE SEL (IF CENTER TANK NOT EMPTY).................................MAN
ALL TK PUMPS...ON

L2 *All pumps in center tank and in wing tanks will run.*

L1
- ■ **IF NO FUEL LEAK:**
  FUEL X FEED...ON
- ■ **IF GRVTY FEED:**
  FUEL X FEED...OFF

FUEL L + R WING TK LO LVL

Applicable to: MSN 01251

Ident.: PRO-ABN-FUEL-BO-00016810.0001001 / 21 MAR 16

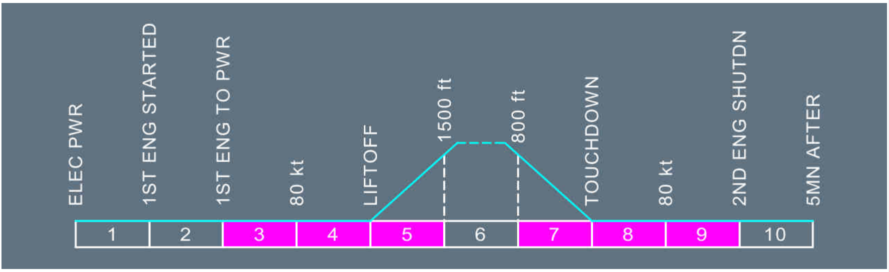
70

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the low level is detected in both wing inner tanks. The alert is triggered by sensors getting dry and is independent from the fuel quantity indications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L + R WING TK LO LVL (Cont'd)

Ident.: PRO-ABN-FUEL-BO-00018673.0001001 / 21 MAR 16

LAND ASAP

FUEL MODE SEL (IF CENTER TANK NOT EMPTY)..MAN

ALL TK PUMPS..ON

L2 *The center tank transfer valves ◁✳ will open if the associated pushbutton are ON. All tanks pumps will run.*

L1 FUEL X FEED...OFF

FUEL L + R WING TK LO LVL

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

Ident.: PRO-ABN-FUEL-BO-00016810.0002001 / 21 MAR 16

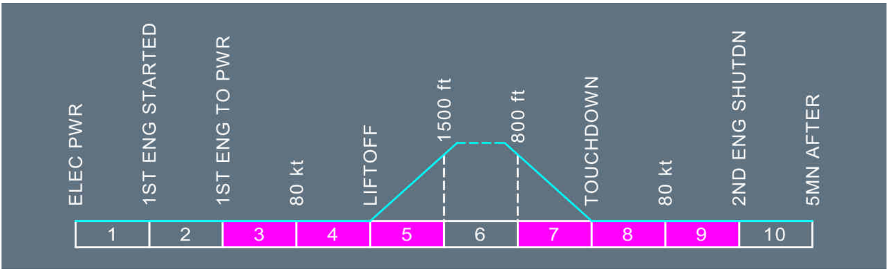
71

ANNUNCIATIONS

Triggering Conditions:

L3 This alert triggers when the low level is detected in both wing tanks. The alert is triggered by sensors getting dry and is independent from the fuel quantity indications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L + R WING TK LO LVL (Cont'd)

Ident.: PRO-ABN-FUEL-BO-00018673.0004001 / 21 MAR 16

72

LAND ASAP

FUEL MODE SEL (IF CENTER TANK NOT EMPTY)........MAN
ALL TK PUMPS........ON
CTR TK L+R XFR........ON

L2 *The center tank transfer valves will open and all pumps in wing tanks will run.*

L1
- **IF NO FUEL LEAK:**
  FUEL X FEED........ON
- **IF GRVTY FEED:**
  FUEL X FEED........OFF

FUEL L + R WING TK LO LVL

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-BO-00016810.0001001 / 21 MAR 16

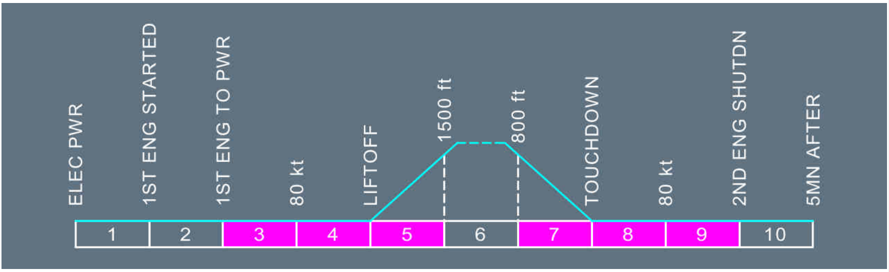
73

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the low level is detected in both wing inner tanks. The alert is triggered by sensors getting dry and is independent from the fuel quantity indications.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L + R WING TK LO LVL (Cont'd)

Ident.: PRO-ABN-FUEL-BO-00018673.0004001 / 21 MAR 16

74

LAND ASAP

FUEL MODE SEL (IF CENTER TANK NOT EMPTY)........MAN
ALL TK PUMPS........ON
CTR TK L+R XFR........ON

L2 *The center tank transfer valves will open and all pumps in wing tanks will run.*

L1
- **IF NO FUEL LEAK:**
  FUEL X FEED........ON
- **IF GRVTY FEED:**
  FUEL X FEED........OFF

FUEL L (R) WING TK LO TEMP

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

Ident.: PRO-ABN-FUEL-BP-00016815.0001001 / 21 MAR 16

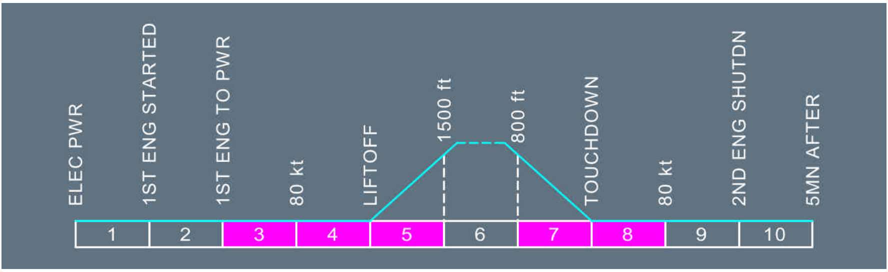
75

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fuel temperature is below -44 °C.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) WING TK LO TEMP (Cont'd)

Ident.: PRO-ABN-FUEL-BP-00011209.0001001 / 25 FEB 14

76

- **On the ground before takeoff:**

  DELAY T.O

  L2 *Do not takeoff until temperatures are within limits.*

- L1 **In flight:**

  Crew awareness.

  L2 Consider descending to a lower altitude and/or increasing mach to increase TAT.

FUEL L (R) WING TK OVERFLOW

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-FUEL-P-00016818.0002001 / 21 MAR 16

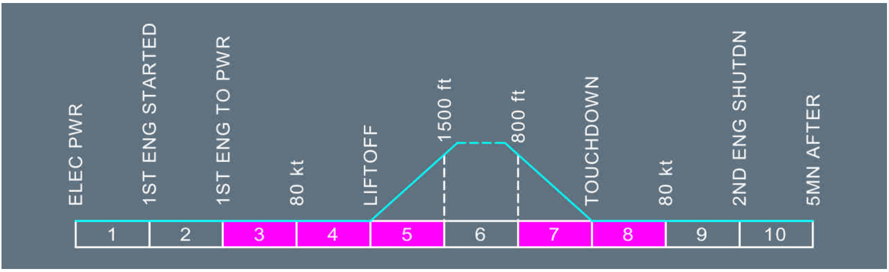
77

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an overflow of the tank is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) WING TK OVERFLOW (Cont'd)

Ident.: PRO-ABN-FUEL-P-00018938.0001001 / 03 NOV 21

78

CTR TK L(R) XFR..........OFF

L2 *If this action is successful, it will take up to 5 min for this ECAM alert to be removed. This is the necessary time for the overflow sensor to become dry again.*

L1 ● **IF UNSUCCESSFUL**

L2 Turn off both L(R) wing tank pumps to stop the fuel transfer from the center tank to the L(R) wing tank.

As a result, both engines are fed by the wing tank with the running fuel pumps until the center tank is empty. The FUEL L(R) WING TK OVERFLOW alert may remain displayed until the center tank is empty.

L1
FUEL X FEED..........ON
L(R) TK PUMP 1..........OFF
L(R) TK PUMP 2..........OFF

- **When center tank empty:**
  L(R) TK PUMP 1..........ON
  L(R) TK PUMP 2..........ON
  FUEL X FEED..........OFF

Ident.: PRO-ABN-FUEL-P-00018980.0001001 / 21 MAR 16

79

STATUS

INOP SYS

CTR TK L (R) XFR

FUEL L (R) WING TK OVERFLOW

Applicable to: MSN 05621-05883, 06139, 06173

Ident.: PRO-ABN-FUEL-P-00016818.0002001 / 21 MAR 16

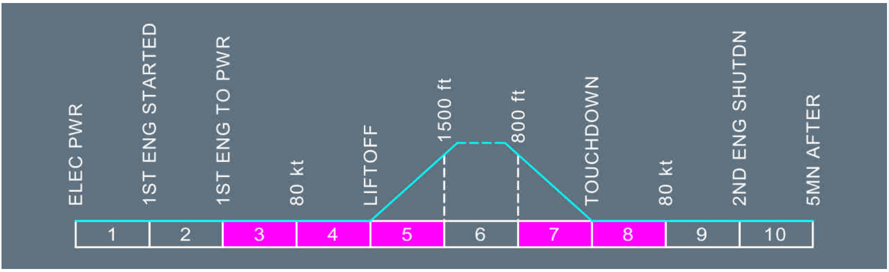
80

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an overflow of the tank is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-FUEL-P-00018938.0003001 / 21 MAR 16

FUEL X FEED....................OFF
FUEL MODE SEL....................AUTO
CTR TK PUMP 1(2)....................OFF

L2 *When the CTR TK PUMP 1(2) is ON, fuel from the center tank can be used to cool the IDG 1(2) and recirculate into the left (right) outer tank. Switching the CTR TK PUMP 1(2) OFF enables to stop this fuel recirculation.*

L1 EXPECT FUEL IMBALANCE

Ident.: PRO-ABN-FUEL-P-00018980.0002001 / 21 MAR 16

STATUS

	INOP SYS
	CTR TK PUMP 1(2)

FUEL L (R) WING TK OVERFLOW

Applicable to: MSN 11531

Ident.: PRO-ABN-FUEL-P-00016818.0002001 / 21 MAR 16

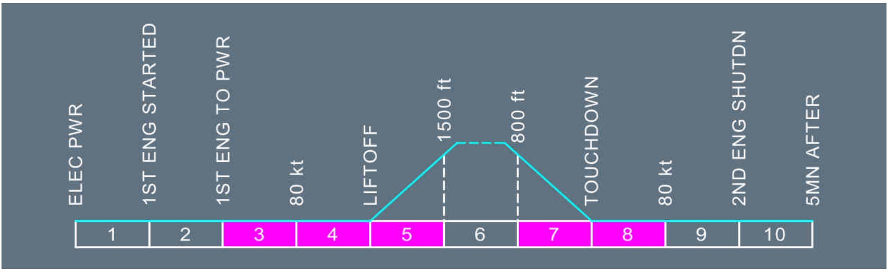
81

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when an overflow of the tank is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

FUEL L (R) WING TK OVERFLOW (Cont'd)

82 Ident.: PRO-ABN-FUEL-P-00018938.0005001 / 03 NOV 21

CTR TK L(R) XFR....................OFF

L2 *If this action is successful, it will take up to 5 min for this ECAM alert to be removed. This is the necessary time for the overflow sensor to become dry again.*

L1 ALL ACT....................ISOL

L2 *Displayed only if ACTs are transferring.*

L1
- **IF UNSUCCESSFUL**

  L2 Turn off both L(R) wing tank pumps to stop the fuel transfer from the center tank to the L(R) wing tank.

  As a result, both engines are fed by the wing tank with the running fuel pumps until the center tank is empty. The FUEL L(R) WING TK OVERFLOW alert may remain displayed until the center tank is empty.

  L1 FUEL X FEED....................ON
  L(R) TK PUMP 1....................OFF
  L(R) TK PUMP 2....................OFF

  - **When center tank empty:**

    L(R) TK PUMP 1....................ON
    L(R) TK PUMP 2....................ON
    FUEL X FEED....................OFF

EXPECT FUEL IMBALANCE

Ident.: PRO-ABN-FUEL-P-00018980.0001001 / 21 MAR 16

83

STATUS

	INOP SYS
	CTR TK L (R) XFR

FUEL L (R) XFR VALVE CLOSED

Applicable to: MSN 01251

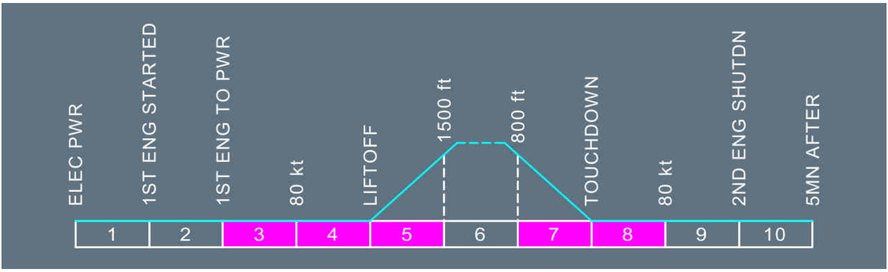
Ident.: PRO-ABN-FUEL-F-00016824.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both transfer valves remain closed after the inner cell reaches the low level.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-F-00011183.0001001 / 13 AUG 10

L2 Note: *When fuel quantity in affected wing reaches low level, corresponding WING TK LO LVL warning is triggered.*

L1 OUTER TK UNUSABLE (AFFECTED SIDE)

Ident.: PRO-ABN-FUEL-F-00011193.0001001 / 13 AUG 10

STATUS

OUTER TK UNUSABLE (affected side)

FUEL L (R) XFR VALVE OPEN

Applicable to: MSN 01251

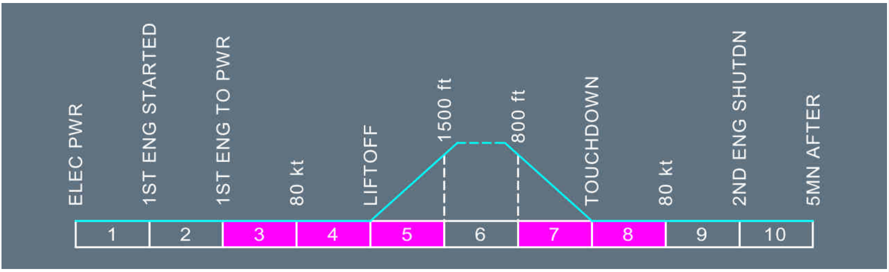
Ident.: PRO-ABN-FUEL-G-00016836.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when either transfer valve opens before inner tank reaches low level.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FUEL-G-00011194.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-FUEL-G-00011196.0001001 / 13 AUG 10

STATUS

INOP SYS

L (R) CELL VALVE

FUEL LO LVL DET FAULT

Applicable to: MSN 06528-06561, 06598-09324, 10949-11597

Ident.: PRO-ABN-FUEL-BQ-00016840.0002001 / 21 MAR 16

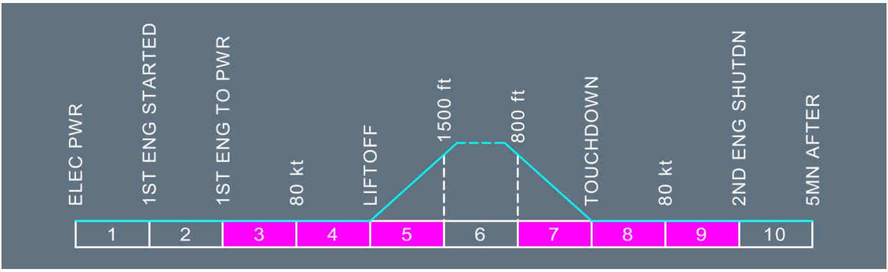
84

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both low level sensors are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
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9
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Ident.: PRO-ABN-FUEL-BQ-00011263.0001001 / 25 FEB 14

85

L2 Maintenance action is due.

L1 Crew awareness.

FUEL X FEED VALVE FAULT

Applicable to: ALL

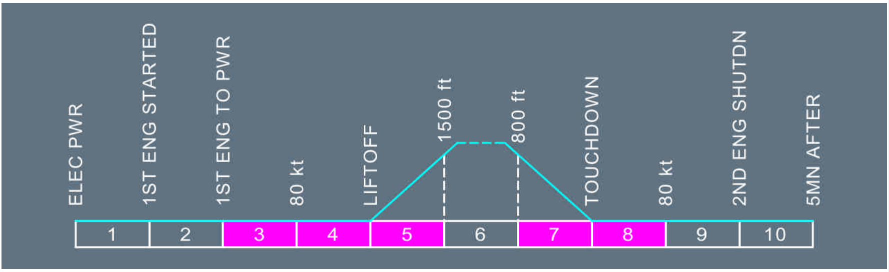
Ident.: PRO-ABN-FUEL-J-00016842.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the valve position disagrees with the selected position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
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10

Ident.: PRO-ABN-FUEL-J-00011206.0001001 / 25 FEB 14

L2 If valve failed open, maintain fuel balance with selective use of pumps.
If valve failed closed and if unable to maintain an acceptable balance, land as soon as possible.

L1 Crew awareness.

Ident.: PRO-ABN-FUEL-J-00011207.0001001 / 13 AUG 10

STATUS

INOP SYS

FUEL X FEED

FWS AUDIO DEGRADED

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-FWS-A-00024990.0001001 / 18 NOV 21

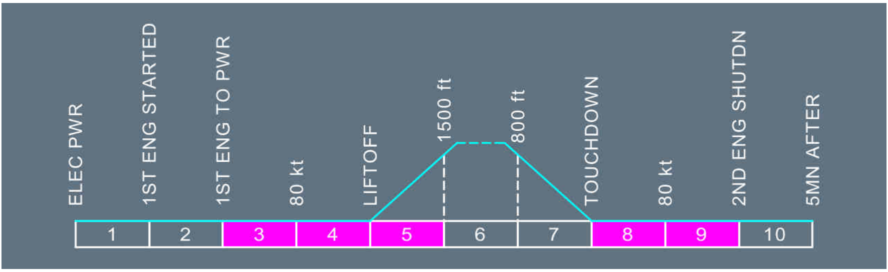
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when synthetic voice is lost for more than 4 s.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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9
10

Ident.: PRO-ABN-FWS-A-00024991.0001001 / 18 NOV 21

2

AUDIO CALLOUT LOST
SYNTH VOICE MSG LOST

FWS AUDIO REDUND LOST ON FWC 1(2)

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-FWS-B-00024988.0001001 / 18 NOV 21

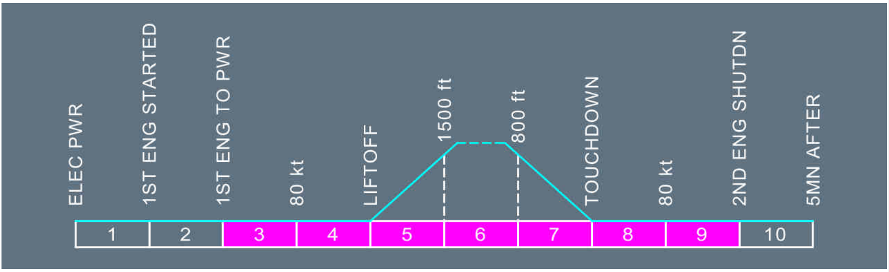
3

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when synthetic voice is lost on FWC 1(2).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-B-00024989.0001001 / 18 NOV 21

4

Crew awareness.

FWS FWC 1 + 2 FAULT

Applicable to: ALL

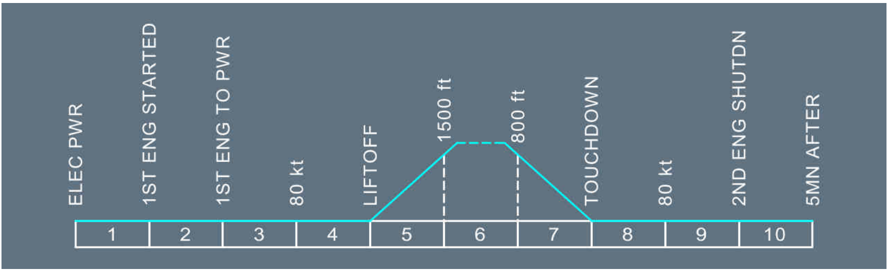
Ident.: PRO-ABN-FWS-H-00017311.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both FWC 1 and FWC 2 are failed, or when the communication between the FWC and the EIS is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-H-00010055.0001001 / 14 FEB 13

MONITOR SYS
MONITOR OVERHEAD PANEL

NOT AVAIL

ECAM WARN
ALTI ALERT
STATUS
A/CALL OUT
MEMO

Continued on the following page

FWS FWC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-FWS-H-00010056.0001001 / 14 FEB 13

L2

Other INOP SYS

CAT2

ECAM Cautions and Warnings, aural warnings, master caution and warning lights are lost.
ECAM system pages are still available. therefore check regularly (more often than usual) cockpit panels for local warnings and ECAM system pages for system checks.
Check the general status of the systems for the DES/APPR preparation.

FWS FWC 1(2) FAULT

Applicable to: ALL

Ident.: PRO-ABN-FWS-G-00017310.0001001 / 21 MAR 16

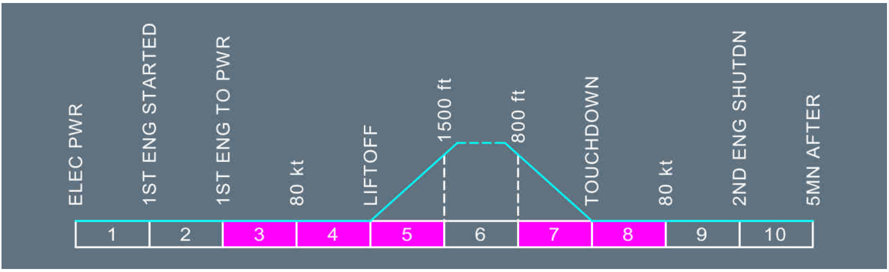
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when either FWC 1 or, FWC 2 is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-G-00010059.0001001 / 10 AUG 10

Crew awareness.

Continued on the following page

FWS FWC 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-FWS-G-00010060.0001001 / 10 AUG 10

STATUS

CAT 3 SINGLE ONLY

INOP SYS

CAT 3 DUAL
FWC 1(2)

FWS OEB/FWC DISCREPANCY

Applicable to: ALL

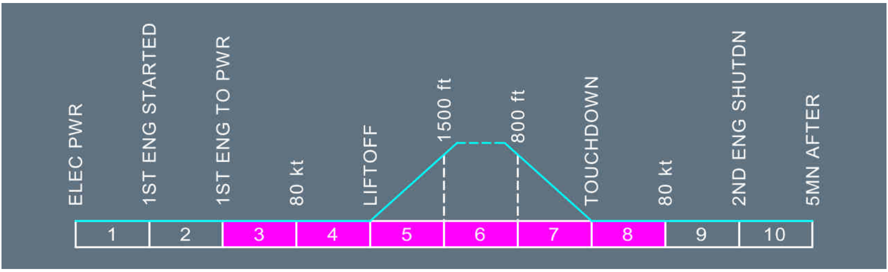
Ident.: PRO-ABN-FWS-J-00017314.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when FWC1 and FWC2 do not have the same OEBs listed in their OEB reminder database.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-J-00010050.0001001 / 10 AUG 10

OEB DATABASE...XCHECK

L2 *This action is normally performed by maintenance.*

FWS SDAC 1 + 2 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

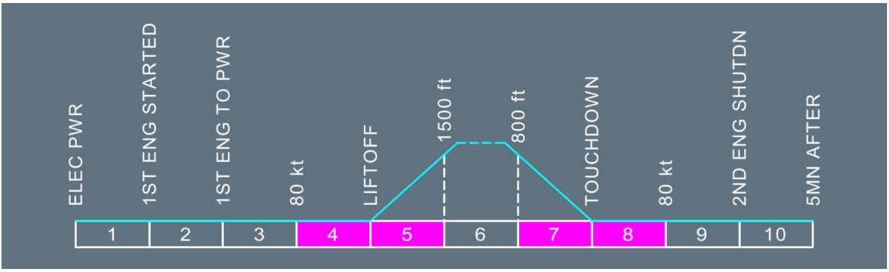
Ident.: PRO-ABN-FWS-E-00017306.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both SDAC 1 and SDAC 2 are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-E-00010053.0001001 / 04 SEP 18

MONITOR OVERHEAD PANEL

L2 *Some of amber cautions are lost.*

L1 *Aircraft status on the ECAM STATUS page is lost.*

L2 *All red warnings, engine and fuel parameters, and slat/flap positions are available on ECAM upper DU.*

L1 ECAM ENG FUEL F/CTL WHEEL (L/G POS IND) SYS PAGES AVAIL.

Ident.: PRO-ABN-FWS-E-00010054.0002001 / 10 AUG 10

5

STATUS

INOP SYS

SDAC 1 + 2

FWS SDAC 1 + 2 FAULT

Applicable to: MSN 01251

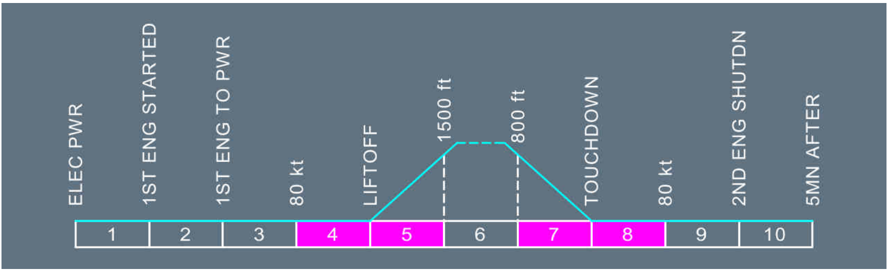
Ident.: PRO-ABN-FWS-E-00017306.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both SDAC 1 and SDAC 2 are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-E-00010053.0001001 / 04 SEP 18

MONITOR OVERHEAD PANEL

L2 *Some of amber cautions are lost.*

L1 *Aircraft status on the ECAM STATUS page is lost.*

L2 *All red warnings, engine and fuel parameters, and slat/flap positions are available on ECAM upper DU.*

L1 ECAM ENG FUEL F/CTL WHEEL (L/G POS IND) SYS PAGES AVAIL.

Continued on the following page

FWS SDAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-FWS-E-00010054.0001001 / 10 AUG 10

L12

STATUS

INOP SYS

SDAC 1 + 2

Note: *Although this failure does not affect engine idle, the “ENG 1 APPR IDLE ONLY” and “ENG 2 APPR IDLE ONLY” messages are displayed. Disregard them.*

FWS SDAC 1 + 2 FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

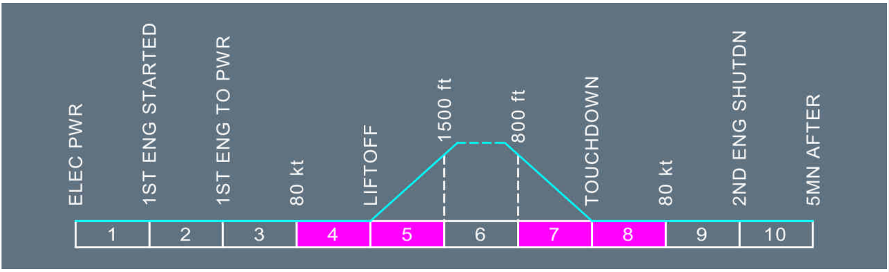
Ident.: PRO-ABN-FWS-E-00017306.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both SDAC 1 and SDAC 2 are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

FWS SDAC 1 + 2 FAULT (Cont'd)

Ident.: PRO-ABN-FWS-E-00010053.0001001 / 04 SEP 18

MONITOR OVERHEAD PANEL

L2 *Some of amber cautions are lost.*

L1 *Aircraft status on the ECAM STATUS page is lost.*

L2 *All red warnings, engine and fuel parameters, and slat/flap positions are available on ECAM upper DU.*

L1 ECAM ENG FUEL F/CTL WHEEL (L/G POS IND) SYS PAGES AVAIL.

FWS SDAC 1(2) FAULT

Applicable to: ALL

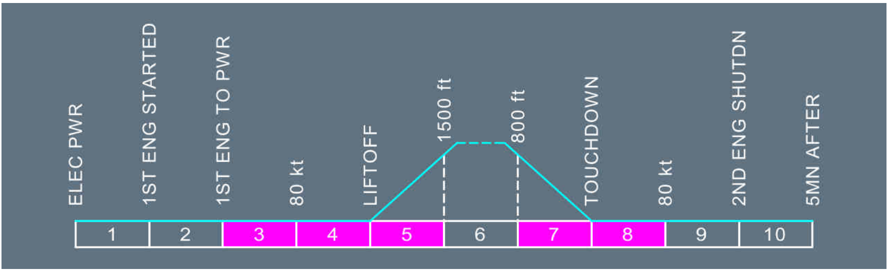
Ident.: PRO-ABN-FWS-D-00017308.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alerts triggers when either SDAC 1 or, SDAC 2 is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-D-00010051.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

FWS SDAC 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-FWS-D-00010052.0001001 / 10 AUG 10

L12

STATUS

INOP SYS

SDAC 1(2)

Note: *Although the ECAM may display some symbols and/or parameters in amber, this does not always signify that additional systems are failed.*

FWS SLAT (FLAP) SYNCHRO FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-FWS-K-00024805.0002001 / 18 NOV 21

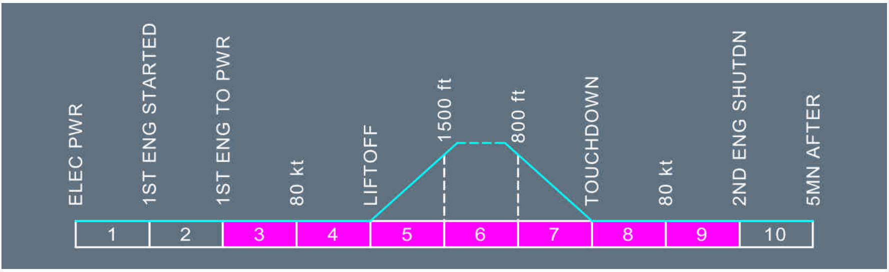
6

ANNUNCIATIONS

Triggering Conditions:

This alert triggers when slat (flap) position from IPPU 1 and IPPU 2 is detected invalid or erroneous.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-FWS-K-00024809.0002001 / 18 NOV 21

7

Crew awareness.

HYD B ELEC PUMP LO PR OR OVHT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-HYD-T-00017137.0001001 / 21 MAR 16

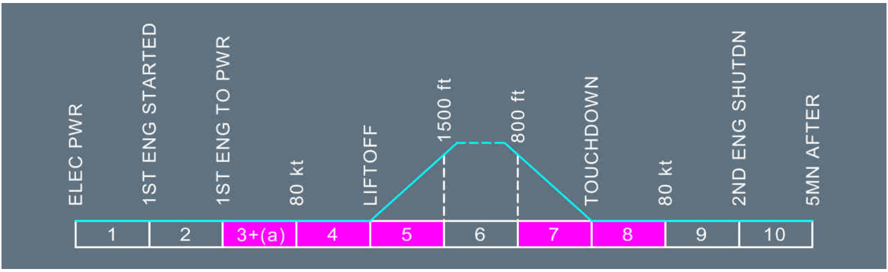
ANNUNCIATIONS

Triggering Conditions:

L2

LO PR: This alert triggers when the pump outlet pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).
OVHT: This alert triggers when the blue electric pump overheats.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: (a) The Flight Phase Inhibition 3 is only available for HYD B ELEC PUMP OVHT.

Ident.: PRO-ABN-HYD-T-00011661.0002001 / 27 NOV 12

1

BLUE ELEC PUMP..OFF
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

B SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B ELEC PUMP LO PR OR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-T-00018313.0003001 / 21 MAR 17

2

L12

STATUS

APPR PROC

HYD LO PR

- **IF BLUE OVHT OUT:**
  BLUE ELEC PUMP.. AUTO

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS SLOW

CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
B ELEC PUMP
STEEP APPR ⊲

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and refer to QRH/OPS Operational Data - Fuel Penalty Factors Tables in order to find the applicable Fuel Penalty Factor.*

HYD B ELEC PUMP LO PR OR OVHT

Applicable to: MSN 01251

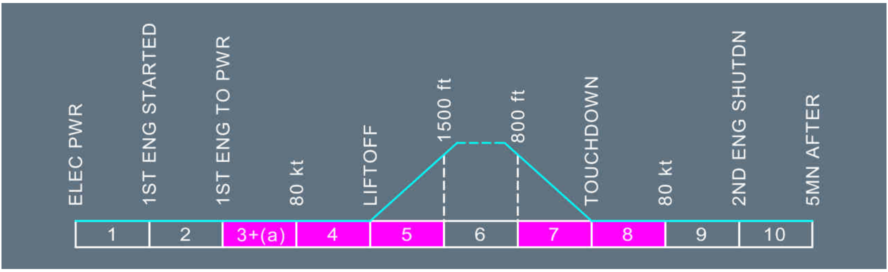
Ident.: PRO-ABN-HYD-T-00017137.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 LO PR: This alert triggers when the pump outlet pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).
OVHT: This alert triggers when the blue electric pump overheats.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: (a) The Flight Phase Inhibition 3 is only available for HYD B ELEC PUMP OVHT.

Ident.: PRO-ABN-HYD-T-00011661.0001001 / 18 AUG 10

BLUE ELEC PUMP......................................OFF

ASSOCIATED PROCEDURES

B SYS LO PR

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B ELEC PUMP LO PR OR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-T-00018313.0001001 / 21 MAR 16

STATUS

APPR PROC

HYD LO PR

- **IF BLUE OVHT OUT:**
  BLUE ELEC PUMP.. AUTO

LDG DIST PROC.. APPLY

SLATS SLOW
CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
B ELEC PUMP
STEEP APPR ◁

HYD B ELEC PUMP LO PR OR OVHT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

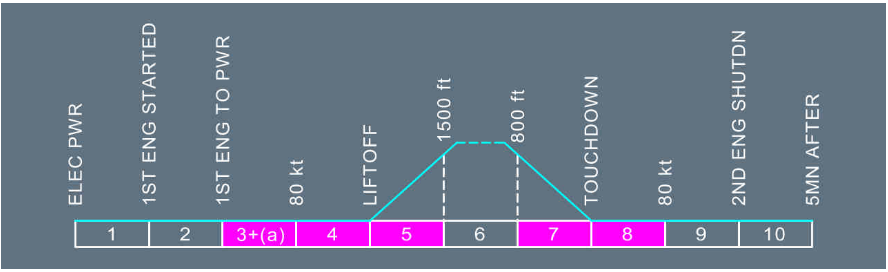
Ident.: PRO-ABN-HYD-T-00017137.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 LO PR: This alert triggers when the pump outlet pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).
OVHT: This alert triggers when the blue electric pump overheats.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: (a) The Flight Phase Inhibition 3 is only available for HYD B ELEC PUMP OVHT.

HYD B RSVR LO AIR PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-HYD-A-00017106.0002001 / 21 MAR 16

3

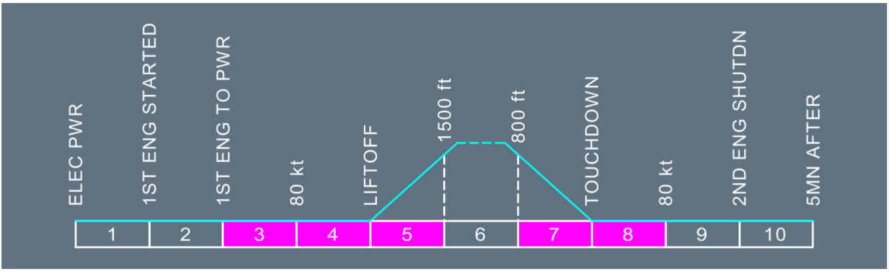
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI).
This alert triggers when the reservoir air pressure ≤ 30 PSI (detected in flight but only displayed on ground after landing).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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Ident.: PRO-ABN-HYD-A-00011602.0002001 / 05 MAR 13

4

- **IF PRESS FLUCTUATES:**
  BLUE ELEC PUMP....................OFF

ASSOCIATED PROCEDURES

B SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-A-00018312.0003001 / 17 MAY 21

5

L12

STATUS

APPR PROC

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

HYD LO PR

BLUE ELEC PUMP..AUTO

- **If sys not recovered:**
  LDG DIST PROC...APPLY

FUEL CONSUMPT INCRSD

See [1]

FMS PRED UNRELIABLE

See [2]

SLATS SLOW

CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
B ELEC PUMP
STEEP APPR ◁

---

[1] *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

[2] *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B RSVR LO AIR PR

Applicable to: MSN 01251

Ident.: PRO-ABN-HYD-A-00017106.0002001 / 21 MAR 16

6

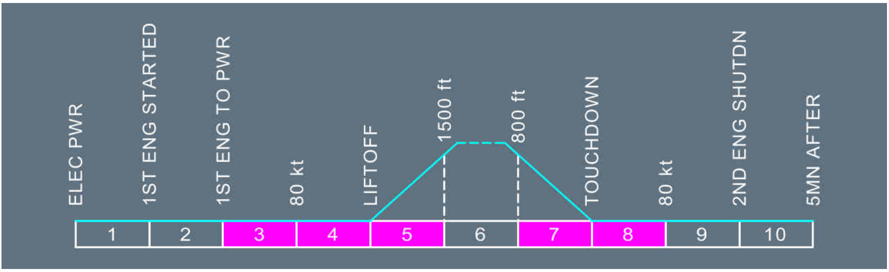
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI).
This alert triggers when the reservoir air pressure ≤ 30 PSI (detected in flight but only displayed on ground after landing).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-A-00011602.0001001 / 05 MAR 13

- **IF PRESS FLUCTUATES:**
  BLUE ELEC PUMP.....OFF

ASSOCIATED PROCEDURES

B SYS LO PR

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-A-00018312.0001001 / 21 MAR 16

L12

STATUS

APPR PROC

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

HYD LO PR
BLUE ELEC PUMP..AUTO

- **If sys not recovered:**
  LDG DIST PROC..APPLY

SLATS SLOW
CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
B ELEC PUMP
STEEP APPR ◁

HYD B RSVR LO AIR PR

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531

Ident.: PRO-ABN-HYD-A-00017106.0001001 / 21 MAR 16

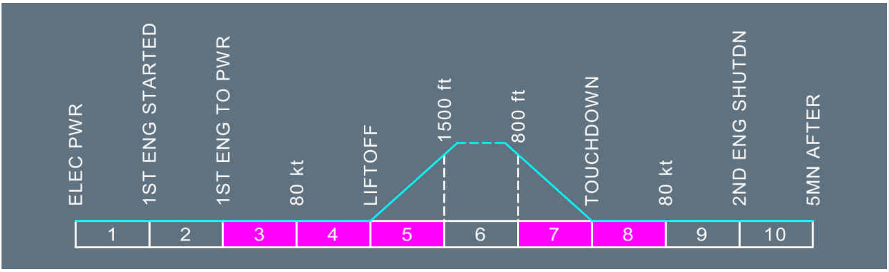
7

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI.)

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-A-00011602.0002001 / 05 MAR 13

8

- **IF PRESS FLUCTUATES:**
  BLUE ELEC PUMP....................OFF

ASSOCIATED PROCEDURES

B SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-A-00018312.0003001 / 17 MAY 21

9

L12

STATUS

APPR PROC

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

HYD LO PR

BLUE ELEC PUMP..........AUTO

- **If sys not recovered:**

  LDG DIST PROC..........APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS SLOW

CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
B ELEC PUMP
STEEP APPR ◁

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B RSVR LO LVL

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

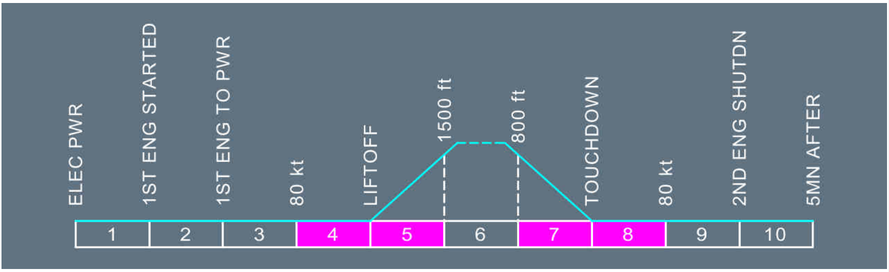
Ident.: PRO-ABN-HYD-C-00017144.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the fluid quantity < 2.4 l (0.63 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-C-00011606.0002001 / 05 MAR 13

10 BLUE ELEC PUMP..OFF

ASSOCIATED PROCEDURES

B SYS LO PR

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-C-00018314.0003001 / 17 MAY 21

11

L12

STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS SLOW

CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
EMER GEN
B ELEC PUMP
STEEP APPR

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B RSVR LO LVL

Applicable to: MSN 01251

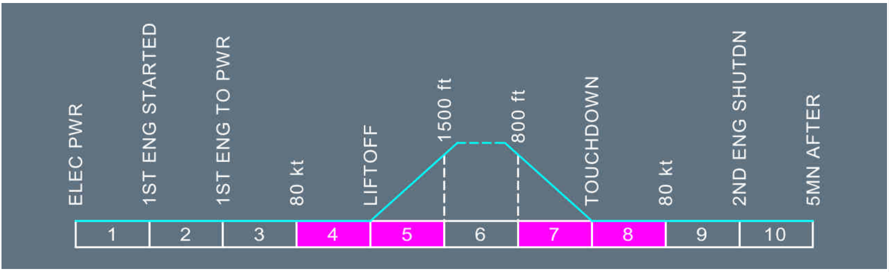
Ident.: PRO-ABN-HYD-C-00017144.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the fluid quantity < 2.4 l (0.63 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-C-00011606.0001001 / 05 MAR 13

BLUE ELEC PUMP....................OFF

ASSOCIATED PROCEDURES

B SYS LO PR

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-C-00018314.0001001 / 21 MAR 16

STATUS

LDG DIST PROC.. APPLY

SLATS SLOW
CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
EMER GEN
B ELEC PUMP
STEEP APPR

HYD B RSVR LO LVL

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

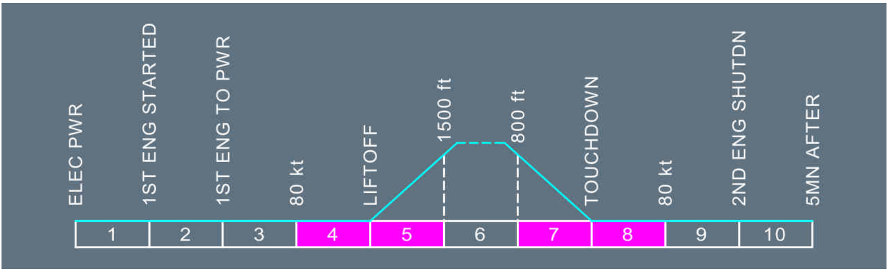
Ident.: PRO-ABN-HYD-C-00017144.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the fluid quantity < 2.4 l (0.63 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

HYD B RSVR OVHT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

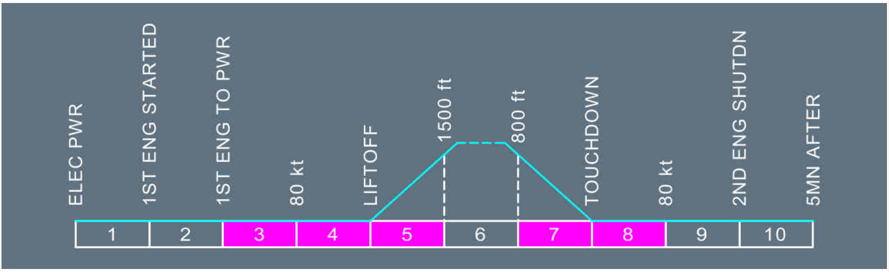
Ident.: PRO-ABN-HYD-B-00017108.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-B-00011604.0002001 / 05 MAR 13

12 BLUE ELEC PUMP....................OFF

ASSOCIATED PROCEDURES

B SYS LO PR

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-B-00018315.0003001 / 17 MAY 21

13

L12

STATUS

APPR PROC

HYD LO PR

- **IF BLUE OVHT OUT:**
  BLUE ELEC PUMP.. AUTO
- **If sys not recovered:**
  LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS SLOW

CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
B ELEC PUMP
STEEP APPR ⊲

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B RSVR OVHT

Applicable to: MSN 01251

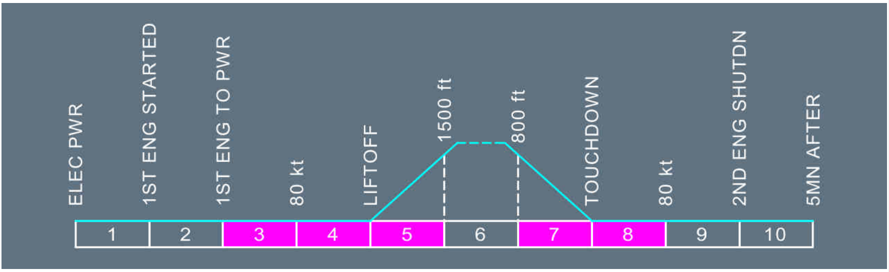
Ident.: PRO-ABN-HYD-B-00017108.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-B-00011604.0001001 / 05 MAR 13

BLUE ELEC PUMP....................OFF

ASSOCIATED PROCEDURES

B SYS LO PR

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-B-00018315.0001001 / 21 MAR 16

STATUS

APPR PROC

HYD LO PR

- **IF BLUE OVHT OUT:**
  BLUE ELEC PUMP... AUTO

- **If sys not recovered:**
  LDG DIST PROC..APPLY

SLATS SLOW
CAT 3 SINGLE ONLY

INOP SYS

BLUE HYD
SPLR 3
CAT 3 DUAL
B ELEC PUMP
STEEP APPR ◁

HYD B RSVR OVHT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

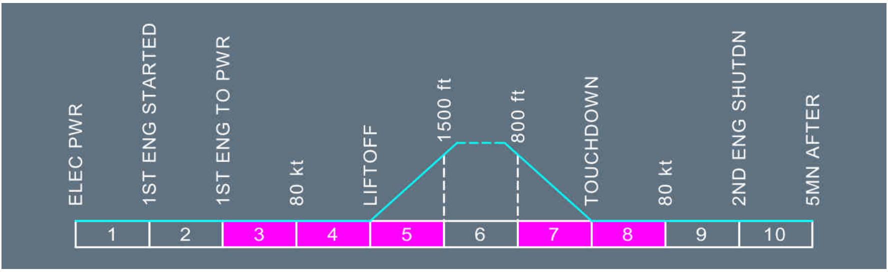
Ident.: PRO-ABN-HYD-B-00017108.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

HYD G ENG 1 PUMP LO PR
(PTU OPERATIVE)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

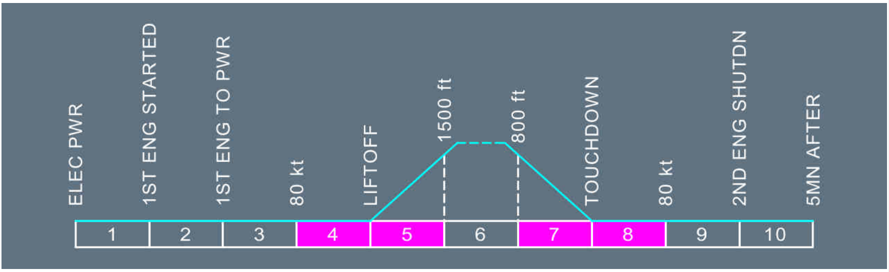
Ident.: PRO-ABN-HYD-N-00017136.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-N-00011648.0001001 / 18 AUG 10

GREEN ENG 1 PUMP.....OFF

Ident.: PRO-ABN-HYD-N-00011649.0001001 / 17 MAR 11

STATUS

INOP SYS

G ENG 1 PUMP

HYD G ENG 1 PUMP LO PR
(PTU OPERATIVE)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

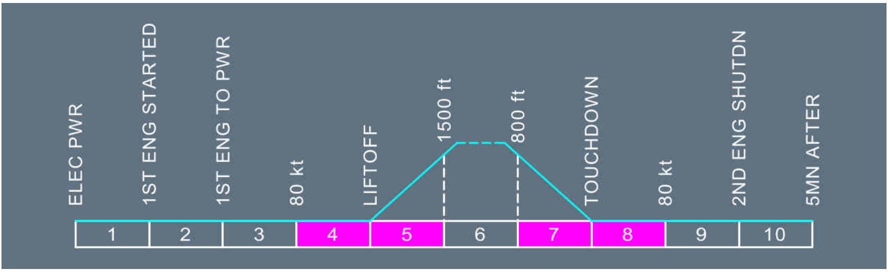
Ident.: PRO-ABN-HYD-N-00017136.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-N-00011648.0001001 / 18 AUG 10

GREEN ENG 1 PUMP..OFF

HYD G ENG 1 PUMP LO PR
(PTU OPERATIVE)

Applicable to: MSN 08495-09324, 10949-11597

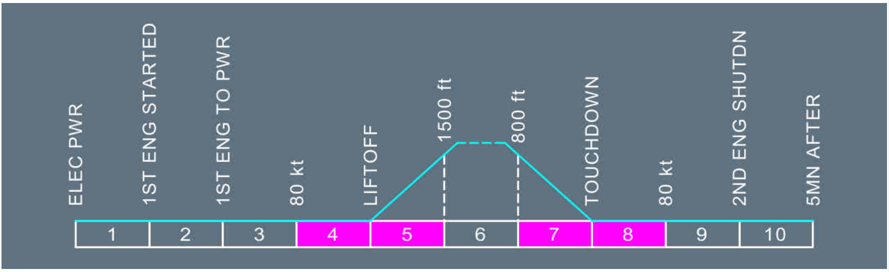
Ident.: PRO-ABN-HYD-N-00017136.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-N-00011648.0001001 / 18 AUG 10

GREEN ENG 1 PUMP....................OFF

Ident.: PRO-ABN-HYD-N-00011649.0003001 / 02 MAY 16

14

STATUS

LDG DIST PROC....................APPLY

INOP SYS

G ENG 1 PUMP

HYD G ENG 1 PUMP LO PR
(PTU INOPERATIVE)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

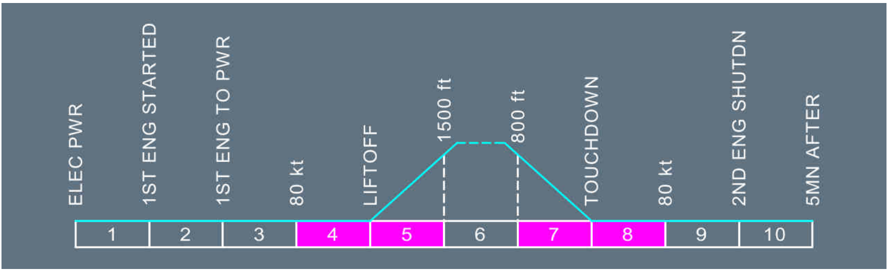
Ident.: PRO-ABN-HYD-P-00018805.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-P-00011652.0001001 / 18 AUG 10

GREEN ENG 1 PUMP..OFF

ASSOCIATED PROCEDURES

G SYS LO PR

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G ENG 1 PUMP LO PR (Cont'd)
(PTU INOPERATIVE)

Ident.: PRO-ABN-HYD-P-00018316.0003001 / 10 NOV 20

STATUS

L/G.. GRVTY EXTN

SLATS/FLAPS SLOW
CAT 3 SINGLE

INOP SYS

GREEN HYD
SPLR 1+5
CAT 3 DUAL
N.W. STEER
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
PTU
G ENG 1 PUMP
YAW DAMPER 1

HYD G ENG 1 PUMP LO PR
(PTU INOPERATIVE)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

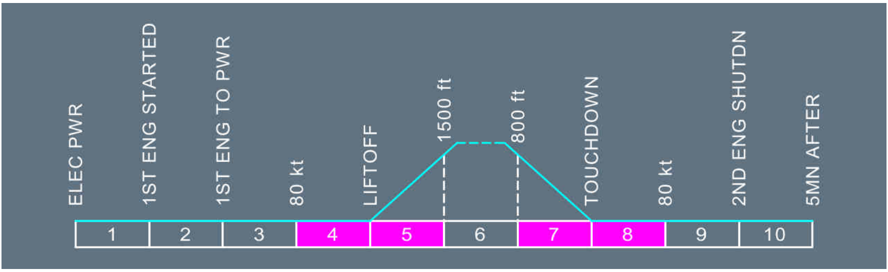
Ident.: PRO-ABN-HYD-P-00018805.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-P-00011652.0001001 / 18 AUG 10

GREEN ENG 1 PUMP..OFF

ASSOCIATED PROCEDURES

G SYS LO PR

SECONDARY FAILURES

*WHEEL
*F/CTL

HYD G ENG 1 PUMP LO PR
(PTU INOPERATIVE)

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-07098

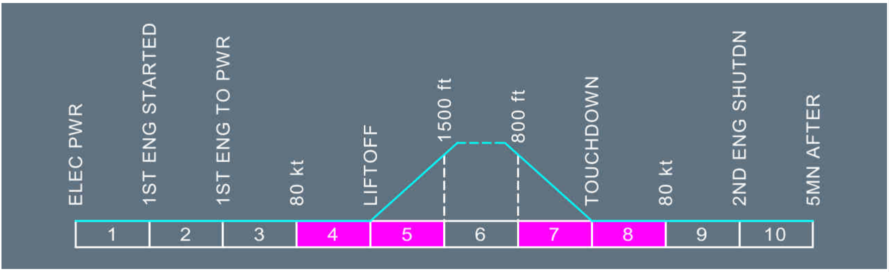
Ident.: PRO-ABN-HYD-P-00018805.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-P-00011652.0001001 / 18 AUG 10

GREEN ENG 1 PUMP..OFF

ASSOCIATED PROCEDURES

G SYS LO PR

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G ENG 1 PUMP LO PR (Cont'd)
(PTU INOPERATIVE)

Ident.: PRO-ABN-HYD-P-00018316.0004001 / 10 NOV 20

STATUS

L/G.. GRVTY EXTN

ALTN Y BRK WITH A/SKID
SLATS/FLAPS SLOW
CAT 3 SINGLE

INOP SYS

GREEN HYD
SPLR 1+5
CAT 3 DUAL
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
PTU
G ENG 1 PUMP
YAW DAMPER 1

HYD G ENG 1 PUMP LO PR
(PTU INOPERATIVE)

Applicable to: MSN 08495-09324, 10949-11597

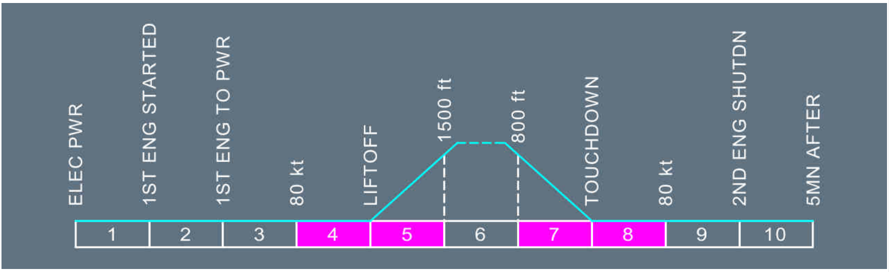
Ident.: PRO-ABN-HYD-P-00018805.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-P-00011652.0001001 / 18 AUG 10

GREEN ENG 1 PUMP.....OFF

ASSOCIATED PROCEDURES

G SYS LO PR

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G ENG 1 PUMP LO PR (Cont'd)
(PTU INOPERATIVE)

Ident.: PRO-ABN-HYD-P-00018316.0002001 / 28 MAY 20

15

STATUS

L/G.. GRVTY EXTN
LDG DIST PROC.. APPLY

ALTN Y BRK WITH A/SKID
SLATS/FLAPS SLOW
CAT 3 SINGLE

INOP SYS

- GREEN HYD
- SPLR 1+5
- CAT 3 DUAL
- AUTO BRK
- NORM BRK
- L/G RETRACT
- REVERSER 1
- PTU
- G ENG 1 PUMP
- YAW DAMPER 1

HYD G RSVR LO AIR PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

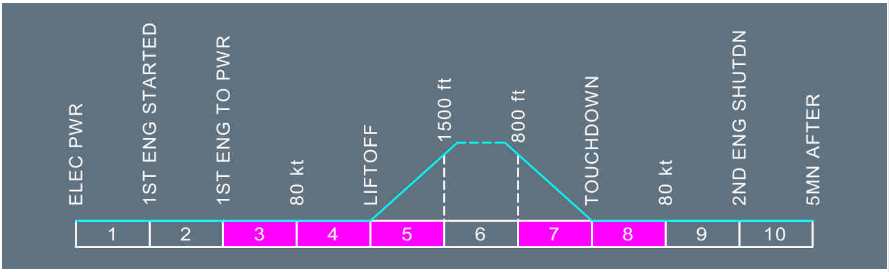
Ident.: PRO-ABN-HYD-D-00017104.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤22 PSI (the alert resets if air pressure ≥25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-D-00011609.0002001 / 05 MAR 13

16

- **IF PRESS FLUCTUATES:**

  PTU.. OFF
  GREEN ENG 1 PUMP.. OFF

G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-D-00018317.0006001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

GREEN ENG 1 PUMP.. ON

- **IF HYD NOT RECOVERED:**

  L/G...GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR LO AIR PR

Applicable to: MSN 01251

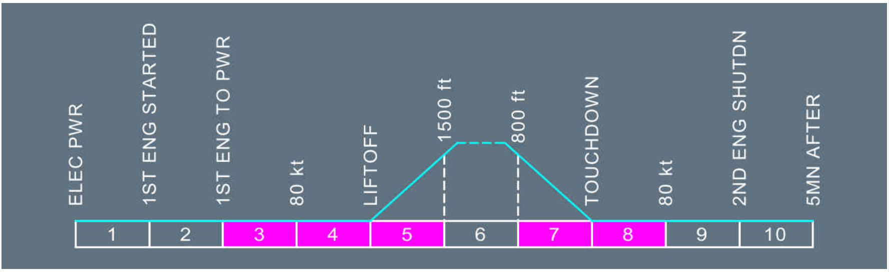
Ident.: PRO-ABN-HYD-D-00017104.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤22 PSI (the alert resets if air pressure ≥25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-D-00011609.0001001 / 05 MAR 13

- **IF PRESS FLUCTUATES:**
  PTU.. OFF
  GREEN ENG 1 PUMP.. OFF

G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-D-00018317.0002001 / 21 MAR 16

L12

STATUS

APPR PROC

HYD LO PR

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

GREEN ENG 1 PUMP.. ON

- **IF HYD NOT RECOVERED:**

  L/G..GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  LDG DIST PROC...APPLY

SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

HYD G RSVR LO AIR PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

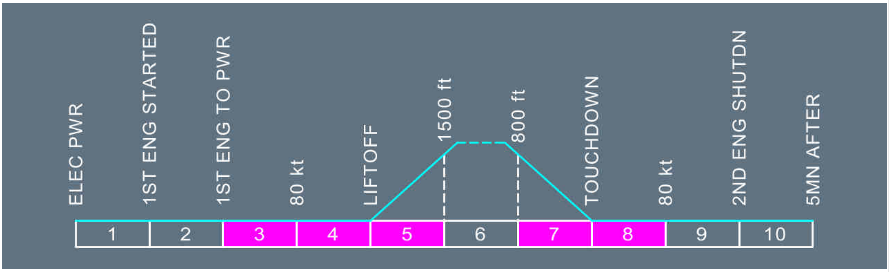
Ident.: PRO-ABN-HYD-D-00017104.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤22 PSI (the alert resets if air pressure ≥25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

HYD G RSVR LO AIR PR

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

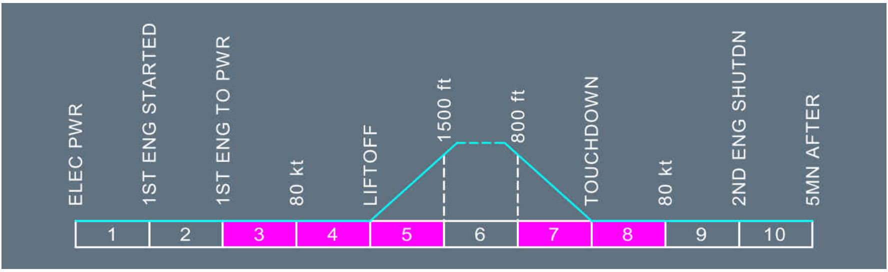
Ident.: PRO-ABN-HYD-D-00017104.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤22 PSI (the alert resets if air pressure ≥25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-D-00011609.0002001 / 05 MAR 13

17

- **IF PRESS FLUCTUATES:**
  PTU .... OFF
  GREEN ENG 1 PUMP .... OFF

G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-D-00018317.0007001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

GREEN ENG 1 PUMP.. ON

- **IF HYD NOT RECOVERED:**

  L/G..GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  LDG DIST PROC...APPLY

FUEL CONSUMPT INCRSD

See [1]

FMS PRED UNRELIABLE

See [2]

ALTN Y BRK WITH A/SKID
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR LO AIR PR

Applicable to: MSN 08635

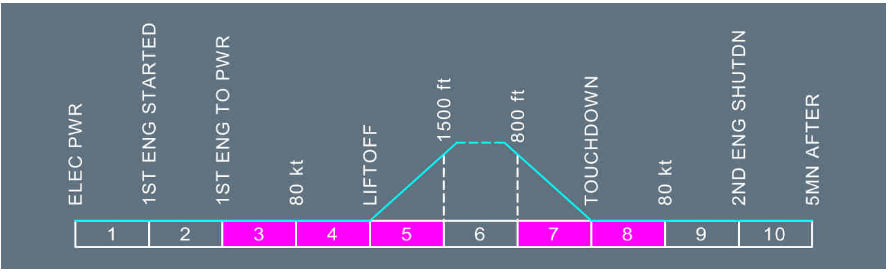
Ident.: PRO-ABN-HYD-D-00017104.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤22 PSI (the alert resets if air pressure ≥25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-D-00011609.0002001 / 05 MAR 13

18

- **IF PRESS FLUCTUATES:**
  - PTU....................OFF
  - GREEN ENG 1 PUMP....................OFF

G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL

*F/CTL

Continued on the following page

HYD G RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-D-00018317.0009001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

GREEN ENG 1 PUMP.. ON

- **IF HYD NOT RECOVERED:**

  L/G..GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK (1)
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1 (1)

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR LO AIR PR

Applicable to: MSN 10949-11597

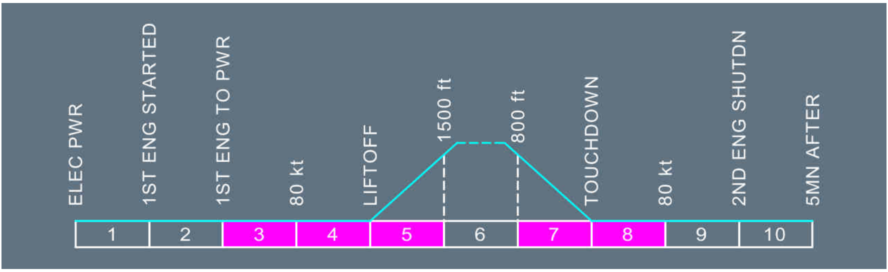
Ident.: PRO-ABN-HYD-D-00017104.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤22 PSI (the alert resets if air pressure ≥25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-D-00011609.0002001 / 05 MAR 13

19

- **IF PRESS FLUCTUATES:**

  PTU.. OFF
  GREEN ENG 1 PUMP.. OFF

G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-D-00018317.0011001 / 09 NOV 21

20

L12

STATUS

APPR PROC

HYD LO PR

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

GREEN ENG 1 PUMP.. ON

- **IF HYD NOT RECOVERED:**

  L/G GRVTY PROC... APPLY

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  LDG DIST PROC...APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK (1)
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1 (1)

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR LO LVL

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-HYD-F-00017142.0002001 / 21 MAR 16

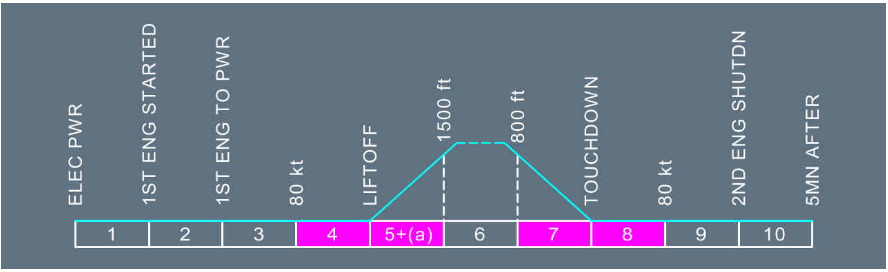
21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

L1 *Note: The HYD G RSVR LO LVL alert is inhibited for the first 15 s of flight phase 5.*

Ident.: PRO-ABN-HYD-F-00011614.0002001 / 05 MAR 13

22

PTU....................OFF
GREEN ENG 1 PUMP....................OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-F-00018320.0006001 / 17 MAY 21

L12

STATUS

L/G.. GRVTY EXTN

Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR LO LVL

Applicable to: MSN 01251

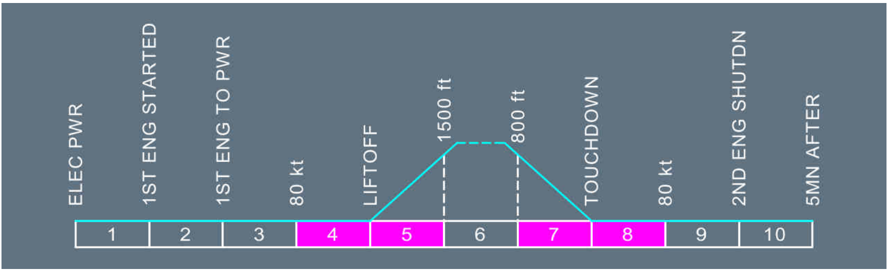
Ident.: PRO-ABN-HYD-F-00017142.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-F-00011614.0001001 / 05 MAR 13

PTU..OFF
GREEN ENG 1 PUMP...OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-F-00018320.0002001 / 21 MAR 16

L12

STATUS

L/G.. GRVTY EXTN

Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

LDG DIST PROC.. APPLY

SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

HYD G RSVR LO LVL

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

Ident.: PRO-ABN-HYD-F-00017142.0002001 / 21 MAR 16

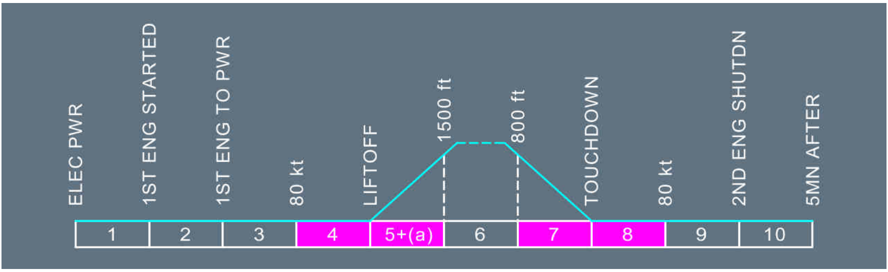
23

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

L1 *Note: The HYD G RSVR LO LVL alert is inhibited for the first 15 s of flight phase 5.*

Ident.: PRO-ABN-HYD-F-00011614.0002001 / 05 MAR 13

24

PTU...OFF
GREEN ENG 1 PUMP...OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-F-00018320.0007001 / 17 MAY 21

L12

STATUS

L/G.. GRVTY EXTN

Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR LO LVL

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-HYD-F-00017142.0002001 / 21 MAR 16

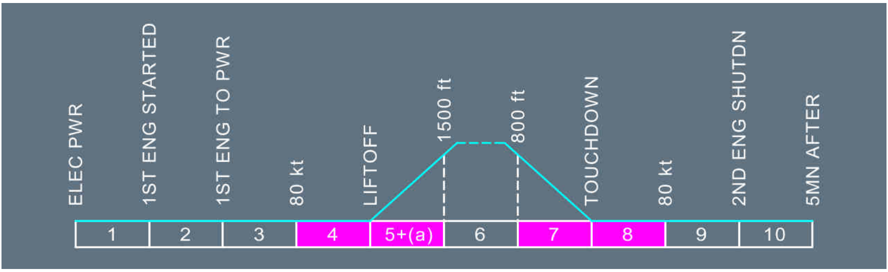
25

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

L1 Note: *The HYD G RSVR LO LVL alert is inhibited for the first 15 s of flight phase 5.*

Ident.: PRO-ABN-HYD-F-00011614.0002001 / 05 MAR 13

26

PTU....................OFF
GREEN ENG 1 PUMP....................OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-F-00018320.0009001 / 17 MAY 21

27

L12

STATUS

L/G.. GRVTY EXTN

Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK (1)
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1 (1)

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR OVHT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

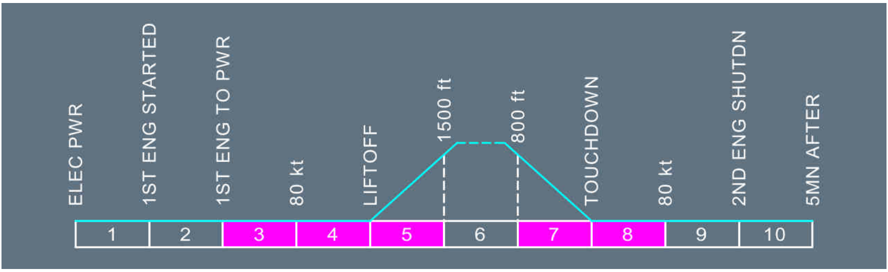
Ident.: PRO-ABN-HYD-E-00017107.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-E-00011612.0002001 / 05 MAR 13

28

PTU..OFF
GREEN ENG 1 PUMP..OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-E-00018321.0006001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- ● **IF GREEN OVHT OUT:**
  GREEN ENG 1 PUMP...ON
- ● **IF HYD NOT RECOVERED:**
  L/G...GRVTY EXTN
  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION
  LDG DIST PROC...APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR OVHT

Applicable to: MSN 01251

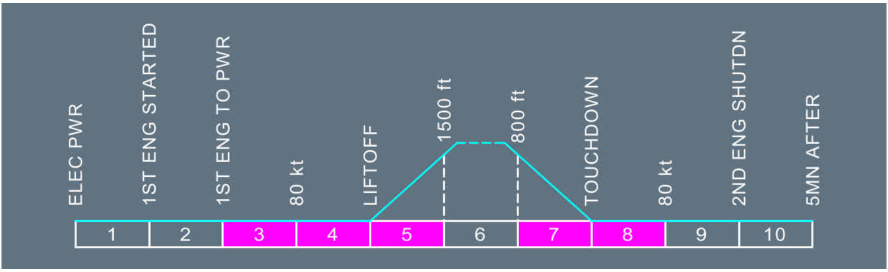
Ident.: PRO-ABN-HYD-E-00017107.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-E-00011612.0001001 / 05 MAR 13

PTU..........OFF
GREEN ENG 1 PUMP..........OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-E-00018321.0002001 / 21 MAR 16

L12

STATUS

APPR PROC

HYD LO PR

- **IF GREEN OVHT OUT:**
  GREEN ENG 1 PUMP.....ON
- **IF HYD NOT RECOVERED:**
  L/G.....GRVTY EXTN
  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION
  LDG DIST PROC.....APPLY

SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

HYD G RSVR OVHT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-07098

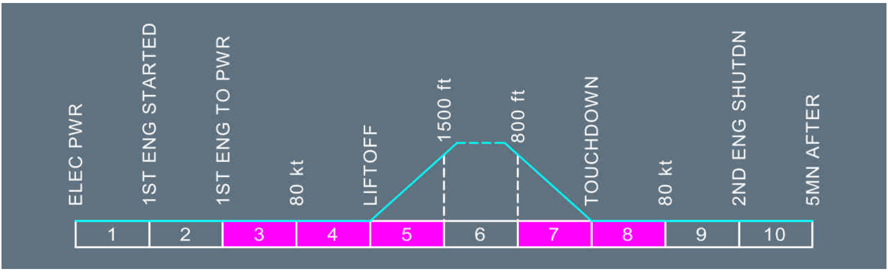
Ident.: PRO-ABN-HYD-E-00017107.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-E-00011612.0002001 / 05 MAR 13

29

PTU..OFF
GREEN ENG 1 PUMP..OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-E-00018321.0007001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- **IF GREEN OVHT OUT:**
  GREEN ENG 1 PUMP....................ON
- **IF HYD NOT RECOVERED:**
  L/G....................GRVTY EXTN
  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION
  LDG DIST PROC....................APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR OVHT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-HYD-E-00017107.0002001 / 01 JUN 16

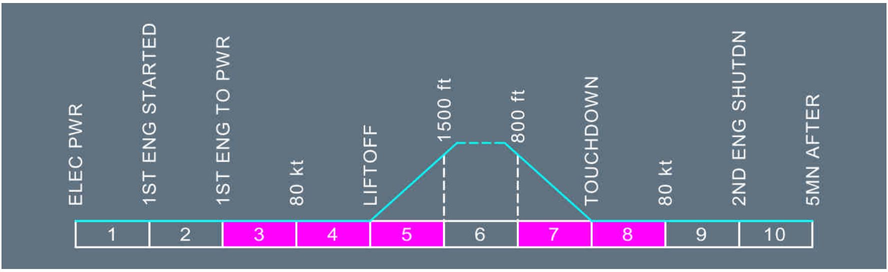
30

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥98 °C (the alert resets if temperature ≤93 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-E-00011612.0002001 / 05 MAR 13

31

PTU..OFF
GREEN ENG 1 PUMP..OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-E-00018321.0007001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- **IF GREEN OVHT OUT:**
  GREEN ENG 1 PUMP...ON
- **IF HYD NOT RECOVERED:**
  L/G...GRVTY EXTN
  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION
  LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

ALTN Y BRK WITH A/SKID
SLATS/FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR OVHT

Applicable to: MSN 08635

Ident.: PRO-ABN-HYD-E-00017107.0002001 / 01 JUN 16

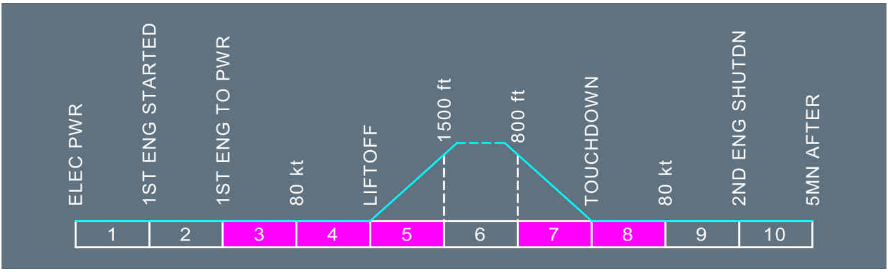
32

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥98 °C (the alert resets if temperature ≤93 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-E-00011612.0002001 / 05 MAR 13

33

PTU..OFF
GREEN ENG 1 PUMP..OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-E-00018321.0009001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- **IF GREEN OVHT OUT:**
  GREEN ENG 1 PUMP....................ON
- **IF HYD NOT RECOVERED:**
  L/G....................GRVTY EXTN
  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION
  LDG DIST PROC....................APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK (1)
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1 (1)

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G RSVR OVHT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-HYD-E-00017107.0002001 / 01 JUN 16

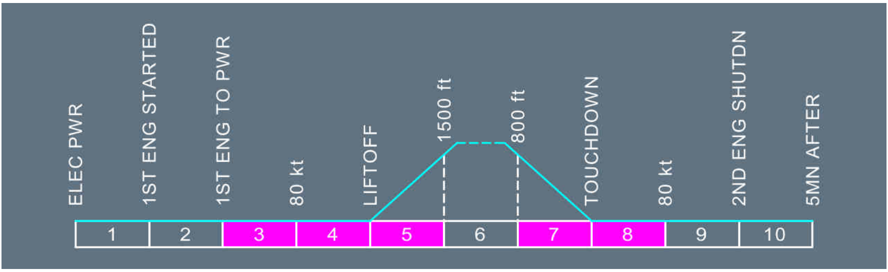
34

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥98 °C (the alert resets if temperature ≤93 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-E-00011612.0002001 / 05 MAR 13

35

PTU....................OFF
GREEN ENG 1 PUMP....................OFF
G ENG 1 PUMP LO PR

ASSOCIATED PROCEDURES

G SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-E-00018321.0011001 / 09 NOV 21

36

L12

STATUS

APPR PROC

HYD LO PR

- **IF GREEN OVHT OUT:**
  GREEN ENG 1 PUMP..........ON
- **IF HYD NOT RECOVERED:**
  L/G GRVTY PROC..........APPLY
  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION
  LDG DIST PROC..........APPLY

FUEL CONSUMPT INCRSD

See [(2)]

FMS PRED UNRELIABLE

See [(3)]

ALTN Y BRK WITH A/SKID

SLATS/FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

GREEN HYD
SPLR 1 + 5
CAT 3 DUAL
AUTO BRK (1)
NORM BRK
L/G RETRACT
REVERSER 1
YAW DAMPER 1 (1)

---

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y ELEC PUMP LO PR OR OVHT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-HYD-M-00017133.0001001 / 21 MAR 16

ANNUNCIATIONS

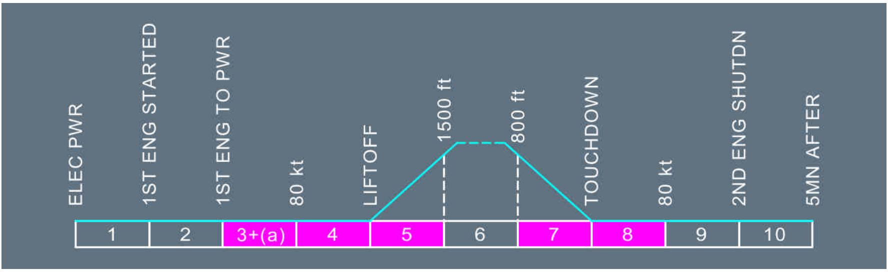
Triggering Conditions:

L2 LO PR: This alert triggers when the yellow system pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI) with:

- Y ELEC PUMP pb at ON
- Y ENG PUMP and PTU not available.

OVHT: This alert triggers when the yellow electric pump overheats.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: (a) The Flight Phase Inhibition 3 is only available for HYD Y ELEC PUMP OVHT.

Continued on the following page

HYD Y ELEC PUMP LO PR OR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-M-00019032.0003001 / 21 MAR 16

37

YELLOW ELEC PUMP.. OFF

ASSOCIATED PROCEDURES

Y SYS LO PR

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is the normal braking using green pressure, the parking brake should not be used since it is not available and the chocks should be in place before engine 1 shutdown.*

L1 FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y ELEC PUMP LO PR OR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-M-00018322.0003001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP...ON
  PTU..AUTO
  The above two lines are only displayed, in case of an electrical pump overheat.

LDG DIST PROC... APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

YELLOW HYD
SPLR 2+4
CAT 3 DUAL
REVERSER 2
Y ELEC PUMP
YAW DAMPER 2

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y ELEC PUMP LO PR OR OVHT

Applicable to: MSN 01251

Ident.: PRO-ABN-HYD-M-00017133.0001001 / 21 MAR 16

ANNUNCIATIONS

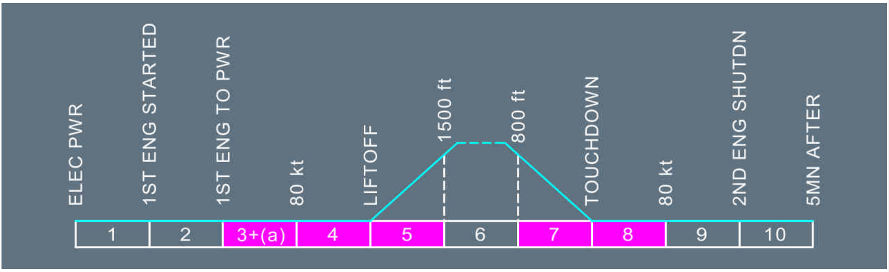
Triggering Conditions:

L2 LO PR: This alert triggers when the yellow system pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI) with:

- Y ELEC PUMP pb at ON
- Y ENG PUMP and PTU not available.

OVHT: This alert triggers when the yellow electric pump overheats.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: (a) The Flight Phase Inhibition 3 is only available for HYD Y ELEC PUMP OVHT.

Continued on the following page

HYD Y ELEC PUMP LO PR OR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-M-00019032.0002001 / 21 MAR 16

YELLOW ELEC PUMP.. OFF

ASSOCIATED PROCEDURES

Y SYS LO PR

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is the normal braking using green pressure, the parking brake should not be used since it is not available and the chocks should be in place before engine 1 shutdown.*

L1

SECONDARY FAILURES

*F/CTL

Ident.: PRO-ABN-HYD-M-00018322.0001001 / 21 MAR 16

L12

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP..ON
  PTU...AUTO
  The above two lines are only displayed, in case of an electrical pump overheat.

LDG DIST PROC.. APPLY

FLAPS SLOW
CAT 3 SINGLE ONLY

INOP SYS

YELLOW HYD
SPLR 2+4
CAT 3 DUAL
REVERSER 2
Y ELEC PUMP
YAW DAMPER 2

HYD Y ELEC PUMP LO PR OR OVHT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-HYD-M-00017133.0001001 / 21 MAR 16

ANNUNCIATIONS

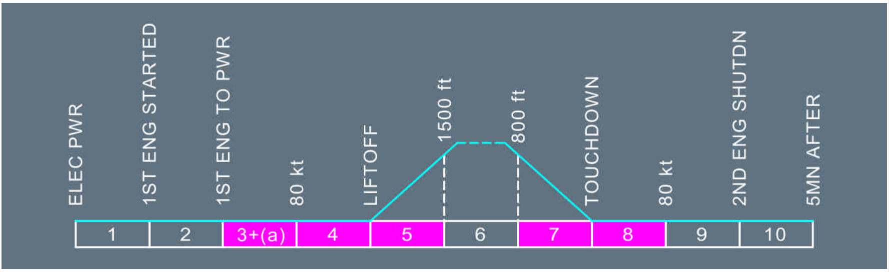
Triggering Conditions:

L2 LO PR: This alert triggers when the yellow system pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI) with:

- Y ELEC PUMP pb at ON
- Y ENG PUMP and PTU not available.

OVHT: This alert triggers when the yellow electric pump overheats.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: (a) The Flight Phase Inhibition 3 is only available for HYD Y ELEC PUMP OVHT.

HYD Y ELEC PUMP LO PR OR OVHT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-HYD-M-00017133.0001001 / 21 MAR 16

ANNUNCIATIONS

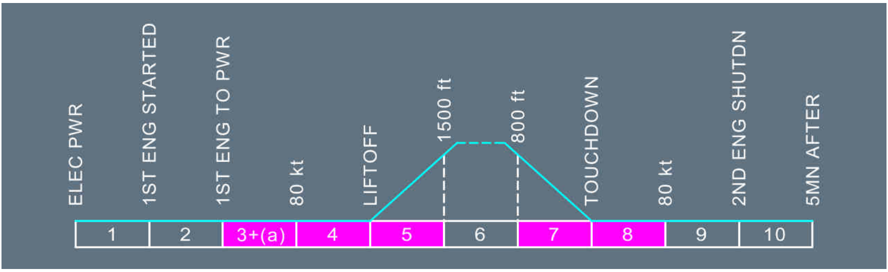
Triggering Conditions:

L2 LO PR: This alert triggers when the yellow system pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI) with:

- Y ELEC PUMP pb at ON
- Y ENG PUMP and PTU not available.

OVHT: This alert triggers when the yellow electric pump overheats.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: (a) The Flight Phase Inhibition 3 is only available for HYD Y ELEC PUMP OVHT.

Continued on the following page

HYD Y ELEC PUMP LO PR OR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-M-00019032.0003001 / 21 MAR 16

38 YELLOW ELEC PUMP.. OFF

ASSOCIATED PROCEDURES

Y SYS LO PR

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is the normal braking using green pressure, the parking brake should not be used since it is not available and the chocks should be in place before engine 1 shutdown.*

L1 FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y ELEC PUMP LO PR OR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-M-00018322.0004001 / 17 MAY 21

39

L12

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP...ON
  PTU...AUTO
  The above two lines are only displayed, in case of an electrical pump overheat.

LDG DIST PROC... APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

FLAPS SLOW

CAT 3 SINGLE ONLY

INOP SYS

YELLOW HYD
SPLR 2+4
CAT 3 DUAL
N/W STRG
REVERSER 2
Y ELEC PUMP
YAW DAMPER 2
STEEP APPR

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y ENG 2 PUMP LO PR
(PTU OPERATIVE)

Applicable to: ALL

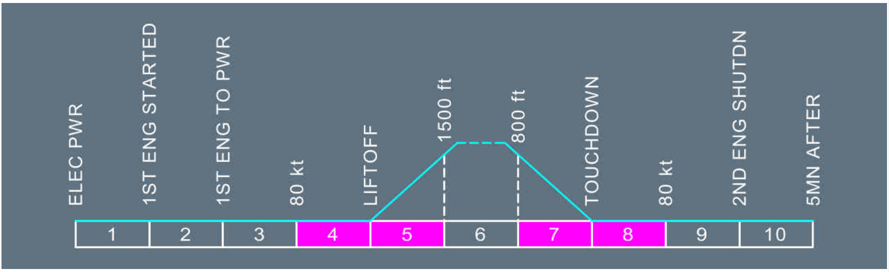
Ident.: PRO-ABN-HYD-O-00017135.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-O-00011650.0001001 / 18 AUG 10

YELLOW ENG 2 PUMP..OFF

Ident.: PRO-ABN-HYD-O-00011651.0001001 / 18 AUG 10

STATUS

INOP SYS

Y ENG 2 PUMP

HYD Y ENG 2 PUMP LO PR
(PTU INOPERATIVE)

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

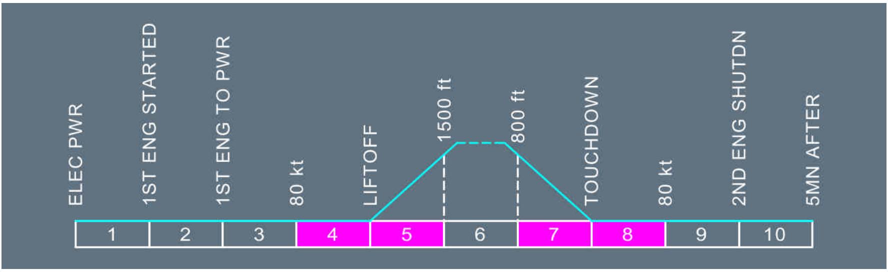
Ident.: PRO-ABN-HYD-Q-00018806.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-Q-00011654.0001001 / 18 AUG 10

YELLOW ENG 2 PUMP..OFF

ASSOCIATED PROCEDURES

Y SYS LO PR

L2 *Note: If yellow system is affected, the yellow electrical pump may be used.*

L1

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y ENG 2 PUMP LO PR (Cont'd)
(PTU INOPERATIVE)

Ident.: PRO-ABN-HYD-Q-00018323.0001001 / 21 MAR 16

L12

STATUS

LDG DIST PROC.. APPLY

FLAPS SLOW
CAT 3 SINGLE
See (1)

INOP SYS

YELLOW HYD
SPLR 2+4
CAT 3 DUAL
REVERSER 2
PTU
Y ENG 2 PUMP
YAW DAMPER 2

(1) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to a yellow accumulator low pressure.*

HYD Y ENG 2 PUMP LO PR
(PTU INOPERATIVE)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

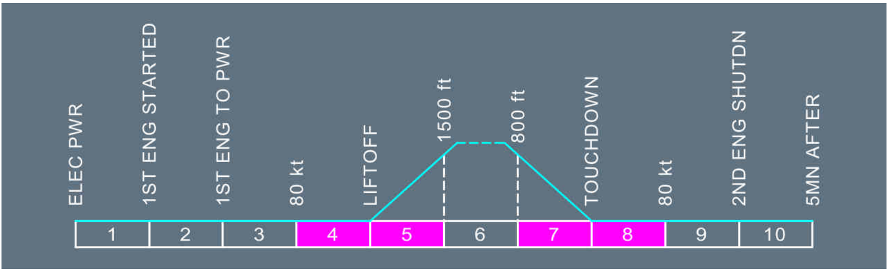
Ident.: PRO-ABN-HYD-Q-00018806.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-Q-00011654.0001001 / 18 AUG 10

YELLOW ENG 2 PUMP..OFF

ASSOCIATED PROCEDURES

Y SYS LO PR

L2 Note: *If yellow system is affected, the yellow electrical pump may be used.*

L1

SECONDARY FAILURES

*F/CTL

HYD Y ENG 2 PUMP LO PR
(PTU INOPERATIVE)

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

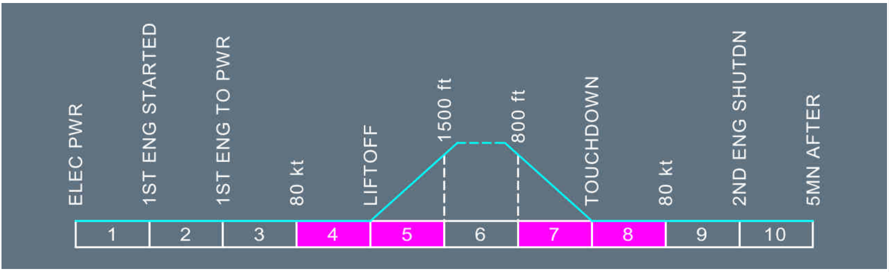
Ident.: PRO-ABN-HYD-Q-00018806.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the pump outlet pressure ≤1 750 PSI (the alert resets if pressure ≥2 200 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-Q-00011654.0001001 / 18 AUG 10

YELLOW ENG 2 PUMP..OFF

ASSOCIATED PROCEDURES

Y SYS LO PR

L2 *Note:* *If yellow system is affected, the yellow electrical pump may be used.*

L1

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y ENG 2 PUMP LO PR (Cont'd)
(PTU INOPERATIVE)

Ident.: PRO-ABN-HYD-Q-00018323.0002001 / 21 MAR 16

40

L12

STATUS

LDG DIST PROC.. APPLY

FLAPS SLOW
CAT 3 SINGLE
See (1)

INOP SYS

YELLOW HYD
SPLR 2+4
CAT 3 DUAL
N/W STRG
REVERSER 2
PTU
Y ENG 2 PUMP
YAW DAMPER 2
STEEP APPR ◁

(1) *Note:* *Following a yellow hydraulic system failure, the parking brake may be inoperative due to a yellow accumulator low pressure.*

HYD Y RSVR LO AIR PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

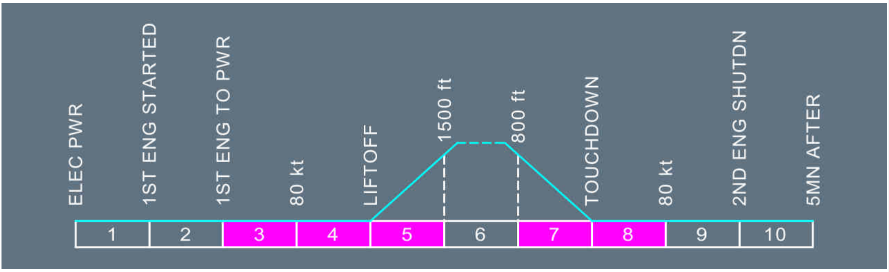
Ident.: PRO-ABN-HYD-G-00017105.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

HYD Y RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-G-00011626.0003001 / 27 NOV 12

41

- **IF PRESS FLUCTUATES:**
  - PTU.......................................OFF
  - YELLOW ENG 2 PUMP.......................OFF
  - YELLOW ELEC PUMP........................OFF

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case : The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-G-00018324.0006001 / 17 MAY 21

L2 The probability of cavitation increases with altitude.
Therefore, it may be possible to restore the system after descending to a lower altitude.

L12

STATUS

APPR PROC

HYD LO PR
YELLOW ENG 2 PUMP.. ON

- **If sys not recovered:**
  LDG DIST PROC...APPLY

FUEL CONSUMPT INCRSD
See (1)
FMS PRED UNRELIABLE
See (2)
FLAPS SLOW
CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
REVERSER 2
YAW DAMPER 2

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y RSVR LO AIR PR

Applicable to: MSN 01251

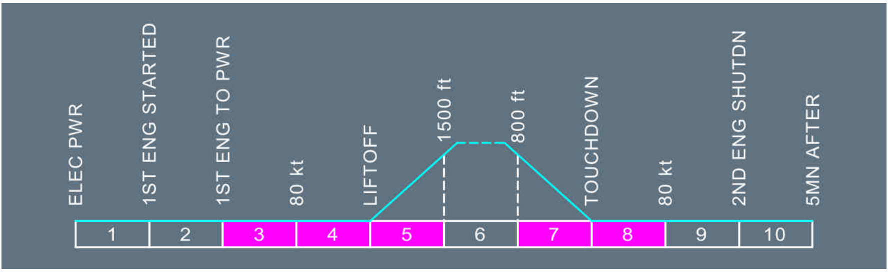
Ident.: PRO-ABN-HYD-G-00017105.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

HYD Y RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-G-00011626.0002001 / 18 AUG 10

- **IF PRESS FLUCTUATES:**
  PTU....................OFF
  YELLOW ENG 2 PUMP....................OFF
  YELLOW ELEC PUMP....................OFF

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case : The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

SECONDARY FAILURES

*F/CTL

Ident.: PRO-ABN-HYD-G-00018324.0002001 / 21 MAR 16

L2 The probability of cavitation increases with altitude.
Therefore, it may be possible to restore the system after descending to a lower altitude.

L1

STATUS

APPR PROC

HYD LO PR
YELLOW ENG 2 PUMP....................ON

- **If sys not recovered:**
  LDG DIST PROC....................APPLY

FLAPS SLOW
CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
REVERSER 2
YAW DAMPER 2

HYD Y RSVR LO AIR PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

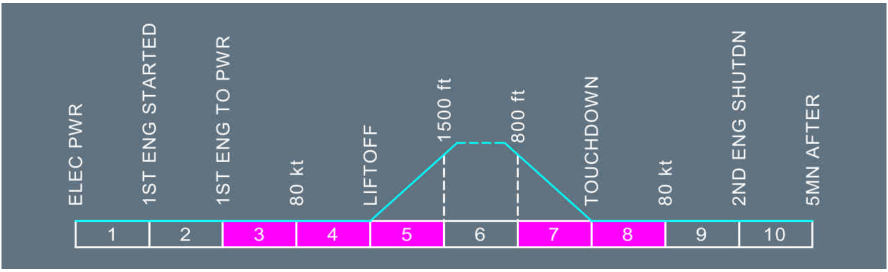
Ident.: PRO-ABN-HYD-G-00017105.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

HYD Y RSVR LO AIR PR

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

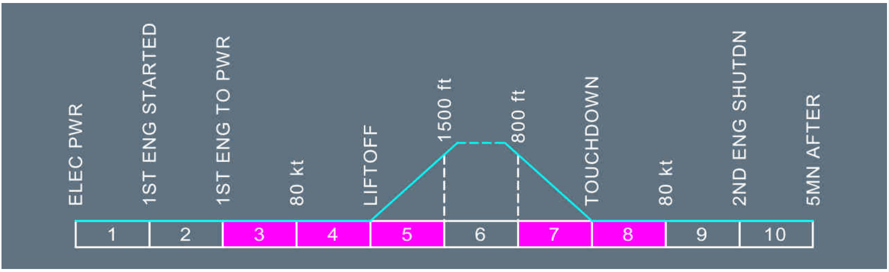
Ident.: PRO-ABN-HYD-G-00017105.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

HYD Y RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-G-00011626.0003001 / 27 NOV 12

42

- **IF PRESS FLUCTUATES:**

  PTU...OFF
  YELLOW ENG 2 PUMP...OFF
  YELLOW ELEC PUMP..OFF

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case : The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-G-00018324.0007001 / 17 MAY 21

L2 The probability of cavitation increases with altitude.
Therefore, it may be possible to restore the system after descending to a lower altitude.

L12

STATUS

APPR PROC

HYD LO PR
YELLOW ENG 2 PUMP..ON

- **If sys not recovered:**
  LDG DIST PROC...APPLY

FUEL CONSUMPT INCRSD
See (1)
FMS PRED UNRELIABLE
See (2)
FLAPS SLOW
CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
N/W STRG
REVERSER 2
YAW DAMPER 2
STEEP APPR

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y RSVR LO AIR PR

Applicable to: MSN 08635, 10949-11597

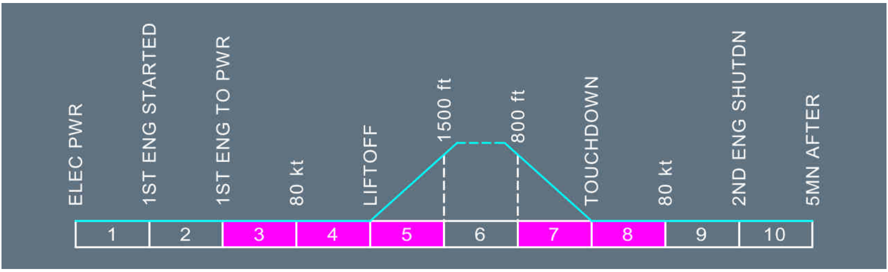
Ident.: PRO-ABN-HYD-G-00017105.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reservoir air pressure ≤ 22 PSI (the alert resets if pressure ≥ 25 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

HYD Y RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-G-00011626.0003001 / 27 NOV 12

43

- **IF PRESS FLUCTUATES:**
  - PTU....................OFF
  - YELLOW ENG 2 PUMP....................OFF
  - YELLOW ELEC PUMP....................OFF

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case : The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR LO AIR PR (Cont'd)

Ident.: PRO-ABN-HYD-G-00018324.0009001 / 17 MAY 21

44

L12

STATUS

APPR PROC

HYD LO PR

The probability of cavitation increases with altitude. Therefore, it may be possible to restore the system after descending to a lower altitude.

YELLOW ENG 2 PUMP...ON

- **If sys not recovered:**

  LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
N/W STRG
REVERSER 2
YAW DAMPER 2 (1)
STEEP APPR

---

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and* Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table *in order to find the applicable Fuel Penalty Factor.*

HYD Y RSVR LO LVL

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-HYD-I-00017143.0002001 / 06 SEP 16

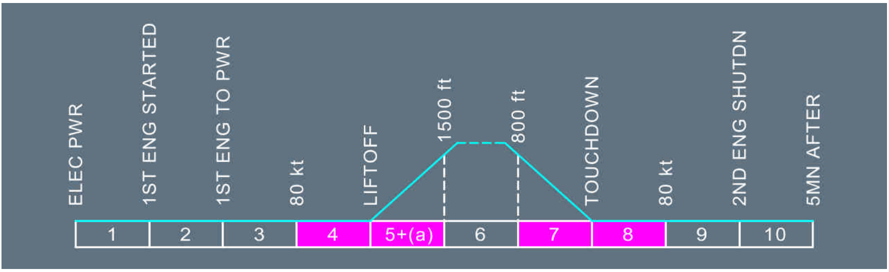
45

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

L1 *Note:* *(a) The HYD Y RSVR LO LVL alert is inhibited for the first 15 s of flight phase 5.*

Continued on the following page

HYD Y RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-I-00011631.0003001 / 05 MAR 13

46

PTU..OFF
YELLOW ENG 2 PUMP..OFF
YELLOW ELEC PUMP...OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-I-00018326.0005001 / 17 MAY 21

L12

STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

FLAPS SLOW

CAT 3 SINGLE

See (3)

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
REVERSER 2
CARGO DOOR
YAW DAMPER 2

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(3) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to a yellow accumulator low pressure.*

HYD Y RSVR LO LVL

Applicable to: MSN 01251

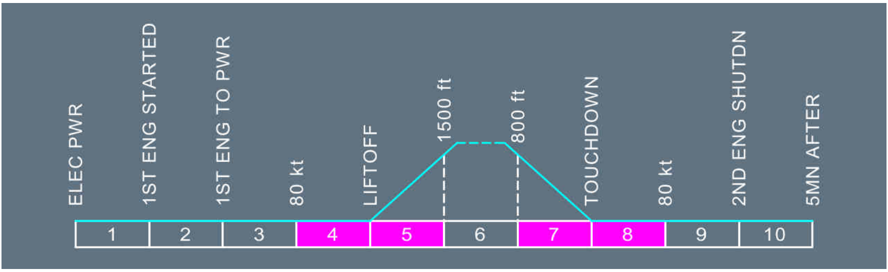
Ident.: PRO-ABN-HYD-I-00017143.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

HYD Y RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-I-00011631.0002001 / 05 MAR 13

PTU....................OFF
YELLOW ENG 2 PUMP....................OFF
YELLOW ELEC PUMP....................OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

SECONDARY FAILURES

*F/CTL

Ident.: PRO-ABN-HYD-I-00018326.0001001 / 21 MAR 16

L12

STATUS

LDG DIST PROC....................APPLY

FLAPS SLOW
CAT 3 SINGLE
See (1)

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
REVERSER 2
CARGO DOOR
YAW DAMPER 2

(1) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to a yellow accumulator low pressure.*

HYD Y RSVR LO LVL

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

Ident.: PRO-ABN-HYD-I-00017143.0002001 / 06 SEP 16

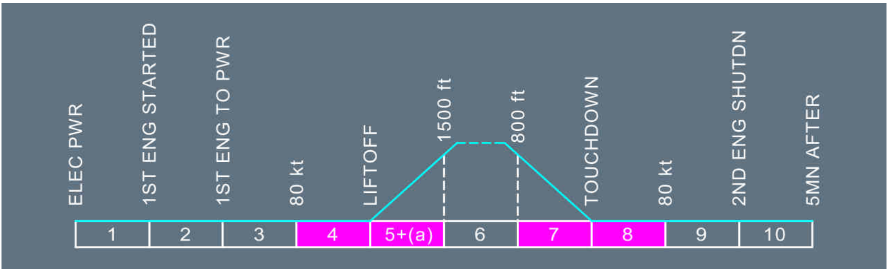
47

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

L1 Note: *(a) The HYD Y RSVR LO LVL alert is inhibited for the first 15 s of flight phase 5.*

Continued on the following page

HYD Y RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-I-00011631.0003001 / 05 MAR 13

48

PTU....................OFF
YELLOW ENG 2 PUMP....................OFF
YELLOW ELEC PUMP.................... OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-I-00018326.0006001 / 17 MAY 21

L12

STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

FLAPS SLOW

CAT 3 SINGLE

See (3)

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
N/W STRG
REVERSER 2
CARGO DOOR
YAW DAMPER 2
STEEP APPR ⊲

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(3) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to a yellow accumulator low pressure.*

HYD Y RSVR LO LVL

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-HYD-I-00017143.0002001 / 06 SEP 16

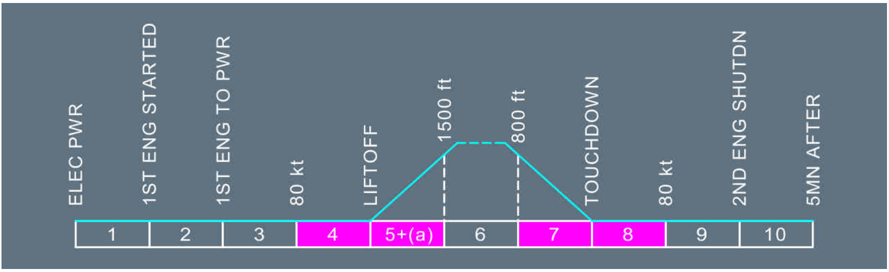
49

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid quantity < 3.5 l (0.92 US Gal).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5+(a)
6
7
8
9
10

L1 *Note:* *(a) The HYD Y RSVR LO LVL alert is inhibited for the first 15 s of flight phase 5.*

Continued on the following page

HYD Y RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-I-00011631.0003001 / 05 MAR 13

50

PTU.....OFF
YELLOW ENG 2 PUMP.....OFF
YELLOW ELEC PUMP.....OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR LO LVL (Cont'd)

Ident.: PRO-ABN-HYD-I-00018326.0008001 / 17 MAY 21

51

L12

STATUS

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

CAT 3 SINGLE

See (4)

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
N/W STRG
REVERSER 2
CARGO DOOR
YAW DAMPER 2 (1)
STEEP APPR

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(4) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to a yellow accumulator low pressure.*

HYD Y RSVR OVHT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

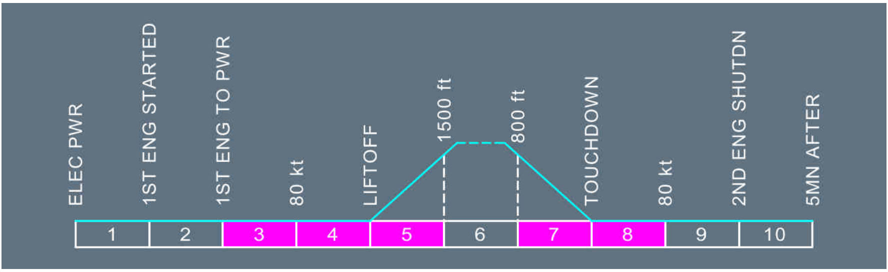
Ident.: PRO-ABN-HYD-H-00017109.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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5
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Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00011629.0003001 / 05 MAR 13

52

PTU....OFF
YELLOW ENG 2 PUMP....OFF
YELLOW ELEC PUMP.... OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00018327.0006001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP..ON
- **If not recovered:**
  LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See [1]

FMS PRED UNRELIABLE

See [2]

FLAPS SLOW

CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
REVERSER 2
YAW DAMPER 2

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y RSVR OVHT

Applicable to: MSN 01251

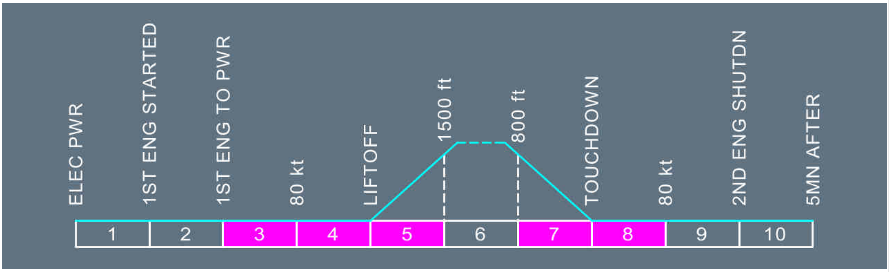
Ident.: PRO-ABN-HYD-H-00017109.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
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10

Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00011629.0002001 / 05 MAR 13

PTU....................OFF
YELLOW ENG 2 PUMP....................OFF
YELLOW ELEC PUMP....................OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

SECONDARY FAILURES

*F/CTL

Ident.: PRO-ABN-HYD-H-00018327.0002001 / 21 MAR 16

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP....................ON
- **If not recovered:**
  LDG DIST PROC....................APPLY

FLAPS SLOW
CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
REVERSER 2
YAW DAMPER 2

HYD Y RSVR OVHT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-07098

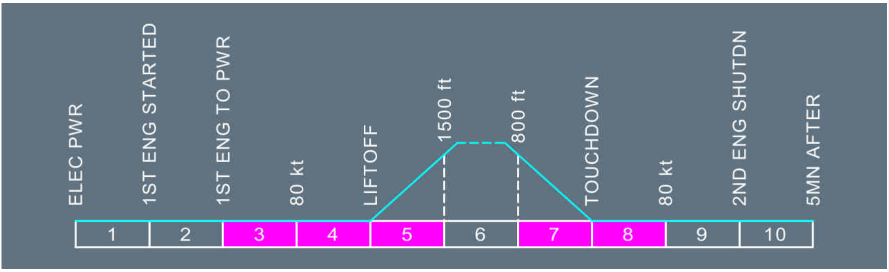
Ident.: PRO-ABN-HYD-H-00017109.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥93 °C (the alert resets if temperature ≤88 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00011629.0003001 / 05 MAR 13

53

PTU...OFF

YELLOW ENG 2 PUMP...OFF

YELLOW ELEC PUMP... OFF

BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00018327.0007001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP...ON
- **If not recovered:**
  LDG DIST PROC...APPLY

FUEL CONSUMPT INCRSD

See [1]

FMS PRED UNRELIABLE

See [2]

FLAPS SLOW

CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
N/W STRG
REVERSER 2
YAW DAMPER 2
STEEP APPR ◁

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y RSVR OVHT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-HYD-H-00017109.0002001 / 01 JUN 16

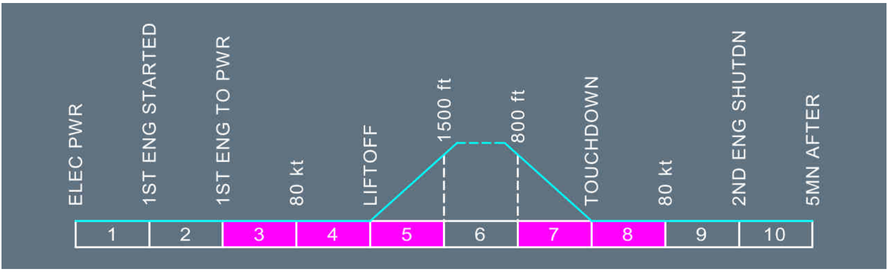
54

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥98 °C (the alert resets if temperature ≤93 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00011629.0003001 / 05 MAR 13

55

PTU....................OFF
YELLOW ENG 2 PUMP....................OFF
YELLOW ELEC PUMP....................OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00018327.0007001 / 17 MAY 21

L12

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP....................ON
- **If not recovered:**
  LDG DIST PROC....................APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

FLAPS SLOW

CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
N/W STRG
REVERSER 2
YAW DAMPER 2
STEEP APPR ◁

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD Y RSVR OVHT

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-HYD-H-00017109.0002001 / 01 JUN 16

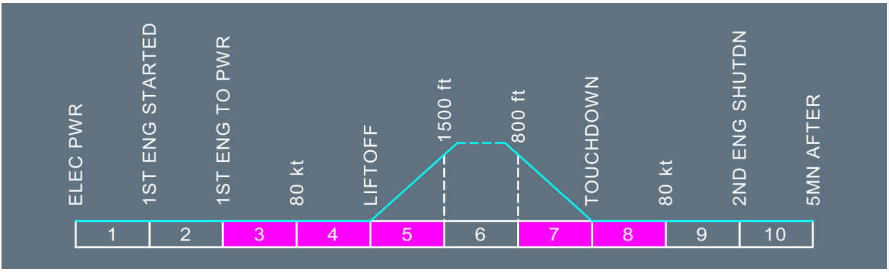
56

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the fluid temperature ≥98 °C (the alert resets if temperature ≤93 °C).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00011629.0003001 / 05 MAR 13

57

PTU...OFF
YELLOW ENG 2 PUMP...OFF
YELLOW ELEC PUMP..OFF
BRK Y ACCU PR MONITOR

L2 *This check is recommended to cover the case of a pipe rupture, which could lead to the simultaneous loss of the hydraulic system and the accumulator fluid. If this occurs, the loss of the accumulator should be observed on the indicator within 10 min. In that case: The only remaining braking means is normal braking, using green pressure. The parking brake should not be used since, it is not available. And, the chocks should be in place before Engine 1 shutdown.*

L1 Y ENG 2 PUMP LO PR

ASSOCIATED PROCEDURES

Y SYS LO PR
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD Y RSVR OVHT (Cont'd)

Ident.: PRO-ABN-HYD-H-00018327.0009001 / 17 MAY 21

58

L12

STATUS

APPR PROC

HYD LO PR

- **IF YELLOW OVHT OUT:**
  YELLOW ENG 2 PUMP..ON
- **If not recovered:**
  LDG DIST PROC..APPLY

FUEL CONSUMPT INCRSD

See [2]

FMS PRED UNRELIABLE

See [3]

FLAPS SLOW

CAT 3 SINGLE

INOP SYS

YELLOW HYD
SPLR 2 + 4
CAT 3 DUAL
N/W STRG
REVERSER 2
YAW DAMPER 2 [1]
STEEP APPR

(1) *(When both engines are running)*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B+Y SYS LO PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

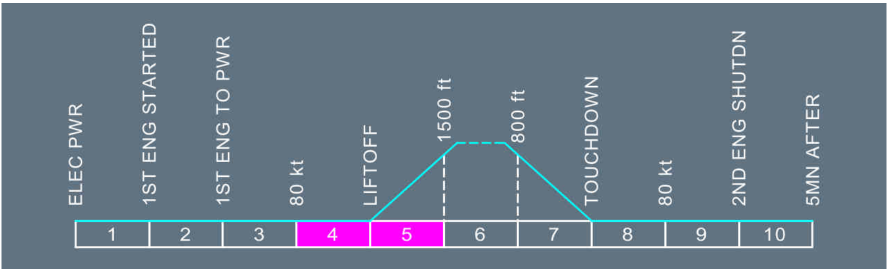
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0003001 / 21 MAR 16

L2 Note: *If the yellow hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests that the flight crew switches the PTU off.*

L1 **LAND ASAP**

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP..ON
- **If blue sys lost by ELEC PUMP LO PR:**
  RAT..MAN ON

L2 *To extend the RAT, the flight crew must press the RAT MAN ON pb located on the Hydraulic overhead panel.*

L1 MIN RAT SPD..140 KT

AFFECTED PUMPS..OFF
MAX SPEED..320/0.77

L2 Note: *Flight controls remain in normal law.*

L1 MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

L2
- **If blue or yellow sys recovered:**

  See procedure for single failure.

L1
- **If neither system recovered:**

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0011001 / 17 MAY 21

L12

STATUS

MIN RAT SPD.. 140 KT

(If B PUMP LO PR)

MAX SPEED... 320/0.77

MANEUVER WITH CARE

FOR GA: MAX PITCH 15 DEG

APPR PROC

DUAL HYD LO PR

(Line not displayed for dual LO LVL)

- **If sys lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP.. ON

- **If sys lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP...AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP...................................... ON

- **IF HYD NOT RECOVERED (line not displayed for dual LO LVL):**

  - **For A321 aircraft:**

    FOR LDG... USE FLAP 3

    This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3..ON

  L/G...GRVTY EXTN

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Landing gear is extended by gravity to preserve green system integrity Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

- **For A321 aircraft:**
  APPR SPD...VREF +10 KT

LDG DIST PROC.. APPLY

SLATS/FLAPS SLOW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

(1) *Note:* *Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B+Y SYS LO PR

Applicable to: MSN 01251

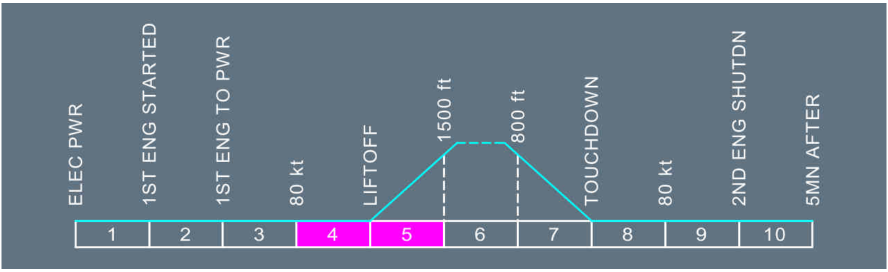
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0001001 / 21 MAR 16

L2 Note: *If the yellow hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests that the flight crew switches the PTU off.*

L1 **LAND ASAP**

- **If yellow sys lost by ENG 2 PUMP LO PR:**

  YELLOW ELEC PUMP....................ON

- **If blue sys lost by ELEC PUMP LO PR:**

  RAT....................MAN ON

L2 *To extend the RAT, the flight crew must press the RAT MAN ON pb located on the Hydraulic overhead panel.*

L1 MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF

MAX SPEED....................320/0.77

L2 Note: *Flight controls remain in normal law.*

L1 MANEUVER WITH CARE

L2
- **If blue or yellow sys recovered:**

  See procedure for single failure.

L1
- **If neither system recovered:**

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0002001 / 21 MAR 16

L12

STATUS

MIN RAT SPD...140 KT

(If B PUMP LO PR)

MAX SPEED...320/0.77

MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for dual LO LVL)

- **If sys lost by RSVR LO AIR PR:**
  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP...ON
- **If sys lost by RSVR OVHT:**
  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP.......................................AUTO
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP.......................................ON
- **IF HYD NOT RECOVERED (line not displayed for dual LO LVL):**
  - **For A321 aircraft:**
    FOR LDG.......................................USE FLAP 3
    GPWS LDG FLAP 3.......................................ON

  L/G...GRVTY EXTN

  Landing gear is extended by gravity to preserve green system integrity Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

- **For A321 aircraft:**
  APPR SPD...VREF +10 KT

LDG DIST PROC... APPLY

SLATS/FLAPS SLOW

See (1)

(1) Note: *Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD B+Y SYS LO PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

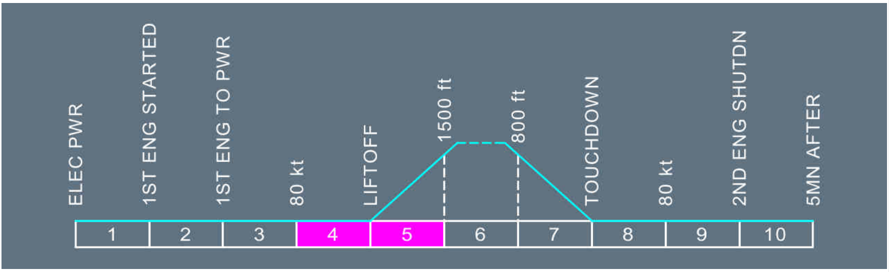
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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HYD B+Y SYS LO PR

Applicable to: MSN 02014

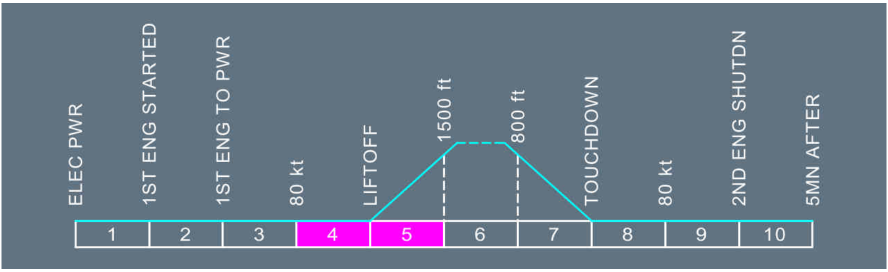
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0002001 / 21 MAR 16

L2 *Note: If the yellow hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests that the flight crew switches the PTU off.*

L1 **LAND ASAP**

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP....................ON
- **If blue sys lost by ELEC PUMP LO PR:**
  RAT....................MAN ON

L2 *To extend the RAT, the flight crew must press the RAT MAN ON pb located on the Hydraulic overhead panel.*

L1 MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF
MAX SPEED....................320/0.77

L2 *Note: Flight controls remain in normal law.*

L1 MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

L2
- **If blue or yellow sys recovered:**

  See procedure for single failure.

L1
- **If neither system recovered:**

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0008001 / 17 MAY 21

L12

STATUS

MIN RAT SPD..........140 KT

(If B PUMP LO PR)

MAX SPEED..........320/0.77

MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for dual LO LVL)

- **If sys lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP..........ON

- **If sys lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP..........AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP..........ON

- **IF HYD NOT RECOVERED (line not displayed for dual LO LVL):**

  - **For A321 aircraft:**

    FOR LDG..........USE FLAP 3

    This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3..........ON

  L/G..........GRVTY EXTN

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Landing gear is extended by gravity to preserve green system integrity Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

- **For A321 aircraft:**
  APPR SPD.....VREF +10 KT

LDG DIST PROC.....APPLY

SLATS/FLAPS SLOW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

(1) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B+Y SYS LO PR

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-07098

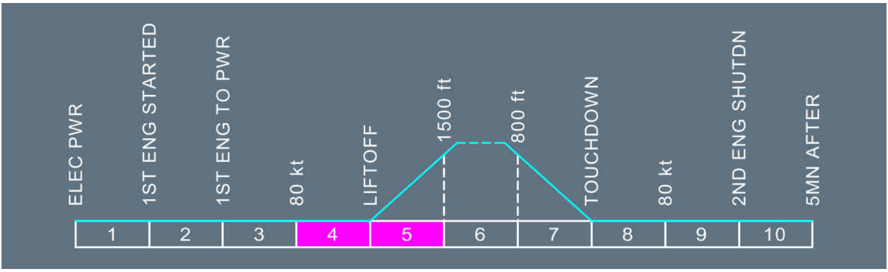
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0003001 / 21 MAR 16

L2 *Note:* *If the yellow hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests that the flight crew switches the PTU off.*

L1 **LAND ASAP**

- **If yellow sys lost by ENG 2 PUMP LO PR:**

  YELLOW ELEC PUMP....................ON

- **If blue sys lost by ELEC PUMP LO PR:**

  RAT....................MAN ON

  L2 *To extend the RAT, the flight crew must press the RAT MAN ON pb located on the Hydraulic overhead panel.*

  L1 MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF
MAX SPEED....................320/0.77

L2 *Note:* *Flight controls remain in normal law.*

L1 MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

L2
- **If blue or yellow sys recovered:**

  See procedure for single failure.

L1
- **If neither system recovered:**

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0013001 / 17 MAY 21

L12

STATUS

MIN RAT SPD....................140 KT

(If B PUMP LO PR)

MAX SPEED....................320/0.77

MANEUVER WITH CARE

FOR GA: MAX PITCH 15 DEG

APPR PROC

DUAL HYD LO PR

(Line not displayed for dual LO LVL)

- **If sys lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP....................ON

- **If sys lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP....................AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP....................ON

- **IF HYD NOT RECOVERED (line not displayed for dual LO LVL):**

  - **For A321 aircraft:**

    FOR LDG....................USE FLAP 3

    This line is replaced by “FOR LDG: USE FLAP 3” when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3....................ON

  L/G....................GRVTY EXTN

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
N/W STRG
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND
STEEP APPR

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Landing gear is extended by gravity to preserve green system integrity Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

- **For A321 aircraft:**
  APPR SPD..VREF +10 KT

LDG DIST PROC.. APPLY

SLATS/FLAPS SLOW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

---

(1) *Note:* *Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B+Y SYS LO PR

Applicable to: MSN 06561

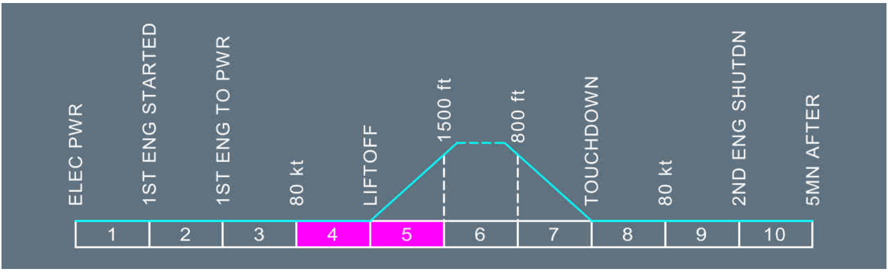
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0002001 / 21 MAR 16

L2 Note: *If the yellow hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM message may appear, and requests that the flight crew switches the PTU off.*

L1 LAND ASAP

- **If yellow sys lost by ENG 2 PUMP LO PR:**

  YELLOW ELEC PUMP....................ON

- **If blue sys lost by ELEC PUMP LO PR:**

  RAT....................MAN ON

L2 *To extend the RAT, the flight crew must press the RAT MAN ON pb located on the Hydraulic overhead panel.*

L1 MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF
MAX SPEED....................320/0.77

L2 Note: *Flight controls remain in normal law.*

L1 MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

L2
- **If blue or yellow sys recovered:**

  See procedure for single failure.

L1
- **If neither system recovered:**

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0009001 / 17 MAY 21

L12

STATUS

MIN RAT SPD....................140 KT

(If B PUMP LO PR)

MAX SPEED....................320/0.77

MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for dual LO LVL)

- **If sys lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP....................ON

- **If sys lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP....................AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP....................ON

- **IF HYD NOT RECOVERED (line not displayed for dual LO LVL):**

  - **For A321 aircraft:**

    FOR LDG....................USE FLAP 3

    This line is replaced by “FOR LDG: USE FLAP 3” when CONF 3 is selected, as a reminder.

    GPWS LDG FLAP 3....................ON

  L/G....................GRVTY EXTN

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
N/W STRG
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND ⊲
STEEP APPR ⊲

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Landing gear is extended by gravity to preserve green system integrity Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

- **For A321 aircraft:**
  APPR SPD...VREF +10 KT

LDG DIST PROC... APPLY

SLATS/FLAPS SLOW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

---

(1) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B+Y SYS LO PR

Applicable to: MSN 08495-08596, 09190-09324

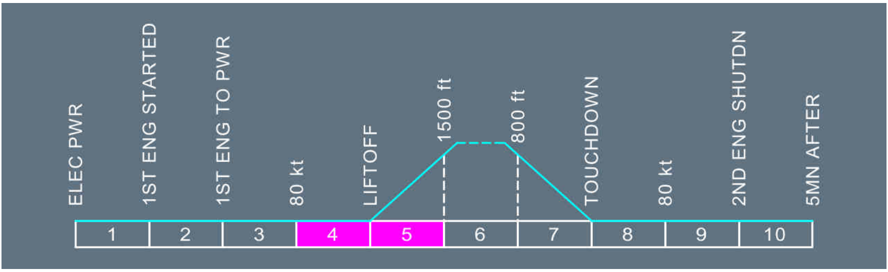
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0003001 / 21 MAR 16

L2 *Note: If the yellow hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests that the flight crew switches the PTU off.*

L1 **LAND ASAP**

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP.......ON
- **If blue sys lost by ELEC PUMP LO PR:**
  RAT.......MAN ON
  L2 *To extend the RAT, the flight crew must press the RAT MAN ON pb located on the Hydraulic overhead panel.*
  L1 MIN RAT SPD.......140 KT

AFFECTED PUMPS.......OFF
MAX SPEED.......320/0.77

L2 *Note: Flight controls remain in normal law.*

L1 MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

L2
- **If blue or yellow sys recovered:**

  See procedure for single failure.

L1
- **If neither system recovered:**

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0010001 / 17 MAY 21

L12

STATUS

MIN RAT SPD..140 KT

(If B PUMP LO PR)

MAX SPEED..320/0.77

MANEUVER WITH CARE

FOR GA: MAX PITCH 15 DEG

APPR PROC

DUAL HYD LO PR

(Line not displayed for dual LO LVL).

- **If sys lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP..ON

- **If sys lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP..AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP..ON

- **IF HYD NOT RECOVERED (line not displayed for dual LO LVL):**

  L/G..GRVTY EXTN

  Landing gear is extended by gravity to preserve green system integrity Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

  - **IF CONF3:**

    APPR SPD..VREF +25 KT

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
N/W STRG
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

LDG DIST PROC.. APPLY

SLATS/FLAPS SLOW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

(1) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD B+Y SYS LO PR

Applicable to: MSN 08635

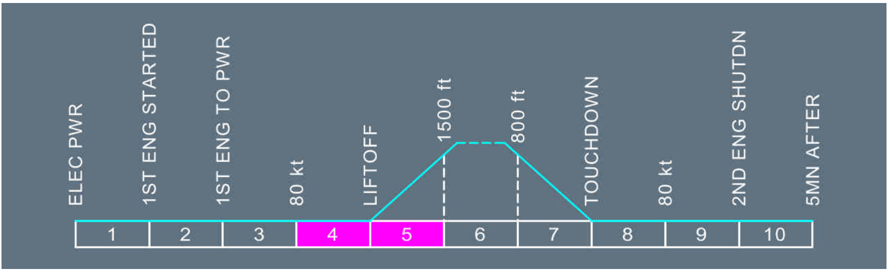
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0004001 / 16 APR 19

59

Note: *If the yellow hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM message may appear, and requests that the flight crew switches the PTU off.*

LAND ASAP

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP.....ON
- **If blue sys lost by ELEC PUMP LO PR:**
  RAT.....MAN ON
  MIN RAT SPD.....140 KT

AFFECTED PUMPS.....OFF
MAX SPEED.....320/0.77

L2 Note: *Flight controls remain in normal law.*

L1 MANEUVER WITH CARE

- **FOR GO-AROUND**
  MAX PITCH 15 DEG
  THR LVR..... TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0023001 / 17 MAY 21

L12

STATUS

MIN RAT SPD...140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

- **FOR GO-AROUND**

  MAX PITCH 15 DEG

THR LVR..TOGA THEN MCT

APPR PROC

DUAL HYD LO PR

- **If sys lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP.. ON

- **If sys lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP..AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP..................................... ON

- **IF HYD NOT RECOVERED:**

  - **If L/G is not downlocked:**

    L/G.. GRVTY EXTN

    Landing gear is extended by gravity to preserve green system integrity. Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
N/W STRG
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND ⊲

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

- **IF CONF3:**
  - APPR SPD.. VREF +25 KT

LDG DIST PROC... APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS/FLAPS SLOW

See (3)

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(3) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD B+Y SYS LO PR

Applicable to: MSN 10949-11522, 11572-11597

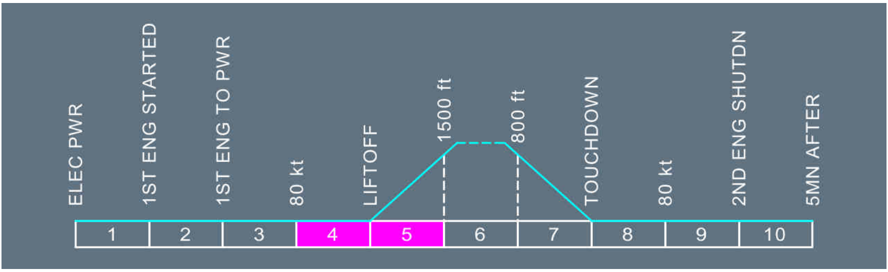
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0004001 / 16 APR 19

60

Note: If the yellow hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM message may appear, and requests that the flight crew switches the PTU off.

LAND ASAP

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP.................................ON
- **If blue sys lost by ELEC PUMP LO PR:**
  RAT.................................MAN ON
  MIN RAT SPD.................................140 KT

AFFECTED PUMPS.................................OFF
MAX SPEED.................................320/0.77

L2 *Note: Flight controls remain in normal law.*

L1 MANEUVER WITH CARE

- **FOR GO-AROUND**
  MAX PITCH 15 DEG
  THR LVR................................. TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018342.0028001 / 09 NOV 21

61

L12

STATUS

MIN RAT SPD..140 KT

(If B PUMP LO PR)

MAX SPEED..320/0.77

MANEUVER WITH CARE

- **FOR GO-AROUND**

  MAX PITCH 15 DEG

THR LVR..TOGA THEN MCT

APPR PROC

DUAL HYD LO PR

- **If system lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP..ON

- **If system lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP..AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP..ON

- **IF HYD NOT RECOVERED:**

  - **If L/G is not downlocked:**

    L/G GRVTY PROC..APPLY

    Landing gear is extended by gravity to preserve green system integrity. Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
N/W STRG
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

- **IF CONF 3:**
  APPR SPD....................................... VREF + 25 KT

LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS/FLAPS SLOW

See (3)

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(3) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD B+Y SYS LO PR

Applicable to: MSN 11531

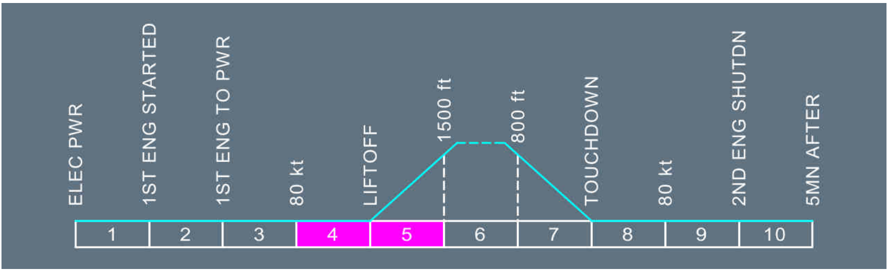
Ident.: PRO-ABN-HYD-L-00018917.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the blue and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-L-00018727.0004001 / 16 APR 19

62

Note: If the yellow hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM message may appear, and requests that the flight crew switches the PTU off.

LAND ASAP

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP.....ON
- **If blue sys lost by ELEC PUMP LO PR:**
  RAT.....MAN ON
  MIN RAT SPD.....140 KT

AFFECTED PUMPS.....OFF
MAX SPEED.....320/0.77

L2 *Note: Flight controls remain in normal law.*

L1 MANEUVER WITH CARE

- **FOR GO-AROUND**
  MAX PITCH 15 DEG
  THR LVR..... TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

SECONDARY FAILURES

*F/CTL

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

63 Ident.: PRO-ABN-HYD-L-00018342.0026001 / 09 NOV 21

L12

STATUS

MIN RAT SPD....................140 KT

(If B PUMP LO PR)

MAX SPEED....................320/0.77

MANEUVER WITH CARE

- **FOR GO-AROUND**

  MAX PITCH 15 DEG

THR LVR....................TOGA THEN MCT

APPR PROC

DUAL HYD LO PR

- **If system lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMP....................ON

- **If system lost by RSVR OVHT:**

  In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP....................AUTO

  - **IF YELLOW OVHT OUT:**

    YELLOW ENG 2 PUMP....................ON

- **IF HYD NOT RECOVERED:**

  FOR LDG....................FLAP LVR 3

  This line is replaced by “FOR LDG: FLAP LVR 3” when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3....................ON

  This line is displayed when flaps are in CONF 3.

INOP SYS

B+Y HYD
R ELEV
SPLR 2+3+4
SPD BRK
AP 1+2
N/W STRG
CARGO DOOR (If Y RSVR LO LVL)
REVERSER 2
B ELEC PUMP
EMER GEN (If B RSVR LO LVL)
YAW DAMPER 2
CAT 2
GLS AUTOLAND ⊲

Continued on the following page

HYD B+Y SYS LO PR (Cont'd)

- **If L/G is not downlocked:**

  L/G GRVTY PROC.......................................APPLY

  Landing gear is extended by gravity to preserve green system integrity. Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.

APPR SPD.. VREF + 25 KT
LDG DIST PROC.. APPLY

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

SLATS/FLAPS SLOW

See (3)

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(3) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD G+B SYS LO PR

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02321

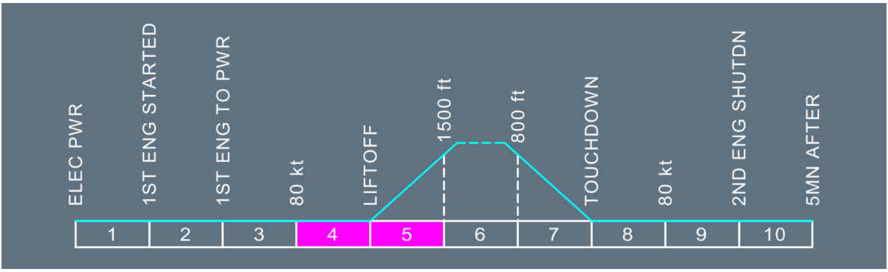
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0004001 / 10 MAY 21

L2 *Note: If the green hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  - RAT...MAN ON
  - MIN RAT SPD...140 KT

AFFECTED PUMPS...OFF
MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED...320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK...DO NOT USE

- **If blue sys recovered:**

  See procedure for single failure.

- **If blue sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0017001 / 17 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).................................... 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK..DO NOT USE

FOR GA: MAX PITCH 15 DEG

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMPS.. ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP...AUTO
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP....................................... ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  A/THR...OFF
  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.
  FOR LDG...USE FLAP 3
  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.
  GPWS LDG FLAP 3.. ON

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND
STEEP APPR

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

- **WHEN SPD 200 KT (displayed when slats are retracted):**

  L/G.. GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +25 KT

Approach speed must be increased, due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 01251

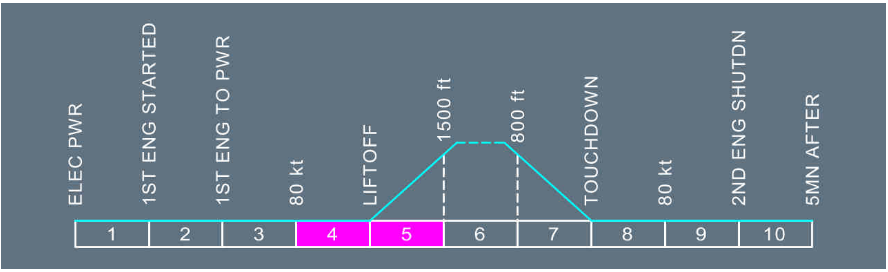
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0001001 / 10 MAY 21

L2 *Note: If the green hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  RAT....................MAN ON
  MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF
MANEUVER WITH CARE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK....................DO NOT USE

- **If blue sys recovered:**

  See procedure for single failure.

- **If blue sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0003001 / 21 MAR 16

L12

STATUS

MIN RAT SPD (IF RAT OUT).................................... 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK..DO NOT USE

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMPS.. ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP...AUTO
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.. ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  A/THR... OFF
  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.
  FOR LDG..USE FLAP 3
  GPWS LDG FLAP 3... ON
  - **WHEN SPD 200 KT (displayed when slats are retracted):**
    L/G.. GRVTY EXTN
    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND ⊲

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +25 KT

Approach speed must be increased, due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

FLAPS SLOW

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

HYD G+B SYS LO PR

Applicable to: MSN 01518, 01593-01628, 01825, 01832

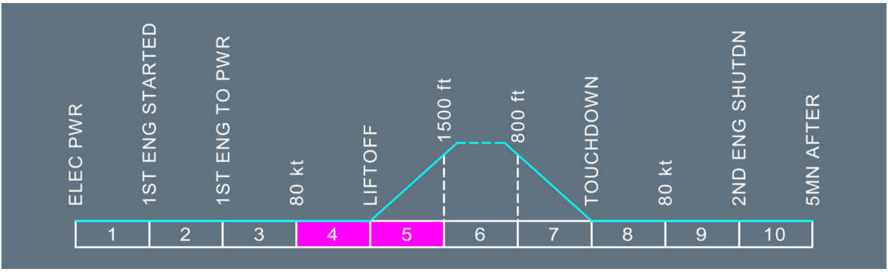
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0004001 / 10 MAY 21

L2 *Note: If the green hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  - RAT.......MAN ON
  - MIN RAT SPD.......140 KT

AFFECTED PUMPS.......OFF
MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED.......320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK.......DO NOT USE

- **If blue sys recovered:**

  See procedure for single failure.

- **If blue sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0018001 / 17 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).. 140 KT

(If B PUMP LO PR)

MAX SPEED... 320/0.77

MANEUVER WITH CARE

SPD BRK..DO NOT USE

FOR GA: MAX PITCH 15 DEG

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMPS.. ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP.......................................AUTO
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP...................................... ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  A/THR.. OFF

  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.

  FOR LDG...USE FLAP 3

  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3.. ON

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

- **WHEN SPD 200 KT (displayed when slats are retracted):**

  L/G.. GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +30 KT

Approach speed must be increased, due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

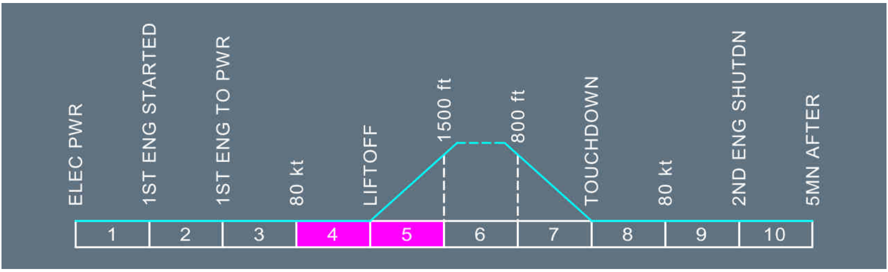
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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HYD G+B SYS LO PR

Applicable to: MSN 02014

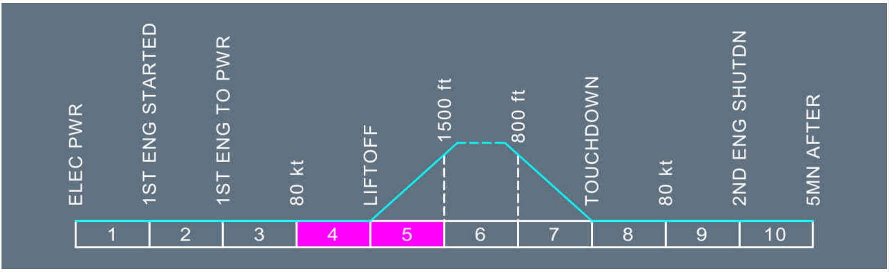
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0002001 / 10 MAY 21

L2 Note: *If the green hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

● **If blue sys lost by ELEC PUMP LO PR:**

RAT....................MAN ON
MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF
MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK....................DO NOT USE

■ **If blue sys recovered:**

See procedure for single failure.

■ **If blue sys not recovered:**

Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0011001 / 17 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).................................... 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK...DO NOT USE

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMPS..ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP...AUTO
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.. ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  A/THR.. OFF
  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.
  FOR LDG..USE FLAP 3
  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.
  GPWS LDG FLAP 3.. ON

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
N/W STRG
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND
STEEP APPR

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

- **WHEN SPD 200 KT (displayed when slats are retracted):**

  L/G.. GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +25 KT

Approach speed must be increased, due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-07098

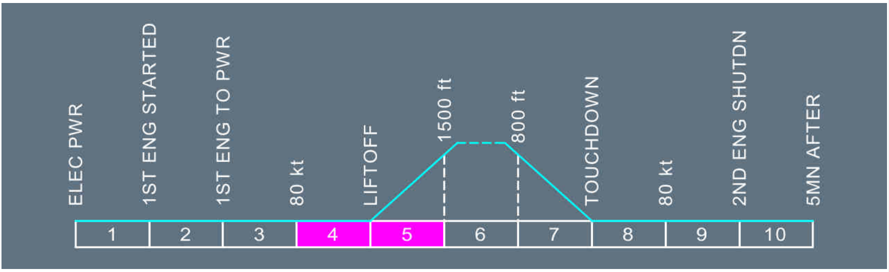
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0004001 / 10 MAY 21

L2 *Note: If the green hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  RAT.....MAN ON
  MIN RAT SPD.....140 KT

AFFECTED PUMPS.....OFF
MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED.....320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK.....DO NOT USE

- **If blue sys recovered:**

  See procedure for single failure.

- **If blue sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0023001 / 17 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).. 140 KT

(If B PUMP LO PR)

MAX SPEED... 320/0.77

MANEUVER WITH CARE

SPD BRK...DO NOT USE

FOR GA: MAX PITCH 15 DEG

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMPS..ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP...AUTO
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.. ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  A/THR...OFF

  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.

  FOR LDG..USE FLAP 3

  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3.. ON

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

- **WHEN SPD 200 KT (displayed when slats are retracted):**

  L/G.. GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +25 KT

Approach speed must be increased, due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See [(2)]

FMS PRED UNRELIABLE

See [(3)]

FLAPS SLOW

[(1)] *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

[(2)] *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[(3)] *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 02896-02904

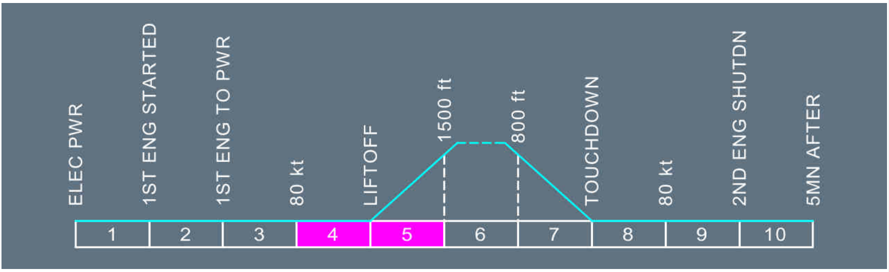
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0004001 / 10 MAY 21

L2 *Note: If the green hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

● **If blue sys lost by ELEC PUMP LO PR:**

RAT...MAN ON
MIN RAT SPD...140 KT

AFFECTED PUMPS...OFF
MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED...320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK...DO NOT USE

■ **If blue sys recovered:**

See procedure for single failure.

■ **If blue sys not recovered:**

Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0019001 / 17 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).. 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK..DO NOT USE

FOR GA: MAX PITCH 15 DEG

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMPS..ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP..AUTO
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP... ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  A/THR..OFF
  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.
  FOR LDG..USE FLAP 3
  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.
  GPWS LDG FLAP 3.. ON

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND ◁

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

- **WHEN SPD 200 KT (displayed when slats are retracted):**

  L/G.. GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +30 KT

Approach speed must be increased, due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 06561

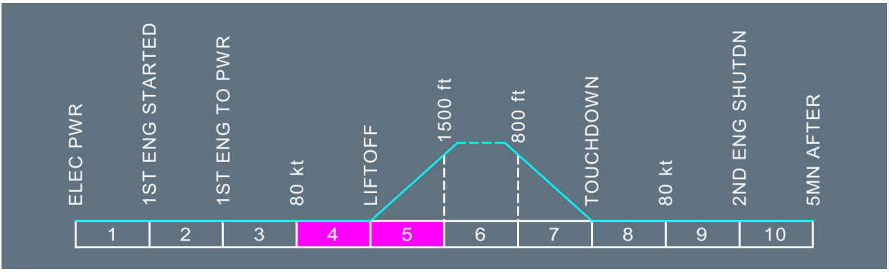
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0002001 / 10 MAY 21

L2 *Note: If the green hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  RAT....................MAN ON
  MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF
MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK....................DO NOT USE

- **If blue sys recovered:**

  See procedure for single failure.

- **If blue sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0013001 / 17 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).................................... 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK...DO NOT USE

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMPS...ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**
    BLUE ELEC PUMP...AUTO
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.. ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  A/THR..OFF

  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.

  FOR LDG..USE FLAP 3

  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3.. ON

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND
STEEP APPR

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

- **WHEN SPD 200 KT (displayed when slats are retracted):**

  L/G.. GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +25 KT

Approach speed must be increased, due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 08495-08596, 09190-09324

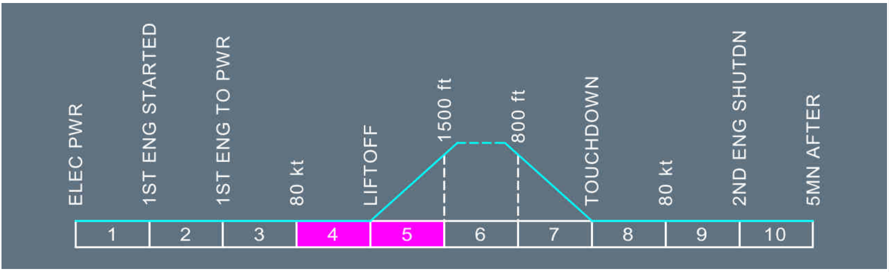
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0003001 / 10 MAY 21

L2 *Note: If the green hydraulic system is lost due to low level, the “HYD PTU FAULT” ECAM message may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  - RAT.....MAN ON
  - MIN RAT SPD.....140 KT

AFFECTED PUMPS.....OFF
MANEUVER WITH CARE
FOR GA: MAX PITCH 15 DEG
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED.....320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK.....DO NOT USE

- **If blue sys recovered:**

  See procedure for single failure.

- **If blue sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0016001 / 17 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).................................... 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK...DO NOT USE

FOR GA: MAX PITCH 15 DEG

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL):

- **If sys lost by RSVR LO AIR PR:**

  RELATED PUMPS...ON
- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**

    BLUE ELEC PUMP..AUTO
  - **IF GREEN OVHT OUT:**

    GREEN ENG 1 PUMP.. ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**

  A/THR...OFF

  Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.

  FOR LDG..USE FLAP 3

  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

  GPWS LDG FLAP 3... ON

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND ◁

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

- **WHEN SPD 200 KT (displayed when slats are retracted):**

  L/G.. GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

  Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt , a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD.. VREF +30 KT
LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

FUEL CONSUMPT INCRSD

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(3) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 08635

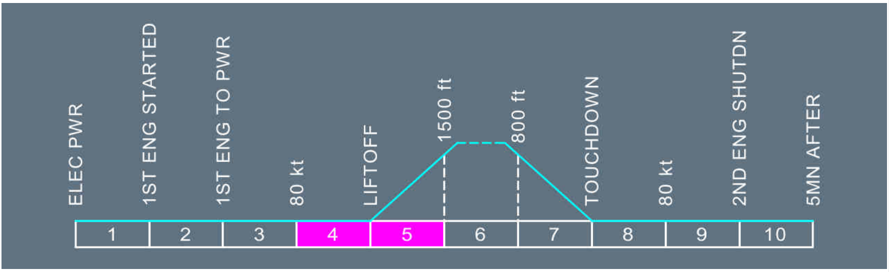
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0008001 / 26 NOV 19

64

L2 *Note: If the green hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM alert may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  RAT....................MAN ON
  MIN RAT SPD....................140 KT

AFFECTED PUMPS....................OFF
MANEUVER WITH CARE

- **FOR GO-AROUND**
  MAX PITCH 15 DEG
  THR LVR.................... TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK....................DO NOT USE

■ **If blue sys recovered:**

See procedure for single failure.

■ **If blue sys not recovered:**
S/F JAMMED PROC....................APPLY

L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed.*

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

L1

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0050001 / 10 MAY 21

L12

STATUS

MIN RAT SPD (IF RAT OUT).................................... 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK...DO NOT USE

- **FOR GO-AROUND**

  MAX PITCH 15 DEG

  THR LVR... TOGA THEN MCT

  This line is not displayed if one engine is inoperative.

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

This line is not displayed for a double LO LVL.

- **If sys lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMPS... ON

- **If sys lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**

    In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

    BLUE ELEC PUMP...AUTO

  - **IF GREEN OVHT OUT:**

    GREEN ENG 1 PUMP.. ON

- **IF HYD NOT RECOVERED:**

  S/F JAMMED PROC...APPLY

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND ⊲

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

A/THR..OFF

Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

- **If L/G is not downlocked:**
  - **WHEN SPD 200 KT (displayed when slats are retracted):**

    L/G...GRVTY EXTN

    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.
    Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt, a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD...VREF + 30 KT

Approach speed must be increased due to the loss of ailerons and slats.

LDG DIST PROC...APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

(3) *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+B SYS LO PR

Applicable to: MSN 10949-11597

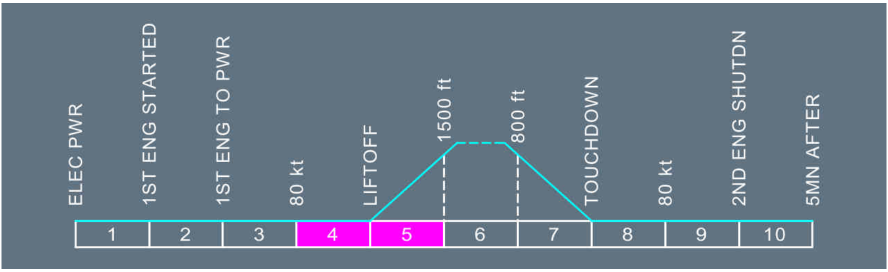
Ident.: PRO-ABN-HYD-J-00018920.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and blue systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018349.0008001 / 26 NOV 19

65

L2 *Note:* *If the green hydraulic system is lost due to low level, the "HYD PTU FAULT" ECAM alert may appear, and requests the flight crew to switch the PTU off.*

L1 **LAND ASAP**

- **If blue sys lost by ELEC PUMP LO PR:**
  - RAT.......MAN ON
  - MIN RAT SPD.......140 KT

AFFECTED PUMPS.......OFF
MANEUVER WITH CARE

- **FOR GO-AROUND**
  - MAX PITCH 15 DEG
  - THR LVR.......TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 The flight control normal laws and associated protections are lost. Only load factor limitation is furnished (alternate law without protection).

L1 MAX SPEED.......320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 SPD BRK.......DO NOT USE

- **If blue sys recovered:**

  See procedure for single failure.

- **If blue sys not recovered:**
  - S/F JAMMED PROC.......APPLY

L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*.

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

L1

SECONDARY FAILURES

*WHEEL
*F/CTL

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-J-00018350.0059001 / 09 NOV 21

66

L12

STATUS

MIN RAT SPD (IF RAT OUT)....................................... 140 KT

(If B PUMP LO PR)

MAX SPEED.. 320/0.77

MANEUVER WITH CARE

SPD BRK..DO NOT USE

- **FOR GO-AROUND**

  MAX PITCH 15 DEG

  THR LVR.. TOGA THEN MCT

  This line is not displayed if one engine is inoperative.

FUEL CONSUMPT INCRSD

See (1)

APPR PROC

DUAL HYD LO PR

This line is not displayed for a double LO LVL.

- **If system lost by RSVR LO AIR PR:**

  In approach, system lost by RSVR LO AIR PR may be recovered at low altitude.

  RELATED PUMPS...ON

- **If system lost by RSVR OVHT:**
  - **IF BLUE OVHT OUT:**

    In approach, system lost by RSVR OVHT may be recovered if OVHT indication disappears.

    BLUE ELEC PUMP...AUTO

  - **IF GREEN OVHT OUT:**

    GREEN ENG 1 PUMP... ON

- **IF HYD NOT RECOVERED:**

  S/F JAMMED PROC..APPLY

INOP SYS

G+B HYD
F/CTL PROT
L ELEV
L+R AIL
SPLR 1+3+5
SLATS
AP 1+2
AUTO BRK
NORM BRK
L/G RETRACT
REVERSER 1
EMER GEN (If B RSVR LO LVL)
G ENG 1 PUMP
B ELEC PUMP
YAW DAMPER 1
CAT 2
GLS AUTOLAND ◁

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

A/THR...OFF

Select the target speed on the FCU. Due to the loss of slats and some flight control surfaces, the A/THR may not satisfactorily maintain speed.

FOR LDG.. FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3.. ON

This line is displayed when flaps are in CONF 3.

- **If L/G is not downlocked:**
  - **WHEN SPD 200 KT (displayed when slats are retracted):**

    L/G GRVTY PROC................................. APPLY

    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.
    Extend the landing gear at 200 kt to revert sooner in direct law. This provides, below 200 kt, a better pitch control than in alternate law with one elevator lost and all slats lost.

APPR SPD...VREF + 30 KT

Approach speed must be increased due to the loss of ailerons and slats.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (2)

FMS PRED UNRELIABLE

See (3)

FLAPS SLOW

---

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

Continued on the following page

HYD G+B SYS LO PR (Cont'd)

(3) *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

HYD G+Y SYS LO PR

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

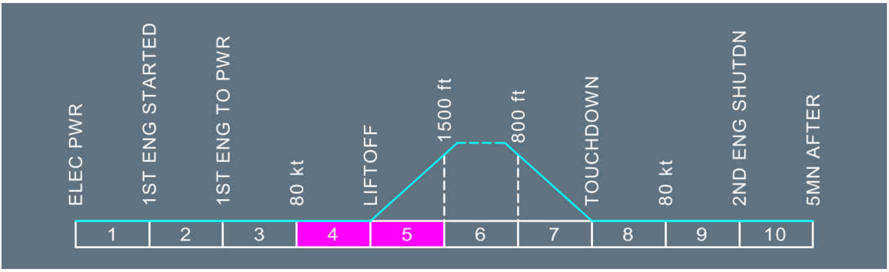
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
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Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018352.0003001 / 10 MAY 21

LAND ASAP

PTU..OFF
AFFECTED PUMPS..OFF

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP..ON

MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided (alternate law with reduced protection).

L1 MAX SPEED..320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1
- **If yellow sys recovered:**

  See procedure for single failure.

- **If yellow sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*F/CTL
*WHEEL

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018353.0014001 / 17 MAY 21

L12

STATUS

MAX SPEED.. 320/0.77
MAX BRK PR.. 1 000 PSI
MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL)

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMP.. ON
- **If sys lost by RSVR OVHT:**
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.................................... ON
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP.................................... ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  FOR LDG...USE FLAP 3
  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.
  GPWS FLAP MODE...OFF
  - **WHEN CONF 3 AND VAPP:**
    L/G.. GRVTY EXTN
    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP, before selecting the gear down, enables the aircraft to be trimmed for approach.

APPR SPD.. VREF +25 KT

Approach speed must be increased, due to the loss of flaps.

LDG DIST PROC.. APPLY

INOP SYS

G+Y HYD
F/CTL PROT
STABILIZER
REVERSER 1+2
SPLR 1+2+ 4+5
FLAPS
LAF ◁
YAW DAMPER
AP 1+2
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK
L/G RETRACT
CARGO DOOR (If Y RSVR LO LVL)
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
FUEL CONSUMPT INCRSD
See (3)
FMS PRED UNRELIABLE
See (4)
SLATS SLOW
See (5)

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(5) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD G+Y SYS LO PR

Applicable to: MSN 01251

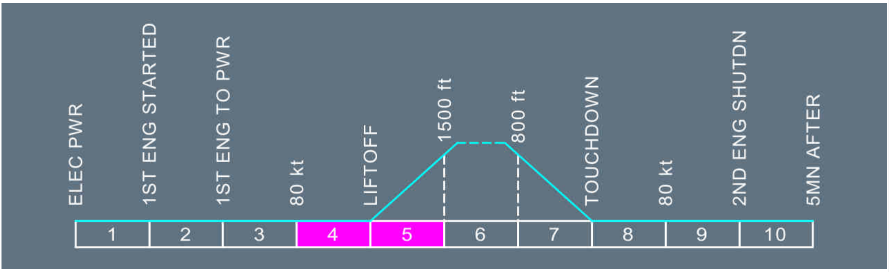
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018352.0001001 / 10 MAY 21

LAND ASAP

AFFECTED PUMPS....................OFF

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP....................ON

MANEUVER WITH CARE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided (alternate law with reduced protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1
- **If yellow sys recovered:**

  See procedure for single failure.

- **If yellow sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*F/CTL
*WHEEL

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018353.0005001 / 21 MAR 16

L12

STATUS

MAX SPEED.. 320/0.77
MAX BRK PR.. 1 000 PSI
MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL)

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMP.. ON
- **If sys lost by RSVR OVHT:**
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP....................................... ON
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP..................................... ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  FOR LDG...USE FLAP 3
  GPWS FLAP MODE...OFF
  - **WHEN CONF 3 AND VAPP:**
    L/G.. GRVTY EXTN
    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP, before selecting the gear down, enables the aircraft to be trimmed for approach.

■ **For A319/A320 aircraft:**
APPR SPD...VREF +25 KT
Approach speed must be increased, due to the loss of flaps.

INOP SYS

G+Y HYD
F/CTL PROT
STABILIZER
REVERSER 1+2
SPLR 1+2+ 4+5
FLAPS
LAF ◁
YAW DAMPER
AP 1+2
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK
L/G RETRACT
CARGO DOOR (If Y RSVR LO LVL)
CAT 2
GLS AUTOLAND ◁

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

- **For A321 aircraft:**

  APPR SPD...VREF +30 KT

  Approach speed must be increased, due to the loss of flaps.

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

BRK Y ACCU PR ONLY

See (2)

SLATS SLOW

See (3)

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

(3) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD G+Y SYS LO PR

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

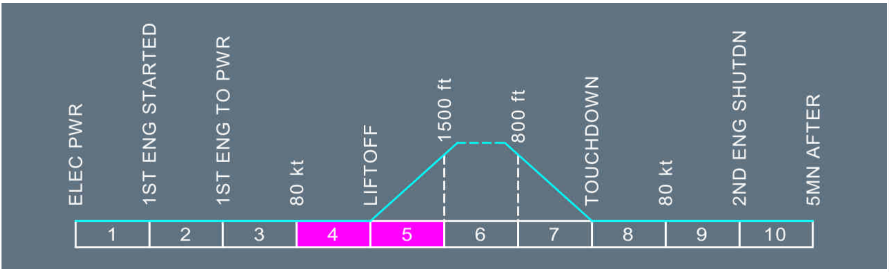
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018352.0003001 / 10 MAY 21

LAND ASAP

PTU....................OFF
AFFECTED PUMPS....................OFF

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP....................ON

MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided (alternate law with reduced protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1
- ■ **If yellow sys recovered:**

  See procedure for single failure.

- ■ **If yellow sys not recovered:**

  Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*F/CTL
*WHEEL

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018353.0015001 / 17 MAY 21

L12

STATUS

MAX SPEED.. 320/0.77
MAX BRK PR.. 1 000 PSI
MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL)

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMP.. ON
- **If sys lost by RSVR OVHT:**
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.. ON
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP.. ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  FOR LDG..USE FLAP 3

  This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

  GPWS FLAP MODE..OFF
  - **WHEN CONF 3 AND VAPP:**
    L/G.. GRVTY EXTN

    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP, before selecting the gear down, enables the aircraft to be trimmed for approach.

APPR SPD.. VREF +30 KT

Approach speed must be increased, due to the loss of flaps.

LDG DIST PROC.. APPLY

INOP SYS

G+Y HYD
F/CTL PROT
STABILIZER
REVERSER 1+2
SPLR 1+2+ 4+5
FLAPS
LAF ◁✳
YAW DAMPER
AP 1+2
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK
L/G RETRACT
CARGO DOOR (If Y RSVR LO LVL)
CAT 2
GLS AUTOLAND ◁✳
STEEP APPR ◁✳

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

BRK Y ACCU PR ONLY

See (2)

FUEL CONSUMPT INCRSD

See (3)

FMS PRED UNRELIABLE

See (4)

SLATS SLOW

See (5)

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(5) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD G+Y SYS LO PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

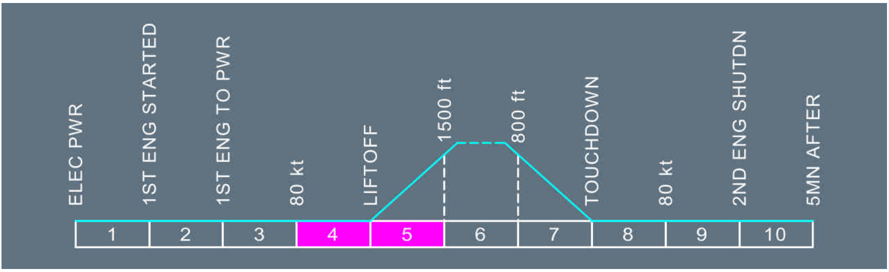
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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HYD G+Y SYS LO PR

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

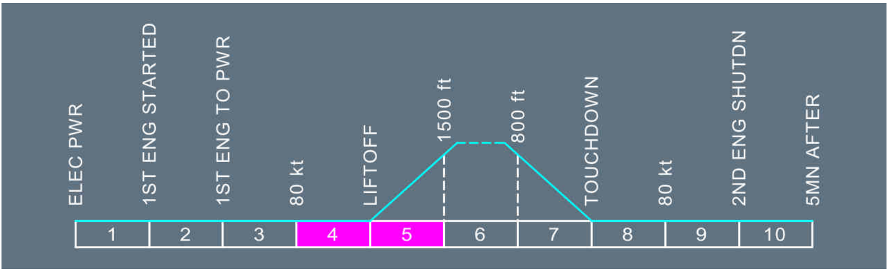
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018352.0003001 / 10 MAY 21

LAND ASAP

PTU..OFF
AFFECTED PUMPS..OFF

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP..ON

MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided (alternate law with reduced protection).

L1 MAX SPEED..320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 ■ **If yellow sys recovered:**

See procedure for single failure.

■ **If yellow sys not recovered:**

Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*F/CTL
*WHEEL

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018353.0021001 / 17 MAY 21

L12

STATUS

MAX SPEED.......................................320/0.77
MAX BRK PR.......................................1 000 PSI
MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL)

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMP.......................................ON
- **If sys lost by RSVR OVHT:**
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.......................................ON
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP.......................................ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  FOR LDG.......................................USE FLAP 3
  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.
  GPWS FLAP MODE.......................................OFF
  - **WHEN CONF 3 AND VAPP:**
    L/G.......................................GRVTY EXTN
    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP, before selecting the gear down, enables the aircraft to be trimmed for approach.

APPR SPD.......................................VREF +30 KT

Approach speed must be increased, due to the loss of flaps.

LDG DIST PROC.......................................APPLY

INOP SYS

G+Y HYD
F/CTL PROT
STABILIZER
REVERSER 1+2
SPLR 1+2+ 4+5
FLAPS
LAF ◁
YAW DAMPER
AP 1+2
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK
L/G RETRACT
CARGO DOOR (If Y RSVR LO LVL)
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
FUEL CONSUMPT INCRSD
See (3)
FMS PRED UNRELIABLE
See (4)
SLATS SLOW
See (5)

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(5) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD G+Y SYS LO PR

Applicable to: MSN 08495-08596, 09190-09324

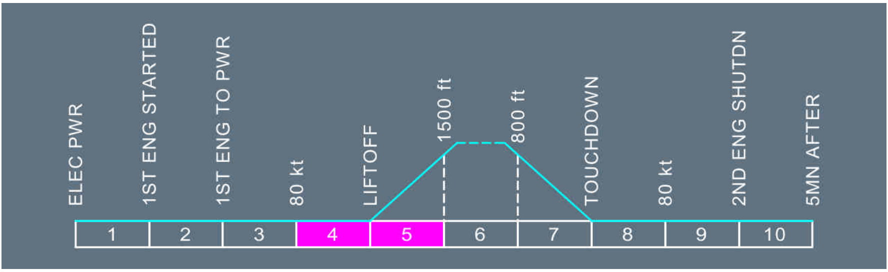
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018352.0003001 / 10 MAY 21

LAND ASAP

PTU....................OFF
AFFECTED PUMPS....................OFF

- **If yellow sys lost by ENG 2 PUMP LO PR:**

  YELLOW ELEC PUMP....................ON

MANEUVER WITH CARE
FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided (alternate law with reduced protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 ■ **If yellow sys recovered:**

See procedure for single failure.

■ **If yellow sys not recovered:**

Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed

SECONDARY FAILURES

*F/CTL
*WHEEL

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018353.0016001 / 17 MAY 21

L12

STATUS

MAX SPEED.. 320/0.77
MAX BRK PR.. 1 000 PSI
MANEUVER WITH CARE

APPR PROC

DUAL HYD LO PR

(Line not displayed for a double LO LVL)

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMP.. ON
- **If sys lost by RSVR OVHT:**
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.. ON
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP.. ON
- **IF HYD NOT RECOVERED (line not displayed for a double LO LVL):**
  FOR LDG..USE FLAP 3
  This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.
  GPWS FLAP MODE..OFF
  - **WHEN CONF 3 AND VAPP:**
    L/G.. GRVTY EXTN
    Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP, before selecting the gear down, enables the aircraft to be trimmed for approach.

■ **For A319 and A320 aircraft:**
APPR SPD..VREF +30 KT

INOP SYS

G+Y HYD
F/CTL PROT
STABILIZER
REVERSER 1+2
SPLR 1+2+4+5
FLAPS
YAW DAMPER
AP 1+2
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK
L/G RETRACT
CARGO DOOR (If Y RSVR LO LVL)
CAT 2
GLS AUTOLAND ⊲

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Approach speed must be increased, due to the loss of flaps.

■ **For A321 aircraft:**
APPR SPD...VREF +35 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
FUEL CONSUMPT INCRSD
See (3)
FMS PRED UNRELIABLE
See (4)
SLATS SLOW
See (5)

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll. (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(5) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure.*

HYD G+Y SYS LO PR

Applicable to: MSN 08635

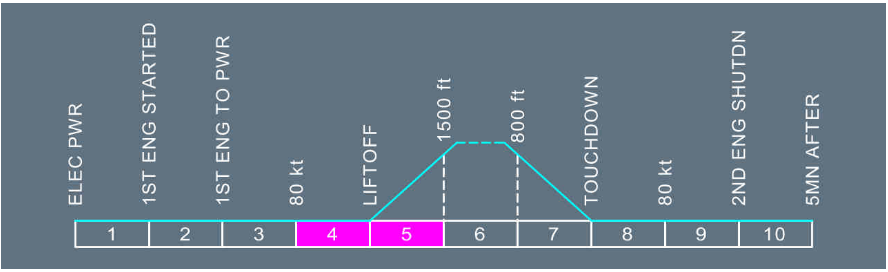
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
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6
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Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018352.0006001 / 26 NOV 19

67

LAND ASAP

PTU....................OFF
AFFECTED PUMPS....................OFF

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP....................ON

MANEUVER WITH CARE

- **FOR GO-AROUND**
  MAX PITCH 15 DEG
  THR LVR.................... TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided (alternate law with reduced protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 ■ **If yellow sys recovered:**

See procedure for single failure.

■ **If yellow sys not recovered:**
S/F JAMMED PROC.................... APPLY

L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*.

L1

SECONDARY FAILURES

*F/CTL
*WHEEL

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018353.0033001 / 17 MAY 21

L12

STATUS

MAX SPEED...320/0.77
MAX BRK PR...1 000 PSI
MANEUVER WITH CARE

- **FOR GO-AROUND:**
  MAX PITCH 15 DEG

THR LVR..TOGA THEN MCT

APPR PROC

DUAL HYD LO PR

- **If sys lost by RSVR LO AIR PR:**
  RELATED PUMP..ON
- **If sys lost by RSVR OVHT:**
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP.......................................ON
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP.....................................ON
- **IF HYD NOT RECOVERED:**
  S/F JAMMED PROC...APPLY
  FOR LDG..FLAP LVR 3
  This line is replaced by "FOR LDG : FLAP LVR 3" when CONF 3 is selected, as a reminder.
  GPWS FLAP MODE..OFF
  - **If L/G is not downlocked:**
    - **WHEN CONF 3 AND VAPP:**
      L/G...GRVTY EXTN
      Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP, before selecting the gear down, enables the aircraft to be trimmed for approach.

INOP SYS

G+Y HYD
F/CTL PROT
STABILIZER
REVERSER 1+2
SPLR 1+2+4+5
FLAPS
YAW DAMPER
AP 1+2
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK
L/G RETRACT
CARGO DOOR (If Y RSVR LO LVL)
CAT 2
GLS AUTOLAND

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

- **For A319 and A320 aircraft:**
  APPR SPD..VREF +30 KT
  Approach speed must be increased, due to the loss of flaps.
- **For A321 aircraft:**
  APPR SPD..VREF +35 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
FUEL CONSUMPT INCRSD
See (3)
FMS PRED UNRELIABLE
See (4)
SLATS SLOW
See (5)

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll. (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(5) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure*

HYD G+Y SYS LO PR

Applicable to: MSN 10949-11597

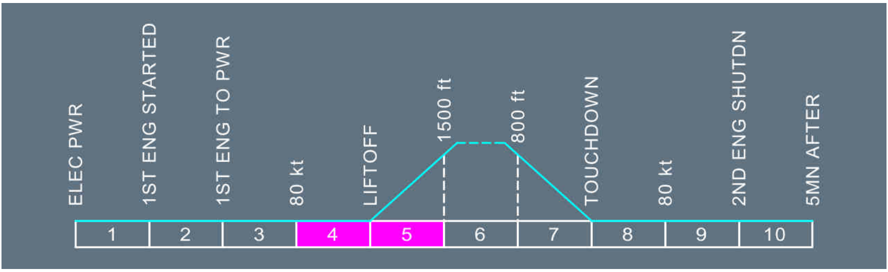
Ident.: PRO-ABN-HYD-K-00018921.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the green and yellow systems pressure ≤1 450 PSI (the alert resets if pressure ≥1 750 PSI).

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018352.0006001 / 26 NOV 19

68

LAND ASAP

PTU....................OFF
AFFECTED PUMPS....................OFF

- **If yellow sys lost by ENG 2 PUMP LO PR:**
  YELLOW ELEC PUMP....................ON

MANEUVER WITH CARE

- **FOR GO-AROUND**
  MAX PITCH 15 DEG
  THR LVR.................... TOGA THEN MCT

L2 *This line is not displayed if one engine is inoperative.*

L1 FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided (alternate law with reduced protection).

L1 MAX SPEED....................320/0.77

L2 *Speed is limited due to loss of high speed protection.*

L1 ■ **If yellow sys recovered:**

See procedure for single failure.

■ **If yellow sys not recovered:**
S/F JAMMED PROC.................... APPLY

L2 *Refer to PRO-ABN-F_CTL [QRH] Landing with Slats or Flaps Jammed*.

L1

SECONDARY FAILURES

*F/CTL
*WHEEL

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

Ident.: PRO-ABN-HYD-K-00018353.0041001 / 09 NOV 21

69

L12

STATUS

MAX SPEED..320/0.77
MAX BRK PR..1 000 PSI
MANEUVER WITH CARE

- **FOR GO-AROUND:**
  MAX PITCH 15 DEG

THR LVR..TOGA THEN MCT

APPR PROC

DUAL HYD LO PR

- **If system lost by RSVR LO AIR PR:**
  RELATED PUMP..ON
- **If system lost by RSVR OVHT:**
  - **IF GREEN OVHT OUT:**
    GREEN ENG 1 PUMP..ON
  - **IF YELLOW OVHT OUT:**
    YELLOW ENG 2 PUMP..ON
- **IF HYD NOT RECOVERED:**
  S/F JAMMED PROC..APPLY
  FOR LDG..FLAP LVR 3
  This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.
  GPWS FLAP MODE..OFF
  - **If L/G is not downlocked:**
    - **WHEN CONF 3 AND VAPP:**
      L/G GRVTY PROC..APPLY
      Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION. Being stabilized at VAPP, before selecting the gear down, enables the aircraft to be trimmed for approach.

INOP SYS

G+Y HYD
F/CTL PROT
STABILIZER
REVERSER 1+2
SPLR 1+2+4+5
FLAPS
YAW DAMPER
AP 1+2
ANTI SKID
N/W STRG
NORM BRK
AUTO BRK
L/G RETRACT
CARGO DOOR (If Y RSVR LO LVL)
CAT 2
GLS AUTOLAND

Continued on the following page

HYD G+Y SYS LO PR (Cont'd)

- **For A319/A320 aircraft:**

  APPR SPD..VREF + 30 KT

  Approach speed must be increased, due to the loss of flaps.

- **For A321 aircraft:**

  APPR SPD..VREF + 35 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)
BRK Y ACCU PR ONLY
See (2)
FUEL CONSUMPT INCRSD
See (3)
FMS PRED UNRELIABLE
See (4)
SLATS SLOW
See (5)

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(2) *7 full brake applications are available.*

(3) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(4) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

(5) *Note: Following a yellow hydraulic system failure, the parking brake may be inoperative due to yellow accumulator low pressure*

HYD PTU FAULT

Applicable to: ALL

Ident.: PRO-ABN-HYD-R-00017140.0001001 / 21 MAR 16

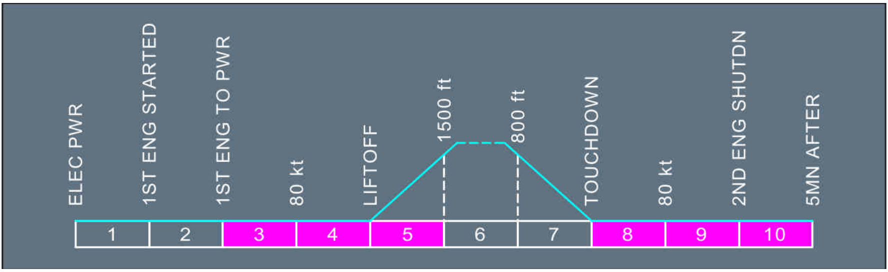
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- On ground, PTU does not run if the differential pressure is higher than 650 PSI between G and Y system, or
- In flight, PTU at AUTO position does not run when G or Y reservoir level is low, and G or Y system pressure is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-R-00011657.0001001 / 31 AUG 17

L2 Note: *This warning is triggered, if the last engine is started within 40 s following the end of the cargo doors operation. In this case, reset the warning by switching the yellow ELEC pump ON, then OFF.*

L1 ● **If green or yellow reservoir low level and system low press:**
PTU..OFF

Continued on the following page

HYD PTU FAULT (Cont'd)

Ident.: PRO-ABN-HYD-R-00011658.0001001 / 18 AUG 10

STATUS

INOP SYS

PTU

HYD RAT FAULT

Applicable to: ALL

Ident.: PRO-ABN-HYD-S-00017141.0001001 / 21 MAR 16

ANNUNCIATIONS

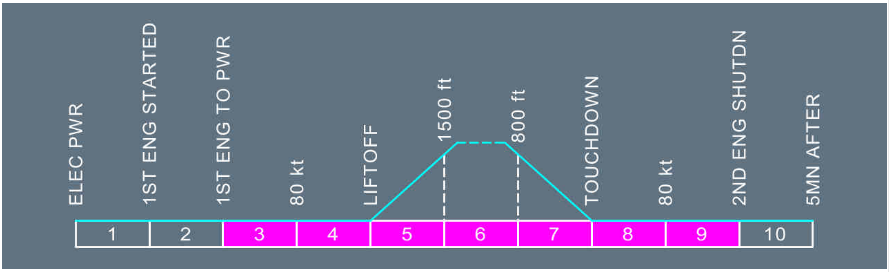
Triggering Conditions:

L2

This alert triggers when:

- The RAT is not fully stowed, or
- Pressure is present in the RAT stowing actuator, or
- The RAT pump is not available.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-HYD-S-00011659.0001001 / 16 NOV 11

Crew awareness.

Continued on the following page

HYD RAT FAULT (Cont'd)

Ident.: PRO-ABN-HYD-S-00011660.0001001 / 18 AUG 10

STATUS

INOP SYS

RAT

Intentionally left blank

[QRH] LANDING WITH ABNORMAL L/G

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-LG-AD-00018650.0002001 / 17 MAR 17

1

The procedure is intended for use when the nose or main landing gear fail to extend and/or lock down following the application of the L/G GRVTY EXTN procedure.
It is preferable to use any available landing gear, rather than carry out a belly landing.
Under these circumstances, a hard surface runway landing is recommended.
Full advantage should be taken of any foam, spread on the runway.

CAUTION	Do not apply this procedure if at least one green triangle is displayed on each landing gear on the WHEEL SD page. This is sufficient to confirm that the landing gear is downlocked. Disregard any possible GPWS "TOO LOW GEAR" aural alert.

Ident.: PRO-ABN-LG-AD-00018651.0002001 / 17 MAR 17

CABIN CREW....................NOTIFY

Notify the cabin crew of the nature of the emergency encountered and state intentions. Specify the amount of available preparation time.

ATC....................NOTIFY

Notify ATC of the nature of the emergency and state intentions.

GALY & CAB....................OFF

CONSIDER FUEL REDUCTION. This reduces VREF and, consequently, the load factor at impact and the energy to be dissipated.

- **If NOSE L/G abnormal:**

  SHIFT CG AFT IF POSSIBLE

  - *10 pax from front to rear moves the CG roughly 4 % aft*
  - *10 pax from mid to rear moves the CG roughly 2.5 aft.*

- **If one MAIN L/G abnormal:**

  FUEL DISTRIBUTION....................CONSIDER

  Open the fuel X-FEED valve and switch off the pumps on the side with landing gear normally extended.

OXYGEN CREW SUPPLY....................OFF
SIGNS....................ON
CABIN and COCKPIT (LOOSE EQPT)....................SECURE

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018652.0001001 / 17 MAR 17

- **For approach:**

  GPWS SYS........OFF
  L/G lever........CHECK DOWN
  GRVTY GEAR EXTN handcrank........TURN BACK TO NORMAL

  Rotating three turns back to normal may, in certain cases, pressurize the landing gear down actuators, thereby reducing the probability of gear collapse after touchdown.

  DO NOT ARM AUTOBRAKE

  Manual braking will enable better pitch and roll control. Moreover, with at least one main landing gear in the abnormal position the autobrake cannot be activated (ground spoilers not armed).

  EMER EXIT LT........ON
  CABIN REPORT........OBTAIN
  A/SKID & N/W STRG........OFF

  With one main landing gear not extended, the reference speed used by the anti-skid to detect a wheel blockage is not correctly initialized. As a result, the anti-skid must be switched off to prevent permanent brake release.

  MAX BRAKE PR : 1 000 PSI

  Modulate the brake pressure to 1 000 PSI because the anti-skid is off.

  - **If one or both MAIN L/G abnormal:** DO NOT ARM GROUND SPOILERS

    To keep as much roll authority as possible for maintaining the wings level.
    Ground spoiler extension would prevent spoilers from acting as roll surfaces.

  RAM AIR........ON

  To ensure full depressurization of the aircraft before impact.

  DOME LT........DIM

  Set the dome light to DIM to ensure that there is a light source after both engines are shut down after landing, in order to see and read the BRAKE PRESS indicator.

- **At 500 ft AGL:**

  BRACE FOR IMPACT........ORDER

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018654.0001001 / 17 MAR 17

- **At flare, touchdown and rollout:**

  Engines should be shut down sufficiently early to ensure fuel is shut off before the nacelles impact, but sufficiently late to ensure adequate hydraulic supplies for the flight controls.

  Engine pumps continue to supply adequate hydraulic pressure for 30 s after engine shutdown.

  DO NOT USE REVERSE

  - **If NOSE L/G abnormal:**

    KEEP NOSE UP

    After touchdown, keep the nose off the runway by the use of the elevator. Then, lower the nose on to the runway before elevator control is lost.

    BRAKES.. SMOOTHLY APPLY

    Adapt braking to the efficiency of the elevator.

    BEFORE NOSE IMPACT : ALL ENG MASTERS OFF

  - **If one MAIN L/G abnormal:**

    AT TOUCHDOWN : ALL ENG MASTERS OFF

    KEEP AFFECTED SIDE WING UP

    Use roll control, as necessary, to maintain the unsupported wing up as long as possible.

  - **If both MAIN L/G abnormal:**

    DURING FLARE : ALL ENG MASTERS OFF

    MIN PITCH ATT : 6 °

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018655.0001001 / 09 MAY 17

- **When aircraft stopped:**

  PARK BRK..........ON
  ALL FIRE pb (ENGs & APU)..........PUSH
  ALL AGENT (ENGs & APU)..........DISCH

  - **If evacuation required:**

    EVACUATION..........INITIATE

    Make a short and precise announcement to order the emergency evacuation.
    Press the EVAC COMMAND pb .

  - **If evacuation not required:**

    CABIN CREW and PASSENGERS (PA)..........NOTIFY

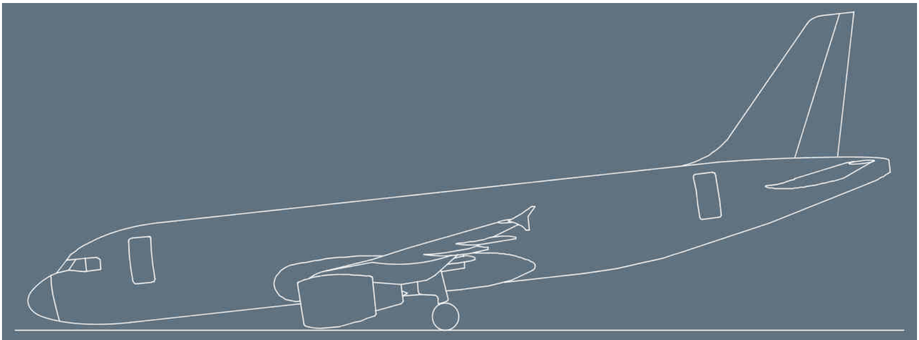
    Ensure that all the landing gears are secured before initiating the disembarkation (before switching OFF the seat belts signs).

Continued on the following page

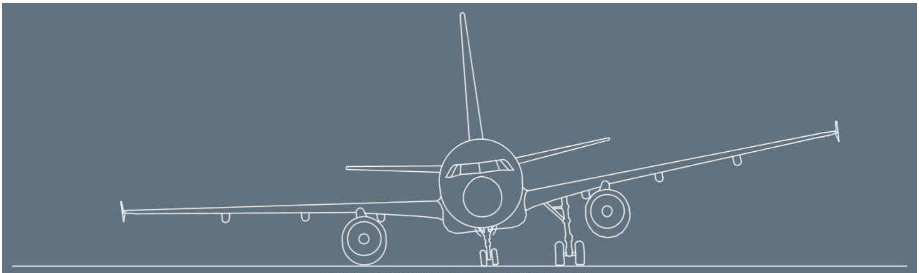
[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018711.0001001 / 17 MAR 17

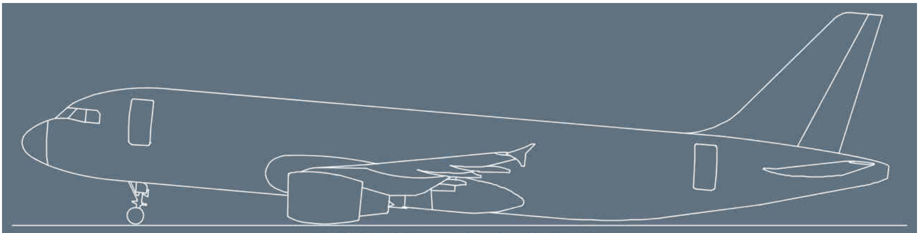
REFERENCE AIRCRAFT ATTITUDE AFTER IMPACT



NOSE L/G ABNORMAL



ONE MAIN L/G ABNORMAL



BOTH MAIN L/G ABNORMAL

[QRH] LANDING WITH ABNORMAL L/G

Applicable to: MSN 01251

Ident.: PRO-ABN-LG-AD-00018650.0001001 / 17 MAR 17

The procedure is intended for use when the nose or main landing gear fail to extend and/or lock down following the application of the L/G GRVTY EXTN procedure.
It is preferable to use any available landing gear, rather than carry out a belly landing.
Under these circumstances, a hard surface runway landing is recommended.
Full advantage should be taken of any foam, spread on the runway.

CAUTION	Do not apply this procedure if at least one green triangle is displayed on each landing gear on the WHEEL SD page. This is sufficient to confirm that the landing gear is downlocked. Disregard any possible L/G GEAR NOT DOWN ECAM alert at 750 ft RA and any possible GPWS "TOO LOW GEAR" aural alert.

Ident.: PRO-ABN-LG-AD-00018651.0002001 / 17 MAR 17

CABIN CREW..NOTIFY

Notify the cabin crew of the nature of the emergency encountered and state intentions. Specify the amount of available preparation time.

ATC...NOTIFY

Notify ATC of the nature of the emergency and state intentions.

GALY & CAB..OFF

CONSIDER FUEL REDUCTION. This reduces VREF and, consequently, the load factor at impact and the energy to be dissipated.

- **If NOSE L/G abnormal:**

  SHIFT CG AFT IF POSSIBLE

  - *10 pax from front to rear moves the CG roughly 4 % aft*
  - *10 pax from mid to rear moves the CG roughly 2.5 aft.*

- **If one MAIN L/G abnormal:**

  FUEL DISTRIBUTION...CONSIDER

  Open the fuel X-FEED valve and switch off the pumps on the side with landing gear normally extended.

OXYGEN CREW SUPPLY..OFF
SIGNS...ON
CABIN and COCKPIT (LOOSE EQPT)..SECURE

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018652.0001001 / 17 MAR 17

- **For approach:**

  GPWS SYS....................OFF
  L/G lever....................CHECK DOWN
  GRVTY GEAR EXTN handcrank....................TURN BACK TO NORMAL

  Rotating three turns back to normal may, in certain cases, pressurize the landing gear down actuators, thereby reducing the probability of gear collapse after touchdown.

  DO NOT ARM AUTOBRAKE

  Manual braking will enable better pitch and roll control. Moreover, with at least one main landing gear in the abnormal position the autobrake cannot be activated (ground spoilers not armed).

  EMER EXIT LT....................ON
  CABIN REPORT....................OBTAIN
  A/SKID & N/W STRG....................OFF

  With one main landing gear not extended, the reference speed used by the anti-skid to detect a wheel blockage is not correctly initialized. As a result, the anti-skid must be switched off to prevent permanent brake release.

  MAX BRAKE PR : 1 000 PSI

  Modulate the brake pressure to 1 000 PSI because the anti-skid is off.

  - **If one or both MAIN L/G abnormal:** DO NOT ARM GROUND SPOILERS

    To keep as much roll authority as possible for maintaining the wings level.
    Ground spoiler extension would prevent spoilers from acting as roll surfaces.

  RAM AIR....................ON

  To ensure full depressurization of the aircraft before impact.

  DOME LT....................DIM

  Set the dome light to DIM to ensure that there is a light source after both engines are shut down after landing, in order to see and read the BRAKE PRESS indicator.

- **At 500 ft AGL:**

  BRACE FOR IMPACT....................ORDER

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018654.0001001 / 17 MAR 17

- **At flare, touchdown and rollout:**

  Engines should be shut down sufficiently early to ensure fuel is shut off before the nacelles impact, but sufficiently late to ensure adequate hydraulic supplies for the flight controls.

  Engine pumps continue to supply adequate hydraulic pressure for 30 s after engine shutdown.

  DO NOT USE REVERSE

  - **If NOSE L/G abnormal:**

    KEEP NOSE UP

    After touchdown, keep the nose off the runway by the use of the elevator. Then, lower the nose on to the runway before elevator control is lost.

    BRAKES.. SMOOTHLY APPLY

    Adapt braking to the efficiency of the elevator.

    BEFORE NOSE IMPACT : ALL ENG MASTERS OFF

  - **If one MAIN L/G abnormal:**

    AT TOUCHDOWN : ALL ENG MASTERS OFF

    KEEP AFFECTED SIDE WING UP

    Use roll control, as necessary, to maintain the unsupported wing up as long as possible.

  - **If both MAIN L/G abnormal:**

    DURING FLARE : ALL ENG MASTERS OFF

    MIN PITCH ATT : 6 °

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018655.0001001 / 09 MAY 17

● **When aircraft stopped:**

PARK BRK..........ON
ALL FIRE pb (ENGs & APU)..........PUSH
ALL AGENT (ENGs & APU)..........DISCH

■ **If evacuation required:**

EVACUATION..........INITIATE

Make a short and precise announcement to order the emergency evacuation.
Press the EVAC COMMAND pb .

■ **If evacuation not required:**

CABIN CREW and PASSENGERS (PA)..........NOTIFY

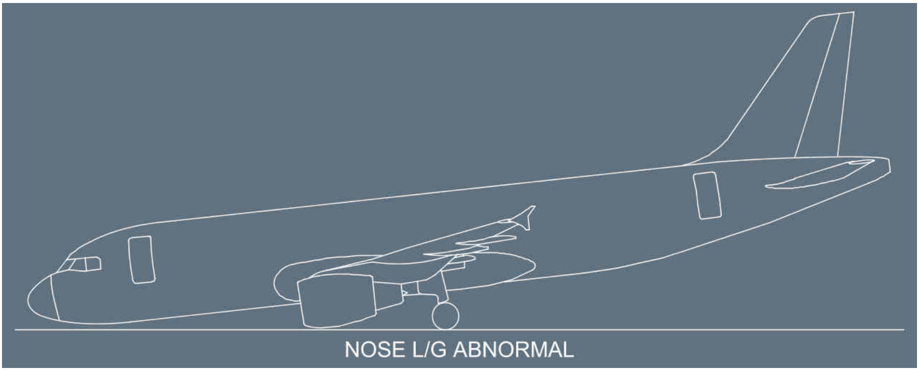
Ensure that all the landing gears are secured before initiating the disembarkation (before switching OFF the seat belts signs).

Continued on the following page

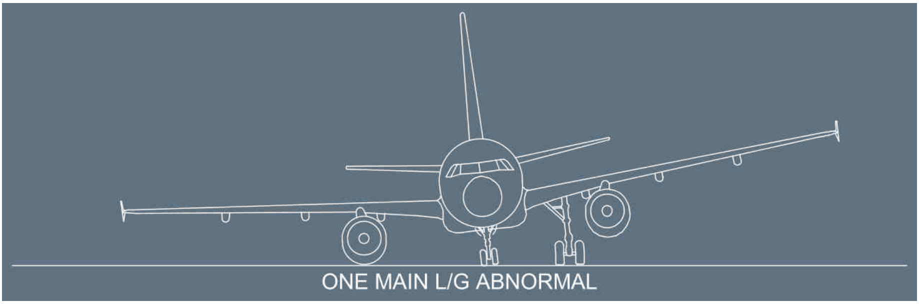
[QRH] LANDING WITH ABNORMAL L/G (Cont'd)

Ident.: PRO-ABN-LG-AD-00018711.0001001 / 17 MAR 17

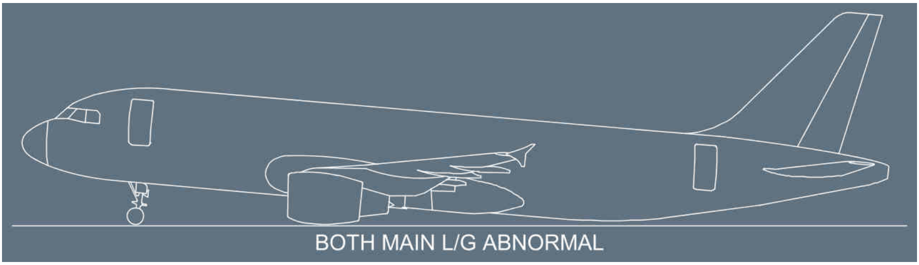
REFERENCE AIRCRAFT ATTITUDE AFTER IMPACT



NOSE L/G ABNORMAL



ONE MAIN L/G ABNORMAL



BOTH MAIN L/G ABNORMAL

[QRH] LANDING WITH ABNORMAL L/G - PREPARATION

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-LG-AD-00018651.0002001 / 17 MAR 17

CABIN CREW...NOTIFY

Notify the cabin crew of the nature of the emergency encountered and state intentions. Specify the amount of available preparation time.

ATC...NOTIFY

Notify ATC of the nature of the emergency and state intentions.

GALY & CAB...OFF

CONSIDER FUEL REDUCTION. This reduces VREF and, consequently, the load factor at impact and the energy to be dissipated.

- **If NOSE L/G abnormal:**

  SHIFT CG AFT IF POSSIBLE

  - *10 pax from front to rear moves the CG roughly 4 % aft*
  - *10 pax from mid to rear moves the CG roughly 2.5 aft.*

- **If one MAIN L/G abnormal:**

  FUEL DISTRIBUTION...CONSIDER

  Open the fuel X-FEED valve and switch off the pumps on the side with landing gear normally extended.

OXYGEN CREW SUPPLY...OFF
SIGNS...ON
CABIN and COCKPIT (LOOSE EQPT)...SECURE

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G - PREPARATION (Cont'd)

Ident.: PRO-ABN-LG-AD-00018652.0001001 / 17 MAR 17

- **For approach:**

  GPWS SYS.....OFF
  L/G lever.....CHECK DOWN
  GRVTY GEAR EXTN handcrank.....TURN BACK TO NORMAL

  Rotating three turns back to normal may, in certain cases, pressurize the landing gear down actuators, thereby reducing the probability of gear collapse after touchdown.

  DO NOT ARM AUTOBRAKE

  Manual braking will enable better pitch and roll control. Moreover, with at least one main landing gear in the abnormal position the autobrake cannot be activated (ground spoilers not armed).

  EMER EXIT LT.....ON
  CABIN REPORT.....OBTAIN
  A/SKID & N/W STRG.....OFF

  With one main landing gear not extended, the reference speed used by the anti-skid to detect a wheel blockage is not correctly initialized. As a result, the anti-skid must be switched off to prevent permanent brake release.

  MAX BRAKE PR : 1 000 PSI

  Modulate the brake pressure to 1 000 PSI because the anti-skid is off.

  - **If one or both MAIN L/G abnormal:** DO NOT ARM GROUND SPOILERS

    To keep as much roll authority as possible for maintaining the wings level.
    Ground spoiler extension would prevent spoilers from acting as roll surfaces.

  RAM AIR.....ON

  To ensure full depressurization of the aircraft before impact.

  DOME LT.....DIM

  Set the dome light to DIM to ensure that there is a light source after both engines are shut down after landing, in order to see and read the BRAKE PRESS indicator.

- **At 500 ft AGL:**

  BRACE FOR IMPACT.....ORDER

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G - PREPARATION (Cont'd)

Ident.: PRO-ABN-LG-AD-00018654.0001001 / 17 MAR 17

- **At flare, touchdown and rollout:**

  Engines should be shut down sufficiently early to ensure fuel is shut off before the nacelles impact, but sufficiently late to ensure adequate hydraulic supplies for the flight controls.

  Engine pumps continue to supply adequate hydraulic pressure for 30 s after engine shutdown.

  DO NOT USE REVERSE

  - **If NOSE L/G abnormal:**

    KEEP NOSE UP

    After touchdown, keep the nose off the runway by the use of the elevator. Then, lower the nose on to the runway before elevator control is lost.

    BRAKES.. SMOOTHLY APPLY

    Adapt braking to the efficiency of the elevator.

    BEFORE NOSE IMPACT : ALL ENG MASTERS OFF

  - **If one MAIN L/G abnormal:**

    AT TOUCHDOWN : ALL ENG MASTERS OFF

    KEEP AFFECTED SIDE WING UP

    Use roll control, as necessary, to maintain the unsupported wing up as long as possible.

  - **If both MAIN L/G abnormal:**

    DURING FLARE : ALL ENG MASTERS OFF

    MIN PITCH ATT : 6 °

Continued on the following page

[QRH] LANDING WITH ABNORMAL L/G - PREPARATION (Cont'd)

Ident.: PRO-ABN-LG-AD-00018655.0001001 / 09 MAY 17

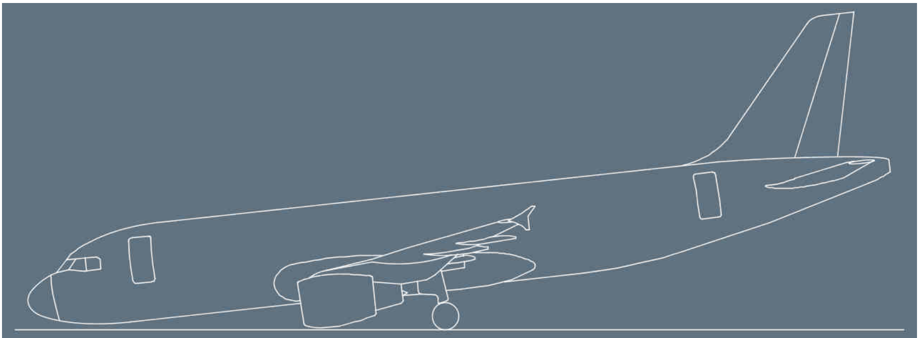
- **When aircraft stopped:**
  PARK BRK.......ON
  ALL FIRE pb (ENGs & APU).......PUSH
  ALL AGENT (ENGs & APU).......DISCH
  - **If evacuation required:**
    EVACUATION.......INITIATE
    Make a short and precise announcement to order the emergency evacuation.
    Press the EVAC COMMAND pb ◁ .
  - **If evacuation not required:**
    CABIN CREW and PASSENGERS (PA).......NOTIFY
    Ensure that all the landing gears are secured before initiating the disembarkation (before switching OFF the seat belts signs).

Continued on the following page

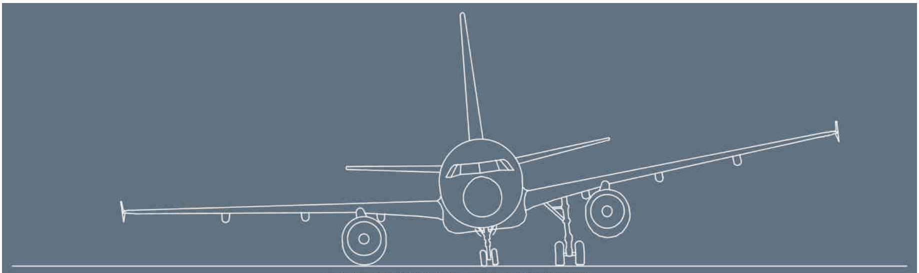
[QRH] LANDING WITH ABNORMAL L/G - PREPARATION (Cont'd)

Ident.: PRO-ABN-LG-AD-00018711.0001001 / 17 MAR 17

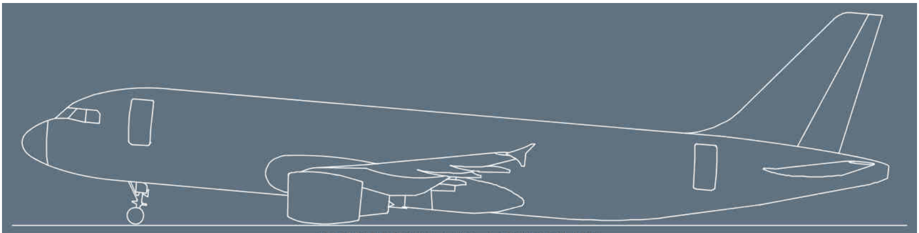
REFERENCE AIRCRAFT ATTITUDE AFTER IMPACT



NOSE L/G ABNORMAL



ONE MAIN L/G ABNORMAL



BOTH MAIN L/G ABNORMAL

[QRH] L/G GRAVITY EXTENSION

Ident.: PRO-ABN-LG-00011286.0010001 / 05 MAY 22
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

CAUTION	Do not apply this procedure if at least one green triangle is displayed on each landing gear on the WHEEL SD page. This is sufficient to confirm that the landing gear is downlocked. Disregard any possible GPWS "TOO LOW GEAR" aural alert.

■ **If L/G GEAR NOT DOWNLOCKED alert was displayed and IF TIME PERMITS:**

The landing gear recycling can be attempted up to 4 times, if necessary. These additional attempts should enable the successful pressurized extension of the landing gear and avoid a landing gear extension by gravity.

L/G lever .... UP
WAIT L/G UPLOCKED
L/G lever .... DOWN
WAIT AT LEAST 60 s

- **If unsuccessful:**

  REPEAT UP TO THREE TIMES

  - **If unsuccessful after 4 attempts:**

    WAIT AT LEAST 120 s
    L/G GRVTY PROC...APPLY

    See "In all other cases" condition below.

■ **In all other cases:**

GRAVITY GEAR EXTN handcrank.................................PULL AND TURN

Rotate the handle clockwise 3 turns until reaching the mechanical stop, even if resistance is felt.

L/G lever .... DOWN

The landing gear lever should be confirmed in the DOWN position for the following reasons:
- *To extinguish the UNLK lights on the LDG GEAR indicator panel*
- *To avoid the L/G CTL message on the WHEEL SD page*
- *To minimize the risk of landing gear retraction on the ground, due to an unknown system fault, when the free-fall system is reset.*

GEAR DOWN indications (if available)..................................CHECK

The L/G LGCIU 2 FAULT or BRAKES SYS 1(2) FAULT alert may be spuriously triggered after a gravity extension.

Continued on the following page

[QRH] L/G GRAVITY EXTENSION (Cont'd)

Note: 1. *Depending on aircraft speed, the display may show the landing gear doors in the amber transit position.*
2. *In the event of gravity extension caused by the failure of both LGCIUs, indications of the landing gears position on the ECAM are lost. LDG GEAR lights on the LDG GEAR indicator panel remain available, if LGCIU 1 is electrically supplied.*
3. *If the three green downlock arrows are not illuminated, it may indicate that the handcrank did not reach the mechanical stop. Check that the handcrank is firmly against the mechanical stop.*

N/W STEERING NOT AVAILABLE

- **If successful:**

  DO NOT RESET LDG GEAR GRVTY EXTN

  Do not reset the free-fall system. This will avoid undesirable effects such as further loss of fluid, in the event of a leak, or possible landing gear unlock, in the event of a gear selector valve jammed in the UP position.

  Note: *The free-fall system may be reset in flights used for training purpose. If the green hydraulic system is available, reset of the free-fall system enables the landing gear doors closure and the nosewheel steering operation.*
  The flight crew should not reset the free-fall system on the ground after the flight.

- **If unsuccessful:**

  LDG WITH ABNORMAL L/G PROC.. APPLY

  Refer to PRO-ABN-LG [QRH] Landing with Abnormal L/G.

[QRH] L/G GRAVITY EXTENSION

Ident.: PRO-ABN-LG-00011286.0004001 / 05 MAY 22
Applicable to: MSN 01251

CAUTION	Do not apply this procedure if at least one green triangle is displayed on each landing gear on the WHEEL SD page. This is sufficient to confirm that the landing gear is downlocked. Disregard any possible L/G GEAR NOT DOWN ECAM alert at 750 ft RA and any possible GPWS "TOO LOW GEAR" aural alert.

■ **If L/G GEAR NOT DOWNLOCKED alert was displayed and IF TIME PERMITS:**

The landing gear recycling can be attempted up to 4 times, if necessary. These additional attempts should enable the successful pressurized extension of the landing gear and avoid a landing gear extension by gravity.

L/G lever .... UP

WAIT L/G UPLOCKED

L/G lever .... DOWN

WAIT AT LEAST 60 s

- **If unsuccessful:**

  REPEAT UP TO THREE TIMES

  - **If unsuccessful after 4 attempts:**

    WAIT AT LEAST 120 s

    L/G GRVTY PROC.................................... APPLY

    See "In all other cases" condition below.

■ **In all other cases:**

GRAVITY GEAR EXTN handcrank.................................... PULL AND TURN

Rotate the handle clockwise 3 turns until reaching the mechanical stop, even if resistance is felt.

L/G lever .... DOWN

The landing gear lever should be confirmed in the DOWN position for the following reasons:
- *To extinguish the UNLK lights on the LDG GEAR indicator panel*
- *To avoid the L/G CTL message on the WHEEL SD page*
- *To minimize the risk of landing gear retraction on the ground, due to an unknown system fault, when the free-fall system is reset.*

GEAR DOWN indications (if available).................................... CHECK

Continued on the following page

[QRH] L/G GRAVITY EXTENSION (Cont'd)

The L/G LGCIU 2 FAULT or BRAKES SYS 1(2) FAULT alert may be spuriously triggered after a gravity extension.

Note:
1. *Depending on aircraft speed, the display may show the landing gear doors in the amber transit position.*
2. *In the event of gravity extension caused by the failure of both LGCIUs, indications of the landing gears position on the ECAM are lost. LDG GEAR lights on the LDG GEAR indicator panel remain available, if LGCIU 1 is electrically supplied.*
3. *If the three green downlock arrows are not illuminated, it may indicate that the handcrank did not reach the mechanical stop. Check that the handcrank is firmly against the mechanical stop.*

N/W STEERING NOT AVAILABLE

■ **If successful:**

DO NOT RESET LDG GEAR GRVTY EXTN

Do not reset the free-fall system. This will avoid undesirable effects such as further loss of fluid, in the event of a leak, or possible landing gear unlock, in the event of a gear selector valve jammed in the UP position.

Note: The free-fall system may be reset in flights used for training purpose. If the green hydraulic system is available, reset of the free-fall system enables the landing gear doors closure and the nosewheel steering operation.
The flight crew should not reset the free-fall system on the ground after the flight.

■ **If unsuccessful:**

LDG WITH ABNORMAL L/G PROC.. APPLY

Refer to PRO-ABN-LG [QRH] Landing with Abnormal L/G.

[QRH] L/G GRAVITY EXTENSION

Ident.: PRO-ABN-LG-00011286.0011001 / 05 MAY 22

2 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

CAUTION	Do not apply this procedure if at least one green triangle is displayed on each landing gear on the WHEEL SD page. This is sufficient to confirm that the landing gear is downlocked. Disregard any possible GPWS "TOO LOW GEAR" aural alert.

■ **If L/G GEAR NOT DOWNLOCKED alert was displayed and IF TIME PERMITS:**

The landing gear recycling can be attempted up to 4 times, if necessary. These additional attempts should enable the successful pressurized extension of the landing gear and avoid a landing gear extension by gravity.

L/G lever .... UP

WAIT L/G UPLOCKED

L/G lever .... DOWN

WAIT AT LEAST 60 s

- **If unsuccessful:**

  REPEAT UP TO THREE TIMES

  - **If unsuccessful after 4 attempts:**

    WAIT AT LEAST 120 s

    L/G GRVTY PROC.. APPLY

    See "In all other cases" condition below.

■ **In all other cases:**

GRAVITY GEAR EXTN handcrank.. PULL AND TURN

Rotate the handle clockwise 3 turns until reaching the mechanical stop, even if resistance is felt.

L/G lever .... DOWN

The landing gear lever should be confirmed in the DOWN position for the following reasons:
- *To extinguish the UNLK lights on the LDG GEAR indicator panel*
- *To avoid the L/G CTL message on the WHEEL SD page*
- *To minimize the risk of landing gear retraction on the ground, due to an unknown system fault, when the free-fall system is reset.*

GEAR DOWN indications (if available).. CHECK

The L/G LGCIU 2 FAULT or BRAKES SYS 1(2) FAULT alert may be spuriously triggered after a gravity extension.

Continued on the following page

[QRH] L/G GRAVITY EXTENSION (Cont'd)

Note: 1. *Depending on aircraft speed, the display may show the landing gear doors in the amber transit position.*
2. *In the event of gravity extension caused by the failure of both LGCIUs, indications of the landing gears position on the ECAM are lost. LDG GEAR lights on the LDG GEAR indicator panel remain available, if LGCIU 1 is electrically supplied.*
3. *If the three green downlock arrows are not illuminated, it may indicate that the handcrank did not reach the mechanical stop. Check that the handcrank is firmly against the mechanical stop.*

■ **If successful:**

DO NOT RESET LDG GEAR GRVTY EXTN

Do not reset the free-fall system. This will avoid undesirable effects such as further loss of fluid, in the event of a leak, or possible landing gear unlock, in the event of a gear selector valve jammed in the UP position.

Note: *The free-fall system may be reset in flights used for training purpose. If the green hydraulic system is available, reset of the free-fall system enables the landing gear doors closure.*
The flight crew should not reset the free-fall system on the ground after the flight.

■ **If unsuccessful:**

LDG WITH ABNORMAL L/G PROC.. APPLY

Refer to PRO-ABN-LG [QRH] Landing with Abnormal L/G.

L/G DOORS NOT CLOSED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

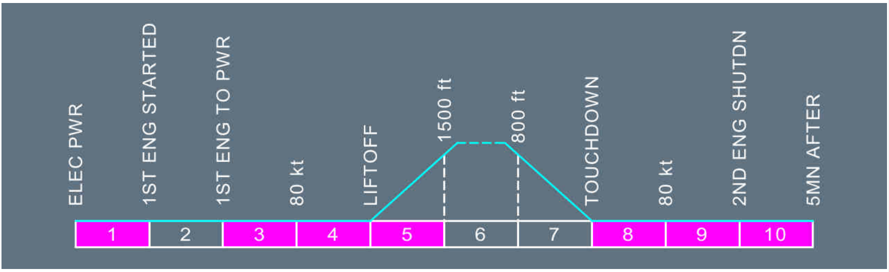
Ident.: PRO-ABN-LG-D-00017734.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear door is not uplocked.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-LG-D-00011287.0003001 / 01 DEC 14

- **If the L/G lever is UP:**
  - **WHEN SPD < 220/0.54:**

    L/G LEVER.. RECYCLE

L2 *Note:* *To recycle the landing gear, the flight crew must perform the following actions:*
- *Move the landing gear lever down*
- *Wait for the landing gear to downlock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)*
- *Move the landing gear lever up.*

The active LGCIU changes when the landing gear is recycled.

L1
- **IF UNSUCCESSFUL:**

  MAX SPEED... 250/0.60

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

L/G DOORS NOT CLOSED (Cont'd)

Ident.: PRO-ABN-LG-D-00011288.0002001 / 17 MAR 17

3

L12

STATUS

	INOP SYS
MAX SPEED........ 250/.60	L/G DOOR
FUEL CONSUMPT INCRSD *See* (1)	
FMS PRED UNRELIABLE *See* (2)	

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

L/G DOORS NOT CLOSED

Applicable to: MSN 01251

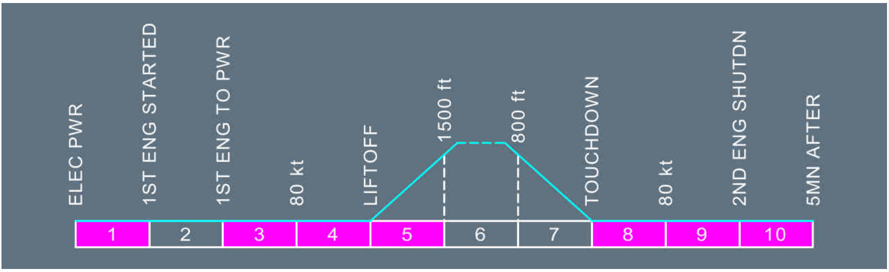
Ident.: PRO-ABN-LG-D-00017734.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear door is not uplocked.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-LG-D-00011287.0002001 / 01 DEC 14

- **If the L/G lever is UP:**
  - **WHEN SPD < 220/0.54:**

    L/G.. RECYCLE

L2 *Note: To recycle the landing gear, the flight crew must perform the following actions:*
- *Move the landing gear lever down*
- *Wait for the landing gear to downlock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)*
- *Move the landing gear lever up.*

The active LGCIU changes when the landing gear is recycled.

L1 - **IF UNSUCCESSFUL:**

  MAX SPEED.. 250/0.60

Continued on the following page

L/G DOORS NOT CLOSED (Cont'd)

Ident.: PRO-ABN-LG-D-00011288.0001001 / 17 MAR 17

L12

STATUS

MAX SPEED.. 250/.60	**INOP SYS**
INCREASED FUEL CONSUMP *See* (1)	L/G DOOR

(1) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

L/G DOORS NOT CLOSED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

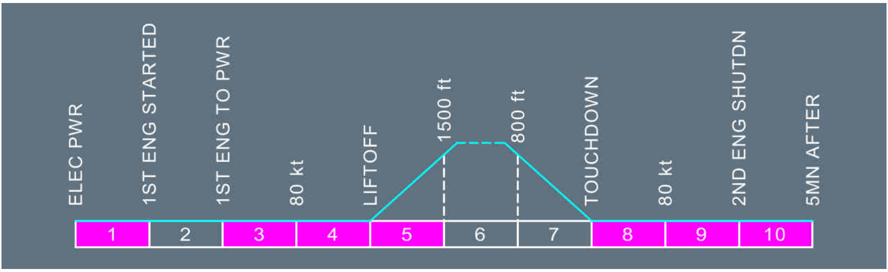
Ident.: PRO-ABN-LG-D-00017734.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear door is not uplocked.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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L/G DOORS NOT CLOSED

Applicable to: MSN 10949-11597

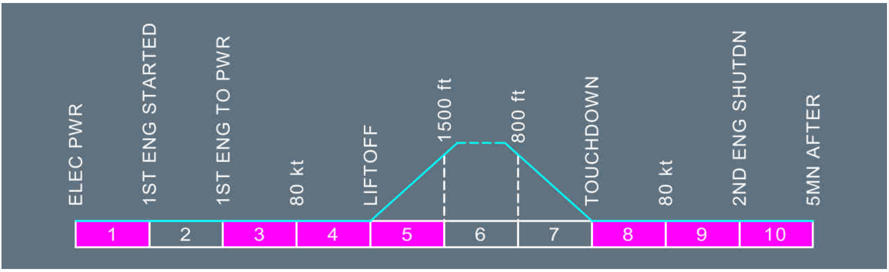
Ident.: PRO-ABN-LG-D-00017734.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear door is not uplocked.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-LG-D-00011287.0004001 / 09 NOV 21

4

- **If the L/G lever is UP:**
  - **WHEN SPD < 220/0.54:**
    L/G.. RECYCLE

L2 *Note:* *To recycle the landing gear, the flight crew must perform the following actions:*
1. Move the landing gear lever down
2. Wait for the landing gear to downlock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)
3. Move the landing gear lever up.
The active LGCIU changes when the landing gear is recycled.

L1
- **IF UNSUCCESSFUL:**
  MAX SPEED.. 250/0.60

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

L/G DOORS NOT CLOSED (Cont'd)

Ident.: PRO-ABN-LG-D-00011288.0002001 / 17 MAR 17

5

L12

STATUS

MAX SPEED... 250/.60

FUEL CONSUMPT INCRSD

See (1)

FMS PRED UNRELIABLE

See (2)

INOP SYS

L/G DOOR

(1) *This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.*

L/G GEAR NOT DOWN

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-LG-AA-00017859.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

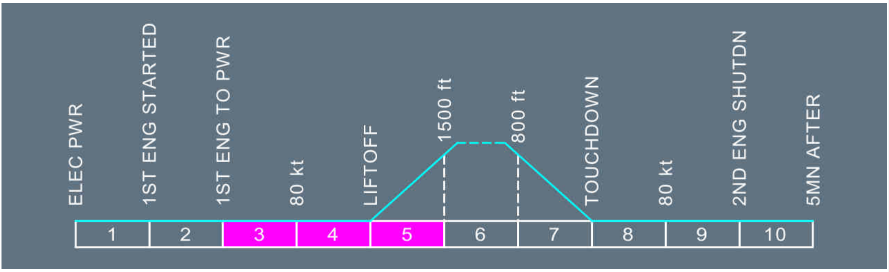
L2

This alert triggers when:

1. L/G is not downlocked and radio height is lower than 750 ft and both engines N1 lower than 75% (or if engine shutdown N1 of remaining engine lower than 97%) or
2. L/G is not downlocked and radio height is lower than 750 ft and both engines are not at T.O power and flaps at 1, 2, 3 or FULL or
3. L/G is not downlocked and flaps at 3 or FULL and both radio altimeters are failed.

Note: In the cases 2 and 3 above, the aural warning can only be cancelled by the emergency cancel pushbutton.

Flight Phase Inhibition:



Ident.: PRO-ABN-LG-AA-00018573.0002001 / 21 MAR 16

6

L2 When this warning appears, the red arrow on the instrument panel comes on.

L1 Crew awareness.

L/G GEAR NOT DOWN

Applicable to: MSN 01251

Ident.: PRO-ABN-LG-AA-00017859.0001001 / 21 MAR 16

ANNUNCIATIONS

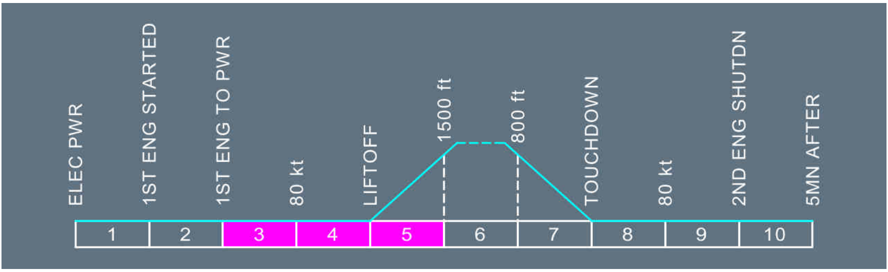
Triggering Conditions:

L2 This alert triggers when:

1. L/G is not downlocked and radio height is lower than 750 ft and both engines N1 lower than 75% (or if engine shutdown N1 of remaining engine lower than 97%) or
2. L/G is not downlocked and radio height is lower than 750 ft and both engines are not at T.O power and flaps at 1, 2, 3 or FULL or
3. L/G is not downlocked and flaps at 3 or FULL and both radio altimeters are failed.

Note: *In the cases 2 and 3 above, the aural warning can only be cancelled by the emergency cancel pushbutton.*

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

L/G GEAR NOT DOWN (Cont'd)

Ident.: PRO-ABN-LG-AA-00018573.0001001 / 21 MAR 16

L2 When this warning appears, the red arrow on the instrument panel comes on.
This warning could be wrongly triggered in the case of landing gear position sensors disagreement between LGCIU 1 and LGCIU 2. In this case, check that at least one green triangle is displayed on each landing gear strut on the WHEEL SD page. This confirms that the landing gear is downlocked. Rely also on the "**LDG GEAR DN**" green MEMO message to confirm that the landing gear is downlocked. Press the EMER CANC pb on the ECAM Control Panel (ECP) to stop the Continus Repetitive Chime (CRC) and press the CLR pb on the ECP to clear the warning on the ECAM display.

L1 Crew awareness.

L/G GEAR NOT DOWN

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-LG-AA-00017859.0001001 / 21 MAR 16

ANNUNCIATIONS

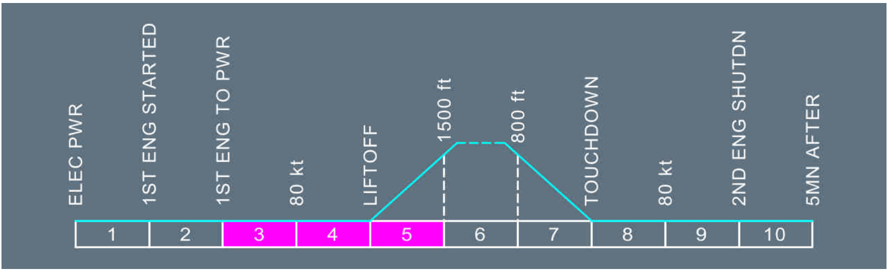
Triggering Conditions:

L2 This alert triggers when:

1. L/G is not downlocked and radio height is lower than 750 ft and both engines N1 lower than 75% (or if engine shutdown N1 of remaining engine lower than 97%) or
2. L/G is not downlocked and radio height is lower than 750 ft and both engines are not at T.O power and flaps at 1, 2, 3 or FULL or
3. L/G is not downlocked and flaps at 3 or FULL and both radio altimeters are failed.

Note: In the cases 2 and 3 above, the aural warning can only be cancelled by the emergency cancel pushbutton.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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L/G GEAR NOT DOWNLOCKED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-LG-C-00017860.0002001 / 21 MAR 16

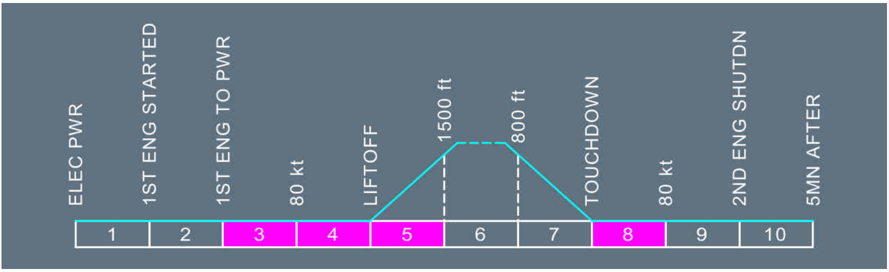
7

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear is not downlocked and L/G is selected down.

Flight Phase Inhibition:



Ident.: PRO-ABN-LG-C-00011284.0002001 / 01 DEC 14

L2 This warning appears, if the landing gear sequence is not completed after 30 s.

L1 L/G LEVER.. RECYCLE

L2 Note: *To recycle the landing gear, the flight crew must perform the following actions:*
- *Move the landing gear lever up*
- *Wait for the landing gear to uplock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)*
- *Move the landing gear lever down.*

The active LGCIU changes when the landing gear is recycled.

L1 ● **IF UNSUCCESSFUL AFTER 120 s:**

L/G.. GRVTY EXTN

L2 *Rotate the handle clockwise about 3 turns until reaching the mechanical stop. Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

Continued on the following page

L/G GEAR NOT DOWNLOCKED (Cont'd)

Ident.: PRO-ABN-LG-C-00011285.0001001 / 03 NOV 22

L12

STATUS

L/G.. GRVTY EXTN

If gravity extension unsuccessful, *Refer to PRO-ABN-LG [QRH] Landing with Abnormal L/G.*

INOP SYS

N.W. STEER

See (1)

(1) *As nose gear doors remain open, hydraulic power for nosewheel steering is lost.*

L/G GEAR NOT DOWNLOCKED

Applicable to: MSN 01251

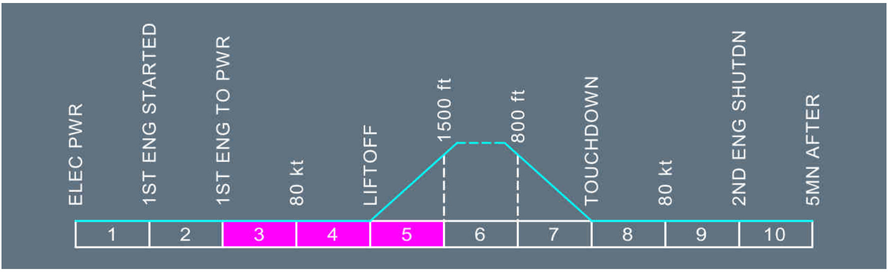
Ident.: PRO-ABN-LG-C-00017860.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear is not downlocked and L/G is selected down.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

L/G GEAR NOT DOWNLOCKED (Cont'd)

Ident.: PRO-ABN-LG-C-00011284.0001001 / 01 DEC 14

L2 This warning appears, if the landing gear sequence is not completed after 30 s.

L1 L/G.. RECYCLE

L2 Note: *To recycle the landing gear, the flight crew must perform the following actions:*
- *Move the landing gear lever up*
- *Wait for the landing gear to uplock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)*
- *Move the landing gear lever down.*

The active LGCIU changes when the landing gear is recycled.

L1 ● **IF UNSUCCESSFUL:**

L/G.. GRVTY EXTN

L2 *Rotate the handle clockwise about 3 turns until reaching the mechanical stop. Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

Ident.: PRO-ABN-LG-C-00011285.0001001 / 03 NOV 22

L12

STATUS

	INOP SYS
L/G... GRVTY EXTN *If gravity extension unsuccessful, Refer to PRO-ABN-LG [QRH] Landing with Abnormal L/G.*	N.W. STEER *See* (1)

(1) *As nose gear doors remain open, hydraulic power for nosewheel steering is lost.*

L/G GEAR NOT DOWNLOCKED

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324

Ident.: PRO-ABN-LG-C-00017860.0002001 / 21 MAR 16

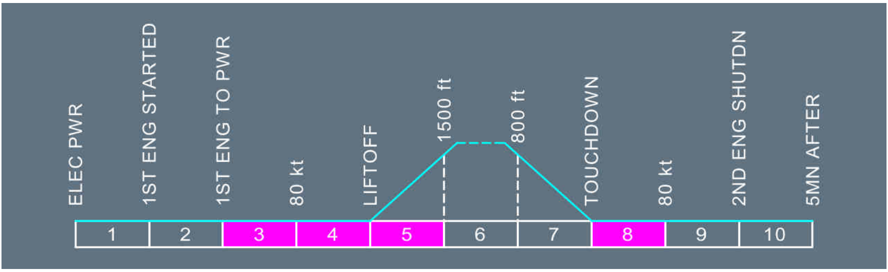
8

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear is not downlocked and L/G is selected down.

Flight Phase Inhibition:



Ident.: PRO-ABN-LG-C-00011284.0002001 / 01 DEC 14

L2 This warning appears, if the landing gear sequence is not completed after 30 s.

L1 L/G LEVER.. RECYCLE

L2 Note: *To recycle the landing gear, the flight crew must perform the following actions:*
- *Move the landing gear lever up*
- *Wait for the landing gear to uplock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)*
- *Move the landing gear lever down.*

The active LGCIU changes when the landing gear is recycled.

L1 ● **IF UNSUCCESSFUL AFTER 120 s:**

L/G.. GRVTY EXTN

L2 *Rotate the handle clockwise about 3 turns until reaching the mechanical stop. Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

Continued on the following page

L/G GEAR NOT DOWNLOCKED (Cont'd)

Ident.: PRO-ABN-LG-C-00011285.0003001 / 03 NOV 22

9

L12

STATUS

L/G.. GRVTY EXTN

If gravity extension unsuccessful, Refer to PRO-ABN-LG [QRH] Landing with Abnormal L/G.

L/G GEAR NOT DOWNLOCKED

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-LG-C-00017860.0002001 / 21 MAR 16

10

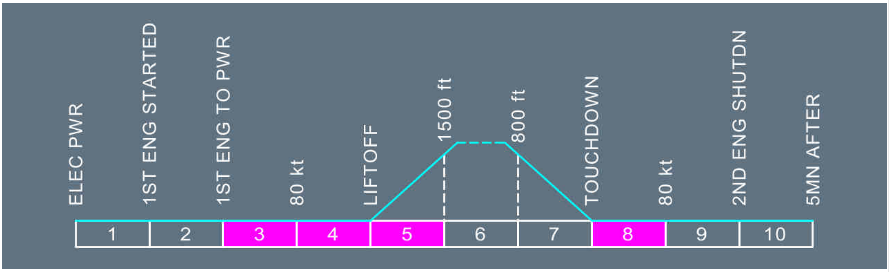
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when one gear is not downlocked and L/G is selected down.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

L/G GEAR NOT DOWNLOCKED (Cont'd)

Ident.: PRO-ABN-LG-C-00011284.0003001 / 09 NOV 21

11

L2 This warning appears if the landing gear sequence is not completed after 30 s.

L1 L/G.. RECYCLE

L2 Note: *To recycle the landing gear, the flight crew must perform the following actions:*
1. Move the landing gear lever up
2. Wait for the landing gear to uplock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)
3. Move the landing gear lever down.
The active LGCIU changes when the landing gear is recycled.

L1 ● **IF UNSUCCESSFUL AFTER 120 s:**

L/G GRVTY PROC..APPLY

L2 *Rotate the handle clockwise about 3 turns until reaching the mechanical stop. Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

Ident.: PRO-ABN-LG-C-00011285.0003001 / 03 NOV 22

12

L12

STATUS

L/G.................................... GRVTY EXTN

If gravity extension unsuccessful, Refer to PRO-ABN-LG [QRH] Landing with Abnormal L/G.

L/G GEAR NOT UPLOCKED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

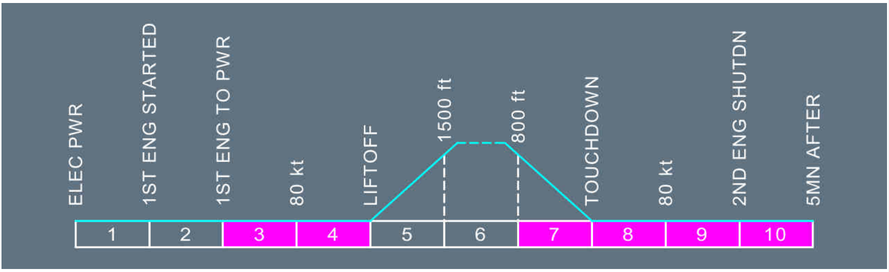
Ident.: PRO-ABN-LG-B-00017736.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear is not uplocked and L/G is not selected down.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

L/G GEAR NOT UPLOCKED (Cont'd)

Ident.: PRO-ABN-LG-B-00011061.0003001 / 01 DEC 14

L2 This warning appears if the landing gear sequence is not completed after 30 s.

L1 ■ **L/G doors closed:**

AVOID EXCESS G FACTOR

L2 *Because the gear rests on the doors, avoid excessive load factors in order not to damage door structure.*

L1 ■ **L/G doors not closed and shock absorber fault:**

MAX SPEED.. 220/0.54
L/G.. DOWN
MAX SPEED.. 280/0.67

■ **L/G doors not closed and no shock absorber fault:**

MAX SPEED.. 220/0.54
L/G LEVER.. RECYCLE

L2 *Note:* *To recycle the landing gear, the flight crew must perform the following actions:*
- *Move the landing gear lever down*
- *Wait for the landing gear to downlock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)*
- *Move the landing gear lever up.*

The active LGCIU changes when the landing gear is recycled.

L1 ● **IF UNSUCCESSFUL:**

L/G.. DOWN
MAX SPEED.. 280/0.67

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

L/G GEAR NOT UPLOCKED (Cont'd)

Ident.: PRO-ABN-LG-B-00018687.0002001 / 17 NOV 20

13

L12

STATUS

MAX SPEED.......... 280/.67	**INOP SYS**
	L/G RETRACT
FUEL CONSUMPT INCRSD	
FMS PRED UNRELIABLE	
See (1)	

(1) *If the flight is continued (to destination or to alternate) with landing gear extended:*
- *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor*
- *Disregard FMS altitude and speed predictions. Time predictions are only valid in cruise*
- *Do not use the managed speed mode (except in approach)*
- *Do not use the CLB and the DES autopilot modes.*

L/G GEAR NOT UPLOCKED

Applicable to: MSN 01251

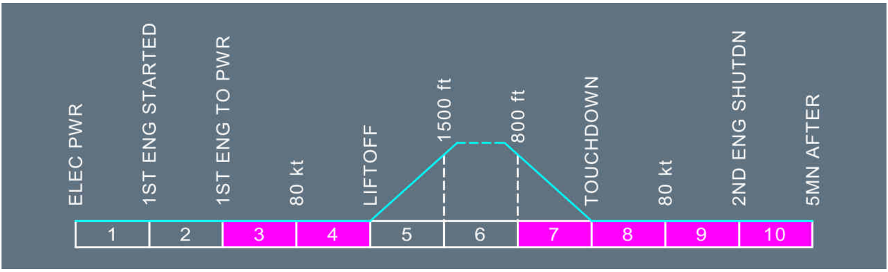
Ident.: PRO-ABN-LG-B-00017736.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear is not uplocked and L/G is not selected down.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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9
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Continued on the following page

L/G GEAR NOT UPLOCKED (Cont'd)

Ident.: PRO-ABN-LG-B-00011061.0001001 / 01 DEC 14

L2 This warning appears if the landing gear sequence is not completed after 30 s.

L1 ■ **L/G doors closed:**

AVOID EXCESS G FACTOR

L2 *Because the gear rests on the doors, avoid excessive load factors in order not to damage door structure.*

L1 ■ **L/G doors not closed:**

MAX SPEED.................... 220/0.54
L/G.................... RECYCLE

L2 *Note:* *To recycle the landing gear, the flight crew must perform the following actions:*
- *Move the landing gear lever down*
- *Wait for the landing gear to downlock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)*
- *Move the landing gear lever up.*

The active LGCIU changes when the landing gear is recycled.

L1 ● **IF UNSUCCESSFUL:**

L/G.................... DOWN
MAX SPEED.................... 280/0.67

Continued on the following page

L/G GEAR NOT UPLOCKED (Cont'd)

Ident.: PRO-ABN-LG-B-00018687.0001001 / 17 NOV 20

L12

STATUS

	INOP SYS
MAX SPEED... 280/.67	L/G RETRACT
INCREASED FUEL CONSUMP *See (1)*	

(1) *If the flight is continued (to destination or to alternate) with landing gear extended:*
- *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor*
- *Disregard FMS altitude and speed predictions. Time predictions are only valid in cruise*
- *Do not use the managed speed mode (except in approach)*
- *Do not use the CLB and the DES autopilot modes.*

L/G GEAR NOT UPLOCKED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

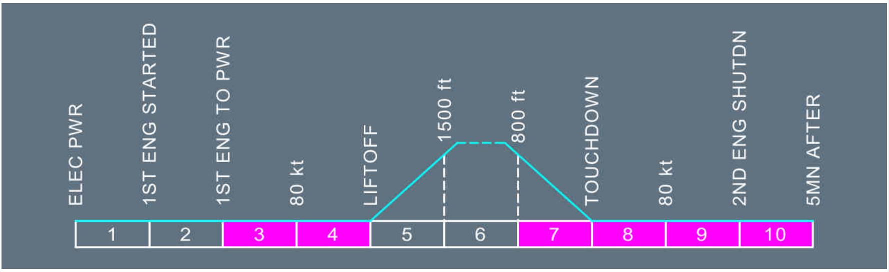
Ident.: PRO-ABN-LG-B-00017736.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear is not uplocked and L/G is not selected down.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

L/G GEAR NOT UPLOCKED

Applicable to: MSN 10949-11597

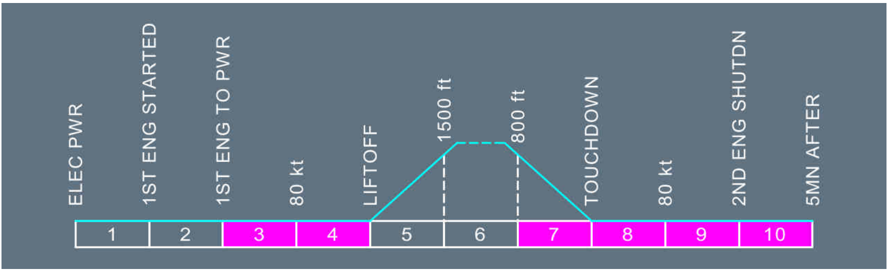
Ident.: PRO-ABN-LG-B-00017736.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear is not uplocked and L/G is not selected down.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
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Continued on the following page

L/G GEAR NOT UPLOCKED (Cont'd)

Ident.: PRO-ABN-LG-B-00011061.0004001 / 09 NOV 21

14

L2 This warning appears if the landing gear sequence is not completed after 30 s.

L1 ■ **If L/G doors closed:**

AVOID EXCESS G FACTOR

L2 *Because the gear rests on the doors, avoid excessive load factors in order not to damage door structure.*

L1 ■ **If L/G doors not closed and shock absorber fault:**

MAX SPEED........ 220/0.54
L/G........ DOWN
MAX SPEED........ 280/0.67

■ **If L/G doors not closed and no shock absorber fault:**

MAX SPEED........ 220/0.54
L/G........ RECYCLE

L2 *Note: To recycle the landing gear, the flight crew must perform the following actions:*
1. Move the landing gear lever down
2. Wait for the landing gear to downlock and for the landing gear doors to close. Simultaneously monitor the WHEEL page on the System Display (SD)
3. Move the landing gear lever up.
The active LGCIU changes when the landing gear is recycled.

L1 ● **IF UNSUCCESSFUL:**

L/G........ DOWN
MAX SPEED........ 280/0.67

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE

Continued on the following page

L/G GEAR NOT UPLOCKED (Cont'd)

Ident.: PRO-ABN-LG-B-00018687.0002001 / 17 NOV 20

15

L12

STATUS

MAX SPEED.. 280/.67

FUEL CONSUMPT INCRSD
FMS PRED UNRELIABLE
See (1)

INOP SYS

L/G RETRACT

(1) *If the flight is continued (to destination or to alternate) with landing gear extended:*
- *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor*
- *Disregard FMS altitude and speed predictions. Time predictions are only valid in cruise*
- *Do not use the managed speed mode (except in approach)*
- *Do not use the CLB and the DES autopilot modes.*

L/G GEAR UPLOCK FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

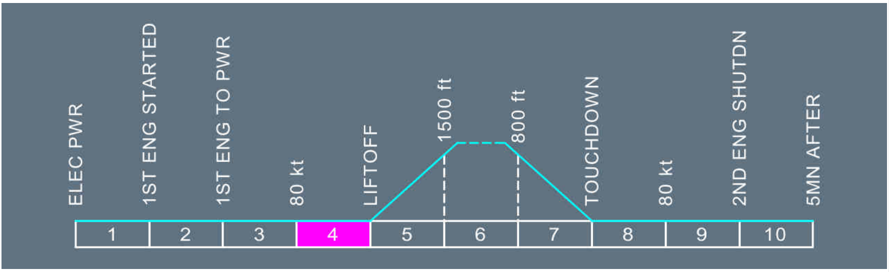
Ident.: PRO-ABN-LG-E-00017737.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear uplock is engaged with corresponding gear downlocked.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-LG-E-00011289.0002001 / 27 NOV 12

16

L/G..KEEP DOWN

L2 *The landing gear must be left down to avoid structural damage, because the uplock device will stay in the locked position.*

L1 MAX SPEED..280/.67

FUEL CONSUMPT INCRSD

FMS PRED UNRELIABLE

Continued on the following page

L/G GEAR UPLOCK FAULT (Cont'd)

Ident.: PRO-ABN-LG-E-00018719.0002001 / 17 NOV 20

17

L12

STATUS

MAX SPEED.. 280/.67
L/G.. KEEP DOWN

FUEL CONSUMPT INCRSD
See (1)
FMS PRED UNRELIABLE
See (2)

INOP SYS

L/G RETRACT

(1) *This message triggers when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.*

(2) *If the flight is continued (to destination or to alternate) with landing gear extended:*
- *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor*
- *Disregard FMS altitude and speed predictions. Time predictions are only valid in cruise*
- *Do not use the managed speed mode (except in approach)*
- *Do not use the CLB and the DES autopilot modes.*

L/G GEAR UPLOCK FAULT

Applicable to: MSN 01251

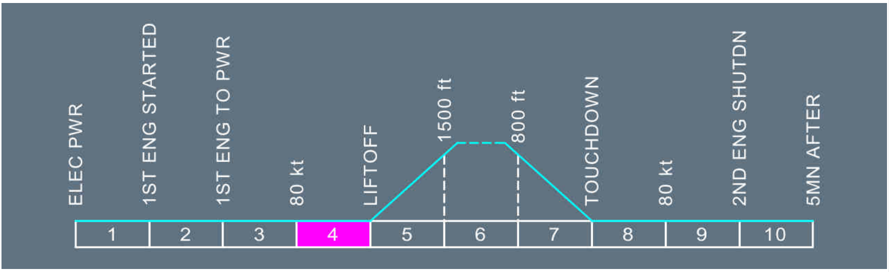
Ident.: PRO-ABN-LG-E-00017737.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear uplock is engaged with corresponding gear downlocked.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
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Ident.: PRO-ABN-LG-E-00011289.0001001 / 05 AUG 10

L/G..KEEP DOWN

L2 *The landing gear must be left down to avoid structural damage, because the uplock device will stay in the locked position.*

L1 MAX SPEED..280/.67

Continued on the following page

L/G GEAR UPLOCK FAULT (Cont'd)

Ident.: PRO-ABN-LG-E-00018719.0001001 / 17 NOV 20

L12

STATUS

MAX SPEED.. 280/.67
L/G... KEEP DOWN

INCREASED FUEL CONSUMP

See (1)

INOP SYS

L/G RETRACT

(1)

If the flight is continued (to destination or to alternate) with landing gear extended:

- *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor*
- *Disregard FMS altitude and speed predictions. Time predictions are only valid in cruise*
- *Do not use the managed speed mode (except in approach)*
- *Do not use the CLB and the DES autopilot modes.*

L/G GEAR UPLOCK FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

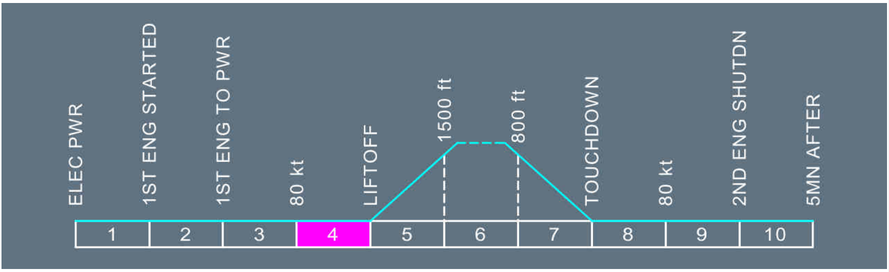
Ident.: PRO-ABN-LG-E-00017737.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one gear uplock is engaged with corresponding gear downlocked.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
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L/G LGCIU 1(2) FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Ident.: PRO-ABN-LG-G-00018059.0002001 / 21 MAR 16

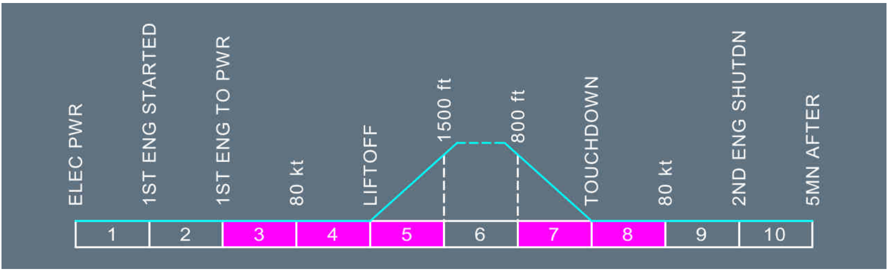
18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when LGCIU 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-LG-G-00018681.0002001 / 21 MAR 16

19

- **If LGCIU 1 is failed:**

  GPWS SYS...OFF

L2 *GPWS receives “L/G in up position” information even if the landing gear is down.*
Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during the approach.

Continued on the following page

L/G LGCIU 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-LG-G-00018682.0001001 / 05 MAY 22

L12

STATUS

	INOP SYS
ENG 1(2) APPR IDLE ONLY *See* [(2)]	LGCIU 1(2) REVERSER 1(2) GPWS [(1)]

Note: 1. *The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is higher than 72 kt.*
2. *Depending on the LGCIU failure, only a part of the above systems may be lost.*

(1) *(When GPWS is set to OFF)*
(2) *When idle is selected on ground with slats extended, only approach idle is available.*

L/G LGCIU 1(2) FAULT

Applicable to: MSN 01251

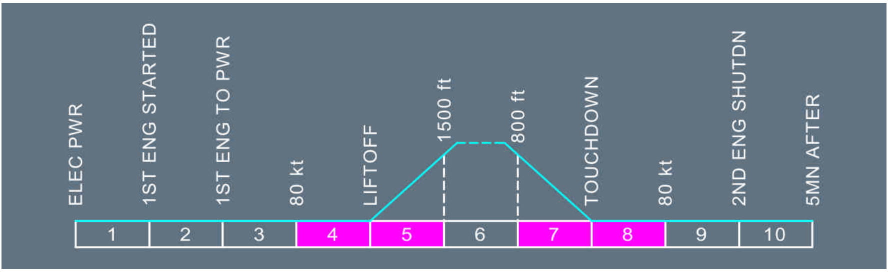
Ident.: PRO-ABN-LG-G-00018059.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when LGCIU 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-LG-G-00018681.0001001 / 21 MAR 16

- **If LGCIU 1 is failed:**

  GPWS.. OFF

  L2 *GPWS receives "L/G in up position" information even if the landing gear is down.*
  Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during the approach.

Continued on the following page

L/G LGCIU 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-LG-G-00018682.0001001 / 05 MAY 22

L12

STATUS

INOP SYS

ENG 1(2) APPR IDLE ONLY

See [(2)]

LGCIU 1(2)
REVERSER 1(2)
GPWS [(1)]

Note: *1. The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is higher than 72 kt.*
2. Depending on the LGCIU failure, only a part of the above systems may be lost.

[(1)] *(When GPWS is set to OFF)*

[(2)] *When idle is selected on ground with slats extended, only approach idle is available.*

L/G LGCIU 1(2) FAULT

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-LG-G-00018059.0002001 / 21 MAR 16

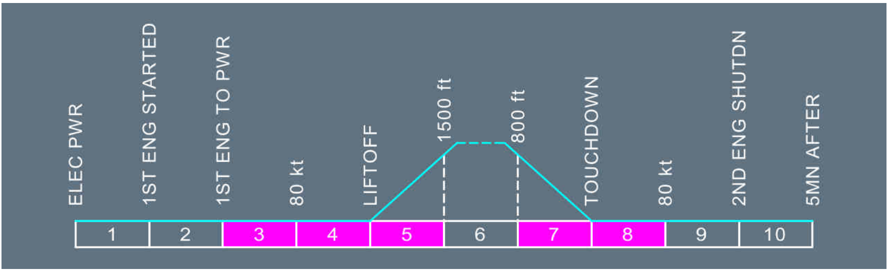
20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when LGCIU 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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9
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Ident.: PRO-ABN-LG-G-00018681.0002001 / 21 MAR 16

21

- **If LGCIU 1 is failed:**

  GPWS SYS...OFF

  L2 *GPWS receives “L/G in up position” information even if the landing gear is down. Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during the approach.*

Continued on the following page

L/G LGCIU 1(2) FAULT (Cont'd)

Ident.: PRO-ABN-LG-G-00018682.0002001 / 05 MAY 22

22

L12

STATUS

	INOP SYS
ENG 1(2) APPR IDLE ONLY *See* [(2)]	LGCIU 1(2) GPWS [(1)]

Note: 1. *The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is higher than 72 kt.*
2. *Depending on the LGCIU failure, only a part of the above systems may be lost.*

(1) *(When GPWS is set to OFF)*
(2) *When idle is selected on ground with slats extended, only approach idle is available.*

L/G LGCIU 1+2 FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-LG-V-00017739.0002001 / 21 MAR 16

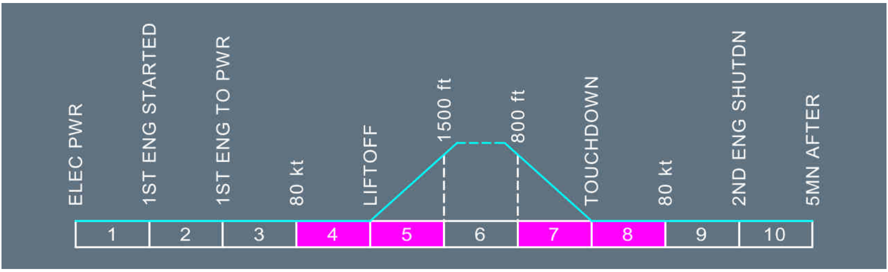
23

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both LGCIUs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-LG-V-00018683.0002001 / 21 MAR 16

L2 Normal landing gear control and position indications are lost. LDG GEAR lights on LDG GEAR control panel remain available if LGCIU 1 is electrically supplied.

L1 L/G.. GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS SYS.. OFF

L2 *As LGCIU 1 is lost, GPWS receives “L/G in up position” information even if the landing gear is down.*
Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during approach.

Continued on the following page

L/G LGCIU 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-LG-V-00018684.0008001 / 05 MAY 22

STATUS

- **If the selected configuration is not FLAP 3:**

  FOR LDG..USE FLAP 3

- **If the selected configuration is FLAP 3:**

  FOR LDG: USE FLAP 3

L/G.. GRVTY EXTN

L/G CONTROL NOT AVAIL
ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY

INOP SYS

REVERSER 1+2
AP 1+2 (1)
CAT 2 (1)
A/THR
N/W STRG
GLS AUTOLAND ◁
LGCIU 1
LGCIU 2
GPWS (2)
ROW/ROP ◁

Note: 1. *The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is higher than 72 kt.*
2. *In flight with both LGCIUs "faulty", whatever the landing gear configuration, when the flight crew switches the wing anti-ice on, there is only 30 s of heating. This loss of wing anti-ice will not have an ECAM/Aural alert, but will be indicated on the BLEED SD page.*

(1) *(Except in LAND mode)*
(2) *(When GPWS is set to OFF)*

L/G LGCIU 1(2) FAULT
(TWO LGCIUS FAULTY)

Applicable to: MSN 01251

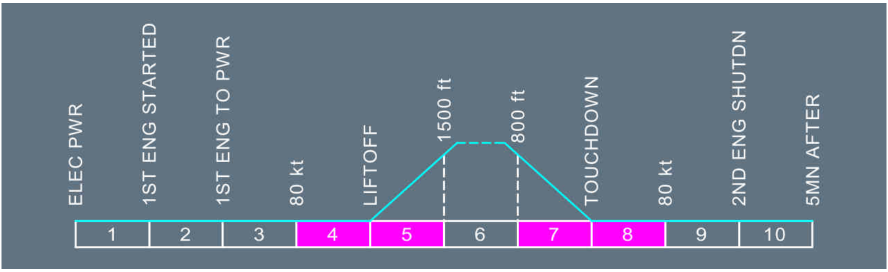
Ident.: PRO-ABN-LG-V-00017739.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both LGCIUs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-LG-V-00018683.0001001 / 21 MAR 16

L2 Normal landing gear control and position indications are lost. LDG GEAR lights on LDG GEAR control panel remain available if LGCIU 1 is electrically supplied.

L1 L/G.. GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS.. OFF

L2 *As LGCIU 1 is lost, GPWS receives "L/G in up position" information even if the landing gear is down.*
Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during approach.

Continued on the following page

L/G LGCIU 1(2) FAULT (Cont'd)

(TWO LGCIUS FAULTY)

Ident.: PRO-ABN-LG-V-00018684.0003001 / 05 MAY 22

STATUS

L/G.. GRVTY EXTN

L/G CONTROL NOT AVAIL
ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY

INOP SYS

REVERSER 1+2
AP 1+2 (1)
CAT 2 (1)
A/THR
GLS AUTOLAND ◁
N/W STRG
LGCIU 1
LGCIU 2
GPWS (2)

Note: 1. *The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is higher than 72 kt.*
2. *In flight with both LGCIUs "faulty", whatever the landing gear configuration, when the flight crew switches the wing anti-ice on, there is only 30 s of heating. This loss of wing anti-ice will not have an ECAM/Aural alert but will be indicated on the BLEED SD page.*

(1) *(Except in LAND mode)*
(2) *(When GPWS is set to OFF)*

L/G LGCIU 1+2 FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

Ident.: PRO-ABN-LG-V-00017739.0002001 / 21 MAR 16

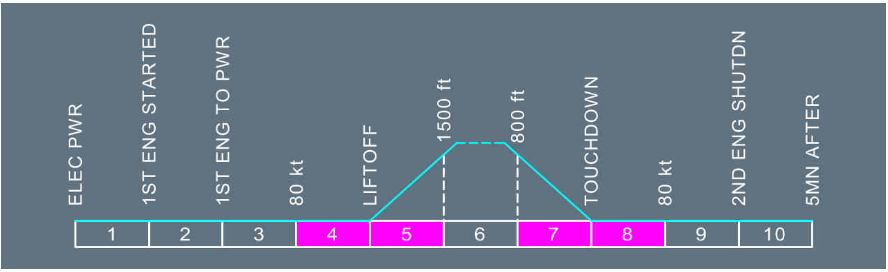
24

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both LGCIUs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-LG-V-00018683.0002001 / 21 MAR 16

L2 Normal landing gear control and position indications are lost. LDG GEAR lights on LDG GEAR control panel remain available if LGCIU 1 is electrically supplied.

L1 L/G..GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS SYS..OFF

L2 *As LGCIU 1 is lost, GPWS receives “L/G in up position” information even if the landing gear is down.*
Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during approach.

Continued on the following page

L/G LGCIU 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-LG-V-00018684.0006001 / 05 MAY 22

STATUS

- **If the selected configuration is not FLAP 3:**

  FOR LDG...USE FLAP 3

- **If the selected configuration is FLAP 3:**

  FOR LDG: USE FLAP 3

L/G... GRVTY EXTN

L/G CONTROL NOT AVAIL
ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY

INOP SYS

REVERSER 1+2
AP 1+2 (1)
CAT 2 (1)
A/THR
GLS AUTOLAND ◁✳
LGCIU 1
LGCIU 2
GPWS (2)
ROW/ROP ◁✳

Note: 1. *The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is higher than 72 kt.*
2. *In flight with both LGCIUs "faulty", whatever the landing gear configuration, when the flight crew switches the wing anti-ice on, there is only 30 s of heating. This loss of wing anti-ice will not have an ECAM/Aural alert but will be indicated on the BLEED SD page.*

(1) *(Except in LAND mode)*
(2) *(When GPWS is set to OFF)*

L/G LGCIU 1+2 FAULT

Applicable to: MSN 08635

Ident.: PRO-ABN-LG-V-00017739.0002001 / 21 MAR 16

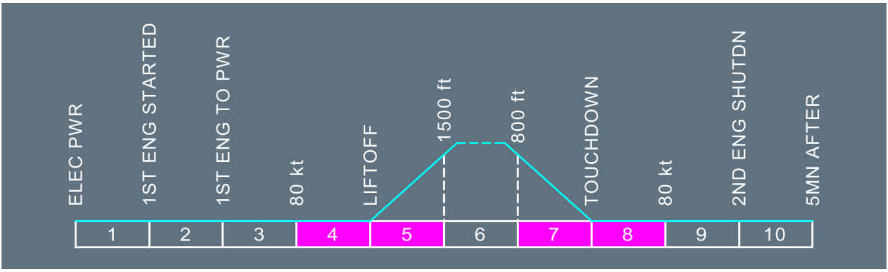
25

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both LGCIUs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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10

Ident.: PRO-ABN-LG-V-00018683.0002001 / 21 MAR 16

L2 Normal landing gear control and position indications are lost. LDG GEAR lights on LDG GEAR control panel remain available if LGCIU 1 is electrically supplied.

L1 L/G...GRVTY EXTN

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS SYS... OFF

L2 *As LGCIU 1 is lost, GPWS receives “L/G in up position” information even if the landing gear is down.*
Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during approach.

Continued on the following page

L/G LGCIU 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-LG-V-00018684.0009001 / 05 MAY 22

L12

STATUS

FOR LDG...FLAP LVR 3

This line is replaced by “FOR LDG: FLAP LVR 3” when CONF 3 is selected, as a reminder.

L/G.. GRVTY EXTN

L/G CONTROL NOT AVAIL
ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY

INOP SYS

REVERSER 1+2
AP 1+2 (1)
CAT 2 (1)
A/THR
GLS AUTOLAND ◁
LGCIU 1
LGCIU 2
GPWS (2)
ROW/ROP ◁

Note:
1. *The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is greater than 72 kt.*
2. *In flight with both LGCIUs "faulty", whatever the landing gear configuration, when the flight crew switches the wing anti-ice on, there is only 30 s of heating. This loss of wing anti-ice will not have an ECAM/Aural alert but will be indicated on the BLEED SD page.*

(1) *(Except in LAND mode)*
(2) *(When GPWS is set to OFF)*

L/G LGCIU 1+2 FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-LG-V-00017739.0002001 / 21 MAR 16

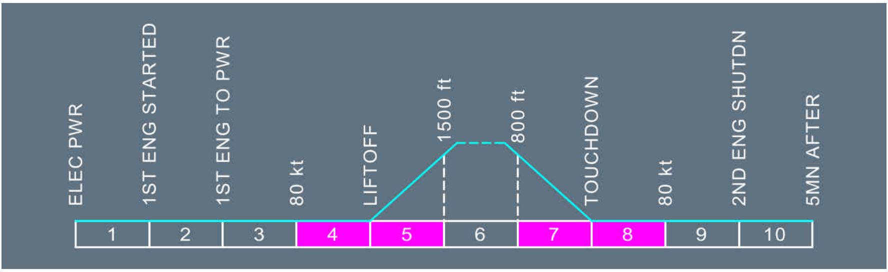
26

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both LGCIUs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-LG-V-00018683.0003001 / 09 NOV 21

27

L2 Normal landing gear control and position indications are lost. LDG GEAR lights on LDG GEAR control panel remain available if LGCIU 1 is electrically supplied.

L1 L/G GRVTY PROC.. APPLY

L2 *Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION.*

L1 GPWS SYS.. OFF

L2 *As LGCIU 1 is lost, GPWS receives “L/G in up position” information even if the landing gear is down.*
Set the GPWS SYS pb-sw to OFF in order to prevent untimely warnings during approach.

Continued on the following page

L/G LGCIU 1+2 FAULT (Cont'd)

Ident.: PRO-ABN-LG-V-00018684.0013001 / 05 MAY 22

28

L12

STATUS

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

L/G... GRVTY EXTN

L/G CONTROL NOT AVAIL
ENG 1 APPR IDLE ONLY
ENG 2 APPR IDLE ONLY

INOP SYS

REVERSER 1+2
GLS AUTOLAND ◁
LGCIU 1
LGCIU 2
GPWS [(1)]
ROW/ROP ◁

Note: 1. *The partial spoiler extension at landing when only one main landing gear is compressed is not available. The spoilers extend normally on ground when wheel speed is higher than 72 kt.*
2. *In flight with both LGCIUs "faulty", whatever the landing gear configuration, when the flight crew switches the wing anti-ice on, there is only 30 s of heating. This loss of wing anti-ice will not have an ECAM/Aural alert but will be indicated on the BLEED SD page.*

---

(1) *(When GPWS is set to OFF)*

L/G SHOCK ABSORBER FAULT
(SHOCK ABSORBER EXTENDED ON GROUND)

Applicable to: ALL

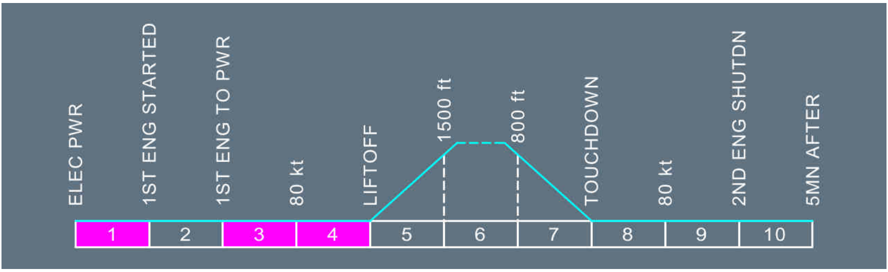
Ident.: PRO-ABN-LG-AB-00017733.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one shock absorber is not compressed after landing.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-LG-AB-00011056.0001001 / 25 FEB 14

Crew awareness.

L/G SHOCK ABSORBER FAULT
(SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

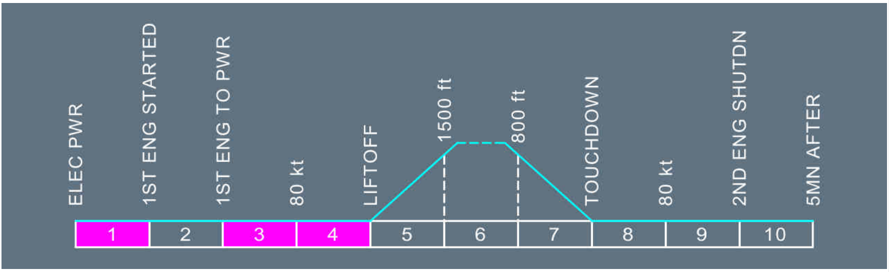
Ident.: PRO-ABN-LG-A-00018062.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one shock absorber is not extended when airborne.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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8
9
10

Ident.: PRO-ABN-LG-A-00011058.0003001 / 25 FEB 14

29

- **Shock absorber not extended after liftoff and L/G uplocked :**

  Crew awareness.

- **Shock absorber not extended after liftoff and L/G not uplocked :**

  MAX SPEED...280/.67

  - **If L/G lever still down :**

    L/G...KEEP DOWN

  - **If L/G lever selected up :**

    L/G...DOWN

  FUEL CONSUMPT INCRSD
  FMS PRED UNRELIABLE

Continued on the following page

L/G SHOCK ABSORBER FAULT (Cont'd)
(SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)

Ident.: PRO-ABN-LG-A-00011059.0003001 / 17 NOV 20

30

L12

STATUS

● **If L/G not uplocked:** MAX SPEED....................280/.67 L/G....................KEEP DOWN	**INOP SYS** L/G RETRACT
FUEL CONSUMPT INCRSD FMS PRED UNRELIABLE *See (1)*	

(1) *If the flight is continued (to destination or to alternate) with landing gear extended:*

- *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor*
- *Disregard FMS altitude and speed predictions. Time predictions are only valid in cruise*
- *Do not use the managed speed mode (except in approach)*
- *Do not use the CLB and the DES autopilot modes.*

Note: In few cases, autothrust and autopilot may also be lost.
If WHEEL N.W. STEER FAULT is also displayed, then the nose wheels may be at maximum deflection. (Turned 90 ° from center.) During landing, delay nose wheel touchdown for as long as possible.

L/G SHOCK ABSORBER FAULT
(SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)

Applicable to: MSN 01251

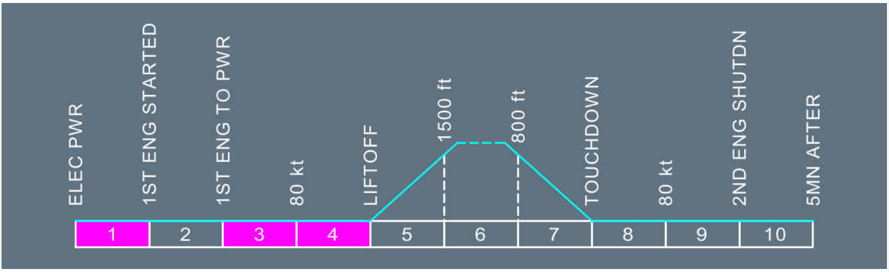
Ident.: PRO-ABN-LG-A-00018062.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one shock absorber is not extended when airborne.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-LG-A-00011058.0001001 / 05 AUG 10

MAX SPEED........280/.67
L/G........KEEP DOWN

Continued on the following page

L/G SHOCK ABSORBER FAULT (Cont'd)
(SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)

Ident.: PRO-ABN-LG-A-00011059.0001001 / 17 NOV 20

L12

STATUS

MAX SPEED...280/.67
L/G...KEEP DOWN

INCREASED FUEL CONSUMP
See (1)

INOP SYS

L/G RETRACT

(1)

If the flight is continued (to destination or to alternate) with landing gear extended:.

- *Disregard FMS fuel predictions. Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor*
- *Disregard FMS altitude and speed predictions. Time predictions are only valid in cruise*
- *Do not use the managed speed mode (except in approach)*
- *Do not use the CLB and the DES autopilot modes.*

Note: *In few cases, autothrust and autopilot may also be lost.*
If WHEEL N.W. STEER FAULT is also displayed, then the nose wheels may be at maximum deflection. (Turned 90 ° from center.) During landing, delay nose wheel touchdown for as long as possible.

L/G SHOCK ABSORBER FAULT
(SHOCK ABSORBER NOT EXTENDED AFTER LIFTOFF)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

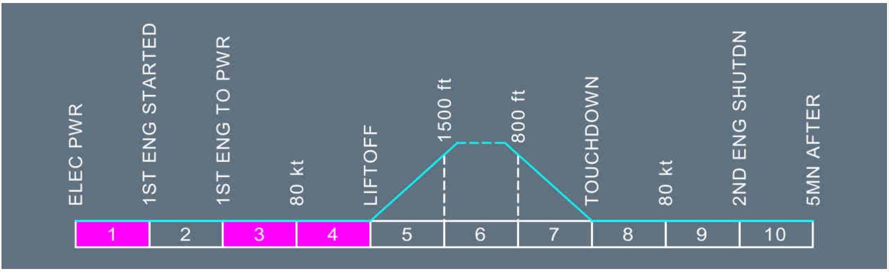
Ident.: PRO-ABN-LG-A-00018062.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one shock absorber is not extended when airborne.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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L/G SYS DISAGREE

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

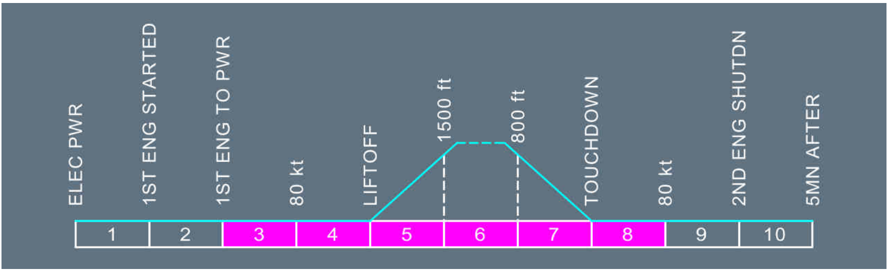
Ident.: PRO-ABN-LG-AC-00017861.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when LGCIU 1 and LGCIU 2 detect a discrepancy between the landing gear positions.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-LG-AC-00018664.0002001 / 21 MAR 16

Crew awareness.

L/G SYS DISAGREE

Applicable to: MSN 01251

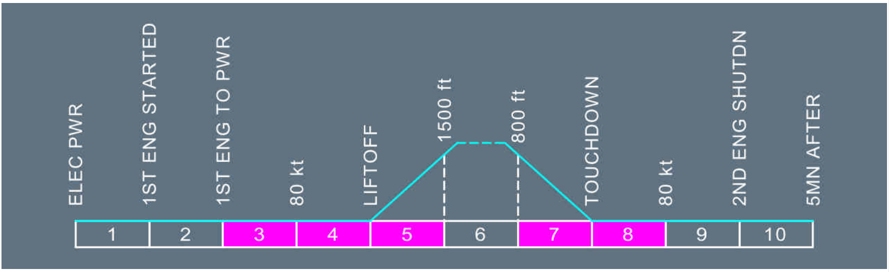
Ident.: PRO-ABN-LG-AC-00017861.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when LGCIU 1 and LGCIU 2 detect a discrepancy between the landing gear positions.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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4
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6
7
8
9
10

Ident.: PRO-ABN-LG-AC-00018664.0002001 / 21 MAR 16

Crew awareness.

L/G SYS DISAGREE

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-LG-AC-00018664.0002001 / 21 MAR 16

Crew awareness.

L/G SYS DISAGREE

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-LG-AC-00017861.0003001 / 09 NOV 21

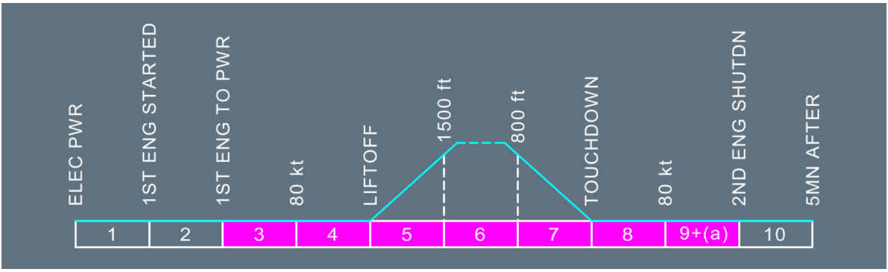
31

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when LGCIU 1 and LGCIU 2 detect a discrepancy between the landing gear positions.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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9+(a)
10

Note: (a) Alert inhibited during the first 60 s of the flight phase 9.

Ident.: PRO-ABN-LG-AC-00018664.0002001 / 21 MAR 16

Crew awareness.

Intentionally left blank

[MEM] EMER DESCENT

Ident.: PRO-ABN-MISC-00012092.0001001 / 17 MAR 17
Applicable to: ALL

CREW OXY MASKS..USE
SIGNS..ON
EMER DESCENT..INITIATE

- **If A/THR not active:**

  THR LEVERS..IDLE

SPD BRK..FULL

- **When descent established:**

  SPEED..MAX/APPROPRIATE

  - **If structural damage suspected:** MANEUVER WITH CARE

  CONSIDER L/G EXTENSION
  ENG MODE SEL..IGN
  ATC..NOTIFY

  Notify ATC of the nature of the emergency, and state intention. The flight crew can communicate with the ATC using voice, or CPDLC when the voice contact cannot be established or has poor quality.

  EMER DESCENT (PA)..ANNOUNCE

  The flight crew must inform the cabin of emergency descent on the PA system.

  ATC XPDR 7700..CONSIDER

  Squawk 7700 unless otherwise specified by ATC.

  CREW OXY MASKS DILUTION..NORM

  - *To save oxygen, set the oxygen diluter selector to the N position*
  - *If the oxygen diluter selector remains set to 100 %, oxygen quantity may be insufficient to cover the entire emergency descent profile*
  - *Ensure that crew communication is established with oxygen masks. Avoid the continuous use of the interphone to minimize interference with the breathing noise in the oxygen mask.*

  MAX FL: 100/MEA-MORA

  - **If CAB ALT above 14 000 ft:**

    OXYGEN PAX MASK MAN ON..PRESS

    This action confirms that the passenger oxygen masks are released.

Continued on the following page

[MEM] EMER DESCENT (Cont'd)

Note: Notify the cabin crew, when the aircraft reaches a safe flight level, and when cabin oxygen is no more necessary.

[MEM] STALL RECOVERY

Ident.: PRO-ABN-MISC-00013768.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974

As soon as any stall indication (could be aural warning, buffet...) is recognized, apply the immediate actions:

NOSE DOWN PITCH CONTROL.......APPLY

This will reduce angle of attack

Note: In case of lack of pitch down authority, reducing thrust may be necessary.

BANK.......WINGS LEVEL

- **When out of stall (no longer stall indications) :**

  THRUST.......INCREASE SMOOTHLY AS NEEDED

  Note: In case of one engine inoperative, progressively compensate the thrust asymmetry with rudder.

  SPEEDBRAKES.......CHECK RETRACTED
  FLIGHT PATH.......RECOVER SMOOTHLY

  - **If in clean configuration and below 20 000 ft :**

    FLAP1.......SELECT

    Note: If a risk of ground contact exists, once clearly out of stall (no longer stall indications), establish smoothly a positive climb gradient.

[MEM] STALL RECOVERY

Ident.: PRO-ABN-MISC-00013768.0002001 / 17 MAR 17

1 **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

As soon as any stall indication (could be aural warning, "STALL STALL" red message on PFD, buffet...) is recognized, apply the immediate actions:

NOSE DOWN PITCH CONTROL.......................APPLY

This will reduce angle of attack

Note: *In case of lack of pitch down authority, reducing thrust may be necessary.*

BANK.......................WINGS LEVEL

- **When out of stall (no longer stall indications) :**

  THRUST.......................INCREASE SMOOTHLY AS NEEDED

  Note: *In case of one engine inoperative, progressively compensate the thrust asymmetry with rudder.*

  SPEEDBRAKES.......................CHECK RETRACTED

  FLIGHT PATH.......................RECOVER SMOOTHLY

  - **If in clean configuration and below 20 000 ft :**

    FLAP1.......................SELECT

    Note: *If a risk of ground contact exists, once clearly out of stall (no longer stall indications), establish smoothly a positive climb gradient.*

[MEM] STALL WARNING AT LIFTOFF

Ident.: PRO-ABN-MISC-00013769.0001001 / 10 MAY 21

Applicable to: ALL

If stall warnings trigger at liftoff, apply the following immediate actions:

THRUST.......................TOGA

At the same time:

PITCH ATTITUDE.......................15 °

BANK.......................WINGS LEVEL

[QRH] BOMB ON BOARD

Ident.: PRO-ABN-MISC-00012095.0004001 / 05 MAY 22

2 **Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

COCKPIT PROCEDURES

BACKGROUND

To avoid the activation of an altitude-sensitive bomb, the cabin altitude should not exceed the value at which the bomb has been discovered.
To reduce the effects of the explosion, the aircraft should fly as long as possible with approximately 1 PSI differential pressure, to help the blast go outwards. 1 PSI differential pressure corresponds to a 2 500 ft difference between the aircraft and the cabin altitude.
These conditions are achieved by using the manual pressure control.

PROCEDURE

The following procedure assumes that it is initiated during climb or cruise:

First, maintain the cabin altitude using manual pressure mode.
While maintaining the cabin altitude, descend the aircraft to the cabin altitude + 2 500 ft and maintain delta P at 1 PSI.
During further steps of descent, maintain delta P at 1 PSI using the cabin V/S target selector.
During the approach, use automatic pressure mode in order to reduce the differential pressure to zero at touchdown.

If flight conditions are different, the crew should adapt the procedure, bearing in mind the above-mentioned principles (background paragraph).

CKPT/CAB COM...ESTABLISH

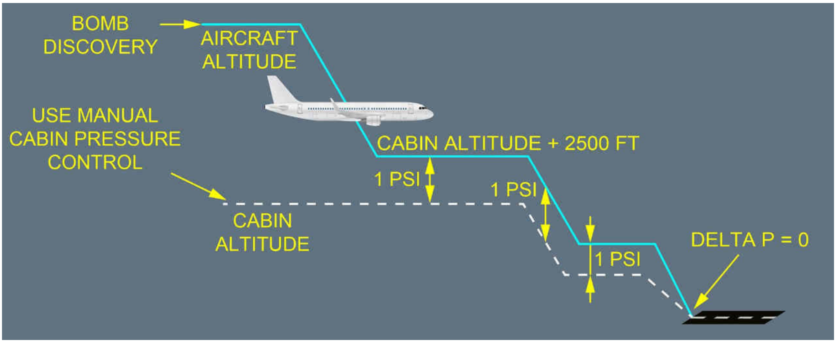
■ **If landing and evacuation possible within 30 min:**

ATC/COMPANY...NOTIFY
EVAC...PREPARE

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

- **If landing and evacuation NOT possible within 30 min:**



AIRCRAFT (IF CLIMBING)..LEVEL OFF

CABIN PRESS MODE SEL..MAN

L2 *The purpose is to immediately prevent the cabin altitude from increasing, in order to avoid the activation of an altitude-sensitive bomb.*

L1 MAINTAIN CAB ALT

L2 *Use MAN V/S CTL sw to maintain the cabin altitude at the value it had when the bomb was discovered.*

L1 ATC/COMPANY..NOTIFY

L2 *To obtain expert advice from explosive specialists.*

L1 TRGT SPEED: PREFER LO IAS

Low speed could reduce the consequences of possible structural damage, if the bomb explodes.

DESCENT TO CAB ALT + 2 500 ft or MEA - MORA...INITIATE

L2 *Descending to 2 500 ft above the cabin altitude gives a cabin differential pressure of approximately 1 PSI, which helps to ensure that the blast goes outwards, if the bomb explodes.*

L1 AVOID SHARP MANEUVERS

L2 *Which might result in the bomb moving.*

L1 MAINTAIN CAB ALT

L2 *Use MAN V/S CTL sw to maintain the cabin altitude. Initially brief UP input should be required; but, be careful not to increase the cabin altitude.*

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

L1

- **When at CAB ALT + 2 500 ft:**

  MAINTAIN 1 PSI ∆P

  L2 *Use MAN V/S CTL sw to adjust delta P to 1 PSI. Brief DN input should be initially required to set 0 ft/min cabin vertical speed.*

  L1 GALY & CAB....................OFF
  FUEL RESERVES....................DETERMINE

  When flying at cabin altitude + 2 500 ft, fuel consumption in CONF 1, with landing gear down, will be about 2.1 times that consumed in clean configuration.

  - **When bomb secured at the LRBL or cannot be moved:**

    Least Risk Bomb Location (LRBL) is the center of the RH aft cabin door

    EMER EXIT LT....................ON

    L2 *To recover minimum cabin lighting when the COMMERCIAL pb is OFF*

    L1 COMMERCIAL....................OFF

  - **If fuel permits:**

    FLAPS....................AT LEAST CONF 1
    L/G lever (except for flight over water)....................DOWN

    L2 *The detonation could damage the landing systems. Therefore, if fuel permits, configure the aircraft for landing as soon as possible. Reducing the speed will minimize stress on the aircraft structure.*

    L1 USE NORMAL CONF FOR LANDING

  DURING FURTHER DESCENT: MAINTAIN MAX 1 PSI ∆P

  Use MAN V/S CTL sw to DN to adjust delta P to 1 PSI.

  - **During approach:**

    CABIN PRESS MODE SEL....................AUTO

    L2 *This allows CPC to automatically control the cabin altitude to 0 during final approach.*

L1

- **When aircraft on ground and stopped in a remote area (if possible):**

  Refer to PRO-ABN-MISC [QRH] EMER EVAC.

CABIN PROCEDURES

If a suspect device is found in the cabin:

WARNING	Do not cut or disconnect any wires and do not open or attempt to gain entry to internal components of a closed or concealed suspect device. Any attempt may

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

	result in an explosion. Booby-trapped closed devices have been used on aircraft in the past.
WARNING	Alternate locations must not be used without consulting with an aviation explosives security specialist. Never take a suspect device to the flight deck.
CAUTION	The least risk bomb location for the aircraft structure and systems is center of the RH aft cabin door.

EOD PERSONNEL ON BOARD....................CHECK

L2 *Announce "Is there any EOD personnel on board ?". By using the initials, only persons familiar with EOD (Explosive Ordnance Disposal) will be made aware of the problem.*

L1 DO NOT OPEN THE BOMB
DO NOT CUT BOMB'S WIRES
SECURE BOMB AGAINST SLIPPING
PROTECT BOMB AGAINST SHOCKS

L2 *Secure in the attitude found and do not lift before having checked for an anti-lift ignition device.*

L1 PASSENGERS....................LEAD AWAY FROM BOMB

L2 *Move passengers at least 4 seat rows away from the bomb location. On full flights, it may be necessary to double up passengers to achieve standoff from the suspect device.*
Passengers near the bomb should protect their heads with pillows, blankets.
All passengers must remain seated with seatbelts on and, if possible, head below the top of the head rest. Seat backs and tray tables should be in their full upright position.
Service items may need to be collected in order to secure tray tables.

L1 PORTABLE ELECTRONIC DEVICES....................SWITCH OFF

L2 *The cabin crews must command passengers to switch off all portable electronic devices.*

L1 BOMB....................CHECK NO ANTI-LIFT DEVICE

L2 *To check for an anti-lift switch or lever, slide a string or stiff card, (such as the emergency information card) under the bomb, without disturbing the bomb.*
If the string or card cannot be slipped under the bomb, it may indicate that an anti-lift switch or lever is present and that the bomb cannot be moved.
If a card is used and can be slid under the bomb, leave it under the bomb and move together with the bomb.
If it is not possible to move the bomb, then it should be surrounded with a single thin sheet of plastic (e. g. trash bag), then with wetted materials, and other blast attenuation materials such as seat cushions and soft carry-on baggage. Move personnel as far away from the bomb location as possible.

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

L1 EMERGENCY EQUIPMENT....................REMOVE AND STOW

L2 *Emergency equipment (PBE, fire extinguisher, etc.) located close to the LRBL must be removed and stowed in alternate location.*

L1 GALLEY/IFE POWER....................OFF

L2 *All galley and IFE equipment located close to the LRBL must be switched off.*

L1 ● **If the bomb can be moved:**

RH AFT CABIN DOOR SLIDE.................... DISARM

LEAST RISK BOMB LOCATION (LRBL).................... PREPARE

L2 *Build up a platform of solid baggage against the door up to about 25 cm (10 in) below the middle of the door.*
On top of this, build up at least 25 cm (10 in) of wetted material such as blankets and pillows.
Place a single thin sheet of plastic (e.g. trash bag) on top of the wetted materials. This prevents any possible short circuit.

CAUTION	*DO NOT OMIT THE PLASTIC SHEETS, AS THE SUSPECT DEVICE COULD GET WET AND POSSIBLY SHORT CIRCUIT ELECTRONIC COMPONENTS CAUSING INADVERTENT DEVICE ACTIVATION.*

L1 BOMB INDICATION LINE....................POSITION

Note: *A bomb location indicator line is a 6 to 8 ft (1.8 to 2.4 m) (e.g. neckties, headset cord, or belts connected together) preferably of constrating color, that helps the responding bomb squad find the precise location of the suspect device within the LRBL stack once constructed.*

Position the bomb indication line from the location on the platform where you will place the suspect device, EXTENDING outward into the aisle.

BOMB....................MOVE TO LRBL

L2 *Carefully carry in the attitude found and place on top of the wetted materials in the same attitude and as close to the door structure as possible.*

CAUTION	*Ensure that the suspect device, when placed on the stack against the door, is above the slide pack but not against the door handle, and if possible, avoid placement in the view port.*

L1 LEAST RISK BOMB LOCATION (LRBL)....................COMPLETE

L2 *Place an additional single thin sheet of plastic over the bomb.*

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

CAUTION	*DO NOT OMIT THE PLASTIC SHEETS, AS THE SUSPECT DEVICE COULD GET WET AND POSSIBLY SHORT CIRCUIT ELECTRONIC COMPONENTS CAUSING INADVERTENT DEVICE ACTIVATION.*

L1

Build up at 25 cm (10 in) of wetted material around the sides and on top of the bomb.

DO NOT PLACE ANYTHING BETWEEN THE BOMB AND THE DOOR, AND MINIMIZE AIRSPACE AROUND THE BOMB.

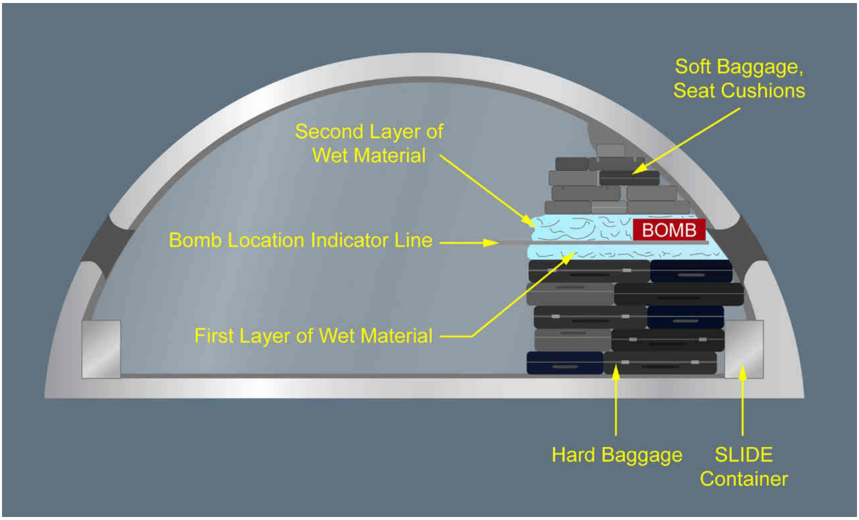
L2

The idea is to build up a protective surrounding of the bomb so that the explosive force is directed in the only unprotected area into the door structure.
Fill the area around the bomb with seat cushions and other soft materials such as hand luggage (saturated with water or any other nonflammable liquid) up to the cabin ceiling, compressing as much as possible. Secure the LRBL stack in place using belt, ties or other appropriate materials. The more material stacked around the bomb, the less the damage will be.

L1

USE ONLY SOFT MATERIAL. AVOID USING MATERIALS CONTAINING ANY INFLAMMABLE LIQUID AND ANY METAL OBJECTS WHICH COULD BECOME DANGEROUS PROJECTILES.

LRBL STACK


Soft Baggage,
Seat Cushions
Second Layer of
Wet Material
BOMB
Bomb Location Indicator Line
First Layer of Wet Material
Hard Baggage
SLIDE
Container

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

PASSENGERS.. MOVE/ADVISE

L2 *Move passengers at least 4 seat rows away from the least risk bomb location (RH aft cabin door). On full flights, it may be necessary to double up passengers to achieve standoff from the suspect device.*
Passengers near the bomb should protect their heads with pillows, blankets. All passengers must remain seated with seatbelts on and, if possible, head below the top of the head rest. Seat backs and tray tables must be in their full upright position.

L1 CABIN CREW.. NOTIFY COCKPIT CREW

L2 *Cabin crew notify the flight crew that the bomb is secured at the LRBL.*

L1 EVACUATION/DISEMBARKATION...EXECUTE

L2 *Evacuate through normal and emergency exits on the opposite side of the “bomb” location. Do not use the door just opposite the “bomb”.*
Use all available airport facilities to disembark without delay.

[QRH] BOMB ON BOARD

Ident.: PRO-ABN-MISC-00012095.0003001 / 05 MAY 22
Applicable to: MSN 01143-01518, 01593-01628

COCKPIT PROCEDURES

BACKGROUND

To avoid the activation of an altitude-sensitive bomb, the cabin altitude should not exceed the value at which the bomb has been discovered.
To reduce the effects of the explosion, the aircraft should fly as long as possible with approximately 1 PSI differential pressure, to help the blast go outwards. 1 PSI differential pressure corresponds to a 2 500 ft difference between the aircraft and the cabin altitude.
These conditions are achieved by using the manual pressure control.

PROCEDURE

The following procedure assumes that it is initiated during climb or cruise:

First, maintain the cabin altitude using manual pressure mode.
While maintaining the cabin altitude, descend the aircraft to the cabin altitude + 2 500 ft and maintain delta P at 1 PSI.
During further steps of descent, maintain delta P at 1 PSI using the cabin V/S target selector.
During the approach, use automatic pressure mode in order to reduce the differential pressure to zero at touchdown.

If flight conditions are different, the crew should adapt the procedure, bearing in mind the above-mentioned principles (background paragraph).

CKPT/CAB COM..ESTABLISH

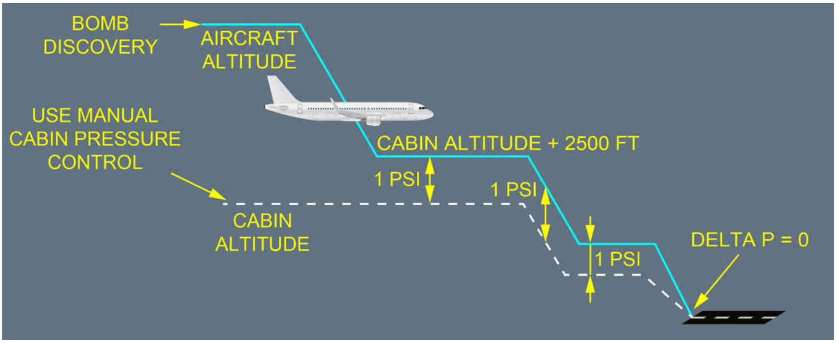
■ **If landing and evacuation possible within 30 min:**

  ATC/COMPANY..NOTIFY
  EVAC..PREPARE

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

- **If landing and evacuation NOT possible within 30 min:**



AIRCRAFT (IF CLIMBING).....LEVEL OFF
CABIN PRESS MODE SEL.....MAN

L2 *The purpose is to immediately prevent the cabin altitude from increasing, in order to avoid the activation of an altitude-sensitive bomb.*

L1 MAINTAIN CAB ALT

L2 *Use MAN V/S CTL sw to maintain the cabin altitude at the value it had when the bomb was discovered.*

L1 ATC/COMPANY.....NOTIFY

L2 *To obtain expert advice from explosive specialists.*

L1 TRGT SPEED: PREFER LO IAS

Low speed could reduce the consequences of possible structural damage, if the bomb explodes.

DESCENT TO CAB ALT + 2 500 ft or MEA - MORA.....INITIATE

L2 *Descending to 2 500 ft above the cabin altitude gives a cabin differential pressure of approximately 1 PSI, which helps to ensure that the blast goes outwards, if the bomb explodes.*

L1 AVOID SHARP MANEUVERS

L2 *Which might result in the bomb moving.*

L1 MAINTAIN CAB ALT

L2 *Use MAN V/S CTL sw to maintain the cabin altitude. Initially brief UP input should be required; but, be careful not to increase the cabin altitude.*

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

L1 - **When at CAB ALT + 2 500 ft:**

MAINTAIN 1 PSI ΔP

L2 *Use MAN V/S CTL sw to adjust delta P to 1 PSI. Brief DN input should be initially required to set 0 ft/min cabin vertical speed.*

L1 GALY & CAB....................OFF
FUEL RESERVES....................DETERMINE

When flying at cabin altitude + 2 500 ft, fuel consumption in CONF 1, with landing gear down, will be about 2.1 times that consumed in clean configuration.

- **When bomb secured at the LRBL or cannot be moved:**

Least Risk Bomb Location (LRBL) is the center of the RH aft cabin door

EMER EXIT LT....................ON

- **If fuel permits:**

FLAPS....................AT LEAST CONF 1
L/G lever (except for flight over water)....................DOWN

L2 *The detonation could damage the landing systems. Therefore, if fuel permits, configure the aircraft for landing as soon as possible. Reducing the speed will minimize stress on the aircraft structure.*

L1 USE NORMAL CONF FOR LANDING

DURING FURTHER DESCENT: MAINTAIN MAX 1 PSI ΔP

L2 *Use MAN V/S CTL sw to DN to adjust delta P to 1 PSI.*

L1 - **During approach:**

CABIN PRESS MODE SEL....................AUTO

L2 *This allows CPC to automatically control the cabin altitude to 0 during final approach.*

L1 - **When aircraft on ground and stopped in a remote area (if possible):**

Refer to PRO-ABN-MISC [QRH] EMER EVAC.

CABIN PROCEDURES

If a suspect device is found in the cabin:

WARNING	Do not cut or disconnect any wires and do not open or attempt to gain entry to internal components of a closed or concealed suspect device. Any attempt may

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

	result in an explosion. Booby-trapped closed devices have been used on aircraft in the past.

WARNING	Alternate locations must not be used without consulting with an aviation explosives security specialist. Never take a suspect device to the flight deck.

CAUTION	The least risk bomb location for the aircraft structure and systems is center of the RH aft cabin door.

EOD PERSONNEL ON BOARD..........CHECK

L2 *Announce “Is there any EOD personnel on board ?”. By using the initials, only persons familiar with EOD (Explosive Ordnance Disposal) will be made aware of the problem.*

L1 DO NOT OPEN THE BOMB
DO NOT CUT BOMB’S WIRES
SECURE BOMB AGAINST SLIPPING
PROTECT BOMB AGAINST SHOCKS

L2 *Secure in the attitude found and do not lift before having checked for an anti-lift ignition device.*

L1 PASSENGERS..........LEAD AWAY FROM BOMB

L2 *Move passengers at least 4 seat rows away from the bomb location. On full flights, it may be necessary to double up passengers to achieve standoff from the suspect device.*
Passengers near the bomb should protect their heads with pillows, blankets.
All passengers must remain seated with seatbelts on and, if possible, head below the top of the head rest. Seat backs and tray tables should be in their full upright position.
Service items may need to be collected in order to secure tray tables.

L1 PORTABLE ELECTRONIC DEVICES..........SWITCH OFF

L2 *The cabin crews must command passengers to switch off all portable electronic devices.*

L1 BOMB..........CHECK NO ANTI-LIFT DEVICE

L2 *To check for an anti-lift switch or lever, slide a string or stiff card, (such as the emergency information card) under the bomb, without disturbing the bomb.*
If the string or card cannot be slipped under the bomb, it may indicate that an anti-lift switch or lever is present and that the bomb cannot be moved.
If a card is used and can be slid under the bomb, leave it under the bomb and move together with the bomb.
If it is not possible to move the bomb, then it should be surrounded with a single thin sheet of plastic (e. g. trash bag), then with wetted materials, and other blast attenuation materials such as seat cushions and soft carry-on baggage. Move personnel as far away from the bomb location as possible.

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

L1 EMERGENCY EQUIPMENT.......................................REMOVE AND STOW

L2 *Emergency equipment (PBE, fire extinguisher, etc.) located close to the LRBL must be removed and stowed in alternate location.*

L1 GALLEY/IFE POWER.......................................OFF

L2 *All galley and IFE equipment located close to the LRBL must be switched off.*

L1
- **If the bomb can be moved:**

  RH AFT CABIN DOOR SLIDE.......................................DISARM

  LEAST RISK BOMB LOCATION (LRBL).......................................PREPARE

L2 *Build up a platform of solid baggage against the door up to about 25 cm (10 in) below the middle of the door.*
On top of this, build up at least 25 cm (10 in) of wetted material such as blankets and pillows.
Place a single thin sheet of plastic (e.g. trash bag) on top of the wetted materials. This prevents any possible short circuit.

CAUTION	*DO NOT OMIT THE PLASTIC SHEETS, AS THE SUSPECT DEVICE COULD GET WET AND POSSIBLY SHORT CIRCUIT ELECTRONIC COMPONENTS CAUSING INADVERTENT DEVICE ACTIVATION.*

L1 BOMB INDICATION LINE.......................................POSITION

Note: *A bomb location indicator line is a 6 to 8 ft (1.8 to 2.4 m) (e.g. neckties, headset cord, or belts connected together) preferably of constrating color, that helps the responding bomb squad find the precise location of the suspect device within the LRBL stack once constructed.*

Position the bomb indication line from the location on the platform where you will place the suspect device, EXTENDING outward into the aisle.

BOMB.......................................MOVE TO LRBL

L2 *Carefully carry in the attitude found and place on top of the wetted materials in the same attitude and as close to the door structure as possible.*

CAUTION	*Ensure that the suspect device, when placed on the stack against the door, is above the slide pack but not against the door handle, and if possible, avoid placement in the view port.*

L1 LEAST RISK BOMB LOCATION (LRBL).......................................COMPLETE

L2 *Place an additional single thin sheet of plastic over the bomb.*

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

CAUTION	*DO NOT OMIT THE PLASTIC SHEETS, AS THE SUSPECT DEVICE COULD GET WET AND POSSIBLY SHORT CIRCUIT ELECTRONIC COMPONENTS CAUSING INADVERTENT DEVICE ACTIVATION.*

L1

Build up at 25 cm (10 in) of wetted material around the sides and on top of the bomb.

DO NOT PLACE ANYTHING BETWEEN THE BOMB AND THE DOOR, AND MINIMIZE AIRSPACE AROUND THE BOMB.

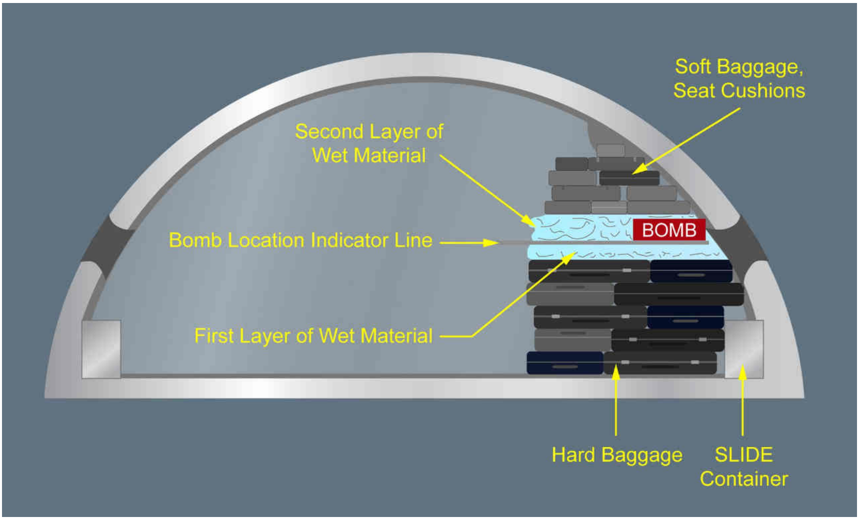
L2

The idea is to build up a protective surrounding of the bomb so that the explosive force is directed in the only unprotected area into the door structure.
Fill the area around the bomb with seat cushions and other soft materials such as hand luggage (saturated with water or any other nonflammable liquid) up to the cabin ceiling, compressing as much as possible. Secure the LRBL stack in place using belt, ties or other appropriate materials. The more material stacked around the bomb, the less the damage will be.

L1

USE ONLY SOFT MATERIAL. AVOID USING MATERIALS CONTAINING ANY INFLAMMABLE LIQUID AND ANY METAL OBJECTS WHICH COULD BECOME DANGEROUS PROJECTILES.

LRBL STACK


Soft Baggage,
Seat Cushions
Second Layer of
Wet Material
BOMB
Bomb Location Indicator Line
First Layer of Wet Material
Hard Baggage
SLIDE
Container

Continued on the following page

[QRH] BOMB ON BOARD (Cont'd)

PASSENGERS.. MOVE/ADVISE

L2 *Move passengers at least 4 seat rows away from the least risk bomb location (RH aft cabin door). On full flights, it may be necessary to double up passengers to achieve standoff from the suspect device.*
Passengers near the bomb should protect their heads with pillows, blankets. All passengers must remain seated with seatbelts on and, if possible, head below the top of the head rest. Seat backs and tray tables must be in their full upright position.

L1 CABIN CREW.. NOTIFY COCKPIT CREW

L2 *Cabin crew notify the flight crew that the bomb is secured at the LRBL.*

L1 EVACUATION/DISEMBARKATION...EXECUTE

L2 *Evacuate through normal and emergency exits on the opposite side of the “bomb” location. Do not use the door just opposite the “bomb”.*
Use all available airport facilities to disembark without delay.

[QRH] COCKPIT WINDSHIELD / WINDOW ARCING

Ident.: PRO-ABN-MISC-00012099.0001001 / 17 MAR 17
Applicable to: ALL

Affected WINDOW / WINDSHIELD ANTI-ICE C/B... PULL

Pull the circuit breaker of the affected window/windshield heating system, in case of:
- *Electrical arcing of the cockpit windshield/window, or*
- *Burning smell or smoke identified as coming from the bottom right corner of CAPT windshield or bottom left corner of the F/O windshield.*

On the rear C/B panel:

- *ANTI-ICE L WSHLD AF10 C/B [123VU],*
- *ANTI-ICE R WSHLD AF03 C/B [123VU],*
- *ANTI-ICE/WINDOWS L X14 C/B [122VU],*
- *ANTI-ICE/WINDOWS R W14 C/B [122VU].*

[QRH] COCKPIT WINDSHIELD / WINDOW CRACKED

Ident.: PRO-ABN-MISC-00012097.0001001 / 04 DEC 18
Applicable to: ALL

SHOULDER HARNESS.. FASTEN
TOUCH THE CRACK WITH A PEN (OR CAREFULLY WITH FINGERNAIL)

- **If no crack on cockpit side:**

  NO LIMITATION

  The inner ply is not affected. Therefore, the window/windshield is still able to sustain the differential pressure up to the maximum flight level.

- **If cracks on cockpit side:**

  CREW OXY MASKS.. USE

  MAX FL: 230 / MEA-MORA

  The inner ply is affected. The flight crew is not able to easily determine if other plies are affected. Descend to FL 230/MEA and reduce differential pressure to 5 PSI .

  Note: The maximum flight level is restricted to FL 230/MEA to obtain ΔP 5 PSI , without resulting in an excessive cabin altitude and an EXCESS CAB ALT warning.

  The following procedure enables maintaining ΔP 5 PSI in manual cabin pressure mode.

  CAB PRESS MODE SEL.. MAN

  DISREGARD THE CAB ALT TARGET TABLE DISPLAYED ON THE ECAM
  MAN V/S CTL.. AS RQRD

  SET THE CABIN ALTITUDE ACCORDING TO THE TABLE BELOW TO MAINTAIN ΔP 5 PSI

FL	*100*	*150*	*200*	*230*
CABIN ALTITUDE	*0*	*3 000*	*6 000*	*8 000*

  - **When ΔP is 5 PSI:**

    CREW OXY MASKS.. REMOVE

  - **Below FL 100:**

    CAB PRESS MODE SEL.. AUTO

Note: Due to the increased noise level, pay particular attention to visual warnings.

- **If visibility not sufficient for approach due to damage:**

  CONSIDER AUTOLAND

  - **For approach, if AUTOLAND not available:**

    CAB PRESS MODE SEL.. MAN

Continued on the following page

[QRH] COCKPIT WINDSHIELD / WINDOW CRACKED (Cont'd)

MAN V/S CTL...FULL UP

MAX SPEED: 200 kt

PF SLIDING WINDOW...OPEN

[QRH] DITCHING

Ident.: PRO-ABN-MISC-00022090.0006001 / 05 MAR 19
Applicable to: MSN 02014, 06561

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - FUEL REMAINING - DITCHING* procedure or *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - NO FUEL REMAINING - DITCHING* procedure, which include the ditching procedure when the engines are failed.

ATC .... NOTIFY
ATC XPDR 7700 .... CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:
- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS .... OFF
GPWS TERR .... OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS .... ON
EMER EXIT LT .... ON
COMMERCIAL .... OFF
LDG ELEV .... SELECT 00
BARO .... SET
DISREGARD NORM C/Ls
ELT (when conditions permit) .... ON

● **For approach and ditching:**

KEEP LANDING GEAR UP
SLATS / FLAPS .... MAX AVAIL
FOR FLARE: TARGET PITCH 11 ° & MIN V/S

● **At 2 000 ft AGL:**

CAB PRESS MODE SEL .... CHECK AUTO

L2 *The outflow valve remains open, if the MODE SEL pb is not set to AUTO.*

L1 ALL BLEEDS (ENGs & APU) .... OFF
CABIN CREW .... NOTIFY FOR DITCHING

Continued on the following page

[QRH] DITCHING (Cont'd)

DITCHING pb .... ON

L2 *The ditching direction mainly depends on the wind direction, and on the state of the sea. These factors may be considered as follows :*

1. Wind direction :
This may be determined by observing of the waves, which move and break downwind. Spray from the wave tops is also a reliable indicator.

2. Wind speed :

The following guidelines can be used to evaluate wind speed :

A few white crests	*8-17 kt*
Many white crests	*17-26 kt*
Streaks of foam along the water	*23-35 kt*
Spray from the waves	*35-43 kt*

3. Sea state :
This is best determined from a height of 500 to 1 000 ft.
At a lower altitude, the swell direction may be less obvious than the wave direction, even though the waves are much smaller.

4. When there is no swell, align into the wind. In the presence of swell, and provided that drift does not exceed 10 °, ditch parallel to the swell and as nearly into wind as possible. If drift exceeds 10 °, ditch into the wind. The presence of drift on touchdown is not dangerous, but every effort should be made to minimize roll.

L1
- **At 500 ft AGL:**

BRACE FOR IMPACT .... ORDER

- **At touchdown:**

ALL ENG MASTERS .... OFF
APU MASTER SW .... OFF

- **After ditching:**

ATC (VHF 1) .... NOTIFY

L2 *With both engines and APU shut down, only VHF 1 is supplied.*

L1 ALL FIRE pb (ENGs & APU) .... PUSH
ALL AGENTS (ENGs and APU) .... DISCH
EVACUATION .... INITIATE

L2 *After impact, the lowest point of the passenger exits (aft door) remains above the waterline for more than 7 min.*

[QRH] DITCHING

Ident.: PRO-ABN-MISC-00022090.0004001 / 05 MAR 19
Applicable to: MSN 01251

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - FUEL REMAINING - DITCHING* procedure or *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - NO FUEL REMAINING - DITCHING* procedure, which include the ditching procedure when the engines are failed.

ATC .... NOTIFY
ATC XPDR 7700 .... CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:

- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS .... OFF
GPWS TERR .... OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS .... ON
GALY & CAB .... OFF
LDG ELEV .... SELECT 00
BARO .... SET
DISREGARD NORM C/Ls
ELT ◁ (when conditions permit) .... ON

- **For approach and ditching:**

  KEEP LANDING GEAR UP
  SLATS / FLAPS .... MAX AVAIL
  FOR FLARE: TARGET PITCH 11 ° & MIN V/S

- **At 2 000 ft AGL:**

  CAB PRESS MODE SEL .... CHECK AUTO

  L2 *The outflow valve remains open, if the MODE SEL pb is not set to AUTO.*

  L1 ALL BLEEDS (ENGs & APU) .... OFF
  CABIN CREW .... NOTIFY FOR DITCHING
  DITCHING pb .... ON

Continued on the following page

[QRH] DITCHING (Cont'd)

L2 *The ditching direction mainly depends on the wind direction, and on the state of the sea. These factors may be considered as follows :*

1. *Wind direction :*
   This may be determined by observing of the waves, which move and break downwind. Spray from the wave tops is also a reliable indicator.
2. *Wind speed :*

   The following guidelines can be used to evaluate wind speed :

A few white crests	*8-17 kt*
Many white crests	*17-26 kt*
Streaks of foam along the water	*23-35 kt*
Spray from the waves	*35-43 kt*

3. *Sea state :*
   This is best determined from a height of 500 to 1 000 ft.
   At a lower altitude, the swell direction may be less obvious than the wave direction, even though the waves are much smaller.
4. *When there is no swell, align into the wind. In the presence of swell, and provided that drift does not exceed 10 °, ditch parallel to the swell and as nearly into wind as possible. If drift exceeds 10 °, ditch into the wind. The presence of drift on touchdown is not dangerous, but every effort should be made to minimize roll.*

L1 ● **At 500 ft AGL:**

BRACE FOR IMPACT.. ORDER

● **At touchdown:**

ALL ENG MASTERS..OFF
APU MASTER SW...OFF

● **After ditching:**

ATC (VHF 1)..NOTIFY

L2 *With both engines and APU shut down, only VHF 1 is supplied.*

L1 ALL FIRE pb (ENGs & APU)..PUSH
ALL AGENTS (ENGs and APU)...DISCH
EVACUATION.. INITIATE

L2 *After impact, the lowest point of the passenger exits (aft door) remains above the waterline for more than 7 min.*

[QRH] DITCHING

Ident.: PRO-ABN-MISC-00022090.0013001 / 05 MAR 19
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated* procedure, which includes the ditching procedure when the engines are failed.

ATC.. NOTIFY
ATC XPDR 7700.................................... CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:
- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS.. OFF
GPWS TERR.. OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS.. ON
GALY & CAB.. OFF
LDG ELEV.. SELECT 00
BARO... SET
DISREGARD NORM C/Ls
ELT ◁ (when conditions permit)................ ON

- **For approach and ditching:**

  KEEP LANDING GEAR UP
  SLATS / FLAPS..................................... MAX AVAIL

  FOR FLARE: TARGET PITCH 11 ° & MIN V/S

- **At 2 000 ft AGL:**

  CAB PRESS MODE SEL.......................... CHECK AUTO

L2 *The outflow valve remains open, if the MODE SEL pb is not set to AUTO.*

L1 ALL BLEEDS (ENGs & APU)................. OFF
CABIN CREW................................ NOTIFY FOR DITCHING
DITCHING pb .... ON

Continued on the following page

[QRH] DITCHING (Cont'd)

L2 *The ditching direction mainly depends on the wind direction, and on the state of the sea. These factors may be considered as follows :*

1. *Wind direction :*
   This may be determined by observing of the waves, which move and break downwind. Spray from the wave tops is also a reliable indicator.
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   The following guidelines can be used to evaluate wind speed :

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3. *Sea state :*
   This is best determined from a height of 500 to 1 000 ft.
   At a lower altitude, the swell direction may be less obvious than the wave direction, even though the waves are much smaller.
4. *When there is no swell, align into the wind. In the presence of swell, and provided that drift does not exceed 10 °, ditch parallel to the swell and as nearly into wind as possible. If drift exceeds 10 °, ditch into the wind. The presence of drift on touchdown is not dangerous, but every effort should be made to minimize roll.*

L1 ● **At 500 ft AGL:**

BRACE FOR IMPACT..ORDER

● **At touchdown:**

ALL ENG MASTERS..OFF
APU MASTER SW..OFF

● **After ditching:**

ATC (VHF 1)..NOTIFY

L2 *With both engines and APU shut down, only VHF 1 is supplied.*

L1 ALL FIRE pb (ENGs & APU)..PUSH
ALL AGENTS (ENGs and APU)..DISCH
EVACUATION..INITIATE

L2 *After impact, the lowest point of the passenger exits (aft door) remains above the waterline for more than 7 min.*

[QRH] DITCHING

Ident.: PRO-ABN-MISC-00022090.0015001 / 05 MAR 19

3 **Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If ditching anticipated* procedure, which includes the ditching procedure when the engines are failed.

ATC .... NOTIFY
ATC XPDR 7700 .... CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:
- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS .... OFF
GPWS TERR .... OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS .... ON
EMER EXIT LT .... ON
COMMERCIAL .... OFF
LDG ELEV .... SELECT 00
BARO .... SET
DISREGARD NORM C/Ls
ELT ◁✳ (when conditions permit) .... ON

- **For approach and ditching:**

  KEEP LANDING GEAR UP
  SLATS / FLAPS .... MAX AVAIL

  FOR FLARE: TARGET PITCH 11 ° & MIN V/S

- **At 2 000 ft AGL:**

  CAB PRESS MODE SEL .... CHECK AUTO

L2 *The outflow valve remains open, if the MODE SEL pb is not set to AUTO.*

L1 ALL BLEEDS (ENGs & APU) .... OFF
CABIN CREW .... NOTIFY FOR DITCHING
DITCHING pb .... ON

Continued on the following page

[QRH] DITCHING (Cont'd)

L2 *The ditching direction mainly depends on the wind direction, and on the state of the sea. These factors may be considered as follows :*

1. *Wind direction :*
   This may be determined by observing of the waves, which move and break downwind. Spray from the wave tops is also a reliable indicator.
2. *Wind speed :*

   The following guidelines can be used to evaluate wind speed :

A few white crests	*8-17 kt*
Many white crests	*17-26 kt*
Streaks of foam along the water	*23-35 kt*
Spray from the waves	*35-43 kt*

3. *Sea state :*
   This is best determined from a height of 500 to 1 000 ft.
   At a lower altitude, the swell direction may be less obvious than the wave direction, even though the waves are much smaller.
4. *When there is no swell, align into the wind. In the presence of swell, and provided that drift does not exceed 10 °, ditch parallel to the swell and as nearly into wind as possible. If drift exceeds 10 °, ditch into the wind. The presence of drift on touchdown is not dangerous, but every effort should be made to minimize roll.*

L1 ● **At 500 ft AGL:**

BRACE FOR IMPACT...ORDER

● **At touchdown:**

ALL ENG MASTERS...OFF
APU MASTER SW...OFF

● **After ditching:**

ATC (VHF 1)...NOTIFY

L2 *With both engines and APU shut down, only VHF 1 is supplied.*

L1 ALL FIRE pb (ENGs & APU)...PUSH
ALL AGENTS (ENGs and APU)...DISCH
EVACUATION...INITIATE

L2 *After impact, the lowest point of the passenger exits (aft door) remains above the waterline for more than 7 min.*

[QRH] EMER EVAC

Ident.: PRO-ABN-MISC-00012083.0003001 / 04 MAY 18

4 **Applicable to: MSN 01143, 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03032, 03058, 03180-03710, 03733-04773, 05005-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06949-09324, 10949-11597**

Apply this procedure when considering an emergency evacuation, or when required by the ECAM. Carefully analyze the situation before deciding to evacuate passengers. However do not waste valuable time.

AIRCRAFT / PARKING BRK...STOP / ON
ATC (VHF1)...NOTIFY

Notify ATC of the nature of the emergency, and state intentions.
Only VHF 1 is available on batteries.

CABIN CREW (PA)..ALERT

Make a short and precise announcement to warn that an emergency evacuation may be required.

ΔP (only if MAN CAB PR has been used).......................................CHECK ZERO

If ΔP is not at zero, MODE selector on MAN and V/S CTL FULL UP, to fully open the outflow valve.

● **If ΔP not at zero:**
CAB PR MODE SEL...MAN
V/S CTL...FULL UP

ALL ENG MASTER...OFF

Associated LP and HP valves close.

ALL FIRE pb (ENGs & APU)...PUSH
ALL AGENTS (ENGs & APU)...AS RQRD

The use of agents is required if the ENG FIRE or APU FIRE is displayed.

■ **If evacuation required:**
EVACUATION...INITIATE

Make a short and precise announcement to order the emergency evacuation.
Press the EVAC COMMAND pb .

■ **If evacuation not required:**
CABIN CREW AND PASSENGERS (PA)...NOTIFY

[QRH] EMER EVAC

Ident.: PRO-ABN-MISC-00012083.0001001 / 09 MAY 17

Applicable to: MSN 01158, 01251, 02014, 03035-03047, 03111, 04827-04974, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06895

Apply this procedure when considering an emergency evacuation, or when required by the ECAM. Carefully analyze the situation before deciding to evacuate passengers. However do not waste valuable time.

AIRCRAFT / PARKING BRK....................STOP / ON
ATC (VHF1)....................NOTIFY

Notify ATC of the nature of the emergency, and state intentions.
Only VHF 1 is available on batteries.

CABIN CREW (PA)....................ALERT

Make a short and precise announcement to warn that an emergency evacuation may be required.

ΔP (only if MAN CAB PR has been used)....................CHECK ZERO

If ΔP is not at zero, MODE selector on MAN and V/S CTL FULL UP, to fully open the outflow valve.

● **If ΔP not at zero:**
    CAB PR MODE SEL....................MAN
    V/S CTL....................FULL UP

ALL ENG MASTER....................OFF

Associated LP and HP valves close.

ALL FIRE pb (ENGs & APU)....................PUSH
ALL AGENTS (ENGs & APU)....................AS RQRD

Engine Agent 2 is not available.
The use of agents is required if the ENG FIRE or APU FIRE is displayed.

■ **If evacuation required:**
    EVACUATION....................INITIATE

    Make a short and precise announcement to order the emergency evacuation.
    Press the EVAC COMMAND pb ◁ .

■ **If evacuation not required:**
    CABIN CREW AND PASSENGERS (PA)....................NOTIFY

[QRH] EMER LANDING
ALL ENG FAILURE

Ident.: PRO-ABN-MISC-00015075.0009001 / 17 MAR 17
Applicable to: ALL

Apply the following if not able to maintain altitude after the loss of thrust near the ground.

■ **If ditching anticipated:**

APU.......... START
L/G LEVER.......... CHECK UP
FOR LANDING.......... USE FLAP 2

L2 *Only slats extend, and slowly.*

L1 VAPP.......... DETERMINE

Weight	40 t / 90 klb	50 t / 110 klb	60 t / 130 klb	70 t / 155 klb	80 t / 175 klb	90 t / 200 klb	95 t / 210 klb
VAPP	150 kt	150 kt	163 kt	173 kt	183 kt	193 kt	198 kt

DITCHING pb .... ON

L2 *Ditch the aircraft parallel to the swell. If that causes a strong crosswind, ditch the aircraft into the wind.*

L1

● **At 500 ft AGL or below:**

BRACE FOR IMPACT.......... ORDER

● **For flare:**

TOUCH DOWN AT MIN V/S

TARGET PITCH ATT 11 °

● **At touchdown:**

ALL ENG MASTERS.......... OFF
APU MASTER SW.......... OFF
EMER EVAC PROC.......... APPLY

L2 *Refer to PRO-ABN-MISC [QRH] EMER EVAC*

L1 ■ **If forced landing anticipated:**

APU.......... START
FOR LANDING.......... USE FLAP 2

L2 *Only slats extend, and slowly.*

L1 VAPP.......... DETERMINE

Weight	40 t	50 t	60 t	70 t	80 t	90 t	95 t

Continued on the following page

[QRH] EMER LANDING (Cont'd)

ALL ENG FAILURE

	/ 90 klb	/ 110 klb	/ 130 klb	/ 155 klb	/ 175 klb	/ 200 klb	/ 210 klb
VAPP	150 kt	150 kt	163 kt	173 kt	183 kt	193 kt	198 kt

GND SPLRs....................ARM

- **At 1 000 ft AGL at the latest:**

  GRAVITY GEAR EXTN handcrank....................PULL AND TURN

  L2 *Flight controls revert to direct law at landing gear extension. To ensure correct aircraft trimming for approach, extend the landing gear only when the aircraft is in CONF 2 and at VAPP. Disregard the ″USE MAN PITCH TRIM″ message on the PFD, because the stabilizer is jammed, due to not sufficient hydraulic power.*

  L1
  - **When L/G downlocked:**

    L/G LEVER....................DOWN

- **At 500 ft AGL or below:**

  BRACE FOR IMPACT....................ORDER

- **For flare:**

  TOUCH DOWN AT MIN V/S

- **At touchdown:**

  ALL ENG MASTERS....................OFF
  APU MASTER SW....................OFF
  EMER EVAC PROC....................APPLY

  L2 *Refer to PRO-ABN-MISC [QRH] EMER EVAC*

[QRH] FORCED LANDING

Ident.: PRO-ABN-MISC-00022092.0004001 / 05 JUN 18
Applicable to: MSN 01251

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - FUEL REMAINING - FORCED LANDING* procedure or *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - NO FUEL REMAINING - FORCED LANDING* procedure, which include the forced landing procedure when the engines are failed.

ATC...NOTIFY
ATC XPDR 7700...CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:
- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS...OFF
GPWS TERR...OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS...ON
GALY & CAB...OFF
LDG ELEV...SET

L2 *If not known, select an approximate value.*

L1 BARO...SET
DISREGARD NORM C/Ls
ELT (when conditions permit)...ON

- **For approach and landing:**

  RAM AIR...ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft on the ground.*

  L1 L/G lever ....DOWN
  SLATS / FLAPS...MAX AVAIL
  GND SPLR...ARM

  MAX BRK PR: 1000 PSI

Continued on the following page

[QRH] FORCED LANDING (Cont'd)

- **At 2 000 ft AGL:**
  CABIN CREW..NOTIFY FOR LANDING
- **At 500 ft AGL:**
  BRACE FOR IMPACT..ORDER
- **At touchdown:**
  ALL ENG MASTERS..OFF
  APU MASTER SW..OFF

  BRAKES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK..ON
  ATC (VHF 1)..NOTIFY

L2 *With both engines and APU shut down, only VHF 1 is supplied.*

L1 ALL FIRE pb (ENGs & APU)..PUSH
ALL AGENTS (ENGs & APU)..DISCH

- ■ **If evacuation required:**
  EVACUATION..INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb ⊲✻ .

L1
- ■ **If evacuation not required:**
  CABIN CREW AND PASSENGERS (PA)..NOTIFY

[QRH] FORCED LANDING

Ident.: PRO-ABN-MISC-00022092.0009001 / 05 JUN 18
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated* procedure, which includes the forced landing procedure when the engines are failed.

ATC...NOTIFY
ATC XPDR 7700...CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:
- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS...OFF
GPWS TERR...OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS...ON
GALY & CAB...OFF
LDG ELEV...SET

L2 *If not known, select an approximate value.*

L1 BARO...SET
DISREGARD NORM C/Ls
ELT (when conditions permit)...ON

- **For approach and landing:**

  RAM AIR...ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft on the ground.*

  L1 L/G lever ....DOWN
  SLATS / FLAPS...MAX AVAIL
  GND SPLR...ARM

  MAX BRK PR: 1000 PSI

- **At 2 000 ft AGL:**

  CABIN CREW...NOTIFY FOR LANDING

Continued on the following page

[QRH] FORCED LANDING (Cont'd)

- **At 500 ft AGL:**

  BRACE FOR IMPACT..ORDER

- **At touchdown:**

  ALL ENG MASTERS..OFF
  APU MASTER SW..OFF

  BRAKES ON ACCU ONLY

- **When aircraft stopped:**

  PARKING BRK..ON
  ATC (VHF 1)..NOTIFY

L2 *With both engines and APU shut down, only VHF 1 is supplied.*

L1 ALL FIRE pb (ENGs & APU)..PUSH
ALL AGENTS (ENGs & APU)..DISCH

  ■ **If evacuation required:**

  EVACUATION..INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb ⊲ .

L1 ■ **If evacuation not required:**

  CABIN CREW AND PASSENGERS (PA)..NOTIFY

[QRH] FORCED LANDING

Ident.: PRO-ABN-MISC-00022092.0006001 / 05 JUN 18
Applicable to: MSN 02014, 06561

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - FUEL REMAINING - FORCED LANDING* procedure or *Refer to PRO-ABN-ENG [QRH] ENG DUAL FAILURE - NO FUEL REMAINING - FORCED LANDING* procedure, which include the forced landing procedure when the engines are failed.

ATC.......................................NOTIFY
ATC XPDR 7700.......................................CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:
- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS.......................................OFF
GPWS TERR.......................................OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS.......................................ON
EMER EXIT LT.......................................ON
COMMERCIAL.......................................OFF
LDG ELEV.......................................SET

L2 *If not known, select an approximate value.*

L1 BARO.......................................SET
DISREGARD NORM C/Ls
ELT (when conditions permit).......................................ON

- **For approach and landing:**

  RAM AIR.......................................ON

L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft on the ground.*

L1 L/G lever ....DOWN
SLATS / FLAPS.......................................MAX AVAIL
GND SPLR.......................................ARM

MAX BRK PR: 1000 PSI

Continued on the following page

[QRH] FORCED LANDING (Cont'd)

- **At 2 000 ft AGL:**
  CABIN CREW.......NOTIFY FOR LANDING
- **At 500 ft AGL:**
  BRACE FOR IMPACT.......ORDER
- **At touchdown:**
  ALL ENG MASTERS.......OFF
  APU MASTER SW.......OFF

  BRAKES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK.......ON
  ATC (VHF 1).......NOTIFY

L2 *With both engines and APU shut down, only VHF 1 is supplied.*

L1 ALL FIRE pb (ENGs & APU).......PUSH
ALL AGENTS (ENGs & APU).......DISCH

  - ■ **If evacuation required:**
    EVACUATION.......INITIATE

L2 *Make a short and precise announcement to order the emergency evacuation.*
Press the EVAC COMMAND pb ⊲ .

L1
  - ■ **If evacuation not required:**
    CABIN CREW AND PASSENGERS (PA).......NOTIFY

[QRH] FORCED LANDING

Ident.: PRO-ABN-MISC-00022092.0010001 / 05 JUN 18

5 **Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597**

This procedure applies when engines are running.
If engines are not running, *Refer to PRO-ABN-ENG [QRH] ALL ENG FAIL - If forced landing anticipated* procedure, which includes the forced landing procedure when the engines are failed.

ATC..NOTIFY
ATC XPDR 7700..CONSIDER
PREPARE CABIN AND COCKPIT

L2 *Notify the cabin crew of the nature of the emergency and indicate intentions.*

Specify the available time, in order to:
- *Secure loose equipment*
- *Prepare survival equipment*
- *Lock belts and shoulder harnesses.*

L1 GPWS SYS..OFF
GPWS TERR..OFF

L2 *Set both the SYS pb-sw and the TERR pb-sw to OFF, in order to prevent nuisance warnings.*

L1 SIGNS..ON
EMER EXIT LT..ON
COMMERCIAL..OFF
LDG ELEV..SET

L2 *If not known, select an approximate value.*

L1 BARO..SET
DISREGARD NORM C/Ls
ELT (when conditions permit)..ON

- **For approach and landing:**

  RAM AIR..ON

  L2 *Switch the RAM AIR on, in order to ensure entire depressurization of the aircraft on the ground.*

  L1 L/G lever ....DOWN
  SLATS / FLAPS..MAX AVAIL
  GND SPLR..ARM

  MAX BRK PR: 1000 PSI

Continued on the following page

[QRH] FORCED LANDING (Cont'd)

- **At 2 000 ft AGL:**
  CABIN CREW..NOTIFY FOR LANDING
- **At 500 ft AGL:**
  BRACE FOR IMPACT..ORDER
- **At touchdown:**
  ALL ENG MASTERS..OFF
  APU MASTER SW..OFF

  BRAKES ON ACCU ONLY
- **When aircraft stopped:**
  PARKING BRK..ON
  ATC (VHF 1)..NOTIFY

  L2 *With both engines and APU shut down, only VHF 1 is supplied.*

  L1 ALL FIRE pb (ENGs & APU)..PUSH
  ALL AGENTS (ENGs & APU)..DISCH
  - **If evacuation required:**
    EVACUATION..INITIATE

    L2 *Make a short and precise announcement to order the emergency evacuation.*
    Press the EVAC COMMAND pb ◁ *.*

  - L1 **If evacuation not required:**
    CABIN CREW AND PASSENGERS (PA)..NOTIFY

[QRH] OVERWEIGHT LANDING

Ident.: PRO-ABN-MISC-00023093.0001001 / 17 NOV 20
Applicable to: ALL

USE CONF FULL FOR LANDING UNLESS SPECIFIED BY ABN PROC OR LIMITED BY LANDING PERF

LDG DIST PROC....................APPLY

- **For approach:**

  PACK 1....................OFF OR SUPPLIED BY APU
  PACK 2....................OFF OR SUPPLIED BY APU

L2 *The selection of the PACKS to OFF (or to APU BLEED) increases the maximum thrust available from the engines, in the case of a go-around.*

L1
  - **If landing CONF other than FULL:** USE CONF 1+F FOR GO AROUND

  SPEED AT RUNWAY THRESHOLD : VLS

L2 *This speed target is applicable to manual landing and autoland. Reduce the speed to reach VLS at the runway threshold.*

L1 MINIMIZE V/S AT TOUCHDOWN

L2 *Touch down as smoothly as possible to reduce the V/S. The maximum touchdown V/S should not exceed 360 ft/min. The main landing gears must touch down as symmetrically as possible.*

L1
- **For landing:**

  INCREASE FLARE HEIGHT

  USE MAX REVERSE ASAP

L2 *It is recommended to use the reverse as soon as possible, in order to limit the braking action.*

L1
  - **After nosewheel touchdown:** APPLY BRAKES AS NECESSARY

L2 *It is recommended that the flight crew uses the maximum available runway length to limit the braking energy.*

L1
- **When landing completed:**

  BRAKE FANS ◁✳ ....ON

L2 *Be prepared for tire deflation, if temperature exceed 800 °C.*

[QRH] SEVERE TURBULENCE

Ident.: PRO-ABN-MISC-10-00002202.0001001 / 17 MAR 17
Applicable to: ALL

Whenever possible, avoid areas with known or forecasted severe turbulence. If turbulence is unavoidable, aim to keep the speed in the region of the target speed given in this section, so as to provide the best protection against the effect of gust on the structural limits, whilst maintaining an adequate margin above VLS.
Sufficient buffet margin exists at optimum altitude. In order to further increase the margin to buffet onset, consider descending to a lower altitude.
Severe turbulence is defined as turbulence that causes large, abrupt changes in altitude and/or attitude. It usually causes large variations in airspeed. Occupants are forced violently against their seat belts and loose objects will move around the aircraft.
If severe turbulence occurs during a flight, the flight crew must make a logbook entry in order to initiate maintenance action.

Note: *Recommendations for severe turbulence are also applicable to extreme turbulence.*

Ident.: PRO-ABN-MISC-10-00002203.0001001 / 22 FEB 17
Applicable to: ALL

Before the aircraft enters an area where turbulence is expected:

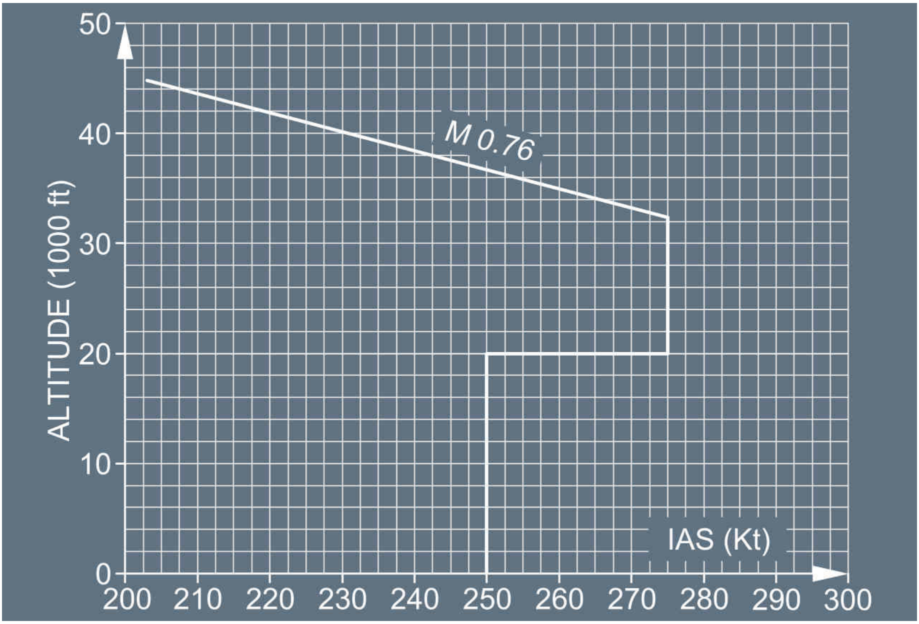
- All loose equipment must be secured in the cockpit and in the cabin
- The flight crew must set the SEAT BELTS sw to ON.

Ident.: PRO-ABN-MISC-10-00002301.0001001 / 09 DEC 09
Applicable to: ALL

Keep the autopilot ON.
When thrust changes become excessive : Disconnect Autothrust.
For approach : Use A/THR for managed speed.

Ident.: PRO-ABN-MISC-10-00002208.0004001 / 22 MAY 12
Applicable to: MSN 02321, 02887

Set the thrust to give the recommended speed (*Refer to PRO-ABN-MISC [QRH] Thrust Setting (N1) for Recommended Speed*). This thrust setting attempts to obtain, in stabilized conditions, the speed for turbulence penetration given in the graph below.
Only change thrust in case of an extreme variation in airspeed, and do not chase your Mach or airspeed.
A transient increase is preferable to a loss of speed, that decreases buffet margins and is difficult to recover.



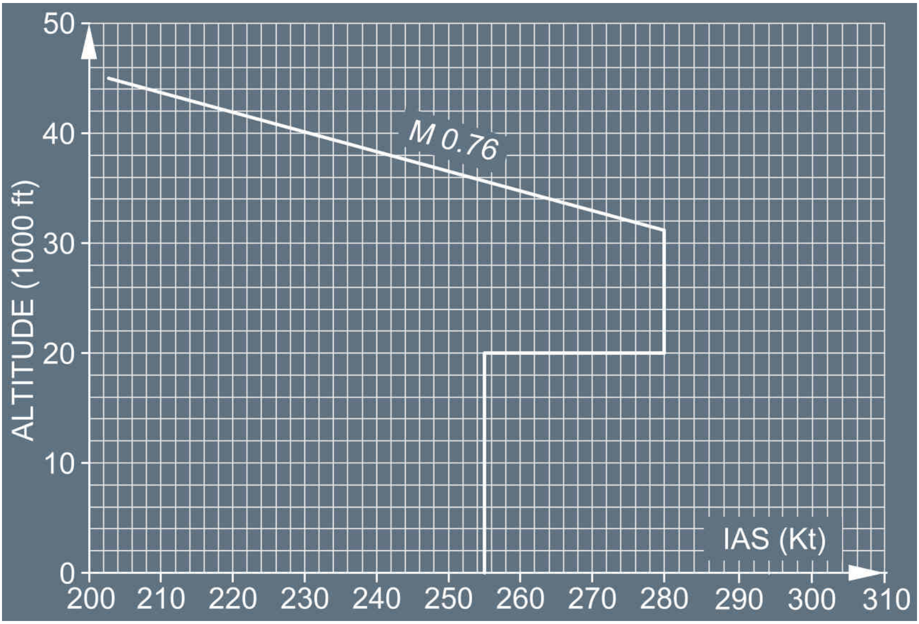
Ident.: PRO-ABN-MISC-10-00002208.0008001 / 22 MAY 12

Applicable to: MSN 01801, 01826, 01837-01855, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

Set the thrust to give the recommended speed (*Refer to PRO-ABN-MISC [QRH] Thrust Setting (N1) for Recommended Speed*). This thrust setting attempts to obtain, in stabilized conditions, the speed for turbulence penetration given in the graph below.

Only change thrust in case of an extreme variation in airspeed, and do not chase your Mach or airspeed.

A transient increase is preferable to a loss of speed, that decreases buffet margins and is difficult to recover.



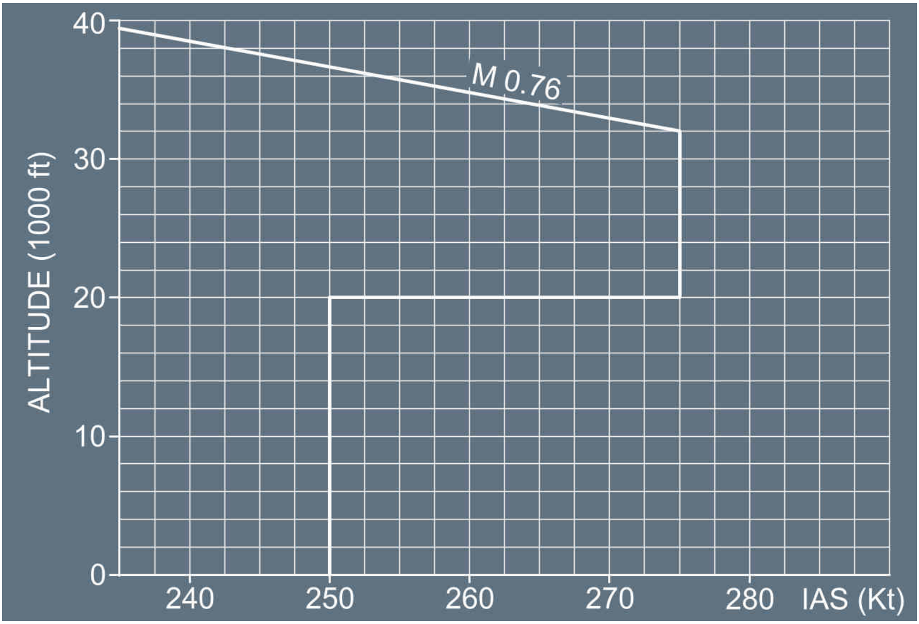
Ident.: PRO-ABN-MISC-10-00002208.0002001 / 22 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Set the thrust to give the recommended speed (*Refer to PRO-ABN-MISC [QRH] Thrust Setting (N1) for Recommended Speed*). This thrust setting attempts to obtain, in stabilized conditions, the speed for turbulence penetration given in the graph below.

Only change thrust in case of an extreme variation in airspeed, and do not chase your Mach or airspeed.

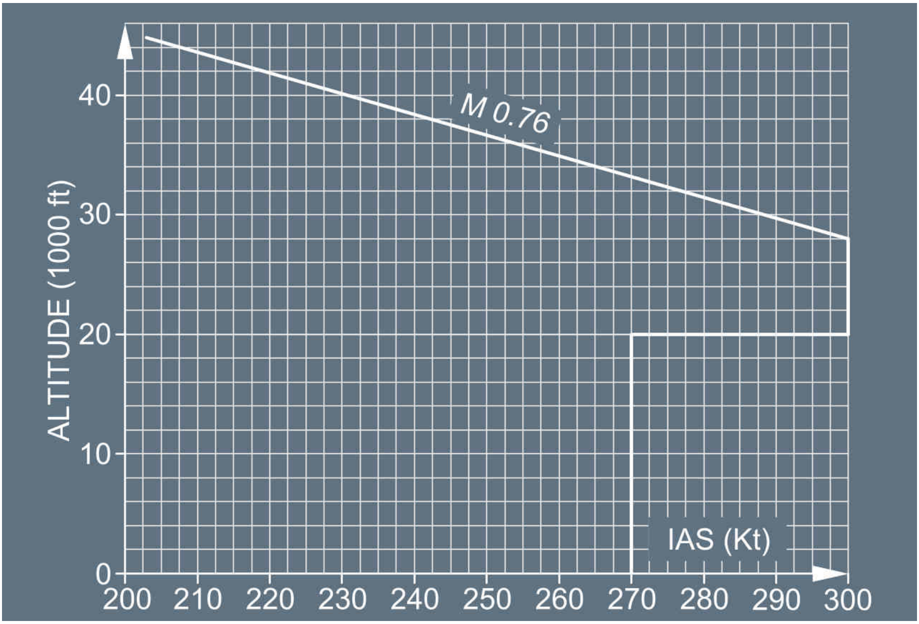
A transient increase is preferable to a loss of speed, that decreases buffet margins and is difficult to recover.



Ident.: PRO-ABN-MISC-10-00002208.0005001 / 22 MAY 12

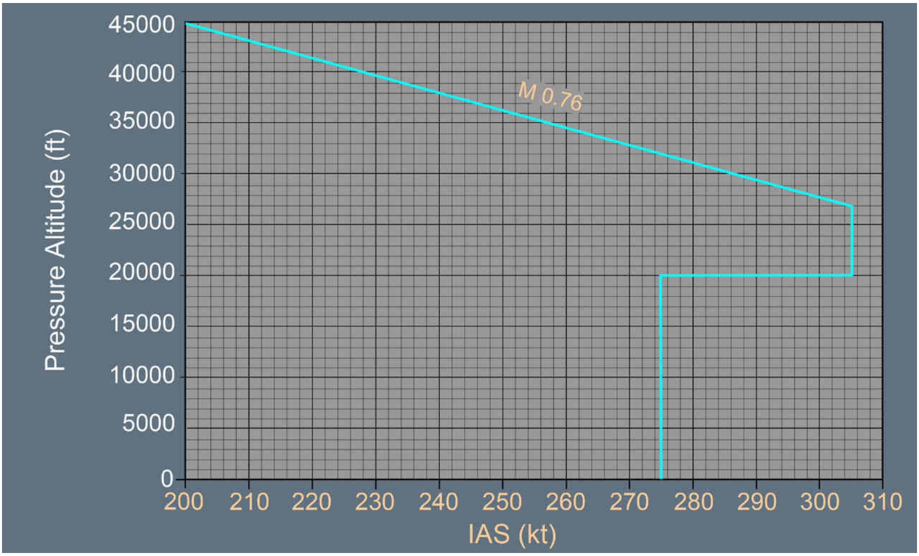
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Set the thrust to give the recommended speed (*Refer to PRO-ABN-MISC [QRH] Thrust Setting (N1) for Recommended Speed*). This thrust setting attempts to obtain, in stabilized conditions, the speed for turbulence penetration given in the graph below.
Only change thrust in case of an extreme variation in airspeed, and do not chase your Mach or airspeed.
A transient increase is preferable to a loss of speed, that decreases buffet margins and is difficult to recover.



6 Ident.: PRO-ABN-MISC-10-00002208.0007001 / 18 JAN 17
Applicable to: MSN 11531

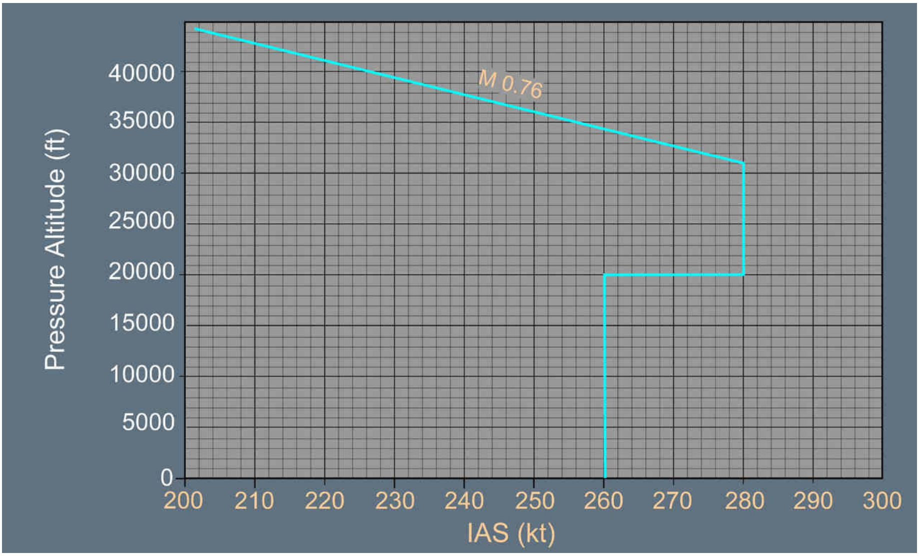
Set the thrust to give the recommended speed (*Refer to PRO-ABN-MISC [QRH] Thrust Setting (N1) for Recommended Speed*). This thrust setting attempts to obtain, in stabilized conditions, the speed for turbulence penetration given in the graph below.
Only change thrust in case of an extreme variation in airspeed, and do not chase your Mach or airspeed.
A transient increase is preferable to a loss of speed, that decreases buffet margins and is difficult to recover.



Ident.: PRO-ABN-MISC-10-00002208.0055001 / 16 NOV 15

7 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

Set the thrust to give the recommended speed (*Refer to PRO-ABN-MISC [QRH] Thrust Setting (N1) for Recommended Speed*). This thrust setting attempts to obtain, in stabilized conditions, the speed for turbulence penetration given in the graph below.
Only change thrust in case of an extreme variation in airspeed, and do not chase your Mach or airspeed.
A transient increase is preferable to a loss of speed, that decreases buffet margins and is difficult to recover.



8 Ident.: PRO-ABN-MISC-10-00007380.0108001 / 30 OCT 18

Applicable to: MSN 11531

SEVERE TURBULENCE													
N1 SETTING FOR RECOMMENDED TURBULENCE SPEED (%)													
FL	**SPD or Mach**	**WEIGHT (1 000 kg)**											
		54	**58**	**62**	**66**	**70**	**74**	**78**	**82**	**86**	**90**	**95**	**100**
390	.76	80.8	81.9	83.2	-	-	-	-	-	-	-	-	-
370	.76	79.5	80.3	81.2	82.3	-	-	-	-	-	-	-	-
350	.76	78.8	79.5	80.2	81.0	81.9	83.0	-	-	-	-	-	-
330	.76	78.6	79.2	79.7	80.4	81.1	81.8	82.7	83.7	-	-	-	-
310	.76	78.5	79.0	79.5	80.0	80.6	81.2	81.8	82.6	83.4	84.3	-	-
290	.76	78.6	79.0	79.4	79.8	80.3	80.8	81.3	81.9	82.5	83.2	84.1	-
270	305	78.4	78.8	79.2	79.5	79.9	80.4	80.8	81.3	81.8	82.3	83.1	83.9
250	305	76.8	77.2	77.6	78.0	78.4	78.8	79.2	79.7	80.2	80.7	81.4	82.2
200	305	73.1	73.4	73.7	74.0	74.4	74.8	75.2	75.7	76.2	76.7	77.4	78.1
150	275	63.9	64.4	64.9	65.5	66.1	66.7	67.4	68.2	68.9	69.7	70.8	72.0

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100	275	58.7	59.1	59.6	60.1	60.7	61.3	62.0	62.7	63.5	64.3	65.5	66.7
50	275	55.3	55.6	56.1	56.6	57.1	57.7	58.2	58.9	59.6	60.3	61.3	62.3

Ident.: PRO-ABN-MISC-10-00007380.0103001 / 06 JAN 16
Applicable to: MSN 08495-09324, 10949-11522, 11572-11597

SEVERE TURBULENCE

N1 SETTING FOR RECOMMENDED TURBULENCE SPEED (%)

FL	SPD or Mach	WEIGHT (1000 KG)								
		44	**48**	**52**	**56**	**60**	**64**	**68**	**72**	**79**
390	.76	77.5	78.4	79.4	80.4	81.7	-	-	-	-
370	.76	76.5	77.3	78.1	78.9	79.9	80.9	-	-	-
350	.76	76.1	76.7	77.3	78.1	78.8	79.6	80.5	81.6	-
330	.76	76.0	76.5	77.1	77.7	78.3	79.0	79.8	80.5	82.1
310	280	75.8	76.3	76.8	77.3	77.9	78.5	79.1	79.8	81.0
290	280	74.4	74.7	75.2	75.7	76.3	76.9	77.5	78.2	79.4
270	280	72.9	73.3	73.7	74.2	74.8	75.3	75.9	76.6	77.8
250	280	71.5	71.8	72.2	72.7	73.2	73.8	74.4	75.0	76.1
200	280	67.6	67.9	68.3	68.8	69.3	69.8	70.4	70.9	72.0
150	260	59.1	59.7	60.2	60.8	61.5	62.1	62.9	63.7	65.2
100	260	55.2	55.7	56.2	56.7	57.3	57.9	58.6	59.3	60.6
50	260	52.3	52.7	53.1	53.6	54.1	54.7	55.3	55.9	57.1

Ident.: PRO-ABN-MISC-10-00007380.0092001 / 01 FEB 19
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

SEVERE TURBULENCE

N1 SETTING FOR RECOMMENDED TURBULENCE SPEED (%)

FL	SPD or Mach	WEIGHT (1000 KG)										
		54	**58**	**62**	**66**	**70**	**74**	**78**	**82**	**86**	**90**	**94**
390	.76	83.3	84.1	-	-	-	-	-	-	-	-	-
370	.76	82.3	83.0	83.7	84.4	-	-	-	-	-	-	-
350	.76	81.8	82.4	83.0	83.6	84.3	-	-	-	-	-	-
330	.76	81.7	82.2	82.8	83.3	83.9	84.5	85.1	-	-	-	-
310	.76	81.7	82.1	82.6	83.1	83.6	84.2	84.7	85.2	85.8	-	-
290	.76	81.9	82.2	82.6	83.0	83.4	83.9	84.4	84.9	85.4	85.9	86.4
270	305	82.0	82.2	82.5	82.9	83.2	83.6	84.0	84.5	85.0	85.4	85.9

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SEVERE TURBULENCE												
N1 SETTING FOR RECOMMENDED TURBULENCE SPEED (%)												
FL	**SPD or Mach**	**WEIGHT (1000 KG)**										
		54	**58**	**62**	**66**	**70**	**74**	**78**	**82**	**86**	**90**	**94**
250	305	80.7	81.1	81.4	81.7	82.1	82.4	82.8	83.2	83.7	84.2	84.7
200	305	77.0	77.4	77.7	78.1	78.5	78.9	79.4	79.9	80.4	81.0	81.6
150	275	68.7	69.1	69.6	70.1	70.7	71.3	71.9	72.6	73.3	74.1	75.0
100	275	64.8	65.3	65.8	66.3	66.9	67.6	68.2	69.0	69.6	70.3	71.0
50	275	61.4	61.8	62.2	62.6	63.1	63.7	64.2	64.9	65.5	66.2	66.9

Ident.: PRO-ABN-MISC-10-00007380.0091001 / 01 FEB 19
Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165

SEVERE TURBULENCE												
N1 SETTING FOR RECOMMENDED TURBULENCE SPEED (%)												
FL	**SPD or Mach**	**WEIGHT (1000 KG)**										
		54	**58**	**62**	**66**	**70**	**74**	**78**	**82**	**86**	**90**	**94**
390	.76	78.9	79.9	-	-	-	-	-	-	-	-	-
370	.76	77.6	78.4	79.3	80.3	-	-	-	-	-	-	-
350	.76	76.9	77.6	78.3	79.2	80.0	-	-	-	-	-	-
330	.76	76.7	77.3	77.9	78.6	79.3	80.1	80.8	-	-	-	-
310	.76	76.6	77.1	77.7	78.3	78.8	79.5	80.1	80.8	81.5	-	-
290	.76	76.7	77.1	77.5	78.0	78.5	79.1	79.6	80.2	80.8	81.5	82.1
270	305	76.7	77.0	77.4	77.8	78.2	78.7	79.2	79.7	80.2	80.8	81.3
250	305	75.5	75.8	76.2	76.5	76.9	77.4	77.8	78.3	78.8	79.4	80.0
200	305	72.7	73.0	73.3	73.7	74.0	74.4	74.9	75.3	75.8	76.3	76.8
150	275	65.9	66.3	66.7	67.2	67.7	68.4	69.1	69.8	70.8	71.5	72.2
100	275	63.1	63.5	63.9	64.3	64.8	65.4	66.1	66.7	67.4	68.1	68.9
50	275	59.7	60.1	60.5	60.9	61.4	61.9	62.6	63.3	64.1	64.8	65.5

Ident.: PRO-ABN-MISC-10-00007380.0071001 / 14 DEC 12
Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

SEVERE TURBULENCE

N1 SETTING FOR RECOMMENDED TURBULENCE SPEED (%)

FL	SPD or Mach	WEIGHT (1000 KG)								
		44	48	52	56	60	64	68	72	76
390	.76	79.8	80.6	81.5	82.4	-	-	-	-	-
370	.76	79.0	79.6	80.3	81.1	82.0	82.8	-	-	-
350	.76	78.7	79.2	79.7	80.4	81.1	81.9	82.7	83.5	-
330	.76	78.8	79.3	79.7	80.2	80.8	81.4	82.0	82.8	83.5
310	275	78.0	78.5	79.0	79.6	80.1	80.6	81.2	81.8	82.5
290	275	76.5	76.9	77.4	78.0	78.5	79.2	79.9	80.5	81.2
270	275	75.0	75.5	75.9	76.4	77.0	77.6	78.3	79.0	79.9
250	275	73.4	73.9	74.4	74.9	75.5	76.2	76.8	77.5	78.2
200	275	69.8	70.2	70.6	71.1	71.6	72.1	72.7	73.3	74.0
150	250	61.8	62.4	63.0	63.8	64.6	65.4	66.4	67.4	68.4
100	250	58.2	58.8	59.4	60.0	60.7	61.5	62.5	63.5	64.5
50	250	54.2	54.8	55.4	56.1	56.8	57.7	58.8	60.0	60.8

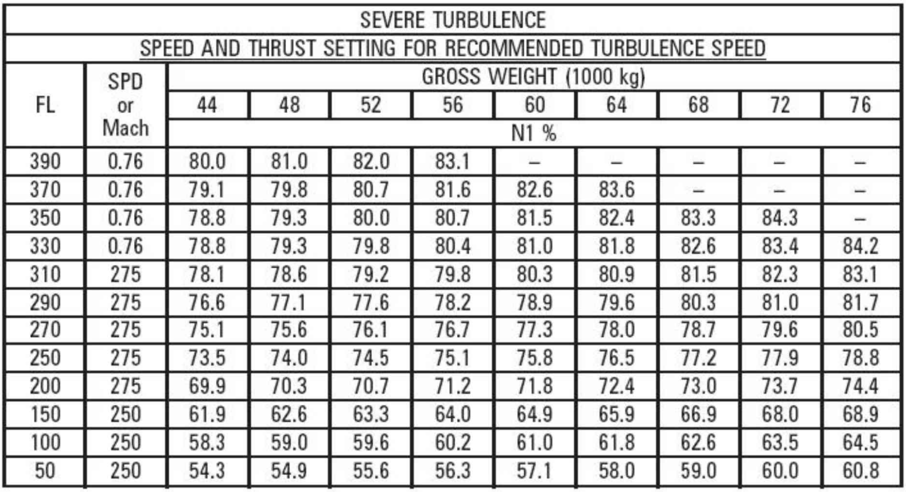
Ident.: PRO-ABN-MISC-10-00007380.0005001 / 21 NOV 11
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

SPEED AND THRUST SETTING FOR RECOMMENDED TURBULENCE SPEED

FL	SPD or Mach	GROSS WEIGHT (1000 kg)								
		44	48	52	56	60	64	68	72	76
		N1 %								
390	**0.76**	75.7	76.6	77.7	79.0	-	-	-	-	-
370	**0.76**	74.7	75.5	76.3	77.2	78.4	79.7	-	-	-
350	**0.76**	74.3	74.8	75.6	76.3	77.1	78.1	79.3	80.5	-
330	**0.76**	74.5	74.8	75.3	76.0	76.6	77.4	78.2	79.2	80.2
310	**275**	74.1	74.3	74.7	75.2	75.8	76.4	77.1	77.9	78.8
290	**275**	72.9	73.2	73.5	73.9	74.5	75.1	75.8	76.5	77.3
270	**275**	71.7	71.9	72.3	72.7	73.3	73.9	74.5	75.2	76.0
250	**275**	70.4	70.7	71.0	71.4	71.9	72.6	73.2	73.9	74.7
200	**275**	66.8	67.1	67.4	67.9	68.4	69.0	69.8	70.4	71.1
150	**250**	59.9	60.4	61.0	61.7	62.5	63.5	64.5	65.5	66.5
100	**250**	56.3	56.7	57.2	57.8	58.5	59.3	60.3	61.4	62.5
50	**250**	52.7	53.4	53.8	54.4	54.9	55.7	56.5	57.4	58.4

Ident.: PRO-ABN-MISC-10-00007380.0009001 / 16 NOV 11

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240



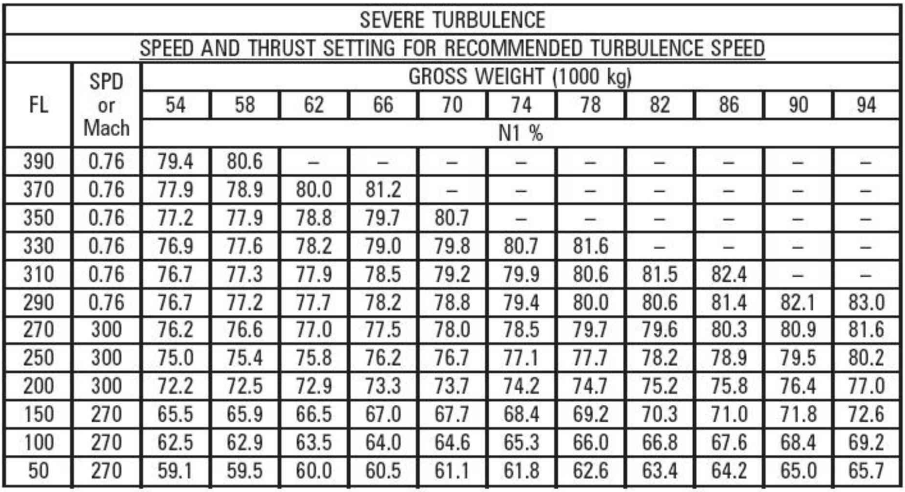
SEVERE TURBULENCE

SPEED AND THRUST SETTING FOR RECOMMENDED TURBULENCE SPEED

FL	SPD or Mach	GROSS WEIGHT (1000 kg)								
		44	48	52	56	60	64	68	72	76
		N1 %								
390	0.76	80.0	81.0	82.0	83.1	–	–	–	–	–
370	0.76	79.1	79.8	80.7	81.6	82.6	83.6	–	–	–
350	0.76	78.8	79.3	80.0	80.7	81.5	82.4	83.3	84.3	–
330	0.76	78.8	79.3	79.8	80.4	81.0	81.8	82.6	83.4	84.2
310	275	78.1	78.6	79.2	79.8	80.3	80.9	81.5	82.3	83.1
290	275	76.6	77.1	77.6	78.2	78.9	79.6	80.3	81.0	81.7
270	275	75.1	75.6	76.1	76.7	77.3	78.0	78.7	79.6	80.5
250	275	73.5	74.0	74.5	75.1	75.8	76.5	77.2	77.9	78.8
200	275	69.9	70.3	70.7	71.2	71.8	72.4	73.0	73.7	74.4
150	250	61.9	62.6	63.3	64.0	64.9	65.9	66.9	68.0	68.9
100	250	58.3	59.0	59.6	60.2	61.0	61.8	62.6	63.5	64.5
50	250	54.3	54.9	55.6	56.3	57.1	58.0	59.0	60.0	60.8

Ident.: PRO-ABN-MISC-10-00007380.0012001 / 17 MAR 11

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662



SEVERE TURBULENCE

SPEED AND THRUST SETTING FOR RECOMMENDED TURBULENCE SPEED

FL	SPD or Mach	GROSS WEIGHT (1000 kg)										
		54	58	62	66	70	74	78	82	86	90	94
		N1 %										
390	0.76	79.4	80.6	–	–	–	–	–	–	–	–	–
370	0.76	77.9	78.9	80.0	81.2	–	–	–	–	–	–	–
350	0.76	77.2	77.9	78.8	79.7	80.7	–	–	–	–	–	–
330	0.76	76.9	77.6	78.2	79.0	79.8	80.7	81.6	–	–	–	–
310	0.76	76.7	77.3	77.9	78.5	79.2	79.9	80.6	81.5	82.4	–	–
290	0.76	76.7	77.2	77.7	78.2	78.8	79.4	80.0	80.6	81.4	82.1	83.0
270	300	76.2	76.6	77.0	77.5	78.0	78.5	79.7	79.6	80.3	80.9	81.6
250	300	75.0	75.4	75.8	76.2	76.7	77.1	77.7	78.2	78.9	79.5	80.2
200	300	72.2	72.5	72.9	73.3	73.7	74.2	74.7	75.2	75.8	76.4	77.0
150	270	65.5	65.9	66.5	67.0	67.7	68.4	69.2	70.3	71.0	71.8	72.6
100	270	62.5	62.9	63.5	64.0	64.6	65.3	66.0	66.8	67.6	68.4	69.2
50	270	59.1	59.5	60.0	60.5	61.1	61.8	62.6	63.4	64.2	65.0	65.7

Ident.: PRO-ABN-MISC-10-00007380.0024001 / 17 MAR 11
Applicable to: MSN 02321, 02887

SEVERE TURBULENCE

SPEED AND THRUST SETTING FOR RECOMMENDED TURBULENCE SPEED

FL	SPD or Mach	GROSS WEIGHT (1000 kg)									
		40	44	48	52	56	60	64	68	72	76
		N1 %									
410	0.76	75.7	76.8	78.0	79.6	–	–	–	–	–	–
390	0.76	74.7	75.6	76.5	77.6	79.0	–	–	–	–	–
370	0.76	74.0	74.6	75.4	76.2	77.1	78.3	79.6	–	–	–
350	0.76	73.9	74.2	74.8	75.5	76.2	77.1	78.0	79.2	80.4	–
330	0.76	74.2	74.4	74.7	75.2	75.9	76.6	77.3	78.1	79.1	80.2
310	275	73.8	74.0	74.3	74.6	75.1	75.7	76.3	77.0	77.8	78.7
290	275	72.6	72.8	73.1	73.4	73.9	74.4	75.0	75.7	76.4	77.2
270	275	71.3	71.5	71.8	72.2	72.6	73.2	73.8	74.5	75.1	75.9
250	275	70.1	70.3	70.6	70.9	71.3	71.9	72.5	73.1	73.8	74.6
200	275	66.4	66.6	66.9	67.3	67.7	68.2	68.9	69.7	70.3	70.9
150	250	60.3	60.6	60.9	61.4	62.0	62.7	63.4	64.3	65.2	66.2
100	250	56.9	57.2	57.6	58.0	58.6	59.2	59.9	60.7	61.6	62.6
50	250	54.0	54.3	54.7	55.2	55.8	56.4	57.1	57.9	58.7	59.6

Ident.: PRO-ABN-MISC-10-00007380.0003001 / 17 MAR 11
Applicable to: MSN 03733, 04734-04756, 05005, 05097

SEVERE TURBULENCE

SPEED AND THRUST SETTING FOR RECOMMENDED TURBULENCE SPEED

FL	SPD or Mach	GROSS WEIGHT (1000 KG)									
		40	44	48	52	56	60	64	68	72	76
		N1 %									
390	0.76	78.9	79.7	80.6	81.7	82.8	–	–	–	–	–
370	0.76	78.2	78.8	79.5	80.3	81.3	82.3	83.4	–	–	–
350	0.76	77.8	78.5	79.0	79.6	80.4	81.2	82.2	83.1	84.1	–
330	0.76	77.8	78.3	79.0	79.5	80.1	80.7	81.4	82.2	83.1	84.0
310	280	77.8	78.2	78.7	79.3	79.9	80.4	80.9	81.6	82.3	83.1
290	280	76.3	76.7	77.2	77.7	78.3	78.9	79.6	80.3	81.0	81.6
270	280	74.8	75.2	75.8	76.3	76.8	77.4	78.0	78.8	79.5	80.4
250	280	73.3	73.7	74.2	74.7	75.3	75.9	76.5	77.2	77.9	78.7
200	280	69.8	70.2	70.5	70.9	71.4	71.9	72.5	73.1	73.8	74.5
150	255	62.2	62.6	63.2	63.8	64.6	65.4	66.3	67.2	68.2	69.0
100	255	58.8	59.3	59.7	60.2	60.8	61.5	62.2	63.0	63.8	64.8
50	255	54.9	55.3	55.8	56.4	57.1	57.8	58.6	59.4	60.3	61.1

Ident.: PRO-ABN-MISC-10-00007380.0058001 / 17 MAR 11
Applicable to: MSN 01801, 01826, 01837-01855, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

SEVERE TURBULENCE

SPEED AND THRUST SETTING FOR RECOMMENDED TURBULENCE SPEED

FL	SPD or Mach	GROSS WEIGHT (1000 KG)									
		40	44	48	52	56	60	64	68	72	76
		N1 %									
390	0.76	74.7	75.6	76.6	77.6	79.0	–	–	–	–	–
370	0.76	74.0	74.6	75.4	76.2	77.2	78.4	79.7	–	–	–
350	0.76	73.9	74.2	74.8	75.5	76.2	77.1	78.1	79.2	80.4	–
330	0.76	74.2	74.4	74.8	75.2	75.9	76.6	77.3	78.1	79.1	80.2
310	280	74.4	74.6	74.9	75.1	75.6	76.1	76.8	77.4	78.2	79.0
290	280	73.3	73.5	73.7	74.0	74.4	74.8	75.4	76.0	76.7	77.5
270	280	72.0	72.2	72.5	72.8	73.1	73.6	74.2	74.8	75.5	76.1
250	280	70.8	71.0	71.2	71.5	71.9	72.3	72.9	73.5	74.1	74.8
200	280	67.2	67.4	67.7	68.0	68.4	68.9	69.5	70.2	70.7	71.3
150	255	61.0	61.2	61.6	62.0	62.5	63.1	63.8	64.6	65.4	66.4
100	255	57.7	58.0	58.3	58.7	59.2	59.7	60.3	61.0	61.9	62.8
50	255	54.7	55.0	55.3	55.7	56.2	56.8	57.4	58.1	58.9	59.7

Ident.: PRO-ABN-MISC-10-00007386.0001001 / 09 JUN 15
Applicable to: ALL

If the flight crew flies the aircraft manually:
- The flight crew may expect large variations in altitude, but should not chase altitude.
- The flight crew should consider descending to or below OPT FL, in order to increase the margin to buffet.

Ident.: PRO-ABN-MISC-10-00007388.0002001 / 29 SEP 15
Applicable to: ALL

Configuration FULL, or 3, can be used.
CONF FULL provides better handling capability in turbulent conditions, however, CONF 3 provides more energy and less drag.

[QRH] TAILSTRIKE

Ident.: PRO-ABN-MISC-00012273.0001001 / 04 JUN 19
Applicable to: ALL

LAND ASAP

MAX FL: 100 / MEA-MORA

500 ft/min should be targeted for the climb, to minimize pressure changes, and for passenger and crew comfort. Similarly, the rate of descent must be limited to about 1 000 ft/min, except for the final approach that must be performed normally.
Notify the ATC of the aircraft's rate of climb.

RAM AIR.......... ON
PACK 1.......... OFF
PACK 2.......... OFF

[QRH] VOLCANIC ASH ENCOUNTER

Ident.: PRO-ABN-MISC-00012176.0005001 / 17 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

180° TURN..........INITIATE

The performance of a 180 ° turn will usually enable the aircraft to exit the volcanic ash clouds as quickly as possible, because volcanic ash clouds can extend for hundreds of nautical miles.

ATC..........NOTIFY

Note: *Electrostatic conditions may cause communication problems.*

A/THR..........OFF

This prevents the autothrust from generating thrust variations.

THRUST (IF CONDS PERMIT)..........REDUCE

Reduced thrust minimizes ash ingestion.
If altitude permits, reduce thrust to idle. This maximizes engine surge margin and lowers engine turbine temperature.

CREW OXY MASKS..........USE / 100 % / EMER
CABIN CREW..........NOTIFY
OXYGEN PASSENGER MASK MAN ON..........AS RQRD

Depending on contamination.

ENG ANTI ICE..........ON
WING ANTI ICE..........ON
ECON FLOW..........OFF

Maximum air bleed gives the engines additional stall margin.

CARGO ISOL VALVES ◁* ....OFF

Note: *To prevent a cargo smoke warning being triggered*

ENGINE PARAMETERS..........MONITOR

Monitor particularly EGT. If EGT exceeds limits, it may become necessary to consider a precautionary engine shutdown and engine restart in flight.

Note: *In the case of precautionary shutdown:*
- *restart when clear of the volcanic ash cloud*
- *Upon restart, the engine may accelerate very slowly. Do not misinterpret this as a failure to start*
- *Consider that the compressor and turbine blades have been eroded and avoid sudden changes in thrust. Fuel flow and EGT may increase.*

Continued on the following page

[QRH] VOLCANIC ASH ENCOUNTER (Cont'd)

AIRSPEED INDICATIONS....................MONITOR

If airspeed is unreliable or lost, Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items.

Note: If both engines flame out and speed indications are lost, Refer to ALL ENGINES FAILURE procedure to get the required pitch attitude for the optimum relight speed. In case of engine failure, switch off the wing anti ice before engine restart.

- **If visibility not sufficient for approach due to windshield damage:**

  CONSIDER AUTOLAND

  - **For approach, if AUTOLAND is not available:**

    CAB PRESS MODE SEL....................MAN
    MAN V/S CTL....................FULL UP

    Due to the increased noise level, pay particular attention to visual warnings.

    MAX SPEED: 200 kt
    PF SLIDING WINDOW....................OPEN

[QRH] VOLCANIC ASH ENCOUNTER

Ident.: PRO-ABN-MISC-00012176.0004001 / 17 MAR 17

10 **Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**

180° TURN.......................INITIATE

The performance of a 180 ° turn will usually enable the aircraft to exit the volcanic ash clouds as quickly as possible, because volcanic ash clouds can extend for hundreds of nautical miles.

ATC.......................NOTIFY

Note: Electrostatic conditions may cause communication problems.

A/THR.......................OFF

This prevents the autothrust from generating thrust variations.

THRUST (IF CONDS PERMIT).......................REDUCE

Reduced thrust minimizes ash ingestion.
If altitude permits, reduce thrust to idle. This maximizes engine surge margin and lowers engine turbine temperature.

CREW OXY MASKS.......................USE / 100 % / EMER
CABIN CREW.......................NOTIFY
OXYGEN PASSENGER MASK MAN ON.......................AS RQRD

Depending on contamination.

ENG ANTI ICE.......................ON
WING ANTI ICE.......................ON
PACK FLOW.......................HI

Maximum air bleed gives the engines additional stall margin.

CARGO ISOL VALVES ◁ ....OFF

Note: To prevent a cargo smoke warning being triggered

ENGINE PARAMETERS.......................MONITOR

Monitor particularly EGT. If EGT exceeds limits, it may become necessary to consider a precautionary engine shutdown and engine restart in flight.

Note: In the case of precautionary shutdown:
- *restart when clear of the volcanic ash cloud*
- *Upon restart, the engine may accelerate very slowly. Do not misinterpret this as a failure to start*

Continued on the following page

[QRH] VOLCANIC ASH ENCOUNTER (Cont'd)

- *Consider that the compressor and turbine blades have been eroded and avoid sudden changes in thrust. Fuel flow and EGT may increase.*

AIRSPEED INDICATIONS....................MONITOR

If airspeed is unreliable or lost, Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items.

Note: If both engines flame out and speed indications are lost, Refer to ALL ENGINES FAILURE procedure to get the required pitch attitude for the optimum relight speed. In case of engine failure, switch off the wing anti ice before engine restart.

- **If visibility not sufficient for approach due to windshield damage:**

  CONSIDER AUTOLAND

  - **For approach, if AUTOLAND is not available:**

    CAB PRESS MODE SEL....................MAN
    MAN V/S CTL....................FULL UP

    Due to the increased noise level, pay particular attention to visual warnings.

    MAX SPEED: 200 kt
    PF SLIDING WINDOW.................... OPEN

[QRH] VOLCANIC ASH ENCOUNTER

Ident.: PRO-ABN-MISC-00012176.0001001 / 29 MAY 20
Applicable to: MSN 01251, 02014, 06561

180° TURN..........INITIATE

The performance of a 180 ° turn will usually enable the aircraft to exit the volcanic ash clouds as quickly as possible, because volcanic ash clouds can extend for hundreds of nautical miles.

ATC..........NOTIFY

Note: *Electrostatic conditions may cause communication problems.*

A/THR..........OFF

This prevents the autothrust from generating thrust variations.

THRUST (IF CONDS PERMIT)..........REDUCE

Reduced thrust minimizes ash ingestion.
If altitude permits, reduce thrust to idle. This maximizes engine surge margin and lowers engine turbine temperature.

CREW OXY MASKS..........USE / 100 % / EMER
CABIN CREW..........NOTIFY
OXYGEN PASSENGER MASK MAN ON..........AS RQRD

Depending on contamination.

ENG ANTI ICE..........ON
WING ANTI ICE..........ON
PACK FLOW..........HI

Maximum air bleed gives the engines additional stall margin.

CARGO ISOL VALVES ⊲ ....OFF

Note: *To prevent a cargo smoke warning being triggered*

ENGINE PARAMETERS..........MONITOR

Monitor particularly EGT. If EGT exceeds limits, it may become necessary to consider a precautionary engine shutdown and engine restart in flight.

Note: *In the case of precautionary shutdown:*
- *restart when clear of the volcanic ash cloud*
- *Upon restart, the engine may accelerate very slowly. Do not misinterpret this as a failure to start*
- *Consider that the compressor and turbine blades have been eroded and avoid sudden changes in thrust. Fuel flow and EGT may increase.*

Continued on the following page

[QRH] VOLCANIC ASH ENCOUNTER (Cont'd)

AIRSPEED INDICATIONS..MONITOR

If airspeed is unreliable or lost, Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items.

Note: *If both engines flame out and speed indications are lost, refer to PRO / ABN / ENG / DUAL ENGINE FAILURE procedure to get the required pitch attitude for the optimum relight speed. In case of engine failure, switch off the wing anti ice before engine restart.*

- **If visibility not sufficient for approach due to windshield damage:**

  CONSIDER AUTOLAND

  - **For approach, if AUTOLAND is not available:**

    CAB PRESS MODE SEL..MAN
    MAN V/S CTL..FULL UP

    Due to the increased noise level, pay particular attention to visual warnings.

    MAX SPEED: 200 kt
    PF SLIDING WINDOW..OPEN

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 01143-01459, 02014, 02734

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP .... OFF
  A/THR .... OFF
  FD .... OFF

  PITCH/THRUST:
  Below THRUST RED ALT .... 15° / TOGA
  Above THRUST RED ALT and Below FL 100 .... 10° / CLB
  Above THRUST RED ALT and Above FL 100 .... 5° / CLB
  FLAPS (if CONF 0(1)(2)(3)) .... MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL) .... SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES .... CHECK RETRACTED
  L/G .... UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0019001 / 10 MAY 21

- **To level off:**

AP...OFF
A/THR...OFF
FD...OFF
SPEEDBRAKES.......................CHECK RETRACTED
PITCH/THRUST TABLE..........................APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST** % **N1** (Resultant speed)			
3	**7°**	**66%** (165 kt)	**62%** (155 kt)	**58%** (140 kt)	**54%** (130 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (175 kt)	**58%** (160 kt)	**54%** (145 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**58%** (175 kt)	**54%** (160 kt)
1	**6.5°**	**64%** (220 kt)	**60%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST** % **N1** (Resultant speed)			
4° at or below FL250	**100**	**64%** (265 kt)	**60%** (245 kt)	**56%** (225 kt)	**52%** (205 kt)
	200	**72%** (260 kt)	**68%** (245 kt)	**66%** (225 kt)	**60%** (205 kt)
3° above FL250	**300**	**78%** (280 kt)	**76%** (265 kt)	**74%** (245 kt)	**70%** (225 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**74%** (225 kt)
	400	/	/	**82%** (235 kt)	**78%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**
  AP....................OFF
  A/THR....................OFF
  FD....................OFF
  SPEEDBRAKES....................CHECK RETRACTED
  FLIGHT PATH....................KEEP STABILIZED

RESPECT STALL WARNING

Ident.: PRO-ABN-NAV-AM-00017725.0001001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT....................ON
ALL SPEED INDICATIONS....................CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- **If at least one ADR confirmed reliable:**
  RELIABLE AIR DATA....................USE
  UNRELIABLE ADR pb(s)....................OFF

- **If affected ADR(s) cannot be identified, or all ADRs affected:**
  KEEP ONE ADR ON
  TWO ADR pbs....................OFF
  This prevents the flight control laws from using two coherent but unreliable ADR data.
  ATC/XPDR....................ALT RPTG OFF
  FOR LANDING: USE FLAP 3
  APP SPD ....VLS +10 kt
  LDG DIST PROC....................APPLY
  - **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0019001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**10°** (255 kt)	**11°** (245 kt)	**13°** (220 kt)	**15°** (205 kt)
	100	**9°** (250 kt)	**10°** (240 kt)	**12°** (215 kt)	**14°** (200 kt)
	200	**6°** (265 kt)	**7°** (245 kt)	**8°** (230 kt)	**10°** (210 kt)
	300	**5°** (250 kt)	**5°** (250 kt)	**6°** (225 kt)	**7°** (205 kt)
	400	/	/	**4°** (225 kt)	**5°** (200 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° at or below FL250	**100**	**64%** (265 kt)	**60%** (245 kt)	**56%** (225 kt)	**52%** (205 kt)
	200	**72%** (260 kt)	**68%** (245 kt)	**66%** (225 kt)	**60%** (205 kt)
3° above FL250	**300**	**78%** (280 kt)	**76%** (265 kt)	**74%** (245 kt)	**70%** (225 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**74%** (225 kt)
	400	/	/	**82%** (235 kt)	**78%** (220 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	270 kt	255 kt	235 kt	215 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
WITH LANDING GEAR UP					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5.5°**	**60%** (240 kt)	**56%** (220 kt)	**52%** (200 kt)	**50%** (180 kt)
1	**6.5°**	**64%** (220 kt)	**60%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**58%** (175 kt)	**54%** (160 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (175 kt)	**58%** (160 kt)	**54%** (145 kt)
WITH LANDING GEAR DOWN					
3	**7°**	**70%** (165 kt)	**68%** (155 kt)	**62%** (145 kt)	**58%** (130 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**54%**	**52%**	**48%**	**44%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

AP.. OFF
A/THR... OFF
FD.. OFF

PITCH/THRUST:
Below THRUST RED ALT...15° / TOGA
Above THRUST RED ALT and Below FL 100.......................10° / CLB
Above THRUST RED ALT and Above FL 100.......................5° / CLB
FLAPS (if CONF 0(1)(2)(3)).................. MAINTAIN CURRENT CONF
FLAPS (if CONF FULL)................. SELECT CONF 3 AND MAINTAIN
SPEEDBRAKES...CHECK RETRACTED
L/G.. UP

When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0019001 / 10 MAY 21

- **To level off:**

AP.....OFF
A/THR.....OFF
FD.....OFF
SPEEDBRAKES.....CHECK RETRACTED
PITCH/THRUST TABLE.....APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7°**	**66%** (165 kt)	**62%** (155 kt)	**58%** (140 kt)	**54%** (130 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (175 kt)	**58%** (160 kt)	**54%** (145 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**58%** (175 kt)	**54%** (160 kt)
1	**6.5°**	**64%** (220 kt)	**60%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° at or below FL250	**100**	**64%** (265 kt)	**60%** (245 kt)	**56%** (225 kt)	**52%** (205 kt)
	200	**72%** (260 kt)	**68%** (245 kt)	**66%** (225 kt)	**60%** (205 kt)
3° above FL250	**300**	**78%** (280 kt)	**76%** (265 kt)	**74%** (245 kt)	**70%** (225 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**74%** (225 kt)
	400	/	/	**82%** (235 kt)	**78%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**
  AP....................OFF
  A/THR....................OFF
  FD....................OFF
  SPEEDBRAKES....................CHECK RETRACTED
  FLIGHT PATH.................... KEEP STABILIZED

RESPECT STALL WARNING

Ident.: PRO-ABN-NAV-AM-00017725.0004001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT....................ON
ALL SPEED INDICATIONS....................CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- ■ **If at least one ADR confirmed reliable:**
  RELIABLE AIR DATA....................USE
  UNRELIABLE ADR pb(s)....................OFF

- ■ **If affected ADR(s) cannot be identified, or all ADRs affected:**
  KEEP ONE ADR ON
  TWO ADR pbs....................OFF
  This prevents the flight control laws from using two coherent but unreliable ADR data.
  ATC/XPDR....................ALT RPTG OFF
  FOR LANDING: USE FLAP 3
  APP SPD ....VLS +15 kt
  LDG DIST PROC.................... APPLY
  - **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0019001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**10°** (255 kt)	**11°** (245 kt)	**13°** (220 kt)	**15°** (205 kt)
	100	**9°** (250 kt)	**10°** (240 kt)	**12°** (215 kt)	**14°** (200 kt)
	200	**6°** (265 kt)	**7°** (245 kt)	**8°** (230 kt)	**10°** (210 kt)
	300	**5°** (250 kt)	**5°** (250 kt)	**6°** (225 kt)	**7°** (205 kt)
	400	/	/	**4°** (225 kt)	**5°** (200 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° at or below FL250	**100**	**64%** (265 kt)	**60%** (245 kt)	**56%** (225 kt)	**52%** (205 kt)
	200	**72%** (260 kt)	**68%** (245 kt)	**66%** (225 kt)	**60%** (205 kt)
3° above FL250	**300**	**78%** (280 kt)	**76%** (265 kt)	**74%** (245 kt)	**70%** (225 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**74%** (225 kt)
	400	/	/	**82%** (235 kt)	**78%** (220 kt)

Note: If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	270 kt	255 kt	235 kt	215 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
WITH LANDING GEAR UP					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5.5°**	**60%** (240 kt)	**56%** (220 kt)	**52%** (200 kt)	**50%** (180 kt)
1	**6.5°**	**64%** (220 kt)	**60%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**58%** (175 kt)	**54%** (160 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (175 kt)	**58%** (160 kt)	**54%** (145 kt)
WITH LANDING GEAR DOWN					
3	**7°**	**70%** (165 kt)	**68%** (155 kt)	**62%** (145 kt)	**58%** (130 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**54%**	**52%**	**48%**	**44%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP...OFF
  A/THR..OFF
  FD...OFF

  PITCH/THRUST:
  Below THRUST RED ALT...15° / TOGA
  Above THRUST RED ALT and Below FL 100..............................10° / CLB
  Above THRUST RED ALT and Above FL 100...............................5° / CLB
  FLAPS (if CONF 0(1)(2)(3))...............................MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)..................................SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES..CHECK RETRACTED
  L/G..UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 03032, 03588-03595, 03710, 04000-04192

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP...OFF
  A/THR..OFF
  FD...OFF

  PITCH/THRUST:
  Below THRUST RED ALT...15° / TOGA
  Above THRUST RED ALT and Below FL 100..............................10° / CLB
  Above THRUST RED ALT and Above FL 100...............................5° / CLB
  FLAPS (if CONF 0(1)(2)(3))...............................MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)..................................SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES..CHECK RETRACTED
  L/G..UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0018001 / 10 MAY 21

- **To level off:**

AP..OFF
A/THR..OFF
FD..OFF
SPEEDBRAKES..CHECK RETRACTED
PITCH/THRUST TABLE..APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7.5°**	**64%** (160 kt)	**60%** (150 kt)	**56%** (140 kt)	**52%** (125 kt)
2	**5.5°**	**64%** (185 kt)	**60%** (175 kt)	**56%** (160 kt)	**52%** (145 kt)
1+F	**5°**	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
1	**6.5°**	**62%** (225 kt)	**58%** (210 kt)	**54%** (190 kt)	**50%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° **at or below** **FL250**	**100**	**64%** (260 kt)	**60%** (240 kt)	**56%** (220 kt)	**52%** (200 kt)
	200	**70%** (260 kt)	**68%** (240 kt)	**64%** (220 kt)	**60%** (200 kt)
3° **above** **FL250**	**300**	**80%** (275 kt)	**76%** (260 kt)	**72%** (240 kt)	**68%** (220 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**72%** (220 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**
  AP.....OFF
  A/THR.....OFF
  FD.....OFF
  SPEEDBRAKES.....CHECK RETRACTED
  FLIGHT PATH..... KEEP STABILIZED

RESPECT STALL WARNING

Ident.: PRO-ABN-NAV-AM-00017725.0001001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT.....ON
ALL SPEED INDICATIONS.....CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- ■ **If at least one ADR confirmed reliable:**
  RELIABLE AIR DATA.....USE
  UNRELIABLE ADR pb(s).....OFF

- ■ **If affected ADR(s) cannot be identified, or all ADRs affected:**
  KEEP ONE ADR ON
  TWO ADR pbs.....OFF
  This prevents the flight control laws from using two coherent but unreliable ADR data.
  ATC/XPDR.....ALT RPTG OFF
  FOR LANDING: USE FLAP 3
  APP SPD .....VLS +10 kt
  LDG DIST PROC..... APPLY
  - **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

1 Ident.: PRO-ABN-NAV-AM-00017726.0028001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**10°** (250 kt)	**11°** (240 kt)	**13°** (210 kt)	**15°** (195 kt)
	100	**8°** (265 kt)	**10°** (235 kt)	**12°** (210 kt)	**14°** (195 kt)
	200	**6°** (265 kt)	**7°** (245 kt)	**9°** (215 kt)	**11°** (195 kt)
	300	**5°** (250 kt)	**6°** (230 kt)	**7°** (210 kt)	**8°** (195 kt)
	400	/	/	**4°** (220 kt)	**5°** (200 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° at or below FL250	**100**	**64%** (260 kt)	**60%** (240 kt)	**56%** (220 kt)	**52%** (200 kt)
	200	**70%** (260 kt)	**68%** (240 kt)	**64%** (220 kt)	**60%** (200 kt)
3° above FL250	**300**	**80%** (275 kt)	**76%** (260 kt)	**72%** (240 kt)	**68%** (220 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**72%** (220 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	265 kt	250 kt	235 kt	215 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
WITH LANDING GEAR UP					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5°**	**60%** (245 kt)	**56%** (225 kt)	**52%** (205 kt)	**48%** (185 kt)
1	**6.5°**	**62%** (225 kt)	**58%** (210 kt)	**54%** (190 kt)	**50%** (175 kt)
1+F	**5°**	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
2	**5.5°**	**64%** (185 kt)	**60%** (175 kt)	**56%** (160 kt)	**52%** (145 kt)
WITH LANDING GEAR DOWN					
3	**7.5°**	**70%** (160 kt)	**66%** (150 kt)	**62%** (140 kt)	**56%** (125 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**50%**	**50%**	**46%**	**42%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 02887, 04389, 04563, 04773, 05345

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

AP.. OFF
A/THR.. OFF
FD.. OFF

PITCH/THRUST:
Below THRUST RED ALT..15° / TOGA
Above THRUST RED ALT and Below FL 100..10° / CLB
Above THRUST RED ALT and Above FL 100..5° / CLB
FLAPS (if CONF 0(1)(2)(3)).. MAINTAIN CURRENT CONF
FLAPS (if CONF FULL).. SELECT CONF 3 AND MAINTAIN
SPEEDBRAKES..CHECK RETRACTED
L/G.. UP

When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0018001 / 10 MAY 21

- **To level off:**
  AP....................OFF
  A/THR....................OFF
  FD....................OFF
  SPEEDBRAKES....................CHECK RETRACTED
  PITCH/THRUST TABLE....................APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7.5°**	**64%** (160 kt)	**60%** (150 kt)	**56%** (140 kt)	**52%** (125 kt)
2	**5.5°**	**64%** (185 kt)	**60%** (175 kt)	**56%** (160 kt)	**52%** (145 kt)
1+F	**5°**	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
1	**6.5°**	**62%** (225 kt)	**58%** (210 kt)	**54%** (190 kt)	**50%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° **at or below** **FL250**	**100**	**64%** (260 kt)	**60%** (240 kt)	**56%** (220 kt)	**52%** (200 kt)
	200	**70%** (260 kt)	**68%** (240 kt)	**64%** (220 kt)	**60%** (200 kt)
3° **above** **FL250**	**300**	**80%** (275 kt)	**76%** (260 kt)	**72%** (240 kt)	**68%** (220 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**72%** (220 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**

  AP.....OFF
  A/THR.....OFF
  FD.....OFF
  SPEEDBRAKES.....CHECK RETRACTED
  FLIGHT PATH.....KEEP STABILIZED

RESPECT STALL WARNING

Continued on the following page

Ident.: PRO-ABN-NAV-AM-00017725.0003001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT......ON
ALL SPEED INDICATIONS......CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- **If at least one ADR confirmed reliable:**

  RELIABLE AIR DATA......USE
  UNRELIABLE ADR pb(s)......OFF

- **If affected ADR(s) cannot be identified, or all ADRs affected:**

  - **When above FL 250:**

    KEEP ONE ADR ON
    TWO ADR pbs...... OFF

    This prevents the flight control laws from using two coherent but unreliable ADR data.

    ATC/XPDR......ALT RPTG OFF

    - **For flight continuation:** USE PITCH/THRUST TABLES

  - **When below FL 250, if speed still unreliable:**

    ALL ADR pbs...... OFF

    All ADRs must be switched OFF to replace the PFD's normal speed scale and altitude indication by the BUSS and GPS altitude indication.

    SPEED......FLY THE GREEN

    Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

    ATC/XPDR......ALT RPTG OFF
    NAV ADR 1+2+3 FAULT ECAM PROCEDURE......APPLY

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

2 Ident.: PRO-ABN-NAV-AM-00017726.0028001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	50	**10°** (250 kt)	**11°** (240 kt)	**13°** (210 kt)	**15°** (195 kt)
	100	**8°** (265 kt)	**10°** (235 kt)	**12°** (210 kt)	**14°** (195 kt)
	200	**6°** (265 kt)	**7°** (245 kt)	**9°** (215 kt)	**11°** (195 kt)
	300	**5°** (250 kt)	**6°** (230 kt)	**7°** (210 kt)	**8°** (195 kt)
	400	/	/	**4°** (220 kt)	**5°** (200 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° at or below FL250	100	**64%** (260 kt)	**60%** (240 kt)	**56%** (220 kt)	**52%** (200 kt)
	200	**70%** (260 kt)	**68%** (240 kt)	**64%** (220 kt)	**60%** (200 kt)
3° above FL250	300	**80%** (275 kt)	**76%** (260 kt)	**72%** (240 kt)	**68%** (220 kt)
	350	/	**80%** (255 kt)	**76%** (240 kt)	**72%** (220 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	265 kt	250 kt	235 kt	215 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
WITH LANDING GEAR UP					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5°**	**60%** (245 kt)	**56%** (225 kt)	**52%** (205 kt)	**48%** (185 kt)
1	**6.5°**	**62%** (225 kt)	**58%** (210 kt)	**54%** (190 kt)	**50%** (175 kt)
1+F	**5°**	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
2	**5.5°**	**64%** (185 kt)	**60%** (175 kt)	**56%** (160 kt)	**52%** (145 kt)
WITH LANDING GEAR DOWN					
3	**7.5°**	**70%** (160 kt)	**66%** (150 kt)	**62%** (140 kt)	**56%** (125 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**50%**	**50%**	**46%**	**42%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

● **If the safe conduct of the flight is impacted:**

AP.. OFF
A/THR.. OFF
FD.. OFF

PITCH/THRUST:
Below THRUST RED ALT...15° / TOGA
Above THRUST RED ALT and Below FL 100.. 10° / CLB
Above THRUST RED ALT and Above FL 100...5° / CLB
FLAPS (if CONF 0(1)(2)(3)).. MAINTAIN CURRENT CONF
FLAPS (if CONF FULL).. SELECT CONF 3 AND MAINTAIN
SPEEDBRAKES...CHECK RETRACTED
L/G.. UP

When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0040001 / 03 NOV 21

- **To level off:**

AP....................OFF
A/THR....................OFF
FD....................OFF
SPEEDBRAKES....................CHECK RETRACTED
PITCH/THRUST TABLE....................APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7°**	**68%** (165 kt)	**64%** (155 kt)	**60%** (140 kt)	**54%** (130 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (170 kt)	**58%** (160 kt)	**52%** (145 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
1	**6.5°**	**64%** (220 kt)	**62%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° at or below FL250	**100**	**66%** (265 kt)	**62%** (245 kt)	**60%** (225 kt)	**54%** (205 kt)
	200	**74%** (260 kt)	**70%** (245 kt)	**66%** (225 kt)	**62%** (205 kt)
3° above FL250	**300**	**82%** (280 kt)	**80%** (265 kt)	**76%** (245 kt)	**72%** (225 kt)
	350	**88%** (270 kt)	**84%** (255 kt)	**80%** (240 kt)	**76%** (220 kt)
	400	/	/	**86%** (235 kt)	**80%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**
  AP..OFF
  A/THR..OFF
  FD..OFF
  SPEEDBRAKES..CHECK RETRACTED
  FLIGHT PATH..KEEP STABILIZED

RESPECT STALL WARNING

Ident.: PRO-ABN-NAV-AM-00017725.0001001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT..ON
ALL SPEED INDICATIONS..CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- **If at least one ADR confirmed reliable:**
  RELIABLE AIR DATA..USE
  UNRELIABLE ADR pb(s)..OFF

- **If affected ADR(s) cannot be identified, or all ADRs affected:**
  KEEP ONE ADR ON
  TWO ADR pbs..OFF
  This prevents the flight control laws from using two coherent but unreliable ADR data.
  ATC/XPDR..ALT RPTG OFF
  FOR LANDING: USE FLAP 3
  APP SPD ....VLS +10 kt
  LDG DIST PROC..APPLY
  - **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0026001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**10°** (255 kt)	**11°** (245 kt)	**13°** (225 kt)	**16°** (195 kt)
	100	**9°** (250 kt)	**10°** (240 kt)	**12°** (215 kt)	**14°** (205 kt)
	200	**6°** (270 kt)	**7°** (250 kt)	**8°** (230 kt)	**10°** (205 kt)
	300	**5°** (255 kt)	**5°** (250 kt)	**6°** (225 kt)	**7°** (210 kt)
	400	/	/	**4°** (220 kt)	**5°** (200 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° **at or below** **FL250**	**100**	**66%** (265 kt)	**62%** (245 kt)	**60%** (225 kt)	**54%** (205 kt)
	200	**74%** (260 kt)	**70%** (245 kt)	**66%** (225 kt)	**62%** (205 kt)
3° **above** **FL250**	**300**	**82%** (280 kt)	**80%** (265 kt)	**76%** (245 kt)	**72%** (225 kt)
	350	**88%** (270 kt)	**84%** (255 kt)	**80%** (240 kt)	**76%** (220 kt)
	400	/	/	**86%** (235 kt)	**80%** (220 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	265 kt	245 kt	225 kt	200 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
WITH LANDING GEAR UP					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5.5°**	**62%** (245 kt)	**58%** (225 kt)	**54%** (205 kt)	**50%** (185 kt)
1	**6.5°**	**64%** (220 kt)	**62%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (170 kt)	**58%** (160 kt)	**52%** (145 kt)
WITH LANDING GEAR DOWN					
3	**7°**	**72%** (165 kt)	**68%** (155 kt)	**64%** (140 kt)	**60%** (130 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**56%**	**52%**	**50%**	**44%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 03222-03229, 03294, 03761-03816

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

● **If the safe conduct of the flight is impacted:**

AP.. OFF
A/THR.. OFF
FD.. OFF

PITCH/THRUST:
Below THRUST RED ALT..15° / TOGA
Above THRUST RED ALT and Below FL 100.. 10° / CLB
Above THRUST RED ALT and Above FL 100..5° / CLB
FLAPS (if CONF 0(1)(2)(3)).. MAINTAIN CURRENT CONF
FLAPS (if CONF FULL).. SELECT CONF 3 AND MAINTAIN
SPEEDBRAKES..CHECK RETRACTED
L/G.. UP

When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0020001 / 10 MAY 21

- **To level off:**

AP..OFF
A/THR..OFF
FD..OFF
SPEEDBRAKES..CHECK RETRACTED
PITCH/THRUST TABLE..APPLY

PITCH / THRUST FOR LEVEL OFF						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
SLATS / FLAPS EXTENDED						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
3	**5°**	**72%** (170 kt)	**70%** (165 kt)	**68%** (155 kt)	**64%** (145 kt)	**60%** (135 kt)
2	**4.5°**	**70%** (195 kt)	**68%** (190 kt)	**66%** (180 kt)	**62%** (165 kt)	**58%** (155 kt)
1+F	**4.5°**	**70%** (210 kt)	**68%** (205 kt)	**64%** (190 kt)	**60%** (180 kt)	**56%** (165 kt)
1	**7.5°**	**68%** (225 kt)	**66%** (220 kt)	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)
CLEAN						
PITCH	**FL**	**THRUST % N1** (Resultant speed)				
4° at or below FL250	**100**	**70%** (270 kt)	**68%** (265 kt)	**64%** (250 kt)	**62%** (230 kt)	**58%** (215 kt)
	200	**76%** (270 kt)	**74%** (260 kt)	**72%** (245 kt)	**68%** (230 kt)	**66%** (215 kt)
3° above FL250	**300**	**84%** (280 kt)	**82%** (275 kt)	**80%** (260 kt)	**76%** (245 kt)	**72%** (230 kt)
	350	/	/	**84%** (255 kt)	**80%** (240 kt)	**76%** (225 kt)
	400	/	/	/	/	**82%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**
  AP....................OFF
  A/THR....................OFF
  FD....................OFF
  SPEEDBRAKES....................CHECK RETRACTED
  FLIGHT PATH....................KEEP STABILIZED

RESPECT STALL WARNING

Ident.: PRO-ABN-NAV-AM-00017725.0001001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT....................ON
ALL SPEED INDICATIONS....................CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- **If at least one ADR confirmed reliable:**
  RELIABLE AIR DATA....................USE
  UNRELIABLE ADR pb(s)....................OFF

- **If affected ADR(s) cannot be identified, or all ADRs affected:**
  KEEP ONE ADR ON
  TWO ADR pbs....................OFF
  This prevents the flight control laws from using two coherent but unreliable ADR data.
  ATC/XPDR....................ALT RPTG OFF
  FOR LANDING: USE FLAP 3
  APP SPD ....VLS +10 kt
  LDG DIST PROC....................APPLY
  - **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0020001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION						
		95 t 210 000 lb	90 t 200 000 lb	80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb
THRUST	**FL**	**PITCH (Resultant speed)**				
CLB	**50**	**8°** (275 kt)	**9°** (260 kt)	**10°** (245 kt)	**12°** (225 kt)	**14°** (205 kt)
	100	**7°** (280 kt)	**8°** (260 kt)	**9°** (250 kt)	**10°** (235 kt)	**12°** (215 kt)
	200	**6°** (270 kt)	**6°** (265 kt)	**7°** (245 kt)	**8°** (230 kt)	**9°** (215 kt)
	300	**4°** (270 kt)	**5°** (250 kt)	**5°** (250 kt)	**6°** (225 kt)	**6°** (220 kt)
	400	/	/	/	/	**4°** (215 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION						
		95 t 210 000 lb	90 t 200 000 lb	80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb
PITCH	**FL**	**THRUST % N1 (Resultant speed)**				
4° at or below FL250	**100**	**70%** (270 kt)	**68%**(265 kt)	**64%** (250 kt)	**62%** (230 kt)	**58%** (215 kt)
	200	**76%** (270 kt)	**74%**(260 kt)	**72%** (245 kt)	**68%** (230 kt)	**66%** (215 kt)
3° above FL250	**300**	**84%** (280 kt)	**82%**(275 kt)	**80%** (260 kt)	**76%** (245 kt)	**72%** (230 kt)
	350	/	/	**84%** (255 kt)	**80%** (240 kt)	**76%** (225 kt)
	400	/	/	/	/	**82%** (220 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION						
		95 t 210 000 lb	90 t 200 000 lb	80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb
THRUST	**PITCH**	**Resultant speed**				
IDLE	**1°**	275 kt	270 kt	255 kt	235 kt	220 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT						
		95 t 210 000 lb	90 t 200 000 lb	80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb
WITH LANDING GEAR UP						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
0	**5°**	**64%** (255 kt)	**64%** (245 kt)	**60%** (230 kt)	**58%** (215 kt)	**54%** (200 kt)
1	**7.5°**	**68%** (255 kt)	**66%** (220 kt)	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)
1+F	**4.5°**	**70%** (210 kt)	**68%** (205 kt)	**64%** (190 kt)	**60%** (180 kt)	**56%** (165 kt)
2	**4.5°**	**70%** (195 kt)	**68%** (190 kt)	**66%** (180 kt)	**62%** (165 kt)	**58%** (155 kt)
WITH LANDING GEAR DOWN						
3	**5°**	**76%** (170 kt)	**76%** (165 kt)	**72%** (155 kt)	**68%** (145 kt)	**62%** (135 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED						
		95 t 210 000 lb	90 t 200 000 lb	80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb
CONF	**PITCH**	**THRUST (% N1)**				
3	**1°**	**60%**	**58%**	**56%**	**52%**	**50%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 03733

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

AP	OFF
A/THR	OFF
FD	OFF

PITCH/THRUST:

Below THRUST RED ALT	15° / TOGA
Above THRUST RED ALT and Below FL 100	10° / CLB
Above THRUST RED ALT and Above FL 100	5° / CLB
FLAPS (if CONF 0(1)(2)(3))	MAINTAIN CURRENT CONF
FLAPS (if CONF FULL)	SELECT CONF 3 AND MAINTAIN
SPEEDBRAKES	CHECK RETRACTED
L/G	UP

When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0006001 / 10 MAY 21

- **To level off:**

AP..OFF
A/THR..OFF
FD..OFF
SPEEDBRAKES..CHECK RETRACTED
PITCH/THRUST TABLE..APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7.5°**	**66%** (155 kt)	**62%** (145 kt)	**58%** (135 kt)	**54%** (125 kt)
2	**5.5°**	**64%** (185 kt)	**62%** (170 kt)	**58%** (160 kt)	**52%** (145 kt)
1+F	**5°**	**64%** (205 kt)	**62%** (190 kt)	**58%** (175 kt)	**52%** (160 kt)
1	**6.5°**	**64%** (220 kt)	**60%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° **at or below** **FL250**	**100**	**66%** (260 kt)	**62%** (240 kt)	**60%** (220 kt)	**54%** (200 kt)
	200	**74%** (255 kt)	**70%** (240 kt)	**66%** (220 kt)	**62%** (200 kt)
3° **above** **FL250**	**300**	**82%** (275 kt)	**78%** (260 kt)	**76%** (240 kt)	**70%** (220 kt)
	350	**88%** (265 kt)	**84%** (255 kt)	**80%** (240 kt)	**74%** (220 kt)
	400	/	/	**86%** (230 kt)	**80%** (215 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**
  AP.....OFF
  A/THR.....OFF
  FD.....OFF
  SPEEDBRAKES.....CHECK RETRACTED
  FLIGHT PATH..... KEEP STABILIZED

RESPECT STALL WARNING

Ident.: PRO-ABN-NAV-AM-00017725.0001001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT.....ON
ALL SPEED INDICATIONS.....CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- **If at least one ADR confirmed reliable:**
  RELIABLE AIR DATA.....USE
  UNRELIABLE ADR pb(s).....OFF

- **If affected ADR(s) cannot be identified, or all ADRs affected:**
  KEEP ONE ADR ON
  TWO ADR pbs.....OFF
  This prevents the flight control laws from using two coherent but unreliable ADR data.
  ATC/XPDR.....ALT RPTG OFF
  FOR LANDING: USE FLAP 3
  APP SPD .....VLS +10 kt
  LDG DIST PROC..... APPLY
  - **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0006001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**10°** (250 kt)	**11°** (240 kt)	**13°** (225 kt)	**16°** (190 kt)
	100	**9°** (250 kt)	**10°** (235 kt)	**12°** (215 kt)	**14°** (200 kt)
	200	**6°** (265 kt)	**7°** (245 kt)	**8°** (230 kt)	**10°** (205 kt)
	300	**5°** (250 kt)	**5°** (225 kt)	**6°** (225 kt)	**7°** (205 kt)
	400	/	/	**4°** (220 kt)	**5°** (195 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° at or below FL250	**100**	**66%** (260 kt)	**62%** (240 kt)	**60%** (220 kt)	**54%** (200 kt)
	200	**74%** (255 kt)	**70%** (240 kt)	**66%** (220 kt)	**62%** (200 kt)
3° above FL250	**300**	**82%** (275 kt)	**78%** (260 kt)	**76%** (240 kt)	**70%** (220 kt)
	350	**88%** (265 kt)	**84%** (255 kt)	**80%** (240 kt)	**74%** (220 kt)
	400	/	/	**86%** (230 kt)	**80%** (215 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	260 kt	245 kt	225 kt	205 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
WITH LANDING GEAR UP					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5°**	**62%** (245 kt)	**58%** (225 kt)	**54%** (205 kt)	**48%** (185 kt)
1	**6.5°**	**64%** (220 kt)	**60%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
1+F	**5°**	**64%** (205 kt)	**62%** (190 kt)	**58%** (175 kt)	**52%** (160 kt)
2	**5.5°**	**64%** (185 kt)	**62%** (170 kt)	**58%** (160 kt)	**52%** (145 kt)
WITH LANDING GEAR DOWN					
3	**7.5°**	**70%** (160 kt)	**68%** (150 kt)	**62%** (135 kt)	**58%** (125 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**54%**	**52%**	**48%**	**44%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP..OFF
  A/THR..OFF
  FD..OFF

  PITCH/THRUST:
  Below THRUST RED ALT..15° / TOGA
  Above THRUST RED ALT and Below FL 100..10° / CLB
  Above THRUST RED ALT and Above FL 100..5° / CLB
  FLAPS (if CONF 0(1)(2)(3))..MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)..SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES..CHECK RETRACTED
  L/G..UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0020001 / 10 MAY 21

- **To level off:**

AP..OFF
A/THR..OFF
FD..OFF
SPEEDBRAKES......................................CHECK RETRACTED
PITCH/THRUST TABLE......................................APPLY

PITCH / THRUST FOR LEVEL OFF						
		95 t **210 000 lb**	**90 t** **200 000 lb**	**80 t** **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**
SLATS / FLAPS EXTENDED						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
3	**5°**	**72%** (170 kt)	**70%** (165 kt)	**68%** (155 kt)	**64%** (145 kt)	**60%** (135 kt)
2	**4.5°**	**70%** (195 kt)	**68%** (190 kt)	**66%** (180 kt)	**62%** (165 kt)	**58%** (155 kt)
1+F	**4.5°**	**70%** (210 kt)	**68%** (205 kt)	**64%** (190 kt)	**60%** (180 kt)	**56%** (165 kt)
1	**7.5°**	**68%** (225 kt)	**66%** (220 kt)	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)
CLEAN						
PITCH	**FL**	**THRUST % N1** (Resultant speed)				
4° **at or below FL250**	**100**	**70%** (270 kt)	**68%** (265 kt)	**64%** (250 kt)	**62%** (230 kt)	**58%** (215 kt)
	200	**76%** (270 kt)	**74%** (260 kt)	**72%** (245 kt)	**68%** (230 kt)	**66%** (215 kt)
3° **above FL250**	**300**	**84%** (280 kt)	**82%** (275 kt)	**80%** (260 kt)	**76%** (245 kt)	**72%** (230 kt)
	350	/	/	**84%** (255 kt)	**80%** (240 kt)	**76%** (225 kt)
	400	/	/	/	/	**82%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**

  AP..........OFF
  A/THR..........OFF
  FD..........OFF
  SPEEDBRAKES..........CHECK RETRACTED
  FLIGHT PATH..........KEEP STABILIZED

RESPECT STALL WARNING

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017725.0003001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT....ON
ALL SPEED INDICATIONS....CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

- **If at least one ADR confirmed reliable:**
  RELIABLE AIR DATA....USE
  UNRELIABLE ADR pb(s)....OFF
- **If affected ADR(s) cannot be identified, or all ADRs affected:**
  - **When above FL 250:**
    KEEP ONE ADR ON
    TWO ADR pbs.... OFF
    This prevents the flight control laws from using two coherent but unreliable ADR data.
    ATC/XPDR....ALT RPTG OFF
    - **For flight continuation:** USE PITCH/THRUST TABLES
  - **When below FL 250, if speed still unreliable:**
    ALL ADR pbs.... OFF
    All ADRs must be switched OFF to replace the PFD's normal speed scale and altitude indication by the BUSS and GPS altitude indication.
    SPEED....FLY THE GREEN

    Note: If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.

    ATC/XPDR....ALT RPTG OFF
    NAV ADR 1+2+3 FAULT ECAM PROCEDURE....APPLY

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0020001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**				
CLB	**50**	**8°** (275 kt)	**9°** (260 kt)	**10°** (245 kt)	**12°** (225 kt)	**14°** (205 kt)
	100	**7°** (280 kt)	**8°** (260 kt)	**9°** (250 kt)	**10°** (235 kt)	**12°** (215 kt)
	200	**6°** (270 kt)	**6°** (265 kt)	**7°** (245 kt)	**8°** (230 kt)	**9°** (215 kt)
	300	**4°** (270 kt)	**5°** (250 kt)	**5°** (250 kt)	**6°** (225 kt)	**6°** (220 kt)
	400	/	/	/	/	**4°** (215 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**				
4° at or below FL250	**100**	**70%** (270 kt)	**68%**(265 kt)	**64%** (250 kt)	**62%** (230 kt)	**58%** (215 kt)
	200	**76%** (270 kt)	**74%**(260 kt)	**72%** (245 kt)	**68%** (230 kt)	**66%** (215 kt)
3° above FL250	**300**	**84%** (280 kt)	**82%**(275 kt)	**80%** (260 kt)	**76%** (245 kt)	**72%** (230 kt)
	350	/	/	**84%** (255 kt)	**80%** (240 kt)	**76%** (225 kt)
	400	/	/	/	/	**82%** (220 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
THRUST	**PITCH**	**Resultant speed**				
IDLE	**1°**	275 kt	270 kt	255 kt	235 kt	220 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
WITH LANDING GEAR UP						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
0	**5°**	**64%** (255 kt)	**64%** (245 kt)	**60%** (230 kt)	**58%** (215 kt)	**54%** (200 kt)
1	**7.5°**	**68%** (255 kt)	**66%** (220 kt)	**62%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)
1+F	**4.5°**	**70%** (210 kt)	**68%** (205 kt)	**64%** (190 kt)	**60%** (180 kt)	**56%** (165 kt)
2	**4.5°**	**70%** (195 kt)	**68%** (190 kt)	**66%** (180 kt)	**62%** (165 kt)	**58%** (155 kt)
WITH LANDING GEAR DOWN						
3	**5°**	**76%** (170 kt)	**76%** (165 kt)	**72%** (155 kt)	**68%** (145 kt)	**62%** (135 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
CONF	**PITCH**	**THRUST (% N1)**				
3	**1°**	**60%**	**58%**	**56%**	**52%**	**50%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP.. OFF
  A/THR.. OFF
  FD.. OFF

  PITCH/THRUST:
  Below THRUST RED ALT..15° / TOGA
  Above THRUST RED ALT and Below FL 100.. 10° / CLB
  Above THRUST RED ALT and Above FL 100..5° / CLB
  FLAPS (if CONF 0(1)(2)(3)).. MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL).. SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES..CHECK RETRACTED
  L/G.. UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0040001 / 03 NOV 21

- **To level off:**

AP....................OFF
A/THR....................OFF
FD....................OFF
SPEEDBRAKES....................CHECK RETRACTED
PITCH/THRUST TABLE....................APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7°**	**68%** (165 kt)	**64%** (155 kt)	**60%** (140 kt)	**54%** (130 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (170 kt)	**58%** (160 kt)	**52%** (145 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
1	**6.5°**	**64%** (220 kt)	**62%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° at or below FL250	**100**	**66%** (265 kt)	**62%** (245 kt)	**60%** (225 kt)	**54%** (205 kt)
	200	**74%** (260 kt)	**70%** (245 kt)	**66%** (225 kt)	**62%** (205 kt)
3° above FL250	**300**	**82%** (280 kt)	**80%** (265 kt)	**76%** (245 kt)	**72%** (225 kt)
	350	**88%** (270 kt)	**84%** (255 kt)	**80%** (240 kt)	**76%** (220 kt)
	400	/	/	**86%** (235 kt)	**80%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**

  AP....................OFF
  A/THR....................OFF
  FD....................OFF
  SPEEDBRAKES....................CHECK RETRACTED
  FLIGHT PATH....................KEEP STABILIZED

RESPECT STALL WARNING

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017725.0003001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT....................ON
ALL SPEED INDICATIONS....................CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

■ **If at least one ADR confirmed reliable:**

RELIABLE AIR DATA....................USE
UNRELIABLE ADR pb(s)....................OFF

■ **If affected ADR(s) cannot be identified, or all ADRs affected:**

● **When above FL 250:**

KEEP ONE ADR ON
TWO ADR pbs....................OFF

This prevents the flight control laws from using two coherent but unreliable ADR data.

ATC/XPDR....................ALT RPTG OFF

● **For flight continuation:** USE PITCH/THRUST TABLES

● **When below FL 250, if speed still unreliable:**

ALL ADR pbs....................OFF

All ADRs must be switched OFF to replace the PFD's normal speed scale and altitude indication by the BUSS and GPS altitude indication.

SPEED....................FLY THE GREEN

Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

ATC/XPDR....................ALT RPTG OFF
NAV ADR 1+2+3 FAULT ECAM PROCEDURE....................APPLY

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0026001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**10°** (255 kt)	**11°** (245 kt)	**13°** (225 kt)	**16°** (195 kt)
	100	**9°** (250 kt)	**10°** (240 kt)	**12°** (215 kt)	**14°** (205 kt)
	200	**6°** (270 kt)	**7°** (250 kt)	**8°** (230 kt)	**10°** (205 kt)
	300	**5°** (255 kt)	**5°** (250 kt)	**6°** (225 kt)	**7°** (210 kt)
	400	/	/	**4°** (220 kt)	**5°** (200 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° at or below FL250	**100**	**66%** (265 kt)	**62%** (245 kt)	**60%** (225 kt)	**54%** (205 kt)
	200	**74%** (260 kt)	**70%** (245 kt)	**66%** (225 kt)	**62%** (205 kt)
3° above FL250	**300**	**82%** (280 kt)	**80%** (265 kt)	**76%** (245 kt)	**72%** (225 kt)
	350	**88%** (270 kt)	**84%** (255 kt)	**80%** (240 kt)	**76%** (220 kt)
	400	/	/	**86%** (235 kt)	**80%** (220 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	265 kt	245 kt	225 kt	200 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
WITH LANDING GEAR UP					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5.5°**	**62%** (245 kt)	**58%** (225 kt)	**54%** (205 kt)	**50%** (185 kt)
1	**6.5°**	**64%** (220 kt)	**62%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
1+F	**5°**	**64%** (200 kt)	**62%** (190 kt)	**56%** (175 kt)	**52%** (160 kt)
2	**5.5°**	**66%** (185 kt)	**62%** (170 kt)	**58%** (160 kt)	**52%** (145 kt)
WITH LANDING GEAR DOWN					
3	**7°**	**72%** (165 kt)	**68%** (155 kt)	**64%** (140 kt)	**60%** (130 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**56%**	**52%**	**50%**	**44%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 04734-04756, 05005, 05097

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP....................OFF
  A/THR....................OFF
  FD....................OFF

  PITCH/THRUST:
  Below THRUST RED ALT....................15° / TOGA
  Above THRUST RED ALT and Below FL 100....................10° / CLB
  Above THRUST RED ALT and Above FL 100....................5° / CLB
  FLAPS (if CONF 0(1)(2)(3))....................MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)....................SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES....................CHECK RETRACTED
  L/G....................UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0006001 / 10 MAY 21

- **To level off:**

AP......OFF
A/THR......OFF
FD......OFF
SPEEDBRAKES......CHECK RETRACTED
PITCH/THRUST TABLE......APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7.5°**	**66%** (155 kt)	**62%** (145 kt)	**58%** (135 kt)	**54%** (125 kt)
2	**5.5°**	**64%** (185 kt)	**62%** (170 kt)	**58%** (160 kt)	**52%** (145 kt)
1+F	**5°**	**64%** (205 kt)	**62%** (190 kt)	**58%** (175 kt)	**52%** (160 kt)
1	**6.5°**	**64%** (220 kt)	**60%** (205 kt)	**56%** (190 kt)	**52%** (175 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° at or below FL250	**100**	**66%** (260 kt)	**62%** (240 kt)	**60%** (220 kt)	**54%** (200 kt)
	200	**74%** (255 kt)	**70%** (240 kt)	**66%** (220 kt)	**62%** (200 kt)
3° above FL250	**300**	**82%** (275 kt)	**78%** (260 kt)	**76%** (240 kt)	**70%** (220 kt)
	350	**88%** (265 kt)	**84%** (255 kt)	**80%** (240 kt)	**74%** (220 kt)
	400	/	/	**86%** (230 kt)	**80%** (215 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**
  AP...OFF
  A/THR...OFF
  FD...OFF
  SPEEDBRAKES...CHECK RETRACTED
  FLIGHT PATH...KEEP STABILIZED

RESPECT STALL WARNING

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017725.0003001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT....................ON
ALL SPEED INDICATIONS....................CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

■ **If at least one ADR confirmed reliable:**

RELIABLE AIR DATA....................USE
UNRELIABLE ADR pb(s)....................OFF

■ **If affected ADR(s) cannot be identified, or all ADRs affected:**

- **When above FL 250:**

  KEEP ONE ADR ON
  TWO ADR pbs.................... OFF

  This prevents the flight control laws from using two coherent but unreliable ADR data.

  ATC/XPDR....................ALT RPTG OFF

  - **For flight continuation:** USE PITCH/THRUST TABLES

- **When below FL 250, if speed still unreliable:**

  ALL ADR pbs.................... OFF

  All ADRs must be switched OFF to replace the PFD's normal speed scale and altitude indication by the BUSS and GPS altitude indication.

  SPEED....................FLY THE GREEN

  Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

  ATC/XPDR....................ALT RPTG OFF
  NAV ADR 1+2+3 FAULT ECAM PROCEDURE....................APPLY

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0006001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**10°** (250 kt)	**11°** (240 kt)	**13°** (225 kt)	**16°** (190 kt)
	100	**9°** (250 kt)	**10°** (235 kt)	**12°** (215 kt)	**14°** (200 kt)
	200	**6°** (265 kt)	**7°** (245 kt)	**8°** (230 kt)	**10°** (205 kt)
	300	**5°** (250 kt)	**5°** (225 kt)	**6°** (225 kt)	**7°** (205 kt)
	400	/	/	**4°** (220 kt)	**5°** (195 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° **at or below** **FL250**	**100**	**66%** (260 kt)	**62%** (240 kt)	**60%** (220 kt)	**54%** (200 kt)
	200	**74%** (255 kt)	**70%** (240 kt)	**66%** (220 kt)	**62%** (200 kt)
3° **above** **FL250**	**300**	**82%** (275 kt)	**78%** (260 kt)	**76%** (240 kt)	**70%** (220 kt)
	350	**88%** (265 kt)	**84%** (255 kt)	**80%** (240 kt)	**74%** (220 kt)
	400	/	/	**86%** (230 kt)	**80%** (215 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
THRUST	PITCH	Resultant speed			
IDLE	1°	260 kt	245 kt	225 kt	205 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
WITH LANDING GEAR UP					
CONF	PITCH	THRUST % N1 (Resultant speed)			
0	5°	62% (245 kt)	58% (225 kt)	54% (205 kt)	48% (185 kt)
1	6.5°	64% (220 kt)	60% (205 kt)	56% (190 kt)	52% (175 kt)
1+F	5°	64% (205 kt)	62% (190 kt)	58% (175 kt)	52% (160 kt)
2	5.5°	64% (185 kt)	62% (170 kt)	58% (160 kt)	52% (145 kt)
WITH LANDING GEAR DOWN					
3	7.5°	70% (160 kt)	68% (150 kt)	62% (135 kt)	58% (125 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
CONF	PITCH	THRUST (% N1)			
3	4°	54%	52%	48%	44%

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP..OFF
  A/THR..OFF
  FD..OFF

  PITCH/THRUST:
  Below THRUST RED ALT..........................15° / TOGA
  Above THRUST RED ALT and Below FL 100..........10° / CLB
  Above THRUST RED ALT and Above FL 100............5° / CLB
  FLAPS (if CONF 0(1)(2)(3))..........MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)..........SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES..........................CHECK RETRACTED
  L/G..UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017722.0011001 / 10 NOV 22

- **To level off:**

AP..........OFF
A/THR..........OFF
FD..........OFF
SPEEDBRAKES..........CHECK RETRACTED
PITCH/THRUST TABLE..........APPLY

PITCH / THRUST FOR LEVEL OFF						
		95 t 210 000 lb	90 t 200 000 lb	80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb
SLATS / FLAPS EXTENDED						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
3	**5°**	**74%** (170 kt)	**72%** (165 kt)	**68%** (155 kt)	**64%** (145 kt)	**60%** (135 kt)
2	**4.5°**	**70%** (195 kt)	**70%** (190 kt)	**66%** (175 kt)	**62%** (165 kt)	**58%** (155 kt)
1+F	**4.5°**	**70%** (205 kt)	**68%** (200 kt)	**64%** (190 kt)	**62%** (175 kt)	**58%** (165 kt)
1	**7.5°**	**68%** (220 kt)	**66%** (215 kt)	**64%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)
CLEAN						
PITCH	**FL**	**THRUST % N1** (Resultant speed)				
4° **at or below** **FL250**	**100**	**70%** (270 kt)	**70%** (265 kt)	**66%** (250 kt)	**62%** (230 kt)	**60%** (215 kt)
	200	**78%** (270 kt)	**78%** (260 kt)	**74%** (245 kt)	**70%** (230 kt)	**66%** (215 kt)
3° **above** **FL250**	**300**	**86%** (280 kt)	**86%** (275 kt)	**82%** (260 kt)	**78%** (245 kt)	**76%** (230 kt)
	350	/	**94%** (265 kt)	**88%** (255 kt)	**84%** (240 kt)	**80%** (225 kt)
	400	/	/	/	/	**86%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017724.0002001 / 17 MAR 17

- **When flight path is stabilized:**

  AP....................OFF
  A/THR....................OFF
  FD....................OFF
  SPEEDBRAKES....................CHECK RETRACTED
  FLIGHT PATH.................... KEEP STABILIZED

RESPECT STALL WARNING

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017725.0003001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT.....ON
ALL SPEED INDICATIONS.....CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

■ **If at least one ADR confirmed reliable:**

RELIABLE AIR DATA.....USE
UNRELIABLE ADR pb(s).....OFF

■ **If affected ADR(s) cannot be identified, or all ADRs affected:**

● **When above FL 250:**

KEEP ONE ADR ON
TWO ADR pbs.....OFF

This prevents the flight control laws from using two coherent but unreliable ADR data.

ATC/XPDR.....ALT RPTG OFF

● **For flight continuation:** USE PITCH/THRUST TABLES

● **When below FL 250, if speed still unreliable:**

ALL ADR pbs.....OFF

All ADRs must be switched OFF to replace the PFD's normal speed scale and altitude indication by the BUSS and GPS altitude indication.

SPEED.....FLY THE GREEN

Note: If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.

ATC/XPDR.....ALT RPTG OFF
NAV ADR 1+2+3 FAULT ECAM PROCEDURE.....APPLY

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017726.0011001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION						
		95 t **210 000 lb**	**90 t** **200 000 lb**	**80 t** **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**				
CLB	**50**	**9°** (265 kt)	**9°** (270 kt)	**11°** (240 kt)	**12°** (230 kt)	**14°** (215 kt)
	100	**8°** (265 kt)	**8°** (265 kt)	**9°** (250 kt)	**10°** (235 kt)	**12°** (215 kt)
	200	**6°** (265 kt)	**6°** (265 kt)	**7°** (245 kt)	**8°** (230 kt)	**9°** (215 kt)
	300	**5°** (250 kt)	**5°** (250 kt)	**5°** (245 kt)	**6°** (225 kt)	**6°** (220 kt)
	400	/	/	/	/	**4°** (215 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION						
		95 t **210 000 lb**	**90 t** **200 000 lb**	**80 t** **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**				
4° at or below FL250	**100**	**70%** (270 kt)	**70%** (265 kt)	**66%** (250 kt)	**62%** (230 kt)	**60%** (215 kt)
	200	**78%** (270 kt)	**78%** (260 kt)	**74%** (245 kt)	**70%** (230 kt)	**66%** (215 kt)
3° above FL250	**300**	**86%** (280 kt)	**86%** (275 kt)	**82%** (260 kt)	**78%** (245 kt)	**76%** (230 kt)
	350	/	**94%** (265 kt)	**88%** (255 kt)	**84%** (240 kt)	**80%** (225 kt)
	400	/	/	/	/	**86%** (220 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
THRUST	**PITCH**	**Resultant speed**				
IDLE	**1°**	270 kt	265 kt	250 kt	230 kt	215 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
WITH LANDING GEAR UP						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
0	**5°**	**66%** (255 kt)	**64%** (245 kt)	**62%** (230 kt)	**58%** (215 kt)	**54%** (200 kt)
1	**7.5°**	**68%** (220 kt)	**68%** (215 kt)	**64%** (205 kt)	**60%** (190 kt)	**56%** (175 kt)
1+F	**4.5°**	**70%** (205 kt)	**68%** (200 kt)	**64%** (190 kt)	**62%** (175 kt)	**58%** (165 kt)
2	**4.5°**	**70%** (195 kt)	**70%** (185 kt)	**66%** (175 kt)	**62%** (165 kt)	**58%** (155 kt)
WITH LANDING GEAR DOWN						
3	**5°**	**78%** (170 kt)	**76%** (165 kt)	**72%** (155 kt)	**68%** (145 kt)	**64%** (135 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED						
		95 t 210 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
CONF	**PITCH**	**THRUST (% N1)**				
3	**1°**	**60%**	**58%**	**56%**	**52%**	**48%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP..OFF
  A/THR...OFF
  FD..OFF

  PITCH/THRUST:
  Below THRUST RED ALT......................................15° / TOGA
  Above THRUST RED ALT and Below FL 100.....................10° / CLB
  Above THRUST RED ALT and Above FL 100.....................5° / CLB
  FLAPS (if CONF 0(1)(2)(3))................................MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)......................................SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES...CHECK RETRACTED
  L/G...UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017723.0004001 / 03 NOV 21

- **To level off:**

AP...OFF
A/THR..OFF
FD...OFF
SPEEDBRAKES..CHECK RETRACTED

- **Below FL 250:**

  BKUP SPD/ALT pb..USE

  This action is reversible.

  SPEED..FLY THE GREEN

  Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

- **Above FL 250:**

  PITCH/THRUST TABLE.......................................APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7°**	**60%** (160 kt)	**56%** (150 kt)	**52%** (140 kt)	**48%** (125 kt)
2	**5.5°**	**58%** (180 kt)	**56%** (165 kt)	**52%** (155 kt)	**48%** (140 kt)
1+F	**5°**	**58%** (195 kt)	**54%** (180 kt)	**50%** (165 kt)	**46%** (150 kt)
1	**6.5°**	**58%** (215 kt)	**56%** (200 kt)	**52%** (185 kt)	**48%** (170 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° at or below FL250	**100**	**60%** (225 kt)	**58%** (235 kt)	**54%** (220 kt)	**50%** (200 kt)
	200	**70%** (255 kt)	**66%** (235 kt)	**62%** (220 kt)	**58%** (200 kt)
3° above FL250	**300**	**80%** (270 kt)	**78%** (260 kt)	**74%** (240 kt)	**68%** (220 kt)
	350	**84%** (260 kt)	**82%** (250 kt)	**78%** (235 kt)	**72%** (215 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Ident.: PRO-ABN-NAV-AM-00017724.0003001 / 20 MAR 17

- **When flight path is stabilized:**

  AP.....OFF
  A/THR.....OFF
  FD.....OFF
  SPEEDBRAKES.....CHECK RETRACTED

  - **Below FL 250:**

    BKUP SPD/ALT pb.....USE

    This action is reversible.

    SPEED.....FLY THE GREEN

    Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

  - **Above FL 250:**

    FLIGHT PATH.....KEEP STABILIZED

RESPECT STALL WARNING

Disregard "RISK OF UNDUE STALL WARNING" STATUS message, if displayed on ECAM.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017725.0005001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT..........ON
ALL SPEED INDICATIONS..........CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

■ **If at least one ADR confirmed reliable:**

RELIABLE AIR DATA..........USE
UNRELIABLE ADR pb(s)..........OFF

■ **If affected ADR(s) cannot be identified, or all ADRs affected:**

KEEP ONE ADR ON
TWO ADR pbs..........OFF

This prevents the flight control laws from using two coherent but unreliable ADR data.

ATC/XPDR..........ALT RPTG OFF

● **When above FL 250:**

USE PITCH/THRUST TABLES

● **When below FL 250, if speed still unreliable:**

BKUP SPD/ALT pb..........USE

This action is reversible.

SPEED..........FLY THE GREEN

Note: If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017727.0001001 / 10 NOV 22

3

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
THRUST	FL	PITCH (Resultant speed)			
CLB	50	**11°** (245 kt)	**13°** (225 kt)	**15.5°** (205 kt)	**16.5°** (215 kt)
	100	**9.5°** (250 kt)	**11.5°** (225 kt)	**13.5°** (210 kt)	**15°** (210 kt)
	200	**7.5°** (250 kt)	**8.5°** (230 kt)	**10.5°** (205 kt)	**11.5°** (200 kt)
	300	**5°** (255 kt)	**5.5°** (240 kt)	**6.5°** (225 kt)	**8°** (200 kt)
	400	/	/	**3.5°** (230 kt)	**4.5°** (210 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
PITCH	FL	THRUST % N1 (Resultant speed)			
4° at or below FL250	100	**60%** (255 kt)	**58%** (235 kt)	**54%** (220 kt)	**50%** (200 kt)
	200	**70%** (255 kt)	**66%** (235 kt)	**62%** (220 kt)	**58%** (200 kt)
3° above FL250	300	**80%** (270 kt)	**78%** (260 kt)	**74%** (240 kt)	**68%** (220 kt)
	350	**84%** (260 kt)	**82%** (250 kt)	**78%** (235 kt)	**72%** (215 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	260 kt	245 kt	225 kt	205 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT WITH LANDING GEAR UP					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5°**	**56%** (245 kt)	**54%** (225 kt)	**50%** (205 kt)	**46%** (185 kt)
1	**6.5°**	**58%** (215 kt)	**56%** (200 kt)	**52%** (185 kt)	**48%** (170 kt)
1+F	**5°**	**58%** (195 kt)	**54%** (180 kt)	**50%** (165 kt)	**46%** (150 kt)
2	**5.5°**	**58%** (180 kt)	**56%** (165 kt)	**52%** (155 kt)	**48%** (140 kt)
LEVEL FLIGHT WITH LANDING GEAR DOWN					
3	**7°**	**66%** (160 kt)	**62%** (150 kt)	**56%** (140 kt)	**52%** (125 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**48%**	**46%**	**42%**	**38%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 08635

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

AP	OFF
A/THR	OFF
FD	OFF

PITCH/THRUST:

Below THRUST RED ALT	15° / TOGA
Above THRUST RED ALT and Below FL 100	10° / CLB
Above THRUST RED ALT and Above FL 100	5° / CLB
FLAPS (if CONF 0(1)(2)(3))	MAINTAIN CURRENT CONF
FLAPS (if CONF FULL)	SELECT CONF 3 AND MAINTAIN
SPEEDBRAKES	CHECK RETRACTED
L/G	UP

When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017723.0004001 / 03 NOV 21

- **To level off:**

  AP....................OFF
  A/THR....................OFF
  FD....................OFF
  SPEEDBRAKES....................CHECK RETRACTED

  - **Below FL 250:**

    BKUP SPD/ALT pb....................USE

    This action is reversible.

    SPEED....................FLY THE GREEN

    Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

  - **Above FL 250:**

    PITCH/THRUST TABLE....................APPLY

PITCH / THRUST FOR LEVEL OFF

		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7°**	**60%** (160 kt)	**56%** (150 kt)	**52%** (140 kt)	**48%** (125 kt)
2	**5.5°**	**58%** (180 kt)	**56%** (165 kt)	**52%** (155 kt)	**48%** (140 kt)
1+F	**5°**	**58%** (195 kt)	**54%** (180 kt)	**50%** (165 kt)	**46%** (150 kt)
1	**6.5°**	**58%** (215 kt)	**56%** (200 kt)	**52%** (185 kt)	**48%** (170 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° at or below FL250	**100**	**60%** (225 kt)	**58%** (235 kt)	**54%** (220 kt)	**50%** (200 kt)
	200	**70%** (255 kt)	**66%** (235 kt)	**62%** (220 kt)	**58%** (200 kt)
3° above FL250	**300**	**80%** (270 kt)	**78%** (260 kt)	**74%** (240 kt)	**68%** (220 kt)
	350	**84%** (260 kt)	**82%** (250 kt)	**78%** (235 kt)	**72%** (215 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

Ident.: PRO-ABN-NAV-AM-00017724.0005001 / 09 APR 20

- **When flight path is stabilized:**

  AP.....OFF
  A/THR.....OFF
  FD.....OFF
  SPEEDBRAKES.....CHECK RETRACTED

  - **Below FL 250:**

    BKUP SPD/ALT pb.....USE

    This action is reversible.

    SPEED.....FLY THE GREEN

    Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

  - **Above FL 250:**

    FLIGHT PATH.....KEEP STABILIZED

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017725.0005001 / 15 NOV 22

AFFECTED ADR IDENTIFICATION

PROBE/WINDOW HEAT.....ON
ALL SPEED INDICATIONS.....CROSSCHECK

ADR3 and STBY speeds use the data of the same probe.

■ **If at least one ADR confirmed reliable:**

RELIABLE AIR DATA.....USE
UNRELIABLE ADR pb(s).....OFF

■ **If affected ADR(s) cannot be identified, or all ADRs affected:**

KEEP ONE ADR ON
TWO ADR pbs.....OFF

This prevents the flight control laws from using two coherent but unreliable ADR data.

ATC/XPDR.....ALT RPTG OFF

● **When above FL 250:**

USE PITCH/THRUST TABLES

● **When below FL 250, if speed still unreliable:**

BKUP SPD/ALT pb.....USE

This action is reversible.

SPEED.....FLY THE GREEN

Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017727.0001001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**11°** (245 kt)	**13°** (225 kt)	**15.5°** (205 kt)	**16.5°** (215 kt)
	100	**9.5°** (250 kt)	**11.5°** (225 kt)	**13.5°** (210 kt)	**15°** (210 kt)
	200	**7.5°** (250 kt)	**8.5°** (230 kt)	**10.5°** (205 kt)	**11.5°** (200 kt)
	300	**5°** (255 kt)	**5.5°** (240 kt)	**6.5°** (225 kt)	**8°** (200 kt)
	400	/	/	**3.5°** (230 kt)	**4.5°** (210 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° **at or below** **FL250**	**100**	**60%** (255 kt)	**58%** (235 kt)	**54%** (220 kt)	**50%** (200 kt)
	200	**70%** (255 kt)	**66%** (235 kt)	**62%** (220 kt)	**58%** (200 kt)
3° **above** **FL250**	**300**	**80%** (270 kt)	**78%** (260 kt)	**74%** (240 kt)	**68%** (220 kt)
	350	**84%** (260 kt)	**82%** (250 kt)	**78%** (235 kt)	**72%** (215 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	260 kt	245 kt	225 kt	205 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT WITH LANDING GEAR UP					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5°**	**56%** (245 kt)	**54%** (225 kt)	**50%** (205 kt)	**46%** (185 kt)
1	**6.5°**	**58%** (215 kt)	**56%** (200 kt)	**52%** (185 kt)	**48%** (170 kt)
1+F	**5°**	**58%** (195 kt)	**54%** (180 kt)	**50%** (165 kt)	**46%** (150 kt)
2	**5.5°**	**58%** (180 kt)	**56%** (165 kt)	**52%** (155 kt)	**48%** (140 kt)
LEVEL FLIGHT WITH LANDING GEAR DOWN					
3	**7°**	**66%** (160 kt)	**62%** (150 kt)	**56%** (140 kt)	**52%** (125 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**48%**	**46%**	**42%**	**38%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 10949-11522, 11572-11597

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP.. OFF
  A/THR.. OFF
  FD.. OFF

  PITCH/THRUST:
  Below THRUST RED ALT.................................. 15° / TOGA
  Above THRUST RED ALT and Below FL 100.............. 10° / CLB
  Above THRUST RED ALT and Above FL 100.............. 5° / CLB
  FLAPS (if CONF 0(1)(2)(3))................. MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)..................... SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES.. CHECK RETRACTED
  L/G.. UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00024138.0001001 / 10 MAY 21

5

- **If NAV ALL SPD UNCERTAIN is NOT triggered:**

  ECAM PROCEDURE(S)........APPLY
  RELIABLE SPEED DATA........USE

  Speed status is provided by ECAM NAV AIR SPD STS CHANGED and ECAM STATUS page.

- **If NAV ALL SPD UNCERTAIN is triggered:**

  - **At any time, if NAV AIR SPD STS CHANGED is displayed on ECAM:**
    ECAM PROCEDURE(S)........APPLY

  AP........OFF
  A/THR........OFF
  FD........OFF
  SPEEDBRAKES........CHECK RETRACTED

  - **To level off:**
    PITCH/THRUST TABLE........APPLY

PITCH / THRUST FOR LEVEL OFF					
		80 t **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**	**50 t** **110 000 lb**
SLATS / FLAPS EXTENDED					
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
3	**7°**	**60%** (160 kt)	**56%** (150 kt)	**52%** (140 kt)	**48%** (125 kt)
2	**5.5°**	**58%** (180 kt)	**56%** (165 kt)	**52%** (155 kt)	**48%** (140 kt)
1+F	**5°**	**58%** (195 kt)	**54%** (180 kt)	**50%** (165 kt)	**46%** (150 kt)
1	**6.5°**	**58%** (215 kt)	**56%** (200 kt)	**52%** (185 kt)	**48%** (170 kt)
CLEAN					
PITCH	**FL**	**THRUST % N1** (Resultant speed)			
4° **at or below FL250**	**100**	**60%** (255 kt)	**58%** (235 kt)	**54%** (220 kt)	**50%** (200 kt)
	200	**70%** (255 kt)	**66%** (235 kt)	**62%** (220 kt)	**58%** (200 kt)
3° **above** **FL250**	**300**	**80%** (270 kt)	**78%** (260 kt)	**74%** (240 kt)	**68%** (220 kt)
	350	**84%** (260 kt)	**82%** (250 kt)	**78%** (235 kt)	**72%** (215 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude.
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

● **When flight path is stabilized:**
FLIGHT PATH....................KEEP STABILIZED

RELIABLE SPEED IDENTIFICATION

PROBE/WINDOW HEAT....................ON
ALL SPEED INDICATIONS (INCLUDE BKUP SPD)....................CROSSCHECK

L2 *ADR3 and STBY speeds use the data of the same probe.*

L1 ■ **If at least one speed confirmed reliable:**
RELIABLE SPEED....................USE
KEEP ONE ADR ON
TWO UNRELIABLE ADR pushbuttons....................OFF

L2 *This prevents the flight control laws from using two coherent but unreliable ADR data.*

L1 ■ **If affected ADR(s) cannot be identified, or all ADRs affected:**
TWO ADRpushbuttons....................OFF

L2 *This prevents the flight control laws from using two coherent but unreliable ADR data.*

L1 ATC/XPDR....................ALT RPTG OFF

FOR LANDING: FLAP LVR 3
APP SPD....................VLS + 10 kt
LDG DIST PROC....................APPLY

● **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

Ident.: PRO-ABN-NAV-AM-00017727.0001001 / 10 NOV 22

6

CLIMB

CLIMB IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
THRUST	**FL**	**PITCH (Resultant speed)**			
CLB	**50**	**11°** (245 kt)	**13°** (225 kt)	**15.5°** (205 kt)	**16.5°** (215 kt)
	100	**9.5°** (250 kt)	**11.5°** (225 kt)	**13.5°** (210 kt)	**15°** (210 kt)
	200	**7.5°** (250 kt)	**8.5°** (230 kt)	**10.5°** (205 kt)	**11.5°** (200 kt)
	300	**5°** (255 kt)	**5.5°** (240 kt)	**6.5°** (225 kt)	**8°** (200 kt)
	400	/	/	**3.5°** (230 kt)	**4.5°** (210 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	70 t 155 000 lb	60 t 130 000 lb	50 t 110 000 lb
PITCH	**FL**	**THRUST % N1 (Resultant speed)**			
4° at or below FL250	**100**	**60%** (255 kt)	**58%** (235 kt)	**54%** (220 kt)	**50%** (200 kt)
	200	**70%** (255 kt)	**66%** (235 kt)	**62%** (220 kt)	**58%** (200 kt)
3° above FL250	**300**	**80%** (270 kt)	**78%** (260 kt)	**74%** (240 kt)	**68%** (220 kt)
	350	**84%** (260 kt)	**82%** (250 kt)	**78%** (235 kt)	**72%** (215 kt)
	400	/	/	**84%** (230 kt)	**78%** (215 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
THRUST	**PITCH**	**Resultant speed**			
IDLE	**1°**	260 kt	245 kt	225 kt	205 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT WITH LANDING GEAR UP					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
CONF	**PITCH**	**THRUST % N1** (Resultant speed)			
0	**5°**	**56%** (245 kt)	**54%** (225 kt)	**50%** (205 kt)	**46%** (185 kt)
1	**6.5°**	**58%** (215 kt)	**56%** (200 kt)	**52%** (185 kt)	**48%** (170 kt)
1+F	**5°**	**58%** (195 kt)	**54%** (180 kt)	**50%** (165 kt)	**46%** (150 kt)
2	**5.5°**	**58%** (180 kt)	**56%** (165 kt)	**52%** (155 kt)	**48%** (140 kt)
LEVEL FLIGHT WITH LANDING GEAR DOWN					
3	**7°**	**66%** (160 kt)	**62%** (150 kt)	**56%** (140 kt)	**52%** (125 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED					
		80 t 175 000 lb	**70 t 155 000 lb**	**60 t 130 000 lb**	**50 t 110 000 lb**
CONF	**PITCH**	**THRUST (% N1)**			
3	**4°**	**48%**	**46%**	**42%**	**38%**

[MEM] UNRELIABLE SPEED INDICATION

Applicable to: MSN 11531

Ident.: PRO-ABN-NAV-AM-00017720.0002001 / 17 MAR 17

- **If the safe conduct of the flight is impacted:**

  AP..OFF
  A/THR..OFF
  FD..OFF

  PITCH/THRUST:
  Below THRUST RED ALT..15° / TOGA
  Above THRUST RED ALT and Below FL 100..10° / CLB
  Above THRUST RED ALT and Above FL 100..5° / CLB
  FLAPS (if CONF 0(1)(2)(3))..MAINTAIN CURRENT CONF
  FLAPS (if CONF FULL)..SELECT CONF 3 AND MAINTAIN
  SPEEDBRAKES..CHECK RETRACTED
  L/G..UP

  When at, or above MSA or Circuit Altitude: Level off for troubleshooting.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

7 Ident.: PRO-ABN-NAV-AM-00024138.0004001 / 10 MAY 21

- **If NAV ALL SPD UNCERTAIN is NOT triggered:**
  ECAM PROCEDURE(S)....APPLY
  RELIABLE SPEED DATA....USE
  Speed status is provided by ECAM NAV AIR SPD STS CHANGED and ECAM STATUS page.
- **If NAV ALL SPD UNCERTAIN is triggered:**
  - **At any time, if NAV AIR SPD STS CHANGED is displayed on ECAM:**
    ECAM PROCEDURE(S)....APPLY

  AP....OFF
  A/THR....OFF
  FD....OFF
  SPEEDBRAKES....CHECK RETRACTED
  - **To level off:**
    PITCH/THRUST TABLE.... APPLY

PITCH / THRUST FOR LEVEL OFF						
		97 t **215 000 lb**	**90 t** **200 000 lb**	**80 t** **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**
SLATS / FLAPS EXTENDED						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
3	**5°**	**68%** (170 kt)	**66%** (160 kt)	**62%** (150 kt)	**58%** (140 kt)	**54%** (130 kt)
2	**4.5°**	**66%** (195 kt)	**64%** (185 kt)	**60%** (175 kt)	**56%** (165 kt)	**52%** (150 kt)
1+F	**4.5°**	**64%** (205 kt)	**62%** (195 kt)	**58%** (185 kt)	**54%** (170 kt)	**50%** (160 kt)
1	**7°**	**64%** (220 kt)	**62%** (215 kt)	**58%** (200 kt)	**54%** (185 kt)	**50%** (170 kt)
CLEAN						
PITCH	**FL**	**THRUST % N1** (Resultant speed)				
4° at or below FL250	**100**	**66%** (270 kt)	**64%** (260 kt)	**60%** (245 kt)	**56%** (230 kt)	**54%** (210 kt)
	200	**76%** (270 kt)	**74%** (260 kt)	**70%** (245 kt)	**66%** (230 kt)	**62%** (210 kt)
3° above FL250	**300**	**86%** (280 kt)	**84%** (275 kt)	**80%** (260 kt)	**76%** (245 kt)	**72%** (225 kt)
	350	/	**90%** (265 kt)	**84%** (255 kt)	**80%** (240 kt)	**78%** (225 kt)
	400	/	/	/	**88%** (230 kt)	**84%** (220 kt)

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:
- If the pitch is above the target pitch, increase the thrust and maintain the altitude.

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

● **When flight path is stabilized:**

FLIGHT PATH....................KEEP STABILIZED

RELIABLE SPEED IDENTIFICATION

PROBE/WINDOW HEAT....................ON
ALL SPEED INDICATIONS (INCLUDE BKUP SPD)....................CROSSCHECK

L2 *ADR3 and STBY speeds use the data of the same probe.*

L1 ■ **If at least one speed confirmed reliable:**

RELIABLE SPEED....................USE

KEEP ONE ADR ON
TWO UNRELIABLE ADR pushbuttons....................OFF

L2 *This prevents the flight control laws from using two coherent but unreliable ADR data.*

L1 ■ **If affected ADR(s) cannot be identified, or all ADRs affected:**

TWO ADR pushbuttons....................OFF

L2 *This prevents the flight control laws from using two coherent but unreliable ADR data.*

L1 ATC/XPDR....................ALT RPTG OFF

FOR LANDING: FLAP LVR 3
APP SPD....................VLS + 10 kt
LDG DIST PROC....................APPLY

● **For flight continuation:** USE PITCH/THRUST TABLES

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

8 Ident.: PRO-ABN-NAV-AM-00017727.0013001 / 10 NOV 22

CLIMB

CLIMB IN CLEAN CONFIGURATION						
		97 t **215 000 lb**	**90 t** **200 000 lb**	**80 t** **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**
THRUST	**FL**	**PITCH (Resultant speed)**				
CLB	**50**	**10.5°** (250 kt)	**11°** (250 kt)	**12.5°** (230 kt)	**14.5°** (215 kt)	**16°** (210 kt)
	100	**9.5°** (250 kt)	**9.5°** (245 kt)	**11°** (230 kt)	**12.5°** (220 kt)	**14°** (210 kt)
	200	**6°** (275 kt)	**7°** (255 kt)	**8°** (240 kt)	**9.5°** (215 kt)	**11°** (200 kt)
	300	**3.5°** (285 kt)	**3.5°** (285 kt)	**4.5°** (260 kt)	**5.5°** (240 kt)	**7°** (210 kt)
	400	/	/	**2°** (250 kt)	**2.5°** (240 kt)	**3.5°** (225 kt)

CRUISE

FLYING TECHNIQUE TO STABILIZE SPEED

Stabilize the altitude. When altitude is stabilized:

- If the pitch is above the target pitch, increase the thrust and maintain the altitude
- If the pitch is below the target pitch, decrease the thrust and maintain the altitude.

When the pitch reaches the target pitch, adjust the thrust to keep this target pitch.

LEVEL FLIGHT IN CLEAN CONFIGURATION						
		97 t **215 000 lb**	**90 t** **200 000 lb**	**80 t** **175 000 lb**	**70 t** **155 000 lb**	**60 t** **130 000 lb**
PITCH	**FL**	**THRUST % N1 (Resultant speed)**				
4° at or below FL250	**100**	**66%** (270 kt)	**64%** (260 kt)	**60%** (245 kt)	**56%** (230 kt)	**54%** (210 kt)
	200	**76%** (270 kt)	**74%** (260 kt)	**70%** (245 kt)	**66%** (230 kt)	**62%** (210 kt)
3° above FL250	**300**	**86%** (280 kt)	**84%** (275 kt)	**80%** (260 kt)	**76%** (245 kt)	**72%** (225 kt)
	350	/	**90%** (265 kt)	**84%** (255 kt)	**80%** (240 kt)	**78%** (225 kt)
	400	/	/	/	**88%** (230 kt)	**84%** (220 kt)

Note: *If the failure is due to radome destruction, the drag will increase and therefore N1 must be increased by 5 %. Fuel flow will increase by about 27 %.*

Continued on the following page

[MEM] UNRELIABLE SPEED INDICATION (Cont'd)

DESCENT

DESCENT IN CLEAN CONFIGURATION						
		97 t 215 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
THRUST	**PITCH**	**Resultant speed**				
IDLE	**1°**	275 kt	265 kt	250 kt	235 kt	220 kt

INITIAL / INTERMEDIATE APPROACH

APPLY FLYING TECHNIQUE TO STABILIZE SPEED

LEVEL FLIGHT						
		97 t 215 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
WITH LANDING GEAR UP						
CONF	**PITCH**	**THRUST % N1** (Resultant speed)				
0	**5°**	**60%** (250 kt)	**60%** (245 kt)	**56%** (230 kt)	**52%** (215 kt)	**48%** (200 kt)
1	**7°**	**64%** (220 kt)	**62%** (215 kt)	**58%** (200 kt)	**54%** (185 kt)	**50%** (170 kt)
1+F	**4.5°**	**64%** (205 kt)	**62%** (195 kt)	**58%** (185 kt)	**54%** (170 kt)	**50%** (160 kt)
2	**4.5°**	**66%** (195 kt)	**64%** (185 kt)	**60%** (175 kt)	**56%** (165 kt)	**52%** (150 kt)
WITH LANDING GEAR DOWN						
3	**5°**	**72%** (170 kt)	**70%** (165 kt)	**66%** (155 kt)	**62%** (145 kt)	**58%** (130 kt)

FINAL APPROACH AT -3° DESCENT FLIGHT PATH

APPROACH IN CONF 3 AND L/G EXTENDED						
		97 t 215 000 lb	**90 t 200 000 lb**	**80 t 175 000 lb**	**70 t 155 000 lb**	**60 t 130 000 lb**
CONF	**PITCH**	**THRUST (% N1)**				
3	**1°**	**54%**	**54%**	**50%**	**48%**	**44%**

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 01143-01246, 01376, 02014, 02734

Ident.: PRO-ABN-NAV-C-00017828.0001001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs..OFF
STBY INST..USE
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0005001 / 17 MAR 17

STALL WARNING LOST
EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.. MAN
MAN V/S CTL.. AS RQRD

Target CAB PRESS V/S:
- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3.......ON
  LDG DIST PROC.......APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank.......PULL AND TURN
  - **When L/G downlocked:**
    L/G lever.......DOWN
    GEAR DOWN indications.......CHECK

    L/G DOORS REMAIN OPEN
  - **During final approach:**
    MAN V/S CTL.......FULL UP
- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0002001 / 22 MAR 17

STATUS

MAX SPEED.. 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 160 KT
See (1)

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD... VREF +10 KT
LDG DIST PROC... APPLY

Note: *As the landing gear safety valve is closed, landing gear extension must be performed by gravity (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).*

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR**

  MAN V/S CTL... FULL UP

  Note: *In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.*

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1+2
A/THR
RUD TRV LIM 1+2
CAB PR 1+2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
STEEP APPR ◁
ROW/ROP ◁

Other INOP SYS

ATC ALTI MODE
TCAS ◁
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt. At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 01251

Ident.: PRO-ABN-NAV-C-00017828.0001001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs.. OFF
STBY INST...USE
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0001001 / 17 MAR 17

STALL WARNING LOST
EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.......... MAN
MAN V/S CTL.......... AS RQRD

Target CAB PRESS V/S:
- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFT CRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*6500*
300	*5000*
250	*2500*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3........ON
  LDG DIST PROC........APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank........PULL AND TURN
  - **When L/G downlocked:**
    L/G lever........DOWN
    GEAR DOWN indications........CHECK

    L/G DOORS REMAIN OPEN
  - **During final approach:**
    MAN V/S CTL........FULL UP
- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0002001 / 22 MAR 17

STATUS

MAX SPEED.. 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 160 KT
See (1)

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD.. VREF +10 KT
LDG DIST PROC.. APPLY

Note: As the landing gear safety valve is closed, landing gear extension must be performed by gravity (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR**
  MAN V/S CTL..FULL UP

  Note: In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1+2
A/THR
RUD TRV LIM 1+2
CAB PR 1+2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
STEEP APPR ◁
ROW/ROP ◁

Other INOP SYS

ATC ALTI MODE
TCAS ◁
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt. At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 01459, 02924-03002, 03035-03565, 03630-03662

Ident.: PRO-ABN-NAV-C-00017828.0001001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 *Note:* *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs...OFF
STBY INST...USE
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0009001 / 17 MAR 17

EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.. MAN
MAN V/S CTL... AS RQRD

Target CAB PRESS V/S:

- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3..ON
  LDG DIST PROC..APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank..PULL AND TURN

  - **When L/G downlocked:**
    L/G lever..DOWN
    GEAR DOWN indications..CHECK

    L/G DOORS REMAIN OPEN

  - **During final approach:**
    MAN V/S CTL..FULL UP

- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0002001 / 22 MAR 17

STATUS

MAX SPEED... 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 160 KT
See (1)

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD... VREF +10 KT
LDG DIST PROC.. APPLY

Note: As the landing gear safety valve is closed, landing gear extension must be performed by gravity (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR**

  MAN V/S CTL...FULL UP

  Note: In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1+2
A/THR
RUD TRV LIM 1+2
CAB PR 1+2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
STEEP APPR ◁
ROW/ROP ◁

Other INOP SYS

ATC ALTI MODE
TCAS ◁
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt. At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832

Ident.: PRO-ABN-NAV-C-00017828.0001001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs.. OFF
STBY INST..USE
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0005001 / 17 MAR 17

STALL WARNING LOST
EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.. MAN
MAN V/S CTL.. AS RQRD

Target CAB PRESS V/S:

- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3..ON
  LDG DIST PROC..APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank........................PULL AND TURN

  - **When L/G downlocked:**
    L/G lever..DOWN
    GEAR DOWN indications..CHECK

    L/G DOORS REMAIN OPEN

  - **During final approach:**
    MAN V/S CTL..FULL UP

- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0003001 / 01 JUN 16

STATUS

MAX SPEED...320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 160 KT
See (1)

APPR PROC

FOR LDG...USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3...ON

Displayed, when CONF 3 is selected.

APPR SPD...VREF + 15 KT
LDG DIST PROC...APPLY

Note: *As the landing gear safety valve is closed, landing gear extension must be performed by gravity(Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).*

WHEN L/G DN: DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR:**
  MAN V/S CTL...FULL UP

  Note: *In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.*

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1 + 2
A/THR
RUD TRV LIM 1+2
CAB PR 1 + 2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
ROW/ROP ❄

Other INOP SYS

ATC ALTI MODE
TCAS ❄
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt . At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 01801, 01826, 01837-01855, 02321

Ident.: PRO-ABN-NAV-C-00017828.0001001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs..OFF
STBY INST..USE
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0005001 / 17 MAR 17

STALL WARNING LOST
EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.. MAN
MAN V/S CTL.. AS RQRD

Target CAB PRESS V/S:
- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3....................ON
  LDG DIST PROC....................APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank....................PULL AND TURN
  - **When L/G downlocked:**
    L/G lever....................DOWN
    GEAR DOWN indications....................CHECK

    L/G DOORS REMAIN OPEN
  - **During final approach:**
    MAN V/S CTL....................FULL UP
- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0006001 / 22 MAR 17

STATUS

MAX SPEED.. 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 140 KT
See (1)

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD.. VREF +10 KT
LDG DIST PROC.. APPLY

Note: As the landing gear safety valve is closed, landing gear extension must be performed by gravity (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR**

  MAN V/S CTL.. FULL UP

  Note: In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1+2
A/THR
RUD TRV LIM 1+2
CAB PR 1+2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
STEEP APPR ◁
ROW/ROP ◁

Other INOP SYS

ATC ALTI MODE
TCAS ◁
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 140 kt. At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 02896-02904

Ident.: PRO-ABN-NAV-C-00017828.0001001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs...OFF
STBY INST...USE
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC
Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0009001 / 17 MAR 17

EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.......... MAN
MAN V/S CTL.......... AS RQRD

Target CAB PRESS V/S:

- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3..ON
  LDG DIST PROC..APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank..PULL AND TURN

  - **When L/G downlocked:**
    L/G lever..DOWN
    GEAR DOWN indications..CHECK

    L/G DOORS REMAIN OPEN

  - **During final approach:**
    MAN V/S CTL..FULL UP

- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0003001 / 01 JUN 16

STATUS

MAX SPEED... 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 160 KT
See (1)

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD.. VREF + 15 KT
LDG DIST PROC.. APPLY

Note: *As the landing gear safety valve is closed, landing gear extension must be performed by gravity(Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).*

WHEN L/G DN: DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR:**
  MAN V/S CTL..FULL UP

  Note: *In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.*

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1 + 2
A/THR
RUD TRV LIM 1+2
CAB PR 1 + 2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
ROW/ROP ◁✳

Other INOP SYS

ATC ALTI MODE
TCAS ◁✳
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt . At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 03032, 03588-03595

Ident.: PRO-ABN-NAV-C-00017828.0001001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs..OFF
STBY INST..USE
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0009001 / 17 MAR 17

EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.. MAN
MAN V/S CTL...AS RQRD

Target CAB PRESS V/S:

- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3.....ON
  LDG DIST PROC.....APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank.....PULL AND TURN
  - **When L/G downlocked:**
    L/G lever.....DOWN
    GEAR DOWN indications.....CHECK

    L/G DOORS REMAIN OPEN
  - **During final approach:**
    MAN V/S CTL.....FULL UP
- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

Ident.: PRO-ABN-NAV-C-00016863.0006001 / 22 MAR 17

STATUS

MAX SPEED.. 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 140 KT
See (1)

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD.. VREF +10 KT
LDG DIST PROC.. APPLY

Note: *As the landing gear safety valve is closed, landing gear extension must be performed by gravity (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).*

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR**
  MAN V/S CTL..FULL UP

  Note: *In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.*

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1+2
A/THR
RUD TRV LIM 1+2
CAB PR 1+2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
STEEP APPR ◁
ROW/ROP ◁

Other INOP SYS

ATC ALTI MODE
TCAS ◁
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 140 kt. At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 03710, 03733, 04000-04192

Ident.: PRO-ABN-NAV-C-00017828.0002001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs.. OFF

WHEN ALL ADR OFF BOTH FMS LOST

STBY INST..USE
BACK UP NAV...USE

Revert to Back Up Nav via the NAV B/UP Prompt on the MCDU MENU page.

USE RMP FOR NAVAID TUNING
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0009001 / 17 MAR 17

EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL.. MAN
MAN V/S CTL.. AS RQRD

Target CAB PRESS V/S:
- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3..ON
  LDG DIST PROC..APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank..PULL AND TURN
  - **When L/G downlocked:**
    L/G lever..DOWN
    GEAR DOWN indications..CHECK

    L/G DOORS REMAIN OPEN
  - **During final approach:**
    MAN V/S CTL..FULL UP
- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0006001 / 22 MAR 17

STATUS

MAX SPEED.. 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 140 KT
See [(1)]

APPR PROC

FOR LDG... USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3... ON

Displayed, when CONF 3 is selected.

APPR SPD... VREF +10 KT
LDG DIST PROC.. APPLY

Note: *As the landing gear safety valve is closed, landing gear extension must be performed by gravity (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).*

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR**

  MAN V/S CTL... FULL UP

  Note: *In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.*

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1+2
A/THR
RUD TRV LIM 1+2
CAB PR 1+2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
STEEP APPR ◁
ROW/ROP ◁

Other INOP SYS

ATC ALTI MODE
TCAS ◁
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 140 kt. At slats' extension, full rudder travel authority is recovered.

[QRH] ADR 1+2+3 FAULT

Applicable to: MSN 03761-03816

Ident.: PRO-ABN-NAV-C-00017828.0002001 / 17 MAR 17

In case of a triple ADR failure, ECAM only displays dual ADR alerts.
All dual ADR alerts trigger: NAV ADR 1+2 FAULT, and NAV ADR 1+3 FAULT, and NAV ADR 2+3 FAULT.

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ALL ADR pbs.. OFF

WHEN ALL ADR OFF BOTH FMS LOST

STBY INST...USE
BACK UP NAV..USE

Revert to Back Up Nav via the NAV B/UP Prompt on the MCDU MENU page.

USE RMP FOR NAVAID TUNING
DISREGARD ECAM ACTIONS FOR AIR DATA SWTG AND ATC

Air data switching and ATC have no effect.

TCAS & ATC ALT RPTG INOP

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021399.0009001 / 17 MAR 17

EXPECT ALTN LAW

FL	*390*	*370*	*350*	*330*	*310*	*290*	*280 and below*
MAX SPEED (kt)	*252*	*265*	*278*	*290*	*305*	*315*	*320*

This table provides IAS/MACH 0.82 relationship at or above FL 280.

USE RUDDER WITH CARE

At slats extension, full rudder travel authority is recovered.

WHEN L/G DOWN: DIRECT LAW

At landing gear extension, flight controls revert to direct law in pitch and in roll.

CABIN PRESS MODE SEL........................ MAN
MAN V/S CTL........................ AS RQRD

Target CAB PRESS V/S:

- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFTCRZ FL	***CAB ALT TARGET (ft)***
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00021262.0001001 / 17 MAR 17

- **For approach:**

  CAT 1 ONLY

  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3....................ON
  LDG DIST PROC....................APPLY

  - **For L/G GRVTY EXTN:**
    LDG GEAR GRVTY EXTN handcrank....................PULL AND TURN
  - **When L/G downlocked:**
    L/G lever....................DOWN
    GEAR DOWN indications....................CHECK

    L/G DOORS REMAIN OPEN
  - **During final approach:**
    MAN V/S CTL....................FULL UP
- **Before door opening:** CHECK ΔP ZERO

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-C-00016863.0002001 / 22 MAR 17

STATUS

MAX SPEED... 320/0.82
MANEUVER WITH CARE
RUD WITH CARE ABV 160 KT
See (1)

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD.. VREF +10 KT
LDG DIST PROC.. APPLY

Note: *As the landing gear safety valve is closed, landing gear extension must be performed by gravity (Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION).*

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law in pitch, as well as in roll.

- **DURING FINAL APPR**
  MAN V/S CTL..FULL UP

  Note: *In case of a go-around, respect the maximum speed of 215 kt in CONF 1+F, due to loss of flap auto retraction to CONF 1.*

CAUTION	*Check that the outflow valve is fully open and that cabin altitude is at airfield elevation before opening the doors.*

INOP SYS

F/CTL PROT
WINDSHEAR DET
GPWS
ADR 1+2+3
AP 1+2
A/THR
RUD TRV LIM 1+2
CAB PR 1+2
YAW DAMPER
ATC/XPDR 1
ATC/XPDR 2
STEEP APPR ◁
ROW/ROP ◁

Other INOP SYS

ATC ALTI MODE
TCAS ◁
L/G RETRACT
RAT AUTOMATIC EXTENSION
CAT 2

Continued on the following page

[QRH] ADR 1+2+3 FAULT (Cont'd)

(1) *The rudder travel limit value is frozen at the moment when the failure occurs. Therefore, to prevent damage to the aircraft structure, use the rudder with care, when the speed is above 160 kt. At slats' extension, full rudder travel authority is recovered.*

[QRH] ADR CHECK PROC

Ident.: PRO-ABN-NAV-00015311.0001001 / 17 MAR 17
Applicable to: ALL

For the ADR CHECK procedure, apply the UNRELIABLE SPEED INDICATION procedure. *Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items*.

[QRH] ALL ADR OFF

Ident.: PRO-ABN-NAV-00012464.0030001 / 21 JAN 21

9 **Applicable to: MSN 10949-11597**

Apply this QRH procedure when requested by the NAV ADR 1+2+3 FAULT ECAM alert.

PFD ALTITUDE: GPS

TCAS & ATC ALT RPTG INOP

CABIN PRESS MODE SEL.. MAN
MAN V/S CTL...AS RQRD

Target CAB PRESS V/S:
- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFT CRZ FL	*CAB ALT TARGET (ft)*
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

LDG DIST PROC..APPLY

- **For approach:**

  FOR LANDING: FLAP LVR 3
  GPWS LDG FLAP 3..ON

  - **When FLAP 2:**

    LDG GEAR GRVTY EXTN handcrank..PULL AND TURN

  - **When landing gear downlocked:**

    L/G lever...DOWN
    GEAR DOWN indications.. CHECK

    L/G DOORS REMAIN OPEN

  - **During final approach:**

    MAN V/S CTL...FULL UP

- **Before door opening:** CHECK ΔP ZERO

[QRH] ALL ADR OFF

Ident.: PRO-ABN-NAV-00012464.0020001 / 26 NOV 19
Applicable to: MSN 02887, 04827-04860

Apply this QRH procedure when requested by the NAV ADR 1+2+3 FAULT ECAM alert.

SPEED..FLY THE GREEN

Fly within the green area of the speed scale to ensure safe flight.
For slats/flaps retraction, it is better to fly at the top of the green area of the speed scale.

Note: If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.

PFD ALTITUDE: GPS

TCAS & ATC ALT RPTG INOP

CABIN PRESS MODE SEL..MAN
MAN V/S CTL..AS RQRD

Target CAB PRESS V/S:
- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFT CRZ FL	*CAB ALT TARGET (ft)*
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

LDG DIST PROC..APPLY

● **For approach:**
SPEED..FLY THE GREEN
Before extending the slats/flaps, it is better to fly at the bottom of the speed scale green area, and to be in straight flight.
FOR LANDING: USE FLAP 3
GPWS LDG FLAP 3..ON
APPR SPEED: BUSS TARGET SPEED
During approach, BUSS TARGET SPEED (green triangle) indicates VAPP.

● **When flap 2:**
LDG GEAR GRVTY EXTN handcrank..PULL AND TURN

Continued on the following page

[QRH] ALL ADR OFF (Cont'd)

- **When landing gear downlocked:**
  L/G lever....................................DOWN
  GEAR DOWN indications....................................CHECK

  L/G DOORS REMAIN OPEN

- **During final approach:**
  MAN V/S CTL....................................FULL UP

- **Before door opening:** CHECK ∆P ZERO

[QRH] ALL ADR OFF

Ident.: PRO-ABN-NAV-00012464.0026001 / 26 NOV 19
Applicable to: MSN 04352-04773, 04953-05987, 06097, 06121, 06139-09324

Apply this QRH procedure when requested by the NAV ADR 1+2+3 FAULT ECAM alert.

SPEED.....FLY THE GREEN

Fly within the green area of the speed scale to ensure safe flight.
For slats/flaps retraction, it is better to fly at the top of the green area of the speed scale.

Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust tables.*

WHEN ALL ADR OFF BOTH FMS LOST

BACK UP NAV.....USE

Revert to Back Up Nav via the NAV B/UP prompt on the MCDU MENU page.

USE RMP FOR NAVAID TUNING

PFD ALTITUDE: GPS

TCAS & ATC ALT RPTG INOP

CABIN PRESS MODE SEL..... MAN
MAN V/S CTL.....AS RQRD

Target CAB PRESS V/S:
- *Climb: 500 ft/min*
- *Descent: 300 ft/min*

AIRCRAFT CRZ FL	*CAB ALT TARGET (ft)*
410	*8000*
350	*7000*
300	*5500*
250	*3000*
<200	*0*

LDG DIST PROC.....APPLY

- **For approach:**
  SPEED.....FLY THE GREEN
  Before extending the slats/flaps, it is better to fly at the bottom of the speed scale green area, and to be in straight flight.
  FOR LANDING: USE FLAP 3
  GPWS LDG FLAP 3.....ON

Continued on the following page

[QRH] ALL ADR OFF (Cont'd)

APPR SPEED: BUSS TARGET SPEED

During approach, BUSS TARGET SPEED (green triangle) indicates VAPP.

- **When flap 2:**
  LDG GEAR GRVTY EXTN handcrank....PULL AND TURN
- **When landing gear downlocked:**
  L/G lever....DOWN
  GEAR DOWN indications....CHECK

  L/G DOORS REMAIN OPEN
- **During final approach:**
  MAN V/S CTL....FULL UP

- **Before door opening:** CHECK ΔP ZERO

[QRH] IR ALIGNMENT IN ATT MODE

Ident.: PRO-ABN-NAV-00012425.0006001 / 04 NOV 20

10 **Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

If IR alignment is lost, the navigation mode is inoperative (red ATT flag on PFD and red HDG flag on ND).
Aircraft attitude and heading may be recovered by applying the following procedure:

IR (affected) MODE SEL....ATT
KEEP SPEED, HEADING, AND FL CONSTANT FOR 30 s
FMS DATA page....SELECT

The DATA INDEX page is displayed

IRS MONITOR key....PRESS
[SET HDG key] A/C HDG....ENTER
CROSSCHECK HEADING REGULARLY WITH STBY COMPASS AND UPDATE AS REQUIRED

[QRH] IR ALIGNMENT IN ATT MODE

Ident.: PRO-ABN-NAV-00012425.0002001 / 04 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

If IR alignment is lost, the navigation mode is inoperative (red ATT flag on PFD and red HDG flag on ND).
Aircraft attitude and heading may be recovered by applying the following procedure:

IR (affected) MODE SEL.......ATT

ALIGN light on during 30 s.
ATT MODE displayed on CDU.

KEEP SPEED, HEADING, AND FL CONSTANT FOR 30 s

■ **For alignment through MCDU:**

FMS DATA page.......SELECT

The DATA INDEX page is displayed

IRS MONITOR key.......PRESS
[SET HDG key] A/C HDG.......ENTER

■ **For alignment through ADIRS panel:**

DISPLAY SYS sel.......SELECT AFFECTED SYS
DISPLAY DATA sel.......HDG

● **If “H” written on the “5” key of ADIRS panel:**

H Key.......PRESS

Degree marker, zero decimal point, ENT and CLR lights come on.

A/C HEADING.......ENTER

A/C HEADING.......INSERT
ENT key.......PRESS

Example : to enter heading 320 °, dial 3, 2, 0, 0 then press ENT.
Heading will be displayed on the associated ND.
“HDG–ATT MODE” will be displayed on CDU.

CROSSCHECK HEADING REGULARLY WITH STBY COMPASS AND UPDATE AS REQUIRED

NAV AIR SPD STS CHANGED

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-BC-00023395.0001001 / 05 MAY 22

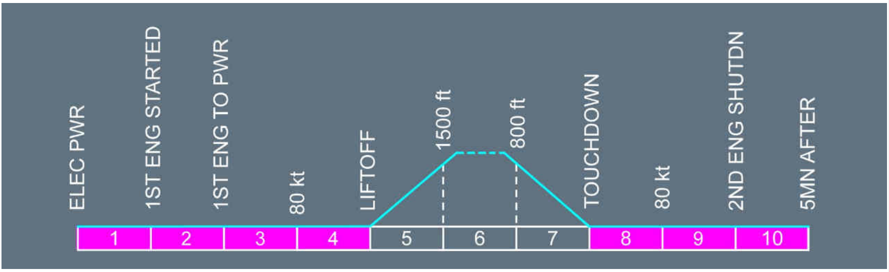
11

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the validity of at least one speed source (ADR or backup) has changed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
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Continued on the following page

NAV AIR SPD STS CHANGED (Cont'd)

Ident.: PRO-ABN-NAV-BC-00023396.0001001 / 21 JAN 21

12

Depending on the validity of each speed source, the following messages can be displayed:

ADR 1(2)(3) SPD RELIABLE
ADR 1(2)(3) SPD UNCERTAIN
ADR 1(2)(3) SPD FAULT
STBY SPD UNCERTAIN
BKUP SPD RELIABLE
BKUP SPD UNCERTAIN
BKUP SPD FAULT

For the condition of each message, *Refer to DSC-34-NAV-10-30-20 Speed Monitoring Status*.

- **If ADR 1(2) not reliable:**
  - **If ADR 3 available:**

    AIR DATA SWTG.. CAPT 3(F/O 3)

    L2 *Select AIR DATA SWTG to ADR 3 on the affected side if ADR 3 is reliable and not already in use.*

  - L1 **If ADR 3 not available:**

    CAPT(F/O) BKUP SPD/ALT.. ON

    L2 *Use DBUS on CAPT(F/O) side if ADR 3 is not reliable or already in use.*

    L1 MAX SPEED..280/.78

    L2 *Speed is limited to ensure DBUS speed accuracy (Refer to DSC-34-NAV-10-30-20 Speed Monitoring Function).*

    L1 ATC/XPDR.. SYS 2(SYS 1)

- **If ADR 1 and ADR 2 reliable, and ADR 3 in use:**

  AIR DATA SWTG..NORM

- **If ADR 1(2) reliable and DBUS in use:**

  CAPT(F/O) BKUP SPD/ALT..OFF

- **If at least two ADRs reliable and AP is not engaged:**

  AP & ATHR..CONSIDER

- **If all ADRs not reliable:**

  ATC/XPDR.. ALT RPTG OFF

Continued on the following page

NAV AIR SPD STS CHANGED (Cont'd)

Ident.: PRO-ABN-NAV-BC-00023397.0001001 / 21 JAN 21

13

L12

STATUS

- **If BKUP SPD/ALT is activated:**

  MAX SPEED..280/.78

  Speed is limited to ensure DBUS speed accuracy (Refer to DSC-34-NAV-10-30-20 Speed Monitoring Function).

SPD STATUS

ADR 1(2)(3) SPD FAULT
ADR 1(2)(3) SPD UNCERTAIN
ADR 1(2)(3) SPD RELIABLE
STBY SPD UNCERTAIN
BKUP SPD FAULT
BKUP SPD UNCERTAIN
BKUP SPD RELIABLE

For the condition of each message, *Refer to DSC-34-NAV-10-30-20 Speed Monitoring Status*.

INOP SYS

BKUP SPD (1)

---

(1) *(if the Digital BackUp Speed is not reliable)*

NAV ADR 1(2)(3) FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

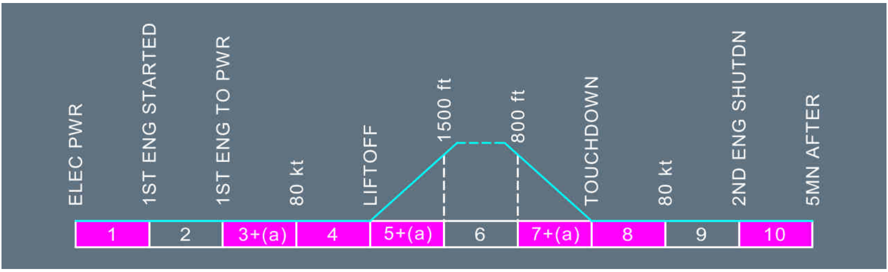
Ident.: PRO-ABN-NAV-A-00018111.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ADR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5+(a)
6
7+(a)
8
9
10

Note: *(a) Not inhibited in flight phase 3 in the case of NAV ADR 3 FAULT while the ADR 3 is in use.*
Not inhibited in flight phases 3, 5, and 7 in the case of NAV ADR 1(2) FAULT.

Continued on the following page

NAV ADR 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-A-00017302.0003001 / 21 MAR 16

L2 *Note: In case of simultaneous failure of ADR and IR (same ADIRU), apply ADR FAULT procedure before IR FAULT procedure.*

L1 ■ **ADR 1 FAULT:**

AIR DATA SWTG....CAPT 3

L2 *Select ADR 3 to captain side.*
For aircraft equipped with EGPWS ⊲ , T2CAS ⊲ or T3CAS ⊲ , the GPWS TERR FAULT light comes on, because the predictive functions of the GPWS are inhibited. As such, the GPWS TERR pb-sw should be switched OFF.

L1 ADR 1 P/B....OFF

■ **ADR 2 FAULT:**

AIR DATA SWTG....F/O 3

L2 *Select ADR 3 to first officer side.*

L1 ADR 2 P/B....OFF
BARO REF....CHECK

L2 *If ADR 2 fails, both baro reference channels are driven by the same FCU channel. Consequently the baro reference displays must be checked.*

L1 ■ **ADR 3 FAULT:**

ADR 3 P/B....OFF
AIR DATA SWTG (IF ADR 3 IN USE)....NORM

Ident.: PRO-ABN-NAV-A-00017505.0001001 / 21 MAR 16

STATUS

	INOP SYS
CAT 3 SINGLE ONLY	ADR 1(2)(3) CAT 3 DUAL GPWS (1)

(1) *(in case of ADR 1 FAULT only)*

NAV ADR 1(2)(3) FAULT

Applicable to: MSN 01251

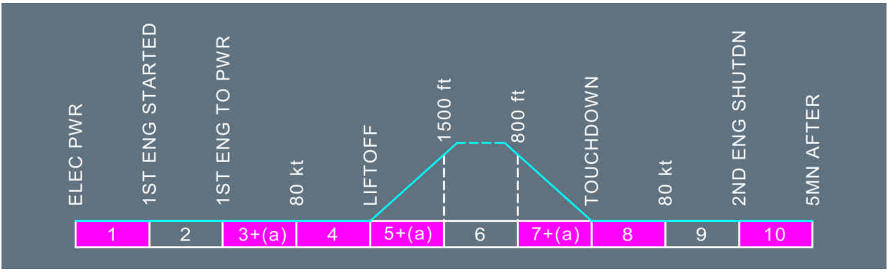
Ident.: PRO-ABN-NAV-A-00018111.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ADR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5+(a)
6
7+(a)
8
9
10

Note: *(a) Not inhibited in flight phase 3 in the case of NAV ADR 3 FAULT while the ADR 3 is in use.*
Not inhibited in flight phases 3, 5, and 7 in the case of NAV ADR 1(2) FAULT.

Continued on the following page

NAV ADR 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-A-00017302.0002001 / 21 MAR 16

L2 *Note: In case of simultaneous failure of ADR and IR (same ADIRU), apply ADR FAULT procedure before IR FAULT procedure.*

L1 ■ **ADR 1 FAULT:**

AIR DATA SWTG..CAPT 3

L2 *Select ADR 3 to captain side.*
For aircraft equipped with EGPWS ◁ , T2CAS ◁ or T3CAS ◁ , the GPWS TERR FAULT light comes on, because the predictive functions of the GPWS are inhibited. As such, the GPWS TERR pb-sw should be switched OFF.

L1 ADR 1..OFF

■ **ADR 2 FAULT:**

AIR DATA SWTG..F/O 3

L2 *Select ADR 3 to first officer side.*

L1 ADR 2..OFF
BARO REF..CHECK

L2 *If ADR 2 fails, both baro reference channels are driven by the same FCU channel. Consequently the baro reference displays must be checked.*

L1 ■ **ADR 3 FAULT:**

ADR 3..OFF
AIR DATA SWTG (IF ADR 3 IN USE)..NORM

Ident.: PRO-ABN-NAV-A-00017505.0001001 / 21 MAR 16

STATUS

CAT 3 SINGLE ONLY

INOP SYS

ADR 1(2)(3)
CAT 3 DUAL
GPWS (1)

(1) *(in case of ADR 1 FAULT only)*

NAV ADR 1(2)(3) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

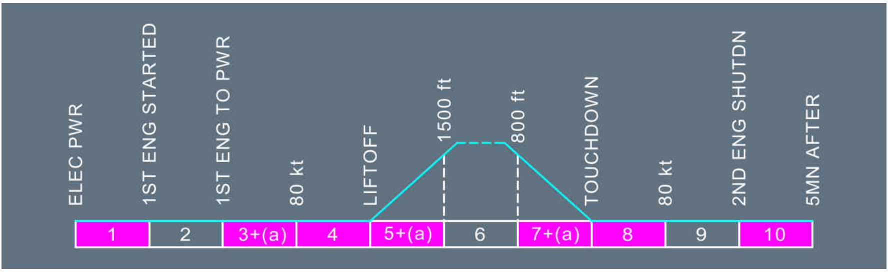
Ident.: PRO-ABN-NAV-A-00018111.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ADR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5+(a)
6
7+(a)
8
9
10

Note: (a) Not inhibited in flight phase 3 in the case of NAV ADR 3 FAULT while the ADR 3 is in use.
Not inhibited in flight phases 3, 5, and 7 in the case of NAV ADR 1(2) FAULT.

NAV ADR 1(2)(3) FAULT

Applicable to: MSN 10949-11597

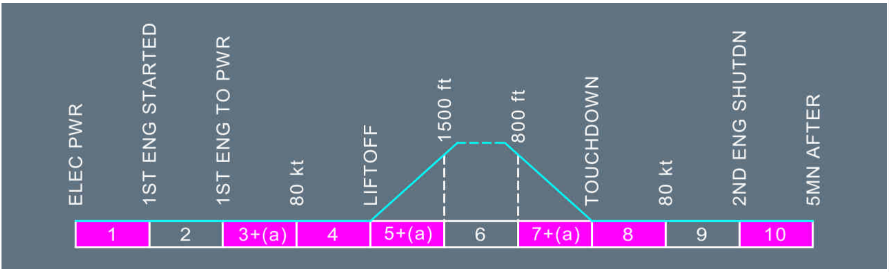
Ident.: PRO-ABN-NAV-A-00018111.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ADR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5+(a)
6
7+(a)
8
9
10

Note: *(a) Not inhibited in flight phase 3 in the case of NAV ADR 3 FAULT while the ADR 3 is in use.*
Not inhibited in flight phases 3, 5, and 7 in the case of NAV ADR 1(2) FAULT.

Continued on the following page

NAV ADR 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-A-00017302.0004001 / 21 JAN 21

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Note: *In case of simultaneous failure of ADR and IR (same ADIRU), apply ADR FAULT procedure before IR FAULT procedure.*

- **If NAV ADR 1 FAULT:**
  - **If ADR 3 available:**
    AIR DATA SWTG.......................................CAPT 3
    L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*
    For aircraft equipped with EGPWS ◁✻ , T2CAS ◁✻ or T3CAS ◁✻ , the GPWS TERR FAULT light comes on, because the predictive functions of the GPWS are inhibited. As such, the GPWS TERR pb-sw should be switched OFF.
  - L1 **If ADR 3 not available:**
    CAPT BKUP SPD/ALT.......................................ON
    L2 *Select DBUS on CAPT side if ADR 3 is not reliable or is already in use.*

  L1 ADR 1 P/B.......................................OFF
  ATC/XPDR.......................................SYS 2
- **If NAV ADR 2 FAULT:**
  - **If ADR 3 available:**
    AIR DATA SWTG ....F/O 3
    L2 *Select ADR 3 to F/O side if ADR 3 is reliable and not in use.*
  - L1 **If ADR 3 not available:**
    F/O BKUP SPD/ALT ....ON
    L2 *Select DBUS on F/O side if ADR 3 is not reliable or is already in use.*

  L1 ADR 2 P/B.......................................OFF
  BARO REF.......................................CHECK
  L2 *If ADR 2 fails, both baro reference channels are driven by the same FCU channel. Consequently the baro reference displays must be checked.*
- L1 **If NAV ADR 3 FAULT:**
  - **If ADR 1(2) speed not reliable:**
    CAPT(F/O) BKUP SPD/ALT.......................................ON
    L2 *Select DBUS on CAPT(F/O) side if ADR 1(2) is not reliable.*

Continued on the following page

NAV ADR 1(2)(3) FAULT (Cont'd)

L1

ATC/XPDR.. SYS 2(SYS 1)

ADR 3 P/B.. OFF

- **If ADR3 in use**

  AIR DATA SWTG.. NORM

Ident.: PRO-ABN-NAV-A-00017505.0002001 / 21 JAN 21

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L12

STATUS

- **If BKUP SPD/ALT is activated:**

  MAX SPEED.. 280/.78

  Speed is limited to ensure DBUS speed accuracy (Refer to DSC-34-NAV-10-30-20 Speed Monitoring Function).

CAT 3 SINGLE ONLY

INOP SYS

ADR 1(2)(3)
CAT 3 DUAL
GPWS [1]

[1] *(in case of ADR 1 FAULT only)*

NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321

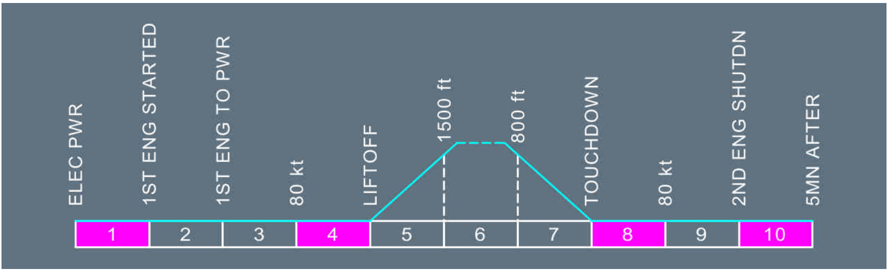
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017147.0003001 / 10 MAY 21

L2 Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If** NAV ADR 1+2 FAULT**:**

AIR DATA SWTG..........CAPT 3

L2 *Set ADR 3 (if available) to the captain's side.*

L1 ADR (AFFECTED) P/B..........OFF

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1 *Note:* *In case of an NAV ADR 1+2 FAULT, check speed is below VFE of CONF 1+F (215 kt) before selecting Flaps 1; since ADR 1+2 parameters are lost, the SFCCs will set CONF 1+F instead of CONF 1.*

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

MAX SPEED..........320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

L1 ● **If** NAV ADR 1+3(2+3) FAULT**:**

L2 Air data information is lost on one PFD and on the associated HUD ◁ .

Note: *In case of NAV ADR 1+3 FAULT, the landing gear safety valve is controlled closed:*
- *Landing gear retraction is inoperative*
- *Landing gear extension must be performed by gravity.*

L1 AIR DATA SWTG..........NORM

ATC/XPDR (IF ADR 1 FAILED)..........SYS 2

ATC/XPDR (IF ADR 2 FAILED)..........SYS 1

ADR (AFFECTED) P/B..........OFF

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.. 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017397.0007001 / 09 FEB 18

L12

STATUS

MAX SPEED... 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Appears when CONF 3 is selected.

- **If ADR 1+3 FAULT:**

  L/G...GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

APPR SPD.. VREF + 10 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

At L/G extension, control reverts to direct law in pitch and roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

FLS ◁ LIMITED TO F–APP + RAW

- **If ADR 1 + 3 (or 2 + 3) FAULT:**

  BOTH PFD ON THE SAME FAC

  Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of an ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.

INOP SYS

F/CTL PROT
ADR 1 + 2 or (2 + 3) or (1 + 3)
AP 1 + 2
A/THR
ATC/XPDR 1 (1)
ATC/XPDR 2 (2)
RUD TRV LIM 1(2) (3)
GPWS (if ADR 1 fault)
N.W. STEER (4)
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
ROW/ROP ◁

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(1) *(ATC/XPDR 1 in the case of ADR 1 failure)*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

(2) *(ATC/XPDR 2 in the case of ADR 2 failure)*

(3) *(in the case of an ADR 1 + 3 FAULT or in the case of an ADR 2 + 3 FAULT)*

(4) *(if ADR 1 + 3 fault)*

NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01251

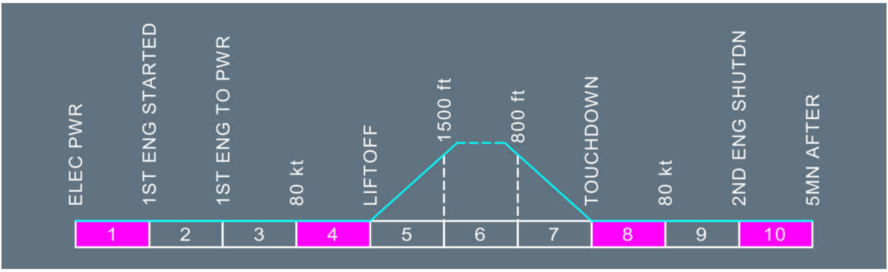
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017147.0002001 / 10 MAY 21

L2 Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost.

Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.

L1 ● **If** NAV ADR 1+2 FAULT**:**

AIR DATA SWTG....................CAPT 3

L2 *Set ADR 3 (if available) to the captain's side.*

L1 ADR (AFFECTED)....................OFF

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1 *Note: In case of an NAV ADR 1+2 FAULT, check speed is below VFE of CONF 1+F (215 kt) before selecting Flaps 1; since ADR 1+2 parameters are lost, the SFCCs will set CONF 1+F instead of CONF 1.*

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

MAX SPEED....................320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

L1 ● **If** NAV ADR 1+3(2+3) FAULT**:**

L2 Air data information is lost on one PFD and on the associated HUD ◁ .

Note: In case of NAV ADR 1+3 FAULT, the landing gear safety valve is controlled closed:
- *Landing gear retraction is inoperative*
- *Landing gear extension must be performed by gravity.*

L1 AIR DATA SWTG....................NORM

ATC (IF ADR 1 FAILED)....................SYS 2

ATC (IF ADR 2 FAILED)....................SYS 1

ADR (AFFECTED)....................OFF

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

L2 *Due to the fact that the enhanced functions of the EGPWS or the predictive functions of the GPWS (for aircraft equipped with T2CAS or T3CAS) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.. 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017397.0003001 / 09 FEB 18

L12

STATUS

MAX SPEED... 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL to not degrade handling qualities.

GPWS LDG FLAP 3..ON

Appears when CONF 3 is selected.

- **If ADR 1+3 FAULT:**

  L/G...GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

APPR SPD... VREF + 10 KT

LDG DIST PROC... APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

At L/G extension, control reverts to direct law in pitch and roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

- **If ADR 1 + 3 (or 2 + 3) FAULT:**

  BOTH PFD ON THE SAME FAC

  Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of an ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.

INOP SYS

F/CTL PROT
ADR 1 + 2 or (2 + 3) or (1 + 3)
AP 1 + 2
A/THR
RUD TRV LIM 1(2) (1)
GPWS (if ADR 1 fault)
N.W. STEER (2)
CAT 2

---

(1) *(in the case of an ADR 1 + 3 FAULT or in the case of an ADR 2 + 3 FAULT)*

(2) *(if ADR 1 + 3 fault)*

NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

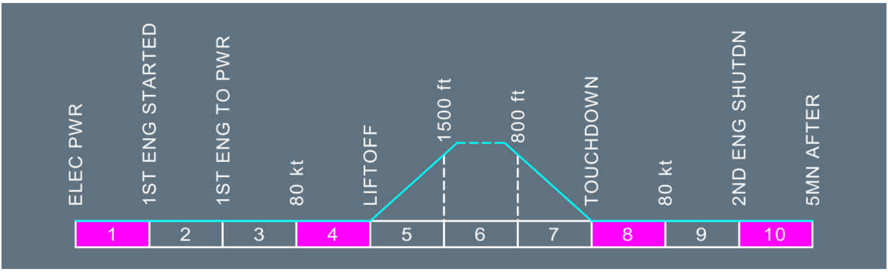
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
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Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017147.0003001 / 10 MAY 21

L2 Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If** NAV ADR 1+2 FAULT**:**

AIR DATA SWTG....................CAPT 3

L2 *Set ADR 3 (if available) to the captain's side.*

L1 ADR (AFFECTED) P/B....................OFF

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1 *Note:* *In case of an NAV ADR 1+2 FAULT, check speed is below VFE of CONF 1+F (215 kt) before selecting Flaps 1; since ADR 1+2 parameters are lost, the SFCCs will set CONF 1+F instead of CONF 1.*

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

MAX SPEED....................320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

L1 ● **If** NAV ADR 1+3(2+3) FAULT**:**

L2 Air data information is lost on one PFD and on the associated HUD ◁ .

Note: *In case of NAV ADR 1+3 FAULT, the landing gear safety valve is controlled closed:*
- *Landing gear retraction is inoperative*
- *Landing gear extension must be performed by gravity.*

L1 AIR DATA SWTG....................NORM
ATC/XPDR (IF ADR 1 FAILED)....................SYS 2
ATC/XPDR (IF ADR 2 FAILED)....................SYS 1
ADR (AFFECTED) P/B....................OFF

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

(PROT LOST)

MAX SPEED.. 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017397.0012001 / 09 FEB 18

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Appears when CONF 3 is selected.

- **If ADR 1+3 FAULT:**

  L/G...GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

APPR SPD... VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

At L/G extension, control reverts to direct law in pitch and roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

FLS ◁ LIMITED TO F–APP + RAW

- **If ADR 1 + 3 (or 2 + 3) FAULT:**

  BOTH PFD ON THE SAME FAC

  Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of an ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.

INOP SYS

F/CTL PROT
ADR 1 + 2 or (2 + 3) or (1 + 3)
AP 1 + 2
A/THR
ATC/XPDR 1 (1)
ATC/XPDR 2 (2)
RUD TRV LIM 1(2) (3)
GPWS (if ADR 1 fault)
CAT 2
GLS AUTOLAND ◁
ROW/ROP ◁

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(1) *(ATC/XPDR 1 in the case of ADR 1 failure)*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

(2) *(ATC/XPDR 2 in the case of ADR 2 failure)*

(3) *(in the case of an ADR 1 + 3 FAULT or in the case of an ADR 2 + 3 FAULT)*

NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

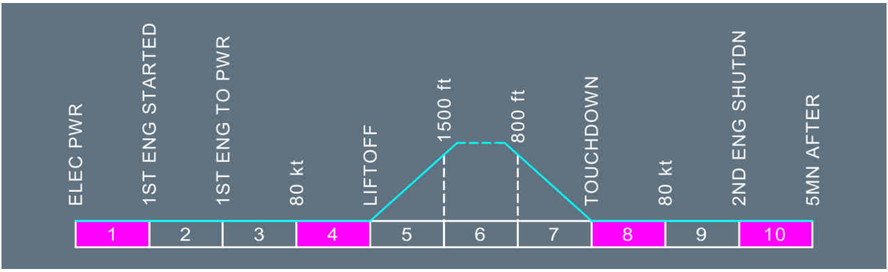
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

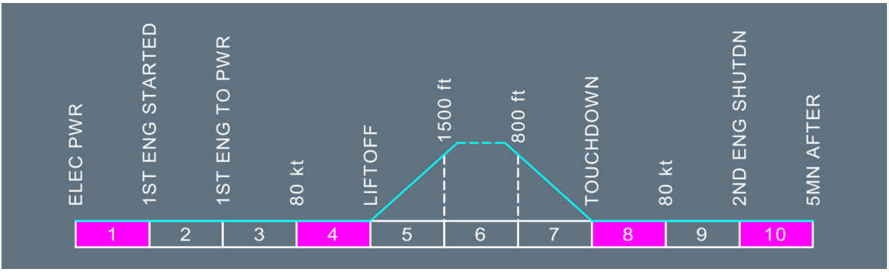
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017147.0003001 / 10 MAY 21

L2 Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If** NAV ADR 1+2 FAULT**:**

AIR DATA SWTG..CAPT 3

L2 *Set ADR 3 (if available) to the captain's side.*

L1 ADR (AFFECTED) P/B..OFF

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1 *Note:* *In case of an NAV ADR 1+2 FAULT, check speed is below VFE of CONF 1+F (215 kt) before selecting Flaps 1; since ADR 1+2 parameters are lost, the SFCCs will set CONF 1+F instead of CONF 1.*

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED..320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

L1 ● **If** NAV ADR 1+3(2+3) FAULT**:**

L2 Air data information is lost on one PFD and on the associated HUD ◁ .

Note: *In case of NAV ADR 1+3 FAULT, the landing gear safety valve is controlled closed:*
- *Landing gear retraction is inoperative*
- *Landing gear extension must be performed by gravity.*

L1 AIR DATA SWTG..NORM
ATC/XPDR (IF ADR 1 FAILED)..SYS 2
ATC/XPDR (IF ADR 2 FAILED)..SYS 1
ADR (AFFECTED) P/B..OFF

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.. 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017397.0009001 / 09 FEB 18

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Appears when CONF 3 is selected.

- **If ADR 1+3 FAULT:**

  L/G..GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

APPR SPD...VREF + 10 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

At L/G extension, control reverts to direct law in pitch and roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

FLS ◁ LIMITED TO F–APP + RAW

- **If ADR 1 + 3 (or 2 + 3) FAULT:**

  BOTH PFD ON THE SAME FAC

  Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of an ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.

INOP SYS

F/CTL PROT
ADR 1 + 2 or (2 + 3) or (1 + 3)
AP 1 + 2
A/THR
ATC/XPDR 1 (1)
ATC/XPDR 2 (2)
RUD TRV LIM 1(2) (3)
GPWS (if ADR 1 fault)
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
ROW/ROP ◁

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(1) *(ATC/XPDR 1 in the case of ADR 1 failure)*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

(2) *(ATC/XPDR 2 in the case of ADR 2 failure)*

(3) *(in the case of an ADR 1 + 3 FAULT or in the case of an ADR 2 + 3 FAULT)*

NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 08495-08596, 09190-09324

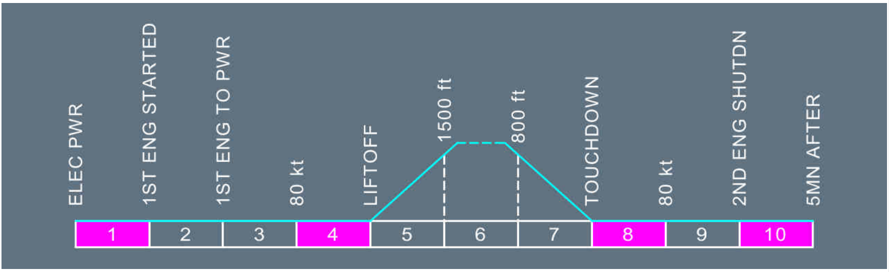
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017147.0003001 / 10 MAY 21

L2 Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If NAV ADR 1+2 FAULT:**

AIR DATA SWTG.......................................CAPT 3

L2 *Set ADR 3 (if available) to the captain's side.*

L1 ADR (AFFECTED) P/B.......................................OFF

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

Note: *In case of an NAV ADR 1+2 FAULT, check speed is below VFE of CONF 1+F (215 kt) before selecting Flaps 1; since ADR 1+2 parameters are lost, the SFCCs will set CONF 1+F instead of CONF 1.*

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.......................................320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

L1 ● **If NAV ADR 1+3(2+3) FAULT:**

L2

Air data information is lost on one PFD and on the associated HUD ◁ .

Note: *In case of NAV ADR 1+3 FAULT, the landing gear safety valve is controlled closed:*
- *Landing gear retraction is inoperative*
- *Landing gear extension must be performed by gravity.*

L1 AIR DATA SWTG.......................................NORM
ATC/XPDR (IF ADR 1 FAILED).......................................SYS 2
ATC/XPDR (IF ADR 2 FAILED).......................................SYS 1
ADR (AFFECTED) P/B.......................................OFF

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.. 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017397.0011001 / 04 JUN 19

L12

STATUS

MAX SPEED.. 320 KT
GA THR: TOGA ONLY

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

Appears when CONF 3 is selected.

- **If ADR (1+3) FAULT:**

  L/G..GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

APPR SPD ....VREF + 15 KT
LDG DIST PROC ....APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (2)
FLS ◁ LIMITED TO RAW ONLY
BOTH PFD ON THE SAME FAC
See (3)

INOP SYS

F/CTL PROT
ADR 1+2 or (1+3) or (2+3)
STEEP APPR ◁
RUD TRV LIM 1(2) (1)
AP 1+2
A/THR
CAT 2
GLS AUTOLAND ◁
GA SOFT
ATC/XPDR 1 (if ADR 1+3 FAULT)
ATC/XPDR 2 (if ADR 2+3 FAULT)
GPWS (if ADR 1 FAULT)
ROW/ROP ◁

(1) *(if ADR 1+3 FAULT or ADR 2+3 FAULT)*

(2) *At L/G extension, control reverts to direct law in pitch and roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(3) *if ADR 1+3 FAULT or ADR 2+3 FAULT.*
Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of an ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.

NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 08635

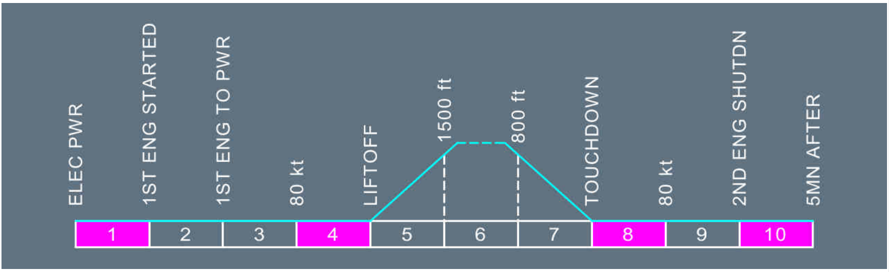
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017147.0006001 / 10 MAY 21

Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

■ **If** NAV ADR 1+2 FAULT**:**

AIR DATA SWTG..CAPT 3

L2 *Set ADR 3 (if available) to the captain's side.*

L1 ADR (AFFECTED) P/B..OFF

L2 *Due to the fact that the enhanced functions of the EGPWS or the predictive functions of the GPWS (for aircraft equipped with T2CAS or T3CAS) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1 *Note:* *In case of an NAV ADR 1+2 FAULT, check speed is below VFE of CONF 1+F (215 kt) before selecting Flaps 1; since ADR 1+2 parameters are lost, the SFCCs will set CONF 1+F instead of CONF 1.*

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED..320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

L1 ■ **If** NAV ADR 1+3(2+3) FAULT**:**

Air data information is lost on one PFD and on the associated HUD .

Note: *In case of NAV ADR 1+3 FAULT, the landing gear safety valve is controlled closed:*
- *Landing gear retraction is inoperative,*
- *Landing gear extension must be performed by gravity.*

AIR DATA SWTG..NORM
ATC/XPDR (IF ADR 1 FAILED)..SYS 2
ATC/XPDR (IF ADR 2 FAILED)..SYS 1
ADR (AFFECTED) P/B..OFF

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of an ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

- **If** NAV ADR 2+3 FAULT **and** ANTI ICE CAPT AOA**:**
  AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.. 320 KT

L2 *Speed is limited, due to the loss of high-speed protections.*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017397.0014001 / 24 MAR 20

L12

STATUS

MAX SPEED.. 320 KT
GA THR: TOGA ONLY

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

- **If NAV ADR 1+3 FAULT:**

  L/G..GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

APPR SPD ....VREF + 15 KT
LDG DIST PROC ....APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (4)

FLS ◁ LIMITED TO RAW ONLY

See (5)

INOP SYS

F/CTL PROT
ADR 1+2(1+3)(2+3)
STEEP APPR ◁
AP 1+2
A/THR
CAT 2
GLS AUTOLAND ◁
GA SOFT
ATC/XPDR 1 (1)
ATC/XPDR 2 (2)
RUD TRV LIM 1(2) (3)
GPWS (if ADR 1 fails)
ROW/ROP ◁

(1) *(if NAV ADR 1+3 FAULT)*
(2) *(if NAV ADR 2+3 FAULT)*
(3) *(if NAV ADR 1+3 (2+3) FAULT)*
(4) *Note: At L/G extension, control reverts to direct law in pitch and roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

(5) *Note: Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

the case of an NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.

NAV ADR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 10949-11597

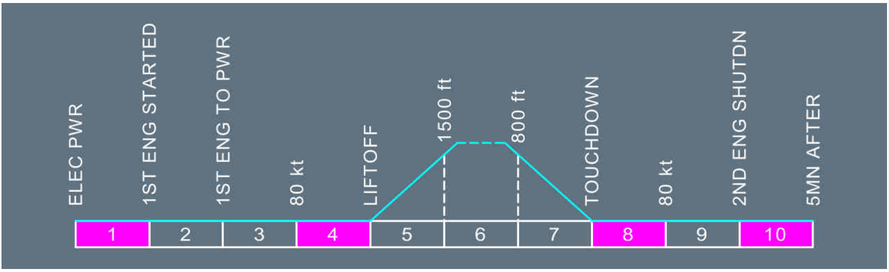
Ident.: PRO-ABN-NAV-B-00018113.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when two ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017147.0007001 / 10 MAY 21

16

L2 Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost.

L1 *Note:* *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

- **If NAV ADR 1+2 FAULT:**
  - **If ADR 3 available:**

    AIR DATA SWTG....................CAPT 3

    L2 *Select ADR 3 to CAPT side if ADR 3 is reliable and not in use.*

    L1 F/O BKUP SPD/ALT....................ON

    L2 *Select DBUS on F/O side.*

  - L1 **If ADR 3 not available:**

    CAPT BKUP SPD/ALT....................ON

    F/O BKUP SPD/ALT....................ON

    Select DBUSon both sides if ADR 3 not reliable.

  ADR (AFFECTED) P/B....................OFF

  L2 *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

  L1 *Note:* *In case of an NAV ADR 1+2 FAULT, check speed is below VFE of CONF 1+F (215 kt) before selecting Flaps 1; since ADR 1+2 parameters are lost, the SFCCs will set CONF 1+F instead of CONF 1.*

  ASSOCIATED PROCEDURES

  F/CTL ALTN LAW
  (PROT LOST)

- **If NAV ADR 1+3(2+3) FAULT:**

  Air data information is lost on one PFD and on the associated HUD ◁ .

  Note: *In case of NAV ADR 1+3 FAULT, the landing gear safety valve is controlled closed:*
  - *Landing gear retraction is inoperative*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

- *Landing gear extension must be performed by gravity.*

CAPT(F/O) BKUP SPD/ALT....ON
AIR DATA SWTG....NORM
ATC/XPDR....SYS 2(SYS 1)
ADR (AFFECTED) P/B....OFF

L2 *Due to the fact that the enhanced functions of the EGPWS or the predictive functions of the GPWS (for aircraft equipped with T2CAS or T3CAS) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of a NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

L1

- **If** NAV ADR 2+3 FAULT **and** ANTI ICE CAPT AOA**:**

  AVOID ICING CONDITIONS

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-B-00017397.0021001 / 21 JAN 21

17

L12

STATUS

MAX SPEED.. 280/.78

Speed is limited to ensure DBUS speed accuracy (Refer to DSC-34-NAV-10-30-20 Speed Monitoring Function).

GA THR: TOGA ONLY

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

- **If NAV ADR 1+3 FAULT:**

  L/G...GRVTY EXTN

  Refer to PRO-ABN-LG [QRH] L/G GRAVITY EXTENSION

APPR SPD ....VREF + 15 KT

LDG DIST PROC ....APPLY

ALTN LAW: PROT LOST

WHEN L/G DN: DIRECT LAW

See (4)

FLS ◁ LIMITED TO RAW ONLY

See (5)

INOP SYS

F/CTL PROT
ADR 1+2(1+3)(2+3)
STEEP APPR ◁
AP 1+2
A/THR
CAT 2
GLS AUTOLAND ◁
GA SOFT
ATC/XPDR 1 (1)
ATC/XPDR 2 (2)
RUD TRV LIM 1(2) (3)
GPWS (if ADR 1 fails)
ROW/ROP ◁

(1) *(if NAV ADR 1+3 FAULT)*

(2) *(if NAV ADR 2+3 FAULT)*

(3) *(if NAV ADR 1+3 (2+3) FAULT)*

(4) *Note: At L/G extension, control reverts to direct law in pitch and roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

Continued on the following page

NAV ADR 1+2(1+3)(2+3) FAULT (Cont'd)

(5)

Note: *Due to the fact that the enhanced functions of the EGPWS ◁ or the predictive functions of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inhibited, the GPWS TERR FAULT light and the GPWS SYS FAULT light come on in the case of an NAV ADR 1+3 FAULT. If this occurs, the flight crew should switch off the GPWS TERR pb-sw and the GPWS SYS pb-sw.*

NAV ADR 1+2+3 FAULT

Applicable to: MSN 02887, 04352-05987, 06097, 06121, 06139-07098

Ident.: PRO-ABN-NAV-X-00018114.0001001 / 21 MAR 16

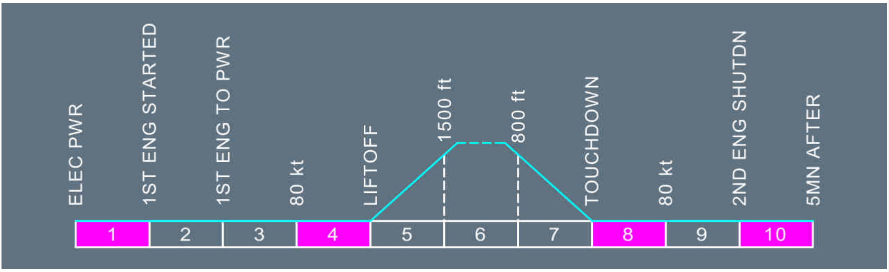
18

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the three ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00017497.0003001 / 10 OCT 17

L2 This procedure requires to turn off the three ADRs, and to use the Back Up Speed Scale (BUSS) and GPS altitude.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 AP+FD.......... OFF
A/THR.......... OFF
PROBE/WINDOW HEAT.......... ON
ADR 1+2+3 P/B.......... OFF

L2 Note: *The STALL WARNING remains operative.*

L1 SPD.......... FLY THE GREEN

L2 *Fly the green area of the speed scale to ensure safe flight.*

L1 Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust table.*

STBY INST.......... MAY BE UNREL

L2 *ADR3 and STBY speeds use the data of the same probes. Therefore, standby instrument must be used with care.*

L1 ALL ADR OFF PROC.......... APPLY

L2 *Refer to PRO-ABN-NAV [QRH] ALL ADR OFF.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MANEUVER WITH CARE

L2 Note: *The rudder travel limiter is frozen at the value it had at the moment when the failure occurred, and may not be in correct position for the flight speed. At slats extension, full rudder travel authority is recovered.*

L1 SPD BRK.......... DO NOT USE

Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00016858.0002001 / 18 NOV 21

L12

STATUS

MANEUVER WITH CARE
SPD BRK...DO NOT USE

STBY INST... MAY BE UNREL

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by “FOR LDG: USE FLAP 3” when CONF 3 is selected, as a reminder.

LDG..GRVTY EXTN

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

INOP SYS

REAC W/S DET
PRED W/S DET ◁✳
F/CTL PROT
ADR 1+2+3
STEEP APPR ◁✳
RUD TRV LIM
AP 1+2
A/THR
CAB PR 1+2
GPWS
GPWS TERR ◁✳
ATC/XPDR 1
ATC/XPDR 2
ROW/ROP ◁✳

NAV ADR 1+2+3 FAULT

Applicable to: MSN 08495-08596, 09190-09324

Ident.: PRO-ABN-NAV-X-00018114.0001001 / 21 MAR 16

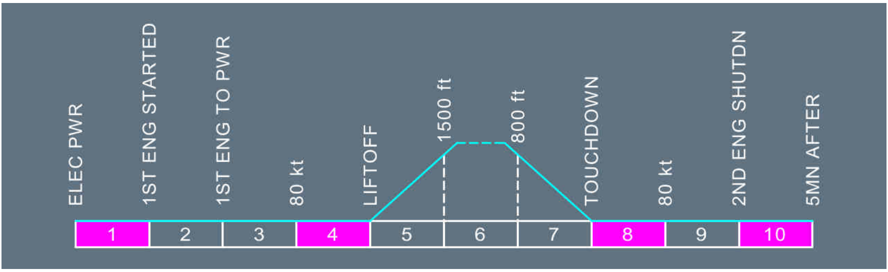
19

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the three ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00017497.0006001 / 10 OCT 17

L2 This procedure requires to turn off the three ADRs, and to use the BackUp Speed Scale (BUSS) and GPS altitude.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 AP+FD...OFF
A/THR...OFF
PROBE/WINDOW HEAT...ON
BKUP SPD/ALT PB...USE
ADR 1+2+3 P/B...OFF

L2 Note: *The STALL WARNING remains operative.*

L1 SPD...FLY THE GREEN

L2 *Fly the green area of the speed scale to ensure safe flight.*

L1 Note: *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust table.*

- **If AOA disagree:**
  BKUP SPD/ALT...DO NOT USE

STBY INST...MAY BE UNREL

L2 *ADR3 and STBY speeds use the data of the same probes. Therefore, standby instrument must be used with care.*

L1 ALL ADR OFF PROC...APPLY

L2 *Refer to PRO-ABN-NAV [QRH] ALL ADR OFF.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MANEUVER WITH CARE

L2 Note: *The rudder travel limiter is frozen at the value it had at the moment when the failure occurred, and may not be in correct position for the flight speed. At slats extension, full rudder travel authority is recovered.*

L1 SPD BRK...DO NOT USE

Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00016858.0004001 / 18 NOV 21

L12

STATUS

MANEUVER WITH CARE
SPD BRK..DO NOT USE
GA THR: TOGA ONLY

STBY INST.. MAY BE UNREL

- **If AOA disagree:**
  BKUP SPD/ALT.................................. DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by "FOR LDG: USE FLAP 3" when CONF 3 is selected, as a reminder.

LDG...GRVTY EXTN

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

INOP SYS

REAC W/S DET
PRED W/S DET ◁
F/CTL PROT
ADR 1+2+3
STEEP APPR ◁
RUD TRV LIM
AP 1+2
A/THR
GA SOFT
CAB PR 1+2
ATC/XPDR 1
ATC/XPDR 2
GPWS
GPWS TERR ◁
ROW/ROP ◁

NAV ADR 1+2+3 FAULT

Applicable to: MSN 08635

Ident.: PRO-ABN-NAV-X-00018114.0001001 / 21 MAR 16

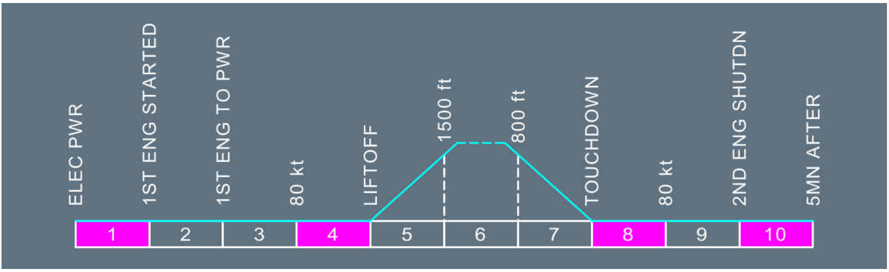
20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the three ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00017497.0006001 / 10 OCT 17

L2 This procedure requires to turn off the three ADRs, and to use the BackUp Speed Scale (BUSS) and GPS altitude.

Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 AP+FD.......... OFF
A/THR.......... OFF
PROBE/WINDOW HEAT.......... ON
BKUP SPD/ALT PB.......... USE
ADR 1+2+3 P/B.......... OFF

L2 *Note:* *The STALL WARNING remains operative.*

L1 SPD.......... FLY THE GREEN

L2 *Fly the green area of the speed scale to ensure safe flight.*

L1 *Note:* *If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and use pitch/thrust table.*

- **If AOA disagree:**
  BKUP SPD/ALT.......... DO NOT USE

STBY INST.......... MAY BE UNREL

L2 *ADR3 and STBY speeds use the data of the same probes. Therefore, standby instrument must be used with care.*

L1 ALL ADR OFF PROC.......... APPLY

L2 *Refer to PRO-ABN-NAV [QRH] ALL ADR OFF.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MANEUVER WITH CARE

L2 *Note:* *The rudder travel limiter is frozen at the value it had at the moment when the failure occurred, and may not be in correct position for the flight speed. At slats extension, full rudder travel authority is recovered.*

L1 SPD BRK.......... DO NOT USE

Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00016858.0011001 / 18 NOV 21

L12

STATUS

MANEUVER WITH CARE
SPD BRK .... DO NOT USE
GA THR: TOGA ONLY

STBY INST .... MAY BE UNREL

- **If AOA disagree:**
  BKUP SPD/ALT...................................... DO NOT USE

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

LDG...GRVTY EXTN

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

REAC W/S DET
PRED W/S DET ◁✻
F/CTL PROT
ADR 1+2+3
STEEP APPR ◁✻
RUD TRV LIM
AP 1+2
A/THR
GA SOFT ◁✻
CAB PR 1+2
ATC/XPDR 1
ATC/XPDR 2
GPWS
GPWS TERR ◁✻
ROW/ROP ◁✻

(1) *Note:* *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV ADR 1+2+3 FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-X-00018114.0001001 / 21 MAR 16

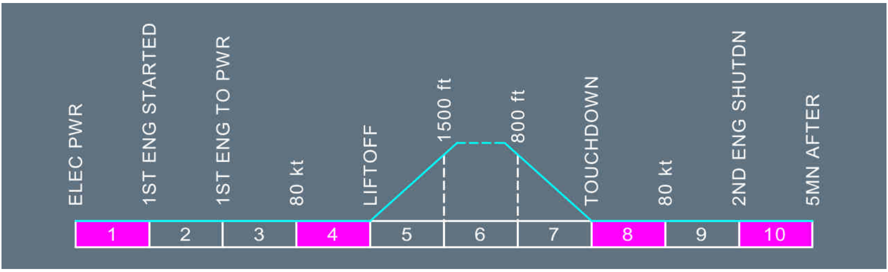
21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the three ADRs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00017497.0012001 / 21 JAN 21

22

L2 This procedure requires to turn off the three ADRs, and to use the DBUS and GPS altitude.

L1 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

AP+FD.......OFF
A/THR.......OFF
PROBE/WINDOW HEAT.......ON
CAPT BKUP SPD/ALT.......ON
F/O BKUP SPD/ALT.......ON
ADR 1+2+3 P/B.......OFF

Note: *The STALL WARNING remains operative.*

STBY INST.......MAY BE UNREL

L2 *ADR3 and STBY speeds use the data of the same probes. Therefore, standby instrument must be used with care.*

L1 ALL ADR OFF PROC.......APPLY

L2 *Refer to PRO-ABN-NAV [QRH] ALL ADR OFF.*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MANEUVER WITH CARE

Note: *The rudder travel limiter is frozen at the value it had at the moment when the failure occurred, and may not be in correct position for the flight speed. At slats extension, full rudder travel authority is recovered.*

SPD BRK.......DO NOT USE

Continued on the following page

NAV ADR 1+2+3 FAULT (Cont'd)

Ident.: PRO-ABN-NAV-X-00016858.0018001 / 18 NOV 21

23

L12

STATUS

MANEUVER WITH CARE
STBY INST.. MAY BE UNREL
SPD BRK .... DO NOT USE
GA THR: TOGA ONLY
MAX SPEED.. 280/.78

Speed is limited to ensure DBUS speed accuracy (Refer to DSC-34-NAV-10-30-20 Speed Monitoring Function).

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

LDG...GRVTY EXTN

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

REAC W/S DET
PRED W/S DET ◁✻
F/CTL PROT
ADR 1+2+3
STEEP APPR ◁✻
RUD TRV LIM
AP 1+2
A/THR
GA SOFT
CAB PR 1+2
ATC/XPDR 1
ATC/XPDR 2
GPWS
GPWS TERR ◁✻
ROW/ROP ◁✻

(1) *Note:* *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV ADR ALT DISAGREE

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-BF-00023414.0001001 / 21 JAN 21

24

ANNUNCIATIONS

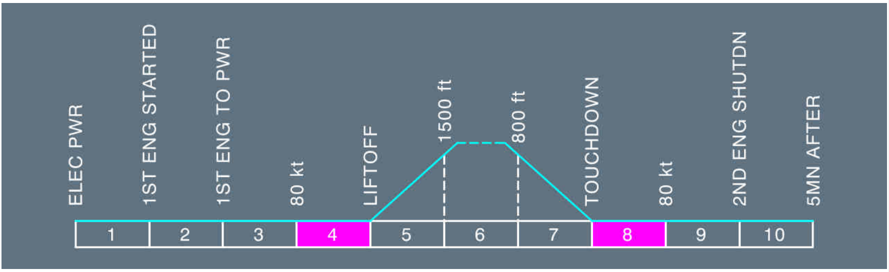
Triggering Conditions:

L2

The NAV ADR ALT DISAGREEalert triggers when all ADRs are reliable and the pressure altitude provided by selected ADR is different from median pressure altitude:

- 500 ft if STD reference is selected
- 250 ft if QNH or QFE reference is selected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-BF-00023415.0001001 / 21 JAN 21

25

ADR 1(2)(3) ALT AFFECTED

■ **If altitude of ADR 1(2)(3) affected:**

AIR DATA SWTG.. CAPT 3(F/O 3)(AS RQRD)

■ **If altitude of ADR 1 and ADR 2 affected:**

AIR DATA SWTG..AS RQRD

■ **If altitude of ADR 1(2) and ADR 3 affected:**

ATC/XPDR..SYS 2(SYS 1)

NAV ADR DISAGREE

Applicable to: MSN 01143-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

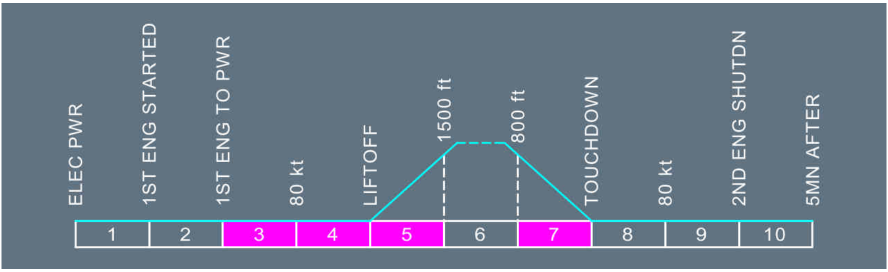
Ident.: PRO-ABN-NAV-U-00018110.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the following conditions occur:
- The ELAC rejected an ADR, or an ADR is faulty
- The speed or the Angle Of Attack (AOA) from the two remaining ADRs are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017130.0002001 / 18 MAY 21

L2 The alternate law activates, and protections are lost.

L1 AIR SPD..X CHECK

L2 *Check airspeed information on both PFDs, and on the standby airspeed indicator.*

L1 ■ **IF SPD DISAGREE:**

ADR CHECK PROC..APPLY

L2 To determine the faulty ADR, *Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items*.

L1 ■ **IF NO SPD DISAGREE:**

AOA DISCREPANCY

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

Note: Following NAV ADR DISAGREE, detected by the ELACs, alternate law is latched (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).

(PROT LOST)
MAX SPEED..320 KT

Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017131.0001001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3.. ON

Displayed, when CONF 3 is selected.

APPR SPD.. VREF +10

LDG DIST PROC.. APPLY

- **IF NO SPD DISAGREE:**
  RISK OF UNDUE STALL WARN

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
STEEP APPR

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV ADR DISAGREE

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

Ident.: PRO-ABN-NAV-U-00018110.0001001 / 21 MAR 16

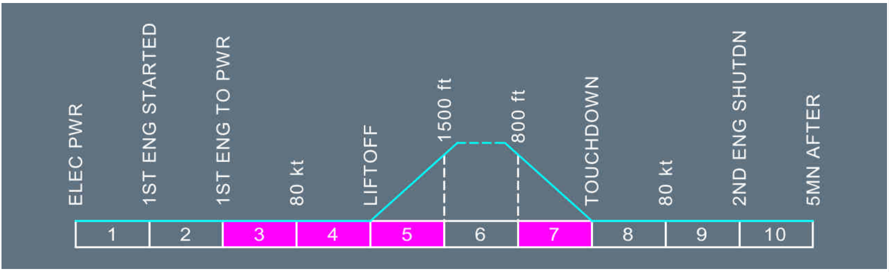
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the following conditions occur:
- The ELAC rejected an ADR, or an ADR is faulty
- The speed or the Angle Of Attack (AOA) from the two remaining ADRs are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017130.0002001 / 18 MAY 21

L2 The alternate law activates, and protections are lost.

L1 AIR SPD...X CHECK

L2 *Check airspeed information on both PFDs, and on the standby airspeed indicator.*

L1 ■ **IF SPD DISAGREE:**

ADR CHECK PROC...APPLY

L2 To determine the faulty ADR, *Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items*.

L1 ■ **IF NO SPD DISAGREE:**

AOA DISCREPANCY

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

Note: Following NAV ADR DISAGREE, detected by the ELACs, alternate law is latched (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).

(PROT LOST)
MAX SPEED...320 KT

Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017131.0002001 / 21 MAR 16

L12

STATUS

MAX SPEED... 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Displayed, when CONF 3 is selected.

APPR SPD... VREF +15 KT

LDG DIST PROC... APPLY

- **IF NO SPD DISAGREE:**
  RISK OF UNDUE STALL WARN

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV ADR DISAGREE

Applicable to: MSN 08495-08596, 09190-09324

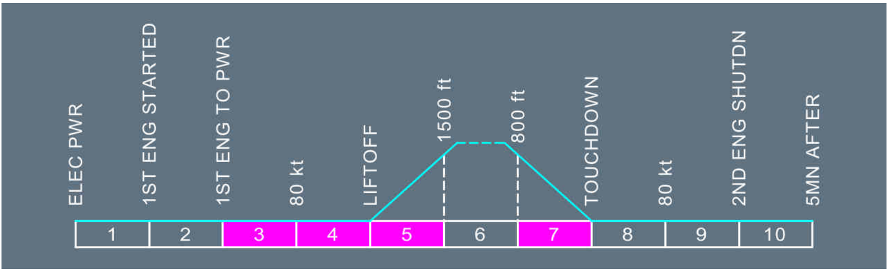
Ident.: PRO-ABN-NAV-U-00018110.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the following conditions occur:
- The ELAC rejected an ADR, or an ADR is faulty
- The speed or the Angle Of Attack (AOA) from the two remaining ADRs are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017130.0003001 / 18 MAY 21

L2 The alternate law activates, and protections are lost.

L1 AIR SPD..X CHECK

L2 *Check airspeed information on both PFDs, and on the standby airspeed indicator.*

L1

- **IF NO SPD DISAGREE:**

  AOA DISCREPANCY
  BKUP SPD/ALT..DO NOT USE

- **IF SPD DISAGREE:**

  ADR CHECK PROC..APPLY

L2 To determine the faulty ADR,*Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items*.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

Note: Following NAV ADR DISAGREE, detected by the ELACs, alternate law is latched (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).

(PROT LOST)

- **For A318 aircraft:**

  MAX SPEED..320/0.77
  MANEUVER WITH CARE
  MAX FL..350

- **For A319/A320/A321 aircraft:**

  MAX SPEED..320 KT

Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017131.0014001 / 18 NOV 21

L12

STATUS

MAX SPEED.. 320 KT

- **IF AOA DISAGREE:**
  BKUP SPD/ALT...................................... DO NOT USE

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL so as not to degrade handling qualities.

GPWS LDG FLAP 3.. ON

This line is displayed when flaps are in CONF 3.

APPR SPD... VREF +15

LDG DIST PROC.. APPLY

- **IF NO SPD DISAGREE:**
  RISK OF UNDUE STALL WARN

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT

---

(1) *Note: At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV ADR DISAGREE

Applicable to: MSN 08635

Ident.: PRO-ABN-NAV-U-00018110.0001001 / 21 MAR 16

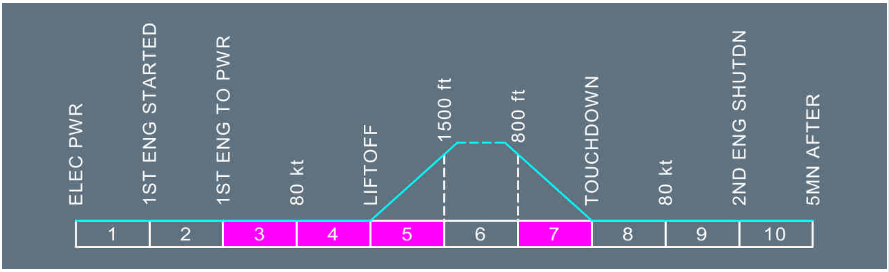
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the following conditions occur:
- The ELAC rejected an ADR, or an ADR is faulty
- The speed or the Angle Of Attack (AOA) from the two remaining ADRs are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017130.0003001 / 18 MAY 21

L2 The alternate law activates, and protections are lost.

L1 AIR SPD...X CHECK

L2 *Check airspeed information on both PFDs, and on the standby airspeed indicator.*

L1
- **IF NO SPD DISAGREE:**

  AOA DISCREPANCY
  BKUP SPD/ALT....................................DO NOT USE

- **IF SPD DISAGREE:**

  ADR CHECK PROC....................................APPLY

L2 To determine the faulty ADR,*Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items*.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

Note: *Following NAV ADR DISAGREE, detected by the ELACs, alternate law is latched (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).*

(PROT LOST)

- **For A318 aircraft:**

  MAX SPEED....................................320/0.77

  MANEUVER WITH CARE

  MAX FL....................................350

- **For A319/A320/A321 aircraft:**

  MAX SPEED....................................320 KT

Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017131.0020001 / 18 NOV 21

26

L12

STATUS

MAX SPEED.. 320 KT

- **IF AOA DISAGREE:**
  BKUP SPD/ALT.. DO NOT USE

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. VREF + 15 KT
LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
See (1)

INOP SYS

F/CTL PROT

(1) *Note:* *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV ADR DISAGREE

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-U-00018110.0004001 / 21 JAN 21

27

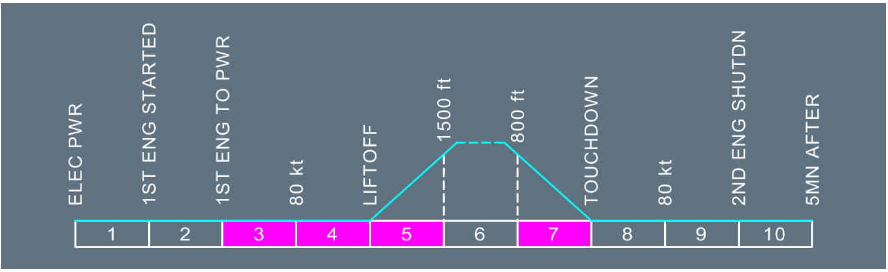
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when both FACs are failed and the following conditions occur:
- The ELAC rejected an ADR, or an ADR is faulty
- The speed or the AOA from the two remaining ADRs are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017130.0005001 / 18 NOV 21

28

L2 The alternate law activates, and protections are lost.

L1 AIR SPD...X CHECK

L2 *Check airspeed information on both PFDs, and on the standby airspeed indicator.*

L1
- **IF NO SPD DISAGREE:**

  AOA DISCREPANCY

  BKUP SPD/ALT...DO NOT USE

- **IF SPD DISAGREE:**

  UNREL SPD PROC...APPLY

L2 To determine the faulty ADR, *Refer to PRO-ABN-NAV UNRELIABLE SPEED INDICATION - Memory Items*.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW

Note: Following NAV ADR DISAGREE, detected by the ELACs, alternate law is latched (Refer to PRO-ABN-F_CTL F/CTL ALTN LAW).

(PROT LOST)

- **For A318 aircraft:**

  MAX SPEED...320/0.77

  MANEUVER WITH CARE

  MAX FL...350

- **For A319/A320/A321 aircraft:**

  MAX SPEED...320 KT

Continued on the following page

NAV ADR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-U-00017131.0020001 / 18 NOV 21

29

L12

STATUS

MAX SPEED.. 320 KT

- **IF AOA DISAGREE:**
  BKUP SPD/ALT....................................... DO NOT USE

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

APPR SPD..VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT

---

(1) Note: At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

NAV ADS-B RPTG 1(2) FAULT

Applicable to: MSN 02321, 03180-03211, 04827-04860, 08495-09324, 10949-11597

Ident.: PRO-ABN-NAV-AL-00018118.0001001 / 21 MAR 16

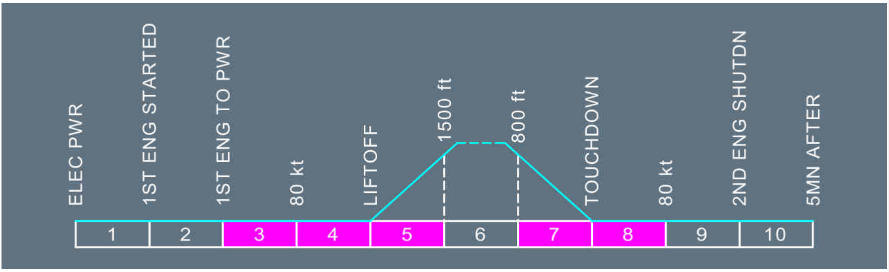
30

ANNUNCIATIONS

Triggering Conditions:

L2 The Automatic Dependent Surveillance-Broadcast (ADS-B) function is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-NAV-AL-00015758.0001001 / 08 AUG 14

31

ATC/XPDR..SYS 2(1)

Ident.: PRO-ABN-NAV-AL-00015760.0001001 / 08 AUG 14

32

STATUS

INOP SYS

ADS-B RPTG 1(2)

NAV ALL SPD UNCERTAIN

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-BE-00023398.0001001 / 21 JAN 21

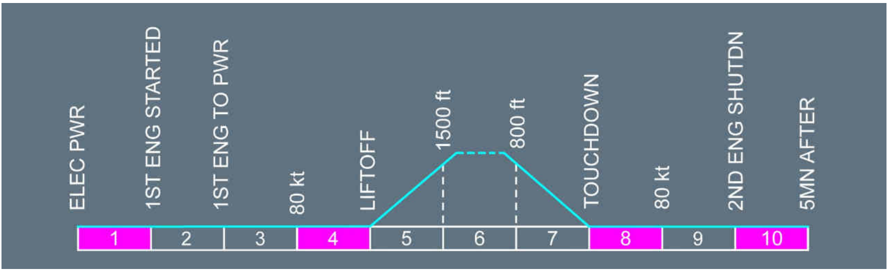
33

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when all speeds (ADRs and backup) are FAULT or UNCERTAIN.
This alert is associated with the display of the speeds status on ECAM status display.

Flight Phase Inhibition:



Ident.: PRO-ABN-NAV-BE-00023399.0001001 / 21 JAN 21

34

L2 Flight control normal laws are lost. Pitch alternate law preserves the neutral static stability. All protections, except maneuver protections are lost. This procedure requires to apply the Unreliable Speed Procedure for pitch/thrust table and troubleshooting.

The following messages are displayed:
ALL ADR SPD UNCERTAIN, and
BKUP SPD FAULT or BKUP SPD UNCERTAIN.

For the condition of each message, *Refer to DSC-34-NAV-10-30-20 Speed Monitoring Status*.

L1 UNREL SPD PROC....................APPLY
MAX SPEED....................280/.78

L2 *Speed is limited to ensure DBUS speed accuracy (Refer to DSC-34-NAV-10-30-20 Speed Monitoring Function).*

Continued on the following page

NAV ALL SPD UNCERTAIN (Cont'd)

Ident.: PRO-ABN-NAV-BE-00024150.0001001 / 21 JAN 21

35

STATUS

MAX SPEED... 280/.78

SPD STATUS

The following messages can be displayed:

ADR 1(2)(3) SPD FAULT or ADR 1(2)(3) SPD UNCERTAIN
and
STBY SPD UNCERTAIN
and
BKUP SPD FAULT or BKUP SPD UNCERTAIN

For the condition of each message, *Refer to DSC-34-NAV-10-30-20 Speed Monitoring Status*.

NAV ALT DISCREPANCY

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-NAV-BI-00024168.0001001 / 21 JAN 21

36

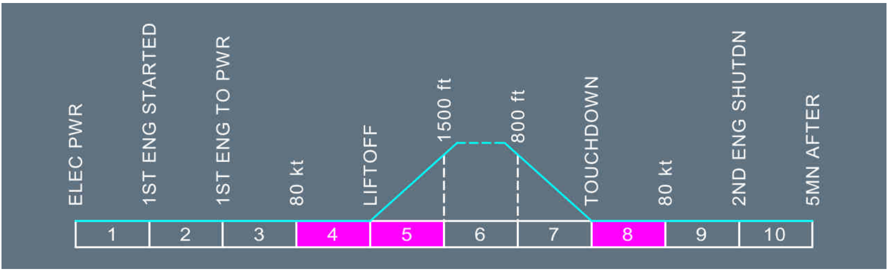
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the altitude displayed on the CAPT and F/O PFDs is greater than:

- 500 ft, if STD reference is selected
- 250 ft, if QNH or QFE reference is selected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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10

Ident.: PRO-ABN-NAV-BI-00024169.0001001 / 21 JAN 21

37

This alert is associated with CHEK ALT message on PFD.

ALT.. X CHECK

L2 *Crosscheck with the standby altimeter.*

L1 AIR DATA SWTG.. AS RQRD

L2 *Select ADR 3 to the faulty side.*

NAV ALTI DISCREPANCY

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-08596, 09190-09324

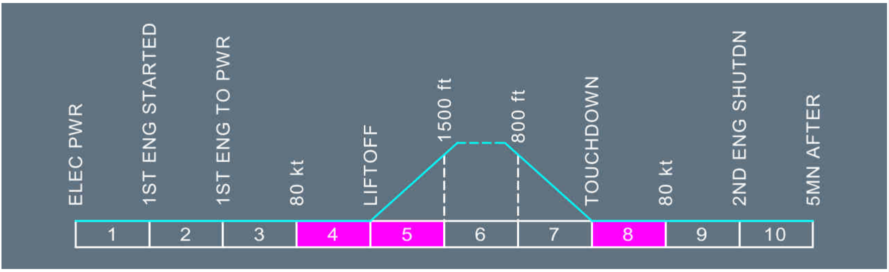
Ident.: PRO-ABN-NAV-AO-00018116.0001001 / 09 NOV 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the altitude displayed on the CAPT and F/O PFDs is greater than:
- 500 ft, if STD BARO reference is selected
- 250 ft, if QNH or QFE BARO reference is selected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AO-00012411.0002001 / 09 APR 14

ALT.. X CHECK

L2 *Crosscheck with the standby altimeter.*

L1 AIR DATA SWTG.. AS RQRD

L2 *Select ADR 3 to the faulty side.*

NAV AOA DISAGREE

Applicable to: MSN 08635

Ident.: PRO-ABN-NAV-BG-00023416.0001001 / 09 APR 20

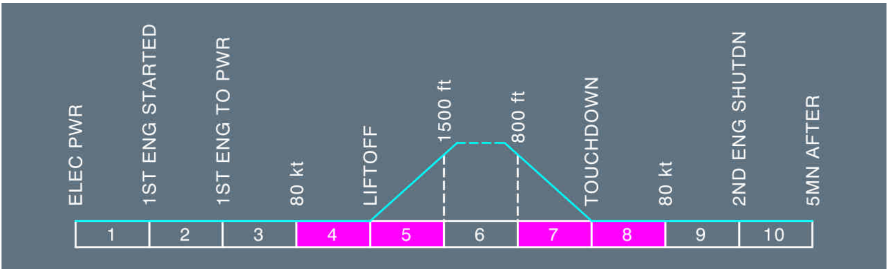
38

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ELAC detected a discrepancy between the angles of attack.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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10

Ident.: PRO-ABN-NAV-BG-00023417.0003001 / 09 APR 20

BKUP SPD/ALT..DO NOT USE

Ident.: PRO-ABN-NAV-BG-00023418.0001001 / 21 JAN 21

39

STATUS

INOP SYS

BKUP SPD

NAV AOA DISAGREE

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-BG-00023416.0001001 / 09 APR 20

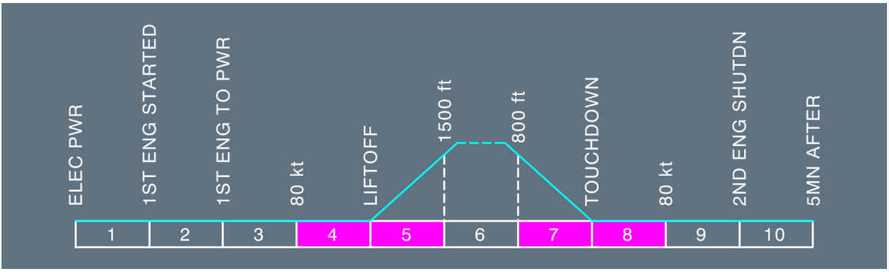
40

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when ELAC detected a discrepancy between the angles of attack.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-BG-00023417.0001001 / 09 APR 20

41

Crew awareness.

Ident.: PRO-ABN-NAV-BG-00023418.0001001 / 21 JAN 21

42

STATUS

INOP SYS

BKUP SPD

NAV CAPT(F/O)(STBY) AOA FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-V-00018124.0001001 / 21 MAR 16

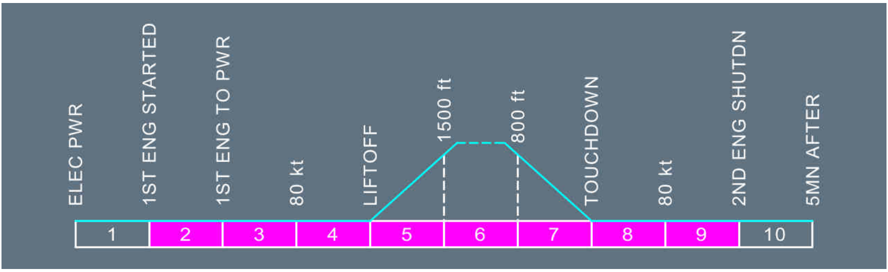
43

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the CAPT(F/O)(STBY) Angle Of Attack (AOA) sensor is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-V-00012458.0003001 / 25 FEB 14

44

Crew awareness.

Ident.: PRO-ABN-NAV-V-00012459.0003001 / 19 JUN 12

45

STATUS

INOP SYS

CAPT (F/O) (STBY)
AOA

NAV ATC/XPDR 1(2) FAULT

Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11597

Ident.: PRO-ABN-NAV-Z-00018119.0001001 / 21 MAR 16

46

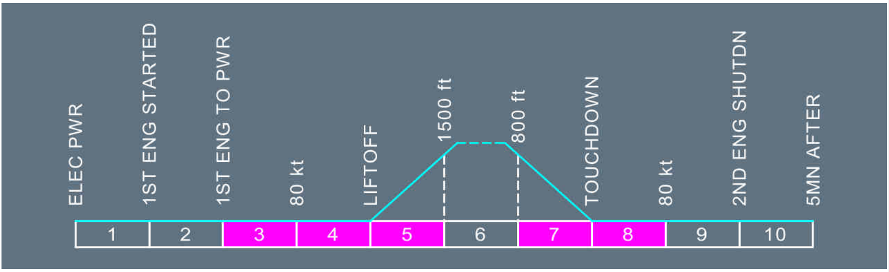
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when the related transponder fails.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-Z-00013539.0001001 / 18 JAN 17

47

ATC/XPDR..SYS 2(1)

Note: *In case of flight in RVSM airspace, select AP1 if SYS1 is used and AP2 if SYS2 is used.*

Ident.: PRO-ABN-NAV-Z-00013541.0002001 / 08 AUG 14

48

STATUS

INOP SYS

ATC/XPDR 1(2)
ADS-B RPTG 1(2)

NAV ATC/XPDR 1(2) FAULT

Applicable to: MSN 03284, 04544-04773, 04953-05987, 06097, 06121, 06139-07098

Ident.: PRO-ABN-NAV-Z-00018119.0001001 / 21 MAR 16

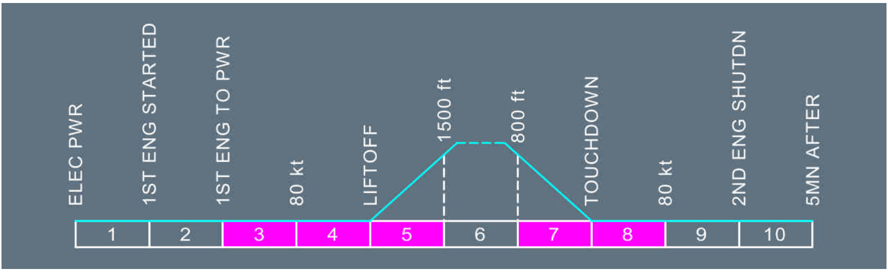
49

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the related transponder fails.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-Z-00013539.0001001 / 18 JAN 17

50

ATC/XPDR..SYS 2(1)

Note: *In case of flight in RVSM airspace, select AP1 if SYS1 is used and AP2 if SYS2 is used.*

Ident.: PRO-ABN-NAV-Z-00013541.0001001 / 17 MAR 11

STATUS

INOP SYS

ATC/XPDR 1(2)

NAV ATC/XPDR 1+2 FAULT

Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11293

Ident.: PRO-ABN-NAV-AA-00018120.0001001 / 21 MAR 16

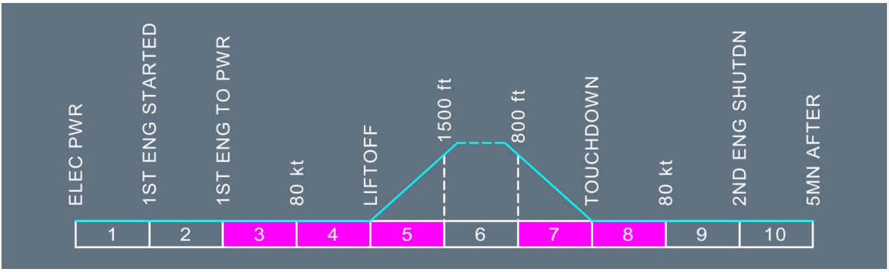
51

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both transponders fail.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AA-00013542.0001001 / 25 FEB 14

52

Crew awareness.

Ident.: PRO-ABN-NAV-AA-00013543.0002001 / 08 AUG 14

53

STATUS

INOP SYS

TCAS
ATC/XPDR 1
ATC/XPDR 2
ADS-B RPTG 1
ADS-B RPTG 2

NAV ATC/XPDR 1+2 FAULT

Applicable to: MSN 03284, 04544-04773, 04953-05987, 06097, 06121, 06139-07098

Ident.: PRO-ABN-NAV-AA-00018120.0001001 / 21 MAR 16

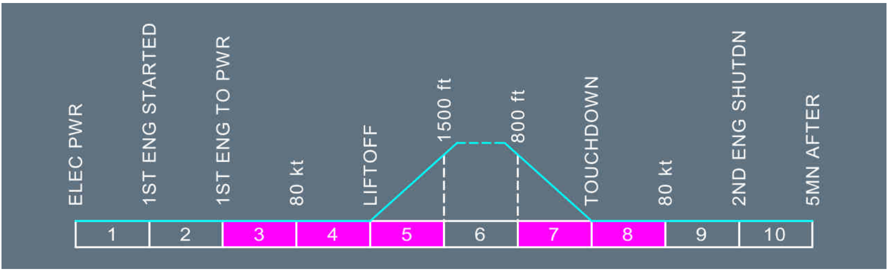
54

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both transponders fail.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AA-00013542.0001001 / 25 FEB 14

55

Crew awareness.

Ident.: PRO-ABN-NAV-AA-00013543.0001001 / 17 MAR 11

STATUS

INOP SYS

TCAS
ATC/XPDR 1
ATC/XPDR 2

NAV ATC/XPDR 1+2 FAULT

Applicable to: MSN 11482-11597

56 Ident.: PRO-ABN-NAV-AA-00018120.0002001 / 25 MAY 20

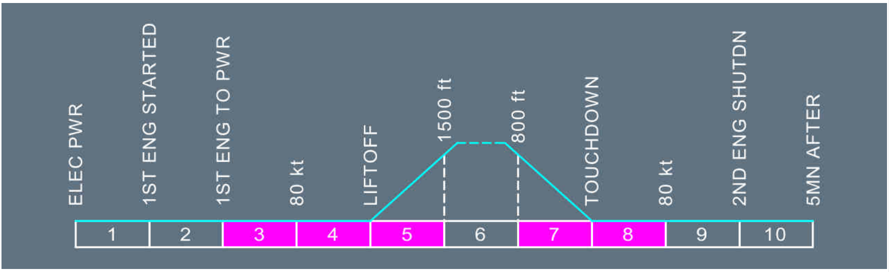
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- RMP1 is in backup mode and the XPDR 1 fails, or
- Both transponders fail.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AA-00013542.0001001 / 25 FEB 14

57

Crew awareness.

Continued on the following page

NAV ATC/XPDR 1+2 FAULT (Cont'd)

58 Ident.: PRO-ABN-NAV-AA-00013543.0003001 / 26 NOV 19

L12

STATUS

XPDR 1+2 NOT AVAIL

See (1)

INOP SYS

TCAS
ATC/XPDR 1
ATC/XPDR 2
ADS-B RPTG 1
ADS-B RPTG 2

(1) *In case of XPDR 1 fault and AMU fault.*

NAV ATC/XPDR 2 CTL FAULT

Applicable to: MSN 11482-11597

59 Ident.: PRO-ABN-NAV-BJ-00024207.0001001 / 25 MAY 20

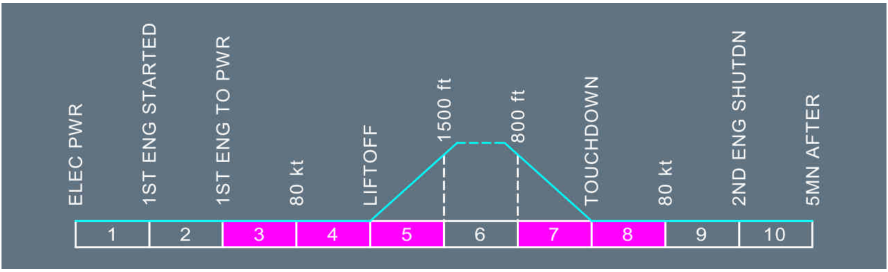
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when RMP1 is in backup mode and the transponder 2 fails.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ATC/XPDR 2 CTL FAULT (Cont'd)

60 Ident.: PRO-ABN-NAV-BJ-00024208.0001001 / 25 MAY 20

XPDR 1 ON RMP 1 ONLY

61 Ident.: PRO-ABN-NAV-BJ-00024209.0001001 / 25 MAY 20

STATUS

XPDR 1 ONLY
XPDR 2 NOT AVAIL

NAV ATC/XPDR STBY

Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266-03284, 04544-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-AP-00018121.0001001 / 21 MAR 16

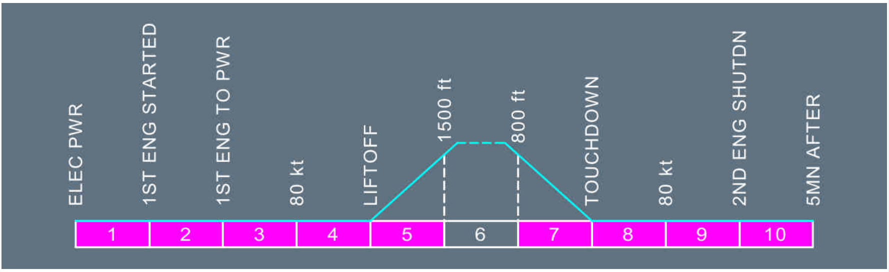
62

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the flight crew sets the ATC transponder on STBY in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV ATC/XPDR STBY (Cont'd)

Ident.: PRO-ABN-NAV-AP-00013545.0001001 / 25 FEB 14

63

Crew awareness.

NAV ATT DISCREPANCY

Applicable to: ALL

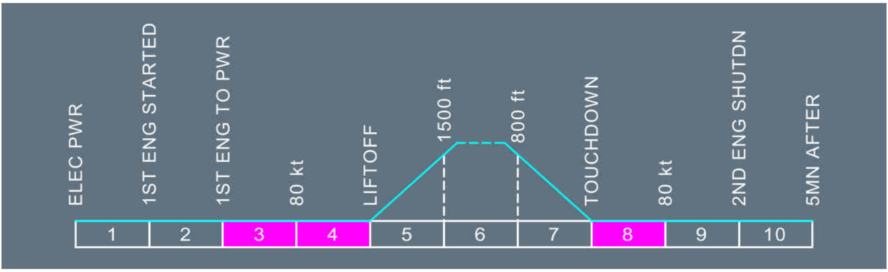
Ident.: PRO-ABN-NAV-AQ-00018122.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the roll or pitch angle displayed on the CAPT and F/O PFDs is greater than 5 °.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AQ-00012410.0001001 / 19 AUG 10

ATT .... X CHECK

L2 *Crosscheck with standby horizon.*

L1 ATT HDG SWTG .... AS RQRD

L2 *Select IR 3 (if available) to faulty side.*

NAV BARO REF DISCREPANCY

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-AR-00018123.0001001 / 21 MAR 16

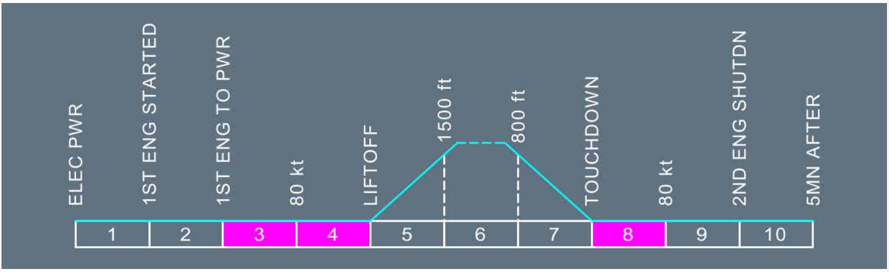
64

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the BARO reference is not the same on CAPT and F/O sides.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AR-00012413.0001001 / 16 NOV 11

65

BARO REF..X CHECK

L2 *Crosscheck the barometric reference selection, captain side versus first officer side.*

NAV BARO VALUE DISAGREE

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-NAV-BA-00022266.0001001 / 27 FEB 18

66

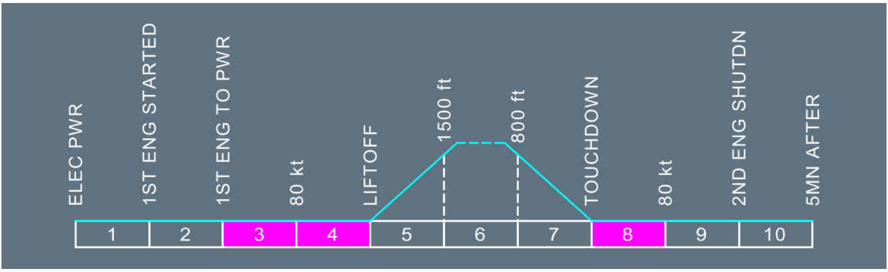
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when there is a difference between the barometer value selections on the FCU control panels.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-BA-00022267.0001001 / 27 FEB 18

67

BARO REF VALUE...X CHECK

NAV BKUP SPD/ALT ON CAPT(F/O) PFD

Applicable to: MSN 08495-09324

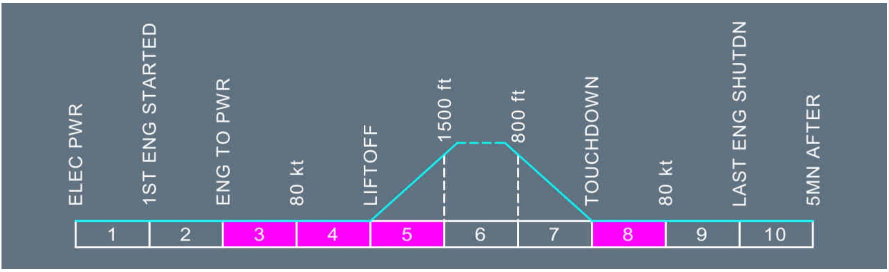
Ident.: PRO-ABN-NAV-AY-00020395.0001001 / 20 MAR 17

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the BKUP SPD/ALT is activated on the CAPT PFD or on the F/O PFD and the AP and/or FD of the same side is engaged.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AY-00020394.0001001 / 20 MAR 17

AP1(2)..DO NOT USE
FD1(2)..DO NOT USE

NAV BKUP SPD/ALT ON CAPT(F/O) PFD

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-AY-00020395.0003001 / 03 NOV 21

68

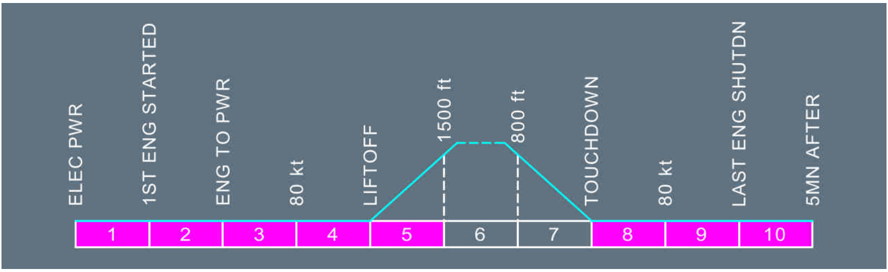
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the BKUP SPD/ALT is activated on the CAPT PFD or on the F/O PFD and the AP and/or FD of the same side is engaged.

Note: This alert is inhibited by FAC in flight phases 1,2,9, and 10.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AY-00020394.0003001 / 21 JAN 21

69

- **If AP 1(2) is engaged:**
  AP2(1).. SELECT
- **If FD 1(2) is engaged:**
  FD CAPT(F/O).. OFF

NAV BKUP SPD/ALT ON CAPT+F/O PFD

Applicable to: MSN 08495-09324

Ident.: PRO-ABN-NAV-AZ-00020396.0001001 / 20 MAR 17

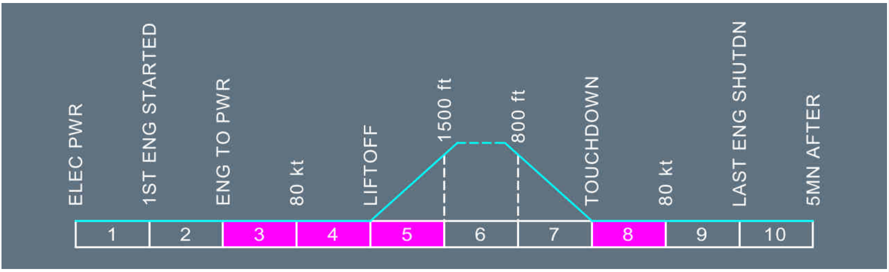
70

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the BKUP SPD/ALT is activated on CAPT and F/O PFDs at the same time.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AZ-00020398.0001001 / 20 MAR 17

- **If all airspeeds unreliable:**
  ADR CHECK PROC.....APPLY
- **If at least one airspeed reliable:**
  RELIABLE AIR DATA.....USE

NAV BKUP SPD/ALT ON CAPT+F/O PFD

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-AZ-00020396.0001001 / 20 MAR 17

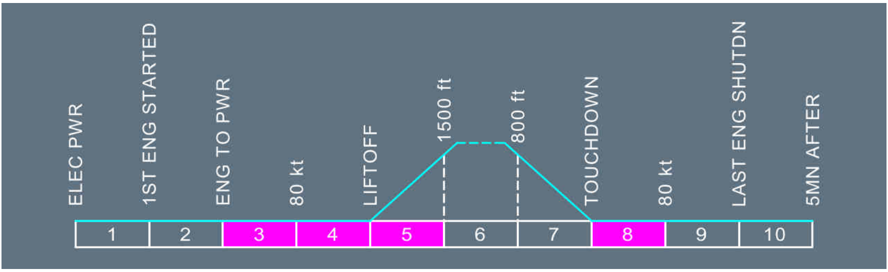
71

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the BKUP SPD/ALT is activated on CAPT and F/O PFDs at the same time.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AZ-00020398.0003001 / 21 JAN 21

72

- **IF AIR DATA RELIABLE (AT LEAST ONE):**
  RELIABLE AIR DATA...USE
- **IF ALL AIR DATA UNREL:**
  UNREL SPD PROC.. APPLY

NAV BKUP SPD FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-BB-00023392.0001001 / 21 JAN 21

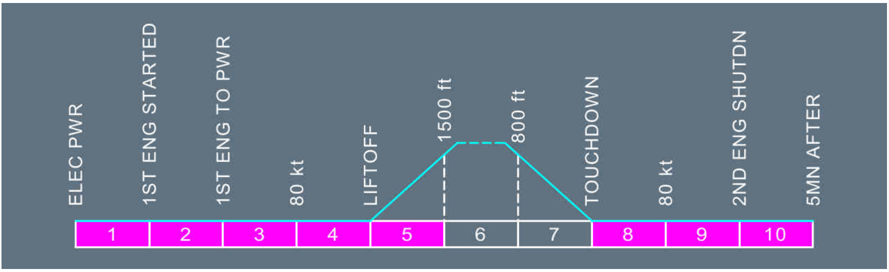
73

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the Digital BackUp Speed is FAULT while other speed sources are RELIABLE.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-BB-00023393.0001001 / 21 JAN 21

74

- **If BKUP SPD/ALT is in use:**
  BKUP SPD/ALT.. OFF

Ident.: PRO-ABN-NAV-BB-00023394.0001001 / 21 JAN 21

75

STATUS

INOP SYS

BKUP SPD

NAV BKUP SPD UNCERTAIN

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-NAV-BH-00024152.0001001 / 21 JAN 21

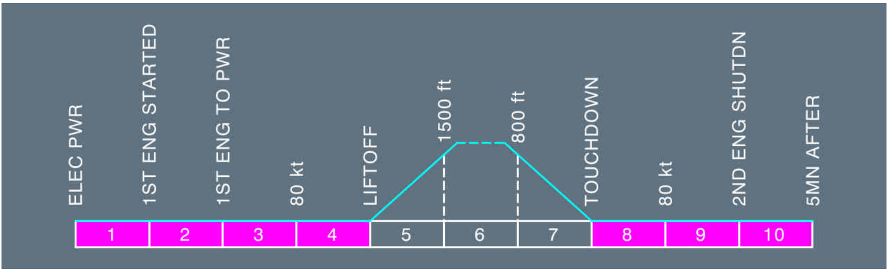
76

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the Digital BackUp Speed is UNCERTAIN while it is displayed on one or both PFD(s) and other speed sources are RELIABLE.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-BH-00024153.0001001 / 21 JAN 21

77

BKUP SPD/ALT..OFF

Ident.: PRO-ABN-NAV-BH-00024154.0001001 / 21 JAN 21

78

STATUS

SPD STATUS

ADR 1 SPD RELIABLE
ADR 2 SPD RELIABLE
ADR 3 SPD RELIABLE
BKUP SPD UNCERTAIN

NAV FLS 1(2)(1+2) FAULT

Applicable to: MSN 11531

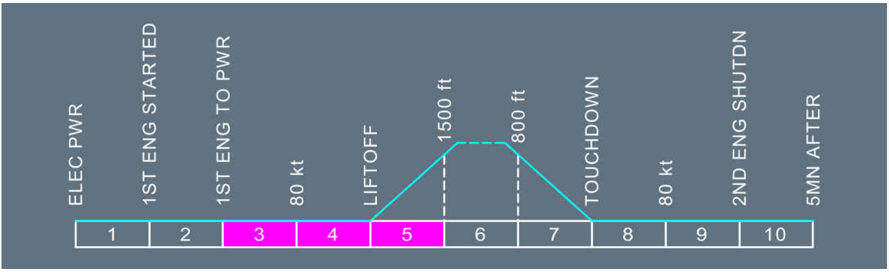
79 Ident.: PRO-ABN-NAV-AC-00018125.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FLS 1(2)(1+2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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80 Ident.: PRO-ABN-NAV-AC-00017481.0001001 / 21 MAR 16

Crew awareness.

81 Ident.: PRO-ABN-NAV-AC-00017482.0001001 / 21 MAR 16

STATUS

INOP SYS

FLS 1(2)(1+2)

NAV FM/GPS POS DISAGREE ⩤

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734

Ident.: PRO-ABN-NAV-AG-00017090.0001001 / 21 MAR 16

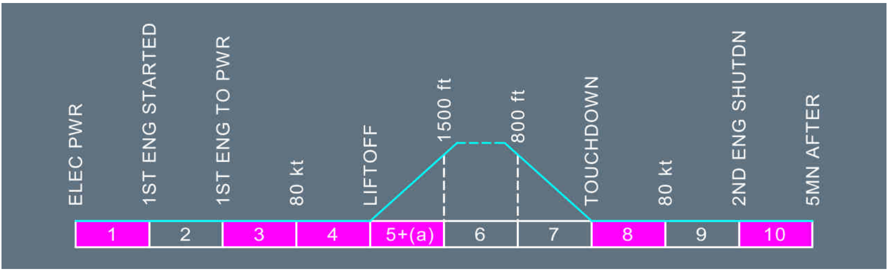
82

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FM and GPS positions disagree.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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5+(a)
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9
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Note: *(a) Alert inhibited only for the first 15 s in flight phase 5.*

Continued on the following page

NAV FM/GPS POS DISAGREE ◁ (Cont'd)

Ident.: PRO-ABN-NAV-AG-00017148.0002001 / 09 FEB 18

A/C POS..CHECK

The following procedure is not displayed on the ECAM:

■ **During climb, cruise, or descent:**

  Check accuracy on the MCDU PROG page:

  ■ **If ESTIMATED ACCUR below REQUIRED ACCUR:**

    CONSIDER NAV MODE AND ND ARC/ROSE NAV

  ■ **If ESTIMATED ACCUR above REQUIRED ACCUR:**

    HDG/TRK MODE...SELECT

    USE RAW DATA

    ● **For aircraft equipped with EGPWS ◁ or T2CAS ◁ :**

      CONSIDER SWITCHING OFF GPWS TERRAIN FUNCTIONS

  When possible, compare the positions of both FMs with the GPIRS position, on the MCDU POSITION MONITOR page:

  ■ **If one FM position agrees with onside GPIRS position:**

    USE ASSOCIATED AP/FD

  ■ **If both FM positions DO NOT agree with onside GPIRS position:**

    GPS..DESELECT

    USE RAW DATA

■ **During ILS/MLS ◁ /LOC/GLS ◁ approach:**

  NAV MODE: DO NOT USE

  CONTINUE APPROACH

■ **During LOC only approach with FLS ◁ :**

  NAV MODE: DO NOT USE

  DISREGARD F-G/S DEVIATION

  REVERT TO VERTICAL SELECTED MODE

■ **During RNAV GNSS, or RNAV RNP approach:**

  ● **If visual references not sufficient:** GO AROUND

Continued on the following page

NAV FM/GPS POS DISAGREE ◁ (Cont'd)

■ **During VOR, VOR-DME, NDB, or NDB-DME approach:**

HDG/TRK MODE.. SELECT

USE RAW DATA

- **If FLS ◁ used:**

  LS pb.. PRESS

  FLS deviations are removed from PFD.

NAV FM/GPS POS DISAGREE ◁

Applicable to: MSN 01251, 02014

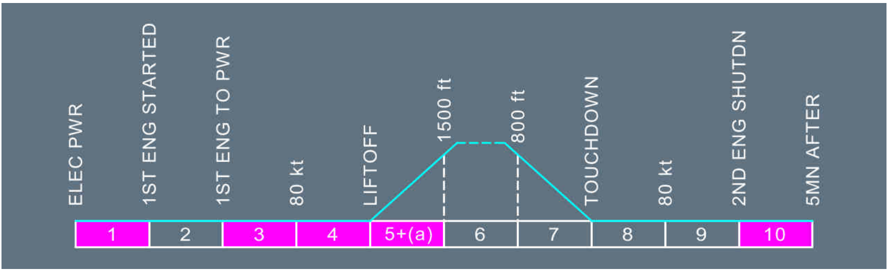
Ident.: PRO-ABN-NAV-AG-00017090.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FM and GPS positions disagree.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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4
5+(a)
6
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Note: (a) Alert inhibited only for the first 15 s in flight phase 5.

Continued on the following page

NAV FM/GPS POS DISAGREE ⩤ (Cont'd)

Ident.: PRO-ABN-NAV-AG-00017148.0002001 / 09 FEB 18

A/C POS...CHECK

The following procedure is not displayed on the ECAM:

- ■ **During climb, cruise, or descent:**

  Check accuracy on the MCDU PROG page:

  - ■ **If ESTIMATED ACCUR below REQUIRED ACCUR:**

    CONSIDER NAV MODE AND ND ARC/ROSE NAV

  - ■ **If ESTIMATED ACCUR above REQUIRED ACCUR:**

    HDG/TRK MODE...SELECT

    USE RAW DATA

    - ● **For aircraft equipped with EGPWS ⩤ or T2CAS ⩤ :**

      CONSIDER SWITCHING OFF GPWS TERRAIN FUNCTIONS

  When possible, compare the positions of both FMs with the GPIRS position, on the MCDU POSITION MONITOR page:

  - ■ **If one FM position agrees with onside GPIRS position:**

    USE ASSOCIATED AP/FD

  - ■ **If both FM positions DO NOT agree with onside GPIRS position:**

    GPS.. DESELECT

    USE RAW DATA

- ■ **During ILS/MLS ⩤ /LOC/GLS ⩤ approach:**

  NAV MODE: DO NOT USE

  CONTINUE APPROACH

- ■ **During LOC only approach with FLS ⩤ :**

  NAV MODE: DO NOT USE

  DISREGARD F-G/S DEVIATION

  REVERT TO VERTICAL SELECTED MODE

- ■ **During RNAV GNSS, or RNAV RNP approach:**

  - ● **If visual references not sufficient:** GO AROUND

Continued on the following page

NAV FM/GPS POS DISAGREE ◁ (Cont'd)

- **During VOR, VOR-DME, NDB, or NDB-DME approach:**

  HDG/TRK MODE.. SELECT

  USE RAW DATA

  - **If FLS ◁ used:**

    LS pb.. PRESS

    FLS deviations are removed from PFD.

NAV FM/GPS POS DISAGREE ◁

Applicable to: MSN 02321, 02887-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11597

Ident.: PRO-ABN-NAV-AG-00017090.0001001 / 21 MAR 16

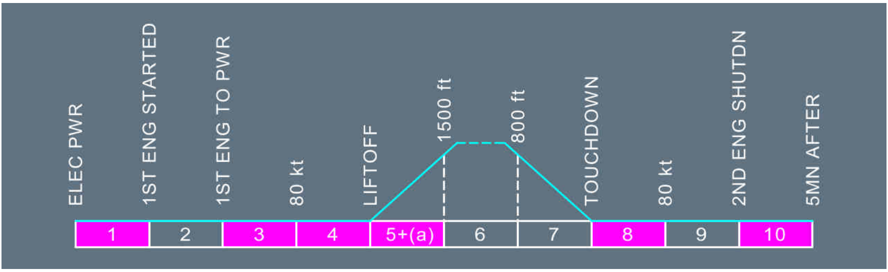
83

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FM and GPS positions disagree.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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5+(a)
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Note: (a) Alert inhibited only for the first 15 s in flight phase 5.

Continued on the following page

NAV FM/GPS POS DISAGREE ◁ (Cont'd)

Ident.: PRO-ABN-NAV-AG-00017148.0003001 / 09 FEB 18

84

A/C POS...CHECK

The following procedure is not displayed on the ECAM:

- **During climb, cruise, or descent:**

  Check accuracy on the MCDU PROG page:

  - **If ESTIMATED ACCUR below REQUIRED ACCUR:**

    CONSIDER NAV MODE AND ND ARC/ROSE NAV

  - **If ESTIMATED ACCUR above REQUIRED ACCUR:**

    HDG/TRK MODE..SELECT

    USE RAW DATA

  When possible, compare the positions of both FMs with the GPIRS position, on the MCDU POSITION MONITOR page:

  - **If one FM position agrees with onside GPIRS position:**

    USE ASSOCIATED AP/FD

  - **If both FM positions DO NOT agree with onside GPIRS position:**

    GPS.. DESELECT

    USE RAW DATA

- **During ILS/MLS ◁ /LOC/GLS ◁ approach:**

  NAV MODE: DO NOT USE

  CONTINUE APPROACH

- **During LOC only approach with FLS ◁ :**

  NAV MODE: DO NOT USE

  DISREGARD F-G/S DEVIATION

  REVERT TO VERTICAL SELECTED MODE

- **During RNAV GNSS, or RNAV RNP approach:**

  - ● **If visual references not sufficient:** GO AROUND

- **During VOR, VOR-DME, NDB, or NDB-DME approach:**

  HDG/TRK MODE.. SELECT

  USE RAW DATA

Continued on the following page

NAV FM/GPS POS DISAGREE ◁ (Cont'd)

- **If FLS ◁ used:**

  LS pb..PRESS

  FLS deviations are removed from PFD.

NAV FM/GPS POS DISAGREE ◁

Applicable to: MSN 06561

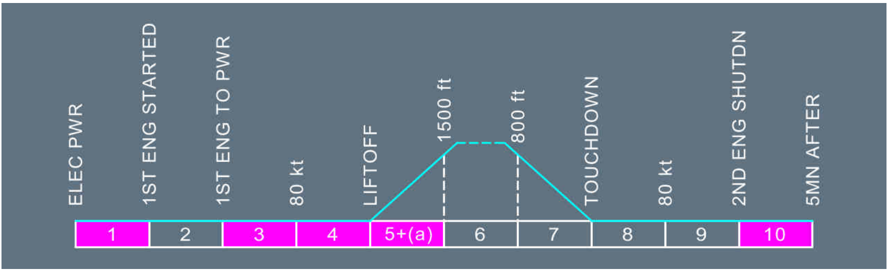
Ident.: PRO-ABN-NAV-AG-00017090.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FM and GPS positions disagree.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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5+(a)
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Note: *(a) Alert inhibited only for the first 15 s in flight phase 5.*

Continued on the following page

NAV FM/GPS POS DISAGREE ◁ (Cont'd)

85

A/C POS...CHECK

The following procedure is not displayed on the ECAM:

- **During climb, cruise, or descent:**

  Check accuracy on the MCDU PROG page:

  - **If ESTIMATED ACCUR below REQUIRED ACCUR:**

    CONSIDER NAV MODE AND ND ARC/ROSE NAV

  - **If ESTIMATED ACCUR above REQUIRED ACCUR:**

    HDG/TRK MODE...SELECT

    USE RAW DATA

  When possible, compare the positions of both FMs with the GPIRS position, on the MCDU POSITION MONITOR page:

  - **If one FM position agrees with onside GPIRS position:**

    USE ASSOCIATED AP/FD

  - **If both FM positions DO NOT agree with onside GPIRS position:**

    GPS...DESELECT

    USE RAW DATA

- **During ILS/MLS ◁ /LOC/GLS ◁ approach:**

  NAV MODE: DO NOT USE

  CONTINUE APPROACH

- **During LOC only approach with FLS ◁ :**

  NAV MODE: DO NOT USE

  DISREGARD F-G/S DEVIATION

  REVERT TO VERTICAL SELECTED MODE

- **During RNAV GNSS, or RNAV RNP approach:**

  - **If visual references not sufficient:** GO AROUND

- **During VOR, VOR-DME, NDB, or NDB-DME approach:**

  HDG/TRK MODE..SELECT

  USE RAW DATA

Continued on the following page

NAV FM/GPS POS DISAGREE ◁ (Cont'd)

- **If FLS ◁ used:**
  LS pb..PRESS
  FLS deviations are removed from PFD.

NAV GLS 1(2)(1+2) FAULT

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

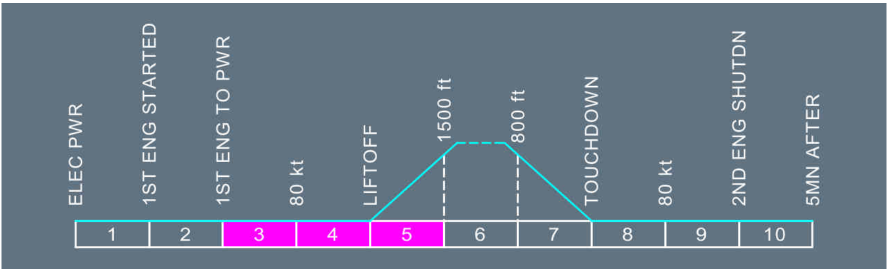
Ident.: PRO-ABN-NAV-AE-00018127.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the GLS 1(2)(1+2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AE-00017477.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

NAV GLS 1(2)(1+2) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-AE-00017478.0001001 / 21 MAR 16

STATUS

INOP SYS

GLS 1(2)(1+2)
GLS AUTOLAND
GPWS [1]

[1] *(If GLS 1 FAULT on ground or if GLS 1+2 FAULT)*

NAV GPS 1(2) FAULT ⩤

Applicable to: ALL

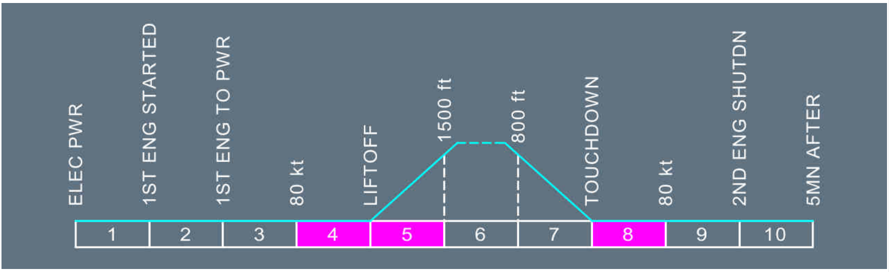
Ident.: PRO-ABN-NAV-L-00018144.0001001 / 10 MAY 21

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the GPS 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-L-00017127.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

NAV GPS 1(2) FAULT ◁ (Cont'd)

Ident.: PRO-ABN-NAV-L-00017128.0001001 / 21 MAR 16

STATUS

- **If both GPS FAULT**
  FLS ◁ LIMITED TO F-APP + RAW

INOP SYS

GPS 1(2)

NAV GPWS FAULT

Applicable to: ALL

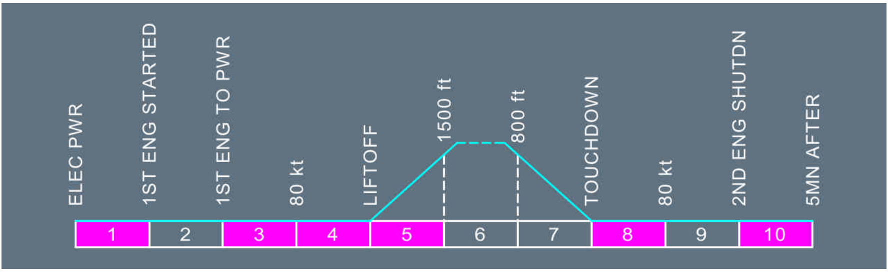
Ident.: PRO-ABN-NAV-N-00018129.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alerts triggers when the GPWS fails.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
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Ident.: PRO-ABN-NAV-N-00012443.0001001 / 16 NOV 11

GPWS..OFF

L2 *This line remains displayed, even after the GPWS pb-sw has been switched OFF.*

Continued on the following page

NAV GPWS FAULT (Cont'd)

Ident.: PRO-ABN-NAV-N-00012444.0001001 / 19 AUG 10

STATUS

INOP SYS

GPWS

NAV GPWS TERR DET FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

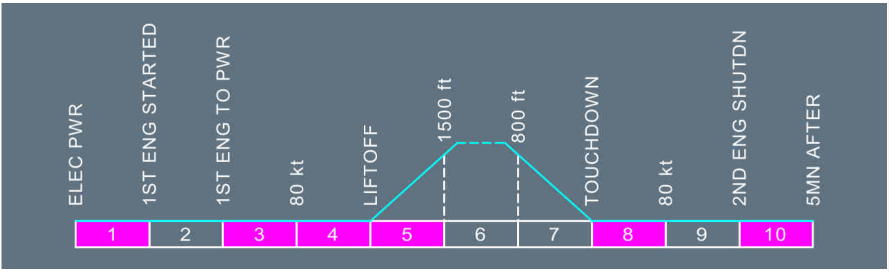
Ident.: PRO-ABN-NAV-AS-00018130.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the enhanced TCF and TAD modes of the EGPWS ◁ or the predictive function of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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Ident.: PRO-ABN-NAV-AS-00017542.0001001 / 21 MAR 16

GPWS TERR..OFF

L2 *The basic GPWS mode 1 to mode 5 are still operative if SYS pb-sw lights FAULT or OFF are not illuminated.*

Continued on the following page

NAV GPWS TERR DET FAULT (Cont'd)

Ident.: PRO-ABN-NAV-AS-00019752.0001001 / 01 JUN 16

86

STATUS

INOP SYS

GPWS TERR
ROW/ROP ◁

NAV GPWS TERR DET FAULT

Applicable to: MSN 01251, 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

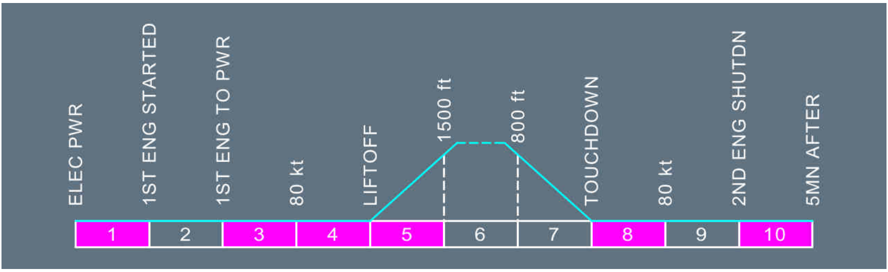
Ident.: PRO-ABN-NAV-AS-00018130.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the enhanced TCF and TAD modes of the EGPWS ◁ or the predictive function of the GPWS (for aircraft equipped with T2CAS ◁ or T3CAS ◁) are inoperative.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
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Ident.: PRO-ABN-NAV-AS-00017542.0001001 / 21 MAR 16

GPWS TERR..OFF

L2 *The basic GPWS mode 1 to mode 5 are still operative if SYS pb-sw lights FAULT or OFF are not illuminated.*

NAV HDG DISCREPANCY

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03662

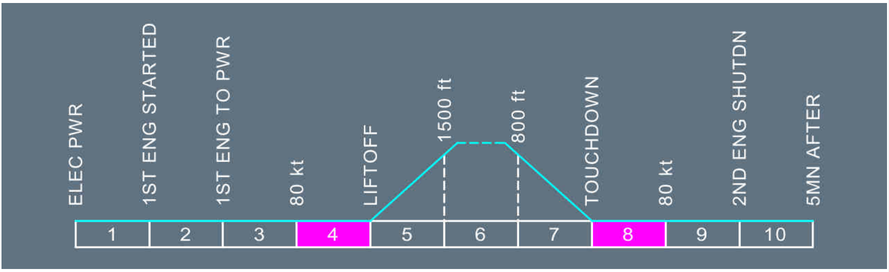
Ident.: PRO-ABN-NAV-AT-00018131.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the headings on the CAPT and F/O displays (PFD and ND) is greater than 5 °.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-NAV-AT-00012409.0001001 / 19 AUG 10

HDG..X CHECK

L2 *Compare the 3 IR headings on ADIRS CDU or crosscheck with standby compass.*

L1 ATT HDG SWTG..AS RQRD

L2 *Select IR 3 (if available) to faulty side.*

NAV HDG DISCREPANCY

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

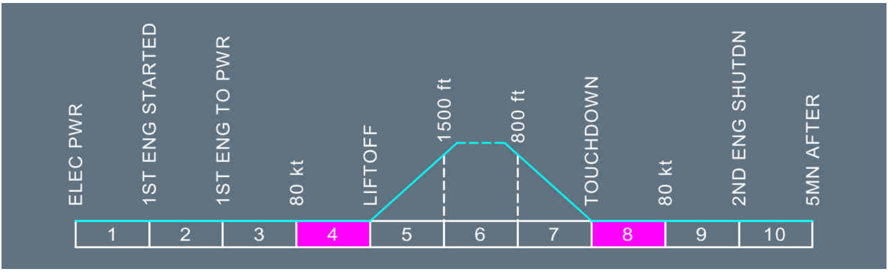
Ident.: PRO-ABN-NAV-AT-00018131.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the headings on the CAPT and F/O displays (PFD and ND) is greater than 5 °.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
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NAV HDG DISCREPANCY

Applicable to: MSN 03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

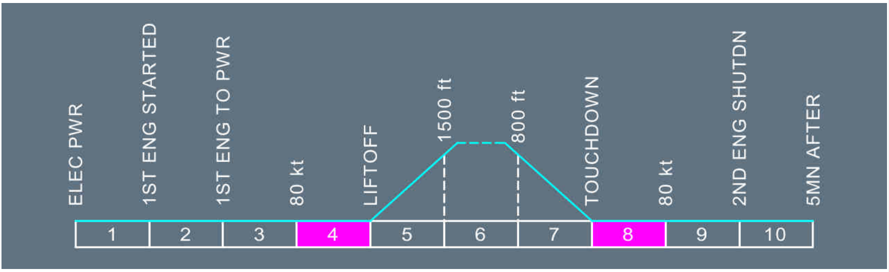
Ident.: PRO-ABN-NAV-AT-00018131.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the difference between the headings on the CAPT and F/O displays (PFD and ND) is greater than 5 °.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
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Ident.: PRO-ABN-NAV-AT-00012409.0003001 / 19 AUG 10

87

HDG....................................X CHECK

L2 *Compare the 3 IR headings on MCDU or crosscheck with standby compass.*

L1 ATT HDG SWTG....................................AS RQRD

L2 *Select IR 3 (if available) to faulty side.*

NAV IAS DISCREPANCY

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

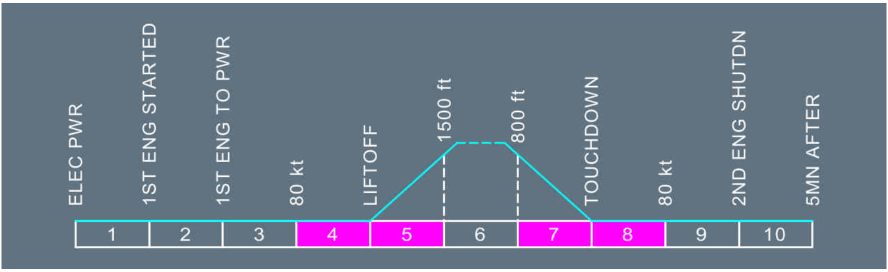
Ident.: PRO-ABN-NAV-W-00018146.0003001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the speed displayed on the CAPT and F/O PFDs are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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Ident.: PRO-ABN-NAV-W-00017528.0001001 / 21 MAR 16

AIR SPD....................X CHECK
AIR DATA SWTG....................AS RQRD

Ident.: PRO-ABN-NAV-W-00017525.0001001 / 21 MAR 16

STATUS	INOP SYS
CAT 3 SINGLE ONLY	CAT 3 DUAL

NAV ILS 1(2)(1+2) FAULT

Applicable to: ALL

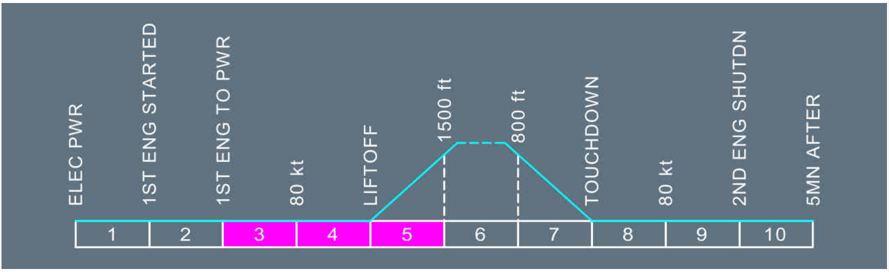
Ident.: PRO-ABN-NAV-M-00018138.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ILS 1(2)(1+2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-NAV-M-00017125.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-NAV-M-00017126.0002001 / 21 MAR 16

STATUS

INOP SYS

ILS 1(2)(1+2)
CAT 2 (1)
GPWS (2)

(1) *(If ILS 1 FAULT or if ILS 2 FAULT)*
(2) *(if ILS 1 FAULT on ground or if ILS 1+2 FAULT)*

NAV IR 1(2)(3) FAULT

Applicable to: MSN 01143-01246, 01801, 01826, 01855

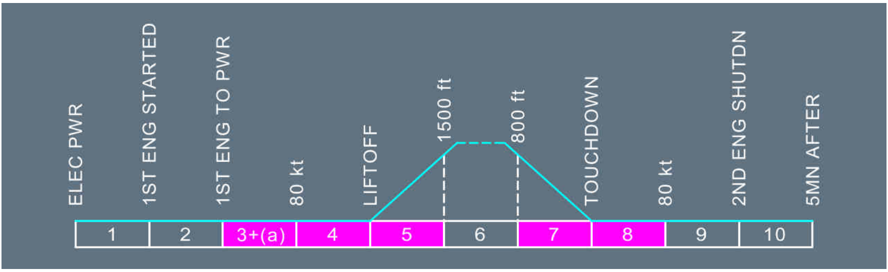
Ident.: PRO-ABN-NAV-D-00018140.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
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Note: *(a) Alert not inhibited in flight phase 3 in the case of NAV IR 3 FAULT while the ADR 3 is in use.*
Alert not inhibited in flight phase 3 in the case of NAV IR 1(2) FAULT.

Continued on the following page

NAV IR 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-D-00017521.0003001 / 21 MAR 16

88

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure before the IR FAULT procedure.*

L1
- **IR 1 FAULT:**
  ATT HDG SWTG.......... CAPT 3
  ATC/XPDR.......... SYS 2
- **IR 2 FAULT:**
  ATT HDG SWTG.......... F/O 3
  ATC/XPDR.......... SYS 1
- **IR 3 FAULT:**
  ATT HDG SWTG (IF IR 3 IN USE).......... NORM

L2 *This line is not displayed on the ECAM.*

Ident.: PRO-ABN-NAV-D-00017123.0001001 / 18 NOV 21

L12

STATUS

IR MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

CAT 3 SINGLE ONLY

INOP SYS

IR 1(2)(3)
CAT 3 DUAL
GPWS TERR (1)
ROW/ROP (1)
TCAS (1)
See (2)

(1) (In case of an IR 1 fault)

(2) In Case of an IR 1 fault, the TCAS may be inoperative (depending on the TCAS manufacturer). If the IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per the IR ALIGNMENT IN ATT MODE procedure.

Ident.: PRO-ABN-NAV-D-00015142.0001001 / 29 JUL 13

89

The loss or the failure of an Inertial Reference System (IRS) may result in the loss of the FMS.
Refer to DSC-22_20-100-20 Loss Of FMS Position Further To IRS Loss.

NAV IR 1(2)(3) FAULT

Applicable to: MSN 01251

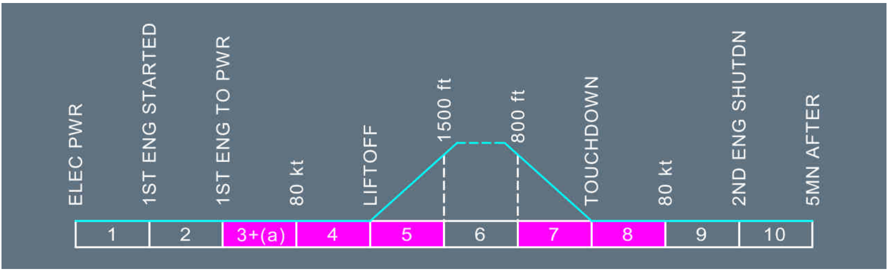
Ident.: PRO-ABN-NAV-D-00018140.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
8
9
10

Note: *(a) Alert not inhibited in flight phase 3 in the case of NAV IR 3 FAULT while the ADR 3 is in use.*
Alert not inhibited in flight phase 3 in the case of NAV IR 1(2) FAULT.

Ident.: PRO-ABN-NAV-D-00017521.0002001 / 21 MAR 16

L2 *Note:* *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure before the IR FAULT procedure.*

L1
- **IR 1 FAULT:**
  ATT HDG SWTG.. CAPT 3
- **IR 2 FAULT:**
  ATT HDG SWTG... F/O 3
- **IR 3 FAULT:**
  ATT HDG SWTG (IF IR 3 IN USE)...NORM

L2 *This line is not displayed on the ECAM.*

Continued on the following page

NAV IR 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-D-00017123.0001001 / 18 NOV 21

L12

STATUS

IR MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

CAT 3 SINGLE ONLY

INOP SYS

IR 1(2)(3)
CAT 3 DUAL
GPWS TERR ◁✳ [1]
ROW/ROP ◁✳ [1]
TCAS [1]
See [2]

(1) *(In case of an IR 1 fault)*

(2) *In Case of an IR 1 fault, the TCAS may be inoperative (depending on the TCAS manufacturer). If the IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per the IR ALIGNMENT IN ATT MODE procedure.*

Ident.: PRO-ABN-NAV-D-00015142.0001001 / 29 JUL 13

90

The loss or the failure of an Inertial Reference System (IRS) may result in the loss of the FMS. *Refer to DSC-22_20-100-20 Loss Of FMS Position Further To IRS Loss*.

NAV IR 1(2)(3) FAULT

Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

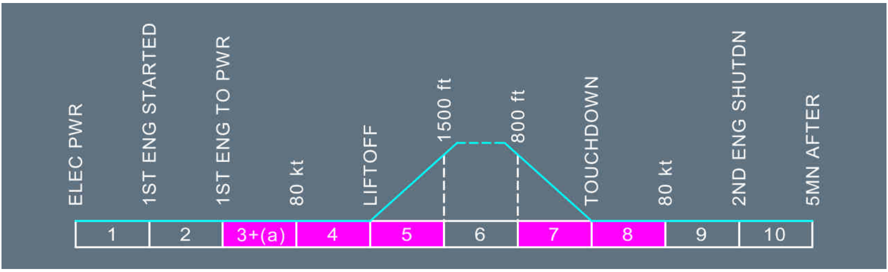
Ident.: PRO-ABN-NAV-D-00018140.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3+(a)
4
5
6
7
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9
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Note: *(a) Alert not inhibited in flight phase 3 in the case of NAV IR 3 FAULT while the ADR 3 is in use.*
Alert not inhibited in flight phase 3 in the case of NAV IR 1(2) FAULT.

Continued on the following page

NAV IR 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-D-00017521.0003001 / 21 MAR 16

91

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure before the IR FAULT procedure.*

L1

- **IR 1 FAULT:**
  ATT HDG SWTG...CAPT 3
  ATC/XPDR...SYS 2
- **IR 2 FAULT:**
  ATT HDG SWTG...F/O 3
  ATC/XPDR...SYS 1
- **IR 3 FAULT:**
  ATT HDG SWTG (IF IR 3 IN USE)...NORM

L2 *This line is not displayed on the ECAM.*

Ident.: PRO-ABN-NAV-D-00017123.0001001 / 18 NOV 21

L12

STATUS

IR MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

CAT 3 SINGLE ONLY

INOP SYS

IR 1(2)(3)
CAT 3 DUAL
GPWS TERR ◁ (1)
ROW/ROP ◁ (1)
TCAS (1)
See (2)

(1) *(In case of an IR 1 fault)*

(2) *In Case of an IR 1 fault, the TCAS may be inoperative (depending on the TCAS manufacturer). If the IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per the IR ALIGNMENT IN ATT MODE procedure.*

NAV IR 1(2)(3) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

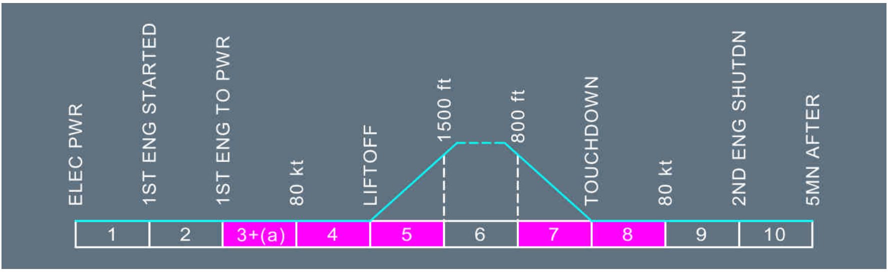
Ident.: PRO-ABN-NAV-D-00018140.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the IR 1(2)(3) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3+(a)
4
5
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9
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Note: *(a) Alert not inhibited in flight phase 3 in the case of NAV IR 3 FAULT while the ADR 3 is in use.*
Alert not inhibited in flight phase 3 in the case of NAV IR 1(2) FAULT.

Continued on the following page

NAV IR 1(2)(3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-D-00017123.0001001 / 18 NOV 21

L12

STATUS

IR MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

CAT 3 SINGLE ONLY

INOP SYS

IR 1(2)(3)
CAT 3 DUAL
GPWS TERR ◁ (1)
ROW/ROP ◁ (1)
TCAS (1)
See (2)

---

(1) *(In case of an IR 1 fault)*

(2) *In Case of an IR 1 fault, the TCAS may be inoperative (depending on the TCAS manufacturer). If the IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per the IR ALIGNMENT IN ATT MODE procedure.*

NAV IR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

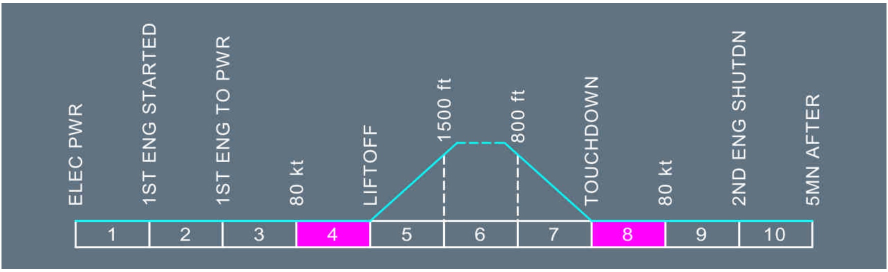
Ident.: PRO-ABN-NAV-E-00018139.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when IR 1+2(1+3)(2+3) are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-E-00017111.0002001 / 03 DEC 19

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If IR 1 + 2 FAULT:**

ATT HDG SWTG.. CAPT 3

L2 *Set IR 3 (If available) to the Captain's side.*
Attitude information is lost on first officer's PFD.

L1 ● **If IR 1 + 3 (or 2 + 3) FAULT:**

ATT HDG SWTG.. NORM

L2 *Attitude information is lost on one side (Captain or first officer).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Flight control normal laws are lost. Pitch alternate law with static stability becomes active.*
All protections, except maneuver protections, are lost.

L1 MAX SPEED..320 KT

L2 *Speed is limited, due to the loss of high speed protection.*

Continued on the following page

Ident.: PRO-ABN-NAV-E-00016864.0004001 / 05 MAR 19

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

This line is replaced by “FOR LDG : USE FLAP 3” when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3.. ON

Will appear, when CONF 3 is selected.

APPR SPD : VREF + 10 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law, in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

IR (AFFECTED) MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

FLS ◁ LIMITED TO F–APP + RAW

INOP SYS

F/CTL PROT
IR 1 (2)(3)
IR 1+2 or 1+3 or 2+3
AP 1+2
A/THR
YAW DAMPER 1 (1)
YAW DAMPER 2 (2)
GPWS TERR ◁ (if IR 1 fault)
TCAS
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁ (if at least 2 IRs are lost)
ROW/ROP ◁

Note: *In case of an IR 1 fault, the TCAS may be inoperative (depending on the TCAS manufacturer). If the IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per IR ALIGNMENT IN ATT MODE procedure.*

(1) *(In case of an IR 1+3 fault)*
(2) *(In case of an IR 2+3 fault)*

NAV IR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01251

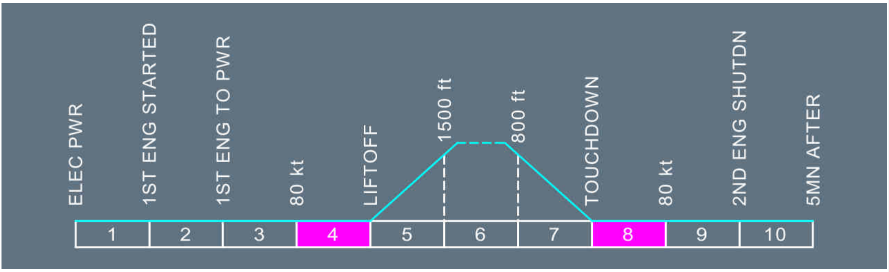
Ident.: PRO-ABN-NAV-E-00018139.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when IR 1+2(1+3)(2+3) are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-E-00017111.0002001 / 03 DEC 19

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If IR 1 + 2 FAULT:**

ATT HDG SWTG.. CAPT 3

L2 *Set IR 3 (If available) to the Captain's side.*
Attitude information is lost on first officer's PFD.

L1 ● **If IR 1 + 3 (or 2 + 3) FAULT:**

ATT HDG SWTG.. NORM

L2 *Attitude information is lost on one side (Captain or first officer).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Flight control normal laws are lost. Pitch alternate law with static stability becomes active.*
All protections, except maneuver protections, are lost.

L1 MAX SPEED..320 KT

L2 *Speed is limited, due to the loss of high speed protection.*

Continued on the following page

NAV IR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-E-00016864.0002001 / 21 MAR 16

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Will appear, when CONF 3 is selected.

APPR SPD : VREF + 10 KT

LDG DIST PROC... APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law, in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

IR (AFFECTED) MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

FLS ◁ : F–APP + RAW ONLY

INOP SYS

F/CTL PROT
IR 1 (2)(3)
IR 1+2 or 1+3 or 2+3
AP 1+2
A/THR
YAW DAMPER 1 (1)
YAW DAMPER 2 (2)
GPWS TERR ◁ (if IR 1 fault)
TCAS
CAT 2

Note: *In case of an IR 1 fault, the TCAS may be inoperative (depending on the TCAS manufacturer). If the IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per IR ALIGNMENT IN ATT MODE procedure.*

(1) *(In case of an IR 1+3 fault)*
(2) *(In case of an IR 2+3 fault)*

NAV IR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904, 08495-08596, 09190-09324

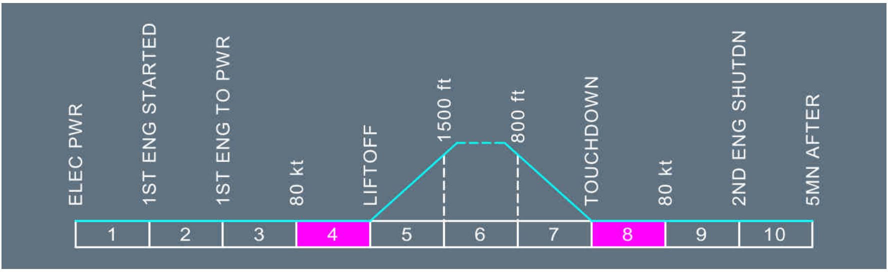
Ident.: PRO-ABN-NAV-E-00018139.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when IR 1+2(1+3)(2+3) are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

NAV IR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-E-00017111.0002001 / 03 DEC 19

L2 *Note: In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1
- **If IR 1 + 2 FAULT:**

  ATT HDG SWTG.. CAPT 3

L2 *Set IR 3 (If available) to the Captain's side.*
Attitude information is lost on first officer's PFD.

L1
- **If IR 1 + 3 (or 2 + 3) FAULT:**

  ATT HDG SWTG.. NORM

L2 *Attitude information is lost on one side (Captain or first officer).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Flight control normal laws are lost. Pitch alternate law with static stability becomes active.*
All protections, except maneuver protections, are lost.

L1 MAX SPEED..320 KT

L2 *Speed is limited, due to the loss of high speed protection.*

Continued on the following page

Ident.: PRO-ABN-NAV-E-00016864.0006001 / 05 MAR 19

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG... USE FLAP 3

This line is replaced by "FOR LDG : USE FLAP 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

Will appear, when CONF 3 is selected.

APPR SPD : VREF + 15 KT

LDG DIST PROC... APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

At landing gear extension, control reverts to direct law, in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

IR (AFFECTED) MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

FLS ◁✳ LIMITED TO F–APP + RAW

INOP SYS

F/CTL PROT
IR 1 (2)(3)
IR 1+2 or 1+3 or 2+3
AP 1+2
A/THR
YAW DAMPER 1 (1)
YAW DAMPER 2 (2)
GPWS TERR ◁✳ (if IR 1 fault)
TCAS
CAT 2
GLS AUTOLAND ◁✳
ROW/ROP ◁✳

Note: *In case of an IR 1 fault, the TCAS may be inoperative (depending on the TCAS manufacturer). If the IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per IR ALIGNMENT IN ATT MODE procedure.*

(1) *(In case of an IR 1+3 fault)*
(2) *(In case of an IR 2+3 fault)*

NAV IR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

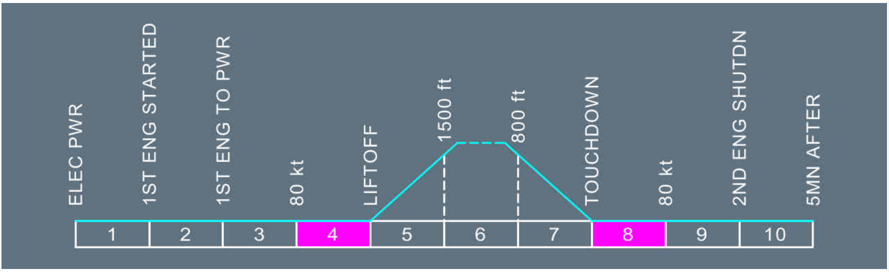
Ident.: PRO-ABN-NAV-E-00018139.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when IR 1+2(1+3)(2+3) are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-E-00017111.0002001 / 03 DEC 19

L2 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If IR 1 + 2 FAULT:**

ATT HDG SWTG........ CAPT 3

L2 *Set IR 3 (If available) to the Captain's side.*
Attitude information is lost on first officer's PFD.

L1 ● **If IR 1 + 3 (or 2 + 3) FAULT:**

ATT HDG SWTG........ NORM

L2 *Attitude information is lost on one side (Captain or first officer).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Flight control normal laws are lost. Pitch alternate law with static stability becomes active.*
All protections, except maneuver protections, are lost.

L1 MAX SPEED........320 KT

L2 *Speed is limited, due to the loss of high speed protection.*

NAV IR 1+2(1+3)(2+3) FAULT

Applicable to: MSN 08635, 10949-11597

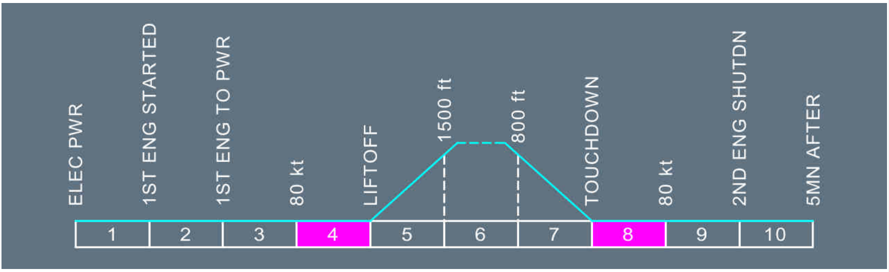
Ident.: PRO-ABN-NAV-E-00018139.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when IR 1+2(1+3)(2+3) are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-E-00017111.0002001 / 03 DEC 19

L2 Note: *In case of a simultaneous ADR and IR (same ADIRU) failure, apply the ADR FAULT procedure prior to the IR FAULT procedure.*

L1 ● **If IR 1 + 2 FAULT:**

ATT HDG SWTG........................ CAPT 3

L2 *Set IR 3 (If available) to the Captain's side.*
Attitude information is lost on first officer's PFD.

L1 ● **If IR 1 + 3 (or 2 + 3) FAULT:**

ATT HDG SWTG........................ NORM

L2 *Attitude information is lost on one side (Captain or first officer).*

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)

L2 *Flight control normal laws are lost. Pitch alternate law with static stability becomes active.*
All protections, except maneuver protections, are lost.

L1 MAX SPEED........................320 KT

L2 *Speed is limited, due to the loss of high speed protection.*

Continued on the following page

NAV IR 1+2(1+3)(2+3) FAULT (Cont'd)

Ident.: PRO-ABN-NAV-E-00016864.0009001 / 24 MAR 20

92

L12

STATUS

MAX SPEED... 320 KT

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD..VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW : PROT LOST

WHEN L/G DN : DIRECT LAW

Note: At landing gear extension, control reverts to direct law, in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).

IR (AFFECTED) MAY BE AVAIL IN ATT

Refer to PRO-ABN-NAV [QRH] IR ALIGNMENT IN ATT MODE

FLS ◁ LIMITED TO F–APP + RAW

Note: If IR 1 fails, the TCAS may be inoperative (depending on the TCAS manufacturer). If IR 1 is available in ATT mode, the TCAS can be recovered by entering the aircraft magnetic heading into the CDU, as per IR ALIGNMENT IN ATT MODE procedure.

INOP SYS

F/CTL PROT
IR 1+2(1+3)(2+3)
AP 1+2
A/THR
YAW DAMPER 1 (1)
YAW DAMPER 2 (2)
GPWS TERR ◁ (If IR 1 fails)
TCAS
CAT 2
GLS AUTOLAND ◁
ROW/ROP ◁

(1) *(if NAV IR 1+3 FAULT)*
(2) *(if NAV IR 2+3 FAULT)*

NAV IR DISAGREE

Applicable to: MSN 01143-01459, 01801, 01826, 01837-01855, 02014-02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-07098

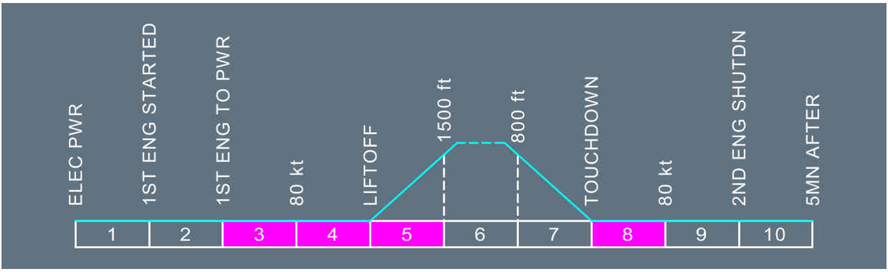
Ident.: PRO-ABN-NAV-G-00018147.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one IR is failed, and the information received from the two remaining IRs is different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR DISAGREE (Cont'd)

L2 Direct law becomes active. All protections (pitch and roll) are lost.

L1 ATT.. X CHECK

L2 *Use the standby horizon to determine the faulty IR.*

L1 ● **IF DISAGREE CONFIRMED:**

FAULTY IR.. OFF

L2
- *If the ADIRS Control Panel has the IR pb, turn off the faulty IR using the associated IR pb.*
- *If the ADIRS Control Panel does not have the IR pb, set the ADIRS selector to OFF. This action will also switch off the associated ADR.*

L1 ELAC 2.. OFF THEN ON
ELAC 1.. OFF THEN ON

L2 *Note:* *When the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*
After corrective action (faulty IR switched off and ELACs reset), pitch alternate law with reduced protections is recovered.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.. 320 KT

Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016852.0001001 / 22 MAR 17

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3.. ON

Will be displayed, when CONF 3 is selected.

APPR SPD.. VREF + 10
LDG DIST PROC... APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT
STEEP APPR ◁

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV IR DISAGREE

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

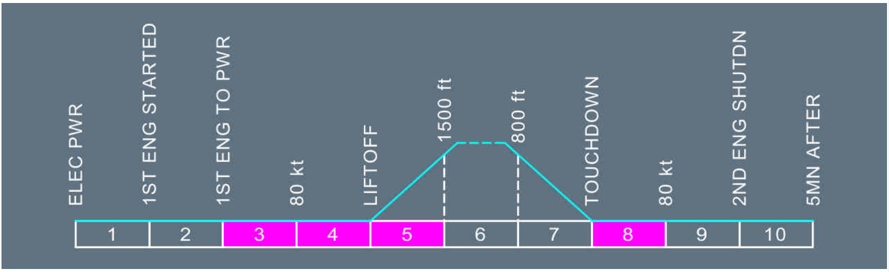
Ident.: PRO-ABN-NAV-G-00018147.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one IR is failed, and the information received from the two remaining IRs is different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016851.0001001 / 22 MAR 17

L2 Direct law becomes active. All protections (pitch and roll) are lost.

L1 ATT....................X CHECK

L2 *Use the standby horizon to determine the faulty IR.*

L1 ● **IF DISAGREE CONFIRMED:**

FAULTY IR.................... OFF

L2
- *If the ADIRS Control Panel has the IR pb, turn off the faulty IR using the associated IR pb.*
- *If the ADIRS Control Panel does not have the IR pb, set the ADIRS selector to OFF. This action will also switch off the associated ADR.*

L1 ELAC 2....................OFF THEN ON
ELAC 1....................OFF THEN ON

L2 *Note:* *When the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*
After corrective action (faulty IR switched off and ELACs reset), pitch alternate law with reduced protections is recovered.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.................... 320 KT

Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016852.0002001 / 21 MAR 16

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3..ON

Will be displayed, when CONF 3 is selected.

APPR SPD.. VREF + 15 KT

LDG DIST PROC... APPLY

ALTN LAW: PROT LOST

WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV IR DISAGREE

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

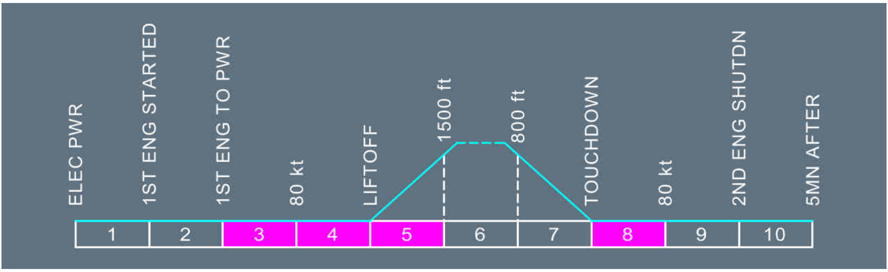
Ident.: PRO-ABN-NAV-G-00018147.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one IR is failed, and the information received from the two remaining IRs is different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016851.0001001 / 22 MAR 17

L2 Direct law becomes active. All protections (pitch and roll) are lost.

L1 ATT...X CHECK

L2 *Use the standby horizon to determine the faulty IR.*

L1 ● **IF DISAGREE CONFIRMED:**

FAULTY IR...OFF

L2
- *If the ADIRS Control Panel has the IR pb, turn off the faulty IR using the associated IR pb.*
- *If the ADIRS Control Panel does not have the IR pb, set the ADIRS selector to OFF. This action will also switch off the associated ADR.*

L1 ELAC 2...OFF THEN ON
ELAC 1...OFF THEN ON

L2 *Note:* *When the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*
After corrective action (faulty IR switched off and ELACs reset), pitch alternate law with reduced protections is recovered.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED...320 KT

NAV IR DISAGREE

Applicable to: MSN 08495-08596, 09190-09324

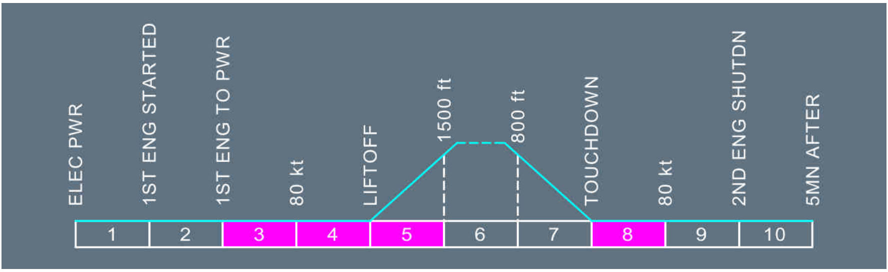
Ident.: PRO-ABN-NAV-G-00018147.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one IR is failed, and the information received from the two remaining IRs is different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016851.0001001 / 22 MAR 17

L2 Direct law becomes active. All protections (pitch and roll) are lost.

L1 ATT...X CHECK

L2 *Use the standby horizon to determine the faulty IR.*

L1 ● **IF DISAGREE CONFIRMED:**

FAULTY IR...OFF

L2
- *If the ADIRS Control Panel has the IR pb, turn off the faulty IR using the associated IR pb.*
- *If the ADIRS Control Panel does not have the IR pb, set the ADIRS selector to OFF. This action will also switch off the associated ADR.*

L1 ELAC 2...OFF THEN ON
ELAC 1...OFF THEN ON

L2 *Note:* *When the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*
After corrective action (faulty IR switched off and ELACs reset), pitch alternate law with reduced protections is recovered.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED...320 KT

Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016852.0005001 / 08 NOV 16

L12

STATUS

MAX SPEED.. 320 KT

APPR PROC

FOR LDG.. USE FLAP 3

Do not select CONF FULL, so as not to degrade handling qualities.

GPWS LDG FLAP 3.. ON

Will be displayed, when CONF 3 is selected.

APPR SPD.. VREF + 15
LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT

---

(1) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV IR DISAGREE

Applicable to: MSN 08635, 10949-11597

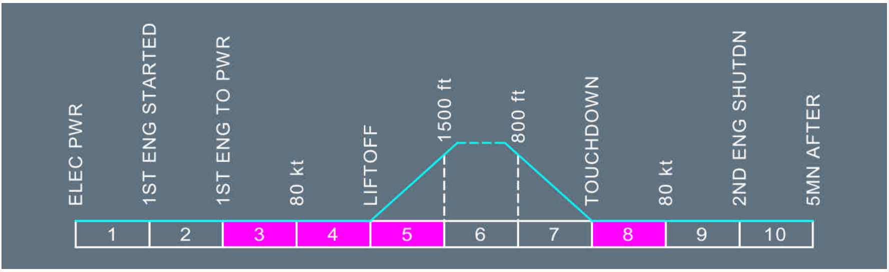
Ident.: PRO-ABN-NAV-G-00018147.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one IR is failed, and the information received from the two remaining IRs is different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016851.0001001 / 22 MAR 17

L2 Direct law becomes active. All protections (pitch and roll) are lost.

L1 ATT....................X CHECK

L2 *Use the standby horizon to determine the faulty IR.*

L1 ● **IF DISAGREE CONFIRMED:**

FAULTY IR.................... OFF

L2
- *If the ADIRS Control Panel has the IR pb, turn off the faulty IR using the associated IR pb.*
- *If the ADIRS Control Panel does not have the IR pb, set the ADIRS selector to OFF. This action will also switch off the associated ADR.*

L1 ELAC 2....................OFF THEN ON
ELAC 1....................OFF THEN ON

L2 *Note:* *When the ELAC 1 computer is reset on ground, the pitch trim returns to the ground setting position (0 °).*
After corrective action (faulty IR switched off and ELACs reset), pitch alternate law with reduced protections is recovered.

L1

ASSOCIATED PROCEDURES

F/CTL ALTN LAW
(PROT LOST)
MAX SPEED.................... 320 KT

Continued on the following page

NAV IR DISAGREE (Cont'd)

Ident.: PRO-ABN-NAV-G-00016852.0009001 / 24 MAR 20

93

L12

STATUS

MAX SPEED... 320 KT

APPR PROC

FOR LDG...FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3..ON

This line is displayed when flaps are in CONF 3.

APPR SPD.. VREF + 15 KT

LDG DIST PROC.. APPLY

ALTN LAW: PROT LOST

WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

F/CTL PROT

(1) *Note: At landing gear extension, flight controls revert to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

NAV IR NOT ALIGNED

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-AU-00018141.0002001 / 21 MAR 16

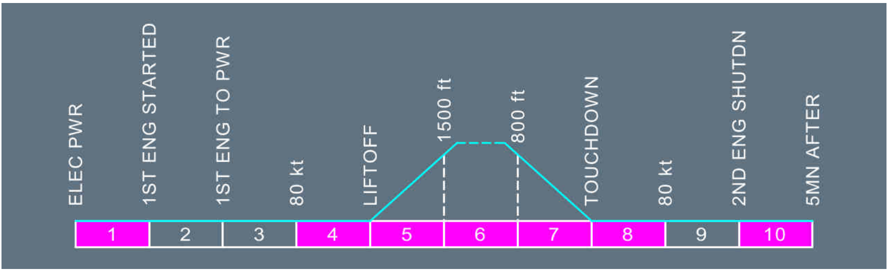
94

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is a problem during IR alignment.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AU-00012570.0001001 / 19 AUG 10

95

L2 This caution is available in Phase 2 (after first engine start, until takeoff)

L1 POSITION DISAGREE
POSITION MISSING
PRESENT POS.. INSERT
EXCESS MOTION
IR 1 (2) (3) (1+2) (2+3) (1+2+3) IN ALIGN

NAV LS 1(2)(1+2) FAULT

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 11531

Ident.: PRO-ABN-NAV-R-00018148.0001001 / 21 MAR 16

96

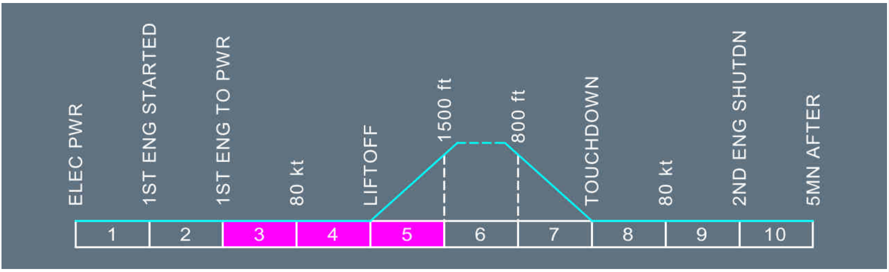
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the LS 1(2)(1+2) is failed.

Note: *LS includes ILS, FLS ⊲✻, GLS ⊲✻, and MLS ⊲✻.*

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-NAV-R-00017155.0001001 / 21 MAR 16

97

Crew awareness.

Ident.: PRO-ABN-NAV-R-00017156.0001001 / 21 MAR 16

98

STATUS

INOP SYS

LS 1(2) (1+2)
GPWS (1)
CAT 2 (2)

(1) *(If LS 1 FAULT on ground)*
(2) *(Not displayed if LS 1+2 FAULT)*

NAV LS TUNING DISAGREE

Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-AI-00018151.0001001 / 21 MAR 16

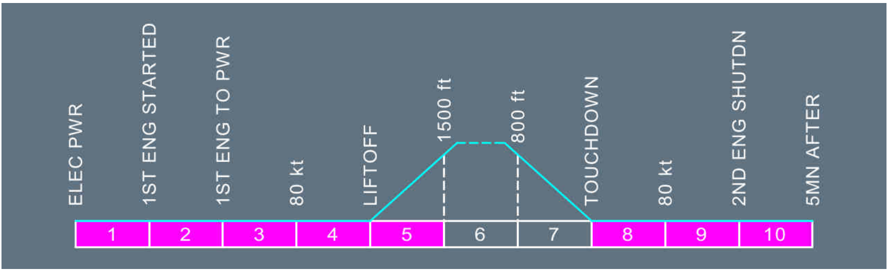
99

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the tuning of MMR 1 and MMR 2 are different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
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Ident.: PRO-ABN-NAV-AI-00018932.0004001 / 21 MAR 16

100

Crew awareness.

L2 When the alert is triggered, the AP/FD:
- Inhibits APPR mode arming, or
- Disarms the APPR mode if already armed, or
- Reverts to basic AP/FD modes if APPR mode already engaged.

Ident.: PRO-ABN-NAV-AI-00014337.0001001 / 29 MAR 12

101

STATUS

INOP SYS

CAT 2

NAV PRED W/S DET FAULT

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-F-00018855.0002001 / 21 MAR 16

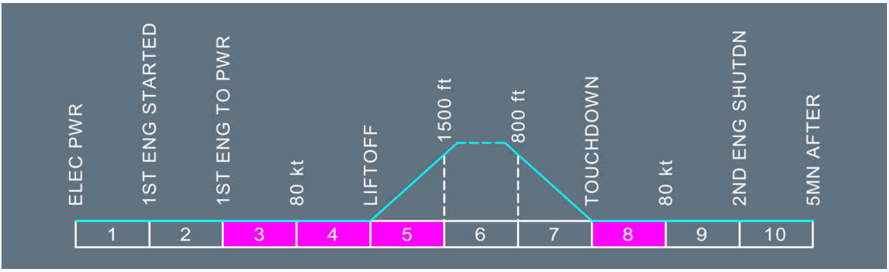
102

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the predictive function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
10

Ident.: PRO-ABN-NAV-F-00018853.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-NAV-F-00018854.0001001 / 21 MAR 16

STATUS

INOP SYS

PRED W/S DET

NAV PRED W/S DET FAULT

Applicable to: MSN 01459

Ident.: PRO-ABN-NAV-F-00018855.0001001 / 21 MAR 16

ANNUNCIATIONS

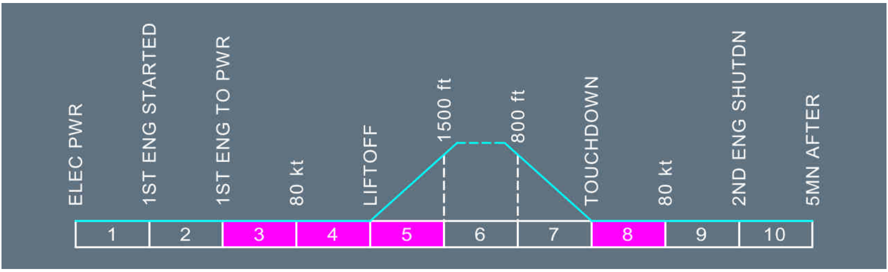
Triggering Conditions:

L2

This alert triggers when the flight crew switches the predictive windshear function to ON. It may be cancelled by switching the weather radar and the predictive windshear function OFF then ON :

- If this clears the alert, the predictive windshear function is operative again
- If not, the predictive windshear function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
3
4
5
6
7
8
9
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Ident.: PRO-ABN-NAV-F-00018853.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-NAV-F-00018854.0001001 / 21 MAR 16

STATUS

INOP SYS

PRED W/S DET

NAV PRED W/S DET FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-NAV-F-00018853.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-NAV-F-00018854.0001001 / 21 MAR 16

STATUS

INOP SYS

PRED W/S DET

NAV RA 1 AND 2 FAULT
(DUAL RA FAILURE)

Applicable to: MSN 01143-01246, 01376-01459, 01801, 01826, 01837-01855, 02321, 02734-02887, 02924-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-07098

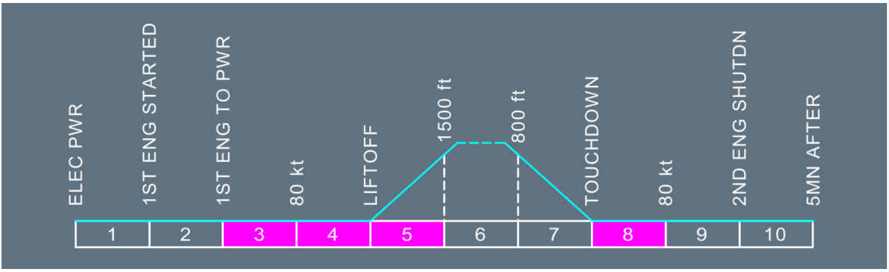
Ident.: PRO-ABN-NAV-J-00018403.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both RAs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
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8
9
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Continued on the following page

NAV RA 1 AND 2 FAULT (Cont'd)
(DUAL RA FAILURE)

Ident.: PRO-ABN-NAV-J-00012432.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-NAV-J-00016850.0004001 / 01 JUN 16

L12

STATUS

APPR PROC

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3..ON
APPR SPD...VREF+10 KT
LDG DIST PROC... APPLY

WHEN L/G DN: DIRECT LAW
See (1)

INOP SYS

RA 1+2
A/CALL OUT
GPWS
CAT 2
GLS AUTOLAND ◁
REAC W/S DET
TCAS
ROW/ROP ◁

(1) *At landing gear extension, flight controls revert to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*
ILS APPR mode cannot be engaged, LOC mode is available via the FCU LOC pb.

NAV RA 1 AND 2 FAULT
(DUAL RA FAILURE)

Applicable to: MSN 01251

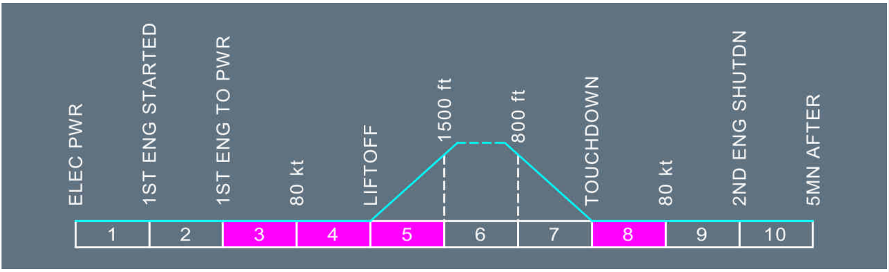
Ident.: PRO-ABN-NAV-J-00018403.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both RAs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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5
6
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Ident.: PRO-ABN-NAV-J-00012432.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

NAV RA 1 AND 2 FAULT (Cont'd)
(DUAL RA FAILURE)

Ident.: PRO-ABN-NAV-J-00016850.0002001 / 21 MAR 16

L12

STATUS

WHEN L/G DN: DIRECT LAW
See (1)

INOP SYS

RA 1+2
A/CALL OUT
GPWS
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
REAC W/S DET

(1) *At landing gear extension, flight controls revert to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*
ILS APPR mode cannot be engaged, LOC mode is available via the FCU LOC pb.

NAV RA 1 AND 2 FAULT
(DUAL RA FAILURE)

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904, 08495-08596, 09190-09324

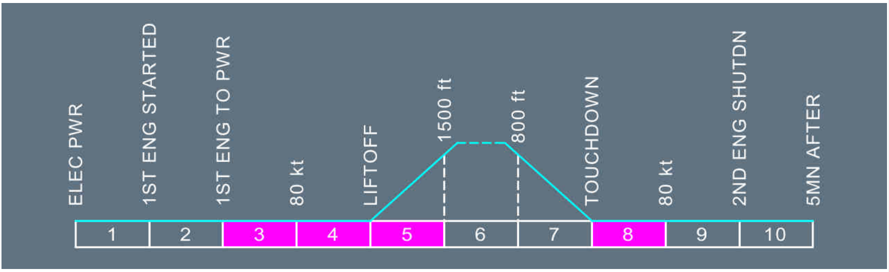
Ident.: PRO-ABN-NAV-J-00018403.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both RAs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-J-00012432.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

NAV RA 1 AND 2 FAULT (Cont'd)
(DUAL RA FAILURE)

Ident.: PRO-ABN-NAV-J-00016850.0005001 / 01 JUN 16

L12

STATUS

APPR PROC

FOR LDG..USE FLAPS 3
GPWS LDG FLAP 3..ON
APPR SPD..VREF+15 KT
LDG DIST PROC.. APPLY

WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

RA 1+2
A/CALL OUT
GPWS
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
REAC W/S DET
TCAS
ROW/ROP ◁

(1) *At landing gear extension, flight controls revert to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*
ILS APPR mode cannot be engaged, LOC mode is available via the FCU LOC pb.

NAV RA 1 AND 2 FAULT
(DUAL RA FAILURE)

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

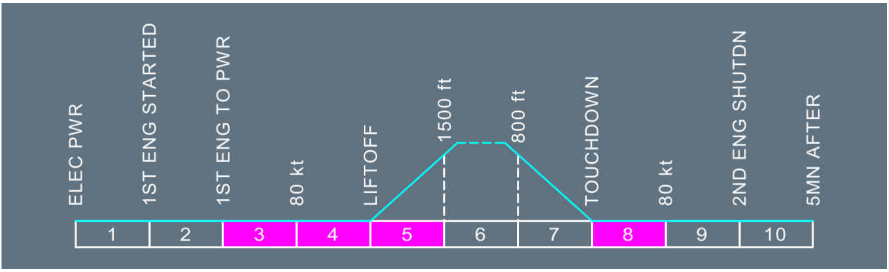
Ident.: PRO-ABN-NAV-J-00018403.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both RAs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-J-00012432.0001001 / 25 FEB 14

Crew awareness.

NAV RA 1 AND 2 FAULT
(DUAL RA FAILURE)

Applicable to: MSN 02014, 06561

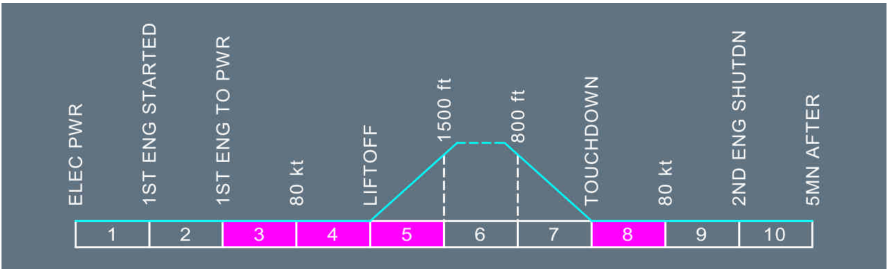
Ident.: PRO-ABN-NAV-J-00018403.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both RAs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-J-00012432.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

NAV RA 1 AND 2 FAULT (Cont'd)
(DUAL RA FAILURE)

Ident.: PRO-ABN-NAV-J-00016850.0003001 / 01 JUN 16

L12

STATUS

WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

RA 1+2
A/CALL OUT
GPWS
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
REAC W/S DET
TCAS
ROW/ROP ◁

(1) *At landing gear extension, flight controls revert to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*
ILS APPR mode cannot be engaged, LOC mode is available via the FCU LOC pb.

NAV RA 1 AND 2 FAULT
(DUAL RA FAILURE)

Applicable to: MSN 08635, 10949-11597

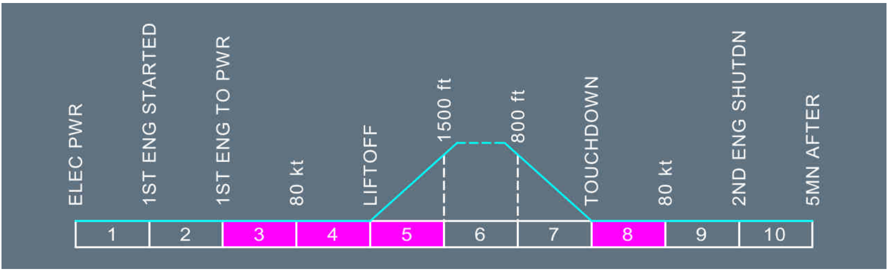
Ident.: PRO-ABN-NAV-J-00018403.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both RAs are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
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9
10

Ident.: PRO-ABN-NAV-J-00012432.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

NAV RA 1 AND 2 FAULT (Cont'd)
(DUAL RA FAILURE)

Ident.: PRO-ABN-NAV-J-00016850.0006001 / 24 MAR 20

103

L12

STATUS

APPR PROC

FOR LDG..FLAP LVR 3

This line is replaced by "FOR LDG: FLAP LVR 3" when CONF 3 is selected, as a reminder.

GPWS LDG FLAP 3...ON

This line is displayed when flaps are in CONF 3.

APPR SPD..VREF + 15 KT

LDG DIST PROC.. APPLY

WHEN L/G DN: DIRECT LAW

See (1)

INOP SYS

RA 1+2
A/CALL OUT
GPWS
CAT 2
GLS AUTOLAND ◁
STEEP APPR ◁
REAC W/S DET
TCAS
ROW/ROP ◁

(1) *Note:* *1. At landing gear extension, flight controls revert to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*
2. ILS APPR mode cannot be engaged, LOC mode is available via the FCU LOC pb.

NAV RA 1(2) FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06414

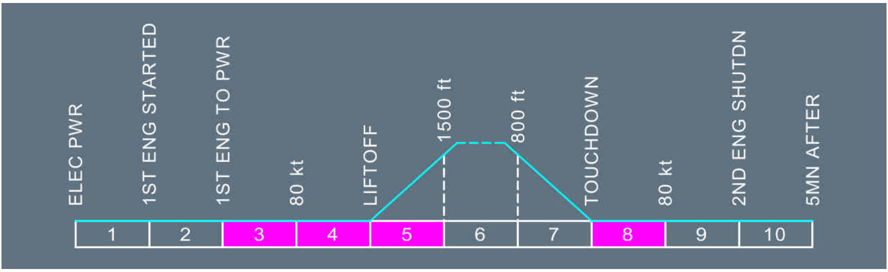
Ident.: PRO-ABN-NAV-I-00018135.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the RA 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
6
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Ident.: PRO-ABN-NAV-I-00012430.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-NAV-I-00016849.0001001 / 05 MAY 22

STATUS

	INOP SYS
CAT 2 ONLY	RA 1(2) CAT 3 GPWS (If RA 1 fault)

NAV RA 1(2) FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

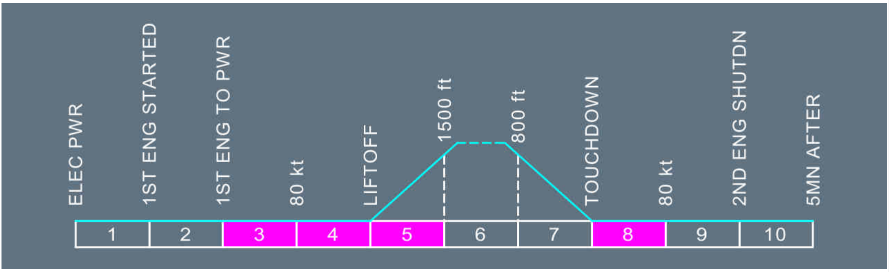
Ident.: PRO-ABN-NAV-I-00018135.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the RA 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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5
6
7
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Ident.: PRO-ABN-NAV-I-00012430.0001001 / 25 FEB 14

Crew awareness.

NAV RA 1(2) FAULT

Applicable to: MSN 04827-04860, 06528-09324, 10949-11597

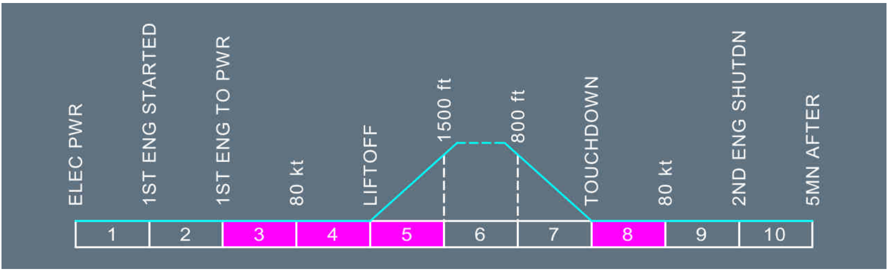
Ident.: PRO-ABN-NAV-I-00018135.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the RA 1(2) is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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3
4
5
6
7
8
9
10

Ident.: PRO-ABN-NAV-I-00012430.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-NAV-I-00016849.0002001 / 05 MAY 22

104

STATUS

	INOP SYS
CAT 2 ONLY	RA 1(2) CAT 3

NAV RA DEGRADED

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-AV-00018134.0001001 / 21 MAR 16

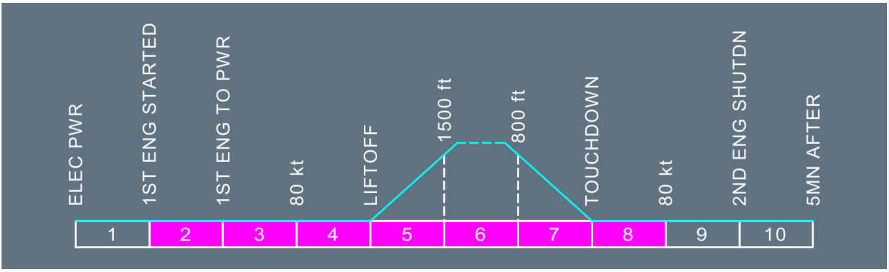
105

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the height that RA 1 and RA 2 provide are significantly different.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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6
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Ident.: PRO-ABN-NAV-AV-00018933.0001001 / 21 MAR 16

106

Crew awareness.

NAV TCAS FAULT ⩤

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-K-00018397.0002001 / 21 MAR 16

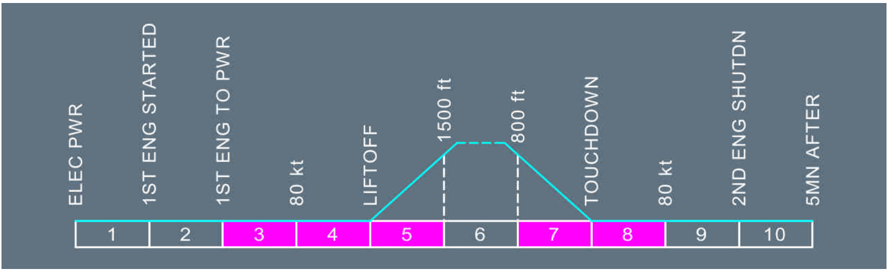
107

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is an internal failure of the TCAS.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-K-00012434.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-NAV-K-00012435.0001001 / 19 AUG 10

STATUS

INOP SYS
TCAS

NAV TCAS FAULT ◁

Applicable to: MSN 01251

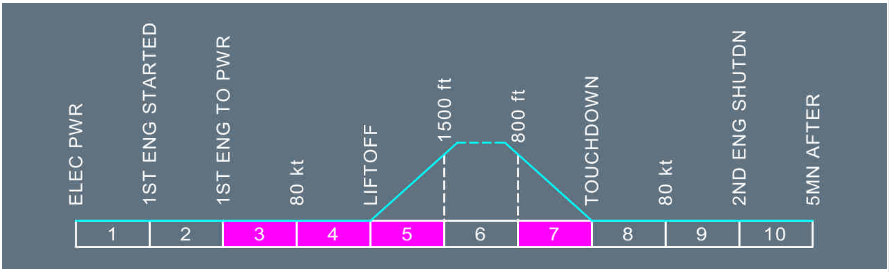
Ident.: PRO-ABN-NAV-K-00018397.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when there is an internal failure of the TCAS.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-K-00012434.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-NAV-K-00012435.0001001 / 19 AUG 10

STATUS

INOP SYS

TCAS

NAV TCAS ◁ FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-NAV-K-00012434.0001001 / 25 FEB 14

Crew awareness.

Continued on the following page

NAV TCAS ◁ FAULT (Cont'd)

Ident.: PRO-ABN-NAV-K-00012435.0001001 / 19 AUG 10

STATUS

INOP SYS

TCAS

NAV TCAS STBY

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-AW-00018133.0001001 / 21 MAR 16

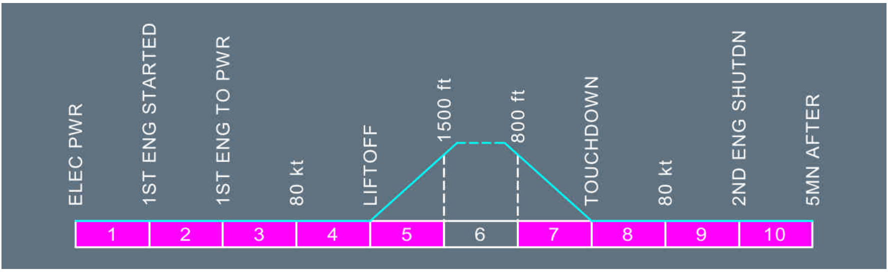
108

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the flight crew sets the TCAS on STBY in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AW-00018847.0001001 / 21 MAR 16

109

Crew awareness.

NAV L(R) CAPT(F/O) STATIC FAULT

Applicable to: MSN 05621-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-NAV-AJ-00018132.0001001 / 21 MAR 16

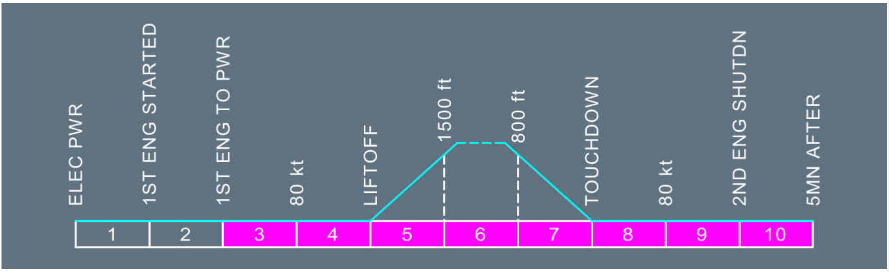
110

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the left(right) CAPT(F/O) static pressure probe is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-NAV-AJ-00015067.0001001 / 08 AUG 13

111

IAS/ALTI MAY BE UNREL

Ident.: PRO-ABN-NAV-AJ-00015068.0001001 / 08 AUG 13

112

STATUS

INOP SYS

CAPT(F/O) (R)(L) STAT
CAPT PROBES (1)
F/O PROBES (2)

(1) *((If the CAPT AOA and STAT are failed, and the heating systems of the CAPT PITOT and TAT are lost), or (If all the heating systems of the CAPT PROBES are lost))*

(2) *((If the F/O AOA and STAT are failed, and the heating systems of the F/O PITOT and TAT are lost), or (If all the heating systems of the F/O PROBES are lost))*

STALL WARNING

Ident.: PRO-ABN-NAV-00013994.0001001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 03035-03047, 03111, 04953-04974

When the threshold is reached, a permanent aural warning is triggered "STALL + CRICKET" as long as a correct angle-of-attack is not recovered. (*Refer to PRO-ABN-MISC [MEM] Stall Recovery*).

STALL WARNING

Ident.: PRO-ABN-NAV-00013994.0002001 / 21 MAR 17
13 **Applicable to: MSN 02734-03032, 03058, 03180-03710, 03733-04860, 05005-05987, 06097, 06121, 06139-09324, 10949-11597**

When the threshold is reached, permanent aural and visual alerts (“STALL, STALL” synthetic voice then cricket, "STALL STALL" red message on PFD) are triggered until a correct angle-of-attack is recovered (*Refer to PRO-ABN-MISC [MEM] Stall Recovery*).

Intentionally left blank

OVERSPEED

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597

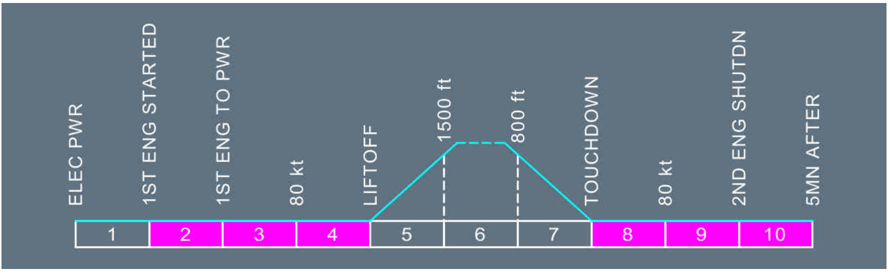
Ident.: PRO-ABN-OVERSPEED-AX-00018108.0001001 / 20 APR 17

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The aircraft speed/mach is greater than VMO + 4 kt/MMO + 0.006, or
- The aircraft speed is greater than VLE + 4 kt, with L/G not uplocked or L/G doors not closed, or
- The aircraft speed is greater than VFE + 4 kt, with slats and/or flaps extended.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-OVERSPEED-AX-00016848.0001001 / 21 MAR 16

1

VMO/MMO.. 350/.82

L2 *(235/0.60 in case of dispatch with landing gear down).*

L1 VLE.. 280/.67

VFE.. SEE BELOW

CONF	*VFE*
FULL	*177*
3	*185*
2	*200*
1+F	*215*
1	*230*

OVERSPEED

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-OVERSPEED-AX-00018108.0001001 / 20 APR 17

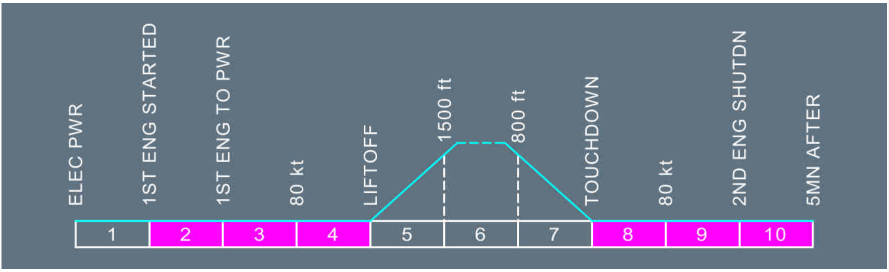
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The aircraft speed/mach is greater than VMO + 4 kt/MMO + 0.006, or
- The aircraft speed is greater than VLE + 4 kt, with L/G not uplocked or L/G doors not closed, or
- The aircraft speed is greater than VFE + 4 kt, with slats and/or flaps extended.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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OVERSPEED

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

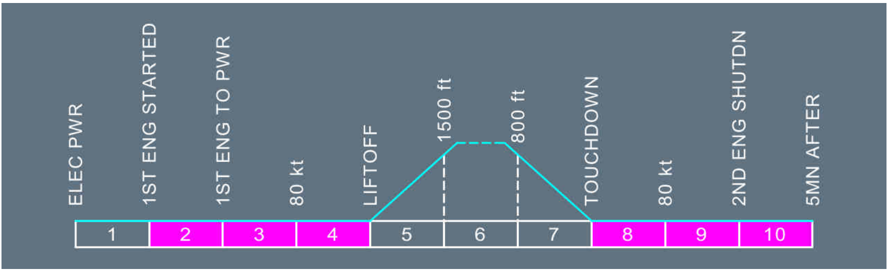
Ident.: PRO-ABN-OVERSPEED-AX-00018108.0001001 / 20 APR 17

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The aircraft speed/mach is greater than VMO + 4 kt/MMO + 0.006, or
- The aircraft speed is greater than VLE + 4 kt, with L/G not uplocked or L/G doors not closed, or
- The aircraft speed is greater than VFE + 4 kt, with slats and/or flaps extended.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-OVERSPEED-AX-00016848.0003001 / 21 MAR 16

VMO/MMO.. 350/.82

L2 *(235/0.60 in case of dispatch with landing gear down).*

L1 VLE.. 280/.67

VFE.. SEE BELOW

CONF	*VFE*
FULL	*190*
3	*195*
2	*215*
1+F	*225*
1	*235*

OVERSPEED

Applicable to: MSN 11531

Ident.: PRO-ABN-OVERSPEED-AX-00018108.0001001 / 20 APR 17

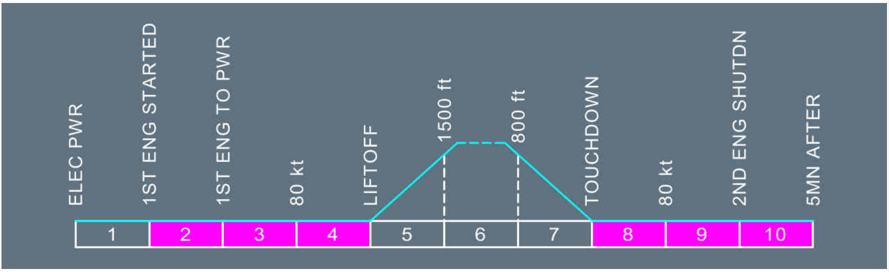
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The aircraft speed/mach is greater than VMO + 4 kt/MMO + 0.006, or
- The aircraft speed is greater than VLE + 4 kt, with L/G not uplocked or L/G doors not closed, or
- The aircraft speed is greater than VFE + 4 kt, with slats and/or flaps extended.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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2 Ident.: PRO-ABN-OVERSPEED-AX-00016848.0005001 / 09 APR 18

VMO/MMO.. 350/.82

L2 *(235/0.60 in case of dispatch with landing gear down).*

L1 VLE.. 280/.67

VFE..SEE BELOW

CONF	*VFE*
FULL	*186*
3	*195*
2	*215*
1+F	*225*
1	*243*

RECORDER CVR FAULT- ANNUNCIATION

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-RECORDER-C-00017318.0003001 / 18 NOV 21

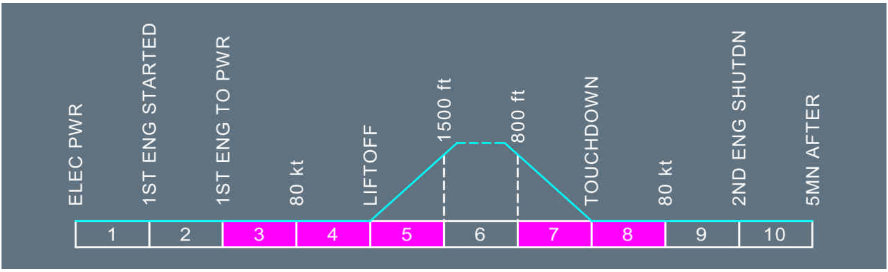
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the CVR is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-RECORDER-C-00013630.0002001 / 25 FEB 14

2

Crew awareness.

Ident.: PRO-ABN-RECORDER-C-00013631.0002001 / 29 MAR 12

3

STATUS

INOP SYS

CVR

RECORDER DFDR FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

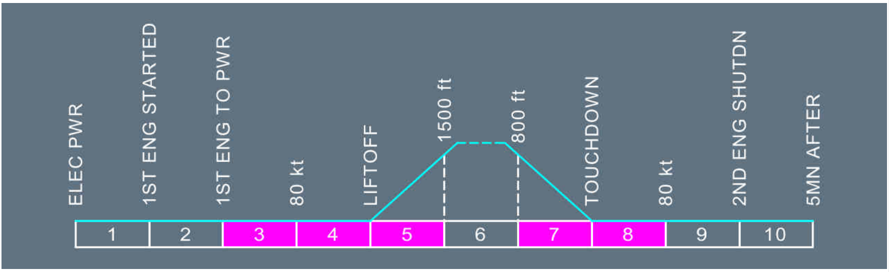
Ident.: PRO-ABN-RECORDER-A-00017312.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the DFDR is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-RECORDER-A-00010046.0001001 / 10 AUG 10

Crew awareness.

Ident.: PRO-ABN-RECORDER-A-00010047.0001001 / 10 AUG 10

STATUS

INOP SYS

DFDR

RECORDER FDR FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-RECORDER-A-00017312.0003001 / 18 NOV 21

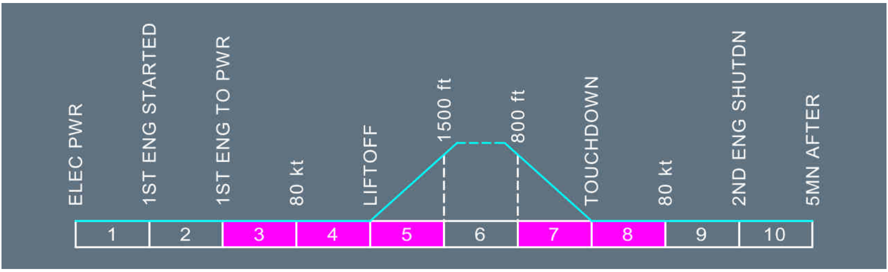
4

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FDR is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-RECORDER-A-00010046.0003001 / 18 NOV 21

5

Crew awareness.

Ident.: PRO-ABN-RECORDER-A-00010047.0003001 / 18 NOV 21

6

STATUS

INOP SYS

FDR

RECORDER SYS FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

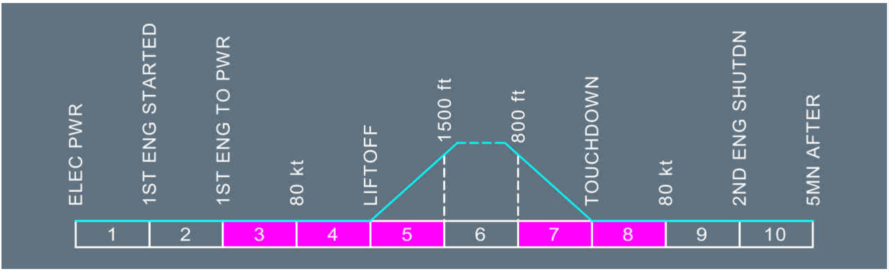
Ident.: PRO-ABN-RECORDER-B-00017313.0002001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FDIU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-RECORDER-B-00010048.0002001 / 10 AUG 10

Crew awareness.

Ident.: PRO-ABN-RECORDER-B-00010049.0002001 / 10 AUG 10

STATUS

INOP SYS

RECORDER SYS

RECORDER FDIU FAULT

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-RECORDER-B-00017313.0001001 / 21 MAR 16

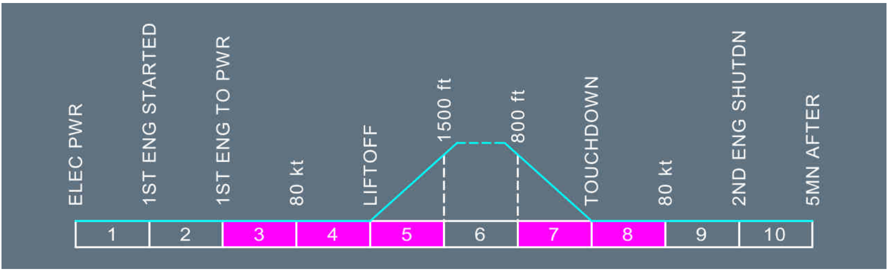
7

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FDIU is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-RECORDER-B-00010048.0001001 / 10 AUG 10

8

Crew awareness.

Ident.: PRO-ABN-RECORDER-B-00010049.0001001 / 10 AUG 10

9

STATUS

INOP SYS
FDIU

Intentionally left blank

SEVERE ICE DETECTED

Applicable to: MSN 04563, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-SEVERE_ICE-AB-00017188.0001001 / 21 MAR 16

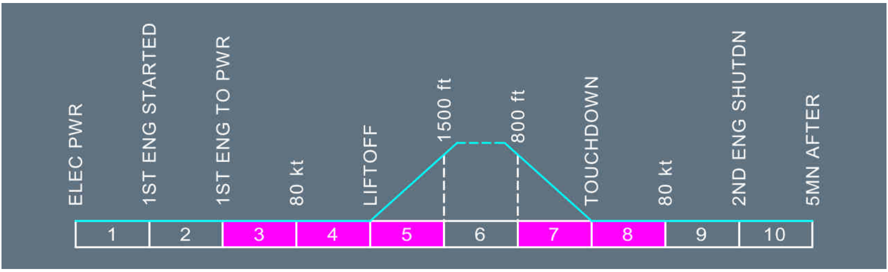
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when heavy ice is detected in flight above 1 500 ft (with TAT<10 °C) and the WING ANTI ICE pb-sw is set to OFF.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SEVERE_ICE-AB-00018892.0001001 / 21 MAR 16

WING ANTI ICE...ON
ENG MODE SEL...IGN

L2 *This line does not normally appear since continuous ignition has already been selected with the "ICE DETECTED" warning (selection of ENG ANTI ICE).*

SEVERE ICE DETECTED

Applicable to: MSN 04827-04860, 05005, 05097, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597

Ident.: PRO-ABN-SEVERE_ICE-AB-00017188.0001001 / 21 MAR 16

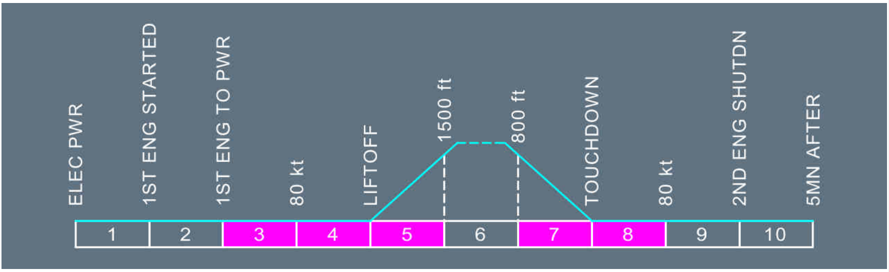
2

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when heavy ice is detected in flight above 1 500 ft (with TAT<10 °C) and the WING ANTI ICE pb-sw is set to OFF.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SEVERE_ICE-AB-00018892.0003001 / 04 JUN 19

3

WING ANTI ICE...ON
ENG MODE SEL..IGN

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 01143-01246, 01376, 01518, 01593-01628

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

1

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0001001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**
  APU BLEED....OFF
  VENTILATION BLOWER and EXTRACT....AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  PACK 1....OFF
  - **If smoke/fumes continue:**
    PACK 1....ON
    PACK 2....OFF
    - **If smoke/fumes persist:**
      PACK 2....ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER....OVRD
      VENTILATION EXTRACT....OVRD

  REMOVAL OF SMOKE / FUMES....CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
- **If CABIN EQPT smoke/fumes suspected:**
  - **If smoke/fumes continue:**
    EMER EXIT LIGHT....ON
    BUS TIE....OFF
    GEN 2....OFF

    AC BUS 2 shedding can be considered in order to isolate most of the cabin equipments. The ECAM lower display, and the F/O's PFD and ND will be lost.

    SMOKE / FUMES DISSIPATION....CHECK
    FAULTY EQPT....SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.
    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**
      GEN 2....ON

      All busbars recovered when GEN 2 restored. But, TR 2 remains INOP.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

BUS TIE...AUTO

- **If faulty equipment not confirmed isolated:**
  - **Before L/G extension:**

    GEN 2...ON

    BUS TIE..AUTO

REMOVAL OF SMOKE / FUMES...CONSIDER

Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**

  ELEC EMER CONFIG...CONSIDER

  Refer to the end of the procedure to set ELEC EMER CONFIG.

- **If smoke/fumes disappear within 5 min:**

  NORMAL VENTILATION...RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0017001 / 06 JUL 17

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE.......................................OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR.......................................MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN.......................................OFF
  GEN 2.......................................OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2.......................................ON
      EMER ELEC GEN 1 LINE.......................................ON

    - **When aircraft stopped:**

      ALL GENs.......................................OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED.......................................140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1 .... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Note: *Depending on the value of the engine total air temperature, the “EPR FAULT MODE" may be triggered, resulting in the degraded N1 MODE for both engines.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED.. 320 KT
MAX BRK PR...1000 PSI

FOR LDG..USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD.. VREF +10 KT
LDG DIST PROC.. APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED...320 KT
  APPR SPD...VREF +10 KT
  LDG DIST PROC...APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE... ON
- **WHEN A/C IS STOPPED:**
  ALL GEN.. OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 01251

Ident.: PRO-ABN-SMOKE-D-00012212.0002001 / 15 NOV 21

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered or, at the latest, after completing the immediate actions of the AVIONICS SMOKE procedure (before reaching the 5 min countdown procedure line)
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)..USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.

Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER..OVRD
VENTILATION EXTRACT..OVRD

Avionics ventilation air is extracted overboard.

CAB FANS..OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB..OFF
SIGNS..ON
CKPT / CABIN COM..ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

● **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
FAULTY EQPT..ISOLATE

● **If smoke/fumes source not immediately isolated:**
DIVERSION..INITIATE
DESCENT TO FL 100 / MEA-MORA..INITIATE

● **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
REMOVAL OF SMOKE / FUMES..CONSIDER

Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

ELEC EMER CONFIG..CONSIDER

Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

● **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
IMMEDIATE LANDING..CONSIDER

L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke/fumes.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0001001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**

  APU BLEED....................OFF
  VENTILATION BLOWER and EXTRACT....................AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  PACK 1....................OFF

  - **If smoke/fumes continue:**

    PACK 1....................ON
    PACK 2....................OFF

    - **If smoke/fumes persist:**

      PACK 2....................ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER....................OVRD
      VENTILATION EXTRACT....................OVRD

  REMOVAL OF SMOKE / FUMES....................CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT....................ON
    BUS TIE....................OFF
    GEN 2....................OFF

    AC BUS 2 shedding can be considered in order to isolate most of the cabin equipments.
    The ECAM lower display, and the F/O's PFD and ND will be lost.

    SMOKE / FUMES DISSIPATION....................CHECK
    FAULTY EQPT....................SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it.
    Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      GEN 2....................ON

      All busbars recovered when GEN 2 restored. But, TR 2 remains INOP.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

BUS TIE...AUTO

- **If faulty equipment not confirmed isolated:**
  - **Before L/G extension:**
    GEN 2...ON
    BUS TIE...AUTO

REMOVAL OF SMOKE / FUMES...CONSIDER

Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG...CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.

- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION...RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0008001 / 06 JUL 17

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE.. OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR.. MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN.. OFF
  GEN 2.. OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **Before L/G extension:**

      Restore all generators only few minutes before landing to minimize the possible reactivation of a smoke source.

      GEN 2.. ON
      EMER ELEC GEN 1 LINE.. ON

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED.. 140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

    VHF 1 / HF 1 / ATC 1.. USE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **Before L/G extension:**

  Restore all generators only a few minutes before landing, to minimize possible smoke source reactivation.

  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Note: *Depending on the value of the engine total air temperature, the “EPR FAULT MODE" may be triggered, resulting in the degraded N1 MODE for both engines.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0011001 / 31 AUG 17

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

STATUS

MIN RAT SPEED..140 KT
MAX SPEED..320 KT
MAX BRK PR..1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD..VREF +10 KT
LDG DIST PROC...APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
SLATS/FLAPS SLOW

APPR PROC

- **BEFORE L/G EXTENSION:**
  GEN 2...ON
  EMER ELEC GEN 1 LINE...ON
- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MIN RAT SPEED...140 KT
  Will disappear at landing gear extension.
  MAX SPEED..320 KT
  FOR LDG...USE FLAPS 3
  GPWS LDG FLAP 3..ON
  Will be displayed when flaps in CONF 3.
  APPR SPD...VREF +10 KT

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

LDG DIST PROC..APPLY

ALTN LAW: PROT LOST
See [1]
WHEN L/G DN: DIRECT LAW
See [2]

[1] *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

[2] *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 01459

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

2

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:
- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Ident.: PRO-ABN-SMOKE-D-00024296.0002001 / 15 NOV 21

In case of perceptible smoke/fumes, remember that the smoke/fumes may come from the Cockpit Door Surveillance System (CDSS) LCD monitor:

- **If smoke/fumes from LCD monitor suspected :**
  CKPT DOOR VIDEO pb..OFF

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0001001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**

  APU BLEED.....OFF
  VENTILATION BLOWER and EXTRACT.....AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  PACK 1.....OFF

  - **If smoke/fumes continue:**

    PACK 1.....ON
    PACK 2.....OFF

    - **If smoke/fumes persist:**

      PACK 2.....ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER.....OVRD
      VENTILATION EXTRACT.....OVRD

  REMOVAL OF SMOKE / FUMES.....CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT.....ON
    BUS TIE.....OFF
    GEN 2.....OFF

    AC BUS 2 shedding can be considered in order to isolate most of the cabin equipments. The ECAM lower display, and the F/O's PFD and ND will be lost.

    SMOKE / FUMES DISSIPATION.....CHECK
    FAULTY EQPT.....SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      GEN 2.....ON

      All busbars recovered when GEN 2 restored. But, TR 2 remains INOP.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

BUS TIE...AUTO

- **If faulty equipment not confirmed isolated:**
  - **Before L/G extension:**

    GEN 2...ON

    BUS TIE...AUTO

REMOVAL OF SMOKE / FUMES.................................CONSIDER

Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**

  ELEC EMER CONFIG.................................CONSIDER

  Refer to the end of the procedure to set ELEC EMER CONFIG.

- **If smoke/fumes disappear within 5 min:**

  NORMAL VENTILATION.................................RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0017001 / 06 JUL 17

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE....................OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR....................MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN....................OFF
  GEN 2....................OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2....................ON
      EMER ELEC GEN 1 LINE....................ON

    - **When aircraft stopped:**

      ALL GENs....................OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED....................140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1 .... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Note: *Depending on the value of the engine total air temperature, the “EPR FAULT MODE" may be triggered, resulting in the degraded N1 MODE for both engines.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED... 320 KT
MAX BRK PR...1000 PSI

FOR LDG..USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD...VREF +10 KT
LDG DIST PROC.. APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED...320 KT
  APPR SPD...VREF +10 KT
  LDG DIST PROC...APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON
- **WHEN A/C IS STOPPED:**
  ALL GEN .... OFF

ALTN LAW: PROT LOST
See [(1)]
WHEN L/G DN: DIRECT LAW
See [(2)]

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*
(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

SMOKE / FUMES / AVNCS SMOKE - UNDETERMINED / AVNCS / ELECTRICAL SMOKE

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG .... CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION .... RESTORE

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 01801, 01825-01826, 01832, 01837-01855, 02896-02904, 03588-03595, 03710, 04000-04192, 04389, 04773, 05345

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

3

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA....................INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0004001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**

  APU BLEED....OFF
  VENTILATION BLOWER and EXTRACT....AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  PACK 1....OFF

  - **If smoke/fumes continue:**

    PACK 1....ON
    PACK 2....OFF

    - **If smoke/fumes persist:**

      PACK 2....ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER....OVRD
      VENTILATION EXTRACT....OVRD

  REMOVAL OF SMOKE / FUMES....CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT....ON
    COMMERCIAL....OFF
    SMOKE / FUMES DISSIPATION....CHECK
    FAULTY EQPT....SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL....NORM

    REMOVAL OF SMOKE / FUMES....CONSIDER

    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG..CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION..RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0017001 / 06 JUL 17

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE.................... OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR.................... MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN.................... OFF
  GEN 2.................... OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - ■ **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2.................... ON
      EMER ELEC GEN 1 LINE.................... ON

    - **When aircraft stopped:**

      ALL GENs.................... OFF

  - ■ **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED.................... 140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1...USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1...OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2...ON
  EMER ELEC GEN 1 LINE...ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED...320 KT

Note: *Depending on the value of the engine total air temperature, the "EPR FAULT MODE" may be triggered, resulting in the degraded N1 MODE for both engines.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED..140 KT
MAX SPEED..320 KT
MAX BRK PR..1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD...VREF +10 KT
LDG DIST PROC...APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED...320 KT
  APPR SPD...VREF +10 KT
  LDG DIST PROC...APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE... ON
- **WHEN A/C IS STOPPED:**
  ALL GEN... OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 02014, 02734-02887, 03032, 04563

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

4

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.

Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE

- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0007001 / 15 NOV 21

5

- **If AIR COND smoke/fumes suspected:**

  APU BLEED........................OFF
  VENTILATION BLOWER and EXTRACT........................AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  CARGO AFT ISOL VALVE........................OFF
  To prevent a cargo smoke/fumes warning from being triggered due to cabin smoke/fumes.
  PACK 1........................OFF

  - **If smoke/fumes continue:**

    PACK 1........................ON
    PACK 2........................OFF

    - **If smoke/fumes persist:**

      PACK 2........................ON
      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.
      VENTILATION BLOWER........................OVRD
      VENTILATION EXTRACT........................OVRD

  REMOVAL OF SMOKE / FUMES........................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT........................ON
    COMMERCIAL........................OFF
    SMOKE / FUMES DISSIPATION........................CHECK
    FAULTY EQPT........................SEARCH / ISOLATE
    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL........................NORM

    REMOVAL OF SMOKE / FUMES........................CONSIDER
    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**

  ELEC EMER CONFIG...CONSIDER

  Refer to the end of the procedure to set ELEC EMER CONFIG.

- **If smoke/fumes disappear within 5 min:**

  NORMAL VENTILATION...RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0017001 / 06 JUL 17

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE..OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR..MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN..OFF
  GEN 2..OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2..ON
      EMER ELEC GEN 1 LINE..ON

    - **When aircraft stopped:**

      ALL GENs..OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED..140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1..USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1..OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

● **At 3 min or 2 000 ft AAL before landing:**

Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

GEN 2..ON
EMER ELEC GEN 1 LINE..ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED..320 KT

Note: *Depending on the value of the engine total air temperature, the “EPR FAULT MODE" may be triggered, resulting in the degraded N1 MODE for both engines.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED..140 KT
MAX SPEED..320 KT
MAX BRK PR..1000 PSI

FOR LDG..USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD......................................VREF +10 KT
LDG DIST PROC..APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED......................................320 KT
  APPR SPD..................................VREF +10 KT
  LDG DIST PROC..................................APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE........................ ON
- **WHEN A/C IS STOPPED:**
  ALL GEN..................................... OFF

ALTN LAW: PROT LOST
See (1)
WHEN L/G DN: DIRECT LAW
See (2)

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(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*
(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 02321

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

6

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA....................INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Ident.: PRO-ABN-SMOKE-D-00024296.0002001 / 15 NOV 21

In case of perceptible smoke/fumes, remember that the smoke/fumes may come from the Cockpit Door Surveillance System (CDSS) LCD monitor:

● **If smoke/fumes from LCD monitor suspected :**
CKPT DOOR VIDEO pb....................................OFF

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0007001 / 15 NOV 21

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- **If AIR COND smoke/fumes suspected:**

  APU BLEED..........OFF
  VENTILATION BLOWER and EXTRACT..........AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  CARGO AFT ISOL VALVE..........OFF

  To prevent a cargo smoke/fumes warning from being triggered due to cabin smoke/fumes.

  PACK 1..........OFF

  - **If smoke/fumes continue:**

    PACK 1..........ON
    PACK 2..........OFF

    - **If smoke/fumes persist:**

      PACK 2..........ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER..........OVRD
      VENTILATION EXTRACT..........OVRD

  REMOVAL OF SMOKE / FUMES..........CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT..........ON
    COMMERCIAL..........OFF
    SMOKE / FUMES DISSIPATION..........CHECK
    FAULTY EQPT..........SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL..........NORM

    REMOVAL OF SMOKE / FUMES..........CONSIDER

    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

● **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**

ELEC EMER CONFIG.. CONSIDER

Refer to the end of the procedure to set ELEC EMER CONFIG.

● **If smoke/fumes disappear within 5 min:**

NORMAL VENTILATION.. RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0017001 / 06 JUL 17

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE.......................................OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR.......................................MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN.......................................OFF
  GEN 2.......................................OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2.......................................ON
      EMER ELEC GEN 1 LINE.......................................ON

    - **When aircraft stopped:**

      ALL GENs.......................................OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED.......................................140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1..USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1..OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2..ON
  EMER ELEC GEN 1 LINE..ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED..320 KT

Note: *Depending on the value of the engine total air temperature, the “EPR FAULT MODE" may be triggered, resulting in the degraded N1 MODE for both engines.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED... 320 KT
MAX BRK PR..1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3..ON
APPR SPD.. VREF +10 KT
LDG DIST PROC... APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED...320 KT
  APPR SPD...VREF +10 KT
  LDG DIST PROC..APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON
- **WHEN A/C IS STOPPED:**
  ALL GEN .... OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-04974, 05066, 05101-05342, 05591-05883

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

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This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0004001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**

  APU BLEED....OFF
  VENTILATION BLOWER and EXTRACT....AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  PACK 1....OFF

  - **If smoke/fumes continue:**

    PACK 1....ON
    PACK 2....OFF

    - **If smoke/fumes persist:**

      PACK 2....ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER....OVRD
      VENTILATION EXTRACT....OVRD

  REMOVAL OF SMOKE / FUMES....CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT....ON
    COMMERCIAL....OFF
    SMOKE / FUMES DISSIPATION....CHECK
    FAULTY EQPT....SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL....NORM

    REMOVAL OF SMOKE / FUMES....CONSIDER

    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG..CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION..RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0019001 / 17 MAR 17

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TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE.......................................OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR.......................................MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN.......................................OFF
  GEN 2.......................................OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2.......................................ON
      EMER ELEC GEN 1 LINE.......................................ON

    - **When aircraft stopped:**

      ALL GENs.......................................OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED.......................................140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1 .... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED.. 320 KT
MAX BRK PR..1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3..ON
APPR SPD...VREF +10 KT
LDG DIST PROC..APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED..320 KT
  APPR SPD...VREF +10 KT
  LDG DIST PROC...APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE.. ON
- **WHEN A/C IS STOPPED:**
  ALL GEN.. OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

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This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0004001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**

  APU BLEED..........OFF
  VENTILATION BLOWER and EXTRACT..........AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  PACK 1..........OFF

  - **If smoke/fumes continue:**

    PACK 1..........ON
    PACK 2..........OFF

    - **If smoke/fumes persist:**

      PACK 2..........ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER..........OVRD
      VENTILATION EXTRACT..........OVRD

  REMOVAL OF SMOKE / FUMES..........CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT..........ON
    COMMERCIAL..........OFF
    SMOKE / FUMES DISSIPATION..........CHECK
    FAULTY EQPT..........SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it.
    Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL..........NORM

    REMOVAL OF SMOKE / FUMES..........CONSIDER

    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG.. CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION...RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0017001 / 06 JUL 17

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE.......OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR.......MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN.......OFF
  GEN 2.......OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2.......ON
      EMER ELEC GEN 1 LINE.......ON

    - **When aircraft stopped:**

      ALL GENs.......OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED.......140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1.................... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1.................... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2.................... ON
  EMER ELEC GEN 1 LINE.................... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED.................... 320 KT

Note: *Depending on the value of the engine total air temperature, the “EPR FAULT MODE" may be triggered, resulting in the degraded N1 MODE for both engines.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0066001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED	140 KT
MAX SPEED	320 KT
MAX BRK PR	1000 PSI

FOR LDG	USE FLAPS 3
GPWS LDG FLAP 3	ON
APPR SPD	VREF +10 KT
LDG DIST PROC	APPLY

ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL USABLE BY GRAVITY
CTR TK FUEL: 2T UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**

MAX SPEED	320 KT
APPR SPD	VREF +10 KT
LDG DIST PROC	APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2..ON
  EMER ELEC GEN 1 LINE...ON
- **WHEN A/C IS STOPPED:**
  ALL GEN...OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 04827-04860

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

11

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0007001 / 15 NOV 21

12

- **If AIR COND smoke/fumes suspected:**

  APU BLEED....OFF
  VENTILATION BLOWER and EXTRACT....AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  CARGO AFT ISOL VALVE....OFF
  To prevent a cargo smoke/fumes warning from being triggered due to cabin smoke/fumes.
  PACK 1....OFF

  - **If smoke/fumes continue:**

    PACK 1....ON
    PACK 2....OFF

    - **If smoke/fumes persist:**

      PACK 2....ON
      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.
      VENTILATION BLOWER....OVRD
      VENTILATION EXTRACT....OVRD

  REMOVAL OF SMOKE / FUMES....CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT....ON
    COMMERCIAL....OFF
    SMOKE / FUMES DISSIPATION....CHECK
    FAULTY EQPT....SEARCH / ISOLATE
    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL....NORM

    REMOVAL OF SMOKE / FUMES....CONSIDER
    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG.......CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION.......RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0019001 / 17 MAR 17

13

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE...OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR...MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

● **When EMER GEN AVAIL:**

APU GEN...OFF
GEN 2...OFF

ELEC EMER CONFIG

Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

■ **If AVIONICS SMOKE not triggered:**

APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

● **At 3 min or 2 000 ft AAL before landing:**

Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

GEN 2...ON
EMER ELEC GEN 1 LINE...ON

● **When aircraft stopped:**

ALL GENs...OFF

■ **If AVIONICS SMOKE triggered:**

The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

MIN RAT SPEED...140 KT

Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1 .... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

● **At 3 min or 2 000 ft AAL before landing:**

Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

GEN 2 .... ON
EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED.. 320 KT
MAX BRK PR...1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD...VREF +10 KT
LDG DIST PROC.. APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED...320 KT
  APPR SPD...VREF +10 KT
  LDG DIST PROC..APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE.. ON
- **WHEN A/C IS STOPPED:**
  ALL GEN.. OFF

ALTN LAW: PROT LOST
See (1)
WHEN L/G DN: DIRECT LAW
See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*
(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 05005, 05097

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

14

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....OVRD
VENTILATION EXTRACT....OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....OFF
SIGNS....ON
CKPT / CABIN COM....ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....ISOLATE

- **If smoke/fumes source not immediately isolated:**
  DIVERSION....INITIATE
  DESCENT TO FL 100 / MEA-MORA....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Ident.: PRO-ABN-SMOKE-D-00024296.0002001 / 15 NOV 21

In case of perceptible smoke/fumes, remember that the smoke/fumes may come from the Cockpit Door Surveillance System (CDSS) LCD monitor:

- **If smoke/fumes from LCD monitor suspected :**
  CKPT DOOR VIDEO pb...OFF

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0007001 / 15 NOV 21

15

- **If AIR COND smoke/fumes suspected:**
  APU BLEED.......OFF
  VENTILATION BLOWER and EXTRACT.......AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  CARGO AFT ISOL VALVE.......OFF
  To prevent a cargo smoke/fumes warning from being triggered due to cabin smoke/fumes.
  PACK 1.......OFF
  - **If smoke/fumes continue:**
    PACK 1.......ON
    PACK 2.......OFF
    - **If smoke/fumes persist:**
      PACK 2.......ON
      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.
      VENTILATION BLOWER.......OVRD
      VENTILATION EXTRACT.......OVRD

  REMOVAL OF SMOKE / FUMES.......CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
- **If CABIN EQPT smoke/fumes suspected:**
  - **If smoke/fumes continue:**
    EMER EXIT LIGHT.......ON
    COMMERCIAL.......OFF
    SMOKE / FUMES DISSIPATION.......CHECK
    FAULTY EQPT.......SEARCH / ISOLATE
    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.
    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**
      COMMERCIAL.......NORM

    REMOVAL OF SMOKE / FUMES.......CONSIDER
    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG..CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION..RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0019001 / 17 MAR 17

16

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE...OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR...MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN...OFF
  GEN 2...OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2...ON
      EMER ELEC GEN 1 LINE...ON

    - **When aircraft stopped:**

      ALL GENs...OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED...140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1 .... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED.. 320 KT
MAX BRK PR...1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3..ON
APPR SPD.. VREF +10 KT
LDG DIST PROC.. APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED...320 KT
  APPR SPD...VREF +10 KT
  LDG DIST PROC..APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON
- **WHEN A/C IS STOPPED:**
  ALL GEN .... OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 06139, 06173

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

17

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0005001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**
  APU BLEED......OFF
  VENTILATION BLOWER and EXTRACT......AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  CARGO FWD ISOL VALVE......OFF
  To prevent a cargo smoke/fumes warning from being triggered due to cabin smoke/fumes.
  PACK 1......OFF
  - **If smoke/fumes continue:**
    PACK 1......ON
    PACK 2......OFF
    - **If smoke/fumes persist:**
      PACK 2......ON
      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.
      VENTILATION BLOWER......OVRD
      VENTILATION EXTRACT......OVRD

  REMOVAL OF SMOKE / FUMES......CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
- **If CABIN EQPT smoke/fumes suspected:**
  - **If smoke/fumes continue:**
    EMER EXIT LIGHT......ON
    COMMERCIAL......OFF
    SMOKE / FUMES DISSIPATION......CHECK
    FAULTY EQPT......SEARCH / ISOLATE
    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.
    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**
      COMMERCIAL......NORM

    REMOVAL OF SMOKE / FUMES......CONSIDER
    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG...CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION...RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0019001 / 17 MAR 17

18

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE...OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR..MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN..OFF
  GEN 2...OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2..ON
      EMER ELEC GEN 1 LINE...ON

    - **When aircraft stopped:**

      ALL GENs..OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED...140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1.. USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1.. OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2.. ON
  EMER ELEC GEN 1 LINE.. ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED.. 320 KT

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0057001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED.. 320 KT
MAX BRK PR..1000 PSI

FOR LDG..USE FLAPS 3
GPWS LDG FLAP 3..ON
APPR SPD... VREF +10 KT
LDG DIST PROC... APPLY
ENG 1+2 APPR IDLE ONLY
ENG 1+2 N1 DEGRADED MODE
(IAE-powered aircraft)
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED..320 KT
  APPR SPD..VREF +10 KT
  LDG DIST PROC..APPLY

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

APPR PROC

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE.. ON
- **WHEN A/C IS STOPPED:**
  ALL GEN.. OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

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This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE

- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0004001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**

  APU BLEED....................OFF
  VENTILATION BLOWER and EXTRACT....................AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  PACK 1....................OFF

  - **If smoke/fumes continue:**

    PACK 1....................ON
    PACK 2....................OFF

    - **If smoke/fumes persist:**

      PACK 2....................ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER....................OVRD
      VENTILATION EXTRACT....................OVRD

  REMOVAL OF SMOKE / FUMES....................CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT....................ON
    COMMERCIAL....................OFF
    SMOKE / FUMES DISSIPATION....................CHECK
    FAULTY EQPT....................SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it.
    Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL....................NORM

    REMOVAL OF SMOKE / FUMES....................CONSIDER

    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG.. CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION.. RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0019001 / 17 MAR 17

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TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE..OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR..MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN..OFF
  GEN 2..OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2..ON
      EMER ELEC GEN 1 LINE..ON

    - **When aircraft stopped:**

      ALL GENs..OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED..140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1....................USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1....................OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

● **At 3 min or 2 000 ft AAL before landing:**

Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

GEN 2....................ON
EMER ELEC GEN 1 LINE....................ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED....................320 KT

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0064001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED...140 KT
MAX SPEED..320 KT
MAX BRK PR..1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD...VREF +10 KT
LDG DIST PROC..APPLY
ENG 1+2 APPR IDLE ONLY
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL USABLE BY GRAVITY
CTR TK FUEL: 2T UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED...320 KT
  APPR SPD..VREF +10 KT
  LDG DIST PROC...APPLY

APPR PROC

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE.. ON

- **WHEN A/C IS STOPPED:**
  ALL GEN.. OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

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This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....................USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.
Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....................OVRD
VENTILATION EXTRACT....................OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....................OFF
SIGNS....................ON
CKPT / CABIN COM....................ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....................ISOLATE
- **If smoke/fumes source not immediately isolated:**
  DIVERSION....................INITIATE
  DESCENT TO FL 100 / MEA-MORA ....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES
  ELEC EMER CONFIG....................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0005001 / 15 NOV 21

- **If AIR COND smoke/fumes suspected:**

  APU BLEED....................OFF
  VENTILATION BLOWER and EXTRACT....................AUTO

  Note: When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.

  CARGO FWD ISOL VALVE....................OFF

  To prevent a cargo smoke/fumes warning from being triggered due to cabin smoke/fumes.

  PACK 1....................OFF

  - **If smoke/fumes continue:**

    PACK 1....................ON
    PACK 2....................OFF

    - **If smoke/fumes persist:**

      PACK 2....................ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      VENTILATION BLOWER....................OVRD
      VENTILATION EXTRACT....................OVRD

  REMOVAL OF SMOKE / FUMES....................CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**

  - **If smoke/fumes continue:**

    EMER EXIT LIGHT....................ON
    COMMERCIAL....................OFF
    SMOKE / FUMES DISSIPATION....................CHECK
    FAULTY EQPT....................SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**

      COMMERCIAL....................NORM

    REMOVAL OF SMOKE / FUMES....................CONSIDER

    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**

  ELEC EMER CONFIG...CONSIDER

  Refer to the end of the procedure to set ELEC EMER CONFIG.

- **If smoke/fumes disappear within 5 min:**

  NORMAL VENTILATION...RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0019001 / 17 MAR 17

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TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE...OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR...MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN...OFF
  GEN 2...OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2...ON
      EMER ELEC GEN 1 LINE...ON

    - **When aircraft stopped:**

      ALL GENs...OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED...140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1 .... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0064001 / 17 MAY 21

ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED........140 KT
MAX SPEED........320 KT
MAX BRK PR........1000 PSI

FOR LDG........USE FLAPS 3
GPWS LDG FLAP 3........ON
APPR SPD........VREF +10 KT
LDG DIST PROC........APPLY
ENG 1+2 APPR IDLE ONLY
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL USABLE BY GRAVITY
CTR TK FUEL: 2T UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**

  MAX SPEED........320 KT
  APPR SPD........VREF +10 KT
  LDG DIST PROC........APPLY

APPR PROC

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

- **3 MN/2000 FT BEFORE LDG:**
  GEN 2.. ON
  EMER ELEC GEN 1 LINE.. ON
- **WHEN A/C IS STOPPED:**
  ALL GEN.. OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] SMOKE / FUMES / AVNCS SMOKE

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-SMOKE-D-00012212.0004001 / 15 NOV 21

23

This procedure includes all the steps of the AVIONICS SMOKE procedure.

Apply this procedure when:
- The flight (cabin) crew suspect that smoke/fumes are coming from any of the following:
  - The avionics
  - The air conditioning
  - The cabin equipment
- The AVIONICS SMOKE alert is triggered.
- There is a smell of smoke/fumes in the cockpit:
  - If the smell is similar to that of orange peels, suspect a toxic leak of rain repellent fluid.
  - If the smell is similar to that of pine needles, suspect a non-toxic leak.

If any other ECAM SMOKE alert triggers (CARGO, ...), the crew must first apply the ECAM procedure, then consider applying this procedure.
Note that these ECAM alerts may be caused by another source, that should usually first be detected by the flight crew/cabin crew/avionics smoke detectors.

The following explains the layout of this procedure:
- The procedure lines above the boxed items indicate the actions that the flight crew must immediately perform, if smoke/fumes are detected (with or without ECAM activation and regardless of the smoke/fumes source). These immediate actions correspond to the most common steps to be taken in smoke/fumes cases. In all cases, the flight crew must also be prepared to immediately perform a diversion. However, this diversion may be avoided if the smoke/fumes source is obvious, accessible and extinguishable or confirmed isolated (after completion of the immediate actions).
- The boxed items indicate the actions that the flight crew must consider, if at any time during the remainder of the procedure but always after the initial steps:
  - Smoke/fumes become the greatest threat and removal of smoke/fumes is required, and/or
  - The situation becomes critical and can no longer be controlled.
- The procedure lines below the boxed items indicate the actions that the flight crew must perform, as soon as they suspect a source of smoke/fumes. The actions will depend on whether the smoke/fumes are coming from the avionics, and/or air conditioning, and/or cabin equipment.

LAND ASAP

IF PERCEPTIBLE SMOKE/FUMES APPLY IMMEDIATELY:

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

If smoke/fumes are confirmed, the following procedure must be applied.

OXY MASK / GOGGLE (if required)....USE/100%/EMERG

Ensure crew communication is established. Avoid continuous use of the interphone to minimize interference from the oxygen mask breathing noise.

Turn the emergency knob to remove condensation or smoke/fumes from the mask.

VENTILATION BLOWER....OVRD
VENTILATION EXTRACT....OVRD

Avionics ventilation air is extracted overboard.

CAB FANS....OFF

To prevent smoke/fumes from entering the cockpit and cabin.

GALY & CAB....OFF
SIGNS....ON
CKPT / CABIN COM....ESTABLISH

Communication must be established with the cabin crew in order to follow up on the smoke/fumes origin and dissipation.

- **If smoke/fumes source immediately obvious, accessible, and extinguishable:**
  FAULTY EQPT....ISOLATE

- **If smoke/fumes source not immediately isolated:**
  DIVERSION....INITIATE
  DESCENT TO FL 100 / MEA-MORA....INITIATE

- **At ANY TIME of the procedure, if smoke/fumes become the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES....CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

  ELEC EMER CONFIG....CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - ELEC EMER CONFIG

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING....CONSIDER

  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

L1 Guidelines to determine smoke/fumes source:

- If smoke/fumes initially come out of the ventilation outlets, the crew may suspect AIR COND SMOKE. In addition, very shortly thereafter, several SMOKE alerts (cargo, lavatory, avionics) will be triggered. The displayed ECAM procedures must be applied.
- After an ENG or APU failure, smoke/fumes may come from the faulty item via the bleed system and be perceived in the cockpit and/or cabin. In such a case, it will be recirculated throughout the aircraft, until it completely disappears from the air conditioning system.
- If only the AVIONICS SMOKE alert is triggered, the crew may suspect avionics smoke.
- If smoke/fumes are detected while an equipment is declared faulty, the crew may suspect that smoke/fumes are coming from this equipment.
- Avionics or forward galley smoke/fumes may be smelt, or may enter in the cockpit before ECAM alert activation.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012214.0007001 / 15 NOV 21

24

- **If AIR COND smoke/fumes suspected:**
  - APU BLEED........OFF
  - VENTILATION BLOWER and EXTRACT........AUTO

  Note: *When both VENTILATION BLOWER and VENTILATION EXTRACT are in the OVRD position, a single pack may not be able to maintain the cabin pressure.*

  - CARGO AFT ISOL VALVE........OFF

  To prevent a cargo smoke/fumes warning from being triggered due to cabin smoke/fumes.

  - PACK 1........OFF
  - **If smoke/fumes continue:**
    - PACK 1........ON
    - PACK 2........OFF
    - **If smoke/fumes persist:**
      - PACK 2........ON

      Restore normal configuration if PACK 2 is not suspected to cause smoke/fumes.

      - VENTILATION BLOWER........OVRD
      - VENTILATION EXTRACT........OVRD
  - REMOVAL OF SMOKE / FUMES........CONSIDER

  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

- **If CABIN EQPT smoke/fumes suspected:**
  - **If smoke/fumes continue:**
    - EMER EXIT LIGHT........ON
    - COMMERCIAL........OFF
    - SMOKE / FUMES DISSIPATION........CHECK
    - FAULTY EQPT........SEARCH / ISOLATE

    Once the cabin has been secured, try to find the smoke/fumes source and isolate it. Cabin lights, reading lights, passenger systems, galleys have dedicated control C/B in the cabin or cockpit.

    - **If smoke/fumes persist or if faulty equipment confirmed isolated:**
      - COMMERCIAL........NORM
    - REMOVAL OF SMOKE / FUMES........CONSIDER

    Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012215.0001001 / 15 NOV 21

- **If smoke/fumes source cannot be determined and persist or AVNCS / ELECTRICAL smoke/fumes suspected:**
  ELEC EMER CONFIG.. CONSIDER
  Refer to the end of the procedure to set ELEC EMER CONFIG.
- **If smoke/fumes disappear within 5 min:**
  NORMAL VENTILATION..RESTORE

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012565.0019001 / 17 MAR 17

25

TO SET ELEC EMER CONFIG

EMER ELEC GEN 1 LINE.......... OFF

GEN 1 LINE contactor opens. GEN 1 remains running and supplies one fuel pump in each wing tank. AC BUS 1 is supplied by GEN 2 through the bus tie contactor.

EMER ELEC PWR.......... MAN ON

RAT is extended and the EMER GEN is connected to the aircraft network. Check emergency generator parameters on the ELEC SD page (displayed automatically).

- **When EMER GEN AVAIL:**

  APU GEN.......... OFF
  GEN 2.......... OFF

  ELEC EMER CONFIG

  Two different procedures can be displayed on the ECAM, depending on whether the AVIONICS SMOKE ECAM caution is triggered or not before the flight crew sets the electrical emergency configuration.

  - **If AVIONICS SMOKE not triggered:**

    APPLY ELEC EMER CONFIG PROCEDURE, BUT DO NOT RESET GEN, EVEN IF REQUESTED BY ECAM

    - **At 3 min or 2 000 ft AAL before landing:**

      Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

      GEN 2.......... ON
      EMER ELEC GEN 1 LINE.......... ON

    - **When aircraft stopped:**

      ALL GENs.......... OFF

  - **If AVIONICS SMOKE triggered:**

    The ECAM displays a specific ELEC EMER CONFIG procedure. The flight crew must apply the following ECAM procedure.

    MIN RAT SPEED.......... 140 KT

    Note: *The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied).*

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

VHF 1 / HF 1 / ATC 1 .... USE

Only VHF 1, HF 1 and ATC 1 are supplied in this configuration. Notify the ATC of the nature of the emergency, and state intentions. If there is no contact with the ATC, switch to code A7700, or transmit a distress message on one of the emergency frequencies.

FAC 1 .... OFF THEN ON

Rudder trim is recovered, despite the fact that no indication is available.

- **At 3 min or 2 000 ft AAL before landing:**

  Restore all generators only 3 min before landing or at 2 000 ft AAL to recover normal braking, while minimizing possible reactivation of a smoke source.

  GEN 2 .... ON
  EMER ELEC GEN 1 LINE .... ON

F/CTL ALTN LAW (PROT LOST)

Flight control normal laws and associated protections are lost. Only the load factor limitation, and the high and low speed stability remain (ALTN law with reduced protection).

MAX SPEED .... 320 KT

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-D-00012217.0070001 / 17 MAY 21

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ECAM lower display is not available. STATUS SD page is displayed on the upper ECAM display, as long as the STATUS pb is pressed.

L12

STATUS

MIN RAT SPEED.. 140 KT
MAX SPEED... 320 KT
MAX BRK PR...1000 PSI

FOR LDG...USE FLAPS 3
GPWS LDG FLAP 3...ON
APPR SPD.. VREF +15 KT
LDG DIST PROC.. APPLY
ENG 1+2 APPR IDLE ONLY
ALTN LAW: PROT LOST
WHEN L/G DN: DIRECT LAW
CTR TK FUEL USABLE BY GRAVITY
CTR TK FUEL: 2T UNUSABLE
FUEL CONSUMPT INCRSD

This message is triggered when the failure (or combination of failures) affects the nominal aerodynamic characteristics of the aircraft.

FMS PRED UNRELIABLE

Disregard FMS fuel predictions and Refer to QRH/OPS Fuel Penalty Factors/ECAM Alert Table in order to find the applicable Fuel Penalty Factor.

SLATS/FLAPS SLOW

- **After recovery of normal electrical supply, the following STATUS will be displayed:**
  MAX SPEED..320 KT
  APPR SPD...VREF +15 KT
  LDG DIST PROC..APPLY

APPR PROC

INOP SYS

Refer to PRO-ABN-ELEC-[QRH] ELEC EMER CONFIG SYS REMAINING.

Continued on the following page

[QRH] SMOKE / FUMES / AVNCS SMOKE (Cont'd)

- **3 MN/2000 FT BEFORE LDG:**

  GEN 2.. ON
  EMER ELEC GEN 1 LINE... ON

- **WHEN A/C IS STOPPED:**

  ALL GEN.. OFF

ALTN LAW: PROT LOST

See (1)

WHEN L/G DN: DIRECT LAW

See (2)

(1) *Flight controls remain in alternate law, due to the loss of IR 2 and 3.*

(2) *At landing gear extension, control reverts to direct law in pitch, as well as in roll (Refer to PRO-ABN-F_CTL F/CTL DIRECT LAW).*

[QRH] REMOVAL OF SMOKE / FUMES

Ident.: PRO-ABN-SMOKE-00012218.0001001 / 05 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Apply this [QRH] REMOVAL OF SMOKE / FUMES procedure, if smoke/fumes become the greatest threat when applying the [QRH] SMOKE / FUMES / AVNCS SMOKE procedure.

EMER EXIT LIGHT..ON

- **If fuel vapors:**

  CAB FANS..ON

  The recirculating air ventilates the air mixer bay and other fuselage area. This prevents fuel vapors from accumulating and the risk of explosion. Passenger health is not affected.

  PACK 1..OFF
  PACK 2..OFF

- **If no fuel vapors:**

  CAB FANS..OFF

  To prevent smoke/fumes from entering the cockpit and cabin.

  PACK FLOW..HI

  To provide maximum airflow from the packs.
  Do not shut down the air conditioning packs, and do not reduce ventilation in an attempt to smother the fire.
  Do not deploy oxygen masks, if fire is suspected in the cabin.

LDG ELEV.. 10 000 ft / MEA-MORA
DESCENT TO FL 100 / MEA-MORA..INITIATE

The most effective means of smoke/fumes removal is use of ram air. Therefore, descent is initiated to FL 100 or the MEA-MORA, while the cabin altitude is increased to 10 000 ft or the MEA-MORA. The increase in cabin altitude also reduces, at least temporarily, the smoke/fumes concentration. Cabin depressurization starts, when descent is initiated.

ATC..NOTIFY
SMOKE / FUMES / AVNCS SMOKE PROC..CONTINUE

Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - GENERAL

- ● **At FL 100 or MEA-MORA:**
  - ● **If in ELEC EMER CONFIG:**

    APU MASTER sw ....ON

Continued on the following page

[QRH] REMOVAL OF SMOKE / FUMES (Cont'd)

In electrical emergency configuration, when the APU MASTER sw is ON, the battery contactors will automatically close for a maximum of 3 min. This will enable the flight crew to manually control the outflow valve that is powered by the DC BAT BUS.

PACK 1 .... OFF
PACK 2 .... OFF

In electrical emergency configuration, the PACK 2 flow control valve cannot close because it is not electrically supplied. Therefore PACK 2 remains operative even when PACK 2 pb is set to OFF.

CABIN PRESS MODE SEL .... MAN
MAN V/S CTL .... FULL UP
RAM AIR .... ON

At FL 100, or MEA-MORA, it is possible to open the RAM AIR valve when ΔP is 1 PSI or below. Opening the RAM AIR enables flying with both packs OFF.

APU MASTER sw .... OFF

- **If smoke/fumes persist:**

  If there is smoke/fumes in the cockpit, open the cockpit window to evacuate the smoke/fumes.

  MAX SPEED: 200 kt
  COCKPIT DOOR .... OPEN
  HEADSETS .... ON
  PM SLIDING WINDOW .... OPEN

  - **When window open:**

    NON-AFFECTED PACK(s) .... ON
    VISUAL WARNINGS (noisy cockpit) .... MONITOR

    Due to the increased noise level, pay particular attention to visual warnings.

    SMOKE / FUMES / AVNCS SMOKE PROC .... CONTINUE

    Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - GENERAL

[QRH] REMOVAL OF SMOKE / FUMES

Ident.: PRO-ABN-SMOKE-00012218.0003001 / 05 MAY 22

27 **Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11597**

Apply this [QRH] REMOVAL OF SMOKE / FUMES procedure, if smoke/fumes become the greatest threat when applying the [QRH] SMOKE / FUMES / AVNCS SMOKE procedure.

EMER EXIT LIGHT......ON

- **If fuel vapors:**
  CAB FANS......ON
  The recirculating air ventilates the air mixer bay and other fuselage area. This prevents fuel vapors from accumulating and the risk of explosion. Passenger health is not affected.
  PACK 1......OFF
  PACK 2......OFF

- **If no fuel vapors:**
  CAB FANS......OFF
  To prevent smoke/fumes from entering the cockpit and cabin.
  PACK FLOW......HI
  To provide maximum airflow from the packs.
  Do not shut down the air conditioning packs, and do not reduce ventilation in an attempt to smother the fire.
  Do not deploy oxygen masks, if fire is suspected in the cabin.

LDG ELEV...... 10 000 ft / MEA-MORA
DESCENT TO FL 100 / MEA-MORA ......INITIATE

The most effective means of smoke/fumes removal is use of ram air. Therefore, descent is initiated to FL 100 or the MEA-MORA, while the cabin altitude is increased to 10 000 ft or the MEA-MORA. The increase in cabin altitude also reduces, at least temporarily, the smoke/fumes concentration. Cabin depressurization starts, when descent is initiated.

ATC......NOTIFY
SMOKE / FUMES / AVNCS SMOKE PROC......CONTINUE

Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - GENERAL

- **At FL 100 or MEA-MORA:**
  - **If in ELEC EMER CONFIG:**
    APU MASTER sw ......ON

Continued on the following page

[QRH] REMOVAL OF SMOKE / FUMES (Cont'd)

In electrical emergency configuration, when the APU MASTER sw is ON, the battery contactors will automatically close for a maximum of 3 min. This will enable the flight crew to manually control the outflow valve that is powered by the DC BAT BUS.

PACK 1..OFF
PACK 2..OFF
CABIN PRESS MODE SEL..........................MAN
MAN V/S CTL...................................FULL UP
RAM AIR.......................................ON

At FL 100, or MEA-MORA, it is possible to open the RAM AIR valve when ΔP is 1 PSI or below. Opening the RAM AIR enables flying with both packs OFF.

APU MASTER sw ....OFF

- **If smoke/fumes persist:**

  If there is smoke/fumes in the cockpit, open the cockpit window to evacuate the smoke/fumes.

  MAX SPEED: 200 kt
  COCKPIT DOOR..................................OPEN
  HEADSETS......................................ON
  PM SLIDING WINDOW.............................OPEN

  - **When window open:**
    NON-AFFECTED PACK(s)........................ON
    VISUAL WARNINGS (noisy cockpit).............MONITOR

    Due to the increased noise level, pay particular attention to visual warnings.

    SMOKE / FUMES / AVNCS SMOKE PROC............CONTINUE

    Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - GENERAL

[QRH] REMOVAL OF SMOKE / FUMES

Ident.: PRO-ABN-SMOKE-00012218.0004001 / 05 MAY 22
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Apply this [QRH] REMOVAL OF SMOKE / FUMES procedure, if smoke/fumes become the greatest threat when applying the [QRH] SMOKE / FUMES / AVNCS SMOKE procedure.

EMER EXIT LIGHT.......................................ON

■ **If fuel vapors:**

CAB FANS.......................................ON

The recirculating air ventilates the air mixer bay and other fuselage area. This prevents fuel vapors from accumulating and the risk of explosion. Passenger health is not affected.

PACK 1.......................................OFF
PACK 2.......................................OFF

■ **If no fuel vapors:**

CAB FANS.......................................OFF

To prevent smoke/fumes from entering the cockpit and cabin.

ECON FLOW.......................................OFF

To provide maximum airflow from the packs.
Do not shut down the air conditioning packs, and do not reduce ventilation in an attempt to smother the fire.
Do not deploy oxygen masks, if fire is suspected in the cabin.

LDG ELEV.......................................10 000 ft / MEA-MORA
DESCENT TO FL 100 / MEA-MORA.......................................INITIATE

The most effective means of smoke/fumes removal is use of ram air. Therefore, descent is initiated to FL 100 or the MEA-MORA, while the cabin altitude is increased to 10 000 ft or the MEA-MORA. The increase in cabin altitude also reduces, at least temporarily, the smoke/fumes concentration. Cabin depressurization starts, when descent is initiated.

ATC.......................................NOTIFY
SMOKE / FUMES / AVNCS SMOKE PROC.......................................CONTINUE

Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - GENERAL

● **At FL 100 or MEA-MORA:**

  ● **If in ELEC EMER CONFIG:**

  APU MASTER sw.......................................ON

Continued on the following page

[QRH] REMOVAL OF SMOKE / FUMES (Cont'd)

In electrical emergency configuration, when the APU MASTER sw is ON, the battery contactors will automatically close for a maximum of 3 min. This will enable the flight crew to manually control the outflow valve that is powered by the DC BAT BUS.

PACK 1..OFF
PACK 2..OFF
CABIN PRESS MODE SEL..MAN
MAN V/S CTL..FULL UP
RAM AIR..ON

At FL 100, or MEA-MORA, it is possible to open the RAM AIR valve when ΔP is 1 PSI or below. Opening the RAM AIR enables flying with both packs OFF.

APU MASTER sw ....OFF

- **If smoke/fumes persist:**

  If there is smoke/fumes in the cockpit, open the cockpit window to evacuate the smoke/fumes.

  MAX SPEED: 200 kt
  COCKPIT DOOR..OPEN
  HEADSETS..ON
  PM SLIDING WINDOW..OPEN

  - **When window open:**

    NON-AFFECTED PACK(s)..ON
    VISUAL WARNINGS (noisy cockpit)..MONITOR

    Due to the increased noise level, pay particular attention to visual warnings.

    SMOKE / FUMES / AVNCS SMOKE PROC..CONTINUE

    Refer to PRO-ABN-SMOKE [QRH] SMOKE / FUMES / AVNCS SMOKE - GENERAL

[QRH] SMOKE / FIRE FROM LITHIUM BATTERY

Ident.: PRO-ABN-SMOKE-00016024.0001001 / 15 NOV 21
Applicable to: ALL

If necessary, transfer control to the flight crewmember seated on the opposite side of the fire.

CKPT / CAB COM.................ESTABLISH
STORAGE AFTER Li BAT FIRE cabin procedure.................REQUEST INITIATION

- **If flames:**
  OXY MASK / GOGGLE (PF).................USE / 100% / EMERG
  SMOKE HOOD (PM).................USE
  FIRE EXTINGUISHER.................USE
- **If no flames or when flames extinguished:**
  - **If not possible to remove device from the cockpit:**
    WATER or NON-ALCOHOLIC LIQUID.................POUR ON DEVICE
    DEVICE.................MONITOR
  - **If possible to remove device from the cockpit:**
    DEVICE.................TRANSFER TO CABIN

- **At ANY TIME of the procedure, if SMOKE becomes the GREATEST THREAT:**
  REMOVAL OF SMOKE / FUMES procedure.................CONSIDER
  Refer to PRO-ABN-SMOKE [QRH] REMOVAL OF SMOKE / FUMES.

- **At ANY TIME of the procedure, if situation becomes UNMANAGEABLE:**
  IMMEDIATE LANDING.................CONSIDER
  L2 *Depending on the situation, the Captain can consider an overweight landing, a tailwind landing, a ditching, a forced landing, etc.*

SMOKE AFT CARGO SMOKE ⩤

Applicable to: MSN 01143-01246, 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-08596, 09190-09324

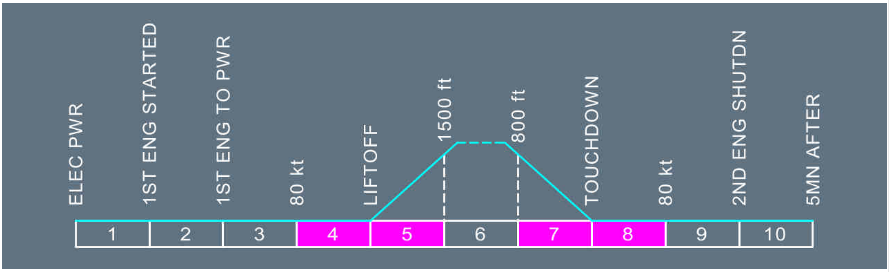
Ident.: PRO-ABN-SMOKE-O-00018698.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the AFT cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
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Continued on the following page

SMOKE AFT CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018589.0007001 / 06 OCT 17

28

LAND ASAP

AFT ISOL VALVE ◁ (IF NOT AUTOMATICALLY CLOSED)..OFF
CAB FANS..OFF

- **IF AFT CRG CLOSED (displayed on ground only):**

L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present. Also ensure that the AFT cargo door is closed before discharging the extinguishing agent.

L1 AGENT..DISCH

L2 *Note:* *Expect the SMOKE warning to remain after agent discharge, even if the smoke source is extinguished. Gases from the smoke source are not evacuated, and smoke detectors are also sensitive to the extinguishing agent.*

L1 ■ **In flight:**

- **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
  PAX...DISEMBARK

■ **On ground:**

- **BEFORE OPEN CRG DOORS:**
  PAX...DISEMBARK

L2 *Note:* *For aircraft equipped with AFT Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
C/B of CARGO VENT controller (S20 on 122VU, or C7 on 49VU, as installed for AFT CARGO) ...... PULL then PUSH

Continued on the following page

SMOKE AFT CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018590.0002001 / 06 OCT 17

STATUS

- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX.. DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**
    PAX.. DISEMBARK

INOP SYS

AFT CRG VENT ◁
AFT CRG HEAT ◁

SMOKE AFT CARGO SMOKE ◁

Applicable to: MSN 01251

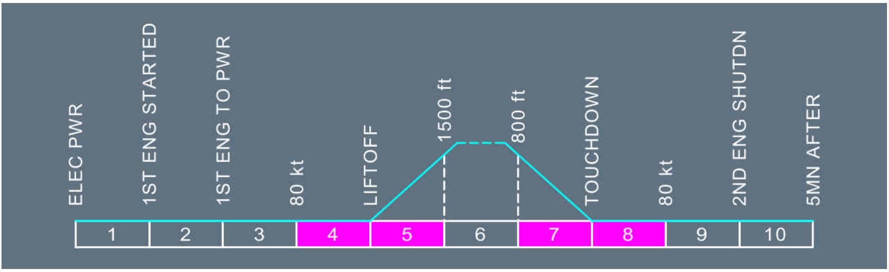
Ident.: PRO-ABN-SMOKE-O-00018698.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the AFT cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

SMOKE AFT CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018589.0004001 / 21 MAR 16

LAND ASAP

AFT ISOL VALVE (IF NOT AUTOMATICALLY CLOSED).. OFF

- **IF AFT CRG CLOSED (displayed on ground only):**

L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present. Also ensure that the AFT cargo door is closed before discharging the extinguishing agent.

L1 AGENT.. DISCH

L2 *Note:* *Expect the SMOKE warning to remain after agent discharge, even if the smoke source is extinguished. Gases from the smoke source are not evacuated, and smoke detectors are also sensitive to the extinguishing agent.*

L1 L2 *Note:* *For aircraft equipped with AFT Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
C/B of CARGO VENT controller (S20 on 122VU, or C7 on 49VU, as installed for AFT CARGO) ...... PULL then PUSH

Ident.: PRO-ABN-SMOKE-O-00018590.0001001 / 21 MAR 16

STATUS

INOP SYS

AFT CRG VENT ◁
AFT CRG HEAT ◁

SMOKE AFT CARGO SMOKE ⋞

Applicable to: MSN 01459

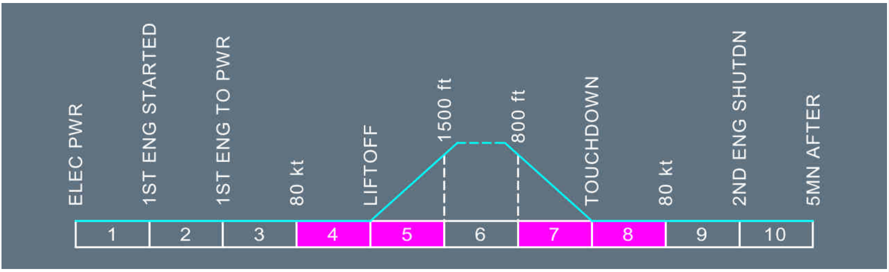
Ident.: PRO-ABN-SMOKE-O-00018698.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the AFT cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

SMOKE AFT CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018589.0006001 / 06 OCT 17

LAND ASAP

AFT ISOL VALVE ◁ (IF NOT AUTOMATICALLY CLOSED)........OFF
CAB FANS........OFF

L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present.

L1
- ■ **In flight:**
  - ● **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX........DISEMBARK
- ■ **On ground:**
  - ● **BEFORE OPEN CRG DOORS:**
    PAX........DISEMBARK

L2 Note: *For aircraft equipped with AFT Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
C/B of CARGO VENT controller (S20 on 122VU, or C7 on 49VU, as installed for AFT CARGO) ...... PULL then PUSH

Ident.: PRO-ABN-SMOKE-O-00018590.0002001 / 06 OCT 17

STATUS

- ■ **In flight:**
  - ● **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX........DISEMBARK
- ■ **On ground:**
  - ● **BEFORE OPEN CRG DOORS:**
    PAX........DISEMBARK

INOP SYS

AFT CRG VENT ◁
AFT CRG HEAT ◁

SMOKE AFT CARGO SMOKE ⋖

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

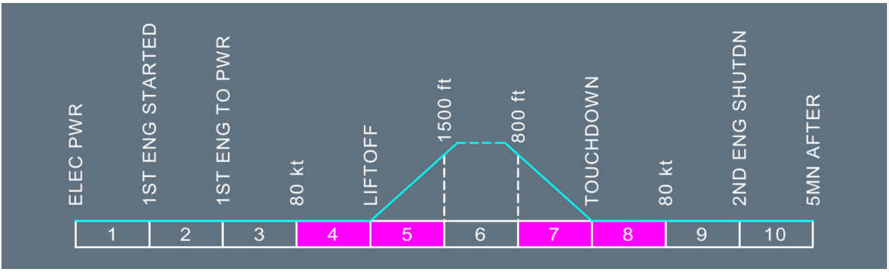
Ident.: PRO-ABN-SMOKE-O-00018698.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the AFT cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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SMOKE AFT CARGO SMOKE ⋞

Applicable to: MSN 02014, 04827-04860

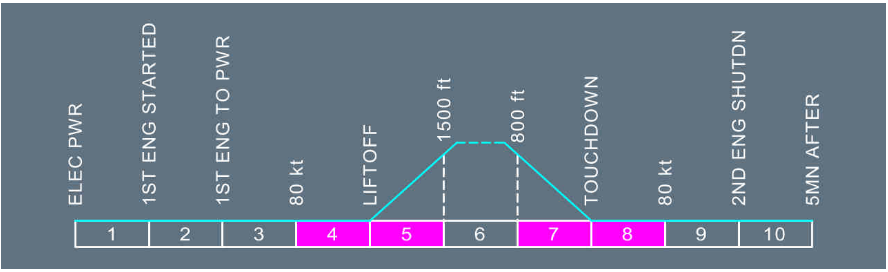
Ident.: PRO-ABN-SMOKE-O-00018698.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the AFT cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

SMOKE AFT CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018589.0008001 / 06 OCT 17

LAND ASAP

AFT ISOL VALVE ◁ (IF NOT AUTOMATICALLY CLOSED)....................OFF
CAB FANS....................OFF

- **IF AFT CRG CLOSED (displayed on ground only):**

  L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present. Also ensure that the AFT cargo door is closed before discharging the extinguishing agent.

  L1 AGENT 1....................DISCH

  - **60 min after AGENT 1 discharge:**

    AGENT 2....................DISCH

    L2 Note: *Expect the SMOKE warning to remain after agent discharge, even if the smoke source is extinguished. Gases from the smoke source are not evacuated, and smoke detectors are also sensitive to the extinguishing agent.*

L1 ■ **In flight:**

- **WHEN ON GROUND BEFORE OPEN CRG DOORS:**

  PAX....................DISEMBARK

■ **On ground:**

- **BEFORE OPEN CRG DOORS:**

  PAX....................DISEMBARK

L2 Note: *For aircraft equipped with AFT Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
C/B of CARGO VENT controller (S20 on 122VU, or C7 on 49VU, as installed for AFT CARGO) ...... PULL then PUSH

Continued on the following page

SMOKE AFT CARGO SMOKE ⩤ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018590.0002001 / 06 OCT 17

STATUS

- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX..DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**
    PAX..DISEMBARK

INOP SYS

AFT CRG VENT ⩤
AFT CRG HEAT ⩤

SMOKE AFT CARGO SMOKE ⩤

Applicable to: MSN 08635, 10949-11597

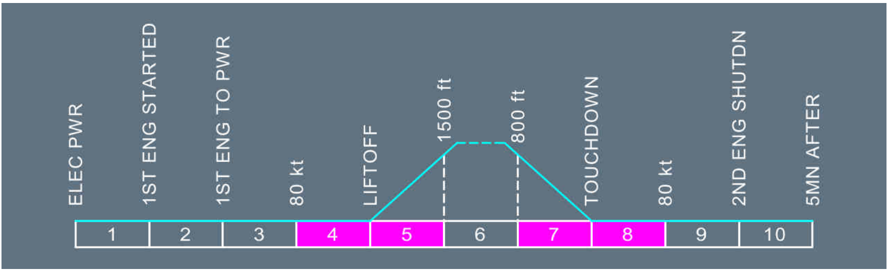
Ident.: PRO-ABN-SMOKE-O-00018698.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the AFT cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

SMOKE AFT CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018589.0007001 / 06 OCT 17

29

LAND ASAP

AFT ISOL VALVE ◁ (IF NOT AUTOMATICALLY CLOSED)..........OFF
CAB FANS..........OFF

- **IF AFT CRG CLOSED (displayed on ground only):**

L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present. Also ensure that the AFT cargo door is closed before discharging the extinguishing agent.

L1 AGENT..........DISCH

L2 *Note: Expect the SMOKE warning to remain after agent discharge, even if the smoke source is extinguished. Gases from the smoke source are not evacuated, and smoke detectors are also sensitive to the extinguishing agent.*

L1 ■ **In flight:**

- **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
  PAX..........DISEMBARK

■ **On ground:**

- **BEFORE OPEN CRG DOORS:**
  PAX..........DISEMBARK

L2 *Note: For aircraft equipped with AFT Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
C/B of CARGO VENT controller (S20 on 122VU, or C7 on 49VU, as installed for AFT CARGO) ...... PULL then PUSH

Continued on the following page

SMOKE AFT CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-O-00018590.0003001 / 16 JUL 19

30

STATUS

- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX..DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**
    PAX..DISEMBARK

INOP SYS

L+R CAB FAN ◁
AFT CRG VENT ◁
AFT CRG HEAT ◁

SMOKE AFT CRG DET FAULT ◁

Applicable to: ALL

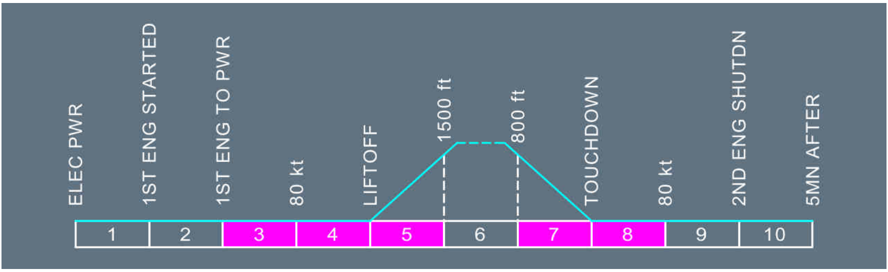
Ident.: PRO-ABN-SMOKE-P-00018699.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the AFT smoke detection is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

SMOKE AFT CRG DET FAULT ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-P-00018592.0001001 / 21 MAR 16

- **IF NO LIVE STOCK:**
  AFT ISOL VALVE ◁ .... OFF

Ident.: PRO-ABN-SMOKE-P-00018593.0001001 / 21 MAR 16

STATUS

INOP SYS

AFT CRG DET ◁

SMOKE DISCH AGENT 2 ◁

Applicable to: MSN 02014, 04827-04860

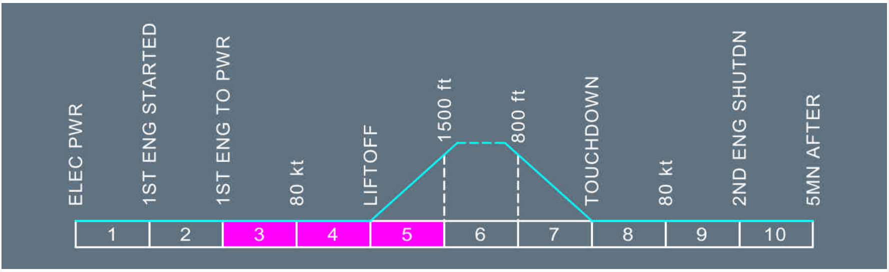
Ident.: PRO-ABN-SMOKE-J-00025148.0001001 / 05 MAY 22

ANNUNCIATIONS

Triggering Conditions:

This alert triggers 60 minutes after discharging the first extinguisher bottle in case the SMOKE FWD(AFT) CARGO SMOKE alerts are not triggered.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SMOKE-J-00025149.0001001 / 05 MAY 22

AGENT 2.. DISCH

SMOKE FWD CARGO SMOKE

Applicable to: MSN 01143-01246, 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

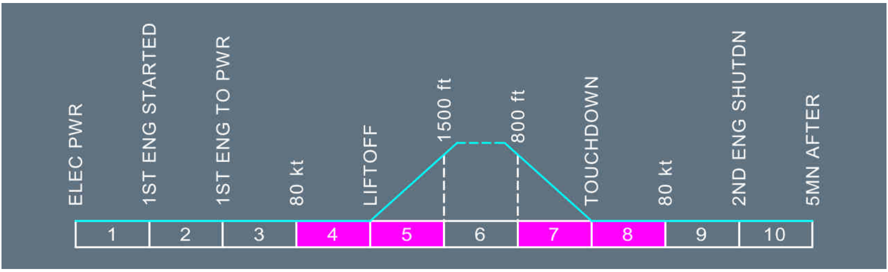
Ident.: PRO-ABN-SMOKE-E-00017408.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the FWD cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
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Continued on the following page

SMOKE FWD CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-E-00018287.0005001 / 03 NOV 22

31

LAND ASAP

FWD ISOL VALVE ◁ .... OFF

L2 *If FWD ISOL VALVE ◁ is not automatically closed.*

L1 CAB FANS..OFF

- **On ground:**
  - **IF FWD CRG CLOSED:**

    L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present. Also ensure that the FWD Cargo Door is closed before discharging the extinguishing agent.

    L1 AGENT... DISCH

    Note: Expect the SMOKE warning to remain after agent discharge, even if the smoke source is extinguished. Gases from the smoke source are not evacuated, and smoke detectors are also sensitive to the extinguishing agent.
- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**

    PAX...DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**

    PAX...DISEMBARK

Note:

1. *For aircraft equipped with FWD Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
   C/B of CARGO VENT controller (T20 on 122VU, or C8 on 49VU, as installed for FWD CARGO) ...... PULL then PUSH
2. *On ground, the warning may be triggered due to a high level of humidity or insecticide spraying. Provided that the smoke is not visually confirmed and the warning is no more displayed:*
   - *Deactivate the smoke detection system, by pulling the SDCU 1 and 2 reset pb-sw*
   - *Reset the cargo ventilation system, by pulling and pushing the AIR COND/FWD CARGO/VENT/CTL & MONG circuit breaker (C8 on 49VU)*

Continued on the following page

SMOKE FWD CARGO SMOKE ◁ (Cont'd)

- *At cargo doors closure, reactivate SDCU 1 and 2.*

Ident.: PRO-ABN-SMOKE-E-00018588.0002001 / 06 OCT 17

32

STATUS

- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX..DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**
    PAX..DISEMBARK

INOP SYS

FWD CRG VENT ◁
FWD CRG HEAT ◁

SMOKE FWD CARGO SMOKE ◁

Applicable to: MSN 01251

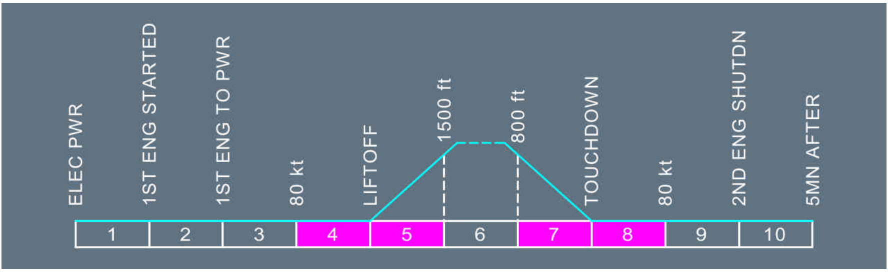
Ident.: PRO-ABN-SMOKE-E-00017408.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the FWD cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
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SMOKE FWD CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-E-00018287.0003001 / 03 NOV 22

LAND ASAP

FWD ISOL VALVE ◁ .... OFF

L2 *If FWD ISOL VALVE ◁ is not automatically closed.*

L1 ● **On ground:**

● **IF FWD CRG CLOSED:**

L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present. Also ensure that the FWD cargo door is closed before discharging the extinguishing agent.

L1 AGENT.. DISCH

Note: Expect the SMOKE warning to remain after agent discharge, even if the smoke source is extinguished. Gases from the smoke source are not evacuated, and smoke detectors are also sensitive to the extinguishing agent.

Note:

1. *For aircraft equipped with FWD Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
   C/B of CARGO VENT controller (T20 on 122VU, or C8 on 49VU, as installed for FWD CARGO) ...... PULL then PUSH
2. *On ground, the warning may be triggered due to a high level of humidity or insecticide spraying. Provided that the smoke is not visually confirmed and the warning is no more displayed:*
   - *Deactivate the smoke detection system, by pulling the SDCU 1 and 2 reset pb-sw*
   - *Reset the cargo ventilation system, by pulling and pushing the AIR COND/FWD CARGO/VENT/CTL & MONG circuit breaker (C8 on 49VU)*
   - *At cargo doors closure, reactivate SDCU 1 and 2.*

Continued on the following page

SMOKE FWD CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-E-00018588.0001001 / 21 MAR 16

STATUS

INOP SYS

FWD CRG VENT ◁
FWD CRG HEAT ◁

SMOKE FWD CARGO SMOKE ◁

Applicable to: MSN 01459

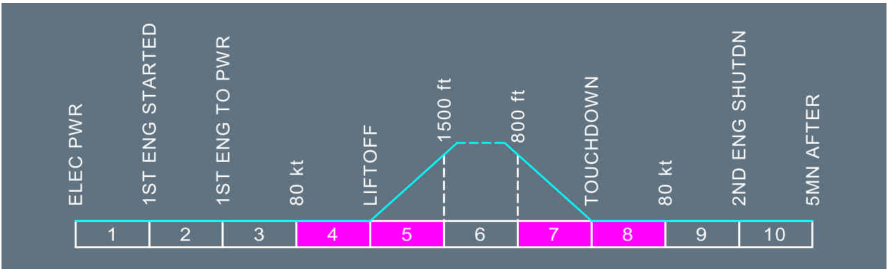
Ident.: PRO-ABN-SMOKE-E-00017408.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the FWD cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
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TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

SMOKE FWD CARGO SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-E-00018287.0004001 / 03 NOV 22

LAND ASAP

FWD ISOL VALVE .... OFF

L2 *If FWD ISOL VALVE is not automatically closed.*

L1 CAB FANS .... OFF

L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present.

L1
- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**

    PAX .... DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**

    PAX .... DISEMBARK

Note:
1. *For aircraft equipped with FWD Cargo Ventilation , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
   C/B of CARGO VENT controller (T20 on 122VU, or C8 on 49VU, as installed for FWD CARGO) ...... PULL then PUSH
2. *On ground, the warning may be triggered due to a high level of humidity or insecticide spraying. Provided that the smoke is not visually confirmed and the warning is no more displayed:*
   - *Deactivate the smoke detection system, by pulling the SDCU 1 and 2 reset pb-sw*
   - *Reset the cargo ventilation system, by pulling and pushing the AIR COND/FWD CARGO/VENT/CTL & MONG circuit breaker (C8 on 49VU)*
   - *At cargo doors closure, reactivate SDCU 1 and 2.*

Continued on the following page

SMOKE FWD CARGO SMOKE (Cont'd)

Ident.: PRO-ABN-SMOKE-E-00018588.0002001 / 06 OCT 17

33

STATUS

- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX.. DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**
    PAX.. DISEMBARK

INOP SYS

FWD CRG VENT
FWD CRG HEAT

SMOKE FWD CARGO SMOKE

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

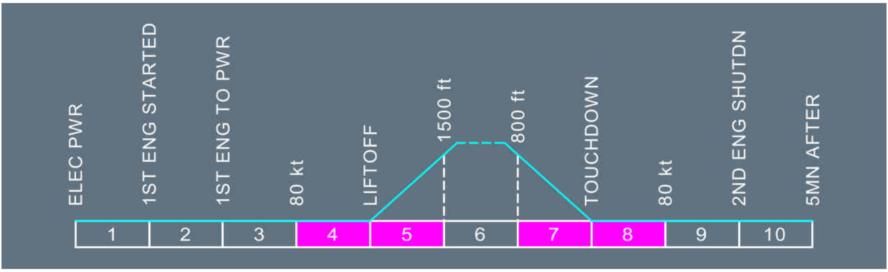
Ident.: PRO-ABN-SMOKE-E-00017408.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the FWD cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
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TOUCHDOWN
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2ND ENG SHUTDN
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SMOKE FWD CARGO SMOKE ⋞

Applicable to: MSN 02014, 04827-04860

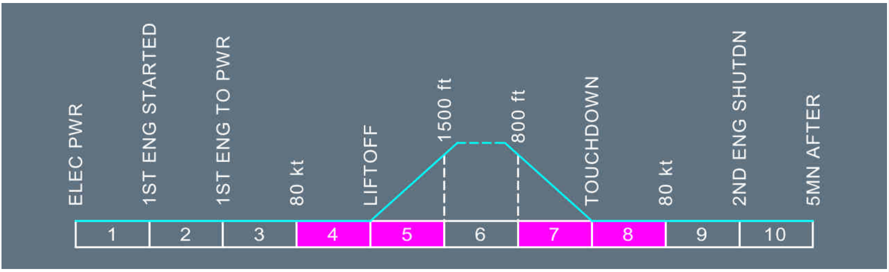
Ident.: PRO-ABN-SMOKE-E-00017408.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in the FWD cargo compartment is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
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TOUCHDOWN
80 kt
2ND ENG SHUTDN
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Continued on the following page

SMOKE FWD CARGO SMOKE ◁ (Cont'd)

Ident.: PRO-ABN-SMOKE-E-00018287.0009001 / 03 NOV 22

LAND ASAP

FWD ISOL VALVE ◁ .... OFF

L2 *If FWD ISOL VALVE ◁ is not automatically closed.*

L1 CAB FANS .... OFF

- **On ground:**
  - **IF FWD CRG CLOSED:**

    L2 Order the ground crew not to open the door of the affected cargo compartment, unless the passengers have disembarked and fire services are present. Also ensure that the FWD Cargo Door is closed before discharging the extinguishing agent.

    L1 AGENT 1 .... DISCH

    - **60 min after AGENT 1 discharge:**

      AGENT 2 .... DISCH

      Note: *Expect the SMOKE warning to remain after agent discharge, even if the smoke source is extinguished. Gases from the smoke source are not evacuated, and smoke detectors are also sensitive to the extinguishing agent.*

- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**

    PAX .... DISEMBARK

- **On ground:**
  - **BEFORE OPEN CRG DOORS:**

    PAX .... DISEMBARK

Note:
1. *For aircraft equipped with FWD Cargo Ventilation ◁ , if the warning has been displayed temporarily, and agent has not been discharged, normal cargo ventilation may be recovered when ventilation is required for livestock transportation:*
   C/B of CARGO VENT controller (T20 on 122VU, or C8 on 49VU, as installed for FWD CARGO) ...... PULL then PUSH
2. *On ground, the warning may be triggered due to a high level of humidity or insecticide spraying. Provided that the smoke is not visually confirmed and the warning is no more displayed:*
   - *Deactivate the smoke detection system, by pulling the SDCU 1 and 2 reset pb-sw*

Continued on the following page

SMOKE FWD CARGO SMOKE ⊲ (Cont'd)

- *Reset the cargo ventilation system, by pulling and pushing the AIR COND/FWD CARGO/VENT/CTL & MONG circuit breaker (C8 on 49VU)*
- *At cargo doors closure, reactivate SDCU 1 and 2.*

Ident.: PRO-ABN-SMOKE-E-00018588.0002001 / 06 OCT 17

34

STATUS

- **In flight:**
  - **WHEN ON GROUND BEFORE OPEN CRG DOORS:**
    PAX.. DISEMBARK
- **On ground:**
  - **BEFORE OPEN CRG DOORS:**
    PAX.. DISEMBARK

INOP SYS

FWD CRG VENT ⊲
FWD CRG HEAT ⊲

SMOKE FWD(AFT) CRG BTL 1(2) FAULT ◁

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-SMOKE-L-00017414.0001001 / 21 MAR 16

35

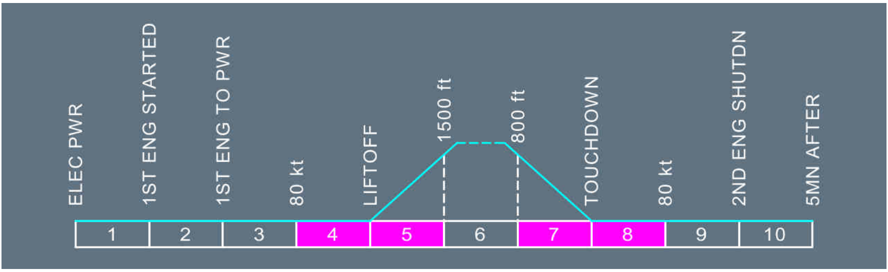
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- FWD or AFT bottle 1 (2) ◁ squib is failed, or
- FWD or AFT bottle 1 (2) ◁ is at low pressure.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-SMOKE-L-00018325.0001001 / 21 MAR 16

36

L2 If bottle 1 is lost, fire extinguishing capability is lost in the FWD(AFT) cargo compartment.
If bottle 2 is lost, agent concentration will not be ensured after fire extinguishing.

L1 Crew awareness.

SMOKE FWD CRG DET FAULT

Applicable to: ALL

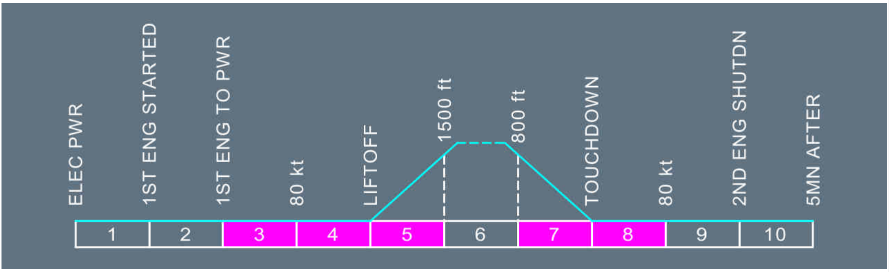
Ident.: PRO-ABN-SMOKE-F-00017689.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the FWD smoke detection is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SMOKE-F-00018336.0001001 / 21 MAR 16

- **IF NO LIVE STOCK:**
  FWD ISOL VALVE ....OFF

Ident.: PRO-ABN-SMOKE-F-00018337.0001001 / 21 MAR 16

STATUS

INOP SYS

FWD CRG DET

SMOKE DET FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-SMOKE-G-00017400.0002001 / 21 MAR 16

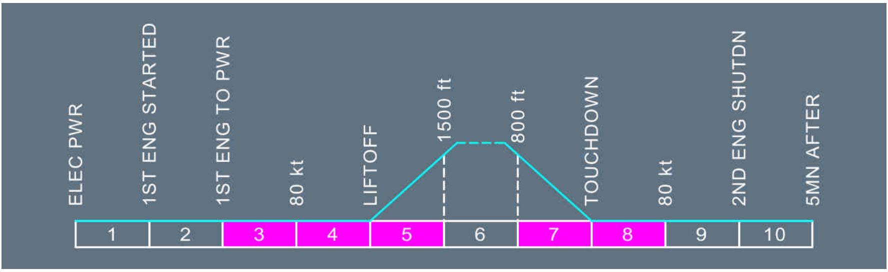
37

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both SDCU or CIDS-SDF ◁ are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SMOKE-G-00018423.0002001 / 21 MAR 16

38

- **IF NO LIVE STOCK:**
  - FWD ISOL VALVE ◁ .... OFF
  - AFT ISOL VALVE ◁ .... OFF

PAX SYS ◁ .... OFF

Ident.: PRO-ABN-SMOKE-G-00012226.0011001 / 01 APR 11

39

STATUS

INOP SYS

SMOKE DET

SMOKE LAV+CRG DET FAULT

Applicable to: MSN 01251

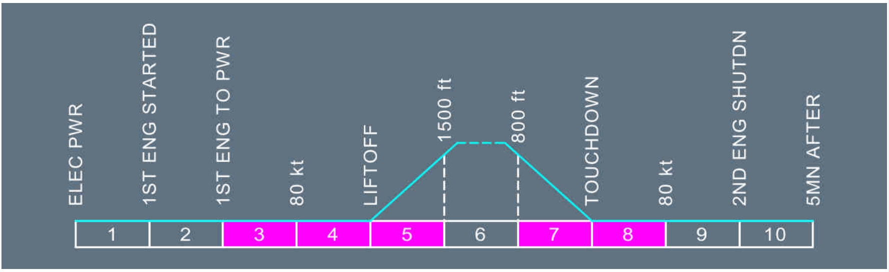
Ident.: PRO-ABN-SMOKE-G-00017400.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when both SDCU or CIDS-SDF ◁ channels are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SMOKE-G-00018423.0001001 / 21 MAR 16

- **IF NO LIVE STOCK:**
  FWD ISOL VALVE ◁ .... OFF
  AFT ISOL VALVE ◁ .... OFF

Ident.: PRO-ABN-SMOKE-G-00012226.0005001 / 01 APR 11

STATUS

INOP SYS

SMOKE DET

SMOKE LAVATORY DET FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-SMOKE-H-00017407.0001001 / 21 MAR 16

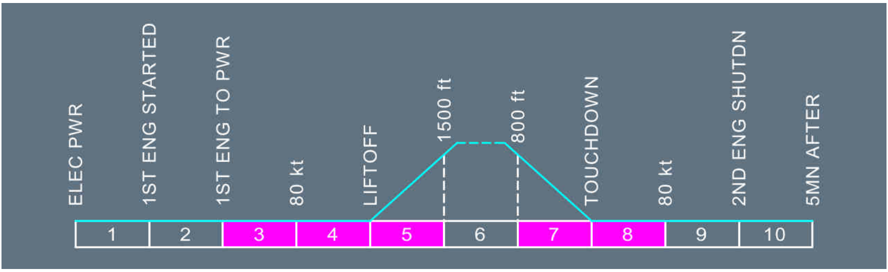
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- Lavatory smoke detection is failed, or
- Lavatory and galley fan are failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SMOKE-H-00018724.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-SMOKE-H-00012228.0001001 / 18 AUG 10

STATUS

INOP SYS

LAV DET

SMOKE LAVATORY DET FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-SMOKE-H-00018724.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-SMOKE-H-00012228.0001001 / 18 AUG 10

STATUS

INOP SYS

LAV DET

SMOKE LAVATORY DET FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-SMOKE-H-00017407.0002001 / 21 MAR 16

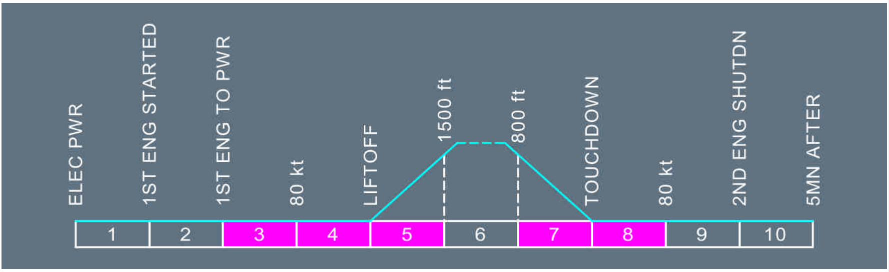
40

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the lavatory smoke detection is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SMOKE-H-00018724.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

SMOKE LAVATORY DET FAULT (Cont'd)

Ident.: PRO-ABN-SMOKE-H-00012228.0001001 / 18 AUG 10

STATUS

INOP SYS

LAV DET

SMOKE LAVATORY SMOKE

Applicable to: ALL

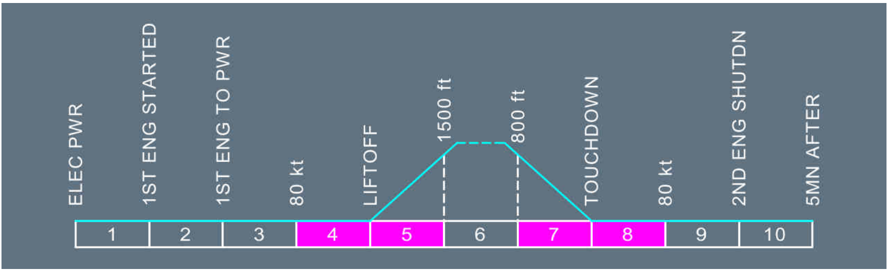
Ident.: PRO-ABN-SMOKE-N-00017406.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when smoke in one of the lavatory is detected.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-SMOKE-N-00018427.0002001 / 21 MAR 17

L2 Communication must be established with the cabin crew in order to follow up on the smoke origin and dissipation.
Consider applying the SMOKE/FUMES/AVNCS SMOKE QRH procedure.

L1 CKPT/CAB COM...ESTABLISH

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[MEM] EGPWS CAUTIONS

Ident.: PRO-ABN-SURV-00018751.0009001 / 04 DEC 18
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

- **"TERRAIN TERRAIN" - "TOO LOW TERRAIN" - "CAUTION TERRAIN" - "CAUTION OBSTACLE"**
  - **During night or IMC:**

    Simultaneously:

    AP....................OFF
    PITCH....................PULL UP

L2 Pull to full backstick and maintain in that position.

L1 THRUST LEVERS....................TOGA
SPEED BRAKES lever....................CHECK RETRACTED
BANK....................WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 *Note:* *For some airports, the operator may define a specific procedure.*

DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

  - **During daylight and VMC, with terrain and obstacles clearly in sight:**

    FLIGHT PATH....................ADJUST

L2 Adjust pitch, bank and thrust to silence the alert.

L1 *Note:* *For some airports, the operator may define a specific procedure.*

- **"SINK RATE"**
  - **Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:**

    FLIGHT PATH....................ADJUST

L2 Adjust pitch and thrust to silence the alert.

L1
  - **Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:**

    GO-AROUND....................CONSIDER

- **"DON'T SINK"**

  FLIGHT PATH....................ADJUST

Continued on the following page

[MEM] EGPWS CAUTIONS (Cont'd)

L2 Adjust pitch and thrust to silence the alert.

L1
- **"TOO LOW GEAR" - "TOO LOW FLAPS"**

  GO-AROUND....................PERFORM

- **"GLIDESLOPE"**
  - **Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:**

    FLIGHT PATH....................ADJUST

    L2 Adjust pitch and thrust to reduce the vertical deviation from the glideslope.

    L1
    - **When conditions require a deliberate approach below glideslope:**

      G/S MODE....................OFF

  - **Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:**

    GO-AROUND....................CONSIDER

[MEM] EGPWS CAUTIONS

Ident.: PRO-ABN-SURV-00018751.0005001 / 04 DEC 18

1 **Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

■ "TERRAIN TERRAIN" - "TOO LOW TERRAIN" - "TERRAIN AHEAD" - "OBSTACLE AHEAD"

■ During night or IMC:

Simultaneously:

AP.....OFF
PITCH.....PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS..... TOGA
SPEED BRAKES lever.....CHECK RETRACTED
BANK..... WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 *Note:* *For some airports, the operator may define a specific procedure.*

DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

■ During daylight and VMC, with terrain and obstacles clearly in sight:

FLIGHT PATH.....ADJUST

L2 Adjust pitch, bank and thrust to silence the alert.

L1 *Note:* *For some airports, the operator may define a specific procedure.*

■ "SINK RATE"

■ Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:

FLIGHT PATH.....ADJUST

L2 Adjust pitch and thrust to silence the alert.

L1

■ Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:

GO-AROUND..... CONSIDER

Continued on the following page

[MEM] EGPWS CAUTIONS (Cont'd)

- ■ **"DON'T SINK"**

FLIGHT PATH.. ADJUST

L2 Adjust pitch and thrust to silence the alert.

L1

- ■ **"TOO LOW GEAR" - "TOO LOW FLAPS"**

GO-AROUND..PERFORM

- ■ **"GLIDESLOPE"**
  - ■ **Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:**

FLIGHT PATH..ADJUST

L2 Adjust pitch and thrust to reduce the vertical deviation from the glideslope.

L1

- ● **When conditions require a deliberate approach below glideslope:**

G/S MODE..OFF

- ■ **Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:**

GO-AROUND.. CONSIDER

[MEM] EGPWS CAUTIONS

Ident.: PRO-ABN-SURV-00018751.0002001 / 04 DEC 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734

■ "TERRAIN TERRAIN" - "TOO LOW TERRAIN" - "TERRAIN AHEAD"

■ During night or IMC:

Simultaneously:

AP....................OFF
PITCH....................PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS....................TOGA
SPEED BRAKES lever....................CHECK RETRACTED
BANK....................WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 *Note: For some airports, the operator may define a specific procedure.*

DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

■ During daylight and VMC, with terrain and obstacles clearly in sight:

FLIGHT PATH....................ADJUST

L2 Adjust pitch, bank and thrust to silence the alert.

L1 *Note: For some airports, the operator may define a specific procedure.*

■ "SINK RATE"

■ Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:

FLIGHT PATH....................ADJUST

L2 Adjust pitch and thrust to silence the alert.

L1

■ Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:

GO-AROUND....................CONSIDER

■ "DON'T SINK"

FLIGHT PATH....................ADJUST

Continued on the following page

[MEM] EGPWS CAUTIONS (Cont'd)

L2

Adjust pitch and thrust to silence the alert.

L1

- **"TOO LOW GEAR" - "TOO LOW FLAPS"**

  GO-AROUND........PERFORM

- **"GLIDESLOPE"**
  - **Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:**

    FLIGHT PATH........ADJUST

    L2

    Adjust pitch and thrust to reduce the vertical deviation from the glideslope.

    L1

    - **When conditions require a deliberate approach below glideslope:**

      G/S MODE........OFF

  - **Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:**

    GO-AROUND........CONSIDER

[MEM] EGPWS CAUTIONS

Ident.: PRO-ABN-SURV-00018751.0006001 / 04 DEC 18
Applicable to: MSN 02014

"TERRAIN TERRAIN" - "TOO LOW TERRAIN" - "CAUTION TERRAIN"

During night or IMC:

Simultaneously:

AP.....OFF
PITCH.....PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS.....TOGA
SPEED BRAKES lever.....CHECK RETRACTED
BANK.....WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 *Note: For some airports, the operator may define a specific procedure.*

DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

During daylight and VMC, with terrain and obstacles clearly in sight:

FLIGHT PATH.....ADJUST

L2 Adjust pitch, bank and thrust to silence the alert.

L1 *Note: For some airports, the operator may define a specific procedure.*

"SINK RATE"

Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:

FLIGHT PATH.....ADJUST

L2 Adjust pitch and thrust to silence the alert.

L1

Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:

GO-AROUND.....CONSIDER

"DON'T SINK"

FLIGHT PATH.....ADJUST

Continued on the following page

[MEM] EGPWS CAUTIONS (Cont'd)

L2 Adjust pitch and thrust to silence the alert.

L1 ■ **"TOO LOW GEAR" - "TOO LOW FLAPS"**

GO-AROUND....................PERFORM

■ **"GLIDESLOPE"**

■ **Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:**

FLIGHT PATH....................ADJUST

L2 Adjust pitch and thrust to reduce the vertical deviation from the glideslope.

L1 ● **When conditions require a deliberate approach below glideslope:**

G/S MODE....................OFF

■ **Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:**

GO-AROUND....................CONSIDER

[MEM] GPWS CAUTIONS

Ident.: PRO-ABN-SURV-00018751.0011001 / 04 DEC 18
Applicable to: MSN 04827-04860

- **"TERRAIN TERRAIN" - "TOO LOW TERRAIN" - "TERRAIN AHEAD" - "OBSTACLE AHEAD"**
  - **During night or IMC:**

    Simultaneously:

    AP....................OFF
    PITCH....................PULL UP

L2 Pull to full backstick and maintain in that position.

L1 THRUST LEVERS....................TOGA
SPEED BRAKES lever....................CHECK RETRACTED
BANK....................WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 *Note:* *For some airports, the operator may define a specific procedure.*

DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

  - **During daylight and VMC, with terrain and obstacles clearly in sight:**

    FLIGHT PATH....................ADJUST

L2 Adjust pitch, bank and thrust to silence the alert.

L1 *Note:* *For some airports, the operator may define a specific procedure.*

- **"SINK RATE"**
  - **Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:**

    FLIGHT PATH....................ADJUST

L2 Adjust pitch and thrust to silence the alert.

L1
  - **Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:**

    GO-AROUND....................CONSIDER

- **"DON'T SINK"**

  FLIGHT PATH....................ADJUST

Continued on the following page

[MEM] GPWS CAUTIONS (Cont'd)

L2 Adjust pitch and thrust to silence the alert.

L1
- ■ **"TOO LOW GEAR" - "TOO LOW FLAPS"**

GO-AROUND....................PERFORM

- ■ **"GLIDESLOPE"**
  - ■ **Above 1 000 ft AAL in IMC or above 500 ft AAL in VMC:**

FLIGHT PATH....................ADJUST

L2 Adjust pitch and thrust to reduce the vertical deviation from the glideslope.

L1
- ● **When conditions require a deliberate approach below glideslope:**

G/S MODE....................OFF

- ■ **Below 1 000 ft AAL in IMC or below 500 ft AAL in VMC:**

GO-AROUND....................CONSIDER

[MEM] EGPWS WARNINGS

Ident.: PRO-ABN-SURV-00016878.0002001 / 04 DEC 18

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734

- ● **"PULL UP" - "TERRAIN AHEAD PULL UP"**

Simultaneously:

AP....................OFF
PITCH....................PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS....................TOGA
SPEED BRAKES lever....................CHECK RETRACTED
BANK....................WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

[MEM] GPWS WARNINGS

Ident.: PRO-ABN-SURV-00016878.0017001 / 04 DEC 18
Applicable to: MSN 04827-04860

- **"PULL UP" - "TERRAIN AHEAD PULL UP" - "OBSTACLE AHEAD PULL UP" - "AVOID TERRAIN" - "AVOID OBSTACLE"**

Simultaneously:

AP....................OFF
PITCH....................PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS....................TOGA
SPEED BRAKES lever....................CHECK RETRACTED
BANK....................WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

The "TERRAIN AHEAD PULL UP" or "OBSTACLE AHEAD PULL UP" aural alert may be followed by the "AVOID TERRAIN" or "AVOID OBSTACLE" aural alert. In this case, the flight crew must adjust bank as necessary.

L1 DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

[MEM] EGPWS WARNINGS

Ident.: PRO-ABN-SURV-00016878.0018001 / 04 DEC 18
Applicable to: MSN 02014

- **"PULL UP" - "TERRAIN TERRAIN PULL UP"**

Simultaneously:

AP.. OFF
PITCH.. PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS.. TOGA
SPEED BRAKES lever.. CHECK RETRACTED
BANK.. WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

[MEM] EGPWS WARNINGS

Ident.: PRO-ABN-SURV-00016878.0019001 / 04 DEC 18

2 **Applicable to: MSN 02321, 02887-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

● "PULL UP" - "TERRAIN AHEAD PULL UP" - "OBSTACLE AHEAD PULL UP"

Simultaneously:

AP.. OFF
PITCH.. PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS.. TOGA
SPEED BRAKES lever.. CHECK RETRACTED
BANK.. WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

[MEM] EGPWS WARNINGS

Ident.: PRO-ABN-SURV-00016878.0020001 / 04 DEC 18
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

- **"PULL UP" - "TERRAIN TERRAIN PULL UP" - "OBSTACLE OBSTACLE PULL UP"**

Simultaneously:

AP....................OFF
PITCH....................PULL UP

L2 Pull to full backstick and maintain in that position.

L1
THRUST LEVERS....................TOGA
SPEED BRAKES lever....................CHECK RETRACTED
BANK....................WINGS LEVEL or ADJUST

L2 Aircraft obtain the best climb performance when the wings are as level as possible. The flight crew can adjust bank while climbing, provided that turning is the safest action.

L1 DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL CLEAR OF OBSTACLE.

[MEM] TCAS CAUTION - TRAFFIC ADVISORY

Ident.: PRO-ABN-SURV-00025023.0002001 / 16 MAY 22
3 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

L2 If the AP/FD TCAS mode is available, the TCAS mode arms on FMA.

L1 TCAS mode....................CHECK ARMED

L2 If the AP/FD TCAS mode does not arm, the flight crew must be prepared to disconnect the AP in the case of a RA, and manually follow the TCAS guidances.

L1
- **If the A/THR is off:**

AUTOTHRUST....................ON

L2 It is recommended to set the A/THR to ON in order to avoid the AUTO FLT A/THR LIMITED alert at the automatic A/THR activation that occurs in the case of a RA.

L1 Do not perform a maneuver based on a TA alone.

[MEM] TCAS CAUTION - TRAFFIC ADVISORY

Ident.: PRO-ABN-SURV-00025023.0001001 / 16 MAY 22

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Do not perform a maneuver based on a TA alone.

[MEM] TCAS WARNING - RESOLUTION ADVISORY

Ident.: PRO-ABN-SURV-00012455.0031001 / 16 MAY 22
4 **Applicable to: MSN 01459, 08495-09324, 10949-11597**

Always follow RA orders, even if this results in crossing the intruder altitude, because these orders ensure the best altitude separation.

CAUTION	Be aware that the intruder may have a TCAS, and may maneuver in response to a coordinated RA order. Therefore, not following an RA order could compromise safe separation.

■ **If the AP/FD TCAS mode is available:**

L2 The flight crew applies this procedure, when a RA is triggered, and the AP/FD TCAS mode engages. The AP/FD TCAS mode follows the RA orders.

L1 ● **All RA, except any CLIMB RA during approach in CONF 3 or FULL:**

● **If the AP is OFF:**

FD ORDERS.. FOLLOW
The AP can be engaged.

VERTICAL SPEED..MONITOR

L2 If a preventive RA was triggered: check that the vertical speed remains out of the red area of the vertical speed scale.

If a corrective RA was triggered: check that the vertical speed gets out of the red area, and remains in the green area of the vertical speed scale.

L1

CAUTION	If for any reason during a RA, the aircraft vertical speed does not reach the green area of the vertical speed scale, the PF should disconnect the AP, and override the FD orders, in order to lead the aircraft vertical speed out of the red area of the vertical speed scale. If necessary, the PF must use the full speed range between Vαmax and VMAX.

● **Any CLIMB RA during approach in CONF 3 or FULL:**

GO-AROUND.. PERFORM

L2 The AP/FD TCAS mode disengages (the AP/FD does no longer follows the RA orders).

L1 Follow the SRS GA mode.

VERTICAL SPEED..MONITOR

Continued on the following page

[MEM] TCAS WARNING - RESOLUTION ADVISORY (Cont'd)

L2 Check that the vertical speed remains out of the red area of the vertical speed scale and take over if necessary.

L1 Respect stall, GPWS or windshear warnings.

ATC...NOTIFY

- **When the "CLEAR OF CONFLICT" aural alert sounds:**

L2 The AP/FD TCAS mode, if engaged, disengages.

L1
AP/FD...MONITOR/FOLLOW
ATC...NOTIFY
LATERAL AND VERTICAL GUIDANCE...ADJUST

L2 The flight crew should engage an appropriate vertical mode, or adjust the vertical speed target, in accordance with the latest ATC clearance.

L1 SPEED...ADJUST

L2 The flight crew should adjust the speed target, and revert to managed speed, as appropriate.

L1 ■ **If the AP/FD TCAS mode is not available:**

L2 The flight crew applies this procedure, when a RA is triggered, and the AP/FD TCAS mode does not engage.

L1
- **All RA, except CLIMB RA during approach in CONF 3 or FULL:**

AP (if engaged)...OFF
BOTH FDs...OFF

Respond promptly and smoothly.

VERTICAL SPEED...ADJUST or MAINTAIN

L2 Adjust or maintain the vertical speed as required, to reach the green area and/or avoid the red area of the vertical speed scale.

L1 _Note:_ *Avoid excessive maneuvers while attempting to maintain the vertical speed just outside the red area of the vertical speed scale, and within the green area. If necessary, use the full speed range between Vαmax and VMAX.*

- **Any CLIMB RA during approach in CONF 3 or FULL:**

GO-AROUND...PERFORM

Continued on the following page

[MEM] TCAS WARNING - RESOLUTION ADVISORY (Cont'd)

Follow the SRS GA mode.

VERTICAL SPEED	MONITOR

L2

Check that the vertical speed remains out of the red area of the vertical speed scale and take over if necessary.

L1

Respect stall, GPWS or windshear warnings.

ATC	NOTIFY

- **When the “CLEAR OF CONFLICT” aural alert sounds:**

ATC	NOTIFY
LATERAL AND VERTICAL GUIDANCE	ADJUST

L2

Adjust the lateral and vertical guidance to resume normal navigation, in accordance with ATC clearance.

L1

AP/FD	AS RQRD

L2

If necessary, reengage the AP/FD.

[MEM] TCAS WARNING - RESOLUTION ADVISORY

Ident.: PRO-ABN-SURV-00012455.0022001 / 16 MAY 22

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

Always follow RA orders, even if this results in crossing the intruder altitude, because these orders ensure the best altitude separation.

CAUTION	Be aware that the intruder may have a TCAS, and may maneuver in response to a coordinated RA order. Therefore, not following an RA order could compromise safe separation.

■ **All RA, except any CLIMB RA during approach in CONF 3 or FULL:**

AP (if engaged)........OFF
BOTH FDs........OFF

Respond promptly and smoothly.

VERTICAL SPEED........ADJUST or MAINTAIN

L2 Adjust or maintain the vertical speed as required, to reach the green area and/or avoid the red area of vertical speed scale.

L1 *Note:* *Avoid excessive maneuvers while attempting to maintain the vertical speed just outside the red area of the vertical speed scale, and within the green area. If necessary, use the full speed range between Vαmax and VMAX.*

■ **Any CLIMB RA during approach in CONF 3 or FULL:**

GO-AROUND........PERFORM

Follow the SRS GA mode.

VERTICAL SPEED........MONITOR

L2 Check that the vertical speed remains out of the red area of the vertical speed scale and take over if necessary.

L1 Respect stall, GPWS, or windshear warnings.

ATC........NOTIFY

● **When the "CLEAR OF CONFLICT" aural alert sounds:**

ATC........NOTIFY
LATERAL AND VERTICAL GUIDANCE........ADJUST

L2 Adjust the lateral and vertical guidance to resume normal navigation, in accordance with ATC clearance.

Continued on the following page

[MEM] TCAS WARNING - RESOLUTION ADVISORY (Cont'd)

L1 AP/FD..AS RQRD

L2 If necessary, reengage the AP/FD.

[MEM] WINDSHEAR WARNING - REACTIVE WINDSHEAR

Ident.: PRO-ABN-SURV-00012271.0002001 / 04 NOV 20
Applicable to: ALL

If Windshear is detected, both PFDs display a WINDSHEAR message. An associated aural WINDSHEAR alert sounds three times.
If the flight crew detects WINDSHEAR, apply the following recovery technique:

- **At Takeoff:**
  - **If before V1:**

    If there are significant variations in airspeed, and in airspeed trend below the indicated V1, reject the takeoff.

    L2 *If windshear occurs during the takeoff roll, the aircraft may reach V1 later (or sooner) than expected. The flight crew should ensure that there is sufficient runway remaining to stop the aircraft, if necessary.*

  - L1 **If after V1:**

    THR LEVERS.....TOGA
    REACHING VR.....ROTATE
    SRS ORDERS.....FOLLOW

    If necessary the flight crew may pull the sidestick fully back.

    Note: If the FD bars are not displayed, move toward an initial pitch attitude of 17.5 °. Then, if necessary, to prevent a loss in altitude, increase the pitch attitude.

- **Airborne, initial climb or landing:**

  THR LEVERS AT TOGA.....SET OR CONFIRM
  AP (if engaged).....KEEP ON
  SRS ORDERS.....FOLLOW

  If necessary the flight crew may pull the sidestick fully back.

  Note: 1. Autopilot disengages if the angle of attack value goes above α prot.
  2. If the FD bars are not displayed, move toward an initial pitch attitude of 17.5 °. Then, if necessary, to prevent a loss in altitude, increase the pitch attitude.

  DO NOT CHANGE CONFIGURATION (SLATS/FLAPS, GEAR) UNTIL OUT OF WINDSHEAR.
  CLOSELY MONITOR FLIGHT PATH AND SPEED.
  RECOVER SMOOTHLY TO NORMAL CLIMB OUT OF WINDSHEAR.

SURV ROW/ROP LOST

Applicable to: MSN 08495-09324, 10949-11597

Ident.: PRO-ABN-SURV-AN-00018109.0001001 / 26 NOV 19

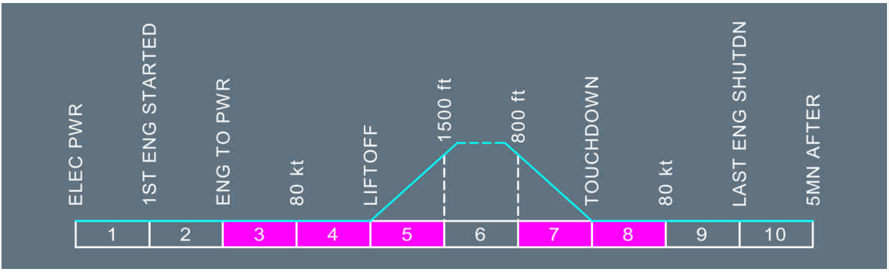
5

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the ROW/ROP is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
LAST ENG SHUTDN
5MN AFTER
1
2
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4
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Note: *The alert will be triggered in flight phase 9, when the runway is not validated for ROPS operations in the TAWS database.*

Ident.: PRO-ABN-SURV-AN-00015138.0001001 / 29 JUL 13

6

Crew awareness.

Ident.: PRO-ABN-SURV-AN-00018647.0002001 / 17 MAR 16

7

STATUS

INOP SYS

ROW/ROP

T.O SPEEDS NOT INSERTED

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-T-O-T-00016999.0001001 / 05 JUN 18

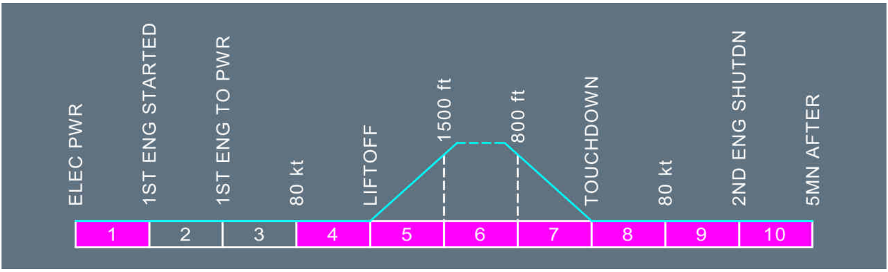
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the take off speeds are not inserted.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-T-O-T-00016083.0001001 / 05 JUN 18

2

Crew awareness.

T.O SPEEDS TOO LOW

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-T-O-U-00017000.0001001 / 05 JUN 18

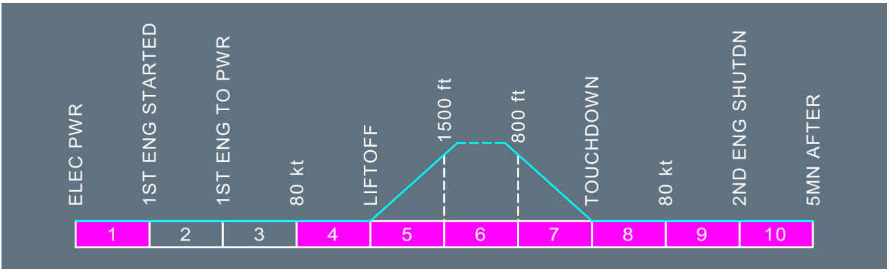
3

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the take off speeds are too low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-T-O-U-00016081.0002001 / 05 JUN 18

4

TOW & T.O DATA...CHECK

L2 *Check both takeoff weight and takeoff data on the FMS pages.*

T.O V1/VR/V2 DISAGREE

Applicable to: MSN 10949-11597

Ident.: PRO-ABN-T-O-V-00017001.0001001 / 05 JUN 18

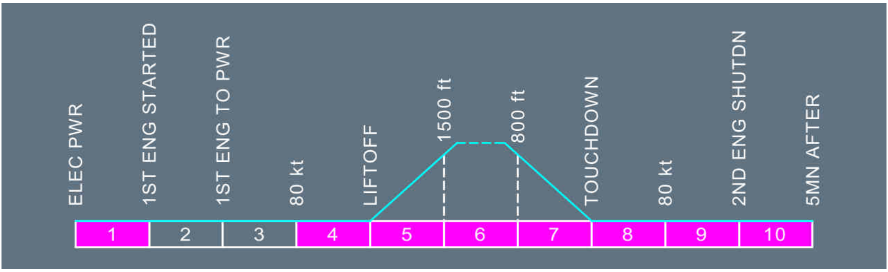
5

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when V1, VR, and V2 disagree.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-T-O-V-00016082.0001001 / 05 JUN 18

6

Crew awareness.

Intentionally left blank

VENT AVNCS SYS FAULT

Applicable to: ALL

Ident.: PRO-ABN-VENT-AA-00017332.0001001 / 21 MAR 16

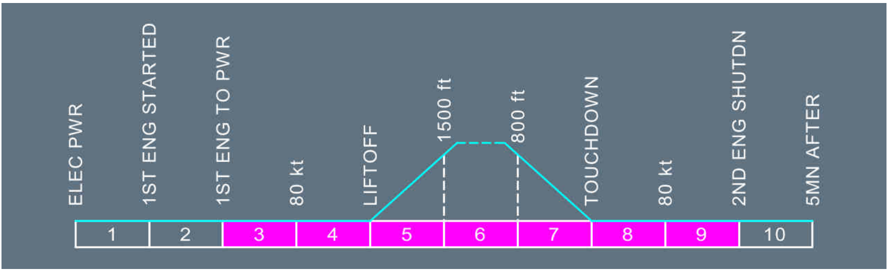
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The power up test is not satisfactory, or
- The AEVC is not supplied, or
- The valve position disagrees with the commanded position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-VENT-AA-00018047.0001001 / 21 MAR 16

Crew awareness.

Ident.: PRO-ABN-VENT-AA-00010775.0001001 / 05 AUG 10

STATUS

INOP SYS

AVNCS VENT
VENT BLOWER (1)
VENT EXTRACT (1)

(1) *(If AEVC not supplied)*

VENT BLOWER FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Ident.: PRO-ABN-VENT-X-00017329.0001001 / 21 MAR 16

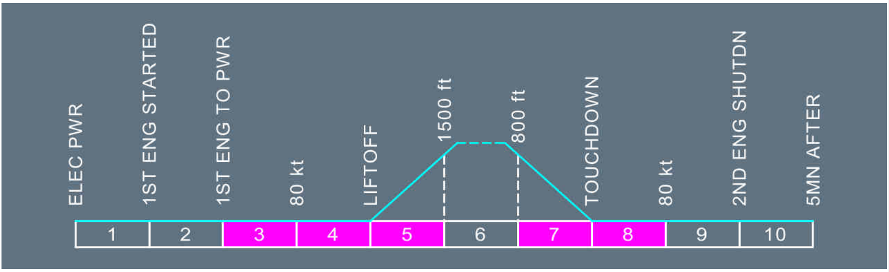
1

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the blowing pressure is low or there is a duct overheat.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-VENT-X-00010768.0005001 / 12 APR 16

- **If NO DC ESS BUS FAULT:**

  BLOWER..OVRD

  L2 *The ventilation system is in closed circuit configuration and air from air conditioning is added to the ventilation air.*

L1
- **If DC ESS BUS FAULT:**

LAND ASAP

Continued on the following page

VENT BLOWER FAULT (Cont'd)

2 Ident.: PRO-ABN-VENT-X-00010769.0001001 / 03 NOV 22

STATUS

INOP SYS

VENT BLOWER

Note: In the case the avionics ventilation is not sufficient (triggering of both VENT BLOWER FAULT and VENT EXTRACT FAULT alerts), the terrain and weather display will be lost in order to prevent NDs overheat.

VENT BLOWER FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-VENT-X-00010768.0005001 / 12 APR 16

- **If NO DC ESS BUS FAULT:**

  BLOWER..OVRD

  L2 *The ventilation system is in closed circuit configuration and air from air conditioning is added to the ventilation air.*

- L1 **If DC ESS BUS FAULT:**

  LAND ASAP

VENT BLOWER FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597

Ident.: PRO-ABN-VENT-X-00017329.0001001 / 21 MAR 16

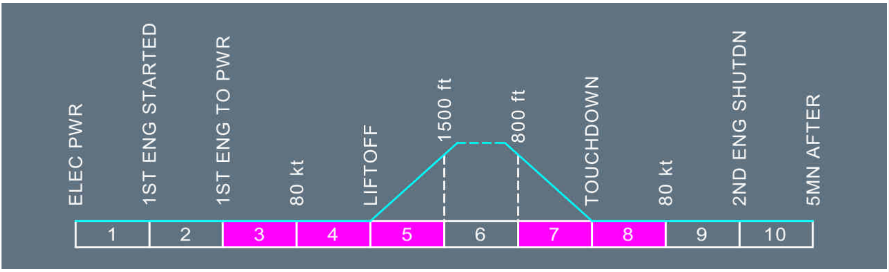
3

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the blowing pressure is low or there is a duct overheat.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-VENT-X-00010768.0005001 / 12 APR 16

- **If NO DC ESS BUS FAULT:**

  BLOWER.....OVRD

  L2 *The ventilation system is in closed circuit configuration and air from air conditioning is added to the ventilation air.*

L1
- **If DC ESS BUS FAULT:**

  LAND ASAP

4 Ident.: PRO-ABN-VENT-X-00010769.0006001 / 03 NOV 22

STATUS

INOP SYS

VENT BLOWER

VENT BLOWER FAULT

Applicable to: MSN 11531

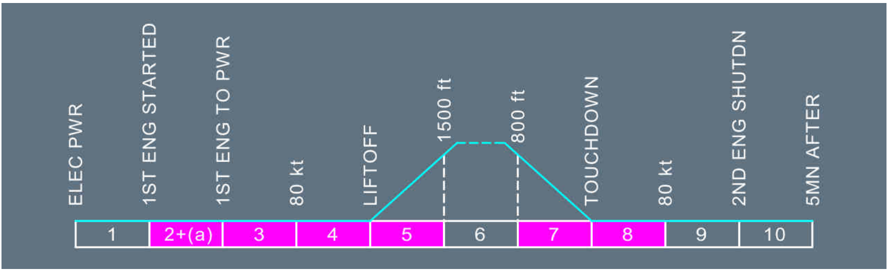
5 Ident.: PRO-ABN-VENT-X-00017329.0002001 / 03 NOV 21

ANNUNCIATIONS

Triggering Conditions:

L2 The alert triggers when the blowing pressure is low or there is a duct overheat.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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9
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Note: *(a) Alert inhibited during 10 min after pressing the T.O CONFIG pb in flight phase 2.*

Ident.: PRO-ABN-VENT-X-00010768.0005001 / 12 APR 16

- **If NO DC ESS BUS FAULT:**

  BLOWER..OVRD

  L2 *The ventilation system is in closed circuit configuration and air from air conditioning is added to the ventilation air.*

L1
- **If DC ESS BUS FAULT:**

LAND ASAP

Continued on the following page

VENT BLOWER FAULT (Cont'd)

6 Ident.: PRO-ABN-VENT-X-00010769.0006001 / 03 NOV 22

STATUS

INOP SYS

VENT BLOWER

VENT EXTRACT FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

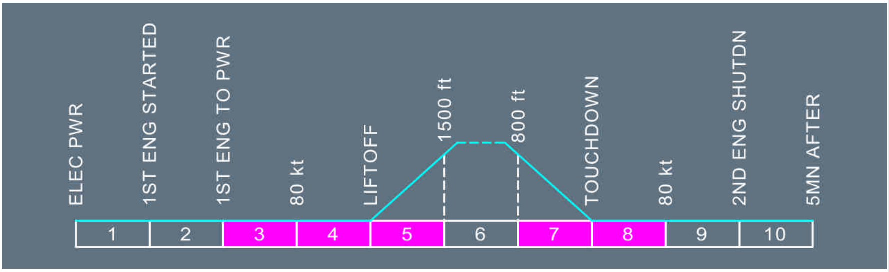
Ident.: PRO-ABN-VENT-Y-00017330.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the extract pressure is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-VENT-Y-00010770.0001001 / 05 AUG 10

EXTRACT....................OVRD

L2 *The ventilation system is in closed circuit configuration and air from air conditioning is added to the ventilation air.*

Continued on the following page

VENT EXTRACT FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Y-00010771.0001001 / 03 NOV 22

7

STATUS

INOP SYS

VENT EXTRACT

Note: *In the case the avionics ventilation is not sufficient (triggering of both VENT BLOWER FAULT and VENT EXTRACT FAULT alerts), the terrain and weather display will be lost in order to prevent NDs overheat.*

VENT EXTRACT FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

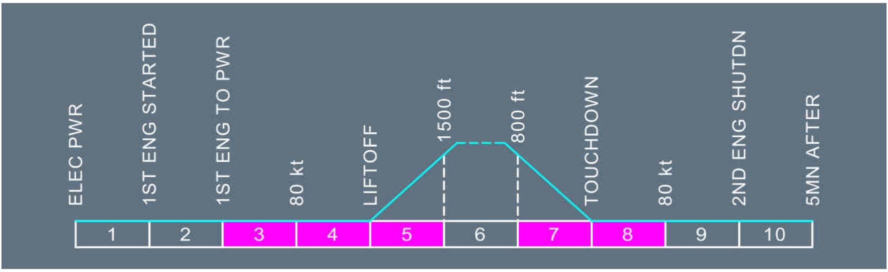
Ident.: PRO-ABN-VENT-Y-00017330.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the extract pressure is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

VENT EXTRACT FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Y-00010770.0001001 / 05 AUG 10

EXTRACT...OVRD

L2 *The ventilation system is in closed circuit configuration and air from air conditioning is added to the ventilation air.*

VENT EXTRACT FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

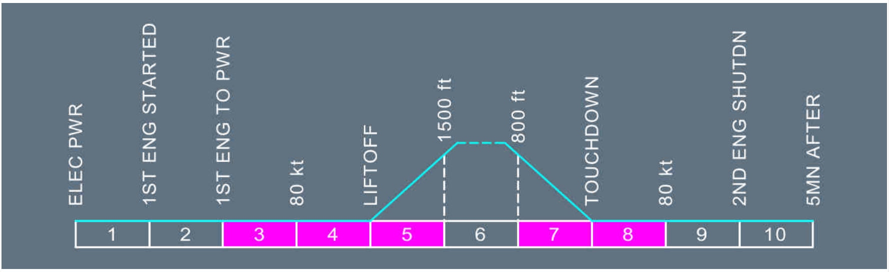
Ident.: PRO-ABN-VENT-Y-00017330.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the extract pressure is low.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-VENT-Y-00010770.0001001 / 05 AUG 10

EXTRACT...OVRD

L2 *The ventilation system is in closed circuit configuration and air from air conditioning is added to the ventilation air.*

Continued on the following page

VENT EXTRACT FAULT (Cont'd)

8 Ident.: PRO-ABN-VENT-Y-00010771.0002001 / 03 NOV 22

STATUS

	INOP SYS
	VENT EXTRACT

VENT SKIN VALVE FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324

Ident.: PRO-ABN-VENT-Z-00017331.0001001 / 21 MAR 16

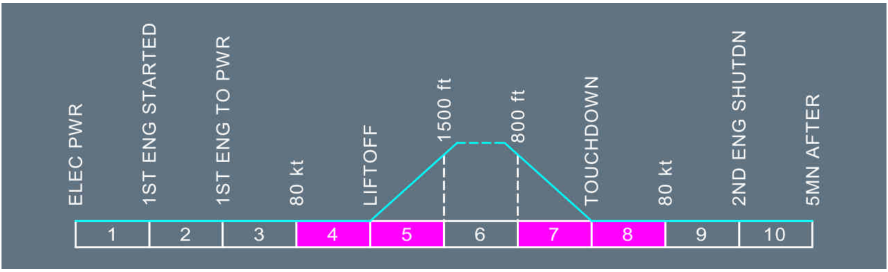
9

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:
- The extract valve is fully open in phase 3, or
- The extract valve is fully open in flight, or
- The inlet valve is not fully closed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

VENT SKIN VALVE FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Z-00018941.0002001 / 21 MAR 16

- **If INLET valve not fully closed in flight:**

  Crew awareness.

  L2 No action is required, since there is a non return valve in the air inlet.

- L1 **If EXTRACT valve affected:**

  BLOWER....................OVRD
  EXTRACT....................OVRD

  L2 *These actions send additional closure signals to the inlet and extract valves.*
  The weather radar image on both NDs may be lost, in case of insufficient ventilation.

  - L1 **IF UNSUCCESSFUL:**

    MAX FL....................100/MEA-MORA
    CAB PR MODE SEL....................MAN
    MAN V/S CTL....................FULL UP

    L2 *The aircraft is manually depressurized.*
    It may take 10 s in manual mode before the crew notices a change of the outflow valve position.

Ident.: PRO-ABN-VENT-Z-00018942.0003001 / 21 MAR 16

10

STATUS

MAX FL: 100/MEA-MORA

MAN CAB PR CTL
TGT V/S: CLIMB 500 FT/MIN
TGT V/S: DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	7 000
300	5 500
250	3 000
< 200	0

INOP SYS

AVNCS VALVE

VENT SKIN VALVE FAULT

Applicable to: MSN 01251

Ident.: PRO-ABN-VENT-Z-00017331.0001001 / 21 MAR 16

11

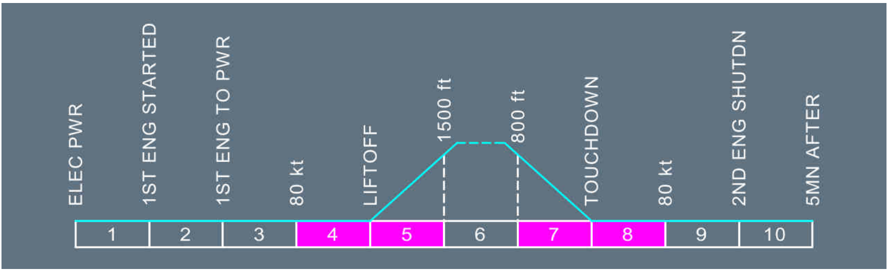
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The extract valve is fully open in phase 3, or
- The extract valve is fully open in flight, or
- The inlet valve is not fully closed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Continued on the following page

VENT SKIN VALVE FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Z-00018941.0001001 / 21 MAR 16

- **If INLET valve not fully closed in flight:**

  Crew awareness.

L2 No action is required, since there is a non return valve in the air inlet.

L1
- **If EXTRACT valve affected:**

  BLOWER....................OVRD
  EXTRACT....................OVRD

L2 *These actions send additional closure signals to the inlet and extract valves.*
The weather radar image on both NDs may be lost, in case of insufficient ventilation.

L1
  - **IF UNSUCCESSFUL:**

    MAX FL....................100/MEA
    CAB PR MODE SEL....................MAN
    MAN V/S CTL....................FULL UP

L2 *The aircraft is manually depressurized.*
It may take 10 s in manual mode before the crew notices a change of the outflow valve position.

Ident.: PRO-ABN-VENT-Z-00018942.0001001 / 21 MAR 16

STATUS

MAX FL: 100/MEA

INOP SYS

AVNCS VALVE

VENT SKIN VALVE FAULT

Applicable to: MSN 02014, 06561

Ident.: PRO-ABN-VENT-Z-00017331.0001001 / 21 MAR 16

12

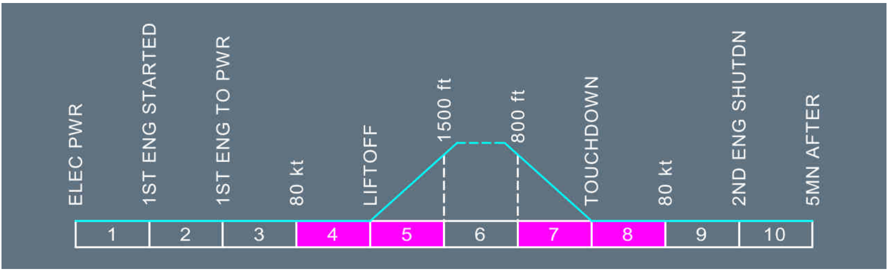
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when:

- The extract valve is fully open in phase 3, or
- The extract valve is fully open in flight, or
- The inlet valve is not fully closed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

VENT SKIN VALVE FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Z-00018941.0001001 / 21 MAR 16

- **If INLET valve not fully closed in flight:**

  Crew awareness.

L2 No action is required, since there is a non return valve in the air inlet.

L1
- **If EXTRACT valve affected:**

  BLOWER....................OVRD
  EXTRACT....................OVRD

L2 *These actions send additional closure signals to the inlet and extract valves.*
The weather radar image on both NDs may be lost, in case of insufficient ventilation.

L1
  - **IF UNSUCCESSFUL:**

    MAX FL....................100/MEA
    CAB PR MODE SEL....................MAN
    MAN V/S CTL....................FULL UP

L2 *The aircraft is manually depressurized.*
It may take 10 s in manual mode before the crew notices a change of the outflow valve position.

Ident.: PRO-ABN-VENT-Z-00018942.0002001 / 21 MAR 16

STATUS

MAX FL: 100/MEA

MAN CAB PR CTL
TGT V/S: CLIMB 500 FT/MIN
TGT V/S: DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	7 000
300	5 500
250	3 000
< 200	0

INOP SYS

AVNCS VALVE

VENT SKIN VALVE FAULT

Applicable to: MSN 10949-11522, 11572-11597

Ident.: PRO-ABN-VENT-Z-00017331.0001001 / 21 MAR 16

13

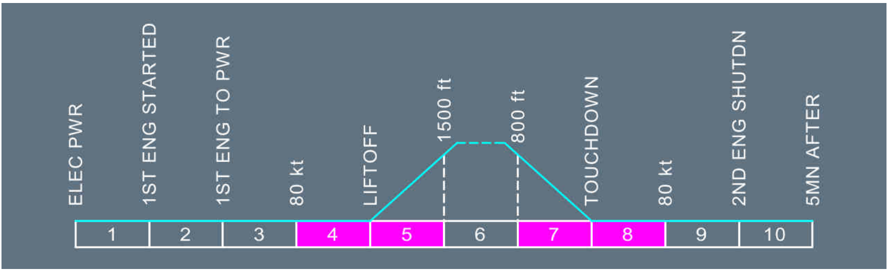
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The extract valve is fully open in phase 3, or
- The extract valve is fully open in flight, or
- The inlet valve is not fully closed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

VENT SKIN VALVE FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Z-00018941.0003001 / 18 NOV 21

14

- **If INLET valve not fully closed in flight:**

  Crew awareness.

L2 No action is required, since there is a non return valve in the air inlet.

L1
- **If EXTRACT valve affected:**

  BLOWER....................OVRD
  EXTRACT....................OVRD

L2 *These actions send additional closure signals to the inlet and extract valves.*
The weather radar image on both NDs may be lost, in case of insufficient ventilation.

L1
  - **IF UNSUCCESSFUL:**

    MAX FL....................100/MEA-MORA
    CAB PR MODE SEL....................MAN

    - **If cabin differential pressure above 1 PSI:**

      MAN V/S CTL....................UP

      TGT V/S : CLIMB 1000 FT/MIN

L2 *The aircraft is manually depressurized.*
It may take 10 s in manual mode before the crew notices a change of the outflow valve position.

L1
    - **If cabin differential pressure below 1 PSI or invalid:**

      MAN V/S CTL....................FULL UP

L2 *The aircraft is manually depressurized.*
It may take 10 s in manual mode before the crew notices a change of the outflow valve position.

Continued on the following page

VENT SKIN VALVE FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Z-00018942.0003001 / 21 MAR 16

15

STATUS

MAX FL: 100/MEA-MORA

MAN CAB PR CTL
TGT V/S: CLIMB 500 FT/MIN
TGT V/S: DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	7 000
300	5 500
250	3 000
< 200	0

INOP SYS

AVNCS VALVE

VENT SKIN VALVE FAULT

Applicable to: MSN 11531

16 Ident.: PRO-ABN-VENT-Z-00017331.0002001 / 03 NOV 21

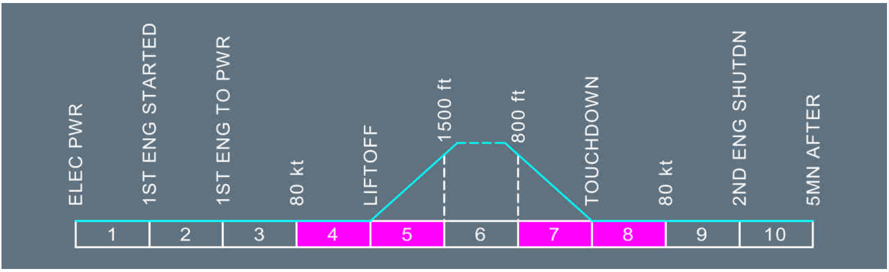
ANNUNCIATIONS

Triggering Conditions:

L2

This alert triggers when:
- The extract valve is fully open 5s after pressing the T.O CONFIG pb in phase 2, or
- The extract valve is neither fully closed nor partially open 25s after pressing the T.O CONFIG pb in phase 2, or
- The inlet valve is not fully closed 25s after pressing the T.O CONFIG pb in phase 2, or
- The extract valve is fully open in phase 3, or
- The extract valve is fully open in flight, or
- The inlet valve is not fully closed in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

VENT SKIN VALVE FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Z-00018941.0003001 / 18 NOV 21

17

- **If INLET valve not fully closed in flight:**

  Crew awareness.

  L2 No action is required, since there is a non return valve in the air inlet.

- L1 **If EXTRACT valve affected:**

  BLOWER.......................OVRD
  EXTRACT.......................OVRD

  L2 *These actions send additional closure signals to the inlet and extract valves.*
  The weather radar image on both NDs may be lost, in case of insufficient ventilation.

  - L1 **IF UNSUCCESSFUL:**

    MAX FL.......................100/MEA-MORA
    CAB PR MODE SEL.......................MAN

    - **If cabin differential pressure above 1 PSI:**

      MAN V/S CTL.......................UP

      TGT V/S : CLIMB 1000 FT/MIN

      L2 *The aircraft is manually depressurized.*
      It may take 10 s in manual mode before the crew notices a change of the outflow valve position.

    - L1 **If cabin differential pressure below 1 PSI or invalid:**

      MAN V/S CTL.......................FULL UP

      L2 *The aircraft is manually depressurized.*
      It may take 10 s in manual mode before the crew notices a change of the outflow valve position.

Continued on the following page

VENT SKIN VALVE FAULT (Cont'd)

Ident.: PRO-ABN-VENT-Z-00018942.0003001 / 21 MAR 16

18

STATUS

MAX FL: 100/MEA-MORA

MAN CAB PR CTL
TGT V/S: CLIMB 500 FT/MIN
TGT V/S: DESC 300 FT/MIN

A/C FL	CAB ALT TGT
390	8 000
350	7 000
300	5 500
250	3 000
< 200	0

INOP SYS

AVNCS VALVE

[QRH] WHEEL TIRE DAMAGE SUSPECTED

Ident.: PRO-ABN-WHEEL-00019841.0002001 / 12 SEP 17
Applicable to: ALL

LDG DIST PROC...APPLY

Performance impact of one burst tire is equivalent to one brake released.

TAXI WITH CARE

Refer to LIM-LG Taxi with Deflated or Damaged Tires

WHEEL HYD SEL FAULT

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

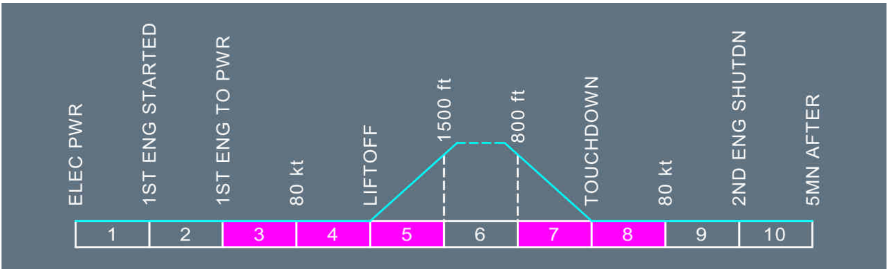
Ident.: PRO-ABN-WHEEL-AE-00017810.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the brake normal selector valve is failed, or the NWS selector valve is at open position.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

WHEEL HYD SEL FAULT (Cont'd)

Ident.: PRO-ABN-WHEEL-AE-00018363.0001001 / 21 MAR 16

L2
- If the normal brake selector valve is failed open, full green hydraulic pressure is present at normal servovalves' entry.
  Nosewheel steering remains available.
- On ground, do not tow the aircraft with the green hydraulic system pressurized: If the steering selector valve is failed open, nosewheel steering remains pressurized, and so towing may either break the towbar shear pin, or the nose gear (if towbarless towing).
- If the steering selector valve is failed open, setting A/SKID & N/W STRG sw to OFF will cause the nosewheel to go to maximum deflection.

L1 A/SKID & N/W STRG..KEEP ON

L2 *As long as antiskid is operative, brake pressure is regulated by normal servovalves.*

WHEEL HYD SEL FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

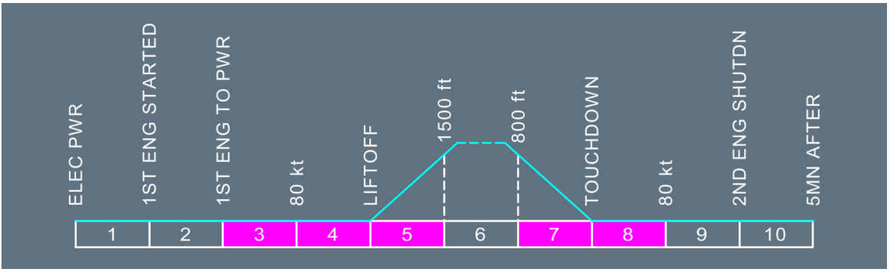
Ident.: PRO-ABN-WHEEL-AE-00017810.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the brake normal selector valve is failed, or the NWS selector valve is at open position.

Flight Phase Inhibition:



WHEEL HYD SEL FAULT

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

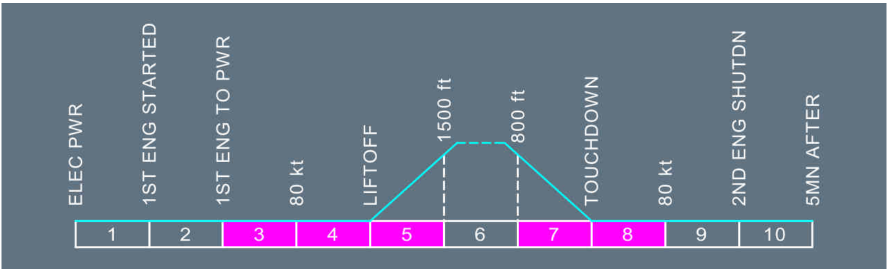
Ident.: PRO-ABN-WHEEL-AE-00017810.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the brake normal selector valve is failed, or the NWS selector valve is at open position.

Flight Phase Inhibition:



Ident.: PRO-ABN-WHEEL-AE-00018363.0003001 / 21 MAR 16

1

L2
- If the normal brake selector valve is failed open, full green hydraulic pressure is present at normal servovalves' entry.
  Nosewheel steering remains available.
- On ground, do not tow the aircraft with the yellow hydraulic system pressurized: If the steering selector valve is failed open, nosewheel steering remains pressurized, and so towing may either break the towbar shear pin, or the nose gear (if towbarless towing).
- If the steering selector valve is failed open, setting A/SKID & N/W STRG sw to OFF will cause the nosewheel to go to maximum deflection.

L1 A/SKID & N/W STRG...KEEP ON

L2 *As long as antiskid is operative, brake pressure is regulated by normal servovalves.*

WHEEL N/W STRG FAULT

Applicable to: ALL

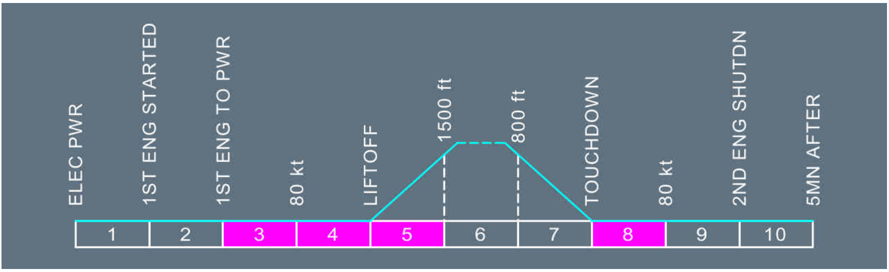
Ident.: PRO-ABN-WHEEL-AF-00017744.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the nose wheel steering system is failed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-WHEEL-AF-00018712.0001001 / 21 MAR 16

Crew awareness.

Continued on the following page

WHEEL N/W STRG FAULT (Cont'd)

Ident.: PRO-ABN-WHEEL-AF-00018713.0001001 / 21 MAR 16

L12

STATUS

	INOP SYS
CAT 3 SINGLE ONLY *See (1)*	CAT 3 DUAL N/W STRG

(1)

Note:
1. *If the L/G SHOCK ABSORBER FAULT is also displayed, then the nose wheels may be at maximum deflection (turned 90 ° from center). During landing, delay nose wheel touchdown as long as possible.*
2. *Automatic rollout is not permitted (Refer to QRH/OPS Required Equipment for CAT2 and CAT3).*

WHEEL TYRE LO PR

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-ABN-WHEEL-AG-00017824.0003001 / 21 MAR 16

2

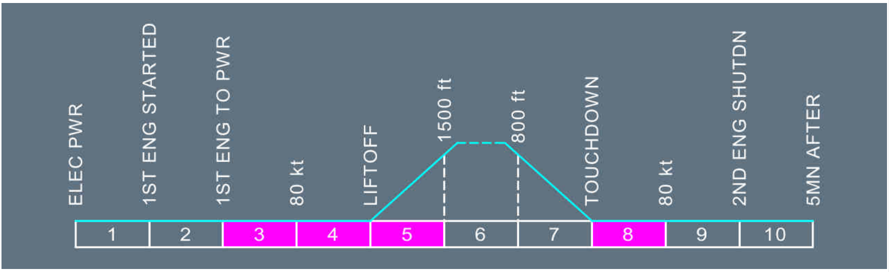
ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when one of the following cases occurs:

- One tire pressure is below:
  - 74% of nominal pressure between liftoff and engines shutdown, or
  - 89% of nominal pressure in other cases.
- There is difference of pressure between two wheels of the same axle that is above:
  - 21% of nominal pressure between liftoff and engines shutdown, or
  - 15% of nominal pressure in other cases.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-WHEEL-AG-00018714.0001001 / 21 MAR 16

Crew awareness.

WHEEL TYRE LO PR

Applicable to: MSN 01251

Ident.: PRO-ABN-WHEEL-AG-00017824.0001001 / 21 MAR 16

ANNUNCIATIONS

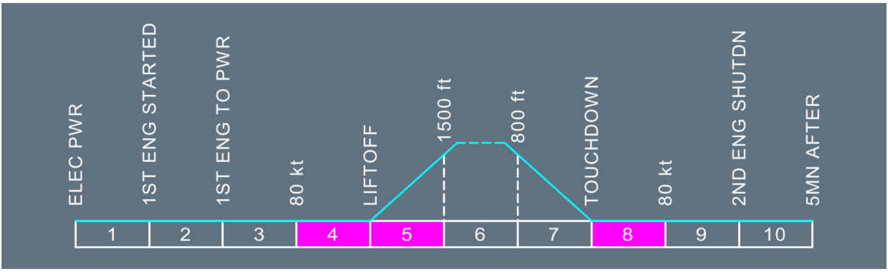
Triggering Conditions:

L2

This alert triggers when one of the following cases occurs:

- One tire pressure is below:
  - 74% of nominal pressure between liftoff and engines shutdown, or
  - 89% of nominal pressure in other cases.
- There is difference of pressure between two wheels of the same axle that is above:
  - 21% of nominal pressure between liftoff and engines shutdown, or
  - 15% of nominal pressure in other cases.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-WHEEL-AG-00018714.0001001 / 21 MAR 16

Crew awareness.

WHEEL TYRE LO PR

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: PRO-ABN-WHEEL-AG-00018714.0001001 / 21 MAR 16

Crew awareness.

Intentionally left blank

WING A.ICE L(R) HI PR

Applicable to: ALL

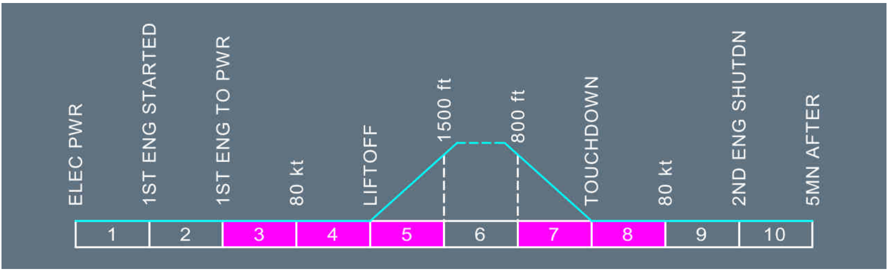
Ident.: PRO-ABN-W_A_ICE-Q-00017161.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the WING ANTI ICE pb-sw is set to ON and the pressure sensor (downstream of the valve) indicates a high pressure in the duct.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-W_A_ICE-Q-00018328.0001001 / 21 MAR 16

THRUST LIM PENALTY

Ident.: PRO-ABN-W_A_ICE-Q-00018330.0001001 / 21 MAR 16

STATUS

	INOP SYS
THRUST LIM PENALTY	WAI REGUL

WING A.ICE L(R) VALVE OPEN
(FAILURE DETECTED IN FLIGHT)

Applicable to: ALL

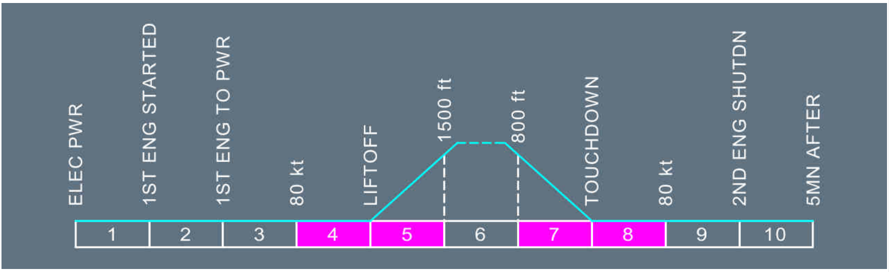
Ident.: PRO-ABN-W_A_ICE-N-00017160.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the WING ANTI ICE pb-sw is set to OFF and one wing anti ice valve remains open, in flight.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-W_A_ICE-N-00018331.0001001 / 21 MAR 16

WAI AVAIL IN FLT
WING ANTI ICE......AS RQRD

L2 *Wing anti-ice is available if needed and anyway is continually on, on failed side.*

L1 THRUST LIM PENALTY

- **After landing (automatic recall):**
  ENG BLEED (AFFECTED SIDE)......OFF
  X BLEED (IF NOT CLOSED)......SHUT
  APU BLEED (IF LEFT WING AFFECTED)......OFF
  WING ANTI ICE......OFF

Continued on the following page

WING A.ICE L(R) VALVE OPEN (Cont'd)
(FAILURE DETECTED IN FLIGHT)

Ident.: PRO-ABN-W_A_ICE-N-00018332.0001001 / 21 MAR 16

STATUS

- **In flight:**
  THRUST LIM PENALTY
  WAI AVAIL IN FLT

INOP SYS

ENG 1(2) BLEED (On ground only)
PACK 1(2) (On ground only)

WING A.ICE L(R) VALVE OPEN
(FAILURE DETECTED ON GROUND)

Applicable to: ALL

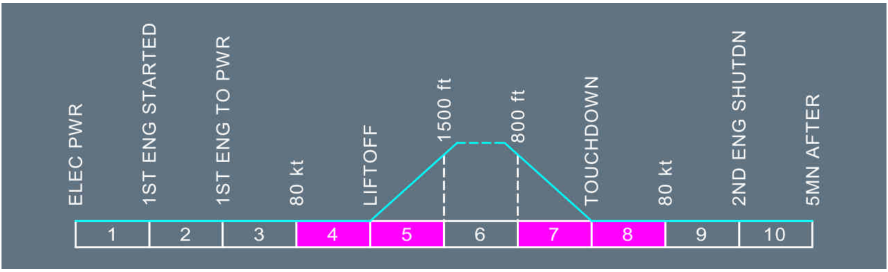
Ident.: PRO-ABN-W_A_ICE-M-00017495.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the WING ANTI ICE pb-sw is set to OFF and one wing anti ice valve remains open, on ground.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Continued on the following page

WING A.ICE L(R) VALVE OPEN (Cont'd)
(FAILURE DETECTED ON GROUND)

Ident.: PRO-ABN-W_A_ICE-M-00018333.0001001 / 21 MAR 16

WING ANTI ICE....................OFF
ENG BLEED (AFFECTED SIDE)....................OFF
X BLEED (IF NOT CLOSED)....................SHUT
APU BLEED (IF LEFT WING AFFECTED AND IF APU RUNNING)....................OFF
WAI AVAIL IN FLT

- **After takeoff when above 1 500 ft (automatic recall):**
  WAI AVAIL IN FLT
  ENG BLEED (AFFECTED SIDE)....................ON
  WING ANTI ICE....................AS RQRD
  L2 *Wing anti ice is available if needed and anyway is continually on, on failed side.*
  L1 THRUST LIM PENALTY

- **After landing (automatic recall):**
  WING ANTI ICE....................OFF
  ENG BLEED (AFFECTED SIDE)....................OFF
  X BLEED (IF NOT CLOSED)....................SHUT
  APU BLEED (IF LEFT WING AFFECTED)....................OFF

Ident.: PRO-ABN-W_A_ICE-M-00018334.0001001 / 21 MAR 16

STATUS

	INOP SYS
● **Before takeoff:** WAI AVAIL IN FLT ● **In flight:** THRUST LIM PENALTY	ENG 1 (2) BLEED (On ground only) PACK 1 (2) (On ground only)

WING A.ICE L(R) WING LO PR

Applicable to: MSN 08635, 10949-11597

Ident.: PRO-ABN-W_A_ICE-R-00023800.0001001 / 24 MAR 20

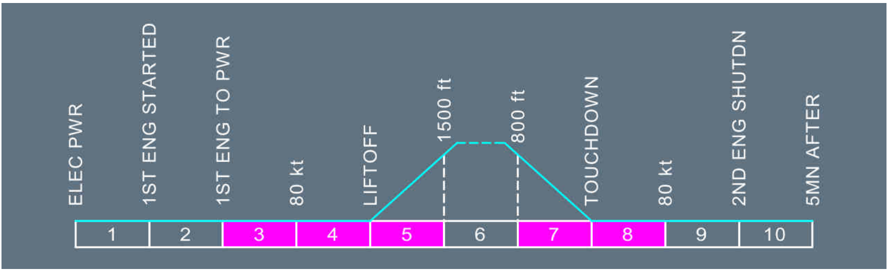
1

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the WING ANTI ICE pb-sw is set to ON and the pressure sensor (downstream of the valve) detects a low pressure in the duct.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-W_A_ICE-R-00023801.0001001 / 24 MAR 20

2

THRUST.. INCREASE

- **IF UNSUCCESSFUL:**

  WING ANTI ICE...OFF

AVOID ICING CONDITIONS

Ident.: PRO-ABN-W_A_ICE-R-00023802.0001001 / 24 MAR 20

3

STATUS

AVOID ICING CONDITIONS	**INOP SYS**
● **IF SEVERE ICE ACCRETION**	WING A.ICE
MIN SPD... VLS + 10 / G DOT	
MANEUVER WITH CARE	
LDG DIST PROC...APPLY	

WING A.ICE OPEN ON GND

Applicable to: ALL

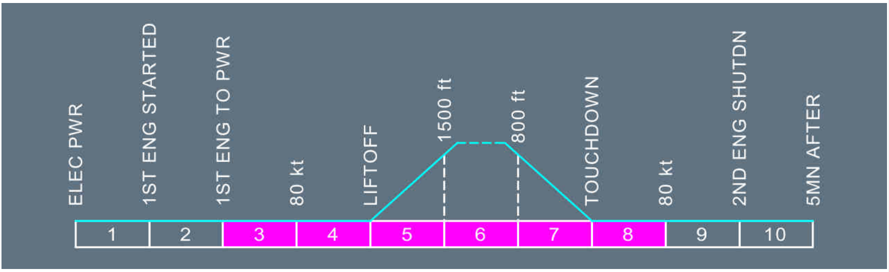
Ident.: PRO-ABN-W_A_ICE-O-00017158.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the aircraft is on ground and the wing anti ice valves remain open for more than 35 s after the WING ANTI ICE pb-sw is set to ON.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
2
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Ident.: PRO-ABN-W_A_ICE-O-00018311.0001001 / 21 MAR 16

WING ANTI ICE.. OFF

Ident.: PRO-ABN-W_A_ICE-O-00018335.0001001 / 21 MAR 16

STATUS

WAI AVAIL IN FLT

WING A.ICE SYS FAULT

Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597

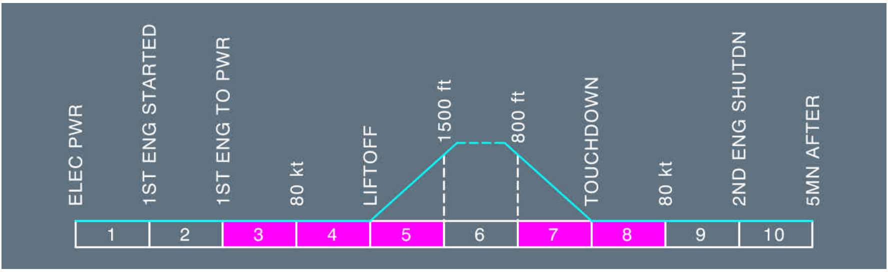
Ident.: PRO-ABN-W_A_ICE-AB-00024062.0002001 / 24 MAR 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the WING ANTI ICE pb-sw is set to ON and one wing anti ice valve remains closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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Ident.: PRO-ABN-W_A_ICE-AB-00024063.0002001 / 24 MAR 20

4

- **If one engine or one bleed is not operative:**

  X BLEED...OPEN

L2 *Note:* *The affected pack has to be selected OFF due to precooler performance.*

L1
- **If both engines and both bleeds are operative:**

  WING ANTI ICE...OFF

  AVOID ICING CONDITIONS

Continued on the following page

WING A.ICE SYS FAULT (Cont'd)

Ident.: PRO-ABN-W_A_ICE-AB-00024064.0002001 / 24 MAR 20

5

STATUS

- **If both engines and both bleeds are operative:**

  AVOID ICING CONDITIONS

  - **IF SEVERE ICE ACCRETION**

    MIN SPD..VLS +10/G DOT

    MANEUVER WITH CARE

    Note:
    - *In the case of severe ice accretion and with failed wing anti-ice, the AOA protections remain efficient,*
    - *Avoid large roll inputs at high AOA and high thrust setting. In the case of abnormal response in pitch or roll, release the backstick and reduce thrust.*

    LDG DIST PROC.. APPLY

INOP SYS

WING ANTI ICE (1)

(1) *(If both engines and both bleeds are operative)*

WING A.ICE SYS FAULT

Applicable to: MSN 01251

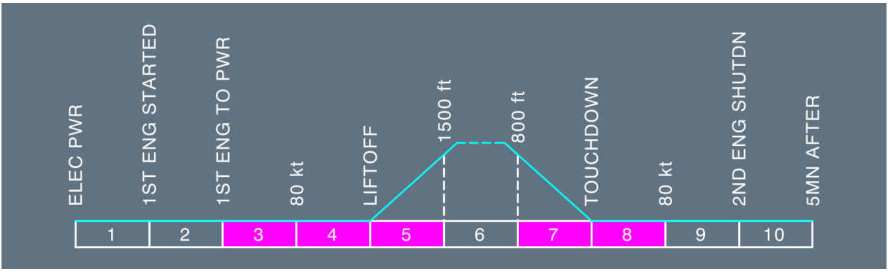
Ident.: PRO-ABN-W_A_ICE-AB-00024062.0002001 / 24 MAR 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the WING ANTI ICE pb-sw is set to ON and one wing anti ice valve remains closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
1
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9
10

Ident.: PRO-ABN-W_A_ICE-AB-00024063.0001001 / 10 MAY 21

- **If one engine or one bleed is not operative:**

  X BLEED...OPEN

L2 *Note: The affected pack has to be selected OFF due to precooler performance.*

L1
- **If both engines and both bleeds are operative:**

  WING ANTI ICE...OFF

  AVOID ICING CONDITIONS

  Note: If ice accretion, the speed must at or above:
  - *VLS +15 kt when in CONF 0, or*
  - *VLS +10 kt for other configurations.*

Continued on the following page

WING A.ICE SYS FAULT (Cont'd)

Ident.: PRO-ABN-W_A_ICE-AB-00024064.0006001 / 10 MAY 21

STATUS

- **If both engines and both bleeds are operative:**

  AVOID ICING CONDITIONS

  Note:
  - *In the case of severe ice accretion and with failed wing anti-ice, the AOA protections remain efficient,*
  - *Maneuver with care. Avoid large roll inputs at high AOA and high thrust setting. In the case of abnormal response in pitch or roll, release the backstick and reduce thrust.*

INOP SYS

WING ANTI ICE (1)

---

(1) *(If both engines and both bleeds are operative)*

WING A.ICE SYS FAULT

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

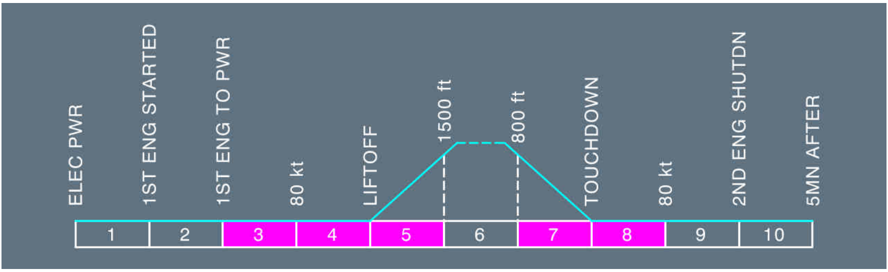
Ident.: PRO-ABN-W_A_ICE-AB-00024062.0002001 / 24 MAR 20

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the WING ANTI ICE pb-sw is set to ON and one wing anti ice valve remains closed.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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WINDSHEAR DET FAULT

Applicable to: MSN 01459

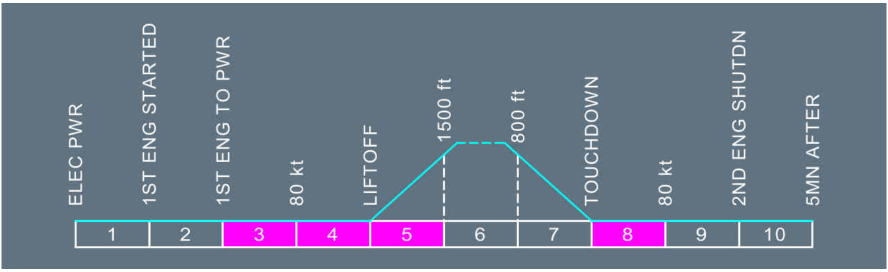
Ident.: PRO-ABN-W_S-M-00016997.0001001 / 21 MAR 16

ANNUNCIATIONS

Triggering Conditions:

L2 This alert triggers when the reactive windshear function is lost.

Flight Phase Inhibition:


ELEC PWR
1ST ENG STARTED
1ST ENG TO PWR
80 kt
LIFTOFF
1500 ft
800 ft
TOUCHDOWN
80 kt
2ND ENG SHUTDN
5MN AFTER
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Ident.: PRO-ABN-W_S-M-00010471.0001001 / 25 FEB 14

Crew awareness.

Ident.: PRO-ABN-W_S-M-00010472.0001001 / 05 JUN 18

STATUS

INOP SYS

WNDSHEAR DET

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GENERAL

Ident.: PRO-ABN-90-00010415.0001001 / 15 OCT 12
Applicable to: ALL

A successful outcome for an emergency situation depends, first of all, upon each crew member's perfect knowledge and execution of the duties assigned to him.
The captain should check frequently that all crew members know exactly their assigned positions and their specific duties, as well as the duties of the other crew members, in case of an abnormal or an emergency condition.
Since it is not possible to cover all the situations that may occur, the captain will be responsible for adapting the following instructions to obtain the best coordination of the emergency operation.
Should it be physically impossible for the captain to carry out his duties, another crew member will substitute for him according to the chain of command. The procedures in this manual are AIRBUS procedures and should be considered to be a reference.

COCKPIT-ASSIGNED DUTIES FOR EVACUATION

Ident.: PRO-ABN-90-00010416.0001001 / 03 NOV 21
Applicable to: ALL

■ **If it is NOT POSSIBLE to reach the passenger cabin:**

The flight crew member should evacuate the aircraft via the cockpit clearview windows, by using the escape ropes.

On ground, each flight crew member must help passengers, and direct them away from the aircraft.

■ **If it is POSSIBLE to reach the passenger cabin:**

CAPT	- Is the last person to leave the cockpit: Proceeds to the cabin, and helps with passenger evacuation, as necessary - Is the last person to leave the aircraft: Checks that all persons have evacuated the aircraft - Evacuates the aircraft, via the rear door, or any other available exit, if the flight crew cannot reach the rear door. - On ground, the flight crew takes command of operations until rescue units arrive.
F/O	- Proceeds to the cabin, and takes the emergency equipment. - Evacuates the aircraft, using any available exit. - Helps passengers on ground, and directs them away from the aircraft.

CABIN CREW-ASSIGNED AREAS FOR EVACUATION

1 Ident.: PRO-ABN-90-00010607.0004001 / 05 MAR 19
Applicable to: MSN 11531

Refer to CCOM/14-030 CABIN CREW-ASSIGNED AREAS FOR EVACUATION.

CABIN CREW-ASSIGNED AREAS FOR EVACUATION

Ident.: PRO-ABN-90-00010607.0001001 / 27 FEB 18
2 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

CABIN CREW DESIGNATION	ASSIGNED DOOR	ASSIGNED JUMPSEAT	ASSIGNED AREA
1 PURSER	DOOR 1 LH	FWD OUTBOARD	FWD/MID
1 CABIN CREW	DOOR 1 RH/LH	FWD INBOARD	FWD/MID
1 CABIN CREW	DOOR 4 RH	AFT CENTER	MID/AFT
1 CABIN CREW	DOOR 4 LH	REARWARD	MID/AFT

Note: *These procedures are established for the minimum required number of 4 cabin crews. At least, one crewmember must be seated on the center swivel cabin attendant seat (if installed).*

CABIN CREW-ASSIGNED AREAS FOR EVACUATION

Ident.: PRO-ABN-90-00010607.0003001 / 09 NOV 17
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04860, 05005, 05097, 05345

2 CABIN CREW FWD AND 1 AFT

CABIN CREW DESIGNATION	ASSIGNED DOOR	ASSIGNED JUMPSEAT	ASSIGNED AREA
1 PURSER	DOOR 1 RH	FWD INBOARD	FWD/MID
1 CABIN CREW	DOOR 1 LH	FWD OUTBOARD	FWD/MID
1 CABIN CREW	DOOR 4 RH/LH	AFT CENTER	MID/AFT

Note: *These procedures are established for the minimum required number of 3 cabin crew. For customized seating configurations above 150 passenger seats, the minimum required cabin crew is 4 (ORO CC 100). At least, one crewmember must be seated on the center swivel cabin attendant seat (if installed).*

1 CABIN CREW FWD AND 2 AFT

CABIN CREW DESIGNATION	ASSIGNED DOOR	ASSIGNED JUMPSEAT	ASSIGNED AREA
1 PURSER	DOOR 1 LH/ RH	FWD INBOARD	FWD/MID
1 CABIN CREW	DOOR 4 LH	AFT LH	MID/AFT
1 CABIN CREW	DOOR 4 RH	AFT CENTER	MID/AFT

Note: *These procedures are established for the minimum required number of 3 cabin crew.*
For customized seating configurations above 150 passenger seats, the minimum required cabin crew is 4 (ORO CC 100).
At least, one crewmember must be seated on the center swivel cabin attendant seat (if installed).

CABIN CREW-ASSIGNED AREAS FOR EVACUATION

Ident.: PRO-ABN-90-00010607.0002001 / 09 NOV 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

CABIN CREW DESIGNATION	ASSIGNED DOOR	ASSIGNED JUMPSEAT	ASSIGNED AREA
1 PURSER	DOOR 1 LH	FWD INBOARD	FWD/MID
1 CABIN CREW	DOOR 2	FWD/MID	FWD/MID
1 CABIN CREW	DOOR 3	AFT/MID	MID/AFT
1 CABIN CREW	DOOR 4 LH	AFT LH	MID/AFT
1 CABIN CREW	DOOR 4 RH	AFT RH	MID/AFT

Note: *The procedures are established for the minimum required number of 5 cabin crew.*
For customized seating configurations of 200 passengers seats or less, the minimum required cabin crew can be reduced to 4 (JAR-OPS 1.990).
When the minimum required cabin crew is reduced to 4, occupancy of AFT RH seat is not required.
However, one cabin crew must be seated on the center swivel cabin attendant seat (if installed).

COMMUNICATIONS

Ident.: PRO-ABN-90-00010418.0001001 / 27 FEB 18
Applicable to: ALL

1. EMERGENCY CALL

FROM	TO	COMMUNICATION METHOD(S)	REMARKS
COCKPIT	CABIN	- Press EMER pb-sw on the CALLS panel, or - Passenger Address (PA) System: "PURSER TO COCKPIT PLEASE!"	Purser must immediately go to the cockpit.
CABIN	COCKPIT	- Interphone: "PRIO CAPT"	Any cabin crewmember can make such a call. The cockpit crew must reply.

2. EMERGENCY ALERT

FROM	TO	COMMUNICATION METHOD(S)	REMARKS
COCKPIT	CABIN	- PA System: "ATTENTION CREW! AT STATIONS!"	The cockpit crew makes a short and precise announcement to warn that an emergency evacuation may soon be required. Cabin crews must proceed to their emergency stations.

3. NOTIFICATION TO PASSENGERS

FROM	TO	COMMUNICATION METHOD(S)	REMARKS
COCKPIT	CABIN	- SIGNS ON - PA System	For psychological reasons, the cockpit crew should be the first to inform of an intended emergency landing.
PURSER	CABIN	- CABIN LIGHTS 100 % - PA System	Purser informs passengers that they have to pay special attention to these warnings: - “FINISH PREPARATION” - “BRACE FOR IMPACT” - “EVACUATE, EVACUATE”

4. FINISH PREPARATION

FROM	TO	COMMUNICATION METHOD(S)	REMARKS
COCKPIT	CABIN	- Passenger Address (PA) System: "FINISH PREPARATION"	The cockpit crew gives this order a short time before an emergency landing.

5. BRACE FOR IMPACT

FROM	TO	COMMUNICATION METHOD(S)	REMARKS
COCKPIT	CABIN	- PA System: "BRACE FOR IMPACT!"	The cockpit crew announces to brace for impact approximately 1 min before landing.

6. INITIATE EVACUATION (RESTRICTED EXITS)

FROM	TO	COMMUNICATION METHOD(S)	REMARKS
COCKPIT	CABIN	- PA System: "EVACUATE, EVACUATE" - Activate EVAC signals ◁✳	The cockpit crew orders an immediate evacuation, and the cabin crew directs passengers to all available exists.
CABIN	COCKPIT AND CABIN	- EVAC SIGNAL SYSTEM ◁✳ on FWD ATTND panel (FAP) - PA System or megaphone	Used by the cabin crew, if there is no signal or order from the cockpit, and if it is unmistakably clear that the aircraft must be evacuated.
CABIN	CABIN	- Verbal	The cabin crew stands up and shouts: - "SEATBELTS OFF!" - "LEAVE EVERYTHING!" - "GET OUT!" - "COME THIS WAY!"

7. EVACUATION NOT REQUIRED

FROM	TO	COMMUNICATION METHOD(S)	REMARKS
COCKPIT	CABIN	- PA System: "CABIN CREW and PASSENGERS REMAIN SEATED!"	When the Captain decides that an evacuation is not required, the cockpit crew makes an immediate announcement to this effect.

ON GROUND EVACUATION

Applicable to: ALL

Ident.: PRO-ABN-90-A-00010419.0001001 / 16 JAN 18

COCKPIT CREW PROCEDURES

The cockpit crew notifies the cabin crew of the nature of the emergency, and states intentions. The cockpit crew uses the Passenger Address system to make an appropriate announcement, such as: “EVACUATE, EVACUATE”, and presses the EVAC COMMAND pb.

Ident.: PRO-ABN-90-A-00010420.0001001 / 26 JAN 18

CABIN CREW PROCEDURES

When the cabin receives the order to evacuate, each cabin crewmember must proceed as follows:

STAND UP AND SHOUT..“UNFASTEN SEATBELTS”
OUTSIDE CONDITIONS...CHECK

■ **If outside conditions are safe:**

DOOR IN ARMED POSITION...OPEN FIRMLY
SHOUT..“COME THIS WAY”

● **If the door does not open automatically:**

DOOR..PUSH AND OPEN MANUALLY

SLIDE (or SLIDERAFT) DEPLOYMENT.....................................CHECK FULL DEPLOYMENT

It takes approximately 4 s for the slide (or slideraft) to deploy.

● **If the slide (or slideraft) does not automatically inflate:**

RED, MANUAL INFLATION HANDLE...PULL

The red, manual inflation handle is located on the right-hand side of the slide (or slideraft) girt extension.

ORDER...“EVACUATE, EVACUATE”
PASSENGER EVACUATION ....EXPEDITE

● **If the slide (or slideraft) becomes unserviceable:**

PASSENGER EVACUATION..STOP
PASSENGERS TO ANOTHER USABLE EXIT...REDIRECT

TOTAL ZONE EVACUATION..CHECK
CABIN CREW... EVACUATE
PASSENGERS AWAY FROM THE AIRCRAFT...DIRECT

■ **If outside conditions are unsafe:**

EXIT DOOR...BLOCK
PASSENGERS TO NEAREST USABLE EXIT...REDIRECT

COCKPIT EVACUATION THROUGH WINDOW

Applicable to: ALL

Ident.: PRO-ABN-90-B-00010421.0001001 / 05 AUG 10

OPENING THE SLIDING WINDOW

HANDLE.......................................PUSH DOWN AND PULL BACK

Pulling the handle backwards, opens the sliding window.

Ident.: PRO-ABN-90-B-00010422.0001001 / 24 NOV 15

COCKPIT EVACUATION WITH ESCAPE ROPE

ESCAPE ROPE STOWAGE.......................................OPEN

The escape rope stowage is located above the sliding window, on either side of the overhead panel.

ESCAPE ROPE.......................................UNROLL

Unroll the escape rope, and throw it through the window.

SEAT.......................................STEP ON
ESCAPE ROPE.......................................GRASP

Grasp the escape rope firmly with both hands, and slide down along the rope.

EVACUATION ON WATER

Ident.: PRO-ABN-90-C-00010423.0001001 / 05 AUG 10

3 **Applicable to: MSN 01143-01158, 01459, 02321, 02734-02924, 03032-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04544, 04734-04773, 04953-05345, 05591-05883, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

CABIN CREW RESPONSIBLE FOR TYPE "I" DOORS

When the cabin receives the order to evacuate, each cabin crewmember must proceed as follows:

CHILDREN LIFEVESTS.......................................DISTRIBUTE
STAND UP AND SHOUT..........“UNFASTEN SEATBELTS – PUT ON YOUR LIFEVEST”

Inflate the lifevest, only once outside the aircraft.

ORDER.......................................“REMOVE SHOES”

- **If the Type I door is usable:**
  DOOR IN ARMED POSITION.......................................OPEN
  SLIDE.......................................DEPLOY
  RED, MANUAL INFLATION HANDLE.......................................PULL

  Do not wait for automatic inflation of the slide.

■ **If the water level is close to the door sill:**

The slide inflates on the water.

SLIDE....................LEAVE ATTACHED TO CABIN FLOOR
PASSENGER LIFEVESTS....................INFLATE WHEN EVACUATING AIRCRAFT
PASSENGERS....................EVACUATE

Evacuate passengers into the water. The slide is used as a flotation device.

TOTAL ZONE EVACUATION....................CHECK
LAST CREWMEMBER....................EVACUATE
SLIDE....................SEPARATE FROM DOOR SILL

The last crewmember must separate the slide from the door sill.

MOORING LINE....................CUT

■ **If the water level is too far away from the door sill:**
SLIDE....................DISCONNECT FROM DOOR SILL

The slide remains tied to the aircraft by a 6 m (20 ft) mooring line.

MOORING LINE....................HOLD

To keep the slide close to the exit, hold the mooring line.

PASSENGER LIFEVESTS....................INFLATE WHEN EVACUATING AIRCRAFT
PASSENGERS....................EVACUATE

Evacuate passengers into the water. The slide is used as a flotation device.

TOTAL ZONE EVACUATION....................CHECK
LAST CREWMEMBER....................EVACUATE
MOORING LINE....................CUT

Ident.: PRO-ABN-90-C-00010423.0002001 / 17 MAR 11
Applicable to: MSN 01246-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 03002, 03222-03229, 03294, 03761-03816, 04352-04358, 04563-04662, 04827-04860, 05528, 05947-05987, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

CABIN CREW RESPONSIBLE FOR TYPE "I" DOORS

When the cabin receives the order to evacuate, each cabin crewmember must proceed as follows:

CHILDREN LIFEVESTS....................DISTRIBUTE
STAND UP AND SHOUT....................“UNFASTEN SEATBELTS – PUT ON YOUR LIFEVEST”

Inflate the lifevest, only once outside the aircraft.

ORDER....................“REMOVE SHOES”

● **If the Type I door is usable:**
DOOR IN ARMED POSITION....................OPEN
SLIDERAFT....................DEPLOY

RED, MANUAL INFLATION HANDLE.......... PULL

Do not wait for automatic inflation of the slideraft.

- **If the water level is close to the door sill:**

The slideraft inflates on the water.

SLIDERAFT.......... LEAVE ATTACHED TO CABIN FLOOR
PASSENGER LIFEVESTS.......... INFLATE WHEN BOARDING SLIDERAFT
PASSENGERS.......... BOARD SLIDERAFT
TOTAL ZONE EVACUATION.......... CHECK
LAST CREWMEMBER.......... BOARD SLIDERAFT
SLIDERAFT.......... SEPARATE FROM DOOR SILL

The last crewmember must separate the slideraft from the door sill, and board with all the necessary safety equipment.

MOORING LINE.......... CUT
SURVIVAL KIT.......... RETRIEVE

The survival kit is attached to the slideraft via a lanyard.

- **If the water level is too far away from the door sill:**

SLIDERAFT.......... DISCONNECT FROM DOOR SILL

The slideraft remains tied to the aircraft by a 6 m (20 ft) mooring line.

MOORING LINE.......... HOLD

To keep the slideraft close to the exit, hold the mooring line.

PASSENGER LIFEVESTS.......... INFLATE WHEN BOARDING SLIDERAFT
PASSENGERS.......... BOARD SLIDERAFT
TOTAL ZONE EVACUATION.......... CHECK
LAST CREWMEMBER.......... BOARD SLIDERAFT

The last crewmember must board with all the necessary safety equipment.

MOORING LINE.......... CUT
SURVIVAL KIT.......... RETRIEVE

The survival kit is attached to the slideraft via a lanyard.

Note: *Evacuation is usually done through the passenger doors. However, if one of the passenger doors is not usable, the overwing exit may be used for evacuation. The cabin crew should install the lifeline to help passenger to stay on the wing. These passengers will, however, be obliged to wait on the wing until the slideraft arrives, and until all other passengers have evacuated from the passenger door exits, and have finished boarding the sliderafts.*

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PROCEDURES

NORMAL PROCEDURES

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1

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15 Taxi....................A

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17 Before Takeoff....................A

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18 Takeoff....................A

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			Documentation update: The "Exterior Walkaround - ENG 1 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Preliminary Cockpit Preparation - EFB/ACARS Initialization" table of content entry moved from "NG01998" to "AIL-00001871"
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			Documentation update: The "Aircraft Configuration for Approach" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP)" table of content entry moved from "NG02002" to "AIL-00001874"
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			Documentation update: The "Engine Start" table of content entry moved from "NP05794" to "AIL-00001870"
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			Documentation update: The "After Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Exterior Walkaround - ENG 1 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "After Start For One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
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			Documentation update: The "Before Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
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			Documentation update: The "Descent Preparation" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Overhead Panel - RCDR" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "Manual Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Automatic Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Go Around (With FD On)" table of content entry moved from "NP05794" to "AIL-00001870"
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			Documentation update: The "Overhead Panel - Air Cond" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: Deletion of the "NP02582 Standard Operating Procedures" table of content entry.
			Documentation update: The "Overhead Panel - Fuel" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "CTR Instrument Panel - STBY Instrument " table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - ISIS" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - Clock" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "Pedestal - Cockpit Door " table of content entry moved from "NG00854" to "AIL-00001815"
			Documentation update: The "EFB/ACARS Init - FMGS Pre-Initialization - FM Database Validity" table of content entry moved from "NG01252" to "AIL-00001808"

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			Documentation update: The "FMGS Preparation - FM Database Validity" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - NAVAID Deselection" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - ADIRS Position Initialization" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - RNP Insertion (PROG page)" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "ATC Datalink Communication" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "Instrument Panels" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "At Pushback/Start Clearance - Windows and Doors" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "At Pushback/Start Clearance - NW STRG DISC" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "One Engine Taxi Procedure" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Automatic Engine Start" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Before Walkaround - ECAM Pages" table of content entry moved from "NG00709" to "AIL-00001809"
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			Documentation update: The "After Start - Flow Pattern" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Mode Selector" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - Dual Cooling" table of content entry moved from "NG00714" to "AIL-00001823"
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			Documentation update: The "Taxi - ENG Mode Selector" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Before Walkaround - Alternate Braking System" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Taxi - Radar" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Departure Change" table of content entry moved from "NP05905" to "AIL-00001826"
			Documentation update: The "Before Takeoff - Exterior Lights" table of content entry moved from "NG00745" to "AIL-00001828"
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			Documentation update: The "After Takeoff - ENG MODE Selector" table of content entry moved from "NG00706" to "AIL-00001832"
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			Documentation update: Deletion of the "NP02609 Standard Callouts" table of content entry.
			Documentation update: The "Climb - At the Transition Altitude" table of content entry moved from "NG00723" to "AIL-00001834"
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			Documentation update: The "Descent Preparation - RUNWAY CONDITION" table of content entry moved from "NG00916" to "AIL-00001838"
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			Documentation update: The "Cross-Reference Table" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Stabilization Criteria" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Initial Approach - Radar" table of content entry moved from "NG01260" to "AIL-00001844"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At Green Dot Speed" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Approach using LOC G/S Guidance - Final Approach" table of content entry moved from "NG01262" to "AIL-00001847"
			Documentation update: The "Approach using FINAL APP Guidance - General" table of content entry moved from "NG01263" to "AIL-00001848"
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			Documentation update: The "Exterior Walkaround - Lower Center Fuselage" table of content entry moved from "NG00744" to "AIL-00001811"
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			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft" table of content entry moved from "NG01273" to "AIL-00001849"
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			Documentation update: The "Approach using FPA Guidance - At Entered Minimum" table of content entry moved from "NG01265" to "AIL-00001850"
			Documentation update: The "Visual Approach - General" table of content entry moved from "NG01267" to "AIL-00001853"
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			Documentation update: The "Landing - At Touchdown" table of content entry moved from "NG00743" to "AIL-00001855"
			Documentation update: The "Autoland - At Touch Down" table of content entry moved from "NG01757" to "AIL-00001856"
			Documentation update: The "Go Around with FD - Go Around Initiation" table of content entry moved from "NG00919" to "AIL-00001858"
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			Documentation update: The "After Landing - Flaps" table of content entry moved from "NG00985" to "AIL-00001860"
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			Documentation update: The "After Landing - ATC" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Anti-Ice Protection" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Brake Temperature" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Exterior Walkaround - ENG 2 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "After Landing - Single Engine Taxi" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "Parking - General" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - ENG MASTER Levers" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Fuel Pumps" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Severe Icing Conditions" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Securing the Aircraft - ADIRS" table of content entry moved from "NG00742" to "AIL-00001864"
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			Documentation update: The "Approach" table of content entry moved from "NG01819" to "AIL-00001868"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Landing" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Summary for Each Phase - Taxi" table of content entry moved from "NG00990" to "AIL-00001869"
PRO-NOR-PLP-TOC Flight Preparation		2	Documentation update: The "GPS PRIMARY Availability (If Installed)" table of content entry moved from "NP02584" to "AIL-00001802"
PRO-NOR-PLP-TOC Preliminary Cockpit Preparation		3	Documentation update: The "ADIRS" table of content entry moved from "NP02586" to "AIL-00001805"
PRO-NOR-PLP-TOC EFB/ACARS (If Installed) Initialization		4	Documentation update: The "EFB/ACARS Init - FMGS Pre-Initialization - FM Database Validity" table of content entry moved from "NG01252" to "AIL-00001808"
PRO-NOR-PLP-TOC Before Walkaround		5	Documentation update: The "Before Walkaround - ECAM Pages" table of content entry moved from "NG00709" to "AIL-00001809"
			Documentation update: The "Before Walkaround - Alternate Braking System" table of content entry moved from "NG00709" to "AIL-00001809"
PRO-NOR-PLP-TOC Exterior Walkaround		6	Documentation update: The "Exterior Walkaround - ENG 1 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Exterior Walkaround - ENG 1 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Exterior Walkaround - Lower Center Fuselage" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Exterior Walkaround - ENG 2 LH Side" table of content entry moved from "NG00744" to "AIL-00001811"
			Documentation update: The "Exterior Walkaround - ENG 2 RH Side" table of content entry moved from "NG00744" to "AIL-00001811"
PRO-NOR-PLP-TOC Cockpit Preparation		7	Documentation update: The "ATC Datalink Communication" table of content entry moved from "NP02588" to "AIL-00001812"
			Documentation update: The "Instrument Panels" table of content entry moved from "NP02588" to "AIL-00001812"
PRO-NOR-PLP-TOC Overhead Panel		8	Documentation update: The "Overhead Panel - RCDR" table of content entry moved from "NG00846" to "AIL-00001813"
			Documentation update: The "Overhead Panel - Air Cond" table of content entry moved from "NG00846" to "AIL-00001813"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Overhead Panel - Fuel" table of content entry moved from "NG00846" to "AIL-00001813"
PRO-NOR-PLP-TOC CTR Instrument Panel		9	Documentation update: The "CTR Instrument Panel - STBY Instrument " table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - ISIS" table of content entry moved from "NG00852" to "AIL-00001814"
			Documentation update: The "CTR Instrument Panel - Clock" table of content entry moved from "NG00852" to "AIL-00001814"
PRO-NOR-PLP-TOC Pedestal		10	Documentation update: The "Pedestal - Cockpit Door " table of content entry moved from "NG00854" to "AIL-00001815"
PRO-NOR-PLP-TOC FMGS Preparation		11	Documentation update: The "FMGS Preparation - FM Database Validity" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - NAVAID Deselection" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - ADIRS Position Initialization" table of content entry moved from "NG00864" to "AIL-00001816"
			Documentation update: The "FMGS Preparation - RNP Insertion (PROG page)" table of content entry moved from "NG00864" to "AIL-00001816"
PRO-NOR-PLP-TOC At Pushback/Start Clearance		12	Documentation update: The "At Pushback/Start Clearance - Windows and Doors" table of content entry moved from "NG00713" to "AIL-00001820"
			Documentation update: The "At Pushback/Start Clearance - NW STRG DISC" table of content entry moved from "NG00713" to "AIL-00001820"
PRO-NOR-PLP-TOC Engine Start		13	Documentation update: The "One Engine Taxi Procedure" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Automatic Engine Start" table of content entry moved from "NP02590" to "AIL-00001821"
			Documentation update: The "Ground Run Up - Danger Areas" table of content entry moved from "NP02590" to "AIL-00001821"
PRO-NOR-PLP-TOC After Start		14	Documentation update: The "After Start - Flow Pattern" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Mode Selector" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - Dual Cooling" table of content entry moved from "NG00714" to "AIL-00001823"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "After Start - APU Bleed" table of content entry moved from "NG00714" to "AIL-00001823"
			Documentation update: The "After Start - ENG Anti-Ice" table of content entry moved from "NG00714" to "AIL-00001823"
PRO-NOR-PLP-TOC Taxi		15	Documentation update: The "Taxi - Brakes" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - Engine 2 Start" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - ENG Mode Selector" table of content entry moved from "NG00715" to "AIL-00001825"
			Documentation update: The "Taxi - Radar" table of content entry moved from "NG00715" to "AIL-00001825"
PRO-NOR-PLP-TOC Departure Change		16	Documentation update: The "Departure Change" table of content entry moved from "NP05905" to "AIL-00001826"
PRO-NOR-PLP-TOC Before Takeoff		17	Documentation update: The "Before Takeoff - Exterior Lights" table of content entry moved from "NG00745" to "AIL-00001828"
			Documentation update: The "Before Takeoff - RNP AR Departure Check" table of content entry moved from "NG00745" to "AIL-00001828"
PRO-NOR-PLP-TOC Takeoff		18	Documentation update: The "Takeoff - Thrust Setting" table of content entry moved from "NG00917" to "AIL-00001830"
			Documentation update: The "Takeoff - Above Acceleration Altitude (or Once in Climb Phase)" table of content entry moved from "NG00917" to "AIL-00001830"
PRO-NOR-PLP-TOC After Takeoff		19	Documentation update: The "After Takeoff - ENG MODE Selector" table of content entry moved from "NG00706" to "AIL-00001832"
			Documentation update: The "After Takeoff - Anti-Ice Protection" table of content entry moved from "NG00706" to "AIL-00001832"
PRO-NOR-PLP-TOC Climb		20	Documentation update: The "Climb - At the Transition Altitude" table of content entry moved from "NG00723" to "AIL-00001834"
			Documentation update: The "Climb - Radar" table of content entry moved from "NG00723" to "AIL-00001834"
PRO-NOR-PLP-TOC Cruise		21	Documentation update: The "Cruise - Radar Tilt" table of content entry moved from "NG00734" to "AIL-00001836"
PRO-NOR-PLP-TOC Descent Preparation		22	Documentation update: The "Descent Preparation - FMGS - PERF APPR - PERF GO AROUND" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - FMGS - RADIO NAV" table of content entry moved from "NG00916" to "AIL-00001838"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Descent Preparation - RUNWAY CONDITION" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Radar" table of content entry moved from "NG00916" to "AIL-00001838"
			Documentation update: The "Descent Preparation - Anti-Ice Protection" table of content entry moved from "NG00916" to "AIL-00001838"
PRO-NOR-PLP-TOC Approach General		23	Documentation update: The "Cross-Reference Table" table of content entry moved from "NP03173" to "AIL-00001842"
			Documentation update: The "Stabilization Criteria" table of content entry moved from "NP03173" to "AIL-00001842"
PRO-NOR-PLP-TOC Initial Approach		24	Documentation update: The "Initial Approach - Radar" table of content entry moved from "NG01260" to "AIL-00001844"
PRO-NOR-PLP-TOC Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches		25	Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At Green Dot Speed" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2" table of content entry moved from "AIL-00000005" to "AIL-00001845"
			Documentation update: The "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE" table of content entry moved from "AIL-00000005" to "AIL-00001845"
PRO-NOR-PLP-TOC Approach using LOC G/S Guidance		26	Documentation update: The "Approach using LOC G/S Guidance - Final Approach" table of content entry moved from "NG01262" to "AIL-00001847"
PRO-NOR-PLP-TOC Approach using FINAL APP Guidance		27	Documentation update: The "Approach using FINAL APP Guidance - General" table of content entry moved from "NG01263" to "AIL-00001848"
			Documentation update: The "Approach using FINAL APP Guidance - At Entered Minimum" table of content entry moved from "NG01263" to "AIL-00001848"
PRO-NOR-PLP-TOC Approach using FINAL APP Guidance for RNAV(RNP)		28	Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - General" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Aircraft Equipment" table of content entry moved from "NG01273" to "AIL-00001849"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Flight Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Descent" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Engine Failure" table of content entry moved from "NG01273" to "AIL-00001849"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP) - Management of Degraded Navigation" table of content entry moved from "NG01273" to "AIL-00001849"
PRO-NOR-PLP-TOC Approach using FPA Guidance		29	Documentation update: The "Approach using FPA Guidance - At Entered Minimum" table of content entry moved from "NG01265" to "AIL-00001850"
PRO-NOR-PLP-TOC Visual Approach		30	Documentation update: The "Visual Approach - General" table of content entry moved from "NG01267" to "AIL-00001853"
PRO-NOR-PLP-TOC Manual Landing		31	Documentation update: The "Landing - At Touchdown" table of content entry moved from "NG00743" to "AIL-00001855"
PRO-NOR-PLP-TOC Autoland		32	Documentation update: The "Autoland - At Touch Down" table of content entry moved from "NG01757" to "AIL-00001856"
PRO-NOR-PLP-TOC Go Around with FD		33	Documentation update: The "Go Around with FD - Go Around Initiation" table of content entry moved from "NG00919" to "AIL-00001858"
PRO-NOR-PLP-TOC After Landing		34	Documentation update: The "After Landing - Predictive Windshear" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Flaps" table of content entry moved from "NG00985" to "AIL-00001860"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "After Landing - TCAS" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - ATC" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Anti-Ice Protection" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Brake Temperature" table of content entry moved from "NG00985" to "AIL-00001860"
			Documentation update: The "After Landing - Single Engine Taxi" table of content entry moved from "NG00985" to "AIL-00001860"
PRO-NOR-PLP-TOC Parking		35	Documentation update: The "Parking - General" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - ENG MASTER Levers" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Fuel Pumps" table of content entry moved from "NG00986" to "AIL-00001862"
			Documentation update: The "Parking - Severe Icing Conditions" table of content entry moved from "NG00986" to "AIL-00001862"
PRO-NOR-PLP-TOC Securing the Aircraft		36	Documentation update: The "Securing the Aircraft - ADIRS" table of content entry moved from "NG00742" to "AIL-00001864"
			Documentation update: The "Securing the Aircraft - EMER Lights and Signs" table of content entry moved from "NG00742" to "AIL-00001864"
PRO-NOR-PLP-TOC Flight Parameters		37	Documentation update: The "Approach" table of content entry moved from "NG01819" to "AIL-00001868"
			Documentation update: The "Landing" table of content entry moved from "NG01819" to "AIL-00001868"
PRO-NOR-PLP-TOC Summary for Each Phase		38	Documentation update: The "Summary for Each Phase - Taxi" table of content entry moved from "NG00990" to "AIL-00001869"
PRO-NOR-PLP-TOC Tasksharing		39	Documentation update: The "Engine Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Engine Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start For One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Start For One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "One Engine Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "One Engine Taxi SETWA" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Taxi" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Before Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "After Takeoff" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Climb" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Cruise" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Descent Preparation" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Manual Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Automatic Landing" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Go Around (With FD On)" table of content entry moved from "NP05794" to "AIL-00001870"
			Documentation update: The "Parking" table of content entry moved from "NP05794" to "AIL-00001870"
PRO-NOR-PLP-TOC Preliminary Cockpit Preparation		40	Documentation update: The "Preliminary Cockpit Preparation - EFB/ACARS Initialization" table of content entry moved from "NG01998" to "AIL-00001871"
			Documentation update: The "Preliminary Cockpit Preparation - Before Walkaround" table of content entry moved from "NG01998" to "AIL-00001871"
PRO-NOR-PLP-TOC Cockpit Preparation		41	Documentation update: The "Cockpit Preparation - Pedestal" table of content entry moved from "NG01999" to "AIL-00001872"
PRO-NOR-PLP-TOC Approach		42	Documentation update: The "Aircraft Configuration for Approach" table of content entry moved from "NG02002" to "AIL-00001874"
			Documentation update: The "Approach using FINAL APP Guidance for RNAV(RNP)" table of content entry moved from "NG02002" to "AIL-00001874"

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Localization Title	Toc Index	ID	Reason
			Documentation update: The "Approach using FINAL APP Guidance" table of content entry moved from "NG02002" to "AIL-00001874"
PRO-NOR-SOP-01 Foreword	A	1	Documentation update: Addition of "Foreword" documentary unit
PRO-NOR-SOP-01 Golden Rules for Pilots	B	2	Documentation update: Addition of "Golden Rules for Pilots" documentary unit
PRO-NOR-SOP-01 Airlines Policy	C	3	Documentation update: Addition of "Airlines Policy" documentary unit
PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)	A	1	**Addition of RNP2 and RNP4 in order to be consistent with all RNP operations.** **Addition of abbreviation tags in order to comply with Airbus**
PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)	A	3	**Addition of abbreviation tags in order to comply with Airbus** **Addition of RNP2 and RNP4 in order to be consistent with all RNP operations.**
PRO-NOR-SOP-03 Safety Exterior Inspection - General	A	1	Documentation update: Addition of "Safety Exterior Inspection - General" documentary unit
PRO-NOR-SOP-03 Safety Exterior Inspection - Wheel Chocks	A	2	Documentation update: Addition of "Safety Exterior Inspection - Wheel Chocks" documentary unit
PRO-NOR-SOP-03 Safety Exterior Inspection - Landing Gear Doors	A	3	Documentation update: Addition of "Safety Exterior Inspection - Landing Gear Doors" documentary unit
PRO-NOR-SOP-03 Safety Exterior Inspection - APU Area	A	4	Documentation update: Addition of "Safety Exterior Inspection - APU Area" documentary unit
PRO-NOR-SOP-04 General	A	1	Documentation update: Addition of "General" documentary unit
PRO-NOR-SOP-04 General	B	2	Documentation update: Addition of "General" documentary unit
PRO-NOR-SOP-04 Aircraft Power Up - ENG	B	3	Documentation update: Addition of "Aircraft Power Up - ENG" documentary unit
PRO-NOR-SOP-04 Aircraft Power Up - Weather Radar	B	4	Documentation update: Addition of "Aircraft Power Up - Weather Radar" documentary unit
PRO-NOR-SOP-04 Aircraft Power Up - L/G	B	5	Documentation update: Addition of "Aircraft Power Up - L/G" documentary unit
PRO-NOR-SOP-04 Aircraft Power Up - Wipers	B	6	Documentation update: Addition of "Aircraft Power Up - Wipers" documentary unit
PRO-NOR-SOP-04 Batteries Check/External Power	C	7	Documentation update: Addition of "Batteries Check/External Power" documentary unit
PRO-NOR-SOP-04 RMP	D	8	Documentation update: Addition of "RMP" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-04 APU Fire Test/Start - APU fire	D	9	Documentation update: Addition of "APU Fire Test/Start - APU fire" documentary unit
PRO-NOR-SOP-04 APU Fire Test/Start - APU Start	D	10	Documentation update: Addition of "APU Fire Test/Start - APU Start" documentary unit
PRO-NOR-SOP-04 ADIRS	E	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-04 ADIRS	E	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-04 ADIRS	F	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-04 Cockpit Lights	G	15	Documentation update: Addition of "Cockpit Lights" documentary unit
PRO-NOR-SOP-04 EFB Initialization	H	16	Documentation update: Addition of "EFB Initialization" documentary unit
PRO-NOR-SOP-04 EFB/ACARS Init - ACARS Initialization	H	17	Documentation update: Addition of "EFB/ACARS Init - ACARS Initialization" documentary unit
PRO-NOR-SOP-04 FMGS Pre-Initialization - General	H	18	Documentation update: Addition of "FMGS Pre-Initialization - General" documentary unit
PRO-NOR-SOP-04 FMGS Pre-Initialization - Engine and Aircraft Type	H	19	Documentation update: Addition of "FMGS Pre-Initialization - Engine and Aircraft Type" documentary unit
PRO-NOR-SOP-04 FMGS Pre-Initialization - FLT NBR - FROM/TO	H	20	Documentation update: Addition of "FMGS Pre-Initialization - FLT NBR - FROM/TO" documentary unit
PRO-NOR-SOP-04 EFB STATUS Page	H	21	Documentation update: Addition of "EFB STATUS Page" documentary unit
PRO-NOR-SOP-04 AIRCRAFT ACCEPTANCE	I	22	Documentation update: Addition of "AIRCRAFT ACCEPTANCE" documentary unit
PRO-NOR-SOP-04 Preliminary Performance Determination	J	23	Documentation update: Addition of "Preliminary Performance Determination" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - F/CTL	K	24	Documentation update: Addition of "Before Walk-Around - F/CTL" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - Parking Brake	K	25	Documentation update: Addition of "Before Walk-Around - Parking Brake" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-04 Before Walk-Around - Alternate Braking System	K	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
			Removal of the condition "before the first flight of the day" when checking the alternate braking system because the check must be done after each flight crew change.
PRO-NOR-SOP-04 Before Walk-Around - Emergency Equipment	K	27	Documentation update: Addition of "Before Walk-Around - Emergency Equipment" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - Rain Repellent ◁✳	K	28	Documentation update: Addition of "Before Walk-Around - Rain Repellent" documentary unit
PRO-NOR-SOP-04 Before Walk-Around - Rear and Overhead Circuit Breakers Panels	K	29	Documentation update: Addition of "Before Walk-Around - Rear and Overhead Circuit Breakers Panels" documentary unit
PRO-NOR-SOP-04 Before Walkaround - Landing Gear Pins	K	30	Documentation update: Addition of "Before Walkaround - Landing Gear Pins" documentary unit
PRO-NOR-SOP-05 General	A	1	Documentation update: Addition of "General" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - Schematic	B	2	Documentation update: Addition of "Exterior Walk-Around - Schematic" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH FWD Fuselage	B	3	Documentation update: Addition of "Exterior Walk-Around - LH FWD Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - Nose Section	B	4	Documentation update: Addition of "Exterior Walk-Around - Nose Section" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - Nose L/G	B	5	Documentation update: Addition of "Exterior Walk-Around - Nose L/G" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH FWD Fuselage	B	6	Documentation update: Addition of "Exterior Walk-Around - RH FWD Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH Center Wing	B	7	Documentation update: Addition of "Exterior Walk-Around - RH Center Wing" documentary unit
PRO-NOR-SOP-05 Exterior WalkAround RH Wing Leading Edge	B	8	Documentation update: Addition of "Exterior WalkAround RH Wing Leading Edge" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH Wing Trailing Edge	B	9	Documentation update: Addition of "Exterior Walk-Around - RH Wing Trailing Edge" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-05 Exterior Walk-Around - RH L/G and Fuselage	B	10	Documentation update: Addition of "Exterior Walk-Around - RH L/G and Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - RH AFT Fuselage	B	11	Documentation update: Addition of "Exterior Walk-Around - RH AFT Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - TAIL	B	12	Documentation update: Addition of "Exterior Walk-Around - TAIL" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - APU	B	13	Documentation update: Addition of "Exterior Walk-Around - APU" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH AFT Fuselage	B	14	Documentation update: Addition of "Exterior Walk-Around - LH AFT Fuselage" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Landing Gear	B	15	Documentation update: Addition of "Exterior Walk-Around - LH Landing Gear" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Wing Trailing Edge	B	16	Documentation update: Addition of "Exterior Walk-Around - LH Wing Trailing Edge" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Wing Leading Edge	B	17	Documentation update: Addition of "Exterior Walk-Around - LH Wing Leading Edge" documentary unit
PRO-NOR-SOP-05 Exterior Walk-Around - LH Center Wing	B	18	Documentation update: Addition of "Exterior Walk-Around - LH Center Wing" documentary unit
PRO-NOR-SOP-06 General	A	1	Documentation update: Addition of "General" documentary unit
PRO-NOR-SOP-06 Flow Pattern	B	2	Documentation update: Addition of "Flow Pattern" documentary unit
PRO-NOR-SOP-06 Overhead Panel - White Lights On Overhead Panel	C	3	Documentation update: Addition of "Overhead Panel - White Lights On Overhead Panel" documentary unit
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-06 Overhead Panel - RCDR	C	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - EVAC	C	9	Documentation update: Addition of "Overhead Panel - EVAC" documentary unit
PRO-NOR-SOP-06 Overhead Panel - EXTERIOR LIGHTS	C	10	Documentation update: Addition of "Overhead Panel - EXTERIOR LIGHTS" documentary unit
PRO-NOR-SOP-06 Overhead Panel - SIGNS	C	11	Documentation update: Addition of "Overhead Panel - SIGNS" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Probe/Window Heat	C	12	Documentation update: Addition of "Overhead Panel - Probe/Window Heat" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Cabin Press	C	13	Documentation update: Addition of "Overhead Panel - Cabin Press" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Air Cond	C	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Air Cond	C	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Air COND	C	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Elec	C	17	Documentation update: Addition of "Overhead Panel - Elec" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Fuel	C	18	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - Fuel	C	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Overhead Panel - ENG 1- ENG 2 Fire	C	20	Documentation update: Addition of "Overhead Panel - ENG 1- ENG 2 Fire" documentary unit
PRO-NOR-SOP-06 Overhead Panel - Audio Switching Panel	C	21	Documentation update: Addition of "Overhead Panel - Audio Switching Panel" documentary unit
PRO-NOR-SOP-06 Cargo Heat	C	22	Documentation update: Addition of "Cargo Heat" documentary unit
PRO-NOR-SOP-06	C	23	Documentation update: Addition of "Overhead Panel - Third Occupant Audio Control Panel" documentary unit

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Localization Title	Toc Index	ID	Reason
Overhead Panel - Third Occupant Audio Control Panel			
PRO-NOR-SOP-06 Overhead Panel - Maintenance Panel	C	24	Documentation update: Addition of "Overhead Panel - Maintenance Panel" documentary unit
PRO-NOR-SOP-06 CTR Instrument Panel - STBY Instrument	D	25	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrumental Panel - ISIS	D	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrument Panel - Clock	D	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrument Panel - Clock	D	28	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 CTR Instrument Panel - Nosewheel Steering	D	29	Documentation update: Addition of "CTR Instrument Panel - Nosewheel Steering" documentary unit
PRO-NOR-SOP-06 Pedestal - ACP	E	30	Documentation update: Addition of "Pedestal - ACP" documentary unit
PRO-NOR-SOP-06 Pedestal - Parking BRK	E	31	Documentation update: Addition of "Pedestal - Parking BRK" documentary unit
PRO-NOR-SOP-06 Pedestal - Cockpit Door	E	32	**Addition of CKPT DOOR sw in order to harmonize with tasksharing.**
			Wording enhancement. No technical change.
			Removal of abbreviation tag in order to comply with the Airbus authoring policy.
			Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.
PRO-NOR-SOP-06 Pedestal - Switching Panel	E	33	Documentation update: Addition of "Pedestal - Switching Panel" documentary unit
PRO-NOR-SOP-06 Pedestal - Engines	E	34	Documentation update: Addition of "Pedestal - Engines" documentary unit
PRO-NOR-SOP-06 Pedestal - Gravity Gear EXTN	E	35	Documentation update: Addition of "Pedestal - Gravity Gear EXTN" documentary unit
PRO-NOR-SOP-06 Pedestal - ATC	E	36	Documentation update: Addition of "Pedestal - ATC" documentary unit
PRO-NOR-SOP-06 RMP	F	37	Documentation update: Addition of "RMP" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-06 FMGS Initialization - General	H	38	Documentation update: Addition of "FMGS Initialization - General" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - Engine and Aircraft Type	H	39	Documentation update: Addition of "FMGS Initialization - Engine and Aircraft Type" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - FM Database Validity	H	40	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - FM Database Validity	H	41	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - NAVAID Deselection	H	42	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - NAVAID Deselection	H	43	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - NAVAID Deselection	H	44	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - Flight Plan Initialization	H	45	Documentation update: Addition of "FMGS Initialization - Flight Plan Initialization" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - ADIRS Position Initialization	H	46	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - ADIRS Position Initialization	H	47	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Initialization - Active F-PLN Check	H	48	Documentation update: Addition of "FMGS Initialization - Active F-PLN Check" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - Secondary F-PLN	H	49	Documentation update: Addition of "FMGS Initialization - Secondary F-PLN" documentary unit
PRO-NOR-SOP-06 FMGS Initialization - Radio NAV	H	50	Documentation update: Addition of "FMGS Initialization - Radio NAV" documentary unit
PRO-NOR-SOP-06 FMGS Data Insertion - Gross Weight Insertion (INIT B PAGE)	H	51	Documentation update: Addition of "FMGS Data Insertion - Gross Weight Insertion (INIT B page)" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-06 FMGS Data Insertion - Takeoff Data Insertion (PERF TAKEOFF PAGE)	H	52	Documentation update: Addition of "FMGS Data Insertion - Takeoff Data Insertion (PERF Takeoff page)" documentary unit
PRO-NOR-SOP-06 FMGS Data Insertion - RNP Insertion (PROG PAGE)	H	53	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 FMGS Data Insertion - Climb, Cruise, Descent, SpeEd Preselection	H	54	Documentation update: Addition of "FMGS Data Insertion - Climb, Cruise, Descent, SpeEd Preselection" documentary unit
PRO-NOR-SOP-06 FMGS Preparation - Check of FMGS Preparation	H	55	Documentation update: Addition of "FMGS Preparation - Check of FMGS Preparation" documentary unit
PRO-NOR-SOP-06 Glareshield - EFIS Control Panel	I	56	Documentation update: Addition of "Glareshield - EFIS Control Panel" documentary unit
PRO-NOR-SOP-06 Glareshield - FCU	I	57	Documentation update: Addition of "Glareshield - FCU" documentary unit
PRO-NOR-SOP-06 Lateral Consoles	J	58	Documentation update: Addition of "Lateral Consoles" documentary unit
PRO-NOR-SOP-06 Instrument Panels	K	59	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 Instrument Panels	K	60	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-06 ECAM Control Panel	L	61	Documentation update: Addition of "ECAM Control Panel" documentary unit
PRO-NOR-SOP-06 ADIRS	M	62	Documentation update: Addition of "ADIRS" documentary unit
PRO-NOR-SOP-06 Fuel on Board	N	63	Documentation update: Addition of "Fuel on Board" documentary unit
PRO-NOR-SOP-06 Departure Briefing	O	64	Documentation update: Addition of "Departure Briefing" documentary unit
PRO-NOR-SOP-06 Cockpit Preparation Checklist	P	65	Documentation update: Addition of "Cockpit Preparation Checklist" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Loadsheet	A	1	Documentation update: Addition of "Before Pushback/Start Clearance - Loadsheet" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Fuel	A	2	Documentation update: Addition of "Before Pushback/Start Clearance - Fuel" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Takeoff Data	A	3	Documentation update: Addition of "Before Pushback/Start Clearance - Takeoff Data" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - Seating Position	A	4	Documentation update: Addition of "Before Pushback/Start Clearance - Seating Position" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - MCDU	A	5	Documentation update: Addition of "Before Pushback/Start Clearance - MCDU" documentary unit
PRO-NOR-SOP-07 Before Pushback/Start Clearance - EXT PWR	A	6	Documentation update: Addition of "Before Pushback/Start Clearance - EXT PWR" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Flow Pattern	B	7	Documentation update: Addition of "At Pushback/Start Clearance - Flow Pattern" documentary unit
PRO-NOR-SOP-07 At Start Clearance	B	8	Documentation update: Addition of "At Start Clearance" documentary unit
PRO-NOR-SOP-07 At Start Clearance - Slides Armed Announce	B	9	Documentation update: Addition of "At Start Clearance - Slides Armed Announce" documentary unit
PRO-NOR-SOP-07 At Start Clearance - Safety Check	B	10	Documentation update: Addition of "At Start Clearance - Safety Check" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Pushback/Start Clearance	B	11	Documentation update: Addition of "At Pushback/Start Clearance - Pushback/Start Clearance" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Beacon Light	B	12	Documentation update: Addition of "At Pushback/Start Clearance - Beacon Light" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - ATC	B	13	Documentation update: Addition of "At Pushback/Start Clearance - ATC" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - Windows and Doors	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-07 At Pushback/Start Clearance - Windows and Doors	B	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-07 At Pushback/Start Clearance - THR Levers	B	16	Documentation update: Addition of "At Pushback/Start Clearance - THR Levers" documentary unit
PRO-NOR-SOP-07	B	17	Documentation update: Addition of "At Pushback/Start Clearance - ACCU PRESSURE" documentary unit

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Localization Title	Toc Index	ID	Reason
At Pushback/Start Clearance - ACCU PRESSURE			
PRO-NOR-SOP-07 At Pushback/Start Clearance - Parking Brake	B	18	Documentation update: Addition of "At Pushback/Start Clearance - Parking Brake" documentary unit
PRO-NOR-SOP-07 At Pushback/Start Clearance - NW STRG DISC	B	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
			Change of the wording from "N WHEEL STEERG DISC" to “NW STRG DISC”, to be in accordance with the actual memo display of the aircraft.
			SOP LATAM Standarization
PRO-NOR-SOP-07 At Pushback/Start Clearance - NW STRG DISC	B	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
			Change of the wording from "N WHEEL STEERG DISC" to “NW STRG DISC”, to be in accordance with the actual memo display of the aircraft.
			SOP LATAM Standarization
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	1	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 One Engine Taxi Procedure	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	B	6	**Introduction of a note to highlight a normal engine start sequence behavior where the EGT may slightly drop during the early phase of the start sequence.**
PRO-NOR-SOP-08 Automatic Engine Start	B	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-08 Automatic Engine Start	C	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	C	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	C	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-08 Automatic Engine Start	C	11	**Introduction of a note to highlight a normal engine start sequence behavior where the EGT may slightly drop during the early phase of the start sequence.**
PRO-NOR-SOP-08 Automatic Engine Start	C	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - Flow Pattern	A	1	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-SOP-09 After Start - Flow Pattern	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Mode Selector	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - Dual Cooling	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - APU Bleed	A	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Anti Ice	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-09 After Start - ENG Anti Ice	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - ENG Anti Ice	A	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-09 After Start - Wing Anti Ice	A	13	Documentation update: Addition of "After Start - Wing Anti Ice" documentary unit
PRO-NOR-SOP-09 After Start - APU	A	14	Documentation update: Addition of "After Start - APU" documentary unit
PRO-NOR-SOP-09 After Start - Ground Spoilers	A	15	Documentation update: Addition of "After Start - Ground Spoilers" documentary unit
PRO-NOR-SOP-09 After Start - Rudder Trim	A	16	Documentation update: Addition of "After Start - Rudder Trim" documentary unit
PRO-NOR-SOP-09 After Start - Flaps Lever	A	17	Documentation update: Addition of "After Start - Flaps Lever" documentary unit
PRO-NOR-SOP-09 After Start - Pitch Trim	A	18	Documentation update: Addition of "After Start - Pitch Trim" documentary unit
PRO-NOR-SOP-09 After Start - ECAM Status	A	19	Documentation update: Addition of "After Start - ECAM Status" documentary unit
PRO-NOR-SOP-09 After Start - N/W STEER DISC MEMO	A	20	Documentation update: Addition of "After Start - N/W STEER DISC MEMO" documentary unit
PRO-NOR-SOP-09 After Start - Ground Crew	A	21	Documentation update: Addition of "After Start - Ground Crew" documentary unit
PRO-NOR-SOP-09 After Start - Checklist	A	22	Documentation update: Addition of "After Start - Checklist" documentary unit
PRO-NOR-SOP-10 Taxi - Taxi Clearance	A	1	Documentation update: Addition of "Taxi - Taxi Clearance" documentary unit
PRO-NOR-SOP-10 Taxi - Lights	A	2	Documentation update: Addition of "Taxi - Lights" documentary unit
PRO-NOR-SOP-10 Taxi - Y Elec Pump	A	3	Documentation update: Addition of "Taxi - Y Elec Pump" documentary unit
PRO-NOR-SOP-10 Taxi - Parking Brake	A	4	Documentation update: Addition of "Taxi - Parking Brake" documentary unit
PRO-NOR-SOP-10 Taxi - Brakes	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Brakes	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-10 Taxi - Engine 2 Start	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Engine 2 Start	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Engine 2 Start	A	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - Flight Controls	A	10	Documentation update: Addition of "Taxi - Flight Controls" documentary unit
PRO-NOR-SOP-10 Taxi - ATC Clearance	A	11	Documentation update: Addition of "Taxi - ATC Clearance" documentary unit
PRO-NOR-SOP-10 Taxi - AFS/Flight Instruments	A	12	Documentation update: Addition of "Taxi - AFS/Flight Instruments" documentary unit
PRO-NOR-SOP-10 Taxi - Flow Pattern	A	13	Documentation update: Addition of "Taxi - Flow Pattern" documentary unit
PRO-NOR-SOP-10 Taxi - Auto BRK	A	14	Documentation update: Addition of "Taxi - Auto BRK" documentary unit
PRO-NOR-SOP-10 Taxi - Terr on ND	A	15	Documentation update: Addition of "Taxi - Terr on ND" documentary unit
PRO-NOR-SOP-10 Taxi - ATC	A	16	Documentation update: Addition of "Taxi - ATC" documentary unit
PRO-NOR-SOP-10 Taxi - ENG Mode Selector	A	17	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Taxi - ENG Mode Selector	A	18	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	21	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-10 Radar	A	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-10 Taxi - Final Check	A	24	Documentation update: Addition of "Taxi - Final Check" documentary unit
PRO-NOR-SOP-10 Taxi - Checklist	A	25	Documentation update: Addition of "Taxi - Checklist" documentary unit
PRO-NOR-SOP-10B Departure Change	A	1	**Modification of content according to SOP.**
PRO-NOR-SOP-11 Before Takeoff - Line-Up Flow Pattern	A	1	Documentation update: Addition of "Before Takeoff - Line-Up Flow Pattern" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Brake Temperature	A	2	Documentation update: Addition of "Before Takeoff - Brake Temperature" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Line-Up Clearance	A	3	Documentation update: Addition of "Before Takeoff - Line-Up Clearance" documentary unit
PRO-NOR-SOP-11 Before Takeoff - TCAS	A	4	Documentation update: Addition of "Before Takeoff - TCAS" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Takeoff Runway Check	A	5	Documentation update: Addition of "Before Takeoff - Takeoff Runway Check" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Approach Path Cleared of Traffic	A	6	Documentation update: Addition of "Before Takeoff - Approach Path Cleared of Traffic" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Exterior Lights	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-11 Before Takeoff - Exterior Lights	A	8	Documentation update: Addition of "Before Takeoff - Exterior Lights" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Packs	A	9	Documentation update: Addition of "Before Takeoff - Packs" documentary unit
PRO-NOR-SOP-11 Before Takeoff - RNP AR Departure Check	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-11 Before Takeoff - Sliding Table/efb	A	11	Documentation update: Addition of "Before Takeoff - Sliding Table/efb" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Cabin Crew	A	12	Documentation update: Addition of "Before Takeoff - Cabin Crew" documentary unit
PRO-NOR-SOP-11 Before Takeoff - Line-Up Checklist	A	13	Documentation update: Addition of "Before Takeoff - Line-Up Checklist" documentary unit
PRO-NOR-SOP-12 Takeoff - Takeoff Clearance	A	1	Documentation update: Addition of "Takeoff - Takeoff Clearance" documentary unit
PRO-NOR-SOP-12 Takeoff - Exterior Lights	A	2	Documentation update: Addition of "Takeoff - Exterior Lights" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-12 Takeoff - Thrust Setting	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-12 Takeoff - Thrust Setting	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-12 Takeoff - Below 80 Knots	A	5	Documentation update: Addition of "Takeoff - Below 80 Knots" documentary unit
PRO-NOR-SOP-12 Takeoff - At 80 kt	A	6	Documentation update: Addition of "Takeoff - At 80 kt" documentary unit
PRO-NOR-SOP-12 Takeoff - At 100 Knots	A	7	Documentation update: Addition of "Takeoff - At 100 Knots" documentary unit
PRO-NOR-SOP-12 Takeoff - At V1	A	8	Documentation update: Addition of "Takeoff - At V1" documentary unit
PRO-NOR-SOP-12 Takeoff - At VR	A	9	Documentation update: Addition of "Takeoff - At VR" documentary unit
PRO-NOR-SOP-12 Takeoff - When Positive Climb	A	10	Documentation update: Addition of "Takeoff - When Positive Climb" documentary unit
PRO-NOR-SOP-12 Takeoff - At Thrust Reduction Altitude	A	11	Documentation update: Addition of "Takeoff - At Thrust Reduction Altitude" documentary unit
PRO-NOR-SOP-12 Takeoff - Above Acceleration Altitude (or Once in Climb Phase)	A	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-12 Takeoff - Above Acceleration Altitude (or Once in Climb Phase)	A	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-12 Takeoff - Takeoff Pattern	A	14	Documentation update: Addition of "Takeoff - Takeoff Pattern" documentary unit
PRO-NOR-SOP-13 After Takeoff - APU	A	1	Documentation update: Addition of "After Takeoff - APU" documentary unit
PRO-NOR-SOP-13 After Takeoff - ENG MODE Selector	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-13 After Takeoff - TCAS	A	3	Documentation update: Addition of "After Takeoff - TCAS" documentary unit
PRO-NOR-SOP-13 After Takeoff - Anti-Ice Protection	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-13 After Takeoff - Anti-Ice Protection	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Initial Climb	A	1	Documentation update: Addition of "Climb - Initial Climb" documentary unit
PRO-NOR-SOP-14 Climb - At the Transition Altitude	A	2	Documentation update: Addition of "Climb - At the Transition Altitude" documentary unit
PRO-NOR-SOP-14 Climb - At the Transition Altitude	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Climb	A	4	Documentation update: Addition of "Climb - Climb" documentary unit
PRO-NOR-SOP-14 Climb - Anti Ice Protection	A	5	Documentation update: Addition of "Climb - Anti Ice Protection" documentary unit
PRO-NOR-SOP-14 Climb - Radar	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Radar	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Radar	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14 Climb - Radar	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-14	A	11	Documentation update: Addition of "" documentary unit
PRO-NOR-SOP-14 Climb - Climb At 10 000 ft	A	12	Documentation update: Addition of "Climb - Climb At 10 000 ft" documentary unit
PRO-NOR-SOP-15 Cruise - ECAM	A	1	Documentation update: Addition of "Cruise - ECAM" documentary unit
PRO-NOR-SOP-15 Cruise - Flight Progress	A	2	Documentation update: Addition of "Cruise - Flight Progress" documentary unit
PRO-NOR-SOP-15 Cruise - Step Flight Level	A	3	Documentation update: Addition of "Cruise - Step Flight Level" documentary unit
PRO-NOR-SOP-15 Cruise - Navigation Accuracy	A	4	Documentation update: Addition of "Cruise - Navigation Accuracy" documentary unit
PRO-NOR-SOP-15 Cruise - Radar Tilt	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-15 Cruise - Radar Tilt	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-15 Cruise - Oxygen Masks	A	8	Documentation update: Addition of "Cruise - Oxygen Masks" documentary unit
PRO-NOR-SOP-15 Cruise - Cruise Briefing	A	9	Documentation update: Addition of "Cruise - Cruise Briefing" documentary unit
PRO-NOR-SOP-16 Descent Preparation - General	A	1	Documentation update: Addition of "Descent Preparation - General" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Landing Information	A	2	Documentation update: Addition of "Descent Preparation - Landing Information" documentary unit
PRO-NOR-SOP-16 Descent Preparation - ECAM Status	A	3	Documentation update: Addition of "Descent Preparation - ECAM Status" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Landing Performance	A	4	Documentation update: Addition of "Descent Preparation - Landing Performance" documentary unit
PRO-NOR-SOP-16 Descent Preparation - FMGS - ARRIVAL - F-PLN	A	5	Documentation update: Addition of "Descent Preparation - FMGS - ARRIVAL - F-PLN" documentary unit
PRO-NOR-SOP-16 Descent Preparation - FMGS - DES WIND - PERF CRUISE - PERF DES	A	6	Documentation update: Addition of "Descent Preparation - FMGS - DES WIND - PERF CRUISE - PERF DES" documentary unit
PRO-NOR-SOP-16 Descent Preparation - FMGS - PERF APPR - PERF GO AROUND	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-16 Descent Preparation - FMGS - PERF APPR - PERF GO AROUND	A	8	**13 December 2022 : Modification of content of the element 00020102.0001001**
PRO-NOR-SOP-16 Descent Preparation - FMGS - PERF APPR - PERF GO AROUND	A	9	**SOP LATAM Standarization**
PRO-NOR-SOP-16 Descent Preparation - FMGS - RADIO NAV	A	10	**Update of the content in order to introduce the SLS function.**
PRO-NOR-SOP-16 Descent Preparation - FMGS - RADIO NAV	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16	A	12	**Update of the content in order to introduce the SLS function.**

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Localization Title	Toc Index	ID	Reason
Descent Preparation - FMGS - RADIO NAV			
PRO-NOR-SOP-16 Descent Preparation - FMGS - RADIO NAV	A	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - FMGS - SEC F-PLN	A	14	Documentation update: Addition of "Descent Preparation - FMGS - SEC F-PLN" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Check of FMGS Preparation	A	15	Documentation update: Addition of "Descent Preparation - Check of FMGS Preparation" documentary unit
PRO-NOR-SOP-16 Preferential Setting for Landing	A	16	Documentation update: Addition of "Preferential Setting for Landing" documentary unit
PRO-NOR-SOP-16 Descent Preparation - VIP	A	17	Documentation update: Addition of "Descent Preparation - VIP" documentary unit
PRO-NOR-SOP-16 Descent Preparation - GPWS LDG Flaps 3	A	18	Documentation update: Addition of "Descent Preparation - GPWS LDG Flaps 3" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Landing Elevation	A	19	Documentation update: Addition of "Descent Preparation - Landing Elevation" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Runway Condition	A	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Autobrake	A	21	Documentation update: Addition of "Descent Preparation - Autobrake" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Arrival Briefing	A	22	Documentation update: Addition of "Descent Preparation - Arrival Briefing" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Radar	A	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Radar	A	24	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Radar	A	25	Documentation update: Addition of "Descent Preparation - Radar" documentary unit
PRO-NOR-SOP-16 Descent PREPARATION - TCAS	A	26	Documentation update: Addition of "Descent PREPARATION - TCAS" documentary unit
PRO-NOR-SOP-16 Descent Preparation - Anti-Ice Protection	A	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-16 Descent Preparation - Anti-Ice Protection	A	28	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-16 Descent Preparation - Descent Clearance	A	29	Documentation update: Addition of "Descent Preparation - Descent Clearance" documentary unit
PRO-NOR-SOP-17 Descent Initiation	A	1	Documentation update: Addition of "Descent Initiation" documentary unit
PRO-NOR-SOP-17 Descent Monitoring	B	2	Documentation update: Addition of "Descent Monitoring" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - General	C	3	Documentation update: Addition of "Descent Adjustment - General" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - Terr on ND	C	4	Documentation update: Addition of "Descent Adjustment - Terr on ND" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - BARO Ref	C	5	Documentation update: Addition of "Descent Adjustment - BARO Ref" documentary unit
PRO-NOR-SOP-17	C	6	Documentation update: Addition of "" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - At 10000 FT	C	7	Documentation update: Addition of "Descent Adjustment - At 10000 FT" documentary unit
PRO-NOR-SOP-17 descent Adjustment - ENG MODE	C	8	Documentation update: Addition of "descent Adjustment - ENG MODE" documentary unit
PRO-NOR-SOP-17 Descent Adjustment - Navigation Accuracy	C	9	Documentation update: Addition of "Descent Adjustment - Navigation Accuracy" documentary unit
PRO-NOR-SOP-17 Approach Checklist	D	10	Documentation update: Addition of "Approach Checklist" documentary unit
PRO-NOR-SOP-18-A Introduction	A	1	Documentation update: Addition of "Introduction" documentary unit
PRO-NOR-SOP-18-A Cross-Reference Table	B	2	**Addition of RNP before RNAV(GNSS) to comply with the evolution of the name of the charts.**
PRO-NOR-SOP-18-A Cross-Reference Table	B	3	**Added Note.**
PRO-NOR-SOP-18-A Cross-Reference Table	B	4	**Addition of RNP before RNAV(GNSS) to comply with the evolution of the name of the charts.**
PRO-NOR-SOP-18-A Cross-Reference Table	B	5	**Added Note.**
PRO-NOR-SOP-18-A Flying Reference	C	6	Documentation update: Addition of "Flying Reference" documentary unit
PRO-NOR-SOP-18-A Approach Speed Technique	E	7	Documentation update: Addition of "Approach Speed Technique" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-18-A Discontinued Approach	F	8	Documentation update: Addition of "Discontinued Approach" documentary unit
PRO-NOR-SOP-18-B Initial Approach - General	A	1	Documentation update: Addition of "Initial Approach - General" documentary unit
PRO-NOR-SOP-18-B Initial Approach - Initial Approach	A	2	Documentation update: Addition of "Initial Approach - Initial Approach" documentary unit
PRO-NOR-SOP-18-B Initial Approach - Radar	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Initial Approach - Radar	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Initial Approach - Radar	A	5	Documentation update: Addition of "Initial Approach - Radar" documentary unit
PRO-NOR-SOP-18-B Initial Approach - Navigation Accuracy	A	6	Documentation update: Addition of "Initial Approach - Navigation Accuracy" documentary unit
PRO-NOR-SOP-18-B Intermediate/Final Approach	B	7	Documentation update: Addition of "Intermediate/Final Approach" documentary unit
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At green dot speed	B	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches- At green dot speed	B	9	**SOP LATAM Standarization**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - One Dot Below Flight Path, Prior To VIP OR 2 000 ft AFE, Whichever Occurs First	B	10	Documentation update: Addition of "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - One Dot Below Flight Path, Prior To VIP OR 2 000 ft AFE, Whichever Occurs First" documentary unit
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At 2 500 ft AFE	B	11	Documentation update: Addition of "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - At 2 500 ft AFE" documentary unit
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2	B	12	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When FLAPS are at 2	B	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE	B	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - When Landing Gear is down and Not Below 1 500 ft AFE	B	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-B Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - Pattern (decelerated)	B	17	Documentation update: Addition of "Intermediate/Final Approach for ILS and Straight-in Non Precision Approaches - Pattern (decelerated)" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - General	A	1	Documentation update: Addition of "Approach using LOC G/S Guidance - General" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Descent Preparation	A	2	Documentation update: Addition of "Approach using LOC G/S Guidance - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Initial/Intermediate Approach	A	3	Documentation update: Addition of "Approach using LOC G/S Guidance - Initial/Intermediate Approach" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Glide Interception from Above	A	4	Documentation update: Addition of "Approach using LOC G/S Guidance - Glide Interception from Above" documentary unit
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Final Approach	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Final APPROACH	A	6	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Management of Degraded Guidance	A	7	Documentation update: Addition of "Approach using LOC G/S Guidance - Management of Degraded Guidance" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Aircraft Equipment	B	8	Documentation update: Addition of "Approach using FINAL APP Guidance - Aircraft Equipment" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Flight Preparation	B	9	Documentation update: Addition of "Approach using FINAL APP Guidance - Flight Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Descent Preparation	B	10	Documentation update: Addition of "Approach using FINAL APP Guidance - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Descent	B	11	Documentation update: Addition of "Approach using FINAL APP Guidance - Descent" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Initial/Intermediate/Final Approach	B	12	Documentation update: Addition of "Approach using FINAL APP Guidance - Initial/Intermediate/Final Approach" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum +100 ft	B	13	Documentation update: Addition of "Approach using FINAL APP Guidance - At Entered Minimum +100 ft" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	17	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - At Entered Minimum	B	18	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C	B	19	Documentation update: Addition of "Approach using FINAL APP Guidance - Management of Degraded Navigation" documentary unit

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Localization Title	Toc Index	ID	Reason
Approach using FINAL APP Guidance - Management of Degraded Navigation			
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - Selected Vertical (NAV/FPA - TRACK/FPA) FDP (BIRD ON)	B	20	Documentation update: Addition of "Approach using FINAL APP Guidance - Selected Vertical (NAV/FPA - TRACK/FPA) FDP (BIRD ON)" documentary unit
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - Descent Preparation	C	21	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - Descent	C	22	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **SOP LATAM Standarization**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - Initial/Intermediate/Final Approach	C	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum +100 ft	C	24	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum	C	25	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum	C	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FINAL APP Guidance for RNAV(RNP) - At Entered Minimum	C	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FPA Guidance - General	D	28	Documentation update: Addition of "Approach using FPA Guidance - General" documentary unit
PRO-NOR-SOP-18-C	D	29	Documentation update: Addition of "Approach using FPA Guidance - Aircraft Equipment" documentary unit

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Localization Title	Toc Index	ID	Reason
Approach using FPA Guidance - Aircraft Equipment			
PRO-NOR-SOP-18-C Approach using FPA Guidance - Flight Preparation	D	30	Documentation update: Addition of "Approach using FPA Guidance - Flight Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Descent Preparation	D	31	Documentation update: Addition of "Approach using FPA Guidance - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Descent	D	32	Documentation update: Addition of "Approach using FPA Guidance - Descent" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - Initial/Intermediate/Final Approach	D	33	Documentation update: Addition of "Approach using FPA Guidance - Initial/Intermediate/Final Approach" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum +100 ft	D	34	Documentation update: Addition of "Approach using FPA Guidance - At Entered Minimum +100 ft" documentary unit
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum	D	35	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum	D	36	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FPA Guidance - At Entered Minimum	D	37	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-18-C Approach using FPA Guidance - Management of Degraded Navigation	D	38	Documentation update: Addition of "Approach using FPA Guidance - Management of Degraded Navigation" documentary unit
PRO-NOR-SOP-18-C Circling Approach - General	E	39	Documentation update: Addition of "Circling Approach - General" documentary unit
PRO-NOR-SOP-18-C Circling Approach - Approach Preparation	E	40	Documentation update: Addition of "Circling Approach - Approach Preparation" documentary unit
PRO-NOR-SOP-18-C Circling Approach - Instrument Approach	E	41	Documentation update: Addition of "Circling Approach - Instrument Approach" documentary unit
PRO-NOR-SOP-18-C Circling Approach - Circling Approach	E	42	Documentation update: Addition of "Circling Approach - Circling Approach" documentary unit
PRO-NOR-SOP-18-C	E	43	Documentation update: Addition of "Circling Approach - Circling Approach Pattern" documentary unit

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Localization Title	Toc Index	ID	Reason
Circling Approach - Circling Approach Pattern			
PRO-NOR-SOP-18-C RNAV Visual Approach - General	F	44	Documentation update: Addition of "RNAV Visual Approach - General" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Equipment Required	F	45	Documentation update: Addition of "RNAV Visual Approach - Equipment Required" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - FMGC guidance mode	F	46	Documentation update: Addition of "RNAV Visual Approach - FMGC guidance mode" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Descent Preparation	F	47	Documentation update: Addition of "RNAV Visual Approach - Descent Preparation" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Descent	F	48	Documentation update: Addition of "RNAV Visual Approach - Descent" documentary unit
PRO-NOR-SOP-18-C RNAV Visual Approach - Final Approach	F	49	Documentation update: Addition of "RNAV Visual Approach - Final Approach" documentary unit
PRO-NOR-SOP-18-C Visual Approach - Initial/Intermediate Approach	G	50	Documentation update: Addition of "Visual Approach - Initial/Intermediate Approach" documentary unit
PRO-NOR-SOP-18-C Visual Approach - Final Approach	G	51	Documentation update: Addition of "Visual Approach - Final Approach" documentary unit
PRO-NOR-SOP-18-C Visual Approach - Visual Approach (1 or 2 engines) Pattern	G	52	Documentation update: Addition of "Visual Approach - Visual Approach (1 or 2 engines) Pattern" documentary unit
PRO-NOR-SOP-18-C Selected Vertical (NAV/FPA - TRACK/FPA) FPD (Bird On)	H	53	Documentation update: Addition of "Selected Vertical (NAV/FPA - TRACK/FPA) FPD (Bird On)" documentary unit
PRO-NOR-SOP-19 Landing	A	1	Documentation update: Addition of "Landing" documentary unit
PRO-NOR-SOP-19 Landing - Flare	A	2	Documentation update: Addition of "Landing - Flare" documentary unit
PRO-NOR-SOP-19 Landing - At Touchdown	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Landing - At Touchdown	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Landing - At 70 Knots	A	5	Documentation update: Addition of "Landing - At 70 Knots" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-19 Landing - At Taxi Speed	A	6	Documentation update: Addition of "Landing - At Taxi Speed" documentary unit
PRO-NOR-SOP-19 Landing - Before 20 Knots	A	7	Documentation update: Addition of "Landing - Before 20 Knots" documentary unit
PRO-NOR-SOP-19 Autoland	B	8	Documentation update: Addition of "Autoland" documentary unit
PRO-NOR-SOP-19 Autoland - At 350 ft RA	B	9	Documentation update: Addition of "Autoland - At 350 ft RA" documentary unit
PRO-NOR-SOP-19 Autoland - At 40 ft RA	B	10	Documentation update: Addition of "Autoland - At 40 ft RA" documentary unit
PRO-NOR-SOP-19 Autoland - At 30 ft RA	B	11	Documentation update: Addition of "Autoland - At 30 ft RA" documentary unit
PRO-NOR-SOP-19 Autoland - At 10 ft RA	B	12	Documentation update: Addition of "Autoland - At 10 ft RA" documentary unit
PRO-NOR-SOP-19 Landing - At Touch Down	B	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Landing - At Touchdown	B	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-19 Autoland - At 70 Knots	B	15	Documentation update: Addition of "Autoland - At 70 Knots" documentary unit
PRO-NOR-SOP-19 Autoland - Before 20 Knots	B	16	Documentation update: Addition of "Autoland - Before 20 Knots" documentary unit
PRO-NOR-SOP-19 Autoland - End of Roll Out	B	17	Documentation update: Addition of "Autoland - End of Roll Out" documentary unit
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	1	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	2	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	3	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - Go Around Initiation	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-20 Go Around with FD - At Go-Around Thrust Reduction Altitude	A	5	Documentation update: Addition of "Go Around with FD - At Go-Around Thrust Reduction Altitude" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-20 Go Around with FD - At Go-Around Acceleration Altitude	A	6	Documentation update: Addition of "Go Around with FD - At Go-Around Acceleration Altitude" documentary unit
PRO-NOR-SOP-21 After Landing - Flow Pattern	A	1	Documentation update: Addition of "After Landing - Flow Pattern" documentary unit
PRO-NOR-SOP-21 After Landing - Ground Spoilers	A	2	Documentation update: Addition of "After Landing - Ground Spoilers" documentary unit
PRO-NOR-SOP-21 After Landing - Lights	A	3	Documentation update: Addition of "After Landing - Lights" documentary unit
PRO-NOR-SOP-21 After Landing - Radar	A	4	Documentation update: Addition of "After Landing - Radar" documentary unit
PRO-NOR-SOP-21 After Landing - Predictive Windshear	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - ENG Mode Selector	A	6	Documentation update: Addition of "After Landing - ENG Mode Selector" documentary unit
PRO-NOR-SOP-21 After Landing - Flaps	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Flaps	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - TCAS	A	9	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **Deleted "2000". SOP LATAM standardization.**
PRO-NOR-SOP-21 After Landing - TCAS	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.** **Deleted "2000". SOP LATAM standardization.**
PRO-NOR-SOP-21 After Landing - ATC	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 TERR ON ND	A	12	Documentation update: Addition of "TERR ON ND" documentary unit
PRO-NOR-SOP-21 After Landing - APU	A	13	Documentation update: Addition of "After Landing - APU" documentary unit
PRO-NOR-SOP-21 After Landing - Anti-Ice Protection	A	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-21 After Landing - Anti-Ice Protection	A	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Anti-Ice Protection	A	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Brake Temperature	A	17	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Brake Temperature	A	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Brake Temperature	A	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - After Landing Checklist	A	21	Documentation update: Addition of "After Landing - After Landing Checklist" documentary unit
PRO-NOR-SOP-21 After Landing - Single Engine Taxi	A	22	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-21 After Landing - Single Engine Taxi	A	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Flow Pattern	A	1	Documentation update: Addition of "Parking - Flow Pattern" documentary unit
PRO-NOR-SOP-22 Parking - Parking Brake	A	2	Documentation update: Addition of "Parking - Parking Brake" documentary unit
PRO-NOR-SOP-22 Parking - Anti-Ice Protection	A	3	Documentation update: Addition of "Parking - Anti-Ice Protection" documentary unit
PRO-NOR-SOP-22 Parking - APU	A	4	Documentation update: Addition of "Parking - APU" documentary unit
PRO-NOR-SOP-22 Parking - APU Bleed	A	5	Documentation update: Addition of "Parking - APU Bleed" documentary unit
PRO-NOR-SOP-22 Parking - Y ELEC PUMP	A	6	Documentation update: Addition of "Parking - Y ELEC PUMP" documentary unit
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	9	**21 October 2022 : Modification of content of the element 00011856.0004001**
PRO-NOR-SOP-22 Parking - ENG MASTER Levers	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Slide Disarmed Announce	A	11	Documentation update: Addition of "Parking - Slide Disarmed Announce" documentary unit
PRO-NOR-SOP-22 Parking - Exterior Lights	A	12	Documentation update: Addition of "Parking - Exterior Lights" documentary unit
PRO-NOR-SOP-22 Parking - Fuel Pumps	A	13	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Fuel Pumps	A	14	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Slide Disarmed Check	A	15	Documentation update: Addition of "Parking - Slide Disarmed Check" documentary unit
PRO-NOR-SOP-22 Parking - Seat Belts	A	16	Documentation update: Addition of "Parking - Seat Belts" documentary unit
PRO-NOR-SOP-22 Parking - Ground Contact	A	17	Documentation update: Addition of "Parking - Ground Contact" documentary unit
PRO-NOR-SOP-22 Parking - Brake Fan	A	18	Documentation update: Addition of "Parking - Brake Fan" documentary unit
PRO-NOR-SOP-22 Parking - Parking Brake	A	19	Documentation update: Addition of "Parking - Parking Brake" documentary unit
PRO-NOR-SOP-22 Parking - Parking Checklist	A	20	Documentation update: Addition of "Parking - Parking Checklist" documentary unit
PRO-NOR-SOP-22 Parking - ATC	A	21	Documentation update: Addition of "Parking - ATC" documentary unit
PRO-NOR-SOP-22 Parking - IRS Performance	A	22	Documentation update: Addition of "Parking - IRS Performance" documentary unit
PRO-NOR-SOP-22 Parking - Fuel Quantity	A	23	Documentation update: Addition of "Parking - Fuel Quantity" documentary unit
PRO-NOR-SOP-22 Parking - Icing Conditions	A	24	Documentation update: Addition of "Parking - Icing Conditions" documentary unit
PRO-NOR-SOP-22 Parking - Electronic Flight Bag (EFB)	A	25	Documentation update: Addition of "Parking - Electronic Flight Bag (EFB)" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-22 Parking - Severe Icing Conditions	A	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-22 Parking - Display Unit	A	27	Documentation update: Addition of "Parking - Display Unit" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - General	A	1	Documentation update: Addition of "Securing the Aircraft - General" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Parking Brake	A	2	Documentation update: Addition of "Securing the Aircraft - Parking Brake" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Oxygen Crew Supply	A	3	Documentation update: Addition of "Securing the Aircraft - Oxygen Crew Supply" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - ADIRS	A	4	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - ADIRS	A	5	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - Exterior Lights	A	6	Documentation update: Addition of "Securing the Aircraft - Exterior Lights" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - APU BLEED	A	7	Documentation update: Addition of "Securing the Aircraft - APU BLEED" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - External Power	A	8	Documentation update: Addition of "Securing the Aircraft - External Power" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - APU	A	9	Documentation update: Addition of "Securing the Aircraft - APU" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - EMER Lights and Signs	A	10	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - EMER Lights and Signs	A	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added respective Role for each action.**
PRO-NOR-SOP-23 Securing the Aircraft - BAT	A	12	Documentation update: Addition of "Securing the Aircraft - BAT" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Securing the Aircraft Checklist	A	13	Documentation update: Addition of "Securing the Aircraft - Securing the Aircraft Checklist" documentary unit
PRO-NOR-SOP-23 Securing the Aircraft - Electronic Flight Bag (EFB)	A	14	Documentation update: Addition of "Securing the Aircraft - Electronic Flight Bag (EFB)" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SOP-23 Securing the Aircraft - Maintenance Bus	A	15	Documentation update: Addition of "Securing the Aircraft - Maintenance Bus" documentary unit
PRO-NOR-SCO Communications and Standard Terms	A	1	Documentation update: Addition of "Communications and Standard Terms" documentary unit
PRO-NOR-SCO Checklist Callouts	B	2	Documentation update: Addition of "Checklist Callouts" documentary unit
PRO-NOR-SCO Actions Commanded by PF - General	C	3	Documentation update: Addition of "Actions Commanded by PF - General" documentary unit
PRO-NOR-SCO Actions Commanded by PF - Set	C	4	Documentation update: Addition of "Actions Commanded by PF - Set" documentary unit
PRO-NOR-SCO Actions Commanded by PF - Manage/Pull	C	5	Documentation update: Addition of "Actions Commanded by PF - Manage/Pull" documentary unit
PRO-NOR-SCO Actions Commanded by PF - Arm	C	6	Documentation update: Addition of "Actions Commanded by PF - Arm" documentary unit
PRO-NOR-SCO Actions Commanded by PF - On/Off	C	7	Documentation update: Addition of "Actions Commanded by PF - On/Off" documentary unit
PRO-NOR-SCO FMA	D	8	Documentation update: Addition of "FMA" documentary unit
PRO-NOR-SCO Altitude	E	9	Documentation update: Addition of "Altitude" documentary unit
PRO-NOR-SCO Flaps or Gear Callouts - Flaps' Callouts	F	10	Documentation update: Addition of "Flaps or Gear Callouts - Flaps' Callouts" documentary unit
PRO-NOR-SCO Flaps or Gear Callouts - Gear Callouts	F	11	Documentation update: Addition of "Flaps or Gear Callouts - Gear Callouts" documentary unit
PRO-NOR-SCO Go-Around	G	12	Documentation update: Addition of "Go-Around" documentary unit
PRO-NOR-SCO PF/PM Duties Transfer	H	13	Documentation update: Addition of "PF/PM Duties Transfer" documentary unit
PRO-NOR-SCO Pilot/Cabin Crew Announcements	I	14	Documentation update: Addition of "Pilot/Cabin Crew Announcements" documentary unit
PRO-NOR-SCO Summary for Each Phase	J	15	Documentation update: Addition of "Summary for Each Phase" documentary unit
PRO-NOR-SCO Summary for Each Phase - To Remove Ground Supply	J	16	Documentation update: Addition of "Summary for Each Phase - To Remove Ground Supply" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-SCO Before Engine Start / Push Back	J	17	Documentation update: Addition of "Before Engine Start / Push Back" documentary unit
PRO-NOR-SCO Summary for Each Phase - Pushback/Engine Start	J	18	Documentation update: Addition of "Summary for Each Phase - Pushback/Engine Start" documentary unit
PRO-NOR-SCO Summary for Each Phase - Taxi	J	19	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-SCO Summary for Each Phase - Taxi	J	20	**Implementation of New Checklists, New Briefings, and SOP Convergence projects.**
PRO-NOR-SCO Summary for Each Phase - Take Off	J	21	Documentation update: Addition of "Summary for Each Phase - Take Off" documentary unit
PRO-NOR-SCO Summary for Each Phase - Altimeter Setting Changes To/From QNH/QFE-STD	J	22	Documentation update: Addition of "Summary for Each Phase - Altimeter Setting Changes To/From QNH/QFE-STD" documentary unit
PRO-NOR-SCO Summary for Each Phase - Approach and Landing	J	23	Documentation update: Addition of "Summary for Each Phase - Approach and Landing" documentary unit
PRO-NOR-SCO Summary for Each Phase - Discontinued Approach	J	24	Documentation update: Addition of "Summary for Each Phase - Discontinued Approach" documentary unit
PRO-NOR-SCO Summary for Each Phase - Go Around	J	25	Documentation update: Addition of "Summary for Each Phase - Go Around" documentary unit
PRO-NOR-TSK Safety Exterior Inspection	A	1	Documentation update: Addition of "Safety Exterior Inspection" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - AIRCRAFT SETUP	B	2	Documentation update: Addition of "Preliminary Cockpit Preparation - AIRCRAFT SETUP" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - BATTERIES/EXTERNAL POWER	B	3	Documentation update: Addition of "Preliminary Cockpit Preparation - BATTERIES/EXTERNAL POWER" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - APU FIRE TEST/APU START	B	4	Documentation update: Addition of "Preliminary Cockpit Preparation - APU FIRE TEST/APU START" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - ADIRS	B	5	Documentation update: Addition of "Preliminary Cockpit Preparation - ADIRS" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - COCKPIT LIGHTS	B	6	Documentation update: Addition of "Preliminary Cockpit Preparation - COCKPIT LIGHTS" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-TSK Preliminary Cockpit Preparation - EFB/ACARS ◁ INITIALIZATION	B	7	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Preliminary Cockpit Preparation - EFB Initialization	B	8	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Preliminary Cockpit Preparation - AIRCRAFT ACCEPTANCE	B	9	Documentation update: Addition of "Preliminary Cockpit Preparation - AIRCRAFT ACCEPTANCE" documentary unit
PRO-NOR-TSK Preliminary Cockpit Preparation - PRELIMINARY PERFORMANCE DETERMINATION	B	10	Documentation update: Addition of "Preliminary Cockpit Preparation - PRELIMINARY PERFORMANCE DETERMINATION" documentary unit
PRO-NOR-TSK Preliminary CocKpit Preparation - Before Walkaround	B	11	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Preliminary Cockpit Preparation - BEFORE WALKAROUND	B	12	**11 October 2022 : Modification of content of the element 00024979.0001001**
PRO-NOR-TSK Cockpit Preparation - OVERHEAD PANEL	C	13	Documentation update: Addition of "Cockpit Preparation - OVERHEAD PANEL" documentary unit
PRO-NOR-TSK Cockpit Preparation - CTR Instrument Panel	C	14	Documentation update: Addition of "Cockpit Preparation - CTR Instrument Panel" documentary unit
PRO-NOR-TSK Cockpit Preparation - PEDESTAL	C	15	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Cockpit Preparation - PEDESTAL	C	16	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Cockpit Preparation - RMP	C	17	Documentation update: Addition of "Cockpit Preparation - RMP" documentary unit
PRO-NOR-TSK Cockpit Preparation - GLARESHIELD	C	18	Documentation update: Addition of "Cockpit Preparation - GLARESHIELD" documentary unit
PRO-NOR-TSK Cockpit Preparation - LATERAL CONSOLE AND PF/PM INSTRUMENT PANELS	C	19	Documentation update: Addition of "Cockpit Preparation - LATERAL CONSOLE AND PF/PM INSTRUMENT PANELS" documentary unit
PRO-NOR-TSK Before Pushback or Start - BEFORE PUSHBACK/START CLEARANCE	D	20	Documentation update: Addition of "Before Pushback or Start - BEFORE PUSHBACK/START CLEARANCE" documentary unit

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Localization Title	Toc Index	ID	Reason
PRO-NOR-TSK BEFORE PUSHBACK OR START - At Pushback/Start Clearance	D	21	Documentation update: Addition of "BEFORE PUSHBACK OR START - At Pushback/Start Clearance" documentary unit
PRO-NOR-TSK Engine Start	E	22	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Engine Start	E	23	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Engine Start for One Engine Taxi	F	24	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Engine Start For One Engine Taxi	G	25	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start	H	26	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start	H	27	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi	I	28	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi	I	29	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi SETWA	J	30	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Start For One Engine Taxi SETWA	J	31	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK One Engine Taxi	K	33	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.** **SOP LATAM Standarization**
PRO-NOR-TSK One Engine Taxi	K	34	**SOP LATAM Standarization**
PRO-NOR-TSK One Engine Taxi SETWA	L	35	**27 January 2023 : Modification of content of the element 20800716.9001003**
PRO-NOR-TSK One Engine Taxi SETWA	L	36	**27 January 2023 : Modification of content of the element 20800716.9001002**
PRO-NOR-TSK One Engine Taxi SETWA	L	37	**SOP LATAM Standarization**
PRO-NOR-TSK Taxi	M	39	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK DEPARTURE CHANGE	N	40	Documentation update: Addition of "DEPARTURE CHANGE" documentary unit
PRO-NOR-TSK	O	41	**SOP Requirement**

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Localization **Title**	**Toc Index**	**ID**	**Reason**
Before Takeoff			
PRO-NOR-TSK Descent Preparation	T	42	**09 May 2023 : Modification of content of the element 00024910.0003001**
PRO-NOR-TSK Descent Preparation	T	43	**09 May 2023 : Modification of content of the element 00024910.0002001**
PRO-NOR-TSK Descent	U	44	Documentation update: Addition of "Descent" documentary unit
PRO-NOR-TSK APPROACH - Aircraft Configuration for Approach	V	45	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.** **SOP LATAM Standarization**
PRO-NOR-TSK APPROACH - Aircraft Configuration for Approach	V	46	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.** **SOP LATAM Standarization**
PRO-NOR-TSK APPROACH - Approach using LOC G/S Guidance	V	47	Documentation update: Addition of "APPROACH - Approach using LOC G/S Guidance" documentary unit
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance for RNAV(RNP)	V	48	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance for RNAV(RNP)	V	49	**SOP LATAM Standarization**
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance	V	51	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance	V	52	**SOP LATAM Standarization**
PRO-NOR-TSK Approach - Approach using FPA Guidance	V	53	Documentation update: Addition of "Approach - Approach using FPA Guidance" documentary unit
PRO-NOR-TSK Manual Landing	W	54	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Manual Landing	W	55	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Automatic Landing	X	56	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Automatic landing	Y	57	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK Go Around (With FD On)	Z	58	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**

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Localization Title	Toc Index	ID	Reason
PRO-NOR-TSK GO AROUND (With FD On)	AA	59	**Implementation of New Checklists, New Briefings, and SOP Convergence projects. Added new section Tasksharing.**
PRO-NOR-TSK After Landing	AB	60	Documentation update: Addition of "After Landing" documentary unit
PRO-NOR-TSK Parking	AC	61	**Modification of content**
PRO-NOR-TSK Securing the Aircraft	AD	62	Documentation update: Addition of "Securing the Aircraft" documentary unit
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Entering the Approach Data	F	9	Documentation update: Addition of "Preparation for Descent and Approach - Entering the Approach Data" documentary unit
PRO-NOR-SRP-01-60 Descent Monitoring - OP DES, V/S or FPA Mode Engaged	B	3	Documentation update: Addition of "Descent Monitoring - OP DES, V/S or FPA Mode Engaged" documentary unit
PRO-NOR-SRP-01-70 Initial Approach	A	2	Documentation update: Addition of "Initial Approach" documentary unit
PRO-NOR-SRP-01-70 ILS/FLS Approach - Localizer (LOC) or F-LOC Beam Capture	B	11	Documentation update: Addition of "ILS/FLS Approach - Localizer (LOC) or F-LOC Beam Capture" documentary unit
PRO-NOR-SRP-01-70 Landing Capabilities	G	14	Documentation update: Addition of "Landing Capabilities" documentary unit
PRO-NOR-SRP-01-80 Monitoring the Go-Around	A	1	Documentation update: Addition of "Monitoring the Go-Around" documentary unit
PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SOP-09 After Start - APU Bleed	A	8	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163,

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			06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-TSK One Engine Taxi	K	32	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-TSK Taxi	M	38	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712,

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			06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-TSK Approach - Approach using FINAL APP Guidance	V	50	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-SUP-ADVWXR Deicing/Anti-Icing Procedure on Ground - Upon Completion of the Spraying Operation	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01591, 01593, 01628, 01652, 01801, 01802, 01825, 01826, 01827, 01832, 01835, 01837, 01855, 01857, 01891, 02014, 02321, 02513, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03727, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06057, 06097, 06103, 06110, 06121, 06125, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596,

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			08635, 09190, 09324, 09558, 09563, 10949, 11139, 11228, 11293. The information no longer applies to all MSN.
PRO-NOR-SRP-01-10 FMGS Initialization	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - General	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - Aligning IRS	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - Lateral Flight Plan	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 Flight Plan Initialization - Vertical Flight Plan	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 FLIGHT PLAN INITIALIZATION - RADIO NAV	B	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 FMGS Data Insertion - Climb Speed Preselection	C	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-10 FMGS Data Insertion - Cruise Mach (Speed) Preselection	C	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-15 Change of Runway	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-20 FMA Mode Check	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-30 Takeoff Using the Localizer of the Opposite Runway	F	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-40 Monitoring the Climb Phase	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-40 Expedite Climb	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-40 Immediate Return to Origin Airport	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Monitoring the Navigation Accuracy - Position Discrepancy	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50	D	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
Entering a Step Climb or a Step Descent			
PRO-NOR-SRP-01-50 Immediate Change of Level in Cruise	E	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Revision of Lateral F-PLN	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Revision of Vertical Flight Plan	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Entering the Winds for Descent	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Preselecting a Managed Speed/Mach	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Modification of the Cabin Rate	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Entering the Approach Data	F	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-50 Preparation for Descent and Approach - Selecting the Radio NAVAIDs	F	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-60 Descent Monitoring - DES Mode Engaged	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-60 Descent Monitoring - OP DES, V/S or FPA Mode Engaged	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-60 Too Steep Path	E	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 Initial Approach	A	1	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593,

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Localization Title	Toc Index	ID	Reason
			01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-NOR-SRP-01-70 ILS Approach - Intermediate/Final Approach (ILS Approach Entered in the F-PLN)	B	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS / GLS ◁ / LPV(with SLS ◁) Approach - Approach Mode Activation (LOC - G/S)	B	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS/MLS Approach - Autoland	B	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-70 ILS/MLS Approach - Autoland	B	6	Effectivity update: The information now also applies to MSN 11531.
PRO-NOR-SRP-01-70 ILS Approach - Standard ILS Automatic Approach	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS Approach - Data Lock	B	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS Approach - Use of RMPs for ILS/DME	B	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 ILS Approach - Localizer (LOC) Beam Capture	B	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-70	C	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
Switching from Non ILS to ILS Approach			
PRO-NOR-SRP-01-70 Landing Categories	F	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-70 Warnings for ILS Approach	J	15	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-70 Warnings for ILS Approach	J	16	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-NOR-SRP-01-80 MONITORING THE GO-AROUND	B	2	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734, 11228, 11293, 11482, 11522, 11572, 11597.
PRO-NOR-SRP-01-80 MONITORING THE GO-AROUND	B	3	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
PRO-NOR-SRP-01-80 Go-Around Profile	C	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-80 Missed Approach: Try Again	D	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-NOR-SRP-01-80 Missed Approach: Divert	E	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

FOREWORD

1 Ident.: PRO-NOR-SOP-01-20806557.9001001 / 02 MAY 23
Applicable to: ALL

The procedures contained in this Chapter are recommended by Airbus, and are consistent with the other Chapters of this manual.
The manufacturer presents them herein as the best way to proceed, from a technical and operational standpoint. Some of these procedures were modified in order to meet Airline's operational needs.
They are continually updated and the revisions take into account Operator input, as well as manufacturer experience.
The following sections contain expanded information on normal procedures.
Standard Operating Procedures consist of inspections, preparations, and normal procedures. All items of a given procedure are listed in a sequence that follows a standardized scan of the cockpit panels, unless that sequence goes against the action priority logic, to ensure that all actions are performed in the most efficient way.
These procedures assume that all systems are operating normally, and that all automatic functions are used normally.
Standard Operating Procedures consider that both pilots use Electronic Flight Bag (EFB). Airbus recommends operating with two EFBs in order to reduce the risk of erroneous inputs.
The FCOM also contains normal procedures that are non-routine procedures in the Supplementary Procedures chapter and in the Special Operations chapter.

GOLDEN RULES FOR PILOTS

2 Ident.: PRO-NOR-SOP-01-20806558.9001001 / 02 MAY 23
Applicable to: ALL

INTRODUCTION

The Airbus "Golden Rules for Pilots" are operational guidelines, based on all of the following:
- Basic flying principles
- The adaptation of these basic flying principles to modern-technology aircraft
- The provision of information about required crew coordination for the operation of Airbus aircraft.

The objective of these Golden Rules is to also take into account the principles of flight crew interaction with automated systems, and the principles of Crew Resource Management (CRM), in order to help prevent the causes of many accidents or incidents and to ensure flight efficiency.

GENERAL GOLDEN RULES

The following four Golden Rules for Pilots are applicable to all normal operations, and to all unexpected or abnormal/emergency situations:

1. ***Fly. Navigate. Communicate:*** *In this order and with appropriate tasksharing.*
   Fly! Navigate! Communicate! The flight crew must perform these three actions in sequence and must use appropriate tasksharing in normal and abnormal operations, in manual flight or in flight with the AP engaged.

The following explains each of the three actions, and the steps associated with the performance of these actions:

- ***Fly***

  "**Fly**" indicates that:
  - **The Pilot Flying (PF)** must concentrate on "**flying the aircraft**" to monitor and control the pitch attitude, bank angle, airspeed, thrust, sideslip, heading, etc., in order to achieve and maintain the desired targets, vertical flight path, and lateral flight path.
  - **The Pilot Monitoring (PM)** must assist the PF and must **actively monitor** flight parameters, and call out any excessive deviation. The PM's role of "actively monitoring" is very important.

  Therefore, both flight crewmembers must:
  - Focus and concentrate on their tasks to ensure appropriate tasksharing
  - Maintain situational awareness and immediately resolve any uncertainty as a crew.
- ***Navigate***

  "**Navigate**" refers to and includes the following four ***"Know where ..."*** statements, in order to ensure situational awareness:
  - Know **where you are…**
  - Know **where you should be…**
  - Know **where you should go…**
  - Know **where the weather, terrain, and obstacles are.**
- ***Communicate***

  "Communicate" involves effective and appropriate crew communication between the:
  - PF and the PM
  - Flight crew and Air Traffic Control (ATC)
  - Flight crew and the cabin crew
  - Flight crew and the ground crew.

  Communication enables the flight crew to safely and appropriately perform the flight, and enhance situational awareness. To ensure good communication, the flight crew should use **standard phraseology** and the **applicable callouts.**

  In abnormal and emergency situations, the PF must recover a steady flight path, and the flight crew must identify the flight situation. The PF must then inform ATC and the cabin crew of:
  - ■ The flight situation
  - ■ The flight crew's intentions.

  The flight crew must therefore always keep in mind the key message:

  Fly the Aircraft, Fly the Aircraft, Fly the Aircraft...

To safely and appropriately perform a flight, both flight crewmembers must have basic flying skills, and must be able to fly with appropriate tasksharing in all situations.

2. ***Use the appropriate level of automation at all times.***
   Aircraft are equipped with several levels of automation, used to perform specific tasks. The flight crew must determine the appropriate level of interaction with automated systems, based on the flight situation (e.g. Visibility, incapacitation, system malfunction, etc.), and the task to be performed.

   To use the appropriate level of automation at all times, the flight crew must:
   - **Determine and select** the appropriate level of automation that can include manual flight
   - **Understand** the operational effect of the selected level of automation
   - **Confirm that the aircraft reacts as expected.**
3. ***Understand the FMA at all times.***
   The flight crew must confirm the operational effect of all actions on the FCU, or on the MCDU, via a crosscheck of the corresponding annunciation or data on the PFD and on the ND.

   At all times, the flight crew should be aware of the following:
   - Guidance modes (armed or engaged)
   - Guidance targets
   - Aircraft response in terms of attitude, speed, and trajectory
   - Transition or reversion modes.

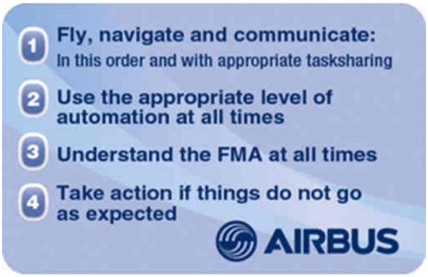
   Therefore, to ensure correct situational awareness, at all times, the flight crew must:
   - **Monitor the FMA**
   - **Announce the FMA**
   - **Confirm the FMA**
   - **Understand the FMA.**
4. ***Take action if things do not go as expected***

   If the aircraft does not follow the desired vertical or lateral flight path, or the selected targets, and if the flight crew does not have sufficient time to analyze and solve the situation, the flight **crew must immediately take appropriate or required actions**, as follows:

   The PF should change the level of automation:
   - From managed guidance to selected guidance, or
   - From selected guidance to manual flying.

   The PM should perform the following actions in sequence:
   - Communicate with the PF
   - Challenge the actions of the PF, when necessary
   - Take over, when necessary.

GOLDEN
RULES
FOR PILOTS
AIRBUS



1. **Fly, navigate and communicate:**
   In this order and with appropriate tasksharing
2. **Use the appropriate level of automation at all times**
3. **Understand the FMA at all times**
4. **Take action if things do not go as expected**

AIRBUS

AIRLINES POLICY

3 Ident.: PRO-NOR-SOP-01-20806559.9001001 / 02 MAY 23
Applicable to: ALL

The Airline Policy chapter contains a set of rules defined by the company. These rules were created and are always being updated according to its needs as well as local regulations. All rules may be found on the respective airline's Operations Manual, but the ones that directly affect procedures contained on the FCOM may be found in this manual.

GENERAL POLICIES

- The CM1 must be the left hand seat pilot
- The CM2 must be the right hand seat pilot

Both Pilots are allowed to taxi the aircraft.

If the CM2 is a F/O, the following restrictions apply:
- 180 ° turns on runways without runway turn pad marking
- Contaminated taxiways/runways

- Airports previously specified by Flight Operations
- Aircraft dispatched with any failure that may affect directional control and/or brake system.

When approaching to parking spots with self-docking system available only to the CM1, this one must park the aircraft.

NIGHT OPERATION

Visual APP Night operation is not recommended.
At night operations always select, when is possible, a runway equipped with visual approach slope indicator system such as PAPI or VASI for landing.

If not VASI/PAPI available, use the following priority approaches procedures for landing, bearing in mind, when is possible, to use the FD as an additional guidance from MAP to 50 ft HAT over the RWY Threshold (*):
1. ILS
2. RNAV (RNP)
3. RNAV (GNSS) LNAV/VNAV minimums
4. RNAV (GNSS) LNAV minimums only, VOR or LOC Approaches

(*) for NON ILS approaches, FD will be useful as an additional vertical guidance when a RWY Waypoint is included into the MCDU. For all other cases, FD must be switched off.

PF AND PM ASSIGNMENT

The PF and PM assignments start after the "PRELIMINARY PERFORMANCE DETERMINATION" is completed by both pilots.

SHOULDER HARNESS

The crewmembers must use the shoulder harness before pushback until FL 100/ 10.000 ft (10.000 ft AFE for airports with elevation at 4.000 ft or above) and from top of descent until engine shutdown.

ROLLER SUN-BLIND

The Roller Sun-Blind (sun-screen) must not be used under FL 100/ 10.000 ft (10.000 ft AFE for airports with elevation at 4.000 ft or above) or during TAXI, TAKEOFF, APPROACH and LANDING.

HEADSETS

The crewmembers must use the headsets from the engine start procedure until the end of the climb phase and from the beginning of descent phase until the end of the parking procedure.
The loudspeakers will be used as a communication backup and the volume may be adjusted as described on Cockpit Preparation (1 o’clock position). *Refer to 00011252 **Not found***

The crewmembers when using other frequencies (ATIS, Company, etc.), should set the loudspeaker knob to OFF and use the headsets in order to not interfere with the usual ACFT x ATC communication.

Note: *When using VHF 2 together with any other channel, pilots must use the headsets and silence the loudspeaker volume.*

Note: *Every time that the headsets have not been used, pilots will set the INT reception knob to neutral position and the loudspeaker shall be readjusted to a desired comfortable position.*

FMGS DATA

The following actions are assigned to the pilots as they are described (either being CM1 or CM2):
- The PF is responsible for the FMGS initialization and data insertion
- The PM must always perform the data confirmation.

Note: *The Pilot in Command can adjust the tasksharing due to safety reasons.*

Note: *All the messages displayed on MCDU must be crosschecked by both pilots before clearing them.*

CRUISE / ESCAPE ROUTE

In Order to improve situational awareness, crew members must consider the escape route when applicable. This may be accomplished using:
- FIX INFO page
- SEC F-PLN page
- The company's escape route contained in the EFB.

EMERGENCY DESCENT

In case of Emergency Descent the PF, after completing the memory items, will make the EMER DESCENT (PA) announcement.

REJECTED TAKEOFF

Please observe the following rules regarding Rejected Takeoffs (RTO):
- If the Co-Pilot is flying as PF, he may even callout a failure but only the Captain may call STOP and perform the RTO actions. As soon as the Captain calls STOP, the Co-Pilot becomes the PM.
- If the CM1 is a Captain under training and is flying as PF, he/she may make the decision and perform the RTO actions. In this case, the Instructor Captain (CM2) will continue as PM.
- If it happens that the CM1 is a Captain under training and is flying as PF but the Instructor Captain (CM2) thinks a stop is required, the Instructor will call STOP and the Captain under training will perform the RTO actions.

Both Emergency and Rejected Takeoff Briefings must be done by either the Instructor Captain or the Captain under training.

DUTIES TRANSFER

According to recommendations and industry best practicies, some actions require duties transfer:

- Expanded information for passengers in cruise
- FLB/MLB when performed by PF
- Any situation which requires PF not to control the flight in case necessary.

In order to perform the duties transfer follow the procedure: *Refer to 00011914 **Not found***

FLIGHT OPERATIONS PUBLICATIONS

The flight crew must be updated and aware of the Operations Manual content along with the current Flight Operations Bulletins.
It is important to remember that all documents published by the Flight Operations and Flight Safety Department might have valuable information for the flight as well.

GPS PRIMARY AVAILABILITY (IF INSTALLED)

Ident.: PRO-NOR-SOP-02-00014998.0001001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734

1
- **For RNP1/RNP2/RNP4 operations, RNAV(GNSS) approaches and RNAV(RNP) approaches:**

  If required by operational regulation, an appropriate Ground-Based Prediction Program should be used to check the RAIM/AIME for each intended procedure (arrival, departure, alternate if required).

GPS PRIMARY AVAILABILITY (IF INSTALLED)

Ident.: PRO-NOR-SOP-02-00014998.0002001 / 02 MAY 23
2 **Applicable to: MSN 01459, 02887-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

3
- **For RNP1/RNP2/RNP4 operations, RNAV(GNSS) approaches and RNAV(RNP) approaches:**

  RAIM/AIME has been demonstrated to be available 100% of the time with 24 healthy satellites.

  If required by operational regulation, for specific conditions (e.g RNAV(RNP), mountainous terrain or less than 24 satellites) an appropriate Ground-Based Prediction Program should be used to check the RAIM/AIME for each intended procedure (arrival, departure and alternate if required)

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SAFETY EXTERIOR INSPECTION

Applicable to: ALL

1 Ident.: PRO-NOR-SOP-03-A-20806561.9001001 / 02 MAY 23

GENERAL

Items marked by asterisks (*) are the only steps to be completed after a transit stop without flight crew change. Otherwise, the new flight crew performs all the items.

Safety exterior inspections ensure that the aircraft and the external environment of the aircraft are safe for operation. When the flight crew arrives at the aircraft, they must check for, or be informed of any obstructions near the aircraft, engineering activity, or refueling activity, etc.

2 Ident.: PRO-NOR-SOP-03-A-20806562.9001001 / 02 MAY 23

WHEEL CHOCKS

WHEEL CHOCKS... CHECK | CM2

L2 *If the wheel chocks are not in position, the flight crew must check that the parking brake is set with sufficient accumulator pressure.*

3 Ident.: PRO-NOR-SOP-03-A-20806563.9001001 / 02 MAY 23

LANDING GEAR DOORS

LANDING GEAR DOORS...CHECK POSITION | CM2

WARNING	*If any landing gear door is open, do not pressurize the hydraulic systems until clearance is obtained from ground personnel.*

4 Ident.: PRO-NOR-SOP-03-A-20806564.9001001 / 02 MAY 23

APU AREA

APU AREA.. CHECK | CM2

L2 *Observe that the APU inlet and outlet are clear.*

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GENERAL

1 Ident.: PRO-NOR-SOP-04-20806565.9001001 / 02 MAY 23
Applicable to: ALL

Items marked by asterisks (*) are the only steps to be completed after a transit stop without flight crew change. Otherwise, the new flight crew performs all the items.
The flight crew performs the preliminary cockpit preparation to ensure that all required safety checks are completed.
The safety checks prevent the inadvertent operation of aircraft systems, danger to the aircraft, and danger to the personnel.

AIRCRAFT SETUP

Applicable to: ALL

2 Ident.: PRO-NOR-SOP-04-A-20806566.9001001 / 02 MAY 23

GENERAL

WARNING If the aircraft is not energized, first check MLB or consult maintenance staff to ensure that the aircraft can be energized.
Do not pressurize the hydraulic systems until clearance is obtained from ground personnel.

3 Ident.: PRO-NOR-SOP-04-A-20806567.9001001 / 02 MAY 23

ENG

ENG 1, 2 MASTER LEVERS....................OFF | CM2
ENG MODE selector....................NORM | CM2

4 Ident.: PRO-NOR-SOP-04-A-20806568.9001001 / 02 MAY 23

WEATHER RADAR

* RADAR sw ....OFF | CM2
* WINDSHEAR / PWS sw ....OFF | CM2
* GAIN knob ....AUTO/CAL | CM2
* MODE selector ....AS RQRD | CM2

5 Ident.: PRO-NOR-SOP-04-A-20806569.9001001 / 02 MAY 23

L/G

L/G lever ....DOWN | CM2

6 Ident.: PRO-NOR-SOP-04-A-20806570.9001001 / 02 MAY 23

WIPERS

Both WIPER selectors....................OFF | CM2

BATTERIES CHECK/EXTERNAL POWER

7 Ident.: PRO-NOR-SOP-04-20806571.9001001 / 02 MAY 23
Applicable to: ALL

- **If the aircraft has not been electrically supplied for 6 h or more, perform the following check:**

  BAT 1 pb-sw and BAT 2 pb-sw ....CHECK OFF | CM2
  BAT 1 and 2 VOLTAGE....................CHECK ABOVE 25.5 V | CM2

  L2 *Battery voltage above 25.5 V ensures a charge above 50 %.*

  L1
  - **If the battery voltage is at or below 25.5 V:**

    A charging cycle of about 20 min is required.

    BAT 1 pb-sw and BAT 2 pb-sw .... AUTO | CM2
    EXT PWR pb-sw ....ON | CM2

    L2 *Check on ELEC SD page, that the battery contactor is closed and the batteries are charging.*

    L1
    - **After 20 min:**

      BAT 1 pb-sw and BAT 2 pb-sw ....OFF | CM2
      BAT 1 and 2 VOLTAGE....................CHECK ABOVE 25.5 V | CM2
      BAT 1 pb-sw and BAT 2 pb-sw ....AUTO | CM2

  - **If the battery voltage is above 25.5 V:**

    BAT 1 pb-sw and BAT 2 pb-sw .... AUTO | CM2

    L2 *If the APU is started on batteries only, it should be started within 30 min after the selection of batteries to AUTO (35 min after battery selection to AUTO, the battery charge is less than 25 % of maximum capacity).*

L1
- **If the aircraft has been electrically supplied during the last 6 h:**

  BAT 1 pb-sw and BAT 2 pb-sw ....AUTO | CM2

- **If the AVAIL light is on:**

EXT PWR pb-sw	ON	CM2

APU FIRE TEST/APU START

Applicable to: ALL

8 Ident.: PRO-NOR-SOP-04-C-20806572.9001001 / 02 MAY 23

RMP

RMP	CHECK ON/SET	CM2
Green NAV light	CHECK OFF	CM2
SEL light	CHECK OFF	CM2
COM FREQUENCIES	TUNE	CM2

L2 *Use VHF 1 for ATC (only VHF 1 is available in emergency electrical configuration), VHF 2 for ATIS and company frequencies. VHF 3 is normally devoted to ACARS.*

9 Ident.: PRO-NOR-SOP-04-C-20806573.9001001 / 02 MAY 23

APU FIRE

WARNING	The automatic shutdown of the APU and the discharge of the APU fire extinguisher bottle may occur if the flight crew presses the APU FIRE test pb for more than 3 seconds.

APU FIRE pb-sw	CHECK IN and GUARDED	CM2
APU AGENT light	CHECK OFF	CM2
APU FIRE TEST pb	PRESS and MAINTAIN	CM2

TEST RESULT

Check that the APU fire detection and extinguishing system is operative:

- APU FIRE warning on (if AC power available):
  - ECAM
  - CRC
  - MASTER WARN light
- APU FIRE pb-sw lighted red (lighted partially if AC power not available)
- SQUIB light and DISCH light on

10 Ident.: PRO-NOR-SOP-04-C-20806574.9001001 / 02 MAY 23

APU START

The APU start should be delayed until 5 minutes prior to the estimated time of departure or when doors close, whichever occurs first. The APU may be started earlier in the following conditions:
- When no external power unit is available
- When there's no ACU available and the cockpit/cabin temperature is above 26 °C or at or below 17 °C.

Note: If it's not able to control the temperature in the parameters described above using the external power unit, the APU must be used.

■ **If the EXT PWR pb-sw ON light is on:**

APU MASTER SW pb-sw .... ON | CM2
APU START pb-sw .... ON | CM2

Note: Wait at least 3 s before selecting APU START pb-sw.

L2 *For more information on the APU start, Refer to 00017438 **Not found**.*

For more information on APU starter limitations and APU operations during refueling:
- *Refer to 00020088 **Not found***
- *Refer to 00020091 **Not found**.*

L1 * EXT PWR pb-sw .... AS RQRD | CM2

L2 *The flight crew should keep ON the external power units to reduce the APU load, particularly in hot weather conditions.*

L1 ■ **If the EXT PWR pb-sw ON light is off:**

APU MASTER SW pb-sw .... ON | CM2
APU START pb-sw .... ON | CM2

Note: Wait at least 3 s before selecting APU START pb-sw.

L2 *For more information on the APU start, Refer to 00017438 **Not found**.*

For more information on APU starter limitations and APU operations during refueling:
- *Refer to 00020088 **Not found***
- *Refer to 00020091 **Not found**.*

L1 AIR COND

● **When the APU is AVAIL:**

APU BLEED pb-sw .... ON | CM2

L2 *Do not use APU BLEED, if the ground personnel confirms that a LP or HP ground air unit is connected to the aircraft. To determine if an HP ground air unit is connected, the flight crew should also check on the BLEED SD page, if there is pressure in the bleed air system.*

L1	ALL WHITE LIGHTS	OFF	CM2
	X BLEED selector	AUTO	CM2
	COCKPIT TEMP rotary selector and CABIN TEMP rotary selector	AS RQRD	CM2

L2 *Full range temperature 24 ± 6 °C (75 ± 11 °F).*

ADIRS

Ident.: PRO-NOR-SOP-04-00011159.0038001 / 02 MAY 23
Applicable to: MSN 01459

11 **ADIRS**

* All IR MODE selectors........NAV | CM2

CAUTION	*To avoid damage of the RTLU (Ruder Travel Limit Unit) mechanical stop, the SLAT/FLAP should be retracted before ADIRS alignment procedure. After full alingment of ADIRS if OAT is above 30 °C the flaps lever should be selected to 1 position to extend the slats and flaps again to avoid the "AIR L (R) WING LEAK" warning.*

L2 *Align or realign IRS as appropriate. Refer to FCTM/PR-NP-SOP-60 ADIRS Operations.*

L1

Note: *In order to prevent an erroneous data initialization, wait at least 12 min after power-up and then select the ADIRS to NAV.*

L2 A complete IRS alignment must be performed in the following cases:
- Before the first flight of the day, or
- When there is a crew change, or
- When the departure airport is located between latitudes 2 ° north and 2 ° south, or
- When the GPS is not available and the NAVAID coverage is poor on the expected route, or
- When the GPS is not available and the expected flight time is more than 3 h.

A fast IRS alignment must be performed if a complete IRS alignment is not necessary and the difference between the IRS position and the FMGC position is at or above 5 NM (see MCDU POSITION MONITOR page).
To perform an alignment, the aircraft must be stopped on ground. Do not align IRS during engine start, or while the engines are running. In the case of aircraft movement during the IRS alignment, the flight crew must perform a new full alignment.

ADIRS

Ident.: PRO-NOR-SOP-04-00011159.0009001 / 02 MAY 23
Applicable to: MSN 10949-11139
Impacted by TDU: 00022626 ADIRS

12 **ADIRS**

* All IR MODE selectors.. NAV | CM2

CAUTION	*To avoid damage of the RTLU (Ruder Travel Limit Unit) mechanical stop, the SLAT/FLAP should be retracted before ADIRS alignment procedure. After full alingment of ADIRS if OAT is above 30 °C the flaps lever should be selected to 1 position to extend the slats and flaps again to avoid the "AIR L (R) WING LEAK" warning.*

L2 *Align or realign IRS as appropriate. Refer to FCTM/PR-NP-SOP-60 ADIRS Operations.*

L1 L2 A complete IRS alignment must be performed in the following cases:
- Before the first flight of the day, or
- When there is a crew change, or
- When the departure airport is located between latitudes 2 ° north and 2 ° south, or
- When the GPS is not available and the NAVAID coverage is poor on the expected route, or
- When the GPS is not available and the expected flight time is more than 3 h.

A fast IRS alignment must be performed if a complete IRS alignment is not necessary and the difference between the IRS position and the FMGC position is at or above 5 NM (see MCDU POSITION MONITOR page).
To perform an alignment, the aircraft must be stopped on ground. Do not align IRS during engine start, or while the engines are running. In the case of aircraft movement during the IRS alignment, the flight crew must perform a new full alignment.

ADIRS

Ident.: PRO-NOR-SOP-04-00011159.0009001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

13 ADIRS

* All IR MODE selectors....................NAV | CM2

CAUTION	*To avoid damage of the RTLU (Ruder Travel Limit Unit) mechanical stop, the SLAT/FLAP should be retracted before ADIRS alignment procedure. After full alingment of ADIRS if OAT is above 30 °C the flaps lever should be selected to 1 position to extend the slats and flaps again to avoid the "AIR L (R) WING LEAK" warning.*

L2 *Align or realign IRS as appropriate.* Refer to FCTM/PR-NP-SOP-60 ADIRS Operations.

L1 L2 A complete IRS alignment must be performed in the following cases:
- Before the first flight of the day, or
- When there is a crew change, or
- When the departure airport is located between latitudes 2 ° north and 2 ° south, or
- When the GPS is not available and the NAVAID coverage is poor on the expected route, or
- When the GPS is not available and the expected flight time is more than 3 h.

A fast IRS alignment must be performed if a complete IRS alignment is not necessary and the difference between the IRS position and the FMGC position is at or above 5 NM (see MCDU POSITION MONITOR page).
To perform an alignment, the aircraft must be stopped on ground. Do not align IRS during engine start, or while the engines are running. In the case of aircraft movement during the IRS alignment, the flight crew must perform a new full alignment.

ADIRS

Ident.: TDU / PRO-NOR-SOP-04-00022626.0014001 / 02 MAY 23
Applicable to: MSN 10949-11139
Impacted DU: 00011159 ADIRS

14 ADIRS

* All IR MODE selector ....NAV | CM2

L2 *Align or realign IRS as appropriate.* Refer to FCTM/PR-NP-SOP-60 ADIRS Operations.

L1 *Note:* *With some dedicated FWC standards, some systems that depend on ADIRS data might generate the following spurious alerts until at least one IR mode selector is switched to NAV:*
- *AUTO FLT RUD TRV LIM SYS potentially associated with CAT 2 / CAT 3 / CAT 3 DUAL / GLS AUTOLAND INOP SYS*
- *COM SATCOM FAULT.*

L2 A complete IRS alignment must be performed in the following cases:
- Before the first flight of the day, or
- When there is a crew change, or
- When the departure airport is located between latitudes 2 ° north and 2 ° south, or
- When the GPS is not available and the NAVAID coverage is poor on the expected route, or
- When the GPS is not available and the expected flight time is more than 3 h.

A fast IRS alignment must be performed if a complete IRS alignment is not necessary and the difference between the IRS position and the FMGC position is at or above 5 NM (see MCDU POSITION MONITOR page).
To perform an alignment, the aircraft must be stopped on ground. Any aircraft movement will automatically restart the IRS alignment.
Do not align IRS during engine start, or while the engines are running.

COCKPIT LIGHTS

15 Ident.: PRO-NOR-SOP-04-20806577.9001001 / 02 MAY 23
Applicable to: ALL

COCKPIT LIGHTS

* COCKPIT LIGHTS.. AS RQRD | CM1-CM2

L2 *Set INT LT, FLOOD LT, INTEG LT (included glareshield and FCU).*

EFB/ACARS (IF INSTALLED) INITIALIZATION

16 Ident.: PRO-NOR-SOP-04-B-20806578.9001001 / 02 MAY 23
Applicable to: ALL

EFB START

ALL EFB...START | CM1-CM2

- **In accordance with the Operator's policy or if required by operational regulation:**

EFB/eQRH VERSION....................CHECK | CM1-CM2

L2 *If required, the flight crew performs this check unless a specific procedure is established as per Operator's policy to ensure that the correct version is onboard.*
On the EFB STATUS page and the eQRH My aircraft page, check the EFB VERSION number and compare it with the valid version number given as reference by the Operator (e.g. on the company flight plan).

17 Ident.: PRO-NOR-SOP-04-B-20806579.9001001 / 02 MAY 23
Applicable to: MSN 01459

ACARS INITIALIZATION

* ACARS ◁ ....INITIALIZE | CM1

L2 *Initialize ACARS if not done automatically, as per company policy.*

18 Ident.: PRO-NOR-SOP-04-B-20806580.9001001 / 02 MAY 23
Applicable to: ALL

FMGS PRE-INITIALIZATION

Perform FMGS Pre-Initialization in the case of ACARS ◁ operations or EFB operations with SYNCHRO AVIONICS ◁ .
At electrical power-up, the FMGSs and FCU run through various internal tests. Allow enough time (3 min) for tests’ completion, and do not start to press pushbuttons until the tests are over. If the “PLEASE WAIT” message appears, do not press any MCDU key until the message clears.

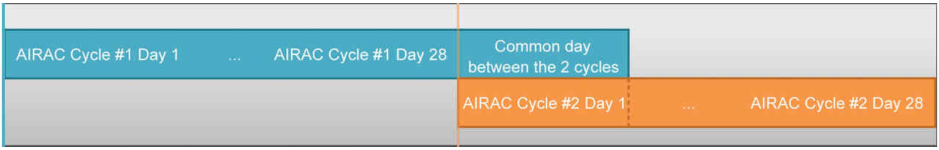
19 Ident.: PRO-NOR-SOP-04-B-20806581.9001001 / 02 MAY 23
Applicable to: ALL

* ENGINE & AIRCRAFT TYPE....................CHECK | CM1

Ident.: PRO-NOR-SOP-04-B-00014424.0001001 / 26 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139

* FM database validity.................................CHECK | CM1

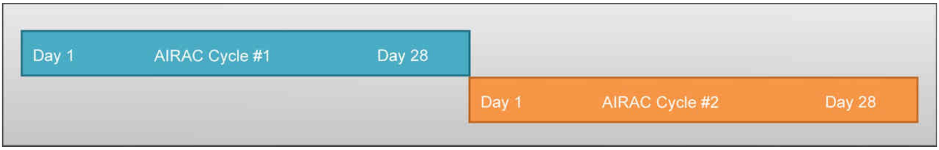
- *Check DATA BASE validity and stored WPT/NAVAIDS/RWY/ROUTES, if any. If applicable, review the stored data for deletion decision.*
- *On Honeywell FMS, the double AIRAC cycle of the NDB has one day in common (AIRAC Cycle #1 Day 29 / AIRAC Cycle #2 Day 1). From Day 2 of AIRAC Cycle #2, the active database is no longer valid and the message "CHECK DATA BASE CYCLE" will be triggered.*
  On the common day, select AIRAC Cycle #2 prior to the first flight of the day.



Ident.: PRO-NOR-SOP-04-B-00014424.0002001 / 26 OCT 22
Applicable to: MSN 04827-04860

* FM database validity.................................CHECK | CM1

- *Check DATA BASE validity and stored WPT/NAVAIDS/RWY/ROUTES, if any. If applicable, review the stored data for deletion decision.*
- *On Thales FMS, if the "CHECK DATA BASE CYCLE" message triggers, the active database is no longer valid. Therefore, on Day 1 of AIRAC Cycle #2, select AIRAC Cycle #2 prior to the first flight of the day.*



20 Ident.: PRO-NOR-SOP-04-B-20806583.9001001 / 02 MAY 23
Applicable to: ALL

* FLT NBR.................................INSERT/CHECK | CM1

L2 *Insert FLT NBR only if the company flight plan is not received via ACARS.*

L1 * FROM/TO.................................INSERT/CHECK | CM1

L2 *Insert FROM/TO only if the company flight plan is not received via ACARS.*

21 Ident.: PRO-NOR-SOP-04-B-20806584.9001001 / 02 MAY 23
Applicable to: ALL

EFB STATUS PAGE

* EFB SYNCHRO AVIONICS .... CLICK | CM1-CM2
* EFB STATUS page.................................. INSERT/CHECK | CM1-CM2

L2 On the EFB STATUS page, each flight crewmember checks or, inserts and checks (if no EFB SYNCHRO AVIONICS):
- ACFT TYPE and ACFT REG
- FLT NBR and FROM/TO (in agreement with the FMS ACTIVE/INIT page).

AIRCRAFT ACCEPTANCE

22 Ident.: PRO-NOR-SOP-04-20806585.9001001 / 02 MAY 23
Applicable to: ALL

* RCL pb ....PRESS 3 s | CM1

L2 *This action recalls all the warnings that the flight crew cleared or cancelled during the last flight*

L1 * LOGBOOK AND MEL/CDL ITEMS..................................CHECK | BOTH

L2
- *Check the deferred items list.*
- *Crosscheck with ECAM recall.*

All flight crew members:
- *Check and discuss the technical condition of the aircraft (deferred items list)*
- *Check and discuss the MEL items (including the associated operational procedures, if any) and the CDL items. This includes the acceptability of the MEL and CDL items and the influence on the flight plan*
- *Activate the MEL and CDL items (the activated MEL and CDL items are sent to the performance applications.*

L1 * AIRCRAFT CONFIGURATION SUMMARY..................................CHECK | BOTH

L2 *For awareness of the current aircraft configuration, both flight crewmembers discuss together the optional installed aircraft systems and functions, and their influence on the ongoing flight.*

L1 * OEB..................................CHECK | BOTH

L2 *All flight crewmembers review and discuss together all OEBs and associated procedures applicable to the aircraft.*
Any flight crewmember who operates at the flight deck at any time during the on-going flight should be aware of the applicable OEB(s).

L1 * AIRCRAFT ACCEPTANCE..................................PERFORM | CM1

Note: *The aircraft acceptance can be performed later, but must be completed at the end of the Cockpit Preparation.*

PRELIMINARY PERFORMANCE DETERMINATION

23 Ident.: PRO-NOR-SOP-04-20806586.9001001 / 02 MAY 23
Applicable to: ALL

For more information, *Refer to FCTM/PR-NP-SOP-PRELIMINARY COCKPIT PREPARATION-Preliminary Takeoff Performance Computation*.

Note: *In the event of a short turn around time, the PRELIMINARY PERFORMANCE DETERMINATION may be done after returning from EXTERIOR WALKAROUND.*

Each flight crewmember independently computes the preliminary performance data in accordance with the technical condition of the aircraft and/or any other criteria that may affect the aircraft performance (e.g. NOTAM, runway condition, aircraft configuration).

* AIRFIELD DATA....................OBTAIN | CM1-CM2

L2 *Obtain data needed for initializing the system, preparing the cockpit and for preliminary takeoff performance computation. The airfield data should include: RUNWAY IN USE, ALTIMETER SETTING, and WEATHER DATA.*

L1
- **If the LOADSHEET application is used:**
  - * PRELIMINARY LOADING....................COMPUTE AND CROSSCHECK | CM1-CM2
- **If dispatch under MEL and in accordance with the logbook:**
  - * MEL/CDL ITEMS (as appropriate)....................CHECK ACTIVATED | CM1-CM2

L2 *As appropriate, check that the MEL and CDL items are activated in the applicable T.O PERF application.*

L1 * NAV CHARTS CLIPBOARD....................PREPARE | BOTH

L2 *Prepare the necessary charts and verify that both flight crewmembers refer to the same chart reference.*

L1 * PRELIMINARY TAKEOFF PERF DATA....................COMPUTE | CM1-CM2

L2 *Both flight crewmembers discuss together and decide all of the following:*
- *RWY to be used*
- *RWY intersection*
- *Optimum Flap*
- *Use of anti-ice*
- *Use of packs*
- *Takeoff thrust setting options (FLEX, TOGA, DERATE).*

The PF and the PM independently compute the preliminary takeoff performance data.

L1 * PRELIMINARY TAKEOFF PERF DATA.. CROSSCHECK | BOTH

L2 *The PF and the PM compare and ensure that the computations are the same.*

BEFORE WALKAROUND

Ident.: PRO-NOR-SOP-04-E-00021917.0001001 / 26 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

ECAM PAGES

- **On the DOOR SD page:**

  * OXY...CHECK PRESSURE | PM

  - **If the OXY pressure is half boxed in amber:**

    MIN FLT CREW OXY CHART.......................................CHECK PRESSURE | PM

    L2 *Verify that the pressure is sufficient for the scheduled flight (Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure).*

L1

- **On the HYD SD page:**

  * RESERVOIR FLUID LEVEL......................CHECK WITHIN NORMAL RANGE | PM

  Note: The volume of the hydraulic fluid in the reservoirs may change with Outside Air Temperature. As a result, the reservoir fluid level that appears on the HYD SD page may be outside of the normal range with no HYD RSVR LO AIR PR or HYD RSVR LO LVL warning. If the fluid level is outside of the normal range, contact maintenance to determine if service is required.

- **On the ENG SD page:**

  * ENG OIL QUANTITY..CHECK | PM

  L2 *Check that the oil quantity is above the minimum. Refer to LIM-ENG Oil.*

Ident.: PRO-NOR-SOP-04-E-00021917.0003001 / 26 OCT 22
Applicable to: MSN 08495-09324, 10949-11139

ECAM PAGES

- **On the DOOR SD page:**

  * OXY...CHECK PRESSURE | PM

  - **If the OXY pressure is half boxed in amber:**

    MIN FLT CREW OXY CHART.......................................CHECK PRESSURE | PM

    L2 *Verify that the pressure is sufficient for the scheduled flight (Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure).*

L1
- **On the HYD SD page:**

  * RESERVOIR FLUID LEVEL........................ CHECK WITHIN NORMAL RANGE | PM

  Note: *The volume of the hydraulic fluid in the reservoirs may change with Outside Air Temperature. As a result, the reservoir fluid level that appears on the HYD SD page may be outside of the normal range with no HYD RSVR LO AIR PR or HYD RSVR LO LVL warning. If the fluid level is outside of the normal range, contact maintenance to determine if service is required.*

- **On the ENG SD page:**

  * ENG OIL QUANTITY...CHECK | PM

L2 *Check that the oil quantity is above the minimum. Refer to LIM-ENG Oil.*

L1 *Note:* *If the ENG oil quantity indication does not appear on the ENG SD page, press the ENG 1 and 2 FADEC GND PWR pb-sw on the overhead maintenance panel. After the check of the ENG oil quantity, press again the ENG 1 and 2 FADEC GND PWR pb-sw.*

24 Ident.: PRO-NOR-SOP-04-E-20806588.9001001 / 02 MAY 23
Applicable to: ALL

F/CTL

FLAPS...CHECK POSITION | PM

L2 *Check the upper ECAM display to confirm that the FLAPS position agrees with the handle position.*

L1 * SPEEDBRAKE lever ....CHECK RETRACTED and DISARMED | PM

WARNING	*If flight control surface positions do not agree with the control handle positions, check with the maintenance crew before applying hydraulic power.*

25 Ident.: PRO-NOR-SOP-04-E-20806589.9001001 / 02 MAY 23
Applicable to: ALL

PARKING BRAKE

* ACCU PRESS indicator..CHECK | PM

L2 *The ACCU PRESS indication must be in the green band. If required use the electric pump on yellow hydraulic system to recharge the brake accumulator.*

L1 * PARK BRK handle ....ON | PM

L2 *When one brake temperature is above 500 °C (or 350 °C with brake fans ◁ ON), avoid applying the parking brake, unless operationally necessary.*

L1 * BRAKES PRESS indicator .... CHECK | PM

L2 *Check for normal indications.*

L1

WARNING	Yellow and green hydraulic systems are pressurized from yellow electric pump. Get ground crew clearance before using the electric pump.

Ident.: PRO-NOR-SOP-04-E-00010175.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

26

ALTERNATE BRAKING SYSTEM

Note: *The purpose of this check is to verify, the efficiency of the alternate braking system (absence of "spongy pedals").*

Y ELEC PUMP pb-sw .... CHECK OFF | PM
CHOCKS .... CHECK IN PLACE | PM
PARK BRK handle .... OFF | PM
BRAKE PEDALS .... PRESS | PM

L2 *Apply maximum pressure on both pedals.*

L1 BRAKE PRESSURE (on BRAKE press indicator) .... CHECK | PM

L2 *Pressure must build up without delay symmetrically on left and right sides for the same application simultaneously applied on left and right pedals. With full pedal deflection, the pressure must be between 2 000 and 2 700 PSI.*

L1 BRAKE PEDALS .... RELEASE | PM
PARK BRK handle .... ON | PM

L2 *The parking brake must be on during the exterior inspection to allow the flight crew to check brake wear indicators.*

27 Ident.: PRO-NOR-SOP-04-E-20806591.9001001 / 02 MAY 23
Applicable to: ALL

EMERGENCY EQUIPMENT

EMER EQPT .... CHECK | PM

L2 *Check that:*

- *Life vests are stowed*
- *Crash axe is stowed*
- *Protective Breathing Equipment (PBE) is stowed and ready for use*
- *Portable fire extinguisher is lockwired and the pressure gauge indicator is in the green area*
- *Smoke goggles are stowed (smoke hoods ◁)*
- *Oxygen masks are stowed*

- *Flashlights are stowed*
- *Escape ropes are stowed.*

28 Ident.: PRO-NOR-SOP-04-E-20806592.9001001 / 02 MAY 23
Applicable to: ALL

RAIN REPELLENT

RAIN RPLNT indicators ....CHECK PRESSURE and QUANTITY | PM

CAUTION	*Never use rain repellent to wash the windshield and never use it on a dry windshield.*

29 Ident.: PRO-NOR-SOP-04-E-20806593.9001001 / 02 MAY 23
Applicable to: ALL

REAR AND OVERHEAD CIRCUIT BREAKERS PANELS

REAR and OVERHEAD CIRCUIT BREAKERS panels.................................. CHECK | PM

L2 *Check that all circuit breakers are set. Reset as necessary.*

30 Ident.: PRO-NOR-SOP-04-E-20806594.9001001 / 02 MAY 23
Applicable to: ALL

LANDING GEAR PINS

* GEAR PINS .... CHECK ONBOARD and STOWED | PM

L2 *Check that the three gear pins are on board and stowed.*

GENERAL

1 Ident.: PRO-NOR-SOP-05-20806595.9001001 / 02 MAY 23
Applicable to: ALL

The CM1 must perform the complete EXTERIOR WALKAROUND procedure when taking on the aircraft, however due to operational reasons this action may be delegated to CM2.
If there is no flight crew or aircraft change, the PM will be responsible for the subsequent exterior inspections.

Note: *Crewmembers must wear hearing protection devices, safety reflective vest and all other personal protective equipment, when appropriate, during the exterior walkaround.*

The exterior walkaround ensures that the general condition of the aircraft is satisfactory and that the visible aircraft components and equipment are safe for the flight:
- There is no impact damage to the structure
- There is no evident fuel, oil, or hydraulic leak
- All ground access doors are closed.
- All covers are removed (e.g. pitot covers, AOA covers, etc.).
- Aircraft discrepancies will immediately be brought to the attention of the Pilot in command. The appropriate crewmember will notify maintenance and ground staff as necessary.

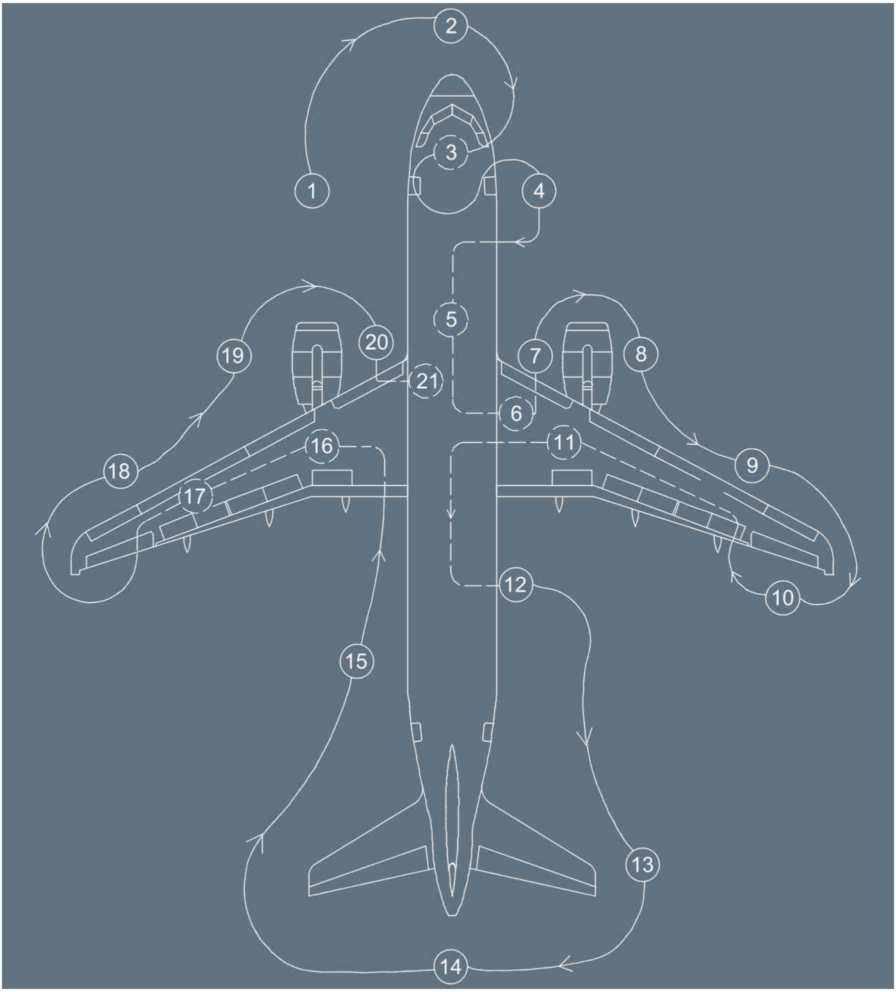
In case of ice and snow accumulated on the aircraft surfaces, the pilot in command of the aircraft must perform a complementary EXTERIOR WALKAROUND procedure.
The flight crew must perform a complete walkaround before each flight.
The parking brake must be set to ON during the exterior walkaround, in order to enable the flight crew to check brake wear indicators.

WARNING	If any landing gear door is open, do not apply hydraulic power until clearance is obtained from ground personnel.

EXTERIOR WALKAROUND

2 Ident.: PRO-NOR-SOP-05-A-20806596.9001001 / 02 MAY 23
Applicable to: ALL

SCHEMATIC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(1) *Refer to 00010363 **Not found***

(2) *Refer to 00010364 **Not found***

(3) *Refer to 00010365 **Not found***

(4) *Refer to 00010366 **Not found***

(5) *Refer to 00010367 **Not found***

(6) *Refer to 00010368 **Not found***

(7) *Refer to 00010370 **Not found***

(8) *Refer to 00010371 **Not found***

(9) *Refer to 00010372 **Not found***

(10) *Refer to 00010373 **Not found***

(11) *Refer to 00010374 **Not found***

(12) *Refer to 00010375 **Not found***

(13) *Refer to 00010376 **Not found***

(14) *Refer to 00010377 **Not found***

(15) *Refer to 00010378 **Not found***

(16) *Refer to 00010379 **Not found***

(17) *Refer to 00010380 **Not found***

(18) *Refer to 00010381 **Not found***

(19) *Refer to 00010384 **Not found***

(20) *Refer to 00010386 **Not found***

(21) *Refer to 00010387 **Not found***

3 Ident.: PRO-NOR-SOP-05-A-20806597.9001001 / 02 MAY 23
Applicable to: ALL

LH FWD FUSELAGE

AOA probes..CHECK CONDITION
F/O and CAPT static ports..CLEAR
Avionics equipment vent air inlet valve..CHECK CONDITION
Oxygen bay..CLOSED
Oxygen overboard discharge indicator(s)..GREEN
Toilet servicing door ❄ ....CLOSED

4 Ident.: PRO-NOR-SOP-05-A-20806598.9001001 / 02 MAY 23
Applicable to: ALL

NOSE SECTION

Pitot probes	CHECK CONDITION
STBY static ports	CLEAR
TAT probes	CHECK CONDITION
Radome and latches	CHECK CONDITION/LATCHED
FWD avionics compartment door	CLOSED
Ground electrical power door (if not required)	CLOSED

5 Ident.: PRO-NOR-SOP-05-A-20806599.9001001 / 02 MAY 23
Applicable to: ALL

NOSE L/G

Nose wheel chocks	IN PLACE
Wheels and tires	CHECK CONDITION
Nose gear structure	CHECK CONDITION
Taxi, Takeoff and Runway Turnoff lights	CHECK CONDITION
Hydraulic lines and electrical wires	CHECK CONDITION
Wheel well	CHECK
Safety pin	REMOVED

6 Ident.: PRO-NOR-SOP-05-A-20806600.9001001 / 02 MAY 23
Applicable to: ALL

RH FWD FUSELAGE

RH + Aft avionic compartment doors	CLOSED
Avionic equipment vent air outlet valve	CHECK CONDITION
F/O and CAPT static ports	CLEAR
AOA probe	CHECK CONDITION
FWD cargo door and selector panel	CHECK

Ident.: PRO-NOR-SOP-05-A-00010367.0001001 / 09 NOV 21
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

LOWER CENTER FUSELAGE

Potable water drain panel	CLOSED
Antennas	CHECK CONDITION
Drain mast	CHECK CONDITION
Emergency ram air inlet flap	CHECK CONDITION
LP and HP ground connection doors (if not required)	CLOSED

Anticollision light	CHECK CONDITION
CTR TK magnetic fuel level	FLUSH
Pack air intakes and outlets	CLEAR

Ident.: PRO-NOR-SOP-05-A-00010367.0002001 / 09 NOV 21
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

LOWER CENTER FUSELAGE

Antennas	CHECK CONDITION
Drain mast	CHECK CONDITION
Emergency ram air inlet flap	CHECK CONDITION
LP and HP ground connection doors (if not required)	CLOSED
Anticollision light	CHECK CONDITION
CTR TK magnetic fuel level	FLUSH
Pack air intakes and outlets	CLEAR

7 Ident.: PRO-NOR-SOP-05-A-20806602.9001001 / 02 MAY 23
Applicable to: ALL

RH CENTER WING

Yellow hydraulic bay door	CLOSED
Fuel panel	CLOSED
Tank magnetic fuel level(s)	FLUSH
Fuel water drain valve(s)	NO LEAK
Landing light	CHECK CONDITION
Wing leading edge ventilation intake ❄	CLEAR
Slat 1	CHECK CONDITION

Ident.: PRO-NOR-SOP-05-A-00010370.0020001 / 09 NOV 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

ENG 2 LH SIDE

Oil fill access door	CLOSED
Thrust reversers	CLOSED/LATCHED
Fan cowl doors	CLOSED/LATCHED/FLAG REMOVED
Drain mast	CHECK CONDITION/NO LEAK
Engine inlet and fan blades	CHECK CONDITION
Safety pin	REMOVED

Ident.: PRO-NOR-SOP-05-A-00010370.0011001 / 09 NOV 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

ENG 2 LH SIDE

Oil fill access door....................CLOSED
Master magnetic chip detector access door....................CLOSED
Thrust reversers....................CLOSED/LATCHED
Fan cowl doors....................CLOSED/LATCHED/FLAG REMOVED
Drain mast....................CHECK CONDITION/NO LEAK
Engine inlet and fan blades....................CHECK CONDITION
Safety pin....................REMOVED

Ident.: PRO-NOR-SOP-05-A-00010370.0007001 / 09 NOV 21
Applicable to: MSN 08495-09324, 10949-11139

ENG 2 LH SIDE

Engine oil tank access door....................CLOSED
Thrust reverser pressure relief door....................CLOSED
Thrust reversers....................CLOSED/LATCHED
Fan cowl doors....................CLOSED/LATCHED/FLAG REMOVED
Drain mast....................CHECK CONDITION/NO LEAK
Engine inlet and fan blades....................CHECK CONDITION

Ident.: PRO-NOR-SOP-05-A-00010371.0014001 / 09 NOV 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

ENG 2 RH SIDE

Vent inlet....................CLEAR
Pressure-relief/Start valve handle access door....................CLOSED
Thrust reversers....................CLOSED/LATCHED
Fan cowl doors....................CLOSED/LATCHED/FLAG REMOVED
Turbine exhaust ....CLEAR
Pylon/access panel....................CHECK CONDITION/CLOSED
Safety pin....................REMOVED

Ident.: PRO-NOR-SOP-05-A-00010371.0011001 / 09 NOV 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

ENG 2 RH SIDE

Pressure-relief/Start valve handle access door....................CLOSED
Thrust reversers....................CLOSED/LATCHED

Fan cowl doors........................CLOSED/LATCHED/FLAG REMOVED
Turbine exhaust........................CLEAR
Pylon/access panel........................CHECK CONDITION/CLOSED
Safety pin........................REMOVED

Ident.: PRO-NOR-SOP-05-A-00010371.0010001 / 09 NOV 21
Applicable to: MSN 08495-09324, 10949-11139

ENG 2 RH SIDE

Nacelle anti-ice valve access ports........................CLOSED
Thrust reversers........................CLOSED/LATCHED
Fan cowl doors........................CLOSED/LATCHED/FLAG REMOVED
Turbine exhaust........................CLEAR
Pylon/access panel........................CHECK CONDITION/CLOSED
Interphone jack flapper door ❄........................CHECK/CLOSED

8 Ident.: PRO-NOR-SOP-05-A-20806605.9001001 / 02 MAY 23
Applicable to: ALL

RH WING LEADING EDGE

Slats 2, 3, 4, 5........................CHECK CONDITION
Tank magnetic fuel level(s)........................FLUSH
Fuel water drain valve(s)........................NO LEAK
Refuel coupling........................CLOSED
Surge tank air inlet........................CLEAR
Fuel ventilation overpressure disc........................INTACT
Navigation and Strobe lights........................CHECK CONDITION
Wing tip/Sharklet........................CHECK CONDITION

9 Ident.: PRO-NOR-SOP-05-A-20806606.9001001 / 02 MAY 23
Applicable to: ALL

RH WING TRAILING EDGE

Static dischargers........................CHECK CONDITION
Control surfaces........................CHECK CONDITION
Flaps and fairings........................CHECK CONDITION
Antennas on top of fuselage........................CHECK CONDITION

10 Ident.: PRO-NOR-SOP-05-A-20806607.9001001 / 02 MAY 23
Applicable to: ALL

RH L/G AND FUSELAGE

Chocks.................... REMOVED
Wheels and tires.................... CHECK CONDITION
Brakes and brake wear indicators.................... CHECK CONDITION
Torque link damper.................... CHECK CONDITION
Hydraulic lines.................... CHECK
Landing gear structure.................... CHECK
Downlock springs.................... CHECK
Safety pin.................... REMOVED
Ground hydraulic connection yellow.................... CLOSED
Drain mast ❄ .... CHECK CONDITION
Shroud fuel drain.................... CHECK CONDITION/NO LEAK

11 Ident.: PRO-NOR-SOP-05-A-20806608.9001001 / 02 MAY 23
Applicable to: ALL

RH AFT FUSELAGE

RA Antennas.................... CHECK CONDITION

Check that the RA antennas are clean.

Cargo door and selector panel.................... CHECK
Bulk door ❄ (if not required).................... CLOSED
Toilet service access door.................... CLOSED
Outflow valve.................... CHECK CONDITION
Drain mast .... CHECK CONDITION
Flight recorder access door .... CLOSED
Pax oxygen discharge indicator ❄ .... GREEN

12 Ident.: PRO-NOR-SOP-05-A-20806609.9001001 / 02 MAY 23
Applicable to: ALL

TAIL

Stabilizer, elevator, fin and rudder.................... CHECK CONDITION
Static dischargers.................... CHECK
Lower fuselage structure (tail impact on runway).................... CHECK CONDITION

13 Ident.: PRO-NOR-SOP-05-A-20806610.9001001 / 02 MAY 23
Applicable to: ALL

APU

Access doors (if not required).................... CLOSED

Air intake.......CHECK CONDITION
Drain.......CHECK CONDITION/NO LEAK
Oil cooler air outlet ....CLEAR
Exhaust.......CLEAR
Navigation light.......CHECK CONDITION
Fire extinguisher overpressure indication (red disc).......IN PLACE

14 Ident.: PRO-NOR-SOP-05-A-20806611.9001001 / 02 MAY 23
Applicable to: ALL

LH AFT FUSELAGE

Stabilizer, elevator, fin and rudder.......CHECK CONDITION
Potable water service door.......CLOSED
Ground hydraulic connection blue door.......CLOSED
Ground hydraulic connection green and reservoir filling door.......CLOSED

15 Ident.: PRO-NOR-SOP-05-A-20806612.9001001 / 02 MAY 23
Applicable to: ALL

LH LANDING GEAR

Chocks.......REMOVED
Wheels and tires.......CHECK CONDITION
Brakes and brake wear indicators.......CHECK CONDITION
Torque link damper.......CHECK CONDITION
Hydraulic lines.......CHECK
Landing gear structure.......CHECK
Downlock springs.......CHECK
Safety pin.......REMOVED

16 Ident.: PRO-NOR-SOP-05-A-20806613.9001001 / 02 MAY 23
Applicable to: ALL

LH WING TRAILING EDGE

Flaps and fairing.......CHECK CONDITION
Control surfaces.......CHECK CONDITION
Static dischargers.......CHECK CONDITION
Antennas on top of fuselage.......CHECK CONDITION

17 Ident.: PRO-NOR-SOP-05-A-20806614.9001001 / 02 MAY 23
Applicable to: ALL

LH WING LEADING EDGE

Wing tip/Sharklet........CHECK CONDITION
Navigation and Strobe lights........CHECK CONDITION
Surge tank air inlet........CLEAR
Fuel ventilation overpressure disc........INTACT
Fuel water drain valve(s)........NO LEAK
Tank magnetic fuel level(s)........FLUSH
Slats 2, 3, 4, 5........CHECK CONDITION

Ident.: PRO-NOR-SOP-05-A-00010384.0015001 / 09 NOV 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

ENG 1 LH SIDE

Oil fill access door........CLOSED
Thrust reversers........CLOSED/LATCHED
Fan cowl doors........CLOSED/LATCHED/FLAG REMOVED
Drain mast........CHECK CONDITION/NO LEAK
Engine inlet and fan blades........CHECK CONDITION
Safety pin........REMOVED
Pylon/access panel........CHECK CONDITION/CLOSED

Ident.: PRO-NOR-SOP-05-A-00010384.0012001 / 09 NOV 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

ENG 1 LH SIDE

Oil fill access door........CLOSED
Master magnetic chip detector access door........CLOSED
Thrust reversers........CLOSED/LATCHED
Fan cowl doors........CLOSED/LATCHED/FLAG REMOVED
Drain mast........CHECK CONDITION/NO LEAK
Engine inlet and fan blades........CHECK CONDITION
Safety pin........REMOVED
Pylon/access panel........CHECK CONDITION/CLOSED

Ident.: PRO-NOR-SOP-05-A-00010384.0011001 / 09 NOV 21
Applicable to: MSN 08495-09324, 10949-11139

ENG 1 LH SIDE

Engine oil tank access door........CLOSED
Thrust Reverser pressure relief door........CLOSED
Thrust reversers........CLOSED/LATCHED

Fan cowl doors.. CLOSED/LATCHED/FLAG REMOVED
Drain mast.. CHECK CONDITION/NO LEAK
Engine inlet and fan blades.. CHECK CONDITION
Pylon/access panel.. CHECK CONDITION/CLOSED

Ident.: PRO-NOR-SOP-05-A-00010386.0015001 / 09 NOV 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

ENG 1 RH SIDE

Vent inlet.. CLEAR
Pressure relief/Start valve handle access door.. CLOSED
Thrust reversers.. CLOSED/LATCHED
Fan cowl doors.. CLOSED/LATCHED/FLAG REMOVED
Turbine exhaust.. CLEAR
Safety pin.. REMOVED

Ident.: PRO-NOR-SOP-05-A-00010386.0012001 / 09 NOV 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

ENG 1 RH SIDE

Pressure relief/Start valve handle access door.. CLOSED
Thrust reversers.. CLOSED/LATCHED
Fan cowl doors.. CLOSED/LATCHED/FLAG REMOVED
Turbine exhaust.. CLEAR
Safety pin.. REMOVED

Ident.: PRO-NOR-SOP-05-A-00010386.0011001 / 09 NOV 21
Applicable to: MSN 08495-09324, 10949-11139

ENG 1 RH SIDE

Nacelle anti-ice valve access ports.. CLOSED
Thrust reversers.. CLOSED/LATCHED
Fan cowl doors.. CLOSED/LATCHED/FLAG REMOVED
Turbine exhaust.. CLEAR
Interphone jack flapper door ❄ .... CHECK/CLOSED

18 Ident.: PRO-NOR-SOP-05-A-20806617.9001001 / 02 MAY 23
Applicable to: ALL

LH CENTER WING

Slat 1.. CHECK CONDITION
Wing leading edge ventilation intake ❄ .... CLEAR

Fuel water drain valve(s)	NO LEAK
Tank magnetic fuel level(s)	FLUSH
Landing lights	CHECK CONDITION
Hydraulic reservoir pressurization door	CLOSED
RAT doors	CLOSED

GENERAL

1 Ident.: PRO-NOR-SOP-06-20806618.9001001 / 02 MAY 23
Applicable to: ALL

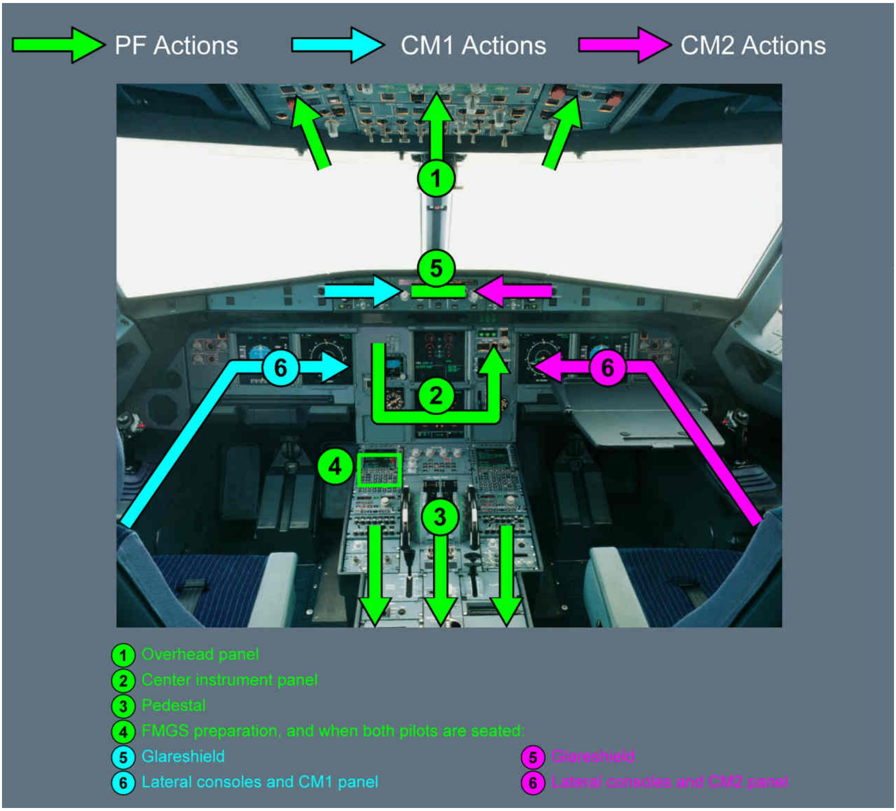
Items marked by asterisks (*) are the only steps to be completed after a transit stop without flight crew change. Otherwise, the new flight crew performs all the items.
The PF and PM should perform the cockpit preparation, in accordance with the defined panel scan sequence and tasksharing.
The PF prepares the overhead panel, the center instrument panel and the pedestal while the PM performs the external walkaround. When both flight crewmembers are seated and the PM has checked the FMS, both flight crewmembers continue the cockpit preparation.

WARNING	Do not pressurize the hydraulic systems until clearance is obtained from ground personnel.

FLOW PATTERN

2 Ident.: PRO-NOR-SOP-06-20806619.9001001 / 02 MAY 23
Applicable to: ALL

COCKPIT PREPARATION - FLOW PATTERN


PF Actions
CM1 Actions
CM2 Actions
1
5
6
2
6
4
3
1 Overhead panel
2 Center instrument panel
3 Pedestal
4 FMGS preparation, and when both pilots are seated:
5 Glareshield
6 Lateral consoles and CM1 panel
5 Glareshield
6 Lateral consoles and CM2 panel

OVERHEAD PANEL

3 Ident.: PRO-NOR-SOP-06-A-20806620.9001001 / 02 MAY 23
Applicable to: ALL

WHITE LIGHTS ON THE OVERHEAD PANEL

- **As a general rule, during the scan sequence of the overhead panel:**

* ALL WHITE LIGHTS (except MAINTENANCE panel)................................OFF | PF

Note: - *Depending on Operators policy, some lights may be kept ON during the cockpit preparation (e.g. lights on GND CONNECTION pb-sw)*
- *During the scan of the overhead panel, check also that the only amber lights are the GEN FAULT lights.*

Ident.: PRO-NOR-SOP-06-A-00015476.0006001 / 02 MAY 23
Applicable to: MSN 10949-11139

4 RCDR

* RCDR GND CTL pb-sw ....ON | PF

L2 *In order to perform the test, ensure that the PARK BRK is on.*

L1 LOUDSPEAKER VOLUME knob ....OFF (BOTH SIDES) | PF
ACP INT/RAD sw (CAPT and F/O)...SET to INT | PF
INTERPHONE VOLUME RECEPTION knob (CAPT and F/O)....................RELEASE | PF

L2 *Turn down the volume to the minimum.*

L1 CVR TEST pb ....PRESS AND MAINTAIN | PF

L2 *The CVR test is successful when an audio test signal (short tone) is heard.*

Ident.: PRO-NOR-SOP-06-A-00015476.0004001 / 02 MAY 23
Applicable to: MSN 08495-08635
Impacted by TDU: 00021691 Overhead Panel - RCDR

5 RCDR

* RCDR GND CTL pb-sw ....ON | PF

L2 *In order to perform the test, ensure that the PARK BRK is on.*

L1 LOUDSPEAKER VOLUME knob ....OFF (BOTH SIDES) | PF
ACP INT/RAD sw (CAPT and F/O)...SET to INT | PF
INTERPHONE VOLUME RECEPTION knob (CAPT and F/O)....................RELEASE | PF

L2 *Turn down the volume to the minimum.*

L1 CVR TEST pb ....PRESS AND MAINTAIN | PF

L2 *The CVR test is successful when an audio test signal is heard through the loudspeakers and the CVR TEST pb is pressed and maintained.*
Depending on the CVR model, the audio test signal is:

- *For CVR 30 minutes:*
  - *A continuous tone, or*
  - *A short tone.*
- *For CVR 120 minutes:*
  - *A short tone, or*
  - *A short tone and a beep every 4 s, or*
  - *Two short tones and a beep every 4 s.*

The audio test signal stops when the CVR TEST pb is released.

L1 *Note:*
- *The flight crew may also hear an acoustic feedback (i.e. Larsen effect) during the test. The test is still valid even if this acoustic feedback (i.e. Larsen effect) is heard*
- *If the flight crew cannot hear the audio test signal through the loudspeakers, and if the CVR maintenance headset (22RK or 28RK headset) is available, the flight crew can perform the CVR TEST through the CVR maintenance headset*
- *If an acoustic feedback (i.e. Larsen effect) is still heard, the flight crew can perform the CVR TEST using the 22RK or 28RK headset and with the parking brake set to off. Before setting the parking brake to off, the flight crew must ensure that chocks are in place or brakes are applied. Set the parking brake to on when the CVR TEST is achieved*
- *If no 22RK or 28RK headset is available, the Larsen effect can also be reduced by preventing the cockpit ambient microphone from picking up the ambient sound (i.e. by temporarily covering it during the test).*

Ident.: PRO-NOR-SOP-06-A-00015476.0004001 / 02 MAY 23
Applicable to: MSN 09190-09324

6 RCDR

* RCDR GND CTL pb-sw .... ON | PF

L2 *In order to perform the test, ensure that the PARK BRK is on.*

L1 LOUDSPEAKER VOLUME knob .... OFF (BOTH SIDES) | PF
ACP INT/RAD sw (CAPT and F/O)........................ SET to INT | PF
INTERPHONE VOLUME RECEPTION knob (CAPT and F/O)........ RELEASE | PF

L2 *Turn down the volume to the minimum.*

L1 CVR TEST pb .... PRESS AND MAINTAIN | PF

L2 *The CVR test is successful when an audio test signal is heard through the loudspeakers and the CVR TEST pb is pressed and maintained.*
Depending on the CVR model, the audio test signal is:

- *For CVR 30 minutes:*
  - *A continuous tone, or*
  - *A short tone.*
- *For CVR 120 minutes:*
  - *A short tone, or*
  - *A short tone and a beep every 4 s, or*
  - *Two short tones and a beep every 4 s.*

The audio test signal stops when the CVR TEST pb is released.

L1 *Note:*
- *The flight crew may also hear an acoustic feedback (i.e. Larsen effect) during the test. The test is still valid even if this acoustic feedback (i.e. Larsen effect) is heard*
- *If the flight crew cannot hear the audio test signal through the loudspeakers, and if the CVR maintenance headset (22RK or 28RK headset) is available, the flight crew can perform the CVR TEST through the CVR maintenance headset*
- *If an acoustic feedback (i.e. Larsen effect) is still heard, the flight crew can perform the CVR TEST using the 22RK or 28RK headset and with the parking brake set to off. Before setting the parking brake to off, the flight crew must ensure that chocks are in place or brakes are applied. Set the parking brake to on when the CVR TEST is achieved*
- *If no 22RK or 28RK headset is available, the Larsen effect can also be reduced by preventing the cockpit ambient microphone from picking up the ambient sound (i.e. by temporarily covering it during the test).*

Ident.: PRO-NOR-SOP-06-A-00015476.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

7 RCDR

* RCDR GND CTL pb-sw .... ON | PF

L2 *In order to perform the test, ensure that the PARK BRK is on.*

L1 LOUDSPEAKER VOLUME knob .... OFF (BOTH SIDES) | PF
ACP INT/RAD sw (CAPT and F/O) .... SET to INT | PF
INTERPHONE VOLUME RECEPTION knob (CAPT and F/O) .... RELEASE | PF

L2 *Turn down the volume to the minimum.*

L1 CVR TEST pb .... PRESS AND MAINTAIN | PF

L2 *The CVR test is successful when an audio test signal is heard through the loudspeakers and the CVR TEST pb is pressed and maintained.*
Depending on the CVR model, the audio test signal is:

- *For CVR 30 minutes:*
  - *A continuous tone, or*
  - *A short tone.*
- *For CVR 120 minutes:*
  - *A short tone, or*
  - *A short tone and a beep every 4 s, or*
  - *Two short tones and a beep every 4 s.*

The audio test signal stops when the CVR TEST pb is released.

L1 *Note:*
- *The flight crew may also hear an acoustic feedback (i.e. Larsen effect) during the test. The test is still valid even if this acoustic feedback (i.e. Larsen effect) is heard*
- *If the flight crew cannot hear the audio test signal through the loudspeakers, and if the CVR maintenance headset (22RK headset) is available, the flight crew can perform the CVR TEST through the CVR maintenance headset*
- *If an acoustic feedback (i.e. Larsen effect) is still heard, the flight crew can perform the CVR TEST using the 22RK headset and with the parking brake set to off. Before setting the parking brake to off, the flight crew must ensure that chocks are in place or brakes are applied. Set the parking brake to on when the CVR TEST is achieved*
- *If no 22RK headset is available, the Larsen effect can also be reduced by preventing the cockpit ambient microphone from picking up the ambient sound (i.e. by temporarily covering it during the test).*

Ident.: TDU / PRO-NOR-SOP-06-A-00021691.0006001 / 02 MAY 23
Applicable to: MSN 08495-08635
Impacted DU: 00015476 Overhead Panel - RCDR

8
RCDR

* RCDR GND CTL pb-sw .... ON | PF

L2 *Note:* *Before engine start, the RCDR GND CTL pb-sw may revert to AUTO in the case of electrical transient between EXT PWR and APU GEN. In that case, the flight crew must set the RCDR GND CTL pb-sw back to ON.*

In order to perform the test, ensure that the PARK BRK is on.

L1 LOUDSPEAKER VOLUME knob .... OFF (BOTH SIDES) | PF
ACP INT/RAD sw (CAPT and F/O)............................ SET to INT | PF
INTERPHONE VOLUME RECEPTION knob (CAPT and F/O)............ RELEASE | PF

L2 *Turn down the volume to the minimum.*

L1 CVR TEST pb .... PRESS AND MAINTAIN | PF

L2 *The CVR test is successful when an audio test signal is heard through the loudspeakers and the CVR TEST pb is pressed and maintained.*
Depending on the CVR model, the audio test signal is:

- *For CVR 30 minutes:*
  - *A continuous tone, or*
  - *A short tone.*
- *For CVR 120 minutes:*
  - *A short tone, or*
  - *A short tone and a beep every 4 s, or*
  - *Two short tones and a beep every 4 s.*

The audio test signal stops when the CVR TEST pb is released.

L1 *Note:*
- *The flight crew may also hear an acoustic feedback (i.e. Larsen effect) during the test. The test is still valid even if this acoustic feedback (i.e. Larsen effect) is heard*
- *If the flight crew cannot hear the audio test signal through the loudspeakers, and if the CVR maintenance headset (22RK or 28RK headset) is available, the flight crew can perform the CVR TEST through the CVR maintenance headset*
- *If an acoustic feedback (i.e. Larsen effect) is still heard, the flight crew can perform the CVR TEST using the 22RK or 28RK headset and with the parking brake set to off. Before setting the parking brake to off, the flight crew must ensure that chocks are in place or brakes are applied. Set the parking brake to on when the CVR TEST is achieved*
- *If no 22RK or 28RK headset is available, the Larsen effect can also be reduced by preventing the cockpit ambient microphone from picking up the ambient sound (i.e. by temporarily covering it during the test).*

9 Ident.: PRO-NOR-SOP-06-A-20806623.9001001 / 02 MAY 23
Applicable to: ALL

EVAC

CAPT & PURS/CAPT sw .... CAPT | PF

L2 *Set the CAPT & PURS/CAPT sw on the EVAC panel as per Company Policy.*

10 Ident.: PRO-NOR-SOP-06-A-20806624.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

STROBE sw .... AUTO | PF
BEACON sw .... OFF | PF
NAV & LOGO ◁ sw .... ON | PF

L2 *Set to NAV & LOGO 1 ◁ the NAV & LOGO sw ◁, ON, to turn on the navigation and logo lights (NAV & LOGO LT 2 ◁ is used only when NAV & LOGO LT 1 ◁ fails).*

L1 REMAINING EXTERIOR LIGHTS.. AS RQRD | PF

11 Ident.: PRO-NOR-SOP-06-A-20806625.9001001 / 02 MAY 23
Applicable to: ALL

SIGNS

* SIGNS panel.. SET | PF

L2
- *Set the SEAT BELTS sw to ON when refueling is complete.*
- *Set the EMER EXIT LT sw to ARM*
- *Set the other switches, as required.*

L1 *Note: If the CIDS has been programmed (option) for a non-smoking flight, NO SMOKING or NO PORTABLE/ELEC DEVICE ◁ signs are permanently on, with the EXIT sw or NO SMOKING sw or NO PORTABLE/ELEC DEVICE sw ◁ at AUTO.*

12 Ident.: PRO-NOR-SOP-06-A-20806626.9001001 / 02 MAY 23
Applicable to: ALL

PROBE/WINDOW HEAT

PROBE/WINDOW HEAT pb-sw .... AUTO | PF

13 Ident.: PRO-NOR-SOP-06-A-20806627.9001001 / 02 MAY 23
Applicable to: ALL

CABIN PRESS

LDG ELEV knob .... AUTO | PF

Ident.: PRO-NOR-SOP-06-A-00011163.0010001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

14 AIR COND

* ENG 2 BLEED.. AS RQRD | PF

If SETWA is installed and the procedure is to be performed then set the ENG 2 BLEED to OFF. This item is to configure the pneumatic system to perform a CROSSBLEED ENG START during SETWA operations.

* PACK 1.. OFF | PF

The Single Pack On Ground should be used as a normal procedure and must be discontinued in the following conditions:

- *If the airport is at 9 200 ft or higher*
- *If the cabin temperature is 17 °C or below*
- *If the cabin temperature is 26 °C or above*
- *If operational needs or weather conditions require so.*

If one of the conditions described above apply, the PACK 1 should be switched to ON in order to improve passenger and crew comfort.
At all times when the SINGLE PACK ON GROUND procedure conditions are met again, it must be resumed.

* PACK 2.. ON | PF
* PACK FLOW selector .... AS RQRD | PF

Select:

LO : If the number of occupants is below 144 + 4 (pax + cabin crew).

HI : For abnormally hot and humid conditions.

NORM : For all other normal operating cases.
If the APU is supplying, pack controllers select HI flow automatically, independent of the selector position.

Ident.: PRO-NOR-SOP-06-A-00011163.0001001 / 02 MAY 23
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

15 AIR COND

* ENG 2 BLEED.. AS RQRD | PF

If SETWA is installed and the procedure is to be performed then set the ENG 2 BLEED to OFF. This item is to configure the pneumatic system to perform a CROSSBLEED ENG START during SETWA operations.

* PACK 1 .... OFF | PF

The Single Pack On Ground should be used as a normal procedure and must be discontinued in the following conditions:

- *If the airport is at 9 200 ft or higher*
- *If the cabin temperature is 17 °C or below*
- *If the cabin temperature is 26 °C or above*
- *If operational needs or weather conditions require so.*

If one of the conditions described above apply, the PACK 1 should be switched to ON in order to improve passenger and crew comfort.
At all times when the SINGLE PACK ON GROUND procedure conditions are met again, it must be resumed.

* PACK 2 .... ON | PF
* PACK FLOW selector .... AS RQRD | PF

Select:

LO	:	*If the number of occupants is below 144 + 4 (pax + cabin crew).*
HI	:	*For abnormally hot and humid conditions.*
NORM	:	*For all other normal operating cases.*

If the APU is supplying, pack controllers select HI flow automatically, independent of the selector position.

Ident.: PRO-NOR-SOP-06-A-00011163.0002001 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

16 AIR COND

* ENG 2 BLEED .... AS RQRD | PF

If SETWA is installed and the procedure is to be performed then set the ENG 2 BLEED to OFF. This item is to configure the pneumatic system to perform a CROSSBLEED ENG START during SETWA operations.

* PACK 1 .... OFF | PF

The Single Pack On Ground should be used as a normal procedure and must be discontinued in the following conditions:

- *If the airport is at 9 200 ft or higher*
- *If the cabin temperature is 17 °C or below*
- *If the cabin temperature is 26 °C or above*
- *If operational needs or weather conditions require so.*

If one of the conditions described above apply, the PACK 1 should be switched to ON in order to improve passenger and crew comfort.

At all times when the SINGLE PACK ON GROUND procedure conditions are met again, it must be resumed.

* PACK 2	ON	PF
* ECON FLOW pb	AS RQRD	PF

Select:

ON : ECON flow, if the number of occupants is below 170 + 6 (pax + cabin crew).

Off : For normal flow.

If the APU is supplying, pack controllers select normal flow automatically, independent of the selector position.

17 Ident.: PRO-NOR-SOP-06-A-20806629.9001001 / 02 MAY 23
Applicable to: ALL

ELEC

ELEC pb (on the ECAM Control Panel)	PRESS	PF
BAT 1 pb-sw and BAT 2 pb-sw	OFF then ON	PF

L2 *This action initiates a charging cycle of the batteries.*

L1 10 s after setting all BAT pb-sw ON, check on the ELEC SD page that the current charge of the battery is below 60 A, and is decreasing.

- **If the charge of at least one battery is not below 60 A:**

  Wait until the end of the charging cycle of the batteries and perform this check again.

Ident.: PRO-NOR-SOP-06-A-00011166.0003001 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11139

18 FUEL

CAUTION	If the FUEL MODE SEL pb-sw is unduly left in the MAN position on ground, when the CTR TK L XFR pb-sw and CTR TK R XFR pb-sw are not in the OFF position: There is a possibility of fuel spillage. In this configuration, the center tank fuel transfer will not stop when the wing tanks become full.

* FUEL MODE SEL pb-sw	CHECK AUTO	PF

Ident.: PRO-NOR-SOP-06-A-00011166.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

19 FUEL

■ If the center tank is less than 200 kg (440 lb) for the flight:

Apply the following procedure, if your airline is affected by FUEL CTR TK PUMPS LO PR cautions on ground or in flight when the center tank is less than 200 kg (440 lb):

* FUEL MODE SEL pb-sw	MAN	PF
* CTR TK PUMP 1 pb-sw and CTR TK PUMP 2 pb-sw	OFF	PF

■ If the center tank is NOT less than 200 kg (440 lb) for the flight:

CAUTION If the FUEL MODE SEL pb is unduly left in the MAN position on ground, when the CTR TK PUMP 1 pb & CTR TK PUMP 2 pb are not in the OFF position: There is a possibility of fuel spillage, if there are any hidden failures.

* FUEL MODE SEL pb	CHECK AUTO	PF

20 Ident.: PRO-NOR-SOP-06-A-20806631.9001001 / 02 MAY 23
Applicable to: ALL

ENG 1 - ENG 2 FIRE

ENG 1 FIRE pb-sw and ENG 2 FIRE pb-sw	CHECK IN and GUARDED	PF
AGENT 1 light and AGENT 2 light	CHECK OFF	PF
ENG 1 TEST pb	PRESS and MAINTAIN	PF

L2 *The flight crew should maintain the TEST pb pressed during the time of the test.*

L1 ENG 2 TEST pb	PRESS and MAINTAIN	PF

L2 *The flight crew should maintain the TEST pb pressed during the time of the test.*

L1 TEST RESULT

Check that ENG 1 FIRE and ENG 2 FIRE detection and extinguishing systems are operative:
- The CRC sounds
- The MASTER WARN lights flash
- The ECAM displays the ENG 1 FIRE, ENG 2 FIRE alerts
- All ENG FIRE pb-sw come on red
- All SQUIB lights of the AGENT pb come on
- All DISCH lights of the AGENT pb come on
- All FIRE lights on the ENG MASTER panel come on.

21 Ident.: PRO-NOR-SOP-06-A-20806632.9001001 / 02 MAY 23
Applicable to: ALL

AUDIO SWITCHING PANEL

AUDIO SWITCHING selector ....NORM | PF

22 Ident.: PRO-NOR-SOP-06-A-20806633.9001001 / 02 MAY 23
Applicable to: ALL

CARGO HEAT

TEMPERATURE selector .... AS RQRD | PF

23 Ident.: PRO-NOR-SOP-06-A-20806634.9001001 / 02 MAY 23
Applicable to: ALL

THIRD OCCUPANT AUDIO CONTROL PANEL

PA knob .... RECEPT | PF

L2
- *This allows cabin attendant announcements to be recorded on the CVR.*
- *For proper recording, set volume at or above medium range.*

24 Ident.: PRO-NOR-SOP-06-A-20806635.9001001 / 02 MAY 23
Applicable to: ALL

MAINTENANCE PANEL

ALL LIGHTS..CHECK | PF

CTR INSTRUMENT PANEL

Ident.: PRO-NOR-SOP-06-B-00011179.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

25 STBY INSTRUMENT

* STBY INSTRUMENTS...CHECK | PF

L2
- *Check IAS, altimeter readings, altimeter settings and altitude*
- *Check no flag - Erect if necessary.*

Ident.: PRO-NOR-SOP-06-B-00011184.0001001 / 02 MAY 23
Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

26

ISIS

* ISIS..CHECK | PF

L2
- *Adjust brightness, check IAS, altimeter readings, altimeter settings and attitude display.*
- *Check no flags - Reset attitude, if necessary.*

Note: *Use of the ISIS bugs function is not recommended (Refer to DSC-34-NAV-20 Bugs Function)*

Ident.: PRO-NOR-SOP-06-B-00011185.0001001 / 02 MAY 23
Applicable to: MSN 01459

27

CLOCK

* CLOCK..CHECK/SET | PF

L2 *For more information on the setting of the clock, Refer to DSC-31-55-10 General.*

Ident.: PRO-NOR-SOP-06-B-00011185.0009001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

28

CLOCK

* CLOCK..CHECK/SET | PF

L2 *Note:*

1. *If the date is incorrect, set the date manually then set and keep the clock mode to internal (INT) mode for the whole flight.*
2. *To comply with the time precision requirement (+/-1 s UTC) for ATC datalink communication, the flight crew must either:*
   - *Use the clock in GPS mode, or*
   - *Use the clock in INT mode and synchronize the clock with the GPS at least one time per day. This synchonization ensures that the UTC time drift is below +/- 1 s UTC.*

For more information on the setting of the clock, Refer to DSC-31-55-10 General.
For more information on the use of the internal (INT) mode, Refer to DSC-31-55-20 Operation in Internal Mode.

29 Ident.: PRO-NOR-SOP-06-B-20806639.9001001 / 02 MAY 23
Applicable to: ALL

NOSEWHEEL STEERING

* A/SKID & N/W STRG sw ....ON | PF

PEDESTAL

30 Ident.: PRO-NOR-SOP-06-C-20806640.9001001 / 02 MAY 23
Applicable to: ALL

ACP

INT knob .... PRESS OUT/VOLUME CHECK | PF

L2 *Ensure sure that INT volume is turned up, to enable contact with the ground crew.*

L1 VHF .... CHECK | PF

L2 *Check transmission and reception.*

L1 HF (if required for flight).......... CHECK | PF

L2 *Check transmission and reception.*

CAUTION	- *Do not transmit on HF during refueling operations (i.e. refueling, defueling, fuel transfer)* - *Only perform HF radio checks when appropriate (i.e. no personnel in the immediate vicinity).*

31 Ident.: PRO-NOR-SOP-06-C-20806641.9001001 / 02 MAY 23
Applicable to: ALL

PARKING BRK

* ACCU PRESS indicator.......... CHECK | PF

L2 *The ACCU PRESS indication must be in the green band. If required, use the electric pump on yellow hydraulic system to recharge the brake accumulator.*

L1

WARNING	Yellow and green hydraulic systems are pressurized from yellow electric pump. Get ground crew clearance before using the electric pump.

* PARK BRK handle .... CHECK ON | PF
* BRAKES PRESS indicator.......... CHECK | PF

L2 *Check for normal indications.*

L1 ● **If brakes are hot and chocks are in place:**

* PARK BRK handle .... OFF | PF

L2 *This action increases the brake cooling.*

Ident.: PRO-NOR-SOP-06-C-00011191.0001001 / 02 MAY 23
Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

32 COCKPIT DOOR

If required by local Airworthiness Authorities:

ANN LT selector ....TEST | PF

L2 *Check that the OPEN and FAULT lights (on the pedestal), and the three LED lights (on the overhead panel) come on.*

L1 ANN LT selector ....BRT | PF

L2 *Check that all lights go off.*

L1 CKPT DOOR..CHECK CORRECT OPERATION | PF

L2
- *Set the CKPT DOOR sw to the UNLOCK position. Check that the door opens, and that the OPEN light comes on*
- *Then, with the door fully open, release the CKPT DOOR sw (check that it returns to NORM position). Close the door. Check that it is locked, and that the OPEN Indication goes off.*

L1 CKPT DOOR MECHANICAL OVERRIDE sw ....CHECK | PF

L2 *Check that the door opens normally, and that it closes when the mechanical override is used.*

33 Ident.: PRO-NOR-SOP-06-C-20806643.9001001 / 02 MAY 23
Applicable to: ALL

SWITCHING PANEL

All selectors...CHECK NORM | PF

34 Ident.: PRO-NOR-SOP-06-C-20806644.9001001 / 02 MAY 23
Applicable to: ALL

ENG

* THRUST lever .... IDLE | PF
* ENG MASTER sw ....OFF | PF
* ENG MODE selector .... NORM | PF

35 Ident.: PRO-NOR-SOP-06-C-20806645.9001001 / 02 MAY 23
Applicable to: ALL

GRAVITY GEAR EXTN

GRAVITY GEAR EXTN.. CHECK STOWED | PF

36 Ident.: PRO-NOR-SOP-06-C-20806646.9001001 / 02 MAY 23
Applicable to: ALL

ATC

* ATC....STBY | PF

L2 *ATC and TCAS are on standby. To prevent possible interference to radar surveillance systems, TCAS should not be selected before the holding point/lining up.*

L1 ALT RPTG....ON | PF
ATC SYS 1....SELECT | PF

L2 *For RVSM operations (Refer to 00020828 **Not found**), select SYS 1 if AP 1 is used, and SYS 2 if AP 2 is used.*
Only system 1 is available, in emergency electrical configuration.

L1 * TCAS....ABV | PF

RMP

37 Ident.: PRO-NOR-SOP-06-20806647.9001001 / 02 MAY 23
Applicable to: ALL

RMP....CHECK ON/SET | PF
Green NAV light....CHECK OFF | PF
SEL light....CHECK OFF | PF
COM FREQUENCIES....TUNE | PF

L2 *Use VHF 1 for ATC (only VHF 1 is available in emergency electrical configuration), VHF 2 for ATIS, 121.50 MHz in flight and all other necessary secondary communication or company frequencies.*
VHF 3 is normally devoted to ACARS.

ATC DATALINK COMMUNICATION

Ident.: PRO-NOR-SOP-06-00013746.0002001 / 09 NOV 21
Applicable to: MSN 04827-04974

* MSG....ERASE | PF

L2 *This avoid confusing CPDLC messages from the previous flight with the ones of the current flight.*

FMGS PREPARATION

38 Ident.: PRO-NOR-SOP-06-D-20806649.9001001 / 02 MAY 23
Applicable to: ALL

GENERAL

At electrical power-up, the FMGSs and FCU run through various internal tests. Allow enough time (3 min) for tests' completion, and do not start to press pushbuttons until the tests are over. If the "PLEASE WAIT" message appears, do not press any MCDU key until the message clears.

In the case of ACARS ◁ operations, or EFB operations with SYNCHRO AVIONICS ◁ , the following actions are already performed in the section "FMGS Pre-Initialization" of the PRELIMINARY COCKPIT PREPARATION procedure and do not need to be performed again:
- ENGINE & AIRCRAFT TYPE check
- FM database validity check
- Flight plan initialization:
  - FLT NBR insertion
  - FROM/TO insertion

*Refer to 00014422 **Not found**.*

39 Ident.: PRO-NOR-SOP-06-D-20806650.9001001 / 02 MAY 23
Applicable to: ALL

ENGINE AND AIRCRAFT TYPE

* ENGINE & AIRCRAFT TYPE.. CHECK | PF

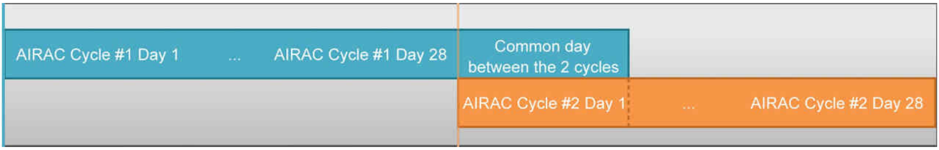
L2 *Press the DATA key, and display the STATUS page (if not displayed).*

Ident.: PRO-NOR-SOP-06-D-00011228.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139

40 FM DATABASE VALIDITY

* FM database validity.. CHECK | PF

L2
- *Check database validity and stored WPT/NAVAIDS/RWY/ROUTES, if any. If applicable, review the stored data for deletion decision.*
- *On Honeywell FM, the double AIRAC cycle of the NDB has one day in common (AIRAC Cycle #1 Day 29 / AIRAC Cycle #2 Day 1). From Day 2 of AIRAC Cycle #2, the active database is no longer valid and the message CHECK DATA BASE CYCLE will be triggered.*
  On the common day, select AIRAC Cycle #2.

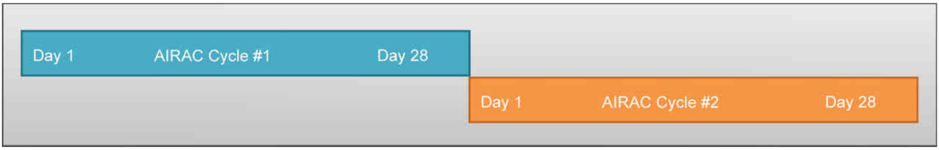


Ident.: PRO-NOR-SOP-06-D-00011228.0002001 / 02 MAY 23
Applicable to: MSN 04827-04860

41
FM DATABASE VALIDITY

* FM database validity..CHECK | PF

L2
- *Check DATA BASE validity and stored WPT/NAVAIDS/RWY/ROUTES, if any. If applicable, review the stored data for deletion decision.*
- *On Thales FMS, if the "CHECK DATA BASE CYCLE" message triggers, the active database is no longer valid. Therefore, on Day 1 of AIRAC Cycle #2, select AIRAC Cycle #2 prior to the first flight of the day.*



Ident.: PRO-NOR-SOP-06-D-00011229.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

42
NAVAID DESELECTION

* NAVAID DESELECTION..AS RQRD | PF

L2
If NOTAMs warn of any unreliable or unserviceable DME or VOR/DME, access the SELECTED NAVAIDS page, and deselect the related NAVAID.

Ident.: PRO-NOR-SOP-06-D-00011229.0002001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-07098

43
NAVAID DESELECTION

* NAVAID DESELECTION..AS RQRD | PF

L2
If NOTAMs warn of any unreliable or unserviceable DME or VOR/DME, access the SELECTED NAVAIDS page and deselect the related NAVAID.

Ident.: PRO-NOR-SOP-06-D-00011229.0011001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

44
NAVAID DESELECTION

* NAVAID DESELECTION..AS RQRD | PF

L2
If NOTAMs warn of any unreliable or unserviceable DME or VOR/DME, access the SELECTED NAVAIDS page, and deselect the related NAVAID.

45 Ident.: PRO-NOR-SOP-06-D-20806653.9001001 / 02 MAY 23
Applicable to: ALL

FLIGHT PLAN INITIALIZATION

* FLIGHT PLAN INITIALIZATION...COMPLETE | PF

L2
- *Press the INIT key*
- *Insert CO RTE or city pair, and check FROM/TO*
- *Check/modify ALTN/CO RTE*
- *Enter flight number*

Note: For ATC needs, the crew should enter exactly the entire flight number, as shown on the ICAO flight plan, without inserting any space, on the MCDU INIT page.

- *Enter (and/or check) cost index*
- *Enter intended initial CRZ FL, or check if it was already supplied by the database. Modify it, if necessary, taking into account ATC constraints or expected gross weight*
- *Check and modify CRZ FL TEMP and tropopause level to agree with forecast*
- *Enter (and/or check) the expected ground temperature for take off (GND TEMP)* ⊲
- *PRESS IRS INIT prompt*
- *Check alignment latitude/longitude.*

Ident.: PRO-NOR-SOP-06-D-00011232.0011001 / 02 MAY 23
Applicable to: MSN 01459, 02887

46 ADIRS POSITION INITIALIZATION

* ADIRS POSITION INITIALIZATION...AS APPROPRIATE | PF

L2 *Confirm or insert position coordinates for the IRS alignment. Refer to FCTM/PR-NP-SOP-60 FMGS Preparation.*

L1
- Between latitude 73 ° and 82 °, the IRS alignment should last at least 15 min.
  After the start of the IRS alignment procedure, wait 15 min. Then press the ALIGN IRS prompt.

Ident.: PRO-NOR-SOP-06-D-00011232.0001001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

47 ADIRS POSITION INITIALIZATION

* ADIRS POSITION INITIALIZATION...AS APPROPRIATE | PF

L2 *Confirm or insert position coordinates for the IRS alignment. Refer to FCTM/PR-NP-SOP-60 FMGS Preparation.*

IRS Alignment Based on GPS ◁✲ Position available:

The position initialization is automatic. The position for the initialization of the IRS is the GPS position. However, the flight crew can manually override the automatic position initialization. The IRS crosschecks the flight crew's manual entry with the GPS position.

IRS Alignment Based on GPS ◁✲ Position not available:

Apply the manual position initialization procedure.

48 Ident.: PRO-NOR-SOP-06-D-20806655.9001001 / 02 MAY 23
Applicable to: ALL

ACTIVE F-PLN CHECK

* F-PLN A page..COMPLETE AND CHECK | PF

L2 *If CO RTE has been inserted, the F-PLN should automatically include the preferential or probable takeoff runway approach and landing runway, associated SIDs, STARs, transition and en-route waypoints. However some databases will only include departure and arrival airport IDENTs and en-route waypoints.*

The flight crew must check, modify, or insert (as applicable) the F-PLN in the following order, according to the data given by ATIS, ATC, or MET:

- *Lateral revision at departure airport. Select RWY, then SID, then TRANS using scroll keys*

  Note: On the MCDU departure page, select only a runway associated with an ILS or NO NAVAIDS.

- *Lateral revision at WPT for ROUTE modification if needed. (Refer to 00010632 **Not found**)*
- *Vertical revision. Check or enter climb speed limit, constraints according to ATC clearance. Enter step altitude as appropriate.*

L1 * WINDS...AS APPROPRIATE | PF

L2 *Choose between using trip wind and the forecast wind for CLB, CRZ and DES phases.(Refer to 00011024 **Not found**).*

L1 * F-PLN.. CHECK | PF

L2
- *Check the F-PLN using F-PLN page and ND PLAN mode versus the computer (paper) flight plan or navigation chart*
- *Check DIST TO DEST along the F-PLN. Compare it with the total distance computed for the flight with the computer (paper) flight plan.*

49 Ident.: PRO-NOR-SOP-06-D-20806656.9001001 / 02 MAY 23
Applicable to: ALL

SECONDARY F-PLN

* SECONDARY FLIGHT PLAN...AS APPROPRIATE | PF

L2 *This is routinely a copy of the active flight plan. However, consideration may be given to the following:*

a. Copy the active F-PLN, but modify it at a suitable WPT for an immediate return to the departure airfield in the event of, for example, engine failure

b. If weather is below landings minima at the departure airfield, the secondary flight plan should be that required for a diversion immediately after takeoff

c. If there is a chance of a change in runway or SID during taxi, prepare for it by copying the active flight plan and making the necessary modifications.

50 Ident.: PRO-NOR-SOP-06-D-20806657.9001001 / 02 MAY 23
Applicable to: ALL

RADIO NAV

* RADIO NAV...CHECK | PF

L2
- *Check the VOR, ILS / GLS ◁ / MLS ◁ , and ADF ◁ tuned by the FMGC*
- *Modify them if required, and check that the correct identifier is displayed on the ND and PFD (VOR, ILS / GLS ◁ / MLS ◁). If unsatisfactory, go through the audio check. For GLS ◁ / MLS ◁ , no audio check is necessary.*

L1

CAUTION	Do not enter an IDENT or channel associated with a MLS ◁ .

51 Ident.: PRO-NOR-SOP-06-D-20806658.9001001 / 02 MAY 23
Applicable to: ALL

GROSS WEIGHT INSERTION (INIT B PAGE);

* ZFW/ZFWCG.. INSERT | PF
* BLOCK FUEL...INSERT | PF

CAUTION	The characteristic speeds displayed on the MCDU (green dot, F, S, VLS) are computed from the ZFW and ZFWCG entered by the crew on the MCDU. Therefore, this data must be carefully checked (Captain’s responsibility).

- The flight crew should insert the weights after completing all other insertions. This is to avoid cycles of prediction computations at each change in flight plan, constraints, etc
- If ZFW and ZFWCG are unavailable, it is acceptable to enter the expected values in order to obtain predictions. Similarly, the flight crew may enter the expected fuel on board, if refueling has not been completed at that time
- If ZFW, ZFWCG, and BLOCK FUEL are inserted, the FMS will provide all predictions, as well as the EXTRA fuel, if any.

● **If the flight has been dispatched with operational tankering:**

FINAL/TIME..INSERT | PF

- The operational tankering fuel should be added to the FINAL/TIME fuel and inserted into the FINAL/TIME field.
- If ZFW, ZFWCG, FINAL/TIME and BLOCK FUEL are inserted, the FM will provide all predictions, as well as the actaul EXTRA fuel, if any.

52 Ident.: PRO-NOR-SOP-06-D-20806659.9001001 / 02 MAY 23
Applicable to: ALL

TAKEOFF DATA INSERTION (PERF TAKEOFF PAGE):

The PF inserts the takeoff data in the PERF TAKEOFF page of the MCDU.

* T.O SHIFT..INSERT AS RQRD | PF

L2 *If the aircraft takes off from an intersection, insert a T.O shift value (even when GPS PRIMARY is active) to increase flight crew awareness of the runway length reduction.*

L1 * V1, VR, V2..INSERT | PF
* FLX TO TEMP..INSERT | PF
* THR RED/ACC altitude..SET or CHECK | PF

The THR RED/ACC altitude must be checked on the EFB.

Note: *If EFB is inoperative or not available, the THR RED/ACC altitude must be checked on the ODM (Operational Data Manual).*

If a Noise Abatement Departure Procedure is in effect, the pilot must adjust the values according to the local regulations. If the ACC altitude is not specified, it must be of 3.000 ft AFE and the minimum THR RED altitude, if not specified, must be of 800 ft AFE (NADP 1).

* ENG OUT ACC altitude..SET or CHECK | PF

The ENG OUT ACC altitude must be checked on the EFB (minimum 1.500 ft AFE)

* FLAPS/THS reminder..INSERT | PF

The FLAPS reminder position must be checked against the TO CONF setting selected on the EFB.

L2 *The THS can be left black until the loadsheet is received. When entered in the MCDU, the THS value will be used to trigger the F/CTL PITCH TRIM/MCDU/CG DISAGREE ECAM caution, if appropriate.*

Ident.: PRO-NOR-SOP-06-D-00011241.0001001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-07098

53

RNP INSERTION (PROG PAGE):

* RNP.. SET or CHECK | PF

L2 *For RNP AR departure, check or insert the RNP.*

54 Ident.: PRO-NOR-SOP-06-D-20806661.9001001 / 02 MAY 23
Applicable to: ALL

CLIMB, CRUISE, DESCENT, SPEED PRESELECTION

* PRESET SPEEDS.. AS RQRD | PF

L2 *If the flight is cleared for a close-in turn or close-in altitude constraint, the flight crew may preselect green dot speed on the PERF CLB page. Once the CLB phase is active, the preselected speed will be displayed in the FCU speed window and on the PFD (blue symbol). Once the turn is completed or the altitude cleared, the pilot will resume the managed speed profile by pressing the SPD selector on the FCU.*
Similarly the pilot may select a CRZ MACH number on the PERF CRZ page (constant CRZ Mach segment, for example). When the CRZ phase is active, the preselected CRZ MACH number will be displayed in the FCU speed window and on the PFD. When ECON MACH number may be resumed, the crew presses the FCU SPD selector.
In either of the above cases, the pilot may cancel the CLB or CRZ preselected SPD/MACH prior to activating the related phase, by selecting ECON on the PERF CLB or CRZ pages.
SPD LIM is defaulted to 250 kt below 10 000 ft in the managed speed profile. This may be either cleared or modified on the VERT REV page at the origin (or a climb waypoint).

55 Ident.: PRO-NOR-SOP-06-D-20806662.9001001 / 02 MAY 23
Applicable to: ALL

CHECK OF FMGS PREPARATION:

* FMS PREPARATION.. CROSSCHECK | PM

L2 *After the PF prepares the FMS, the PM checks all the data entered in the FMS. This check includes a crosscheck between:*

- *Waypoints of the expected departure route that include constraints*
- *Waypoints of the flight plan and the computerized flight plan*
- *Initial cruise altitude and the computerized flight plan*

- *Total track miles and the computerized flight plan*
- *Fuel remaining at destination and the computerized flight plan*
- *Performance data displayed on the PM's EFB with the PERF TAKE OFF page. This includes modifications of the THR RED/ACCEL/EO ACCEL settings, if applicable*
- *TRANS ALT in the ACTIVE/PERF page*
- *Setup of the SEC flight plan.*

L1 L2 The PM should have the same mental image of the intended departure procedure, trajectory, and constraints as the PF. The PM should check with the PF if anything is not clear.

L1 * EFB/MCDU GREEN DOT..COMPARE | PM

L2 *The PM compares Green Dot speed computed by the FMGS and the Green Dot speed computed using the TAKEOFF application. A discrepancy indicates a difference in the TOW used in both systems (EFB/FMGS).*

GLARESHIELD

Applicable to: ALL

56 Ident.: PRO-NOR-SOP-06-E-20806663.9001001 / 02 MAY 23

EFIS CONTROL PANEL

* BAROMETRIC REFERENCE..SET/CROSSCHECK | PF-PM

L2
- *Set QNH (or QFE) on the EFIS control panel and on the standby altimeter.*
- *Check the barometric reference and altitude indications on the PFDs and on the standby altimeter.*
  The maximum difference is:
  ±20 ft between both PFDs
  And depending on the aircraft configuration:
  ±100 ft between ISIS and PFDs, or
  ±300 ft between mechanical standby altimeter and PFDs.

L1 * FD..CHECK ON | PF-PM
* ILS/LS..AS RQRD | PF-PM
* ND MODE and RANGE..AS RQRD | PF-PM
* ADF/VOR sw..AS RQRD | PF-PM

L2 *Display VOR and ADF pointers as needed.*

57 Ident.: PRO-NOR-SOP-06-E-20806664.9001001 / 02 MAY 23

FCU

* SPD/MACH window	DASHED	PF
* HDG-V/S / TRK-FPA pb	HDG-V/S	PF
* ALT window	INITIAL EXPECTED CLEARANCE ALTITUDE	PF

Note: *Do not engage the autothrust on ground, as it may generate the AUTO FLT A/THR OFF warning at engine start.*

LATERAL CONSOLES

58 Ident.: PRO-NOR-SOP-06-20806665.9001001 / 02 MAY 23
Applicable to: ALL

OXYGEN MASK TEST

WARNING	To prevent hearing damage to the ground crew connected to the intercom system, inform them that a loud noise may be heard in the headset when performing the oxygen mask test.

- **On the OXYGEN panel:**

CREW SUPPLY pb	CHECK ON	PF-PM

- **On the glareshield:**

LOUDSPEAKERS	ON	PF-PM

- **On the audio control panel:**

INT reception knob	PRESS OUT-ADJUST	PF-PM
INT/RAD sw	INT	PF-PM

- **On the mask stowage box:**
  - Press and hold the reset/test pb in the direction of the arrow.
    - Check that the blinker turns yellow for a short time, and then goes black.
  - Hold the reset/test pb down, and press the emergency pressure selector.
    - Check that the blinker turns yellow and remains yellow, as long as the emergency pressure selector is pressed.
    - Listen for oxygen flow through the loudspeakers. Warn any engineer, whose headset may be connected to the nose intercom, that a loud noise may be heard when performing this check.

- Check that the reset/test pb returns to the up position and the N 100 % selector is in the 100 % position.
- Press the emergency pressure selector again, and check that the blinker does not turn yellow. This ensures that the mask is not supplied.

● **On the ECAM DOOR/OXY SD page:**
REGUL LO PR message........ CHECK OFF | PF-PM

Note: *The crew must perform this check after having checked all masks. It ensures that the LP valve is open, (due to residual pressure between the LP valve and the oxygen masks, an LP valve failed in the closed position may not be detected during the oxygen mask test).*

INSTRUMENT PANELS

Ident.: PRO-NOR-SOP-06-00011252.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-04974, 05066, 05101-05345, 05591-05643, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

59 PFD and ND brightness knob........ AS RQRD | PF-PM

L2 *Check the ND outer ring is set to maximum brightness (radar/terrain display).*

L1 LOUDSPEAKER knob........ SET | PF-PM

L2 *Set the LOUDSPEAKER knob around the 1 o'clock position.*

L1 * PFD........ CHECK | PF-PM

L2
- *Check PFD/ND not transferred.*
- *Check for correct display, when ATT and HDG are available.*
- *Check IAS, FMA, initial target ALT, altimeter readings, VSI, altimeter settings, heading and attitude display.*

L1 * ND........ CHECK | PF-PM

L2
- *Check for correct display.*
- *Crosscheck MAG HDG indications on the ND and DDRMI.*
- *Check heading, initial waypoint, VOR ADF indications.*

INSTRUMENT PANELS

Ident.: PRO-NOR-SOP-06-00011252.0002001 / 02 MAY 23
Applicable to: MSN 04827-04860, 05005, 05097, 05528, 05749-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11139

60 PFD and ND brightness knob........ AS RQRD | PF-PM

L2 *Check the ND outer ring is set to maximum brightness (radar/terrain display).*

L1 LOUDSPEAKER knob .... SET | PF-PM

L2 *Set the LOUDSPEAKER knob around the 1 o'clock position.*

L1 * PFD .... CHECK | PF-PM

L2
- *Check PFD/ND not transferred.*
- *Check for correct display, when ATT and HDG are available.*
- *Check IAS, FMA, initial target ALT, altimeter readings, VSI, altimeter settings, heading and attitude display.*

L1 * ND .... CHECK | PF-PM

L2
- *Check for correct display.*
- *Check heading, initial waypoint, VOR ADF indications.*

ECAM CONTROL PANEL

61 Ident.: PRO-NOR-SOP-06-20806667.9001001 / 02 MAY 23
Applicable to: ALL

* PRESS pb .... PRESS | PF

L2 *Check that the CAB PRESS SD page page displays LDG ELEV AUTO, to confirm the correct position of the LDG ELEV knob.*

L1 * STS pb .... PRESS | PF

L2 *Check that INOP SYS display is compatible with MEL.*
*If a message is displayed in MAINTENANCE STATUS, Refer to MEL/00012623 **Not found**.*

ADIRS

62 Ident.: PRO-NOR-SOP-06-20806668.9001001 / 02 MAY 23
Applicable to: ALL

* IRS ALIGN .... CHECK | PM

L2 *On the POSITION MONITOR page, check that the IRS are in NAV mode, and check that the distance between each IRS and the FMS position is lower than 5 NM. Select ND in ROSE NAV or ARC mode, and confirm that the aircraft position is consistent with the position of the airport, the SID and the surrounding NAVAIDs.*

FUEL ON BOARD

63 Ident.: PRO-NOR-SOP-06-20806669.9001001 / 02 MAY 23
Applicable to: ALL

* FUEL ON BOARD..CHECK | PF-PM

L2
- *Check that ECAM FOB corresponds to the F-PLN*
- *On ECAM FUEL SD page, check that the fuel is correctly balanced*
- *Crosscheck that the sum of the FOB recorded at the end of the last flight and the fuel uplift (if any) is consistent with the current FOB. If an abnormal difference is found, a maintenance action is due.*

FOB after refueling	***Abnormal difference above***
Up to 6 t (13 200 lb)	*400 kg (900 lb)*
Between 6 t (13 200 lb) and 12 t (26 500 lb)	*500 kg (1 100 lb)*
More than 12 t (26 500 lb)	*600 kg (1 300 lb)*

DEPARTURE BRIEFING

64 Ident.: PRO-NOR-SOP-06-20806670.9001001 / 02 MAY 23
Applicable to: ALL

* DEPARTURE BRIEFING...PERFORM | BOTH

Note: *In case of Delayed Refueling or Short Turn Around Time, pilots may start the departure briefing prior to refueling finalization.*

COCKPIT PREPARATION CHECKLIST

65 Ident.: PRO-NOR-SOP-06-20806671.9001001 / 02 MAY 23
Applicable to: ALL

* COCKPIT PREPARATION C/L...COMPLETE | PF-PM

Intentionally left blank

BEFORE PUSHBACK/START CLEARANCE

Applicable to: ALL

1 Ident.: PRO-NOR-SOP-07-A-20806672.9001001 / 02 MAY 23

LOADSHEET

FINAL LOADSHEET.. CHECK | PF-PM

L2 *Both crew members carefully check the Load and Trim Sheet, particularly for gross errors. Make sure that the load sheet data is correct (e.g. correct flight, correct aircraft, dry operating index, configuration, Fuel on Board, etc.).*

L1 ZFW/ZFWCG..CHECK/REVISE | PF-PM

L2 *The PF compares the ZFW and the ZFWCG with the previously-entered data, and adjust if necessary.*

L1 ZFW/ZFWCG.. CROSSCHECK | PF-PM

L2 *The PM crosschecks the ZFW and the ZFWCG entered in the FMS.*

Check that the takeoff CG is within Load and Trim Sheet operational limits.

2 Ident.: PRO-NOR-SOP-07-A-20806673.9001001 / 02 MAY 23

FUEL

FUEL ON BOARD..CHECK | PF-PM

L2
- *Check that ECAM FOB corresponds to the F-PLN*
- *On the ECAM FUEL SD page, check that the FOB corresponds to the loadsheet.*

3 Ident.: PRO-NOR-SOP-07-A-20806674.9001001 / 02 MAY 23

TAKEOFF DATA

- **If takeoff conditions changed:**

L2 For more information, *Refer to FCTM/PR-NP-SOP-BEFORE PUSHBACK OR START-Takeoff Data*.

L1 FINAL TAKEOFF PERF DATA.. RECOMPUTE | PF-PM

L2 *The PF and the PM independently compute again the takeoff performance data.*

L1 FMS TAKEOFF DATA.. REVISE | PF

L2 *The PF revises the takeoff data in the FMS.*
If the flight crew uses the optimum configuration option for the computation, they should pay specific attention to changes to the configuration of the slats/flaps at takeoff.

L1 FMS REVISED TAKEOFF PERF DATA......................................CROSSCHECK | PM

L2 *The PM crosschecks the performance data displayed on the PM's EFB with the FMS PERF T.O page.*

Note: If EFB is inoperative or not available, the PM must check the takeoff speeds and the flexible temperature using the ODM (Operational Data Manual)/Airport Analysis.

L1 EFB/MCDU GREEN DOT...COMPARE | PM

L2 *The PM compares Green Dot speed computed by the FMGS and the Green Dot speed computed using the TAKEOFF application. A discrepancy indicates a difference in the TOW used in both systems (EFB/FMGS).*

4 Ident.: PRO-NOR-SOP-07-A-20806675.9001001 / 02 MAY 23

SEATING POSITION

SEATS, SEAT BELTS, HARNESSES, RUDDER PEDALS, ARMRESTS...ADJUST | PF-PM

L2 *The seat is correctly adjusted when the pilot's eyes are in line with the red ball and white light.*

5 Ident.: PRO-NOR-SOP-07-A-20806676.9001001 / 02 MAY 23

MCDU

FMS PERF TO page...SELECT | PF

L2 *It is recommended to display the PERF TO page on the PF side.*

L1 FMS F-PLN page..SELECT | PM

L2 *It is recommended to display the F-PLN page on the PM side.*

6 Ident.: PRO-NOR-SOP-07-A-20806677.9001001 / 02 MAY 23

AIR CONDITIONING UNITS

AIR CONDITIONING UNITS..CHECK DISCONNECTED | PM

ELEC

EXT PWR pb ....CHECK AVAIL | PM

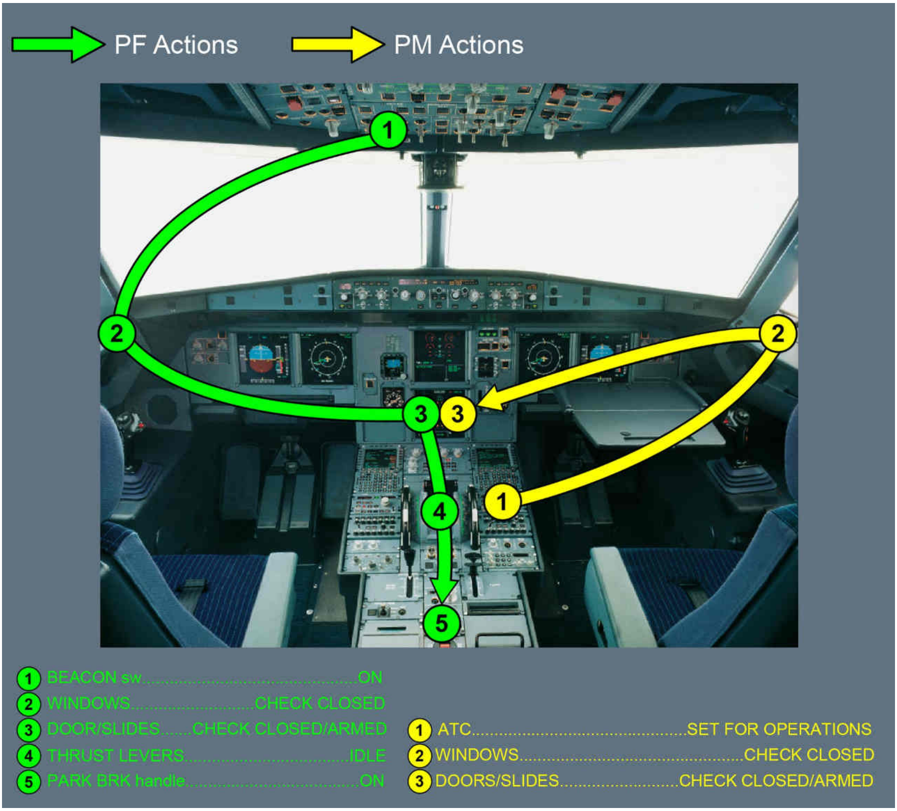
WARNING	Disconnection of the external power with the EXT PWR pb ON may cause injury to the ground engineer. Request disconnection of the external power only with the EXT PWR pb AVAIL.

EXT PWR DISCONNECTION...REQUEST | PM

AT PUSHBACK/START CLEARANCE

7 Ident.: PRO-NOR-SOP-07-B-20806678.9001001 / 02 MAY 23
Applicable to: ALL

BEFORE START FLOW PATTERN



① BEACON sw..ON
② WINDOWS..........................CHECK CLOSED
③ DOOR/SLIDES.......CHECK CLOSED/ARMED
④ THRUST LEVERS.................................IDLE
⑤ PARK BRK handle.....................................ON

① ATC...SET FOR OPERATIONS
② WINDOWS...CHECK CLOSED
③ DOORS/SLIDES.........................CHECK CLOSED/ARMED

8 Ident.: PRO-NOR-SOP-07-B-20806679.9001001 / 02 MAY 23
Applicable to: ALL

The Single Engine Taxi Without APU (SETWA) must be considered as the standard operating procedure when taxiing out the aircraft. This procedure must not be performed if any of the following situations apply:

- The aircraft has been dispatched with MEL items that affect operational procedures.
- Heavy gross weight.
- Slippery taxiways.
- Uphill slopes.
- Low visibility conditions.
- The use of Anti-Ice is required.
- APU is not working.
- Captain considers that the procedure will increase the workload and could have an impact on the flight safety.
- At airports where Pushback is not available and/or with reduced distances and space where jet blast can cause damage.
- If the Aircraft is not configured with Single Engine Taxi Without APU (SETWA), One Engine Taxi with APU may be considered with the above conditions.

9 Ident.: PRO-NOR-SOP-07-B-20806680.9001001 / 02 MAY 23
Applicable to: ALL

SLIDES ARMED ANNOUNCE

SLIDES ARMED.. ANNOUNCE | CM1

The Pilot in Command may perform the “slides armed” announcement as soon as the doors are closed, as long as no boarding bridge and stairs are connected to the aircraft.

10 Ident.: PRO-NOR-SOP-07-B-20806681.9001001 / 02 MAY 23
Applicable to: ALL

SAFETY CHECK

SAFETY CHECK..OBTAIN | PF

When ground mechanic confirms "SAFETY CHECK OK" it means:

- *NOSE GEAR STEERING PIN INSTALLED AND ALL CABIN AND CARGO DOORS, PANEL AND ENGINE COWLING CLOSED AND LOCKED.*
- *PITOTS AND STATIC PORTS CHECKED AND CLEAR, GEAR PINS REMOVED.*

11 Ident.: PRO-NOR-SOP-07-B-20806682.9001001 / 02 MAY 23
Applicable to: ALL

PUSHBACK/START CLEARANCE

	PUSHBACK/START CLEARANCE.................OBTAIN	PM
L2	*Obtain ATC pushback/start clearance and ground crew clearance.*	

12 Ident.: PRO-NOR-SOP-07-B-20806683.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

	BEACON sw ....ON	PF
L2	*When cleared for start or pushback, set to ON the BEACON sw.*	

13 Ident.: PRO-NOR-SOP-07-B-20806684.9001001 / 02 MAY 23
Applicable to: ALL

ATC

	ATC.................SET FOR OPERATION	PM
L2	*Set to AUTO or in accordance with airport requirements.*	

Ident.: PRO-NOR-SOP-07-B-00010199.0001001 / 02 MAY 23
Applicable to: MSN 01143-01251, 01518, 01593-01628

14 WINDOWS AND DOORS

	WINDOWS and DOORS.................CHECK CLOSED	PF-PM
L2	- *To ensure that the sliding window is correctly closed and locked, push the handle of the sliding window fully forward to the closed position, and verify that the red indicator is visible* - *Check, on the ECAM lower display, that all the aircraft doors are closed.*	
L1	SLIDES.................CHECK ARMED	PF-PM
L2	*Check, on the ECAM lower display, that all slides are armed.*	

Ident.: PRO-NOR-SOP-07-B-00010199.0002001 / 02 MAY 23
Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

15 WINDOWS AND DOORS

WINDOWS and DOORS...CHECK CLOSED | PF-PM

L2
- *To ensure that the sliding window is correctly closed and locked, push the handle of the sliding window fully forward to the closed position, and check that the red indicator is visible*
- *Check, on the ECAM lower display, that all the aircraft doors are closed*
- *When required by local airworthiness authorities, check that the cockpit door is closed and locked (no cockpit door open/fault indication).*
  If entry is requested, identify the person requesting entry before unlocking the door. With the cockpit door sw on NORM position, the cockpit door is closed and locked. If entry is requested from the cabin, and if no further action is performed by the pilot, the cabin crew will be able to unlock the door by using the emergency access procedure. Except for crew entry/exit, the cockpit door should remain closed until engine shutdown.

L1 SLIDES..CHECK ARMED | PF-PM

L2 *Check, on the ECAM lower display, that all slides are armed.*

16 Ident.: PRO-NOR-SOP-07-B-20806686.9001001 / 02 MAY 23
Applicable to: ALL

THRUST LEVERS

THRUST LEVERS...IDLE | PF

CAUTION	*The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, then thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.*

17 Ident.: PRO-NOR-SOP-07-B-20806687.9001001 / 02 MAY 23
Applicable to: ALL

ACCU PRESSURE

ACCU PRESS indicator...CHECK | PF

L2 *The ACCU PRESS indication must be in the green band. If required, use the electric pump on yellow hydraulic system to recharge the brake accumulator.*

L1

WARNING	Yellow and green hydraulic systems are pressurized from yellow electric pump. Get ground crew clearance before using the electric pump.

18 Ident.: PRO-NOR-SOP-07-B-20806688.9001001 / 02 MAY 23
Applicable to: ALL

PARKING BRAKE AND NOSEWHEEL STEERING

- **If pushback is not required:**

PARK BRK handle .... ON | PF
BRAKES PRESS indicator .... CHECK | PF

L2 *Check for normal indications.*

L1 BEFORE START C/L .... COMPLETE | PF-PM

The T.O. SPEEDS & THRUST Item should be confirmed by both pilots according to the following check technique:

T.O. SPEEDS & THRUST .... _____(BOTH) | PF-PM

The PF reads aloud V1, VR, V2 and thrust setting on the FMS PERF page, e.g. “V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two” The PM reads aloud V1, VR, V2 and thrust setting on the EFB, e.g. “V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two”

Ident.: PRO-NOR-SOP-07-B-00010198.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

19

- **If pushback is required:**

NW STRG DISC MEMO .... CHECK DISPLAYED | PF

L2 *In the case of pushback (towbarless or conventional), the nosewheel steering selector bypass pin must be in the tow position. The NW STRG DISC memo on the ECAM indicates this position.*

L1

CAUTION	*If the ECAM does not display the NW STRG DISC memo, but the ground crew confirms that the tow pin is in the towing position, do not start the engines during pushback in order to avoid possible damage to the nose landing gear upon green hydraulic pressurization.* *To dispatch the aircraft in such a case, Refer to MMEL/MI-32-51 NWS Electrical Deactivation Box.*

L2 *In the case of a powerpush by the main landing gear, the nosewheel steering selector should remain in the normal position to steer the aircraft (Refer to PRO-NOR-SUP-MISC-D Pushback with Power Push Unit via the Main Landing Gear - Procedure 1/2).*

L1 BEFORE START C/L .... COMPLETE | PF-PM

The T.O. SPEEDS & THRUST Item should be confirmed by both pilots according to the following check technique:

T.O. SPEEDS & THRUST...______(BOTH) | PF-PM

The PF reads aloud V1, VR, V2 and thrust setting on the FMS PERF page, e.g. "V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two".
The PM reads aloud V1, VR, V2 and thrust setting on the EFB, e.g. "V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two".

PARK BRK handle ....OFF | PF

CAUTION	*Do not use the brakes during pushback, unless required due to an emergency.*

- **When pushback is completed:**

  PARK BRK handle ....ON | PF
  BRAKE PRESS indicator...CHECK | PF

L2 *Check for normal indications.*
Ask the ground crew for towbar disconnection.

Ident.: PRO-NOR-SOP-07-B-00010198.0002001 / 02 MAY 23
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

20

- **If pushback is required:**

NW STRG DISC MEMO...CHECK DISPLAYED | PF

L2 *In the case of pushback (towbarless or conventional), the nosewheel steering selector bypass pin must be in the tow position. The NW STRG DISC memo on the ECAM indicates this position.*

L1

CAUTION	*If the ECAM does not display the NW STRG DISC memo, but the ground crew confirms that the tow pin is in the towing position, do not start the engines during pushback in order to avoid possible damage to the nose landing gear upon yellow hydraulic pressurization.* *To dispatch the aircraft in such a case, Refer to MMEL/MI-32-51 NWS Electrical Deactivation Box.*

L2 *In the case of a powerpush by the main landing gear, the nosewheel steering selector should remain in the normal position to steer the aircraft (Refer to PRO-NOR-SUP-MISC-D Pushback with Power Push Unit via the Main Landing Gear - Procedure 1/2).*

L1 BEFORE START C/L.. COMPLETE | PF-PM

The T.O. SPEEDS & THRUST Item should be confirmed by both pilots according to the following check technique:

T.O. SPEEDS & THRUST...______(BOTH) | PF-PM

The PF reads aloud V1, VR, V2 and thrust setting on the FMS PERF page, e.g. "V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two".
The PM reads aloud V1, VR, V2 and thrust setting on the EFB, e.g. "V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two".

PARK BRK handle	OFF	PF

CAUTION *Do not use the brakes during pushback, unless required due to an emergency.*

● **When pushback is completed:**

PARK BRK handle	ON	PF
BRAKE PRESS indicator	CHECK	PF

L2 *Check for normal indications.*
Ask the ground crew for towbar disconnection.

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ONE ENGINE TAXI PROCEDURE

Ident.: PRO-NOR-SOP-08-20800213.9001001 / 02 MAY 23
Applicable to: MSN 01143, 01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014

1 BRAKE ACCU PRESS.. CHECK | PF

L2 *If necessary, use the Y ELEC PUMP to pressurize the brake accumulator.*

L1 ENG 1.. START | PF

L2 *Engine 1 pressurizes the green hydraulic system, providing nosewheel steering and normal braking without using the PTU.*

L1 X BLEED..OPEN | PF

L2 *Open the cross bleed valve in order to supply both packs with engine 1.*

L1 APPLY THE “AFTER START” NORMAL PROCEDURE, BUT:
- Keep the APU running and switch the APU BLEED to OFF.

L2 The APU generator provides power to the engine fire extinguisher, prevents electrical transients and enables galley and IFE operation. Closing the APU BLEED prevents engine exhaust gases ingestion in the air conditioning system.

L1 - Delay the ECAM STATUS check and the wing anti-ice setting until all engines are started.

GROUND EQPT and MECHANIC.. REMOVED | PF

Note: *Engine 2 start will be done during taxi.*

ONE ENGINE TAXI PROCEDURE

Ident.: PRO-NOR-SOP-08-20800213.9001002 / 02 MAY 23
Applicable to: MSN 04827-04974

2 BRAKE ACCU PRESS.. CHECK | PF

L2 *If necessary, use the Y ELEC PUMP to pressurize the brake accumulator.*

L1 ENG 1.. START | PF

L2 *Engine 1 pressurizes the green hydraulic system, providing normal braking..*

L1 X BLEED..OPEN | PF

L2 *Open the cross bleed valve in order to supply both packs with engine 1.*

L1 APPLY THE “AFTER START” NORMAL PROCEDURE, BUT:

- Keep the APU running and switch the APU BLEED to OFF.

L2 The APU generator provides power to the engine fire extinguisher, prevents electrical transients and enables galley and IFE operation. Closing the APU BLEED prevents engine exhaust gases ingestion in the air conditioning system.

L1 - Delay the ECAM STATUS check and the wing anti-ice setting until all engines are started.

GROUND EQPT and MECHANIC.. REMOVED | PF

Note: *Engine 2 start will be done during taxi.*

ONE ENGINE TAXI PROCEDURE

Ident.: PRO-NOR-SOP-08-20800213.9001003 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

3 BRAKE ACCU PRESS.. CHECK | PF

L2 *If necessary, use the Y ELEC PUMP to pressurize the brake accumulator.*

L1 ENG 1.. START | PF

L2 *Engine 1 pressurizes the green hydraulic system, providing nosewheel steering and normal braking without using the PTU.*

L1 X BLEED..OPEN | PF

L2 *Open the cross bleed valve in order to supply both packs with engine 1.*

L1 APPLY THE “AFTER START” NORMAL PROCEDURE, BUT:

- The APU can be kept running. In that case, switch the APU BLEED to OFF.

L2 The APU generator provides power to prevent electrical transients and enable galley operation. Closing the APU BLEED prevents engine exhaust gases ingestion in the air conditioning system.

L1 - If the APU is shut down, the remaining engine should be started using a Crossbleed Engine Start procedure.
- Delay the ECAM STATUS check and the wing anti-ice setting until all engines are started.

GROUND EQPT and MECHANIC.. REMOVED | PF

Note: *Engine 2 start will be done during taxi.*

ONE ENGINE TAXI PROCEDURE

Ident.: PRO-NOR-SOP-08-20800213.9001004 / 02 MAY 23
Applicable to: MSN 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-07098

4 BRAKE ACCU PRESS.. CHECK | PF

L2 *If necessary, use the Y ELEC PUMP to pressurize the brake accumulator.*

L1 ENG 1.. START | PF

L2 *Engine 1 pressurizes the green hydraulic system, providing normal braking.*

L1 X BLEED.. OPEN | PF

L2 *Open the cross bleed valve in order to supply both packs with engine 1.*

L1 APPLY THE "AFTER START" NORMAL PROCEDURE, BUT:

- The APU can be kept running. In that case, switch the APU BLEED to OFF.

L2 The APU generator provides power to prevent electrical transients and enable galley operation. Closing the APU BLEED prevents engine exhaust gases ingestion in the air conditioning system.

L1
- If the APU is shut down, the remaining engine should be started using a Crossbleed Engine Start procedure.
- Delay the ECAM STATUS check and the wing anti-ice setting until all engines are started.

GROUND EQPT and MECHANIC.................................. REMOVED | PF

Note: *Engine 2 start will be done during taxi.*

ONE ENGINE TAXI PROCEDURE

Ident.: PRO-NOR-SOP-08-20800213.9001005 / 02 MAY 23
Applicable to: MSN 01158, 01251, 02321

5 BRAKE ACCU PRESS.. CHECK | PF

L2 *If necessary, use the Y ELEC PUMP to pressurize the brake accumulator.*

L1 ENG 1.. START | PF

L2 *Engine 1 pressurizes the green hydraulic system, providing nosewheel steering and normal braking without using the PTU.*

L1 X BLEED.. OPEN | PF

L2 *Open the cross bleed valve in order to supply both packs with engine 1.*

L1 APPLY THE "AFTER START" NORMAL PROCEDURE, BUT:

- The APU can be kept running. In that case, switch the APU BLEED to OFF.

L2 The APU generator provides power to prevent electrical transients and enable galley operation. Closing the APU BLEED prevents engine exhaust gases ingestion in the air conditioning system.

L1
- If the APU is shut down, the remaining engine should be started using a Crossbleed Engine Start procedure.
- Delay the ECAM STATUS check and the wing anti-ice setting until all engines are started.

GROUND EQPT and MECHANIC.................................. REMOVED | PF

Note: *Engine 2 start will be done during taxi.*

AUTOMATIC ENGINE START

Ident.: TDU / PRO-NOR-SOP-08-00022757.0001001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139
Impacted DU: 00010162 Automatic Engine Start

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7

If, during the engine start, the ground crew reports a leak from the engine, abort the engine start sequence. Maintenance action is due before the flight.

THRUST levers...IDLE | PF

CAUTION	*The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, then thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.*

ENG MODE selector ....IGN/START | PF

The lower ECAM displays the ENG SD page. Depending on the engine thermal state, the FADEC can command an automatic dry cranking (engine cooling). In such case, when the ENG MODE selector is set to IGN/START, the indication COOLING is displayed on the E/WD for one, or both engines with the expected engine cooling time indicated. Refer to DSC-70-80-40 Engine Cooling

DUAL COOLING pb-sw ....AS RQRD | PF

The dual cooling function becomes available when the required cooling times of both engines is displayed: if dual cooling is required, wait until the indication COOLING is displayed for both engines before setting the DUAL COOLING pb-sw to ON. Setting the DUAL COOLING pb-sw to ON enables to arm the dual cooling function: When the ENG MASTER lever is set to ON, the FADEC commands an automatic dry cranking on both engines simultaneously (if cooling is required). This enhances the overall time to start the engines when cooling is required. When this function is armed, the memoDUAL COOLING is displayed on the E/WD.

ENGINE 1 START...ANNOUNCE | PF

L2 *Engine 1 will be started first as a Standard Procedure.*

L1

WARNING	Contact and Verify with ground personnel that surrounding area is cleared of ground equipment and personnel before starting the engines.

- **After all amber crosses and messages have disappeared on the engine parameters (upper ECAM display) and ENG SD page:**

  ENG 1 MASTER lever .... ON | PF

  Note:
  - *Parameter callouts are not mandatory.*
  - *In case the electrical power supply is interrupted during the start sequence (indicated by the loss of ECAM DUs), abort the start by setting to OFF the ENG 1 MASTER lever. Then, perform a 30 s dry crank.*
  - *When the FADEC detects an impending hot start or stall, the FADEC applies an automatic recovery sequence without an ECAM message. The flight crew notices that fuel will be commanded OFF, and then re-commanded ON. It is not necessary for the flight crew to shut down the engine.*

  Note: *If the DUAL COOLING function is armed, the cooling will be performed on both engines simultaneously. In such case, the FADEC resumes the start sequence of ENG 1 once the cooling time indication is at zero for both engines.*

ON ECAM UPPER DISPLAY	***ON ECAM LOWER DISPLAY***
N2 increases	*Corresponding start valve inline.* *Bleed pressure indication green.* *Oil pressure increases.*
At approximately 18 % N2: *- FF increases.*	*Indication of the active igniter (A or B).*
20 s (maximum) after fuel is on *- EGT increases* [1] *- N1 increases prior to 48 % N2.*	
At approximately 55 % N2	*Start valve crossline.* *Igniter indication off.*

(1) *After initial EGT increase during the start sequence, the EGT may drop slightly for a short period of time before increasing again. This EGT roll-back is a normal engine start behavior and does not require any maintenance action.*

- **When idle is reached (AVAIL indication is displayed):**

  ENG IDLE PARAMETERS...CHECK | PF

  At ISA sea level : *N1 about 19 %*
  N2 about 59 %
  EGT about 550 °C
  FF about 270 kg/h (600 lb/h)

  Immediately upon the start valve is fully closed, start Engine 2.

  ENGINE 2 START...ANNOUNCE | PF

ENG 2 MASTER lever .... ON | PF

Apply the same procedure as indicated for engine 1. Engine 2 powers the yellow hydraulic system, that pressurizes the parking brake.

Note:
- *If dual cooling has been selected for engine start, the FADEC keeps in memory the cooling benefit for ENG2 provided ENG 2 is started within 20 min after ENG 1 start. However, in any case, the FADEC commands an engine cooling before ENG 2 start.*
- *A PTU FAULT is triggered, if the last engine is started within 40 s following the end of the cargo doors operation. .Refer to PRO-ABN-HYD HYD PTU FAULT*

AUTOMATIC ENGINE START

Ident.: PRO-NOR-SOP-08-00010162.0060001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

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If, during the engine start, the ground crew reports a fuel leak from the engine drain mast, run the engine at idle for 5 min. If the leak disappears during these 5 min, the aircraft can be dispatched without maintenance action. If the leak is still present after 5 min, shut down the engine and request the maintenance personnel to investigate the leakage source.

THRUST levers...IDLE | PF

CAUTION	*The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, then thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.*

ENG MODE selector .... IGN/START | PF

L2 *The lower ECAM displays the ENG SD page.*

L1 ENGINE 1 START..ANNOUNCE | PF

L2 *Engine 1 will be started first as a Standard Procedure.*

L1

WARNING	Contact and Verify with ground personnel that surrounding area is cleared of ground equipment and personnel before starting the engines.

- **After all amber crosses and messages have disappeared on the engine parameters (upper ECAM display) and ENG SD page:**

  ENG 1 MASTER lever .... ON | PF

  Note:
  - *Parameter callouts are not mandatory.*
  - *In case the electrical power supply is interrupted during the start sequence (indicated by the loss of ECAM DUs), abort the start by setting to OFF the ENG 1 MASTER lever. Then, perform a 30 s dry crank.*

ON ECAM UPPER DISPLAY	*ON ECAM LOWER DISPLAY*
N2 increases	*Corresponding start valve in line.* *Bleed pressure indication green.* *Oil pressure increases.*
At 16 % N2	*Indication of the active igniter (A or B).*
At 22 % N2 *- FF increases* *15 s (maximum) after fuel is on* *- EGT increases* *- N1 increases*	
At 50 % N2	*Start valve starts closing. (It is fully closed between 50 % and 56 % N2).* *Igniter indication off.*

- **When idle is reached (AVAIL indication is displayed):**

ENG IDLE PARAMETERS....................CHECK | PF

At ISA sea level : N1 about 19.5 %
N2 about 58.5 %
EGT about 390 °C
FF about 275 kg/h (600 lb/h)

Grey background on N2 indication disappears.

Immediately upon the start valve is fully closed, start Engine 2.

ENGINE 2 START....................ANNOUNCE | PF
ENG 2 MASTER lever ....ON | PF

Apply the same procedure as for engine 1. Engine 2 powers the yellow hydraulic system, that pressurizes the parking brake.

L2 *Both pack valves reopen with 30 s delay after the second engine N2 is above 50 %.*

L1 *Note: A PTU FAULT is triggered, if the last engine is started within 40 s following the end of the cargo doors operation. Refer to PRO-ABN-HYD HYD PTU FAULT.*

AUTOMATIC ENGINE START

Ident.: PRO-NOR-SOP-08-00010162.0040001 / 02 MAY 23
Applicable to: MSN 02321, 02887

9 THRUST levers....................IDLE | PF

CAUTION	*The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, then thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.*

ENG MODE selector .... IGN/START | PF

L2 *The lower ECAM displays the ENG SD page.*

L1 ENGINE 1 START..ANNOUNCE | PF

L2 *Engine 1 will be started first as a Standard Procedure.*

L1

WARNING	Contact and Verify with ground personnel that surrounding area is cleared of ground equipment and personnel before starting the engines.

- **After all amber crosses (except N1 and N2) and messages have disappeared on the engine parameters (upper ECAM display) and ENG SD page:**

  ENG 1 MASTER lever .... ON | PF

Note:
- *Parameter callouts are not mandatory*
- *In the case of the electrical power supply is interrupted during the start sequence (indicated by the loss of ECAM DUs), abort the start by setting to OFF the ENG 1 MASTER lever. Then, perform a 30 s dry crank.*
- *When the FADEC detects an impending hung start or hot start, the FADEC applies an automatic recovery sequence without an ECAM message. The crew will notice that dual ignition (A+B) is applied, and that fuel will be commanded OFF, and then re-commanded ON within 0.5 s. It is not necessary for the crew to shut down the engine.*

ON ECAM UPPER DISPLAY	*ON ECAM LOWER DISPLAY*
N2 increases	*Corresponding start valve inline.* *Bleed pressure indication green.* *Oil pressure increases.*
30 s after ENG 1 MASTER sw is ON: *- FF increases.*	*Indication of the active igniter (A or B).*
20 s (maximum) after fuel is on: *- EGT increases* *- N1 increases prior to 34 % N2.*	
At 43 % N2	*Igniter indication off.*
Slightly above 43 % N2	*Start valve crossline.*

ENG IDLE PARAMETERS...CHECK | PF

At ISA sea level : N1 about 21.4 %
N2 about 57.8 %
EPR about 1.01
EGT about 414 °C
FF about 350 kg/h (775 lb/h)

Grey background on N2 indication disappears.

Immediately upon the start valve is fully closed, start Engine 2.

ENGINE 2 START..ANNOUNCE | PF
ENG 2 MASTER lever ....ON | PF

Apply the same procedure as for engine 1. Engine 2 powers the yellow hydraulic system, that pressurizes the parking brake.

L2 *Both pack valves reopen with 30 s delay after the second engine N2 is above 50 %.*

L1 *Note:* *The HYD PTU FAULT alert is triggered, if the last engine is started within 40 s following the end of the cargo doors operation. Refer to PRO-ABN-HYD HYD PTU FAULT.*

AUTOMATIC ENGINE START

Ident.: PRO-NOR-SOP-08-00010162.0056001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

10 THRUST levers..IDLE | PF

CAUTION	*The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, then thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.*

ENG MODE selector ....IGN/START | PF

L2 *The lower ECAM displays the ENG SD page.*

L1 ENGINE 1 START..ANNOUNCE | PF

L2 *Engine 1 will be started first as a Standard Procedure.*

L1

WARNING	Contact and Verify with ground personnel that surrounding area is cleared of ground equipment and personnel before starting the engines.

- **After all amber crosses (except N1 and N2) and messages have disappeared on the engine parameters (upper ECAM display) and ENG SD page:**

  ENG 1 MASTER lever ....ON | PF

  Note:
  - *Parameter callouts are not mandatory*
  - *In the case of the electrical power supply is interrupted during the start sequence (indicated by the loss of ECAM DUs), abort the start by setting to OFF the ENG 1 MASTER lever. Then, perform a 30 s dry crank.*
  - *When the FADEC detects an impending hung start or hot start, the FADEC applies an automatic recovery sequence without an ECAM message. The crew will notice that dual ignition (A+B) is applied, and that fuel will be commanded OFF, and then re-commanded ON within 0.5 s. It is not necessary for the crew to shut down the engine.*

ON ECAM UPPER DISPLAY	*ON ECAM LOWER DISPLAY*
N2 increases	*Corresponding start valve inline.* *Bleed pressure indication green.* *Oil pressure increases.*
30 s after ENG 1 MASTER sw is ON: - *FF increases.*	*Indication of the active igniter (A or B).*
20 s (maximum) after fuel is on: - *EGT increases* - *N1 increases prior to 34 % N2.*	
At 43 % N2	*Igniter indication off.*
Slightly above 43 % N2	*Start valve crossline.*

- **When idle is reached (AVAIL indication is displayed):**

ENG IDLE PARAMETERS..........CHECK | PF

At ISA sea level : *EPR about 1.01*
N1about 21.4 %
N2 about 57.8 %
EGT about 414 °C
FF about350 kg/h (775 lb/h)

Immediately upon the start valve is fully closed, start Engine 2.

ENGINE 2 START..........ANNOUNCE | PF
ENG 2 MASTER lever .... ON | PF

Apply the same procedure as for engine 1. Engine 2 powers the yellow hydraulic system, that pressurizes the parking brake.

Note: *The HYD PTU FAULT alert is triggered, if the last engine is started within 40 s following the end of the cargo doors operation. Refer to PRO-ABN-HYD HYD PTU FAULT.*

AUTOMATIC ENGINE START

Ident.: PRO-NOR-SOP-08-00010162.0065001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139
Impacted by TDU: 00022757 Automatic Engine Start

11
12

If, during the engine start, the ground crew reports a leak from the engine, abort the engine start sequence. Maintenance action is due before the flight.

THRUST levers..IDLE | PF

CAUTION *The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, then thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.*

ENG MODE selector ....IGN/START | PF

The lower ECAM displays the ENG SD page. Depending on the engine thermal state, the FADEC can command an automatic dry cranking (engine cooling). In such case, when the ENG MODE selector is set to IGN/START, the indication COOLING is displayed on the E/WD for one, or both engines with the expected engine cooling time indicated. Refer to DSC-70-80-40 Engine Cooling

DUAL COOLING pb-sw ....AS RQRD | PF

Setting the DUAL COOLING pb-sw to ON enables to arm the dual cooling function: When the ENG MASTER lever is set to ON, the FADEC commands an automatic dry cranking on both engines simultaneously (if cooling is required). This enhances the overall time to start the engines when cooling is required. When this function is armed, the memoDUAL COOLING is displayed on the E/WD.

ENGINE 1 START..ANNOUNCE | PF

L2 *Engine 1 will be started first as a Standard Procedure.*

L1

WARNING Contact and Verify with ground personnel that surrounding area is cleared of ground equipment and personnel before starting the engines.

● **After all amber crosses and messages have disappeared on the engine parameters (upper ECAM display) and ENG SD page:**

ENG 1 MASTER lever .... ON | PF

- *Parameter callouts are not mandatory.*
- *In case the electrical power supply is interrupted during the start sequence (indicated by the loss of ECAM DUs), abort the start by setting to OFF the ENG 1 MASTER lever. Then, perform a 30 s dry crank.*
- *When the FADEC detects an impending hot start or stall, the FADEC applies an automatic recovery sequence without an ECAM message. The flight crew notices that fuel will be commanded OFF, and then re-commanded ON. It is not necessary for the flight crew to shut down the engine.*

Note: *If the DUAL COOLING function is armed, the cooling will be performed on both engines simultaneously. In such case, the FADEC resumes the start sequence of ENG 1 once the cooling time indication is at zero for both engines.*

ON ECAM UPPER DISPLAY	*ON ECAM LOWER DISPLAY*
N2 increases	*Corresponding start valve inline.* *Bleed pressure indication green.* *Oil pressure increases.*
At approximately 18 % N2: *- FF increases.*	*Indication of the active igniter (A or B).*
20 s (maximum) after fuel is on *- EGT increases* [1] *- N1 increases prior to 48 % N2.*	
At approximately 55 % N2	*Start valve crossline.* *Igniter indication off.*

(1) *After initial EGT increase during the start sequence, the EGT may drop slightly for a short period of time before increasing again. This EGT roll-back is a normal engine start behavior and does not require any maintenance action.*

- **When idle is reached (AVAIL indication is displayed):**

ENG IDLE PARAMETERS...CHECK | PF

At ISA sea level : N1 about 19 %
N2 about 59 %
EGT about 550 °C
FF about 270 kg/h (600 lb/h)

Immediately upon the start valve is fully closed, start Engine 2.

ENGINE 2 START...ANNOUNCE | PF
ENG 2 MASTER lever .... ON | PF

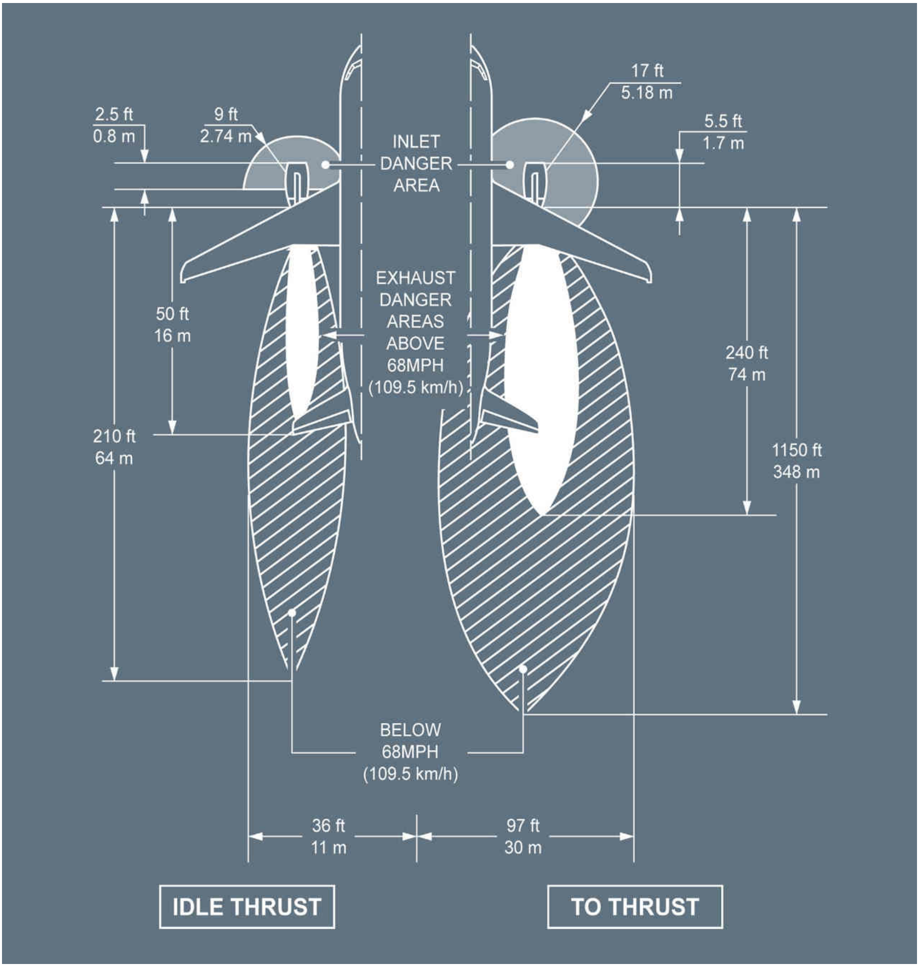
Apply the same procedure as for engine 1. Engine 2 powers the yellow hydraulic system, that pressurizes the parking brake.

Note:
- If dual cooling has been selected for engine start, the FADEC keeps in memory the cooling benefit for ENG 2 provided ENG 2 is started within 20 min after ENG 1 start. However, in any case, the FADEC commands an engine cooling before ENG 2 start.
- A PTU FAULT is triggered, if the last engine is started within 40 s following the end of the cargo doors operation. Refer to PRO-ABN-HYD HYD PTU FAULT.

GROUND RUN UP - DANGER AREAS

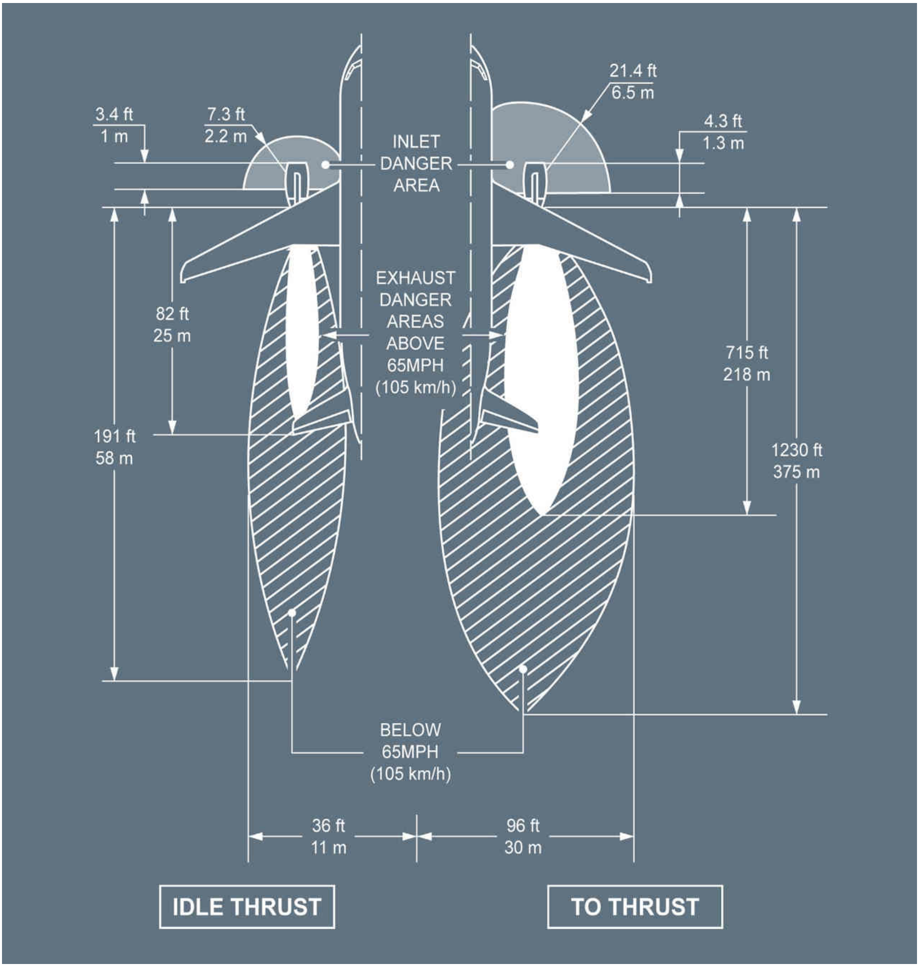
Ident.: PRO-NOR-SOP-08-00010163.0019001 / 20 OCT 22

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904


17 ft
5.18 m
2.5 ft
0.8 m
9 ft
2.74 m
5.5 ft
1.7 m
INLET
DANGER
AREA
EXHAUST
DANGER
AREAS
ABOVE
68MPH
(109.5 km/h)
50 ft
16 m
240 ft
74 m
210 ft
64 m
1150 ft
348 m
BELOW
68MPH
(109.5 km/h)
36 ft
11 m
97 ft
30 m
IDLE THRUST
TO THRUST

GROUND RUN UP - DANGER AREAS

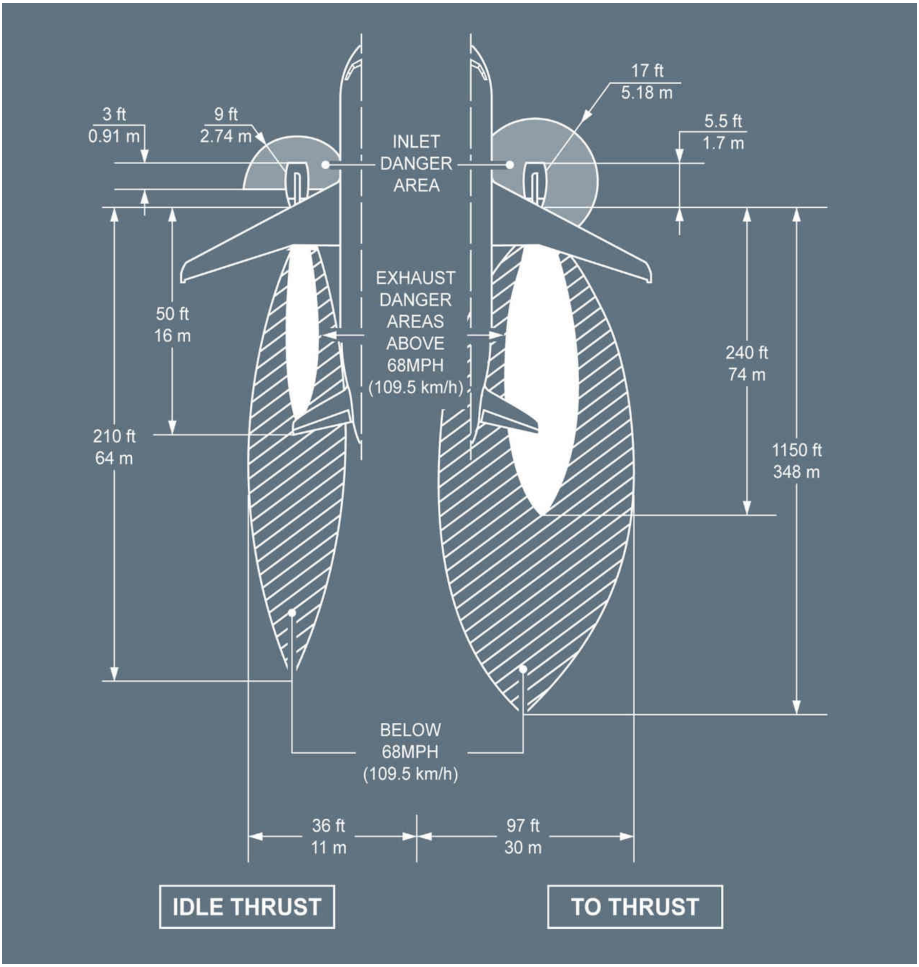
Ident.: PRO-NOR-SOP-08-00010163.0006001 / 06 JAN 16
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098


3.4 ft
1 m
7.3 ft
2.2 m
INLET DANGER AREA
21.4 ft
6.5 m
4.3 ft
1.3 m
82 ft
25 m
191 ft
58 m
EXHAUST DANGER AREAS ABOVE 65MPH (105 km/h)
715 ft
218 m
1230 ft
375 m
BELOW 65MPH (105 km/h)
36 ft
11 m
96 ft
30 m
IDLE THRUST
TO THRUST

GROUND RUN UP - DANGER AREAS

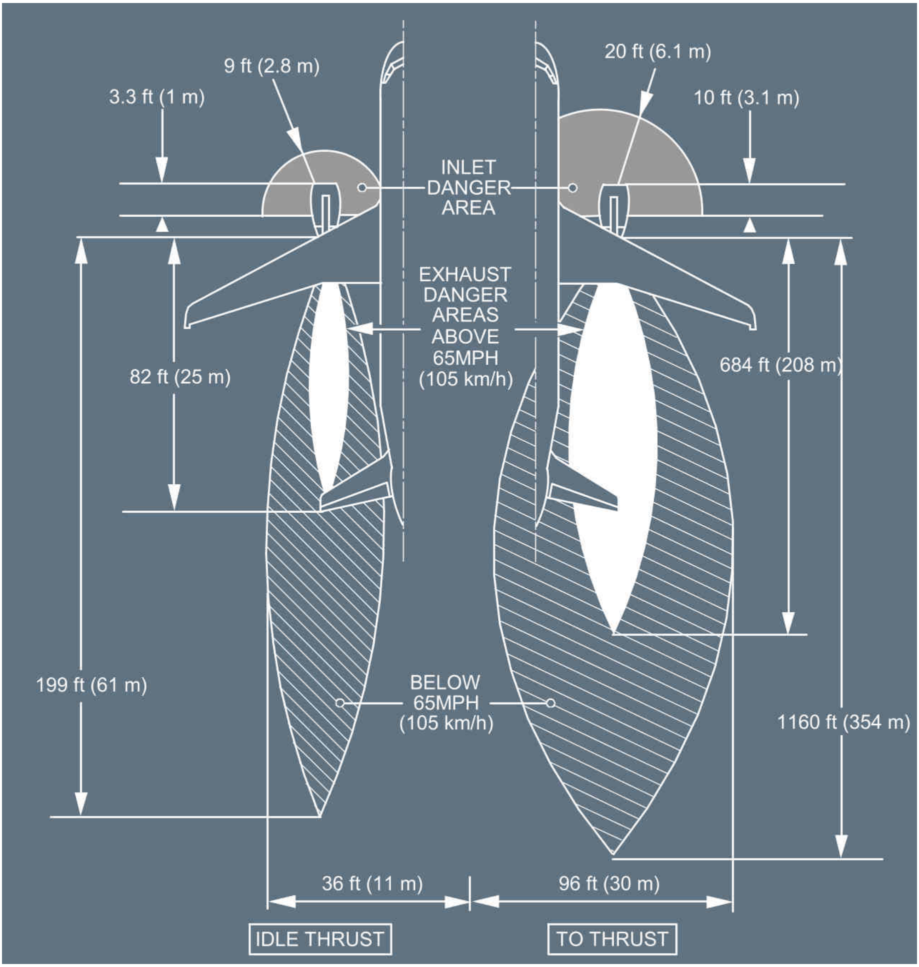
Ident.: PRO-NOR-SOP-08-00010163.0015001 / 06 JAN 16

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165


3 ft
0.91 m
9 ft
2.74 m
INLET
DANGER
AREA
17 ft
5.18 m
5.5 ft
1.7 m
50 ft
16 m
EXHAUST
DANGER
AREAS
ABOVE
68MPH
(109.5 km/h)
240 ft
74 m
210 ft
64 m
1150 ft
348 m
BELOW
68MPH
(109.5 km/h)
36 ft
11 m
97 ft
30 m
IDLE THRUST
TO THRUST

GROUND RUN UP - DANGER AREAS

Ident.: PRO-NOR-SOP-08-00010163.0018001 / 16 NOV 15
Applicable to: MSN 08495-09324, 10949-11139

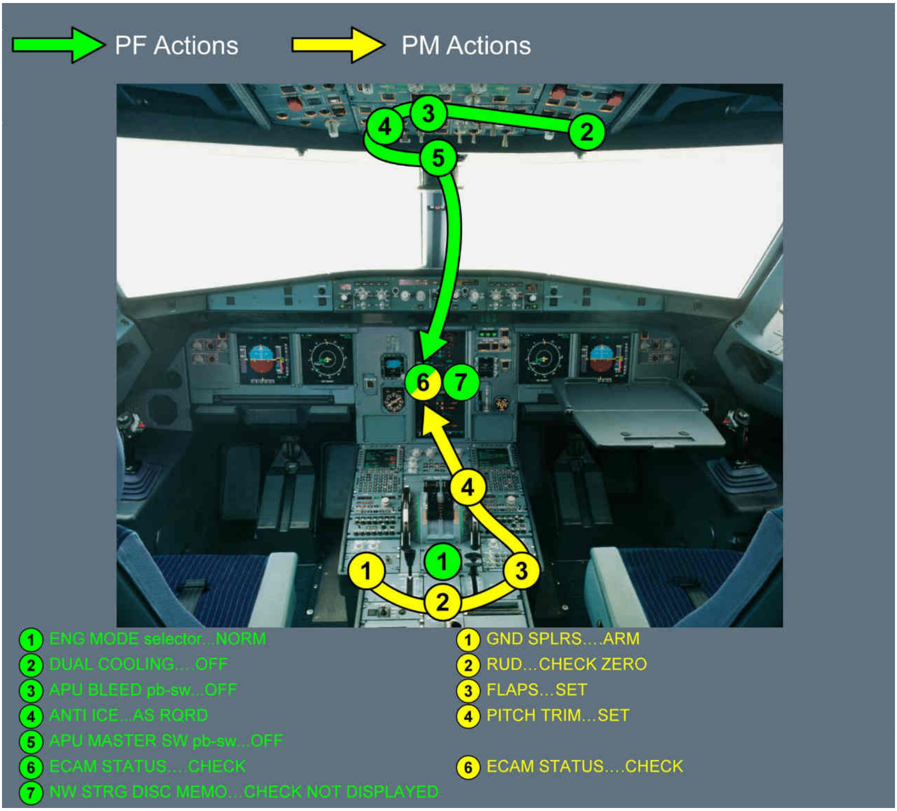

9 ft (2.8 m)
3.3 ft (1 m)
20 ft (6.1 m)
10 ft (3.1 m)
INLET DANGER AREA
EXHAUST DANGER AREAS ABOVE 65MPH (105 km/h)
82 ft (25 m)
684 ft (208 m)
199 ft (61 m)
BELOW 65MPH (105 km/h)
1160 ft (354 m)
36 ft (11 m)
96 ft (30 m)
IDLE THRUST
TO THRUST

AFTER START

Ident.: PRO-NOR-SOP-09-A-00020074.0002001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

AFTER START FLOW PATTERN

When the engines have started, the PF sets the ENG MODE selector to NORM to permit normal pack operation. At this time, the After Start Flow Pattern begins.



① ENG MODE selector...NORM
② DUAL COOLING....OFF
③ APU BLEED pb-sw...OFF
④ ANTI ICE...AS RQRD
⑤ APU MASTER SW pb-sw...OFF
⑥ ECAM STATUS....CHECK
⑦ NW STRG DISC MEMO...CHECK NOT DISPLAYED

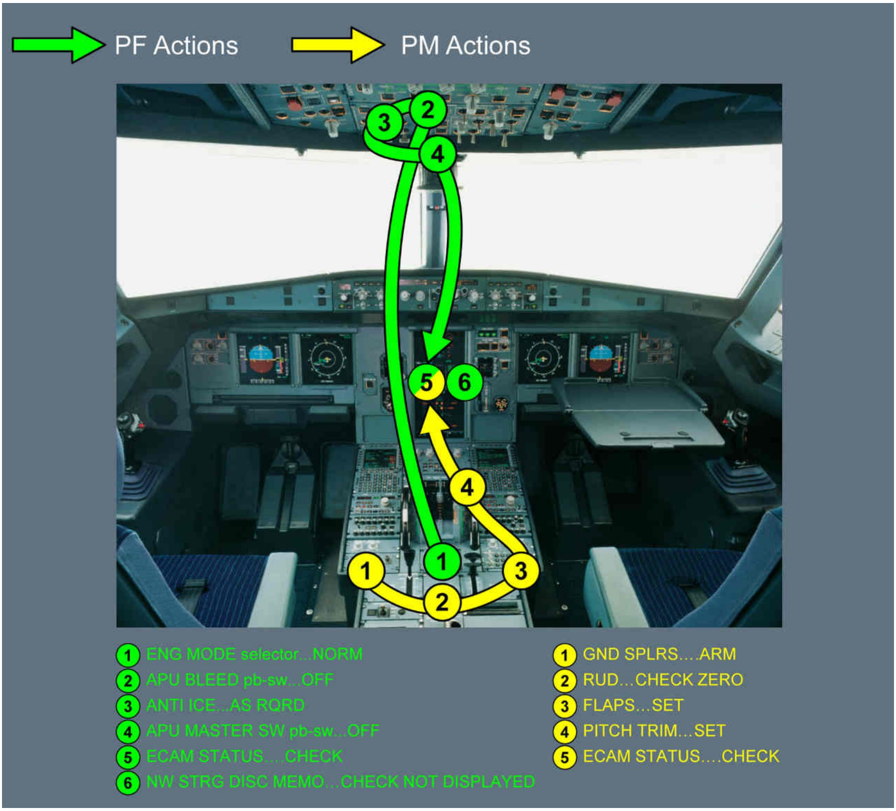
① GND SPLRS....ARM
② RUD...CHECK ZERO
③ FLAPS...SET
④ PITCH TRIM...SET

⑥ ECAM STATUS....CHECK

Ident.: PRO-NOR-SOP-09-A-00020074.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

AFTER START FLOW PATTERN

When the engines have started, the PF sets the ENG MODE selector to NORM to permit normal pack operation. At this time, the After Start Flow Pattern begins.



PF Actions:
① ENG MODE selector...NORM
② APU BLEED pb-sw...OFF
③ ANTI ICE...AS RQRD
④ APU MASTER SW pb-sw...OFF
⑤ ECAM STATUS....CHECK
⑥ NW STRG DISC MEMO...CHECK NOT DISPLAYED

PM Actions:
① GND SPLRS....ARM
② RUD...CHECK ZERO
③ FLAPS...SET
④ PITCH TRIM...SET
⑤ ECAM STATUS....CHECK

Ident.: PRO-NOR-SOP-09-A-00010210.0001001 / 02 MAY 23
Applicable to: MSN 06409-07098

3 ENG MODE SELECTOR

ENG MODE selector .... NORM | PF

L2 *For additional information on the automatic starting sequence, Refer to DSC-70-80-40 Sequence of the Automatic Start.*

L1 After start, to avoid thermal shock, the pilot should operate the engine at idle or near idle for at least 2 min before advancing the thrust lever to high power. Taxi time at idle may be included in the warm-up period.

Ident.: PRO-NOR-SOP-09-A-00010210.0002001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173

4 ENG MODE SELECTOR

ENG MODE selector .... NORM | PF

L2 *For additional information on the automatic starting sequence, Refer to DSC-70-80-40 Sequence of the Automatic Start.*

L1 After start, to avoid thermal shock, the pilot should operate the engine at idle or near idle for at least 2 min before advancing the thrust lever to high power. Taxi time at idle may be included in the warm-up period.
The last engine started must run for at least 2 min before takeoff initiation, to ensure that takeoff is not initiated before the center tank pumps test is finished, since takeoff on center tank is prohibited.

Ident.: PRO-NOR-SOP-09-A-00010210.0003001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

5 ENG MODE SELECTOR

ENG MODE selector .... NORM | PF

L2 *For additional information on the automatic starting sequence, Refer to DSC-70-80-40 Sequence of the Automatic Start.*

L1 After a shutdown period greater than 2 h, to avoid thermal shock, the pilot should operate the engine at idle or near idle for at least 5 min before advancing the thrust lever to high power. Taxi time at idle may be included in the warm-up period.
The last engine started must run for at least 2 min before takeoff initiation, to ensure that takeoff is not initiated before the center tank pumps test is finished, since takeoff on center tank is prohibited.

Ident.: PRO-NOR-SOP-09-A-00010210.0006001 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 08495-09324, 10949-11139

6 ENG MODE SELECTOR

ENG MODE selector .... NORM | PF

L2 *For additional information on the automatic starting sequence, Refer to DSC-70-80-40 Sequence of the Automatic Start.*

L1

After a shutdown period greater than 2 h, to avoid thermal shock, the pilot should operate the engine at idle or near idle for at least 5 min before advancing the thrust lever to high power. Taxi time at idle may be included in the warm-up period.

Ident.: PRO-NOR-SOP-09-A-00020192.0001001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

7 DUAL COOLING pb-sw .... OFF | PF

Ident.: PRO-NOR-SOP-09-A-00010211.0001001 / 02 MAY 23
8 **Applicable to: MSN 01143-11293**

9 APU BLEED

APU BLEED pb-sw .... OFF | PF

L2 - *This action enables to avoid ingestion of engine exhaust gases.*

Ident.: PRO-NOR-SOP-09-A-00010212.0007001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

10 ANTI ICE

CAUTION	In icing conditions (*Refer to LIM-ICE_RAIN Definition of Icing Conditions*), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG 1 and 2 ANTI ICE pb-sw .... AS RQRD | PF

- *Turn on engine anti-ice during all ground operations, when icing conditions exist or are anticipated*
- *During ground operation, when in icing conditions and when the OAT is +3 °C or less, or if significant engine vibration occurs, the following procedure should be applied for ice shedding:*

L2

1. The flight crew must consider the taxi-in time from the previous flight and the taxi-out time of the current flight to determine the total taxi time.
2. If a maintenance task to de-ice the engines was performed before engine start, the taxi-in time of the previous flight must be disregarded.
3. For taxi-in time, Refer to PRO-NOR-SOP-22 Parking - Logbook.

L1

CAUTION	*If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE.*

If ground surface conditions and the environment permit, the flight crew should set parking brake to ON or brake with pedals and accelerate the engines to minimum 60 % of N1.

Engine accelerations should be performed at intervals not greater than:
- *30 min if OAT is at +3 °C or below but above -9 °C*
- *120 min if OAT is at -9 °C or below.*

There is no requirement to maintain the high thrust settings.
In addition, this engine acceleration should also be performed just before take-off, with particular attention to engine parameters to ensure normal engine operation.
If the ground surface conditions or the environment do not permit, the flight crew must request maintenance action for manual engine deicing.

Ident.: PRO-NOR-SOP-09-A-00010212.0004001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

11 ANTI ICE

CAUTION	In icing conditions (*Refer to LIM-ICE_RAIN Definition of Icing Conditions*), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG 1 and 2 ANTI ICE pb-sw .... AS RQRD | PF

- *Turn on engine anti-ice during all ground operations, when icing conditions exist or are anticipated.*
- *During ground operation, when in icing conditions and the OAT is +3 °C or less, or if significant engine vibration occurs, the following procedure should be applied for ice shedding:*

L2 *Note:* 1. *The flight crew must consider the taxi-in time from the previous flight and the taxi-out time of the current flight to determine the total taxi time.*
2. *If a maintenance task to de-ice the engines was performed before engine start, the taxi-in time of the previous flight must be disregarded.*
3. *For taxi-in time, Refer to PRO-NOR-SOP-22 Parking - Logbook.*

L1

CAUTION	*If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE.*

If ground surface conditions and the environment permit, the flight crew should set parking brake to ON or brake with pedals and accelerate the engines to minimum 50 % of N1 at intervals not greater than 15 min. There is no requirement to maintain the high trust settings. In addition, this engine acceleration should also be performed just before take-off, with particular attention to engine parameters to ensure normal engine operation.

Note: *When performing the static run-up, the 61-74 % N1 range should be avoided.*

- *If ENG ANTI ICE pb-sw is set to ON and the valve(s) do not open (FAULT light(s) remain on), increase the N2 of the associated engine by about 5 %.*
  When the valves are open, retard the thrust lever(s) to IDLE.
- *If ENG ANTI ICE pb-sw is set to ON, the IGNITION memo appears on the ECAM because continuous ignition is automatically selected.*

Ident.: PRO-NOR-SOP-09-A-00010212.0005001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

12

ANTI ICE

CAUTION	In icing conditions (Refer to LIM-ICE_RAIN Definition of Icing Conditions), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG 1 and 2 ANTI ICE pb-sw .... AS RQRD | PF

- *Turn on engine anti-ice during all ground operation, when icing conditions exist or are anticipated.*
- *During ground operation, when in icing conditions and the OAT is +3 °C or less for more than 30 min, or if significant engine vibration occurs, the following procedure should be applied for ice shedding:*

L2 *Note:* 1. *The flight crew must consider the taxi-in time from the previous flight and the taxi-out time of the current flight to determine the total taxi time.*
2. *If a maintenance task to de-ice the engines was performed before engine start, the taxi-in time of the previous flight must be disregarded.*
3. *For taxi-in time, Refer to PRO-NOR-SOP-22 Parking - Logbook.*

L1

CAUTION	*If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE.*

If ground surface conditions and the environment permit, the flight crew should set parking brake to ON or brake with pedals and accelerate the engines to approximately 70 % of N1 for 30 s at intervals not greater than 30 min.
In addition, this engine acceleration should also be performed just before take-off, with particular attention to engine parameters to ensure normal engine operation. If ground surface or environment do not permit to accelerate the engine to 70 % N1, then power setting and dwell time should be as high as practical.
When operating in conditions of freezing rain, freezing drizzle, freezing fog or heavy snow, ice shedding may be enhanced, by additional run ups at intervals, to not exceed 10 min, advancing throttles to 70 % N1 momentarily (no hold time).

13 Ident.: PRO-NOR-SOP-09-A-20806699.9001001 / 02 MAY 23
Applicable to: ALL

WING ANTI ICE pb-sw ....AS RQRD | PF

On ground when wing anti-ice is switched on, the anti-ice valves open for about 30 s for self-test sequence, then close as long as the aircraft is on ground.

14 Ident.: PRO-NOR-SOP-09-A-20806700.9001001 / 02 MAY 23
Applicable to: ALL

APU

- **If the APU is required:**
  APU MASTER SW...KEEP ON | PF
  When the engines are running, exhaust gas ingestion may occur during use of the APU bleed.

- **If the APU is not required:**

  APU MASTER SW pb-sw ....OFF | PF

15 Ident.: PRO-NOR-SOP-09-A-20806701.9001001 / 02 MAY 23
Applicable to: ALL

GROUND SPOILERS

GND SPLRS..........ARM | PM

16 Ident.: PRO-NOR-SOP-09-A-20806702.9001001 / 02 MAY 23
Applicable to: ALL

RUDDER TRIM

RUD TRIM RESET pb ....PRESS | PM

L2 *Press the RESET pb on the RUDDER TRIM panel.*

L1 RUD TRIM..........CHECK ZERO | PM

Note: After the reset, the flight crew may observe an indication of up to 0.3 ° (L or R) in the RUD TRIM position indication.

17 Ident.: PRO-NOR-SOP-09-A-20806703.9001001 / 02 MAY 23
Applicable to: ALL

FLAPS

FLAPS lever ....SET FOR TAKEOFF | PM
FLAPS..........CHECK POSITION | PM

L2 *Check the position of the flaps on the ECAM upper display.*

L1

- **If taxiing in icing conditions with rain, slush or snow:**

  Maintain the flaps retracted until the aircraft reaches the holding point of the takeoff runway.

  This action prevents contamination of the slats/flaps mechanism.

18 Ident.: PRO-NOR-SOP-09-A-20806704.9001001 / 02 MAY 23
Applicable to: ALL

PITCH TRIM

PITCH TRIM handwheel..........SET | PM

L2 *Set takeoff CG on pitch trim handwheel.*

19 Ident.: PRO-NOR-SOP-09-A-20806705.9001001 / 02 MAY 23
Applicable to: ALL

ECAM STATUS

ECAM STATUS...CHECK | PF-PM

L2 *The PM checks and the PF crosschecks that there is no status reminder (STS) on the WD.*
If STS apppears on the WD, press the STATUS pb to display the STATUS page.

20 Ident.: PRO-NOR-SOP-09-A-20806706.9001001 / 02 MAY 23
Applicable to: ALL

N/W STEER DISC MEMO

NW STRG DISC MEMO...CHECK NOT DISPLAYED | PF

21 Ident.: PRO-NOR-SOP-09-A-20806707.9001001 / 02 MAY 23
Applicable to: ALL

GROUND CREW

CLEAR TO DISCONNECT...ANNOUNCE | PF

L2 *The ground crew:*
- *Removes the chocks*
- *Disconnects the interphone*
- *Makes the hand signal on the left or right side.*

L1
- **If One Engine taxi procedure is performed:**
  BEFORE ONE ENGINE TAXI C/L...COMPLETE | PF

22 Ident.: PRO-NOR-SOP-09-A-20806708.9001001 / 02 MAY 23
Applicable to: ALL

AFTER START CHECKLIST

AFTER START C/L...COMPLETE | PF-PM

- **If One Engine taxi procedure is performed:**

  The AFTER START Checklist will be completed after the second engine start.

Intentionally left blank

TAXI

1 Ident.: PRO-NOR-SOP-10-A-20806709.9001001 / 02 MAY 23
Applicable to: ALL

TAXI CLEARANCE

TAXI clearance	OBTAIN	PM

2 Ident.: PRO-NOR-SOP-10-A-20806710.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

NOSE sw	TAXI	PF
RWY TURN OFF sw	ON	PF

When the aircraft is stopped on ground, this lights must be turned OFF.

- **When crossing a runway:**

STROBE sw	ON	PF
RWY TURN OFF sw	ON	PF
L and R LAND selector	ON	PF

L2 The PF may ask the PM to set the exterior lights.

3 Ident.: PRO-NOR-SOP-10-A-20806711.9001001 / 02 MAY 23
Applicable to: ALL

Y ELEC PUMP

- **If the One Engine Taxi procedure has been applied:**

Y ELEC PUMP pb-sw	ON	PF

This pressurizes the yellow hydraulic system.

APPLY THE “TAXI” NORMAL PROCEDURE, BUT:

- Delay the flight controls check until all engines are started
- Arm the autobrake after the flight controls check.

4 Ident.: PRO-NOR-SOP-10-A-20806712.9001001 / 02 MAY 23
Applicable to: ALL

PARK BRK

PARK BRK handle	OFF	PF

BRAKES PRESSURE..CHECK AT ZERO | PF

L2 *The flight crew may observe slight residual pressure on the triple indicator for a short period of time.*

Ident.: PRO-NOR-SOP-10-A-00010231.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

5 BRAKES

CAUTION	If the aircraft was parked in wet conditions for a long time, the first brake application at low speed is less effective.

BRAKE PEDALS.. PRESS | PF
BRAKES ....CHECK | PF
BRAKE FAN pb .... AS RQRD | PM

L2 *If an arc is displayed above the brake temperature on the WHEEL SD page, set to ON the BRAKE FAN pb.*

L1 BRAKES PRESSURE..CHECK AT ZERO | PM

Ident.: PRO-NOR-SOP-10-A-00010231.0002001 / 02 MAY 23
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

6 BRAKES

CAUTION	If the aircraft was parked in wet conditions for a long time, the first brake application at low speed is less effective.

BRAKE PEDALS.. PRESS | PF
BRAKES ....CHECK | PF
BRAKE FAN pb .... AS RQRD | PM

L2 *If an arc is displayed above the brake temperature on the WHEEL SD page, set to ON the BRAKE FAN pb.*

Ident.: PRO-NOR-SOP-10-A-20800241.9001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

7 ENGINE 2 START

ENGINE WARM-UP TIME BEFORE TAKEOFF (remaining engine)............................ .... CONSIDER | PM

The second engine must be started soon enough before takeoff, in order to take into account the engine start time and ensure the applicable engine warm-up time (Refer to PRO-NOR-SOP-09 After Start - ENG Mode Selector).

- **For ENG 2 start and when taxiing in a straight line:**

  Note: *During the engine start, a slight jerk forward may occur if the brakes are applied while the aircraft is moving.*

  Note: *Maintain taxi in a straight line during at least 5 s after the selection of the ENG 2 master lever to ON, in order to ensure the PTU auto-test is completed.*

  Note: *The PM will be responsible for starting the 2nd engine.*

  Y ELEC PUMP.......................................OFF | PM

  L2 *The yellow electric pump must be set to OFF to enable PTU automatic test during engine 2 start.*

  L1 **If the APU bleed is available:**

  APU BLEED.......................................ON | PM

CAUTION	To allow the correct PRV closing cycle, wait 10 s before selecting ENG MODE selector to IGN / START.

  ENG 2.......................................START | PM
  APU ....AS RQRD | PM
  X BLEED.......................................AUTO | PM

  If the APU BLEED is not available:

  AREA CLEAR OF OBSTACLES.......................................CONFIRM | PM

  L2 *Ensure increased power jet wake does not constitute any hazard to people or installation behind the aircraft.*

  L1 THR LEVER ENG 1.................................ADJUST FOR BLEED PRESSURE | PF

  Adjust thrust of supplying engine to obtain an engine bleed pressure of 30 PSI before start initiation, and at least 25 PSI during the start sequence.
  If the thrust required to obtain the appropriate engine bleed pressure exceeds 40 % N1, pay particular attention to the surrounding area.

  ENG 2.......................................START | PM

  Apply the normal engine start procedure.

  After Start:

  THR LEVER ENG 1.......................................IDLE | PF
  X BLEED.......................................AUTO | PM
  ENG 2 BLEED.......................................ON | PM

  APPLY THE “AFTER START” NORMAL PROCEDURE, INCLUDING:
  - ECAM STATUS check
  - Selection of the ENG 2 anti-ice and wing anti-ice, as required.

8 ENGINE 2 START

ENGINE WARM-UP TIME BEFORE TAKEOFF (remaining engine).. CONSIDER | PM

The second engine must be started soon enough before takeoff, in order to take into account the engine start time and ensure the applicable engine warm-up time (Refer to PRO-NOR-SOP-09 After Start - ENG Mode Selector).

- **For ENG 2 start and when taxiing in a straight line:**

  Note: *During the engine start, a slight jerk forward may occur if the brakes are applied while the aircraft is moving.*

  Note: *Maintain taxi in a straight line during at least 5 s after the selection of the ENG 2 master lever to ON, in order to ensure the PTU auto-test is completed.*

  Note: *The PM will be responsible for starting the 2nd engine.*

  Y ELEC PUMP..OFF | PM

  L2 *The yellow electric pump must be set to OFF to enable PTU automatic test during engine 2 start.*

  L1 ■ **If the APU bleed is available:**

  APU BLEED.. ON | PM

CAUTION	To allow the correct PRV closing cycle, wait 10 s before selecting ENG MODE selector to IGN / START.

  ENG 2.. START | PM
  APU ....AS RQRD | PM
  X BLEED..AUTO | PM

  ■ **If the APU BLEED is not available:**

  AREA CLEAR OF OBSTACLES.. CONFIRM | PM

  L2 *Ensure increased power jet wake does not constitute any hazard to people or installation behind the aircraft.*

  L1 THR LEVER ENG 1................................ ADJUST FOR BLEED PRESSURE | PF

  Adjust thrust of supplying engine to obtain an engine bleed pressure of 30 PSI before start initiation, and at least 25 PSI during the start sequence.
  If the thrust required to obtain the appropriate engine bleed pressure exceeds 40 % N1, pay particular attention to the surrounding area.

Note: *If the supplying engine is a DAC engine, preset a 30 % N1 before launching the start sequence.*

ENG 2	START	PM

Apply the normal engine start procedure.

■ **After Start:**

THR LEVER ENG 1	IDLE	PF
X BLEED	AUTO	PM
ENG 2 BLEED	ON	PM

APPLY THE "AFTER START" NORMAL PROCEDURE, INCLUDING:

- ECAM STATUS check
- Selection of the ENG 2 anti-ice and wing anti-ice, as required.

Ident.: PRO-NOR-SOP-10-A-20800241.9001003 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

9 ENGINE 2 START

ENGINE WARM-UP TIME BEFORE TAKEOFF (remaining engine)	CONSIDER	PM

The second engine must be started soon enough before takeoff, in order to take into account the engine start time and ensure the applicable engine warm-up time (Refer to PRO-NOR-SOP-09 After Start - ENG Mode Selector).

● **For ENG 2 start and when taxiing in a straight line:**

Note: *During the engine start, a slight jerk forward may occur if the brakes are applied while the aircraft is moving.*

Note: *Maintain taxi in a straight line during at least 5 s after the selection of the ENG 2 master lever to ON, in order to ensure the PTU auto-test is completed.*

Note: *The PM will be responsible for starting the 2nd engine.*

Y ELEC PUMP	OFF	PM

L2 *The yellow electric pump must be set to OFF to enable PTU automatic test during engine 2 start.*

L1 ■ **If the APU bleed is available:**

APU BLEED	ON	PM
ENG 2	START	PM
APU	AS RQRD	PM

- **If the APU BLEED is not available:**

PACK 2..OFF | PM

L2 *The pack flow control valve on the receiving engine side is closed to prevent an increased ground idle on the supplying engine.*

L1 AREA CLEAR OF OBSTACLES..CONFIRM | PM

L2 *Ensure increased power jet wake does not constitute any hazard to people or installation behind the aircraft.*

L1 THR LEVER ENG 1........................ADJUST FOR BLEED PRESSURE | PF

Adjust thrust of supplying engine to obtain an engine bleed pressure of 30 PSI before start initiation and during the entire start sequence.
If the thrust required to obtain the appropriate engine bleed pressure exceeds 40 % N1, pay particular attention to the surrounding area.

ENG 2..START | PM

Apply the normal engine start procedure.

Depending on the engine thermal state, the FADEC can command an automatic dry cranking (or engine cooling) with the associated COOLING indication displayed on the EWD. Refer to DSC-70-80-40 Engine Cooling

- **After Start:**

THR LEVER ENG 1..IDLE | PF
X BLEED..AUTO | PM
ENG 2 BLEED..ON | PM
PACK 2..ON | PM

APPLY THE “AFTER START” NORMAL PROCEDURE, INCLUDING:
- ECAM STATUS check
- Selection of the ENG 2 anti-ice and wing anti-ice, as required.

10 Ident.: PRO-NOR-SOP-10-A-20806715.9001001 / 02 MAY 23
Applicable to: ALL

FLIGHT CONTROLS

FLIGHT CONTROLS..CHECK | PF-PM

L2 *Check the flight controls at a convenient stage, before or during taxi.*

11 Ident.: PRO-NOR-SOP-10-A-20806716.9001001 / 02 MAY 23
Applicable to: ALL

ATC CLEARANCE

ATC clearance	CONFIRM	PM

12 Ident.: PRO-NOR-SOP-10-A-20806717.9001001 / 02 MAY 23
Applicable to: ALL

AFS/FLIGHT INSTRUMENTS

F-PLN (SID,TRANS)........ CHECK | PM

L2 *Carefully confirm that the ATC clearance agrees with the FMS, if NAV mode is to be used.*

L1 INITIAL CLIMB SPEED AND SPEED LIMIT........ CHECK | PM

L2 *Use VERT REV at departure, or at a CLB waypoint.*

L1 CLEARED ALTITUDE ON FCU........ SET | PM

L2 *On the PFD, crosscheck and confirm the first cleared altitude.*

L1 HDG ON FCU........ IF REQUIRED, PRESET | PM

L2 *If a heading is required by the ATC after takeoff, in the case of a radar vector departure, preset the heading on the FCU. NAV mode will be disarmed.*
RWY TRK mode will keep the aircraft on the runway track.

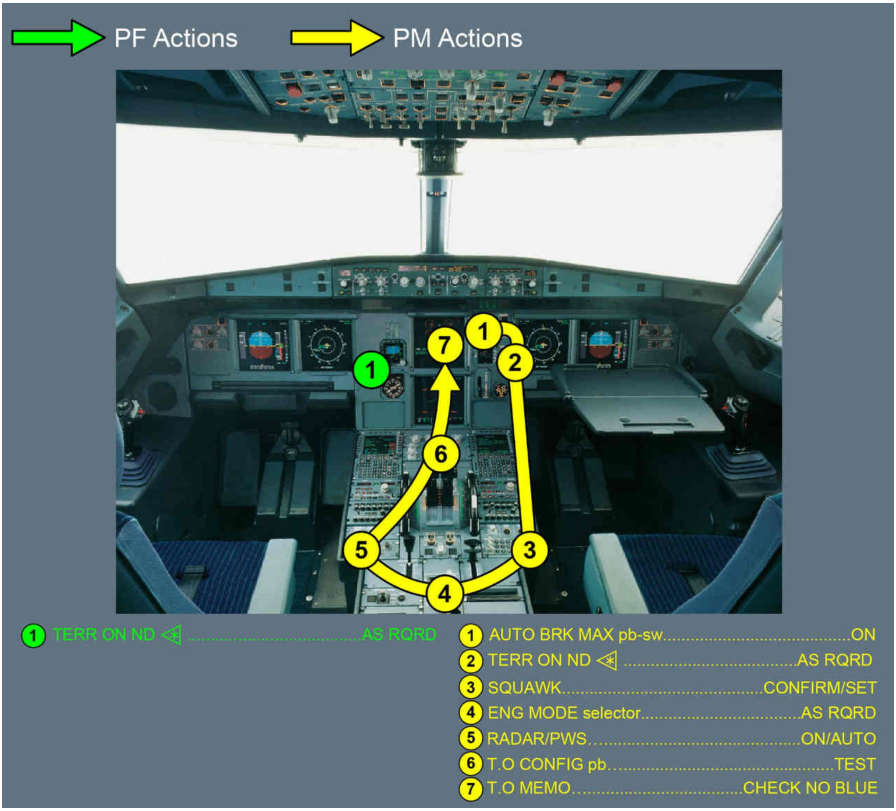
L1 BOTH FD........ CHECK ON | PM
PFD/ND........ CHECK | PF-PM

L2 *Check that the PFD (e.g. airspeeds, initial target altitude, heading, slats/flaps configuration, FMA modes) and the ND indications (SID) are in accordance with the departure.*

L1 DEPARTURE BRIEFING........ CONFIRM | BOTH

13 Ident.: PRO-NOR-SOP-10-A-20806718.9001001 / 02 MAY 23
Applicable to: ALL

TAXI FLOW PATTERN



① TERR ON ND ⊲ ....AS RQRD

① AUTO BRK MAX pb-sw.......................................ON
② TERR ON ND ⊲ ....AS RQRD
③ SQUAWK..CONFIRM/SET
④ ENG MODE selector..................................AS RQRD
⑤ RADAR/PWS..ON/AUTO
⑥ T.O CONFIG pb...TEST
⑦ T.O MEMO...................................CHECK NO BLUE

14 Ident.: PRO-NOR-SOP-10-A-20806719.9001001 / 02 MAY 23
Applicable to: ALL

AUTO BRK

AUTO BRK MAX pb-sw ....ON | PM

15 Ident.: PRO-NOR-SOP-10-A-20806720.9001001 / 02 MAY 23
Applicable to: ALL

TERR ON ND

TERR ON ND ⊲ .... AS RQRD | PF-PM

L2 *Consider selecting the radar display on the PF side, and TERR ON ND on the PM side only.*

16 Ident.: PRO-NOR-SOP-10-A-20806721.9001001 / 02 MAY 23
Applicable to: ALL

ATC

ATC code/mode........ CONFIRM/SET FOR TAKEOFF | PM

Ident.: PRO-NOR-SOP-10-A-00010397.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

17 ENG MODE SELECTOR

ENG MODE selector .... AS RQRD | PM

L2 *Select IGN START, if heavy rain or severe turbulence is expected after takeoff.*

L1 *Note:* *Continuous ignition is automatically selected, if the ENG 1 ANTI ICE pb and ENG 2 ANTI ICE pb are ON.*

Ident.: PRO-NOR-SOP-10-A-00010397.0004001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

18 ENG MODE SELECTOR

ENG MODE selector .... AS RQRD | PM

L2 *Select IGN, if:*
- *The runway has standing water, or*
- *Heavy rain is falling, or*
- *Heavy rain or severe turbulence is expected after takeoff.*

Ident.: TDU / PRO-NOR-SOP-10-A-00015299.0001001 / 02 MAY 23
Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192
Impacted DU: 00015298 Taxi - Radar

19 WEATHER RADAR

RADAR........ ON | PM

L2 *To check the radar and the departure path, set the MULTISCAN sw to MAN. The flight crew can then set the radar to the AUTO position.*
Gain must be manually set to +8, when MULTISCAN sw is set to AUTO and when flying below FL 150.

L1 *Note:* 1. *MULTISCAN AUTO mode provides an efficient ground clutter rejection. During operation in good or non significant weather conditions, no weather pattern will be displayed on the ND's. In this case, the flight crew confirms correct radar operation, using temporarily MANUAL TILT.*
2. *The flight crew monitors the weather radar display in AUTO mode, and confirms any weather display that is ambiguous or unexpected using manual tilt according to standard techniques.*

PREDICTIVE WINDSHEAR SYSTEM ◁✻ ....AUTO | PM

Ident.: TDU / PRO-NOR-SOP-10-A-00015299.0002001 / 02 MAY 23
Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted DU: 00015298 Taxi - Radar

20 WEATHER RADAR

RADAR.. ON | PM

L2 *To check the radar and the departure path, set the MULTISCAN sw to MAN. The flight crew can then set the radar to the AUTO position.*
Gain must be manually set to +4, when MULTISCAN sw is set to AUTO and when flying below FL 200.

L1 *Note:* 1. *If the weather is good, or not significant, in order to check that the radar is operating correctly: down tilt until displaying ground echoes*
2. *If the weather display is ambiguous or unexpected, in order to better analyze the weather situation, use manual tilt according to standard technique.*
3. *In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to MAN mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display.*
4. *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and MAN modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*

PREDICTIVE WINDSHEAR SYSTEM ◁✻ ....AUTO | PM

Ident.: PRO-NOR-SOP-10-A-00015298.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563

21 WEATHER RADAR

RADAR.. ON | PM
PREDICTIVE WINDSHEAR SYSTEM ◁✻ ....AUTO | PM

Ident.: PRO-NOR-SOP-10-A-00015298.0002001 / 02 MAY 23
Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted by TDU: 00015299 Taxi - Radar

22 WEATHER RADAR

RADAR..ON | PM

L2 *To check the radar and the departure path, set the MULTISCAN sw to MAN. The flight crew can then set the radar to the AUTO position.*

L1 PREDICTIVE WINDSHEAR SYSTEM ⊲✱ ....AUTO | PM

Ident.: PRO-NOR-SOP-10-A-00015298.0002001 / 02 MAY 23
Applicable to: MSN 04827-04860, 08495-09324, 10949-11139

23 WEATHER RADAR

RADAR..ON | PM

L2 *To check the radar and the departure path, set the MULTISCAN sw to MAN. The flight crew can then set the radar to the AUTO position.*

L1 PREDICTIVE WINDSHEAR SYSTEM ⊲✱ ....AUTO | PM

24 Ident.: PRO-NOR-SOP-10-A-20806725.9001001 / 02 MAY 23
Applicable to: ALL

FINAL CHECK

T.O CONFIG pb ....TEST | PM

L2 *Press the T.O CONFIG pb on the ECP, and check that the EWD displays the T.O CONFIG NORMAL memo.*

L1 T.O MEMO..CHECK NO BLUE | PM

L2 *Check that the EWD does not display any blue line in the T.O memo section.*

L1 CABIN REPORT..RECEIVE | PF-PM

L2 *Check CABIN READY ⊲✱ in the EWD, or obtain the cabin report from the purser.*

25 Ident.: PRO-NOR-SOP-10-A-20806726.9001001 / 02 MAY 23
Applicable to: ALL

CHECK TECHNIQUE NOTE:

The FLAPS SETTING Item should be confirmed by both pilots according to the following check technique:

FLAP SETTING...CONF___(BOTH) | PF-PM

The PF checks and compares the flaps setting on the EWD and FMS PERF page.

The PF announces the configuration displayed on EWD and FMS PERF page, e.g. “CONF 1+F, CONF 1+F”
The PM checks and compares the flaps setting on the EWD and EFB.
The PM announces the configuration displayed on EWD and EFB, e.g. “CONF 1+F, CONF 1+F”

TAXI CHECKLIST

TAXI C/L..COMPLETE | PF-PM

DEPARTURE CHANGE

Ident.: PRO-NOR-SOP-10B-00010248.0001001 / 02 MAY 23
Applicable to: ALL

DEPARTURE CHANGE

	FINAL TAKEOFF PERF DATA.................RECOMPUTE		PF-PM
L2	*The PF and the PM independently compute again the takeoff performance data.*		
L1	FMS TAKEOFF DATA.................REVISE		PM
L2	*The PM revises the takeoff data in the FMS.* *If the flight crew uses the optimum configuration option for the computation, they should pay specific attention to changes to the configuration of the slats/flaps at takeoff.*		
L1	FMS REVISED TAKEOFF PERF DATA.................CROSSCHECK		PF
L2	*The PF crosschecks the performance data displayed on the PF's EFB with the FMS PERF T.O page.*		
L1	EFB/MCDU GREEN DOT.................COMPARE		PF
L2	*The PF compares Green Dot speed computed by the FMGS and the Green Dot speed computed using the TAKEOFF application. A discrepancy indicates a difference in the TOW used in both systems (EFB/FMGS).*		
L1	FLAPS lever ....AS APPROPRIATE		PM
L2	*Select takeoff position.*		
L1	F-PLN (SID,TRANS).................CHECK		PM
L2	*Carefully confirm that the ATC clearance agrees with the FMS, if NAV mode is to be used.*		
L1	INITIAL CLIMB SPEED AND SPEED LIMIT.................CHECK		PM
L2	*Use VERT REV at departure, or at a CLB waypoint.*		
L1	RE-BRIEFING.................COMPLETE		BOTH
	DEPARTURE CHANGE C/L.................COMPLETE		PF-PM

CHECK TECHNIQUE NOTE:

The FLAPS SETTING Item should be confirmed by both pilots according to the following check technique:

FLAP SETTING.................CONF___(BOTH) | PF-PM

The PF checks and compares the flaps setting on the EWD and FMS PERF page.
The PF announces the configuration displayed on EWD and FMS PERF page, e.g. "CONF 1+F, CONF 1+F"
The PM checks and compares the flaps setting on the EWD and EFB.
The PM announces the configuration displayed on EWD and EFB, e.g. "CONF 1+F, CONF 1+F"

The T.O. SPEEDS & THRUST Item should be confirmed by both pilots according to the following check technique:

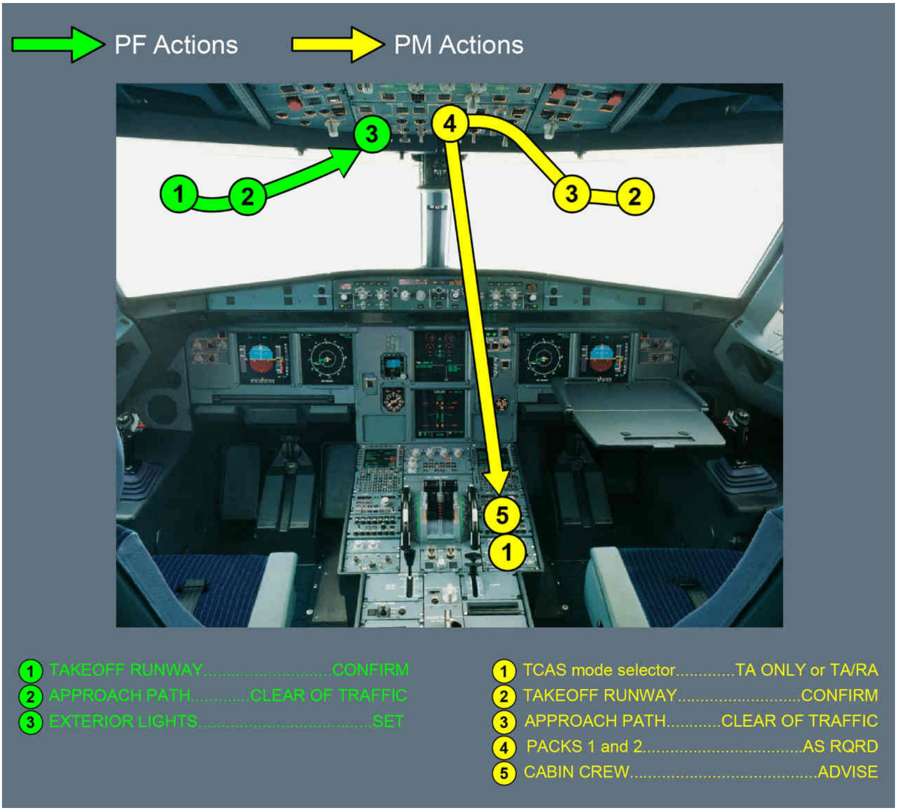
T.O. SPEEDS & THRUST...______(BOTH) | PF-PM

The PF reads aloud V1, VR, V2 and thrust setting on the FMS PERF page, e.g. "V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two".
The PM reads aloud V1, VR, V2 and thrust setting on the EFB, e.g. "V1 One Two Five, VR One Two Five, V2 One Two Nine, Flex Fifty Two".

BEFORE TAKEOFF

1 Ident.: PRO-NOR-SOP-11-A-20806728.9001001 / 02 MAY 23
Applicable to: ALL

LINE-UP FLOW PATTERN



① TAKEOFF RUNWAY............................CONFIRM
② APPROACH PATH............CLEAR OF TRAFFIC
③ EXTERIOR LIGHTS...SET

① TCAS mode selector.............TA ONLY or TA/RA
② TAKEOFF RUNWAY...........................CONFIRM
③ APPROACH PATH............CLEAR OF TRAFFIC
④ PACKS 1 and 2...................................AS RQRD
⑤ CABIN CREW...ADVISE

2 Ident.: PRO-NOR-SOP-11-A-20806729.9001001 / 02 MAY 23
Applicable to: ALL

BRAKE FANS

- **If the brake fans are set to ON:**
  BRAKE TEMPERATURE...CHECK | PM

- **If the temperature of one brake is at or more than 150 °C:**

  TAKEOFF...DELAY | PM

L2 *This prevents the display of the BRAKES HOT alert when the BRAKE FAN is set to OFF.*

L1

- **If the temperature of all brakes is below 150 °C:**

  BRAKE FAN pb ....OFF | PM

3 Ident.: PRO-NOR-SOP-11-A-20806730.9001001 / 02 MAY 23
Applicable to: ALL

LINE-UP CLEARANCE

LINE-UP CLEARANCE...OBTAIN | PM

4 Ident.: PRO-NOR-SOP-11-A-20806731.9001001 / 02 MAY 23
Applicable to: ALL

TCAS

TCAS ◁ Mode selector ....TA or TA/RA | PM

L2 *The flight crew should use the TA/RA mode as the default mode of the TCAS.*
The flight crew may use the TA ONLY mode in specific airports, and for specific procedures (identified by Operators) that may provide resolution advisories that are neither wanted nor appropriate (e.g. closely-spaced parallel or converging runways).

5 Ident.: PRO-NOR-SOP-11-A-20806732.9001001 / 02 MAY 23
Applicable to: ALL

TAKEOFF RUNWAY

TAKEOFF RUNWAY...CONFIRM | PF-PM

L2 *Confirm that the line up is performed on the intended runway and from the intended intersection.*
Useful aids are:
- *The runway markings*
- *The runway lights*
  Be careful that in low visibility, edge lights could be mixed up with the center line lights.
- *The ILS signal*
  If the runway is ILS equipped, the flight crew can press the ILS pb (or LS pb): the LOC deviation should be centered after line up
- *The runway symbol on the ND*
- *The Runway Awareness and Advisory System* ◁ *.*

6 Ident.: PRO-NOR-SOP-11-A-20806733.9001001 / 02 MAY 23
Applicable to: ALL

APPROACH PATH CLEAR OF TRAFFIC

APPROACH PATH..CLEAR OF TRAFFIC | PF-PM

L2 *Check that the approach path is clear of traffic, visually and using TCAS display on the ND.*

Ident.: TDU / PRO-NOR-SOP-11-A-00014740.0001001 / 02 MAY 23
Applicable to: MSN 05342, 05528-05987, 06097, 06121, 06139-09324, 10949-11139
Impacted DU: 00010392

7
EXTERIOR LIGHTS

STROBE sw ....ON | PF

L2 *Set the STROBE sw to ON to cross or enter a runway.*
The PF can request the PM to set the exterior lights.

L1 WING LIGHTS sw ....ON | PF

Note: *The flight crew can switch off the strobe lights if the lights cause any visual trouble during the flight.*

8 Ident.: PRO-NOR-SOP-11-A-20806735.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

STROBE sw ....ON | PF

L2 *Set the STROBE sw to ON to cross or enter a runway.*
The PF can request the PM to set the exterior lights.

L1 WING LIGHTS sw ....ON | PF

9 Ident.: PRO-NOR-SOP-11-A-20806736.9001001 / 02 MAY 23
Applicable to: ALL

PACKS

PACK 1 pb-sw and PACK 2 pb-sw .... AS RQRD | PM

L2 *Consider selecting packs OFF.*
This will improve performance when using TOGA thrust.
In the case of a FLEX takeoff, selecting packs OFF or APU bleed ON will reduce takeoff EGT, and thus reduce maintenance costs.
The use of FLEX thrust may reduce maintenance costs. The effect is particularly significant with the first degrees of FLEX.
Use of APU bleed is not authorized, if wing anti-ice is to be used.

Note: Consider specific procedures for both PACKS OFF when operating in high altitude airport or when flight was dispatched with system related MEL items inoperative.

Ident.: PRO-NOR-SOP-11-A-00010395.0001001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

10 RNP AR DEPARTURE

GPS 1+2 on GPS MONITOR page.. CHECK BOTH IN NAV | PM
GPS PRIMARY on PROG page..CHECK AVAILABLE | PM
FMA.. CHECK | PF-PM

L2 *Verify NAV is armed.*

11 Ident.: PRO-NOR-SOP-11-A-20806738.9001001 / 02 MAY 23
Applicable to: ALL

SLIDING TABLE/EFB

SLIDING TABLE.. STOW | PF-PM
ALL EFB transmitting mode..AS RQRD | PF-PM

L2 *In accordance with the Operator's policy or, as required by operational regulations.*

L1 ALL EFB (with no mounted equipment)... STOW | PF-PM

L2 *In flight, both flight crewmembers should not use EFB applications at the same time.*

12 Ident.: PRO-NOR-SOP-11-A-20806739.9001001 / 02 MAY 23
Applicable to: ALL

CABIN CREW

CABIN CREW...ADVISE | PM

L2 *Advise the cabin crew that takeoff is imminent.*

13 Ident.: PRO-NOR-SOP-11-A-20806740.9001001 / 02 MAY 23
Applicable to: ALL

LINE-UP CHECKLIST

LINE-UP C/L.. COMPLETE | PF-PM

TAKEOFF

1 Ident.: PRO-NOR-SOP-12-A-20806741.9001001 / 02 MAY 23
Applicable to: ALL

TAKEOFF CLEARANCE

TAKEOFF CLEARANCE	OBTAIN	PM

2 Ident.: PRO-NOR-SOP-12-A-20806742.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

NOSE sw	T.O	PF
RWY TURN OFF sw	ON	PF
LAND sw	ON	PF

Ident.: PRO-NOR-SOP-12-A-00011560.0032001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

3 THRUST SETTING

The below procedure is the standard takeoff procedure. However, rolling takeoff is permitted.

TAKEOFF	ANNOUNCE	PF
THRUST	50 % N1 (1.05 EPR)	PF

- **If the crosswind is at or below 20 kt and there is no tailwind:**

SIDESTICK	HALF FORWARD	PF

L2 *To counter the nose-up effect of setting engine takeoff thrust, apply half forward sidestick until the airspeed reaches 80 kt. Release the sidestick gradually to reach neutral at 100 kt.*

L1

BRAKES	RELEASE	PF
THRUST LEVERS	FLX or TOGA	PF

L2 *Once the thrust levers are set to FLX or TOGA detent, the Captain maintains the hand on the thrust levers until the aircraft reaches V1.*

L1

- **In the case of tailwind, or if crosswind is above 20 kt:**

SIDESTICK	FULL FORWARD	PF

L2 *To counter the nose-up effect of setting engine takeoff thrust, apply full forward sidestick until the airspeed reaches 80 kt. Release the sidestick gradually to reach neutral at 100 kt.*

L1

BRAKES	RELEASE	PF

THRUST LEVERS.......... FLX or TOGA | PF

L2
- *Increase thrust progressively to reach takeoff thrust by 40 kt ground speed*
- *Once the thrust levers are set to FLX or TOGA detent, the Captain maintains the hand on the thrust levers until the aircraft reaches V1.*

L1

Note: *1. ENG SD page replaces WHEEL SD page on the ECAM lower display*
2. The FADEC includes a keep-out zone, which is designed to avoid steady state operation inside a N1 range between 60 % and 74 % due to fan flutter phenomenon. This can result in discontinuous EPR increase during thrust setting (Refer to DSC-70-20 Functions).

CHRONO.......... START | PM
DIRECTIONAL CONTROL.......... USE RUDDER | PF

L2 *At 130 kt (wheel speed), the connection between nosewheel steering and the rudder pedals is removed. Therefore, in strong crosswinds, more rudder input will be required at this point to prevent the aircraft from turning into the wind.*

L1 PFD/ND.......... MONITOR | PM

L2 *If GPS PRIMARY LOST, check on the ND the FMS position: i.e. that the aircraft is on the runway centerline.*

Ident.: PRO-NOR-SOP-12-A-00011560.0006001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139

4 THRUST SETTING

The below procedure is the standard takeoff procedure. However, rolling takeoff is permitted.

TAKEOFF.......... ANNOUNCE | PF
THRUST.......... 50 % N1 (1.05 EPR) | PF

- **If the crosswind is at or below 20 kt and there is no tailwind:**

SIDESTICK.......... HALF FORWARD | PF

L2 *To counter the nose-up effect of setting engine takeoff thrust, apply half forward sidestick until the airspeed reaches 80 kt. Release the sidestick gradually to reach neutral at 100 kt.*

L1
BRAKES.......... RELEASE | PF
THRUST LEVERS.......... FLX or TOGA | PF

L2 *Once the thrust levers are set to FLX or TOGA detent, the Captain maintains the hand on the thrust levers until the aircraft reaches V1.*

L1 ● **In the case of tailwind, or if crosswind is above 20 kt:**

SIDESTICK........FULL FORWARD | PF

L2 *To counter the nose-up effect of setting engine takeoff thrust, apply full forward sidestick until the airspeed reaches 80 kt. Release the sidestick gradually to reach neutral at 100 kt.*

L1 BRAKES........RELEASE | PF
THRUST LEVERS........FLX or TOGA | PF

L2
- *Increase thrust rapidly to about 70 % N1 (1.15 EPR) then progressively to reach takeoff thrust by 40 kt ground speed*
- *Once the thrust levers are set to FLX or TOGA detent, the Captain maintains the hand on the thrust levers until the aircraft reaches V1.*

L1 *Note: ENG SD page replaces WHEEL SD page on the ECAM lower display.*

CHRONO........START | PM
DIRECTIONAL CONTROL........USE RUDDER | PF

L2 *At 130 kt (wheel speed), the connection between nosewheel steering and the rudder pedals is removed. Therefore, in strong crosswinds, more rudder input will be required at this point to prevent the aircraft from turning into the wind.*

L1 PFD/ND........MONITOR | PM

L2 *If GPS PRIMARY LOST, check on the ND the FMS position: i.e. that the aircraft is on the runway centerline.*

5 Ident.: PRO-NOR-SOP-12-A-20806744.9001001 / 02 MAY 23
Applicable to: ALL

BELOW 80 KT

TAKEOFF THRUST........CHECK | PM

L2 *Check that the actual N1/EPR of the individual engines has reached the N1/EPR rating limit, before the aircraft reaches 80 kt. Check EGT.*

L1 THRUST SET........ANNOUNCE | PM
PFD and ENG indications........MONITOR | PM

L2 *Scan airspeed, N1/EPR, and EGT throughout the takeoff.*

6 Ident.: PRO-NOR-SOP-12-A-20806745.9001001 / 02 MAY 23
Applicable to: ALL

AT 80 KT

SIDESTICK...RELEASE | PF

L2 *Release the sidestick gradually to reach neutral at 100 kt.*

7 Ident.: PRO-NOR-SOP-12-A-20806746.9001001 / 02 MAY 23
Applicable to: ALL

AT 100 KT

ONE HUNDRED KNOTS...ANNOUNCE | PM
100 KT...CROSSCHECK | PF

L2
- *The PF crosschecks and confirms the speed indicated on the PFD*
- *Below 100 kt, the Captain may decide to abort the takeoff, depending on the circumstances*
- *Above 100 kt, rejecting the takeoff is a more serious matter.*

8 Ident.: PRO-NOR-SOP-12-A-20806747.9001001 / 02 MAY 23
Applicable to: ALL

AT V1

V1..ANNOUNCE | PM

9 Ident.: PRO-NOR-SOP-12-A-20806748.9001001 / 02 MAY 23
Applicable to: ALL

AT VR

ROTATION ....ORDER | PM
ROTATION...PERFORM | PF

L2
- *At VR, initiate the rotation to achieve a continuous rotation with a rate of about 3 °/s, towards a pitch attitude 15 ° (12.5 °, one engine is failed)*
- *Minimize the lateral inputs on ground and during the rotation, to avoid spoiler extension*
- *In strong crosswind conditions, small lateral stick inputs may be used, if necessary, to aim at maintaining wings level*
- *After lift-off, follow the SRS pitch command bar.*

L1

CAUTION	If a tailstrike occurs, avoid flying at an altitude requiring a pressurized cabin, and return to the originating airport for damage assessment.

10 Ident.: PRO-NOR-SOP-12-A-20806749.9001001 / 02 MAY 23
Applicable to: ALL

WHEN POSITIVE CLIMB

POSITIVE CLIMB...ANNOUNCE | PM

L2 *Announce positive climb, when the vertical speed indication is positive and radio altitude has increased.*

L1 L/G UP...ORDER | PF
L/G lever...SELECT UP | PM
AP...AS RQRD | PF

L2 *Above 100 ft AGL, AP 1 or 2 may be engaged.*

11 Ident.: PRO-NOR-SOP-12-A-20806750.9001001 / 02 MAY 23
Applicable to: ALL

AT THRUST REDUCTION ALTITUDE

THRUST LEVERS...CL | PF

L2 *Move the thrust levers to the CL detent, when the flashing LVR CLB prompt appears on the FMA. A/THR is now active.*

L1 PACK 1 and 2 (if applicable)...ON | PM

L2 *Select PACK 1 on after CLB thrust reduction.*
Select PACK 2, at least 10 s after PACK 1 is selected on, for passenger comfort.

L1 *Note:* *1. Selecting pack on before reducing takeoff thrust would result in an EGT increase*
2. If packs are not switched on after the takeoff phase, an ECAM caution will be triggered.

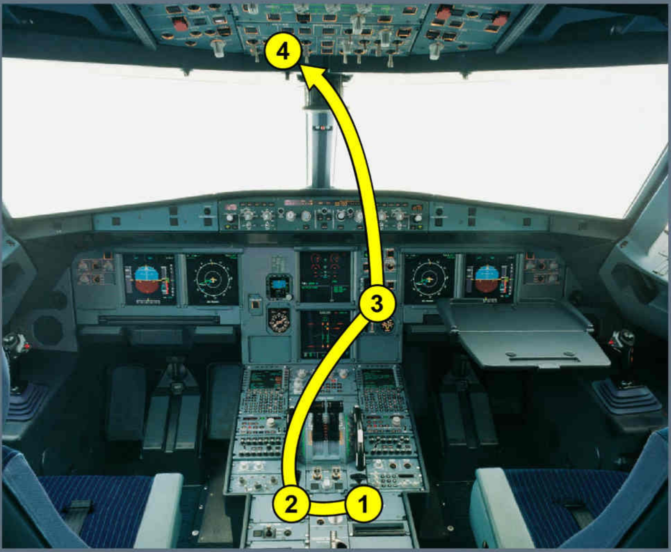
Ident.: PRO-NOR-SOP-12-A-00011568.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

ABOVE ACCELERATION ALTITUDE (OR ONCE IN CLIMB PHASE)

L2 The following procedure ensures that the aircraft is correctly accelerating toward climb speed.

ACCELERATION FLOW PATTERN

PM Actions



① FLAPS ZERO....................SELECT
② GND SPLRS....................DISARM
③ L/G....................CHECK UP
④ EXTERIOR LIGHTS....................SET

- **At F speed:**

FLAPS 1	ORDER	PF
FLAPS 1	SELECT	PM

- **At S speed:**

FLAPS 0	ORDER	PF
FLAPS 0	SELECT	PM
GND SPLRS	DISARM	PM
L/G	CHECK UP	PM
NOSE sw	OFF	PM
RWY TURN OFF sw	OFF	PM
OTHER EXTERIOR LIGHTS	AS RQRD	PM

LAND LIGHTS sw ....RETRACT | PM

Note: *When operating at AFIS airports, or with TCAS inoperative, or if requested by pilot in command due to safety reasons or by the Authority of the Airline that has the operational control of the aircraft, land light must be turned on until passing 10.000 ft AFE.*

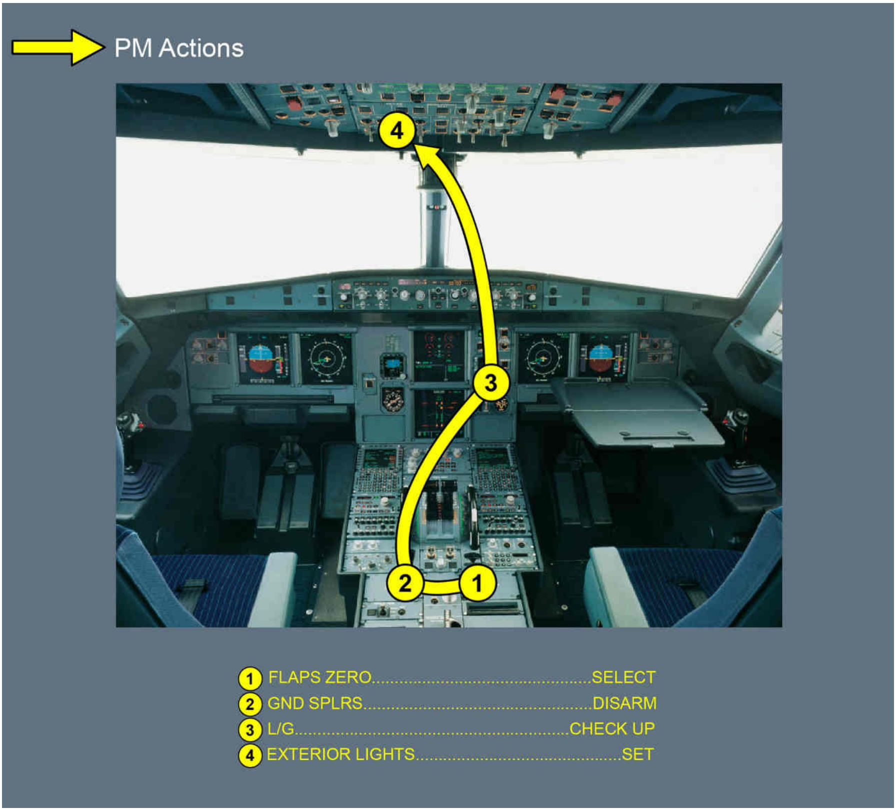
Note: *Do not exceed 250 KTS below 10.000 FT MSL for airports with elevation less than 4.000 FT (10.000 FT AFE for airports with elevation at 4.000 FT or above).*

Ident.: PRO-NOR-SOP-12-A-00011568.0032001 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

ABOVE ACCELERATION ALTITUDE (OR ONCE IN CLIMB PHASE)

L2 The following procedure ensures that the aircraft is correctly accelerating toward climb speed.

13 L1 ACCELERATION FLOW PATTERN



① FLAPS ZERO....................SELECT
② GND SPLRS....................DISARM
③ L/G....................CHECK UP
④ EXTERIOR LIGHTS....................SET

- **At F speed:**

FLAPS 1	ORDER	PF
FLAPS 1	SELECT	PM

- **At S speed:**

Note: *At heavy takeoff weight, the S speed on A321 may be higher than the MAX speed of configuration 1 + F (225 kt). Continue to accelerate and on reaching 210 kt the automatic flap retraction will occur and the MAX speed will move to 235 kt.*

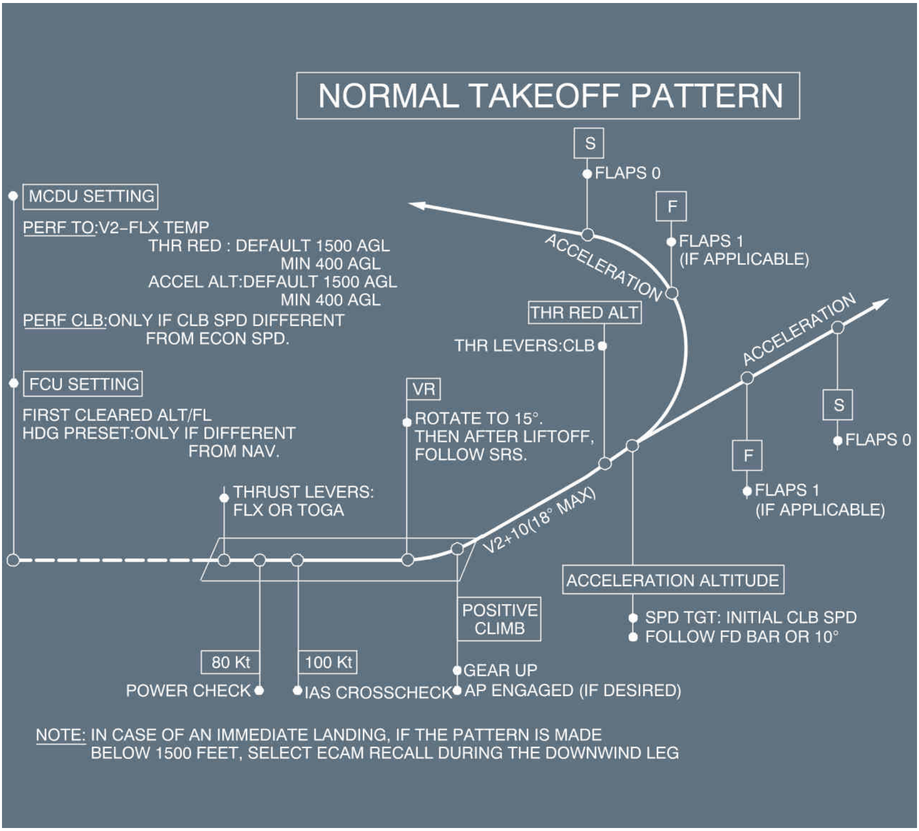
FLAPS 0	ORDER	PF
FLAPS 0	SELECT	PM
GND SPLRS	DISARM	PM

L/G	CHECK UP	PM
NOSE sw	OFF	PM
RWY TURN OFF sw	OFF	PM
OTHER EXTERIOR LIGHTS	AS RQRD	PM
LAND LIGHTS sw	RETRACT	PM

Note: *When operating at AFIS airports, or with TCAS inoperative, or if requested by pilot in command due to safety reasons or by the Authority of the Airline that has the operational control of the aircraft, land light must be turned on until passing 10.000 ft AFE.*

Note: *Do not exceed 250 KTS below 10.000 FT MSL for airports with elevation less than 4.000 FT (10.000 FT AFE for airports with elevation at 4.000 FT or above).*

14 Ident.: PRO-NOR-SOP-12-A-20806752.9001001 / 02 MAY 23
Applicable to: ALL


NORMAL TAKEOFF PATTERN
MCDU SETTING
PERF TO:V2–FLX TEMP
THR RED : DEFAULT 1500 AGL
MIN 400 AGL
ACCEL ALT:DEFAULT 1500 AGL
MIN 400 AGL
PERF CLB:ONLY IF CLB SPD DIFFERENT
FROM ECON SPD.
FCU SETTING
FIRST CLEARED ALT/FL
HDG PRESET:ONLY IF DIFFERENT
FROM NAV.
THRUST LEVERS:
FLX OR TOGA
VR
ROTATE TO 15°.
THEN AFTER LIFTOFF,
FOLLOW SRS.
THR RED ALT
THR LEVERS:CLB
S
FLAPS 0
F
FLAPS 1
(IF APPLICABLE)
ACCELERATION
ACCELERATION
S
FLAPS 0
F
FLAPS 1
(IF APPLICABLE)
V2+10(18° MAX)
ACCELERATION ALTITUDE
SPD TGT: INITIAL CLB SPD
FOLLOW FD BAR OR 10°
POSITIVE
CLIMB
GEAR UP
AP ENGAGED (IF DESIRED)
80 Kt
POWER CHECK
100 Kt
IAS CROSSCHECK

NOTE: IN CASE OF AN IMMEDIATE LANDING, IF THE PATTERN IS MADE BELOW 1500 FEET, SELECT ECAM RECALL DURING THE DOWNWIND LEG

AFTER TAKEOFF

1 Ident.: PRO-NOR-SOP-13-A-20806753.9001001 / 02 MAY 23
Applicable to: ALL

APU

- **If the APU was used to supply the air conditioning during takeoff:**

  APU BLEED pb-sw .... OFF | PM
  APU MASTER SW pb-sw .... OFF | PM

Ident.: PRO-NOR-SOP-13-A-00010158.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

2 ENG MODE SELECTOR

ENG MODE selector .... AS RQRD | PM

L2 *Select IGN/START, if severe turbulence or heavy rain is encountered.*

3 Ident.: PRO-NOR-SOP-13-A-20806755.9001001 / 02 MAY 23
Applicable to: ALL

TCAS

- **If the takeoff was performed with TA only:**

  TCAS mode selector .... TA/RA | PM

Ident.: PRO-NOR-SOP-13-A-00010160.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

4 ANTI ICE

ENG ANTI-ICE pb-sw .... AS RQRD | PM

L2 *Engine anti-ice must be set to ON when icing conditions (Refer to LIM-ICE_RAIN Definition of Icing Conditions) exist or are anticipated, except during climb and cruise when the SAT is below -40 °C (-40 °F).*

L1 *Note:* *With ENG ANTI ICE ON, the FADEC automatically selects continuous ignition. The IGNITION memo appears on ECAM.*

WING ANTI-ICE pb-sw .... AS RQRD | PM

L2 *When icing conditions are encountered:*

- *The flight crew may turn on the wing anti-ice to prevent ice accretion on the wing leading edge*
- *The flight crew must turn on the wing anti-ice if there is evidence of ice accretion, such as ice on the visual indicator, or on the wipers, or with the SEVERE ICE DETECTED alert. This is to remove any ice accumulation from the wing leading edge.*

Ident.: PRO-NOR-SOP-13-A-00010160.0002001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139

5 ANTI ICE

ENG ANTI-ICE pb-sw .... AS RQRD | PM

L2 *Engine anti-ice must be set to ON when icing conditions (Refer to LIM-ICE_RAIN Definition of Icing Conditions) exist or are anticipated, except during climb and cruise when the SAT is below -40 °C (-40 °F).*

L1 WING ANTI-ICE pb-sw .... AS RQRD | PM

L2 *When icing conditions are encountered:*

- *The flight crew may turn on the wing anti-ice to prevent ice accretion on the wing leading edge*
- *The flight crew must turn on the wing anti-ice if there is evidence of ice accretion, such as ice on the visual indicator, or on the wipers, or with the SEVERE ICE DETECTED alert. This is to remove any ice accumulation from the wing leading edge.*

CLIMB

1 Ident.: PRO-NOR-SOP-14-A-20806757.9001001 / 02 MAY 23
Applicable to: ALL

INITIAL CLIMB

Normal vertical mode is CLB or OP CLB with managed speed active.

PF MCDU...PERF CLB | PF

L2
- *PF MCDU should be showing the PERF CLB page (allowing PF to monitor when the aircraft will reach the FCU selected altitude) but the flight crew may select other pages such as F-PLN page as may be tactically necessary*
- *The PROG page displays OPT FL and MAX REC FL. It is worth noting that this OPT FL is a function of the cost index (CI).*
- *The displayed MAX REC FL gives the aircraft at least a 0.3 g buffet margin. The flight crew may enter a cruise flight level above this level into the MCDU and the FMGS will accept it, provided that it does not exceed the level at which the margin is reduced to 0.2 g.*

L1 PM MCDU...F-PLN | PM

L2 *PM MCDU should be showing the F-PLN page (allowing the flight crew to enter any ATC long-term revisions to the lateral or vertical flight plan).*

L1

CLIMB SPEED MODIFICATIONS

- **If ATC, turbulence or operational considerations lead to a speed change:**

  Select the new speed with FCU SPD knob and pull.

  Speed target is now “selected”.

  To return to managed speed mode, push FCU SPD knob.

  The speed target is now “managed”.

  Note: *The best speed (and rate of climb) for long-term situations lies between green dot speed and ECON speed. At high altitude, acceleration from green dot to ECON speed can take a long time.*

EXPEDITE CLIMB

- **If ATC requires a rapid climb through a particular level:**

  Push the EXP pb on the FCU.

  The target speed is now green dot speed. FMA: THR CLB/EXP CLB/NAV.

Note: *Use EXP ◁ only for short-term tactical situations. For the best overall economy fly at ECON IAS.*

To return to ECON CLB speed:
Push ALT knob
Check FMA: THR CLB/CLB/ : DoneNAV.

2 Ident.: PRO-NOR-SOP-14-A-20806758.9001001 / 02 MAY 23
Applicable to: ALL

AT THE TRANSITION ALTITUDE

BAROMETRIC REFERENCE.. SET STD/CROSSCHECK | PF-PM

L2
- *At the transition altitude, the barometric setting flashes on the PFD. The flight crew should set STD on the EFIS CP and on the standby altimeter.*
- *Crosscheck the barometric settings and the altitude indications.*

Ident.: TDU / PRO-NOR-SOP-14-A-00025011.0003001 / 02 MAY 23
Applicable to: MSN 01459, 02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06173, 06528-06561, 06598, 06634, 06689-06712, 06800-07098
Impacted DU: 00025005

3
AT THE TRANSITION ALTITUDE

BAROMETRIC REFERENCE.. SET STD/CROSSCHECK | PF-PM

L2
- *At the transition altitude, the barometric setting flashes on the PFD. The flight crew should set STD on the EFIS CP and on the standby altimeter.*
- *Crosscheck the barometric settings and the altitude indications.*

L1 *Note:* *When STD is set on the EFIS control panel, the transponder does not transmit to the Air Traffic Control (ATC) the standard barometric reference but the last QNH or QFE previously selected. The transmitted aircraft altitude is not affected. Only the FCU selected altitude, if used by the ATC, may be misinterpreted.*
Upon ATC notification of an incorrect barometric reference value, the flight crew can select manually a barometric reference of 1 013 hPa and set again STD on the EFIS control panel.

4 Ident.: PRO-NOR-SOP-14-A-20806760.9001001 / 02 MAY 23
Applicable to: ALL

CLIMB

CRZ FL.. SET AS RQRD | PF

L2
- *If ATC clears the aircraft to its intended CRZ FL or above, there is no need to modify the CRZ FL entered in the INIT A page during cockpit preparation. The MCDU will automatically take into account a higher CRZ FL selected with the FCU ALT knob.*
- *If ATC limits CRZ FL to a lower level than the one entered in the INIT A page (or present on the PROG page) the flight crew must insert this lower CRZ FL in the PROG page.*
  Otherwise there is no transition into CRZ phase: the managed speed targets and Mach are not modified, and SOFT ALT mode is not available. In that case, the FMA will display: MACH/ALT/NAV instead of MACH/ALT CRZ/NAV.

5 Ident.: PRO-NOR-SOP-14-A-20806761.9001001 / 02 MAY 23
Applicable to: ALL

ENG ANTI-ICE pb-sw .... AS RQRD | PM

L2 *Engine anti-ice must be set to ON when icing conditions (Refer to 00020608 **Not found**) exist or are anticipated, except during climb and cruise when the SAT is below - 40 °C (-40 °F).*

Ident.: TDU / PRO-NOR-SOP-14-A-00013047.0003001 / 02 MAY 23
Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted DU: 00010259 Climb - Radar

6 RADAR.. ADJUST AS APPROPRIATE | PF

Gain must be manually set to +4, when MULTISCAN sw is set to AUTO and when flying below FL 200.

Note:
1. *If the weather is good, or not significant, in order to check that the radar is operating correctly: down tilt until displaying ground echoes.*
2. *If the weather display is ambiguous or unexpected, in order to better analyze the weather situation, use manual tilt according to standard technique.*
3. *In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display.*
4. *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*

Ident.: TDU / PRO-NOR-SOP-14-A-00013047.0001001 / 02 MAY 23
Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192
Impacted DU: 00010259 Climb - Radar

7 RADAR...ADJUST AS APPROPRIATE | PF

Gain must be manually set to +8 when, MULTISCAN sw is set to AUTO and when flying below FL 150.

Note:
1. *MULTISCAN AUTO mode provides an efficient ground clutter rejection. During operation in good or non significant weather conditions, no weather pattern will be displayed on the ND's. In this case, the flight crew confirms correct radar operation, using temporarily MANUAL TILT.*
2. *The flight crew monitors the weather radar display in AUTO mode, and confirms any weather display that is ambiguous or unexpected using manual tilt according to standard techniques.*

Ident.: PRO-NOR-SOP-14-A-00010259.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563

8 RADAR TILT...ADJUST AS APPROPRIATE | PF

Ident.: PRO-NOR-SOP-14-A-00010259.0002001 / 02 MAY 23
Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted by TDU: 00013047 Climb - Radar

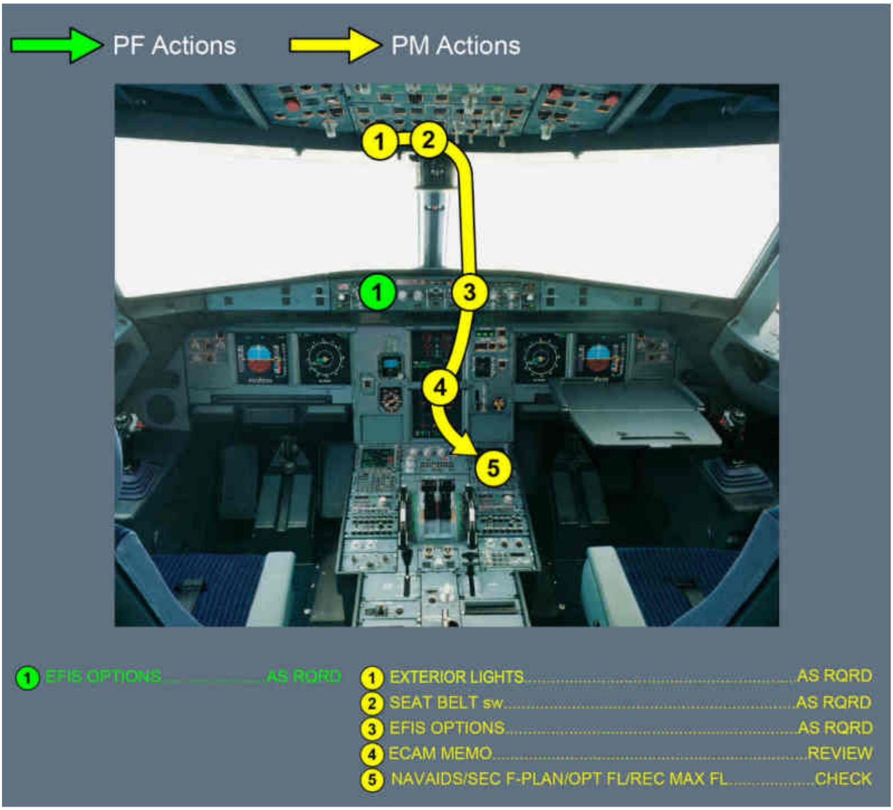
9 RADAR...ADJUST AS APPROPRIATE | PF

Ident.: PRO-NOR-SOP-14-A-00010259.0002001 / 02 MAY 23
Applicable to: MSN 04827-04860, 08495-09324, 10949-11139

10 RADAR...ADJUST AS APPROPRIATE | PF

11 Ident.: PRO-NOR-SOP-14-A-20806764.9001001 / 02 MAY 23
Applicable to: ALL

FL 100/ 10.000 FT (10.000 FT AFE FOR AIRPORTS WITH ELEVATION AT 4.000 FT OR ABOVE)



① EFIS OPTIONS..............................AS RQRD

① EXTERIOR LIGHTS..............................AS RQRD
② SEAT BELT sw..............................AS RQRD
③ EFIS OPTIONS..............................AS RQRD
④ ECAM MEMO..............................REVIEW
⑤ NAVAIDS/SEC F-PLAN/OPT FL/REC MAX FL..................CHECK

EFIS Option:

The PF will select CSTR for grid MORA
The PM will select ARPT

12 Ident.: PRO-NOR-SOP-14-A-20806765.9001001 / 02 MAY 23
Applicable to: ALL

FL 100/ 10.000 FT (10.000 FT AFE FOR AIRPORTS WITH ELEVATION AT 4.000 FT OR ABOVE)

WING LIGHTS..............................OFF	PM
CABIN CREW..............................ADVISE	PM
SEAT BELTS sw .... AS RQRD	PM

The SEATS BELTS sign is a Captain responsability. The PM must switch the SEAT BELTS sw to OFF only after Captain's confirmation. If conditions permits this action should be performed at

5 000 FT AFE, when authorized by the authority of the airline who has the operational control of the aircraft.

	EFIS OPTIONS	AS RQRD	PF-PM
L2	*Select CSTR on one side, for grid MORA (if available), and ARPT on the other side.*		
L1	ECAM MEMO	REVIEW	PM
	NAVAIDS	CLEAR	PM
L2	*Clear manually tuned VORs from RAD NAV page.*		
L1	SEC F-PLN page	AS RQRD	PM
L2	*Recopy the active flight plan in the secondary if an immediate return flight plan has been constructed previously.*		
L1	OPT FL/REC MAX FL	CHECK	PM
L2	*On the FMS PROG page, check the optimum and recommended maximum flight levels.*		

CRUISE

1 Ident.: PRO-NOR-SOP-15-A-20806766.9001001 / 02 MAY 23
Applicable to: ALL

ECAM

L2 In cruise, the tasksharing is left to the flight crew's appreciation.

L1	ECAM MEMO	REVIEW	PF-PM
	SD PAGES	REVIEW	PF-PM

L2 *Periodically review system display pages and, in particular:*

ENG : Oil pressure and temperature

BLEED : BLEED parameters

ELEC : Parameters, GEN loads

HYD : A slight decrease in quantity is normal.
Fluid contraction during cold soak can be expected.
Green system is lower than on ground, following landing gear retraction.

FUEL : Fuel distribution

COND : Duct temperature, compared with zone temperature.
Avoid large differences for passenger comfort.

F/CTL : Note any unusual control surface position

DOOR : Oxygen pressure.

2 Ident.: PRO-NOR-SOP-15-A-20806767.9001001 / 02 MAY 23
Applicable to: ALL

FLIGHT PROGRESS

FLIGHT PROGRESS	CHECK	PF-PM

Monitor flight progress in the conventional way.

WHEN OVERFLYING A MANUALLY ENTERED WAYPOINT

- Check track and distance to the next waypoint
- Check the wind and update it if the current wind is significantly different.

WHEN OVERFLYING THE WAYPOINT, OR AT LEAST EVERY 30 MIN

Check FUEL:
- Check FOB (ECAM) and fuel prediction (FMGC), and compare with the computerized flight or use the performance application of the EFB
- Check that there is no fuel leak
- Check that the sum of the fuel on board and the fuel used is consistent with the fuel on board at departure:
  - If the value is abnormally negative, suspect a fuel leak
  - If the value is abnormally positive, suspect a fuel quantity overread.

CAUTION	This check must also be performed each time a FUEL IMBALANCE procedure is necessary. Perform the check before applying the FUEL IMBALANCE procedure. If a fuel leak is confirmed, apply the FUEL LEAK procedure.

3 Ident.: PRO-NOR-SOP-15-A-20806768.9001001 / 02 MAY 23
Applicable to: ALL

STEP FLIGHT LEVEL

STEP FLIGHT LEVEL....................AS APPROPRIATE | PF-PM

Note: *For aircraft regulated by Brazilian civil aviation authority (JJ):*
- *During night operations the WING LIGHTS must be switched to ON prior to any flight level change and will be kept ON during the transition. After reaching the appropriate flight level, WING LIGHTS must be switched to OFF.*

4 Ident.: PRO-NOR-SOP-15-A-20806769.9001001 / 02 MAY 23
Applicable to: ALL

NAVIGATION ACCURACY

● **If GPS PRIMARY LOST:**
NAV ACCURACY....................MONITOR | PF-PM

L2 *Monitor the navigation accuracy, particularly if any of the following occurs:*
- *IRS only navigation*
- *The PROG page displays LOW accuracy*
- *The NAV ACCUR DOWNGRAD message appears on the MCDU.*

*Refer to 00010499 **Not found**.*

L1 *Note:* *Methods for checking accuracy:*

- ***If the check is positive (error ≤ 3 N.m): FM position is reliable.***
  Use ND (ARC or NAV) and managed lateral guidance.
- ***If the check is negative (error > 3 N.m): FM position is not reliable.***
  Use raw data for navigation and monitor it.
  - ***If there is a significant mismatch between the display and the real position:***
    Disengage MANAGED NAV mode and use raw data navigation (possibly switching to ROSE VOR, so as not to be misled by FM data).

Ident.: TDU / PRO-NOR-SOP-15-A-00013068.0001001 / 26 OCT 22
Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192
Impacted DU: 00010291 Cruise - Radar Tilt

RADAR

RADAR ....ADJUST AS APPROPRIATE | PF

Gain must be manually set to +8, when MULTISCAN sw is set to AUTO and when flying below FL 150.

Note:
1. *MULTISCAN AUTO mode provides an efficient ground clutter rejection. During operation in good or non significant weather conditions, no weather pattern will be displayed on the ND's. In this case, the flight crew confirms correct radar operation, using temporarily MANUAL TILT.*
2. *The flight crew monitors the weather radar display in AUTO mode, and confirms any weather display that is ambiguous or unexpected using manual tilt according to standard techniques.*

Ident.: TDU / PRO-NOR-SOP-15-A-00013068.0006001 / 26 OCT 22
Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted DU: 00010291 Cruise - Radar Tilt

RADAR

RADAR ....ADJUST AS APPROPRIATE | PF

Gain must be manually set to +4, when MULTISCAN sw is set to AUTO and when flying below FL 200.

Note:
1. *If the weather is good, or not significant, in order to check that the radar is operating correctly: Down tilt until displaying ground echoes*
2. *If the weather display is ambiguous or unexpected, in order to better analyze the weather situation, use manual tilt according to standard technique*
3. *In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display*
4. *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*

Ident.: PRO-NOR-SOP-15-A-00010291.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563

5 RADAR

RADAR TILT.. ADJUST AS APPROPRIATE | PF

Ident.: PRO-NOR-SOP-15-A-00010291.0002001 / 02 MAY 23
Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted by TDU: 00013068 Cruise - Radar Tilt

6 RADAR

RADAR ....ADJUST AS APPROPRIATE | PF

Ident.: PRO-NOR-SOP-15-A-00010291.0002001 / 02 MAY 23
Applicable to: MSN 04827-04860, 08495-09324, 10949-11139

7 RADAR

RADAR ....ADJUST AS APPROPRIATE | PF

8 Ident.: PRO-NOR-SOP-15-A-20806772.9001001 / 02 MAY 23
Applicable to: ALL

OXYGEN MASKS

- **If the oxygen mask has been used:**
  OXYGEN MASK ....CHECK | PF-PM

L2 *Check that the oxygen mask has been properly stowed, Refer to 00017801 **Not found**.*

9 Ident.: PRO-NOR-SOP-15-A-20806773.9001001 / 02 MAY 23
Applicable to: ALL

CRUISE BRIEFING.. PERFORM | PF-PM

Upon reaching the cruise flight level, the PF and PM should discuss specific operational threats (e.g. high terrain enroute, weather, traffic, eng out ceiling), their mitigations and special operational rules that are related to the flown route (e.g. RVSM).
The cruise briefing should be reviewed and updated whenever there are new threats, or changes in operational rules.

Intentionally left blank

1 Ident.: PRO-NOR-SOP-16-A-20806774.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT PREPARATION

Descent preparation and arrival briefing should be completed before top of descent.

Note: *For flights with less than 15 minutes of cruise phase, the approach briefing must be completed before crossing 10 000 ft AFE.*

2 Ident.: PRO-NOR-SOP-16-A-20806775.9001001 / 02 MAY 23
Applicable to: ALL

LANDING INFORMATION

WEATHER AND LANDING INFORMATION..OBTAIN | PM

L2 *Check the weather reports and runway conditions at destination and alternate airports. Airfield data, if any, should include the runway to be used for arrival.*
When the aircraft operates in low OAT conditions, consider altitude corrections for low temperature.

L1 NAV CHARTS CLIPBOARD...PREPARE | BOTH

L2 *Prepare the charts for arrival navigation and for the expected approach procedure and verify that both flight crewmembers refer to the same chart reference.*

3 Ident.: PRO-NOR-SOP-16-A-20806776.9001001 / 02 MAY 23
Applicable to: ALL

ECAM

ECAM STATUS...CHECK | PM

L2
- *Check that there is no status reminder on the upper ECAM display*
- *If there is a status reminder, check the aircraft STATUS*
- *Check the STATUS page before completing the landing distance and the arrival briefing. Take particular note of any degradation in landing capability, or any other aspect affecting the approach and landing.*

4 Ident.: PRO-NOR-SOP-16-A-20806777.9001001 / 02 MAY 23
Applicable to: ALL

LANDING PERFORMANCE

LANDING CONDITIONS....................CONFIRM | PF-PM

Check if the landing conditions changed compared with the landing distance computation at dispatch, or with a previous computation (e.g. runway, weather conditions, in-flight failure affecting performance, diversion).

L2 *For more information, Refer to FCTM/00022701 **Not found**.*

L1 ● **If landing conditions changed:**

LANDING PERF DATA....................COMPUTE | PF-PM

L2 *The PF and the PM independently compute the landing distance performance data, based on preferential setting for landing.*

L1 LANDING PERF DATA....................CROSSCHECK | BOTH

L2 *Both flight crewmembers compare their EFB to ensure that the computations are the same.*

5 Ident.: PRO-NOR-SOP-16-A-20806778.9001001 / 02 MAY 23
Applicable to: ALL

FMS

ARRIVAL page....................COMPLETE/CHECK | PF

L2 *Insert APPR, STAR, APPR VIA and TRANS if applicable. (Access by lateral revision at destination.)*

L1 F-PLN A page....................CHECK | PF

L2
- *Check that the F-PLN agrees with the planned approach and missed approach*
- *Check the F-PLN (approach and Missed Approach tracks and distances) vs. the approach charts, using the ND in PLAN mode as necessary*
- *Check speed constraints. Add new speed constraints if required.*

- *Check altitude constraints. Add new altitude constraints if required.*

  Note: *The FMS may have deleted the altitude constraints that are at or above the CRZ FL, or at or above any previous lower CRZ FL in the case of step climbs (Refer to 00012689 **Not found**).*

  In that case,
  - *Insert again the affected procedures (STAR, APPR VIA or TRANS)*
    The FMS keeps the altitude constraints that are below the CRZ FL, and deletes again the altitude constraints that are above current CRZ FL. The FMS may also delete the altitude constraints that are at current CRZ FL, and the altitude constraint windows that have a constraint at or above current CRZ FL.
  - *Manually enter the altitude constraints that are below current CRZ FL using the MCDU Vertical Revision pages.*
    It is not possible to enter an altitude constraint at the CRZ FL.
    In the case of an "AT" or "AT OR ABOVE" altitude constraint at the CRZ FL, the flight crew must select the DES mode only after the aircraft reaches the position of the altitude constraint to prevent an early descent.

- *In all cases, do not modify the final approach (FAF to runway or MAP), including altitude constraints*
- *Identify the position and the altitude of Final Descent Point (FDP) and check the value of the FPA after this FDP*
- *If a TOO STEEP PATH message is displayed after the FDP, do not use FINAL APP guidance for approach*
- *Identify the Missed Approach Point.*

6 Ident.: PRO-NOR-SOP-16-A-20806779.9001001 / 02 MAY 23
Applicable to: ALL

DES WIND page...CHECK | PF

Enter winds for descent before T/D.

Note: *With DPO ◁ , as the idle thrust margins are reduced, accurate winds have to be entered to be able to follow the computed vertical profile and thus maximize the benefits of DPO ◁ . Refer to 00019723 **Not found**.*

PERF CRUISE page..CHECK | PF

Modify the cabin descent rate if different pressure rate is required.

PERF DES page..CHECK | PF

Prior to descent, access PERF DES page and check ECON MACH/SPD. If a speed other than ECON is required, insert that MACH or SPD into the ECON field. This new MACH or SPD is now the *one for the descent path and T/D computation, and it will be used for the managed speed descent profile (instead of ECON).*

L2 *A speed limit of 250 kt below 10 000 ft is the defaulted speed, in the managed speed descent profile. The flight crew may delete or modify it if necessary on the VERT REV at DEST page.*

Ident.: PRO-NOR-SOP-16-A-00020102.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139

7 PERF APPR page..COMPLETE/CHECK | PF

- *Enter the QNH, temperature, and wind at destination.*

CAUTION	*During QFE operations, the flight crew must convert QFE into QNH. The CPC uses the QNH to compute the cabin pressurization profile. Therefore, the entry of QFE in QNH field of the PERF APPR page leads to an erroneous cabin pressurization profile.*

L12

Note: Insert the average wind given by the ATC or ATIS. Do not insert the gust value. During approach, the Ground Speed Mini function (managed speed mode) takes into account the instantaneous gust.
For more information, Refer to Ground Speed Mini Function.
For example, if the wind is 15020G35KT, insert 150/20.

- *Insert the minimum.*

Note: For any Non Precision Approach the minima (MDA) must be added by 50 ft (Derived Decision Altitude = MDA + 50 ft)

CAUTION	*If the QNH altimeter setting is used for an aircraft with the QFE option ◁ , Refer to DSC-22_20-85 QNH Use for Aircraft Equipped with QFE Option.*

Note: Changing the RWY or the type of approach automatically erases the previous minimum.

Note: After the activation of the SEC F-PLN, check the VAPP, and modify if necessary.

- *Check or modify the landing configuration. Always select the landing configuration on the PERF APPR page: CONF FULL is the normal landing configuration. CONF 3 should be considered, depending on the available runway length and go-around performance, or if windshear/severe turbulence is considered possible during approach.*
  If the forecasted tailwind at landing is more than 10 kt, Refer to LIM-AG-OPS Tailwind Landing for the recommended/required landing configuration.
- *Check or modify the transition altitude/flight level.*

PERF GO AROUND page.. CHECK/MODIFY | PF

L2 *Check THR RED ALT and ACC ALT, and modify, if necessary.*

Ident.: PRO-NOR-SOP-16-A-00020102.0001001 / 02 MAY 23
Applicable to: MSN 04827-04860

8

9 PERF APPR page.. COMPLETE/CHECK | PF

- *Enter the QNH, temperature, and wind at destination.*

CAUTION	*During QFE operations, the flight crew must convert QFE into QNH. The CPC uses the QNH to compute the cabin pressurization profile. Therefore, the entry of QFE in QNH field of the PERF APPR page leads to an erroneous cabin pressurization profile.*

L12

Note: *Insert the average wind given by the ATC or ATIS. Do not insert the gust value. During approach, the Ground Speed Mini function (managed speed mode) takes into account the instantaneous gust.*
For more information, Refer to Ground Speed Mini Function.
For example, if the wind is 15020G35KT, insert 150/20.

- *Insert the minimum.*

Note: *For any Non Precision Approach the minima (MDA) must be added by 50 ft (Derived Decision Altitude = MDA + 50 ft)*

CAUTION	*If the QNH altimeter setting is used for an aircraft with the QFE option , Refer to DSC-22_20-85 QNH Use for Aircraft Equipped with QFE Option.*

Note: *Changing the RWY or the type of approach automatically erases the previous minimum.*

Note: *After the activation of the SEC F-PLN, check the VAPP, and modify if necessary.*

- *Check or modify the landing configuration. Always select the landing configuration on the PERF APPR page: CONF FULL is the normal landing configuration. CONF 3 should be considered, depending on the available runway length and go-around performance, or if windshear/severe turbulence is considered possible during approach.*
- *Check or modify the transition altitude/flight level.*

PERF GO AROUND page.. CHECK/MODIFY | PF

L2 *Check THR RED ALT and ACC ALT, and modify, if necessary.*

Ident.: PRO-NOR-SOP-16-A-00020103.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

10
11 RAD NAV page..CHECK | PF

L2
- *Set the navaids, as required, and check the VOR / ADF idents on the NDs and the ILS / MLS ◁ / GLS ◁ / SLS ◁ idents on the PFDs*
- *For an ILS approach, check the frequency and the course*
- *For an approach using GLS ◁ / SLS ◁ , check the channel and the course*
- *If a VOR/DME exists close to the airfield, select it and enter its ident in the BRG/DIST field of the PROG page, for NAV accuracy monitoring during descent*
- *When the flight plan calls for an NDB approach, the system automatically tunes the ADF, only when the aircraft is passing the first fix of the approach. Therefore, it is convenient to manually tune the ADF earlier (before activating the approach phase).*

L1 SELECTED NAVAID page...CHECK/MODIFY | PF

Ident.: PRO-NOR-SOP-16-A-00020103.0002001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

12
13 RAD NAV page..CHECK | PF

L2
- *Set navaids, as required, and check idents on the NDs (VOR-ADF) and PFDs (ILS, GLS ◁). If a VOR/DME exists close to the airfield, select it and enter its ident in the BRG/DIST field of the PROG page, for NAV accuracy monitoring during descent.*
- *When the flight plan calls for an NDB approach, the system automatically tunes the ADF, only when the aircraft is passing the first fix of the approach. Therefore, it is convenient to manually tune the ADF earlier (before activating the approach phase).*

L1 SELECTED NAVAID page...CHECK/MODIFY | PF

14 Ident.: PRO-NOR-SOP-16-A-20806782.9001001 / 02 MAY 23
Applicable to: ALL

SEC F-PLN page..AS RQRD | PF

L2 *Before the top of descent, the SEC F-PLN should either be set to an alternate runway for destination, or to the landing runway in case of circling. In all cases, routing to the alternate should be available. If there is a last-minute runway change, then the flight crew only needs to activate the secondary F-PLN , without forgetting to check/set the new minimum and navaids.*

15 Ident.: PRO-NOR-SOP-16-A-20806783.9001001 / 02 MAY 23
Applicable to: ALL

FMS PREPARATION.. CROSSCHECK | PM

L2 *After the PF prepares the FMS, the PM checks all the data entered in the FMS. The PM should have the same mental image of the intended arrival and approach procedure, trajectory, and constraints as the PF. The PM should check with the PF if anything is not clear.*

For more information, *Refer to FCTM/00022701 **Not found***.

16 Ident.: PRO-NOR-SOP-16-A-20806784.9001001 / 02 MAY 23
Applicable to: ALL

PREFERENTIAL SETTING FOR LANDING

SETTING	RWY CONDITION	REVERSERS	FLAPS	AUTOBRAKE
A	Dry Only / WET(1)	Idle	CONF 3	LO
B	Dry Only / WET(1)	Idle	CONF FULL	LO
C	Dry Only / WET(1)	Idle	CONF FULL	MED
D	ALL(2)	Max	CONF FULL	MED
E	ALL	Max	CONF FULL	MANUAL

(1) *On WET runways (runways surface condition GOOD/RWYCC 5 minimum only), the flight crew may select REV IDLE, if the following conditions are satisfied:*
- *A landing distance assessment has been made with the following parameters:*
  - *MEDIUM TO POOR (RWYCC 2) landing performance level for the in-flight landing distance computation*
  - *NO reverser credit*
- *The result of this landing distance assessment is within the 15 % of LDA margin.*

(2) *On contaminated runway or runway condition GOOD to MEDIUM (RWYCC 4) until MEDIUM (RWYCC 3) the configuration must be: REV MAX, CONF FULL and autobrake MED (Setting D)*

Note: *Landing configuration must be selected from setting A down toward to E until the 15 % of margin is reached.*

Note: *Due to operational reasons the use of CONF 3 is allowed with any combination of AUTOBRAKE and REV setting.*

Note: *If the weather conditions are expected to change at the landing airport, or in the event of significant precipitation, the flight crew should consider a second calculation of the in-flight landing distance with the worst possible runway condition.*

CAUTION CONF 3 should not be used if one or more of the following conditions apply:
- The glide path angle or PAPI is equal or greater than 3,5 °.
- A Low Visibility Procedure is in effect (below CAT I minimums)
- The information used for landing performance calculation indicates tailwind
- Reported braking action is GOOD to MEDIUM (RWYCC 4) or MEDIUM (RWYCC 3)

CAUTION REV IDLE is the desired reverse thrust configuration to be used in normal operations.

REV MAX must be used if one or more of the following conditions apply:
- Reported braking action is GOOD to MEDIUM (RWYCC 4) or MEDIUM (RWYCC3)
- The information used for landing performance calculation indicates tailwind greater than 5 Kt

Note: *During automatic rollout with one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided no more than idle thrust is used.*

In case preferential setting E is selected, additional restrictions must be followed:
- Pilots should select AUTOBRAKE MED and at touchdown apply MAX MANUAL BRAKING
- Captains operations or captain under training according to instructor criteria
- Maximum crosswind of 10 kt
- Maximum tailwind of 10 kt
- Operation with heavy rain, contaminated runway or runway slippery when wet (MEDIUM (RWYCC 3)) not allowed
- Additional restrictions published by the company.

In addition, the flight crew must select REV MAX if any of the following occurs at any time during the landing:
- An emergency
- The deceleration is not as expected
- A failure affects the landing performance
- A long flare or a long touchdown
- An unexpected tailwind.

17 Ident.: PRO-NOR-SOP-16-A-20806785.9001001 / 02 MAY 23
Applicable to: ALL

For approaches using FPA , VIP must be calculated as following:

$$VIP = \frac{\Delta \text{ Altitud}}{\alpha \ \times 106}$$

18 Ident.: PRO-NOR-SOP-16-A-20806786.9001001 / 02 MAY 23
Applicable to: ALL

GPWS LDG FLAP 3 pb-sw .... AS RQRD | PF

L2 *If the flight crew plans on landing in FLAPS 3 configuration, the GPWS LDG FLAP 3 pb-sw should be set to ON.*

19 Ident.: PRO-NOR-SOP-16-A-20806787.9001001 / 02 MAY 23
Applicable to: ALL

LANDING ELEVATION

LDG ELEV .... CHECK | PF

L2 *Check that the LDG ELEV AUTO is displayed on the CRUISE page, and check the associated value.*

Ident.: PRO-NOR-SOP-16-A-00024115.0001001 / 02 MAY 23
Applicable to: MSN 10949-11139

20 ROW/ROP

RWY COND selector .... WET/DRY | PF

L2 *Select the appropriate runway condition between WET and DRY according to weather information. For more information, Refer to FCTM/AS-ROWROP Operating Techniques.*

L1 *Note:* *If the performance credit is approved on a PFC/GROOVED runway, then the runway condition may be set on DRY for WET PFC/GROOVED runway.*

21 Ident.: PRO-NOR-SOP-16-A-20806789.9001001 / 02 MAY 23
Applicable to: ALL

AUTOBRAKE

AUTO BRK.. AS RQRD | PF

In Normal Operations, the use of AUTO BRK is mandatory

L2 *It must be selected according to:Refer to Refer to 20800039 **Not found**.*

L1 *Firmly press the appropriate pushbutton, according to the runway length and condition, and check that the related ON light comes on.*

22 Ident.: PRO-NOR-SOP-16-A-20806790.9001001 / 02 MAY 23
Applicable to: ALL

ARRIVAL BRIEFING

ARRIVAL BRIEFING..........PERFORM | BOTH

Ident.: TDU / PRO-NOR-SOP-16-A-00013353.0003001 / 02 MAY 23
Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted DU: 00011545

23
RADAR

RADAR..........ADJUST AS APPROPRIATE | PF

Gain must be manually set to +4, when MULTISCAN sw is set to AUTO and when flying below FL 200.

Note:
1. *If the weather is good, or not significant, in order to check that the radar is operating correctly: Down tilt until displaying ground echoes*
2. *If the weather display is ambiguous or unexpected, in order to better analyze the weather situation, use manual tilt according to standard technique*
3. *In particular below FL 200, for situations with low-level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to Manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display*
4. *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and Manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*

Ident.: TDU / PRO-NOR-SOP-16-A-00013353.0001001 / 02 MAY 23
Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192
Impacted DU: 00011545

24
RADAR

RADAR..........ADJUST AS APPROPRIATE | PF

Gain must be manually set to +8 when, MULTISCAN sw is set to AUTO and when flying below FL 150.

Note: 1. *MULTISCAN AUTO mode provides an efficient ground clutter rejection. During operation in good or non significant weather conditions, no weather pattern will be displayed on the ND's. In this case, the flight crew confirms correct radar operation, using temporarily MANUAL TILT.*
2. *The flight crew monitors the weather radar display in AUTO mode, and confirms any weather display that is ambiguous or unexpected using manual tilt according to standard techniques.*

25 Ident.: PRO-NOR-SOP-16-A-20806792.9001001 / 02 MAY 23
Applicable to: ALL

RADAR

RADAR....................ADJUST AS APPROPRIATE | PF

26 Ident.: PRO-NOR-SOP-16-A-20806793.9001001 / 02 MAY 23
Applicable to: ALL

TCAS....................BLW | PF

Ident.: PRO-NOR-SOP-16-A-00011558.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

27 ANTI ICE

CAUTION	In icing conditions (*Refer to LIM-ICE_RAIN Definition of Icing Conditions*), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG 1 and 2 ANTI-ICE pb-sw ....AS RQRD | PM

L2 *Engine anti-ice must be set to ON before and during descent, even If the SAT is below -40 °C (-40 °F).*
When ENG ANTI ICE is ON, the FADEC automatically controls continuous ignition and selects a higher idle thrust which gives better protection against flame-out. The IGNITION memo appears on the ECAM.

L1 WING ANTI ICE pb-sw ....AS RQRD | PM

L2 *When icing conditions are encountered:*
- *The flight crew may turn on the wing anti-ice to prevent the ice accretion on the wing leading edge*
- *The flight crew must turn on the wing anti-ice if there is evidence of ice accretion, such as ice on the visual indicators, or on the wipers, or with the SEVERE ICE DETECTED ◁ alert. This is to remove any ice accumulation on the wing leading edge.*

ANTI ICE ON reduces the descent path angle (when the engines are at idle). The flight crew can compensate for this by increasing the descent speed, or by extending up to half speedbrakes.

Ident.: PRO-NOR-SOP-16-A-00011558.0004001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139

28 ANTI ICE

CAUTION	In icing conditions (*Refer to LIM-ICE_RAIN Definition of Icing Conditions*), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG 1 and 2 ANTI-ICE pb-sw .... AS RQRD | PM

L2 *Engine anti-ice must be set to ON before and during descent, event if the SAT is below -40 °C (-40 °F).*
When ENG ANTI ICE is ON, the FADEC selects a higher idle thrust which gives better protection against flame-out.

L1 WING ANTI ICE pb-sw .... AS RQRD | PM

L2 *When icing conditions are encountered:*
- *The flight crew may turn on the wing anti-ice to prevent ice accretion on the wing leading edge*
- *The flight crew must turn on the wing anti-ice if there is evidence of ice accretion, such as ice on the visual indicators, or on the wipers, or with the SEVERE ICE DETECTED alert. This is to remove any ice accumulation from the wing leading edge.*

ANTI ICE ON reduces the descent path angle (when the engines are at idle). The flight crew can compensate for this by increasing the descent speed, or by extending up to half speedbrakes.

29 Ident.: PRO-NOR-SOP-16-A-20806795.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT CLEARANCE

DESCENT CLEARANCE........OBTAIN | PM
CLEARED ALTITUDE ON FCU........ SET | PF

L2 *When the flight crew obtains the ATC clearance, they should set the cleared altitude (FL) on the FCU taking into account the safe altitudes.*
If the lowest safe altitude is above the cleared altitude, check with the ATC to determine if this constraint applies.
If the ATC confirms that this constraint applies, set the safe altitude on the FCU until it is safe to reach the cleared altitude.

DESCENT INITIATION

1 Ident.: PRO-NOR-SOP-17-20806796.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT INITIATION

DESCENT.. INITIATE | PF

L2 The standard method to initiate the descent is to engage the DES mode at the T/D computed by the FMS.

L1 For more information on T/D and profile computation, *Refer to FCTM/00018923 **Not found***.

- **If ATC requires an early descent:**

  Use the DES mode.

  The DES mode guides the aircraft down to a lower vertical speed, in order to converge with the required descent path (the flight crew may use a V/S of 1 000 ft/min).

- **If ATC delays the descent:**

  Beyond the T/D, the T/D REACHED or DECELERATE message appears on the PFD and MCDU. This suggests that the flight crew should reduce the speed toward Green Dot speed with ATC permission.

  When cleared for descent, engage DES mode with the managed speed active.

DESCENT MONITORING

2 Ident.: PRO-NOR-SOP-17-20806797.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT MONITORING

PF MCDU.. PROG/PERF DES | PF

L2 *PF MCDU should be set to PROG or PERF DES page:*
- *PROG page in order to get VDEV or RQD DIST TO LAND/DIRECT DIST TO DEST information*
- *PERF DES page in order to get predictions down to any inserted altitude in DES/OP DES modes and EXP mode .*

L1 PM MCDU.. F-PLN | PM
DESCENT.. MONITOR/ADJUST | PF

L2 *Refer to 00004008 **Not found**.*

- *When flying in NAV mode, use the DES mode*
  - *Monitor the VERT DEV*
    The VERT DEV appears on the PFD and on the PROG page.
  - *Monitor the FMA when the aircraft reaches the level-off symbol (i.e. ↘→ or) ↘→*

    Note: *The NDs display a level-off symbol ↘→ along the flight path. The position of this symbol is based on the current active modes: i.e. AP/FD and A/THR.*
    MCDU predictions assume a return to the lateral F-PLN and descent flight path.
    Note that whenever the lateral mode is changed from NAV to HDG/TRK the vertical mode reverts to V/S at the value pertaining at the time of the mode change.
  - *Monitor the predicted descent point after the next level-off.*
- *From time to time during stabilized descent, the flight crew may select FPA to check that the remaining distance to destination is approximately the altitude change required divided by the FPA in degrees*
- *FPA (°) = ΔFL/DIST (NM).*

DESCENT ADJUSTMENT

Applicable to: ALL

3 Ident.: PRO-NOR-SOP-17-A-20806798.9001001 / 02 MAY 23

DESCENT ADJUSTMENT

RATE of DESCENT...ADJUST, AS RQRD | PF

L2 To increase the rate of descent, increase the descent speed by using the selected speed, if comfort and the ATC permit. It is more cost-effective (Time/Fuel) than using the speed brakes:

- Maintain a high speed as long as possible, provided that the ATC permits to fly above the speed limits
- If the aircraft is high and at high speed, it is more efficient to keep the high speed until ALT* then to decelerate at level-off, instead of combining descent and deceleration
- If the aircraft goes below the desired profile, use the selected speed and the V/S mode to adjust the rate of descent.

In the OP DES mode, the flight crew can use the speed brakes to increase the rate of descent. The flight crew can also use the speed brakes to maintain the required rate of descent, when engine anti-ice is used.
In the DES mode, if the aircraft is on, or below the flight path and the ATC requires a higher rate of descent, do not use the speed brakes because the rate of descent is imposed by the planned

flight path. Therefore, the A/THR may increase thrust to compensate for the increase in drag. In this case, use the OP DES mode with speed brakes.

4 Ident.: PRO-NOR-SOP-17-A-20806799.9001001 / 02 MAY 23

TERRAIN ON ND

TERR ON ND..AS RQRD | PF-PM

L2
- *In mountainous areas, consider displaying terrain on ND*
- *If use of radar is required, consider selecting the radar display on the PF side, and TERR ON ND on the PM side only*
- *If NAV ACCURACY is LOW, do not use TERR ON ND.*

5 Ident.: PRO-NOR-SOP-17-A-20806800.9001001 / 02 MAY 23

BAROMETRIC REFERENCE

- **When the aircraft approaches the transition level, and when cleared for an altitude:**

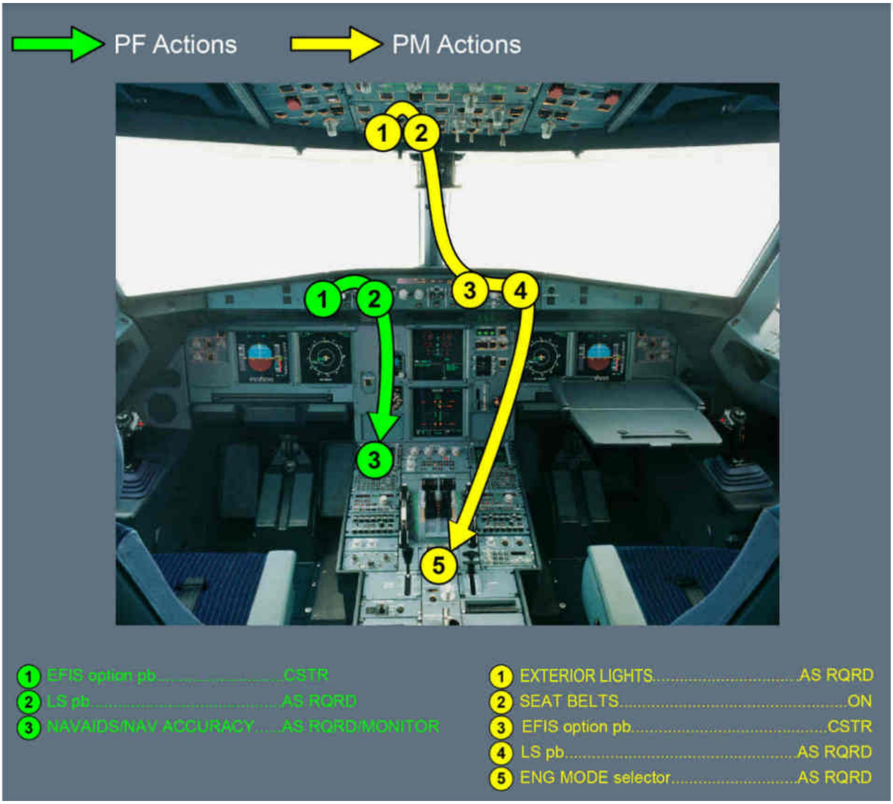
BAROMETRIC REFERENCE...SET/CROSSCHECK | PF-PM

L2 *Set QNH on the EFIS control panel and on the standby altimeter.*
Crosscheck the barometric reference settings and the altitude indications.

Note: *Do not exceed 250 KTS below 10.000 FT MSL/FL100 for airports with elevation less than 4.000 FT (10.000 FT AFE for airports with elevation at 4.000 FT or above).*

6 Ident.: PRO-NOR-SOP-17-A-20806801.9001001 / 02 MAY 23

AT FL 100/ 10.000 FT (10.000 FT AFE FOR AIRPORTS WITH ELEVATION AT 4.000 FT OR ABOVE) FLOW PATTERN



① EFIS option pb..............................CSTR
② LS pb..............................AS RQRD
③ NAVAIDS/NAV ACCURACY......AS RQRD/MONITOR

① EXTERIOR LIGHTS..............................AS RQRD
② SEAT BELTS..............................ON
③ EFIS option pb..............................CSTR
④ LS pb..............................AS RQRD
⑤ ENG MODE selector..............................AS RQRD

7 Ident.: PRO-NOR-SOP-17-A-20806802.9001001 / 02 MAY 23

AT FL 100/ 10.000 FT (10.000 FT AFE FOR AIRPORTS WITH ELEVATION AT 4.000 FT OR ABOVE)

WING LIGHTS..	ON	PM
CABIN CREW..	ADVISE	PM
L&R LAND selector..	AS RQRD	PM

L2 *LAND lights may be switched ON, depending on the airline policy or regulatory recommendation.*

L1 SEAT BELTS sw..	ON	PM

The SEATS BELTS sign is a Captain responsability. The PM must switch the SEAT BELTS sw to ON only after Captain's confirmation. If conditions permits this action should be performed at

5 000 FT AFE, when authorized by the authority of the airline who has the operational control of the aircraft.

EFIS option pb .... CSTR | PF-PM

L2 *Select CSTR on both sides.*

L1 ILS/LS pb .... AS RQRD | PF-PM

L2 *Press the ILS/LS pb, if one of the following approaches is planned:*
- *ILS, GLS , MLS*
- *ILS G/S out, LOC only or LOC B/C*
- *Approach with the FLS function*
- *Approach with the SLS function .*

The flight crew checks that:
- *Deviation scales are displayed on the PFD*
- *The IDENT is properly displayed on the PFD.*

L1 NAVAIDS.. AS RQRD/CHECK | PF

L2 *Ensure that appropriate NAVAIDs are tuned and identified.*
For NDB approaches, manually select the reference NAVAID.

8 Ident.: PRO-NOR-SOP-17-A-20806803.9001001 / 02 MAY 23

ENG MODE selector .... AS RQRD | PM

L2 *Select IGN if the runway is covered with standing water, or if heavy rain or severe turbulence is expected during approach or go-around area.*

9 Ident.: PRO-NOR-SOP-17-A-20806804.9001001 / 02 MAY 23

- **If GPS PRIMARY LOST:**

  NAVIGATION ACCURACY.. MONITOR | PF

L2 *Crosscheck the navigation accuracy by using the POSITION/MONITOR page (i.e. BRG/DIST TO computed data) and the ND (i.e. VOR/DME raw data).*

APPROACH CHECKLIST

10 Ident.: PRO-NOR-SOP-17-20806805.9001001 / 02 MAY 23
Applicable to: ALL

APPROACH CHECKLIST

APPROACH C/L.. COMPLETE | PF-PM

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Approach General

INTRODUCTION

1 Ident.: PRO-NOR-SOP-18-A-20806806.9001001 / 02 MAY 23
Applicable to: ALL

The APPROACH section provides the standard operating procedures for the following approach types:

- ILS / MLS ◁ / GLS ◁ approaches
- Conventional approaches: VOR, VOR-DME, NDB, NDB-DME
- Approaches based on a LOC signal without any G/S signal: LOC ONLY, ILS G/S OUT, LOC B/C
- RNAV approaches including:
  - RNAV(GNSS) approaches with LNAV or LNAV/VNAV minima (with FLS ◁)
  - RNAV(GNSS) approaches with LPV or LP minima (with SLS ◁)
  - RNAV(RNP) approaches for which Authorization is Required (AR) - If capability installed.

Note: *In relation to the names in the ICAO PBN Manual:*
- *"RNP APCH operations" corresponds to RNAV(GNSS) approaches*
- *"RNP AR APCH operations" corresponds to RNAV(RNP) approaches.*

CROSS-REFERENCE TABLE

Ident.: PRO-NOR-SOP-18-A-00014489.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

2
3
This table provides Guidance Modes that may be used depending on the Approach Types.

	Guidance Modes per Approach Types				
	LOC G/S	**FINAL APP**	**LOC FPA**	**NAV FPA**	**TRK FPA**
ILS / MLS ◁ / GLS ◁	*Refer to APPR using LOC G/S*	N/A	N/A	N/A	N/A
LOC ONLY ILS G/S OUT	N/A	N/A	*Refer to APPR using FPA Guidance*	N/A	N/A
LOC B/C	N/A	N/A	N/A	N/A	*Refer to APPR using FPA Guidance*

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	Guidance Modes per Approach Types				
	LOC G/S	**FINAL APP**	**LOC FPA**	**NAV FPA**	**TRK FPA**
RNP or RNAV(GNSS) with LNAV/VNAV minima	N/A	*Refer to APPR using FINAL APP*	N/A	Not Authorized	Not Authorized
RNP or RNAV(GNSS) with LNAV minima	N/A	*Refer to APPR using FINAL APP* (1)	N/A	*Refer to APPR using FPA Guidance*	Not Authorized
RNP or RNAV(GNSS) with LPV minima	N/A	Not Authorized	N/A	Not Authorized	Not Authorized
VOR VOR-DME NDB NDB-DME	N/A	*Refer to APPR using FINAL APP* (1)	N/A	*Refer to APPR using FPA Guidance*	*Refer to APPR using FPA Guidance*

(1) *The FINAL APP is the recommended guidance mode for this type of approach.*

For Visual Approach, *Refer to Visual Approach*
For Circling Approach, *Refer to Circling Approach*

Note: *The names of the approach and departure charts evolve. For convenience purposes the Cross-Reference table provides both names.*
RNP is equivalent to RNAV(GNSS).

* According to ICAO, instrument approach procedures are classified as follows:

- Non-precision approach (NPA) procedure:
  An instrument approach procedure which utilizes lateral guidance but does not utilize vertical guidance.
- Approach procedure with vertical guidance (APV):
  An instrument approach based on a navigation system that is not required to meet the precision approach standards of ICAO Annex 10 but provides course and glide path deviation information (sometimes referred to as “semi-precision”). Baro-VNAV, LDA with glide path, LNAV/VNAV and LPV are examples of APV approaches.
- Precision approach (PA) procedure:
  An instrument approach procedure using precision lateral and vertical guidance with minima as determined by the category of operation.

Note: *Lateral and vertical guidance refers to the guidance provided either by:*
a. ground-based navigation aid; or
b. computer-generated navigation data.

CROSS-REFERENCE TABLE

Ident.: PRO-NOR-SOP-18-A-00014489.0004001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

4
5

This table provides Guidance Modes that may be used depending on the Approach Types.

	Guidance Modes per Approach Types				
	LOC G/S	**FINAL APP**	**LOC FPA**	**NAV FPA**	**TRK FPA**
ILS / MLS ◁ / GLS ◁	*Refer to APPR using LOC G/S*	N/A	N/A	N/A	N/A
LOC ONLY ILS G/S OUT	N/A	N/A	*Refer to APPR using FPA Guidance*	N/A	N/A
LOC B/C	N/A	N/A	N/A	N/A	*Refer to APPR using FPA Guidance*
RNP or RNAV(GNSS) with LNAV/VNAV minima	N/A	*Refer to APPR using FINAL APP*	N/A	Not Authorized	Not Authorized

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	Guidance Modes per Approach Types				
	LOC G/S	**FINAL APP**	**LOC FPA**	**NAV FPA**	**TRK FPA**
RNP or RNAV(GNSS) with LNAV minima	N/A	*Refer to APPR using FINAL APP* [(1)]	N/A	*Refer to APPR using FPA Guidance*	Not Authorized
RNP or RNAV(GNSS) with LPV minima	N/A	Not Authorized	N/A	Not Authorized	Not Authorized
VOR VOR-DME NDB NDB-DME	N/A	*Refer to APPR using FINAL APP* [(1)]	N/A	*Refer to APPR using FPA Guidance*	*Refer to APPR using FPA Guidance*
RNP(AR) or RNAV(RNP)	N/A	*Refer to APPR using FINAL APP for RNAV(RNP)*	N/A	Not Authorized	Not Authorized

(1) *The FINAL APP is the recommended guidance mode for this type of approach.*

For Visual Approach, *Refer to Visual Approach*
For Circling Approach, *Refer to Circling Approach*

Note: *The names of the approach and departure charts evolve. For convenience purposes the Cross-Reference table provides both names.*
RNP is equivalent to RNAV(GNSS).
RNP(AR) is equivalent to RNAV(RNP).

* According to ICAO, instrument approach procedures are classified as follows:

- Non-precision approach (NPA) procedure:
  An instrument approach procedure which utilizes lateral guidance but does not utilize vertical guidance.
- Approach procedure with vertical guidance (APV):
  An instrument approach based on a navigation system that is not required to meet the precision approach standards of ICAO Annex 10 but provides course and glide path deviation information (sometimes referred to as “semi-precision”). Baro-VNAV, LDA with glide path, LNAV/VNAV and LPV are examples of APV approaches.
- Precision approach (PA) procedure:
  An instrument approach procedure using precision lateral and vertical guidance with minima as determined by the category of operation.

Note: *Lateral and vertical guidance refers to the guidance provided either by:*

a. ground-based navigation aid; or
b. computer-generated navigation data.

FLYING REFERENCE

6 Ident.: PRO-NOR-SOP-18-A-20806808.9001001 / 02 MAY 23
Applicable to: ALL

Use the following recommended flying reference:

- In vertical managed modes: HDG-V/S reference associated with the FD crossbars
- In vertical selected modes: TRK-FPA reference associated with FPD.

STABILIZATION CRITERIA

Ident.: PRO-NOR-SOP-18-A-00014487.0001001 / 17 OCT 22
Applicable to: MSN 04827-04860

This stabilization criteria must be applied in all kinds of approaches: LOC G/S, FINAL APP, FPA GUIDANCE and VISUAL APPROACH.
The objective is to be stabilized on the final descent path at VAPP in the landing configuration, at 1 000 ft above airfield elevation (AFE) in either instrument or visual conditions, after continous deceleration on the glide slope.

In order for the approach to be stabilized, all of the following conditions must be satisfied before, or at the stabilization height:

- The aircraft is on the correct lateral and vertical flight path (this may be a straight or curved path, depending on the approach procedure in use);
- The aircraft is in the desired landing configuration (as defined on the approach briefing);
- Engine thrust is properly set, usually above idle, in order to maintain the target approach speed along the desired final approach path;
- IAS is between VApp and VApp +20 kt

Note: *Vapp = Target Speed on the PFD.*

- The descent rate does not exceed 1 000 ft/min;
- Landing Checklist completed (all items accomplished and checklist read);
- There is no excessive flight parameter deviation.

In case of all conditions above have been achieved, at 1 000 ft AFE the PM will callout "**ONE THOUSAND, STABILIZED**".
Unless the flight crew estimates that only small corrections are necessary to rectify minor deviations from stabilized conditions due, amongst others, to external perturbations, if the aircraft is not stabilized on the approach path in landing configuration at 1 000 ft AFE, or at any altitude below 1 000 ft AFE, the flight crew must initiate a go-around.
If a go-around is necessary, the PM will callout "**ONE THOUSAND, UNSTABILIZED GO AROUND**" and the PF will necessarily start the go-around procedure.

STABILIZATION CRITERIA

Ident.: PRO-NOR-SOP-18-A-00014487.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139

This stabilization criteria must be applied in all kinds of approaches: LOC G/S, FINAL APP, FPA GUIDANCE and VISUAL APPROACH.
The objective is to be stabilized on the final descent path at VAPP in the landing configuration, at 1 000 ft above airfield elevation (AFE) in either instrument or visual conditions, after continous deceleration on the glide slope.

In order for the approach to be stabilized, all of the following conditions must be satisfied before, or at the stabilization height:

- The aircraft is on the correct lateral and vertical flight path (this may be a straight or curved path, depending on the approach procedure in use);
- The aircraft is in the desired landing configuration (as defined on the approach briefing);
- Engine thrust is properly set, usually above idle, in order to maintain the target approach speed along the desired final approach path;

- IAS is between VApp and VApp +20 kt

  Note: *Vapp = Target Speed on the PFD.*

- The descent rate does not exceed 1 000 ft/min;
- Landing Checklist completed (all items accomplished and checklist read);
- There is no excessive flight parameter deviation.

In case of all conditions above have been achieved, at 1 000 ft AFE the PM will callout **"ONE THOUSAND, STABILIZED"**.
Unless the flight crew estimates that only small corrections are necessary to rectify minor deviations from stabilized conditions due, amongst others, to external perturbations, if the aircraft is not stabilized on the approach path in landing configuration at 1 000 ft AFE, or at any altitude below 1 000 ft AFE, the flight crew must initiate a go-around.
If a go-around is necessary, the PM will callout **"ONE THOUSAND, UNSTABILIZED GO AROUND"** and the PF will necessarily start the go-around procedure.

Note: *If the predicted tailwind at landing is greater than 10 kt, decelerated approach is not permitted, and the aircraft speed should be stabilized at around VREF + 5 kt in final.*

APPROACH SPEED TECHNIQUE

7 Ident.: PRO-NOR-SOP-18-A-20806810.9001001 / 02 MAY 23
Applicable to: ALL

DECELERATED APPROACH

The decelerated approach with FD or AP/FD guidance is the standard flying technique for ILS / MLS ◁ / GLS ◁ approaches and approaches using FLS ◁, SLS ◁ or FINAL APP guidance.

EARLY STABILIZED APPROACH

Under certain circumstances, the flight crew may decide to reduce the speed down to VAPP in the landing configuration at the Final Descent Point (i.e. approach via selected guidance, high glide path angle, low altitude intermediate approach, etc.). In order to obtain a valuable deceleration pseudo waypoint and to ensure a timely deceleration, the flight crew should enter VAPP as a speed constraint at the Final Descent Point.

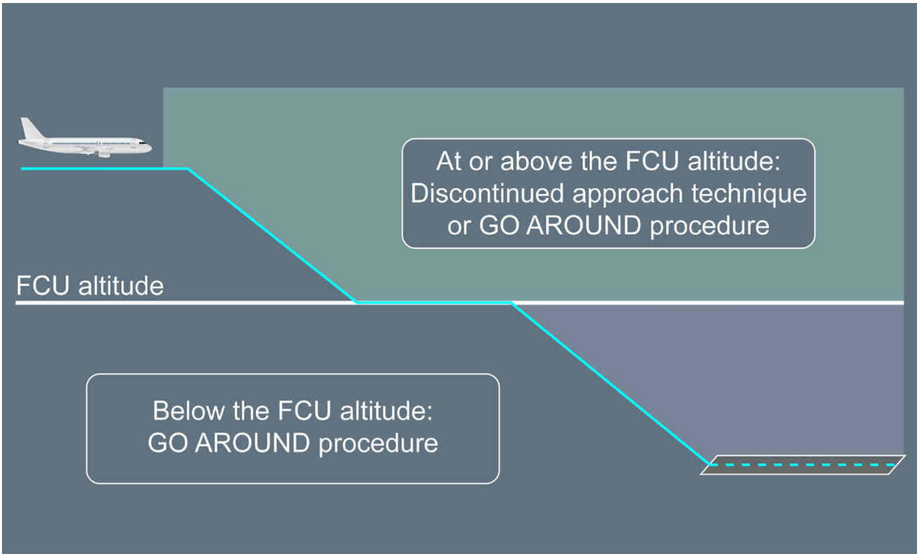
DISCONTINUED APPROACH

8 Ident.: PRO-NOR-SOP-18-A-20806811.9001001 / 02 MAY 23
Applicable to: ALL

In order to discontinue an approach when the aircraft is at or above the altitude selected on the FCU, the flight crew can either:

- Apply the GO AROUND procedure, or
- Apply the discontinued approach technique.

When the aircraft is below the FCU altitude, the flight crew must apply the GO AROUND procedure.


At or above the FCU altitude:
Discontinued approach technique
or GO AROUND procedure
FCU altitude
Below the FCU altitude:
GO AROUND procedure

- **If at or above the FCU altitude:**
  Announce "CANCEL APPROACH".
  To disarm any AP/FD approach mode, press APPR pb or LOC pb.

  Note: Valid only for ILS / MLS ◁ / GLS ◁ / FLS ◁ / SLS ◁ or FINAL APP guidance.

  Select lateral mode as required (NAV or HDG mode).
  Select vertical mode as required (level off or adjust V/S).
  Select SPEED and adjust.

- **If F-PLN has no destination anymore:**

  Perform a LAT REV at the last waypoint and redefine the destination in the NEW DEST field.

Note:
1. *The FMS does not automatically string the previous flown approach in the active F-PLN when the aircraft overflies the last waypoint. The FMS has no more destination in the F-PLN.*
2. *Because the thrust levers are not set to TOGA detent, the FMS remains in approach phase.*

Intentionally left blank

Aircraft Configuration Management

INITIAL APPROACH

1 Ident.: PRO-NOR-SOP-18-B-A-20806812.9001001 / 02 MAY 23
Applicable to: ALL

GENERAL

The initial approach procedure described here is a general guidance whatever the type of approach expected.

2 Ident.: PRO-NOR-SOP-18-B-A-20806813.9001001 / 02 MAY 23
Applicable to: ALL

INITIAL APPROACH

F-PLN SEQUENCING..................ADJUST | PF

L2
- *A good clue to monitor the proper F-PLN sequencing is the TO waypoint on the upper right side of the ND, which should remain meaningful*
- *In NAV mode, the F-PLN will sequence automatically*
- *In HDG or TRK mode, the F-PLN will sequence automatically only if the aircraft flies close to the F-PLN route.*

L1 APPROACH PHASE..................CHECK/ACTIVATE | BOTH

L2
- *If the aircraft overflies the DECEL pseudo waypoint in NAV mode, the APPR phase activates automatically*
- *If the aircraft is in HDG or TRK mode, approximately 15 NM from touchdown, activate and confirm APPR phase on the PERF DES page.*

L1 MANAGED SPEED..................CHECK | PF

L2 *If ATC requires a particular speed, use selected speed. When the ATC speed constraint no longer applies, return to managed speed.*

L1 FLIGHT PATH..................MONITOR | PF

L2
- *In NAV mode, use V/DEV information on the PFD and PROG page*
- *In HDG or TRK mode, use the energy circle on ND representing the required distance to land.*

L1 SPEED BRAKES lever .... AS RQRD | PF

L2 - *If the flight crew uses the speed brakes to increase the rate of deceleration or to increase the rate of descent, the VLS will increase as well:*
  - *The flight crew should ensure that appropriate speed margin exists before the extension of the speed brakes*
  - *If the speed brakes are extended, the flight crew should ensure that appropriate speed margin exists before the beginning of a turn.*

This will avoid the activation of the Alpha-Floor protection.

Note: *In clean configuration, the VLS with speed brakes fully extended may be more than Green Dot speed or VFE FLAP 1.*

Ident.: TDU / PRO-NOR-SOP-18-B-A-00014648.0002001 / 02 MAY 23
Applicable to: MSN 02734, 02896, 03002-03180, 03222-03313, 03565-03630, 03662-03710, 03733, 04000, 04171-04192
Impacted DU: 00014647

3 RADAR

RADAR..ADJUST AS APPROPRIATE | PF

L2
- *Gain must be manually set to +8 when MULTISCAN selector is set to AUTO and when flying below FL 150*
- *MULTISCAN AUTO mode provides an efficient ground clutter rejection. During operations in good or non significant weather conditions, no weather pattern will be displayed on the NDs. In this case, the flight crew confirms correct radar operation, using temporarily MANUAL TILT*
- *The flight crew monitors the weather radar display in AUTO mode, and confirms any weather display that is ambiguous or unexpected using manual tilt according to standard techniques.*

Ident.: TDU / PRO-NOR-SOP-18-B-A-00014648.0003001 / 02 MAY 23
Applicable to: MSN 02904-02924, 03211, 03391, 03658, 03761-03816, 04163, 04352-04544, 04570-04773, 04953-05987, 06097, 06121, 06139-07098
Impacted DU: 00014647

4 RADAR

RADAR..ADJUST AS APPROPRIATE | PF

L2
- *Gain must be manually set to +4 when MULTISCAN selector is set to AUTO and when flying below FL 200*
- *If the weather is good, or not significant, in order to check that the radar is operating correctly: down tilt under displaying ground echoes*
- *If the weather display is ambiguous or unexpected, in order to better analyze the weather situation, use manual tilt according to standard technique*

- *In particular below FL 200, for situations with low level weather, weather with low reflectivity or in front of suspected active cells, the flight crew should switch to manual mode and adjust the tilt setting downward until the weather is detected or the ground clutter appears on the upper part of the display*
- *In addition, the flight crew may increase the manual gain control to display lower reflectivity targets. The manual gain control can be increased in both AUTO and manual modes to display lower levels of weather. In both cases, ground clutter may also be displayed as a result of low settings and/or increased gain.*

5 Ident.: PRO-NOR-SOP-18-B-A-20806815.9001001 / 02 MAY 23
Applicable to: ALL

RADAR

RADAR....................................ADJUST AS APPROPRIATE | PF

6 Ident.: PRO-NOR-SOP-18-B-A-20806816.9001001 / 02 MAY 23
Applicable to: ALL

NAVIGATION ACCURACY

NAV ACCURACY....................................MONITOR | PM

L2
- *When GPS PRIMARY is available, no NAV ACCURACY monitoring is required*
- *If GPS PRIMARY LOST is displayed, or GPS not installed, check on PROG page that the required navigation accuracy is appropriate to the phase of flight*
- *If the accuracy is LOW, at least one ND must be in ROSE LS/VOR depending on the approach.*

INTERMEDIATE/FINAL APPROACH FOR ILS AND STRAIGHT-IN NON PRECISION APPROACHES

7 Ident.: PRO-NOR-SOP-18-B-C-20806817.9001001 / 02 MAY 23
Applicable to: ALL

GENERAL

The intermediate and final approach procedure described here is general guidance whatever the type of approach expected.

Ident.: PRO-NOR-SOP-18-B-C-20800055.9001001 / 02 MAY 23

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

8 AT GREEN DOT SPEED

CAUTION	The flight crew should avoid extended flight in icing conditions with the slats extended.

FLAPS 1	ORDER	PF
FLAPS 1	SELECT	PM

- *FLAPS 1 should be selected more than 3 NM before the Final Descent Point.*
- *Check deceleration toward "S" speed.*
- *If the aircraft does not decelerate on the flight path or aircraft speed is significantly higher than "S" speed, extend the landing gear in order to slow down. The use of speedbrakes is possible. The flight crew should be aware that the use of speedbrakes causes an increase in VLS.*

TCAS Mode selector	TA or TA/RA	PM

- *FAA recommends to select TA only mode:*
  - *In case of known nearby traffic which is in visual contact*
  - *At particular airports and during particular procedures identified by any Flight Operations Department document as having a significant potential for unwanted or inappropriate resolution advisories (closely spaced parallel runways, converging runway, low terrain along the final approach, etc.).*

Ident.: PRO-NOR-SOP-18-B-C-20800055.9001002 / 02 MAY 23

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

9 AT GREEN DOT SPEED

CAUTION	The flight crew should avoid extended flight in icing conditions with the slats extended.

FLAPS 1	ORDER	PF
FLAPS 1	SELECT	PM

- *At high weights, if the green dot speed is close to VFE NEXT, the flight crew may select a lower speed.*
- *FLAPS 1 should be selected more than 3 NM before the Final Descent Point.*
- *Check deceleration toward "S" speed.*
- *If the aircraft does not decelerate on the flight path or aircraft speed is significantly higher than "S" speed, extend the landing gear in order to slow down. The use of speedbrakes is possible. The flight crew should be aware that the use of speedbrakes causes an increase in VLS.*

TCAS Mode selector	TA or TA/RA	PM

- *FAA recommends to select TA only mode:*
  - *In case of known nearby traffic which is in visual contact*
  - *At particular airports and during particular procedures identified by any Flight Operations Department document as having a significant potential for unwanted or inappropriate resolution advisories (closely spaced parallel runways, converging runway, low terrain along the final approach, etc.).*

10 Ident.: PRO-NOR-SOP-18-B-C-20806819.9001001 / 02 MAY 23
Applicable to: ALL

ONE DOT BELOW FLIGHT PATH, PRIOR TO VIP OR 2 000 FT AFE, WHICHEVER OCCURS FIRST

FLAPS 2	ORDER	PF
FLAPS 2	SELECT	PM

- *Check deceleration toward "F" speed.*
- *For decelerated approaches, the aircraft must reach or be established on the final descent with FLAPS 2 at approximately "VFE-15 Knots".*
- *If the aircraft accelerate on the flight path, extend the landing gear in order to slow down. The use of speedbrakes is possible. The flight crew should be aware that the use of speedbrakes causes an increase in VLS.*

11 Ident.: PRO-NOR-SOP-18-B-C-20806820.9001001 / 02 MAY 23
Applicable to: ALL

AT 2 500 FT AFE

CABIN CREW	ADVISE	PM

Ident.: PRO-NOR-SOP-18-B-C-20800058.9001002 / 02 MAY 23
Applicable to: MSN 10949-11139

12 AT 2 000 FT AFE (1 700 FT AFE MINIMUM)

L/G DOWN	ORDER	PF
L/G lever	SELECT DOWN	PM

Recommended Landing Gear Extension Altitude is 2 000 ft AFE. According to the current weather conditions, speed and speed trend, Landing Gear Extension should be anticipated or delayed until a minimum altitude of 1 700 ft AFE.

RWY COND	CONFIRM	PM

AUTO BRK .... CONFIRM | PM

- *If the runway conditions have changed from the approach briefing, consider another braking mode.*

GROUND SPOILERS .... ARM | PM

EXTERIOR LIGHTS

NOSE sw .... T.O | PM
RWY TURN OFF sw .... ON | PM
LAND LIGHTS selector.. ON | PM

LAND LIGHTS must be switched to ON according to the standard operating procedures sequence or up to 5 miles inbound course to the landing runway, whichever occurs first.

Note: *When operating to AFIS airports, or with TCAS inoperative, or if requested by pilot in command due to safety reasons, land lights must be turned on at 10 000 FT AFE.*

Ident.: PRO-NOR-SOP-18-B-C-20800058.9001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

13 AT 2 000 FT AFE (1 700 FT AFE MINIMUM)

L/G DOWN .... ORDER | PF
L/G lever .... SELECT DOWN | PM

Recommended Landing Gear Extension Altitude is 2 000 ft AFE. According to the current weather conditions, speed and speed trend, Landing Gear Extension should be anticipated or delayed until a minimum altitude of 1 700 ft AFE.

AUTO BRK .... CONFIRM | PM

- *If the runway conditions have changed from the approach briefing, consider another braking mode.*

GROUND SPOILERS .... ARM | PM

EXTERIOR LIGHTS

NOSE sw .... T.O | PM
RWY TURN OFF sw .... ON | PM
LAND LIGHTS selector.. ON | PM

LAND LIGHTS must be switched to ON according to the standard operating procedures sequence or up to 5 miles inbound course to the landing runway, whichever occurs first.

Note: *When operating to AFIS airports, or with TCAS inoperative, or if requested by pilot in command due to safety reasons, land lights must be turned on at 10 000 FT AFE.*

14

WHEN LANDING GEAR IS DOWN AND NOT BELOW 1 500 FT AFE

To select the correct FLAPS configuration for landing, *Refer to PRO-NOR-SOP-16 Descent Preparation - Preferential Setting for Landing*

FLAPS 3	ORDER	PF
FLAPS 3	SELECT	PM
ECAM WHEEL SD page	CHECK	PM

- *WHEEL SD page appears below 15 500 ft when landing gear is extended.*
- *Check for three green indications on the landing gear indicator panel. At least one green triangle on each landing gear strut on the WHEEL SD page is sufficient to indicate that the landing gear is downlocked. Rely also on the "LDG GEAR DN" green LDG MEMO message to confirm that the landing gear is downlocked.*

● **If residual pressure is indicated on the triple indicator:**

RESIDUAL BRAKING PROC	APPLY	PM

● **If CONF FULL landing configuration will be used and not below 1 500 ft AFE:**

FLAPS FULL	ORDER	PF
FLAPS FULL	SELECT	PM

  - *Retract the speed brakes before selecting FLAPS FULL to prevent a pitch down when the speed brakes automatically retract.*
  - *Check deceleration towards VAPP.*
  - *Check correct TO waypoint on the ND.*

A/THR	CHECK IN SPEED MODE OR OFF	PM
WING ANTI-ICE pb-sw	OFF	PM

- *Switch the WING ANTI ICE pb-sw to ON, only in severe icing conditions.*

SLIDING TABLE	STOW	PF-PM
LDG MEMO	CHECK NO BLUE	PM

- *The only exception is the CABIN READY ◁ line in flights without cabin crew.*

CABIN REPORT	RECEIVE	PF-PM

- *Obtain cabin report from the purser via one interphone buzzer sound or via CABIN READY MEMO.*

LANDING CHECKLIST	COMPLETE	PF-PM

FLIGHT PARAMETERS.......MONITOR		PM

- *The PF announces any FMA modification.*
- *The PM calls out, if:*
  - *The speed goes lower than the speed target -5 kt , or greater than the speed target +10 kt*
  - *The pitch attitude goes lower than -2.5 °, or greater than +10 ° nose up*
  - *The bank angle becomes greater than 7 °*
  - *The descent rate becomes greater than 1 000 ft/min*
- *Following PM flight parameter exceedance callout, the suitable PF response will be:*
  - *Acknowledge the PM callout, for proper crew coordination purposes*
  - *Take immediate corrective action to control the exceeded parameter back into the defined stabilized conditions*
  - *Assess whether stabilized conditions will be recovered early enough prior to landing, otherwise initiate a go-around.*

Ident.: PRO-NOR-SOP-18-B-C-20800059.9001002 / 02 MAY 23

Applicable to: MSN 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

15 WHEN LANDING GEAR IS DOWN AND NOT BELOW 1 500 FT AFE

To select the correct FLAPS configuration for landing, *Refer to PRO-NOR-SOP-16 Descent Preparation - Preferential Setting for Landing*

FLAPS 3.......ORDER	PF
FLAPS 3.......SELECT	PM
ECAM WHEEL SD page.......CHECK	PM

- *WHEEL SD page appears below 15 500 ft when landing gear is extended.*
- *Check for three green indications on the landing gear indicator panel. At least one green triangle on each landing gear strut on the WHEEL SD page is sufficient to indicate that the landing gear is downlocked. Rely also on the “LDG GEAR DN” green LDG MEMO message to confirm that the landing gear is downlocked.*

● **If residual pressure is indicated on the triple indicator:**

RESIDUAL BRAKING PROC.......APPLY	PM

- *Due to the accomplishment of the alternate braking functional test after the landing gear is downlocked, brief brake pressure indications may be observed on BRAKES PRESS.*

● **If CONF FULL landing configuration will be used and not below 1 500 ft AFE:**

FLAPS FULL.......ORDER	PF

FLAPS FULL.. SELECT | PM

- *Retract the speed brakes before selecting FLAPS FULL to prevent a pitch down when the speed brakes automatically retract.*
- *Check deceleration towards VAPP.*
- *Check correct TO waypoint on the ND.*

A/THR .... CHECK IN SPEED MODE OR OFF | PM
WING ANTI-ICE pb-sw .... OFF | PM

- *Switch the WING ANTI ICE pb-sw to ON, only in severe icing conditions.*

SLIDING TABLE... STOW | PF-PM
LDG MEMO.. CHECK NO BLUE | PM

- *The only exception is the CABIN READY ⊲ line in flights without cabin crew.*

CABIN REPORT... RECEIVE | PF-PM

- *Obtain cabin report from the purser via one interphone buzzer sound or via CABIN READY MEMO.*

LANDING CHECKLIST.. COMPLETE | PF-PM
FLIGHT PARAMETERS..MONITOR | PM

- *The PF announces any FMA modification.*
- *The PM calls out, if:*
  - *The speed goes lower than the speed target -5 kt , or greater than the speed target +10 kt*
  - *The pitch attitude goes lower than -2.5 °, or greater than +10 ° nose up*
  - *The bank angle becomes greater than 7 °*
  - *The descent rate becomes greater than 1 000 ft/min*
- *Following PM flight parameter exceedance callout, the suitable PF response will be:*
  - *Acknowledge the PM callout, for proper crew coordination purposes*
  - *Take immediate corrective action to control the exceeded parameter back into the defined stabilized conditions*
  - *Assess whether stabilized conditions will be recovered early enough prior to landing, otherwise initiate a go-around.*

Ident.: PRO-NOR-SOP-18-B-C-20800059.9001003 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

16 WHEN LANDING GEAR IS DOWN AND NOT BELOW 1 500 FT AFE

To select the correct FLAPS configuration for landing, *Refer to PRO-NOR-SOP-16 Descent Preparation - Preferential Setting for Landing*

FLAPS 3..ORDER | PF

FLAPS 3..........SELECT | PM

- *Retract the speed brakes before selecting FLAPS 3 to prevent a pitch down when the speed brakes automatically retract.*

ECAM WHEEL SD page..........CHECK | PM

- *WHEEL SD page appears below 15 500 ft when landing gear is extended.*
- *Check for three green indications on the landing gear indicator panel. At least one green triangle on each landing gear strut on the WHEEL SD page is sufficient to indicate that the landing gear is downlocked. Rely also on the “LDG GEAR DN” green LDG MEMO message to confirm that the landing gear is downlocked.*

● **If residual pressure is indicated on the triple indicator:**
  RESIDUAL BRAKING PROC..........APPLY | PM

  - *Due to the accomplishment of the alternate braking functional test after the landing gear is downlocked, brief brake pressure indications may be observed on BRAKES PRESS.*

● **If CONF FULL landing configuration will be used and not below 1 500 ft AFE:**
  FLAPS FULL..........ORDER | PF
  FLAPS FULL..........SELECT | PM

  - *Check deceleration towards VAPP.*
  - *Check correct TO waypoint on the ND.*

A/THR..........CHECK IN SPEED MODE OR OFF | PM
WING ANTI-ICE pb-sw..........OFF | PM

- *Switch the WING ANTI ICE pb-sw to ON, only in severe icing conditions.*

SLIDING TABLE..........STOW | PF-PM
LDG MEMO..........CHECK NO BLUE | PM

- *The only exception is the CABIN READY ◁ line in flights without cabin crew.*

CABIN REPORT..........RECEIVE | PF-PM

- *Obtain cabin report from the purser via one interphone buzzer sound or via CABIN READY MEMO.*

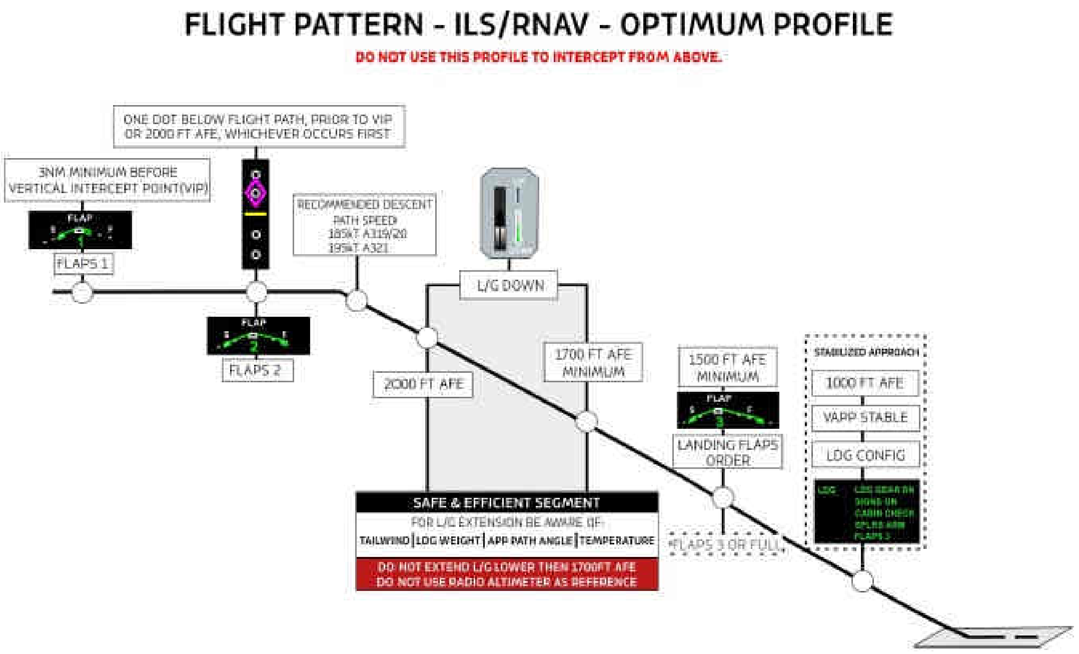
LANDING CHECKLIST..........COMPLETE | PF-PM

FLIGHT PARAMETERS..MONITOR | PM

- *The PF announces any FMA modification.*
- *The PM calls out, if:*
  - *The speed goes lower than the speed target -5 kt , or greater than the speed target +10 kt*
  - *The pitch attitude goes lower than -2.5 °, or greater than +7.5 ° nose up*
  - *The bank angle becomes greater than 7 °*
  - *The descent rate becomes greater than 1 000 ft/min*
- *Following PM flight parameter exceedance callout, the suitable PF response will be:*
  - *Acknowledge the PM callout, for proper crew coordination purposes*
  - *Take immediate corrective action to control the exceeded parameter back into the defined stabilized conditions*
  - *Assess whether stabilized conditions will be recovered early enough prior to landing, otherwise initiate a go-around.*

17 Ident.: PRO-NOR-SOP-18-B-C-20806823.9001001 / 02 MAY 23
Applicable to: ALL

PATTERN (DECELERATED)


FLIGHT PATTERN - ILS/RNAV - OPTIMUM PROFILE
DO NOT USE THIS PROFILE TO INTERCEPT FROM ABOVE.
3NM MINIMUM BEFORE VERTICAL INTERCEPT POINT(VIP)
FLAP
1
FLAPS 1
ONE DOT BELOW FLIGHT PATH, PRIOR TO VIP OR 2000 FT AFE, WHICHEVER OCCURS FIRST
FLAP
2
FLAPS 2
RECOMMENDED DESCENT PATH SPEED
185KT A319/20
195KT A321
L/G DOWN
2000 FT AFE
1700 FT AFE MINIMUM
SAFE & EFFICIENT SEGMENT
FOR L/G EXTENSION BE AWARE OF:
TAILWIND | LDG WEIGHT | APP PATH ANGLE | TEMPERATURE
DO NOT EXTEND L/G LOWER THEN 1700FT AFE
DO NOT USE RADIO ALTIMETER AS REFERENCE
1500 FT AFE MINIMUM
FLAP
3
LANDING FLAPS ORDER
FLAPS 3 OR FULL
STABILIZED APPROACH
1000 FT AFE
VAPP STABLE
LDG CONFIG
LDG
LDG GEAR DN
SIGNS ON
CABIN CHECK
SPLRS ARM
FLAPS 3

Aircraft Guidance Management

APPROACH USING LOC G/S GUIDANCE

1 Ident.: PRO-NOR-SOP-18-C-A-20806824.9001001 / 02 MAY 23
Applicable to: ALL

GENERAL

The following items are to be performed in addition to previous SOP chapters for approach flown with ILS / MLS ◁ / GLS ◁ / SLS ◁ .

2 Ident.: PRO-NOR-SOP-18-C-A-20806825.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT PREPARATION

APPROACH MINIMUM...DETERMINE | PF

L2
- *For CAT II, CAT III approaches, always choose the lowest achievable minimum. The approach minimum is limited by:*
  - *Crew qualification*
  - *Airline Operating Manual requirement*
  - *Aircraft technical status*
  - *Airport status*
- *For CAT III with no DH, the flight crew should enter* NO *in the DH field of the MCDU to avoid false "HUNDRED ABOVE" or "MINIMUM" auto callouts which would not be applicable.*

L1 ARRIVAL BRIEFING...PERFORM | BOTH

L2 *For CAT II, CAT III approaches, review the following items on top of the usual briefing:*
- *Task sharing and callouts*
- *Management of degraded guidance*
- *Low visibility procedures at the airport.*

3 Ident.: PRO-NOR-SOP-18-C-A-20806826.9001001 / 02 MAY 23
Applicable to: ALL

INITIAL/INTERMEDIATE APPROACH

APPR pb on FCU..PRESS | PF

L2 - *Press the APPR pb when:*

- *Cleared for the approach*
- *On the intercept trajectory for the final approach course*
- *LOC deviation is available.*

This arms the LOC and G/S modes

- *LOC and/or G/S capture modes will engage no sooner than 3 s after being armed.*

L1 *Note:* *In NAV mode, the aircraft may leave the F-PLN to capture the LOC.*

L3 *ICAO defines the envelope where the quality of the G/S signal ensures a normal capture. This envelope is within 10 NM, ±8 ° of the centerline of the ILS glide path and up to 1.75 θ and down to 0.3 θ (θ = nominal glide path angle). When arming the approach well outside of the normal G/S capture envelope, a spurious G/S* engagement may occur due to a wrong G/S deviation signal. Whenever the flight crew notices the pitch movement, or the spurious G/S*, or the trajectory deviation, the flight crew will immediately disconnect the AP, if engaged, to re-establish a normal attitude and will disengage APPR mode. It is then recommended to arm/rearm APPR (ILS) mode within the normal capture zone.*

L1 BOTH APs..ENGAGE | PF

L2 - *When APPR mode is selected, AP1 and AP2 should be engaged*
- *Above 5 000 ft AGL, the FMA displays CAT 1 or APPR1 for approach with SLS*
- *Below 5 000 ft AGL, the FMA displays the correct approach capability for the intended approach.*

L1 LOC..CHECK ARMED | PF
G/S..CHECK ARMED | PF
LOC CAPTURE..MONITOR | PF
G/S CAPTURE..MONITOR | PF
GO-AROUND ALTITUDE..SET | BOTH

4 Ident.: PRO-NOR-SOP-18-C-A-20806827.9001001 / 02 MAY 23
Applicable to: ALL

GLIDE INTERCEPTION FROM ABOVE

The following procedure must only be applied when established on the localizer. The flight crew must react without delay to meet the stabilization criteria.

In order to get the best rate of descent when cleared by ATC and below the limiting speeds, the flight crew should lower the landing gear and select flaps as required (at least CONF 2 should be selected to ensure that the aircraft speed will not increase).

- **If above the glideslope:**

APPR MODE .... ARM / CHECK ARMED | PF
LOC..CHECK ENGAGED | PF
FCU ALTITUDE.. SET ABOVE A/C ALTITUDE | PF
V/S MODE..SELECT | PF

L2
- *Select V/S 1 500 ft/min initially. V/S in excess of 2 000 ft/min will result in the speed increasing towards VFE*
- *When reaching VFE, the AP maintains VFE and reduces the V/S without mode reversion.*

Ident.: PRO-NOR-SOP-18-C-A-00014511.0002001 / 02 MAY 23
Applicable to: MSN 02734, 02896, 04827-04860, 06634, 06871, 10949-11139

5 FINAL APPROACH

FLIGHT PARAMETERS..MONITOR | PM

L2 *The PM calls out if excessive deviation occurs:*
- *LOC: ½ dot*
- *G/S: ½ dot.*

For additional information on the associated standard callouts, Refer to PRO-NOR-SCO Approach.

L1 AT 350 ft RA

LAND mode.. CHECK ENGAGED/ANNOUNCE | PF

L2 *If no LAND mode, autoland is not authorized.*

L1 **FOR CAT I, CAT II, CAT III WITH DH APPROACH**

L2 *Note: LPV approaches (with SLS) are considered as approach with CAT 1 minima.*

L1 AT ENTERED MINIMUM +100 ft

ONE HUNDRED ABOVE.....................................MONITOR OR ANNOUNCE | PM

AT ENTERED MINIMUM

MINIMUM..MONITOR OR ANNOUNCE | PM

Below minimum, the visual references must be the primary reference until landing. For more information regarding transition to visual references, *Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.*

- **If visual references are sufficient:**

CONTINUE..ANNOUNCE | PF
AP..AS RQRD | PF

L2 *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Flight Management Function. For Manual Landing and Autoland procedure, Refer to PRO-NOR-SOP-19 Landing - Flare.*

L1 *Note:* *In the case of CAT 1 or APPR1 (SLS ◁) approach capability displayed on FMA, at 150 ft AGL, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

- **If visual references are not sufficient:**

GO-AROUND..ANNOUNCE | PF

L2 *Initiate a go-around.*

L1 **FOR CAT III WITHOUT DH APPROACH**

At 100 ft (Alert Height) if no failure

CONTINUE..ANNOUNCE | PF

Ident.: PRO-NOR-SOP-18-C-A-00014511.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 02904-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

6
FINAL APPROACH

FLIGHT PARAMETERS..MONITOR | PM

L2 *The PM calls out if excessive deviation occurs:*
- *LOC: ½ dot*
- *G/S: ½ dot.*

For additional information on the associated standard callouts, Refer to PRO-NOR-SCO Approach.

L1 AT 350 ft RA

LAND mode..CHECK ENGAGED/ANNOUNCE | PF

L2 *If no LAND mode, autoland is not authorized.*

L1 **FOR CAT I, CAT II, CAT III WITH DH APPROACH**

L2 *Note:* *LPV approaches (with SLS ◁) are considered as approach with CAT 1 minima.*

L1 AT ENTERED MINIMUM +100 ft

ONE HUNDRED ABOVE..MONITOR OR ANNOUNCE | PM

AT ENTERED MINIMUM

MINIMUM	MONITOR OR ANNOUNCE	PM

Below minimum, the visual references must be the primary reference until landing. For more information regarding transition to visual references, *Refer to FCTM/PR-NP-SOP-250 Transition to Visual References*.

- **If visual references are sufficient:**

CONTINUE	ANNOUNCE	PF
AP	AS RQRD	PF

L2 *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Flight Management Function. For Manual Landing and Autoland procedure, Refer to PRO-NOR-SOP-19 Landing - Flare.*

L1
- **If visual references are not sufficient:**

GO-AROUND	ANNOUNCE	PF

L2 *Initiate a go-around.*

L1 **FOR CAT III WITHOUT DH APPROACH**

At 100 ft (Alert Height) if no failure

CONTINUE	ANNOUNCE	PF

7 Ident.: PRO-NOR-SOP-18-C-A-20806829.9001001 / 02 MAY 23
Applicable to: ALL

MANAGEMENT OF DEGRADED GUIDANCE

EARLY/UNTIMELY FLARE MODE ENGAGEMENT

- Perform a go-around (thrust levers set to TOGA), or
- Disconnect AP, set both FDs to OFF and continue the approach using raw data or external visual references.

In association to an early/untimely FLARE mode engagement on the FMA, the following effects may occur:

- On the PFD:
  - The RA height indication may be frozen at a positive or negative value,
  - Discrepancies between both PFDs may happen on the following indications:
    - RA heights,
    - FD orders,
    - FMA indications when both APs are engaged.
- Warnings and/or Callouts:
  - Untimely activation of the AUTOLAND warning light (*Refer to 00012386 **Not found***),
  - Untimely Terrain Awareness and Warning System (TAWS) alerts,
  - Untimely or absence of “RETARD" callout,
  - Untimely L/G GEAR NOT DOWN ECAM warning,
  - Absence or interruption of RA automatic callout (height announcement),
- On the SD: A pulsing cabin differential pressure advisory may appear on the CAB PRESS SD page.

  Note: This ECAM advisory has no consequence on the real cabin pressure.

FOR CAT II, CAT III OPERATIONS

● **In the case of:**

- Amber caution (single chime), or
- Landing capability degradation.

Above 1000 ft AGL :

ECAM / QRH PROCEDURE	COMPLETE	BOTH
REQUIRED EQUIPMENT	CHECK	PM

L2 *For more information, Refer to QRH/00010998 **Not found**.*

L1 APPROACH AND LANDING CAPABILITY	CHECK	BOTH

If required:

RVR	CHECK	PM
DH	ADJUST	PM
ARRIVAL BRIEFING	UPDATE	PF

● **If the flight crew does not complete all the above actions at 1 000 ft:**

GO-AROUND	PERFORM	PF

Below 1000 ft AGL :

- **If external visual references are not sufficient:**
  GO-AROUND..PERFORM | PF

Below 100 ft (Alert Height) for CAT 3 DUAL:

Approach may be continued unless autoland light comes on.

- **In the case of Autoland warning light:**
  - **Visual references not sufficient:**
    GO-AROUND..PERFORM | PF
  - **Visual references sufficient:**

    Approach may be continued manually.

APPROACH USING FINAL APP GUIDANCE

Ident.: PRO-NOR-SOP-18-C-C-00014521.0002001 / 21 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

GENERAL

The following items are to be performed in addition to previous SOP chapters in the following cases:
- RNAV(GNSS) approaches with LNAV and LNAV/VNAV minima
- Conventional approaches based on VOR or NDB using FINAL APP guidance.

Ident.: PRO-NOR-SOP-18-C-C-00014521.0003001 / 29 MAY 13
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

GENERAL

The following items are to be performed in addition to previous SOP chapters in the following cases:
- RNAV(GNSS) approaches with LNAV and LNAV/VNAV minima
- Conventional approaches based on VOR or NDB using FINAL APP guidance.

Note: *For RNAV(RNP), Refer to APPR using FINAL APP for RNAV(RNP)*

8 Ident.: PRO-NOR-SOP-18-C-C-20806831.9001001 / 02 MAY 23
Applicable to: ALL

AIRCRAFT EQUIPMENT

For RNAV(GNSS) approaches, *Refer to 00015840 **Not found***

9 Ident.: PRO-NOR-SOP-18-C-C-20806832.9001001 / 02 MAY 23
Applicable to: ALL

FLIGHT PREPARATION

For RNAV(GNSS) approaches, GPS PRIMARY availability should be confirmed.
*Refer to 00014998 **Not found***

10 Ident.: PRO-NOR-SOP-18-C-C-20806833.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT PREPARATION

WEATHER AND LANDING INFORMATION..OBTAIN | PM

L2
- *The FMS vertical profile does not take into account the effect of low OAT. Therefore, vertical managed guidance:*
  - *Must not be used when the actual OAT is below the minimum temperature indicated on the approach chart or defined by the Operator, or*
  - *May not be used when temperature corrections are required (FINAL APP mode may not engage)*
- *For RNAV (GNSS) approach with LNAV VNAV minima, use of QNH from a remote station is prohibited.*

L1 F-PLN A page...CHECK | PF-PM

L2
- *If a TOO STEEP PATH is displayed after the FDP, do not use FINAL APP guidance for approach. Use NAV FPA, TRK FPA or FLS ◁ for approach*
- *0.1 degree of difference between the MCDU and the charted final vertical path is acceptable*
- *1 degree of difference between the MCDU and the charted final lateral track is acceptable.*

  Note: *A higher lateral track value can be acceptable if the navigation database has been validated to exclude potential coding error*

- *3 degree of difference between the MCDU and the charted final lateral track is acceptable for conventional radio NAVAID approach.*

L1 PROG page..COMPLETE | PF-PM

L2 *Insert the reference RWY threshold in the BRG/DIST field for position monitoring during approach.*

L1 GO-AROUND STRATEGY...REVIEW | PF

L2 *The briefing should include a review of the "Management of Degraded Navigation" chapter.*

11 Ident.: PRO-NOR-SOP-18-C-C-20806834.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT

AT FL 100/10 000 ft (10.000 FT AFE for airports with elevation at 4.000 FT or above):

NAV ACCURACY..CHECK | PF

L2 *If NAV accuracy is LOW, use TRK FPA mode for approach (Refer to APPR using FPA guidance).*

L1 ● **For RNAV(GNSS) approach:**

GPS PRIMARY..CHECK | PF

L2 *GPS PRIMARY must be available on at least one FMS.*

L1 BARO REF..SET | PF

L2 *The vertical guidance requires a precise BARO setting. The maximum acceptable discrepancy between altimeters is 100 ft.*

12 Ident.: PRO-NOR-SOP-18-C-C-20806835.9001001 / 02 MAY 23
Applicable to: ALL

INITIAL/INTERMEDIATE/FINAL APPROACH

POSITION..MONITOR | PF

L2 *Check that ATC clearances allow the aircraft to fly through the capture area of vertical profile. After a radar vectoring, consider a DIR TO RDL IN to sequence the F-PLN.*

L1 APPR pb on FCU..PRESS | PF

L2 *Press the APPR pb when all of the following conditions are satisfied:*
- *The aircraft is cleared for approach*
- *TO waypoint is the FDP.*

L1 APP NAV..CHECK ARMED or ENGAGED | PF
FINAL..CHECK ARMED | PF

L2
- *Check that the V/DEV scale is displayed on the PFD.*
- *At the FDP, a blue arrow on ND indicates that FINAL APP engagement conditions are met.*

L1

At the Final Descent Point :

FINAL APP..CHECK ENGAGED | PF
GO-AROUND ALTITUDE..SET | BOTH
FLIGHT PARAMETERS..MONITOR | PM

L2
- *Monitor XTK error on ND*
- *Monitor V/DEV on PFD*
- *Crosscheck distances versus altitudes as published on the charts*

- *If approaching on a conventional radio NAVAID procedure, monitor the lateral and vertical guidance using raw data*
- *The PM calls out if excessive deviation occurs:*
  - *XTK > 0.1 NM*
  - *V/DEV > ½ dot*
    On the vertical scale, one dot corresponds to 100 ft. Thus ½ dot is 50 ft.

*For additional information on the associated standard callouts, Refer to 00011912 **Not found**.*

13 Ident.: PRO-NOR-SOP-18-C-C-20806836.9001001 / 02 MAY 23
Applicable to: ALL

AT ENTERED MINIMUM +100 FT

ONE HUNDRED ABOVE..MONITOR OR ANNOUNCE | PM

Ident.: PRO-NOR-SOP-18-C-C-00014527.0012001 / 02 MAY 23
Applicable to: MSN 02734, 02896, 04827-04860, 06634, 06871, 10949-11139

14 AT ENTERED MINIMUM

MINIMUM..MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1 ■ **If visual references are sufficient:**

CONTINUE.. ANNOUNCE | PF

At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

AP...OFF | PF

L2
- *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function*
- *At 150 ft AGL, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD.. AS RQRD | PF

CAUTION	- *From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed* - *After the MAP, disregard the FD as it reverts to HDG V/S.*

■ **If visual references are not sufficient:**

GO-AROUND...ANNOUNCE | PF

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-C-00014527.0008001 / 02 MAY 23
Applicable to: MSN 01459, 02887, 02904-03266, 03294, 03391, 03588-03658, 03710, 03733-04465, 04563-04662, 04756-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

15 AT ENTERED MINIMUM

MINIMUM..MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1 ■ **If visual references are sufficient:**

CONTINUE..ANNOUNCE | PF

At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

AP..OFF | PF

L2
- *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function*
- *At minimum -50 ft, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD..AS RQRD | PF

CAUTION	- *From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed* - *After the MAP, disregard the FD as it reverts to HDG V/S.*

■ **If visual references are not sufficient:**

GO-AROUND..ANNOUNCE | PF

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-C-00014527.0010001 / 02 MAY 23
Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321

16 AT ENTERED MINIMUM

MINIMUM..MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1 ■ **If visual references are sufficient:**

CONTINUE..ANNOUNCE | PF

At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

AP..OFF | PF

L2 *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function.*

L1 FD.. AS RQRD | PF

CAUTION	- From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed - After the MAP, disregard the FD as it reverts to HDG V/S.

- **If visual references are not sufficient:**

GO-AROUND.. ANNOUNCE | PF

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-C-00014527.0009001 / 02 MAY 23
Applicable to: MSN 03284, 03313, 03565, 03662, 04544, 04734

17 AT ENTERED MINIMUM

MINIMUM.. MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1
- **If visual references are sufficient:**

CONTINUE.. ANNOUNCE | PF

At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

AP.. OFF | PF

L2
- *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function*
- *The AP will automatically disengage at the MAP*
- *At minimum -50 ft, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD.. AS RQRD | PF

CAUTION	- From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed - After the MAP, disregard the FD as it reverts to HDG V/S.

- **If visual references are not sufficient:**

GO-AROUND.. ANNOUNCE | PF

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-C-00014527.0003001 / 02 MAY 23
Applicable to: MSN 01143-01251, 01801, 01826, 01855

18
AT ENTERED MINIMUM

MINIMUM..........MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1
- **If visual references are sufficient:**

  CONTINUE..........ANNOUNCE | PF

  At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

  AP..........OFF | PF

L2
  - *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function*
  - *The AP will automatically disengage at the MAP.*

L1
  FD..........AS RQRD | PF

CAUTION	- *From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed* - *After the MAP, disregard the FD as it reverts to HDG V/S.*

- **If visual references are not sufficient:**

  GO-AROUND..........ANNOUNCE | PF

L2
  Initiate a go-around.

19 Ident.: PRO-NOR-SOP-18-C-C-20806838.9001001 / 02 MAY 23
Applicable to: ALL

MANAGEMENT OF DEGRADED NAVIGATION

- **For VOR and NDB approaches, be prepared to continue the approach with reference to appropriate raw data by reverting to:**
  - NAV-FPA, if the vertical guidance is not satisfactory
  - TRK-FPA, if the lateral guidance is not satisfactory.

- **For RNAV(GNSS) approaches with LNAV minima:**
  - Use the appropriate remaining AP/FD in the following cases:
    - GPS PRIMARY LOST on one ND
    - NAV ACCUR DOWNGRAD on one ND.
  - Discontinue the approach in the following cases, if external visual references are not sufficient to proceed visually:
    - GPS PRIMARY LOST on both NDs
    - XTK > 0.3 NM
    - NAV FM/GPS POS DISAGREE
    - NAV ACCUR DOWNGRAD on both NDs.
  - Be prepared to continue the approach by reverting to NAV-FPA, if the vertical guidance is not satisfactory.
- **For RNAV(GNSS) approaches with LNAV/VNAV minima:**
  - Use the appropriate remaining AP/FD in the following cases:
    - GPS PRIMARY LOST on one ND
    - NAV ACCUR DOWNGRAD on one ND.
  - Discontinue the approach in the following cases, if external visual references are not sufficient to proceed visually:
    - GPS PRIMARY LOST on both NDs
    - XTK > 0.3 NM
    - NAV FM/GPS POS DISAGREE
    - NAV ACCUR DOWNGRAD on both NDs.
  - Discontinue the approach in the case of deviation of 75 ft below the vertical path (V/DEV > ¾ dot).

20 Ident.: PRO-NOR-SOP-18-C-C-20806839.9001001 / 02 MAY 23
Applicable to: ALL

SELECTED VERTICAL (NAV/FPA - TRACK/FPA) FDP (BIRD ON)

Refer to PRO-NOR-SOP-18-C SELECTED VERTICAL (NAV/FPA - TRACK/FPA) FPD (BIRD ON)

APPROACH USING FINAL APP GUIDANCE FOR RNAV(RNP)

Ident.: PRO-NOR-SOP-18-C-D-00014663.0002001 / 29 MAY 13
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

GENERAL

The following items are to be performed in addition to previous SOP chapters in case of RNAV(RNP) approaches.
The procedures of the paragraph below are generic guidelines for RNAV(RNP) approaches. These procedures may be tailored by the airline for specific airfields according to their OPS approval.

Ident.: PRO-NOR-SOP-18-C-D-00014664.0002001 / 29 MAY 13
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

AIRCRAFT EQUIPMENT

Refer to PRO-SPO-51 RNP AR OPERATIONS

Ident.: PRO-NOR-SOP-18-C-D-00014677.0002001 / 29 MAY 13
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

FLIGHT PREPARATION

Use a prediction tool to check the GPS PRIMARY availability for the estimated time of operation. It ensures that the RNP criteria will be met during approach. This prediction should take into account the terrain environment.

Ident.: PRO-NOR-SOP-18-C-D-00014666.0002001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

21 DESCENT PREPARATION

WEATHER AND LANDING INFORMATION...OBTAIN | PM

L2
- *The FMS vertical profile does not take into account the effect of low OAT. Therefore, vertical managed guidance:*
  - *Must not be used when the actual OAT is below the minimum temperature indicated on the approach chart or defined by the Operator, or*
  - *May not be used when temperature corrections are required (FINAL APP mode may not engage).*
- *Verify that wind is within limits*
- *Use of QNH from a remote station is prohibited.*

L1 F-PLN A page..CHECK | PF-PM

L2 *If a TOO STEEP PATH is displayed after the FDP, FINAL APP guidance cannot be used. Select another approach.*

L1 PROG page..COMPLETE | PF-PM

L2
- *Insert the reference waypoint or RWY threshold in the BRG/DIST field for position monitoring during approach*
- *Check/Insert the RNP value in the 6L field.*

L1 GO-AROUND STRATEGY..REVIEW | PF

L2 *The briefing should include a review of the "Management of Degraded Navigation" chapter.*

Ident.: PRO-NOR-SOP-18-C-D-00014667.0002001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

22 DESCENT

NAVAIDS..DESELECT | PF
GPS PRIMARY ON BOTH FMS..CHECK | PF

L2 *For RNAV(RNP) approaches, GPS PRIMARY must be available on both FMS (GPS PRIMARY LOST is not displayed on NDs).*

L1 GPS 1+2..CHECK both in NAV | PF

L2
- *Both GPS must be in NAV on the GPS MONITOR Page*
- *Both GPS and both FMS must be available before the IAF. Thus, if one FMS is inoperative or if one GPS is not in NAV before the IAF, RNAV(RNP) is not allowed.*

L1 TERR on ND..ON | PF

L2 *Unless weather radar is required on one side, the flight crew selects terrain on both NDs.*

Ident.: PRO-NOR-SOP-18-C-D-00014668.0002001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

23 INITIAL / INTERMEDIATE / FINAL APPROACH

BARO REF/ALTIMETER..CHECK | PF

L2 *The vertical guidance requires a precise BARO setting. The maximum acceptable discrepancy between altimeters is 100 ft.*

L1 FD or AP/FD..USE FOR APPROACH | PF

L2
- *The use of FD or AP/FD provides the required navigation accuracy. Refer to Use of NAV and FINAL APP Modes for Approach*
- *For operations with RNP below 0.3 NM, one AP must be engaged.*

L1 L/DEV...CHECK DISPLAYED | PF

L2 *Check that the L/DEV scale is displayed on the PFD.*

L1 APPR pb on FCU...PRESS | PF

L2 *Press the APPR pb when all of the following conditions are satisfied:*
- *The aircraft is cleared for approach*
- *TO waypoint is the final descent point.*

L1 APP NAV...CHECK ARMED or ENGAGED | PF
FINAL...CHECK ARMED | PF

L2
- *Check that the V/DEV scale is displayed on the PFD*
- *At the VIP, a blue arrow on ND indicates that FINAL APP engagement conditions are met.*

L1

At the Final Descent Point :

FINAL APP...CHECK ENGAGED | PF
GO-AROUND ALTITUDE...SET | BOTH
FLIGHT PARAMETERS...MONITOR | PM

L2
- *Monitor L/DEV and V/DEV on PFD*
- *Monitor XTK on ND*
- *Crosscheck distances versus altitudes as published on the charts*
- *The PM calls out if excessive deviation occurs:*
  - *L/DEV reaches ½ dot*
  - *V/DEV reaches ½ dot.*
    On the vertical scale, one dot corresponds to 100 ft. Therefore, ½ dot is 50 ft.

  Refer to PRO-NOR-SOP 90 Flight Parameters in Approach
- *Go-around must be initiated if excessive deviation occurs:*
  - *L/DEV reaches 1 RNP*
  - *V/DEV reaches ¾ dot below the vertical profile.*
    On the vertical scale, one dot corresponds to 100 ft. Therefore, ¾ dot is 75 ft.

Ident.: PRO-NOR-SOP-18-C-D-00015016.0001001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

24 AT ENTERED MINIMUM +100 FT

ONE HUNDRED ABOVE...MONITOR OR ANNOUNCE | PM

Ident.: PRO-NOR-SOP-18-C-D-00014669.0015001 / 02 MAY 23
Applicable to: MSN 06634, 06871, 10949-11139

25 AT ENTERED MINIMUM

MINIMUM.......MONITOR or ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary reference until landing.*

L1 ■ **If visual references are sufficient:**

CONTINUE.......ANNOUNCE | PF

At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

AP.......OFF | PF

L2
- *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function*
- *At 150 ft AGL, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD.......AS RQRD | PF

CAUTION	- *From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed* - *After the MAP, disregard the FD as it reverts to HDG V/S.*

■ **If visual references are not sufficient:**

GO-AROUND.......ANNOUNCE | PF

L2 *Initiate a-go around.*

Ident.: PRO-NOR-SOP-18-C-D-00014669.0008001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04756-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

26 AT ENTERED MINIMUM

MINIMUM.......MONITOR or ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary reference until landing.*

L1 ■ **If visual references are sufficient:**

CONTINUE.......ANNOUNCE | PF

At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

AP.......OFF | PF

L2
- *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function*
- *At minimum -50 ft, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD.. AS RQRD | PF

CAUTION	- *From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed* - *After the MAP, disregard the FD as it reverts to HDG V/S.*

■ **If visual references are not sufficient:**

GO-AROUND...ANNOUNCE | PF

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-D-00014669.0005001 / 02 MAY 23
Applicable to: MSN 04734

27 AT ENTERED MINIMUM

MINIMUM...MONITOR or ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary reference until landing.*

L1 ■ **If visual references are sufficient:**

CONTINUE... ANNOUNCE | PF

At the latest at the MAP or Minimum Use Height of the AP (whichever occurs first):

AP...OFF | PF

L2
- *For Minimum Use Height of the AP, Refer to LIM-AFS-10 Autopilot Function*
- *The AP will automatically disengage at the MAP*
- *At minimum -50 ft, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD.. AS RQRD | PF

CAUTION	- *From minima down to the MAP, the FD provides an additional guidance. The FD must be switched off if the guidance is not relevant or not followed* - *After the MAP, disregard the FD as it reverts to HDG V/S.*

■ **If visual references are not sufficient:**

GO-AROUND...ANNOUNCE | PF

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-D-00014670.0002001 / 21 OCT 22
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 06895

ENGINE FAILURE

If one engine fails in approach with NAV or FINAL APP mode:
- if RNP < 0.3 NM, the flight crew must perform a Go-Around
- if RNP = 0.3 NM, the flight crew must disconnect the AP and may continue the approach with FDs engaged.

Ident.: PRO-NOR-SOP-18-C-D-00014671.0002001 / 25 JAN 17
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

MANAGEMENT OF DEGRADED NAVIGATION

The approach may be continued in case of single failure of:
- GPS (MMR)
- FMGS
- EFIS DU
- MCDU
- AP

Discontinue the approach in the following cases:
- FINAL APP does not engage
- GPS PRIMARY LOST on both NDs
- Dual NAV ACCUR DOWNGRAD
- FM/GPS POSITION DISAGREE
- FMS1/FMS2 POS DIFF
- Dual loss of FMGC or dual loss of FINAL APP mode
- Dual AP failure if the RNP < 0.3 NM
- Loss of GPWS TERRAIN function in case of inconsistencies affecting obstacles or terrain computation
- NAV ALT DISCREPANCY

APPROACH USING FPA GUIDANCE

28 Ident.: PRO-NOR-SOP-18-C-E-20806850.9001001 / 02 MAY 23
Applicable to: ALL

GENERAL

The following items are to be performed in addition to previous SOP chapters in the following cases:
- RNAV(GNSS) approaches with LNAV minima using mixed NAV FPA guidance
- RNAV(GNSS) approaches with LP minima using LOC FPA guidance
- Conventional approaches based on VOR and NDB using selected TRK FPA or mixed NAV FPA guidance
- ILS G/S OUT, LOC ONLY and LOC B/C approaches.

The approach is flown in TRK FPA when:
- The approach is not stored in the database or
- NAV accuracy is LOW.

29 Ident.: PRO-NOR-SOP-18-C-E-20806851.9001001 / 02 MAY 23
Applicable to: ALL

AIRCRAFT EQUIPMENT

For RNAV(GNSS) approaches, *Refer to 00015840 **Not found***

30 Ident.: PRO-NOR-SOP-18-C-E-20806852.9001001 / 02 MAY 23
Applicable to: ALL

FLIGHT PREPARATION

For RNAV(GNSS) approaches, GPS PRIMARY availability should be confirmed.
*Refer to 00014998 **Not found***

31 Ident.: PRO-NOR-SOP-18-C-E-20806853.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT PREPARATION

F-PLN A page.......... CHECK | PF-PM

L2 - *If a TOO STEEP PATH message is displayed after the FDP, disregard the V/DEV or yoyo information on the PFD*
- *For approaches using NAV FPA:*
  - *1 degree of difference between the MCDU and the charted final lateral track is acceptable.*

    Note: A higher lateral track value can be acceptable if the navigation database has been validated to exclude potential coding error.
  - *3 degree of difference between the MCDU and the charted final lateral track is acceptable for conventional radio NAVAID approach*
- *In all other cases, use TRK FPA mode for approach.*

L1 PROG page.......... COMPLETE | PF-PM

L2 *Insert the reference RWY threshold in the BRG/DIST field for position monitoring during approach.*

L1 GO-AROUND STRATEGY.......... REVIEW | PF

L2 *The briefing should include a review of the "Management of Degraded Navigation" chapter.*

32 Ident.: PRO-NOR-SOP-18-C-E-20806854.9001001 / 02 MAY 23
Applicable to: ALL

DESCENT

AT FL100/10.000FT (10.000 FT AFE for airports with elevation at 4.000 FT or above):

NAV ACCURACY.......... CHECK | PF

L2 *If NAV accuracy is LOW, use TRK mode for approach.*

L1 ● **For RNAV(GNSS) approach:**

GPS PRIMARY.......... CHECK | PF

L2 *GPS PRIMARY must be available on at least one FMS.*

33 Ident.: PRO-NOR-SOP-18-C-E-20806855.9001001 / 02 MAY 23
Applicable to: ALL

INITIAL/INTERMEDIATE/FINAL APPROACH

LATERAL GUIDANCE MODE.......... SET FOR APPROACH | PF

L2 *Arm NAV or LOC mode as appropriate.*

L1 ● **For LOC ONLY, ILS G/S OUT, or LP (with SLS ◁) approaches:**

LOC pb-sw .... PRESS | PF

L2 *Press the LOC pb-sw when:*
- *Cleared for the approach*
- *On the intercept trajectory for the final approach course*
- *LOC deviation is available.*

L1 *Note:* *In NAV mode, the aircraft may leave the F-PLN to capture the LOC.*

LOC.......... CHECK ARMED | PF

CAUTION	Do not press the APPR pb

● **For LOC B/C approaches:**

TRK FPA MODE.......... USE FOR APPROACH | PF

L2 *For back course localizer approaches, Refer to FCTM/00020342 **Not found**.*

L1 LATERAL PATH.......... INTERCEPT | PF

L2 *Monitor NAV or LOC engagement as appropriate.*

L1 TRK FPA pb (Bird).......... SELECT | PF
FPA FOR FINAL APPROACH.......... SET | PF

At 0.3 nm from the Final Descent Point:

FPA selector .... PULL | PF
FPA MODE.......... CHECK ENGAGED | PF

L2 *Check NAV FPA, TRK FPA or LOC FPA is engaged.*

L1 POSITION/FLIGHT PATH .... MONITOR/ADJUST | PF
GO-AROUND ALTITUDE.......... SET | BOTH

L2 *Set when below the go-around altitude to avoid unexpected altitude capture.*

L1 FLIGHT PARAMETERS.......... MONITOR | PM

L2
- *Crosscheck distances versus altitudes as published on the charts*
- *If approaching on a conventional radio NAVAID procedure, monitor the lateral and vertical guidance using raw data*

- *For approaches using NAV FPA, monitor XTK error on ND to check the lateral guidance*
- *The PM calls out if excessive lateral deviation occurs:*
  - *Approach using NAV mode: XTK is more than 0.1 NM*
  - *Approach using LOC mode: LOC ½ dot*
  - *Approach using TRK mode:*
    - ■ *VOR: ½ dot or 2.5 °*
    - ■ *NDB: 5 °*

  Refer to PRO-NOR-SOP-90 Flight Parameters in Approach.

34 Ident.: PRO-NOR-SOP-18-C-E-20806856.9001001 / 02 MAY 23
Applicable to: ALL

AT ENTERED MINIMUM +100 FT

ONE HUNDRED ABOVE..MONITOR OR ANNOUNCE | PM

Ident.: PRO-NOR-SOP-18-C-E-00014555.0014001 / 02 MAY 23
Applicable to: MSN 02734, 02896, 04827-04860, 06634, 06871, 10949-11139

35 AT ENTERED MINIMUM

MINIMUM..MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1 ■ **If visual references are sufficient:**

CONTINUE.. ANNOUNCE | PF
AP...OFF | PF

L2 *At 150 ft AGL, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD...OFF | PM

L2 *The PF orders the PM to set both FDs OFF.*

L1 RUNWAY TRACK...CHECK/SET | PM

L2 *If needed, the PF orders the PM to set the runway track.*

L1 ■ **If visual references are not sufficient:**

GO-AROUND...ANNOUNCE | PF

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-E-00014555.0002001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

36 AT ENTERED MINIMUM

MINIMUM....................MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1 ■ **If visual references are sufficient:**
CONTINUE.................... ANNOUNCE | PF
AP....................OFF | PF
FD....................OFF | PM

L2 *The PF orders the PM to set both FDs OFF.*

L1 RUNWAY TRACK....................CHECK/SET | PM

L2 *If needed, the PF orders the PM to set the runway track.*

L1 ■ **If visual references are not sufficient:**
GO-AROUND.................... ANNOUNCE

L2 *Initiate a go-around.*

Ident.: PRO-NOR-SOP-18-C-E-00014555.0013001 / 02 MAY 23
Applicable to: MSN 01459, 02887, 02904-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

37 AT ENTERED MINIMUM

MINIMUM....................MONITOR OR ANNOUNCE | PM

L2 *Below minimum, the visual references must be the primary references until landing.*
For more information regarding transition to visual references, Refer to FCTM/PR-NP-SOP-250 Transition to Visual References.

L1 ■ **If visual references are sufficient:**
CONTINUE.................... ANNOUNCE | PF
AP....................OFF | PF

L2 *At minimum -50 ft, if the AP is still engaged, the message DISCONNECT AP FOR LDG pulses on the FMA to remind the flight crew that automatic landing is not available.*

L1 FD....................OFF | PM

L2 *The PF orders the PM to set both FDs OFF.*

L1 RUNWAY TRACK....................CHECK/SET | PM

L2 *If needed, the PF orders the PM to set the runway track.*

L1 ■ **If visual references are not sufficient:**

GO-AROUND..........ANNOUNCE | PF

L2 *Initiate a go-around.*

38 Ident.: PRO-NOR-SOP-18-C-E-20806858.9001001 / 02 MAY 23
Applicable to: ALL

MANAGEMENT OF DEGRADED NAVIGATION

- **For VOR and NDB approaches in NAV-FPA, if lateral guidance is not satisfactory:**
  - Be prepared to continue the approach with reference to appropriate raw data by reverting to TRK-FPA.
- **For RNAV(GNSS) approaches, with LNAV minima:**
  - Use the appropriate remaining AP/FD in the following cases:
    - GPS PRIMARY LOST on one ND
    - NAV ACCUR DOWNGRAD on one ND.
  - Discontinue the approach in the following cases, if external visual references are not sufficient to proceed visually:
    - GPS PRIMARY LOST on both NDs
    - XTK > 0.3 NM
    - NAV FM/GPS POS DISAGREE
    - NAV ACCUR DOWNGRAD on both NDs.

CIRCLING APPROACH

Applicable to: ALL

39 Ident.: PRO-NOR-SOP-18-C-F-20806859.9001001 / 02 MAY 23

Circling Approach is not authorized by Airline Policy, except for those airports specified in the Operations Manual.

GENERAL

The circling approach is the visual phase of an instrument approach to bring an aircraft into position for landing on a runway which is not suitably located for a straight-in approach.

CAUTION	The flight crew must conduct the flight within the circling area, while maintaining required visual references at all times.

40 Ident.: PRO-NOR-SOP-18-C-F-20806860.9001001 / 02 MAY 23

APPROACH PREPARATION

For a circling approach, the approach preparation should include the following additional items in the FMS programming.

F-PLN

Introduce the instrument approach procedure, including the missed approach procedure for instrument approach.

SEC F-PLN

The landing runway must be inserted into the SEC F-PLN.

Update the SEC F-PLN as follows:
- Copy the active F-PLN
- Revise the landing runway.

41 Ident.: PRO-NOR-SOP-18-C-F-20806861.9001001 / 02 MAY 23

INSTRUMENT APPROACH

The flight crew flies a stabilized approach at "F" speed, configuration 3 and landing gear down.

42 Ident.: PRO-NOR-SOP-18-C-F-20806862.9001001 / 02 MAY 23

CIRCLING APPROACH

- **At the Circling MDA(H) at the latest:**

  Perform a level off

- **At MAP, if the flight crew finds no visual reference:**

  Initiate a go around

- **When required conditions for circling are satisfied:**

  Select TRK FPA

  Proceed to downwind leg

  At any time in the downwind leg, activate the SEC F-PLN

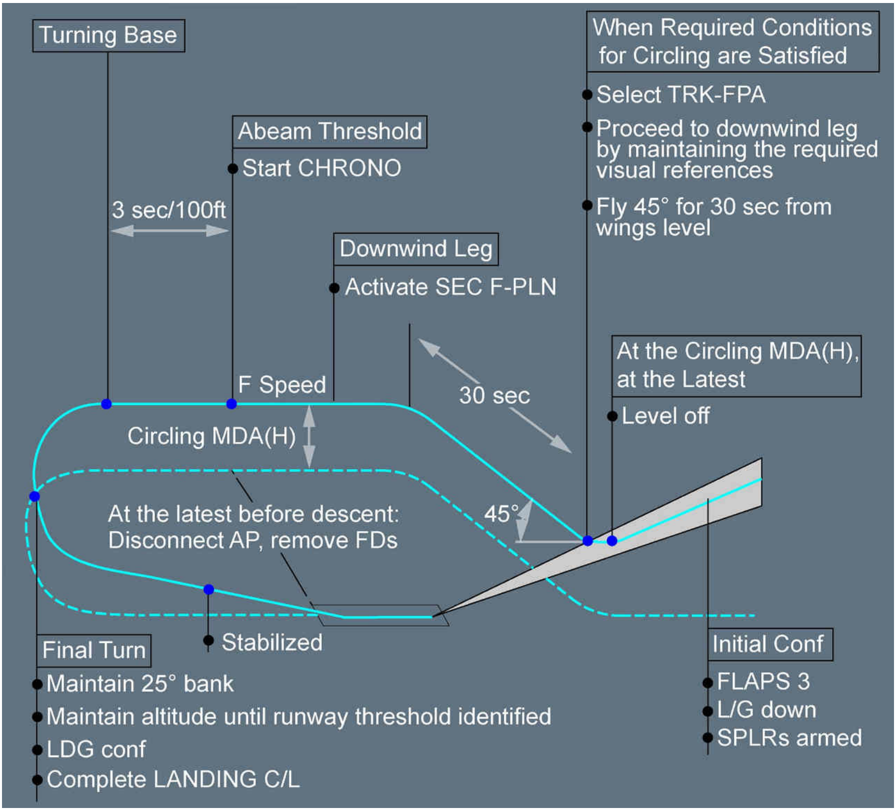
  Disconnect the AP and remove the FDs at the latest before starting the descent toward the runway

  Set the landing configuration when appropriate, but ensure early stabilization in final.

If, at any time during the circling procedure, the required visual references are lost, initiate a go around following the missed approach of the initial instrument approach (unless otherwise specified).

43 Ident.: PRO-NOR-SOP-18-C-F-20806863.9001001 / 02 MAY 23

CIRCLING APPROACH PATTERN


Turning Base
Abeam Threshold
Start CHRONO
3 sec/100ft
Downwind Leg
Activate SEC F-PLN
When Required Conditions for Circling are Satisfied
Select TRK-FPA
Proceed to downwind leg by maintaining the required visual references
Fly 45° for 30 sec from wings level
30 sec
At the Circling MDA(H), at the Latest
Level off
F Speed
Circling MDA(H)
At the latest before descent: Disconnect AP, remove FDs
45°
Final Turn
Maintain 25° bank
Maintain altitude until runway threshold identified
LDG conf
Complete LANDING C/L
Stabilized
Initial Conf
FLAPS 3
L/G down
SPLRs armed

RNAV VISUAL APPROACH

Applicable to: ALL

44 Ident.: PRO-NOR-SOP-18-C-G-20806864.9001001 / 02 MAY 23

GENERAL

The aircraft navigates using the RNAV system, but the position is monitored by visual reference to the ground, obstacles and other traffic.

RNAV visual approach must be stored and retrievable from the Navigation Database.

45 Ident.: PRO-NOR-SOP-18-C-G-20806865.9001001 / 02 MAY 23

EQUIPMENT REQUIRED

- 1 FMS
- 1 GPS or 2 DME to update FM position
- Additional requirement if indicated on the approach chart.

46 Ident.: PRO-NOR-SOP-18-C-G-20806866.9001001 / 02 MAY 23

FMGC GUIDANCE MODE

- **If no required accuracy is published:**

  The use of FMGC guidance mode is at flight crew discretion.

- **If RNAV 1 or RNP 1 is required on the published approach chart:**

  The flight crew should use adequate FMGC guidance modes.

Note: *The use of lateral and vertical managed guidance modes reduces the crew workload and improves energy management.*

For RNAV VISUAL approach including RF legs, *Refer to FCTM/00019329 **Not found*** for RF leg flying technique.

47 Ident.: PRO-NOR-SOP-18-C-G-20806867.9001001 / 02 MAY 23

DESCENT PREPARATION

For approach data insertion in the FMS, keep the BARO/MDA field empty on the PERF APPR Page.

48 Ident.: PRO-NOR-SOP-18-C-G-20806868.9001001 / 02 MAY 23

DESCENT

For RNAV VISUAL approaches requiring GPS, check that GPS PRIMARY is available on at least 1 FMS.

49 Ident.: PRO-NOR-SOP-18-C-G-20806869.9001001 / 02 MAY 23

FINAL APPROACH

The flight crew must disconnect the AP at the latest at the Minimum Use Height of the AP.

*Refer to 00019567 **Not found***

VISUAL APPROACH

Ident.: PRO-NOR-SOP-18-C-H-00014574.0001001 / 17 OCT 22
Applicable to: MSN 04827-04860

GENERAL

Perform the approach on a nominal 3 ° glideslope using visual references. Approach to be stabilized by 1 000 ft AFE on the correct approach path, in the landing configuration, at VAPP.

Method:
- The AP is not used
- Both FDs are OFF
- FPV use is recommended
- A/THR use is recommended with managed speed.

Bear in mind the possible risk of optical illusions due to hindered night vision.

Ident.: PRO-NOR-SOP-18-C-H-00014574.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11139

GENERAL

Perform the approach on a nominal 3 ° glideslope using visual references. Approach to be stabilized by 1 000 ft AFE on the correct approach path, in the landing configuration, at VAPP.

Method:
- The AP is not used
- Both FDs are OFF
- FPV use is recommended
- A/THR use is recommended with managed speed.

Bear in mind the possible risk of optical illusions due to hindered night vision.

Note: *If the forecasted tailwind at landing is greater than 10 kt, decelerated approach is not allowed, and the speed should be stabilized around VREF + 5 kt in final.*

50 Ident.: PRO-NOR-SOP-18-C-H-20806871.9001001 / 02 MAY 23
Applicable to: ALL

INITIAL/INTERMEDIATE APPROACH

The flight plan selected on the MCDU should include the selection of the landing runway. The downwind leg may also be part of the flight plan. This may be a useful indication of the aircraft position in the circuit on the ND.
However, visual references must be used.
Therefore, at the beginning of the downwind leg:

Manually ACTIVATE APPR
Select FDs to OFF
Select TRK FPA to have FPV displayed
Check A/THR active.

Turn into base leg with a maximum of 30 ° of bank. Descent with approximate FPA, in FLAPS 2, at F speed.
Extend the downwind leg to 2.5 NM from the selected runway threshold. Additionally, adjust the flight path to maintain the aircraft 2.5 NM aside the runway.

Note: *For best practices regarding visual approach, it is recommended to use ROSE NAV selected on the ND with the range adjusted to 10 NM.*

Pilots may create a NEW WPT based on Place/Bearing/Distance in order to get a reference to enter Base to Land. This WPT created can be showed in FIX INFO:

REFERENCE	***NEW WPT TO GET A REFERENCE TO ENTER BASE TO LAND***
PLACE	*RWYXXX*
BEARING	*RWY TRACK +(-) 135° (45° according to base turn side)*
DISTANCE	*3.5 NM*

51 Ident.: PRO-NOR-SOP-18-C-H-20806872.9001001 / 02 MAY 23
Applicable to: ALL

FINAL APPROACH

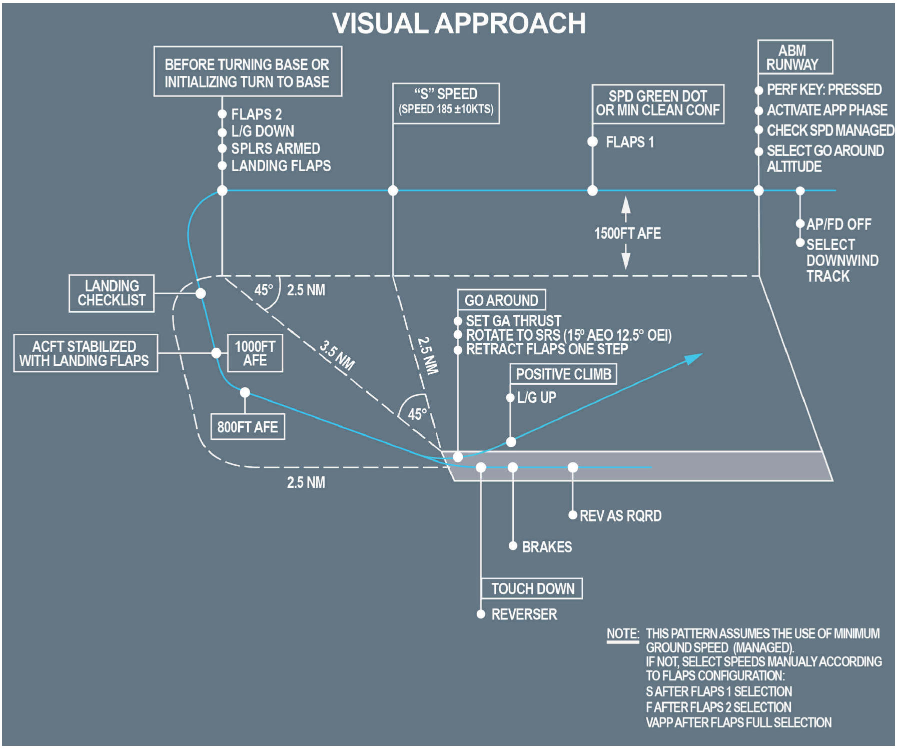
The speed trend arrow and FPV help the flight crew make timely and correct thrust settings (if in manual thrust), and approach path corrections.

Avoid descending through the correct approach path with idle thrust. (Late recognition of this situation without a prompt thrust increase may lead to considerable speed decay and altitude loss).
Ensure that the aircraft is stabilized on the final descent path at VAPP (or ground speed mini) in the landing configuration with the thrust stabilized (usually above idle) at 1 000 ft above airfield elevation AFE.
If the aircraft is not stabilized, the flight crew must initiate a go around, unless they think that only small corrections are necessary to rectify minor deviations from stabilized conditions due, amongst others, to external perturbations.

Avoid any tendency to “duck under” in the late stages of the approach.
Avoid destabilizing the approach in the last 100 ft, in order to have the best chance of performing a good touchdown at the desired position.

52 Ident.: PRO-NOR-SOP-18-C-H-20806873.9001001 / 02 MAY 23
Applicable to: ALL

VISUAL APPROACH (1 OR 2 ENGINES) PATTERN


VISUAL APPROACH
BEFORE TURNING BASE OR INITIALIZING TURN TO BASE
FLAPS 2
L/G DOWN
SPLRS ARMED
LANDING FLAPS
"S" SPEED
(SPEED 185 ±10KTS)
SPD GREEN DOT OR MIN CLEAN CONF
FLAPS 1
ABM RUNWAY
PERF KEY: PRESSED
ACTIVATE APP PHASE
CHECK SPD MANAGED
SELECT GO AROUND ALTITUDE
AP/FD OFF
SELECT DOWNWIND TRACK
1500FT AFE
LANDING CHECKLIST
45°
2.5 NM
ACFT STABILIZED WITH LANDING FLAPS
1000FT AFE
3.5 NM
2.5 NM
45°
800FT AFE
2.5 NM
GO AROUND
SET GA THRUST
ROTATE TO SRS (15° AEO 12.5° OEI)
RETRACT FLAPS ONE STEP
POSITIVE CLIMB
L/G UP
REV AS RQRD
BRAKES
TOUCH DOWN
REVERSER

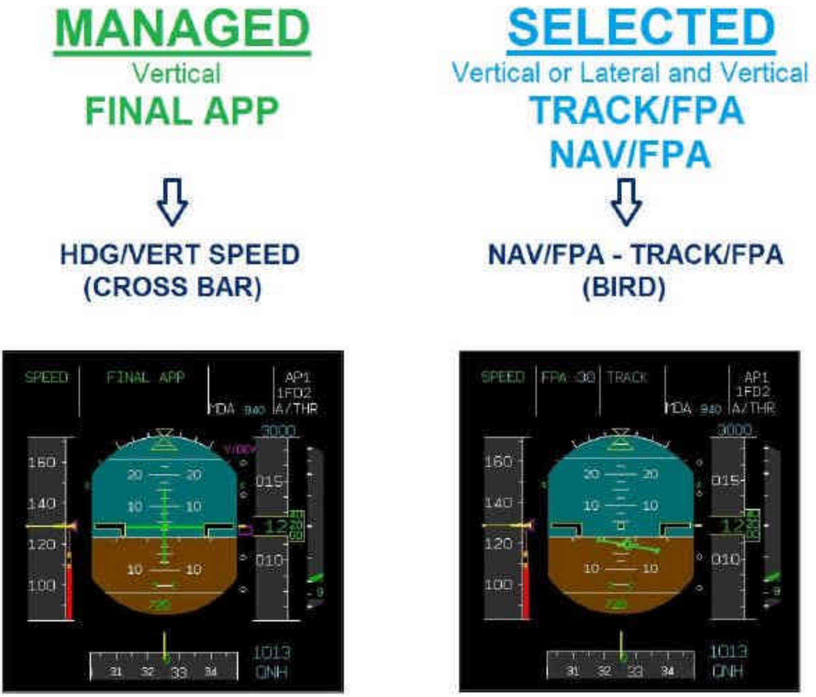
NOTE: THIS PATTERN ASSUMES THE USE OF MINIMUM GROUND SPEED (MANAGED).
IF NOT, SELECT SPEEDS MANUALY ACCORDING TO FLAPS CONFIGURATION:
S AFTER FLAPS 1 SELECTION
F AFTER FLAPS 2 SELECTION
VAPP AFTER FLAPS FULL SELECTION

SELECTED VERTICAL (NAV/FPA - TRACK/FPA) FPD (BIRD ON)

53 Ident.: PRO-NOR-SOP-18-C-20806874.9001001 / 02 MAY 23

Applicable to: ALL

SELECTED VERTICAL (NAV/FPA - TRACK/FPA) FPD (BIRD ON)


MANAGED
Vertical
FINAL APP
HDG/VERT SPEED
(CROSS BAR)
SELECTED
Vertical or Lateral and Vertical
TRACK/FPA
NAV/FPA
NAV/FPA - TRACK/FPA
(BIRD)
SPEED
FINAL APP
AP1
1FD2
A/THR
MDA 940
3000
V/DEV
160
140
120
100
015
010
1013
QNH
31
32
33
34
SPEED
FPA -3.0
TRACK
AP1
1FD2
A/THR
MDA 940
3000
160
140
120
100
015
010
1013
QNH
31
32
33
34

MANUAL LANDING

1 Ident.: PRO-NOR-SOP-19-A-20806875.9001001 / 02 MAY 23
Applicable to: ALL

FOR MANUAL LANDING

AP.. OFF | PF

2 Ident.: PRO-NOR-SOP-19-A-20806876.9001001 / 02 MAY 23
Applicable to: ALL

FLARE

- **AROUND 30 ft RA:**
  In stabilized approach, the flare height is approximately 30 ft.

  FLARE.. PERFORM | PF
  ATTITUDE... MONITOR | PM
  THRUST LEVERS... IDLE | PF

L2 *Move the thrust levers to idle, and begin a gentle progressive flare to enable the aircraft to touch down without a prolonged float.*
If autothrust is engaged, it automatically disconnects when the flight crew sets both thrust levers to the IDLE detent.
At 20 ft, an automatic "RETARD" callout will trigger, as a reminder.

L1 *Note:* *Ground spoilers extension is inhibited if one or more thrust levers remain above the IDLE detent.*

Ident.: PRO-NOR-SOP-19-A-00010352.0008001 / 02 MAY 23
Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139

3 AT TOUCHDOWN

- **As soon as the main landing gear touches down:**
  DEROTATION... INITIATE | PF

ALL THRUST LEVERS.................................. REV MAX or REV IDLE | PF

L2 *The flight crew must select reverse thrust immediately after landing gear touchdown.*

L12

Note: For REV thrust configuration Refer to PRO-NOR-SOP-16 Descent Preparation - Preferential Setting for Landing. In addition, The flight crew must immediately select REV MAX, if any of the following occurs at any time during the landing:

- *An emergency*
- *The deceleration is not as expected*
- *A failure affects the landing performance*
- *A long flare or a long touchdown*
- *An unexpected tailwind.*

L1 *Due to any operational condition, REV MAX thrust may be used.*

L2 *A small pitch up may occur during thrust reversers deployment before nose landing gear touchdown. However, the flight crew can easily control this pitch up.*
As soon as the flight crew selects reverse thrust, they must perform a full-stop landing.

L1 GND SPLRS...CHECK/ANNOUNCE | PM

L2 *Check that the WHEEL SD page displays the ground spoilers extended after touchdown.*

If no ground spoilers are extended:
- *Check that all thrust levers are set to IDLE detent.*
- *Set both thrust reverser levers to MAX REV, and fully press the brake pedals.*

L1 *Note: If ground spoilers are not armed, ground spoilers extend at reverser thrust selection.*

REVERSERS...CHECK/ANNOUNCE | PM

L2
- *Check that the ECAM E/WD displays the expected reverser deployment (i.e. REV).*
- *If reverser(s) do not deploy as expected, one of the main deceleration means is lost. The flight crew should consider adapting the available deceleration means to stop the aircraft.*

L1 DIRECTIONAL CONTROL...MONITOR/ENSURE | PF

L2
- *Ensure directional control. Use the rudder pedals for directional control.*
- *During rollout, avoid sidestick inputs (either lateral or longitudinal)*
- *If the flight crew encounters directional control problems, they should reduce the thrust to REV IDLE until directional control is satisfactory.*

L1 *Do not use the nosewheel steering control handle before reaching taxi speed.*

● **If autobrake is selected:**

AUTO BRK...CHECK/ANNOUNCE | PM

L2 *Check and announce BRK LO or BRK MED on the FMA.*

L1 *Note: If no ground spoilers are extended, the autobrake will not activate.*

WARNING	*Never change the A/BRK selection during roll out.*

AUTOBRAKE....................MONITOR | PM

L2 *During all the rollout, the PM monitors that the FMA displays BRK LO or BRK MED, and calls out if the autobrake mode disengages.*

L1
- **If landing without autobrake:**

  BRAKES....................AS RQRD | PF

L2
- *Although the green hydraulic system supplies the braking system, if pedals are pressed rapidly, a brake pressure indication appears briefly on the BRAKE PRESS indicator.*
- *Braking may begin before the nosewheel has touched down, if required for performance reasons. However, when comfort is the priority, the flight crew should delay braking until the nosewheel has touched down.*

L1 DECELERATION....................CHECK/ANNOUNCE | PM

L2 *The flight crew feels the deceleration. The flight crew checks the speed trend on the PFD to confirm the deceleration.*

Ident.: PRO-NOR-SOP-19-A-00010352.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

4
AT TOUCHDOWN

- **As soon as the main landing gear touches down:**

  DEROTATION....................INITIATE | PF

ALL THRUST LEVERS....................REV MAX or REV IDLE | PF

L2 *The flight crew must select reverse thrust immediately after landing gear touchdown.*

L12

Note: *For REV thrust configuration Refer to PRO-NOR-SOP-16 Descent Preparation - Preferential Setting for Landing. In addition, The flight crew must immediately select REV MAX, if any of the following occurs at any time during the landing:*

- *An emergency*
- *The deceleration is not as expected*
- *A failure affects the landing performance*
- *A long flare or a long touchdown*
- *An unexpected tailwind.*

L1 *Due to any operational condition, REV MAX thrust may be used.*

L2 *A small pitch up may occur during thrust reversers deployment before nose landing gear touchdown. However, the flight crew can easily control this pitch up.*

As soon as the flight crew selects reverse thrust, they must perform a full-stop landing.

L1 GND SPLRS.......................................CHECK/ANNOUNCE | PM

L2 *Check that the WHEEL SD page displays the ground spoilers extended after touchdown.*

If no ground spoilers are extended:
- *Check that all thrust levers are set to IDLE detent.*
- *Set both thrust reverser levers to MAX REV, and fully press the brake pedals.*

L1 *Note: If ground spoilers are not armed, ground spoilers extend at reverser thrust selection.*

REVERSERS.......................................CHECK/ANNOUNCE | PM

L2
- *Check that the ECAM E/WD displays the expected reverser deployment (i.e. REV).*
- *If reverser(s) do not deploy as expected, one of the main deceleration means is lost. The flight crew should consider adapting the available deceleration means to stop the aircraft.*

L1 DIRECTIONAL CONTROL.......................................MONITOR/ENSURE | PF

L2
- *Ensure directional control. Use the rudder pedals for directional control.*
- *During rollout, avoid sidestick inputs (either lateral or longitudinal)*
- *If the flight crew encounters directional control problems, they should reduce the thrust to REV IDLE until directional control is satisfactory.*

L1 *Do not use the nosewheel steering control handle before reaching taxi speed.*

● **If autobrake is selected:**

AUTOBRAKE.......................................MONITOR | PM

L2 *During all the rollout, the PM monitors the blue light on the autobrake panel, and calls out if the autobrake mode disengages.*

L1 *Note: If no ground spoilers are extended, the autobrake will not activate.*

WARNING	*Never change the A/BRK selection during roll out.*

● **If landing without autobrake:**

BRAKES.......................................AS RQRD | PF

L2
- *Although the green hydraulic system supplies the braking system, if pedals are pressed rapidly, a brake pressure indication appears briefly on the BRAKE PRESS indicator.*
- *Braking may begin before the nosewheel has touched down, if required for performance reasons. However, when comfort is the priority, the flight crew should delay braking until the nosewheel has touched down.*

L1 DECELERATION.......................................CHECK/ANNOUNCE | PM

L2 *The flight crew feels the deceleration. The flight crew checks the speed trend on the PFD to confirm the deceleration.*

5 Ident.: PRO-NOR-SOP-19-A-20806878.9001001 / 02 MAY 23
Applicable to: ALL

AT 70 KT

SEVENTY KNOTS	ANNOUNCE	PM
BOTH THRUST LEVERS	REV IDLE	PF

L2 *It is recommended to reduce thrust when passing 70 kt. However, high levels of reverse thrust may be used in order to control aircraft speed in the case of an emergency.*

L1 **CAUTION** *Avoid the use of high levels of reverse thrust at low airspeed, unless required due to an emergency. The distortion of the airflow, caused by gases reentering the compressor, can cause engine stalls that may result in excessive EGT.*

6 Ident.: PRO-NOR-SOP-19-A-20806879.9001001 / 02 MAY 23
Applicable to: ALL

AT TAXI SPEED

REVERSERS	STOW	PF

L2
- *When the aircraft reaches the taxi speed, and before it leaves the runway, stow the reversers.*
- *On snow-covered grounds, the reversers should be stowed when the aircraft speed reaches 25 kt.*
- *When deselecting the reversers, be careful not to apply forward thrust by moving the thrust levers beyond the FWD IDLE position.*

L1 **CAUTION** *Except in an emergency, do not use the reverse thrust to control the aircraft speed while on taxiways.*

L2 *On taxiways, the use of reversers, even restricted to idle thrust, would have the following effects:*
- *The engines may ingest fine sand and debris that may be detrimental to the engines and airframe systems.*
- *On snow–covered areas, snow will recirculate into the air inlet, and may cause an engine flameout or rollback.*

7 Ident.: PRO-NOR-SOP-19-A-20806880.9001001 / 02 MAY 23
Applicable to: ALL

BEFORE 20 KT

AUTO BRK	DISENGAGE	PF

L2 *Disengage the autobrake to avoid some brake jerks at low speed.*
The flight crew should use brake pedals to disengage the autobrake.

AUTOLAND

8 Ident.: PRO-NOR-SOP-19-B-20806881.9001001 / 02 MAY 23
Applicable to: ALL

The following items must be performed in addition to previous *Refer to PRO-NOR-SOP-APPROACH USING LOC G/S*.

9 Ident.: PRO-NOR-SOP-19-B-20806882.9001001 / 02 MAY 23
Applicable to: ALL

AT 350 FT RA

LAND ON FMA..CHECK/ANNOUNCE | PF
ILS/GLS ◁ /MLS ◁ COURSE ON PFD..CHECK | PF

L2 *If the ILS / GLS ◁ course pointer and the runway track differ by more than 5 °, perform a go-around, or a manual landing if visual references are sufficient.*

10 Ident.: PRO-NOR-SOP-19-B-20806883.9001001 / 02 MAY 23
Applicable to: ALL

AT 40 FT RA

FLARE ON FMA..CHECK/ANNOUNCE | PM

L2 *If the FMA does not display FLARE, perform a go-around, or a manual landing if visual references are sufficient.*

L1 FLARE..MONITOR | PF

11 Ident.: PRO-NOR-SOP-19-B-20806884.9001001 / 02 MAY 23
Applicable to: ALL

AT 30 FT RA

THR IDLE ON FMA..CHECK | PM
THRUST IDLE..CHECK | PM

L2 *Monitor thrust reduction.*

12 Ident.: PRO-NOR-SOP-19-B-20806885.9001001 / 02 MAY 23
Applicable to: ALL

AT 10 FT RA

L2 An automatic "RETARD" callout triggers.

L1 THRUST LEVERS.. IDLE | PF

L2 *The autothrust disconnects.*

L1 LATERAL GUIDANCE... MONITOR | PF

L2 *Monitor the lateral guidance by using external references.*

Ident.: PRO-NOR-SOP-19-B-00020902.0008001 / 02 MAY 23
Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139

13 AT TOUCHDOWN

Note: *In the case of NWS or Anti-Skid failure, set the AP OFF at touchdown.*

ROLL OUT ON FMA.. CHECK/ANNOUNCE | PM
BOTH THRUST LEVERS..REV MAX or REV IDLE | PF

L2 *The flight crew must select reverse thrust immediately after main landing gear touchdown.*

The flight crew must immediately select REV MAX, if any of the following occurs at any time during the landing:
- *An emergency*
- *The deceleration is not as expected*
- *A failure affects the landing performance*
- *A long flare or a long touchdown*
- *An unexpected tailwind.*

A small pitch up may occur during thrust reversers deployment before nose landing gear touchdown. However, the auto-flight system will control this pitch up.
As soon as the flight crew selects reverse thrust, they must perform a full-stop landing.

L1 GND SPLRS...CHECK/ANNOUNCE | PM

L2 *Check that the WHEEL SD page displays the ground spoilers extended after touchdown.*

If no ground spoilers are extended:
- *Check that all thrust levers are set to IDLE detent*
- *Set both thrust reverser levers to MAX REV, and fully press the brake pedals.*

L1 *Note:* *If ground spoilers are not armed, ground spoilers extend at reverser thrust selection.*

REVERSERS...CHECK/ANNOUNCE | PM

L2
- *Check that the ECAM E/WD displays the expected reverser deployment (i.e. REV)*
- *If reverser(s) do not deploy as expected, one of the main deceleration means is lost. The flight crew should consider adapting the available deceleration means to stop the aircraft.*

L1 DIRECTIONAL CONTROL.. MONITOR/ENSURE | PF

L2
- *Monitor directional control, if the rollout is automatic*
- *Ensure directional control, if rollout is manual. Use rudder pedals for directional control.*

- *During rollout, avoid sidestick inputs (either lateral or longitudinal)*
- *If the flight crew encounters directional control problems, they should reduce the thrust to REV IDLE until directional control is satisfactory.*

L1 *Do not use the nosewheel steering control handle before reaching taxi speed.*

● **If autobrake is selected:**

AUTO BRK....................CHECK/ANNOUNCE | PM

L2 *Check and announce BRK LO or BRK MED on the FMA.*

L1 *Note: If no ground spoilers are extended, the autobrake will not activate.*

AUTOBRAKE....................MONITOR | PM

L2 *During all the rollout, the PM monitors that the FMA displays BRK LO or BRK MED, and calls out if the autobrake mode disengages.*

L1 ● **If landing without autobrake:**

BRAKES....................AS RQRD | PF

L2
- *Although the green hydraulic system supplies the braking system, if pedals are pressed rapidly, a brake pressure indication appears briefly on the BRAKE PRESS indicator*
- *Braking may begin before the nosewheel has touched down, if required for performance reasons. However, when comfort is the priority, the flight crew should delay braking until the nosewheel has touched down.*

L1 DECELERATION....................CHECK/ANNOUNCE | PM

L2 *The flight crew feels the deceleration. The flight crew checks the speed trend on the PFD to confirm the deceleration.*

Ident.: PRO-NOR-SOP-19-B-00020902.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

14 AT TOUCHDOWN

Note: In the case of NWS or Anti-Skid failure, set the AP OFF at touchdown.

ROLL OUT ON FMA....................CHECK/ANNOUNCE | PM
BOTH THRUST LEVERS....................REV MAX or REV IDLE | PF

L2 *The flight crew must select reverse thrust immediately after main landing gear touchdown.*

The flight crew must immediately select REV MAX, if any of the following occurs at any time during the landing:
- *An emergency*
- *The deceleration is not as expected*
- *A failure affects the landing performance*

- *A long flare or a long touchdown*
- *An unexpected tailwind.*

A small pitch up may occur during thrust reversers deployment before nose landing gear touchdown. However, the auto-flight system will control this pitch up.
As soon as the flight crew selects reverse thrust, they must perform a full-stop landing.

L1 GND SPLRS..........CHECK/ANNOUNCE | PM

L2 *Check that the WHEEL SD page displays the ground spoilers extended after touchdown.*

If no ground spoilers are extended:
- *Check that all thrust levers are set to IDLE detent*
- *Set both thrust reverser levers to MAX REV, and fully press the brake pedals.*

L1 *Note: If ground spoilers are not armed, ground spoilers extend at reverser thrust selection.*

REVERSERS..........CHECK/ANNOUNCE | PM

L2
- *Check that the ECAM E/WD displays the expected reverser deployment (i.e. REV)*
- *If reverser(s) do not deploy as expected, one of the main deceleration means is lost. The flight crew should consider adapting the available deceleration means to stop the aircraft.*

L1 DIRECTIONAL CONTROL..........MONITOR/ENSURE | PF

L2
- *Monitor directional control, if the rollout is automatic*
- *Ensure directional control, if rollout is manual. Use rudder pedals for directional control.*
- *During rollout, avoid sidestick inputs (either lateral or longitudinal)*
- *If the flight crew encounters directional control problems, they should reduce the thrust to REV IDLE until directional control is satisfactory.*

L1 *Do not use the nosewheel steering control handle before reaching taxi speed.*

● **If autobrake is selected:**

AUTOBRAKE..........MONITOR | PM

L2 *During all the rollout, the PM monitors the blue light on the autobrake panel, and calls out if the autobrake mode disengages.*

L1 *Note: If no ground spoilers are extended, the autobrake will not activate.*

● **If landing without autobrake:**

BRAKES..........AS RQRD | PF

L2
- *Although the green hydraulic system supplies the braking system, if pedals are pressed rapidly, a brake pressure indication appears briefly on the BRAKE PRESS indicator*
- *Braking may begin before the nosewheel has touched down, if required for performance reasons. However, when comfort is the priority, the flight crew should delay braking until the nosewheel has touched down.*

L1 DECELERATION.......................................CHECK/ANNOUNCE | PM

L2 *The flight crew feels the deceleration. The flight crew checks the speed trend on the PFD to confirm the deceleration.*

15 Ident.: PRO-NOR-SOP-19-B-20806887.9001001 / 02 MAY 23
Applicable to: ALL

AT 70 KT

SEVENTY KNOTS.......................................ANNOUNCE | PM
BOTH THRUST LEVERS.......................................REV IDLE | PF

L2 *It is better to reduce thrust when passing 70 kt. However, high levels of reverse thrust may be used in order to control aircraft speed in the case of an emergency.*

L1 **CAUTION** *Avoid the use of high levels of reverse thrust at low airspeed, unless required due to an emergency. The distortion of the airflow, caused by gases reentering the compressor, can cause engine stalls that may result in excessive EGT.*

16 Ident.: PRO-NOR-SOP-19-B-20806888.9001001 / 02 MAY 23
Applicable to: ALL

BEFORE 20 KT

AUTO BRK.......................................DISARM | PF

L2 *Disarm autobrake before 20 kt to avoid some brake jerks at low speed.*
The flight crew should use brake pedals to disarm the autobrake.

17 Ident.: PRO-NOR-SOP-19-B-20806889.9001001 / 02 MAY 23
Applicable to: ALL

END OF ROLL OUT

REVERSERS.......................................STOW | PF

L2
- *When the aircraft reaches the taxi speed, and before it leaves the runway, stow the reversers.*
- *On snow-covered grounds, the reversers should be stowed when the aircraft speed reaches 25 kt.*
- *When deselecting the reversers, be careful not to apply forward thrust by moving the thrust levers beyond the FWD IDLE position.*

L1 **CAUTION** *Except in an emergency, do not use the reverse thrust to control the aircraft speed while on taxiways.*

L2 *On taxiways, the use of reversers, even restricted to idle thrust, would have the following effects:*

- *The engines may ingest fine sand and debris that may be detrimental to the engines and airframe systems.*
- *On snow–covered areas, snow will recirculate into the air inlet, and may cause an engine flameout or rollback.*

L1 AP.. OFF | PF

L2 *Disengage the APs at the end of the roll out (before leaving the runway at the latest).*

Intentionally left blank

GO AROUND WITH FD

Ident.: PRO-NOR-SOP-20-A-00011576.0006001 / 02 MAY 23
Applicable to: MSN 01376

1

Simultaneously apply the following three actions:

THRUST LEVERS	TOGA	PF

L2 *If TOGA thrust is not required, set the thrust levers to TOGA detent then retard the thrust levers as required. This enables to engage the GO-AROUND phase, with associated AP/FD modes.*
The flight crew may use CL detent to have benefit of A/THR.

L1 *Note: If the thrust levers are not set briefly to TOGA detent, the FMS does not engage the GO-AROUND phase, and flying over, or close to the airport will sequence the Destination waypoint in the F-PLN.*

ROTATION	PERFORM	PF

L2 *Initiate rotation towards 15 ° of pitch with all engines operative (approximately 12.5 ° if one engine is out) to get a positive rate of climb, then follow the SRS Flight Director orders.*
When near the ground, avoid excessive rotation rate in order to prevent a tail strike.

L1

GO AROUND	ANNOUNCE	PF
FLIGHT PARAMETERS	MONITOR	PM
FLAPS	RETRACT ONE STEP	PM
FMA	CHECK/ANNOUNCE	PF

L2 *The following modes are displayed: MAN TOGA / SRS / GA TRK / A/THR.*

L1

POSITIVE CLIMB	ANNOUNCE	PM
L/G UP	ORDER	PF
L/G	UP	PM
NAV or HDG mode	AS RQRD	PF
GO AROUND ALTITUDE	CHECK	PM

Ident.: PRO-NOR-SOP-20-A-00011576.0046001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

2

Simultaneously apply the following three actions:

THRUST LEVERS	TOGA THEN FLX/MCT	PF

L2 *Set the thrust levers to the TOGA detent to ensure engagement of SRS GA mode. Then, set the thrust levers to FLX/MCT to engage the GA SOFT mode.*
At any time, if TOGA thrust is desired, set the thrust levers to TOGA detent.

L1 *Note:* *If the thrust levers are not set briefly to TOGA detent, the FMS does not engage the GO-AROUND phase, and flying over, or close to the airport will sequence the Destination waypoint in the F-PLN.*

ROTATION	PERFORM	PF

L2 *Initiate rotation towards 15 ° of pitch with all engines operative (approximately 12.5 ° if one engine is out) to get a positive rate of climb, then follow the SRS Flight Director orders.*
When near the ground, avoid excessive rotation rate in order to prevent a tail strike.

L1 GO AROUND	ANNOUNCE	PF
FLIGHT PARAMETERS	MONITOR	PM
FLAPS	RETRACT ONE STEP	PM
FMA	CHECK/ANNOUNCE	PF

L2 *The following modes are displayed: MAN GA SOFT / SRS / GA TRK or NAV / A/THR.*
If the FMA does not display MAN GA SOFT or MAN TOGA, immediately set the thrust levers to the TOGA detent.
Depending on the guidance modes during approach, NAV mode is either automatically armed or automatically engaged.
For RNP AR, check that NAV mode engages immediately (minimum height 100 ft).

L1 POSITIVE CLIMB	ANNOUNCE	PM
L/G UP	ORDER	PF
L/G	UP	PM
NAV or HDG mode	AS RQRD	PF
GO AROUND ALTITUDE	CHECK	PM

Ident.: PRO-NOR-SOP-20-A-00011576.0014001 / 02 MAY 23
Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

3

Simultaneously apply the following three actions:

THRUST LEVERS	TOGA	PF

L2 *If TOGA thrust is not required, set the thrust levers to TOGA detent then retard the thrust levers as required. This enables to engage the GO-AROUND phase, with associated AP/FD modes.*
The flight crew may use CL detent to have benefit of A/THR.

L1 *Note:* *If the thrust levers are not set briefly to TOGA detent, the FMS does not engage the GO-AROUND phase, and flying over, or close to the airport will sequence the Destination waypoint in the F-PLN.*

ROTATION..PERFORM | PF

L2 *Initiate rotation towards 15 ° of pitch with all engines operative (approximately 12.5 ° if one engine is out) to get a positive rate of climb, then follow the SRS Flight Director orders.*
When near the ground, avoid excessive rotation rate in order to prevent a tail strike.

L1 GO AROUND ....ANNOUNCE | PF
FLIGHT PARAMETERS..MONITOR | PM
FLAPS..RETRACT ONE STEP | PM
FMA..CHECK/ANNOUNCE | PF

L2 *The following modes are displayed: MAN TOGA / SRS / GA TRK or NAV / A/THR.*
Depending on the guidance modes during approach, NAV mode is either automatically armed or automatically engaged.

L1 POSITIVE CLIMB ....ANNOUNCE | PM
L/G UP ....ORDER | PF
L/G..UP | PM
NAV or HDG mode..AS RQRD | PF
GO AROUND ALTITUDE..CHECK | PM

Ident.: PRO-NOR-SOP-20-A-00011576.0004001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-07098

4

Simultaneously apply the following three actions:

THRUST LEVERS..TOGA | PF

L2 *If TOGA thrust is not required, set the thrust levers to TOGA detent then retard the thrust levers as required. This enables to engage the GO-AROUND phase, with associated AP/FD modes.*
The flight crew may use CL detent to have benefit of A/THR.

L1 *Note:* *If the thrust levers are not set briefly to TOGA detent, the FMS does not engage the GO-AROUND phase, and flying over, or close to the airport will sequence the Destination waypoint in the F-PLN.*

ROTATION..PERFORM | PF

L2 *Initiate rotation towards 15 ° of pitch with all engines operative (approximately 12.5 ° if one engine is out) to get a positive rate of climb, then follow the SRS Flight Director orders.*
When near the ground, avoid excessive rotation rate in order to prevent a tail strike.

L1 GO AROUND ....ANNOUNCE | PF
FLIGHT PARAMETERS..MONITOR | PM
FLAPS..RETRACT ONE STEP | PM
FMA..CHECK/ANNOUNCE | PF

L2 *The following modes are displayed: MAN TOGA / SRS / GA TRK or NAV / A/THR.*

Depending on the guidance modes during approach, NAV mode is either automatically armed or automatically engaged.
For RNP AR, check that NAV mode engages immediately (minimum height 100 ft).

L1 POSITIVE CLIMB .... ANNOUNCE | PM
L/G UP .... ORDER | PF
L/G .... UP | PM
NAV or HDG mode .... AS RQRD | PF
GO AROUND ALTITUDE .... CHECK | PM

5 Ident.: PRO-NOR-SOP-20-A-20806891.9001001 / 02 MAY 23
Applicable to: ALL

AT GO-AROUND THRUST REDUCTION ALTITUDE

THRUST LEVERS .... CL | PF

L2 *LVR CLB flashing on FMA.*

6 Ident.: PRO-NOR-SOP-20-A-20806892.9001001 / 02 MAY 23
Applicable to: ALL

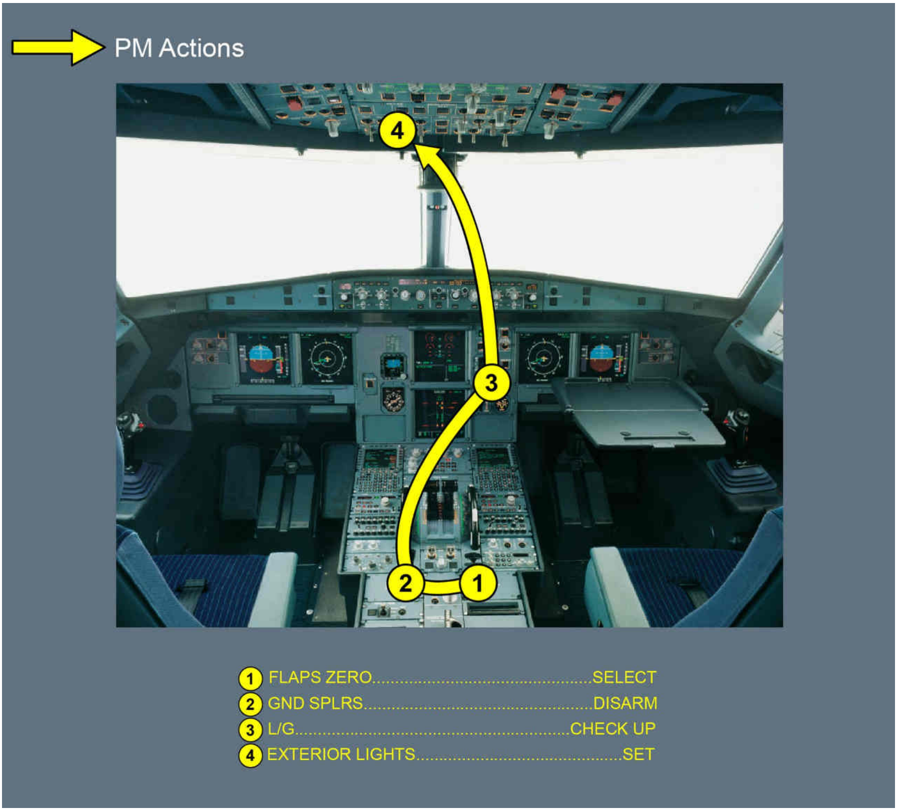
AT GO-AROUND ACCELERATION ALTITUDE

SPEED .... MONITOR | PF

L2 *Monitor that the target speed increases to green dot.*

L1
- **If the target speed does not increase to green dot:**
  FCU ALT .... CHECK | PF
  ALT knob .... PULL | PF

ACCELERATION FLOW PATTERN



① FLAPS ZERO.....SELECT
② GND SPLRS.....DISARM
③ L/G.....CHECK UP
④ EXTERIOR LIGHTS.....SET

- **At F speed:**

FLAPS 1	ORDER	PF
FLAPS 1	SELECT	PM

- **At S speed:**

FLAPS 0	ORDER	PF
FLAPS 0	SELECT	PM
GND SPLRS	DISARM	PM
L/G	CHECK UP	PM
NOSE sw	OFF	PM
RWY TURN OFF sw	OFF	PM

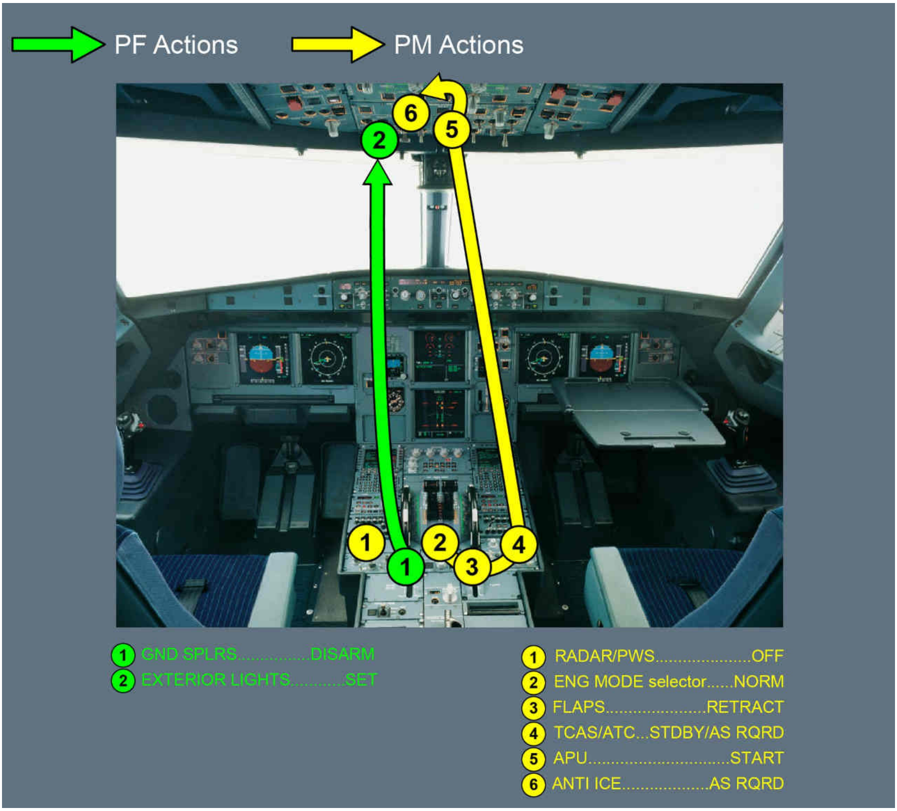
OTHER EXTERIOR LIGHTS...AS RQRD | PM

L2 *The flight crew can maintain the LAND selector set to ON, according to airline policy or regulatory recommendations.*

AFTER LANDING

1 Ident.: PRO-NOR-SOP-21-A-20806893.9001001 / 02 MAY 23
Applicable to: ALL

AFTER LANDING FLOW PATTERN



① GND SPLRS................DISARM
② EXTERIOR LIGHTS............SET

① RADAR/PWS.....................OFF
② ENG MODE selector......NORM
③ FLAPS......................RETRACT
④ TCAS/ATC...STDBY/AS RQRD
⑤ APU...............................START
⑥ ANTI ICE..................AS RQRD

2 Ident.: PRO-NOR-SOP-21-A-20806894.9001001 / 02 MAY 23
Applicable to: ALL

GROUND SPOILERS

- **When the runway is vacated:**
  GRND SPLRS..DISARM | PF

Note: The Ground Spoilers may be disarmed before leaving the runway in case there is a low workload scenario and the Aircraft is at taxi speed.

3 Ident.: PRO-NOR-SOP-21-A-20806895.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

L2 During taxi, the PF may request the PM to set the exterior lights.

L1 LAND LIGHTS sw .... RETRACT | PF

- **When leaving the runway:**
  STROBE sw .... AUTO | PF
  NOSE sw .... TAXI | PF
  WING LIGHTS .... OFF | PF

- **When crossing a runway:**
  STROBE sw .... ON | PF
  RWY TURN OFF sw .... ON | PF
  L and R LAND selector .... ON | PF

OTHER EXTERIOR LIGHTS .... AS RQRD | PF

4 Ident.: PRO-NOR-SOP-21-A-20806896.9001001 / 02 MAY 23
Applicable to: ALL

RADAR .... OFF | PM

Ident.: PRO-NOR-SOP-21-A-00011843.0001001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

5 PREDICTIVE WINDSHEAR SYSTEM .... OFF | PM

Switching the radar and predictive windshear system to OFF after landing avoids risk of radiating persons at the gate area.

6 Ident.: PRO-NOR-SOP-21-A-20806898.9001001 / 02 MAY 23
Applicable to: ALL

ENG MODE SELECTOR

ENG MODE selector .... NORM | PM

Ident.: PRO-NOR-SOP-21-A-00011845.0002001 / 02 MAY 23
Applicable to: MSN 06165, 06670, 06718, 06798, 06813, 07081, 08495-09324, 10949-11139

7 FLAPS

FLAPS...RETRACT | PM

L2
- *Set the FLAPS lever to 0.*
- *If the approach was performed in icing conditions, or if the runway was contaminated with slush or snow, do not retract the flaps until after engine shutdown, and after the ground crew confirmed that flaps and slats are clear of obstruction due to ice.*
- *On ground, hot weather conditions may cause overheating to be detected around the bleed ducts in the wings, resulting in AIR L(R) WING LEAK alert. Such warnings may be avoided during transit by keeping the slats in CONF 1, when the OAT is above 30 °C.*

Ident.: PRO-NOR-SOP-21-A-00011845.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06163, 06173-06658, 06685-06712, 06729, 06800-06806, 06871-07005, 07098

8 FLAPS

FLAPS...RETRACT | PM

L2
- *Set the FLAPS lever to 0.*
- *If the approach was performed in icing conditions, or if the runway was contaminated with slush or snow, do not retract the flaps until after engine shutdown, and after the ground crew confirmed that flaps and slats are clear of obstruction due to ice.*
- *On ground, hot weather conditions may cause overheating to be detected around the bleed ducts in the wings, resulting in AIR L (R) WING LEAK alert. Such warnings may be avoided during transit by keeping the slats in CONF 1, when the OAT is above 30 °C.*
- *To avoid damage on the RTLU (Rudder Travel Limit Unit) mechanical stop, the SLATS/FLAPS should be retracted before all ADIRS are set to OFF simultaneously.*

Ident.: PRO-NOR-SOP-21-A-00011846.0002001 / 02 MAY 23
Applicable to: MSN 01459

9 TCAS

TCAS...XPNDR | PM

Ident.: PRO-NOR-SOP-21-A-00011846.0001001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

10 TCAS

TCAS...STBY | PM

Ident.: PRO-NOR-SOP-21-A-00011847.0001001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

11 ATC

ATC	AS RQRD	PM

L2 *ATC is set in accordance with airport requirements.*

12 Ident.: PRO-NOR-SOP-21-A-20806902.9001001 / 02 MAY 23
Applicable to: ALL

TERR ON ND

TERR ON ND	OFF	PM
PACK 2	OFF	PM

The Single Pack On Ground should be used as a normal procedure and must be discontinued in the following conditions:
- *If the airport is at 9 200 ft or higher*
- *If the cabin temperature is 17 °C or below*
- *If the cabin temperature is 26 °C or above*
- *If operational needs or weather conditions require so.*

If one of the conditions described above apply, the PACK 2 should be switched to ON in order to improve passenger and crew comfort.
At all times when the conditions above has ceased to exist, SINGLE PACK ON GROUND procedure may be resumed and the PACK 2 turned OFF.

13 Ident.: PRO-NOR-SOP-21-A-20806903.9001001 / 02 MAY 23
Applicable to: ALL

APU

APU MASTER SW pb-sw	ON	PM
APU START pb	ON	PM

Note: *APU start may be delayed until before engine shutdown. Before the flight crew shuts down the engines, they must check that the AVAIL light of the APU START pb is on.*

Ident.: PRO-NOR-SOP-21-A-00011849.0005001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

14 ANTI ICE

CAUTION	In icing conditions (*Refer to LIM-ICE_RAIN Definition of Icing Conditions*), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG ANTI ICE..AS RQRD | PM

L2
- *If engine anti-ice is used, carefully control taxi speed, particularly on wet or slippery surfaces because ground idle is increased*
- *During ground operation, when in icing conditions and when the OAT is at +3 °C or below for more than 30 min, the following procedure should be applied for ice shedding:*

CAUTION	*If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE.*

If ground surface conditions and the environment permit, the flight crew should accelerate the engines to approximately 70 % of N1 for 30 s at intervals not more than 30 min.
If ground surface or environment do not permit to accelerate the engine to 70 % N1, then power setting and dwell time should be as high as practical.
When operating in conditions of freezing rain, freezing drizzle, freezing fog or heavy snow, ice shedding may be enhanced, by additional run ups at intervals, to not exceed 10 min, advancing throttles to 70 % N1 momentarily (no hold time).

Ident.: PRO-NOR-SOP-21-A-00011849.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

15 ANTI ICE

CAUTION	In icing conditions (*Refer to LIM-ICE_RAIN Definition of Icing Conditions*), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG ANTI ICE...AS RQRD | PM

L2
- *If engine anti-ice is used, carefully control taxi speed, particularly on wet or slippery surfaces because ground idle is increased*
- *During ground operation, when in icing conditions and the OAT is plus 3 °C or less, the following procedure should be applied for ice shedding:*

CAUTION	*If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE.*

If ground surface conditions and the environment permit, the flight crew should accelerate the engines to minimum 50 % of N1 at intervals not more than 15 min. There is no requirement to maintain the high thrust settings.

Ident.: PRO-NOR-SOP-21-A-00011849.0003001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

16 ANTI ICE

CAUTION	In icing conditions (*Refer to LIM-ICE_RAIN Definition of Icing Conditions*), the flight crew must turn on the engine anti-ice and should not wait until seeing ice building up.

ENG ANTI ICE...AS RQRD | PM

L2
- *If engine anti-ice is used, carefully control taxi speed, particularly on wet or slippery surfaces because ground idle is increased*
- *During ground operation, when in icing conditions and when the OAT is at +3 °C or below, or if significant engine vibrations occur, the following procedure should be applied for ice shedding:*

CAUTION	*If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE.*

If ground surface conditions and the environment permit, the flight crew should set parking brake to ON or brake with pedals and accelerate the engines to minimum 60 % of N1 . Engine accelerations should be performed at intervals not more than:

- *30 min if OAT is at +3 °C or below but above -9 °C*
- *120 min if OAT is at -9 °C or below.*

There is no requirement to maintain the high thrust settings.

Ident.: TDU / PRO-NOR-SOP-21-A-00019773.0003001 / 02 MAY 23
Applicable to: MSN 08529
Impacted DU: 00011850 After Landing - Brake Temperature

17 BRAKE TEMPERATURE

BRAKE TEMPERATURE..MONITOR | PM

L2
- *Check brake temperature for discrepancies and high temperature on the* *WHEEL* *SD page*
- *Maintenance action is due in the following cases:*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is above or equal to 600 °C, or*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is below or equal to 60 °C, or*
  - *The difference between the average temperature of the left gear brakes and right brakes is above or equal to 200 °C, or*
  - *The temperature of one brake exceeds 900 °C.*

L1 BRK FAN pb-sw ....AS RQRD | PM

L2 *Brake fans selection may be performed once the aircraft has cleared the runway.*
For more information, Refer to FCTM/PR-NP-SOP-270 Use of Brake Fans.

Ident.: PRO-NOR-SOP-21-A-00011850.0001001 / 02 MAY 23
Applicable to: MSN 08529
Impacted by TDU: 00019773 After Landing - Brake Temperature

18 BRAKE TEMPERATURE

BRAKE TEMPERATURE..MONITOR | PM

L2
- *Check brake temperature for discrepancies and high temperature on the* *WHEEL* *SD page*
- *Maintenance action is due in the following cases:*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is above or equal to 600 °C, or*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is below or equal to 60 °C, or*
  - *The difference between the average temperature of the left gear brakes and right brakes is above or equal to 200 °C, or*
  - *The temperature of one brake exceeds 900 °C.*

L1 BRK FAN pb-sw ....AS RQRD | PM

L2 *When the turnaround time is short or if the temperature of any brake is likely to exceed 500 °C, use the brake fans without delay. In other cases, the flight crew should delay brake fans selection to 5 min after landing, or approaching the gate, whichever occurs first.*

~~*For more information, Refer to FCTM/PR-NP-SOP-270 Use of Brake Fans.*~~

Ident.: PRO-NOR-SOP-21-A-00011850.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495, 08596-09324, 10949-11139

19 BRAKE TEMPERATURE

BRAKE TEMPERATURE..MONITOR | PM

L2
- *Check brake temperature for discrepancies and high temperature on the WHEEL SD page*
- *Maintenance action is due in the following cases:*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is above or equal to 600 °C, or*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is below or equal to 60 °C, or*
  - *The difference between the average temperature of the left gear brakes and right brakes is above or equal to 200 °C, or*
  - *The temperature of one brake exceeds 900 °C.*

L1 BRK FAN pb-sw ....AS RQRD | PM

L2 *When the turnaround time is short or if the temperature of any brake is likely to exceed 500 °C, use the brake fans without delay. In other cases, the flight crew should delay brake fans selection to 5 min after landing, or approaching the gate, whichever occurs first.*
For more information, Refer to FCTM/PR-NP-SOP-270 Use of Brake Fans.

Ident.: PRO-NOR-SOP-21-A-00011850.0003001 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

20 BRAKE TEMPERATURE

BRAKE TEMPERATURE..MONITOR | PM

L2
- *Check brake temperature for discrepancies and high temperature on the WHEEL SD page*
- *Maintenance action is due in the following cases:*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is above or equal to 600 °C, or*
  - *The temperature difference between two brakes of a gear is more than 150 °C, and the temperature of one of these brakes is below or equal to 60 °C, or*
  - *The difference between the average temperature of the left gear brakes and right brakes is above or equal to 200 °C, or*
  - *The temperature of one brake exceeds 800 °C.*

L1 BRK FAN pb-sw ....AS RQRD | PM

L2 *When the turnaround time is short or if the temperature of any brake is likely to exceed 500 °C, use the brake fans without delay. In other cases, the flight crew should delay brake fans selection to 5 min after landing, or approaching the gate, whichever occurs first.*
For more information, Refer to FCTM/PR-NP-SOP-270 Use of Brake Fans.

21 Ident.: PRO-NOR-SOP-21-A-20806907.9001001 / 02 MAY 23
Applicable to: ALL

AFTER LANDING CHECKLIST

AFTER LANDING C/L....................COMPLETE | PF-PM

L2 *Ensure that the after-landing checks are completed, after the aircraft has cleared the runway.*

Ident.: PRO-NOR-SOP-21-A-20800446.9001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

22

The Single Engine Taxi Without APU (SETWA) must be considered as the standard operating procedure when taxiing in the aircraft. This procedure must not be performed if any of the following situations apply:

- Overweight landing / Heavy gross weight
- Slippery taxiways
- Uphill slopes
- Low visibility conditions
- The Captain considers that the workload will increase too much after landing / during taxi
- If the Aircraft is not configured with Single Engine Taxi Without APU (SETWA), One Engine Taxi with APU may be considered with the above conditions.

● **If none of the conditions listed above apply, no less than 3 min after high thrust operations:**

ENGINE MINIMUM COOLING TIME....................CONSIDER | PM

Refer to PRO-NOR-SOP-22 Parking - ENG MASTER Levers

Note: *When REV IDLE thrust setting is used for landing, engine cooling down is not necessary and the engine may be shut down right away.*

● **When the APU indicates AVAIL (if SETWA is not installed) and taxiing in a straight line:**

Note: *During engine shutdown, a slight jerk forward may occur, if brakes are applied while the aircraft is moving.*

ENG 2.. OFF | PM

Note: *When REV IDLE thrust setting is used for landing, engine cooling down is not necessary and the engine may be shut down right away.*
Refer to PRO-NOR-SOP-22 Parking - ENG MASTER Levers

Y ELEC PUMP.. ON | PM

This avoids running the PTU.

Note: *If necessary, the Captain may turn the engine on again in order to continue taxi to the gate.*

CAUTION	The flight crew must exercise caution when taxiing on one engine to avoid generating excessive jet blast.

CAUTION	The engine may not be shut down when a turn is being performed.

Ident.: PRO-NOR-SOP-21-A-20800446.9001002 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

23

One Engine Taxi is the normal taxi in procedure. It must be disconsidered if any of following situations apply:
- Overweight landing / High gross weight
- Slippery taxiways
- Uphill slopes
- Low visibility conditions
- APU not working
- The Captain considers that the workload will increase too much after landing / during taxi

● **After high thrust operations:**
ENGINE MINIMUM COOLING TIME...CONSIDER | PM

Refer to PRO-NOR-SOP-22 Parking - ENG MASTER Levers

Note: *When REV IDLE thrust setting is used for landing, engine cooling down is not necessary and the engine may be shut down right away.*

● **If none of the conditions listed above apply, no less than 3 min after high thrust operations:**

Note: *During engine shutdown, a slight jerk forward may occur, if brakes are applied while the aircraft is moving.*

ENG 2.. OFF | PM

Note: *When REV IDLE thrust setting is used for landing, engine cooling down is not necessary and the engine may be shut down right away.*
Refer to PRO-NOR-SOP-22 Parking - ENG MASTER Levers

Y ELEC PUMP... ON | PM

This avoids running the PTU.

Note: *On ground, if the ECAM caution ENG 1(2) SHAFT PROT FAULT triggers and all amber crosses are displayed on the engine 2 parameters (upper ECAM display), the flight crew can consider this caution as spurious and can disregard it.*

Note: *If necessary, the Captain may turn the engine on again in order to continue taxi to the gate.*

CAUTION	The flight crew must exercise caution when taxiing on one engine to avoid generating excessive jet blast.

CAUTION	The engine may not be shut down when a turn is being performed.

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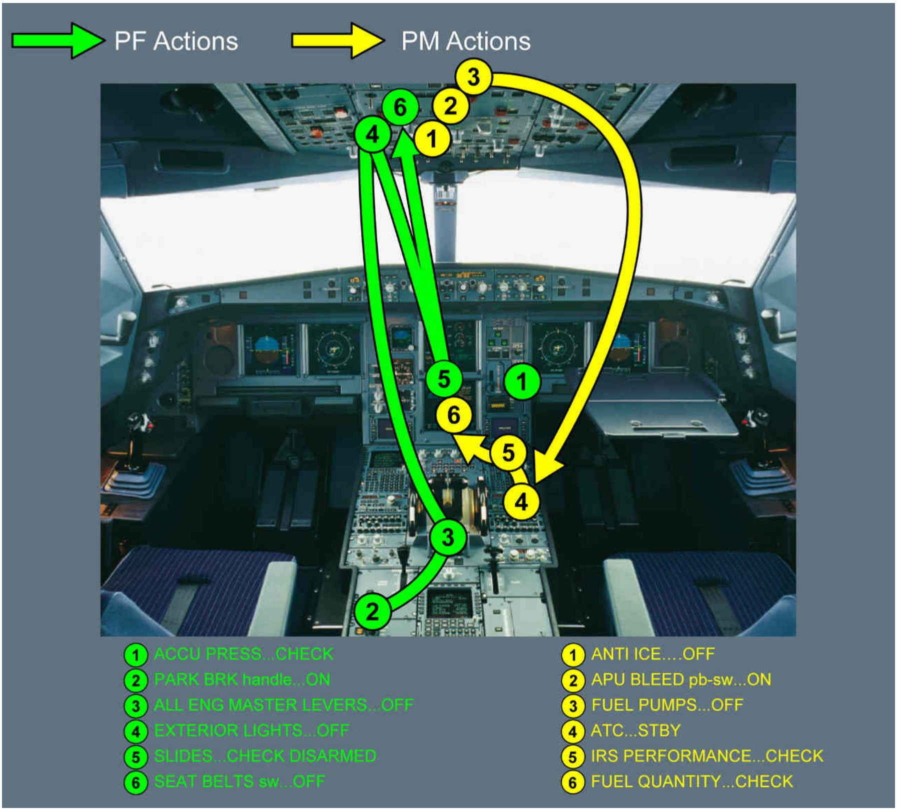
PARKING

Ident.: PRO-NOR-SOP-22-A-00011852.0003001 / 09 NOV 21
Applicable to: MSN 08529

CAUTION	With brakes temperature above 200 °C, brakes vibrations may be experienced. The flight crew must report any occurrence of abnormal brakes vibrations in the logbook.

1 Ident.: PRO-NOR-SOP-22-A-20806910.9001001 / 02 MAY 23
Applicable to: ALL

PARKING FLOW PATTERN



PF Actions

① ACCU PRESS...CHECK
② PARK BRK handle...ON
③ ALL ENG MASTER LEVERS...OFF
④ EXTERIOR LIGHTS...OFF
⑤ SLIDES...CHECK DISARMED
⑥ SEAT BELTS sw...OFF

PM Actions

① ANTI ICE....OFF
② APU BLEED pb-sw...ON
③ FUEL PUMPS...OFF
④ ATC...STBY
⑤ IRS PERFORMANCE...CHECK
⑥ FUEL QUANTITY...CHECK

2 Ident.: PRO-NOR-SOP-22-A-20806911.9001001 / 02 MAY 23
Applicable to: ALL

PARKING BRAKE

ACCU PRESS indicator...CHECK | PF

L2 *The ACCU PRESS indication must be in the green band. In case of low accumulator pressure, chocks are required before engine 1 shutdown.*

L1 PARK BRK handle ....ON | PF

L2 *If the temperature of one brake is above 500 °C (or above 350 °C with the brake fans ✳ ON), avoid applying the parking brake, unless operationally necessary.*

L1 BRAKES PRESS indicator...CHECK | PF

L2 *Keep brake pedals pressed after parking brake application until brakes pressure indications are above the green band on the triple pressure indicator.*

L1

CAUTION	When PARKING BRAKE handle is ON, check the increase in pressure indications and if the aircraft starts to move with the parking brake ON : Immediately restore braking with pedals.

3 Ident.: PRO-NOR-SOP-22-A-20806912.9001001 / 02 MAY 23
Applicable to: ALL

ANTI-ICE

ANTI-ICE...OFF | PM

4 Ident.: PRO-NOR-SOP-22-A-20806913.9001001 / 02 MAY 23
Applicable to: ALL

APU AVAIL...CHECK | PM

If Single Engine Taxi Without APU (SETWA) or dual engine taxi was performed, confirm the APU is available.

5 Ident.: PRO-NOR-SOP-22-A-20806914.9001001 / 02 MAY 23
Applicable to: ALL

APU BLEED

APU BLEED pb-sw ....AS RQRD | PM

L2 *Set the APU BLEED pb-sw to ON immediately before engine shutdown to prevent engine exhaust fumes from entering the air conditioning.*

6 Ident.: PRO-NOR-SOP-22-A-20806915.9001001 / 02 MAY 23
Applicable to: ALL

Y ELEC PUMP pb-sw ....OFF | PM

Ident.: PRO-NOR-SOP-22-A-00011856.0008001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

7 ENGINES

- **If the APU is not available:**
  EXT PWR pb ....ON | PF

No less than 3 min after high thrust operations:

- **If the ONE ENGINE TAXI procedure was performed:**
  ENG 1 MASTER lever ....OFF | PF
- **If the ONE ENGINE TAXI procedure was not performed:**
  ENG 1 MASTER lever and ENG 2 MASTER lever ....OFF | PF

  Check that engine parameters decrease.

  The DOOR/OXY SD page is displayed on the lower ECAM display.

L2

Note: *When REV IDLE thrust setting is used for landing, engine cooling down is not necessary and the engine may be shut down right away.*

Note: *After high thrust operations the flight crew must operate the engines at or near idle thrust for a cooling period of 3 min before engine shutdown, in order to thermally stabilize the engines.*

Idle reverse thrust and normal thrust to maneuver during taxi (i.e. at or near idle), are not considered as high thrust operations. Therefore, the following applies:

- *If the flight crew uses maximum reverse for landing, the cooling period starts when the flight crew sets the thrust lever to idle reverse during the landing rollout.*

Before engine shutdown, routine cooling periods that last less than the required time, can result in engine degradation.

Ident.: PRO-NOR-SOP-22-A-00011856.0005001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

8 ENGINES

- **If the APU is not available:**
  EXT PWR pb ....ON | PF

No less than 3 min after high thrust operations:

- **If the ONE ENGINE TAXI procedure was performed:**

  ENG 1 MASTER lever ....OFF | PF

- **If the ONE ENGINE TAXI procedure was not performed:**

  ENG 1 MASTER lever and ENG 2 MASTER lever ....OFF | PF

  The DOOR/OXY SD page is displayed on the lower ECAM display.

L2

Note: *When REV IDLE thrust setting is used for landing, engine cooling down is not necessary and the engine may be shut down right away.*

Note: *After high thrust operations the flight crew should operate the engines at or near idle thrust for a cooling period of 3 min before engine shutdown, in order to thermally stabilize the engines.*

Idle reverse thrust and normal thrust to maneuver during taxi (i.e. at or near idle), are not considered as high thrust operations. Therefore, the following applies:

- *If the flight crew uses maximum reverse for landing, the cooling period starts when the flight crew sets the thrust lever to idle reverse during the landing rollout.*

Before engine shutdown, routine cooling periods that last less than the recommended time, can result in engine degradation.

Ident.: PRO-NOR-SOP-22-A-00011856.0004001 / 02 MAY 23

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

9

10

- **If the APU is not available:**

  EXT PWR pb ....ON | PF

No less than 3 min after high thrust operations:

- **If the ONE ENGINE TAXI procedure was performed:**

  ENG 1 MASTER lever ....OFF | PF

- **If the ONE ENGINE TAXI procedure was not performed:**

  ENG 1 MASTER lever and ENG 2 MASTER lever ....OFF | PF

CAUTION	*If JP4 fuel is used at ambient temperatures higher than 10 °C, dry motor the engines for 2 min after engine shutdown. This dry motor period should start approximately 90 s after the master lever is selected OFF.*

Check that engine parameters decrease.

The DOOR/OXY SD page is displayed on the lower ECAM display.

L2 Note: *When REV IDLE thrust setting is used for landing, engine cooling down is not necessary and the engine may be shut down right away.*

Note: *After high thrust operations the flight crew should operate the engines at or near idle thrust for a cooling period of 3 min before engine shutdown, in order to thermally stabilize the engines.*

Idle reverse thrust and normal thrust to maneuver during taxi (i.e. at or near idle), are not considered as high thrust operations. Therefore, the following applies:
- *If the flight crew uses maximum reverse for landing, the cooling period starts when the flight crew sets the thrust lever to idle reverse during the landing rollout.*

Before engine shutdown, routine cooling periods that last less than the recommended time, can result in engine degradation.

11 Ident.: PRO-NOR-SOP-22-A-20806917.9001001 / 02 MAY 23
Applicable to: ALL

SLIDES DISARMED....................ANNOUNCE | PF-PM

The CM1 will perform the Slides Disarmed announcement.

12 Ident.: PRO-NOR-SOP-22-A-20806918.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

WING LIGHTS....................OFF | PF
BEACON sw ....OFF | PF

L2 *Turn off the beacon lights when all engines spooled down.*

L1 OTHER EXTERIOR LIGHTS....................AS RQRD | PF

Ident.: PRO-NOR-SOP-22-A-00011862.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

13 FUEL

FUEL PUMPS....................OFF | PM

Ident.: PRO-NOR-SOP-22-A-00011862.0002001 / 02 MAY 23
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-09324, 10949-11139

14 FUEL

FUEL PUMPS/ CTR XFR VALVES..OFF | PM

L2 *Switch off the fuel pumps and the center tank transfer valves.*

15 Ident.: PRO-NOR-SOP-22-A-20806920.9001001 / 02 MAY 23
Applicable to: ALL

SLIDES

SLIDES...CHECK DISARMED | PF

L2 *Check slides disarmed on the DOOR/OXY SD page. Warn the cabin crew, if any slide is not disarmed.*

16 Ident.: PRO-NOR-SOP-22-A-20806921.9001001 / 02 MAY 23
Applicable to: ALL

SEAT BELTS

SEAT BELTS sw ....OFF | PF

17 Ident.: PRO-NOR-SOP-22-A-20806922.9001001 / 02 MAY 23
Applicable to: ALL

GROUND CONTACT

GROUND CONTACT...ESTABLISH | PF

L2
- *The flight crew should establish communication with the ground crew*
- *Check that chocks are in place.*

Note: In case there is no ground staff connected to the aircraft, pilots may continue the Parking flow pattern and establish this communication later.

18 Ident.: PRO-NOR-SOP-22-A-20806923.9001001 / 02 MAY 23
Applicable to: ALL

BRAKE FANS ⊲

BRK FAN ⊲ pb ....AS RQRD | PM

L2 *Turn off the brake fans when they are no longer necessary.*

19 Ident.: PRO-NOR-SOP-22-A-20806924.9001001 / 02 MAY 23
Applicable to: ALL

PARKING BRK

PARK BRK handle ....AS RQRD | PF

L2 *The parking brake should be released after chocks are in place, if a temperature of one brake is above 300 °C (or above 150 °C with brake fans ◁ ON).*
Releasing the parking brake prevents the critical structures from being exposed to high temperature levels for an extended time. However, if operational conditions dictate (e.g. slippery tarmac), the parking brake may remain applied.
When parking with a flat tire on the nose gear, keep the parking brake on, to avoid aircraft yawing at parking brake release.

20 Ident.: PRO-NOR-SOP-22-A-20806925.9001001 / 02 MAY 23
Applicable to: ALL

PARKING CHECKLIST

PARKING C/L... COMPLETE | PF-PM

21 Ident.: PRO-NOR-SOP-22-A-20806926.9001001 / 02 MAY 23
Applicable to: ALL

ATC

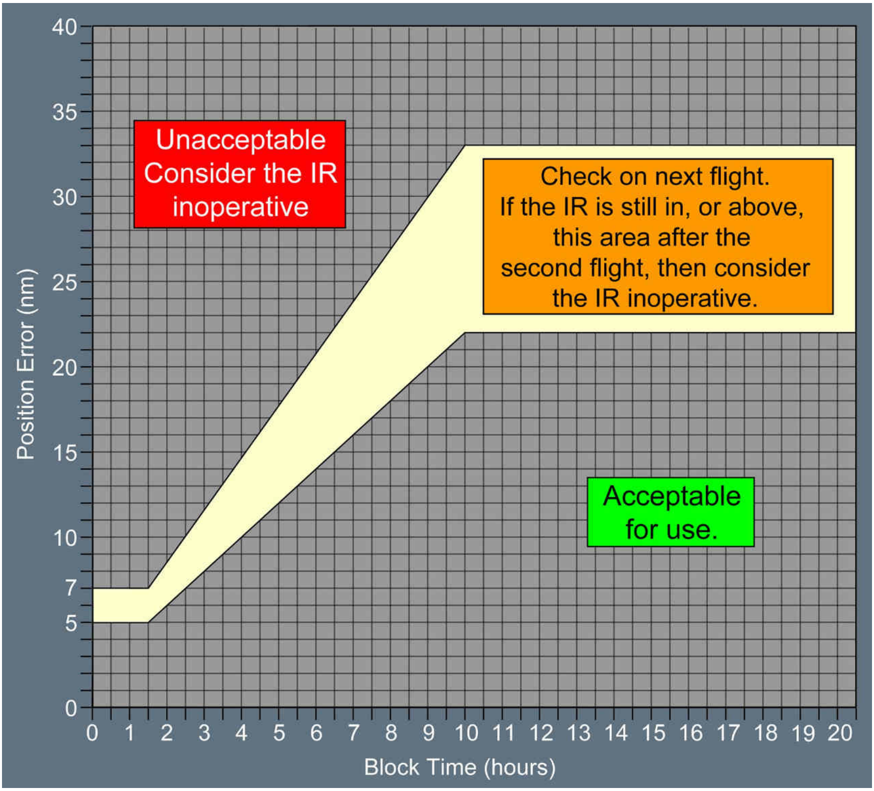
ATC...STBY | PM

22 Ident.: PRO-NOR-SOP-22-A-20806927.9001001 / 02 MAY 23
Applicable to: ALL

IRS PERFORMANCE

IRS PERFORMANCE.. CHECK | PM

On the FMS POSITION/MONITOR page, check that the deviation does not exceed the following:



23 Ident.: PRO-NOR-SOP-22-A-20806928.9001001 / 02 MAY 23
Applicable to: ALL

FUEL QUANTITY

FUEL QUANTITY..CHECK | PM

L2 *Check that the sum of the fuel on board and the fuel used is consistent with the fuel on board at departure. If the flight crew detects a discrepancy that is not usual, maintenance action is due.*

24 Ident.: PRO-NOR-SOP-22-A-20806929.9001001 / 02 MAY 23
Applicable to: ALL

LOGBOOK

STATUS page	CHECK	CM1

L2 *Press the STS pb (ECAM control panel).*

L1 LOGBOOK	COMPLETE	CM1

L2 *Complete the logbook according to the STATUS page.*

L1 ● **Icing conditions identified with OAT +3 °C (37 °F) or below**

TAXI-IN TIME	Record in the LOGBOOK	CM1

L2 *Record the taxi-in time, or the taxi-in time after last ice shedding if performed, to determine the remaining allowed taxi-out time for the next flight.*

Note:
1. *When the engines are running on ground at idle in icing conditions and OAT +3 °C (37 °F) or below, ice may accumulate on the engine fans.*
2. *The quantity of ice accretion depends on the total taxi time that includes taxi-in and taxi-out time.*
3. *For the ice shedding procedure, Refer to 00010212 **Not found**.*

25 Ident.: PRO-NOR-SOP-22-A-20806930.9001001 / 02 MAY 23
Applicable to: ALL

EFB

ALL EFB transmitting mode	AS RQRD	PF-PM

L2 *In accordance with the Operator’s policy or, as required by operational regulations.*

L1 ● **If performing transit stop:**

CLEAR/CLOSE FLIGHT	APPLY	PF-PM

Ident.: PRO-NOR-SOP-22-A-00011874.0001001 / 02 MAY 23
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

26 REPORT SEVERE ICING CONDITIONS

Report severe icing conditions in the log book, requiring inspections of the fan accoustic panels of the engines during the walkaround.

27 Ident.: PRO-NOR-SOP-22-A-20806932.9001001 / 02 MAY 23
Applicable to: ALL

DISPLAY UNITS

DUs	DIM	PF-PM

L2 *Dim EFIS, ECAM and MCDU display units.*

Intentionally left blank

SECURING THE AIRCRAFT

1 Ident.: PRO-NOR-SOP-23-A-20806933.9001001 / 02 MAY 23
Applicable to: ALL

GENERAL

The flight crew should apply the following procedure as per company policy, when the last passenger left the aircraft and the securing of the aircraft is intended.
Airbus recommends performing the following procedure when the aircraft is left unattended: i.e. no qualified flight crew or ground crew are in the cockpit to supervise and monitor the aircraft systems.

Prior to performing this check, the following SUP Adverse Weather procedures should be taken into account when appropriate:
- Securing the aircraft for cold soak (*Refer to 00020772 **Not found***).
- Water system draining (*Refer to 00002313 **Not found***).
- Ground operations in heavy rain (*Refer to 00020720 **Not found***).
- Operations on contaminated airports (*Refer to 00020725 **Not found***).
- Operations with volcanic ash, sand or dust (*Refer to 00020745 **Not found***).

2 Ident.: PRO-NOR-SOP-23-A-20806934.9001001 / 02 MAY 23
Applicable to: ALL

PARK BRK

PARK BRK handle .... CHECK ON | CM1

L2 *Keep the parking brake on to reduce hydraulic leak rate in the brake accumulator.*

3 Ident.: PRO-NOR-SOP-23-A-20806935.9001001 / 02 MAY 23
Applicable to: ALL

OXYGEN CREW SUPPLY

OXYGEN CREW SUPPLY pb .... OFF | CM2

Ident.: PRO-NOR-SOP-23-A-00010339.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

4 **ADIRS**

All IR MODE selectors.. OFF | CM1

CAUTION	*To avoid damage of the RTLU (Ruder Travel Limit Unit) mechanical stop, the SLAT/FLAP should be retracted before switching ADIRS to OFF. After all ADIRS are set to OFF and if OAT is above 30 °C the flaps lever should be selected to 1+F position to extend the slats and flaps again to avoid the "AIR L (R) WING LEAK" warning.*

L2 *After the shutdown off the ADIRS, wait at least 10 s before turning off the electrical supply, in order to ensure that the ADIRS memorize the latest data.*

Ident.: PRO-NOR-SOP-23-A-00010339.0002001 / 02 MAY 23
Applicable to: MSN 02887

5 **ADIRS**

All IR MODE selectors.. OFF | CM1

CAUTION	*To avoid damage of the RTLU (Ruder Travel Limit Unit) mechanical stop, the SLAT/FLAP should be retracted before switching ADIRS to OFF. After all ADIRS are set to OFF and if OAT is above 30 °C the flaps lever should be selected to 1+F position to extend the slats and flaps again to avoid the "AIR L (R) WING LEAK" warning.*

Note: *The flight crew should not turn off ADIRS during transits at latitudes that are above 82 ° N or 82 ° S, in order to avoid excessive alignment time.*

L2 *After turning off the ADIRS, wait at least 10 s before turning off the electrical supply, in order to ensure that the ADIRS memorize the latest data.*

6 Ident.: PRO-NOR-SOP-23-A-20806937.9001001 / 02 MAY 23
Applicable to: ALL

EXTERIOR LIGHTS

EXTERIOR LIGHTS.. OFF | CM2

7 Ident.: PRO-NOR-SOP-23-A-20806938.9001001 / 02 MAY 23
Applicable to: ALL

APU BLEED

APU BLEED pb-sw	OFF	CM2

8 Ident.: PRO-NOR-SOP-23-A-20806939.9001001 / 02 MAY 23
Applicable to: ALL

EXTERNAL POWER

EXT PWR pb	AS RQRD	CM2

9 Ident.: PRO-NOR-SOP-23-A-20806940.9001001 / 02 MAY 23
Applicable to: ALL

APU

APU MASTER SW pb-sw	OFF	CM2

L2 *Turn off the APU after all passengers disembarked.*

Ident.: PRO-NOR-SOP-23-A-00010343.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11139

10 EMER LIGHTS AND SIGNS

EMER EXIT LT sw	OFF	CM2
SIGNS sw	OFF	CM2

Ident.: PRO-NOR-SOP-23-A-00010343.0004001 / 02 MAY 23
Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

11 EMER LIGHTS AND SIGNS

EMER EXIT LT sw	OFF	CM2
NO PORTABLE/ELEC DEVICE sw	OFF	CM2

12 Ident.: PRO-NOR-SOP-23-A-20806942.9001001 / 02 MAY 23
Applicable to: ALL

BAT

BAT 1 pb-sw and BAT 2 pb-sw	OFF	CM2

L2 *Wait until the APU flap is fully closed (about 2 min after the APU AVAIL light goes out) before switching off the batteries. Switching the batteries off before the APU flap is closed may cause smoke in the cabin during the next flight.*
If the batteries are off while the APU is running, APU fire extinguishing is not available.

13 Ident.: PRO-NOR-SOP-23-A-20806943.9001001 / 02 MAY 23
Applicable to: ALL

SECURING THE AIRCRAFT CHECKLIST

SECURING THE AIRCRAFT C/L	COMPLETE	CM1-CM2

14 Ident.: PRO-NOR-SOP-23-A-20806944.9001001 / 02 MAY 23
Applicable to: ALL

ELECTRONIC FLIGHT BAG

EFB APPLICATIONS	CLOSE	BOTH
ALL EFB	SWITCH OFF	BOTH

15 Ident.: PRO-NOR-SOP-23-A-20806945.9001001 / 02 MAY 23
Applicable to: ALL

MAINTENANCE BUS

MAINT BUS sw	AS RQRD	CM2

L2 *Should electrical power be required for the crew or servicing personnel, consider setting the overhead MAINT BUS sw (in the forward cabin) to the ON position, prior to setting aircraft power to off.*

COMMUNICATIONS AND STANDARD TERMS

1 Ident.: PRO-NOR-SCO-20806946.9001001 / 02 MAY 23
Applicable to: ALL

Standard phraseology is essential to ensure effective crew communication. The phraseology should be concise and exact. The following Chapter lists the callouts that should be used as standard. They supplement the callouts identified in the SOP.
These standard Airbus callouts are also designed to promote situational awareness, and to ensure crew understanding of systems and their use in line operation.

CHECKLIST CALLOUTS

2 Ident.: PRO-NOR-SCO-20806947.9001001 / 02 MAY 23
Applicable to: ALL

- “CHECK”: A command for the other pilot to check an item.
- “CHECKED”: A response that an item has been checked.
- “CROSSCHECKED”: A callout verifying information from both pilot stations.

If a checklist needs to be interrupted, it must be restarted from the beginning.
Upon completion of a checklist announce: “__CHECKLIST COMPLETE”.

ACTIONS COMMANDED BY PF

Applicable to: ALL

3 Ident.: PRO-NOR-SCO-A-20806948.9001001 / 02 MAY 23

GENERAL

The following commands do not necessarily initiate a guidance mode change, eg.: selected to managed/managed to selected. The intent is to ensure clear, consistent, standard communication between crewmembers.
All actions performed on the FCU and MCDU must be checked on the PFD and ND (eg.: “FL 350 blue”, “FL 200 magenta"). Ensure that the correct FCU knob is used, then verify indications on the PFD/ND.

4 Ident.: PRO-NOR-SCO-A-20806949.9001001 / 02 MAY 23

SET

The “SET” command means using an FCU knob to set a value, but not to change a mode.
SET is accomplished by only rotating the appropriate selection knob.

Example:
- ”SET GO AROUND ALTITUDE__FT”
- “SET FL __”
- “SET HDG __”

5 Ident.: PRO-NOR-SCO-A-20806950.9001001 / 02 MAY 23

MANAGE/PULL

The “MANAGE” command means pushing an FCU knob to engage, or arm, a managed mode or target.

The “PULL” command means pulling an FCU knob to engage a selected mode or target. Example:

- "PULL HDG 090”	(HDG/TRK knob is pulled and turned).
- “MANAGE NAV”	(HDG/TRK knob is pushed).
- “FL 190 PULL”	(ALT knob is turned and pulled).
- “FL 190 MANAGE”	(ALT knob is turned and pushed).
- “PULL SPEED 250 KNOTS”	(SPD/MACH knob is pulled and turned).
- “MANAGE SPEED”	(SPD/MACH knob is pushed).

Note: *If the value was previously set, there is no requirement to repeat the figure. Simply call e.g. PULL HDG: PULL SPEED: FL PULL.*

The VS/FPA knob has no managed function. The standard callouts for the use of this knob are as follows:
V/S Plus (or Minus) 700 PULL, or

FPA Minus 3 ° PULL	(V/S/FPA knob is turned and pulled)
PUSH TO LEVEL OFF	(V/S/FPA knob is pushed)

6 Ident.: PRO-NOR-SCO-A-20806951.9001001 / 02 MAY 23

ARM

The “ARM __” command means arming a system by pushing the specified FCU button.
e.g. : “ARM APPROACH”
e.g. : “ARM LOC.”

7 Ident.: PRO-NOR-SCO-A-20806952.9001001 / 02 MAY 23

ON/OFF

The simple ON or OFF command is used for the autopilot, flight directors, autothrust and the bird (flight path vector).

e.g.: BIRD ON (The HDG-V/S / TRK-FPA pb is pushed.)

FMA

8 Ident.: PRO-NOR-SCO-20806953.9001001 / 02 MAY 23
Applicable to: ALL

The PF should call out any FMA change, unless specified differently (e.g. CAT II & III task sharing). Therefore, the PF should announce:
- All armed modes with the associated color (e.g. blue, magenta): "G/S blue", "LOC blue".
- All active modes without the associated color (e.g. green, white): "NAV", "ALT".

The PM should check and respond, "CHECKED" to all FMA changes called out by the PF.

ALTITUDE

9 Ident.: PRO-NOR-SCO-20806954.9001001 / 02 MAY 23
Applicable to: ALL

The PM calls out "THOUSAND FEET TO LEVEL OFF" when passing 1 000 ft before the cleared altitude or FL, and the PF calls out "checked".

FLAPS OR GEAR CALLOUTS

Applicable to: ALL

10 Ident.: PRO-NOR-SCO-B-20806955.9001001 / 02 MAY 23

FLAPS' CALLOUTS

FLAPS' CONFIGURATION	CALLOUT
1	"FLAPS ONE"
1 + F	"FLAPS ONE"
0	"FLAPS ZERO"

The reply will be given when selecting the new flap position.
e.g.:

	CALLOUT	REMARK
PF	"FLAPS ONE"	
PM	"SPEED CHECKED"	PM checks the speed: - Above the S or F speed and accelerating (Takeoff) - Below VFE next and decelerating (Approach)
	"FLAPS ONE"	PM selects the FLAPS lever position and replies after checking the blue number on the ECAM flaps indicator to confirm the correct selection has been made.

11 Ident.: PRO-NOR-SCO-B-20806956.9001001 / 02 MAY 23

GEAR CALLOUTS

	CALLOUT	REMARKS
PF	"GEAR UP (DOWN)"	
PM	"GEAR UP (DOWN)"	The PM selects the L/G lever position and replies after checking the red lights on the LDG GEAR indicator to confirm gear operation.

FLIGHT PARAMETERS

Ident.: PRO-NOR-SCO-C-00011912.0001001 / 22 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05222

APPROACH

During approach, the PM announces:

- "SPEED" if the speed decreases below the speed target -5 kt or increases above the speed target +10 kt.
- "SINK RATE" when the descent rate exceeds 1 000 ft/min
- "BANK" when bank angle becomes greater than 7 °
- "PITCH" when pitch attitude becomes lower than -2.5 ° or higher than +10 °
- "LOC" or "GLIDE" when either localizer or glide slope deviation is:
  - ½ dot LOC
  - ½ dot GS.
- "CROSS TRACK" when the XTK is greater than 0.1 NM
- "V/DEV" when the vertical deviation is greater than ½ dot
- "COURSE" when greater than ½ dot or 2.5 ° (VOR) or 5 ° (ADF).
- "__ FT HIGH (LOW)" at altitude checks points.

Note: *The PM announces the attitude deviations until landing.*

Ident.: PRO-NOR-SCO-C-00011912.0002001 / 22 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662

APPROACH

During approach, the PM announces:
- "SPEED" if the speed decreases below the speed target -5 kt or increases above the speed target +10 kt
- "SINK RATE" when the descent rate exceeds 1 000 ft/min
- "BANK" when bank angle becomes greater than 7 °
- "PITCH" when pitch attitude becomes lower than -2.5 ° or higher than +7.5 °
- "LOC" or "GLIDE" when either localizer or glide slope deviation is:
  - ½ dot LOC
  - ½ dot GS.
- "CROSS TRACK" when the XTK is greater than 0.1 NM
- "V/DEV" when the vertical deviation is greater than ½ dot
- "COURSE" when greater than ½ dot or 2.5 ° (VOR) or 5 ° (ADF)
- "__ FT HIGH (LOW)" at altitude checks points.

Note: The PM announces the attitude deviations until landing.

Ident.: PRO-NOR-SCO-C-00011912.0003001 / 28 MAY 20
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

APPROACH

During approach, the PM announces:
- "SPEED" if the speed decreases below the speed target -5 kt or increases above the speed target +10 kt
- "SINK RATE" when the descent rate exceeds 1 000 ft/min
- "BANK" when bank angle becomes greater than 7 °
- "PITCH" when pitch attitude becomes lower than -2.5 ° or higher than +10 °
- "LOC" or "GLIDE" when either localizer or glide slope deviation is:
  - ½ dot LOC
  - ½ dot GS.
- "CROSS TRACK" when the XTK is greater than 0.1 NM
- "V/DEV" when the vertical deviation is greater than ½ dot
- "COURSE" when greater than ½ dot or 2.5 ° (VOR) or 5 ° (ADF)
- "__ FT HIGH (LOW)" at altitude checks points.

Note: The PM announces the attitude deviations until landing.

RNAV (RNP) APPROACH

- "LAT-DEV" when L/DEV reaches ½ dot
- "VDEV" when ½ dot deviation above or below path
- "SINK RATE" when the descent rate exceeds 1 000 ft/min
- "BANK" when the bank angle goes above 30 °.

Ident.: PRO-NOR-SCO-C-00011912.0005001 / 28 MAY 20
Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

APPROACH

During approach, the PM announces:

- "SPEED" if the speed decreases below the speed target -5 kt or increases above the speed target +10 kt
- "SINK RATE" when the descent rate exceeds 1 000 ft/min
- "BANK" when bank angle becomes greater than 7 °
- "PITCH" when pitch attitude becomes lower than -2.5 ° or higher than +7.5 °
- "LOC" or "GLIDE" when either localizer or glide slope deviation is:
  - ½ dot LOC
  - ½ dot GS.
- "CROSS TRACK" when the XTK is greater than 0.1 NM
- "V/DEV" when the vertical deviation is greater than ½ dot
- "COURSE" when greater than ½ dot or 2.5 ° (VOR) or 5 ° (ADF)
- "__ FT HIGH (LOW)" at altitude checks points.

Note: The PM announces the attitude deviations until landing.

RNAV (RNP) APPROACH

- "LAT-DEV" when L/DEV reaches ½ dot
- "VDEV" when ½ dot deviation above or below path
- "SINK RATE" when the descent rate exceeds 1 000 ft/min
- "BANK" when the bank angle goes above 30 °.

Ident.: PRO-NOR-SCO-C-00021570.0004001 / 22 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

LANDING

During landing, the PM announces:

- "PITCH PITCH", if the pitch attitude approaches the tail strike pitch limit indicator ◁ , or reaches 7.5 °
- "BANK BANK", if the bank angle reaches 7 °.

Ident.: PRO-NOR-SCO-C-00021570.0001001 / 22 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

LANDING

During landing, the PM announces:

- "PITCH PITCH", if the pitch attitude approaches the tail strike pitch limit indicator ◁ , or reaches 10 °
- "BANK BANK", if the bank angle reaches 7 °.

12 Ident.: PRO-NOR-SCO-C-20806959.9001001 / 02 MAY 23
Applicable to: ALL

GO-AROUND

During a go-around, the PM announces:

- "BANK", if the bank angle becomes greater than 7 °
- "PITCH", if the pitch attitude becomes greater than 20 ° up or less than 10 ° up
- "SINK RATE", if there is no climb rate.

PF/PM DUTIES TRANSFER

13 Ident.: PRO-NOR-SCO-20806960.9001001 / 02 MAY 23
Applicable to: ALL

To transfer control, flight crewmembers must use the following callouts:

- To give control: The pilot calls out "YOU HAVE CONTROL". The other pilot accepts this transfer by calling out "I HAVE CONTROL", before assuming PF duties.
- To take control: The pilot calls out "I HAVE CONTROL". The other pilot accepts this transfer by calling out "YOU HAVE CONTROL", before assuming PM duties.

PILOT/CABIN CREW ANNOUNCEMENTS

14 Ident.: PRO-NOR-SCO-20806961.9001001 / 02 MAY 23
Applicable to: ALL

Crewmembers must use the following announcements:

ACTION	SPANISH	PORTUGUESE
To inform the beginning of refueling	"TRIPULACIÓN, INICIO ABASTECIMIENTO DE COMBUSTIBLE."	"TRIPULAÇÃO, ESTAMOS INICIANDO O ABASTECIMENTO DE COMBUSTÍVEL."
To inform the end of refueling	"TRIPULACIÓN, ABASTECIMIENTO DE COMBUSTIBLE TERMINADO."	"TRIPULAÇÃO, ABASTECIMENTO DE COMBUSTÍVEL FINALIZADO."
To request Slides Arming	"TRIPULACIÓN, PUERTAS EN AUTOMÁTICO, CROSSCHECK Y REPORTAR."	"TRIPULAÇÃO, PORTAS EM AUTOMÁTICO, CROSSCHECK E CONFIRMAR."
To inform takeoff clearance	"TRIPULACIÓN, PRÓXIMOS AL DESPEGUE."	"TRIPULAÇÃO, ESTAMOS PRÓXIMO A DECOLAGEM."
To inform the end of the sterile cockpit during climb / To inform the beginning of the sterile cockpit during descent	"TRIPULACIÓN, 10.000 PIES."	"TRIPULAÇÃO, 10.000 PÉS."
To request cabin to be prepared for landing	"TRIPULACIÓN, ASEGURAR CABINA PARA ATERRIZAR."	"TRIPULAÇÃO, PREPARAR PARA O POUSO."
To advise cabin that the landing is imminent	"TRIPULACIÓN, PRÓXIMOS AL ATERRIZAJE."	"TRIPULAÇÃO, ESTAMOS PRÓXIMO AO POUSO."
To request Slides Disarming	"TRIPULACIÓN, PUERTAS EN MANUAL, CROSSCHECK Y REPORTAR."	"TRIPULAÇÃO, PORTAS EM MANUAL, CROSSCHECK E CONFIRMAR."
To request Emergency Evacuation (The announcement can be followed by the chosen side of the aircraft to be evacuated)	"TRIPULACIÓN, EVACUACIÓN."	"TRIPULAÇÃO, EVACUAÇÃO."
To inform Emergency Descent.	"TRIPULACION, DESCENSO DE "EMERGENCIA, DESCENSO DE EMERGENCIA."	"TRIPULAÇÃO, DESCIDA DE EMERGÊNCIA, DESCIDA DE EMERGÊNCIA."
To inform safe altitude is reached, when the altitude is 14 000 ft MSL or below.	"TRIPULACION, ALTITUD SEGURA."	"TRIPULAÇÃO, ALTITUDE SEGURA."

SUMMARY FOR EACH PHASE

15 Ident.: PRO-NOR-SCO-D-20806962.9001001 / 02 MAY 23
Applicable to: ALL

Communication between the pilots and the ground mechanics may be in the pilots' native language. At stations outside their country of origin and where the language is not the same as the pilots', the communication must be in English.

16 Ident.: PRO-NOR-SCO-D-20806963.9001001 / 02 MAY 23
Applicable to: ALL

TO REMOVE GROUND SUPPLY		
EVENT	**PF or PM**	**GND Mech**
Initial ground contact	GROUND (from) COCKPIT	COCKPIT (from) GROUND
External __ disconnection	REMOVE EXTERNAL __	EXTERNAL__ REMOVED

17 Ident.: PRO-NOR-SCO-D-20806964.9001001 / 02 MAY 23
Applicable to: ALL

EVENT	PF	GND MECH
Before requesting start up clearance	GROUND, CONFIRM READY TO PUSH BACK?	COCKPIT, SAFETY CHECK OK READY TO PUSH BACK

Note: *When ground mechanic confirms "SAFETY CHECK OK" it means:*

NOSE GEAR STEERING PIN INSTALLED AND ALL CABIN AND CARGO DOORS, PANEL AND ENGINE COWLING CLOSED AND LOCKED.
PITOTS AND STATIC PORTS CHECKED AND CLEAR, GEAR PINS REMOVED.
SAFETY CHECK OK. READY FOR PUSH BACK.

18 Ident.: PRO-NOR-SCO-D-20806965.9001001 / 02 MAY 23
Applicable to: ALL

PUSH BACK/ENGINE START		
EVENT	**PF**	**GND MECH**
When ready for pushback, and pushback clearance received from ATC	GROUND, PARKING BRAKE OFF. REMOVE WHEEL CHOCKS, START PUSH BACK, RUNWAY XX	
During pushback		PUSH BACK IN PROGRESS TO RUNWAY XX
When ready to start engines	CLEAR FOR ENGINE START?	AREA CLEAR FOR ENGINE START

Continued on the following page

Continued from the previous page

PUSH BACK/ENGINE START		
EVENT	**PF**	**GND MECH**
	STARTING ENG(S)__	
When pushback completed	PARKING BRAKE ON	PUSH BACK COMPLETED, SET PARKING BRAKE ON.
When ready to disconnect (after engine started, and parameters are stabilized)	CLEAR TO DISCONNECT, WAITING FOR SIGNAL	EQUIPMENT REMOVED (hand signals on left/right)

Ident.: PRO-NOR-SCO-D-00011921.0001001 / 02 MAY 23

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

19

TAXI		
EVENT	**PF**	**PM**
When taxi clearance obtained	CLEAR LEFT (RIGHT) SIDE	CLEAR RIGHT (LEFT) SIDE
Brake transfer check	BRAKE CHECK	PRESSURE ZERO
Flight control check (can be done before start of taxi)	FLIGHT CONTROL CHECK	
1. Elevators		FULL UP, FULL DOWN, NEUTRAL
2. Ailerons/Spoilers		FULL LEFT, FULL RIGHT, NEUTRAL
3. Rudder(1)	RUDDER	FULL LEFT, FULL RIGHT, NEUTRAL

(1) *The PM should follow pedal movement with his/her feet*

Ident.: PRO-NOR-SCO-D-00011921.0002001 / 02 MAY 23

Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

20

TAXI		
EVENT	**PF**	**PM**
When taxi clearance obtained	CLEAR LEFT (RIGHT) SIDE	CLEAR RIGHT (LEFT) SIDE
Brake check	BRAKE CHECK	PRESSURE ZERO
Flight control check (can be done before start of taxi)	FLIGHT CONTROL CHECK	
1. Elevators		FULL UP, FULL DOWN, NEUTRAL

Continued on the following page

Continued from the previous page

TAXI		
EVENT	**PF**	**PM**
2. Ailerons/Spoilers		FULL LEFT, FULL RIGHT, NEUTRAL
3. Rudder(1)	RUDDER	FULL LEFT, FULL RIGHT, NEUTRAL

(1) *The PM should follow pedal movement with his/her feet*

21 Ident.: PRO-NOR-SCO-D-20806967.9001001 / 02 MAY 23
Applicable to: ALL

TAKEOFF		
EVENT	**PF**	**PM**
Setting thrust levers to initial stabilization value	TAKEOFF	
Before passing 80 kt		THRUST SET
At 100 kt	CHECKED	ONE HUNDRED KNOTS
At V1		V1
At VR		ROTATE
Gear retraction	GEAR UP	POSITIVE CLIMB GEAR UP
If AP is engaged by PM	AP 1(2) ON	

22 Ident.: PRO-NOR-SCO-D-20806968.9001001 / 02 MAY 23
Applicable to: ALL

ALTIMETER SETTING CHANGES TO/FROM QNH/QFE-STD		
EVENT	**PF**	**PM**
Barometric setting change and subsequent altimeter cross-check	SET QNH__ CHECKED	QNH_CROSS-CHECKED PASSING_FT NOW
Barometric setting change and subsequent altimeter cross-check	SET STANDARD CHECKED	STANDARD CROSS-CHECKED PASSING FL__NOW

23 Ident.: PRO-NOR-SCO-D-20806969.9001001 / 02 MAY 23
Applicable to: ALL

APPROACH AND LANDING		
EVENT	**PF**	**PM**
Activation of approach Phase	ACTIVATE APPROACH PHASE	APPROACH PHASE ACTIVATED
RA alive		RADIO ALTIMETER ALIVE(1) (2)

Continued on the following page

Continued from the previous page

APPROACH AND LANDING

EVENT	PF	PM
	CHECKED	
At F-G/S*, G/S*, FINAL APP or below the go-around altitude for approach with FPA guidance	● **If the PF requests the PM to set the go-around altitude:** SET GA ALTITUDE_FT	GA ALTITUDE_SET
	● **If the PF sets the go-around altitude:** GA ALTITUDE_SET	CHECKED
FDP	CHECKED	PASSING__(Fix Name),__ FT,
1 000 ft RA	CHECKED	ONE THOUSAND(2)
100 ft above MDA/DH	CHECKED	ONE HUNDRED ABOVE(2)
Alert Height	CONTINUE	ALERT HEIGHT
MDA/DH visual reference(6)	CONTINUE	MINIMUM(2)
MDA/DH no visual reference(6)	GO AROUND-FLAPS	MINIMUM(2)
		ONE HUNDRED(2) FIFTY(2)
After touchdown Ground spoilers extended REV green on EWD		SPOILERS(3) REVERSE GREEN(4)
Deceleration		DECEL(5)
Autobrake disengagement	MANUAL BRAKING (7)	AUTOBRAKE OFF (8)

Continued on the following page

Continued from the previous page

APPROACH AND LANDING		
EVENT	**PF**	**PM**
At 70 kt	CHECKED	SEVENTY KNOTS

(1) Flight crew awareness, flight crew should now keep RA in scan to landing.

(2) PM monitors pin-programmed auto callout, or announces if inoperative.

(3) If the spoilers are not extended, call NO SPOILERS.

(4) If the reverse deployment is not as expected, call NO REVERSE ENGINE__ or NO REVERSE, as appropriate.

(5) DECEL callout means that the deceleration is felt by the flight crew, and confirmed by the speed trend on the PFD.If no positive deceleration, NO DECEL.

(6) In the case of circling approach, this callout should be performed at the latest, at the MAP.

(7) PF announces MANUAL BRAKING when using the brake pedals if: Autobrake was selected for the landing, and No AUTOBRAKE OFF callout from the PM.

(8) PM announces AUTOBRAKE OFF if: autobrake does not engage as expected or autobrake disengages, and No MANUAL BRAKING callout from the PF.

24 Ident.: PRO-NOR-SCO-D-20806970.9001001 / 02 MAY 23
Applicable to: ALL

DISCONTINUED APPROACH		
EVENT	**PF**	**PM**
DISCONTINUED APPROACH decision	CANCEL APPROACH	

25 Ident.: PRO-NOR-SCO-D-20806971.9001001 / 02 MAY 23
Applicable to: ALL

GO AROUND		
EVENT	**PF**	**PM**
GO AROUND decision	GO AROUND - FLAPS	
Flaps retraction		FLAPS__
Gear retraction	GEAR UP	POSITIVE CLIMB GEAR UP

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SAFETY EXTERIOR INSPECTION

1 Ident.: PRO-NOR-TSK-20806972.9001001 / 02 MAY 23
Applicable to: ALL

CM1	CM2
	WHEEL CHOCKS....................CHECK
	L/G DOORS....................CHECK POSITION
	APU AREA....................CHECK

PRELIMINARY COCKPIT PREPARATION

2 Ident.: PRO-NOR-TSK-A-20806973.9001001 / 02 MAY 23
Applicable to: ALL

AIRCRAFT SETUP :

CM1	CM2
	ENG 1, 2 MASTER LEVERS....................OFF
	ENG MODE selector ....NORM
	* WEATHER RADAR....................OFF
	* WINDSHEAR/PWS sw ....OFF
	L/G lever ....DOWN
	Both WIPER selectors....................OFF

3 Ident.: PRO-NOR-TSK-A-20806974.9001001 / 02 MAY 23
Applicable to: ALL

BATTERIES/EXTERNAL POWER :

CM1	CM2
	BAT....................CHECK/AUTO
	EXT PWR pb ....ON

4 Ident.: PRO-NOR-TSK-A-20806975.9001001 / 02 MAY 23
Applicable to: ALL

APU FIRE TEST/APU START :

CM1	CM2
	RMP....................CHECK ON/SET
	APU FIRE TEST....................PERFORM
	APU....................START
	•When the APU is AVAIL: AIR COND panel....................SET
	* EXT PWR pb ....AS RQRD

5 Ident.: PRO-NOR-TSK-A-20806976.9001001 / 02 MAY 23
Applicable to: ALL

ADIRS :

CM1	CM2
	All IR MODE selectors....................NAV

6 Ident.: PRO-NOR-TSK-A-20806977.9001001 / 02 MAY 23
Applicable to: ALL

COCKPIT LIGHTS :

CM1	CM2
* COCKPIT LIGHTS....................AS RQRD	* COCKPIT LIGHTS....................AS RQRD

Ident.: PRO-NOR-TSK-A-00024974.0001001 / 02 MAY 23
Applicable to: MSN 01459

7 **EFB/ ACARS INITIALIZATION :**

CM1	CM2
All EFB....................START	All EFB....................START
EFB/eQRH Version....................CHECK	EFB/eQRH Version....................CHECK
* ACARS ....INITIALIZE	
FMGS PRE-INITIALIZATION:	
* ENGINE & AIRCRAFT TYPE............CHECK	
* DATABASE VALID............CHECK	
* FLT NBR & FROM/TO....................INSERT/CHECK	
* EFB SYNCHRO AVIONICS....................CLICK	* EFB SYNCHRO AVIONICS....................CLICK
* EFB STATUS page....................INSERT/CHECK	* EFB STATUS page....................INSERT/CHECK

Ident.: PRO-NOR-TSK-A-00024974.0002001 / 02 MAY 23
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

8 **EFB INITIALIZATION :**

CM1	CM2
All EFB....................START	All EFB....................START
EFB/eQRH Version....................CHECK	EFB/eQRH Version....................CHECK
FMGS PRE-INITIALIZATION:	
* ENGINE & AIRCRAFT TYPE............CHECK	
* DATABASE VALID............CHECK	
* FLT NBR & FROM/TO....................INSERT/CHECK	
* EFB SYNCHRO AVIONICS....................CLICK	* EFB SYNCHRO AVIONICS....................CLICK
* EFB STATUS page....................INSERT/CHECK	* EFB STATUS page....................INSERT/CHECK

9 Ident.: PRO-NOR-TSK-A-20806979.9001001 / 02 MAY 23
Applicable to: ALL

<table>
<tr><th colspan="2"><u>AIRCRAFT ACCEPTANCE :</u></th></tr>
<tr><th>CM1</th><th>CM2</th></tr>
<tr><td>* RCL pb ....PRESS 3 s</td><td></td></tr>
<tr><td colspan="2">* LOGBOOK AND MEL/CDL ITEMS.. CHECK</td></tr>
<tr><td colspan="2">* AIRCRAFT CONFIGURATION SUMMARY.. CHECK</td></tr>
<tr><td colspan="2">* OEB...CHECK</td></tr>
<tr><td>* AIRCRAFT ACCEPTANCE............................ PERFORM</td><td></td></tr>
</table>

10 Ident.: PRO-NOR-TSK-A-20806980.9001001 / 02 MAY 23
Applicable to: ALL

<table>
<tr><th colspan="2"><u>PRELIMINARY PERFORMANCE DETERMINATION :</u></th></tr>
<tr><th>CM1</th><th>CM2</th></tr>
<tr><td>* AIRFIELD DATA .... OBTAIN</td><td>* AIRFIELD DATA .... OBTAIN</td></tr>
<tr><td colspan="2">•If the LOADSHEET application is used:</td></tr>
<tr><td>* PRELIMINARY LOADING...COMPUTE/CROSSCHECK(1)</td><td>* PRELIMINARY LOADING...COMPUTE/CROSSCHECK(1)</td></tr>
<tr><td>* MEL/CDL ITEMS............................ CHECK ACTIVATED</td><td>* MEL/CDL ITEMS............................ CHECK ACTIVATED</td></tr>
<tr><td colspan="2">NAV CHARTS CLIPBOARD...PREPARE</td></tr>
<tr><td>* PRELIM T.O PERF DATA..............................COMPUTE</td><td>* PRELIM T.O PERF DATA..............................COMPUTE</td></tr>
<tr><td colspan="2">* PRELIM T.O PERF DATA.. CROSSCHECK</td></tr>
</table>

(1) *In the event of a short turn around time, the PRELIMINARY PERFORMANCE DETERMINATION may be done after returning from EXTERIOR WALKAROUND.*

Ident.: PRO-NOR-TSK-A-00024979.0002001 / 02 MAY 23
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

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<table>
<tr><th colspan="2"><u>BEFORE WALKAROUND :</u></th></tr>
<tr><th>PF</th><th>PM</th></tr>
<tr><td></td><td>* ECAM OXY PRESS/HYD QTY/ENG OIL QTY..... CHECK</td></tr>
<tr><td></td><td>FLAPS.. CHECK POSITION</td></tr>
<tr><td></td><td>* SPEED BRAKE lever ...... CHECK RET AND DISARMED</td></tr>
<tr><td></td><td>* ACCU PRESS..CHECK</td></tr>
<tr><td></td><td>* PARK BRK handle ....ON</td></tr>
<tr><td></td><td>* BRAKES PRESS indicator...................................CHECK</td></tr>
<tr><td></td><td>EMER EQPT..CHECK</td></tr>
<tr><td></td><td>RAIN REPELLENT ◁ ....CHECK</td></tr>
<tr><td></td><td>C/B PANELS..CHECK</td></tr>
</table>

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BEFORE WALKAROUND :

PF	PM
	* GEAR PINS......................CHECK ONBOARD/STOWED
* EXTERIOR WALKAROUND..PERFORM(1)	

(1) *The CM1 must perform the complete EXTERIOR WALKAROUND procedure when taking on the aircraft, however due to operational reasons this action may be delegated to CM2. On subsequent flights, unless there is a flight crew change or aircraft change, the PM must perform the subsequent EXTERIOR WALKAROUNDS.*

Ident.: PRO-NOR-TSK-A-00024979.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

12 **BEFORE WALKAROUND :**

PF	PM
	* ECAM OXY PRESS/HYD QTY/ENG OIL QTY..... CHECK
	FLAPS.. CHECK POSITION
	* SPEED BRAKE lever ...... CHECK RET AND DISARMED
	* ACCU PRESS...CHECK
	* PARK BRK handle ....ON
	* BRAKES PRESS indicator..................................CHECK
	ALTN BRAKING... CHECK
	EMER EQPT...CHECK
	RAIN REPELLENT ◁ ....CHECK
	C/B PANELS..CHECK
	* GEAR PINS ....CHECK ONBOARD/STOWED
* EXTERIOR WALKAROUND..PERFORM(1)	

(1) *The CM1 must perform the complete EXTERIOR WALKAROUND procedure when taking on the aircraft, however due to operational reasons this action may be delegated to CM2. On subsequent flights, unless there is a flight crew change or aircraft change, the PM must perform the subsequent EXTERIOR WALKAROUNDS.*

COCKPIT PREPARATION

13 Ident.: PRO-NOR-TSK-B-20806982.9001001 / 02 MAY 23
Applicable to: ALL

OVERHEAD PANEL :	
PF	**PM**
As a general rule, during the scan sequence: * All white lights (except MAINTENANCE panel)..........OFF	
* RCDR GND CTL pb-sw ....ON	
CVR TEST pb ....PRESS	
CAPT & PURS/CAPT sw .... CAPT	
EXTERIOR LIGHTS... SET	
* SIGNS panel..SET	
PROBE/WINDOW HEAT pb-sw ....AUTO	
LDG ELEV..AUTO	
* BLEED 2...AS RQRD(1)	
* PACK 1...OFF	
* PACK FLOW...AS RQRD	
ELEC panel...CHECK	
BAT... CHECK	
ENG FIRE...CHECK/TEST	
AUDIO SWITCHING..NORM	
CARGO AIR COND panel.................................... AS RQRD	
PA (3rd occupant)..RECEPT	
MAINT panel..CHECK	

(1) *ENG 2 BLEED should be set to OFF for SETWA operations.*

14 Ident.: PRO-NOR-TSK-B-20806983.9001001 / 02 MAY 23
Applicable to: ALL

CTR INSTRUMENT PANEL :	
PF	**PM**
* ISIS/STBY INSTRUMENTS................................ CHECK	
* CLOCK...CHECK/SET	
* A/SKID & N/W STRG sw ....ON	

Ident.: PRO-NOR-TSK-B-00024982.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 05005-05987, 06097, 06121, 06139-09324, 10949-11139

15

PEDESTAL :	
PF	**PM**
ACP...CHECK ON/SET	
* COCKPIT DOOR sw .... NORM	
SWITCHING PANEL.. NORM	
* THRUST LEVERS.. IDLE	

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PEDESTAL :

PF	PM
* ENG MASTER LEVERS.. OFF	
* ENG MODE selector .... NORM	
* ACCU PRESS...CHECK	
* PARK BRK handle ....AS RQRD	
* BRAKES PRESS.. CHECK	
GRAVITY GEAR EXTN........................... CHECK STOWED	
* ATC...STBY	
* FMS...PREPARE(1)	
	* FMS PREPARATION..............................CROSSCHECK
	* EFB/MCDU GREEN DOT.............................. COMPARE

(1) *The PF must perform FMGS data insertion except when he/she is performing the exterior walkaround procedure. The crew member who perform de EXTERIOR WALKAROUND must always perform the FMGS data confirmation.*

Ident.: PRO-NOR-TSK-B-00024982.0003001 / 02 MAY 23
Applicable to: MSN 04827-04974

16

PEDESTAL :

PF	PM
ACP... CHECK ON/SET	
* COCKPIT DOOR sw .... NORM	
SWITCHING PANEL... NORM	
* THRUST LEVERS... IDLE	
* ENG MASTER LEVERS..OFF	
* ENG MODE selector .... NORM	
* ACCU PRESS...CHECK	
* PARK BRK handle ....AS RQRD	
* BRAKES PRESS..CHECK	
GRAVITY GEAR EXTN...........................CHECK STOWED	
* ATC...STBY	
* MSG RECORD (MCDU).......................................ERASE	
* FMS...PREPARE(1)	
	* FMS PREPARATION..............................CROSSCHECK
	* EFB/MCDU GREEN DOT.............................. COMPARE

(1) *The PF must perform FMGS data insertion except when he/she is performing the exterior walkaround procedure. The crew member who perform de EXTERIOR WALKAROUND must always perform the FMGS data confirmation.*

17 Ident.: PRO-NOR-TSK-B-20807016.9001002 / 02 MAY 23
Applicable to: ALL

RMP :	
PF	**PM**
RMP..CHECK ON/SET	

18 Ident.: PRO-NOR-TSK-B-20806985.9001001 / 02 MAY 23
Applicable to: ALL

GLARESHIELD :	
PF	**PM**
•When both flight crewmembers are seated:	
* BAROMETRIC REFERENCE...........SET/CROSSCHECK	* BAROMETRIC REFERENCE...........SET/CROSSCHECK
* FD...CHECK ON	* FD...CHECK ON
* LS/ILS...AS RQRD	* LS/ILS...AS RQRD
* ND mode and range....................................... AS RQRD	* ND mode and range....................................... AS RQRD
* VOR/ADF selector..AS RQRD	* VOR/ADF selector..AS RQRD
* FCU...SET	

19 Ident.: PRO-NOR-TSK-B-20806986.9001001 / 02 MAY 23
Applicable to: ALL

LATERAL CONSOLE AND PF/PM INSTRUMENT PANELS :	
PF	**PM**
OXYGEN MASK..TEST	OXYGEN MASK..TEST
PFD-ND brightness...AS RQRD	PFD-ND brightness...AS RQRD
LOUDSPEAKER knob .... SET	LOUDSPEAKER knob .... SET
* PFD-ND...CHECK	* PFD-ND...CHECK
* LDG ELEV (ECAM)................................CHECK AUTO	* IRS ALIGN... CHECK
* ECAM STATUS...CHECK	
* FOB...CHECK	* FOB...CHECK
* DEPARTURE BRIEFING.. PERFORM	
* COCKPIT PREPARATION C/L.. COMPLETE	

BEFORE PUSHBACK OR START

Applicable to: ALL

20 Ident.: PRO-NOR-TSK-C-20806987.9001001 / 02 MAY 23

BEFORE PUSHBACK/START CLEARANCE :

PF	PM
FINAL LOADSHEET..........CHECK	FINAL LOADSHEET..........CHECK
FUEL ON BOARD..........CHECK	FUEL ON BOARD..........CHECK
•If takeoff conditions changed: FINAL T.O PERF DATA..........RECOMPUTE FMS T.O DATA..........REVISE	FINAL T.O PERF DATA..........RECOMPUTE
	FINAL T.O PERF DATA..........CROSSCHECK
	EFB/MCDU GREEN DOT..........COMPARE
SEATING POSITION..........ADJUST	SEATING POSITION..........ADJUST
FMS PERF TO page..........SELECT	FMS F-PLN page..........SELECT
	AIR CONDITIONING UNITS........CHECK DISCONNECTED
	EXT PWR..........CHECK AVAIL
	EXT PWR DISCONNECTION..........REQUEST

21 Ident.: PRO-NOR-TSK-C-20806988.9001001 / 02 MAY 23

AT PUSHBACK/START CLEARANCE :

PF	PM
SLIDES ARMED..........ANNOUNCE(1)	
SAFETY CHECK..........OBTAIN	
	PUSHBACK/START CLEARANCE..........OBTAIN
BEACON sw ....ON	
	ATC..........SET FOR OPERATIONS
WINDOWS/DOORS..........CHECK CLOSED	WINDOWS/DOORS..........CHECK CLOSED
SLIDES..........CHECK ARMED	SLIDES..........CHECK ARMED
THRUST LEVERS..........IDLE	
ACCU PRESS..........CHECK	
•If pushback is not required: PARK BRK handle ....ON BEFORE START C/L..........COMPLETE	
•If pushback is required: N/W STEER DISC MEMO..........CHECK DISPLAYED BEFORE START C/L..........COMPLETE	
PARK BRK handle ....OFF **•When pushback is completed:** PARK BRK handle ....ON BRAKE PRESS ....CHECK	

(1) *The pilot in command will perform the Slides Armed announcement.*

ENGINE START

Ident.: PRO-NOR-TSK-00024899.0004001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

22

PF	PM
THRUST LEVERS..IDLE	
ENG MODE selector ....IGN/START	
ENG DUAL COOLING..AS RQRD	
ENGINE 1 START.. ANNOUNCE	
ENG 1 MASTER LEVER..ON	
ENG IDLE PARAMETERS...................................... CHECK	
REPEAT THE START SEQUENCE FOR ENG 2	

ENGINE START

Ident.: PRO-NOR-TSK-00024899.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

23

PF	PM
THRUST LEVERS..IDLE	
ENG MODE selector ....IGN/START	
ENGINE 1 START.. ANNOUNCE	
ENG 1 MASTER LEVER..ON	
ENG IDLE PARAMETERS...................................... CHECK	
REPEAT THE START SEQUENCE FOR ENG 2	

ENGINE START FOR ONE ENGINE TAXI

Ident.: PRO-NOR-TSK-20800673.9001001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

24

PF	PM
BRAKE ACCU PRESS... CHECK	
ENG MODE selector ....IGN/START	
ENG DUAL COOLING..AS RQRD	
ENGINE 1 START.. ANNOUNCE	
ENG 1 MASTER LEVER..ON	
ENG IDLE PARAMETERS...................................... CHECK	
X BLEED..OPEN	

ENGINE START FOR ONE ENGINE TAXI

Ident.: PRO-NOR-TSK-20800673.9001002 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

25

PF	PM
BRAKE ACCU PRESS...CHECK	
ENG MODE selector ....IGN/START	
ENGINE 1 START..ANNOUNCE	
ENG 1 MASTER LEVER..ON	
ENG IDLE PARAMETERS.......................................CHECK	
X BLEED..OPEN	

AFTER START

Ident.: PRO-NOR-TSK-00024894.0003001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

26

PF	PM
ENG MODE selector...NORM	
ENG DUAL COOLING..OFF	
APU BLEED pb-sw ....OFF	GND SPLRS...ARM
ANTI ICE..AS RQRD	RUD TRIM...CHECK ZERO
	FLAPS... SET
•If the APU is not required: APU MASTER SW pb-sw ....OFF	PITCH TRIM...SET
ECAM STATUS.. CHECK	ECAM STATUS... CHECK
NW STRG DISC MEMO............. CHECK NOT DISPLAYED	
CLEAR TO DISCONNECT...............................ANNOUNCE	
AFTER START C/L.. COMPLETE	AFTER START C/L.. COMPLETE

AFTER START

Ident.: PRO-NOR-TSK-00024894.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

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PF	PM
ENG MODE selector...NORM	
APU BLEED pb-sw ....OFF	GND SPLRS...ARM
ANTI ICE..AS RQRD	RUD TRIM...CHECK ZERO
	FLAPS... SET

Continued on the following page

Continued from the previous page

PF	PM
•If the APU is not required: APU MASTER SW pb-sw ....OFF	PITCH TRIM............SET
ECAM STATUS............CHECK	ECAM STATUS............CHECK
NW STRG DISC MEMO............CHECK NOT DISPLAYED	
CLEAR TO DISCONNECT............ANNOUNCE	
AFTER START C/L............COMPLETE	AFTER START C/L............COMPLETE

AFTER START FOR ONE ENGINE TAXI

Ident.: PRO-NOR-TSK-20800674.9001001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

28

PF	PM
ENG MODE selector............NORM	
ENG DUAL COOLING............OFF	
APU BLEED pb-sw ....OFF	GND SPLRS............ARM
ANTI ICE............AS RQRD	RUD TRIM............CHECK ZERO
	FLAPS............SET
	PITCH TRIM............SET
NW STRG DISC MEMO............CHECK NOT DISPLAYED	
CLEAR TO DISCONNECT............ANNOUNCE	
GROUND EQPT and MECHANIC............REMOVED	

AFTER START FOR ONE ENGINE TAXI

Ident.: PRO-NOR-TSK-20800674.9001002 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

29

PF	PM
ENG MODE selector............NORM	
APU BLEED pb-sw ....OFF	GND SPLRS............ARM
ANTI ICE............AS RQRD	RUD TRIM............CHECK ZERO
	FLAPS............SET
	PITCH TRIM............SET
NW STRG DISC MEMO............CHECK NOT DISPLAYED	
CLEAR TO DISCONNECT............ANNOUNCE	
GROUND EQPT and MECHANIC............REMOVED	

AFTER START FOR ONE ENGINE TAXI SETWA

Ident.: PRO-NOR-TSK-20800675.9001001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

30

PF	PM
ENG MODE selector......NORM	
ENG DUAL COOLING......OFF	
APU BLEED pb-sw......OFF	GND SPLRS......ARM
ANTI ICE......AS RQRD	RUD TRIM......CHECK ZERO
	FLAPS......SET
APU MASTER sw......OFF	PITCH TRIM......SET
NW STRG DISC MEMO......CHECK NOT DISPLAYED	
CLEAR TO DISCONNECT......ANNOUNCE	
GROUND EQPT and MECHANIC......REMOVED	

AFTER START FOR ONE ENGINE TAXI SETWA

Ident.: PRO-NOR-TSK-20800675.9001002 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

31

PF	PM
ENG MODE selector......NORM	
APU BLEED pb-sw......OFF	GND SPLRS......ARM
ANTI ICE......AS RQRD	RUD TRIM......CHECK ZERO
	FLAPS......SET
APU MASTER sw......OFF	PITCH TRIM......SET
NW STRG DISC MEMO......CHECK NOT DISPLAYED	
CLEAR TO DISCONNECT......ANNOUNCE	
GROUND EQPT and MECHANIC......REMOVED	

ONE ENGINE TAXI

Ident.: PRO-NOR-TSK-20800676.9001001 / 02 MAY 23
32 **Applicable to: MSN 01143-11293**

33
34

PF	PM
BEFORE ONE ENGINE TAXI C/L......COMPLETE	
	TAXI CLEARANCE......OBTAIN
EXTERIOR LIGHTS......SET	
Y ELEC PUMP......ON	
PARK BRK handle......OFF	

Continued on the following page

Continued from the previous page

BRAKES........CHECK	BRAKE FAN ◁ pb ....AS RQRD
	BRAKES PRESSURE........CHECK AT ZERO
	Engine 2 Start: (1)
	Y ELEC PUMP........OFF
	APU BLEED........ON(2)
	ENG MODE selector ....IGN/START
	ENG 2 START........ANNOUNCE
	ENG MASTER 2 ....ON
	ENG IDLE PARAMETERS........CHECK
	ENG MODE selector ....NORM
	APU BLEED........OFF
	APU MASTER sw ....OFF
	X BLEED........AUTO
	ANTI ICE ....AS RQRD
ECAM STATUS........CHECK	ECAM STATUS........CHECK
AFTER START C/L........COMPLETE	AFTER START C/L........COMPLETE
FLT CTL........CHECK	FLT CTL........CHECK
	ATC CLEARANCE........CONFIRM
	FMS F-PLN/SPD........CHECK
	FCU ALT/HDG........SET
	BOTH FD........CHECK ON
PFD/ND........CHECK	PFD/ND........CHECK
DEPARTURE BRIEFING........CONFIRM	
	AUTO BRK MAX pb-sw ....ON
TERR ON ND ◁ ....AS RQRD	TERR ON ND ◁ ....AS RQRD
	ATC CODE/MODE........CONFIRM/SET FOR TAKEOFF
	ENG MODE selector ....AS RQRD
	WEATHER RADAR ....ON
	PREDICTIVE WINDSHEAR SYSTEM ◁ ....AUTO
	T.O CONFIG pb ....TEST
	T.O MEMO........CHECK NO BLUE
CABIN REPORT........RECEIVE	CABIN REPORT........RECEIVE
TAXI C/L........COMPLETE	TAXI C/L........COMPLETE

(1) *The PM will be responsible for starting the 2nd engine*

(2) *To allow the correct PRV closing cycle, wait 10 s before selecting ENG MODE selector to IGN / START.*

ONE ENGINE TAXI SETWA

Ident.: PRO-NOR-TSK-20800716.9001003 / 02 MAY 23

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

35

PF	PM
BEFORE ONE ENGINE TAXI C/L .... COMPLETE	BEFORE ONE ENGINE TAXI C/L .... COMPLETE
	TAXI CLEARANCE...OBTAIN
•Taxi clearance obtained:	
EXTERIOR LIGHTS...SET	
Y ELEC PUMP... ON	
PARKING BRAKE handle..OFF	BRAKES PRESSURE..............................CHECK AT ZERO
THRUST LEVERS... AS RQRD	
BRAKES...CHECK	BRAKES PRESSURE..............................CHECK AT ZERO
	ENGINE 2 START (1)
	Y ELEC PUMP...OFF
	ENG MODE selector...IGN/START
ENG 1 THR LEVER....... ADJUST FOR BLEED PRESSURE	
	ENG 2 START...ANNOUNCE
	ENG MASTER 2...ON
ENG 1 THR LEVER..IDLE	ENG IDLE PARAMETERS.....................................CHECK
	ENG MODE selector..NORM
	X BLEED... AUTO
	ENG 2 BLEED..ON
	ENG ANTI-ICE pb-sw ....AS RQRD
	WING ANTI-ICE pb-sw ....AS RQRD
ECAM STATUS.. CHECK	ECAM STATUS.. CHECK
AFTER START C/L... COMPLETE	AFTER START C/L... COMPLETE

PF	PM
FLT CTL .... CHECK	FLT CTL .... CHECK
• ATC clearance obtained:	
	ATC CLEARANCE...CONFIRM
•If takeoff conditions changed:	
FINAL T.O PERF DATA........................... RECOMPUTE	FINAL T.O PERF DATA........................... RECOMPUTE
	FMS T.O DATA... REVISE
FMS REVISED T.O PERF DATA............CROSSCHECK	
EFB/MCDU GREEN DOT............................. COMPARE	
	FLAPS lever.................................... AS APPROPRIATE
	FMS F-PLAN / SPD .... CHECK
	FCU ALT/HDG ....SET
	BOTH FD ....CHECK ON

Continued on the following page

Continued from the previous page

PF	PM
PFD/ND .... CHECK	PFD/ND .... CHECK
DEPARTURE BRIEFING.......... CONFIRM	
	AUTO BRK MAX pb-sw.......... ON
TERR ON ND .... AS RQRD	TERR ON ND .... AS RQRD
	ATC CODE/MODE.......... CONFIRM/SET FOR TAKEOFF
	ENG MODE selector.......... AS RQRD
	WEATHER RADAR.......... ON
	PREDICTIVE WINDSHEAR SYSTEM .... AUTO
	T.O. CONFIG pb.......... TEST
	T.O MEMO.......... CHECK NO BLUE
CABIN REPORT.......... RECEIVE	CABIN REPORT.......... RECEIVE
TAXI C/L.......... COMPLETE	TAXI C/L.......... COMPLETE

(1) *The PM will be responsible for starting the 2nd engine.*

ONE ENGINE TAXI SETWA

Ident.: PRO-NOR-TSK-20800716.9001002 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

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PF	PM
BEFORE ONE ENGINE TAXI C/L .... COMPLETE	BEFORE ONE ENGINE TAXI C/L .... COMPLETE
	TAXI CLEARANCE.......... OBTAIN
•Taxi clearance obtained:	
EXTERIOR LIGHTS.......... SET	
Y ELEC PUMP.......... ON	
PARKING BRAKE handle.......... OFF	BRAKES PRESSURE.......... CHECK AT ZERO
THRUST LEVERS.......... AS RQRD	
BRAKES.......... CHECK	BRAKES PRESSURE.......... CHECK AT ZERO
	ENGINE 2 START (1)
	Y ELEC PUMP.......... OFF
	PACK 2.......... OFF
	ENG MODE selector.......... IGN/START
ENG 1 THR LEVER.......... IDLE	
	ENG 2 START.......... ANNOUNCE
	ENG MASTER 2.......... ON
	ENG IDLE PARAMETERS.......... CHECK
	ENG MODE selector.......... NORM
	X BLEED.......... AUTO
	ENG 2 BLEED.......... ON
	PACK 2.......... ON

Continued on the following page

Continued from the previous page

PF	**PM**
	ENG ANTI-ICE pb-sw ....AS RQRD
	WING ANTI-ICE pb-sw ....AS RQRD
ECAM STATUS........................CHECK	ECAM STATUS........................CHECK
AFTER START C/L........................COMPLETE	AFTER START C/L........................COMPLETE

PF	**PM**
FLT CTL ....CHECK	FLT CTL ....CHECK
• ATC clearance obtained:	
	ATC CLEARANCE........................CONFIRM
•If takeoff conditions changed:	
FINAL T.O PERF DATA........................RECOMPUTE	FINAL T.O PERF DATA........................RECOMPUTE
	FMS T.O DATA........................REVISE
FMS REVISED T.O PERF DATA............CROSSCHECK	
EFB/MCDU GREEN DOT........................COMPARE	
	FLAPS lever........................AS APPROPRIATE
	FMS F-PLAN / SPD ....CHECK
	FCU ALT/HDG ....SET
	BOTH FD ....CHECK ON
PFD/ND ....CHECK	PFD/ND ....CHECK
DEPARTURE BRIEFING........................CONFIRM	
	AUTO BRK MAX pb-sw........................ON
TERR ON ND ....AS RQRD	TERR ON ND ....AS RQRD
	ATC CODE/MODE.............CONFIRM/SET FOR TAKEOFF
	ENG MODE selector........................AS RQRD
	WEATHER RADAR........................ON
	PREDICTIVE WINDSHEAR SYSTEM ....AUTO
	T.O. CONFIG pb........................TEST
	T.O MEMO........................CHECK NO BLUE
CABIN REPORT........................RECEIVE	CABIN REPORT........................RECEIVE
TAXI C/L........................COMPLETE	TAXI C/L........................COMPLETE

(1) *The PM will be responsible for starting the 2nd engine.*

TAXI

Ident.: PRO-NOR-TSK-00024904.0001001 / 02 MAY 23

38 **Applicable to: MSN 01143-11293**

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PF	**PM**
	TAXI CLEARANCE........................OBTAIN
EXTERIOR LIGHTS........................SET	

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PARK BRK handle ....OFF	
BRAKES...CHECK	BRAKE FAN ◁ pb ....AS RQRD
	BRAKES PRESSURE..............................CHECK AT ZERO
F/CTL...CHECK	F/CTL..CHECK
	ATC CLEARANCE..CONFIRM
	FMS F-PLN/SPD...CHECK
	FCU ALT/HDG..SET
	BOTH FD..CHECK ON
PFD/ND...CHECK	PFD/ND...CHECK
DEPARTURE BRIEFING...CONFIRM	
	AUTO BRK MAX pb-sw ....ON
TERR ON ND ◁ ....AS RQRD	TERR ON ND ◁ ....AS RQRD
	ATC CODE/MODE.............CONFIRM/SET FOR TAKEOFF
	ENG MODE selector ....AS RQRD
	WEATHER RADAR ....ON
	PREDICTIVE WINDSHEAR SYSTEM ◁ ....AUTO
	T.O CONFIG pb ....TEST
	T.O MEMO..CHECK NO BLUE
CABIN REPORT...RECEIVE	CABIN REPORT...RECEIVE
TAXI C/L..COMPLETE	TAXI C/L..COMPLETE

DEPARTURE CHANGE

40 Ident.: PRO-NOR-TSK-20806997.9001001 / 02 MAY 23
Applicable to: ALL

PF	PM
FINAL T.O PERF DATA.............................RECOMPUTE	FINAL T.O PERF DATA.............................RECOMPUTE
	FINAL T.O DATA..REVISE
FMS REVISED T.O PERF DATA................CROSSCHECK	
EFB/MCDU GREEN DOT..................................COMPARE	
	FLAPS lever ....AS APPROPRIATE
	FMS F-PLN/SPD...CHECK
RE-BRIEFING...COMPLETE	
DEPARTURE CHANGE C/L............................COMPLETE	DEPARTURE CHANGE C/L............................COMPLETE

BEFORE TAKEOFF

Ident.: PRO-NOR-TSK-00024905.0003001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

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PF	PM
	•If the brake fans are set to ON and the temperature of all brakes is below 150 °C: BRAKE FAN pb .... OFF
	LINE-UP CLEARANCE.......... OBTAIN
	TCAS.......... TA ONLY or TA/RA
TAKEOFF RUNWAY.......... CONFIRM	TAKEOFF RUNWAY.......... CONFIRM
APPROACH PATH.......... CLEAR OF TRAFFIC	APPROACH PATH.......... CLEAR OF TRAFFIC
EXTERIOR LIGHTS.......... SET	PACK 1 and 2.......... AS RQRD
•If RNP AR departure:	
	GPS 1+2 on GPS MONITOR page ...CHECK BOTH IN NAV GPS PRIMARY on PROG page.......... CHECK AVAILABLE
FMA.......... CHECK	FMA.......... CHECK
SLIDING TABLE.......... STOW	SLIDING TABLE.......... STOW
All EFB TRANSMITTING MODE.......... AS RQRD	All EFB TRANSMITTING MODE.......... AS RQRD
All EFB (with no mounted equipment).......... STOW	All EFB (with no mounted equipment).......... STOW
	CABIN CREW.......... ADVISE
LINE UP C/L.......... COMPLETE	LINE UP C/L.......... COMPLETE

BEFORE TAKEOFF

Ident.: PRO-NOR-TSK-00024905.0001001 / 02 MAY 23

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

PF	PM
	•If the brake fans are set to ON and the temperature of all brakes is below 150 °C: BRAKE FAN pb .... OFF
	LINE-UP CLEARANCE.......... OBTAIN
	TCAS.......... TA ONLY or TA/RA
TAKEOFF RUNWAY.......... CONFIRM	TAKEOFF RUNWAY.......... CONFIRM
APPROACH PATH.......... CLEAR OF TRAFFIC	APPROACH PATH.......... CLEAR OF TRAFFIC
EXTERIOR LIGHTS.......... SET	PACK 1 and 2.......... AS RQRD
SLIDING TABLE.......... STOW	SLIDING TABLE.......... STOW
All EFB TRANSMITTING MODE.......... AS RQRD	All EFB TRANSMITTING MODE.......... AS RQRD
All EFB (with no mounted equipment).......... STOW	All EFB (with no mounted equipment).......... STOW
	CABIN CREW.......... ADVISE
LINE UP C/L.......... COMPLETE	LINE UP C/L.......... COMPLETE

TAKEOFF

Ident.: PRO-NOR-TSK-00024906.0001001 / 26 OCT 22
Applicable to: ALL

PF	PM
	TAKEOFF CLEARANCE..OBTAIN
EXTERIOR LIGHTS..SET	
TAKEOFF..ANNOUNCE	
THRUST.. 50 % N1 (1.05 EPR)	
SIDESTICK..AS RQRD	
BRAKES..RELEASE	
THRUST LEVERS...FLX or TOGA	CHRONO...START
The Captain places hand on thrust levers until V1	
DIRECTIONAL CONTROL.......................... USE RUDDER	
	PFD/ND..MONITOR
•Below 80 kt:	
	TAKEOFF THRUST..CHECK
	THRUST SET..ANNOUNCE
	PFD and ENG indications...................................MONITOR
•At 80 kt:	
SIDESTICK..RELEASE	
•At 100 kt:	
100 kt ....CROSSCHECK	ONE HUNDRED KNOTS.................................ANNOUNCE
•At V1:	
	V1...MONITOR or ANNOUNCE
•At VR:	
ROTATION..PERFORM	ROTATION...ORDER
•When positive climb:	
	POSITIVE CLIMB...ANNOUNCE
L/G UP..ORDER	L/G lever ....SELECT UP
AP...AS RQRD	
•At the thrust reduction altitude:	
THRUST LEVERS...CL	PACK 1 and 2 (if applicable)..ON
•At F speed:	
FLAPS 1..ORDER	FLAPS 1..SELECT
•At S speed:	
FLAPS 0..ORDER	FLAPS 0..SELECT
	GND SPLRS...DISARM
	L/G...CHECK UP
	EXTERIOR LIGHTS..SET

AFTER TAKEOFF

Ident.: PRO-NOR-TSK-00024907.0001001 / 26 OCT 22
Applicable to: ALL

PF	PM
	•If the APU was used to supply the air conditioning during takeoff: APU BLEED pb-sw .... OFF APU MASTER SW pb-sw .... OFF
	ENG MODE selector ....AS RQRD
	•If the takeoff was performed with TA ONLY: TCAS........................ TA/RA
	ANTI ICE........................AS RQRD

CLIMB

Ident.: PRO-NOR-TSK-00024908.0001001 / 26 OCT 22
Applicable to: ALL

PF	PM
MCDU........................PERF CLB	MCDU........................ F-PLN
•At transition altitude:	
BAROMETRIC REFERENCE....... SET STD/CROSSCHECK WEATHER RADAR.................. ADJUST AS APPROPRIATE	BAROMETRIC REFERENCE...... SET STD/CROSSCHECK ENG ANTI ICE pb-sw .... AS RQRD
•At FL100/10.000FT (10.000 FT AFE for airports with elevation at 4.000 FT or above):	
	EXTERIOR LIGHTS sw ....SET
	SEAT BELTS sw .... AS RQRD(1)
EFIS OPTIONS........................ AS RQRD	EFIS OPTIONS........................ AS RQRD
	ECAM MEMO........................ REVIEW
	NAVAIDS........................ CLEAR
	SEC F-PLN........................ AS RQRD
	OPT FL/REC MAX FL........................CHECK

(1) *At 5 000 ft AFE, when authorized by the authority of the airline who has the operational control of the aircraft. If this action is performed, the respective cabin crew advise must be performed.*

CRUISE

Ident.: PRO-NOR-TSK-00024909.0001001 / 26 OCT 22
Applicable to: ALL

PF	PM
ECAM MEMO/SD PAGES........................ REVIEW	ECAM MEMO/SD PAGES........................ REVIEW
FLIGHT PROGRESS........................CHECK	FLIGHT PROGRESS........................CHECK

Continued on the following page

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PF	PM
FUEL....MONITOR	FUEL....MONITOR
•If GPS PRIMARY LOST:	
NAVIGATION ACCURACY....MONITOR	NAVIGATION ACCURACY....MONITOR
RADAR.... ADJUST AS APPROPRIATE	
CRUISE BRIEFING....PERFORM	

DESCENT PREPARATION

Ident.: PRO-NOR-TSK-00024910.0003001 / 02 MAY 23
Applicable to: MSN 10949-11139

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PF	PM
	WEATHER AND LANDING INFORMATION....PREPARE
NAV CHARTS CLIPBOARD ....PREPARE	NAV CHARTS CLIPBOARD ....PREPARE
	STATUS page....CHECK
LANDING CONDITIONS....CONFIRM	LANDING CONDITIONS ....CONFIRM
•If landing conditions changed:	
LANDING PERF DATA....COMPUTE	LANDING PERF DATA....COMPUTE
LANDING PERF DATA....CROSSCHECK	
FMS....PREPARE	FMS PREPARATION....CROSSCHECK
GPWS LDG FLAP 3....AS RQRD	
LDG ELEV ....CHECK	
RWY COND selector ....WET/DRY	
AUTO BRK....AS RQRD	
ARRIVAL BRIEFING....PERFORM	
RADAR.... ADJUST AS APPROPRIATE	
TCAS ....BLW	
	ANTI ICE pb-sw ....AS RQRD
	DESCENT CLEARANCE....OBTAIN
CLEARED ALTITUDE ON FCU....SET	

DESCENT PREPARATION

Ident.: PRO-NOR-TSK-00024910.0002001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

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PF	PM
	WEATHER AND LANDING INFORMATION.... OBTAIN
NAV CHARTS CLIPBOARD ....PREPARE	NAV CHARTS CLIPBOARD ....PREPARE

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<table>
<tr><th>PF</th><th>PM</th></tr>
<tr><td></td><td>STATUS page...CHECK</td></tr>
<tr><td>LANDING CONDITIONS.. CONFIRM</td><td>LANDING CONDITIONS ....CONFIRM</td></tr>
<tr><td colspan="2">•If landing conditions changed:</td></tr>
<tr><td>LANDING PERF DATA... COMPUTE</td><td>LANDING PERF DATA.. COMPUTE</td></tr>
<tr><td colspan="2">LANDING PERF DATA... CROSSCHECK</td></tr>
<tr><td>FMS..PREPARE</td><td>FMS PREPARATION....................................CROSSCHECK</td></tr>
<tr><td>GPWS LDG FLAP 3... AS RQRD</td><td></td></tr>
<tr><td>LDG ELEV ....CHECK</td><td></td></tr>
<tr><td>AUTO BRK.. AS RQRD</td><td></td></tr>
<tr><td colspan="2">ARRIVAL BRIEFING...PERFORM</td></tr>
<tr><td>RADAR..................................... ADJUST AS APPROPRIATE</td><td></td></tr>
<tr><td>TCAS.. BLW</td><td></td></tr>
<tr><td></td><td>ANTI ICE pb-sw ....AS RQRD</td></tr>
<tr><td></td><td>DESCENT CLEARANCE...OBTAIN</td></tr>
<tr><td>CLEARED ALTITUDE ON FCU.......................................SET</td><td></td></tr>
</table>

DESCENT

44 Ident.: PRO-NOR-TSK-20807004.9001001 / 02 MAY 23

Applicable to: ALL

<table>
<tr><th>PF</th><th>PM</th></tr>
<tr><td>DESCENT.. INITIATE</td><td></td></tr>
<tr><td>MCDU..PROG/PERF DESCENT</td><td>MCDU.. F-PLN</td></tr>
<tr><td>DESCENT...MONITOR/ADJUST</td><td></td></tr>
<tr><td>TERR ON ND..AS RQRD</td><td>TERR ON ND...AS RQRD</td></tr>
<tr><td colspan="2">•At FL100/10.000FT (10.000 FT AFE for airports with elevation at 4.000 FT or above):</td></tr>
<tr><td></td><td>EXTERIOR LIGHTS .... SET</td></tr>
<tr><td></td><td>CABIN CREW .... ADVISE</td></tr>
<tr><td>EFIS option pb ....CSTR</td><td>EFIS option pb ....CSTR</td></tr>
<tr><td>LS pb .... AS RQRD</td><td>LS pb .... AS RQRD</td></tr>
<tr><td>NAVAIDS.. AS RQRD/CHECK</td><td>ENG MODE selector ....AS RQRD</td></tr>
<tr><td colspan="2">•When the aircraft approaches the transition level, and when cleared for an altitude:</td></tr>
<tr><td>BAROMETRIC REFERENCE...............SET/CROSSCHECK</td><td>BAROMETRIC REFERENCE................SET/CROSSCHECK</td></tr>
<tr><td></td><td>SEAT BELTS sw .... ON(1)</td></tr>
</table>

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PF	PM
•If GPS PRIMARY LOST:	
NAVIGATION ACCURACY.................................MONITOR	
APPROACH C/L.. COMPLETE	APPROACH C/L... COMPLETE

(1) *At 5 000 ft AFE, when authorized by the authority of the airline who has the operational control of the aircraft. If this action is performed, the respective cabin crew advise must be performed.*

APPROACH

Ident.: PRO-NOR-TSK-D-00024913.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

AIRCRAFT CONFIGURATION FOR APPROACH

PF	PM
INITIAL APPROACH:	
F-PLN SEQUENCING..ADJUST	
•Approx 15 NM from touchdown: APPROACH PHASE .... CHECK/ACTIVATE or set green dot (1)	
MANAGED SPEED..CHECK	
FLIGHT PATH..MONITOR	NAV ACCURACY..MONITOR
SPEED BRAKES lever ....AS RQRD	
RADAR.................................. ADJUST AS APPROPRIATE	
INTERMEDIATE/FINAL APPROACH:	
•At green dot:	
FLAPS 1..ORDER	FLAPS 1...SELECT
	TCAS.. TA ONLY or TA/RA
S SPEED...CHECK or SET (1)	
•At 2 500 ft AFE:	
	CABIN CREW.. ADVISE
•At 2 000 ft AFE minimum:	
FLAPS 2..ORDER	FLAPS 2...SELECT
F SPEED...CHECK or SET (1)	
•When FLAPS 2:	
L/G DOWN..ORDER	L/G lever ....SELECT DOWN
	AUTO BRAKE...CONFIRM
	GND SPLRS...ARM
	EXTERIOR LIGHTS...SET
•When L/G down:	
FLAPS 3..ORDER	FLAPS 3...SELECT
	ECAM WHEEL PAGE..CHECK

Continued on the following page

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AIRCRAFT CONFIGURATION FOR APPROACH

PF	PM
•When FLAPS 3:	
FLAPS FULL............ORDER	FLAPS FULL............SELECT
SPEED TARGET............CHECK or SET (1)	
	A/THR............CHECK IN SPEED MODE or OFF
	WING A.ICE (if not required)............OFF
SLIDING TABLE............STOW	SLIDING TABLE............STOW
All EFB (with no mounted equipment)............STOW	All EFB (with no mounted equipment)............STOW
	LDG MEMO............CHECK NO BLUE
CABIN REPORT............RECEIVE	CABIN REPORT............RECEIVE
LANDING C/L............COMPLETE	LANDING C/L............COMPLETE
	FLIGHT PARAMETERS............MONITOR

(1) *PF if AP is ON, PM if AP is OFF. The PF may request that this action is performed by the PM depending on the situation.*

Ident.: PRO-NOR-TSK-D-00024913.0007001 / 02 MAY 23
Applicable to: MSN 10949-11139

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AIRCRAFT CONFIGURATION FOR APPROACH

PF	PM
INITIAL APPROACH:	
F-PLN SEQUENCING............ADJUST	
•Approx 15 NM from touchdown: APPROACH PHASE ....CHECK/ACTIVATE or set green dot (1)	
MANAGED SPEED............CHECK	
FLIGHT PATH............MONITOR	NAV ACCURACY............MONITOR
SPEED BRAKES lever ....AS RQRD	
RADAR............ADJUST AS APPROPRIATE	
INTERMEDIATE/FINAL APPROACH:	
•At green dot:	
FLAPS 1............ORDER	FLAPS 1............SELECT
	TCAS............TA ONLY or TA/RA
S SPEED............CHECK or SET (1)	
•At 2 500 ft AFE:	
	CABIN CREW............ADVISE
•At 2 000 ft AFE minimum:	
FLAPS 2............ORDER	FLAPS 2............SELECT
F SPEED............CHECK or SET (1)	

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AIRCRAFT CONFIGURATION FOR APPROACH

PF	PM
•When FLAPS 2:	
L/G DOWN.......................................ORDER	L/G lever ....SELECT DOWN
	RWY COND.......................................CONFIRM
	AUTO BRAKE....................................CONFIRM
	GND SPLRS..ARM
	EXTERIOR LIGHTS.....................................SET
•When L/G down:	
FLAPS 3...ORDER	FLAPS 3..SELECT
	ECAM WHEEL PAGE.............................CHECK
•When FLAPS 3:	
FLAPS FULL..ORDER	FLAPS FULL......................................SELECT
SPEED TARGET...CHECK or SET (1)	
	A/THR.....................CHECK IN SPEED MODE or OFF
	WING A.ICE (if not required).......................OFF
SLIDING TABLE.....................................STOW	SLIDING TABLE....................................STOW
All EFB (with no mounted equipment)..................STOW	All EFB (with no mounted equipment)...................STOW
	LDG MEMO..............................CHECK NO BLUE
CABIN REPORT..................................RECEIVE	CABIN REPORT.................................RECEIVE
LANDING C/L...................................COMPLETE	LANDING C/L...................................COMPLETE
	FLIGHT PARAMETERS.......................MONITOR

(1) *PF if AP is ON, PM if AP is OFF. The PF may request that this action is performed by the PM depending on the situation.*

47 Ident.: PRO-NOR-TSK-D-20807006.9001001 / 02 MAY 23
Applicable to: ALL

APPROACH USING LOC G/S GUIDANCE

PF	PM
DESCENT PREPARATION:	
APPROACH MINIMUM.......................DETERMINE	
ARRIVAL BRIEFING...PERFORM	
INITIAL/INTERMEDIATE APPROACH:	
APPR pb on FCU..PRESS	
BOTH AP..ENGAGE	
LOC..CHECK ARMED	
G/S...CHECK ARMED	
LOC CAPTURE.......................................MONITOR	
G/S CAPTURE.......................................MONITOR	

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APPROACH USING LOC G/S GUIDANCE

PF	PM
GO-AROUND ALTITUDE...SET(1)	
FINAL APPROACH:	
	FLIGHT PARAMETERS......................................MONITOR
•At 350 ft: LAND mode.......................CHECK ENGAGED/ANNOUNCE	
For CATI, CATII and CATIII with DH approach:	
•At minimum +100 ft:	ONE HUNDRED ABOVE.............MONITOR or ANNOUNCE
•At minimum: CONTINUE or GO-AROUND..................ANNOUNCE	MINIMUM.................................. MONITOR or ANNOUNCE
For CATIII with no DH approach:	
•At 100 ft RA:	ALERT HEIGHT...ANNOUNCE
If no failure detected	
CONTINUE...ANNOUNCE	

(1) *PF if AP is ON, PM if AP is OFF. The PF may request that this action is performed by the PM depending on the situation.*

Ident.: PRO-NOR-TSK-D-00024919.0001001 / 02 MAY 23
Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11139

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49

APPROACH USING FINAL APP GUIDANCE FOR RNAV(RNP)

PF	PM
DESCENT PREPARATION:	
NAVAIDS..DESELECT	
	WEATHER AND LANDING INFO............................OBTAIN
PROG Page...COMPLETE	PROG Page...COMPLETE
GO-AROUND STRATEGY......................................REVIEW	
DESCENT:	
GPS PRIMARY ON BOTH FMS..............................CHECK	
GPS 1+2...CHECK BOTH IN NAV	
TERR on ND... AS RQRD	
INITIAL/INTERMEDIATE/FINAL APPROACH:	
FD or AP/FD.................................. USE FOR APPROACH	
L/DEV.. CHECK DISPLAYED	
APPR pb on FCU...PRESS	

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APPROACH USING FINAL APP GUIDANCE FOR RNAV(RNP)

PF	PM
APP NAV..............................CHECK ARMED or ENGAGED	
FINAL..CHECK ARMED	
•At the Final Descent Point: FINAL APP.. CHECK ENGAGED	
GO-AROUND ALTITUDE...SET (1)	
	FLIGHT PARAMETERS.......................................MONITOR
•At minimum +100 ft:	ONE HUNDRED ABOVE.............MONITOR or ANNOUNCE
•At minimum: CONTINUE or GO-AROUND.............................ANNOUNCE	MINIMUM.................................. MONITOR or ANNOUNCE

(1) *PF if AP is ON, PM if AP is OFF. The PF may request that this action is performed by the PM depending on the situation.*

Ident.: PRO-NOR-TSK-D-00024917.0001001 / 02 MAY 23

50 **Applicable to: MSN 01143-11293**

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APPROACH USING FINAL APP GUIDANCE

PF	PM
DESCENT PREPARATION :	
	WEATHER AND LANDING INFO.............................OBTAIN
F-PLN A Page... CHECK	F-PLN A Page... CHECK
PROG Page..COMPLETE	PROG Page..COMPLETE
GO-AROUND STRATEGY......................................REVIEW	
DESCENT:	
•At FL100/10.000FT (10.000 FT AFE for airports with elevation at 4.000 FT or above): NAV ACCURACY.. CHECK	
•For RNAV(GNSS): GPS PRIMARY..CHECK	
INITIAL/INTERMEDIATED/FINAL APPROACH:	
POSITION..MONITOR	
APPR pb on FCU..PRESS	
APP NAV..............................CHECK ARMED or ENGAGED	
FINAL..CHECK ARMED	
•At Final Descent Point: FINAL APP.. CHECK ENGAGED	
GO-AROUND ALTITUDE...SET (1)	
	FLIGHT PARAMETERS.......................................MONITOR

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APPROACH USING FINAL APP GUIDANCE

PF	PM
•At minimum + 100 ft:	ONE HUNDRED ABOVE............MONITOR or ANNOUNCE
•At minimum: CONTINUE or GO-AROUND............................ANNOUNCE	MINIMUM.................................. MONITOR or ANNOUNCE

(1) PF if AP is ON, PM if AP is OFF. The PF may request that this action is performed by the PM depending on the situation.

53 Ident.: PRO-NOR-TSK-D-20807009.9001001 / 02 MAY 23
Applicable to: ALL

APPROACH USING FPA GUIDANCE

PF	PM
DESCENT PREPARATION:	
F-PLN A Page...CHECK	F-PLN A Page... CHECK
PROG Page...COMPLETE	PROG Page... COMPLETE
GO-AROUND STRATEGY.....................................REVIEW	
DESCENT:	
•At FL100/10.000FT (10.000 FT AFE for airports with elevation at 4.000 FT or above): NAV ACCURACY...CHECK	
•For RNAV(GNSS): GPS PRIMARY...CHECK	
INITIAL/INTERMEDIATE/FINAL APPROACH:	
LATERAL GUIDANCE MODE........... SET FOR APPROACH	
•For LOC ONLY and ILS G/S OUT: LOC pb-sw ....PRESS	
LOC.. CHECK ARMED	
•For back course localizer approaches: TRK FPA MODE......................USE FOR APPROACH	
LATERAL path.. INTERCEPT	
TRK FPA (Bird)... SELECT	
FPA FOR FINAL APPROACH...................................... SET	
•At 0.3 NM from the Final Descent Point: FPA selector ....PULL	
FPA... CHECK ENGAGED	
POSITION/FLT PATH............................MONITOR/ADJUST	
GO-AROUND ALTITUDE..SET (1)	
	FLIGHT PARAMETERS......................................MONITOR

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APPROACH USING FPA GUIDANCE

PF	PM
•At minimum +100 ft:	
	ONE HUNDRED ABOVE............ MONITOR or ANNOUNCE
•At minimum:	
CONTINUE or GO-AROUND.............................ANNOUNCE	MINIMUM................................... MONITOR or ANNOUNCE

(1) *PF if AP is ON, PM if AP is OFF. The PF may request that this action is performed by the PM depending on the situation.*

MANUAL LANDING

Ident.: PRO-NOR-TSK-00024921.0008001 / 02 MAY 23
Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139

54

PF	PM
AP..OFF	
•Around 30 ft RA:	
FLARE.. PERFORM	ATTITUDE.. MONITOR
THRUST LEVERS..IDLE	
•At touchdown:	
DEROTATION..INITIATE	
ALL REVERSER LEVERS............... REV MAX or REV IDLE	GND SPLRS....................................... CHECK/ANNOUNCE
	REVERSERS...................................... CHECK/ANNOUNCE
DIRECTIONAL CONTROL....................................ENSURE	
•If autobrake is selected:	
	AUTO BRK..CHECK/ANNOUNCE
	AUTO BRK... MONITOR
•If landing without autobrake:	
BRAKES...AS RQRD	
	DECELERATION.................................CHECK/ANNOUNCE
•At 70 kt:	
	SEVENTY KNOTS...ANNOUNCE
All REVERSER LEVERS.. IDLE	
•At taxi speed:	
All REVERSER LEVERS..STOW	
•Before 20 kt:	
AUTO BRK... DISARM	

MANUAL LANDING

Ident.: PRO-NOR-TSK-00024921.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

55

PF	PM
AP..........OFF	
•Around 30 ft RA:	
FLARE..........PERFORM	ATTITUDE..........MONITOR
THRUST LEVERS..........IDLE	
•At touchdown:	
DEROTATION..........INITIATE	
ALL REVERSER LEVERS.......... REV MAX or REV IDLE	GND SPLRS.......... CHECK/ANNOUNCE
	REVERSERS.......... CHECK/ANNOUNCE
DIRECTIONAL CONTROL..........ENSURE	
•If autobrake is selected:	
	AUTO BRK..........MONITOR
•If landing without autobrake:	
BRAKES..........AS RQRD	
	DECELERATION..........CHECK/ANNOUNCE
•At 70 kt:	
	SEVENTY KNOTS..........ANNOUNCE
All REVERSER LEVERS.......... IDLE	
•At taxi speed:	
All REVERSER LEVERS..........STOW	
•Before 20 kt:	
AUTO BRK.......... DISARM	

AUTOMATIC LANDING

Ident.: PRO-NOR-TSK-00024922.0008001 / 02 MAY 23
Applicable to: MSN 04827-04860, 06634, 06871, 10949-11139

56

PF	PM
•At 350 ft RA:	
LAND on FMA..........CHECK/ANNOUNCE	
ILS/GLS/MLS COURSE..........CHECK	
•At 40 ft RA:	
	FLARE on FMA..........CHECK/ANNOUNCE
FLARE..........MONITOR	
•At 30 ft RA:	
	THR IDLE.......... CHECK
•At 10 ft RA: "Retard"	
THRUST LEVERS..........IDLE	

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PF	PM
LATERAL GUIDANCE........MONITOR	
•At touchdown:	
	ROLL OUT mode........CHECK/ANNOUNCE
ALL REVERSER LEVERS........REV MAX or REV IDLE	GND SPLRS........CHECK/ANNOUNCE
	REVERSERS........CHECK/ANNOUNCE
DIRECTIONAL CONTROL........MONITOR	
•If autobrake is selected:	
	AUTO BRK........CHECK/ANNOUNCE
	AUTO BRK........MONITOR
•If landing without autobrake:	
BRAKES........AS RQRD	
	DECELERATION........CHECK/ANNOUNCE
•At 70 kt:	
	SEVENTY KNOTS........ANNOUNCE
BOTH THRUST LEVERS........REV IDLE	
•Before 20 kt:	
AUTO BRK........DISARM	
•End of roll out:	
ALL REVERSERS LEVERS........STOW	
AP........OFF	

AUTOMATIC LANDING

Ident.: PRO-NOR-TSK-00024922.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-06632, 06658-06813, 06876-09324

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PF	PM
•At 350 ft RA:	
LAND on FMA........CHECK/ANNOUNCE	
ILS/GLS/MLS COURSE........CHECK	
•At 40 ft RA:	
	FLARE on FMA........CHECK/ANNOUNCE
FLARE........MONITOR	
•At 30 ft RA:	
	THR IDLE........CHECK
•At 10 ft RA: "Retard"	
THRUST LEVERS........IDLE	
LATERAL GUIDANCE........MONITOR	
•At touchdown:	
	ROLL OUT mode........CHECK/ANNOUNCE
ALL REVERSER LEVERS........REV MAX or REV IDLE	GND SPLRS........CHECK/ANNOUNCE
	REVERSERS........CHECK/ANNOUNCE

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PF	PM
DIRECTIONAL CONTROL..................................MONITOR	
•If autobrake is selected:	
	AUTO BRK..MONITOR
•If landing without autobrake:	
BRAKES.. AS RQRD	
	DECELERATION.................................CHECK/ANNOUNCE
•At 70 kt:	
	SEVENTY KNOTS...ANNOUNCE
BOTH THRUST LEVERS..................................REV IDLE	
•Before 20 kt:	
AUTO BRK...DISARM	
•End of roll out:	
ALL REVERSERS LEVERS......................................STOW	
AP...OFF	

GO AROUND (WITH FD ON)

Ident.: PRO-NOR-TSK-00024925.0003001 / 02 MAY 23
Applicable to: MSN 08495-09324, 10949-11139

58

PF	PM
•Simultaneously apply the following three actions:	
THRUST LEVERS..........................TOGA THEN FLEX/MCT	
ROTATION.. PERFORM	FLIGHT PARAMETERS.....................................MONITOR
GO-AROUND...ANNOUNCE	FLAPS..RETRACT ONE STEP
FMA...CHECK/ANNOUNCE	
	POSITIVE CLIMB.. ANNOUNCE
L/G UP..ORDER	L/G...UP
NAV or HDG..AS RQRD	GO-AROUND ALTITUDE.. CHECK
•At go-around thrust reduction altitude:	
THRUST LEVERS...CL	
•At go-around acceleration altitude:	
SPEED TARGET..MONITOR	
•AT F SPEED:	
FLAPS 1...ORDER	FLAPS 1...SELECT
•AT S SPEED:	
FLAPS 0...ORDER	FLAPS 0...SELECT
	GND SPLRS..DISARM
	L/G...CHECK UP
	EXTERIOR LIGHTS...SET

GO AROUND (WITH FD ON)

Ident.: PRO-NOR-TSK-00024925.0001001 / 02 MAY 23
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

59

PF	PM
•Simultaneously apply the following three actions:	
THRUST LEVERS....................TOGA	
ROTATION....................PERFORM	FLIGHT PARAMETERS....................MONITOR
GO-AROUND....................ANNOUNCE	FLAPS....................RETRACT ONE STEP
FMA....................CHECK/ANNOUNCE	
	POSITIVE CLIMB....................ANNOUNCE
L/G UP....................ORDER	L/G....................UP
NAV or HDG....................AS RQRD	GO-AROUND ALTITUDE....................CHECK
•At go-around thrust reduction altitude:	
THRUST LEVERS....................CL	
•At go-around acceleration altitude:	
SPEED TARGET....................MONITOR	
•AT F SPEED:	
FLAPS 1....................ORDER	FLAPS 1....................SELECT
•AT S SPEED:	
FLAPS 0....................ORDER	FLAPS 0....................SELECT
	GND SPLRS....................DISARM
	L/G....................CHECK UP
	EXTERIOR LIGHTS....................SET

AFTER LANDING

60 Ident.: PRO-NOR-TSK-20807013.9001001 / 02 MAY 23
Applicable to: ALL

PF	PM
GND SPLRS....................DISARM	
EXTERIOR LIGHTS....................SET	
	RADAR....................OFF
	PREDICTIVE WINDSHEAR ....OFF
	ENG MODE selector ....NORM
	FLAPS....................RETRACT
	TCAS....................STBY
	ATC....................AS RQRD
	TERR ON ND....................OFF
	PACK 2....................OFF
	APU....................AS RQRD(1)

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PF	PM
	ANTI ICE..AS RQRD
	BRAKE TEMPERATURE........................MONITOR
	BRK FAN pb ....AS RQRD
AFTER LANDING C/L..............................COMPLETE	AFTER LANDING C/L..............................COMPLETE
•If the One Engine Taxi will be applied:	
	ENGINE 2 SHUTDOWN
	ENG 2 MASTER...OFF Y ELEC PUMP...ON

(1) - *If Single Engine Taxi without APU or DUAL Engine Taxi is performed, keep APU MASTER SW OFF and delay APU start aprox. 1 min. before reaching the gate.*
- *If OET with APU is performed, set APU MASTER SW to ON.*

PARKING

Ident.: PRO-NOR-TSK-00024929.0004001 / 02 MAY 23
Applicable to: ALL

61

PF	PM
ACCU PRESS...CHECK	ANTI ICE...OFF
PARK BRK handle ....ON	APU BLEED pb-sw ....AS RQRD
BRAKES PRESS indicator..............................CHECK	
•If the One Engine Taxi was applied:	Y ELEC PUMP ....OFF
ALL ENG MASTER LEVERS..............................OFF	
SLIDES DISARMED ....ANNOUNCE(1)	
WING sw ....OFF	
BEACON sw ....OFF	
OTHER EXTERIOR LIGHTS............................AS RQRD	FUEL PUMPS/CTR XFR VALVES.............................OFF
SLIDES...CHECK DISARMED	
SEAT BELTS sw ....OFF	
GROUND CONTACT.....................................ESTABLISH	
PARK BRK handle ....AS RQRD	BRAKE FAN pb ....AS RQRD
PARKING C/L..COMPLETE	PARKING C/L..COMPLETE
	ATC...STBY
	IRS PERFORMANCE.....................................CHECK
	FUEL QUANTITY..CHECK
DUs...DIM	DUs...DIM
LOGBOOK..COMPLETE (CM1)	

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PF	PM
All EFB TRANSMITTING MODE.......................... AS RQRD	All EFB TRANSMITTING MODE.......................... AS RQRD
•If performing transit stop: CLEAR/CLOSE FLIGHT... APPLY	**•If performing transit stop:** CLEAR/CLOSE FLIGHT... APPLY

(1) *The Pilot in Command should request "Slides Disarmed".*

SECURING THE AIRCRAFT

62 Ident.: PRO-NOR-TSK-20807015.9001001 / 02 MAY 23
Applicable to: ALL

CM1	CM2
PARK BRK handle .... ON	OXYGEN CREW SUPPLY pb-sw ....OFF
	EXTERIOR LIGHTS..OFF
All IR MODE selectors...OFF	APU BLEED pb-sw ....OFF
	EXT PWR pb .... AS RQRD
	APU MASTER SW pb-sw ....OFF
	EMER EXIT LT sw .... OFF
	SIGNS sw .... OFF
	BAT 1 pb-sw + BAT 2 pb-sw ....OFF
SECURING THE AIRCRAFT C/L...................... COMPLETE	SECURING THE AIRCRAFT C/L...................... COMPLETE
EFB applications.. CLOSE	
All EFB.. SWITCH OFF	
	MAINT BUS sw .... AS RQRD

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SUPPLEMENTARY PROCEDURES

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020244.0001001 / 17 MAR 17
Applicable to: ALL

ADVERSE WEATHER

- [SUP] AIRFRAME DEICING/ANTI-ICING PROCEDURE ON GROUND (*Refer to procedure*)
- [SUP] GROUND OPERATIONS IN COLD WEATHER CONDITIONS (*Refer to procedure*)
- [SUP] GROUND OPERATION IN HEAVY RAIN (*Refer to procedure*)
- [SUP] MINIMUM SPEED WITH ICE ACCRETION (*Refer to procedure*)
- [SUP] OPERATIONS ON CONTAMINATED AIRPORTS (*Refer to procedure*)
- [SUP] OPERATIONS WITH VOLCANIC ASH, SAND OR DUST (*Refer to procedure*)
- [SUP] SECURING THE AIRCRAFT FOR COLD SOAK (*Refer to procedure*)
- [SUP] FOR DRAINING WATER PROCEDURE (*Refer to procedure*)
- [SUP] WATER SYSTEM DRAINING (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020248.0001001 / 18 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-07098

ENGINE

- [SUP] MANUAL ENGINE START (*Refer to procedure*)
- [SUP] ENGINE START WITH AN AIR START UNIT (*Refer to procedure*)
- [SUP] CROSSBLEED ENGINE START (*Refer to procedure*)
- [SUP] ENGINE START VALVE MANUAL OPERATION (*Refer to procedure*)
- [SUP] ENGINE VENTILATION (DRY CRANKING) (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020248.0008001 / 18 OCT 22
Applicable to: MSN 02321, 02887

ENGINE

- [SUP] MANUAL ENGINE START (*Refer to procedure*)
- [SUP] ENGINE START WITH AN AIR START UNIT (*Refer to procedure*)
- [SUP] CROSSBLEED ENGINE START (*Refer to procedure*)
- [SUP] AIR CONDITIONING DURING AUTOMATIC ENGINE START (*Refer to procedure*)
- [SUP] ENGINE START VALVE MANUAL OPERATION (*Refer to procedure*)
- [SUP] ENGINE VENTILATION (DRY CRANKING) (*Refer to procedure*)
- [SUP] ENGINE START USING AIR SUPPLIED BY ANOTHER A320 (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020248.0006001 / 26 OCT 22
Applicable to: MSN 08495-09324, 10949-11139

ENGINE

- [SUP] MANUAL ENGINE START (*Refer to procedure*)
- [SUP] ENGINE START WITH AN AIR START UNIT (*Refer to procedure*)
- [SUP] CROSSBLEED ENGINE START (*Refer to procedure*)

[SUP] AIR CONDITIONING DURING AUTOMATIC ENGINE START (*Refer to procedure*)
[SUP] ENGINE START VALVE MANUAL OPERATION (*Refer to procedure*)
[SUP] ENGINE VENTILATION (DRY CRANKING) (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020249.0001001 / 17 MAR 17
Applicable to: ALL

FUEL

[SUP] REFUELING (*Refer to procedure*)
[SUP] REFUELING WITH ONE ENGINE RUNNING (*Refer to procedure*)
[SUP] GROUND FUEL TRANSFER (*Refer to procedure*)
[SUP] DEFUELING (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00025164.0001001 / 26 JAN 22
Applicable to: ALL

GPS INTERFERENCES

[SUP] GPS INTERFERENCES (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020251.0001001 / 17 NOV 20
Applicable to: ALL

LANDING GEAR

[SUP] OPERATION WITH NOSEWHEEL STEERING OFFSET (*Refer to procedure*)
[SUP] FLIGHT WITH GEAR DOWN (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020254.0001001 / 17 MAR 17
Applicable to: ALL

MISCELLANEOUS

[SUP] MISCELLANEOUS (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020253.0011001 / 17 MAR 17
Applicable to: MSN 02321, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11139

SURVEILLANCE

[SUP] AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST (ADS-B) (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020253.0010001 / 17 MAR 17
Applicable to: MSN 02734

SURVEILLANCE

[SUP] AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST (ADS-B) (*Refer to procedure*)
[SUP] (ENHANCED) GROUND PROXIMITY WARNING SYSTEM (EGPWS/GPWS) (*Refer to procedure*)

Ident.: PRO-NOR-SUP-SUP-SUP-00-00020253.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 03284

SURVEILLANCE

[SUP] (ENHANCED) GROUND PROXIMITY WARNING SYSTEM (EGPWS/GPWS) (*Refer to procedure*)

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AIRFRAME DEICING/ANTI-ICING PROCEDURE ON GROUND

Ident.: PRO-NOR-SUP-ADVWXR-A-00020694.0001001 / 17 MAY 21
Applicable to: MSN 01251, 02014, 06561, 10949-11139

BEFORE FLUID SPRAYING

In all situations, it is the captain's responsibility to decide if the ground crew must deice/anti-ice the aircraft, and/or if additional deicing/anti-icing treatment are required.

CAUTION	- Make sure that the low or high-pressure ground connectors do not supply any external air to the aircraft. - If it is necessary for the ground crew to repeatedly anti-ice the aircraft, they must deice the surfaces with a hot fluid mixture before applying a new layer of anti-icing fluid.

COMMUNICATION WITH GROUND CREW..ESTABLISH

L2 *Establish communication with the crew that will apply the procedure.*

L1 DEICING/ANTI-ICING FLUIDS TYPE..CHECK APPROPRIATE

L2 *Check that the ground crew uses the correct deicing/anti-icing fluids, in accordance with the applicable operator requirements and AMM.*

L1 DO NOT START THE ENGINES DURING FLUID SPRAYING

L2 *Engines and APU can be either stopped or running during deicing/anti-icing.*

L1

CAUTION	- The ground crew should take care when spraying deicing fluid, and make sure that the engines and APU do not ingest any fluid. - Do not move flaps, slats, ailerons, spoilers or elevators if they are not free of ice. - Always ensure that both left and right side of the aircraft receive the same complete and symmetrical deicing/anti-icing treatment.

Note: *In case of frost formation on one or several areas of the wing, the Captain can request a local deicing application only on the affected areas. The Captain shall take care that both wings receive the same symmetrical treatment, even if frost formation does not affect both wing symmetrically. For more information, refer to AMM.*

CABIN PRESS MODE SEL..CHECK AUTO
ENG 1 BLEED..OFF
ENG 2 BLEED..OFF
APU BLEED..OFF
DITCHING pb..ON

L2 *Outflow valve, pack valves, and avionic ventilation inlet and extract valves close.*

This prevents deicing/anti-icing fluid from entering the aircraft. Avionic ventilation is in a closed circuit with both fans running. In view of the low OAT, there is no time limit for this configuration.

L1 *Note:* 1. *If the VENT AVNCS SYS FAULT alert appears, reset the AEVC circuit breaker at the end of the aircraft deicing/anti-icing procedure.*
AIR COND/AVNCS/VENT/MONG Y17 on 122 VU.
2. *For passenger comfort reason, it is not recommended to operate on ground with both PACKS set to OFF for more than 20 min.*

THRUST LEVERS...CHECK IDLE
“AIRCRAFT PREPARED FOR SPRAYING”.. INFORM GROUND CREW

Ident.: PRO-NOR-SUP-ADVWXR-A-00020694.0003001 / 17 MAY 21
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324

BEFORE FLUID SPRAYING

In all situations, it is the captain’s responsibility to decide if the ground crew must deice/anti-ice the aircraft, and/or if additional deicing/anti-icing treatment are required.

CAUTION	- Make sure that the low or high-pressure ground connectors do not supply any external air to the aircraft. - If it is necessary for the ground crew to repeatedly anti-ice the aircraft, they must deice the surfaces with a hot fluid mixture before applying a new layer of anti-icing fluid.

COMMUNICATION WITH GROUND CREW...ESTABLISH

L2 *Establish communication with the crew that will apply the procedure.*

L1 DEICING/ANTI-ICING FLUIDS TYPE.. CHECK APPROPRIATE

L2 *Check that the ground crew uses the correct deicing/anti-icing fluids, in accordance with the applicable operator requirements and AMM.*

L1 DO NOT START THE ENGINES DURING FLUID SPRAYING

L2 *Engines and APU can be either stopped or running during deicing/anti-icing.*

L1

CAUTION	- The ground crew should take care when spraying deicing fluid, and make sure that the engines and APU do not ingest any fluid. - Do not move flaps, slats, ailerons, spoilers or elevators if they are not free of ice. - Always ensure that both left and right side of the aircraft receive the same complete and symmetrical deicing/anti-icing treatment.

Note: In case of frost formation on one or several areas of the wing, the Captain can request a local deicing application only on the affected areas. The Captain shall take care that both wings receive the same symmetrical treatment, even if frost formation does not affect both wing symmetrically. For more information, refer to AMM.

CABIN PRESS MODE SEL.......................CHECK AUTO
ENG 1 BLEED.......................OFF
ENG 2 BLEED.......................OFF

Note: If both engines are running, the AIR ENG 1+2 BLEED FAULT alert triggers when both ENG BLEED pb-sw are set to OFF. If this occurs, disregard this alert.

APU BLEED.......................OFF
DITCHING pb.......................ON

L2 *Outflow valve, pack valves, and avionic ventilation inlet and extract valves close.*
This prevents deicing/anti-icing fluid from entering the aircraft. Avionic ventilation is in a closed circuit with both fans running. In view of the low OAT, there is no time limit for this configuration.

L1

Note:
1. *If the VENT AVNCS SYS FAULT alert appears, reset the AEVC circuit breaker at the end of the aircraft deicing/anti-icing procedure.*
   AIR COND/AVNCS/VENT/MONG Y17 on 122 VU.
2. *For passenger comfort reason, it is not recommended to operate on ground with both PACKS set to OFF for more than 20 min.*

THRUST LEVERS.......................CHECK IDLE
“AIRCRAFT PREPARED FOR SPRAYING”.......................INFORM GROUND CREW

Ident.: PRO-NOR-SUP-ADVWXR-A-00002311.0001001 / 05 MAR 19
1 **Applicable to: MSN 01143-11293**

UPON COMPLETION OF THE SPRAYING OPERATION

PITOTS and STATICS (ground crew).......................CHECK

CAUTION	When the OAT is low (below -5 °C) during snow/freezing rain precipitations , melted snow or raindrops may drip from the cockpit windshields and freeze on the fuselage below. This could create ice build up on the forward fuselage that could possibly disturb the airflow around the static/pitot/angle-of-attack probes, and result in unreliable air data measurements during takeoff. Therefore, during taxi out before takeoff, beware of this possible build up of ice. The area around static/pitot/angle-of-attack probes must be free of ice/snow before starting takeoff.

GROUND EQUIPMENT.......................REMOVE

DEICING/ANTI-ICING REPORT..........RECEIVED

The information from ground personnel, who performed the deicing/anti-icing and post-application check, must include (ANTI-ICING CODE):

- *The type of fluid used*
- *The ratio of fluid to water (e.g. 75/25)*
- *The time of the holdover beginning*
- *The result of the post application check: "Aircraft critical parts are clean".*

DITCHING pb..........OFF
OUTFLOW VALVE..........CHECK OPEN

On the ECAM PRESS page, confirm that the outflow valve indication reaches the open green position to avoid any unexpected aircraft pressurization.

● **At least 1 minute after completion of spraying operations:**

ENG BLEED 1..........ON
ENG BLEED 2..........ON

● **At least 5 minutes after completion of spraying operation:**

APU BLEED..........AS RQRD

Note: *There is a risk of de-icing fluid ingestion by the APU air intake, resulting in specific odors, or smoke warnings. Therefore:*

- *Keep the APU running with the APU BLEED OFF for 5 min after spraying completion before setting the APU BLEED to ON (if required),*
- *Consider APU BLEED OFF for takeoff.*

NORMAL PROCEDURE..........RESUME

Apply appropriate normal procedures. Pay special attention to the flight control check. In freezing precipitation, perform the appropriate checks to evaluate aircraft icing. Base the decision on whether to takeoff, or to re-protect the aircraft, on the amount of ice that has built up on the critical surfaces since the last deicing/anti-icing, as revealed by a personal inspection from the inside and outside of the aircraft. Make this inspection before the holdover time expires, or just before takeoff.

GROUND OPERATIONS IN COLD WEATHER CONDITIONS

Ident.: PRO-NOR-SUP-ADVWXR-B-00020703.0001001 / 17 NOV 20
Applicable to: ALL

GENERAL

For ground operations on contaminated runways, *Refer to EFB-TOF-30-30 Descriptions* and *Refer to PRO-NOR-SUP-ADVWXR General*.

The following procedures supplement the normal operating procedures.

Ident.: PRO-NOR-SUP-ADVWXR-B-00020698.0001001 / 13 DEC 17
Applicable to: ALL

SAFETY EXTERIOR INSPECTION

PROTECTIVE COVERS....REMOVED
APU INTAKE....CHECK FREE OF SNOW AND ICE
PACKS INLET/OUTLET DOORS....CHECK FREE OF SNOW AND ICE
OUTFLOW VALVES.... CHECK FREE OF SNOW AND ICE
ABOVE ITEMS....DEICE IF NECESSARY

Ident.: PRO-NOR-SUP-ADVWXR-B-00020699.0001001 / 21 MAR 17
Applicable to: ALL

PRELIMINARY COCKPIT PREPARATION

PRELIMINARY COCKPIT PREPARATION - SOP....COMPLETED

L2 APU is started and the air conditioning is on.

Note: - *Ground power should be used to start the APU if the OAT is -15 °C (5 °F) or below.*
- *With cockpit temperatures below -15 °C (5 °F), the display units may not be available.*

L1 ● **If the avionics bay is cold soaked:**

L2 The aircraft was parked without electrical ground supply or without air conditioning.

L1 IRS....INITIATE ALIGNMENT

L2 For temperatures at or below -15 °C (5 °F) in the avionics bay, the IRS alignment requires 15 min.

L1 WINDSHIELD AND UPPER COCKPIT FUSELAGE....ICE/SNOW REMOVED

CAUTION	With ice or snow accumulated on the windshield and/or the upper cockpit fuselage, and if the PROBE/WINDOW HEAT is on, melted ice or snow running down from these areas could re-freeze on the fuselage area below, if the temperature is very low. This could create ice build-up on the forward fuselage that could possibly disturb the airflow around the static/pitot/angle-of-attack probes.

PROBE COVERS.... CHECK REMOVED

L2 Ensure that the probe covers are removed in order to prevent the covers from melting.

L1 PROBE/WINDOW HEAT....ON

Ident.: PRO-NOR-SUP-ADVWXR-B-00020700.0001001 / 05 JUN 18
Applicable to: ALL

EXTERIOR WALKAROUND

SURFACES .... CHECK FREE OF FROST, ICE AND SNOW

L2 Check critical surfaces: leading edges, upper wing surfaces, vertical and horizontal stabilizers, all control surfaces, slats and flaps.

Note: *Thin hoarfrost is acceptable on the upper surface of the fuselage. Refer to LIM-ICE_RAIN Definition of Thin Hoarfrost*

On the underside of the wing tank areas, a maximum layer of 3 mm (0.125 in) of frost is acceptable.

L1 LANDING GEAR... CHECK FREE OF FROST, ICE AND SNOW

L2 Check gear assemblies, lever locks, tires and doors

L1 ENGINES... CHECK FREE OF FROST, ICE AND SNOW

L2 Check inlets, inlet lips, fans, spinners, fan exhaust ducts, reversers assemblies.

L1 ENGINE FANS... CHECK FREE ROTATION

L2 Check that engine fans are not stuck and can rotate freely.

L1 DRAINS, BLEEDS, PROBES.................................. CHECK FREE OF FROST, ICE AND SNOW

L2 Probes: pitot tubes, static ports, TAT sensors and AOA sensors.

L1 FUEL TANK VENTS.. CHECK FREE OF FROST, ICE AND SNOW
RADOME... CHECK FREE OF FROST, ICE AND SNOW
Lower part of the NOSE FUSELAGE......................... CHECK FREE OF FROST, ICE AND SNOW
WATER SUPPLIES... CHECK NOT FROZEN AND REFILLED

L2 Commercial water supplies should have been previously emptied prior to aircraft cold soak.

Ident.: PRO-NOR-SUP-ADVWXR-B-00020701.0003001 / 03 NOV 21
Applicable to: MSN 08495-09324, 10949-11139

AFTER START

- **After first engine start:**
  PROBE/WINDOW HEAT pb.. AUTO
  L2 *Heating will continue to operate automatically.*
  L1 NORMAL PROCEDURE.. RESUME
  - **If external temperature is less than or equal to -20 °C (-4 °F), perform the following actions after both engines are started:**
    ENG MODE selector.. NORM

Wait 10 s

L2 Automatic engine shutdowns have been experienced under very low temperatures. This automatic engine shutdown is caused by a transient high bleed extraction on one of the engines combined with a slow SAV / PRV closing/opening sequence when starting the last engine. To avoid this automatic engine shutdown, it is requested to wait 10 s to ensure that the SAV 1 is properly closed after AVAIL indication is displayed and before switching off the APU BLEED.

L1 APU BLEED pb-sw.......................................OFF
NORMAL PROCEDURE.......................................RESUME

Ident.: PRO-NOR-SUP-ADVWXR-B-00020701.0001001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

AFTER START

- **After first engine start:**
  PROBE/WINDOW HEAT.......................................AUTO

L2 Heating will continue to operate automatically.

L1 NORMAL PROCEDURE.......................................RESUME

Ident.: PRO-NOR-SUP-ADVWXR-B-00021770.0001001 / 13 JUN 17
Applicable to: MSN 08495-09324, 10949-11139

TAKEOFF

- **If OAT below -40 °C (-40 °F), perform the following action before takeoff:**
  THRUST REVERSERS.......................................PERFORM 5 CYCLES

L2 To perform 1 cycle, put the thrust levers to REV IDLE and maintain until the REV indication on the Engine/Warning display becomes green. Then put the thrust levers back to IDLE and wait for the REV indication to disappear before the next cycle.

Note: *1. Takeoff has to be initiated within one minute after the last thrust reversers cycle.*
2. If the takeoff is not performed within one minute after the last thrust reversers cycle, repeat each time the 5 thrust reversers cycles.

Ident.: PRO-NOR-SUP-ADVWXR-B-00021770.0002001 / 23 FEB 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

TAKEOFF

- **If OAT below -40 °C (-40 °F), perform the following action before takeoff:**
  THRUST REVERSERS.......................................PERFORM 6 CYCLES

L2

To perform 1 cycle, put the thrust levers to REV IDLE and maintain until the REV indication on the Engine/Warning display becomes green. Then put the thrust levers back to IDLE and wait for the REV indication to disappear before the next cycle.

Note: *1. Takeoff has to be initiated within one minute after the last thrust reversers cycle.*
2. If the takeoff is not performed within one minute after the last thrust reversers cycle, repeat each time the 6 thrust reversers cycles.

GROUND OPERATIONS IN HEAVY RAIN

Ident.: PRO-NOR-SUP-ADVWXR-00020720.0001001 / 21 MAR 17
Applicable to: ALL

On ground (Aircraft taxiing or parked) in case of heavy rain, water may enter the avionics ventilation system via the skin air inlet valve.

- **When on ground:**

  EXTRACT...OVRD

L2

  This closes the skin air inlets, preventing rainwater from entering the avionics bay.

L1

  PACK 1 ON...CHECK
  PACK 2 ON...CHECK

L2

  Air conditioning compensates the avionics cooling reduction when the skin air inlet is closed.

L1

  - **If air conditioning not available:**

L2

    When the aircraft avionics are powered, closing the skin air inlet valve reduces avionics cooling capability. With air conditioning not available, the reduced cooling is efficient for a limited period of time, depending on the outside temperature.

L1

    Aircraft should not remain powered more than:
    - OAT ≤ 39 °C (102 °F): no limit
    - 39 °C (102 °F) < OAT ≤ 45 °C (113 °F): 3 h
    - 45 °C (113 °F) < OAT: 30 min

- **After takeoff:**

  EXTRACT...AUTO

MINIMUM SPEED WITH ICE ACCRETION

Ident.: PRO-NOR-SUP-ADVWXR-00020722.0002001 / 21 MAR 17
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

Evidence of ice accretion can be ice on the visual indicator (between the two cockpit windshields) or on the windshield wipers.

CAUTION	Extended flight in icing conditions with the slats extended should be avoided.

- **If wing anti ice is operative:**
  - **In CONF clean, 1, 2 or 3:**
    MIN SPEED: VLS + 10 kt
  - **In CONF FULL:**
    MIN SPEED: VLS + 5 kt

  The minimum speed takes into account ice accretion on non-heated structure.
- **If wing anti ice is not operative:**
  MIN SPEED: VLS + 10 kt/GREEN DOT

  The minimum speed takes into account ice accretion on the entire airframe when anti-ice is inoperative.

MINIMUM SPEED WITH ICE ACCRETION

Ident.: PRO-NOR-SUP-ADVWXR-00020722.0001001 / 21 MAR 17
Applicable to: MSN 01251

Evidence of ice accretion can be ice on the visual indicator (between the two cockpit windshields) or on the windshield wipers.

CAUTION	Extended flight in icing conditions with the slats extended should be avoided.

- **If wing anti ice is operative:**
  - **In CONF clean, 1, 2 or 3:**
    MIN SPEED: VLS + 10 kt
  - **In CONF FULL:**
    MIN SPEED: VLS + 5 kt

    The minimum speed takes into account ice accretion on non-heated structure.

- **If wing anti-ice is not operative:**
  - **In CONF clean:**

    MIN SPEED: VLS + 15 kt
  - **In CONF 1, 2, 3 or FULL:**

    MIN SPEED: VLS + 10 kt

    The minimum speed takes into account ice accretion on the entire airframe when anti-ice is inoperative.

OPERATIONS ON CONTAMINATED AIRPORTS

Applicable to: ALL

Ident.: PRO-NOR-SUP-ADVWXR-C-00020729.0001001 / 21 MAR 17

GENERAL

If the ground surfaces are not contaminated but the weather corresponds to icing conditions with falling rain, slush or snow, anticipate a probable resulting runway/surfaces contamination.
There is a low probability of fluid ingestion by the engines which should anyway not degrade the safety. The risk of ingestion is independent of the depth of the contaminant.

Ident.: PRO-NOR-SUP-ADVWXR-C-00020726.0002001 / 26 OCT 22

SPURIOUS ALERTS

The radio altimeter indication may fluctuate on contaminated surfaces and trigger auto callouts or GPWS warnings. These alerts can be disregarded.

Note: Spurious GPWS warnings may trigger at the apron, during taxi, takeoff and landing runs.

The radio altimeter may also not compute valid data:
- On surfaces covered with snow, ice or deicing fluid, and/or
- Due to deicing fluid on the antenna.

As a result, the "NAV RA 1(2)(1+2) FAULT" ECAM alert may be triggered.

This alert may disappear when the radio altimeter provides valid data again, when:
- The aircraft is on a non-contaminated surface, or
- The antenna is cleaned, or
- A period of time elapses after deicing, allowing the fluid covering the antenna to dry. The taxi time between deicing spot and holding point may be sufficient.

In any case, the "NAV RA 1(2)(1+2) FAULT" ECAM alert cannot be disregarded. The ISI article 34.42.00015 "Radio Altimeter (RA) - "NAV Rax FAULT" ECAM warning on ground" provides the instructions to manage this alert that triggers on ground on contaminated airports.

In addition, in case the "NAV RA 1(2)(1+2) FAULT" ECAM alert triggers, the following alerts may also trigger and may be disregarded:
- NAV TCAS FAULT
- NAV PRED W/S DET FAULT.

In case of invalid LGCIU information (e.g. ground information not transmitted by LGCIU), disregard the following alerts if triggered:
- ENG DUAL FAILURE or ENG ALL ENGINES FAILURE
- ANTI ICE CAPT(F/O) TAT FAULT
- L/G SHOCK ABSORBER FAULT
- STALL warning.

Ident.: PRO-NOR-SUP-ADVWXR-C-00020725.0001001 / 21 MAR 17

PARKING

- **After engine shutdown and before shutting down electrical supply:**

FLAPS/SLATS.. CONFIRM FREE OF CONTAMINATION

L2 Perform a visual inspection to determine if the flaps/slats mechanism is free of contamination. If necessary, perform decontamination.

L1 YELLOW ELEC PUMP pb.. ON
BLUE ELEC PUMP pb.. AUTO
BLUE PUMP OVRD pb.. ON
SLATS/FLAPS.. RETRACT

L2 *Monitor slats/flaps retraction on ECAM upper display.*

L1
- **When slats and flaps are retracted:**

  YELLOW ELEC PUMP pb.. OFF
  BLUE PUMP OVRD pb.. OFF
  NORMAL PROCEDURE.. RESUME

OPERATIONS WITH VOLCANIC ASH, SAND OR DUST

Ident.: PRO-NOR-SUP-ADVWXR-G-00020733.0001001 / 21 MAR 17
Applicable to: ALL

PRELIMINARY COCKPIT PREPARATION

APU.. AVOID USE

L2 *Request ground power for air conditioning and electricity. If ground power is not available, the APU should be used only to start the engines.*

L1 WINDSHIELD WIPERS.. DO NOT USE

L2 *Do not use the windshield wipers to remove ash, sand or dust.*

L1 ● **For takeoff performance:**

BRAKING PERFORMANCE MAY BE DEGRADED

L2 A layer of volcanic ash, sand or dust on the runway may degrade the braking efficiency.

Ident.: PRO-NOR-SUP-ADVWXR-G-00020734.0001001 / 21 MAR 17
Applicable to: ALL

EXTERIOR WALKAROUND

SURFACES AND EQUIPMENT..CHECK FREE OF DEPOSITS

L2 *Ground maintenance should remove ash, sand or dust that has settled on exposed lubricated surfaces and could penetrate seals or enter the engine gas path, air conditioning system, air data probes, access doors and panels and other orifices on the aircraft.*

L1 ENGINE/APU INLETS.. CHECK FREE OF DEPOSITS

L2 Inspect the inlets and order them cleaned of deposit. Have the area within 8 m (25 ft) of the engine inlet cleaned of volcanic ash, as much as practical.

Ident.: PRO-NOR-SUP-ADVWXR-G-00020735.0001001 / 10 NOV 20
Applicable to: ALL

ENGINE START

ALL ENGINES..CRANK

L2 *Before engine start, ventilate all engines for 2 min by dry-cranking at the maximum motoring speed to remove any deposit from the booster area. Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking).*

L1 ■ **If air start unit is available:**

ENGINE START WITH AN AIR START UNIT..

Refer to PRO-NOR-SUP-ENG Engine Start with an Air Start Unit

■ **If air start unit is not available:**

SOP - ENGINE START..PERFORM

Ident.: PRO-NOR-SUP-ADVWXR-G-00022532.0002001 / 16 OCT 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

AFTER START

ENG ANTI-ICE pb-sw....................ON for 10 s

L2 *Engine anti-ice should be operated on both engines for about 10 s after the first engine start of the day in order to flush any sand and/or dust which could affect later operation of Engine Anti-Ice system.*

Ident.: PRO-NOR-SUP-ADVWXR-G-00020736.0001001 / 21 MAR 17
Applicable to: MSN 01251, 02014, 06561, 10949-11139

TAXI

ONE ENGINE TAXI....................DO NOT PERFORM

L2 *Minimize the thrust during taxi.*

L1 ENG 1 BLEED....................OFF
ENG 2 BLEED....................OFF

L2 Keep engine bleed valves closed for taxiing, especially in volcanic ash.

L1 FOR 180 ° TURN ON RUNWAY: INITIATE THE TURN DOWNWIND

L2 In order to prevent ash, sand or dust ingestion.

Ident.: PRO-NOR-SUP-ADVWXR-G-00020736.0002001 / 28 MAY 20
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324

TAXI

ONE ENGINE TAXI....................DO NOT PERFORM

L2 *Minimize the thrust during taxi.*

L1 ENG 1 BLEED....................OFF
ENG 2 BLEED....................OFF

L2 *Keep engine bleed valves closed for taxiing, especially in volcanic ash.*

L1 *Note: The AIR ENG 1+2 BLEED FAULT alert triggers when both ENG BLEED pb-sw are set to OFF. When this occurs, disregard this alert.*

FOR 180 ° TURN ON RUNWAY: INITIATE THE TURN DOWNWIND

L2 *In order to prevent ash, sand or dust ingestion.*

Ident.: PRO-NOR-SUP-ADVWXR-G-00020737.0001001 / 21 MAR 17
Applicable to: ALL

TAKEOFF

ASH, SAND OR DUST... ALLOW TO SETTLE

L2 *Allow ash, sand or dust to settle on runway before starting the takeoff roll.*

L1 PACK OFF TAKEOFF.. CONSIDER

L2 *This will prevent air conditioning system contamination.*

L1 ROLLING TAKEOFF...CONSIDER

Ident.: PRO-NOR-SUP-ADVWXR-G-00020738.0001001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324

AFTER TAKEOFF

MINIMIZE TIME IN SAND OR DUST CLOUD

L2 *Climb to quickly exit the sand/dust cloud. If possible, altitude constraints may be disregarded in coordination with ATC.*

L1 ENG 1 BLEED..ON
ENG 2 BLEED..ON

Ident.: PRO-NOR-SUP-ADVWXR-G-00020738.0004001 / 18 NOV 21
Applicable to: MSN 10949-11139

AFTER TAKEOFF

MINIMIZE TIME IN SAND OR DUST CLOUD

L2 *Climb to quickly exit the sand/dust cloud. If possible, altitude constraints may be disregarded in coordination with ATC.*

L1 ENG 1 BLEED..ON
ENG 2 BLEED..ON

Note: The AIR ENG 1+2 BLEED FAULT alert triggers if both ENG BLEED pb-sw are still OFF above 1 500 ft. If this occurs, disregard this alert.

Ident.: PRO-NOR-SUP-ADVWXR-G-00020739.0001001 / 21 MAR 17
Applicable to: ALL

IN FLIGHT

AVOID ASH, SAND OR DUST CLOUD

- **If sand or dust cloud encounter:**

  MINIMIZE TIME IN SAND OR DUST CLOUD

L2 *If possible and in coordination with ATC, adapt flight path (route and altitude) to exit the cloud.*

L1

- **If ash cloud encounter:**
  VOLCANIC ASH ENCOUNTER PROCEDURE.. APPLY

  Refer to PRO-ABN-MISC [QRH] VOLCANIC ASH ENCOUNTER .

Ident.: PRO-NOR-SUP-ADVWXR-G-00020740.0001001 / 21 MAR 17
Applicable to: ALL

DESCENT PREPARATION

AUTOLAND RECOMMENDED

L2 *Deposits on the windshield and landing lights may significantly reduce visibility during approach and landing. Consider a diversion to an airport where autoland is possible.*

L1

- **For landing performance:**
  CONSIDER IDLE REVERSE
  BRAKING PERFORMANCE MAY BE DEGRADED

L2 *A layer of volcanic ash, sand or dust on the runway may degrade the braking efficiency.*

Ident.: PRO-NOR-SUP-ADVWXR-G-00020741.0001001 / 21 MAR 17
Applicable to: ALL

DESCENT

AVOID LEVEL FLIGHT IN ASH, SAND OR DUST CLOUD

If possible and in coordination with ATC, perform holding patterns and last level off before final descent outside of the cloud.

Ident.: PRO-NOR-SUP-ADVWXR-G-00020742.0001001 / 21 MAR 17
Applicable to: MSN 01251, 02014, 06561

LANDING

- **Before Landing:**
  ENG 1 BLEED.. OFF
  ENG 2 BLEED.. OFF
  PACK 1 and 2...AS REQUIRED

L2 *Consider to set the packs OFF in order to avoid contamination of the air conditioning system.*

L1

- **During Landing:**
  REVERSERS..AS REQUIRED

L2 *If it appears that maximum reverse thrust is needed, apply reverse thrust when the main landing gear touches down. Limit the use of reverse thrust as much as possible, because reverse flow may throw up ash, sand or dust and impair visibility.*

Ident.: PRO-NOR-SUP-ADVWXR-G-00020742.0002001 / 28 MAY 20
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06536, 06592-09324, 10949-11139

LANDING

- **Before Landing:**
  ENG 1 BLEED.. OFF
  ENG 2 BLEED.. OFF

  Note: The AIR ENG 1+2 BLEED FAULT alert triggers when both ENG BLEED pb-sw are set to OFF. When this occurs, disregard this alert.

  PACK 1 and 2.. AS RQRD

L2 *Consider to set the packs OFF in order to avoid contamination of the air conditioning system.*

L1
- **During Landing:**
  REVERSERS.. AS RQRD

L2 *If it appears that maximum reverse thrust is needed, apply reverse thrust when the main landing gear touches down. Limit the use of reverse thrust as much as possible, because reverse flow may throw up ash, sand or dust and impair visibility.*

Ident.: PRO-NOR-SUP-ADVWXR-G-00020744.0001001 / 21 MAR 17
Applicable to: ALL

AFTER LANDING

ONE ENGINE TAXI.. DO NOT PERFORM

L2 *Minimize thrust during taxi.*

L1 APU.. AVOID USE

FOR 180 ° TURN ON RUNWAY: INITIATE THE TURN DOWNWIND

Ident.: PRO-NOR-SUP-ADVWXR-G-00020745.0001001 / 21 MAR 17
Applicable to: ALL

SECURING THE AIRCRAFT

If the aircraft is parked at an airport covered with volcanic ash, sand or dust, install engine inlet covers and other protective covers and plugs.
In addition:

- **After switching off all bleeds and before switching off the electrical AC power:**
  DITCHING pb.. ON

L2 *This closes the outflow valve, pack valves and avionics ventilation inlet and extract valves.*

L1 ● **After switching off the electrical AC power and the batteries:**
DITCHING pb..OFF

L2 *All the applicable valves will open at the next power-up.*

L1 PROTECTIVE COVERS..INSTALL

L2 Request ground crew to install protective covers and plugs, in order to protect the aircraft and engines from volcanic ash, sand or dust.

L1 LOGBOOK..REPORT ASH, SAND OR DUST CLOUD ENCOUNTER

SECURING THE AIRCRAFT FOR COLD SOAK

Ident.: PRO-NOR-SUP-ADVWXR-00020772.0001001 / 28 MAY 20
Applicable to: ALL

Cold soak should be considered in the following conditions:
- The OAT is less than 0 °C (32 °F), and
- No electrical supply and no air conditioning are provided to the aircraft, and
- The temperatures of aircraft components decrease below 0 °C (32 °F).

WHEN SECURING THE AIRCRAFT

● **After switching off all bleeds and before switching off the electrical AC power:**
DITCHING pb .... ON

L2 *This closes the outflow valve, pack valves and avionics ventilation inlet and extract valves.*

L1 ● **When the chocks are in place:**
PARKING BRAKE handle ....OFF

L2 *Releasing the parking brake prevents the brakes from freezing.*

L1 ● **After switching off the electrical AC power and the batteries:**
DITCHING pb ....OFF

L2 *All the applicable valves will open at the next power-up.*

L1 PROTECTIVE COVERS..INSTALL

L2 *Request ground crew to install protective covers and plugs, in order to protect the wheels, the engines and the probes from snow and ice.*

L1 WATER SYSTEM DRAINING..REQUEST

L2 *Request maintenance actions to drain the water system for cold soak prevention purposes.*
Refer to PRO-NOR-SUP-ADVWXR Water System Draining.

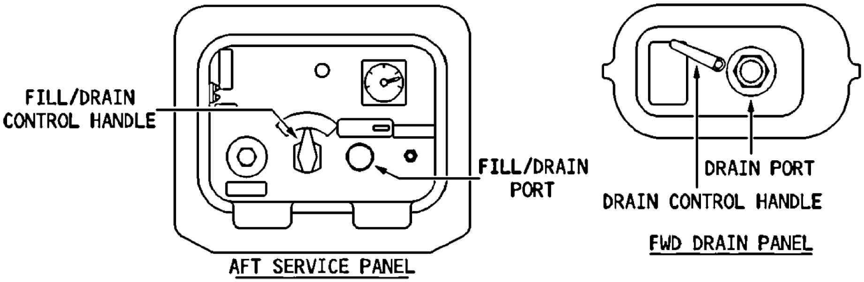
FOR DRAINING WATER PROCEDURE

Applicable to: ALL

Ident.: PRO-NOR-SUP-ADVWXR-D-00002313.0001001 / 21 MAR 17

INTRODUCTION

This procedure uses electrical power.



ACCESS PLATFORM(S)....................PUT IN POSITION
SHUTOFF VALVE IN GALLEYS/TOILETS....................CHECK OPEN
FWD/AFT ACCESS PANEL DOORS....................OPEN
DRAIN PORT CAPS....................REMOVE

Remove drain port caps on forward drain and aft service panels.

DRAIN HOSES....................CONNECT

Connect drain hoses to :

- *the drain port on the forward drain panel.*
- *the full/drain port on the aft service panel.*

Ident.: PRO-NOR-SUP-ADVWXR-D-00002314.0001001 / 21 MAR 17

ON THE FORWARD DRAIN PANEL

DRAIN CONTROL HANDLE....................TURN LEFT

Turn the control handle to drain.

Ident.: PRO-NOR-SUP-ADVWXR-D-00002315.0001001 / 21 MAR 17

ON THE AFT SERVICE PANEL

FILL/DRAIN CONTROL HANDLE....................TURN TO “DRAIN” AND PULL

Turn the handle to the “DRAIN” position and pull it out to its mechanical stop to drain.
The indicator light comes on.

Ident.: PRO-NOR-SUP-ADVWXR-D-00002316.0001001 / 21 MAR 17

WHEN THE WATER SYSTEM IS DRAINED

In freezing conditions, the drain valves must stay open to prevent damage to the system. Do not put on the caps and leave the access door open.

DRAIN HOSES....................DISCONNECT
PANELS....................CLEAN AND DRY
ACCESS PLATFORM(S)....................REMOVE

WATER SYSTEM DRAINING

Ident.: PRO-NOR-SUP-ADVWXR-00002205.0001001 / 21 MAR 17
Applicable to: ALL

Drain the water system, if the OAT requires it, as shown below :

Configuration			**Exposure time**	**Water tank drain**
Air Conditioning	**Cabin temperature**	**Outside Air Temperature**		
ON	Above 10 °C (50 °F)	Between 0 °C and -15 °C (32 °F and 5 °F)	None	Not required
		Below -15 °C (5 °F)	1 h 15 min	Required
OFF		Between 0 °C and -7 °C (32 °F and 19.4 °F)	1 h 30 min	
		Between -7 °C and -15 °C (19.4 °F and 5 °F)	0 h 30 min	
		Below -15 °C (5 °F)	Any	

Intentionally left blank

MANUAL ENGINE START

Ident.: PRO-NOR-SUP-ENG-A-00009443.0004001 / 24 OCT 22
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Pilots normally use automatic starting to start an engine.

However, manual starting is recommended in the following cases:

- **After aborting a start, because of:**
  - Engine stall
  - Engine EGT overlimit
  - Low start air pressure
- **When expecting a start abort, because of:**
  - Degraded bleed performance, due to hot conditions, or at a high-altitude airfields.
  - An engine with a reduced EGT margin, in hot conditions, or at a high-altitude airfields.
  - Marginal performance of the external pneumatic power group.
  - Intermittent ECAM ENG 1(2) IGN A(B) FAULT alert, during the first start of the day.

Ident.: PRO-NOR-SUP-ENG-A-00009443.0002001 / 24 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Pilots normally use automatic starting to start an engine.

However, manual starting is recommended in the following cases :

- **After aborting a start, because of :**
  - Engine stall, or Engine EGT overlimit, or LO START AIR PRESS, or No N1 rotation, or Hung start.
- **When expecting a start abort, because of :**
  - Degraded bleed performance, due to hot conditions, or at a high-altitude airfields.
  - An engine with a reduced EGT margin, in hot conditions, or at a high-altitude airfields.
  - Marginal performance of the external pneumatic power group.
  - Tailwind greater than 10 kt
    Starting in tailwind may fail due to N1 counterrotation, hot gas black flow. Fuel should be set to ON at N2 max motoring speed, provided N1 has stopped, and turn clockwise. (confirmation by the ground crew).

Ident.: PRO-NOR-SUP-ENG-A-00009443.0005001 / 24 OCT 22
Applicable to: MSN 08495-09324, 10949-11139

Pilots normally use automatic starting to start an engine.

However, manual starting is recommended in the following cases:

- **After aborting a start, because of:**
  - Engine stall
  - Engine EGT overlimit
  - Low start air pressure
  - Hung start
- **When expecting a start abort, because of:**
  - Degraded bleed performance, due to hot conditions, or at a high-altitude airfields.
  - An engine with a reduced EGT margin, in hot conditions, or at a high-altitude airfields.
  - Marginal performance of the external pneumatic power group.

Ident.: PRO-NOR-SUP-ENG-A-00020858.0048001 / 24 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

MANUAL ENGINE START PROCEDURE

Note: *During a manual engine start, if the flight crew suspects an engine start malfunction, or if an engine-related ECAM alert is triggered, the PF must abort the start sequence as follows:*

- *Before the ENG MASTER lever is set to ON, the PF must set the ENG MAN START pb-sw to OFF*
- *After the ENG MASTER lever is set to ON, the PF must set the ENG MASTER lever to OFF, and then the ENG MAN START pb-sw to OFF.*
  In that case, the flight crew should consider a dry crank cycle of the affected engine before they perform another start attempt (Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking)).

Then, in the case of an ECAM alert, the PF must announce "ECAM actions", in accordance with the ECAM management philosophy.

THR LEVERS..IDLE

CAUTION	The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, the thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.

ENG MODE sel.. NORM THEN IGN/START

L2 *The lower ECAM displays the engine page.*

L1 *Note:* *If both engines are started manually, the following procedure applies one engine at a time.*

- **When all engines parameters (except N1 and N2) are available on the upper ECAM display (no amber crosses displayed):**

  ENG MAN START pb-sw.......... ON
  START VALVE.......... CHECK IN-LINE
  N2 INCREASE.......... CHECK
  OIL PRESS INCREASE.......... CHECK

  - **If the N2 does not reach 16 %:**

    PACK VALVES.......... CHECK CLOSED

    - **If the APU bleed is used for engine start and the pack valves are closed, shed the APU electrical loads as follows:**

      L2 Shedding APU electrical loads enables to increase bleed air pressure.

      L1 GALY & CAB.......... OFF

      - **If needed, shed also:**

        BLUE ELEC PUMP (on ground only).......... OFF
        FUEL X FEED.......... ON
        FUEL PUMPS (except R TK PUMP 2).......... OFF
        BLOWER.......... OVRD
        CAB FANS.......... OFF

        - **If additional shedding is required:**

          HYD ENG PUMP.......... OFF

          Return the hydraulic engine pump to ON for second engine start, to permit PTU auto test.

- **When N2 reaches the maximum motoring speed (16 % minimum) and 30 s after selection of the ENG MAN START pb-sw:**

  Note: *The maximum motoring speed is reached when a significant decrease in N2 acceleration is observed.*
  Do not attempt to start unless N2 is at least 16 %.

  In hot weather conditions (OAT at or above 40 °C / 104 °F):
  - If the residual EGT is above 100 °C, perform a 2 min dry crank in order to reduce the residual EGT to the minimum achievable. *Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking)*. Following the dry crank if the residual EGT is below 250 °C, the manual start can be attempted after a 15 s wait time for starter lubrication.
  - Starting with a residual EGT above 250 °C is not recommended.

  ENG MASTER.......... ON
  CHRONO.......... START

  L2 *The PM starts the timing in order to monitor the light-up duration.*

L1 IGNITERS A AND B.. CHECK ON
FUEL FLOW INCREASE...CHECK

L2 *With current EEC standard, fuel flow indication spiking occurs at fuel on.*

L1
- **20 s maximum after fuel flow increase:**

  EGT INCREASE... CHECK
  N1 INCREASE (before 34 % N2)...CHECK

  If the electrical power supply is interrupted during the start sequence (indicated by the loss of ECAM displays), abort the start by setting the ENG MASTER lever to OFF. Then perform a 30 s dry crank *Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking)*.

- **When N2 reaches 43 %:**

  IGNITERS A AND B (at 43 % N2)...CHECK OFF
  START VALVE (slightly above 43 % N2)...CHECK CROSS LINE
  MAIN ENG PARAMETERS...CHECK NORMAL
  SECONDARY ENG PARAMETERS... CHECK NORMAL

L2 *The gray background on the N2 indication disappears.*

L1 ENG MAN START pb-sw...OFF
ENG MODE sel... NORM

  - **When no other engine requires to be started manually:**

    SHEDDED SYSTEMS..RESTORE
    SOP - ENGINE START...RESUME

Ident.: PRO-NOR-SUP-ENG-A-00020858.0003001 / 24 OCT 22
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

MANUAL ENGINE START PROCEDURE

Note: *During a manual engine start, if the flight crew suspects an engine start malfunction, or if an engine-related ECAM alert is triggered, the PF must abort the start sequence as follows:*
- *Before the ENG MASTER lever is set to ON, the PF must set the ENG MAN START pb-sw to OFF*
- *After the ENG MASTER lever is set to ON, the PF must set the ENG MASTER lever to OFF, and then the ENG MAN START pb-sw to OFF.*
  In that case, the flight crew should consider a dry crank cycle of the affected engine before they perform another start attempt (Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking)).

Then, in the case of an ECAM alert, the PF must announce "ECAM actions", in accordance with the ECAM management philosophy.

THR LEVERS.....IDLE

CAUTION	The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, the thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.

ENG MODE sel.....NORM THEN IGN/START

L2 *The lower ECAM displays the engine page.*

L1 *Note: If both engines are started manually, the following procedure applies one engine at a time.*

- **When all engines parameters are available on the upper ECAM display (no amber crosses displayed):**
  ENG MAN START pb-sw.....ON
  START VALVE.....CHECK IN-LINE
  N2 INCREASE.....CHECK
  OIL PRESS INCREASE.....CHECK
  - **If the N2 does not reach 20 %:**
    PACK VALVES.....CHECK CLOSED
    - **If the APU bleed is used for engine start and the pack valves are closed, shed the APU electrical loads as follows:**

      L2 Shedding APU electrical loads enables to increase bleed air pressure.

      L1 GALY & CAB.....OFF
      - **If needed, shed also:**
        BLUE ELEC PUMP (on ground only).....OFF
        FUEL X FEED.....ON
        FUEL PUMPS (except R TK PUMP 2).....OFF
        BLOWER.....OVRD
        CAB FANS.....OFF
- **When N2 reaches 22 % or the maximum motoring speed (20 % minimum):**

  Note: The maximum motoring speed is defined as the speed at which N2 acceleration is less than 1 % in approximately 5 s.

  ENG MASTER.....ON
  CHRONO.....START

  L2 *The PM starts the timing in order to monitor the light-up duration.*

  L1 IGNITERS A AND B.....CHECK ON
  FUEL FLOW INCREASE.....CHECK

- **15 s maximum after fuel flow increase:**

  EGT INCREASE.................... CHECK
  N1 INCREASE.................... CHECK

  If the electrical power supply is interrupted during the start sequence (indicated by loss of ECAM displays), abort the start by setting the ENG MASTER lever to OFF. Then perform a 30 s dry crank (*Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking)*).

- **When N2 reaches 50 %:**

  START VALVE (between 50 and 56 % N2).................... CHECK CROSS LINE
  IGNITERS A AND B.................... CHECK OFF
  MAIN ENG PARAMETERS.................... CHECK NORMAL
  SECONDARY ENG PARAMETERS.................... CHECK NORMAL

L2 *The gray background on the N2 indication disappears.*

L1 *Note:* *CFM 56-5B1/B2 engines, N2 accelerates slowly from 50 % to idle. Start abort is not required as long as N2 increases.*

  ENG MAN START pb-sw.................... OFF
  ENG MODE sel.................... NORM

  - **When no other engine requires to be started manually:**

    SHEDDED SYSTEMS.................... RESTORE
    SOP - ENGINE START.................... RESUME

Ident.: PRO-NOR-SUP-ENG-A-00020858.0009001 / 26 OCT 22
Applicable to: MSN 08495-09324, 10949-11139

MANUAL ENGINE START PROCEDURE

Note: *During a manual engine start, if the flight crew suspects an engine start malfunction, or if an engine-related ECAM alert is triggered, the PF must abort the start sequence as follows:*
- *Before the ENG MASTER lever is set to ON, the PF must set the ENG MAN START pb-sw to OFF*
- *After the ENG MASTER lever is set to ON, the PF must set the ENG MASTER lever to OFF, and then the ENG MAN START pb-sw to OFF.*
  In that case, the flight crew should consider a dry crank cycle of the affected engine before they perform another start attempt (Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking)).

Then, in the case of an ECAM alert, the PF must announce "ECAM actions", in accordance with the ECAM management philosophy.

THR LEVERS.................... IDLE

CAUTION	The engines start regardless of the thrust lever position. If the thrust levers are not set to IDLE, the thrust rapidly increases to the corresponding thrust lever position, causing a hazardous situation.

ENG MODE sel.. NORM THEN IGN/START

L2 *The lower ECAM displays the engine page.*

L1 Note: *If both engines are started manually, the following procedure applies one engine at a time.*

- **When all engines parameters are available on the upper ECAM display (no amber crosses displayed):**

  ENG MAN START pb-sw.. ON
  START VALVE..CHECK IN-LINE
  N2 INCREASE.. CHECK
  OIL PRESS INCREASE.. CHECK

  L2 Depending on the thermal state of the engine, the FADEC can command an automatic dry cranking (or engine cooling) with the associated COOLING displayed on the E/WD (*Refer to DSC-70-80-40 Engine Cooling*).

  L1
  - **If the N2 does not reach 18 % and associated COOLING memo is no longer displayed:**

    PACK VALVES..CHECK CLOSED

    - **If the APU bleed is used for engine start and the pack valves are closed, shed the APU electrical loads as follows:**

      L2 Shedding APU electrical loads enables to increase bleed air pressure.

      L1 GALY & CAB..OFF

      - **If needed, shed also:**

        BLUE ELEC PUMP (on ground only)..OFF
        FUEL X FEED..ON
        FUEL PUMPS (except R TK PUMP 2).. OFF
        BLOWER.. OVRD
        CAB FANS..OFF

        - **If additional shedding is required:**

          HYD ENG PUMP.. OFF

          Note: *Return the hydraulic engine pump to ON for second engine start, to permit PTU auto test.*

- **When N2 reaches the maximum motoring speed (or at 18 % minimum):**

  Note: *The maximum motoring speed is reached when a significant decrease in N2 acceleration is observed.*
  Do not attempt to start unless N2 is at least 18 %.

  ENG MASTER...ON
  CHRONO...START

  L2 *The PM starts the timing in order to monitor the light-up duration.*

  L1 IGNITERS A AND B...CHECK ON
  FUEL FLOW INCREASE...CHECK

- **20 s maximum after fuel flow increase:**
  EGT INCREASE...CHECK

  L2 *After initial EGT increase, the EGT may drop slightly for a short period of time before increasing again. This EGT roll-back is a normal engine start behavior and does not require any maintenance action.*

L1
- **Before 48 % N2:**
  N1 INCREASE...CHECK

  Note: *If the electrical power supply is interrupted during the start sequence (indicated by the loss of ECAM displays), abort the start by setting the ENG MASTER lever to OFF. Then perform a 30 s dry crank (Refer to PRO-NOR-SUP-ENG Engine Ventilation (Dry Cranking)).*

- **When N2 reaches 55 %:**
  IGNITERS A AND B (at 55 % N2)..CHECK OFF
  START VALVE (slightly above 55 % N2)..CHECK CROSS LINE
  MAIN ENG PARAMETERS..CHECK NORMAL
  SECONDARY ENG PARAMETERS..CHECK NORMAL

  L2 *The gray background on the N2 indication disappears.*

  L1 ENG MAN START pb-sw...OFF
  ENG MODE sel...NORM

  - **When no other engine requires to be started manually:**
    SHEDDED SYSTEMS...RESTORE
    SOP - ENGINE START...RESUME

ENGINE START WITH AN AIR START UNIT

Ident.: PRO-NOR-SUP-ENG-00020859.0005001 / 04 NOV 20
Applicable to: MSN 08495-09324, 10949-11139

- **Before connecting the air start unit:**

PACK 1........................OFF
PACK 2........................OFF

L2 Packs are selected off to prevent any possible contamination of the packs by the air start unit.

L1 APU BLEED........................OFF
ENG 1 BLEED........................OFF
ENG 2 BLEED........................OFF
X BLEED........................OPEN

AIR START UNIT CONNECTION........................REQUEST

- **When cleared to start:**

ENG 2........................START

Note: - *For any operational reason, engine 1 can be started first. In this case, check the brake ACCU pressure prior to engine start.*
- *The minimum recommended starter air supply pressure is 30 PSI when the start valve is open.*

- **After Engine 2 is started:**

WARNING	Disconnection of the external power with the EXT PWR pb-sw set to ON may cause injury to the ground engineer. Request disconnection of the external power only with the EXT PWR pb-sw set to AVAIL.

EXT PWR........................CHECK AVAIL
EXT PWR DISCONNECTION........................REQUEST

Note: *The external electrical power can be removed after the second engine start.*

■ **If the air start unit is used to start engine 1:**

ENG 1........................START

  - **When engine 1 is started:**

  AIR START UNIT DISCONNECTION........................REQUEST
  X BLEED........................AUTO
  ENG 1 BLEED........................ON
  ENG 2 BLEED........................ON
  PACK 1........................ON
  PACK 2........................ON

- **If the crossbleed engine start procedure is used to start engine 1:**

  AIR START UNIT DISCONNECTION.......... REQUEST
  X BLEED.......... AUTO

  Note: The X BLEED selector must be set to AUTO before the selection of the packs and bleed. This is in order to prevent the increase of ground idle of engine 2.

  PACK 1.......... ON
  PACK 2.......... ON
  ENG 2 BLEED.......... ON
  CROSSBLEED ENGINE START PROC.......... APPLY

  Refer to PRO-NOR-SUP-ENG Crossbleed Engine Start

SOP - AFTER START.......... RESUME

ENGINE START WITH AN AIR START UNIT

Ident.: PRO-NOR-SUP-ENG-00020859.0002001 / 04 NOV 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

- **Before connecting the air start unit:**

  PACK 1.......... OFF
  PACK 2.......... OFF

L2 Packs are selected off to prevent any possible contamination of the packs by the air start unit.

L1 APU BLEED.......... OFF
ENG 1 BLEED.......... OFF
ENG 2 BLEED.......... OFF
X BLEED.......... OPEN

AIR START UNIT CONNECTION.......... REQUEST

- **When cleared to start:**

  ENG 2.......... START

  Note:
  - *For any operational reason, engine 1 can be started first.*
    In this case, check the brake ACCU pressure prior to engine start.
  - *The minimum recommended starter air supply pressure is 30 PSI when the start valve is open.*

- **After Engine 2 is started:**

WARNING	Disconnection of the external power with the EXT PWR pb-sw set to ON may cause injury to the ground engineer. Request disconnection of the external power only with the EXT PWR pb-sw set to AVAIL.

EXT PWR....CHECK AVAIL
EXT PWR DISCONNECTION....REQUEST

Note: The external electrical power can be removed after the second engine start.

■ **If the air start unit is used to start engine 1:**
ENG 1....START

● **When engine 1 is started:**
AIR START UNIT DISCONNECTION....REQUEST
X BLEED....AUTO
ENG 1 BLEED....ON
ENG 2 BLEED....ON
PACK 1....ON
PACK 2....ON

■ **If the crossbleed engine start procedure is used to start engine 1:**
AIR START UNIT DISCONNECTION....REQUEST
PACK 1....ON
PACK 2....ON
ENG 2 BLEED....ON
CROSSBLEED ENGINE START PROC....APPLY

Refer to PRO-NOR-SUP-ENG Crossbleed Engine Start

SOP - AFTER START....RESUME

ENGINE START WITH AN AIR START UNIT

Ident.: PRO-NOR-SUP-ENG-00020859.0001001 / 04 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

● **Before connecting the air start unit:**
PACK 1....OFF
PACK 2....OFF

L2 Packs are selected off to prevent any possible contamination of the packs by the air start unit.

L1 APU BLEED....OFF
ENG 1 BLEED....OFF
ENG 2 BLEED....OFF
X BLEED....OPEN

AIR START UNIT CONNECTION....REQUEST

- **When cleared to start:**

ENG 2..START

Note: - *For any operational reason, engine 1 can be started first.*
In this case, check the brake ACCU pressure prior to engine start.
- *The minimum recommended starter air supply pressure is 25 PSI when the start valve is open.*

- **After Engine 2 is started:**

WARNING	Disconnection of the external power with the EXT PWR pb-sw set to ON may cause injury to the ground engineer. Request disconnection of the external power only with the EXT PWR pb-sw set to AVAIL.

EXT PWR..CHECK AVAIL
EXT PWR DISCONNECTION..REQUEST

Note: *The external electrical power can be removed after the second engine start.*

■ **If the air start unit is used to start engine 1:**

ENG 1..START

- **When engine 1 is started:**

AIR START UNIT DISCONNECTION..REQUEST
X BLEED..AUTO
ENG 1 BLEED..ON
ENG 2 BLEED..ON
PACK 1..ON
PACK 2..ON

■ **If the crossbleed engine start procedure is used to start engine 1:**

AIR START UNIT DISCONNECTION..REQUEST
PACK 1..ON
PACK 2..ON
ENG 2 BLEED..ON
CROSSBLEED ENGINE START PROC..APPLY

Refer to PRO-NOR-SUP-ENG Crossbleed Engine Start

SOP - AFTER START..RESUME

CROSSBLEED ENGINE START

Ident.: PRO-NOR-SUP-ENG-00020860.0004001 / 29 NOV 19
Applicable to: MSN 08495-09324, 10949-11139
Impacted by TDU: 00023018 Crossbleed Engine Start

CAUTION	Do not perform the crossbleed engine start procedure during pushback. Simultaneous use of engine bleed supply and external pneumatic power supply is prohibited.

One engine must be running in order to supply air for other engine start.

- **Before second engine start :**

APU BLEED..OFF

L2 *The BLEED valve of the supplying engine reopens and the cross bleed valve closes.*

L1 ENG BLEED (supplying engine)..ON
ENG BLEED (receiving engine)..OFF

L2 *The bleed valve of receiving engine is closed to avoid reverse flow leakage.*

L1
- **When cleared to start :**

AREA CLEAR OF OBSTACLES..CONFIRM

L2 *Ensure increased power jet wake does not constitute any hazard to people or installation behind the aircraft.*

L1 X BLEED..OPEN
THR LEVER (supplying engine)...................ADJUST FOR BLEED PRESSURE

Adjust thrust of supplying engine to obtain an engine bleed pressure of 30 PSI before start initiation and during the entire start sequence.
If the thrust required to obtain the appropriate engine bleed pressure exceeds 40 % N1, pay particular attention to the surrounding area.

RECEIVING ENGINE..START

Apply the normal engine start procedure.

Depending on the engine thermal state, the FADEC can command an automatic dry cranking (or engine cooling) with the associated COOLING indication displayed on the EWD. *Refer to DSC-70-80-40 Engine Cooling*.

- **After start :**

THR LEVER (supplying engine)..IDLE
X BLEED..AUTO
ENG BLEED (receiving engine)..ON
PACK 1..ON
PACK 2..ON

CROSSBLEED ENGINE START

Ident.: PRO-NOR-SUP-ENG-00020860.0001001 / 17 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

CAUTION	Do not perform the crossbleed engine start procedure during pushback. Simultaneous use of engine bleed supply and external pneumatic power supply is prohibited.

One engine must be running in order to supply air for other engine start.

- **Before second engine start :**

APU BLEED...OFF

L2 *The BLEED valve of the supplying engine reopens and the cross bleed valve closes.*

L1 ENG BLEED (supplying engine).......................................ON
ENG BLEED (receiving engine).......................................OFF

L2 *The bleed valve of receiving engine is closed to avoid reverse flow leakage.*

L1 X BLEED...OPEN

- **When cleared to start :**

AREA CLEAR OF OBSTACLES.......................................CONFIRM

L2 *Ensure increased power jet wake does not constitute any hazard to people or installation behind the aircraft.*

L1 THR LEVER (supplying engine)...................ADJUST FOR BLEED PRESSURE

Adjust thrust of supplying engine to obtain an engine bleed pressure of 30 PSI before start initiation, and at least 25 PSI during the start sequence.
If the thrust required to obtain the appropriate engine bleed pressure exceeds 40 % N1, pay particular attention to the surrounding area.

Note: *If the supplying engine is a DAC engine, preset a 30 % N1 before launching the start sequence.*

RECEIVING ENGINE.......................................START

Apply the normal engine start procedure.

- **After start :**

THR LEVER (supplying engine).......................................IDLE
X BLEED...AUTO
ENG BLEED (receiving engine).......................................ON
PACK 1...ON
PACK 2...ON

CROSSBLEED ENGINE START

Ident.: PRO-NOR-SUP-ENG-00020860.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

CAUTION	Do not perform the crossbleed engine start procedure during pushback. Simultaneous use of engine bleed supply and external pneumatic power supply is prohibited.

One engine must be running in order to supply air for other engine start.

- **Before second engine start :**

APU BLEED..OFF

L2 *The BLEED valve of the supplying engine reopens and the cross bleed valve closes.*

L1 ENG BLEED (supplying engine)..ON
ENG BLEED (receiving engine)..OFF

L2 *The bleed valve of receiving engine is closed to avoid reverse flow leakage.*

L1 X BLEED..OPEN

- **When cleared to start :**

AREA CLEAR OF OBSTACLES..CONFIRM

L2 *Ensure increased power jet wake does not constitute any hazard to people or installation behind the aircraft.*

L1 THR LEVER (supplying engine)..ADJUST FOR BLEED PRESSURE

Adjust thrust of supplying engine to obtain an engine bleed pressure of 30 PSI before start initiation, and at least 25 PSI during the start sequence.
If the thrust required to obtain the appropriate engine bleed pressure exceeds 40 % N1, pay particular attention to the surrounding area.

RECEIVING ENGINE..START

Apply the normal engine start procedure.

- **After start :**

THR LEVER (supplying engine)..IDLE
X BLEED..AUTO
ENG BLEED (receiving engine)..ON
PACK 1..ON
PACK 2..ON

CROSSBLEED ENGINE START

Ident.: TDU / PRO-NOR-SUP-ENG-00023018.0001001 / 29 NOV 19
Applicable to: MSN 08495-09324, 10949-11139
Impacted DU: 00020860 Crossbleed Engine Start

CAUTION	Do not perform the crossbleed engine start procedure during pushback. Simultaneous use of engine bleed supply and external pneumatic power supply is prohibited.

One engine must be running in order to supply air for other engine start.

- **Before second engine start :**

APU BLEED....................OFF

L2 *The BLEED valve of the supplying engine reopens and the cross bleed valve closes.*

L1 ENG BLEED (supplying engine)....................ON
ENG BLEED (receiving engine)....................OFF

L2 *The bleed valve of receiving engine is closed to avoid reverse flow leakage.*

L1 PACK (receiving engine)....................OFF

L2 *The pack flow control valve on the receiving engine side is closed to prevent an increased ground idle on the supplying engine.*

L1 X BLEED....................OPEN

- **When cleared to start :**

AREA CLEAR OF OBSTACLES....................CONFIRM
THR LEVER (supplying engine)....................IDLE
RECEIVING ENGINE....................START

Apply the normal engine start procedure.

Depending on the engine thermal state, the FADEC can command an automatic dry cranking (or engine cooling) with the associated COOLING indication displayed on the EWD. *Refer to DSC-70-80-40 Engine Cooling*

- **After start :**

THR LEVER (supplying engine)....................IDLE
X BLEED....................AUTO
ENG BLEED (receiving engine)....................ON
PACK 1....................ON
PACK 2....................ON

AIR CONDITIONING DURING AUTOMATIC ENGINE START

Ident.: PRO-NOR-SUP-ENG-00021159.0002001 / 04 MAY 18
Applicable to: MSN 08495-09324, 10949-11139

During automatic engine start, the FADEC commands a dry crank that may significantly extend the engine start duration. This procedure enables to use the air conditioning during the start sequence of the engine 1 in order to enhance passenger's comfort.
This procedure can only be used if engine 2 is started before engine 1, as per Standard Operating Procedures, with APU bleed or external pneumatic power.

ENG 2.. START

- **When idle is reached (AVAIL indication is displayed):**
  XBLEED.. SHUT

L2 *The PACK 2 Flow Control Valve will automatically open.*

L1 ENG 1.. START

- **When idle is reached (AVAIL indication is displayed):**
  XBLEED.. AUTO

NORMAL PROCEDURE.. RESUME

ENGINE START VALVE MANUAL OPERATION

Ident.: PRO-NOR-SUP-ENG-00020861.0010001 / 17 MAR 17
Applicable to: MSN 08495-09324, 10949-11139

BEFORE ENGINE START

Before the manual override of the start valve, respect the below minimum time after the last engine shutdown:

Airport Elevation (ft above Sea Level)	Minimum Engine Shutdown Time (h) (1)
4 000 and below	9
4 001 to 5 000	9.5
5 001 to 10 000	10
Above 10 000	10.5

(1) *These times apply only for engines that have performed normal flight operations and have followed the recommended 3 min idle cool down prior to shutdown. If not operated in this manner, 12 h must be observed.*

Advise ground crew to prepare for manual engine start valve operation.

WARNING	To ensure safety of the ground crew when starting an engine with manual operation of the start valve, the flight crew should start the affected engine first.

ENGINE START

AUDIO CONTROL PANEL....................CAB
GROUND CREW CLEARANCE....................OBTAIN

- **If the start valve is failed closed:**
  - **When the ground crew is ready:**

    "ENGINE 1(2) START"....................ANNOUNCE
    ENG MODE sel....................IGN/START

    Apply the following two actions simultaneously:

    ENG MAN START pb-sw....................ON

    L2 *During an automatic start, the EEC detects that the start valve is failed closed and aborts the start. The EEC does not abort the start sequence during a manual start when a start valve is failed closed.*

    L1 "OPEN START VALVE AND KEEP OPEN"....................ORDER

    L2 *If not opened when the ENG MAN START pb-sw is set to ON, the ENG 1(2) START FAULT - STARTER SHAFT SHEAR alert may be triggered. This alert is automatically cleared when idle is reached.*
    If not maintained in the OPEN position by the ground crew, the start valve closes.

    Note: if the SAV is failed closed due to an electrical failure, the ENG 1(2) START VALVE FAULT alert may be triggered. This alert is automatically cleared when idle is reached.

  - L1 **When N2 reaches the maximum motoring speed (Minimum 18 %):**

    ENG MASTER....................ON
  - **When N2 is slightly above 55 %:**

    "CLOSE START VALVE"....................ORDER
  - **When idle is reached (AVAIL indication displayed):**

    ENG MAN START pb-sw....................OFF
- **If the start valve is failed open:**
  - **When the ground crew is ready:**

    "ENGINE 1(2) START"....................ANNOUNCE
    ENG MODE sel....................IGN/START
    ENG MASTER....................ON
  - **When N2 is slightly above 55 %:**

    "CLOSE START VALVE"....................ORDER

SOP – ENGINE START....................RESUME

ENGINE START VALVE MANUAL OPERATION

Ident.: PRO-NOR-SUP-ENG-00020861.0001001 / 17 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

BEFORE ENGINE START

Advise ground crew to prepare for manual engine start valve operation.

WARNING	To ensure safety of the ground crew when starting an engine with manual operation of the start valve, the flight crew should start the affected engine first.

ENGINE START

AUDIO CONTROL PANEL....................CAB
GROUND CREW CLEARANCE....................OBTAIN

- **When the ground crew is ready:**
  “ENGINE 1(2) START”....................ANNOUNCE
  ENG MODE sel....................IGN/START
  ENG MASTER....................ON
  “OPEN START VALVE AND KEEP OPEN”....................ORDER
  If not maintained in the OPEN position by the ground crew, the start valve closes.

- **When N2 at 50 %:**
  “CLOSE START VALVE”....................ORDER
  SOP – ENGINE START....................RESUME

ENGINE START VALVE MANUAL OPERATION

Ident.: PRO-NOR-SUP-ENG-00020861.0002001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

BEFORE ENGINE START

Advise ground crew to prepare for manual engine start valve operation.

WARNING	To ensure safety of the ground crew when starting an engine with manual operation of the start valve, the flight crew should start the affected engine first.

ENGINE START

AUDIO CONTROL PANEL....................CAB
GROUND CREW CLEARANCE....................OBTAIN

- **When the ground crew is ready:**
  "ENGINE 1(2) START"........ ANNOUNCE
  ENG MODE sel........ IGN/START
  ENG MASTER........ ON
  "OPEN START VALVE AND KEEP OPEN"........ ORDER
  If not maintained in the OPEN position by the ground crew, the start valve closes.
- **When N2 at 43 %:**
  "CLOSE START VALVE"........ ORDER
  SOP – ENGINE START........ RESUME

ENGINE VENTILATION (DRY CRANKING)

Ident.: PRO-NOR-SUP-ENG-00020943.0003001 / 17 MAR 17
Applicable to: MSN 08495-09324, 10949-11139

On ground, after:
- An unsuccessful manual engine start, or
- An unsuccessful automatic start not followed by an automatic dry crank,

the flight crew can perform a dry crank cycle on the affected engine to remove the fuel vapors.

- **Before dry crank:**
  ENG MASTER (affected engine)........ CHECK OFF
  ENG MODE sel........ CHECK NORM
  ENG MAN START pb-sw (affected engine)........ CHECK OFF
- **Dry crank:**
  ENG MODE sel........ CRANK
  ENG MAN START pb-sw (affected engine)........ ON

Note: *To clear fuel vapors, a 30 seconds dry crank cycle is the minimum required.*

L2 Note: *A manual start sequence can be initiated following a dry crank cycle (Refer to PRO-NOR-SUP-ENG Manual Engine Start - Procedure). The flight crew should consider the starter limitations (Refer to LIM-ENG Starter).*

Note: *Depending on the engine thermal state, the FADEC can command an automatic dry cranking (or engine cooling) with the associated COOLING indication displayed on the E/WD. Refer to DSC-70-80-40 Engine CoolingAfter approximately 2 min, the automatic bowed rotor protection cranking stops, the N2 value is no longer limited at around 10% and increases up to the maximum motoring speed. At the same time, the COOLING indication disappears from the E/WD.*

L1
- **When the dry crank is completed:**
  ENG MAN START pb-sw (affected engine)........ OFF

ENG MODE sel..NORM

ENGINE VENTILATION (DRY CRANKING)

Ident.: PRO-NOR-SUP-ENG-00020943.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

On ground, after:
- An unsuccessful manual engine start, or
- An unsuccessful automatic start not followed by an automatic dry crank,

the flight crew can perform a dry crank cycle on the affected engine to remove the fuel vapors.

- **Before dry crank:**
  ENG MASTER (affected engine)..CHECK OFF
  ENG MODE sel..CHECK NORM
  ENG MAN START pb-sw (affected engine)..CHECK OFF

- **Dry crank:**
  ENG MODE sel..CRANK
  ENG MAN START pb-sw (affected engine)..ON

Note: To clear fuel vapors, a 30 seconds dry crank cycle is the minimum required.

L2 *Note: A manual start sequence can be initiated following a dry crank cycle (Refer to PRO-NOR-SUP-ENG Manual Engine Start - Procedure). The flight crew should consider the starter limitations (Refer to LIM-ENG Starter).*

L1
- **When the dry crank is completed:**
  ENG MAN START pb-sw (affected engine)..OFF
  ENG MODE sel..NORM

ENGINE START USING AIR SUPPLIED BY ANOTHER A320

Applicable to: MSN 02321, 02887

Ident.: PRO-NOR-SUP-ENG-B-00009615.0002001 / 26 NOV 14

GENERAL

This procedure allows the engine to be started by using air supplied by another A320 aircraft.
A special tool is required to override the non-return valve, fitted on the HP ground connector of the supplying aircraft.
The aircraft should be positioned so that the HP bleed hose does not run through engine hazard areas.

Ident.: PRO-NOR-SUP-ENG-B-00009590.0002001 / 16 NOV 11

A/C supplying HP Bleed	**A/C receiving**
ENG 2..........................START *ENG 2 must be started before connecting HP bleed hose.*	
APU BLEED..........................OFF	APU BLEED..........................OFF
ENG 1 & 2 BLEED..........................OFF	ENG 1 & 2 BLEED..........................OFF
HP BLEED HOSE..........................CONNECT	HP BLEED HOSE..........................CONNECT
CAUTION Hose must not run through engine hazard areas.	
Note: *A special tool is needed to override the non-return valve fitted on the HP ground connector.*	
•WHEN CLEARED TO START	
PACKS 1 & 2..........................OFF	
X BLEED..........................OPEN	X BLEED..........................OPEN
ENG 2 BLEED..........................ON *Note:* *ENG 2 thrust lever may be advanced up to CL notch, if required, to provide at least 20 PSI start air pressure on the receiving engine.*	
	ENG 2..........................START *START air pressure must be at least 20 PSI. ENG 2 is started first as HP ground connector is close to ENG 1.*
•AFTER ENG start	
ENG 2 THR LEVER..........................IDLE	
ENG 2 MASTER..........................OFF	
HP BLEED HOSE..........................REMOVE	HP BLEED HOSE..........................REMOVE
SPECIAL TOOL..........................REMOVE	
X BLEED..........................AUTO	
	ENG 2 BLEED..........................ON
	X BLEED ENG START PROCEDURE..........................APPLY

REFUELING

Ident.: PRO-NOR-SUP-FUEL-A-00021256.0002001 / 25 JUL 17
Applicable to: ALL

WARNING

1. Prior initiation of any ground fuel operations, obey the below fuel safety precautions. This will prevent injury to people and/or damage to the aircraft.
2. Do not request or perform any ground fuel operations if a fire or engine overheat warning is displayed.
3. f the APU fails during any ground fuel operations, do not restart the APU. For APU use during refueling/defueling *Refer to LIM-APU APU Start/Shutdown during Refueling/Defueling*.
4. Do not refuel in bad weather conditions and electrical storms.

PREPARATION

SAFETY PRECAUTIONS....................................APPLY

During refueling operations, ensure that:
- *HF transmission (including HF transmission via the HF DATA LINK pb) is not performed*
- *The aircraft is properly bonded to the tanker*
- *The tanker and the aircraft grounding requirement is based on local regulations. Always connect the ground cable to the parking ground point (or to the tanker) before connecting it to the aircraft.*
- *The external lighting is not operated (except for NAV & LOGO).*

In the cockpit, check that the PARK BRK is ON and that the ACCU PRESS has sufficient pressure. If the PARK BRK cannot be set to ON, check that the chocks are in place.

ACCESS PLATFORM....................................IN POSITION
MAX REFUELING PRESSURE: 50 PSI (3.5 bar)

- **On refueling control panel:**

  TEST sw....................................LTS

  Lights on the panel come on. FUEL QTY and the PRESELECTED and ACTUAL displays show 8's.

  TEST sw....................................HI.LVL

  HI LVL lights change state if the high level sensors and their circuits are serviceable.

Ident.: PRO-NOR-SUP-FUEL-A-00021257.0002001 / 21 MAR 17
Applicable to: MSN 03032, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

AUTOMATIC REFUELING

- **On cockpit refueling control panel:**

REFUEL PWR pb-sw....................ON

Cockpit panel takes priority. The CKPT light comes on and REFUELG is displayed on the ECAM MEMO.

[PRESELECTOR sw] REQUESTED BLOCK FUEL....................SET
REFUEL CTL pb-sw....................ON

Refueling starts. When refueling is finished, the END light comes on.

REFUEL CTL pb-sw....................OFF
REFUEL PWR pb-sw....................OFF

- **On refueling control panel:**

REFUEL VALVES sel....................CHECK NORM and GUARDED
[PRESELECTOR sw] REQUESTED BLOCK FUEL....................SET
MODE SELECT sw....................REFUEL

START REFUELING

When the refueling is finished the END light comes on.

ACTUAL QUANTITY....................CHECK

The actual quantity must be within 100 kg (220 lb) of the preselected quantity.

MODE SELECT sw....................OFF and GUARDED

Ident.: PRO-NOR-SUP-FUEL-A-00021257.0001001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03002, 03035-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11139

AUTOMATIC REFUELING

REFUEL VALVES sel....................CHECK NORM and GUARDED
[PRESELECTOR sw] REQUESTED BLOCK FUEL....................SET
MODE SELECT sw....................REFUEL
START REFUELING

When the refueling is finished the END light comes on.

ACTUAL QUANTITY....................CHECK

The actual quantity must be within 100 kg (220 lb) of the preselected quantity.

MODE SELECT sw....................OFF and GUARDED

Ident.: PRO-NOR-SUP-FUEL-A-00021260.0001001 / 21 MAR 17
Applicable to: ALL

MANUAL REFUELING

REFUEL VALVES sel....................SHUT
MODE SELECT sw....................REFUEL
REFUEL VALVES sel (tanks to be filled)....................OPEN
START REFUELING
FUEL QTY....................MONITOR

- **When the contents of the tanks reach the required level :**
  Corresponding REFUEL VALVES sel....................SHUT
  MODE SELECT sw....................OFF and GUARDED
  REFUEL VALVES sel....................NORM and GUARDED

REFUELING WITH ONE ENGINE RUNNING

Ident.: PRO-NOR-SUP-FUEL-00001677.0003001 / 21 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

- Refuel with one engine running only at airports where no external ground pneumatic power is available and only when APU is unserviceable.
- Only the RH fuel couplings can be used.
- Overwing gravity filling is not permitted.
- Disembark all passengers.
- Obtain airport authorization.
  The Airport Fire Department should standby at the aircraft during the entire refueling procedure.
- Point the aircraft into the wind at a location where the slope is negligible.
  Set the parking brake and check its pressure.
  Run engine n° 1 at ground idle with its generator connected.
- Do not start engine n° 2, do not shut down engine n° 1 or do not attempt to start the APU before all fueling operations have been completed.
- Position the fuel truck under the extremity of the right wing. Its pressure should not exceed 30 PSI.
- Follow manual refueling procedure.

OPERATION MONITORING

DURING THE ENTIRE REFUELING PROCEDURE :

- Monitor the fuel truck shut off valve.
- Be sure that the fueling company is keeping permanent control of the emergency fuel shut off device.

- Have a flight crew member in the cockpit monitoring all systems and the running engine.
- Have a qualified ground crew member at the fueling station to operate the refuel valve switches.
- Monitor the refueling closely and be prepared to close the refuel valves in order not to exceed the following fuel quantities :

DENSITY (kg/l)	0.77	0.78	0.79	0.8	0.81	0.82	0.83
L(R) WING (kg)	5 710	5 780	5 860	5 930	6 005	6 080	6 160
CENTER (kg)	6 030	6 110	6 190	6 270	6 350	6 430	6 500

AFTER SECOND ENGINE START :

- **Reset the 3DMCs in order to reinitialize the fuel used values :**

  DMC 1 SPLY C/B (E11 on 49VU).. PULL
  DMC 2 SPLY C/B (Q8 on 121 VU)..PULL
  DMC 3 SPLY C/B (Q9 on 121 VU)..PULL
  DMC 3 SPLY STBY (E10 on 49 VU)..PULL

  - **After 5 s :**

    All C/B's..PUSH

    Note: *The T.O MEMO does not appear automatically since one engine is kept running.*

REFUELING WITH ONE ENGINE RUNNING

Ident.: PRO-NOR-SUP-FUEL-00001677.0005001 / 21 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

- Refuel with one engine running only at airports where no external ground pneumatic power is available and only when APU is unserviceable.
- Only the RH fuel couplings can be used.
- Overwing gravity filling is not permitted.
- Disembark all passengers.
- Obtain airport authorization.
  The Airport Fire Department should standby at the aircraft during the entire refueling procedure.
- Point the aircraft into the wind at a location where the slope is negligible.
  Set the parking brake and check its pressure.
  Run engine n° 1 at ground idle with its generator connected.
- Do not start engine n° 2, do not shut down engine n° 1 or do not attempt to start the APU before all fueling operations have been completed.
- Position the fuel truck under the extremity of the right wing. Its pressure should not exceed 30 PSI.
- Follow manual refueling procedure.

OPERATION MONITORING

DURING THE ENTIRE REFUELING PROCEDURE :

- Monitor the fuel truck shut off valve.
- Be sure that the fueling company is keeping permanent control of the emergency fuel shut off device.
- Have a flight crew member in the cockpit monitoring all systems and the running engine.
- Have a qualified ground crew member at the fueling station to operate the refuel valve switches.
- Monitor the refueling closely and be prepared to close the refuel valves in order not to exceed the following fuel quantities :

DENSITY (kg/l)	0.77	0.78	0.79	0.8	0.81	0.82	0.83
L(R) WING (kg)	5 660	5 730	5 810	5 880	5 950	6 030	6 100
CENTER (kg)	5 990	6 070	6 150	6 220	6 300	6 380	6 460

AFTER SECOND ENGINE START :

● **Reset the 3DMCs in order to reinitialize the fuel used values :**

DMC 1 SPLY C/B (E11 on 49VU)...PULL
DMC 2 SPLY C/B (Q8 on 121 VU)...PULL
DMC 3 SPLY C/B (Q9 on 121 VU)...PULL
DMC 3 SPLY STBY (E10 on 49 VU)...PULL

● **After 5 s :**

All C/B's...PUSH

Note: *The T.O MEMO does not appear automatically since one engine is kept running.*

GROUND FUEL TRANSFER

Ident.: PRO-NOR-SUP-FUEL-00021258.0001001 / 25 JUL 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

WARNING	1. Prior initiation of any ground fuel operations, obey the below fuel safety precautions. This will prevent injury to people and/or damage to the aircraft. 2. Do not request or perform any ground fuel operations if a fire or engine overheat warning is displayed. 3. If the APU fails during any ground fuel operations, do not restart the APU. For APU use during refueling/defueling *Refer to LIM-APU APU Start/Shutdown during Refueling/Defueling*.

SAFETY PRECAUTIONS...APPLY

During ground operations, ensure that:
- *HF transmission is not performed (including HF transmission via the HF DATA LINK ◁ pb)*
- *If connected :*
  - *The aircraft is properly bonded to the tanker*
  - *The tanker and the aircraft grounding requirement is based on local regulations. Always connect the ground cable to the parking ground point (or to the tanker) before connecting it to the aircraft*
- *The external lighting is not operated (except for NAV & LOGO).*

In the cockpit, check that the PARK BRK is ON and that the ACCU PRESS has sufficient pressure. If the PARK BRK cannot be set to ON, check that the chocks are in place.

ACCESS PLATFORM...IN POSITION

● **On cockpit overhead FUEL panel:**

PUMPS (of the tanks not to be defueled).. OFF
MODE SEL pb-sw ....MAN
PUMPS (of the tank to be defueled)..ON

● **if left wing and/or center tanks is (are) to be defueled :**

X FEED...ON

OPEN light comes on.

● **On refueling control panel :**

REFUEL VALVES sel (of tanks not to be filled).. SHUT
REFUEL VALVES sel (of tanks to be filled)...OPEN
MODE SELECT sw .... DEFUEL/XFR

OPEN light comes on.

FUEL QTY...MONITOR

● **When the tank contents reach the required level :**

Corresponding REFUEL VALVES sel.. SHUT
MODE SELECT sw ....OFF and GUARDED

OPEN light goes out.

REFUEL VALVES sel...NORM and GUARDED

Set cockpit FUEL panel to normal configuration.

GROUND FUEL TRANSFER

Ident.: PRO-NOR-SUP-FUEL-00021258.0004001 / 25 JUL 17
Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

WARNING

1. Prior initiation of any ground fuel operations, obey the below fuel safety precautions. This will prevent injury to people and/or damage to the aircraft.
2. Do not request or perform any ground fuel operations if a fire or engine overheat warning is displayed.
3. If the APU fails during any ground fuel operations, do not restart the APU. For APU use during refueling/defueling *Refer to LIM-APU APU Start/Shutdown during Refueling/Defueling*.

SAFETY PRECAUTIONS..........APPLY

During ground operations, ensure that:
- *HF transmission is not performed (including HF transmission via the HF DATA LINK pb)*
- *If connected :*
  - *The aircraft is properly bonded to the tanker*
  - *The tanker and the aircraft grounding requirement is based on local regulations. Always connect the ground cable to the parking ground point (or to the tanker) before connecting it to the aircraft*
- *The external lighting is not operated (except for NAV & LOGO).*

In the cockpit, check that the PARK BRK is ON and that the ACCU PRESS has sufficient pressure. If the PARK BRK cannot be set to ON, check that the chocks are in place.

ACCESS PLATFORM..........IN POSITION

● **From one wing to the other wing or to the center tank :**

● **On cockpit overhead FUEL panel:**

PUMPS (of the tank not to be defueled)..........OFF
PUMPS (of the tank to be defueled)..........ON
X FEED..........ON

OPEN light comes on.

● **On refueling control panel :**

REFUEL VALVES sel (of tanks not to be filled)..........SHUT
REFUEL VALVES sel (of tanks to be filled)..........OPEN
MODE SELECT sw..........DEFUEL/XFR

OPEN light comes on.

FUEL QTY..........MONITOR

● **When the tank contents reach the required level:**

Corresponding REFUEL VALVES sel..........SHUT

MODE SELECT sw .... OFF and GUARDED

OPEN light goes out.

REFUEL VALVES sel.. NORM and GUARDED

Set cockpit FUEL panel to normal configuration.

● **From center tank to the L (R) inner tank :**

L(R) TK PUMPS.. ON

CTR TK L(R) XFR.. ON

When the inner tank is full or if the center tank is empty the center tank transfer valve will automatically close.

GROUND FUEL TRANSFER

Ident.: PRO-NOR-SUP-FUEL-00021258.0005001 / 25 JUL 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

WARNING

1. Prior initiation of any ground fuel operations, obey the below fuel safety precautions. This will prevent injury to people and/or damage to the aircraft.
2. Do not request or perform any ground fuel operations if a fire or engine overheat warning is displayed.
3. If the APU fails during any ground fuel operations, do not restart the APU. For APU use during refueling/defueling *Refer to LIM-APU APU Start/Shutdown during Refueling/Defueling*.

SAFETY PRECAUTIONS..APPLY

During ground operations, ensure that:

- *HF transmission is not performed (including HF transmission via the HF DATA LINK ◁ pb)*
- *If connected :*
  - *The aircraft is properly bonded to the tanker*
  - *The tanker and the aircraft grounding requirement is based on local regulations. Always connect the ground cable to the parking ground point (or to the tanker) before connecting it to the aircraft*
- *The external lighting is not operated (except for NAV & LOGO).*

In the cockpit, check that the PARK BRK is ON and that the ACCU PRESS has sufficient pressure. If the PARK BRK cannot be set to ON, check that the chocks are in place.

ACCESS PLATFORM...IN POSITION

● **From one wing tank to the other wing tank or to the center tank :**

● **On cockpit overhead FUEL panel:**

PUMPS (of the wing tank not to be defueled).. OFF

PUMPS (of the wing tank to be defueled)... ON

X FEED...ON

OPEN light comes on.

- **On refueling control panel :**

  REFUEL VALVES sel (of tanks not to be filled)..........................SHUT
  REFUEL VALVES sel (of tanks to be filled)..............................OPEN
  MODE SELECT sw ....DEFUEL/XFR

  OPEN light comes on.

  FUEL QTY...MONITOR

  - **When the tank contents reach the required level :**

    Corresponding REFUEL VALVES sel......................................SHUT
    MODE SELECT sw ....OFF and GUARDED

    OPEN light goes out.

    REFUEL VALVES sel..NORM and GUARDED

    Set cockpit FUEL panel to normal configuration.

- **From center tank to the L (R) wing tank :**

  L(R) TK PUMPS..ON
  CTR TK L(R) XFR..ON

  When the wing tank is full or if the center tank is empty the transfer valve will automatically close.

DEFUELING

Ident.: PRO-NOR-SUP-FUEL-00021259.0004001 / 22 MAR 18
Applicable to: MSN 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11139

WARNING

1. Prior initiation of any ground fuel operations, obey the below fuel safety precautions. This will prevent injury to people and/or damage to the aircraft.
2. Do not request or perform any ground fuel operations if a fire or engine overheat warning is displayed.
3. If the APU fails during any ground fuel operations, do not restart the APU. For APU use during refueling/defueling *Refer to LIM-APU APU Start/Shutdown during Refueling/Defueling*.
4. Do not defuel in bad weather conditions and electrical storms.
5. Defueling by suction is not possible. Fuel can be removed from inner tank only. To defuel center tank, first transfer fuel to the inner tanks.

SAFETY PRECAUTIONS...APPLY

During defueling operations, ensure that:
- *HF transmission (including HF transmission via the HF DATA LINK ◁ pb) is not performed*
- *The aircraft is properly bonded to the tanker*

- *The tanker and the aircraft grounding requirement is based on local regulations. Always connect the ground cable to the parking ground point (or to the tanker) before connecting it to the aircraft*
- *The external lighting is not operated (except for NAV & LOGO).*

In the cockpit, check that the PARK BRK is ON and that the ACCU PRESS has sufficient pressure. If the PARK BRK cannot be set to ON, check that the chocks are in place.

ACCESS PLATFORM..........IN POSITION

- **On cockpit overhead FUEL panel:**

  PUMPS..........OFF

- **On refueling control panel:**

  REFUEL VALVES sel..........NORM

  MODE SELECT sw..........DEFUEL/XFR

  OPEN light comes on

- **On cockpit overhead FUEL panel :**

  PUMPS (of the tank(s) to be defueled)..........ON

  X FEED..........ON

  OPEN light comes on

  FUEL QTY..........MONITOR

  - **When tank contents reach required level**

    Corresponding PUMPS..........OFF

- **On refueling control panel:**

  MODE SELECT sw..........OFF and GUARDED

  OPEN light goes out

  REFUEL VALVES sel..........NORM and GUARDED

  Set cockpit FUEL panel to normal configuration.

DEFUELING

Ident.: PRO-NOR-SUP-FUEL-00021259.0002001 / 22 MAR 18
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

WARNING

1. Prior initiation of any ground fuel operations, obey the below fuel safety precautions. This will prevent injury to people and/or damage to the aircraft.
2. Do not request or perform any ground fuel operations if a fire or engine overheat warning is displayed.
3. If the APU fails during any ground fuel operations, do not restart the APU. For APU use during refueling/defueling *Refer to LIM-APU APU Start/Shutdown during Refueling/Defueling*.
4. Do not defuel in bad weather conditions and electrical storms.
5. Defueling by suction is not possible. Fuel can be removed from wing tank only. To defuel center tank, first transfer fuel to the wing tanks.

SAFETY PRECAUTIONS....................APPLY

During defueling operations, ensure that:
- *HF transmission (including HF transmission via the HF DATA LINK ◁ pb) is not performed*
- *The aircraft is properly bonded to the tanker*
- *The tanker and the aircraft grounding requirement is based on local regulations. Always connect the ground cable to the parking ground point (or to the tanker) before connecting it to the aircraft*
- *The external lighting is not operated (except for NAV & LOGO).*

In the cockpit, check that the PARK BRK is ON and that the ACCU PRESS has sufficient pressure. If the PARK BRK cannot be set to ON, check that the chocks are in place.

ACCESS PLATFORM....................IN POSITION

- **On cockpit overhead FUEL panel:**

  PUMPS....................OFF

- **On refueling control panel:**

  REFUEL VALVES sel....................NORM
  MODE SELECT sw....................DEFUEL/XFR

  OPEN light comes on

- **On cockpit overhead FUEL panel :**

  PUMPS (of the tank(s) to be defueled)....................ON
  X FEED....................ON

  OPEN light comes on

  FUEL QTY....................MONITOR

- **When tank contents reach required level**
  Corresponding PUMPS.. OFF

- **On refueling control panel:**
  MODE SELECT sw .... OFF and GUARDED

  OPEN light goes out

  REFUEL VALVES sel.. NORM and GUARDED

  Set cockpit FUEL panel to normal configuration.

DEFUELING

Ident.: PRO-NOR-SUP-FUEL-00021259.0001001 / 22 MAR 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

WARNING

1. Prior initiation of any ground fuel operations, obey the below fuel safety precautions. This will prevent injury to people and/or damage to the aircraft.
2. Do not request or perform any ground fuel operations if a fire or engine overheat warning is displayed.
3. If the APU fails during any ground fuel operations, do not restart the APU. For APU use during refueling/defueling *Refer to LIM-APU APU Start/Shutdown during Refueling/Defueling*.
4. Do not defuel in bad weather conditions and electrical storms.
5. Defueling by suction is not possible

SAFETY PRECAUTIONS..APPLY

During defueling operations, ensure that:
- *HF transmission (including HF transmission via the HF DATA LINK pb) is not performed*
- *The aircraft is properly bonded to the tanker*
- *The tanker and the aircraft grounding requirement is based on local regulations. Always connect the ground cable to the parking ground point (or to the tanker) before connecting it to the aircraft*
- *The external lighting is not operated (except for NAV & LOGO).*

In the cockpit, check that the PARK BRK is ON and that the ACCU PRESS has sufficient pressure. If the PARK BRK cannot be set to ON, check that the chocks are in place.

ACCESS PLATFORM..IN POSITION

- **On cockpit overhead FUEL panel:**
  PUMPS..OFF

- **On refueling control panel:**
  REFUEL VALVES sel.. NORM

MODE SELECT sw .... DEFUEL/XFR

OPEN light comes on

- **On cockpit overhead FUEL panel :**

  MODE SEL pb-sw .... MAN
  PUMPS (of the tank(s) to be defueled).. ON
  X FEED.. ON

  OPEN light comes on

  FUEL QTY.. MONITOR

  - **When tank contents reach required level**

    Corresponding PUMPS.. OFF

- **On refueling control panel:**

  MODE SELECT sw .... OFF and GUARDED

  OPEN light goes out

  REFUEL VALVES sel.. NORM and GUARDED

  Set cockpit FUEL panel to normal configuration.

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GPS INTERFERENCES

Ident.: PRO-NOR-SUP-GPSINT-A-00025101.0001001 / 26 JAN 22
Applicable to: ALL

Radio frequency interferences can affect the GPS data and the aircraft functions that use GPS data. Due to the various levels of interference, the GPS data can be maintained, degraded or lost. The associated sequence of cockpit effects cannot be predicted.
The following table provides a list of cockpit effects that may occur during the GPS interferences:

Ident.: PRO-NOR-SUP-GPSINT-A-00025102.0001001 / 26 JAN 22
Applicable to: ALL

Function	PFD/ND	ECAM Alert	ECAM Status	Other Effects

Ident.: PRO-NOR-SUP-GPSINT-A-00025152.0001001 / 26 JAN 22
Applicable to: MSN 02321, 03211, 04827-04860, 08495-09324, 10949-11139

Function	PFD/ND	ECAM Alert	ECAM Status	Other Effects
ADS-B OUT		NAV ADS-B RPTG 1(2) FAULT	ADS-B RTPG	

Ident.: PRO-NOR-SUP-GPSINT-A-00025153.0001001 / 26 JAN 22
Applicable to: ALL

Function	PFD/ND	ECAM Alert	ECAM Status	Other Effects
Aircraft position		NAV FM/GPS POS DISAGREE		

Ident.: PRO-NOR-SUP-GPSINT-A-00025154.0001001 / 26 JAN 22
Applicable to: MSN 10949-11139

Function	PFD/ND	ECAM Alert	ECAM Status	Other Effects
DBUS	Backup Mach, backup characteristic speeds, and backup altitude are not available.			

Ident.: PRO-NOR-SUP-GPSINT-A-00025155.0002001 / 26 JAN 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Function	PFD/ND	ECAM Alert	ECAM Status	Other Effects
GLS	GLS LOC G/S LOC and G/S deviation scale and index are not available.	NAV GLS 1(2)(1+2) FAULT	GLS 1(2)(1+2) GLS AUTOLAND	

Ident.: PRO-NOR-SUP-GPSINT-A-00025157.0001001 / 26 JAN 22
Applicable to: ALL

Function	PFD/ND	ECAM Alert	ECAM Status	Other Effects
GPS	GPS PRIMARY LOST	NAV GPS 1(2)(1+2) FAULT	GPS 1(2)(1+2)	

Ident.: PRO-NOR-SUP-GPSINT-A-00025159.0002001 / 26 JAN 22
Applicable to: MSN 08495-09324, 10949-11139

Function	PFD/ND	ECAM Alert	ECAM Status	Other Effects
ROW/ROPS		SURV ROW/ROP LOST	ROW/ROP	

Ident.: PRO-NOR-SUP-GPSINT-A-00025160.0001001 / 26 JAN 22
Applicable to: ALL

TAWS (for aircraft equipped with T2CAS, T3CAS or EGPWS)		NAV GPWS TERR DET FAULT	GPWS TERR	Erroneous terrain alerts.

Ident.: PRO-NOR-SUP-GPSINT-A-00025161.0001001 / 26 JAN 22
Applicable to: ALL

Time predictions				Erroneous time and FMS predictions (time drifts or jumps).

Ident.: PRO-NOR-SUP-GPSINT-A-00025162.0002001 / 26 JAN 22
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02734, 02896-03002, 03035-03710, 03733-04544, 04570-04974, 05066, 05101-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

SATCOM				Degraded voice/datalink communications.

Ident.: PRO-NOR-SUP-GPSINT-A-00025163.0001001 / 26 JAN 22
Applicable to: ALL

Wind information	Erroneous wind speed and direction.			

Ident.: PRO-NOR-SUP-GPSINT-A-00025103.0001001 / 26 JAN 22
Applicable to: ALL

When the flight crew suspects some GPS interferences due to the cockpit effects, the flight crew can check the GPS data.
The GPS MONITOR page displays dashes on GPS positions, and/or the number of tracked satellites may be lower than 5 or null, in the case of GPS interferences.
The flight crew should keep the GPS selection on the SELECTED NAVAIDS page. This allows the aircraft to recover the degraded or lost functions based on GPS data (e.g. GPS PRIMARY), as soon as the aircraft is out of the interferences.
When ADS-B OUT is required in the flight area, the flight crew should notify ATC of any loss of ADS-B OUT.

■ If NOTAMs (from Authority or Company) indicate a GPS interference area, and the aircraft is expected to fly in or near interference zone:

● Flight Preparation

The flight crew should consider the following:
- The possibility to identify the entry and exit points of the interference area
- The possible effects of GPS interferences on flight operations
- The availability of alternate routes
- The availability of routes, procedures and approaches that do not require GPS (e.g. ILS, VOR/DME) for the affected area. *Refer to PRO-SPO-51 General - General*.

● Preliminary Cockpit Preparation

Perform a complete IRS alignment if the flight crew expects long segments in airspaces with low radio NAVAIDS coverage.

● Before the Interference Area (Before Departure or during the Flight)

In order to maintain the ATC datalink communication (ADS-C, CPDLC and PBCS) and the FMS predictions, the flight crew should apply the following:

CLOCK.. INT

L2 *If the clock was previously synchronized with the GPS, the INT mode of the clock maintains the ATC datalink capabilities for 24 h.*

L1

● After the Interference Area

GPS MODE.. CHECK

L2 *Check that the GPS MONITOR page displays GPS 1 in NAV mode with at least 5 satellites tracked.*

L1 CLOCK.. GPS

L2 *The clock should remain on INT mode until the GPS NAV mode is recovered.*

L1

■ If no NOTAMs indicate a GPS interference area on the expected route and the flight crew suspects interference on the GPS during the flight:

The flight crew should notify ATC of any interference on the GPS.

During the flight, the flight crew may detect an erroneous time reference due to suspected GPS interferences. In order to maintain the FMS predictions, the flight crew should consider the following:

ATC.. TIME CHECK

L2 *Crosscheck the external time reference with the clock.*

L1

- **If the ATC time is different from the time displayed on the clock:**

  CLOCK...SET

  Note: *Manually enter the time data on the clock, based on the external time reference. When the clock is in the SET mode, the flight crew should consider that the ATC datalink communication (CPDLC, ADS-C and PBCS) is unavailable.*

  - **After the Interference Area**

    GPS MODE... CHECK

    L2 *Check that the GPS MONITOR page displays GPS 1 in NAV mode with at least 5 satellites tracked.*

    L1 CLOCK... AUTO

    L2 *The clock should remain in SET mode until the GPS NAV mode is recovered.*

Flight With Landing Gear Down

FLIGHT WITH LANDING GEAR DOWN

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023362.0001001 / 17 NOV 20
Applicable to: ALL

This chapter applies to dispatch with L/G down. A revenue flight is permitted with the L/G down, and the L/G gear doors closed in the conditions stated below.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023363.0003001 / 17 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

FLIGHT PREPARATION - LIMITATIONS

MAX SPEED : 235/.60

L2 *VMO/MMO for a flight with the L/G in the extended position and L/G doors closed is 235 kt/M 0.60.*

L1

RECOMMENDED SPEED : 230/.50

L2 230 kt/M 0.50 is the recommended speed for climb, cruise, and descent.

L1 LANDING GEAR DOORS........................CHECK CLOSED
TCAS........................TA ONLY
ALTITUDE ALERT: NOT AVAIL
FLT IN EXPECTED ICING CONDITIONS : NOT PERMITTED

L2 *Due to the possible ice accretion on the L/G, flight is not permitted in expected icing conditions.*

L1 RVSM : NOT PERMITTED
ETOPS : NOT PERMITTED

DITCHING NOT DEMONSTRATED

MANAGED VERTICAL MODES (CLB & DES) : DO NOT USE

L2 *Due to the L/G in the extended position in flight, the FMS vertical guidance is not accurate.*

L1 MANAGED SPEED (EXCEPT IN APPR) : DO NOT USE
FMS PRED (ALT, SPD, TIME & PSEUDO-WPT) : DO NOT USE

Note: *However, in level flight, time predictions at cruise waypoints are correct.*

FUEL CONSUMPT INCRSD

FMS FUEL PRED UNRELIABLE

SIGNS AUTO MODE ✳ : DO NOT USE

L2 *Because the L/G is in the extended position, the signs remain on during the whole flight if the AUTO mode ✳ is used.*

L1 CRUISE SD PAGE NOT AVAIL

L2 Because the L/G is in the extended position, the default SD page is the WHEEL SD page. The flight crew should check the other SD pages more frequently.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023363.0002001 / 17 NOV 20
Applicable to: MSN 08495-09324, 10949-11139

FLIGHT PREPARATION - LIMITATIONS

MAX SPEED : 235/.60

L2 *VMO/MMO for a flight with the L/G in the extended position and L/G doors closed is 235 kt/M 0.60.*

L1 RECOMMENDED SPEED : 230/.50

L2 230 kt/M 0.50 is the recommended speed for climb, cruise, and descent.

L1 LANDING GEAR DOORS....................CHECK CLOSED
TCAS....................TA ONLY
ALTITUDE ALERT: NOT AVAIL
FLT IN EXPECTED ICING CONDITIONS : NOT PERMITTED

L2 *Due to the possible ice accretion on the L/G, flight is not permitted in expected icing conditions.*

L1 RVSM : NOT PERMITTED
ETOPS : NOT PERMITTED

DITCHING NOT DEMONSTRATED

GA THR : TOGA ONLY

L2 *Because the soft go-around function is not designed to be used with the L/G in the extended position, the flight crew must select TOGA thrust for go-around.*

L1 MANAGED VERTICAL MODES (CLB & DES) : DO NOT USE

L2 *Due to the L/G in the extended position in flight, the FMS vertical guidance is not accurate.*

L1 MANAGED SPEED (EXCEPT IN APPR) : DO NOT USE
FMS PRED (ALT, SPD, TIME & PSEUDO-WPT) : DO NOT USE

Note: However, in level flight, time predictions at cruise waypoints are correct.

FUEL CONSUMPT INCRSD

FMS FUEL PRED UNRELIABLE

SIGNS AUTO MODE ◁ : DO NOT USE

L2 *Because the L/G is in the extended position, the signs remain on during the whole flight if the AUTO mode ◁ is used.*

L1 CRUISE SD PAGE NOT AVAIL

L2 Because the L/G is in the extended position, the default SD page is the WHEEL SD page. The flight crew should check the other SD pages more frequently.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023363.0001001 / 17 NOV 20
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

FLIGHT PREPARATION - LIMITATIONS

MAX SPEED : 235/.60

L2 *VMO/MMO for a flight with the L/G in the extended position and L/G doors closed is 235 kt/M 0.60.*

L1 RECOMMENDED SPEED : 230/.50

L2 230 kt/M 0.50 is the recommended speed for climb, cruise, and descent.

L1 LANDING GEAR DOORS..CHECK CLOSED
TCAS..TA ONLY

Keep the APU running for the entire duration of the flight.

ALTITUDE ALERT: NOT AVAIL
APU GEN..KEEP ON
FLT IN EXPECTED ICING CONDITIONS : NOT PERMITTED

L2 *Due to the possible ice accretion on the L/G, flight is not permitted in expected icing conditions.*

L1 RVSM : NOT PERMITTED
ETOPS : NOT PERMITTED

DITCHING NOT DEMONSTRATED

MANAGED VERTICAL MODES (CLB & DES) : DO NOT USE

L2 *Due to the L/G in the extended position in flight, the FMS vertical guidance is not accurate.*

L1 MANAGED SPEED (EXCEPT IN APPR) : DO NOT USE
FMS PRED (ALT, SPD, TIME & PSEUDO-WPT) : DO NOT USE

Note: However, in level flight, time predictions at cruise waypoints are correct.

FUEL CONSUMPT INCRSD

FMS FUEL PRED UNRELIABLE

SIGNS AUTO MODE : DO NOT USE

L2 *Because the L/G is in the extended position, the signs remain on during the whole flight if the AUTO mode is used.*

L1 CRUISE SD PAGE NOT AVAIL

L2 Because the L/G is in the extended position, the default SD page is the WHEEL SD page. The flight crew should check the other SD pages more frequently.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023364.0002001 / 17 MAY 21
Applicable to: ALL

DURING PRELIMINARY COCKPIT PREPARATION

VMO/MMO SETTING

VMO-MMO sw.. CHECK L/G DOWN

L2 *The ground crew should set the VMO/MMO switch on the "L/G DOWN" position.*

L1 TAKEOFF PERF

RECOMMENDED FLAPS : CONF 1+F

L2 *CONF 1+F configuration gives a lower drag.*

L1 AVOID TAILWIND
T.O PERF WITH L/G DOWN...COMPUTE

L2 *Takeoff performance is affected, compute takeoff performance with the L/G in the extended position.*

L1 *Note:* *In the Airbus EFB T.O PERF application, select the "Landing gears position extended" MEL item.*

LANDING PERF (DISPATCH)

LDG PERF WITH L/G DOWN.. CHECK

L2 *Landing performance (go-around gradient) is affected, check landing performance with the L/G in the extended position.*

L1 *Note:* *In the Airbus EFB LDG PERF application (DISPATCH computation mode), select the "Landing gears position extended" MEL item.*

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023365.0001001 / 17 NOV 20
Applicable to: ALL

DURING COCKPIT PREPARATION

OVERHEAD PANEL

SIGNS AUTO MODE ◁ : DO NOT USE

L2 *Because the L/G is in the extended position, the signs remain on during the whole flight if the AUTO mode ◁ is used.*

L1 FMGS PREPARATION

FMS FUEL PRED UNRELIABLE

Note: *A conservative value for the fuel penalty is provided in the Fuel Penalty INOP SYS TABLE for L/G - L/G RETRACTION - All L/G extended (Refer to QRH/OPS Fuel Penalty Factors/Inop Sys Table).*

RECOMMENDED SPEED : 230/.50

L2 230 kt/M 0.50 is the recommended speed for climb, cruise, and descent.

L1 [FMS-ACTIVE/PERF PAGES] PRESEL SPDs .... INSERT

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023366.0001001 / 17 NOV 20
Applicable to: ALL

TAKEOFF

WHEN POSITIVE CLIMB

L/G : KEEP DOWN

AT S SPEED

A/BRK MAX.......... CHECK DISARMED

L2 *After standard actions, check that BRK MAX does not appear on the FMA.*

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023367.0001001 / 17 NOV 20
Applicable to: ALL

DURING CLIMB AND CRUISE

RVSM : NOT PERMITTED
AVOID ICING CONDITIONS

RECOMMENDED SPEED : 230/.50

L2 230 kt/M 0.50 is the recommended speed for climb and cruise.

L1 CRUISE SD PAGE NOT AVAIL

L2 Because the L/G is in the extended position, the default SD page is the WHEEL SD page. The flight crew should check the other SD pages more frequently.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023369.0002001 / 17 NOV 20
Applicable to: MSN 08495-09324, 10949-11139

LANDING PERFORMANCE

LDG PERF WITH L/G DOWN.......... CONFIRM

L2 *Go-around performance is affected.*

L1 *Note:* *In the Airbus EFB LDG PERF application (IN-FLIGHT computation mode), select the "Landing gears position extended" MEL item.*

FOR DESCENT AND APPROACH

RECOMMENDED SPEED : 230/.50

L2 230 kt/M 0.50 is the recommended speed for descent.

L1 DESCENT SELECTED V/S MODE..CONSIDER

L2 *To avoid a high rate of descent due to the L/G in the extended position, consider using selected vertical speed.*

L1 AVOID ICING CONDITIONS

FOR HOLDING : CONF 1 RECOMMENDED

L2 Slats extended is the least penalizing configuration.

L1 GA THR : TOGA ONLY

L2 *Because the soft go-around function is not designed to be used with the L/G in the extended position, the flight crew must select TOGA thrust for go-around.*

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023369.0001001 / 17 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

LANDING PERFORMANCE

LDG PERF WITH L/G DOWN..CONFIRM

L2 *Go-around performance is affected.*

L1 *Note:* *In the Airbus EFB LDG PERF application (IN-FLIGHT computation mode), select the "Landing gears position extended" MEL item.*

FOR DESCENT AND APPROACH

RECOMMENDED SPEED : 230/.50

L2 230 kt/M 0.50 is the recommended speed for descent.

L1 DESCENT SELECTED V/S MODE..CONSIDER

L2 *To avoid a high rate of descent due to the L/G in the extended position, consider using selected vertical speed.*

L1 AVOID ICING CONDITIONS

FOR HOLDING : CONF 1 RECOMMENDED

L2 Slats extended is the least penalizing configuration.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00023370.0001001 / 17 NOV 20
Applicable to: ALL

GO-AROUND

GO-AROUND INITIATION

ALL THR LEVERS...TOGA

WHEN POSITIVE CLIMB

L/G : KEEP DOWN

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0002001 / 05 MAY 22
Applicable to: MSN 01251, 02014

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended.

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

- **After acceleration, and when flaps/slats are retracted:**
  SPEED...SELECT GDOT - 5KT

L2 *The flight crew should select GDOT - 5 kt instead of Green Dot.*

L1
- **When GDOT - 5 kt is reached:**
  ALT KNOB...PULL
  THR LEVER (REMAINING ENG)...MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 5KT

L2 *The flight crew should use GDOT - 5 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT... COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ENG DUAL FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

■ If APU is available:

- Perform an assisted relight, when below FL 200
- Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).

■ If APU is not available:

- Attempt an APU start
- If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 260 kt (corresponding N2 above 18 %). In this case, increase the aircraft speed and disregard VMO warning.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0091001 / 05 MAY 22
Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06536, 06598, 06634, 06689-06712, 06800-06876

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended (except for the yaw damper loss where the controls remain in alternate law).

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

- **After acceleration, and when flaps/slats are retracted:**
  SPEED......SELECT GDOT - 5KT

L2 *The flight crew should select GDOT - 5 kt instead of Green Dot.*

L1
- **When GDOT - 5 kt is reached:**
  ALT KNOB......PULL
  THR LEVER (REMAINING ENG)......MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 5KT

L2 *The flight crew should use GDOT - 5 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT......COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ALL ENG FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

- **If APU is available:**
  - Perform an assisted relight, when below FL 200
  - Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).
- **If APU is not available:**
  - Attempt an APU start
  - If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 300 kt (corresponding N2 above 12 %). In this case, increase the aircraft speed and disregard VMO warning.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0029001 / 05 MAY 22
Applicable to: MSN 01143-01246, 01376-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended.

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

- **After acceleration, and when flaps/slats are retracted:**
  SPEED....................SELECT GDOT - 5KT

L2 *The flight crew should select GDOT - 5 kt instead of Green Dot.*

L1
- **When GDOT - 5 kt is reached:**
  ALT KNOB....................PULL
  THR LEVER (REMAINING ENG)....................MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 5KT

L2 *The flight crew should use GDOT - 5 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT....................COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*
- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ALL ENG FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

■ **If APU is available:**

- Perform an assisted relight, when below FL 200
- Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).

■ **If APU is not available:**

- Attempt an APU start
- If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 260 kt (corresponding N2 above 18 %). In this case, increase the aircraft speed and disregard VMO warning.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0032001 / 05 MAY 22
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended.

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

● **After acceleration, and when flaps/slats are retracted:**

SPEED..SELECT GDOT - 10KT

L2 *The flight crew should select GDOT - 10 kt instead of Green Dot.*

L1 ● **When GDOT - 10 kt is reached:**

ALT KNOB..PULL
THR LEVER (REMAINING ENG)..MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 10KT

L2 *The flight crew should use GDOT -10 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT.. COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ALL ENG FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

■ **If APU is available:**

- Perform an assisted relight, when below FL 200
- Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).

■ **If APU is not available:**

- Attempt an APU start
- If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 260 kt (corresponding N2 above 18 %). In this case, increase the aircraft speed and disregard VMO warning.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0075001 / 05 MAY 22
Applicable to: MSN 06561

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended (except for the yaw damper loss where the controls remain in alternate law).

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

- **After acceleration, and when flaps/slats are retracted:**

  SPEED....................SELECT GDOT - 5KT

L2 *The flight crew should select GDOT - 5 kt instead of Green Dot.*

L1
- **When GDOT - 5 kt is reached:**

  ALT KNOB....................PULL
  THR LEVER (REMAINING ENG)....................MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 5KT

L2 *The flight crew should use GDOT - 5 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT....................COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ENG DUAL FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

■ **If APU is available:**

- Perform an assisted relight, when below FL 200
- Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).

■ **If APU is not available:**

- Attempt an APU start
- If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 300 kt (corresponding N2 above 12 %). In this case, increase the aircraft speed and disregard VMO warning.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0044001 / 05 MAY 22
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05240

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended.

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

● **After acceleration, and when flaps/slats are retracted:**

SPEED..SELECT GDOT - 5KT

L2 *The flight crew should select GDOT - 5 kt instead of Green Dot.*

L1 ● **When GDOT - 5 kt is reached:**

ALT KNOB..PULL
THR LEVER (REMAINING ENG)..MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 5KT

L2 *The flight crew should use GDOT - 5 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT..COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ALL ENG FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

■ **If APU is available:**

- Perform an assisted relight, when below FL 200
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■ **If APU is not available:**

- Attempt an APU start
- If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 300 kt (corresponding N2 above 12 %). In this case, increase the aircraft speed and disregard VMO warning.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0053001 / 05 MAY 22
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended (except for the yaw damper loss where the controls remain in alternate law).

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

- **After acceleration, and when flaps/slats are retracted:**

  SPEED.......................................SELECT GDOT - 10KT

L2 *The flight crew should select GDOT - 10 kt instead of Green Dot.*

L1

- **When GDOT - 10 kt is reached:**

  ALT KNOB.......................................PULL
  THR LEVER (REMAINING ENG).......................................MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 10KT

L2 *The flight crew should use GDOT -10 kt instead of green dot as drift-down speed.*

L1 EO MAX ALT.......................................COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
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When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ALL ENG FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

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- Perform an assisted relight, when below FL 200
- Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).

■ **If APU is not available:**

- Attempt an APU start
- If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 300 kt (corresponding N2 above 12 %). In this case, increase the aircraft speed and disregard VMO warning.

Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165

ABNORMAL PROCEDURES

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended (except for the yaw damper loss where the controls remain in alternate law).

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

- **After acceleration, and when flaps/slats are retracted:**
  SPEED....SELECT GDOT - 10KT

L2 *The flight crew should select GDOT - 10 kt instead of Green Dot.*

L1
- **When GDOT - 10 kt is reached:**
  ALT KNOB....PULL
  THR LEVER (REMAINING ENG)....MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 10KT

L2 *The flight crew should use GDOT - 10 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT.... COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the handling of all the different ECAM procedures resulting from this all engine flame out situation, it is recommended to use the ALL ENG FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

■ **If APU is available:**

- Perform an assisted relight, when below FL 200
- Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).

■ **If APU is not available:**

- Attempt an APU start
- If APU start is unsuccessful, a windmilling relight can be performed, as long as the speed is above 260 kt (corresponding N2 above 18 %). In this case, increase the aircraft speed and disregard VMO warning.

Ident.: PRO-NOR-SUP-LG-LG_DN-SUP-LG-00025310.0063001 / 05 MAY 22
Applicable to: MSN 08495-09324, 10949-11139

ABNORMAL PROCEDURE

FLIGHT CONTROLS

Failure cases, which would normally lead to ALTN law, will degrade F/CTL laws down to DIRECT law, if the landing gear is extended (except for the yaw damper loss where the controls remain in alternate law).

FAILURE OF ONE ENGINE

GREEN DOT SPD (FINAL TAKEOFF, GO-AROUND, DRIFT DOWN) : DO NOT USE

L2 *The Green Dot speed displayed by the PFD does not take into account the extended position of the L/G. The flight crew should use the speed mentioned in the TAKEOFF / GO-AROUND and EN-ROUTE sections below instead of Green Dot when required.*

L1 TAKEOFF / GO-AROUND

● **After acceleration, and when flaps/slats are retracted:**
SPEED..SELECT GDOT - 5KT

L2 *The flight crew should select GDOT - 5 kt instead of Green Dot.*

L1 ● **When GDOT - 5 kt is reached:**
ALT KNOB..PULL

THR LEVER (REMAINING ENG)..MCT

EN-ROUTE

DRIFT-DOWN SPEED : GDOT – 5KT

L2 *The flight crew should use GDOT - 5 kt instead of Green Dot as drift-down speed.*

L1 EO MAX ALT.. COMPUTE

L2 *The EO MAX ALT displayed by the FMS does not take into account the extended position of the L/G. The flight crew should use an alternate source to determine the EO maximum altitude.*

L1 *Note:* *In the Airbus IN-FLT PERF application (DES (OEI) panel):*

- *Select the "L/G DISPATCH WITH GEAR DOWN" NON STD CONF item*
- *Select DES TYPE: OBSTACLE and SPD TYPE: Green Dot for a descent at drift-down speed, or DES TYPE: EO STANDARD for a descent at fixed speed.*

FAILURE OF BOTH ENGINES

When both engines are failed, to ease the management of all the different ECAM procedures that result from this all engine flame out situation, it is recommended to use the ALL ENGINES FAILURE QRH procedure, and if time permits, to clear the ECAM.
Follow all the steps of the QRH procedure, except those that are modified by the procedure below:

■ **If APU is available:**

- Perform an assisted relight, when below FL 200.

■ **If the APU is not available:**

- Attempt an APU start
- If the APU start is unsuccessful, a windmill relight can be performed, as long as the speed is above 260 kt. In this case, increase the aircraft speed and disregard the VMO warning.

Flight controls are in direct laws. Use manual pitch trim as necessary (not indicated on PFD if APU GEN is not available).

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Operation with Nosewheel Steering Offset

OPERATION WITH NOSEWHEEL STEERING OFFSET

Applicable to: ALL

Ident.: PRO-NOR-SUP-LG-LG-A-00020945.0001001 / 17 MAR 17

During taxi in a straight line, the crew may notice aircraft veering tendency. This can be due to external conditions (crosswind, slope....), or to a nosewheel steering offset.
A nosewheel steering offset is usually notified through consecutive crew reports. The NWS offset value is determined regarding the necessary rudder trim input used to cancel the veering tendency.

Ident.: PRO-NOR-SUP-LG-LG-A-00020946.0001001 / 17 MAR 17

When the NWS offset is within admissible limits, the flight crew can operate the aircraft as follows:

CAUTION	A rudder trim reset must be performed before takeoff. When the rudder trim adjustment is above the maintenance tolerance (±0.5 ° NWS offset corresponding to ±3 ° rudder trim necessary to taxi straight), the flight crew must systematically and accurately report the rudder trim value in the logbook.

NWS Offset	Necessary Rudder Trim Input	Procedure
Offset ≤ 0.5 °	Trim ≤ 3 °	● **Taxi:** RUDDER TRIM..ADJUST Adjust trim until the aircraft taxies in a straight line. Check input value. ● **Before takeoff:** RUDDER TRIM..RESET
0.5 ° < Offset ≤ 1.5 °	3 ° < Trim ≤ 8.8 °	● **Taxi:** RUDDER TRIM..ADJUST Adjust trim until the aircraft taxies in a straight line. Check input value. ● **Before takeoff:** RUDDER TRIM..RESET ● **Landing:** ● **For autoland:** MAX CROSSWIND..10 kt
Offset > 1.5 °	Trim > 8.8 °	MAINTENANCE ACTION...REQUEST Do not attempt takeoff. Request for troubleshooting.

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Flight Without Cabin Pressurization

FLIGHT WITHOUT CABIN PRESSURIZATION

Ident.: PRO-NOR-SUP-MISC-E-A-00024334.0001001 / 17 NOV 20
Applicable to: ALL

This chapter applies to dispatch under MMEL/MCDL or following a structural damage.

Ident.: PRO-NOR-SUP-MISC-E-A-00024335.0001001 / 17 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

DURING PRELIMINARY COCKPIT PREPARATION

- **If both packs are inoperative:**
  FLIGHT WITH NO PASSENGERS.. CHECK

L2 *Dispatch for a flight with both packs inoperative is not allowed with passengers.*

L1 **OXYGEN FOR FLIGHT CREW MEMBERS**

CKPT OXYGEN PRESSURE..CHECK

L2 *To obtain the requirements in oxygen for flight crew members, refer to FAR 121.329 or AIR-OPS CAT.IDE.A.235, or any other applicable operational regulation.*
For more information on oxygen limitations for flight crew members, Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure.

L1 **OXYGEN FOR CABIN OCCUPANTS**

OXYGEN FOR CABIN OCCUPANTS..CHECK

L2 *To obtain the requirements in oxygen for cabin occupants, refer to FAR 121.329 or AIR-OPS CAT.IDE.A.235, or any other applicable operational regulation.*

Ident.: PRO-NOR-SUP-MISC-E-A-00024335.0005001 / 17 NOV 20
Applicable to: MSN 08495-09324, 10949-11139

DURING PRELIMINARY COCKPIT PREPARATION

- **If both packs are inoperative:**
  FLIGHT WITH NO PASSENGERS.. CHECK

L2 *Dispatch for a flight with both packs inoperative is not allowed with passengers.*

L1 **OXYGEN FOR FLIGHT CREW MEMBERS**

CAPT OXYGEN PRESSURE..CHECK
F/O OXYGEN PRESSURE... CHECK

L2 *To obtain the requirements in oxygen for flight crew members, refer to FAR 121.329 or AIR-OPS CAT.IDE.A.235, or any other applicable operational regulation.*

For more information on oxygen limitations for flight crew members, Refer to LIM-OXY Minimum Flight Crew Oxygen Pressure.

L1 **OXYGEN FOR CABIN OCCUPANTS**

OXYGEN FOR CABIN OCCUPANTS..........CHECK

L2 *To obtain the requirements in oxygen for cabin occupants, refer to FAR 121.329 or AIR-OPS CAT.IDE.A.235, or any other applicable operational regulation.*

Ident.: PRO-NOR-SUP-MISC-E-A-00024424.0002001 / 05 MAY 22
Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11139

DURING COCKPIT PREPARATION

FLIGHT PLAN INITIALIZATION

MAX SPEED: 250 kt
MAX CRZ FL: 100/MSA

If the altitude of the aircraft cabin reaches 14 000 ft, the cabin oxygen masks will automatically drop.

The flight crew must decide the minimum aircraft altitude, depending on:
- The MSA
- Oxygen requirements
- Turbulence, that can be uncomfortable for passengers
- Possible low OAT, that can be uncomfortable for passengers when the aircraft is ventilated by emergency ram air only.

● **If aircraft cruise FL is above FL 95:**

EXPECT CAB PR EXCESS CAB ALT ALERT

● **If both packs are inoperative:**

PACK 1..........OFF
PACK 2..........OFF
RAM AIR..........ON

Note: *If the "AVIONICS SMOKE" procedure has to be applied, the following flight time limitations have to be considered to protect the avionic equipment:*
At ISA +40: 0.5 h
At ISA +30 : 1.5 h
At ISA +20: 4 h
At ISA +10 and below: No limitation.

- **If both automatic cabin pressure control systems are inoperative, or if there is structural damage:**

TEST OF THE MANUAL OPERATION OF THE OUTFLOW VALVE ON GROUND:

PACK 1..OFF
PACK 2..OFF
OUTFLOW VALVE FULLY OPEN..CHECK

L2 *Check that the outflow valve is fully open on the CAB PRESS SD page.*

L1 RPCU C/B (X23 ON 122VU)..PULL
CABIN PRESS MODE SEL..MAN
MAN V/S CTL..DN

L2 *Check that the outflow valve is fully closed on the CAB PRESS SD page.*

L1 MAN V/S CTL..UP

L2 *Check that the outflow valve is fully open on the CAB PRESS SD page.*

L1 CABIN PRESS MODE SEL..AUTO
RPCU C/B (X23 ON 122VU)..PUSH
PACK 1..ON
PACK 2..ON

Ident.: PRO-NOR-SUP-MISC-E-A-00024424.0001001 / 05 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563

DURING COCKPIT PREPARATION

FLIGHT PLAN INITIALIZATION

MAX SPEED: 250 kt
MAX CRZ FL: 100/MSA

If the altitude of the aircraft cabin reaches 14 000 ft, the cabin oxygen masks will automatically drop.

The flight crew must decide the minimum aircraft altitude, depending on:
- The MSA
- Oxygen requirements
- Turbulence, that can be uncomfortable for passengers
- Possible low OAT, that can be uncomfortable for passengers when the aircraft is ventilated by emergency ram air only.

- **If aircraft cruise FL is above FL 95:**

EXPECT CAB PR EXCESS CAB ALT ALERT

- **If both packs are inoperative:**

  PACK 1.....OFF
  PACK 2.....OFF
  RAM AIR.....ON

  Note: *If the "AVIONICS SMOKE" procedure has to be applied, the following flight time limitations have to be considered to protect the avionic equipment:*
  At ISA +40: 0.5 h
  At ISA +30 : 1.5 h
  At ISA +20: 4 h
  At ISA +10 and below: No limitation.

- **If both automatic cabin pressure control systems are inoperative, or if there is structural damage:**

  PACK 1.....ON
  PACK 2.....ON
  CABIN PRESS MODE SEL.....MAN
  MAN V/S CTL.....AS RQRD

  L2 *Use MAN V/S CTL sw to set the outflow valve opening to 50 %.*

  L1 OUTFLOW VALVE HALF OPEN.....CHECK

  L2 *The outflow valve opening is limited to 50 %, to prevent the cabin air suction effect.*

Ident.: PRO-NOR-SUP-MISC-E-A-00024425.0002001 / 10 MAY 21
Applicable to: MSN 02734, 02896-03710, 03733-04544, 04570-05987, 06097, 06121, 06139-09324, 10949-11139

AFTER TAKEOFF

FOR PAX AND CREW COMFORT:

AVOID EXCESSIVE RATE OF CLIMB (MAX: +1 000 ft/min)
AVOID EXCESSIVE RATE OF DESCENT (MAX: -500 ft/min)

L2 *In the case of a door failure or a structural damage, the flight crew must ensure that the differential pressure remains equal to 0 PSI during the whole flight.*

L1

- **If both automatic cabin pressure control systems are inoperative, or if there is structural damage:**

  - **When in clean configuration:**

    MODE SEL.....MAN
    MAN V/S CTL.....AS RQRD

    L2 *Use MAN V/S CTL sw to set the outflow valve opening to 50 %.*

    L1 OUTFLOW VALVE HALF OPEN.....CHECK

    L2 *The outflow valve opening is limited to 50 %, to prevent the cabin air suction effect.*

L1 **ECAM ALERT**

- **If aircraft/cabin altitude is above 9 550 ft:**

  EXPECT CAB PR EXCESS CAB ALT ALERT

  ECAM CLR.......... CONSIDER

Ident.: PRO-NOR-SUP-MISC-E-A-00024425.0001001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887, 04563

AFTER TAKEOFF

FOR PAX AND CREW COMFORT:

AVOID EXCESSIVE RATE OF CLIMB (MAX: +1 000 ft/min)
AVOID EXCESSIVE RATE OF DESCENT (MAX: -500 ft/min)

L2 *In the case of a door failure or a structural damage, the flight crew must ensure that the differential pressure remains equal to 0 PSI during the whole flight.*

L1 **ECAM ALERT**

- **If aircraft/cabin altitude is above 9 550 ft:**

  EXPECT CAB PR EXCESS CAB ALT ALERT

  ECAM CLR.......... CONSIDER

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High Altitude Airport Operations

HIGH ALTITUDE AIRPORT OPERATIONS

Ident.: PRO-NOR-SUP-MISC-A-A-00020648.0002001 / 05 MAY 22
Applicable to: MSN 03002

CAB PRESS SYSTEM

TAKEOFF

TAKEOFF WITH BOTH PACKS OFF : DO NOT PERFORM

L2 *Takeoff with both packs off may trigger the CAB PR EXCESS CAB ALT alert.*

L1 APU BLEED.. AS RQRD

If required for takeoff performance, takeoff must be performed with:

- Both packs running supplied by APU bleed, *Refer to LIM-APU APU Bleed*, or
- One pack running supplied by APU bleed (if permitted), *Refer to LIM-APU APU Bleed*.

IN FLIGHT OR ON GROUND

- **If the** CAB PR EXCESS CAB ALT **alert triggers:**

L2
  - During descent (when cabin altitude is above 9 550 ft ± 350 ft)
  - On ground after electrical power application (if cabin altitude is above 9 550 ft ± 350 ft).

L1 Use the CLR pb to cancel the alert.

HYD SYSTEM

- **If the** HYD Y(B)(G) RSVR LO AIR PR **alert triggers on ground:**

  Before engine start: SWITCH OFF AFFECTED HYD PUMP.

Ident.: PRO-NOR-SUP-MISC-A-A-00020650.0017001 / 05 MAY 22
Applicable to: MSN 04441-04465, 05184, 05591, 05752, 06139, 06173, 06414

TAKEOFF ON AIRPORT WITH AN ELEVATION OF 9 200 FT OR ABOVE

COCKPIT PREPARATION

HIGH ALT LDG pb-sw (for all on ground operation)..ON

BEFORE PUSHBACK OR START

ACCU PRESS.. CHECK

L2 If required, use the HYD YELLOW ELEC PUMP to recharge the brake accumulator.

L1 GEN 1.. OFF
GEN 2.. OFF

G ENG PUMP..OFF
Y ENG PUMP..OFF

ENGINE START

- **When idle is reached:**

GEN 1..ON
GEN 2..ON
G ENG PUMP..ON
Y ENG PUMP..ON

TAKEOFF

Note: For A/C operating under FAA requirements, as long as the cabin altitude is above 12 000 ft in flight, at least one flight crewmember must use the oxygen mask continuously.

TAKEOFF WITH BOTH PACKS OFF : DO NOT PERFORM

L2 *Takeoff with both packs off may trigger the CAB PR EXCESS CAB ALT alert.*

L1 APU BLEED..AS RQRD

If required for takeoff performance, takeoff must be performed with:

- Both packs running supplied by APU bleed up to 17 000 ft, or
- One pack running supplied by APU bleed, *Refer to LIM-APU APU Bleed*.

CRUISE

LDG ELEV AUTO [CRUISE page]..CHECK

- **When cabin altitude below 12 000 ft and decreasing:**

HIGH ALT LDG pb-sw ....OFF

CHECK THAT CABIN ALTITUDE DECREASES BELOW 9 550 ft ± 350 ft

L2 This will allow the CAB PR EXCESS CAB ALT alert to trigger again if necessary despite the clear action.

L1 LANDING ON AIRPORTS WITH AN ELEVATION OF 9 200 FT OR ABOVE

CRUISE

- **If CAB ALT exceeds 8 000 ft:**

LDG ELEV: 8 000 ft ....SET

L2 Manually selecting a landing field elevation overrides the FMGS landing field elevation for the remaining time of cruise.

L1

Note: *A step descent or turbulence conditions may trigger an early CPC descent mode detection, leading the CPC to start controlling to the landing field elevation pressure.*

DESCENT PREPARATION

Note: *For A/C operating under FAA requirements, at least one flight crewmember must use the oxygen mask continuously until landing.*

HIGH ALT LDG pb-sw .... ON

L2

Passengers oxygen masks would drop when cabin altitude is above 14 000 ft +250 ft/-750 ft if HIGH ALT LDG pb-sw is OFF.

L1

Note: *Passengers oxygen masks drop above 16 000 ft +250 ft/-750 ft cabin altitude if HIGH ALT LDG pb-sw is ON.*

LDG ELEV.................... AUTO

L2

CPC starts controlling the pressure to the landing field elevation at beginning of descent.

L1

DESCENT

- **After descent initiation or following a level off when cabin altitude has reached 8 500 ft:**
  MODE SEL pb .... MAN
  - **After 10 s**
    MODE SEL pb .... AUTO

Note: *CPC changeover after descent initiation will force the CPC in standby mode to become operational in cruise mode. This will limit the cabin altitude to 8 000 ft. When descent is detected, the cabin altitude will then increase from 8 000 ft to the targeted airfield elevation.*

AFTER LANDING

HIGH ALT LDG pb-sw (for all on ground operation).................... ON

Ident.: PRO-NOR-SUP-MISC-A-A-00020650.0012001 / 05 MAY 22
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02924, 03035-03710, 03733-04389, 04544-04773, 04953-05107, 05222-05528, 05621-05749, 05883-05987, 06097, 06121, 06163-06165, 06409, 06528-09324, 10949-11139

TAKEOFF ON AIRPORT WITH AN ELEVATION OF 9 200 FT OR ABOVE

COCKPIT PREPARATION

HIGH ALT LDG pb-sw (for all on ground operation).................... ON

TAKEOFF

Note: For A/C operating under FAA requirements, as long as the cabin altitude is above 12 000 ft in flight, at least one flight crewmember must use the oxygen mask continuously.

TAKEOFF WITH BOTH PACKS OFF : DO NOT PERFORM

L2 *Takeoff with both packs off may trigger the CAB PR EXCESS CAB ALT alert.*

L1 APU BLEED.. AS RQRD

If required for takeoff performance, takeoff must be performed with:
- Both packs running supplied by APU bleed up to 17 000 ft, or
- One pack running supplied by APU bleed, *Refer to LIM-APU APU Bleed*.

CRUISE

LDG ELEV AUTO [CRUISE page]..CHECK

- **When cabin altitude below 12 000 ft and decreasing:**

  HIGH ALT LDG pb-sw ....OFF

  CHECK THAT CABIN ALTITUDE DECREASES BELOW 9 550 ft ± 350 ft

L2 This will allow the CAB PR EXCESS CAB ALT alert to trigger again if necessary despite the clear action.

L1 LANDING ON AIRPORTS WITH AN ELEVATION OF 9 200 FT OR ABOVE

CRUISE

- **If CAB ALT exceeds 8 000 ft:**

  LDG ELEV: 8 000 ft ....SET

L2 Manually selecting a landing field elevation overrides the FMGS landing field elevation for the remaining time of cruise.

L1 *Note: A step descent or turbulence conditions may trigger an early CPC descent mode detection, leading the CPC to start controlling to the landing field elevation pressure.*

DESCENT PREPARATION

Note: For A/C operating under FAA requirements, at least one flight crewmember must use the oxygen mask continuously until landing.

HIGH ALT LDG pb-sw ....ON

L2 Passengers oxygen masks would drop when cabin altitude is above 14 000 ft +250 ft/-750 ft if HIGH ALT LDG pb-sw is OFF.

L1

Note: *Passengers oxygen masks drop above 16 000 ft +250 ft/-750 ft cabin altitude if HIGH ALT LDG pb-sw is ON.*

LDG ELEV..AUTO

L2

CPC starts controlling the pressure to the landing field elevation at beginning of descent.

L1

DESCENT

- **After descent initiation or following a level off when cabin altitude has reached 8 500 ft:**
  MODE SEL pb .... MAN
  - **After 10 s**
    MODE SEL pb ....AUTO

Note: *CPC changeover after descent initiation will force the CPC in standby mode to become operational in cruise mode. This will limit the cabin altitude to 8 000 ft. When descent is detected, the cabin altitude will then increase from 8 000 ft to the targeted airfield elevation.*

AFTER LANDING

HIGH ALT LDG pb-sw (for all on ground operation)..ON

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Operations at QNH above 1050 hPa (31.00 inHg)

GENERAL

Ident.: PRO-NOR-SUP-MISC-C-00024567.0002001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Operators may occasionally experience high barometric settings above 1 050 hPa (31.00 inHg), due to polar anticyclonic air mass conditions. These conditions mainly occur during winter in the upper northern region.
For departure and arrival, the flight crew must ensure that the aircraft remains within its flight envelope.

CAUTION	When the QNH exceeds 1 050 hPa (31.00 inHg), the aircraft pressure altitude might be outside of its flight envelope (below -1 000 ft STD), depending on the airfield elevation. Operations at QNH above 1 050 hPa (31.00 inHg) are only authorized within the flight envelope of the aircraft.

In addition, the flight crew should apply the following procedures when the QNH is more than 1 050 hPa (31.00 inHg).

GENERAL

Ident.: PRO-NOR-SUP-MISC-C-00024567.0003001 / 10 MAY 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139

Operators may occasionally experience high barometric settings above 1 050 hPa (31.00 inHg), due to polar anticyclonic air mass conditions. These conditions mainly occur during winter in the upper northern region.
High QNH values may result in pressure altitudes below -1 000 ft during takeoff and landing at low altitude airports. Therefore, the flight crew should apply the following procedures when the QNH is more than 1 050 hPa (31.00 inHg).

PROCEDURES

Ident.: PRO-NOR-SUP-MISC-C-P-00024599.0002001 / 10 MAY 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139

BEFORE TAKEOFF

ALT RPTG.. OFF

L2 *Due to the transponder limitation, the flight crew must disconnect the altitude reporting. After the flight crew turn off the altitude reporting, a TCAS STBY memo appears on the E/WD.*

L1 ATC.. NOTIFY

L2 *Notify the ATC that altitude reporting is not available.*

Ident.: PRO-NOR-SUP-MISC-C-P-00024599.0001001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

BEFORE TAKEOFF

Note: The Standby Altitude Correction Table provides the baro setting that should be used on the standby altimeter. See Standby Altitude Correction Table, Refer to PRO-NOR-SUP-MISC-C Standby Altitude Correction.

[STBY ALTIMETER] BARO SETTING.. SET
USE THE CORRECTION VALUE FOR ALTITUDE READINGS

L2 *To obtain the correct altitude flown by the aircraft, add the correction value to the standby altimeter indication. See Standby Altitude Correction Table, Refer to PRO-NOR-SUP-MISC-C Standby Altitude Correction.*

Ident.: PRO-NOR-SUP-MISC-C-P-00024600.0001001 / 10 MAY 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139

TAKEOFF

- **Above 1 000 ft, when time permits:**
  ALT RPTG..ON
  L2 *As a result, the TCAS automatically reverts to its previous setting.*

Ident.: PRO-NOR-SUP-MISC-C-P-00024607.0001001 / 26 OCT 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

DESCENT PREPARATION

DO NOT INSERT a DEST QNH value on the MCDU PERF APPR page.

Note: *As no DEST QNH is entered, the FMS initially assumes that standard barometric reference will be kept down to destination for descent flight path calculations. When QNH is set on the FCU, the aircraft and cabin altitude will be higher than expected (the aircraft altitude can be up to 2 000 ft higher than expected). This will lead to a higher descent rate, with a possible CAB PR LO DIFF PR alert, and possible opening of the cabin pressure safety valve.*

- **For QFE use:**

  LDG ELEV ....SET TO 0

L2 *When Approach phase is activated, a TERR STBY memo appears on the E/WD.*

Ident.: PRO-NOR-SUP-MISC-C-P-00024601.0001001 / 10 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

DESCENT

- **When approaching transition level:**

  Note: *The Standby Altitude Correction Table provides the baro setting that should be used on the standby altimeter. See Standby Altitude Correction Table, Refer to PRO-NOR-SUP-MISC-C Standby Altitude Correction.*

  [STBY ALTIMETER] BARO SETTING....................................SET

  USE THE CORRECTION VALUE FOR ALTITUDE READINGS

Ident.: PRO-NOR-SUP-MISC-C-P-00024602.0001001 / 10 MAY 21
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11139

APPROACH

- **Before final approach:**

  ATC..NOTIFY

L2 *Notify the ATC that the altitude reporting will be turned off.*

L1 ALT RPTG..OFF

L2 *Due to the transponder limitation, the flight crew must disconnect the altitude reporting. After the flight crew turn off the altitude reporting, a TCAS STBY memo appears on the E/WD.*

L1 Note: *Perform approaches based on a barometric vertical profile using selected lateral and vertical guidance, and raw data reference.*

STANDBY ALTITUDE CORRECTION

Ident.: PRO-NOR-SUP-MISC-C-00024744.0001001 / 10 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

The Standby Altitude Correction Table below provides the baro setting that should be used on the standby altimeter, and the correction that should be applied to the altimeter indications, for each QNH between 1 050 hPa and 1 089 hPa.

Barometric Reference (hPa)	Stby Altimeter Baro Setting (hPa)	Correction (feet)
1 050	1 050	0
1 051	1 047	100
1 052	1 048	100
1 053	1 049	100
1 054	1 046	200
1 055	1 047	200
1 056	1 048	200
1 057	1 049	200
1 058	1 046	300
1 059	1 047	300
1 060	1 048	300
1 061	1 049	300
1 062	1 047	400
1 063	1 048	400
1 064	1 049	400
1 065	1 050	400
1 066	1 047	500
1 067	1 048	500
1 068	1 049	500
1 069	1 050	500
1 070	1 047	600
1 071	1 048	600
1 072	1 049	600
1 073	1 050	600
1 074	1 047	700
1 075	1 048	700
1 076	1 049	700
1 077	1 046	800
1 078	1 047	800
1 079	1 048	800
1 080	1 049	800
1 081	1 046	900

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Continued from the previous page

Barometric Reference (hPa)	Stby Altimeter Baro Setting (hPa)	Correction (feet)
1 082	1 047	900
1 083	1 048	900
1 084	1 049	900
1 085	1 047	1 000
1 086	1 048	1 000
1 087	1 049	1 000
1 088	1 050	1 000
1 089	1 047	1 100

Standby Altitude Correction Table

HOW TO USE

Set the baro reference of the standby altimeter to the appropriate value.

Then:
- To obtain the correct altitude, add the correction to the altimeter indication
- To fly at a desired altitude, subtract the correction from the desired altitude.

EXAMPLE

If the QNH of the day is 1 072 hPa, the baro setting on the standby altimeter should be 1 049 hPa. When reading an altitude on the standby altimeter, it is necessary to add 600 ft to obtain the actual altitude of the aircraft.
Therefore, in this example, the indicated altitude on the standby altimeter should be 1 400 ft, in order to fly at 2 000 ft QNH.

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Pushback with Power Push Unit

PUSHBACK WITH POWER PUSH UNIT VIA THE MAIN LANDING GEAR

Ident.: PRO-NOR-SUP-MISC-D-A-00020472.0002001 / 26 OCT 22
Applicable to: MSN 01376-01459, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

When pushback is performed with a Power Push Unit (PPU) via the main landing gear, this procedure replaces the BEFORE PUSHBACK OR START SOP.

- **Before start clearance**

SOP - BEFORE START CLEARANCE...PERFORM

L2 *Refer to PRO-NOR-SOP-07 Before Start Clearance.*

L1 NW STRG DISC MEMO...CHECK NOT DISPLAYED

L2 *The ground crew should check that the towing lever is in the normal position.*

L1
- **At start clearance**

PUSHBACK/START CLEARANCE...OBTAIN

L2 *Obtain ATC pushback/start clearance.*
Obtain ground crew clearance.

L1 ATC...SET FOR OPERATION

L2 *ATC is set in accordance with airport requirements.*

L1 WINDOWS AND DOORS...CHECK CLOSED

L2 *- To ensure that the sliding window is correctly closed, push the handle of the sliding window fully forward to the closed position, and check that the red indicator is visible.*
- Check, on the ECAM lower display, that all the aircraft doors are closed.
- When required by local airworthiness authorities, check that the cockpit door is closed and locked (no cockpit door open/fault indication).
If entry is requested, identify the person requesting entry before unlocking the door. With the cockpit door sw on NORM, the cockpit door is closed and locked. If entry is requested from the cabin, and if no further action is performed by the pilot, the cabin crew will be able to unlock the door by using the emergency access procedure. Except for crew entry/exit, the cockpit door should remain closed until engine shutdown.

L1 SLIDES...CHECK ARMED

L2 *- Check, on the ECAM lower display, that all slides are armed.*

L1 BEACON sw...ON

THRUST LEVERS...IDLE

CAUTION	*Engines will start, regardless of the thrust lever position; thrust will rapidly increase to the corresponding thrust lever position, causing a hazardous situation, if thrust levers are not at IDLE.*

ACCU PRESS indicator...CHECK

L2 *The ACCU PRESS indication must be in the green band. If required, use the electric pump on yellow hydraulic system to recharge the brake accumulator.*

L1 PARK BRK handle...CHECK ON

BRAKES PRESS indicator...CHECK

L2 *Check for normal indication.*

L1 BEFORE START CHECKLIST ....COMPLETE

Ident.: PRO-NOR-SUP-MISC-D-A-00020472.0001001 / 26 OCT 22

Applicable to: MSN 01143-01251, 01518, 01593-01628

When pushback is performed with a Power Push Unit (PPU) via the main landing gear, this procedure replaces the BEFORE PUSHBACK OR START SOP.

- **Before start clearance**

SOP - BEFORE START CLEARANCE...PERFORM

L2 *Refer to PRO-NOR-SOP-07 Before Start Clearance.*

L1 NW STRG DISC MEMO...CHECK NOT DISPLAYED

L2 *The ground crew should check that the towing lever is in the normal position.*

L1
- **At start clearance**

PUSHBACK/START CLEARANCE...OBTAIN

L2 *Obtain ATC pushback/start clearance.*
Obtain ground crew clearance.

L1 ATC...SET FOR OPERATION

L2 *ATC is set in accordance with airport requirements.*

L1 WINDOWS AND DOORS...CHECK CLOSED

L2 *- To ensure that the sliding window is correctly closed and locked, push the handle of the sliding window fully forward to the closed position, and verify that the red indicator is visible.*
- Check, on the ECAM lower display, that all the aircraft doors are closed.

L1 SLIDES...CHECK ARMED

L2 *- Check, on the ECAM lower display, that all slides are armed.*

L1 BEACON sw...ON

THRUST LEVERS.....IDLE

CAUTION	*Engines will start, regardless of the thrust lever position; thrust will rapidly increase to the corresponding thrust lever position, causing a hazardous situation, if thrust levers are not at IDLE.*

ACCU PRESS indicator.....CHECK

L2 *The ACCU PRESS indication must be in the green band. If required, use the electric pump on yellow hydraulic system to recharge the brake accumulator.*

L1 PARK BRK handle.....CHECK ON

BRAKES PRESS indicator.....CHECK

L2 *Check for normal indication.*

L1 BEFORE START CHECKLIST .....COMPLETE

Ident.: PRO-NOR-SUP-MISC-D-A-00020473.0002001 / 17 MAR 17
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11139

ENG 2.....START

L2 *Engine 2 is usually started first to pressurize the yellow hydraulic system, making the nosewheel steering and parking brake available.*

Ident.: PRO-NOR-SUP-MISC-D-A-00020473.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ENG 2.....START

L2 *Engine 2 is usually started first to pressurize the yellow hydraulic system, making the parking brake available.*

L1 PTU.....CHECK AUTO

L2 *The green hydraulic system is pressurized via PTU, making the nosewheel steering available.*

Ident.: PRO-NOR-SUP-MISC-D-A-00020474.0001001 / 17 MAR 17
Applicable to: ALL

PUSHBACK

Due to a face-to-face situation between the ground personnel and the flight crew, a clear understanding of directional phraseology is essential.

PARK BRK handle.....OFF

BRAKES PRESS indicator.....CHECK ZERO

L2 *A slight residual pressure may remain for a short period of time on the triple indicator. Advise the ground crew that the parking brake is off and that the pushback can be started.*

L1

CAUTION	*Do not use the brakes during pushback, except in case of emergency.* *Do not move flight controls or flap lever.*

L2 *In case of emergency, order the ground crew to separate the PPU and move it away from the evacuation areas. Nevertheless, evacuation is possible with the PPU in place.*

L1 STEERING HANDWHEEL..AS REQUIRED

L2 *Steer the aircraft using guidance from the ground crew.*

L1

- **When pushback is completed:**
  PARK BRK handle..ON
  BRAKES PRESS indicator..CHECK
  GROUND CREW..ADVISED TO REMOVE PPU

- **When PPU is removed and ground crew clearance obtained:**
  ENG 1..START
  SOP - AFTER START..RESUME
  Refer to PRO-NOR-SOP-09 After Start

AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST (ADS-B)

Ident.: PRO-NOR-SUP-SURV-00020957.0001001 / 17 MAR 17
Applicable to: MSN 02321, 02734, 02924-03002, 03058, 03180-03211, 03266, 04827-04860, 08495-09324, 10949-11139

ADS-B OUT:

In some cases, the ATC ground stations can receive non valid data from the ADS-B function.
Therefore, the air traffic controller may ask the flight crew to stop the transmission of the ADS-B data (e.g. the air traffic controller requests "STOP ADS-B TRANSMISSION" or "STOP ADS-B ALTITUDE TRANSMISSION").
The flight crew cannot switch off the ADS-B automatic data transmission independently of the XPDR.
Therefore, do not switch off the ATC transponder or the altitude reporting, in order to maintain TCAS operations or Air Traffic Controller radar surveillance.
In such cases, the flight crew must refer to local Aeronautical Information Publication (AIP) to apply alternate procedure when the air traffic controller requests to stop ADS-B transmission.

ADS-B IN:

The ATSAW ◁ enables the reception of ADS-B information from other aircraft in the vicinity.
Refer to the ATSAW section.

ENHANCED GROUND PROXIMITY WARNING SYSTEM (EGPWS)

Ident.: PRO-NOR-SUP-SURV-00020960.0004001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734

During climb, descent, approach and go-around phases:

- **If GPS PRIMARY ◁ is not available and FMS navigation accuracy check prevents the flight crew from using NAV mode in a phase of flight:**
  TERR pb-sw..OFF

  Note: *When the TERR pb-sw is switched OFF, the ECAM message “NAV GPWS TERR DET FAULT” is displayed.*
  Only the basic GPWS modes 1 to 5 remain operative.

Intentionally left blank

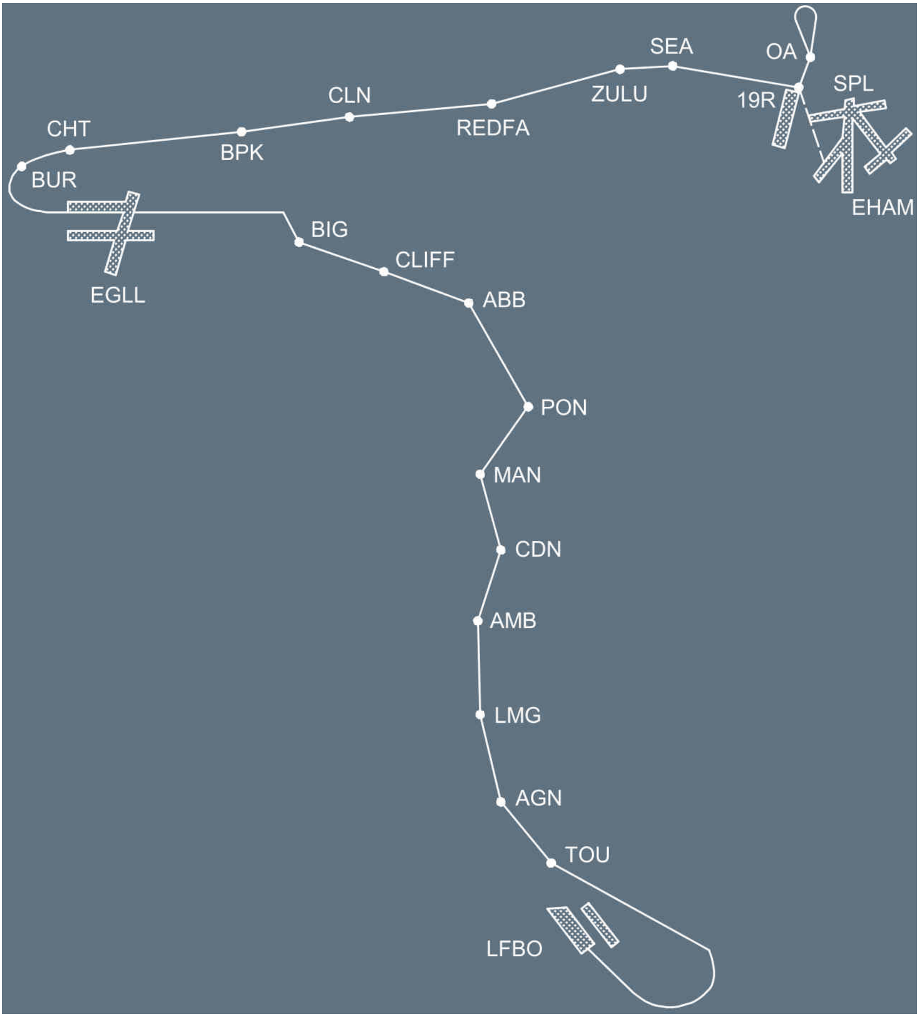
Introduction

INTRODUCTION

Ident.: PRO-NOR-SRP-01-05-00003959.0001001 / 09 OCT 12
Applicable to: ALL

Note: *This chapter is an amplification of the SOP. Anytime it was feasible, the same chapters and the same titles of paragraph were retained.*

The following discussion of the FMGS uses this flight plan as an example.


SEA
OA
CLN
ZULU
19R
SPL
CHT
REDFA
BPK
BUR
EHAM
BIG
CLIFF
EGLL
ABB
PON
MAN
CDN
AMB
LMG
AGN
TOU
LFBO

Cockpit Preparation

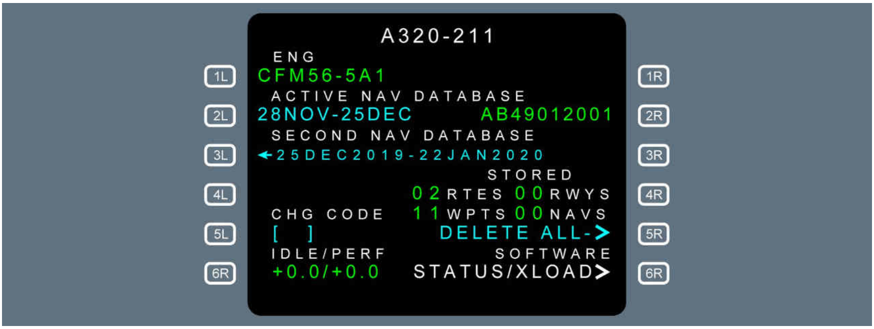
FMGS INITIALIZATION

Ident.: PRO-NOR-SRP-01-10-00003960.0009001 / 25 MAY 21
1 **Applicable to: MSN 10949-11597**

CHECKING THE CLOCK DATE

CHECK the CLOCK DATE and ADJUST, if necessary.

If the date in the active database does not match the clock date, the MCDU displays CHECK DATA BASE CYCLE. If this message appears, check the period of validity in the second database and select it, if required.



```
            A320-211
 ENG
CFM56-5A1
 ACTIVE NAV DATABASE
28NOV-25DEC         AB49012001
 SECOND NAV DATABASE
←25DEC2019-22JAN2020
                        STORED
              02RTES 00RWYS
 CHG CODE     11WPTS 00NAVS
 [  ]            DELETE ALL->
 IDLE/PERF          SOFTWARE
 +0.0/+0.0     STATUS/XLOAD>
```

CAUTION	*Cycling the navigation database deletes the active and secondary flight plans. Do not cycle it while airborne because doing so will delete the flight plan, eliminate all speed predictions, and blank the ND. If the aircraft is in managed speed, Green Dot becomes the speed target.*

CHECKING STORED WAYPOINTS, NAVAIDS, RUNWAYS, OR ROUTES

PRESS the DATA key.
PRESS the next page key [→].

SELECT, successively, as required:
- STORED WAYPOINT
- STORED NAVAIDS
- STORED RUNWAYS
- STORED ROUTES

CHECK the contents of each of these data storages and DELETE items, as appropriate.

NAVAIDS DESELECTION

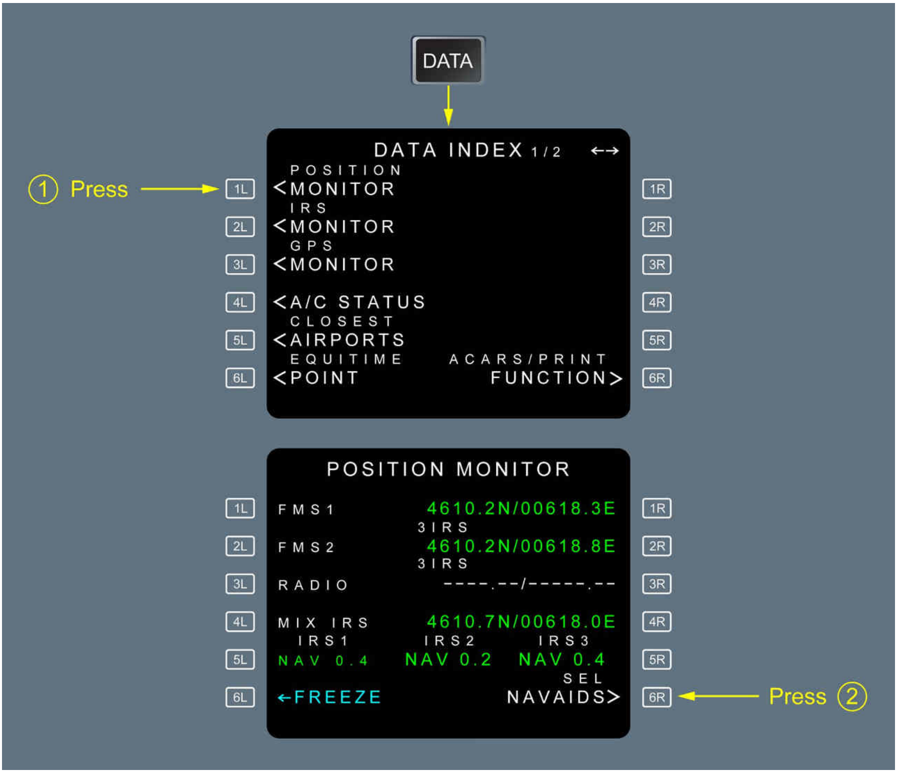
The flight crew can manually deselect all the RADIO NAVAIDs as follows:

PRESS the DATA key
SELECT the POSITION MONITOR page
SELECT the SELECTED NAVAIDS page
PRESS [5L] to DESELECT all the RADIO NAVAIDs

If NOTAMS indicate that selected NAVAIDs are unreliable or unserviceable, deselect them as follows:

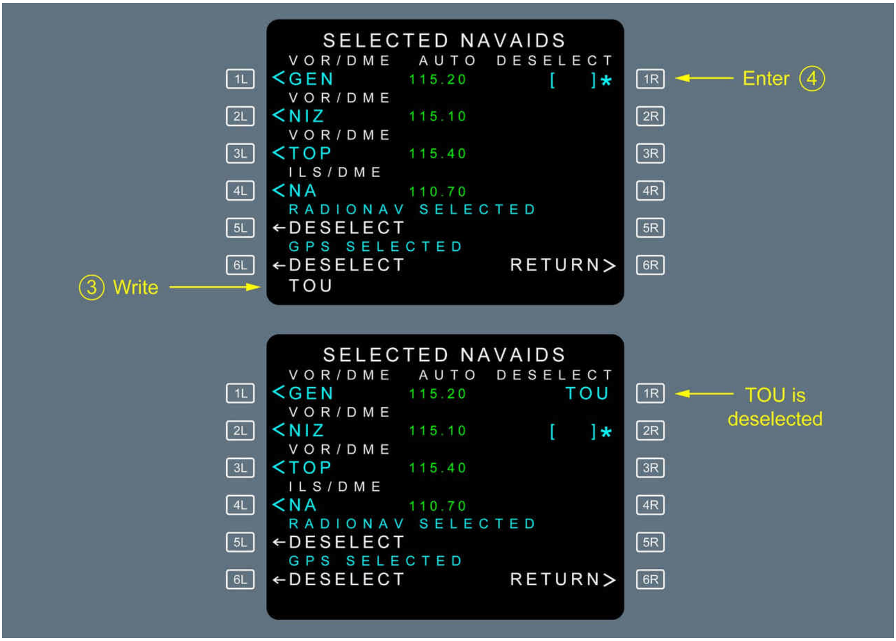
PRESS the DATA key.
SELECT the POSITION MONITOR page.
SELECT the SELECTED NAVAIDS page.
Under “DESELECT”, INSERT the NAVAID identifier in the brackets.

The flight crew can only make six deselections.


DATA
① Press
Press ②
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
        DATA INDEX 1/2         ←→
  POSITION
<MONITOR
  IRS
<MONITOR
  GPS
<MONITOR

<A/C STATUS
  CLOSEST
<AIRPORTS
  EQUITIME          ACARS/PRINT
<POINT                FUNCTION>
```

```
        POSITION MONITOR

FMS1          4610.2N/00618.3E
                 3IRS
FMS2          4610.2N/00618.8E
                 3IRS
RADIO         ----.--/-----.--

MIX IRS       4610.7N/00618.0E
  IRS1          IRS2      IRS3
NAV 0.4       NAV 0.2   NAV 0.4
                           SEL
←FREEZE                NAVAIDS>
```



```
     SELECTED NAVAIDS
  VOR/DME   AUTO  DESELECT
<GEN        115.20    [   ]*
  VOR/DME
<NIZ        115.10
  VOR/DME
<TOP        115.40
  ILS/DME
<NA         110.70
  RADIONAV SELECTED
←DESELECT
  GPS SELECTED
←DESELECT          RETURN>
  TOU
```

Enter ④

③ Write

```
     SELECTED NAVAIDS
  VOR/DME   AUTO  DESELECT
<GEN        115.20      TOU
  VOR/DME
<NIZ        115.10    [   ]*
  VOR/DME
<TOP        115.40
  ILS/DME
<NA         110.70
  RADIONAV SELECTED
←DESELECT
  GPS SELECTED
←DESELECT          RETURN>
```

TOU is deselected

FMGS INITIALIZATION

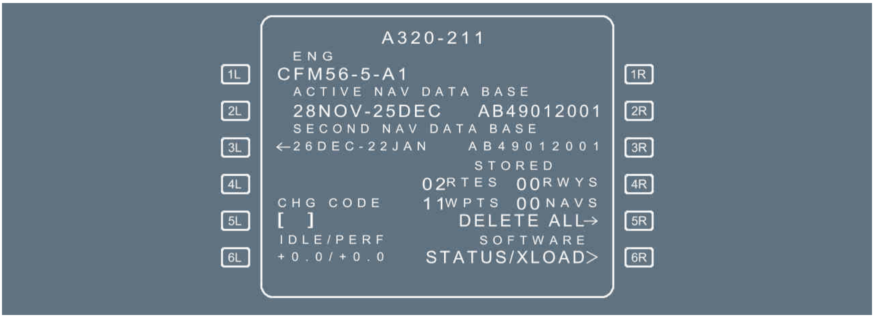
Ident.: PRO-NOR-SRP-01-10-00003960.0002001 / 22 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

CHECKING THE CLOCK DATE

CHECK the CLOCK DATE and ADJUST, if necessary.

If the date in the active database does not match the clock date, the MCDU displays "CHECK DATA BASE CYCLE". If this message appears, check the period of validity in the second database and select it, if required.



```
               A320-211
   ENG
 CFM56-5-A1
   ACTIVE NAV DATA BASE
   28NOV-25DEC      AB49012001
   SECOND NAV DATA BASE
 ←26DEC-22JAN       AB49012001
                     STORED
                02RTES   00RWYS
 CHG CODE       11WPTS   00NAVS
 [   ]               DELETE ALL→
 IDLE/PERF             SOFTWARE
 +0.0/+0.0      STATUS/XLOAD>
```

CAUTION	*Cycling the navigation database deletes the active and secondary flight plans. Do not cycle it while airborne because doing so will delete the flight plan, eliminate all speed predictions, and blank the ND. If the aircraft is in managed speed, Green Dot becomes the speed target.*

CHECKING STORED WAYPOINTS, NAVAIDS, RUNWAYS, OR ROUTES

PRESS the DATA key.
PRESS the next page key.

SELECT, successively, as required:
- STORED WAYPOINT
- STORED NAVAIDS
- STORED RUNWAYS
- STORED ROUTES

CHECK the contents of each of these data storages and DELETE items, as appropriate.

NAVAIDS DESELECTION

- **If NOTAMS indicate that selected NAVAIDs are unreliable or unserviceable, deselect them as follows:**

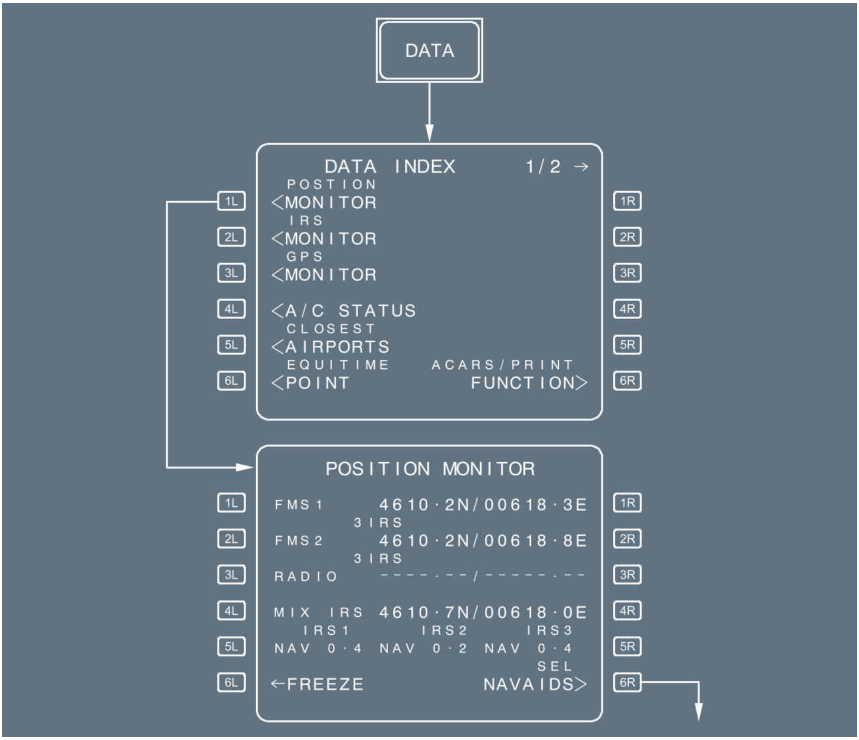
  PRESS the DATA key.

  SELECT the POSITION MONITOR page.

  SELECT the SELECTED NAVAIDS page.

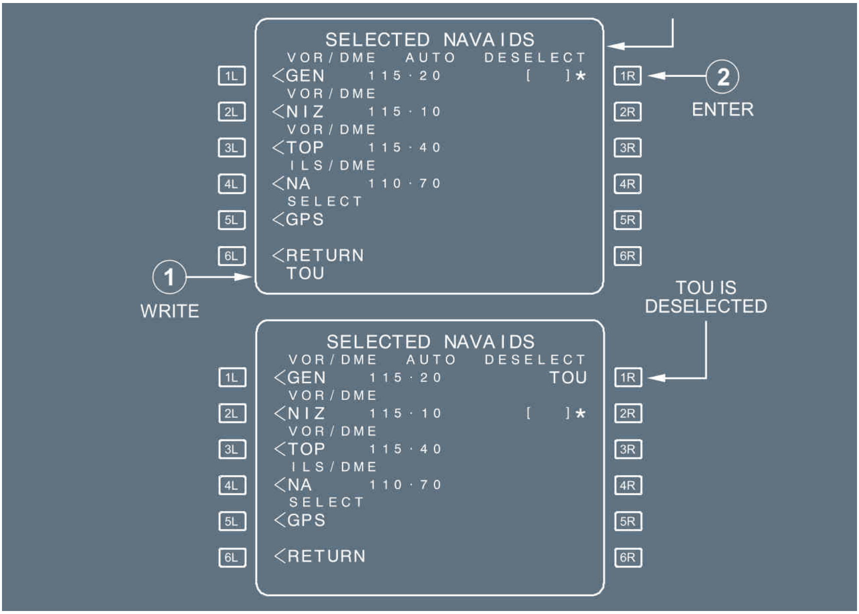
  Under “DESELECT”, INSERT the NAVAID identifier in the brackets.

  The pilot can only make six deselections.



```
      DATA  INDEX           1/2 →
  POSTION
<MONITOR
  IRS
<MONITOR
  GPS
<MONITOR

<A/C STATUS
  CLOSEST
<AIRPORTS
  EQUITIME          ACARS/PRINT
<POINT                FUNCTION>
```

```
        POSITION MONITOR

FMS1        4610.2N/00618.3E
        3IRS
FMS2        4610.2N/00618.8E
        3IRS
RADIO       -----.--/------.--

MIX  IRS    4610.7N/00618.0E
   IRS1        IRS2        IRS3
NAV  0.4    NAV  0.2    NAV  0.4
                            SEL
←FREEZE                NAVAIDS>
```



```
      SELECTED NAVAIDS
  VOR/DME    AUTO    DESELECT
<GEN       115.20          [   ]*
  VOR/DME
<NIZ       115.10
  VOR/DME
<TOP       115.40
  ILS/DME
<NA        110.70
  SELECT
<GPS

<RETURN
 TOU
```

```
      SELECTED NAVAIDS
  VOR/DME    AUTO    DESELECT
<GEN       115.20              TOU
  VOR/DME
<NIZ       115.10          [   ]*
  VOR/DME
<TOP       115.40
  ILS/DME
<NA        110.70
  SELECT
<GPS

<RETURN
```

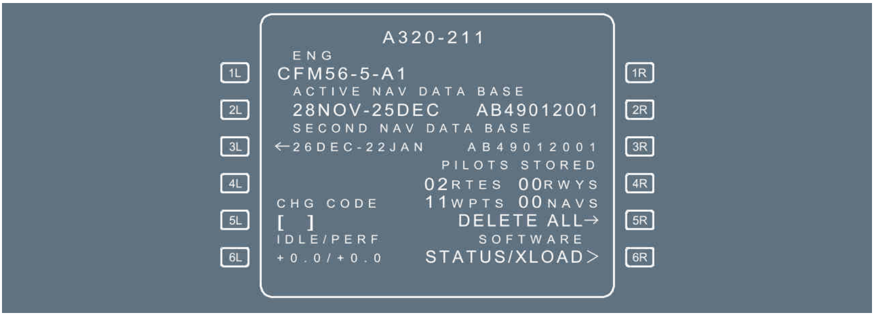
FMGS INITIALIZATION

Ident.: PRO-NOR-SRP-01-10-00003960.0008001 / 22 MAY 12
Applicable to: MSN 04827-04860

CHECKING THE DATABASE CYCLE

CHECK the CLOCK DATE and ADJUST, if necessary.

If the date in the active database does not match the clock date, the MCDU displays “CHECK DATA BASE CYCLE”. If this message appears, check the period of validity in the second database and select it, if required.



```
            A320-211
  ENG
CFM56-5-A1
  ACTIVE NAV DATA BASE
  28NOV-25DEC     AB49012001
  SECOND NAV DATA BASE
←26DEC-22JAN      AB49012001
                PILOTS STORED
               02RTES  00RWYS
CHG CODE       11WPTS  00NAVS
[  ]               DELETE ALL→
IDLE/PERF            SOFTWARE
+0.0/+0.0        STATUS/XLOAD>
```

CAUTION *Cycling the navigation database deletes the active and secondary flight plans. Do not cycle it while airborne because doing so will delete the flight plan, eliminate all speed predictions, and blank the ND. If the aircraft is in managed speed, Green Dot becomes the speed target.*

CHECKING PILOT'S WAYPOINTS, NAVAIDS, RUNWAYS, OR ROUTES

PRESS the DATA key.
PRESS the next page key.

SELECT, successively, as required:
- PILOTS WAYPOINTS
- PILOTS NAVAIDS
- PILOTS RUNWAYS
- PILOTS ROUTES

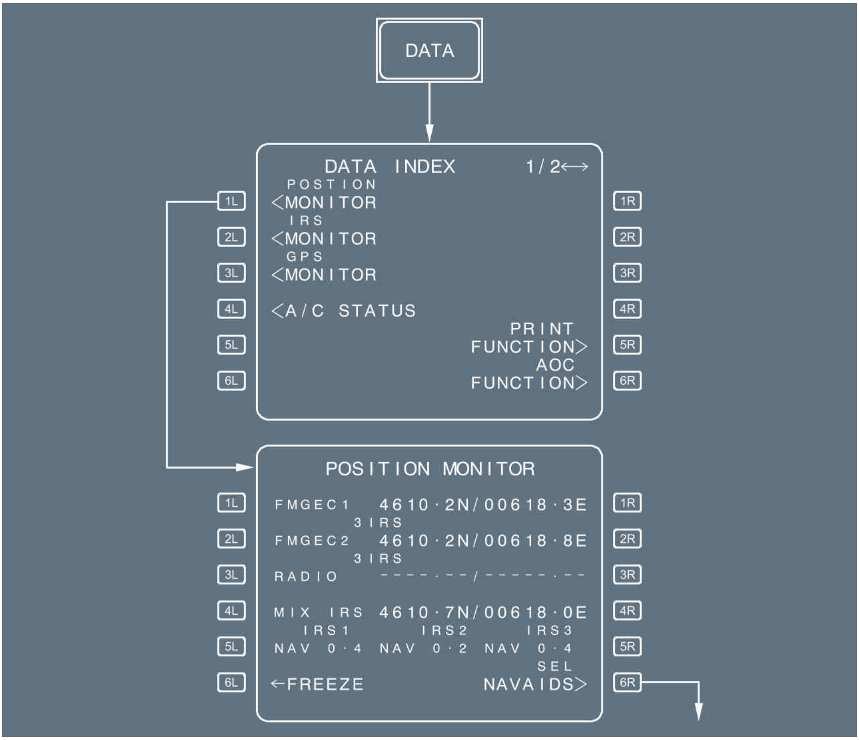
CHECK the contents of each of these data storages and DELETE items, as appropriate.

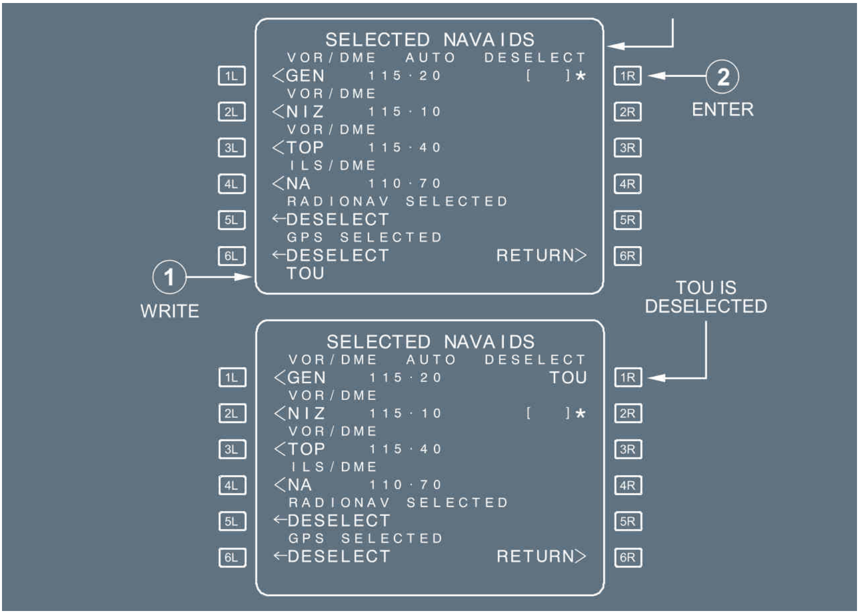
NAVAIDS DESELECTION

- **The flight crew can manually deselect all the RADIO NAVAIDs as follows:**
  PRESS the DATA key.
  SELECT the POSITION MONITOR page.
  SELECT the SELECTED NAVAIDS page.
  Press [5L] to DESELECT all the Radio NAVAIDs.
- **If NOTAMS indicate that selected NAVAIDs are unreliable or unserviceable, deselect them as follows:**
  PRESS the DATA key.
  SELECT the POSITION MONITOR page.
  SELECT the SELECTED NAVAIDS page.

Under “DESELECT”, INSERT the NAVAID identifier in the brackets.

The flight crew can only make four deselections.


DATA
DATA INDEX 1/2←→
POSTION
<MONITOR
IRS
<MONITOR
GPS
<MONITOR
<A/C STATUS
PRINT
FUNCTION>
AOC
FUNCTION>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
POSITION MONITOR
FMGEC1 4610.2N/00618.3E
3IRS
FMGEC2 4610.2N/00618.8E
3IRS
RADIO ----.--/------.--
MIX IRS 4610.7N/00618.0E
IRS1 IRS2 IRS3
NAV 0.4 NAV 0.2 NAV 0.4
SEL
←FREEZE NAVAIDS>



```
      SELECTED  NAVAIDS
  VOR/DME   AUTO   DESELECT
<GEN     115.20        [   ]*
  VOR/DME
<NIZ     115.10
  VOR/DME
<TOP     115.40
  ILS/DME
<NA      110.70
  RADIONAV  SELECTED
←DESELECT
  GPS  SELECTED
←DESELECT              RETURN>
 TOU
```

```
      SELECTED  NAVAIDS
  VOR/DME   AUTO   DESELECT
<GEN     115.20           TOU
  VOR/DME
<NIZ     115.10        [   ]*
  VOR/DME
<TOP     115.40
  ILS/DME
<NA      110.70
  RADIONAV  SELECTED
←DESELECT
  GPS  SELECTED
←DESELECT              RETURN>
```

Note: *When a NAVAID is deselected, it is no more used for navigation by the FMGC during the rest of the flight. However a deselected NAVAID can still be manually tuned on the RAD NAV page and displayed on ND.*

FLIGHT PLAN INITIALIZATION

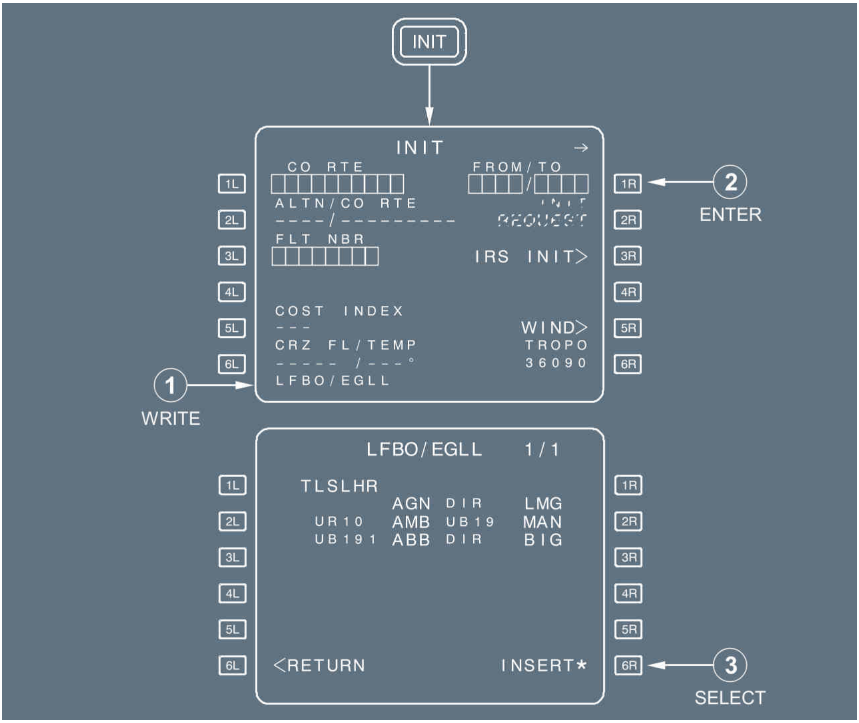
Ident.: PRO-NOR-SRP-01-10-A-00003961.0025001 / 22 MAY 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

GENERAL

Follow SOP instructions, when the route is a company route stored in the database.

- **If the company route is unknown, proceed as follows:**


INIT
INIT →
CO RTE
FROM/TO
ALTN/CO RTE
----/---------
INIT
REQUEST
FLT NBR
IRS INIT>
COST INDEX

WIND>
CRZ FL/TEMP
TROPO
-----/---°
36090
LFBO/EGLL
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
WRITE
2
ENTER
LFBO/EGLL 1/1
TLSLHR
AGN DIR LMG
UR10 AMB UB19 MAN
UB191 ABB DIR BIG
<RETURN
INSERT*
3
SELECT

WRITE a “FROM/TO” city pair, then ENTER it:

If one or more company routes run between the cities, the ROUTE SELECTION page appears and defines them.

INSERT the preferred company route.

- **If the database does not contain a company route:**

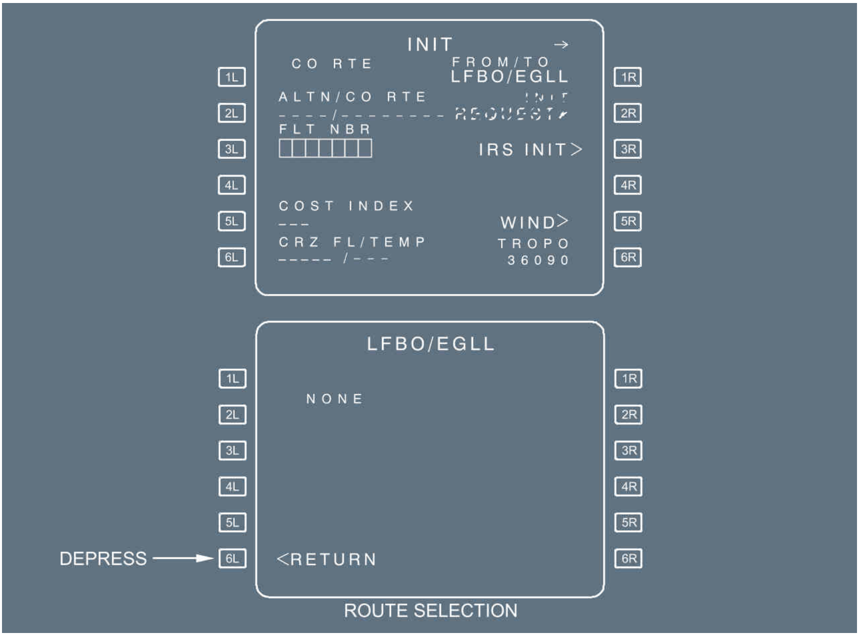
The flight plan must be constructed manually:

PRESS the INIT key

ENTER a city pair in the FROM/TO field.

The ROUTE SELECTION page comes up with “NONE”

SELECT RETURN [6L] key then construct the flight plan manually.


INIT
CO RTE
FROM/TO
LFBO/EGLL
ALTN/CO RTE
INIT
----/--------
REQUEST*
FLT NBR
IRS INIT>
COST INDEX

WIND>
CRZ FL/TEMP
TROPO
-----/---
36090
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
LFBO/EGLL
NONE
<RETURN
DEPRESS
ROUTE SELECTION

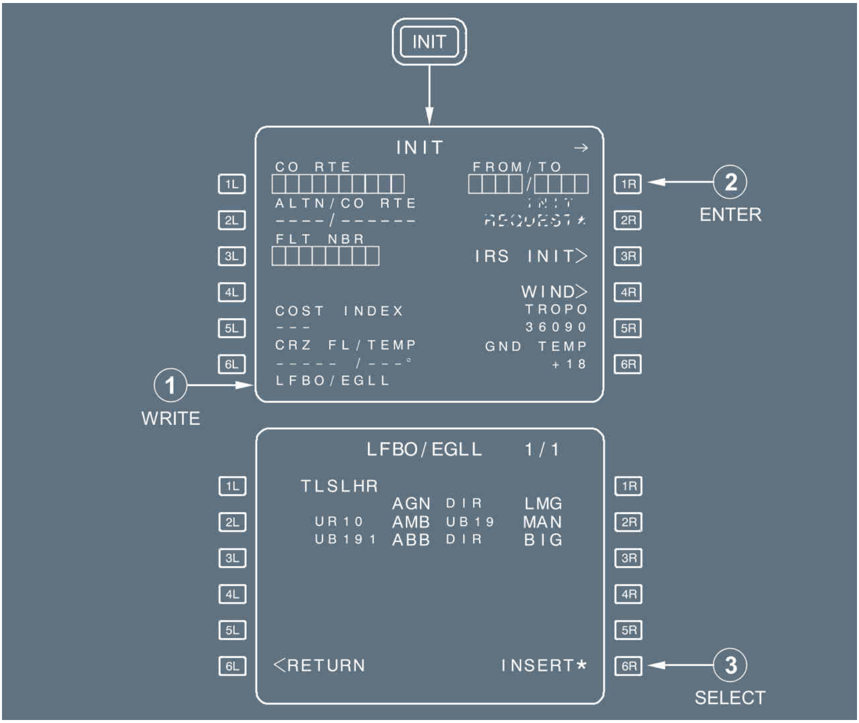
If waypoints, NAVAIDs or airports are not in the NAV database, the crew must define and store them manually, using the “data stored” function.

Ident.: PRO-NOR-SRP-01-10-A-00003961.0062001 / 22 MAY 12
Applicable to: MSN 04827-04860

GENERAL

Follow SOP instructions, when the route is a company route stored in the database.

- **If the company route is unknown, proceed as follows:**


INIT
INIT →
CO RTE
FROM/TO
ALTN/CO RTE
----/------
INIT
REQUEST*
FLT NBR
IRS INIT>
WIND>
COST INDEX

TROPO
36090
CRZ FL/TEMP
-----/---°
GND TEMP
+18
LFBO/EGLL
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
WRITE
2
ENTER
LFBO/EGLL 1/1
TLSLHR
AGN DIR LMG
UR10 AMB UB19 MAN
UB191 ABB DIR BIG
<RETURN
INSERT*
3
SELECT

WRITE a "FROM/TO" city pair, then ENTER it:

If one or more company routes run between the cities, the ROUTE SELECTION page appears and defines them.

INSERT the preferred company route.

Check COST INDEX.

Check/modify GND TEMP.

- **If the database does not contain a company route:**

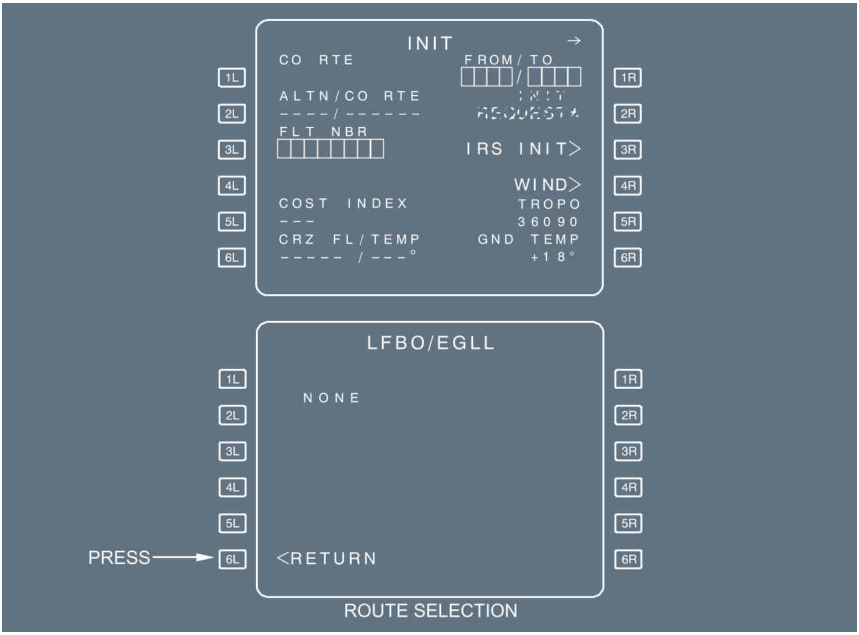
The flight plan must be constructed manually:

PRESS the INIT key

ENTER a city pair in the FROM/TO field.

The ROUTE SELECTION page comes up with "NONE"

SELECT RETURN [6L] key then construct the flight plan manually.


INIT
CO RTE
FROM/TO
ALTN/CO RTE
----/------
INIT
REQUEST*
FLT NBR
IRS INIT>
WIND>
COST INDEX
TROPO

36090
CRZ FL/TEMP
GND TEMP
----- /---°
+18°
LFBO/EGLL
NONE
PRESS
<RETURN
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

ROUTE SELECTION

If waypoints, NAVAIDs or airports are not in the NAV database, the crew must define and store them manually, using the "data stored" function.

Ident.: PRO-NOR-SRP-01-10-A-00003962.0037001 / 23 JUN 15
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-02904

ALIGNING IRS

PRESS the INIT key, and then the IRS INIT prompt.

IRS INIT page is displayed with the airport reference point as default coordinates.

If necessary, PRESS [1L] and/or [1R] and use scroll keys to adjust the latitude and/or longitude values.

For example, this can be used to enter the gate precise coordinates when the aircraft is intended to fly without GPS on long segments without radio coverage.

PRESS the ALIGN ON REF prompt and CONFIRM ALIGN* prompt.

The displayed coordinates are sent to ADIRS for initialization.
The alignment status changes to ALIGNING ON REF.

- **If the “CHECK IRS/AIRPORT POS” or "REF/GPS POS DIF" or "REF/LAST IRS POS DIF" message is displayed:**

  CHECK the departure airport on INIT A page and CORRECT it if necessary.

  REALIGN the IRS per the procedure described previously.

- **If a new FROM or a new CO RTE is entered after IRS alignment is already completed, the ALIGN ON REF prompt is displayed in [6R]:**

  REALIGN the IRS per the procedure described previously.

Ident.: PRO-NOR-SRP-01-10-A-00003962.0046001 / 23 JUN 15

3 **Applicable to: MSN 02887, 02924-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ALIGNING IRS

The alignment phase is completed, when the ADIRS is initialized to an appropriate position. If the GPS is available, initialization is automatic, using the GPS position. Flight crew intervention is not necessary.
However, automatic initialization may be manually overriden by flight crew entry, at any moment during the alignment phase. In this case, perform the following procedure as soon as possible, to prevent delays if an alignment error occurs:

PRESS the INIT key, and then the IRS INIT prompt.

IRS INIT page is displayed with the airport reference point as default coordinates.

If necessary, PRESS [1L] and/or [1R] and use scroll keys to adjust the latitude and/or longitude values.

For example, this can be used to enter the gate precise coordinates when the aircraft is intended to fly without GPS on long segments without radio coverage.

PRESS the ALIGN ON REF prompt and CONFIRM ALIGN* prompt.

The displayed coordinates are sent to ADIRS for initialization.
The alignment status changes to ALIGNING ON REF.

- **If the “CHECK IRS/AIRPORT POS” or "REF/GPS POS DIF" or "REF/LAST IRS POS DIF" message is displayed:**

  CHECK the departure airport on INIT A page and CORRECT it if necessary.

  REALIGN the IRS per the procedure described previously.

- **If a new FROM or a new CO RTE is entered after IRS alignment is already completed, the ALIGN ON REF prompt is displayed in [6R]:**

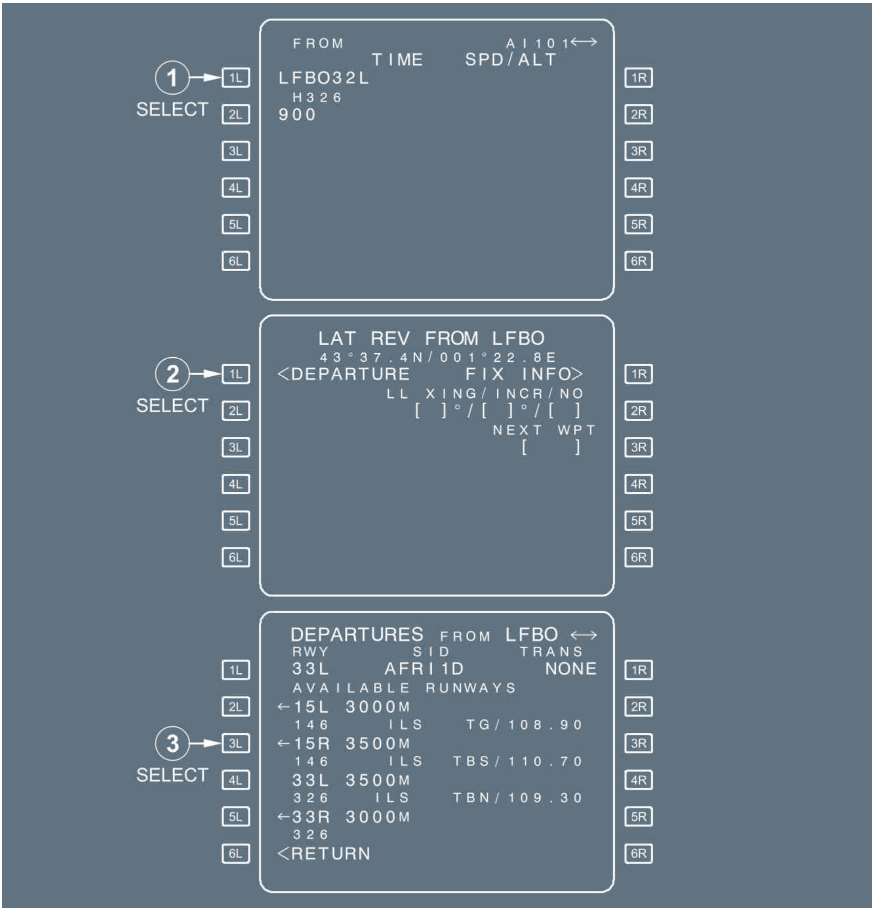
  REALIGN the IRS per the procedure described previously.

Ident.: PRO-NOR-SRP-01-10-A-00003963.0010001 / 22 MAY 12

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

LATERAL FLIGHT PLAN

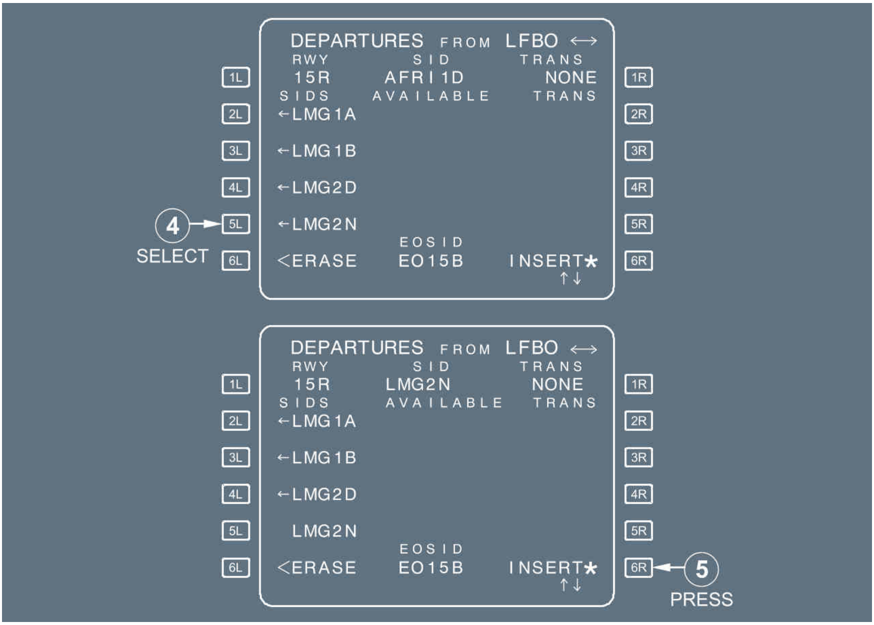
SELECTING A DEPARTURE



```
 FROM                   AI101←→
          TIME      SPD/ALT
LFBO32L
 H326
900
```

```
      LAT REV FROM LFBO
      43°37.4N/001°22.8E
<DEPARTURE         FIX INFO>
            LL XING/INCR/NO
              [  ]°/[  ]°/[  ]
                    NEXT WPT
                     [     ]
```

```
 DEPARTURES FROM LFBO ←→
 RWY          SID        TRANS
 33L        AFRI1D        NONE
 AVAILABLE RUNWAYS
←15L  3000M
 146        ILS     TG/108.90
←15R  3500M
 146        ILS    TBS/110.70
 33L  3500M
 326       ILS     TBN/109.30
←33R  3000M
 326
<RETURN
```


DEPARTURES FROM LFBO ↔
RWY SID TRANS
15R AFRI1D NONE
SIDS AVAILABLE TRANS
←LMG1A
←LMG1B
←LMG2D
←LMG2N
EOSID
<ERASE EO15B INSERT*
↑↓
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
4
SELECT
DEPARTURES FROM LFBO ↔
RWY SID TRANS
15R LMG2N NONE
SIDS AVAILABLE TRANS
←LMG1A
←LMG1B
←LMG2D
LMG2N
EOSID
<ERASE EO15B INSERT*
↑↓
5
PRESS

You may use the ”NEXT PAGE” ◁ , or the “←” or “→” keys to gain access to the listings of runways, SIDs, and transitions.

Procedure

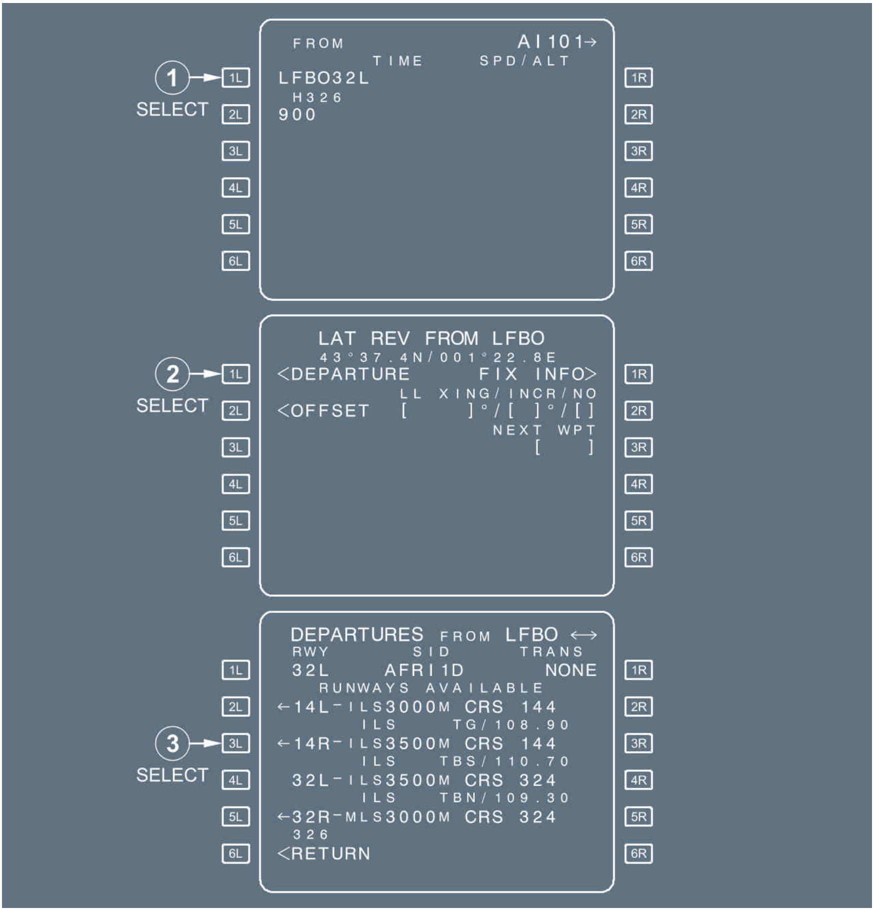
PRESS the F-PLN key on MCDU
SELECT the DEPARTURE prompt [1L] key
SELECT the RWY in USE, SID and TRANS
CHECK the resulting temporary F-PLN
If it is correct, INSERT it using [6R] key.
If it is not correct, ERASE it using [6L] key.

Ident.: PRO-NOR-SRP-01-10-A-00003963.0026001 / 22 MAY 12

Applicable to: MSN 04827-04860

LATERAL FLIGHT PLAN

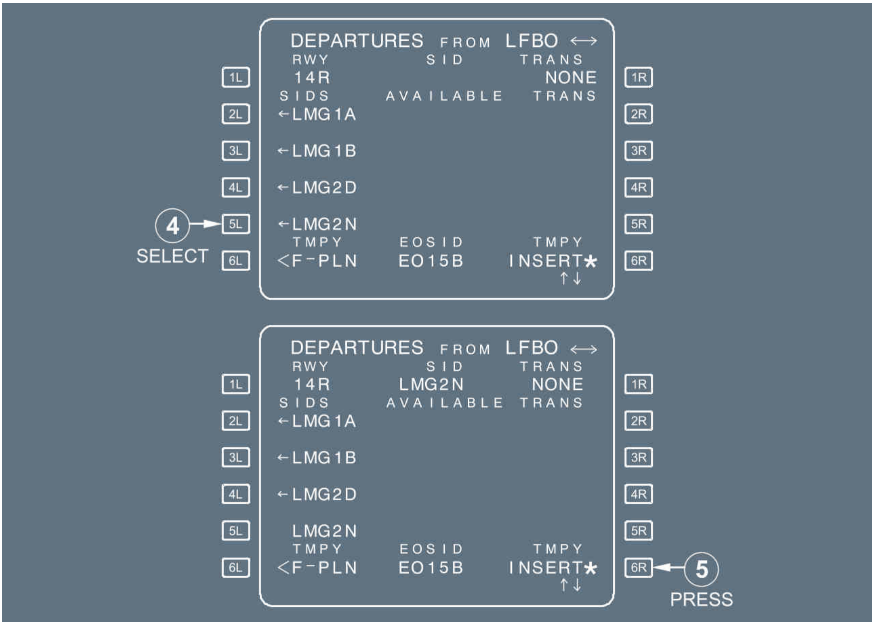
SELECTING A DEPARTURE



```
 FROM                     AI101→
           TIME       SPD/ALT
LFBO32L
 H326
900
```

```
   LAT REV  FROM  LFBO
   43°37.4N/001°22.8E
<DEPARTURE          FIX INFO>
          LL  XING/INCR/NO
<OFFSET  [       ]°/[  ]°/[]
                    NEXT WPT
                     [     ]
```

```
 DEPARTURES FROM LFBO ↔
 RWY         SID        TRANS
 32L       AFRI1D        NONE
    RUNWAYS  AVAILABLE
←14L-ILS3000M CRS 144
         ILS     TG/108.90
←14R-ILS3500M CRS 144
         ILS    TBS/110.70
 32L-ILS3500M CRS 324
         ILS    TBN/109.30
←32R-MLS3000M CRS 324
 326
<RETURN
```



```
DEPARTURES FROM LFBO <->
 RWY         SID       TRANS
 14R                    NONE
SIDS     AVAILABLE     TRANS
<-LMG1A

<-LMG1B

<-LMG2D

<-LMG2N
 TMPY       EOSID       TMPY
<F-PLN      EO15B    INSERT*
                          ↑↓
```

```
DEPARTURES FROM LFBO <->
 RWY         SID       TRANS
 14R        LMG2N       NONE
SIDS     AVAILABLE     TRANS
<-LMG1A

<-LMG1B

<-LMG2D

  LMG2N
 TMPY       EOSID       TMPY
<F-PLN      EO15B    INSERT*
                          ↑↓
```

You may use the "←" or "→" keys to gain access to the listings of runways, or the one of SIDs, and transitions.

Procedure

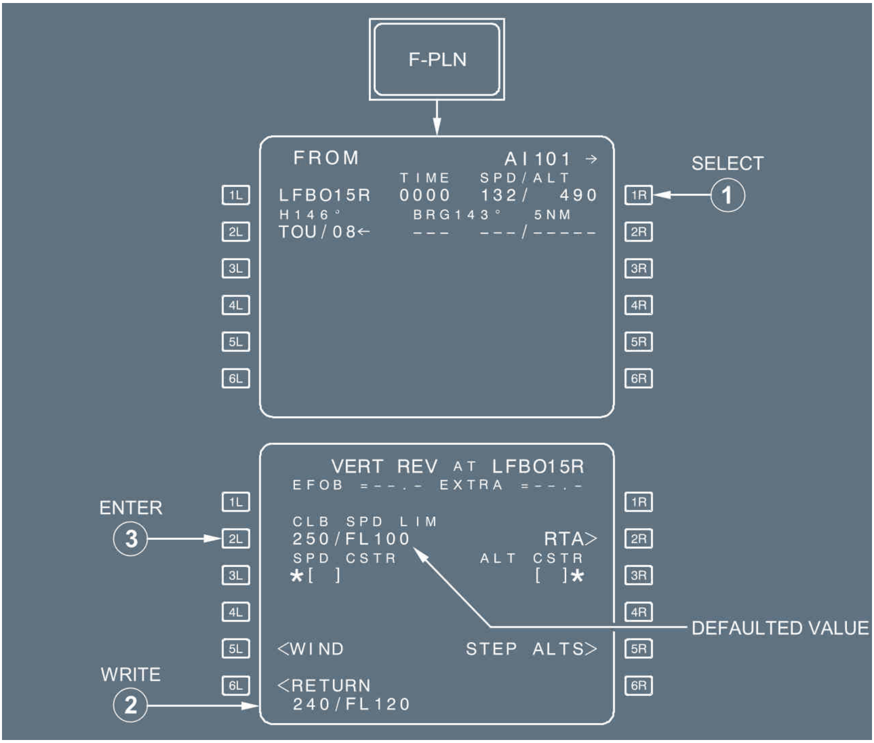
PRESS the F-PLN key on MCDU
SELECT the DEPARTURE prompt [1L] key
SELECT the RWY in USE, SID and TRANS
CHECK and INSERT the TMPY F-PLN or continue with next revision.

Ident.: PRO-NOR-SRP-01-10-A-00003964.0004001 / 22 MAY 12

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

VERTICAL FLIGHT PLAN

ENTERING/MODIFYING A SPEED LIMIT


F-PLN
FROM
AI101 →
TIME
SPD/ALT
LFBO15R
0000
132/ 490
H146°
BRG143°
5NM
TOU/08←

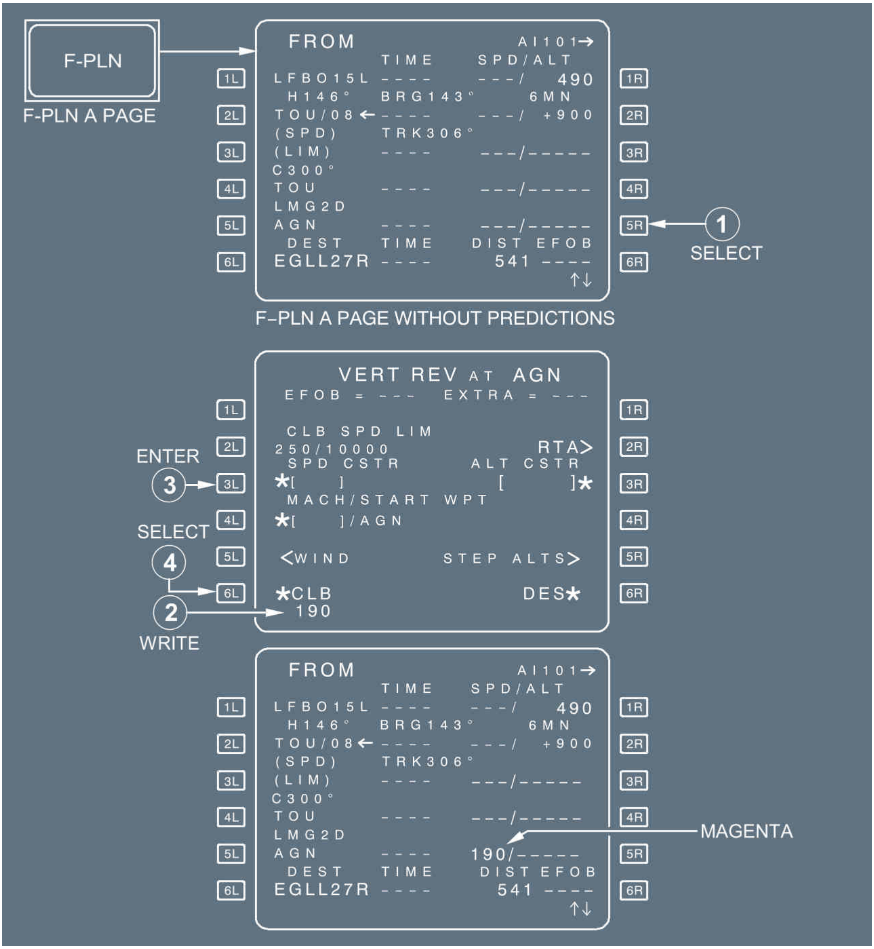
---/-----
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
SELECT
1
VERT REV AT LFBO15R
EFOB =--.-
EXTRA =--.-
CLB SPD LIM
250/FL100
RTA>
SPD CSTR
*[ ]
ALT CSTR
[ ]*
DEFAULTED VALUE
<WIND
STEP ALTS>
<RETURN
240/FL120
ENTER
3
WRITE
2

PRESS the F-PLN key on the MCDU.
SELECT VERTICAL REVISION at the FROM waypoint.
WRITE a new speed limit/altitude and ENTER.

The crew can insert one climb speed limit and one descent speed limit into the vertical flight plan, or modify or clear the limits that are already in it.
The speed limit is defined by a speed and an altitude (for example, 230/9 000), which means that the managed speed target will be limited by the speed limit when the aircraft flies below the specified altitude.

In both climb and descent, 250 kt at 10 000 ft is the default speed limit in the vertical flight plan. The vertical revision page presents the climb speed (CLB SPD) limit if the revised waypoint is between departure and top of descent.
The vertical revision page shows the descent speed (DES SPD) limit, if the revised waypoint is between top of descent and destination.
It can be deleted by a clear action, the field reverts to brackets. It can also be cleared directly on the F-PLN A page by clearing the SPD LIM pseudo-waypoint.

ENTERING A SPEED CONSTRAINT


F-PLN
F-PLN A PAGE
FROM A1101→
TIME SPD/ALT
LFBO15L ---- ---/ 490
H146° BRG143° 6MN
TOU/08← ---- ---/ +900
(SPD) TRK306°
(LIM) ---- ---/-----
C300°
TOU ---- ---/-----
LMG2D
AGN ---- ---/-----
DEST TIME DIST EFOB
EGLL27R ---- 541 ----
↑↓
1L 2L 3L 4L 5L 6L
1R 2R 3R 4R 5R 6R
1
SELECT
F–PLN A PAGE WITHOUT PREDICTIONS
VERT REV AT AGN
EFOB = --- EXTRA = ---
CLB SPD LIM
250/10000 RTA>
SPD CSTR ALT CSTR
[ ] [ ]
MACH/START WPT
*[ ]/AGN
<WIND STEP ALTS>
CLB DES
190
ENTER
3
SELECT
4
2
WRITE
FROM A1101→
TIME SPD/ALT
LFBO15L ---- ---/ 490
H146° BRG143° 6MN
TOU/08← ---- ---/ +900
(SPD) TRK306°
(LIM) ---- ---/-----
C300°
TOU ---- ---/-----
LMG2D
AGN ---- 190/-----
DEST TIME DIST EFOB
EGLL27R ---- 541 ----
↑↓
MAGENTA

Procedure

PRESS the F-PLN key on the MCDU.
SELECT the VERT REV page at the revised waypoint.
WRITE the speed constraint value into the scratchpad and ENTER it in 3L.
INSERT the constraint using the appropriate *CLB or DES* prompt when displayed. If CLB and DES are not displayed, insertion occurs when the value is entered in 3L.

The system displays the climb (CLB) or the descent (DES) prompt at [6L] or [6R] when the predictions are not yet available or when the waypoint is part of the cruise phase as originally defined.
When predictions are not yet available, the constraints are displayed on the F-PLN A page in magenta.

When predictions are available, the speed constraint is highlighted by a star (*).
** If the predicted speed matches the constraint, the star is magenta.*
** If the prediction is that the aircraft will miss the speed constraint, the star is amber.*
If a speed constraint cannot be met (by more than 10 kt), the FMGS generates the message “SPD ERROR AT WPT XX”.

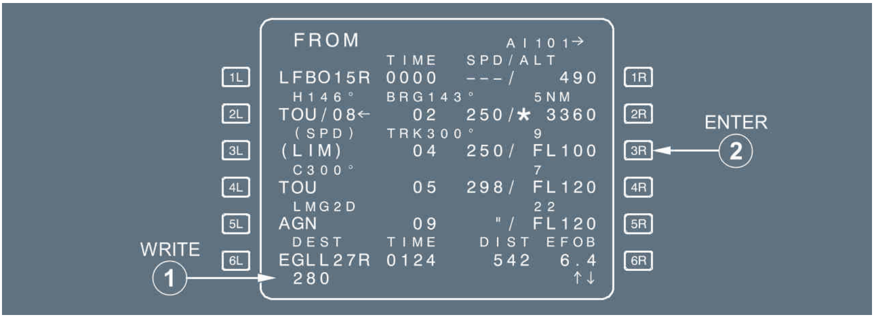
A speed constraint may be assigned to any waypoint in the climb or the descent phase except the FROM, origin, or destination waypoints, and any pseudo waypoint.

When a speed constraint is assigned to a waypoint, the constraint will limit the managed speed target as follows:
- *In takeoff or climb phase until you pass the constrained waypoint.*
- *In descent an approach phase, after passing the constrained waypoint.*

Speed constraints are observed by the FMGS when NAV mode and speed managed are active.

ENTERING A SPEED CONSTRAINT THROUGH F-PLN A PAGE

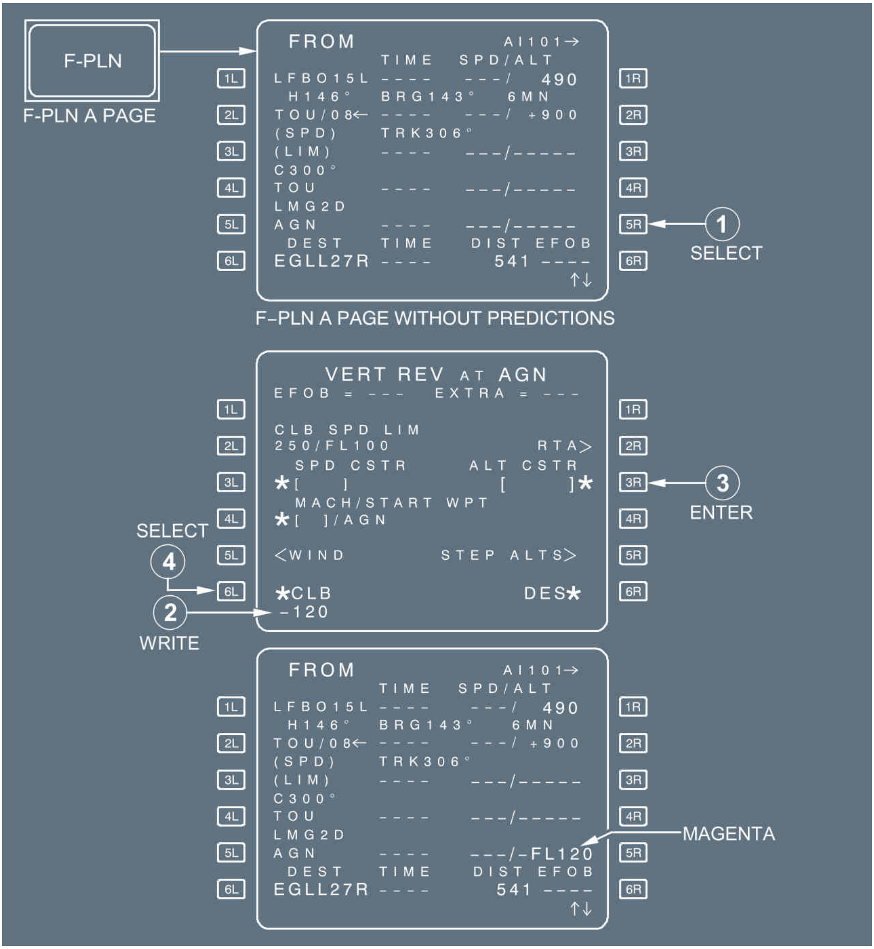
You may also enter a speed constraint through the F-PLN A page.



```
 FROM                          AI101→
          TIME    SPD/ALT
LFBO15R   0000    ---/     490
 H146°    BRG143°         5NM
TOU/08←     02    250/*   3360
 (SPD)    TRK300°          9
(LIM)       04    250/    FL100
 C300°                     7
TOU         05    298/    FL120
 LMG2D                    22
AGN         09     "/     FL120
 DEST     TIME     DIST   EFOB
EGLL27R   0124      542    6.4
 280                        ↑↓
```

Note: *You may delete the constraint using the clear key on the relevant right hand key. However if there is an altitude constraint assigned at that point, the clear action deletes it too.*

ENTERING AN ALTITUDE CONSTRAINT


F-PLN
F-PLN A PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
SELECT
F–PLN A PAGE WITHOUT PREDICTIONS
SELECT
4
2
WRITE
3
ENTER
MAGENTA

```
 FROM                   AI101→
          TIME   SPD/ALT
LFBO15L   ----   ---/   490
  H146°   BRG143°    6MN
TOU/08←   ----   ---/  +900
(SPD)     TRK306°
(LIM)     ----   ---/-----
C300°
TOU       ----   ---/-----
LMG2D
AGN       ----   ---/-----
  DEST    TIME    DIST EFOB
EGLL27R   ----     541 ----
                          ↑↓
```

```
     VERT REV AT AGN
EFOB = ---    EXTRA = ---

CLB SPD LIM
250/FL100              RTA>
  SPD CSTR        ALT CSTR
*[    ]           [      ]*
  MACH/START WPT
*[  ]/AGN

<WIND           STEP ALTS>

*CLB                   DES*
 -120
```

```
 FROM                   AI101→
          TIME   SPD/ALT
LFBO15L   ----   ---/   490
  H146°   BRG143°    6MN
TOU/08←   ----   ---/  +900
(SPD)     TRK306°
(LIM)     ----   ---/-----
C300°
TOU       ----   ---/-----
LMG2D
AGN       ----   ---/-FL120
  DEST    TIME    DIST EFOB
EGLL27R   ----     541 ----
                          ↑↓
```

Procedure

PRESS the F-PLN key on the MCDU.

SELECT the “VERT REV” page at the revised waypoint.
WRITE an altitude constraint in the scratchpad and ENTER it in 3R.
INSERT the constraint using *CLB or DES* prompt when it is displayed. Otherwise the value is inserted when it is entered in 3R field.

*The system displays the *CLB or DES* prompt, when the predictions are not yet available, or when the waypoint is part of the cruise phase as originally defined.*

Note: *In case of QFE operations, the altitude constraints must be converted and entered as an altitude in feet.*

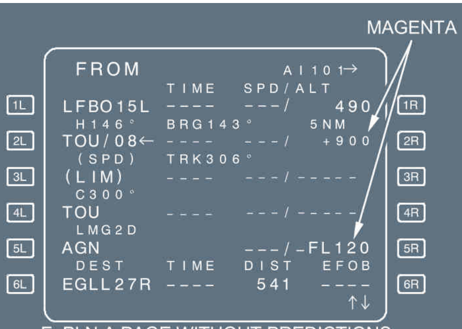
You or the database may assign an altitude constraint to any waypoint in the climb or descent phases except the FROM, origin, or destination waypoints, or any pseudo waypoint.
An altitude constraint may be defined as an “at”, an “at or above”, or an “at or below” constraint. In certain procedures, the database may define an altitude constraint as a window in which the aircraft should fly.

Enter “AT” constraints with no sign.
Enter “AT or ABOVE” constraints preceded by a + sign (+FL 130, for example).
Enter “AT or BELOW” constraints preceded by a – sign (-15 000, for example).
enter four or five-digit number when entering altitude. Include the lead zero (0 500 ft , for example).

For flight level, enter a two- or three-digit number, with or without the letters “FL”. The lead zero is optional. (Examples : +FL 120 or +120 ; -FL 090 or -90 or -090)

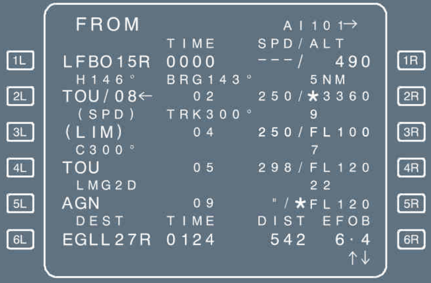
Enter the altitude value as either altitude or flight level ; the MCDU displays the selected value as an “ALT” or “FL,” as appropriate for the transition altitude.

The constraint must be higher than the thrust reduction altitude and lower than the cruise flight level.
Once inserted in the flight plan, the altitude constraint (ALT CSTR) is displayed in magenta as long as predictions are not available.
When predictions are available, the altitude constraints are replaced by the predicted altitude at relevant waypoints highlighted by a star.
** If the predicted altitude matches the constraint the star is magenta. If the predicted altitude is missed (by more than 250 ft), the star is amber.*



```
 FROM                          AI101→
            TIME     SPD/ALT
LFBO15L     ----     ---/       490
 H146°      BRG143°         5NM
TOU/08←     ----     ---/      +900
 (SPD)      TRK306°
(LIM)       ----     ---/-----
 C300°
TOU         ----     ---/-----
 LMG2D
AGN                  ---/-FL120
 DEST       TIME     DIST      EFOB
EGLL27R     ----     541       ----
                                ↑↓
```

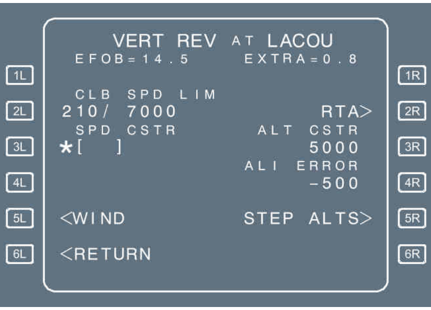
F–PLN A PAGE WITHOUT PREDICTIONS



```
 FROM                          AI101→
            TIME       SPD/ALT
LFBO15R     0000       ---/     490
 H146°      BRG143°         5NM
TOU/08←       02       250/*3360
 (SPD)      TRK300°         9
(LIM)         04       250/FL100
 C300°                      7
TOU           05       298/FL120
 LMG2D                      22
AGN           09         "/*FL120
 DEST       TIME       DIST    EFOB
EGLL27R     0124        542     6.4
                                ↑↓
```

F-PLN A PAGE WITH PREDICTIONS AND STARS

The vertical revision page displays “ALT ERROR”, along with the difference between the constraint and the predicted altitude at the revised waypoint.

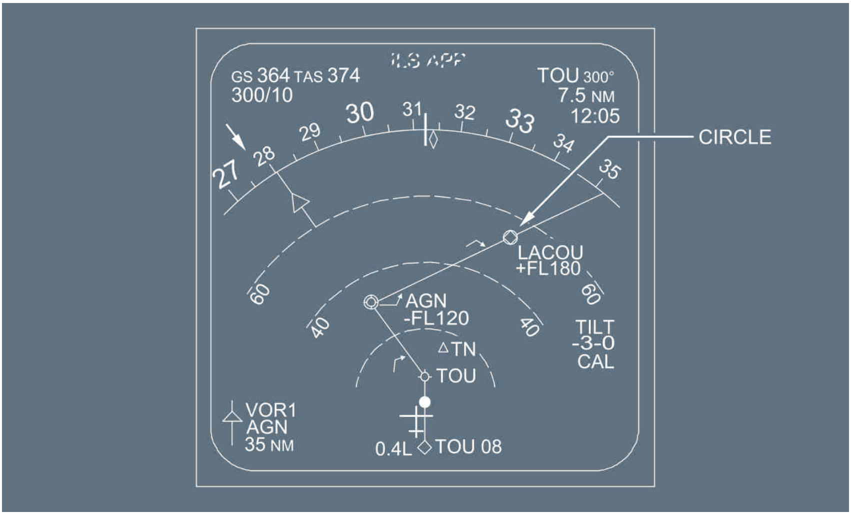


```
       VERT REV AT LACOU
 EFOB=14.5         EXTRA=0.8

 CLB SPD LIM
210/ 7000                 RTA>
 SPD CSTR          ALT CSTR
*[    ]                 5000
                   ALT ERROR
                        -500

<WIND              STEP ALTS>

<RETURN
```

ND Display

An altitude-constrained waypoint is marked by a circle (◯) on the navigation display.

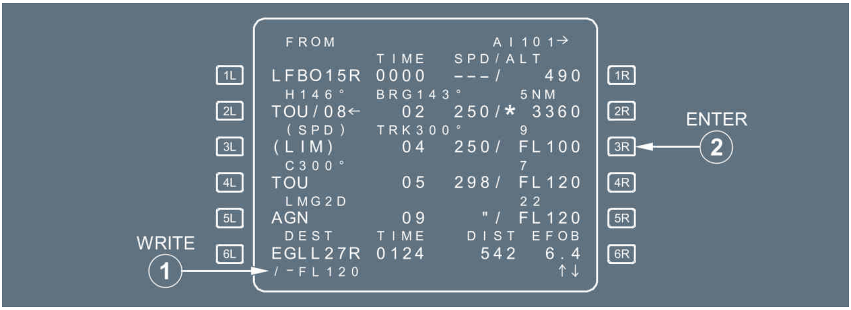
This circle is white when the guidance does not take the altitude constraint into account. It is magenta if the guidance system takes the altitude constraint into account and predicts that it will be matched.
It is amber if the guidance system takes the altitude constraint into account and predicts that it will not be matched.


GS 364 TAS 374
300/10
ILS APP
TOU 300°
7.5 NM
12:05
CIRCLE
27
28
29
30
31
32
33
34
35
LACOU
+FL180
AGN
-FL120
60
40
TN
TOU
TILT
-3-0
CAL
VOR1
AGN
35 NM
0.4L
TOU 08

The aircraft should be at or below FL 120 at AGN and above FL 180 at LACOU.

Entering an Altitude Constraint Through F-PLN A Page

The pilot may also enter an altitude constraint directly through the F-PLN A page.
When entering the value into the scratchpad do not forget the slash e.g. /-120 or /-FL 120.
If the slash is omitted the value will be considered as a speed constraint if it is within the range value.



```
 FROM                   AI101→
          TIME   SPD/ALT
LFBO15R   0000   ---/     490
 H146°    BRG143°     5NM
TOU/08←     02   250/*  3360
 (SPD)    TRK300°      9
(LIM)       04   250/  FL100
 C300°                 7
TOU         05   298/  FL120
 LMG2D                 22
AGN         09     "/  FL120
 DEST     TIME    DIST  EFOB
EGLL27R   0124     542   6.4
/-FL120                  ↑↓
```

Use CLR to delete them directly from the flight plan page, as well. However, if there is also a speed constraint assigned at that waypoint, the clear action deletes it too.

ENTERING AN ESTIMATED TIME OF TAKEOFF (ETT)

In Preflight Phase:

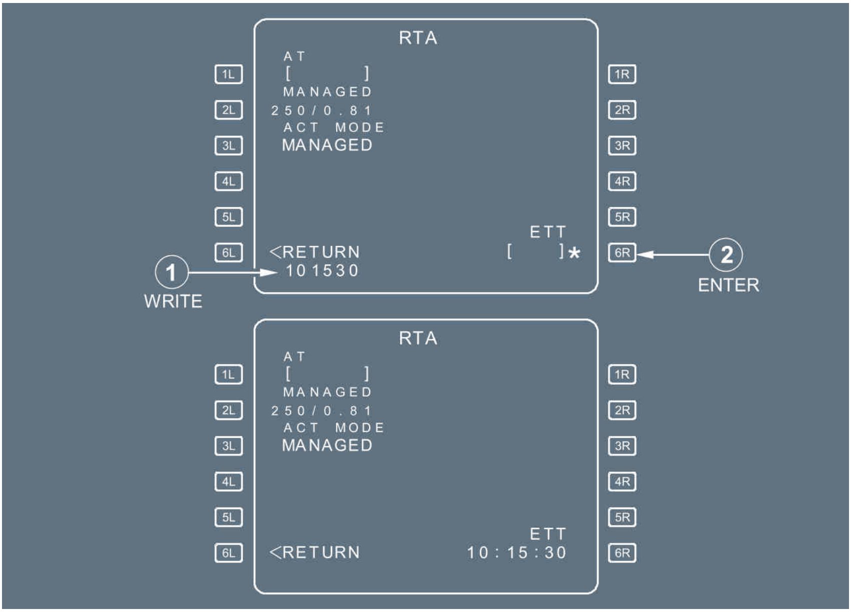
SELECT the SEC F-PLN key on the MCDU.
SELECT a VERT REV at any waypoint.
SELECT the Required Time of Arrival (RTA) prompt (2R).

The MCDU displays the RTA page.

ENTER the Estimated Takeoff Time in the [6R] field.

The format is HHMMSS (entry of seconds is not mandatory).

ENTER it in the 6R field


RTA
AT
[ ]
MANAGED
250/0.81
ACT MODE
MANAGED
ETT
<RETURN
[ ]*
10 1530
1
WRITE
2
ENTER
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
RTA
AT
[ ]
MANAGED
250/0.81
ACT MODE
MANAGED
ETT
<RETURN
10:15:30

If the aircraft has not taken off by the time entered as estimated takeoff time, the MCDU displays the “CLK IS TAKE OFF TIME” message, meaning that the system will replace your estimated takeoff time with the actual time.

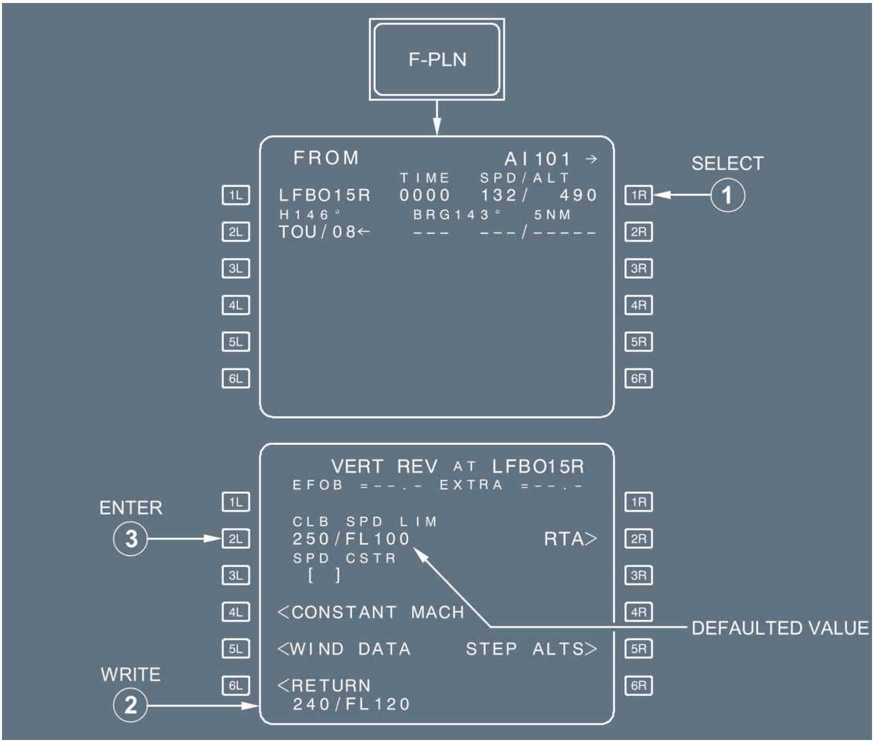
When beginning the takeoff roll, the system automatically adopts that clock time as the takeoff time.

If the origin airport is changed, or the clock time is invalid, the system automatically deletes the estimated takeoff time.

Ident.: PRO-NOR-SRP-01-10-A-00003964.0039001 / 22 MAY 12
Applicable to: MSN 04827-04860

VERTICAL FLIGHT PLAN

ENTERING/MODIFYING A SPEED LIMIT


F-PLN
FROM
AI101 →
TIME SPD/ALT
LFBO15R 0000 132/ 490
H146° BRG143° 5NM
TOU/08← --- ---/-----
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
SELECT
1
VERT REV AT LFBO15R
EFOB =---.- EXTRA =---.-
CLB SPD LIM
250/FL100
RTA>
SPD CSTR
[ ]
<CONSTANT MACH
<WIND DATA
STEP ALTS>
<RETURN
240/FL120
ENTER
3
WRITE
2
DEFAULTED VALUE

PRESS the F-PLN key on the MCDU.
SELECT VERTICAL REVISION at the FROM waypoint.
WRITE a new speed limit/altitude and ENTER.

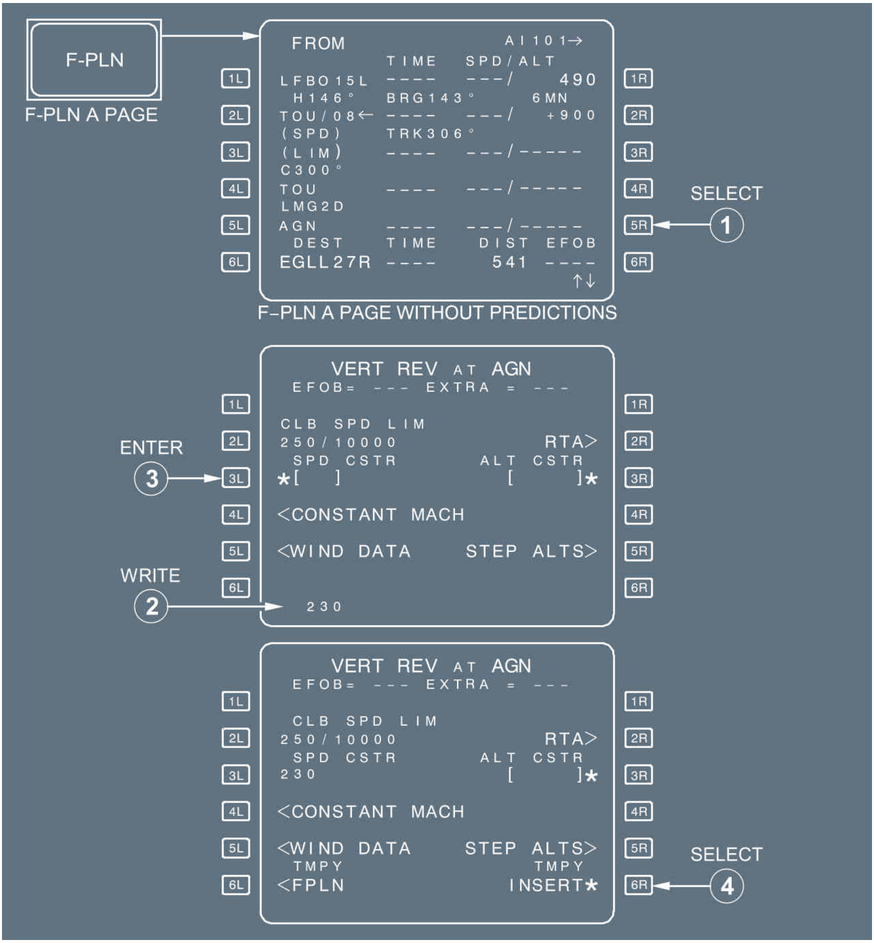
The crew can insert one climb speed limit and one descent speed limit into the vertical flight plan, or modify or clear the limits that are already in it.
The speed limit is defined by a speed and an altitude (for example, 230/9 000), which means that the managed speed target will be limited by the speed limit when the aircraft flies below the specified altitude.

In both climb and descent, 250 kt at 10 000 ft is the default speed limit in the vertical flight plan.
The vertical revision page presents the climb speed (CLB SPD) limit if the revised waypoint is between departure and top of descent.
The vertical revision page shows the descent speed (DES SPD) limit, if the revised waypoint is between top of descent and destination.
It can be deleted by a clear action, the field reverts to brackets. It can also be cleared directly on the F-PLN A page by clearing the SPD LIM pseudo-waypoint.

CHECK and INSERT the TMPY F-PLN or continue with next revision.

Note: *The speed limit cannot be cleared in the temporary flight plan. If the crew inadvertly tries to clear the SPD LIM in the TMPY F-PLN, the message “NOT ALLOWED” is displayed in the scratchpad.*

ENTERING A SPEED CONSTRAINT



```
FROM                       AI101→
           TIME    SPD/ALT
LFBO15L    ----    ---/    490
 H146°     BRG143°       6MN
TOU/08←    ----    ---/   +900
(SPD)      TRK306°
(LIM)      ----    ---/-----
C300°
TOU        ----    ---/-----
LMG2D
AGN        ----    ---/-----
 DEST      TIME     DIST EFOB
EGLL27R    ----     541  ----
                            ↑↓
```

F-PLN A PAGE WITHOUT PREDICTIONS

```
     VERT REV AT AGN
 EFOB= ---  EXTRA = ---

CLB SPD LIM
250/10000                RTA>
 SPD CSTR            ALT CSTR
*[   ]               [     ]*

<CONSTANT MACH

<WIND DATA         STEP ALTS>


  230
```

```
     VERT REV AT AGN
 EFOB= ---  EXTRA = ---

 CLB SPD LIM
250/10000                RTA>
 SPD CSTR            ALT CSTR
230                  [     ]*

<CONSTANT MACH

<WIND DATA         STEP ALTS>
 TMPY                    TMPY
<FPLN                 INSERT*
```

Procedure

PRESS the F-PLN key on the MCDU.
SELECT the VERT REV page at the revised waypoint.
WRITE the speed constraint value into the scratchpad and ENTER it in 3L.
CHECK and INSERT the TMPY F-PLN or continue with next revision.

Note: *A speed constraint can also be entered directly on F-PLN page, without using VERT REV page.*

When predictions are not yet available, the constraints are displayed on the F-PLN A page in magenta.

When predictions are available, the speed constraint is highlighted by a star (*).
** If the predicted speed matches the constraint, the star is magenta.*
** If the prediction is that the aircraft will miss the speed constraint, the star is amber.*
If a speed constraint cannot be met (by more than 10 kt), the FMGS generates the message “SPD ERROR AT WPT XX”.

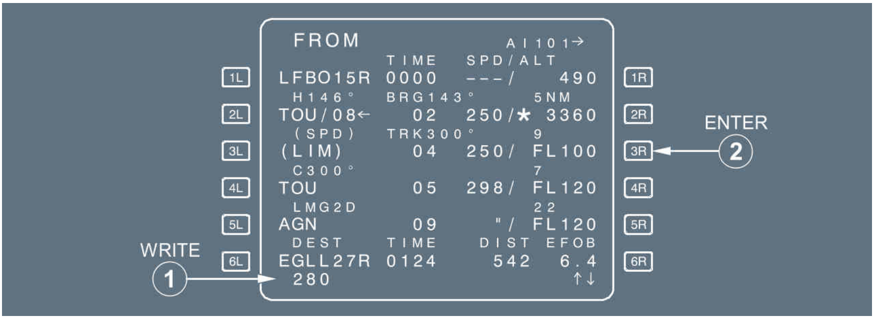
A speed constraint may be assigned to any waypoint in the climb or the descent phase except the FROM, origin, or destination waypoints, and any pseudo waypoint.

When a speed constraint is assigned to a waypoint, the constraint will limit the managed speed target as follows:
- *In takeoff or climb phase until you pass the constrained waypoint.*
- *In descent an approach phase, after passing the constrained waypoint.*

Speed constraints are observed by the FMGS when NAV mode and speed managed are active.

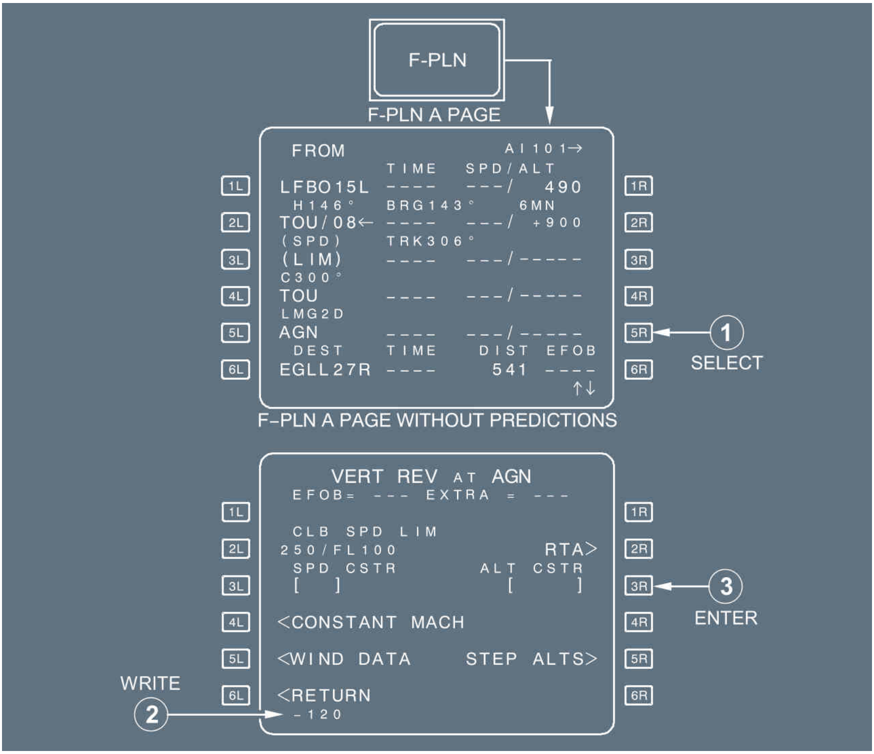
ENTERING A SPEED CONSTRAINT THROUGH F-PLN A PAGE

You may also enter a speed constraint through the F-PLN A page.


```
 FROM                       AI101→
           TIME   SPD/ALT
LFBO15R    0000   ---/     490
  H146°    BRG143°          5NM
TOU/08←      02   250/* 3360
  (SPD)    TRK300°          9
(LIM)        04   250/  FL100
  C300°                     7
TOU          05   298/  FL120
  LMG2D                    22
AGN          09     "/  FL120
  DEST     TIME     DIST  EFOB
EGLL27R    0124      542   6.4
  280                      ↑↓
```

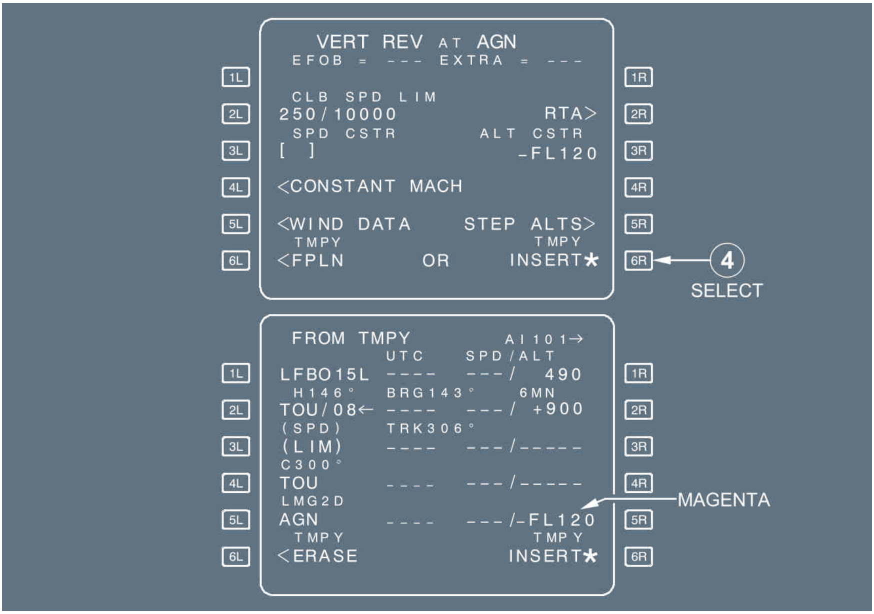
Note: *You may delete the constraint using the clear key on the relevant right hand key. However if there is an altitude constraint assigned at that point, the clear action deletes it too.*

ENTERING AN ALTITUDE CONSTRAINT


F-PLN
F-PLN A PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
SELECT
F-PLN A PAGE WITHOUT PREDICTIONS
3
ENTER
WRITE
2

```
 FROM                        AI101→
            TIME    SPD/ALT
LFBO15L     ----    ---/   490
  H146°     BRG143°      6MN
TOU/08←     ----    ---/  +900
 (SPD)      TRK306°
 (LIM)      ----    ---/-----
C300°
TOU         ----    ---/-----
 LMG2D
AGN         ----    ---/-----
  DEST      TIME     DIST  EFOB
EGLL27R     ----     541   ----
                             ↑↓
```

```
      VERT REV AT AGN
  EFOB= ---  EXTRA = ---

  CLB SPD LIM
250/FL100                  RTA>
  SPD CSTR            ALT CSTR
  [   ]               [      ]
<CONSTANT MACH
<WIND DATA           STEP ALTS>
<RETURN
  -120
```



```
VERT REV AT AGN
EFOB = ---     EXTRA = ---

CLB SPD LIM
250/10000                  RTA>
SPD CSTR              ALT CSTR
[  ]                    -FL120
<CONSTANT MACH

<WIND DATA          STEP ALTS>
 TMPY                     TMPY
<FPLN          OR      INSERT*
```

```
 FROM TMPY               AI101→
           UTC       SPD/ALT
LFBO15L    ----      ---/  490
 H146°     BRG143°      6MN
TOU/08←    ----      ---/ +900
(SPD)      TRK306°
(LIM)      ----      ---/-----
C300°
TOU        ----      ---/-----
LMG2D
AGN        ----      ---/-FL120
 TMPY                     TMPY
<ERASE                 INSERT*
```

Procedure

PRESS the F-PLN key on the MCDU.
SELECT the “VERT REV” page at the revised waypoint.
WRITE an altitude constraint in the scratchpad and ENTER it in 3R.
If ← CLB and DES → prompt are displayed, SELECT the type of constraint.

The system displays the ← CLB or DES → prompt, when the predictions are not yet available, or when the waypoint is part of the cruise phase as originally defined.

CHECK and INSERT the TMPY F-PLN or continue with next revision

Note: 1. *In case of QFE operations, the altitude constraints defined in heights (QFE) must be converted and entered in the FMS as altitudes (QNH).*
2. *An altitude constraint can also be entered directly on F-PLN page, without using VERT REV page.*

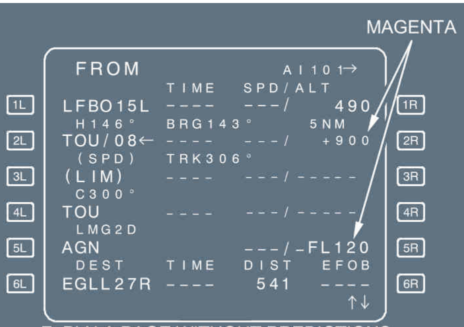
You or the database may assign an altitude constraint to any waypoint in the climb or descent phases except the FROM, origin, or destination waypoints, or any pseudo waypoint.
An altitude constraint may be defined as an “at”, an “at or above”, or an “at or below” constraint. In certain procedures, the database may define an altitude constraint as a window in which the aircraft should fly.

Enter “AT” constraints with no sign.
Enter “AT or ABOVE” constraints preceded by a + sign (+FL 130, for example).
Enter “AT or BELOW” constraints preceded by a – sign (-15 000, for example).
enter four or five-digit number when entering altitude. Include the lead zero (0 500 ft , for example).

For flight level, enter a two- or three-digit number, with or without the letters “FL”. The lead zero is optional. (Examples : +FL 120 or +120 ; -FL 090 or -90 or -090)

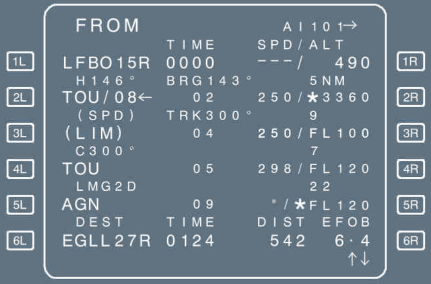
Enter the altitude value as either altitude or flight level ; the MCDU displays the selected value as an “ALT” or “FL,” as appropriate for the transition altitude.

The constraint must be higher than the thrust reduction altitude and lower than the cruise flight level.
Once inserted in the flight plan, the altitude constraint (ALT CSTR) is displayed in magenta as long as predictions are not available.
When predictions are available, the altitude constraints are replaced by the predicted altitude at relevant waypoints highlighted by a star.
** If the predicted altitude matches the constraint the star is magenta. If the predicted altitude is missed (by more than 250 ft), the star is amber.*



```
  FROM                      AI101→
            TIME   SPD/ALT
LFBO15L     ----   ---/      490
  H146°     BRG143°        5NM
TOU/08←     ----   ---/     +900
 (SPD)      TRK306°
(LIM)       ----   ---/-----
  C300°
TOU         ----   ---/-----
  LMG2D
AGN                ---/-FL120
  DEST      TIME   DIST    EFOB
EGLL27R     ----    541    ----
                             ↑↓
```

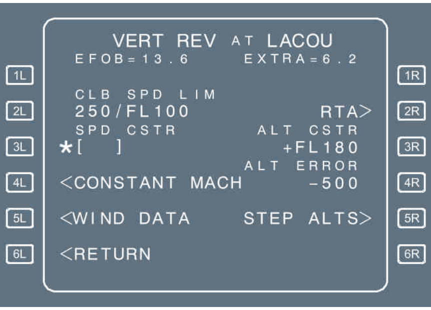
F–PLN A PAGE WITHOUT PREDICTIONS



```
  FROM                      AI101→
            TIME      SPD/ALT
LFBO15R     0000      ---/   490
  H146°     BRG143°        5NM
TOU/08←       02      250/*3360
 (SPD)      TRK300°        9
(LIM)         04      250/FL100
  C300°                    7
TOU           05      298/FL120
  LMG2D                    22
AGN           09        "/*FL120
  DEST      TIME      DIST  EFOB
EGLL27R     0124      542   6·4
                             ↑↓
```

F-PLN A PAGE WITH PREDICTIONS AND STARS

The vertical revision page displays “ALT ERROR”, along with the difference between the constraint and the predicted altitude at the revised waypoint.

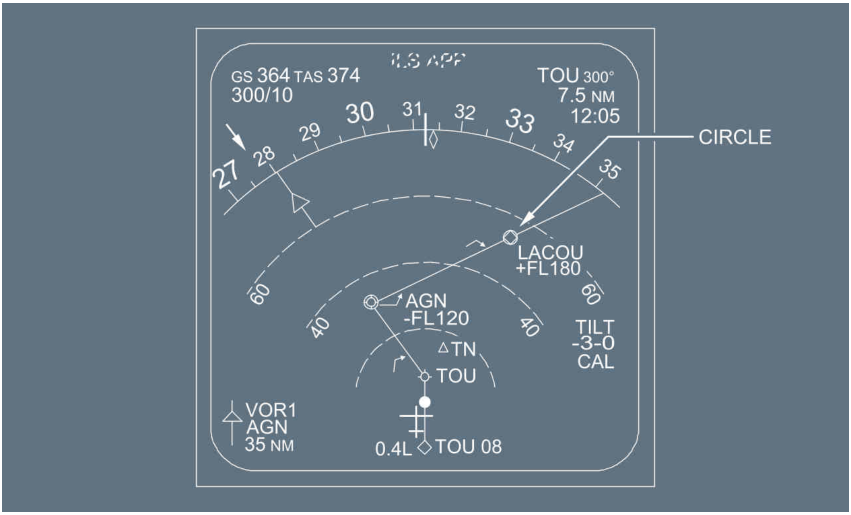


```
     VERT REV AT LACOU
   EFOB=13.6     EXTRA=6.2

   CLB SPD LIM
   250/FL100              RTA>
   SPD CSTR          ALT CSTR
 *[    ]              +FL180
                   ALT ERROR
<CONSTANT MACH          -500

<WIND DATA        STEP ALTS>

<RETURN
```

ND Display

An altitude-constrained waypoint is marked by a circle (○) on the navigation display.

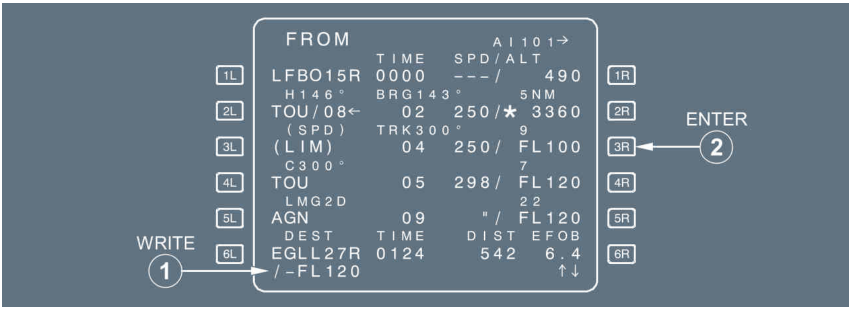
This circle is white when the guidance does not take the altitude constraint into account. It is magenta if the guidance system takes the altitude constraint into account and predicts that it will be matched.
It is amber if the guidance system takes the altitude constraint into account and predicts that it will not be matched.


ILS APP
GS 364 TAS 374
300/10
TOU 300°
7.5 NM
12:05
27
28
29
30
31
32
33
34
35
CIRCLE
LACOU
+FL180
60
60
40
40
AGN
-FL120
TN
TOU
TILT
-3-0
CAL
VOR1
AGN
35 NM
0.4L
TOU 08

The aircraft should be at or below FL 120 at AGN and above FL 180 at LACOU.

Entering an Altitude Constraint Through F-PLN A Page

The pilot may also enter an altitude constraint directly through the F-PLN A page.
When entering the value into the scratchpad do not forget the slash e.g. /-120 or /-FL 120.
If the slash is omitted the value will be considered as a speed constraint if it is within the range value.



```
 FROM                     AI101→
         TIME   SPD/ALT
LFBO15R  0000   ---/     490
  H146°  BRG143°       5NM
TOU/08←    02   250/* 3360
  (SPD)  TRK300°         9
(LIM)      04   250/ FL100
  C300°                  7
TOU        05   298/ FL120
  LMG2D                 22
AGN        09     "/ FL120
  DEST   TIME    DIST  EFOB
EGLL27R  0124     542   6.4
/-FL120                  ↑↓
```

Use CLR to delete them directly from the flight plan page, as well. However, if there is also a speed constraint assigned at that waypoint, the clear action deletes it too.

ENTERING AN ESTIMATED TAKEOFF TIME (ETT)

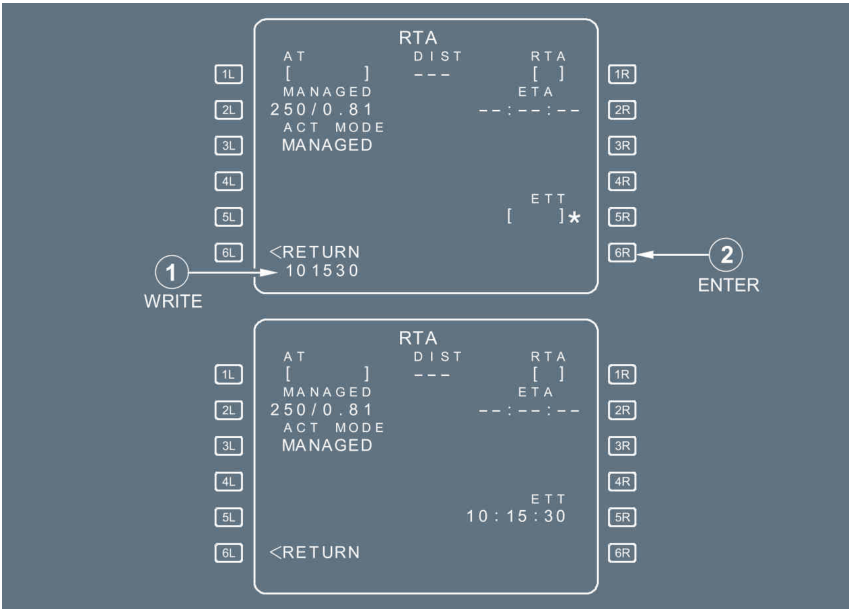
In Preflight Phase:

SELECT the SEC F-PLN key on the MCDU.
SELECT a VERT REV at any waypoint.
SELECT the Required Time of Arrival (RTA) prompt (2R).

The MCDU displays the RTA page.

ENTER the Estimated Takeoff Time in the [5R] field.

The format is HHMMSS (entry of seconds is not mandatory).


RTA
AT
[ ]
DIST

RTA
[ ]
MANAGED
250/0.81
ETA
--:--:--
ACT MODE
MANAGED
ETT
[ ]*
<RETURN
101530
1
WRITE
2
ENTER
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
RTA
AT
[ ]
DIST

RTA
[ ]
MANAGED
250/0.81
ETA
--:--:--
ACT MODE
MANAGED
ETT
10:15:30
<RETURN

If the aircraft has not taken off by the time entered as estimated takeoff time, the MCDU displays the “CLK IS TAKE OFF TIME” message, meaning that the system will replace your estimated takeoff time with the actual time.

When beginning the takeoff roll, the system automatically adopts that clock time as the takeoff time.

If the origin airport is changed, or the clock time is invalid, the system automatically deletes the estimated takeoff time.

Ident.: PRO-NOR-SRP-01-10-A-00003965.0001001 / 15 FEB 11
Applicable to: ALL

FLIGHT PLAN CHECK

CHECK the EOSID on the ND plan mode (yellow line).

Note: *If the details of the EOSID require review, select the EOSID as a TMPY F-PLN and review it as TMPY. Then ERASE it.*

Ident.: PRO-NOR-SRP-01-10-A-00003966.0001001 / 09 DEC 09
Applicable to: ALL

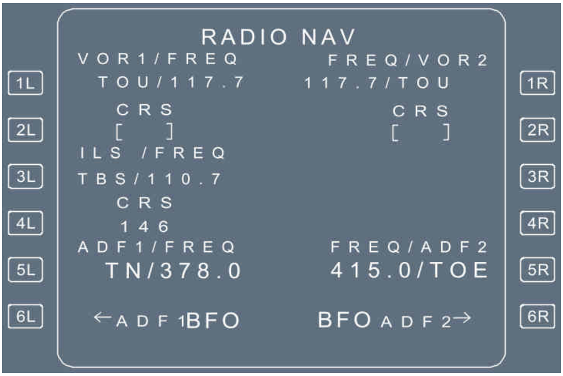
SECONDARY F-PLN

For details : *Refer to DSC-22_20-60-50 Secondary Flight Plan*.

Ident.: PRO-NOR-SRP-01-10-A-00003967.0001001 / 15 FEB 11
6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

RADIO NAV

Whenever a NAVAID IDENT is correctly decoded, in agreement with that published, no audio check is necessary.
Morse decoding is displayed on the ND for VOR/DME, VOR/TAC, DME, ADF, and on the PFD for ILS.
Preferably use the identifier for NAVAID entry.
If the ADF IDENT is not in the database, be sure to include a decimal point when tuning the frequency (e.g 315. or 325.7).



```
               RADIO NAV
VOR1/FREQ                  FREQ/VOR2
 TOU/117.7                117.7/TOU
    CRS                        CRS
   [   ]                      [   ]
ILS  /FREQ
TBS/110.7
    CRS
    146
ADF1/FREQ                  FREQ/ADF2
 TN/378.0                 415.0/TOE

 ←ADF1BFO                 BFO ADF2→
```

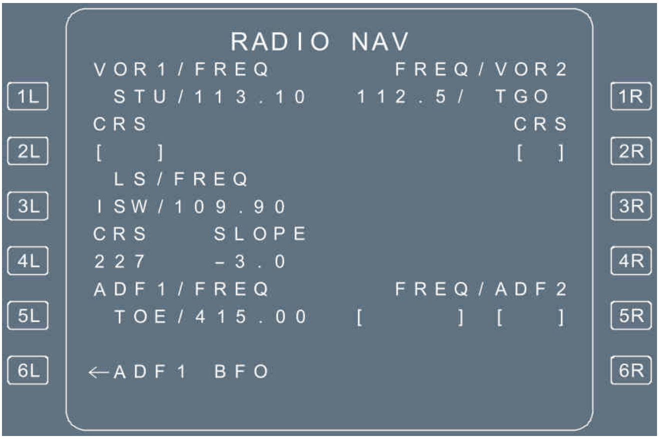
Note: *Whenever, the runway ILS is intented to be retained for guidance after the takeoff phase, it is recommended to manually tune the ILS by its identifier.*

Ident.: PRO-NOR-SRP-01-10-A-00003967.0003001 / 17 MAR 11
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

RADIO NAV

Whenever a NAVAID IDENT is correctly decoded, in agreement with that published, no audio check is necessary.
Morse decoding is displayed on the ND for VOR/DME, VOR/TAC, DME, ADF, and on the PFD for ILS/GLS.

Preferably use the identifier for NAVAID entry.
If the ADF IDENT is not in the database, be sure to include a decimal point when tuning the frequency (e.g 315. or 325.7).



```
              RADIO NAV
    VOR1/FREQ             FREQ/VOR2
1L   STU/113.10        112.5/  TGO    1R
    CRS                         CRS
2L  [     ]                    [  ]   2R
     LS/FREQ
3L  ISW/109.90                        3R
    CRS      SLOPE
4L  227      -3.0                     4R
    ADF1/FREQ             FREQ/ADF2
5L   TOE/415.00        [      ] [  ]  5R

6L  ←ADF1   BFO                       6R
```

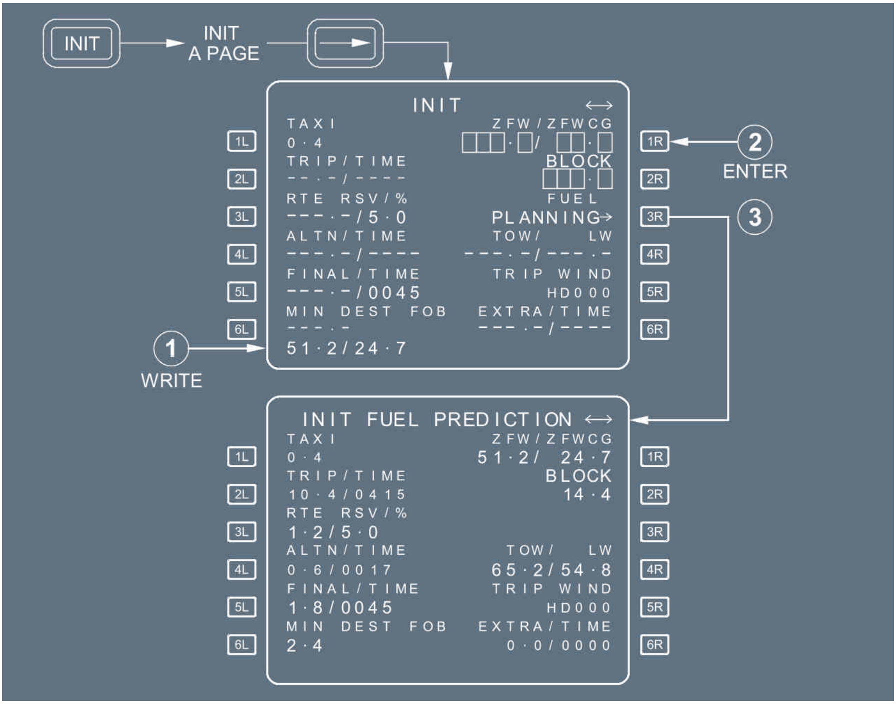
Note: *Whenever, the runway ILS is intented to be retained for guidance after the takeoff phase, it is recommended to manually tune the ILS by its identifier.*

FMGS DATA INSERTION

Ident.: PRO-NOR-SRP-01-10-B-00003968.0024001 / 28 MAY 20
Applicable to: ALL

WEIGHT/CG INSERTION AND FUEL PLANNING

The flight crew must enter the Zero Fuel Weight (ZFW) and Zero Fuel Weight Center of Gravity (ZFWCG) values on the INIT B page, to allow the FMS to perform the fuel planning computations.


INIT
INIT
A PAGE
INIT ⟷
TAXI
0.4
TRIP/TIME
---.-/----
RTE RSV/%
---.-/5.0
ALTN/TIME
---.-/----
FINAL/TIME
---.-/0045
MIN DEST FOB
---.-
ZFW/ZFWCG
☐☐☐.☐/ ☐☐.☐
BLOCK
☐☐☐.☐
FUEL
PLANNING→
TOW/ LW
---.-/---.-
TRIP WIND
HD000
EXTRA/TIME
---.-/----
51.2/24.7
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
2
ENTER
3
1
WRITE
INIT FUEL PREDICTION ⟷
TAXI
0.4
TRIP/TIME
10.4/0415
RTE RSV/%
1.2/5.0
ALTN/TIME
0.6/0017
FINAL/TIME
1.8/0045
MIN DEST FOB
2.4
ZFW/ZFWCG
51.2/ 24.7
BLOCK
14.4
TOW/ LW
65.2/54.8
TRIP WIND
HD000
EXTRA/TIME
0.0/0000

PROCEDURE

PRESS the INIT key, and the Next (“→”) key to access the INIT B page.
ENTER the ZFW and ZFWCG value in the [1R] field.
The “FUEL PLANNING →” prompt appears in the [3R] field.

Note: *As long as the final Load and Trim Sheet is not available, the crew should insert the estimated ZFW/ZFWCG in order to get fuel estimates. The ZFW and ZFWCG values must be updated with the final Load and Trim Sheet values.*

CHECK/MODIFY the TAXI [1L], RTE RSV [3L] and FINAL TIME [5L] values.
The TAXI, RTE RSV and FINAL TIME fields display the default values specified in the AMI file (for example, “0.4 t” for TAXI, “5.0 %” for RTE RSV and "0045" for FINAL TIME). The flight crew may modify these values.

Note: *At takeoff, the RTE RSV field will automatically be reset to 0. The RTE RSV fuel is then added to the EXTRA fuel, which ensures that the EXTRA fuel and MIN DEST FOB values are consistent in flight.*

ENTER an ALTN fuel value in the [4L] field, as necessary.

The flight crew may enter the ALTN fuel value planned on the Computerized Flight Plan (CFP), as necessary.

ENTER a MIN DEST FOB value in the [6L] field, as necessary.

Note: *MIN DEST FOB (equal to ALTN + FINAL) can be increased at flight crew discretion (e.g. when HOLD is expected at destination).*

ENTER the TRIP WIND value in the [5R] field, as necessary.

If no wind profile has been entered in the F-PLN, the crew may enter an average TRIP WIND in this field, to obtain more realistic fuel/time predictions before departure.

Note:

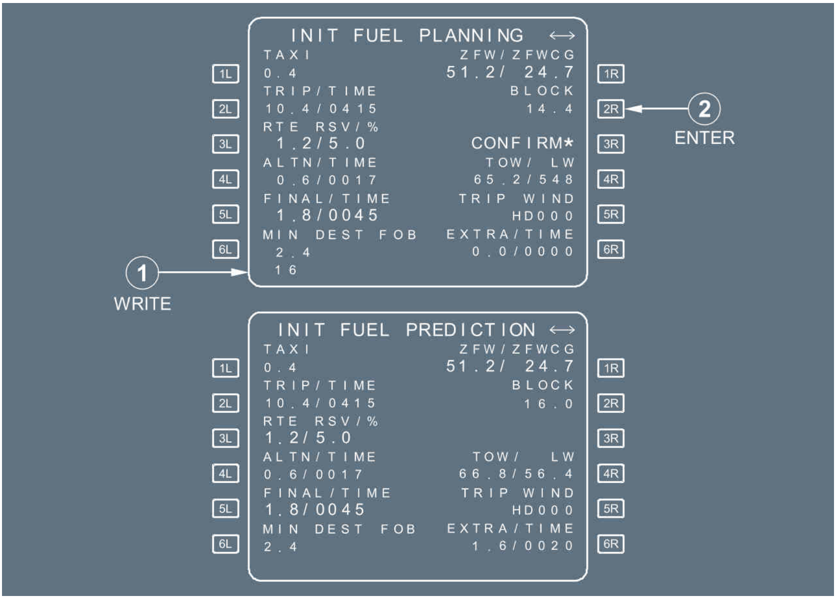
1. *The flight crew should only enter a TRIP WIND to obtain realistic fuel/time predictions, on ground. Then, the flight crew should enter a wind profile using the WIND pages, for fuel/time predictions in flight. As soon as flight crew has entered a wind profile on the WIND pages, the TRIP WIND will be erased.*
2. *If the crew has already defined a wind profile, even partially (such as climb wind), it is not possible to enter a TRIP WIND.*

ENTER the planned BLOCK fuel, as indicated in the computerized flight plan (CFP)

If the planned BLOCK fuel is not available, the crew may obtain a prediction of the minimum BLOCK fuel required for the flight by pressing the FUEL PLANNING prompt [3R].
Pressing this prompt makes the FMS compute the minimum required BLOCK fuel, which is the BLOCK fuel required to have EXTRA fuel = 0, based on the parameters entered on the INIT and F-PLN pages.
The computed BLOCK fuel value is displayed in the [2R] field, and a BLOCK CONFIRM prompt appears in the [3R] field.

Note: *In order to obtain a realistic fuel computation, the flight crew should ensure that the F-PLN initialization has been completed (including insertion of the ALTN F-PLN and/or ALTN fuel and/or MIN DEST FOB if necessary), and that flight parameters, such as CRZ FL, steps climbs (if any), and winds, have been inserted.*

- **When the final Load and Trim Sheet (LTS) data are available:**



```
   INIT FUEL PLANNING  ↔
TAXI              ZFW/ZFWCG
0.4              51.2/ 24.7
TRIP/TIME             BLOCK
10.4/0415              14.4
RTE RSV/%
 1.2/5.0           CONFIRM*
ALTN/TIME          TOW/  LW
 0.6/0017          65.2/548
FINAL/TIME        TRIP WIND
 1.8/0045             HD000
MIN DEST FOB     EXTRA/TIME
 2.4              0.0/0000
 16
```

```
  INIT FUEL PREDICTION ↔
TAXI              ZFW/ZFWCG
0.4              51.2/ 24.7
TRIP/TIME             BLOCK
10.4/0415              16.0
RTE RSV/%
1.2/5.0
ALTN/TIME          TOW/  LW
0.6/0017          66.8/56.4
FINAL/TIME        TRIP WIND
1.8/0045              HD000
MIN DEST FOB     EXTRA/TIME
2.4                1.6/0020
```

ENTER the final ZFW/ZFWCG [1R], and the required BLOCK fuel [2R].

The FMS computes the predictions, based on the entered BLOCK fuel, and estimates the EXTRA fuel value.

CHECK the resulting computed data, against the data planned on the CFP: TRIP fuel, RTE RSV fuel, ALTN fuel, FINAL and EXTRA fuel values.

If necessary, the flight crew may modify the ALTN or FINAL fuel values.

PRINT the PREFLIGHT REPORT, if necessary.

When the final Load and Trim Sheet values (ZFW/ZFWCG/BLOCK) have been entered, the crew may print the pre-flight report, which provides a copy of the F-PLN with the associated FMS predictions.

Ident.: PRO-NOR-SRP-01-10-B-00003969.0010001 / 15 FEB 11
Applicable to: ALL

TAKEOFF WITH NO WEIGHT/CG DATA

If the crew does not enter ZFW/ZFWCG data prior takeoff, or if the FMGC looses these values due to a power interruption, the following will occur:

- At takeoff, the Speed Reference System (SRS) mode is available (provided a V2 has been inserted)
- When the aircraft leaves the SRS mode, the target speed becomes the current speed and reverts to selected.

Note: *If the AP/FD has reverted to ALT or V/S (FPA) mode, the associated A/THR mode is SPEED. In this case, the system will probably reduce thrust, because the speed will be equal to, or greater than, the target speed.*

● **When appropriate, to regain FMS predictions and associated managed modes:**

INSERT the ZFW/ZFWCG values on the FUEL PRED page.

Ident.: PRO-NOR-SRP-01-10-B-00003970.0007001 / 15 FEB 11
Applicable to: ALL

INSERTING WEIGHT/CG DATA AFTER ENGINE START

The flight crew must enter the ZFW/ZFWCG values on INIT B page prior to engine start. If these data have not been entered at engine start, the MCDU displays the “INITIALIZE WEIGHTS” amber message in the scratchpad. After engine start, the crew should enter the ZFW/ZFWCG values on the FUEL PRED page.

PRESS to the FUEL PRED key.
INSERT the ZFW/ZFWCG values in the [4R] field.

This allows predictions and performance computation.

CHECK the resulting computed data, against the data planned on the CFP: TRIP fuel, RTE RSV fuel, ALTN fuel, FINAL and EXTRA fuel values.

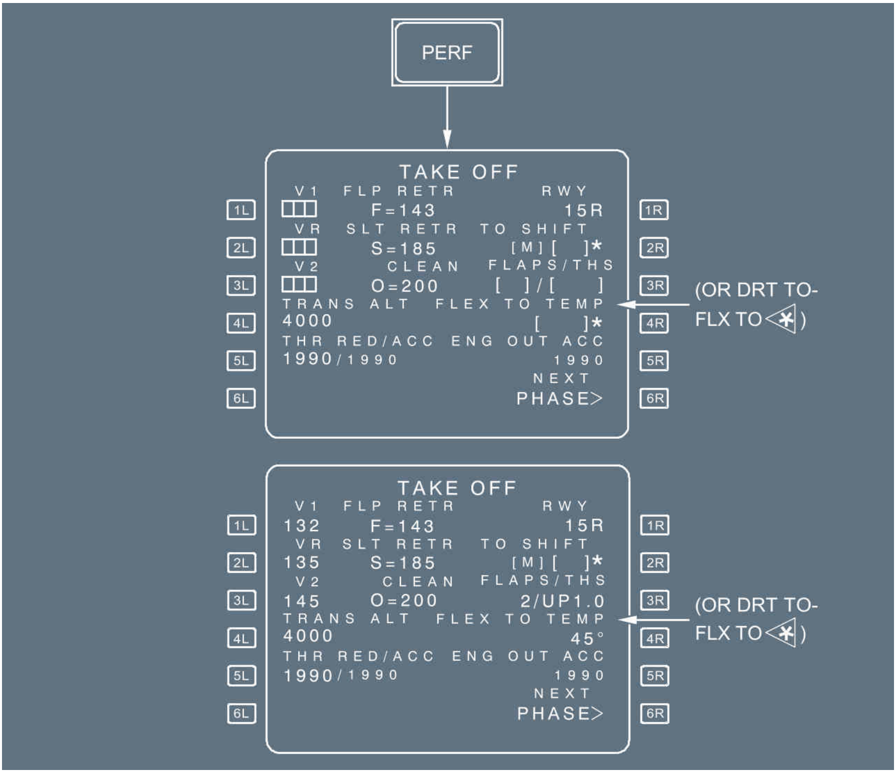
If necessary, the flight crew may modify the ALTN or FINAL fuel values.

PRINT the PREFLIGHT REPORT, if necessary.

When the final load sheet values (ZFW/ZFWCG/BLOCK) have been entered, the crew may print the pre-flight report, which provides a copy of the F-PLN with the associated FMS predictions.

Ident.: PRO-NOR-SRP-01-10-B-00003971.0001001 / 22 MAR 16
Applicable to: ALL

TAKEOFF DATA INSERTION



```
        TAKE OFF
 V1   FLP RETR         RWY
□□□    F=143           15R
 VR   SLT RETR   TO SHIFT
□□□    S=185     [M][   ]*
 V2     CLEAN   FLAPS/THS
□□□    O=200    [  ]/[   ]
TRANS ALT   FLEX TO TEMP
4000               [   ]*
THR RED/ACC  ENG OUT ACC
1990/1990           1990
                   NEXT
                 PHASE>
```

```
        TAKE OFF
 V1   FLP RETR         RWY
132    F=143           15R
 VR   SLT RETR   TO SHIFT
135    S=185     [M][   ]*
 V2     CLEAN   FLAPS/THS
145    O=200      2/UP1.0
TRANS ALT   FLEX TO TEMP
4000                 45°
THR RED/ACC  ENG OUT ACC
1990/1990           1990
                   NEXT
                 PHASE>
```

PROCEDURE

PRESS the PERF key on the MCDU.
WRITE successively and ENTER : V1, VR, V2.
WRITE and ENTER FLX TEMP or DRT TO ◁* .
CHECK/MODIFY the THR RED ALT (Thrust reduction altitude) See *.
CHECK/MODIFY the ACC ALT (acceleration altitude) See *.
CHECK/MODIFY the ENG OUT ACC (engine out acceleration altitude) See *.
CHECK/MODIFY the TRANS ALT (transition altitude) See *
WRITE and ENTER T.O. SHIFT.

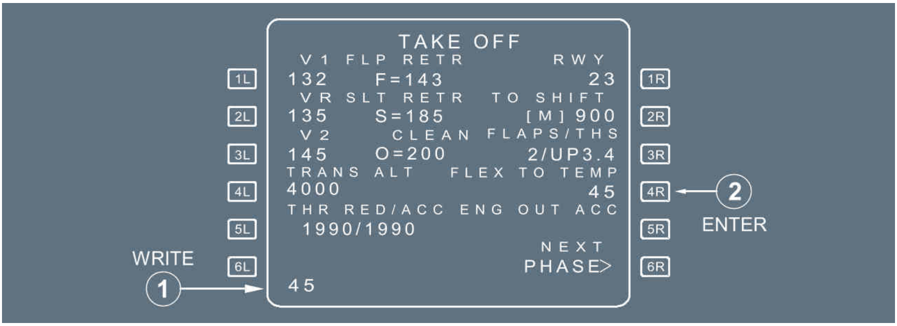
CHECK V1, V2 on PFD See **

* *Altitudes less than 400 ft above airfield elevation cannot be selected.*

** *If the PFD does not display V2 at the top of its speed scale, check that at least one FD is ON.*

ENTERING A FLEX TEMPERATURE

WRITE the desired flex temperature in the scratchpad and ENTER using the [4R] key.



```
          TAKE OFF
  V1  FLP RETR          RWY
132      F=143            23
  VR  SLT RETR    TO SHIFT
135      S=185        [M] 900
  V2      CLEAN  FLAPS/THS
145      O=200       2/UP3.4
TRANS ALT    FLEX TO TEMP
4000                      45
THR RED/ACC  ENG OUT ACC
 1990/1990
                      NEXT
                    PHASE>
45
```

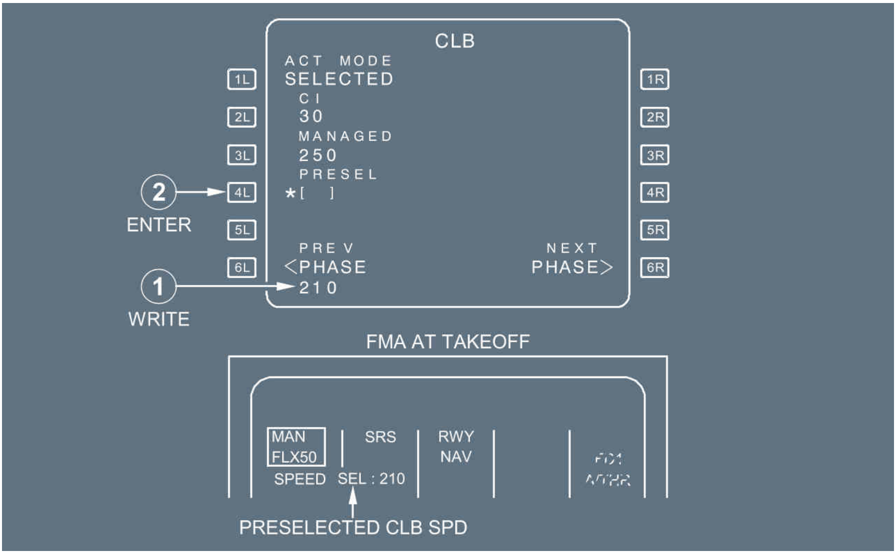
Ident.: PRO-NOR-SRP-01-10-B-00003972.0003001 / 22 MAY 12

7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

CLIMB SPEED PRESELECTION

If the managed speeds for the initial climb are not suitable, the pilot can preselect an appropriate climb speed on the “PERF CLB” page, as long as the climb phase is not active.

The CLB SPD preselection applies, when the:
- ATC specifies an initial climb speed.
- Initial climb speed must be lower than normal because:
  - There are to be turns greater than 120 ° in the initial climb out.
  - Obstacle clearance, or some other situation, requires a high climb angle.
  - The airfield has a risk area to be quickly cleared (birds reported, for example).


CLB
ACT MODE
SELECTED
CI
30
MANAGED
250
PRESEL
*[ ]
PREV
<PHASE
210
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
2
ENTER
1
WRITE
FMA AT TAKEOFF
MAN
FLX50
SRS
RWY
NAV
SPEED SEL : 210
FD1
A/THR
PRESELECTED CLB SPD

PROCEDURE

PRESS the PERF key on the MCDU.

The PERF TAKE OFF page is displayed.

SELECT the “NEXT PHASE” [6R] key to display the CLB page.
WRITE a climb speed and ENTER it.
To revert to managed speed, select MANAGED by pressing [3L].

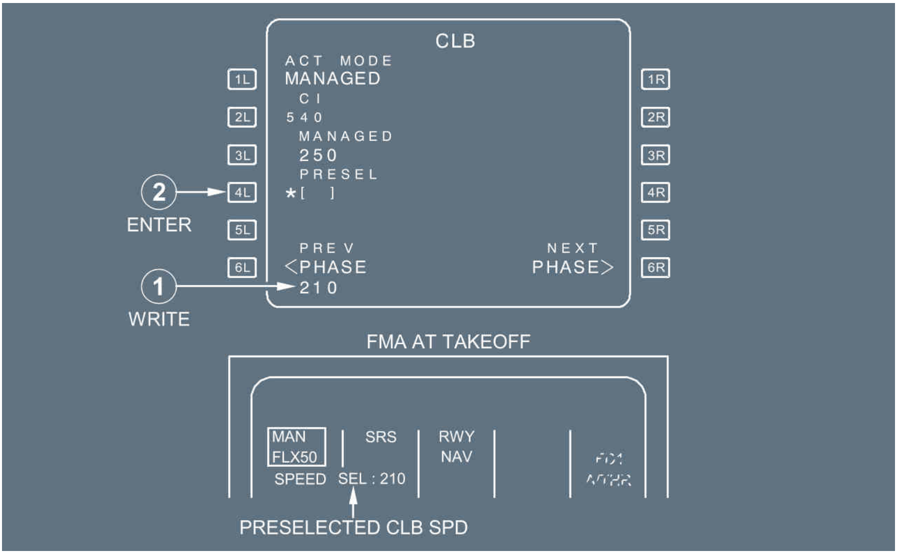
When the aircraft is transitioning into the climb phase, the preselected value becomes the target speed:
- The selected speed target is active.
- The primary flight display shows the target speed in blue.
- The FCU’s speed window displays the new speed or Mach number.

Ident.: PRO-NOR-SRP-01-10-B-00003972.0011001 / 22 MAY 12
Applicable to: MSN 04827-04860

CLIMB SPEED PRESELECTION

If the managed speeds for the initial climb are not suitable, the pilot can preselect an appropriate climb speed on the “PERF CLB” page, as long as the climb phase is not active.

The CLB SPD preselection applies, when the:
- ATC specifies an initial climb speed.
- Initial climb speed must be lower than normal because:
  - There are to be turns greater than 120 ° in the initial climb out.
  - Obstacle clearance, or some other situation, requires a high climb angle.
  - The airfield has a risk area to be quickly cleared (birds reported, for example).


CLB
ACT MODE
MANAGED
CI
540
MANAGED
250
PRESEL
*[ ]
PREV
<PHASE
210
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
2
ENTER
1
WRITE
FMA AT TAKEOFF
MAN
FLX50
SRS
RWY
NAV
FD1
A/THR
SPEED SEL : 210
PRESELECTED CLB SPD

PROCEDURE

PRESS the PERF key on the MCDU.

The PERF TAKE OFF page is displayed.

SELECT the PERF CLB page by pressing [6 R] (“NEXT PHASE” prompt).
WRITE a climb speed and ENTER it.
To revert to managed speed, select MANAGED by pressing [3L].

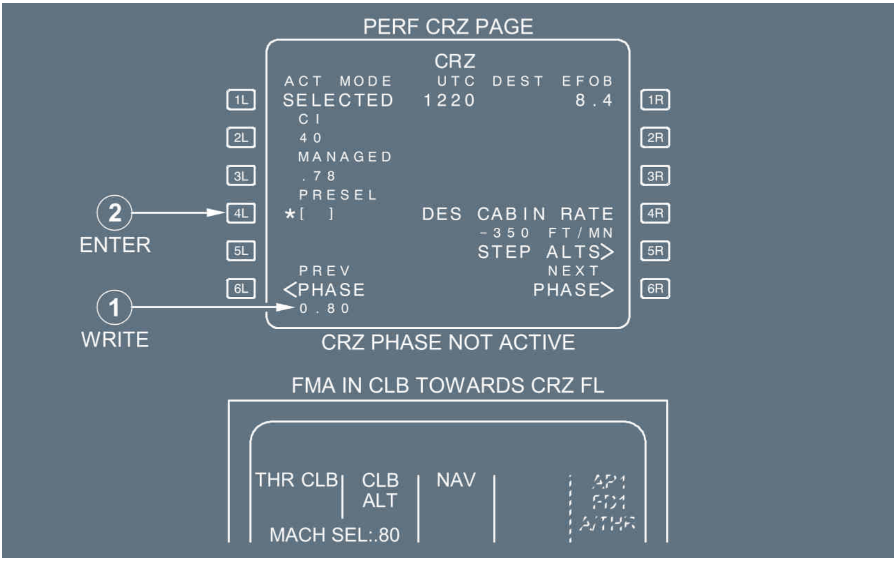
When the aircraft is transitioning into the climb phase, the preselected value becomes the target speed:
- The selected speed target is active.
- The primary flight display shows the target speed in blue.
- The FCU’s speed window displays the new speed or Mach number.

Ident.: PRO-NOR-SRP-01-10-B-00003973.0003001 / 09 OCT 12

8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

CRUISE MACH (SPEED) PRESELECTION

The pilot preselects a cruise Mach, when a Mach number other than the ECON cruise Mach number is required.
When the aircraft transitions to the cruise phase, the speed target symbol goes to the preselected value and “SELECTED” becomes the active speed mode (blue target on PFD, target MACH shown in the speed/Mach window of the FCU).


PERF CRZ PAGE
CRZ
ACT MODE
SELECTED
UTC DEST EFOB
1220 8.4
CI
40
MANAGED
.78
PRESEL
*[ ]
DES CABIN RATE
-350 FT/MN
STEP ALTS>
PREV
<PHASE
NEXT
PHASE>
0.80
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
2
ENTER
1
WRITE
CRZ PHASE NOT ACTIVE
FMA IN CLB TOWARDS CRZ FL
THR CLB
CLB
ALT
NAV
MACH SEL:.80
AP1
FD1
A/THR

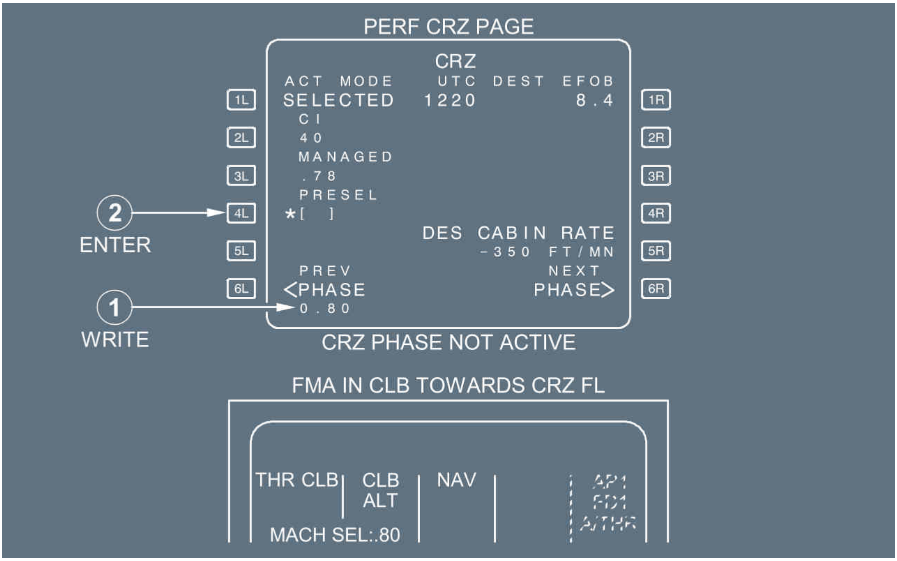
PROCEDURE

PRESS the PERF key on the MCDU.
PRESS the “NEXT PHASE” [6R] key on the MCDU, until the CRZ page is accessed.
WRITE a cruise Mach (or speed) in the scratchpad and ENTER it in [4L].
To revert to managed speed, PRESS [3L].

When the cruise phase is active, you cannot preselect a cruise Mach or speed.

CRUISE MACH (SPEED) PRESELECTION

The pilot preselects a cruise Mach, when a Mach number other than the ECON cruise Mach number is required.
When the aircraft transitions to the cruise phase, the speed target symbol goes to the preselected value and “SELECTED” becomes the active speed mode (blue target on PFD, target MACH shown in the speed/Mach window of the FCU).


PERF CRZ PAGE
CRZ
ACT MODE
SELECTED
UTC
1220
DEST
EFOB
8.4
CI
40
MANAGED
.78
PRESEL
*[ ]
DES CABIN RATE
-350 FT/MN
PREV
<PHASE
NEXT
PHASE>
0.80
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
2
ENTER
1
WRITE
CRZ PHASE NOT ACTIVE
FMA IN CLB TOWARDS CRZ FL
THR CLB
CLB
ALT
NAV
MACH SEL:.80
AP1
FD1
A/THR

PROCEDURE

PRESS the PERF key on the MCDU.
PRESS the “NEXT PHASE” [6R] key on the MCDU, until the CRZ page is accessed.
WRITE a cruise Mach (or speed) in the scratchpad and ENTER it in [4L].
To revert to managed speed, PRESS [3L].

When the cruise phase is active, you cannot preselect a cruise Mach or speed.

Ident.: PRO-NOR-SRP-01-10-B-00004095.0001001 / 09 OCT 12
Applicable to: ALL

ENTERING A HEADING/TRACK PRESET FUNCTION

Tfhe heading/track preset allows the pilot to preset a takeoff or go-around heading or track before commanding the aircraft to take up that heading or track (manual activation).
The flight crew can enter a heading or a track preset while the aircraft is on the ground and until takeoff.

PROCEDURE

- **Before takeoff:**

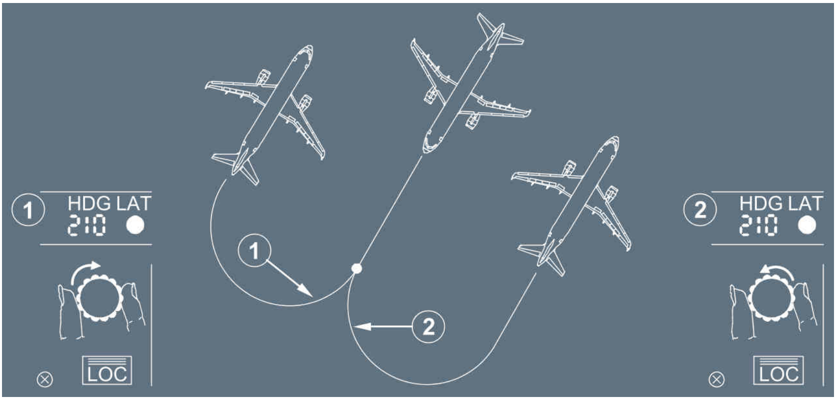
  SET the appropriate HDG or TRK in the FCU window.

  This disarms the navigation mode and allows the runway mode to remain engaged after takeoff.

- **After takeoff:**

  PULL HDG/TRK knob.

  The heading or track mode engages on the preset value.



The direction in which the pilot rotates the HDG/TRK selection knob usually determines the direction of the turn. A left rotation (decreasing heading) produces a left turn; a right rotation produces a right turn.

However, when a heading has been preset before takeoff or go-around, the direction of the turn will be such as to cause the shortest turn at the moment of engagement.

CANCELLING THE HEADING/TRACK PRESET FUNCTION

The pilot can cancel the heading preset by pushing the HDG/TRK knob back in again. This engages or arms the NAV mode.

FMGS RE-INITIALIZATION AFTER A CANCELED FLIGHT

Ident.: PRO-NOR-SRP-01-10-00013064.0001001 / 16 NOV 11
Applicable to: ALL

If the flight crew initially prepared a flight with all the data associated with this flight (takeoff speeds, winds, etc.), and if this flight is later canceled and replaced by another flight, the flight crew may use the following procedure to initialize the FMGS again:

PREPARE the new flight data in the secondary flight plan, using SEC INIT A, SEC INIT B, and SEC PERF pages
ACTIVATE the secondary flight plan.

Note: *When the flight crew activates the secondary flight plan, the following data of the primary flight plan is lost if the secondary flight plan does not include any replacement data:*
- *Alternate data*
- *Winds and cruise TEMP at waypoints as inserted on CRZ WIND pages*
- *Departure and arrival selection (STAR, APP, RWY) and approach parameters (QNH, TEMP, WIND, TRANS ALT, VAPP, MDA/MDH, DH, LDG CONF)*
- *Altitude, speed, and time constraints*
- *Steps*
- *CMS*
- *Offsets*
- *Flaps/THS*
- *Preselected cruise and descent speeds.*

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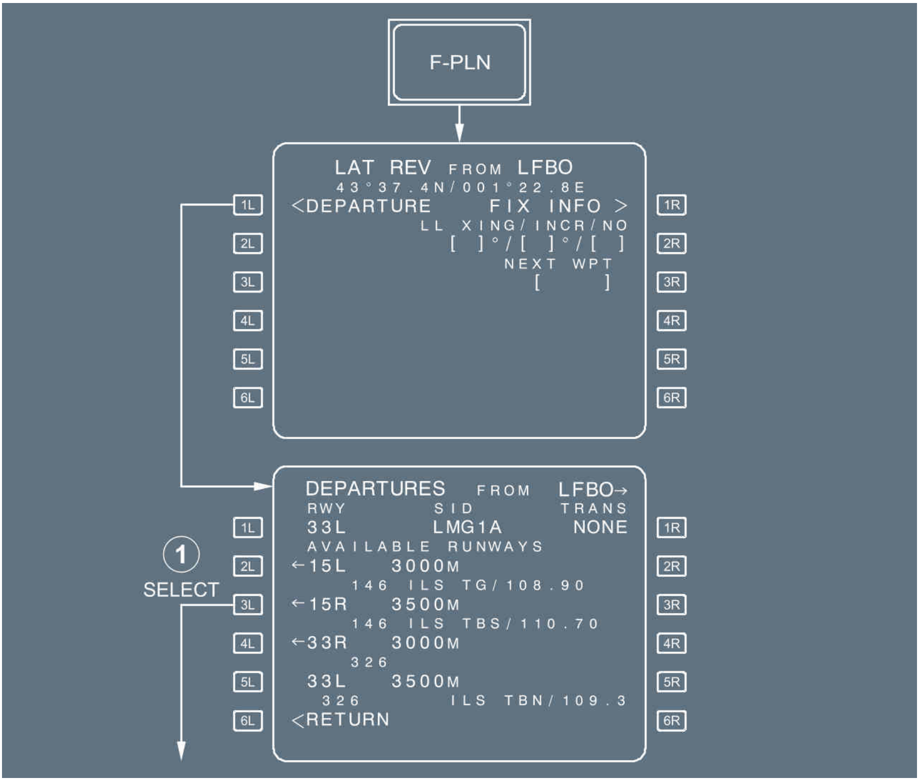
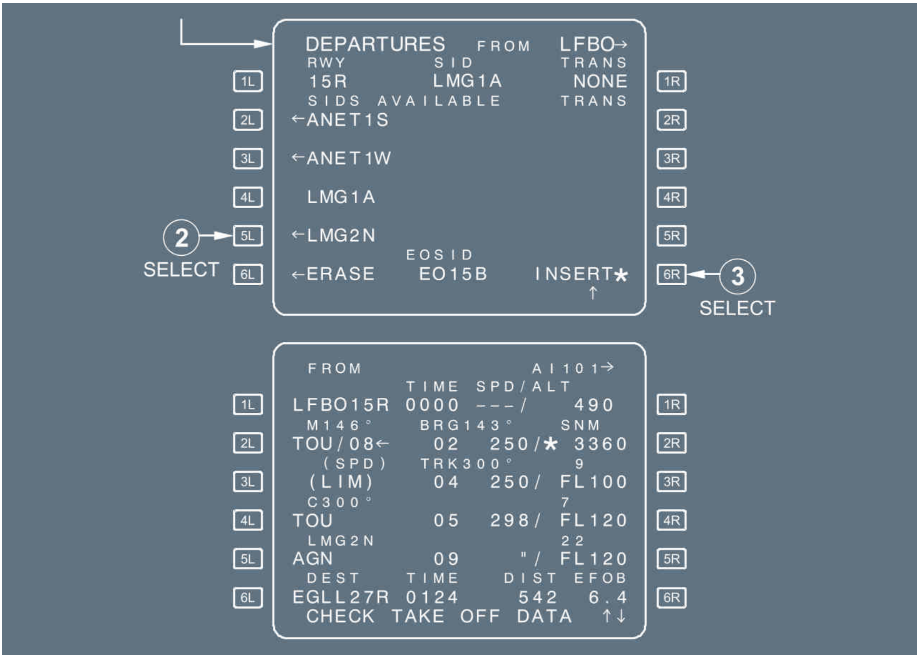
Before Pushback or Start

CHANGE OF RUNWAY

Ident.: PRO-NOR-SRP-01-15-00003975.0003001 / 03 NOV 21

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**


F-PLN
LAT REV FROM LFBO
43°37.4N/001°22.8E
<DEPARTURE
FIX INFO >
LL XING/INCR/NO
[ ]°/[ ]°/[ ]
NEXT WPT
[ ]
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
DEPARTURES FROM LFBO→
RWY
SID
TRANS
33L
LMG1A
NONE
AVAILABLE RUNWAYS
←15L 3000M
146 ILS TG/108.90
←15R 3500M
146 ILS TBS/110.70
←33R 3000M
326
33L 3500M
326 ILS TBN/109.3
<RETURN
①
SELECT



```
 DEPARTURES      FROM      LFBO→
 RWY             SID        TRANS
 15R            LMG1A        NONE
 SIDS AVAILABLE             TRANS
←ANET1S
←ANET1W
 LMG1A
←LMG2N
               EOSID
←ERASE         EO15B     INSERT*
                             ↑
```

```
 FROM                    AI101→
           TIME   SPD/ALT
LFBO15R    0000   ---/     490
 M146°      BRG143°        SNM
TOU/08←      02   250/*   3360
  (SPD)     TRK300°          9
 (LIM)       04   250/   FL100
 C300°                       7
TOU          05   298/   FL120
 LMG2N                      22
AGN          09     "/   FL120
 DEST      TIME     DIST  EFOB
EGLL27R    0124     542    6.4
 CHECK TAKE OFF DATA       ↑↓
```

PRESS the F-PLN key on the MCDU.
SELECT the LAT REV at origin.
SELECT the DEPARTURE prompt [1L].
SELECT the new RWY in use.
SELECT the appropriate SID and TRANS.
CHECK the resulting temporary F-PLN and INSERT it.

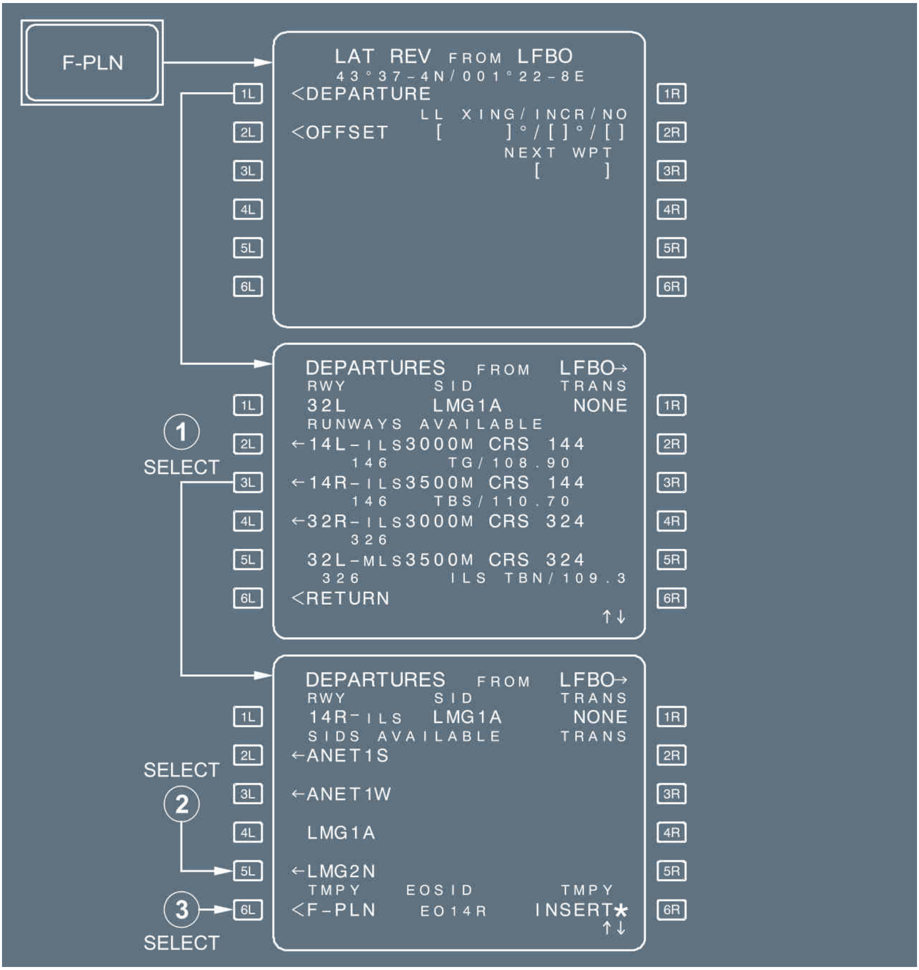
CHECK TAKE OFF DATA comes up in the scratchpad if the PERF TO page had been filled in.

ENTER the new V1, VR, V2, FLEX TEMP or CONF, as appropriate.

Note: *If the previously selected SID is compatible with the new runway, it automatically appears in the temporary flight plan. Any revision the flight crew may have made to the previous SID will not be transferred.*
If the flight crew still wants it, the flight crew has to reenter it.

CHANGE OF RUNWAY

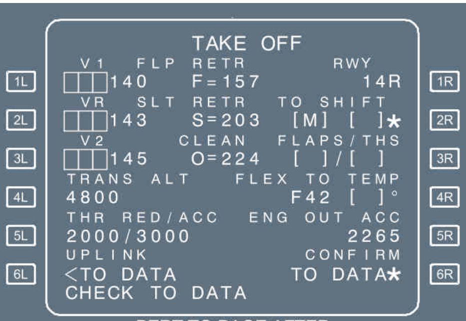
Ident.: PRO-NOR-SRP-01-15-00003975.0015001 / 28 NOV 17
Applicable to: MSN 04827-04860



```
   LAT REV  FROM  LFBO
   43°37-4N/001°22-8E
<DEPARTURE
                LL  XING/INCR/NO
<OFFSET       [       ]°/[ ]°/[ ]
                      NEXT  WPT
                      [       ]
```

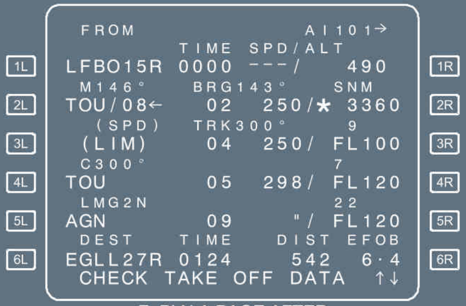
```
 DEPARTURES   FROM    LFBO→
 RWY           SID     TRANS
 32L          LMG1A     NONE
 RUNWAYS AVAILABLE
←14L-ILS3000M  CRS  144
    146      TG/108.90
←14R-ILS3500M  CRS  144
    146      TBS/110.70
←32R-ILS3000M  CRS  324
    326
 32L-MLS3500M  CRS  324
  326          ILS  TBN/109.3
<RETURN
                          ↑↓
```

```
 DEPARTURES   FROM    LFBO→
 RWY           SID     TRANS
 14R-ILS      LMG1A     NONE
 SIDS  AVAILABLE       TRANS
←ANET1S

←ANET1W

 LMG1A

←LMG2N
 TMPY        EOSID      TMPY
<F-PLN       EO14R    INSERT*
                          ↑↓
```



```
          TAKE OFF
 V1    FLP RETR         RWY
□□□140  F=157           14R
 VR    SLT RETR    TO SHIFT
□□□143  S=203     [M]  [  ]*
 V2     CLEAN      FLAPS/THS
□□□145  O=224     [  ]/[  ]
TRANS ALT       FLEX TO TEMP
4800               F42 [  ]°
THR RED/ACC      ENG OUT ACC
2000/3000               2265
UPLINK               CONFIRM
<TO DATA            TO DATA*
CHECK TO DATA
```

PERT TO PAGE AFTER
TMPY F-PLN INSERTION



```
 FROM                AI101→
         TIME  SPD/ALT
LFBO15R  0000  ---/     490
 M146°   BRG143°        SNM
TOU/08←    02  250/*   3360
  (SPD)  TRK300°          9
 (LIM)     04  250/   FL100
 C300°                    7
TOU        05  298/   FL120
 LMG2N                   22
AGN        09    "/   FL120
 DEST    TIME    DIST  EFOB
EGLL27R  0124     542   6.4
 CHECK TAKE OFF DATA     ↑↓
```

F-PLN A PAGE AFTER
TMPY F-PLN INSERTION

PRESS the F-PLN key on the MCDU.
SELECT the LAT REV at origin.
SELECT the DEPARTURE prompt [1L].
SELECT the new RWY in use.

The "CHECK TAKE-OFF DATA" message is displayed.

CHECK/SELECT the appropriate SID and TRANS.
CHECK and INSERT the TMPY F-PLN, or continue with next revision.
PRESS the PERF key to access PERF TAKEOFF page.
CHECK the V1, VR, V2 and FLEX values displayed after the amber boxes. If these values are correct, PRESS [6R] to confirm and insert them. Else, ENTER new values.
ENTER the new V1, VR, V2, FLEX TEMP or CONF, as appropriate.

The previously-entered values, adjacent to the boxes, may be re-selected by pressing the CONFIRM TO DATA on [6R].*

Note: *In case of a runway change, any previous lateral modification performed on the active DEPARTURE procedure may lead to additional waypoint stacking in the temporary F-PLN. The crew has to check and revise it, as necessary.*

TAKEOFF FROM INTERSECTION

Ident.: PRO-NOR-SRP-01-15-00003976.0001001 / 09 DEC 09
Applicable to: ALL

Use RTOW or FCOM to revise takeoff parameters :
PRESS the [PERF] key on MCDU
ENTER the takeoff shift
ENTER the new V1, VR, V2, FLX TEMP, or CONF, as appropriate

Note: *The insertion of the shift in takeoff position permits the system to make an accurate revision to its navigation data at takeoff.*

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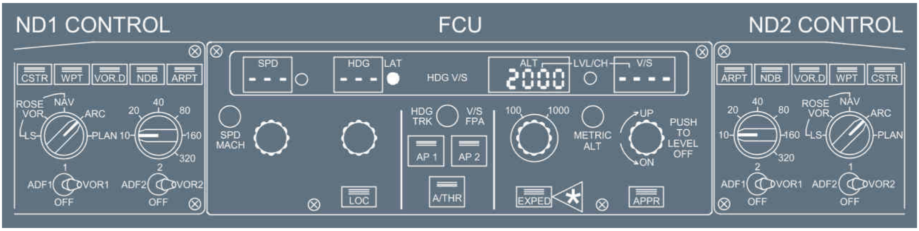
Taxi

FCU SELECTION FOR TAKEOFF

Ident.: PRO-NOR-SRP-01-20-00003978.0004001 / 09 OCT 12
Applicable to: ALL


ND1 CONTROL
FCU
ND2 CONTROL
CSTR
WPT
VOR.D
NDB
ARPT
ROSE
VOR
NAV
ARC
LS
PLAN
10
20
40
80
160
320
ADF1
VOR1
ADF2
VOR2
OFF
SPD
HDG
LAT
HDG V/S
ALT
LVL/CH
V/S
2000
SPD MACH
HDG TRK
V/S FPA
100
1000
METRIC ALT
UP
PUSH TO LEVEL OFF
ON
AP 1
AP 2
A/THR
LOC
EXPED
APPR

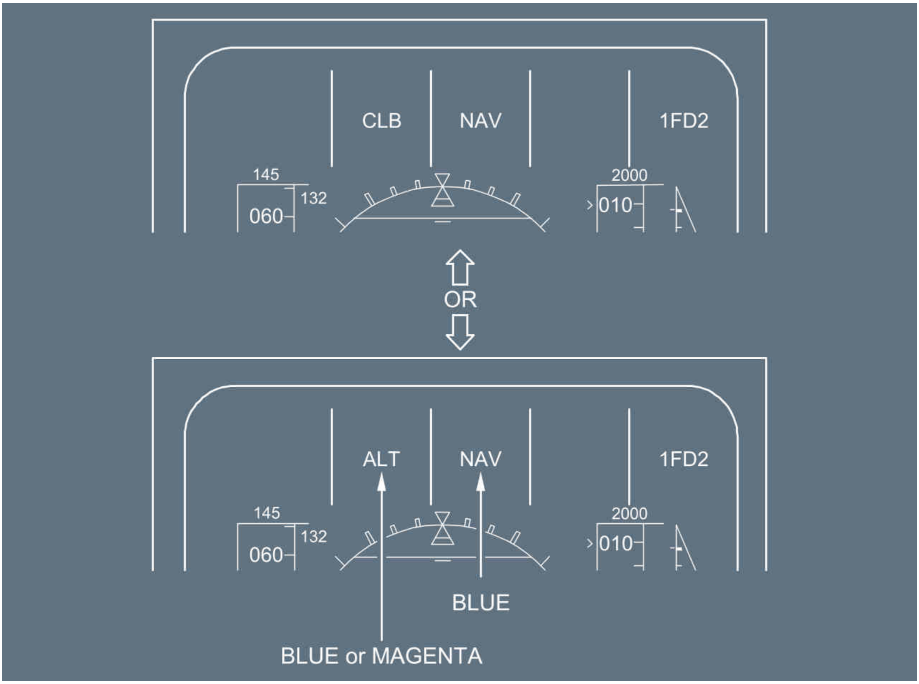
PROCEDURE

ENSURE that HDG – V/S modes are selected (change over pb).
CONFIRM or SELECT the first cleared altitude
CROSS CHECK on PFD the target altitude
CONFIRM both FDs ON

FMA MODE CHECK

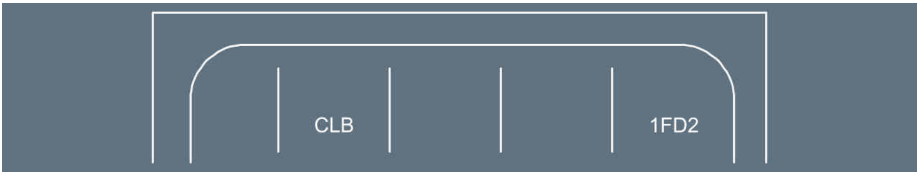
Ident.: PRO-NOR-SRP-01-20-00003979.0002001 / 22 MAY 12
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

CHECK that the FMA CLB (or ALT) mode is armed


CLB
NAV
1FD2
145
132
060
2000
010
OR
ALT
NAV
1FD2
145
132
060
2000
010
BLUE
BLUE or MAGENTA

Note: *ALT (in blue or magenta) may be displayed instead of CLB if the FCU altitude or a constraint is set at or below the acceleration altitude.*

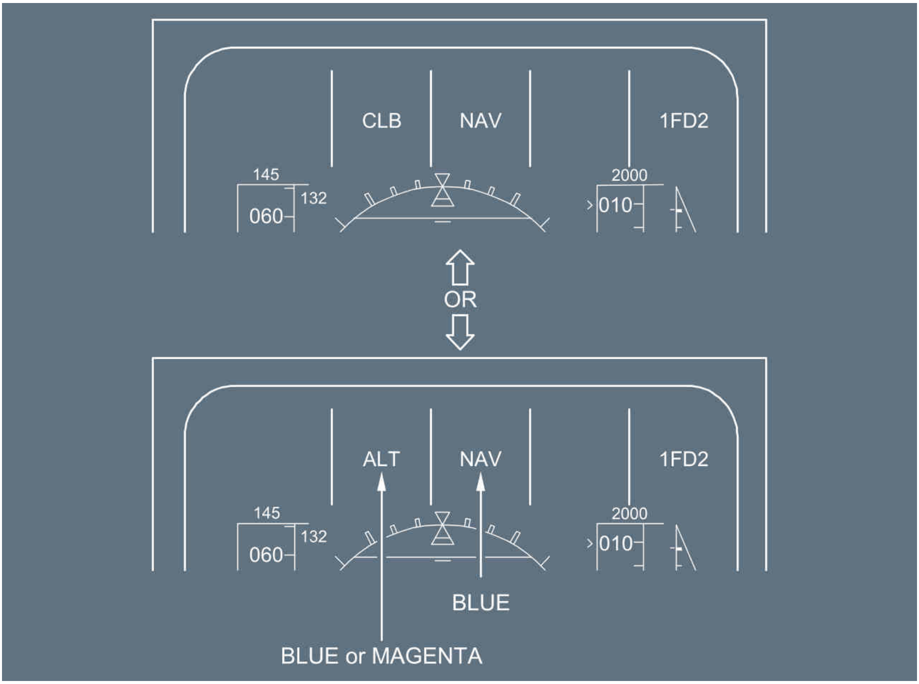
If a HDG/TRK was preset, NAV is disarmed.



FMA MODE CHECK

Ident.: PRO-NOR-SRP-01-20-00003979.0003001 / 22 MAY 12
Applicable to: MSN 04827-04860

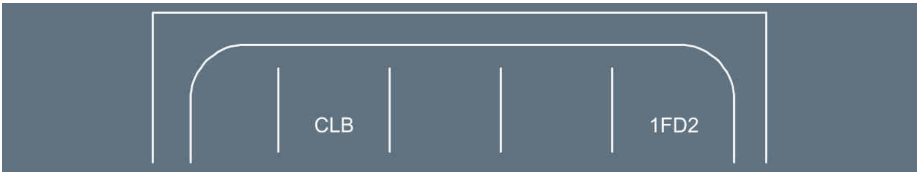
CHECK that the FMA CLB (or ALT) mode is armed


CLB
NAV
1FD2
145
132
060
2000
010
OR
ALT
NAV
1FD2
145
132
060
2000
010
BLUE
BLUE or MAGENTA

Note: *ALT (in blue or magenta) may be displayed instead of CLB if the FCU altitude or a constraint is set at or below the acceleration altitude.*

Note: *If a radar-vector standard instrument departure (SID) has been selected, a F-PLN discontinuity immediately follows the departure runway, and NAV mode is not armed. After takeoff, RWY TRK mode engages until the crew selects a HDG or performs a DIR TO.*

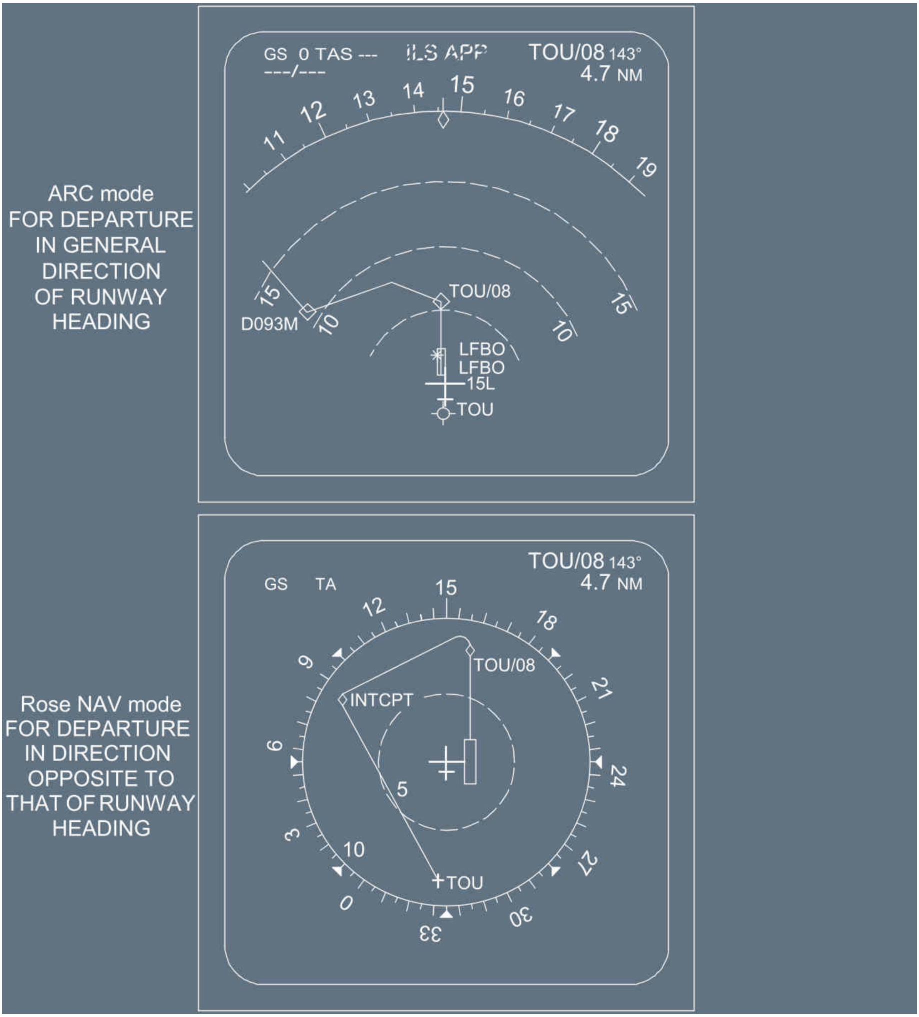
If a HDG/TRK was preset, NAV is disarmed.



SELECTING A NAVIGATION DISPLAY

Ident.: PRO-NOR-SRP-01-20-00003980.0001001 / 22 MAY 12
Applicable to: ALL

SET the minimum range to display the first waypoint after departure or as required for weather radar.

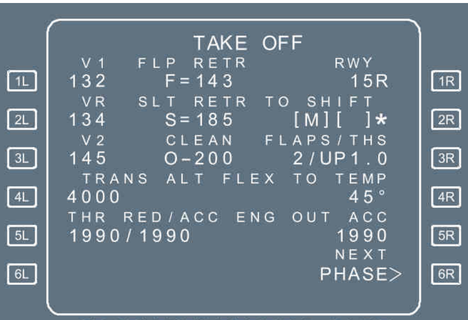

ARC mode FOR DEPARTURE IN GENERAL DIRECTION OF RUNWAY HEADING

Rose NAV mode FOR DEPARTURE IN DIRECTION OPPOSITE TO THAT OF RUNWAY HEADING

GS 0 TAS ---
---/---
ILS APP
TOU/08 143°
4.7 NM
11
12
13
14
15
16
17
18
19
15
10
D093M
TOU/08
10
15
LFBO
LFBO
15L
TOU
GS TA
TOU/08 143°
4.7 NM
15
12
18
9
TOU/08
21
INTCPT
6
24
5
3
10
27
TOU
0
30
33

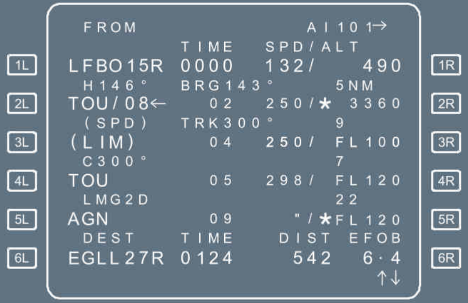
SELECTING TAKEOFF DISPLAYS FOR PILOT'S AND COPILOT'S MCDU

Ident.: PRO-NOR-SRP-01-20-00003981.0001001 / 23 DEC 14
Applicable to: ALL



```
                 TAKE OFF
  V1     FLP RETR          RWY
 132       F=143           15R
  VR     SLT RETR    TO SHIFT
 134       S=185       [M][  ]*
  V2       CLEAN     FLAPS/THS
 145       O-200       2/UP1.0
  TRANS ALT   FLEX TO TEMP
 4000                      45°
 THR RED/ACC  ENG OUT ACC
 1990/1990                1990
                          NEXT
                        PHASE>
```

PF SELECTS PERF T.O. PAGE



```
  FROM                    AI101→
             TIME    SPD/ALT
 LFBO15R     0000    132/    490
  H146°      BRG143°     5NM
 TOU/08←       02    250/* 3360
  (SPD)      TRK300°     9
 (LIM)         04    250/  FL100
  C300°                  7
 TOU           05    298/  FL120
  LMG2D                  22
 AGN           09      "/*FL120
  DEST       TIME     DIST  EFOB
 EGLL27R     0124      542   6·4
                              ↑↓
```

PM SELECTS F-PLN A PAGE

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Takeoff

MONITORING THE TAKEOFF

Ident.: PRO-NOR-SRP-01-30-00003983.0007001 / 09 MAY 22
Applicable to: ALL

- **At power set (thrust levers in FLX or TOGA position):**

  CHECK that the navigation is updated to the runway threshold by verifying that the aircraft symbol is centered on the runway threshold of the ND.

  CHECK the FMA for appropriate mode selection.

  Note:
  - *RWY mode appears if an ILS is tuned to a station corresponding to the departure runway. Otherwise no lateral mode comes up until the aircraft has lifted off.*
  - *Until the aircraft is airborne, do not rely on the wind displayed on the NDs.*

- **At 30 ft:**
  - **If NAV is armed,** it engages automatically.
  - **If NAV is not armed,** RWY TRK mode engages and remains displayed until the crew selects another lateral mode.

- **At 100 ft:**

  Engage AP1 or AP2.

L2 *The FMGS has an internal delay that prevents the AP from engaging 5 s after lift-off and if the aircraft is below 100 ft.*

L1
- **At thrust reduction altitude:**

  LVR CLB flashes in the first column of the FMA.

  Procedure

  SET the thrust levers to the CL detent.

L2 *A/THR activates automatically.*

L1 CHECK that the FMA displays A/THR in the fifth column.

CHECK that the FMA displays THR CLB in the first column.

- **At acceleration altitude:**

  The vertical phase automatically switches to climb.

  CLB mode engages. The target speed jumps to initial climb speed on the PFD.

  Procedure

CHECK that the FMA displays CLB in the second column.

L2

- *SRS mode remains engaged until CLB mode is engaged, which occurs at ACCEL ALT or at any other vertical mode engagement, whichever comes first*
- *If during takeoff the FCU altitude is set below the current aircraft altitude, the system ignores the FCU altitude and the aircraft remains in SRS mode until the flight crew selects an altitude above the aircraft altitude or engages any other mode.*

PRESELECTING A HDG OR A TRK

Ident.: PRO-NOR-SRP-01-30-00003984.0001001 / 16 NOV 11
Applicable to: ALL

PROCEDURE

- **If a HDG or a TRK was preselected on the ground :**

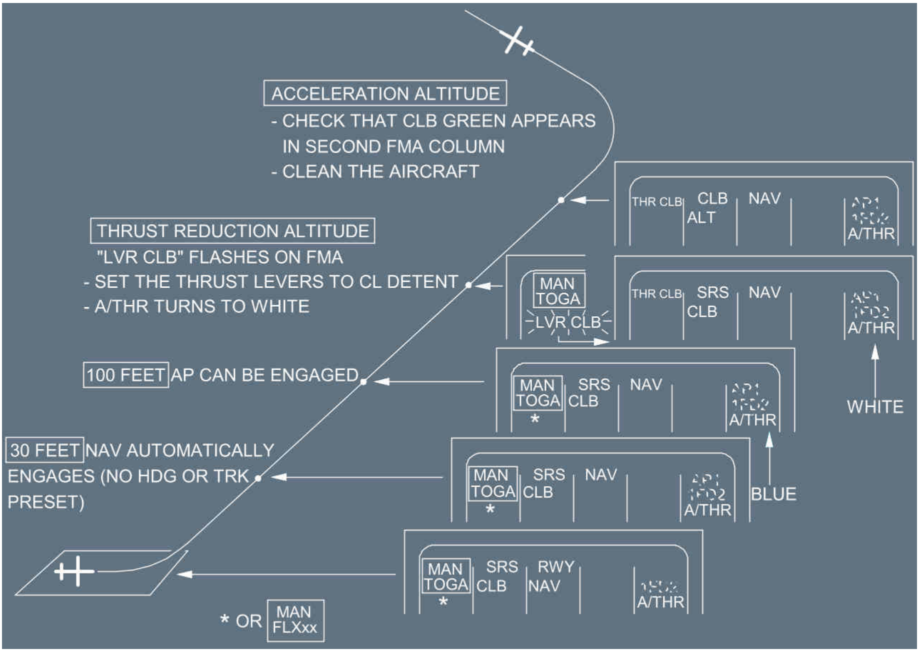
  PULL OUT the HDG/TRK selector knob when required

  CHECK that the HDG/TRK mode is active and displayed on the FMA

  When a HDG or TRK is preset, OP CLB mode will engage at the acceleration altitude. (CLB mode is not available in HDG/TRK mode).

NORMAL TAKEOFF PROFILE

Ident.: PRO-NOR-SRP-01-30-00003985.0002001 / 22 MAY 12
Applicable to: ALL

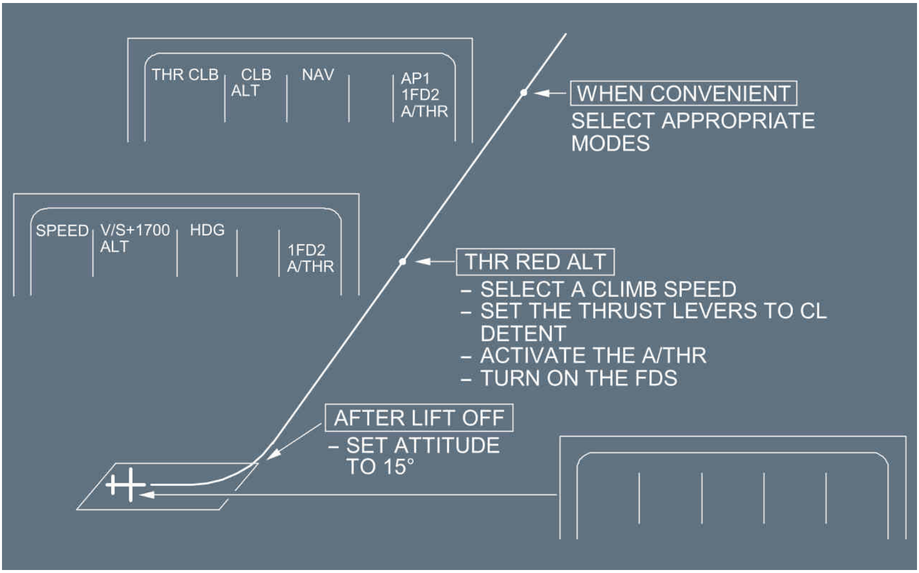

ACCELERATION ALTITUDE
- CHECK THAT CLB GREEN APPEARS IN SECOND FMA COLUMN
- CLEAN THE AIRCRAFT
THRUST REDUCTION ALTITUDE
"LVR CLB" FLASHES ON FMA
- SET THE THRUST LEVERS TO CL DETENT
- A/THR TURNS TO WHITE
100 FEET AP CAN BE ENGAGED
30 FEET NAV AUTOMATICALLY ENGAGES (NO HDG OR TRK PRESET)
* OR MAN FLXxx
THR CLB CLB ALT NAV AP1 1FD2 A/THR
THR CLB SRS CLB NAV AP1 1FD2 A/THR
MAN TOGA LVR CLB
MAN TOGA * SRS CLB NAV AP1 1FD2 A/THR
MAN TOGA * SRS CLB NAV AP1 1FD2 A/THR
MAN TOGA * SRS CLB RWY NAV 1FD2 A/THR
WHITE
BLUE

NO FLIGHT DIRECTOR TAKEOFF

Ident.: PRO-NOR-SRP-01-30-00003986.0004001 / 09 OCT 12
Applicable to: ALL

If a takeoff is initiated without FDs, the system responds as follow:
- There are no FD bars.
- There is no A/THR arming.
- There is no guidance available.
- The target speed on the PFD is that selected on the FCU or is defaulted to 100 kt.
- Setting the thrust levers to the CL detent does not activate A/THR.

Note: *Do not engage the autothrust prior to selecting a target speed on the FCU.*


THR CLB
CLB
ALT
NAV
AP1
1FD2
A/THR
WHEN CONVENIENT
SELECT APPROPRIATE
MODES
SPEED
V/S+1700
ALT
HDG
1FD2
A/THR
THR RED ALT
- SELECT A CLIMB SPEED
- SET THE THRUST LEVERS TO CL
DETENT
- ACTIVATE THE A/THR
- TURN ON THE FDS
AFTER LIFT OFF
- SET ATTITUDE
TO 15°

PROCEDURE

Establish initial climb of 15 °

- **When reaching the thrust reduction altitude (THR RED ALT):**

  SELECT a climb speed.

  SET the thrust levers to CL detent.

  ACTIVATE the autothrust.

  TURN ON the FDs (basic modes engage).

  SELECT appropriate mode.

  Failure of both FDs after the start of takeoff:

  - *The FD bars disappear.*
  - *The FCU window displays the target speed, which synchronizes on V2, or the current speed (if it is higher).*
  - *The autothrust remains armed.*
  - *At thrust reduction altitude, LVR CLB flashes. If the pilot set the thrust levers to the CLB detent, the autothrust becomes active in selected SPD mode (no FDs selected).*
    If the current speed is greater than the target speed, the thrust decreases.
  - *At acceleration altitude the target speed does not change, since it is selected.*

TAKEOFF WITH NO V2 ENTRY

Ident.: PRO-NOR-SRP-01-30-00003987.0001001 / 16 NOV 11
Applicable to: ALL

If V2 is not inserted, the speed reference system (SRS) will not engage for takeoff.
5 s after lift off, V/S mode will engage. When V/S engages the current airspeed becomes the FCU target speed.

To regain a normal speed target, the pilot must :

SELECT the appropriate climb speed on the FCU and PULL out the knob.

- **At ACC ALT :**

  PUSH the A/THR pb on the FCU.

  SET the thrust levers to CL detent.

  PUSH in the SPD selector knob to get a managed speed target.

TAKEOFF USING THE LOCALIZER OF THE OPPOSITE RUNWAY

Ident.: PRO-NOR-SRP-01-30-00003988.0003001 / 09 OCT 12
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321

- **If the localizer, of the ILS associated with the opposite runway, must be used for takeoff:**

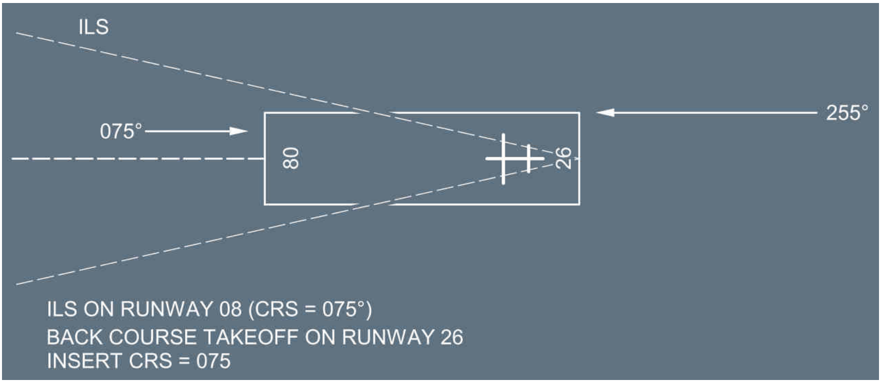
  SELECT the RAD NAV PAGE.

  ENTER the ILS IDENT.

  If the ILS is in the database, the system tunes the proper frequency.
  Check that the ILS front course is displayed in the CRS field.

  Note: This may trigger the "RWY/ILS MISMATCH" message. Disregard it.

- **If the ILS is not in the database:**
  SET the appropriate frequency, and SET the ILS front course in the CRS field.



ILS ON RUNWAY 08 (CRS = 075°)
BACK COURSE TAKEOFF ON RUNWAY 26
INSERT CRS = 075

DESELECT the LS pb on the FCU.

Since the PFD displays reverse deviation.

SELECT ROSE ILS on one ND.

TAKEOFF USING THE LOCALIZER OF THE OPPOSITE RUNWAY

Ident.: PRO-NOR-SRP-01-30-00003988.0005001 / 09 OCT 12

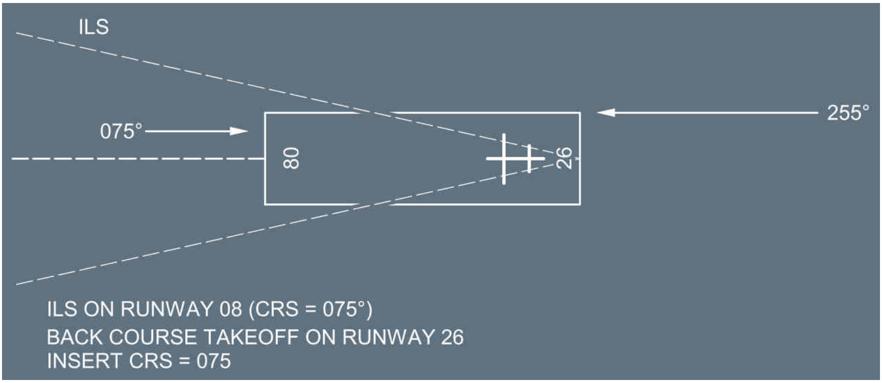
1 **Applicable to: MSN 02014, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

- **If the localizer, of the ILS associated with the opposite runway, must be used for takeoff:**
  SELECT the RAD NAV PAGE.
  ENTER the ILS IDENT.
  If the ILS is in the database, the system tunes the proper frequency.
  Check that the ILS front course is displayed in the CRS field.

  Note: This may trigger the "RWY/ILS MISMATCH" message. Disregard it.

- **If the ILS is not in the database:**

  SET the appropriate frequency, and SET the ILS front course in the CRS field.


ILS
075°
255°
08
26
ILS ON RUNWAY 08 (CRS = 075°)
BACK COURSE TAKEOFF ON RUNWAY 26
INSERT CRS = 075

DESELECT the LS pb on the FCU.

Since the PFD displays reverse deviation.

DESELECT the LS pb on ISIS.

Since ISIS displays LOC reverse deviation.

SELECT ROSE-ILS on one ND.

Intentionally left blank

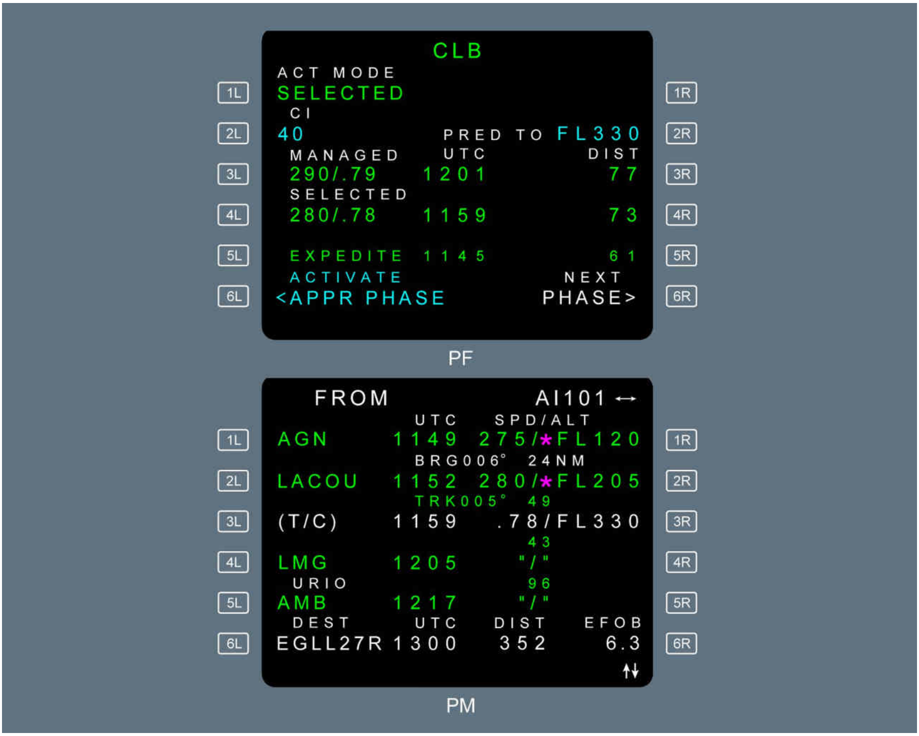
Climb

MONITORING THE CLIMB PHASE

Ident.: PRO-NOR-SRP-01-40-00003989.0031001 / 10 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597

The PF MCDU should display the PERF CLB page allowing him to monitor the climb.
The PM MCDU should display the F-PLN page to allow the pilot to monitor time, speed and altitude predictions. This page also displays matched or missed information for constraints.



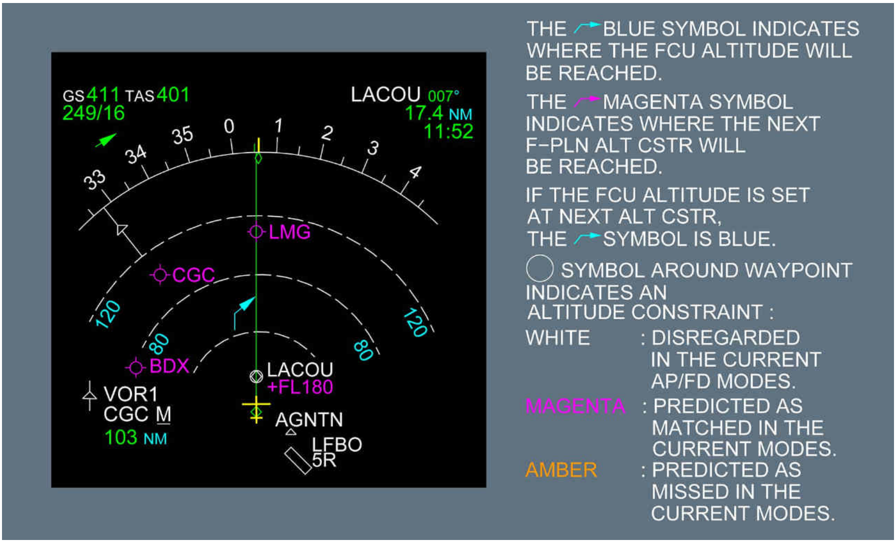
```
            CLB
ACT MODE
SELECTED
 CI
40               PRED TO FL330
 MANAGED         UTC        DIST
 290/.79         1201         77
 SELECTED
 280/.78         1159         73

 EXPEDITE        1145         61
 ACTIVATE                 NEXT
<APPR PHASE              PHASE>
```

```
    FROM                  AI101 ↔
              UTC    SPD/ALT
AGN           1149   275/*FL120
              BRG006°  24NM
LACOU         1152   280/*FL205
              TRK005°  49
(T/C)         1159    .78/FL330
                       43
LMG           1205     "/"
 URIO                  96
AMB           1217     "/"
 DEST         UTC    DIST    EFOB
EGLL27R       1300   352      6.3
                               ↑↓
```

CHECK vertical mode CLB if NAV is engaged.
CHECK vertical mode OP CLB if HDG/TRK is engaged.

MONITORING THE ND (ROSE NAV OR ARC)

Displays the lateral and vertical paths, in the current AP/FD active modes.


GS 411 TAS 401
249/16
LACOU 007°
17.4 NM
11:52
33
34
35
0
1
2
3
4
LMG
CGC
BDX
120
80
120
80
LACOU
+FL180
AGNTN
LFBO
5R
VOR1
CGC M
103 NM

THE ↗ BLUE SYMBOL INDICATES WHERE THE FCU ALTITUDE WILL BE REACHED.

THE ↗ MAGENTA SYMBOL INDICATES WHERE THE NEXT F-PLN ALT CSTR WILL BE REACHED.

IF THE FCU ALTITUDE IS SET AT NEXT ALT CSTR, THE ↗ SYMBOL IS BLUE.

○ SYMBOL AROUND WAYPOINT INDICATES AN ALTITUDE CONSTRAINT :

WHITE : DISREGARDED IN THE CURRENT AP/FD MODES.

MAGENTA : PREDICTED AS MATCHED IN THE CURRENT MODES.

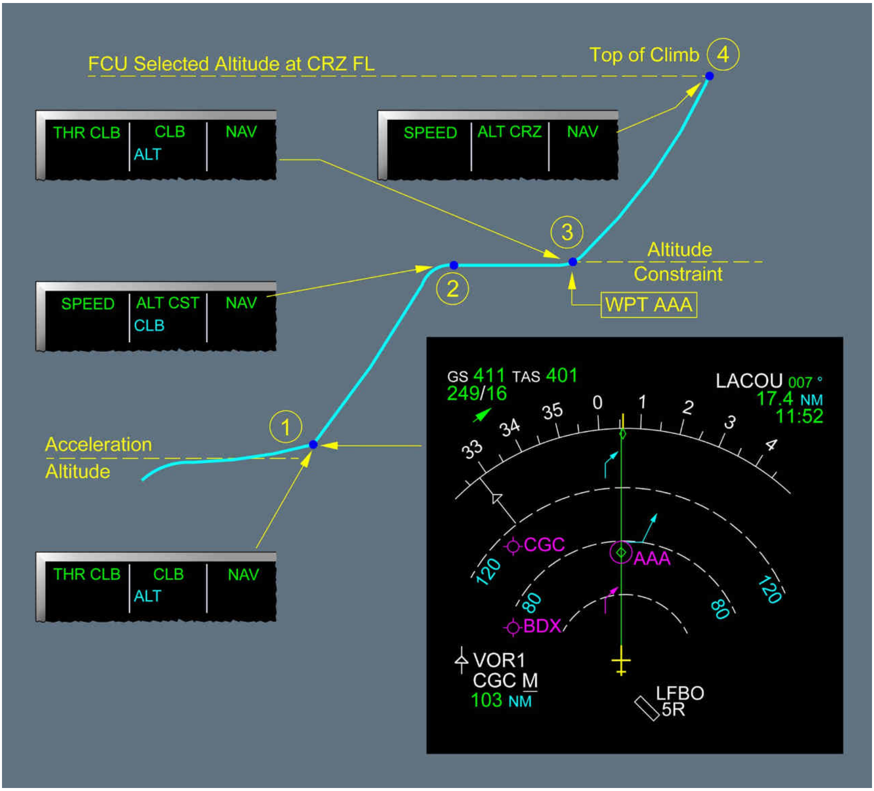
AMBER : PREDICTED AS MISSED IN THE CURRENT MODES.

MONITORING THE AP/FD MODES AND FMA

If CLB mode is engaged, the flight mode annunciator (FMA) and the navigation display (ND) show the tactical situation as follows:

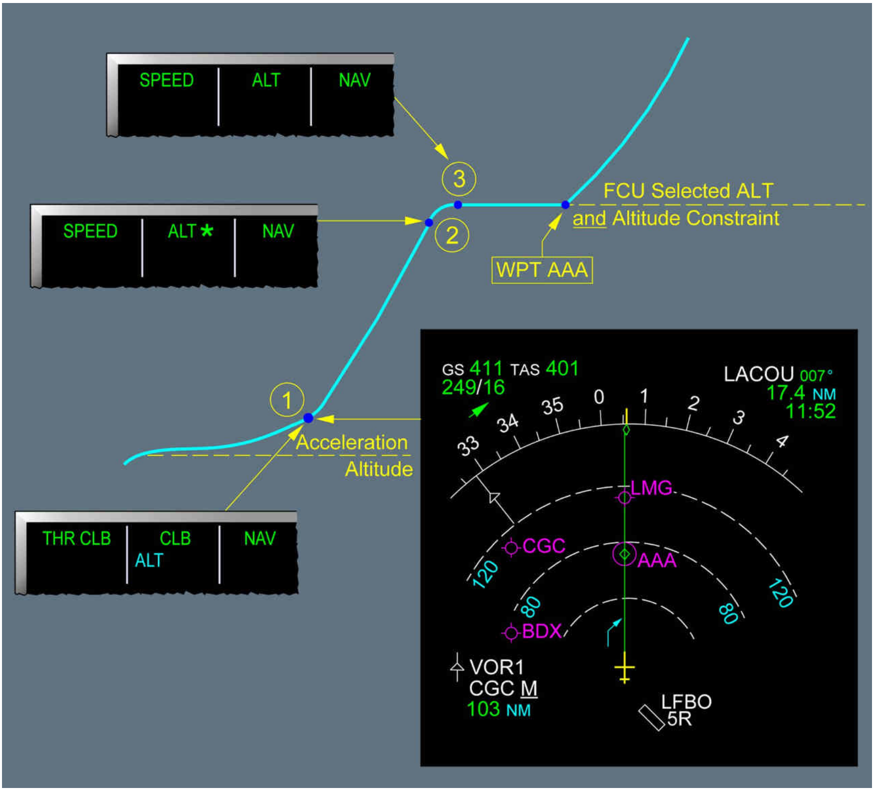
CASE 1

The FCU selected altitude is set above the next altitude constraint.


FCU Selected Altitude at CRZ FL
Top of Climb
④
THR CLB | CLB | NAV
ALT
SPEED | ALT CRZ | NAV
③
Altitude
Constraint
WPT AAA
②
SPEED | ALT CST | NAV
CLB
①
Acceleration
Altitude
THR CLB | CLB | NAV
ALT
GS 411 TAS 401
249/16
LACOU 007 °
17.4 NM
11:52
33
34
35
0
1
2
3
4
CGC
AAA
BDX
120
80
80
120
VOR1
CGC M
103 NM
LFBO
5R

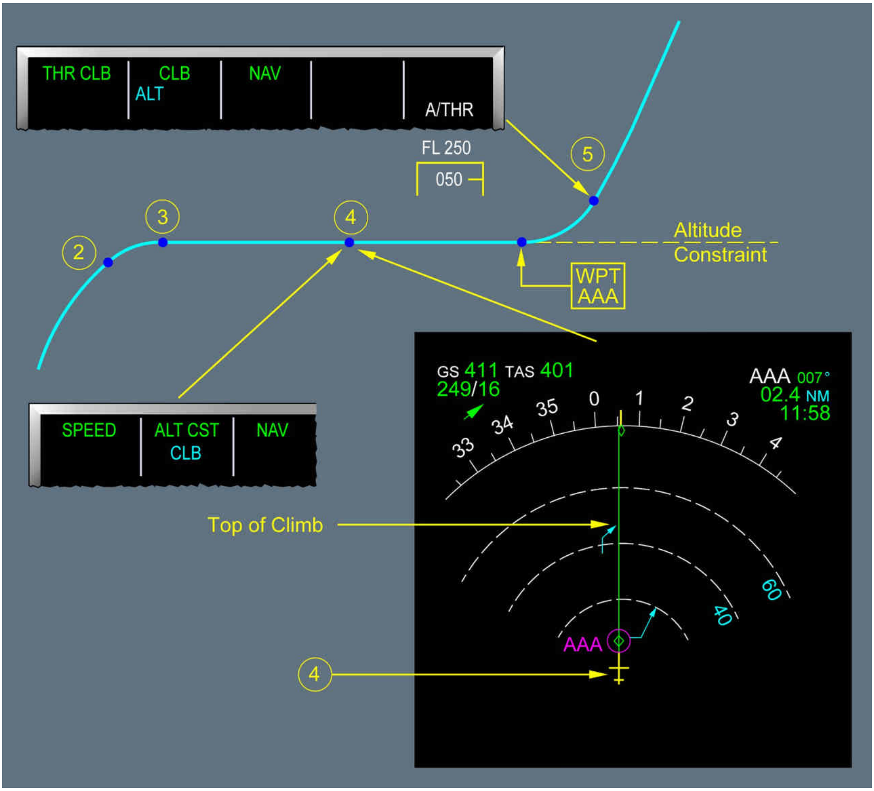
CASE 2

The FCU selected altitude is set at the next altitude constraint.
The aircraft will automatically levels off at this altitude.


SPEED
ALT
NAV
SPEED
ALT*
NAV
THR CLB
CLB
ALT
NAV
1
2
3
FCU Selected ALT
and Altitude Constraint
WPT AAA
Acceleration
Altitude
GS 411 TAS 401
249/16
LACOU 007°
17.4 NM
11:52
33
34
35
0
1
2
3
4
LMG
CGC
AAA
BDX
120
80
80
120
VOR1
CGC M
103 NM
LFBO
5R

To resume the climb automatically when the waypoint AAA is reached, apply the following procedure during the level off (Position 4):

- SELECT the FCU altitude to the next constraint (if any) or the cruise FL.
- PUSH the FCU ALT selector knob to arm CLB mode.


THR CLB
CLB
ALT
NAV
A/THR
FL 250
050
5
3
4
2
Altitude Constraint
WPT AAA
SPEED
ALT CST
CLB
NAV
Top of Climb
4
GS 411 TAS 401
249/16
33
34
35
0
1
2
3
4
AAA 007°
02.4 NM
11:58
60
40
AAA

RECOMMENDATION:

To ensure that you will not miss the next constraint, it is recommended to select the FCU altitude to the next constraint as described above.

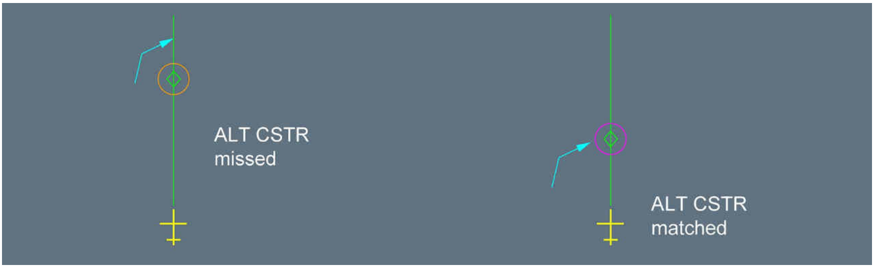
MONITORING THE CONSTRAINTS

SPEED, ALTITUDE and TIME constraint can be checked using MCDUs. Each constraint is preceded by a star that indicates if the constraint is matched (magenta star) or missed (amber star).

ALTITUDE CONSTRAINT

If an altitude constraint is predicted as missed, use the following procedure:

- SET the FCU ALT to the next ALT CSTR.
- CHECK the position of the level off symbol on the ND (blue arrow) with respect to the waypoint with the constraint.
- DECREASE the target speed until the constraint is met.


ALT CSTR
missed
ALT CSTR
matched

SPEED CONSTRAINT

CHECK the SPD CSTR predictions on the MCDU.

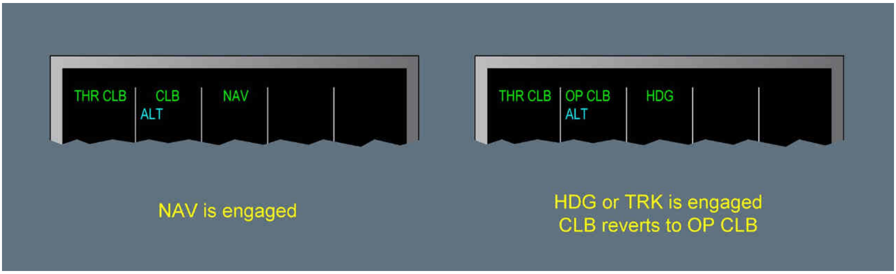
A magenta or amber star (*) indicates that the aircraft will match or miss the constraint.
If the aircraft is to miss the constraint by more than 10 kt, the MCDU scratchpad displays "SPD ERROR AT WPT ---- ".

"CHECK WEIGHT" MESSAGE.

Refer to DSC-22_20-90-20 "CHECK WEIGHT" Message

HDG/TRK MODE ENGAGEMENT

If HDG/TRK is engaged, the guidance does not consider any F-PLN constraint. Therefore, if the flight crew disengages NAV, CLB mode reverts to OP CLB.


THR CLB
CLB
ALT
NAV
NAV is engaged
THR CLB
OP CLB
ALT
HDG
HDG or TRK is engaged
CLB reverts to OP CLB

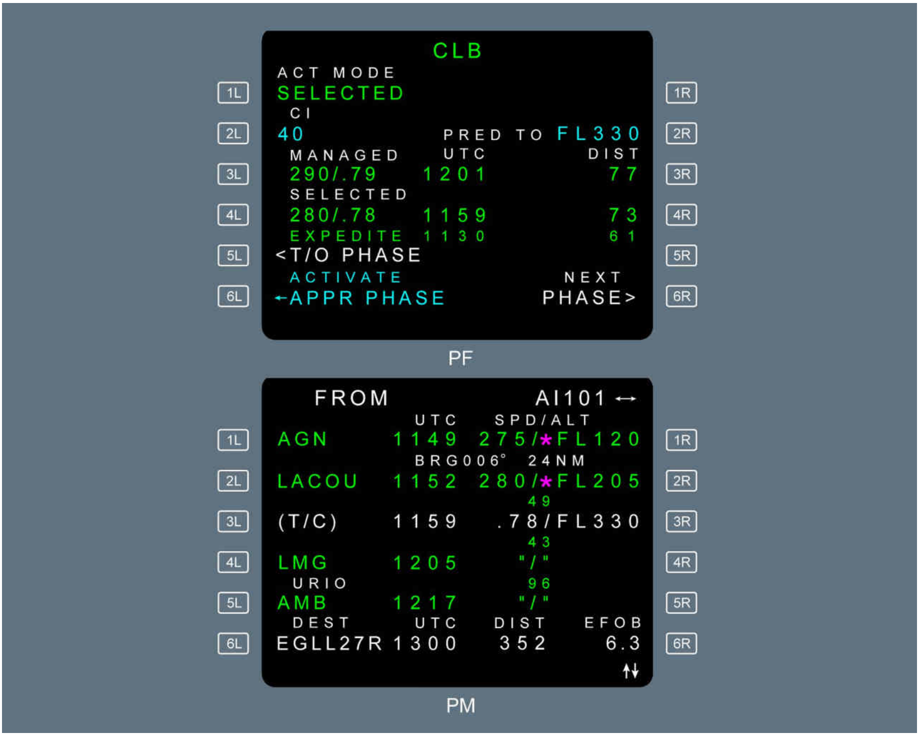
SPEED SELECTION

If a specific speed is required TURN and PULL the SPD selector knob. (This changes the target speed to blue on the PFD speed scale).
Predictions on the F-PLN page assume that the speed remains selected until the next SPD LIM or SPD CSTR, or the next phase, whichever comes first.

MONITORING THE CLIMB PHASE

Ident.: PRO-NOR-SRP-01-40-00003989.0025001 / 10 MAY 21
Applicable to: MSN 04827-04860

The PF MCDU should display the PERF CLB page allowing him to monitor the climb.
The PM MCDU should display the F-PLN page to allow the pilot to monitor time, speed and altitude predictions. This page also displays matched or missed information for constraints.



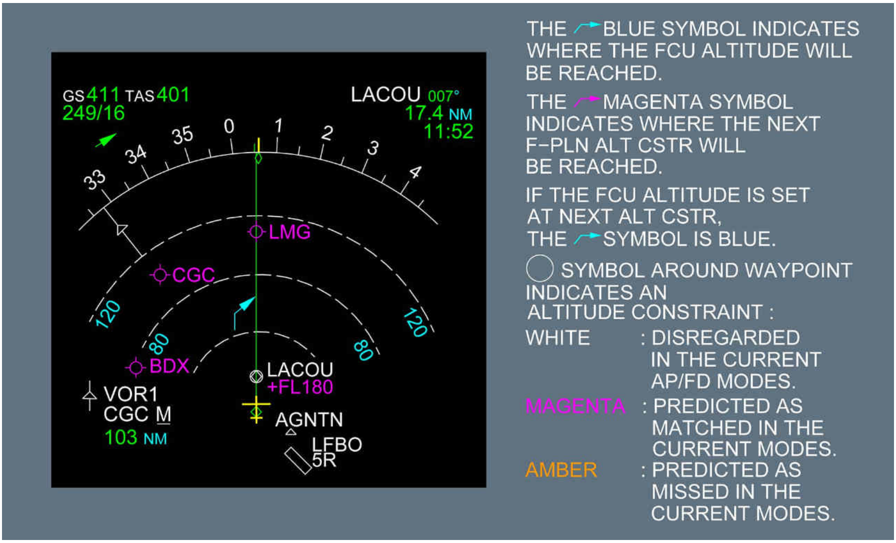
```
                CLB
ACT MODE
SELECTED
 CI
40             PRED TO FL330
 MANAGED       UTC       DIST
 290/.79     1201          77
 SELECTED
 280/.78     1159          73
 EXPEDITE    1130          61
<T/O PHASE
 ACTIVATE                NEXT
←APPR PHASE            PHASE>
```

```
   FROM              AI101 ↔
             UTC   SPD/ALT
AGN         1149  275/*FL120
             BRG006°  24NM
LACOU       1152  280/*FL205
                    49
(T/C)       1159   .78/FL330
                    43
LMG         1205     "/"
 URIO               96
AMB         1217     "/"
 DEST        UTC   DIST   EFOB
EGLL27R     1300   352     6.3
                            ↑↓
```

CHECK vertical mode CLB if NAV is engaged.
CHECK vertical mode OP CLB if HDG/TRK is engaged.

MONITORING THE ND (ROSE NAV OR ARC)

Displays the lateral and vertical paths, in the current AP/FD active modes.


GS 411 TAS 401
249/16
LACOU 007°
17.4 NM
11:52
33
34
35
0
1
2
3
4
LMG
CGC
120
120
80
80
BDX
LACOU
+FL180
VOR1
CGC M
103 NM
AGNTN
LFBO
5R

THE ↗ BLUE SYMBOL INDICATES WHERE THE FCU ALTITUDE WILL BE REACHED.

THE ↗ MAGENTA SYMBOL INDICATES WHERE THE NEXT F-PLN ALT CSTR WILL BE REACHED.

IF THE FCU ALTITUDE IS SET AT NEXT ALT CSTR, THE ↗ SYMBOL IS BLUE.

○ SYMBOL AROUND WAYPOINT INDICATES AN ALTITUDE CONSTRAINT :

WHITE : DISREGARDED IN THE CURRENT AP/FD MODES.

MAGENTA : PREDICTED AS MATCHED IN THE CURRENT MODES.

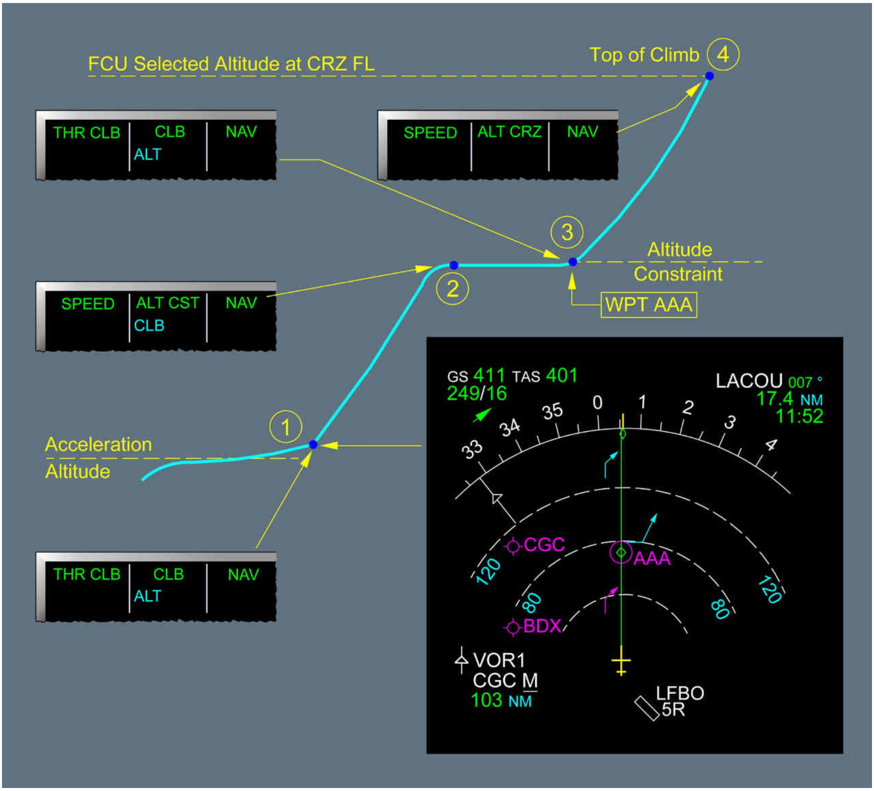
AMBER : PREDICTED AS MISSED IN THE CURRENT MODES.

MONITORING THE AP/FD MODES AND FMA

If CLB mode is engaged, the flight mode annunciator (FMA) and the navigation display (ND) show the tactical situation as follows:

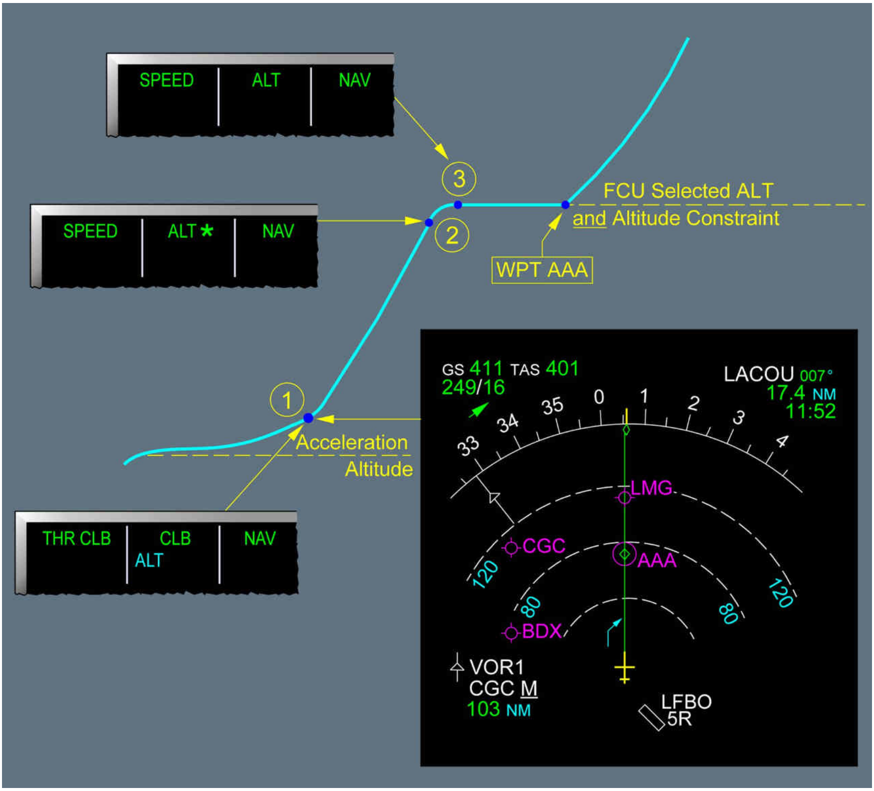
CASE 1

The FCU selected altitude is set above the next altitude constraint.


FCU Selected Altitude at CRZ FL
Top of Climb ④
THR CLB | CLB ALT | NAV
SPEED | ALT CRZ | NAV
③
Altitude Constraint
WPT AAA
②
SPEED | ALT CST CLB | NAV
①
Acceleration Altitude
THR CLB | CLB ALT | NAV
GS 411 TAS 401
249/16
LACOU 007 °
17.4 NM
11:52
33 34 35 0 1 2 3 4
CGC
AAA
BDX
120
80
80
120
VOR1
CGC M
103 NM
LFBO
5R

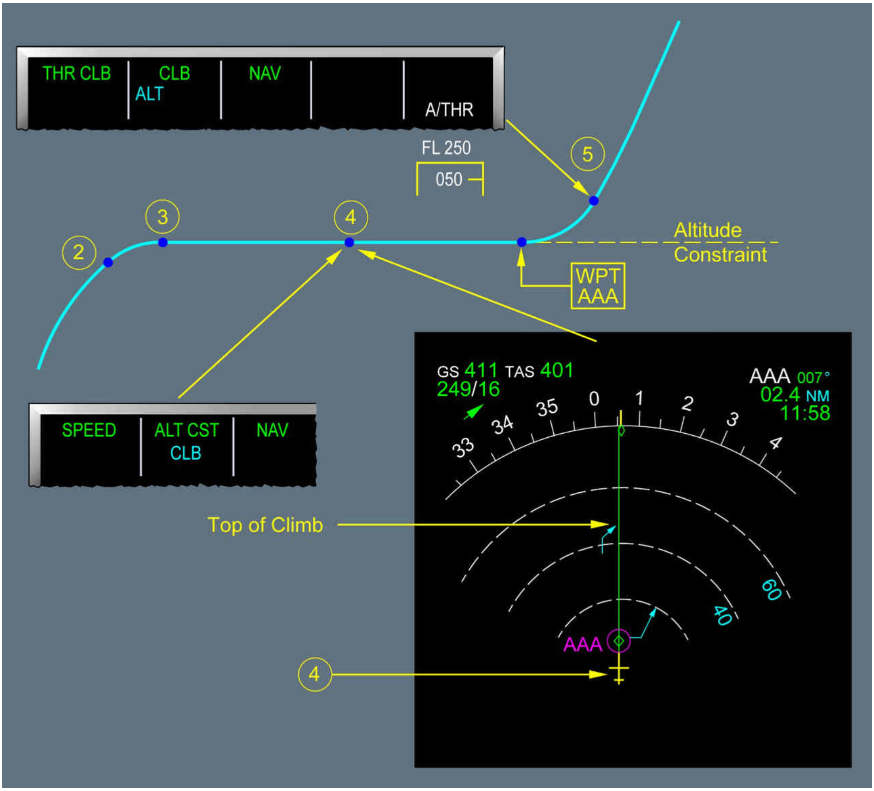
CASE 2

The FCU selected altitude is set at the next altitude constraint.
The aircraft will automatically levels off at this altitude.


SPEED
ALT
NAV
SPEED
ALT*
NAV
THR CLB
CLB
ALT
NAV
3
2
1
FCU Selected ALT
and Altitude Constraint
WPT AAA
Acceleration
Altitude
GS 411 TAS 401
249/16
LACOU 007°
17.4 NM
11:52
33
34
35
0
1
2
3
4
LMG
CGC
AAA
BDX
120
80
80
120
VOR1
CGC M
103 NM
LFBO
5R

To resume the climb automatically when the waypoint AAA is reached, apply the following procedure during the level off (Position 4):

- SELECT the FCU altitude to the next constraint (if any) or the cruise FL.
- PUSH the FCU ALT selector knob to arm CLB mode.


THR CLB
CLB
ALT
NAV
A/THR
FL 250
050
5
3
4
2
Altitude
Constraint
WPT
AAA
GS 411 TAS 401
249/16
AAA 007°
02.4 NM
11:58
33
34
35
0
1
2
3
4
60
40
AAA
SPEED
ALT CST
CLB
NAV
Top of Climb
4

RECOMMENDATION:

To ensure that you will not miss the next constraint, it is recommended to select the FCU altitude to the next constraint as described above.

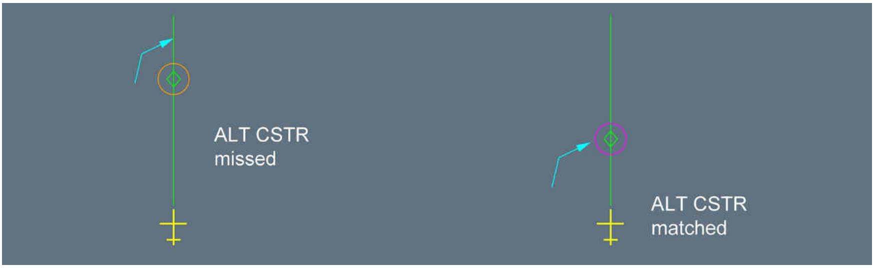
MONITORING THE CONSTRAINTS

SPEED, ALTITUDE and TIME constraint can be checked using MCDUs. Each constraint is preceded by a star that indicates if the constraint is matched (magenta star) or missed (amber star).

ALTITUDE CONSTRAINT

If an altitude constraint is predicted as missed, use the following procedure:

- SET the FCU ALT to the next ALT CSTR
- CHECK the position of the level off symbol on the ND (blue arrow) with respect to the waypoint with the constraint.
- DECREASE the target speed until the constraint is met.


ALT CSTR
missed
ALT CSTR
matched

SPEED CONSTRAINT

CHECK the SPD CSTR predictions on the MCDU.

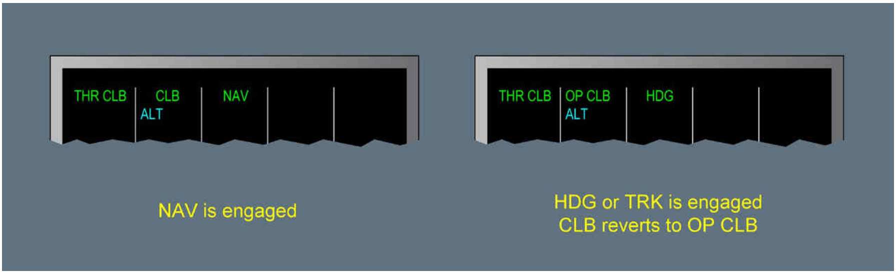
A magenta or amber star (*) indicates that the aircraft will match or miss the constraint.
If the aircraft is to miss the constraint by more than 10 kt, the MCDU scratchpad displays “SPD ERROR AT WPT ---- ”.

“CHECK WEIGHT” MESSAGE.

Refer to DSC-22_20-90-20 "CHECK WEIGHT" Message

HDG/TRKMODE ENGAGEMENT

If HDG/TRK is engaged, the guidance does not consider any F-PLN constraint. Therefore, if the flight crew disengages NAV, CLB mode reverts to OP CLB.


THR CLB
CLB
ALT
NAV
NAV is engaged
THR CLB
OP CLB
ALT
HDG
HDG or TRK is engaged
CLB reverts to OP CLB

SPEED SELECTION

If a specific speed is required TURN and PULL the SPD selector knob. (This changes the target speed to blue on the PFD speed scale).
Predictions on the F-PLN page assume that the speed remains selected until the next SPD LIM or SPD CSTR, or the next phase, whichever comes first.

EXPEDITE CLIMB

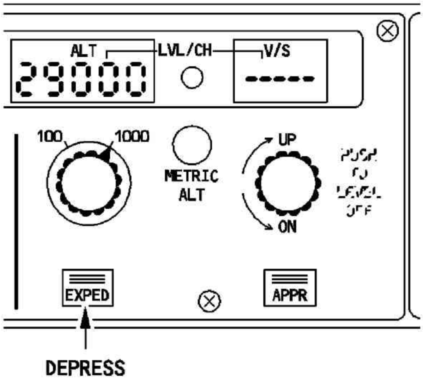
Ident.: PRO-NOR-SRP-01-40-00003990.0002001 / 11 FEB 11

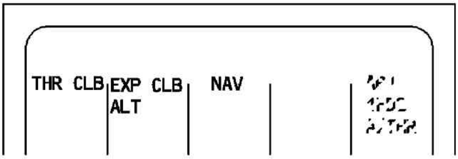
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The flight may use the expedite mode temporarily to clear a specified altitude or to match a constraint.

PRESS EXPED pb on the FCU.

The AP acquires and maintains Green Dot speed. There is no benefit to use expedite mode above FL 250. The mach corresponding to green dot is too low to maintain an increased vertical speed.





FMA in EXPEDITE CLB

To revert to normal climb:
PUSH ALT knob CLB mode will engage.

Note: Pulling ALT knob or V/S knob or SPD/MACH knob also disengages EXPEDITE. PRESSING EXPED pb never disengages the mode.

IMMEDIATE RETURN TO ORIGIN AIRPORT

Ident.: PRO-NOR-SRP-01-40-00003991.0003001 / 23 JUN 15

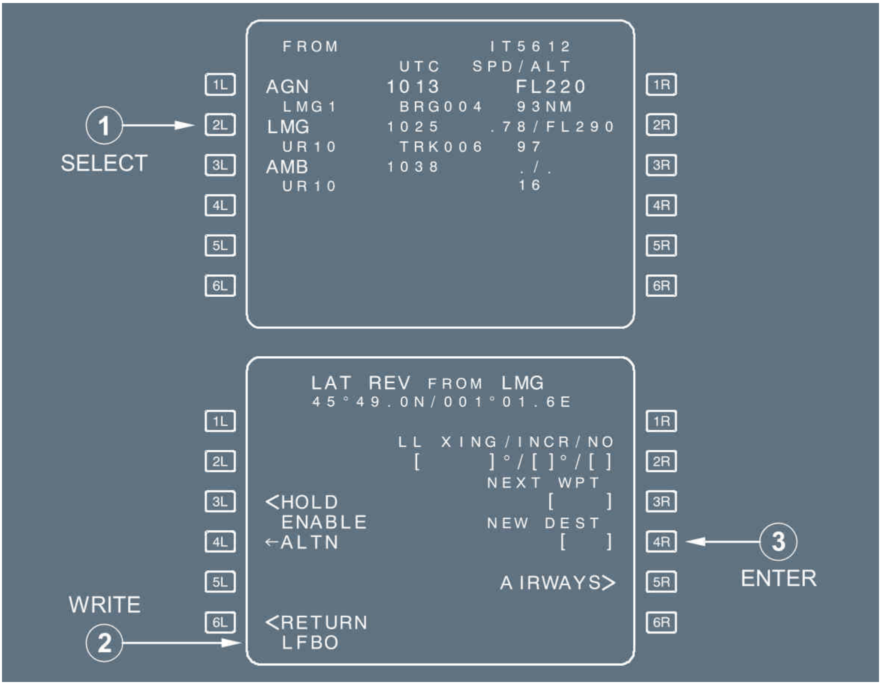
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

- **If the SEC F-PLN has been prepared for an immediate return to the airport of origin:**

  ACTIVATE the SEC F-PLN.

  PERFORM a DIR TO the appropriate waypoint.

- **If the SEC F-PLN has not been prepared for an immediate return to the airport of origin:**



```
 FROM                 IT5612
          UTC    SPD/ALT
AGN       1013      FL220
 LMG1     BRG004     93NM
LMG       1025    .78/FL290
 UR10     TRK006     97
AMB       1038        ./.
 UR10                16
```

```
      LAT REV FROM LMG
      45°49.0N/001°01.6E
          LL XING/INCR/NO
          [       ]°/[ ]°/[ ]
                 NEXT WPT
                   [     ]
<HOLD
 ENABLE          NEW DEST
←ALTN              [     ]
                 AIRWAYS>
<RETURN
 LFBO
```

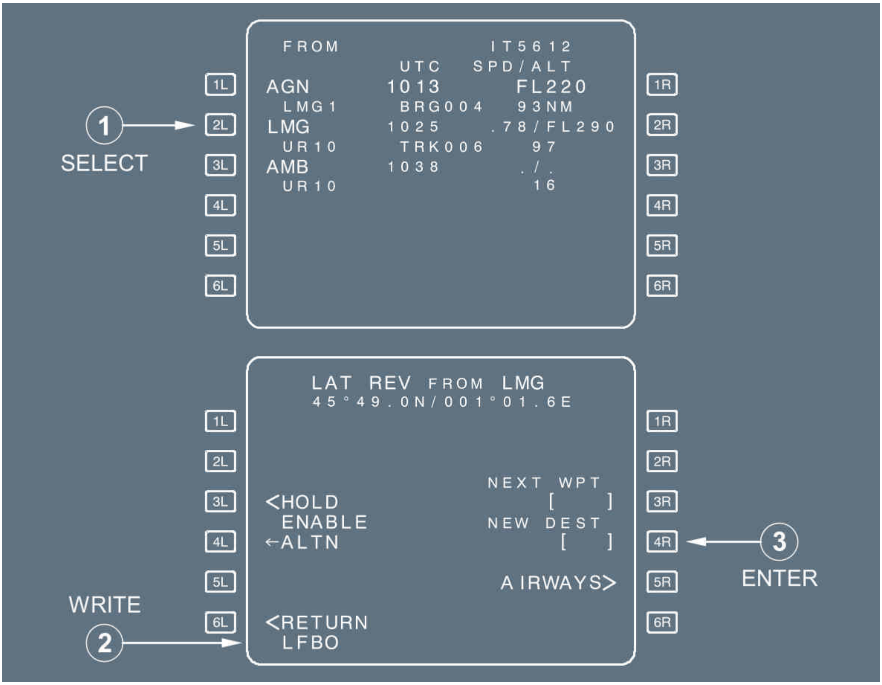
PERFORM a lateral revision at TO waypoint
ENTER the departure airport ident in the NEW DEST field and INSERT the temporary flight plan.
PERFORM a lateral revision at the new destination
SELECT: APPR – STAR – VIA – TRANS and INSERT

- **When cleared to divert:**
  PERFORM a DIR TO the suitable waypoint.
  ENTER QNH, WIND, MDA/MDH, LDG CONF.
  CHECK RAD NAV page.

IMMEDIATE RETURN TO ORIGIN AIRPORT

Ident.: PRO-NOR-SRP-01-40-00003991.0007001 / 23 JUN 15
Applicable to: MSN 04827-04860

- **If the SEC F-PLN has been prepared for an immediate return to the airport of origin:**
  REVERT to HDG mode, then ACTIVATE the SEC F-PLN.
  PERFORM a DIR TO the appropriate waypoint.
- **If the SEC F-PLN has not been prepared for an immediate return to the airport of origin:**



```
  FROM                IT5612
           UTC        SPD/ALT
AGN        1013        FL220
  LMG1      BRG004     93NM
LMG        1025      .78/FL290
  UR10      TRK006      97
AMB        1038         ./.
  UR10                  16
```

```
     LAT REV FROM LMG
     45°49.0N/001°01.6E

                      NEXT WPT
<HOLD                 [      ]
  ENABLE              NEW DEST
←ALTN                   [    ]
                      AIRWAYS>
<RETURN
  LFBO
```

PERFORM a lateral revision at TO waypoint
ENTER the departure airport ident in the NEW DEST field.

PERFORM a lateral revision at the new destination

SELECT: APPR – STAR – VIA – TRANS and INSERT

CHECK and INSERT the TMPY F-PLN or continue with next revision.

- **When cleared to divert:**

  PERFORM a DIR TO the suitable waypoint.

  ENTER QNH, WIND, MDA/MDH, LDG CONF.

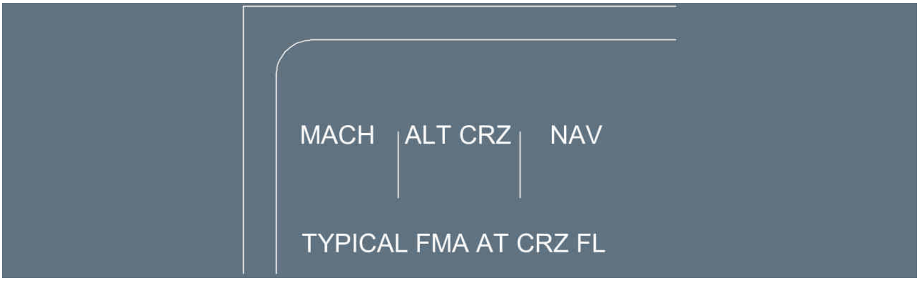
  CHECK RAD NAV page.

Cruise

REACHING CRUISE FLIGHT LEVEL

Ident.: PRO-NOR-SRP-01-50-00003992.0002001 / 03 NOV 14
Applicable to: ALL

On reaching the cruise flight level, the flight crew should be sure that the FMA displays “ALT CRZ” in its second column, which ensures that the aircraft is at cruise flight level and at Economy Cruise Mach (ECON CRZ MACH).



The FMGS engages the “soft altitude” (SOFT ALT) mode 2 min after the cruise flight level is captured and Mach stabilized. (SOFT ALT) mode allows the aircraft to deviate ± 50 ft from the target altitude to minimize the thrust variation and reduce the fuel consumption.

- **If the FMA does not display ALT CRZ at the assigned flight level,** soft altitude mode will not engage and the predictions will be computed at the preplanned flight level. This will occur when the ATC assigned flight level is lower than the preplanned flight level entered on the PROG page.

- **If the FMA does not display ALT CRZ at the assigned FL (as may occur when the ATC-assigned FL is lower than the preplanned FL selected initially):**

  PRESS the [PROG].

  ENTER the current cruise flight level.

  Note: *If the current cruise flight level is above the preplanned FL, selecting the FCU updates it automatically.*

“SET SPD AUTO” OR “SET MANAGED SPD” OR “CHECK SPEED MODE”

- **If the climb phase was flown in selected speed and if the cruise phase is planned to be flown in managed speed (ECON MACH/SPEED)** , “SET SPD AUTO” or “SET MANAGED SPEED” or "CHECK SPEED MODE" appears on the PFD and MCDU as a reminder.

PRESS the FCU speed selector knob to activate the managed Mach.

MONITORING THE NAVIGATION ACCURACY

Ident.: PRO-NOR-SRP-01-50-A-00003993.0001001 / 22 MAY 12
Applicable to: ALL

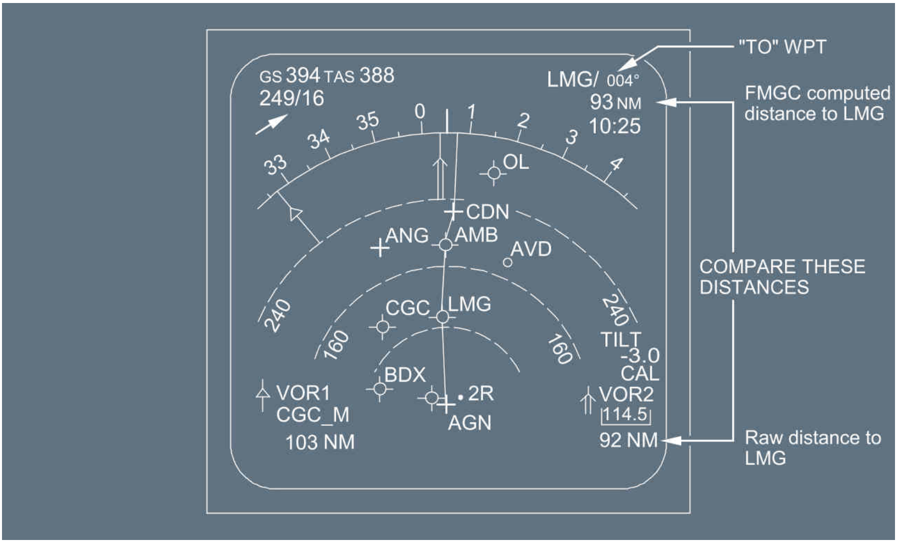
GENERAL

On aircraft equipped with GPS PRIMARY, the navigation accuracy check is not required as long as GPS PRIMARY ◁ is available.
Otherwise, navigation accuracy shall be checked periodically in cruise.

The PROG page displays an estimated accuracy as being high or low (center of sixth line):
- “HIGH” means that the FMGS estimates the FM position accurate enough to meet the EN ROUTE criteria,
- “LOW” means that the pilot must compare raw data from tuned navaids with corresponding data computed by FM and shown on the ND or MCDU PROG page. The appearance of the message “NAV ACCUR DOWNGRAD” on the MCDU calls for a similar crosscheck.

Note: *The pilot should make such a comparison periodically, even if the PROG page is displaying “HIGH” and navaids are available: this allows him to quantify the FM position error.*

The method for checking the accuracy is explained in the SOP and in Evaluation of position accuracy chapter (*Refer to DSC-22_20-20-20 General*).
A quick check is explained here below when the TO waypoint is a DME type. (VOR/DME or VOR/TAC or DME or TAC)


GS 394 TAS 388
249/16
LMG/ 004°
93 NM
10:25
33
34
35
0
1
2
3
4
OL
CDN
ANG
AMB
AVD
CGC
LMG
240
160
240
160
TILT
-3.0
CAL
BDX
2R
AGN
VOR1
CGC_M
103 NM
VOR2
114.5
92 NM
"TO" WPT
FMGC computed distance to LMG
COMPARE THESE DISTANCES
Raw distance to LMG

Ident.: PRO-NOR-SRP-01-50-A-00003994.0013001 / 22 NOV 11

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

POSITION DISCREPANCY

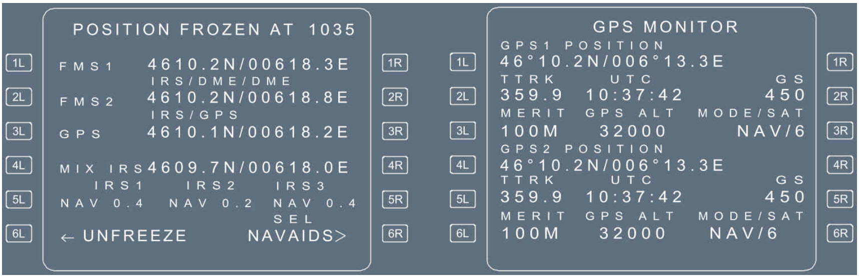
- **If there is a discrepancy between the raw data position and the FM position:**

  PRESS the DATA key on the MCDU.

  SELECT the POSITION MONITOR page.

  SELECT “FREEZE”.

  On the other MCDU : Select the GPS MONITOR page.



```
     POSITION FROZEN AT  1035
FMS1      4610.2N/00618.3E
            IRS/DME/DME
FMS2      4610.2N/00618.8E
            IRS/GPS
GPS       4610.1N/00618.2E

MIX IRS4609.7N/00618.0E
   IRS1      IRS2      IRS3
NAV 0.4   NAV 0.2   NAV 0.4
                       SEL
←UNFREEZE           NAVAIDS>
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
          GPS MONITOR
GPS1 POSITION
46°10.2N/006°13.3E
TTRK      UTC           GS
359.9   10:37:42       450
MERIT   GPS ALT   MODE/SAT
100M     32000       NAV/6
GPS2 POSITION
46°10.2N/006°13.3E
TTRK      UTC           GS
359.9   10:37:42       450
MERIT   GPS ALT   MODE/SAT
100M     32000       NAV/6
```

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

Ident.: PRO-NOR-SRP-01-50-A-00003994.0014001 / 14 FEB 11
Applicable to: MSN 04827-04860

POSITION DISCREPANCY

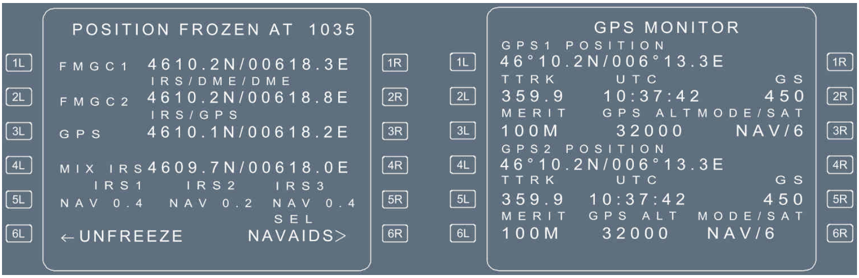
- **If there is a discrepancy between the raw data position and the FM position:**

  PRESS the DATA key on the MCDU.

  SELECT the POSITION MONITOR page.

  SELECT “FREEZE”.

  On the other MCDU: Select the GPS MONITOR page.



```
   POSITION FROZEN AT  1035
FMGC1  4610.2N/00618.3E
          IRS/DME/DME
FMGC2  4610.2N/00618.8E
          IRS/GPS
GPS    4610.1N/00618.2E

MIX IRS4609.7N/00618.0E
    IRS1     IRS2     IRS3
NAV 0.4   NAV 0.2   NAV 0.4
                      SEL
←UNFREEZE          NAVAIDS>
```

```
         GPS MONITOR
GPS1 POSITION
46°10.2N/006°13.3E
TTRK        UTC           GS
359.9    10:37:42        450
MERIT     GPS ALTMODE/SAT
100M       32000       NAV/6
GPS2 POSITION
46°10.2N/006°13.3E
TTRK        UTC           GS
359.9   10:37:42         450
MERIT   GPS ALT    MODE/SAT
100M     32000     NAV/6
```

MONITORING THE FUEL PREDICTIONS

Ident.: PRO-NOR-SRP-01-50-00003995.0013001 / 14 FEB 11
Applicable to: ALL

The F-PLN and FUEL PRED pages display fuel and time predictions throughout the flight. These predictions are meaningful if the lateral and vertical flight plan, and the entered winds are kept accurate enough as the flight progresses.

PROCEDURE

In addition to the Fuel Management procedure described in the SOPs (*Refer to PRO-NOR-SOP-15 Cruise - Flight Progress*), periodically apply the following actions:

KEEP ACCURATE FMS PREDICTIONS

Periodically UPDATE the F-PLN elements (F-PLN waypoints, step altitudes, predicted winds).

CHECK the MIN DEST FOB value on the FUEL PRED page

The MIN DEST FOB value is computed by the FMS and by default it is equals to ALTN + FINAL.
ALTN, FINAL and MIN DEST FOB can be modified by the flight crew.
At the beginning of the CRZ phase, and/or after any change of destination or alternate airport, check that the MIN DEST FOB value is meaningful. Otherwise, update the MIN DEST FOB value, as appropriate.

CHECK the DEST EFOB value on the F-PLN or FUEL PRED page

MONITOR the EFOB at destination on the F-PLN or FUEL PRED page. If necessary, ADAPT the flight strategy.

"DEST EFOB BELOW MIN" MESSAGE

If the predicted EFOB at destination becomes less than the MIN DEST FOB value displayed on the FUEL PRED page:

- The destination EFOB turns to amber on the F-PLN, FUEL PRED and PERF (CLB, CRZ, DES) pages, and REPORT page.
- The “DEST EFOB BELOW MIN” amber message is displayed on the MCDU scratchpad, after 2 min (if the FMS is in CRZ or DES phase).

Note: *If the flight crew has cleared the “DEST EFOB BELOW MIN” message, and if the predicted EFOB at destination is still less than the MIN DEST FOB value, the “DEST EFOB BELOW MIN” message will appear again at the beginning of the descent phase.*

PROCEDURE

● **If the “DEST EFOB BELOW MIN” message is triggered on the MCDU:**

CHECK the DEST EFOB value on the F-PLN or FUEL PRED page,

CHECK the hypothesis used by the FMS to compute the fuel predictions,

Check that the F-PLN elements (F-PLN waypoints, step altitudes, predicted winds) are up-to-date, to ensure that the FMS predictions are accurate.
Check that the MIN DEST FOB fuel value is meaningful and corresponds to the planned fuel strategy.

ADAPT the flight strategy as required.

ENTERING A STEP CLIMB OR A STEP DESCENT

Ident.: PRO-NOR-SRP-01-50-00003996.0002001 / 22 MAY 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

The crew may use the STEP ALTS page to enter up to four geographic step points or one optimal step (computed by the FMGS) at any waypoint of the cruise.

PROCEDURE

PRESS the PERF key.
SELECT “STEP ALTS” prompt.

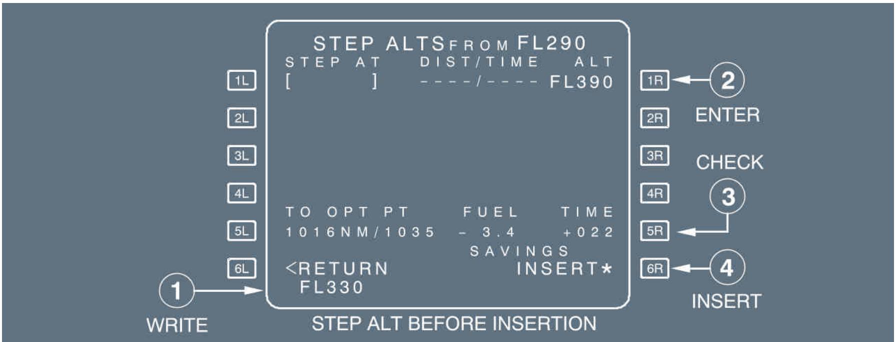
The PERF PAGE displays this prompt in cruise phase. The crew may also call up the STEP ALTS page using a vertical revision at any cruise waypoint.

ENTERING AN OPTIMAL STEP (ONLY STEP CLIMB)

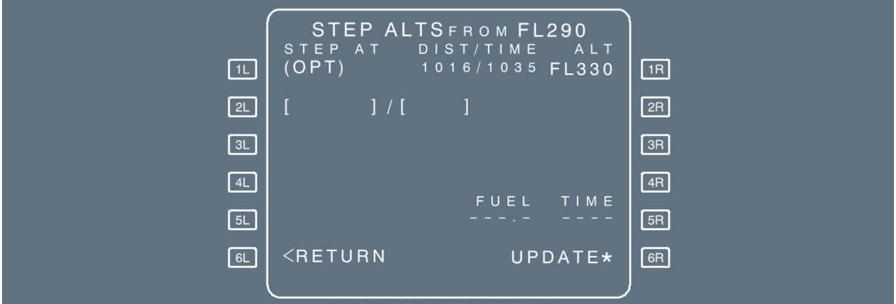
WRITE a step altitude or FL into the scratchpad.
ENTER the step altitude or FL in the [1R] field.
CHECK the FUEL and TIME SAVINGS predictions on the 5L and 5R fields.
PUSH the INSERT prompt [6R] if adequate.

After insertion, the optimum step climb is updated only when the flight crew presses the UPDATE prompt [6R].
The ND shows symbols for the start of climb (S/C) and the top of climb (T/C). The MCDU shows the associated pseudo-waypoints.
It is possible to convert an optimum step to a geographic step by overwriting the [1L] field (see geographic step).

- **When reaching the step climb pseudo-waypoint:**
  REQUEST climb clearance.
  ADJUST the FCU altitude to the STEP ALT, and PUSH.


STEP ALTS FROM FL290
STEP AT
DIST/TIME
ALT
[ ]
----/----
FL390
TO OPT PT
FUEL
TIME
1016NM/1035
-3.4
+022
SAVINGS
<RETURN
INSERT*
FL330
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
WRITE
2
ENTER
CHECK
3
4
INSERT

STEP ALT BEFORE INSERTION


STEP ALTS FROM FL290
STEP AT
DIST/TIME
ALT
(OPT)
1016/1035
FL330
[ ]/[ ]
FUEL
TIME
---.-

<RETURN
UPDATE*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

INSERTED OPT STEP ALT

ENTERING A GEOGRAPHIC STEP

WRITE a step altitude into the scratchpad.

The format is position/altitude (or FL). The position can be a waypoint or waypoint/distance to waypoint. The waypoint/distance is an along track offset waypoint.

ENTER it in [1L] to [4L] field.

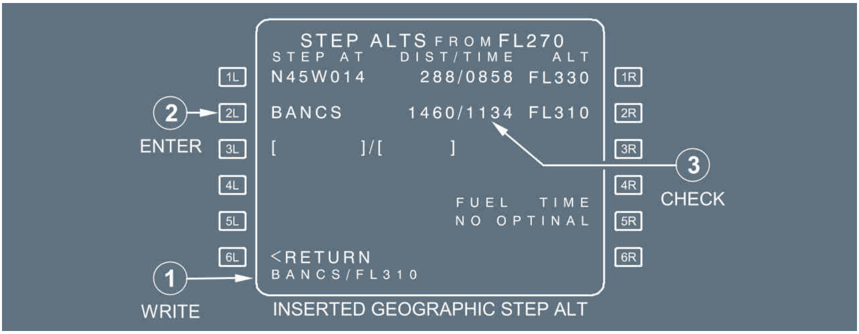
The entry of the initial geographic step point requires both a valid waypoint and altitude entries. When a step has been entered, the flight crew may change the position and the altitude independently. The flight crew cannot modify the position and the altitude in a single entry: To modify both, they should modify the position first, and then the altitude.

CHECK the predictions

- **When reaching the step climb or descent pseudo-waypoint (S/C or S/D):**

  REQUEST climb or descent clearance.

  ADJUST the FCU altitude to the STEP ALT, and PUSH.



INSERTED GEOGRAPHIC STEP ALT

The DIST/TIME field may display the following messages:

- ABOVE MAX if the step altitude exceeds the MAX ALT.
- IGNORED if the start step point is less than 50 NM from the top of descent.
- STEP NOW when the aircraft is within 20 NM of the step point.
  If the aircraft overflies the step waypoint without commencing a climb or a descent, the system deletes the step from the vertical F-PLN automatically (a “STEP DELETED” message is displayed on the MCDU scratchpad), and recomputes the predictions.
  A step is not deleted if the FCU altitude is moved only partially towards the step altitude.
  The flight phase remains “cruise” whenever a step is initiated.

Note: *For an altitude restriction defined at a waypoint less than 50 NM before the top of descent and lower than the CRZ FL, it is recommended to enter an altitude constraint rather than a step.*

ENTERING A STEP CLIMB OR A STEP DESCENT

Ident.: PRO-NOR-SRP-01-50-00003996.0012001 / 22 MAY 12
Applicable to: MSN 04827-04860

The crew may use the STEP ALTS page to enter up to four geographic step points or one optimal step (computed by the FMGS) at any waypoint of the cruise.

PROCEDURE

PRESS the F-PLN key on the MCDU.
SELECT the VERT REV page at any waypoint.
SELECT “STEP ALTS” prompt.

The PERF PAGE displays this prompt in cruise phase. The crew may also call up the STEP ALTS page using a vertical revision at any cruise waypoint.

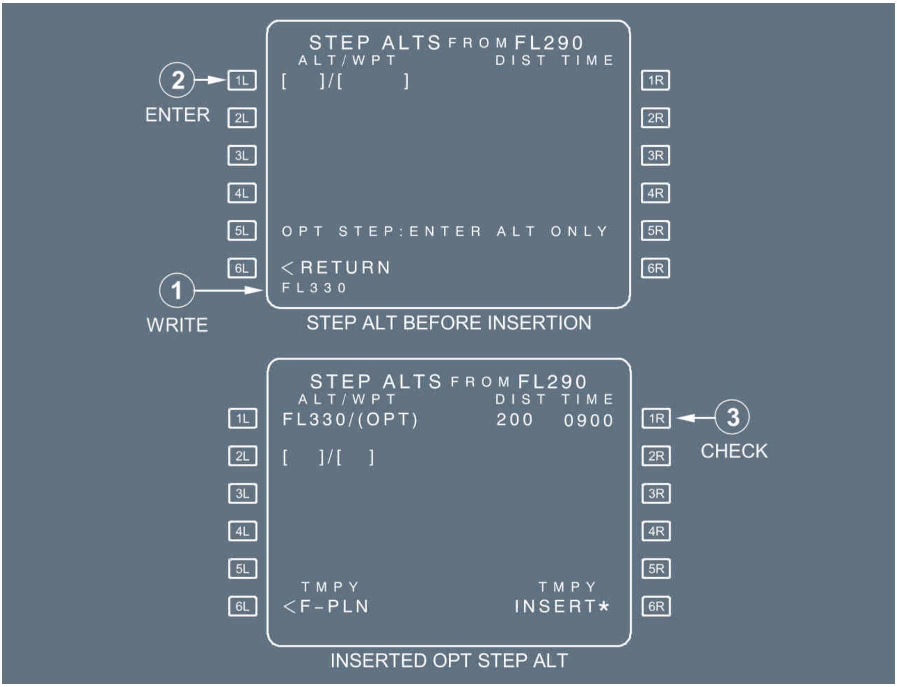
ENTERING AN OPTIMAL STEP (ONLY STEP CLIMB)

WRITE the desired step altitude into the scratchpad.
ENTER it in the [1L] field

The FMGS automatically computes the optimal location of the step and inserts it in the TMPY F-PLN.

CHECK the FUEL and TIME SAVINGS predictions on the [5R].

After insertion, the optimum step location is regularly updated, until the aircraft is within 20 NM of the step point.
The ND shows symbols for the start of climb (S/C) and the top of climb (T/C). The MCDU shows the associated pseudo-waypoints.
It is possible to convert an optimum step to a geographic step by overwriting the [1L] field (see geographic step).


STEP ALTS FROM FL290
ALT/WPT
DIST TIME
[ ]/[ ]
OPT STEP:ENTER ALT ONLY
<RETURN
FL330
2 ENTER
1 WRITE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
STEP ALTS FROM FL290
ALT/WPT
DIST TIME
FL330/(OPT)
200 0900
[ ]/[ ]
TMPY
<F-PLN
TMPY
INSERT*
3 CHECK

STEP ALT BEFORE INSERTION

INSERTED OPT STEP ALT

- **When reaching the step climb pseudo-waypoint (S/C):**
  REQUEST climb clearance to ATC.
  ADJUST the FCU altitude to the STEP ALT, and PUSH the FCU knob.

Note: *The step will be deleted from the F-PLN after having sequenced the start of climb for the step.*

ENTERING A GEOGRAPHIC STEP (STEP CLIMB OR STEP DESCENT)

WRITE a step altitude and waypoint into the scratchpad.

The format is:
- *Altitude (or FL)/waypoint (Ex: FL 350/BERAD)*
- *Altitude (or FL)/waypoint/distance (Ex: FL 350/BERAD/-20)*

The waypoint must be in the flight plan.

ENTER it in [1L] to [4L] field.

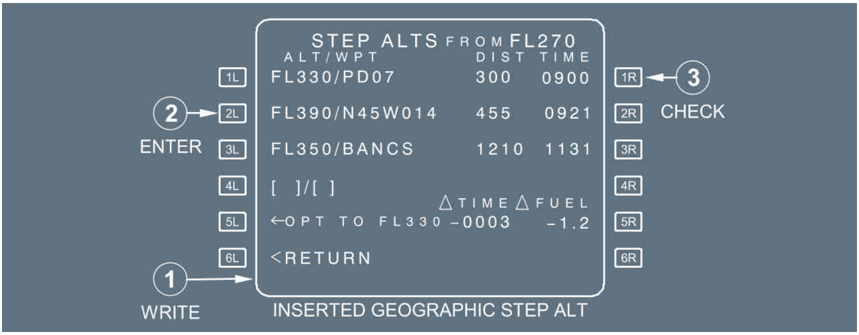
It is possible to independently modify either the location or the altitude of an existing step altitude. It is not possible to modify with a single entry both the location and the altitude : An entry "waypoint/xxx" will be taken by the system as an along track offset of xxx nautical miles.

CHECK the predictions (distance, time).

- **When reaching the step climb or descent pseudo-waypoint (S/C or S/D):**

  REQUEST climb or descent clearance

  ADJUST the FCU altitude to the STEP ALT, and PUSH the FCU knob.



```
      STEP ALTS FROM FL270
 ALT/WPT                  DIST  TIME
FL330/PD07                 300  0900

FL390/N45W014              455  0921

FL350/BANCS               1210  1131

[  ]/[  ]
                      ΔTIME ΔFUEL
←OPT TO FL330         -0003  -1.2

<RETURN
```

INSERTED GEOGRAPHIC STEP ALT

The DIST/TIME field may display the following messages:

- ABOVE MAX if the step altitude exceeds the MAX ALT.
- IGNORED if the step end point is less than 50 NM from the top of descent or if the step climb is located prior to the top of climb or after the top of descent.
- STEP AHEAD when the aircraft is within 20 NM of the step point.

  If the aircraft overflies the step pseudo-waypoint without commencing a climb or a descent, the system deletes the step from the vertical F-PLN automatically (a "STEP DELETED" message is displayed on the MCDU scratchpad), and recomputes the predictions.

  The step is not deleted if the FCU altitude is moved only partially towards the step altitude.

  The flight phase remains "cruise" whenever a step is initiated.

<u>Note:</u> *For an altitude restriction defined at a waypoint less than 50 NM before the top of descent and lower than the CRZ FL, it is recommended to enter an altitude constraint rather than a step.*

IMMEDIATE CHANGE OF LEVEL IN CRUISE

Ident.: PRO-NOR-SRP-01-50-00003997.0001001 / 14 FEB 11
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

When the pilot changes his flight level without inserting a step:

- If the FCU-selected altitude is above the previous CRZ FL, the CRZ FL on the PROG page changes to the new flight level.
- If the FCU-selected altitude is lower than the previous CRZ FL and if the distance to DEST is more than 200 NM, the CRZ FL on the PROG page changes.

  In that case Mach target is managed as follows:
  - At the start of the descent, the Mach target is the managed Mach number at the initial cruise flight level.
  - When the aircraft reaches the new flight level, the Mach target switches either to the Mach number for the lower CRZ FL, or to the speed for the lower CRZ FL if the aircraft reaches the crossover altitude. This logic prevents the aircraft from exceeding VMO during descent.
- If the FCU-selected altitude is lower than the previous CRZ FL and the aircraft is within 200 NM of its destination, the system activates the descent phase.

The pilot may reactivate the cruise phase by entering a new cruise flight level in the PROG page.

IMMEDIATE CHANGE OF LEVEL IN CRUISE

Ident.: PRO-NOR-SRP-01-50-00003997.0002001 / 14 FEB 11
Applicable to: MSN 04827-04860

When the flight crew changes the flight level through a FCU altitude selection:

- If the FCU-selected altitude is above the previous CRZ FL, the CRZ FL on the PROG page changes to the new flight level.
- If the FCU-selected altitude is lower than the previous CRZ FL and if the distance to DEST is more than 200 NM, the CRZ FL on the PROG page changes.

  In that case Mach target is managed as follows:
  - At the start of the descent, the Mach target is the managed Mach number at the initial cruise flight level.
  - When the aircraft reaches the new flight level, the Mach target switches either to the Mach number for the lower CRZ FL, or to the speed for the lower CRZ FL if the aircraft reaches the crossover altitude. This logic prevents the aircraft from exceeding VMO during descent.
- If the FCU-selected altitude is lower than the previous CRZ FL and the aircraft is within 200 NM of its destination, the system activates the descent phase.

The pilot may reactivate the cruise phase by entering a new cruise flight level in the PROG page.

CAUTION	If the pilot modifies the CRZ FL on the PROG page without setting the FCU altitude, the FMS may target a Speed/Mach above VMO/MMO. Changing the FCU altitude makes the FMS behavior become correct again.

PREPARATION FOR DESCENT AND APPROACH

Ident.: PRO-NOR-SRP-01-50-B-00003998.0001001 / 09 DEC 09
Applicable to: ALL

GENERAL

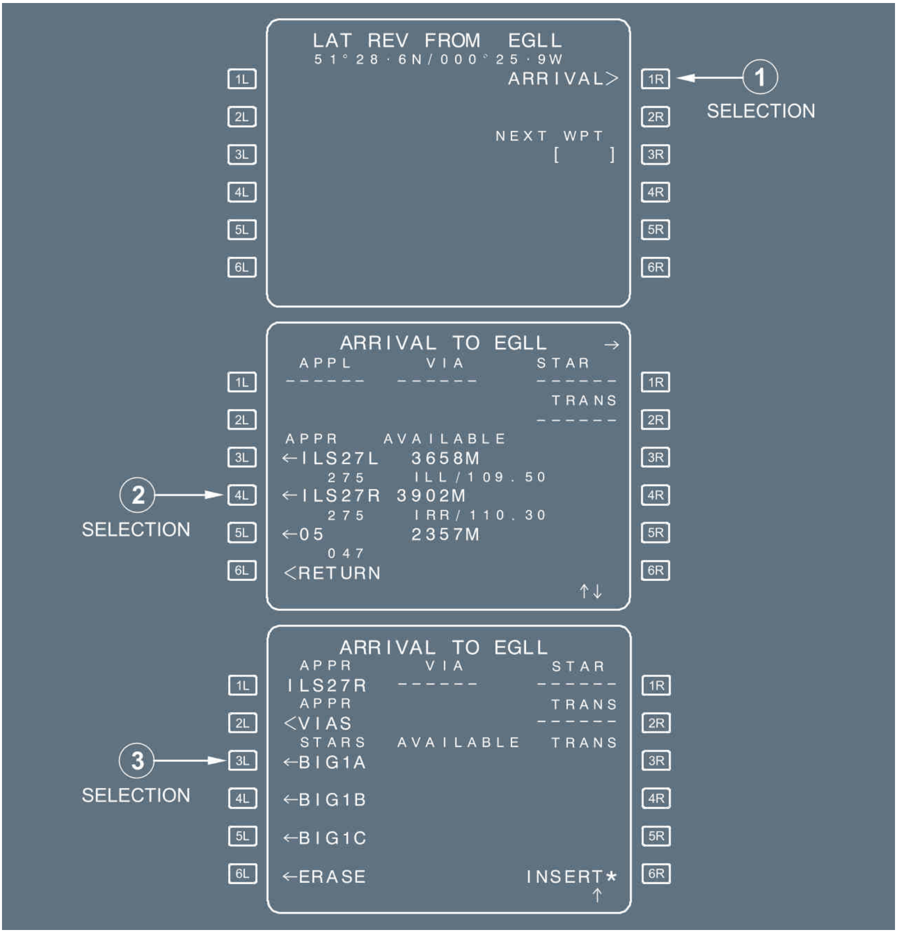
The preparation for descent and approach consists of :
- Entering PERF and WIND data
- Defining the lateral and vertical F-PLN
- Checking the tuning (auto or manual) of the appropriate navaids

After receiving the arrival information, the flight crew should use the following procedure.

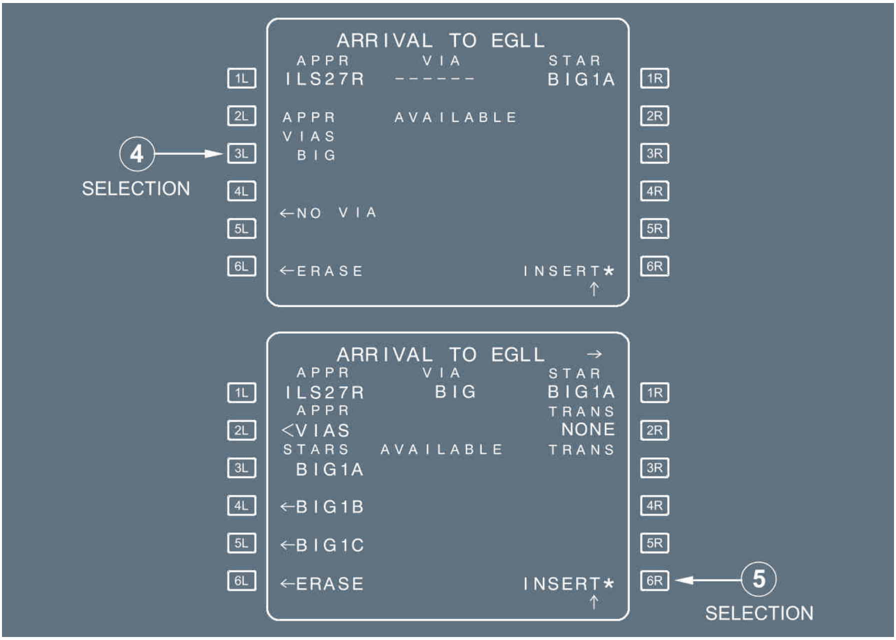
Ident.: PRO-NOR-SRP-01-50-B-00003999.0001001 / 22 MAY 12

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

REVISION OF LATERAL F-PLN


LAT REV FROM EGLL
51°28.6N/000°25.9W
ARRIVAL>
NEXT WPT
[ ]
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
SELECTION
ARRIVAL TO EGLL →
APPL VIA STAR
------ ------ ------
TRANS

APPR AVAILABLE
←ILS27L 3658M
275 ILL/109.50
←ILS27R 3902M
275 IRR/110.30
←05 2357M
047
<RETURN
↑↓
2
SELECTION
ARRIVAL TO EGLL
APPR VIA STAR
ILS27R ------ ------
APPR TRANS
<VIAS ------
STARS AVAILABLE TRANS
←BIG1A
←BIG1B
←BIG1C
←ERASE INSERT*
↑
3
SELECTION


ARRIVAL TO EGLL
APPR
VIA
STAR
ILS27R

BIG1A
APPR
AVAILABLE
VIAS
BIG
←NO VIA
←ERASE
INSERT*
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
4
SELECTION
ARRIVAL TO EGLL →
APPR
VIA
STAR
ILS27R
BIG
BIG1A
APPR
TRANS
<VIAS
NONE
STARS
AVAILABLE
TRANS
BIG1A
←BIG1B
←BIG1C
←ERASE
INSERT*
5
SELECTION

PERFORM a lateral revision at destination

SELECT an ARRIVAL

SELECT an APPROACH, a STAR, a TRANSITION, a VIA.

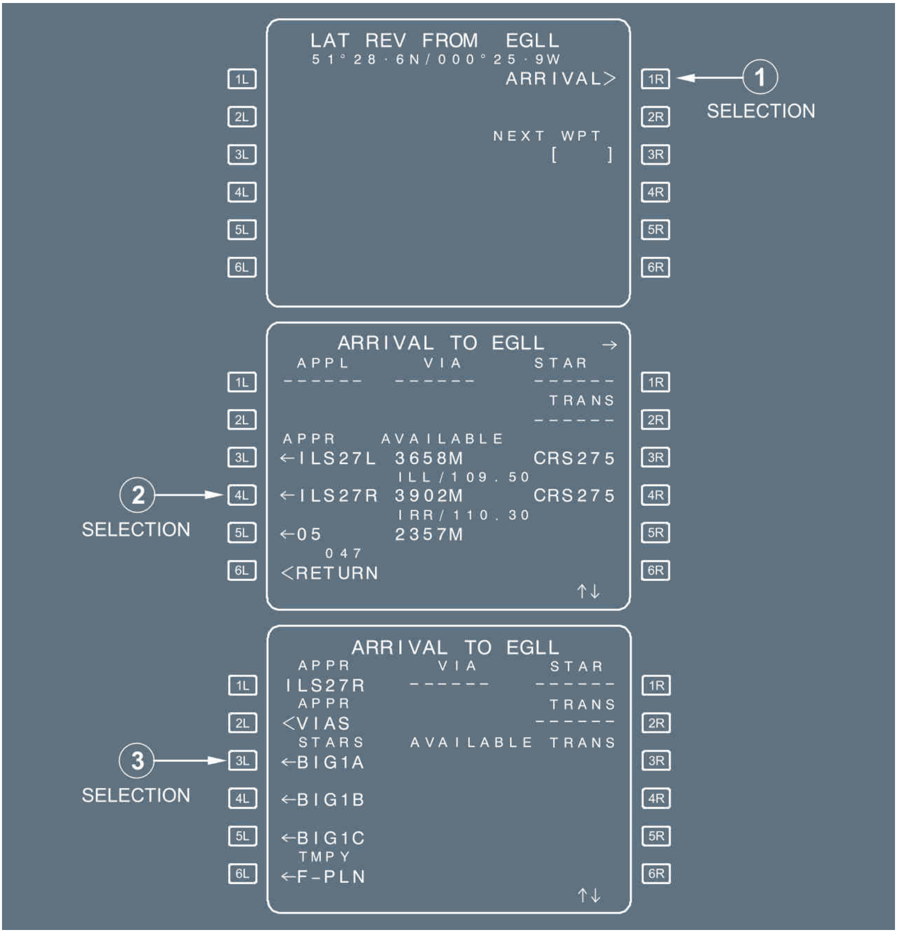
When the pilot selects successive items, the page are automatically sequenced. But pressing "NEXT PAGE" key brings up the APPR and STAR page successively.

CHECK the temporary revision including the missed approach.

INSERT the temporary revision, [6R] key.

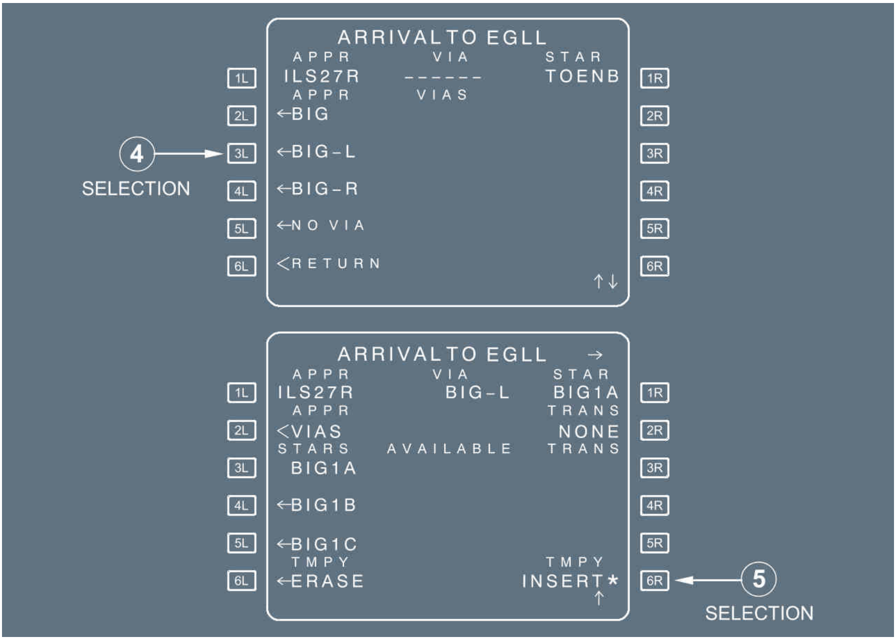
Ident.: PRO-NOR-SRP-01-50-B-00003999.0015001 / 22 MAY 12
Applicable to: MSN 04827-04860

REVISION OF LATERAL F-PLN


```
LAT REV FROM EGLL
51°28.6N/000°25.9W
                        ARRIVAL>

                    NEXT WPT
                        [      ]
```

```
     ARRIVAL TO EGLL           →
  APPL        VIA          STAR
 ------      ------      ------
                          TRANS
                         ------
 APPR      AVAILABLE
←ILS27L   3658M         CRS275
          ILL/109.50
←ILS27R   3902M         CRS275
          IRR/110.30
←05       2357M
    047
<RETURN
                             ↑↓
```

```
     ARRIVAL TO EGLL
  APPR        VIA          STAR
 ILS27R     ------       ------
  APPR                    TRANS
<VIAS                    ------
  STARS     AVAILABLE     TRANS
←BIG1A

←BIG1B

←BIG1C
  TMPY
←F-PLN
                             ↑↓
```
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
SELECTION
2
SELECTION
3
SELECTION



```
    ARRIVAL TO EGLL
 APPR        VIA          STAR
ILS27R      ------       TOENB
 APPR        VIAS
←BIG

←BIG-L

←BIG-R

←NO VIA

<RETURN
                            ↑↓
```

```
    ARRIVAL TO EGLL           →
 APPR        VIA          STAR
ILS27R       BIG-L       BIG1A
 APPR                    TRANS
<VIAS                     NONE
STARS     AVAILABLE      TRANS
 BIG1A

←BIG1B

←BIG1C
 TMPY                     TMPY
←ERASE                 INSERT*
                            ↑
```

PERFORM a lateral revision at destination
SELECT an ARRIVAL prompt.
SELECT an APPROACH.
SELECT A STAR.
If a desired, call up VIA subpage by pressing [2L] prompt on STAR page and SELECT a VIA.

Note: *When the pilot selects successive items, the page are automatically sequenced. But pressing "→" key brings up the APPR and STAR page successively.*

CHECK and INSERT the TMPY F-PLN or continue with next revision.

Ident.: PRO-NOR-SRP-01-50-B-00004000.0001001 / 22 MAY 12

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

REVISION OF VERTICAL FLIGHT PLAN

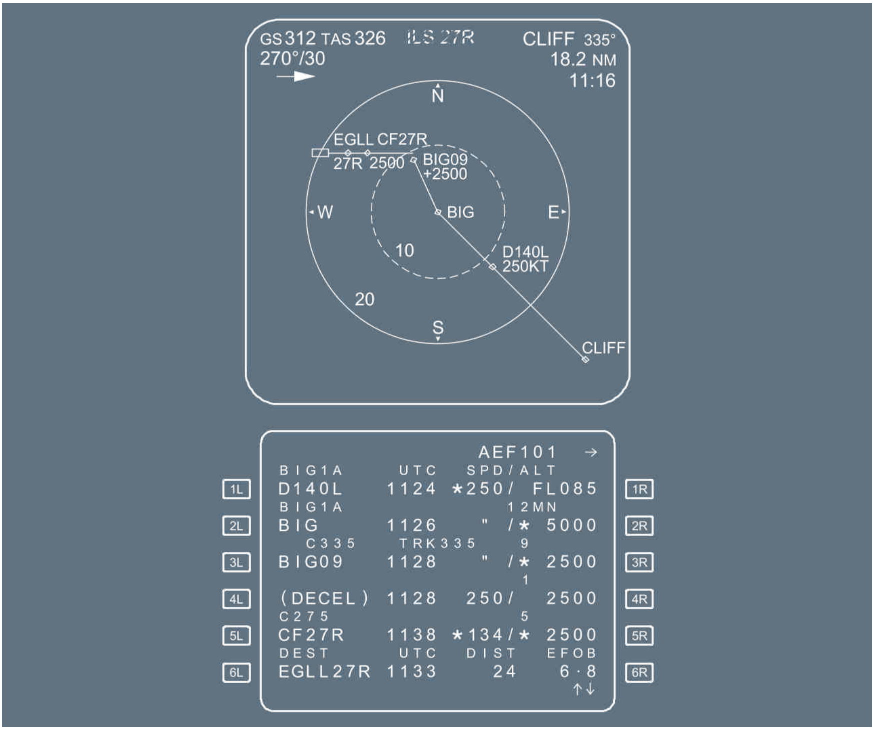
CHECK that the speed and altitude constraints as displayed on the ND. (Use the CSTR pusbutton).

ENTER any additional speed or altitude constraints using the vertical revision page.

In order not to be too fast when commencing the approach, you may insert a speed constraint at the FAF (Final Approach Fix).
When all computations are completed.

REVIEW the flight plan, using the approach chart.

When the destination runway changes and if the previously selected STAR is compatible with the new runway, the system selects it automatically in the temporary F-PLN. If the flight crew has entered any revision or constraint on this STAR, it will not be transferred.
The pilot must reenter it in order to retain it for this approach.


GS 312 TAS 326
ILS 27R
270°/30
CLIFF 335°
18.2 NM
11:16
N
EGLL CF27R
27R 2500
BIG09
+2500
W
BIG
E
10
D140L
250KT
20
S
CLIFF
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
                         AEF101    →
BIG1A          UTC     SPD/ALT
D140L          1124   *250/  FL085
BIG1A                    12MN
BIG            1126     "  /* 5000
     C335      TRK335       9
BIG09          1128     "  /* 2500
                            1
(DECEL)        1128    250/   2500
C275                        5
CF27R          1138   *134/* 2500
DEST           UTC     DIST   EFOB
EGLL27R        1133      24    6.8
                                ↑↓
```

Ident.: PRO-NOR-SRP-01-50-B-00004000.0003001 / 28 NOV 17
Applicable to: MSN 04827-04860

REVISION OF VERTICAL FLIGHT PLAN

CHECK that the speed and altitude constraints as displayed on the ND. (Use the CSTR pushbutton).

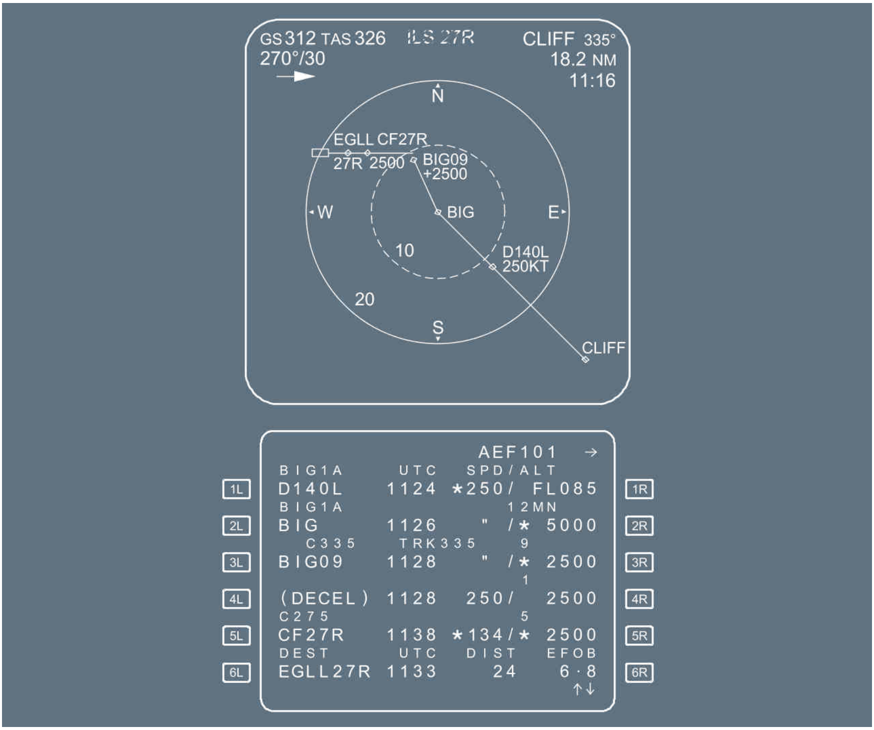
ENTER any additional speed or altitude constraints using the vertical revision page.

In order not to be too fast when commencing the approach, you may insert a speed constraint at the FAF (Final Approach Fix).

When all computations are completed.

REVIEW the flight plan, using the approach chart.

Note: *: When the crew changes the approach or the destination runway, and if the previously selected approach procedure is compatible with the new one, the system automatically inserts it in the temporary F-PLN.*


GS 312 TAS 326
ILS 27R
270°/30
CLIFF 335°
18.2 NM
11:16
N
EGLL CF27R
27R 2500
BIG09
+2500
W
BIG
E
10
D140L
250KT
20
S
CLIFF
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
                                AEF101    →
BIG1A        UTC   SPD/ALT
D140L        1124  *250/  FL085
BIG1A                 12MN
BIG          1126    "  /*  5000
   C335      TRK335     9
BIG09        1128    "  /*  2500
                        1
(DECEL)      1128   250/    2500
C275                    5
CF27R        1138  *134/*   2500
DEST         UTC   DIST     EFOB
EGLL27R      1133    24     6·8
                            ↑↓
```

Ident.: PRO-NOR-SRP-01-50-B-00004001.0002001 / 05 JUN 18

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

ENTERING THE WINDS FOR DESCENT

Refer to DSC-22_20-30-20-25 Wind - Temperature - QNH - General.

Ident.: PRO-NOR-SRP-01-50-B-00004001.0003001 / 05 JUN 18
Applicable to: MSN 04827-04860

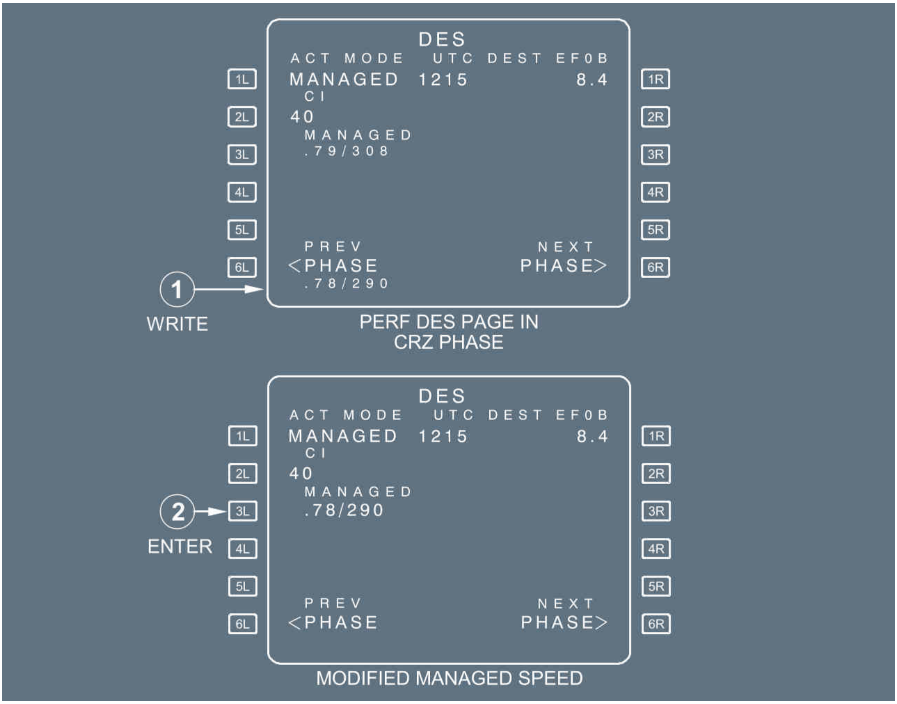
ENTERING THE WINDS FOR DESCENT

Refer to DSC-22_20-30-20-28 Wind - Temperature - QNH - General.

Ident.: PRO-NOR-SRP-01-50-B-00004002.0002001 / 22 MAY 12
7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

PRESELECTING A MANAGED SPEED/MACH

As long as the descent phase is not active, the PERF DES page may either be used to select a speed, or a Mach number, or both, to replace the optimum descent speed.
The Flight Guidance Computer then uses the entered speed, instead of the optimum speed for computing the descent profile.
When the system switches to the descent phase, it sets the MANAGED target speed to the entered speed. From there, the speed may only be modified by using the FCU selector knob.
Once in descent phase, the pilot cannot modify the MANAGED speed again.


DES
ACT MODE
UTC
DEST
EFOB
MANAGED
1215
8.4
CI
40
MANAGED
.79/308
PREV
<PHASE
NEXT
PHASE>
.78/290
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
WRITE
PERF DES PAGE IN
CRZ PHASE
DES
ACT MODE
UTC
DEST
EFOB
MANAGED
1215
8.4
CI
40
MANAGED
.78/290
PREV
<PHASE
NEXT
PHASE>
2
ENTER
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
MODIFIED MANAGED SPEED

PROCEDURE

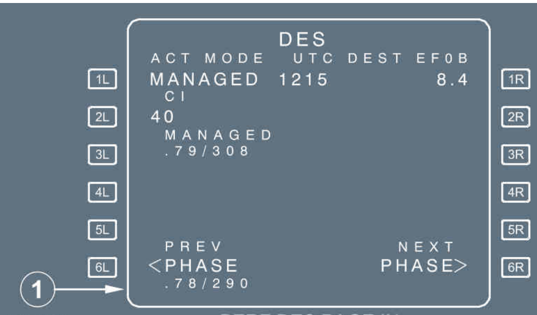
PRESS the PERF on MCDU.
SELECT the “NEXT PHASE” prompt.
WRITE the descent speed into the scratchpad and ENTER it.

The 3L field displays the imposed managed speed value.

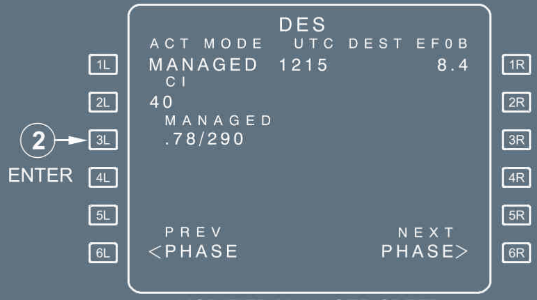
Ident.: PRO-NOR-SRP-01-50-B-00004002.0009001 / 22 MAY 12
Applicable to: MSN 04827-04860

PRESELECTING A MANAGED SPEED/MACH

The PERF DES page may either be used to select a speed, or a Mach number, or both, to replace the optimum descent speed.
The Flight Guidance Computer then uses the entered speed, instead of the optimum speed for computing the descent profile.
When the system switches to the descent phase, it sets the MANAGED target speed to the entered speed. From there, the speed may only be modified by using the FCU selector knob.
Once in descent phase, the pilot cannot modify the MANAGED speed again.


DES
ACT MODE
UTC DEST EFOB
MANAGED
1215
8.4
CI
40
MANAGED
.79/308
PREV
<PHASE
NEXT
PHASE>
.78/290
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
1
WRITE

PERF DES PAGE IN CRZ PHASE


DES
ACT MODE
UTC DEST EFOB
MANAGED
1215
8.4
CI
40
MANAGED
.78/290
PREV
<PHASE
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
2
ENTER

MODIFIED MANAGED SPEED

PROCEDURE

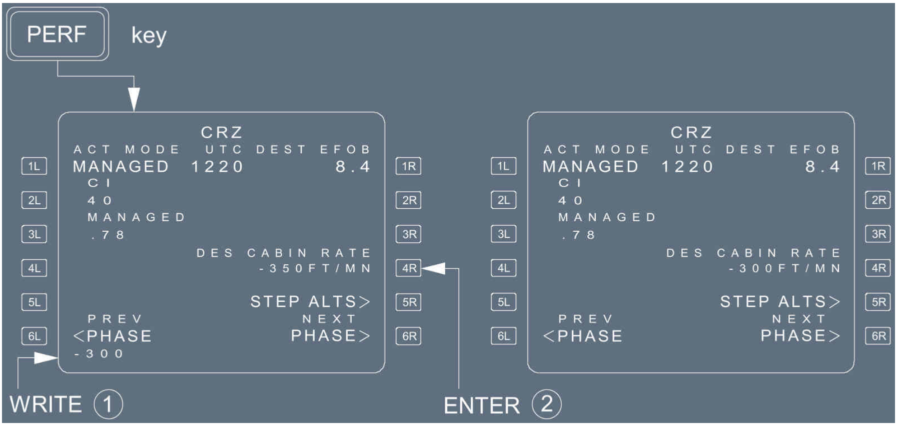
PRESS the PERF on MCDU.
SELECT the “NEXT PHASE” prompt.
WRITE the descent speed into the scratchpad and ENTER it.

The 3L field displays the imposed managed speed value.

Ident.: PRO-NOR-SRP-01-50-B-00004003.0003001 / 16 NOV 11

8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

MODIFICATION OF THE CABIN RATE

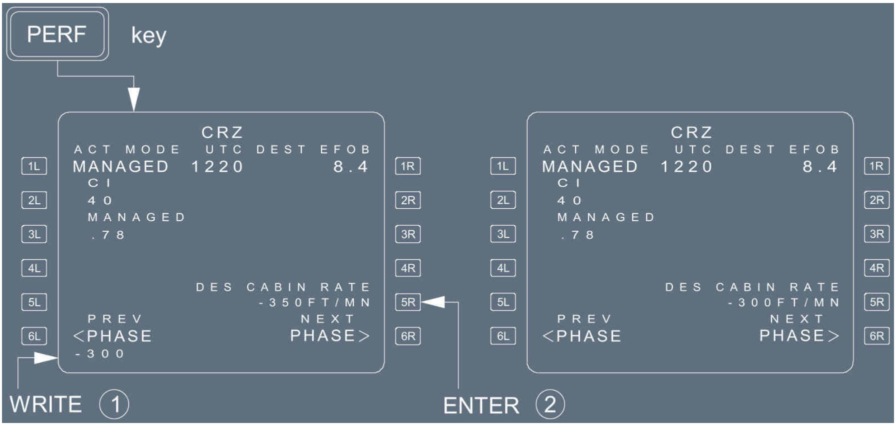

PERF
key
CRZ
ACT MODE
UTC DEST EFOB
MANAGED
1220
8.4
CI
40
MANAGED
.78
DES CABIN RATE
-350FT/MN
STEP ALTS>
PREV
<PHASE
NEXT
PHASE>
-300
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
CRZ
ACT MODE
UTC DEST EFOB
MANAGED
1220
8.4
CI
40
MANAGED
.78
DES CABIN RATE
-300FT/MN
STEP ALTS>
PREV
<PHASE
NEXT
PHASE>
WRITE ①
ENTER ②

PROCEDURE

PRESS the MCDU's PERF.
WRITE the new cabin rate in the scratchpad.
ENTER it in the [4R] field.

Ident.: PRO-NOR-SRP-01-50-B-00004003.0004001 / 16 NOV 11
Applicable to: MSN 04827-04860

MODIFICATION OF THE CABIN RATE


PERF
key
CRZ
ACT MODE
UTC DEST
EFOB
MANAGED
1220
8.4
CI
40
MANAGED
.78
DES CABIN RATE
-350FT/MN
PREV
<PHASE
NEXT
PHASE>
-300
CRZ
ACT MODE
UTC DEST
EFOB
MANAGED
1220
8.4
CI
40
MANAGED
.78
DES CABIN RATE
-300FT/MN
PREV
<PHASE
NEXT
PHASE>
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
WRITE ①
ENTER ②

PROCEDURE

PRESS the MCDU's PERF.
WRITE the new cabin rate in the scratchpad.
ENTER it in the [5R] field.

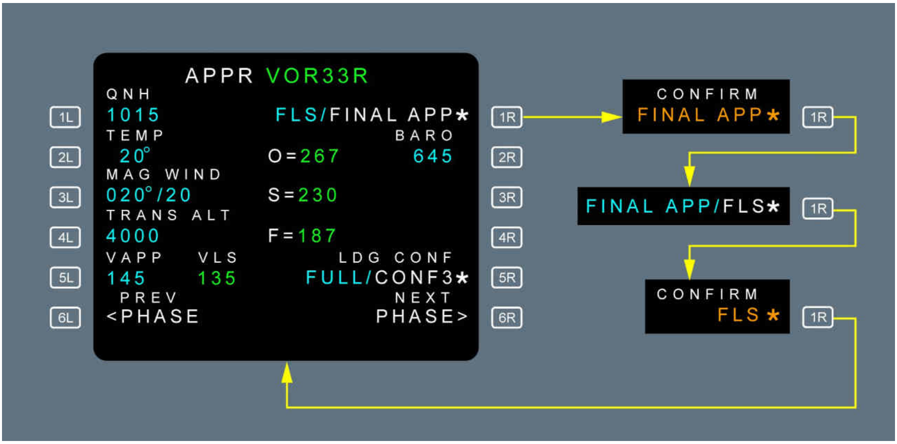
9 Ident.: PRO-NOR-SRP-01-50-B-00004004.0028001 / 04 SEP 18
Applicable to: MSN 11531

ENTERING THE APPROACH DATA

From PERF DES page, SELECT “NEXT PHASE” [6R] key to display the APPR page.
Select the appropriate guidance mode (FLS or FINAL APP), if a non precision approach is inserted in the F-PLN.

Note: 1. *FLS is the recommended guidance mode for non precision approaches, except for RNAV(RNP) approaches.*
2. *If an RNAV(RNP) approach is selected or if the FLS guidance mode is not available for the selected approach, FINAL APP guidance mode is automatically selected. In such case FINAL APP is displayed in green on the MCDU page.*

Note: *If a non precision approach is inserted in the F-PLN, the default guidance mode is FLS.*



```
        APPR VOR33R
QNH
1015            FLS/FINAL APP*
TEMP                      BARO
 20°        O=267          645
MAG WIND
020°/20     S=230
TRANS ALT
4000        F=187
VAPP    VLS         LDG CONF
145     135       FULL/CONF3*
  PREV                  NEXT
<PHASE                PHASE>
```

ENTER QNH, TEMP, WIND at destination (magnetic north reference), minimum in the RADIO or BARO fields.

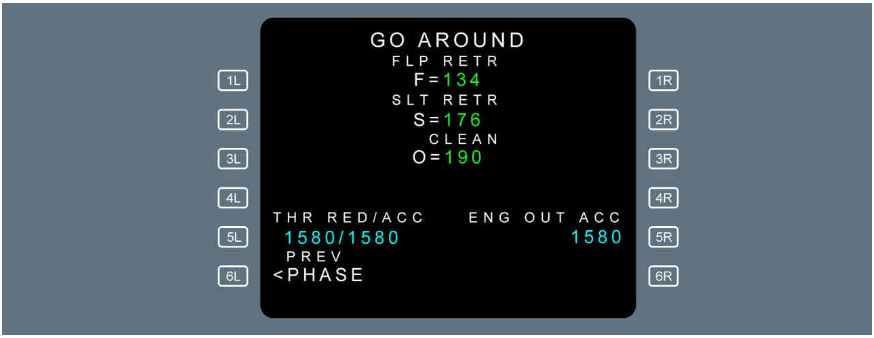
(The PFD displays the BARO or RADIO minimum value only when the distance to destination is less than 250 NM.)

CHECK and, if necessary, MODIFY
- LDG CONF (landing configuration),
- VAPP (the FM-computed value may be modified),
- TRANS ALT (transition altitude).

Note: *The scratchpad displays "ENTER DES DATA" if the PERF APPR page has not been completed when the aircraft is less than 180 NM from destination.*

SELECT "NEXT PHASE" in order to display the GO AROUND page.

CHECK and, if necessary, MODIFY the THR RED ALT and the ACC ALT.



```
       GO AROUND
        FLP RETR
          F=134
        SLT RETR
          S=176
            CLEAN
          O=190

THR RED/ACC     ENG OUT ACC
 1580/1580             1580
  PREV
<PHASE
```

Ident.: PRO-NOR-SRP-01-50-B-00004004.0002001 / 22 MAY 12

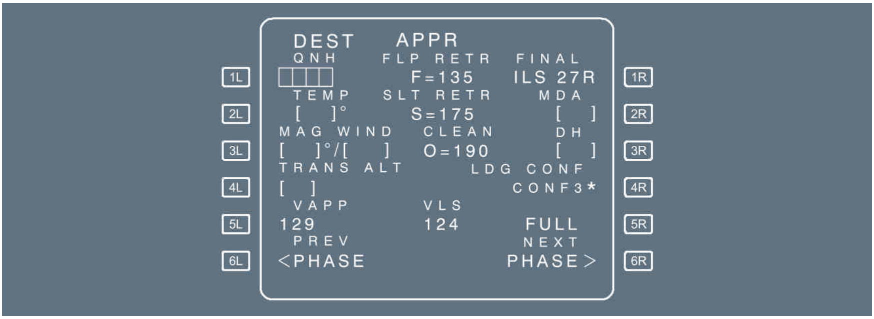
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

ENTERING THE APPROACH DATA

From PERF DES page, SELECT “NEXT PHASE” [6R] key to display the APPR page.
ENTER QNH, TEMP, WIND at destination (magnetic north reference), DH or MDA (MDH depending on the OPC option).

(The PFD displays the MDA/MDH or DH only when the distance to destination is less than 250 NM).

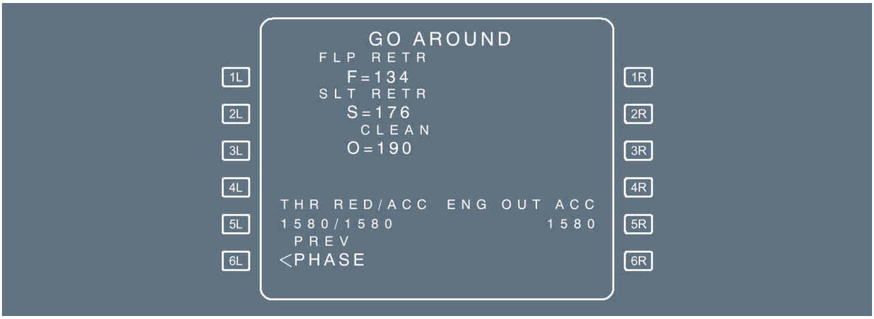
CHECK and, if necessary, MODIFY
- LDG CONF (landing configuration),
- VAPP (the FM-computed value may be modified),
- TRANS ALT (transition altitude).



```
  DEST     APPR
  QNH     FLP RETR    FINAL
□□□□        F=135    ILS 27R
  TEMP    SLT RETR      MDA
  [  ]°     S=175     [   ]
MAG WIND    CLEAN        DH
[  ]°/[  ]  O=190     [   ]
TRANS ALT          LDG CONF
[  ]                 CONF3*
  VAPP      VLS
129         124        FULL
  PREV                 NEXT
<PHASE               PHASE>
```

The scratchpad displays “ENTER DEST DATA” if the approach page is not completed when the aircraft is 180 NM from destination.

SELECT “NEXT PHASE” in order to display the GO AROUND page.
CHECK and, if necessary, MODIFY the THR RED ALT and the ACC ALT.



```
        GO AROUND
    FLP RETR
      F=134
    SLT RETR
      S=176
        CLEAN
      O=190


THR RED/ACC   ENG OUT ACC
1580/1580            1580
 PREV
<PHASE
```

Ident.: PRO-NOR-SRP-01-50-B-00004004.0010001 / 22 MAY 12

Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597

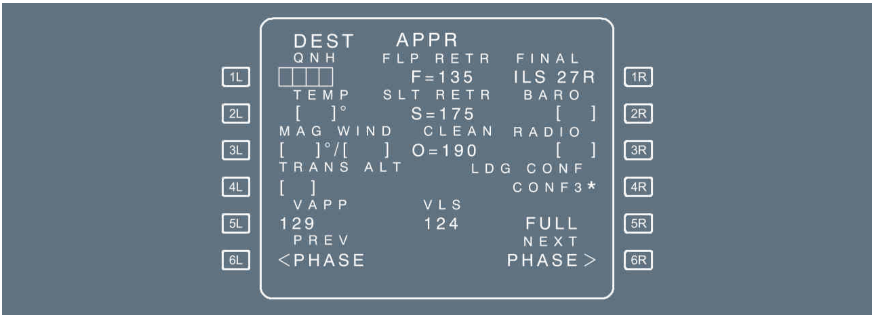
ENTERING THE APPROACH DATA

From PERF DES page, SELECT “NEXT PHASE” [6R] key to display the APPR page.
ENTER QNH, TEMP, WIND at destination (magnetic north reference), minimum in the RADIO or BARO fields.

(The PFD displays the entered BARO or RADIO minimum value, only when the distance to destination is less than 250 NM).

CHECK and, if necessary, MODIFY

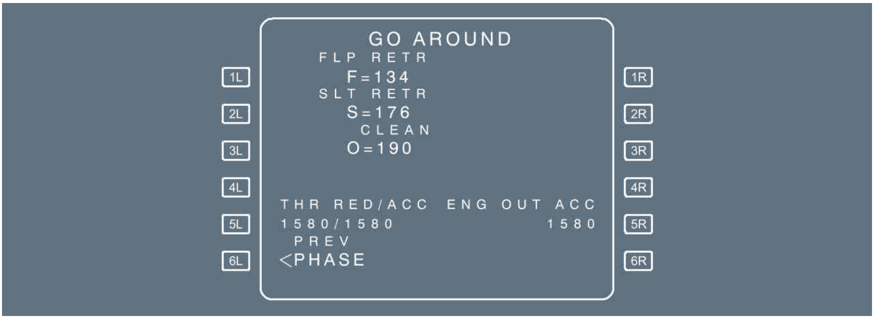
- LDG CONF (landing configuration),
- VAPP (the FM-computed value may be modified),
- TRANS ALT (transition altitude).



```
 DEST     APPR
 QNH      FLP RETR    FINAL
□□□□       F=135     ILS 27R
 TEMP     SLT RETR     BARO
 [   ]°    S=175      [    ]
MAG WIND    CLEAN     RADIO
[  ]°/[  ] O=190      [    ]
TRANS ALT       LDG CONF
[  ]                CONF3*
 VAPP         VLS
129           124      FULL
 PREV                  NEXT
<PHASE               PHASE>
```

The scratchpad displays “ENTER DEST DATA” if the approach page is not completed when the aircraft is 180 NM from destination.

SELECT “NEXT PHASE” in order to display the GO AROUND page.
CHECK and, if necessary, MODIFY the THR RED ALT and the ACC ALT.



```
          GO AROUND
    FLP RETR
       F=134
    SLT RETR
       S=176
         CLEAN
       O=190


THR RED/ACC  ENG OUT ACC
1580/1580           1580
  PREV
<PHASE
```

Ident.: PRO-NOR-SRP-01-50-B-00004004.0027001 / 19 APR 17
Applicable to: MSN 04827-04860

ENTERING THE APPROACH DATA

From PERF DES page, SELECT “NEXT PHASE” [6R] key to display the APPR page.
ENTER QNH, TEMP, WIND at destination (magnetic north reference), minimum in the RADIO or BARO fields.

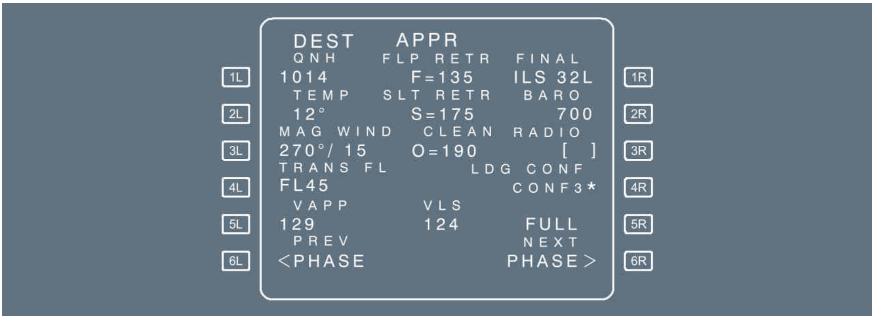
(The PFD displays the entered BARO or RADIO minimum value, only when the distance to destination is less than 250 NM).

CHECK and, if necessary, MODIFY the LDG CONF (landing configuration)
CHECK, and if necessary MODIFY the VAPP

The FMS-computed value may be modified

CHECK the TRANS FL value

(see note 1 below)

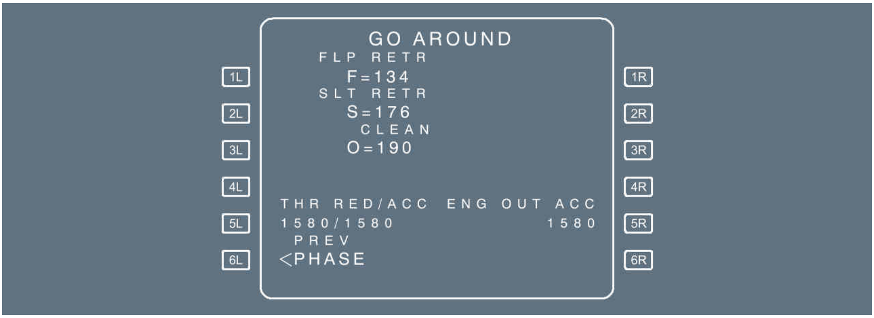


```
  DEST     APPR
  QNH     FLP RETR    FINAL
1014        F=135   ILS 32L
  TEMP    SLT RETR     BARO
  12°       S=175       700
MAG WIND    CLEAN     RADIO
270°/ 15    O=190     [   ]
TRANS FL          LDG CONF
FL45                CONF3*
  VAPP      VLS
129         124        FULL
  PREV                 NEXT
<PHASE               PHASE>
```

Note: *1. The default TRANS FL value is computed by the FMS based on:*
- *The Transition Altitude of the destination airport (extracted from the NAV Database),*
- *The QNH value entered on PERF APPR page. Due to the internal FMS computation of altitude constraints, it is rounded to the upper multiple of 5.*
  If this computed TRANS FL value differs by more than 500 ft from the Transition Level specified on the approach chart or reported by ATC, the flight crew may modify the TRANS FL value.

2. The scratchpad displays "ENTER DEST DATA" if the PERF APPR page has not been completed when the aircraft is less than 180 NM from destination.

SELECT "NEXT PHASE" in order to display the GO AROUND page.
CHECK and, if necessary, MODIFY the THR RED ALT and the ACC ALT.



```
          GO AROUND
     FLP RETR
        F=134
     SLT RETR
        S=176
          CLEAN
        O=190

THR RED/ACC   ENG OUT ACC
1580/1580            1580
  PREV
<PHASE
```

Ident.: PRO-NOR-SRP-01-50-B-00004005.0001001 / 22 MAY 12

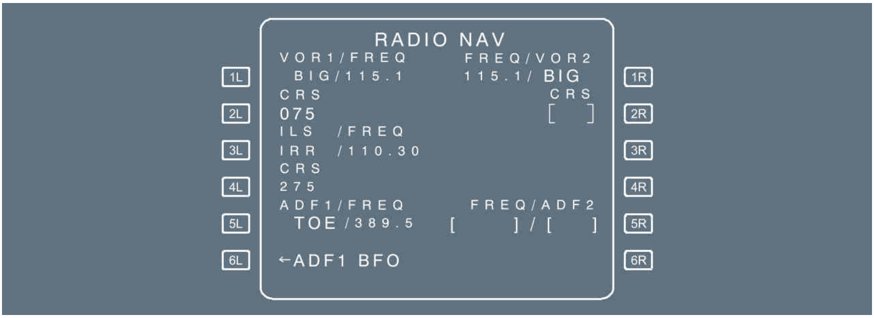
11 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

SELECTING THE RADIO NAVAIDS

CHECK or SELECT the NAVAIDS appropriate for the approach.

For an ILS procedure, the ILS will be autotuned.
NDBs must be manually entered.

Note: *When the destination has a VOR/DME, ENTER it manually in the VOR field. ENTER its identifier in the BRG/DIST field of the PROG page. This allows you to perform a permanent NAV accuracy check.*



```
           RADIO NAV
VOR1/FREQ            FREQ/VOR2
  BIG/115.1          115.1/ BIG
CRS                        CRS
075                       [   ]
ILS  /FREQ
IRR  /110.30
CRS
275
ADF1/FREQ            FREQ/ADF2
  TOE /389.5      [      ] / [    ]

←ADF1 BFO
```

Ident.: PRO-NOR-SRP-01-50-B-00004005.0006001 / 12 MAY 22

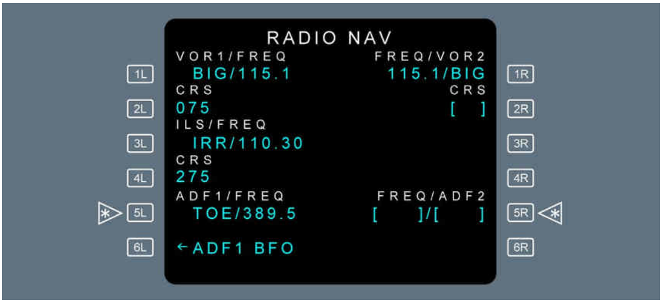
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

SELECTING THE RADIO NAVAIDS

CHECK or SELECT the NAVAIDS appropriate for the approach.

For an ILS / GLS / SLS ◁ procedure, the ILS / GLS / SLS ◁ will be autotuned.
NDBs must be manually entered.

Note: When the destination has a VOR/DME, ENTER it manually in the VOR field. ENTER its identifier in the BRG/DIST field of the PROG page. This allows you to perform a permanent NAV accuracy check.



```
           RADIO NAV
VOR1/FREQ            FREQ/VOR2
  BIG/115.1          115.1/BIG
CRS                        CRS
075                       [  ]
ILS/FREQ
  IRR/110.30
CRS
275
ADF1/FREQ            FREQ/ADF2
  TOE/389.5          [    ]/[    ]

←ADF1 BFO
```

Ident.: PRO-NOR-SRP-01-50-B-00004006.0003001 / 08 DEC 16

Applicable to: ALL

COST INDEX FOR LONG-RANGE CRUISE

The flight crew can use the table below to find an approximate Cost Index value that is calculated for cruise at long-range cruise speed. This value is valid for CRZ FL = OPT ALT ± 1 000 ft.

AIRCRAFT	ENGINE	CILRC	
		kg/min	100 lb/h
A318/A319/A320/A321	CFM 56-5-A1/A3	45	60
	CFM 56-5-A4/A5	40	55
	CFM 56-5-B1/B2/B3	65	85
	CFM 56-5-B4 (A321)	65	85
	CFM 56-5-B4 (A320)	55	75
	CFM 56-5-B4/P	25	35
	CFM 56-5-B5/B6/B7	25	35
	CFM 56-5-B5/2P CFM 56-5-B6/2P CFM 56-5-B7/2P	30	40
	CFM 56-5-B8/B9	15	20
	CFM LEAP-1A	40	55
	PW6122/PW6124	20	30
	PW1100G-JM	40	55
	V2500-A1	45	60
	V2522-A5/V2524-A5/ V2527M-A5	50	70
	V2530-A5/V2533-A5	50	70
	V2527-A5/V2527E-A5	40	55

Intentionally left blank

Descent

DESCENT INITIATION

Ident.: PRO-NOR-SRP-01-60-00004007.0001001 / 17 MAY 21
Applicable to: ALL

The top of descent, displayed on the F-PLN page (T/D) and on the ND (↘), is a position that the system calculates, assuming that the aircraft will begin its descent in DES mode with managed speed, and that the system will guide the aircraft along the descent profile computed with all the vertical F-PLN data (ALT CSTR, ECON or AUTO MACH/SPD, SPD CSTR, SPD LIMIT) to reach VAPP at 1 000 ft AGL.

Note: *The ND does not display the top of descent ↘ when HDG (or TRACK) mode is engaged.*

PROCEDURES

- **When the aircraft reaches the top of descent (T/D) :**

  SELECT the altitude target.

  PUSH the ALT selector knob. DES mode engages.

  CHECK the FMA annunciators.

DESCENT MONITORING

Ident.: PRO-NOR-SRP-01-60-A-00004008.0004001 / 06 JUN 16
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

DES MODE ENGAGED

When DES mode is engaged, NAV mode is engaged, and the system takes into account all altitude and speed constraints of the F-PLN.
The key parameter for monitoring the descent is the vertical deviation (VDEV) displayed on the PFD and on the PROG page, which indicates whether the aircraft is on, above, or below the descent profile.

PROCEDURE

SET the ATC-cleared altitude on the FCU (considering also what is the safe altitude).

If the lowest safe altitude is higher than the ATC-cleared altitude, check with ATC that this constraint applies.
If it is confirmed, SET the FCU altitude to the safe altitude until it is safe to go to the ATC-cleared altitude.

MONITOR the vertical deviation (VDEV) on the PFD and the PROG page.

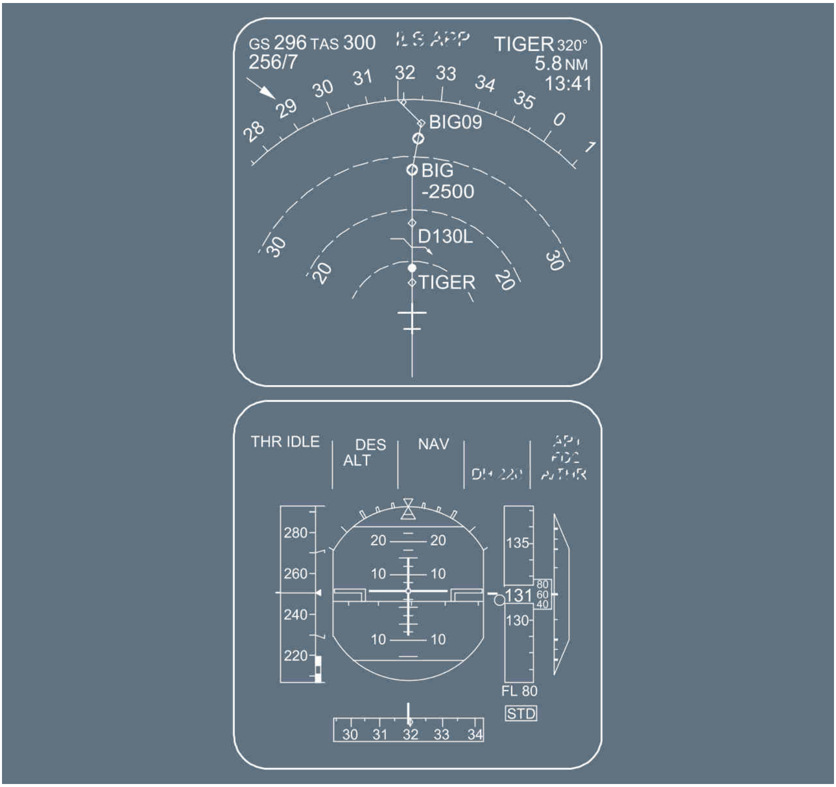
MONITOR the speed change that occurs, when the aircraft reaches a speed change symbol (magenta ball) under managed speed.
MONITOR the FMA (ALT*, ALT CST*, ALT, ALT CST) when the aircraft reaches level symbols.

- **If the aircraft is on the descent profile:**

  The aircraft is considered to be on the vertical profile, when it is within 50 ft of it. VDEV is close to zero, and the system predicts that it will match constraints until the aircraft levels off at the next FCU altitude.

  MONITOR the predicted descent point after the next level-off.

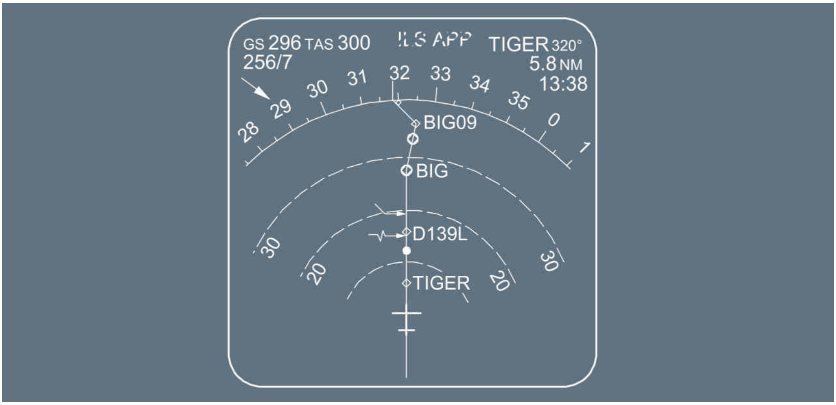
  The A/THR adjusts the thrust for the particular segment. The first FMA column may display "THR IDLE" or "SPEED".

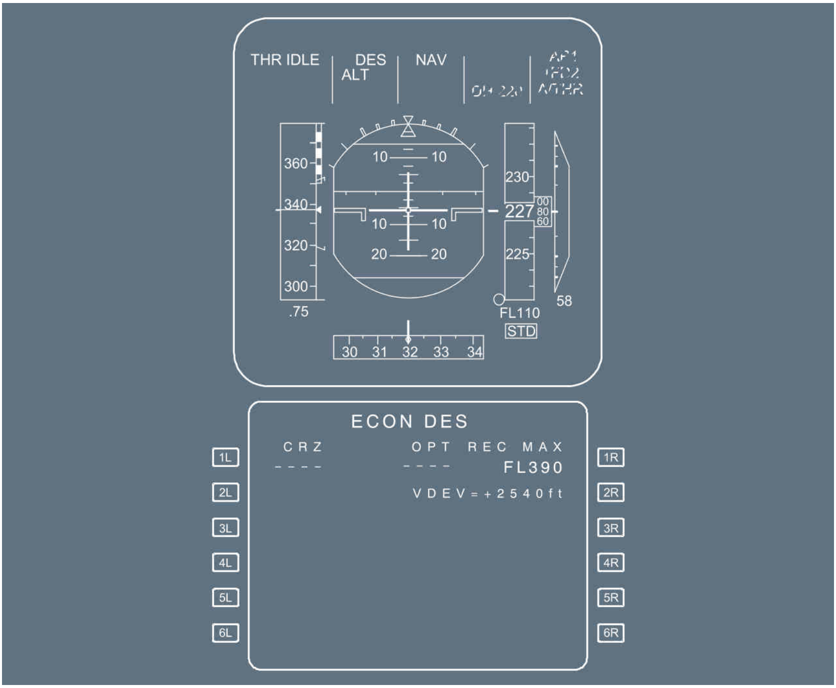

GS 296 TAS 300
256/7
ILS APP
TIGER 320°
5.8 NM
13:41
28
29
30
31
32
33
34
35
0
1
BIG09
BIG
-2500
D130L
TIGER
30
20
20
30
THR IDLE
DES
ALT
NAV
DH 220
AP1
FD2
A/THR
280
260
240
220
20
10
10
20
10
10
135
131
130
80
60
40
FL 80
STD
30
31
32
33
34

- **If the aircraft is above the descent profile:**

  VDEV is down on the PFD and positive on the PROG page.

The A/THR sets IDLE thrust and the AP increases speed by calling for down elevator. If the aircraft reaches the upper limit of the managed speed range, the aircraft diverges and maintains the upper limit speed.


GS 296 TAS 300
256/7
ILS APP
TIGER 320°
5.8 NM
13:38
28
29
30
31
32
33
34
35
0
1
BIG09
BIG
D139L
TIGER
30
20
20
30


THR IDLE
DES
ALT
NAV
DH 220
AP1
1FD2
A/THR
360
340
320
300
.75
10
10
10
10
20
20
230
227
00
80
60
225
58
FL110
STD
30
31
32
33
34
ECON DES
CRZ

OPT

REC MAX
FL390
VDEV=+2540ft
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

Procedure

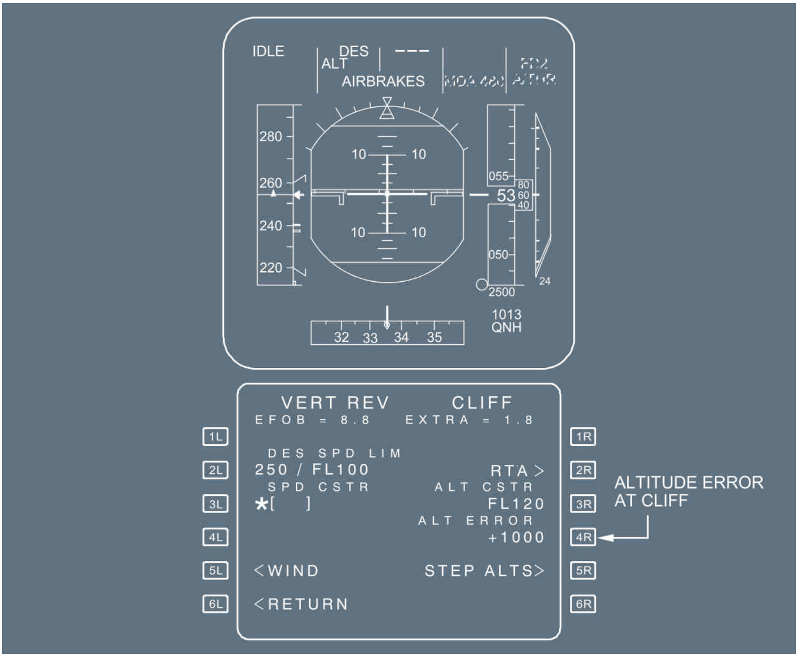
SELECT a descent speed higher than the upper limit when possible.

MONITOR the intercept symbol ⤳.

When this symbol reaches the next ALT CSTR waypoint “MORE DRAG” appears on the PFD indicating that speedbrakes must be extended in order to match the next altitude constraint. This is an advisory message.

Note: *With DPO ⩤ , when above the descent profile, the flight crew may have to extend the speed brakes in order to go back on the descent profile.*

- **If an altitude constraint is predicted to be missed by more than 250 ft,** the vertical revision page shows ALT ERROR at the waypoint.


IDLE
DES
ALT
AIRBRAKES
MDA 480
FD2
A/THR
280
260
240
220
10
10
10
10
055
80
53
60
40
050
2500
24
1013
QNH
32
33
34
35
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

VERT REV CLIFF
EFOB = 8.8 EXTRA = 1.8
DES SPD LIM
250 / FL100 RTA >
SPD CSTR ALT CSTR
*[ ] FL120
ALT ERROR
+1000
<WIND STEP ALTS>
<RETURN

ALTITUDE ERROR AT CLIFF

- **If a speed constraint is predicted to be missed by more than 10 kt:**
  SELECT an appropriate speed.
  RESUME managed speed when the aircraft is back on the descent path.

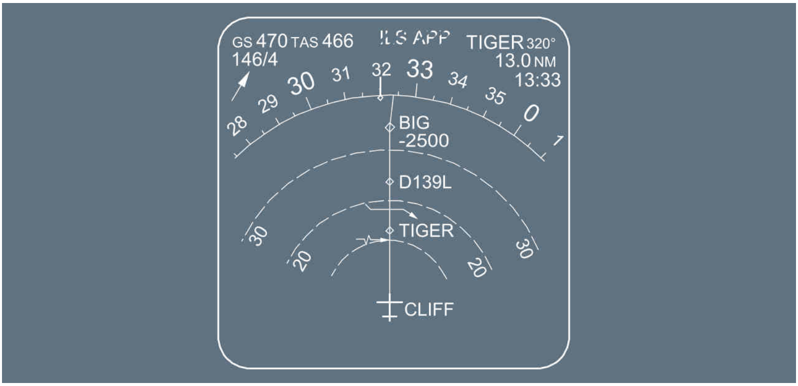
- **If the aircraft is below the descent profile:**
  VDEV is up on the PFD and negative on the PROG page. The system maintains the target speed (managed or selected speed).

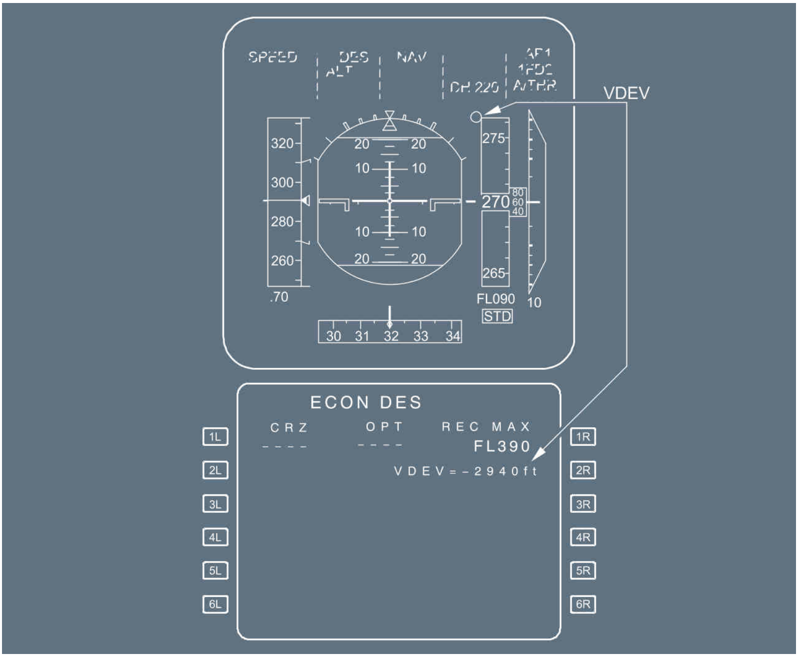
  MONITOR the intercept symbol ([⌁]) on the ND and any leveling off at the next ALT CSTR.

  - **If the aircraft is flying at an altitude that is higher than both the descent speed limit altitude and the destination elevation +5 000 ft:**

    The FMGS maintains the V/S at -1 000 ft/min and the target speed, until the aircraft reaches the altitude constraint or intercepts the descent profile.

  - **If the aircraft is flying at an altitude that is lower than either the descent speed limit altitude, or the destination elevation +5 000 ft:**
    The FMGS maintains the V/S at -500 ft/min and the target speed, until the aircraft reaches the altitude constraint or intercepts the descent profile.




SPEED
DES
ALT
NAV
CH 220
AP1
1FD2
A/THR
VDEV
320
300
280
260
.70
20
10
275
270
80
60
40
265
FL090
STD
10
30
31
32
33
34
ECON DES
CRZ
OPT
REC MAX

FL390
VDEV=-2940ft
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

- **If the rate of descent has to be increased (ATC requirement):**

  SELECT OP DES mode

  Increase the target speed or extend the speedbrakes.

Ident.: PRO-NOR-SRP-01-60-A-00004008.0007001 / 06 JUN 16

1 **Applicable to: MSN 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

DES MODE ENGAGED

When DES mode is engaged, NAV mode is engaged, and the system takes into account all altitude and speed constraints of the F-PLN.
The key parameter for monitoring the descent is the vertical deviation (VDEV) displayed on the PFD and on the PROG page, which indicates whether the aircraft is on, above, or below the descent profile.

PROCEDURE

SET the ATC-cleared altitude on the FCU (considering also what is the safe altitude).
If the lowest safe altitude is higher than the ATC-cleared altitude, check with ATC that this constraint applies.

If it is confirmed, SET the FCU altitude to the safe altitude until it is safe to go to the ATC-cleared altitude.

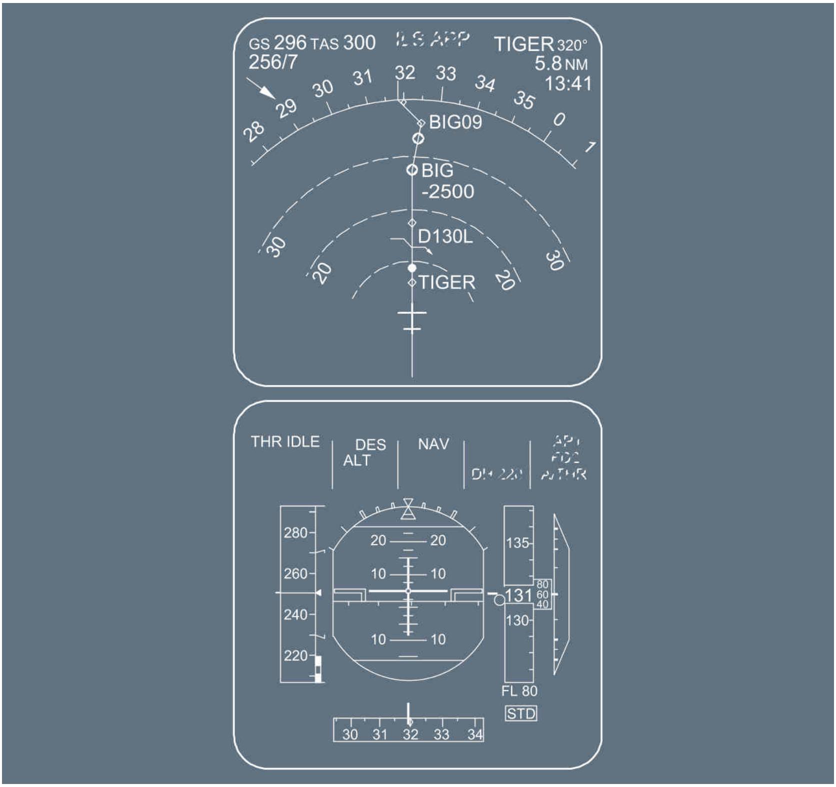
MONITOR vertical deviation (VDEV) on the PFD and the PROG page.
MONITOR the speed change that occurs, when the aircraft reaches a speed change symbol (magenta ball) under managed speed.
MONITOR the FMA (ALT*, ALT CST*, ALT, ALT CST), when the aircraft reaches level symbols.

■ **If the aircraft is on the descent profile:**

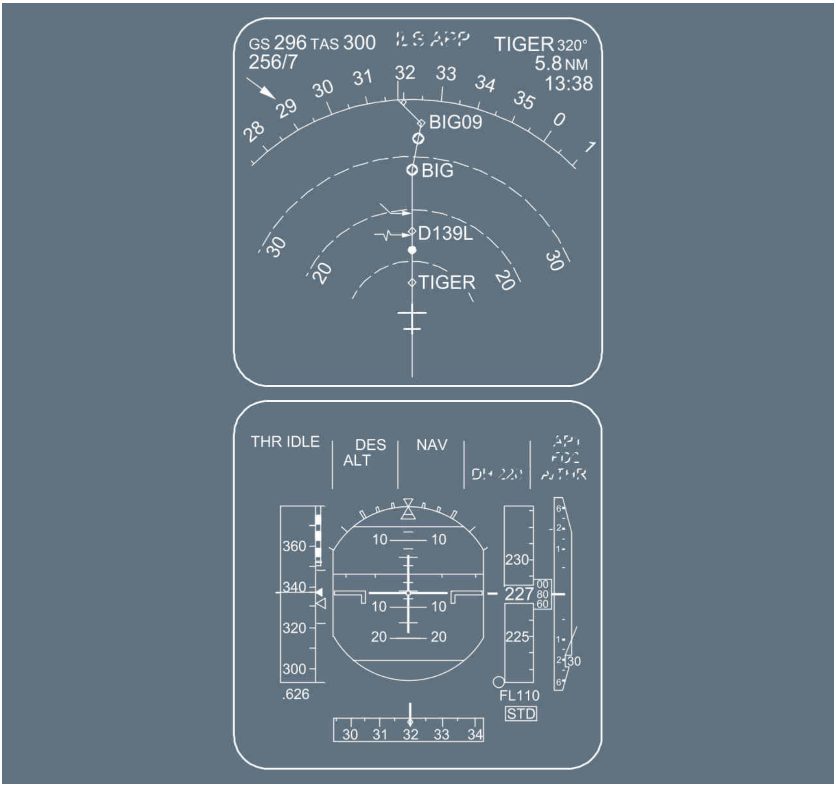
The aircraft is considered to be on the vertical profile, when it is within 50 ft of it. VDEV is close to zero, and the system predicts that it will match constraints until the aircraft levels off at the next FCU altitude.

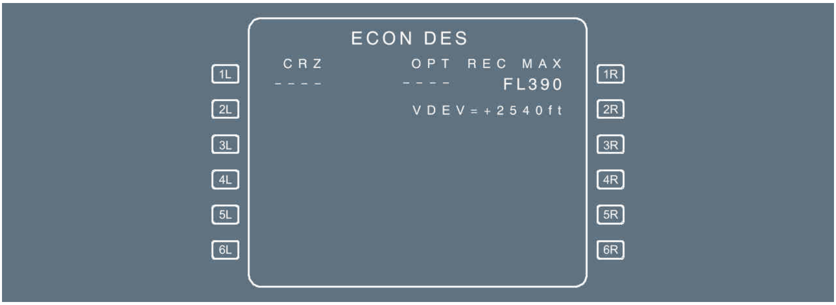
MONITOR the predicted descent point after the next level-off.

A/THR adjusts thrust for the particular segment. The first FMA column may display "THR IDLE" or "SPEED".


GS 296 TAS 300
256/7
ILS APP
TIGER 320°
5.8 NM
13:41
BIG09
BIG
-2500
D130L
TIGER
THR IDLE
DES
ALT
NAV
AP1
FD2
A/THR
DH 220
FL 80
STD
131

- **If the aircraft is above the descent profile:**
  VDEV is down on the PFD and positive on the PROG page.
  A/THR sets IDLE thrust and the AP increases speed by calling for down elevator. If the aircraft reaches the upper limit of the managed speed range, the aircraft diverges and maintains the upper limit speed.


GS 296 TAS 300
256/7
ILS APP
TIGER 320°
5.8 NM
13:38
28 29 30 31 32 33 34 35 0 1
BIG09
BIG
D139L
TIGER
30
20
20
30
THR IDLE
DES
ALT
NAV
DH 220
AP1
FD2
A/THR
360
340
320
300
.626
10
10
10
10
20
20
230
227
00
80
60
225
FL110
STD
6
2
1
1
2
6
30
30 31 32 33 34


ECON DES

CRZ OPT REC MAX

---- ---- FL390

VDEV=+2540ft

1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

Procedure

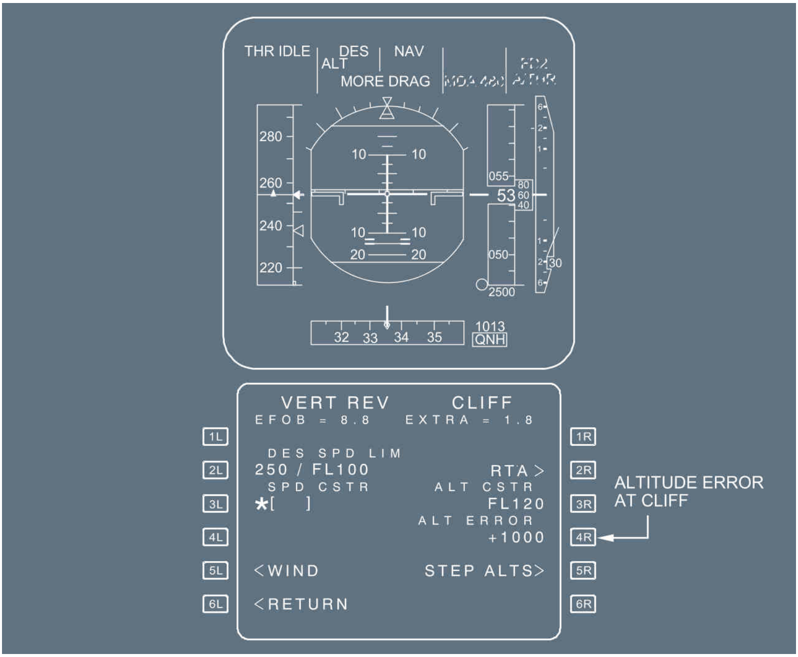
SELECT a descent speed higher than the upper limit when possible.

MONITOR the intercept symbol ↝

When this symbol reaches the next ALT CSTR waypoint, "MORE DRAG" appears on the PFD, indicating that speedbrakes must be extended in order to match the next altitude constraint. This is an advisory message.

<u>Note:</u> *With DPO , when above the descent profile, the flight crew may have to extend the speed brakes in order to go back on the descent profile.*

- **If an <u>altitude constraint</u> is predicted to be missed by more than 250 ft,** the vertical revision page shows ALT ERROR at the waypoint.



```
   VERT REV        CLIFF
 EFOB = 8.8     EXTRA = 1.8

   DES SPD LIM
 250 / FL100             RTA >
   SPD CSTR           ALT CSTR
 *[    ]                 FL120
                     ALT ERROR
                         +1000

 <WIND              STEP ALTS>

 <RETURN
```

ALTITUDE ERROR AT CLIFF

- **If a <u>speed constraint</u> is predicted to be missed by more than 10 kt:**
  SELECT an appropriate speed.
  RESUME managed speed when the aircraft is back on the descent path.

■ **If the aircraft is below the descent profile:**

VDEV is up on the PFD and negative on the PROG page. The system maintains the target speed (managed or selected speed).

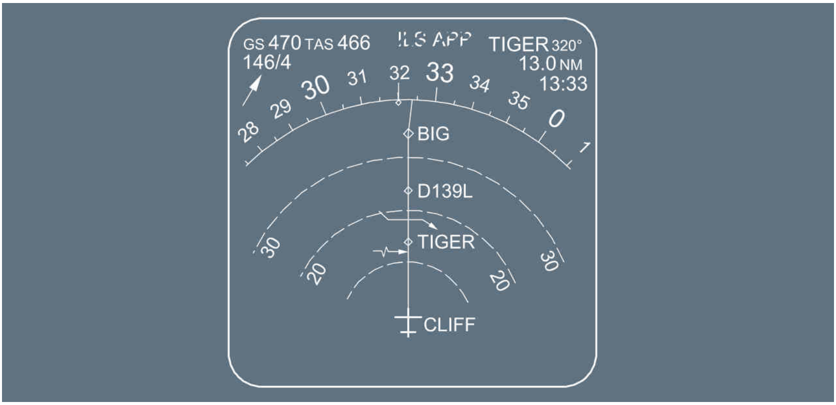
MONITOR the intercept symbol ([↝]) on the ND and any leveling off at the next ALT CSTR.

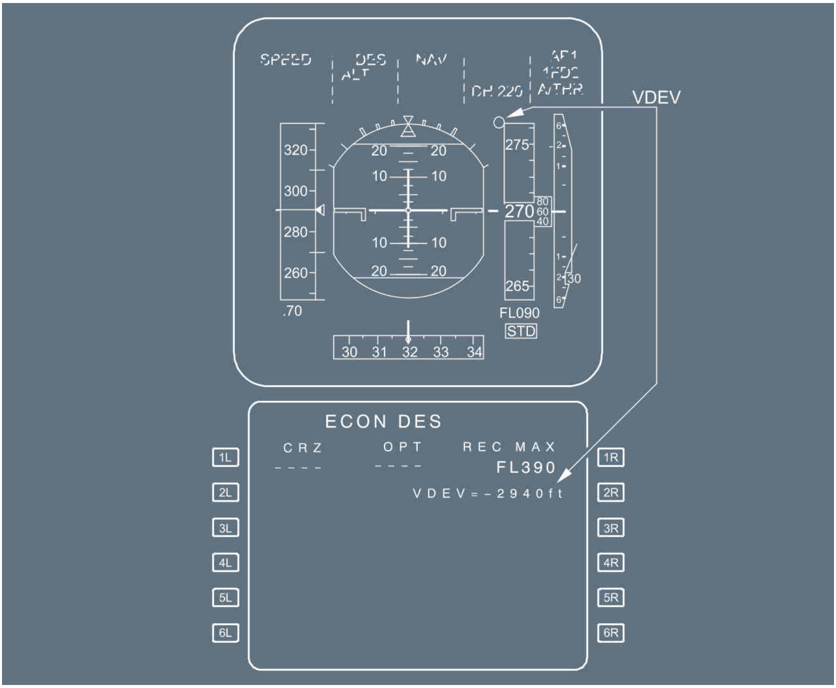
- **If the aircraft is flying at an altitude that is higher than both the descent speed limit altitude and the destination elevation +5 000 ft:**

  The FMGS maintains the V/S at -1 000 ft/min and the target speed, until the aircraft reaches the altitude constraint or intercepts the descent profile.

- **If the aircraft is flying at an altitude that is lower than either the descent speed limit altitude, or the destination elevation +5 000 ft:**

  The FMGS maintains the V/S at -500 ft/min and the target speed, until the aircraft reaches the altitude constraint or intercepts the descent profile.


GS 470 TAS 466
146/4
ILS APP
TIGER 320°
13.0 NM
13:33
28
29
30
31
32
33
34
35
0
1
BIG
D139L
TIGER
CLIFF
30
20
20
30


SPEED
DES
ALT
NAV
CH 220
AP1
1FD2
A/THR
VDEV
320
300
280
260
.70
275
270
265
FL090
STD
30 31 32 33 34
ECON DES
CRZ
OPT
REC MAX
FL390
VDEV = -2940ft
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

- **If the rate of descent has to be increased (ATC requirement):**

  SELECT OP DES mode

  Increase the target speed or extend the speedbrakes.

Ident.: PRO-NOR-SRP-01-60-A-00004008.0032001 / 06 JUN 16

Applicable to: MSN 04827-04860

DES MODE ENGAGED

When DES mode is engaged, NAV mode is engaged, and the system takes into account all altitude and speed constraints of the F-PLN.
The key parameter for monitoring the descent is the vertical deviation (VDEV) displayed on the PFD and on the PROG page, which indicates whether the aircraft is on, above, or below the descent profile.

PROCEDURE

SET the ATC-cleared altitude on the FCU (considering also what is the safe altitude).

If the lowest safe altitude is higher than the ATC-cleared altitude, check with ATC that this constraint applies.
If it is confirmed, SET the FCU altitude to the safe altitude until it is safe to go to the ATC-cleared altitude.

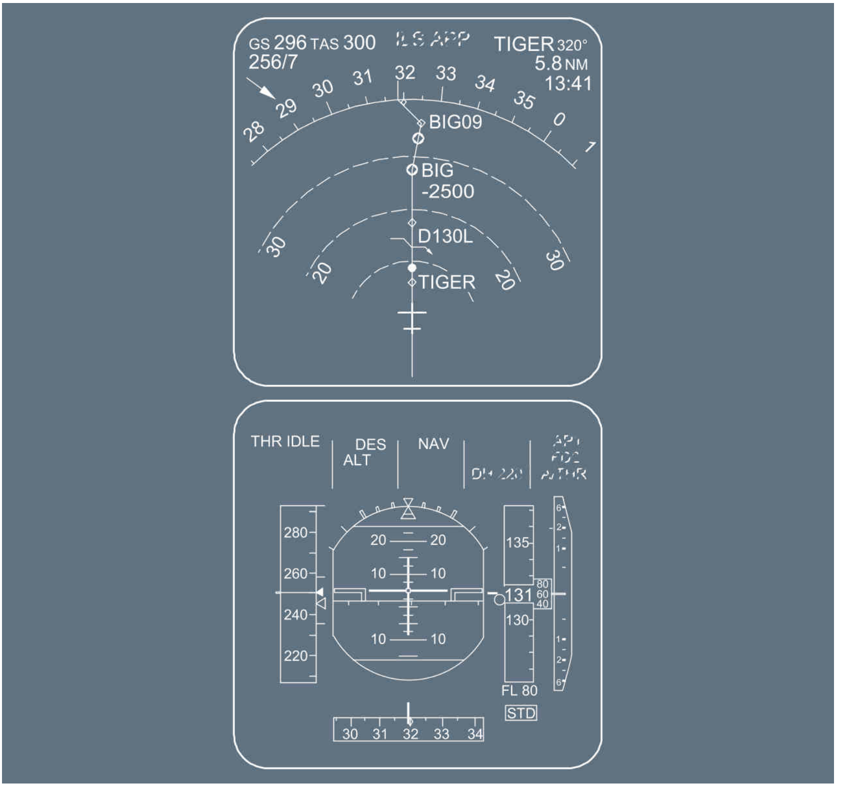
MONITOR vertical deviation (VDEV) on the PFD and the PROG page.
MONITOR the speed change that occurs, when the aircraft reaches a speed change symbol (magenta ball) under managed speed.
MONITOR the FMA (ALT*, ALT CST*, ALT, ALT CST), when the aircraft reaches level symbols.

■ **If the aircraft is on the descent profile:**

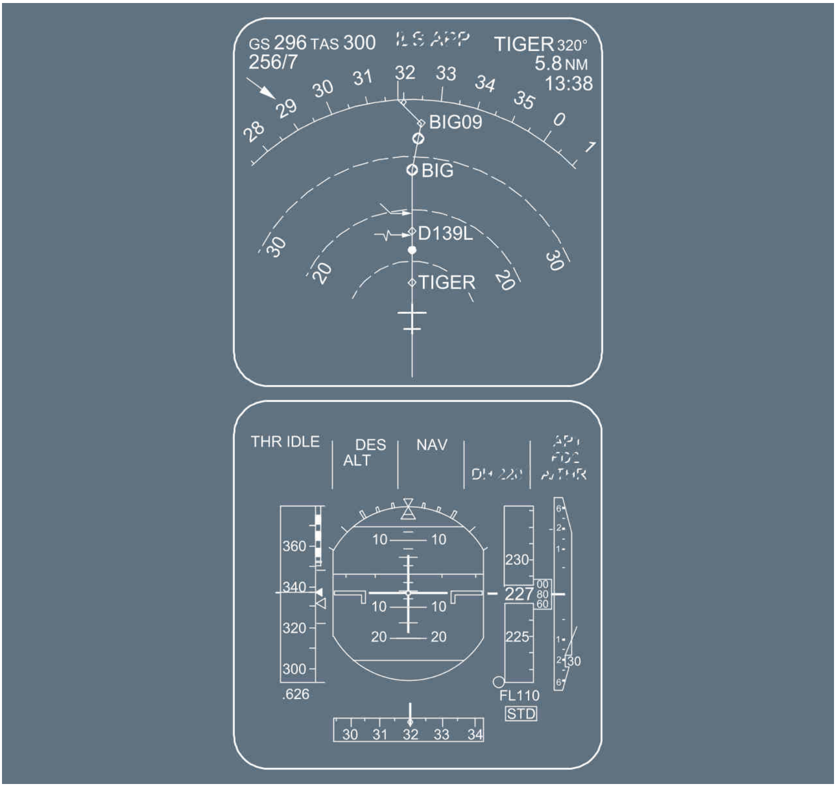
The aircraft is considered to be on the vertical profile, when it is within 50 ft of it. VDEV is close to zero, and the system predicts that it will match constraints until the aircraft levels off at the next FCU altitude.

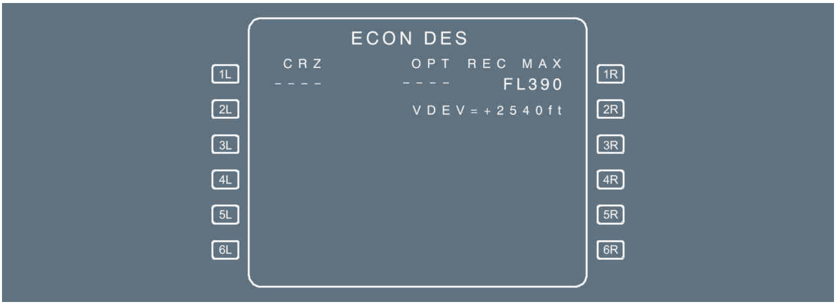
MONITOR the predicted descent point after the next level-off.

A/THR adjusts thrust for the particular segment. The first FMA column may display “THR IDLE” or “SPEED”.


GS 296 TAS 300
256/7
ILS APP
TIGER 320°
5.8 NM
13:41
BIG09
BIG
-2500
D130L
TIGER
THR IDLE
DES
ALT
NAV
DH 220
AP1
FD2
A/THR
280
260
240
220
135
131
130
FL 80
STD
30 31 32 33 34

- **If the aircraft is above the descent profile:**
  VDEV is down on the PFD and positive on the PROG page.
  A/THR sets IDLE thrust and the AP increases speed by calling for down elevator. If the aircraft reaches the upper limit of the managed speed range, the aircraft diverges and maintains the upper limit speed.


GS 296 TAS 300
ILS APP
TIGER 320°
256/7
5.8 NM
13:38
28 29 30 31 32 33 34 35 0 1
BIG09
BIG
D139L
TIGER
30
20
20
30
THR IDLE
DES
ALT
NAV
DH 220
AP1
FD2
A/THR
360
340
320
300
.626
10
10
10
10
20
20
230
227
00
80
60
225
6
2
1
1
2
6
130
FL110
STD
30 31 32 33 34


```
                ECON DES
   CRZ              OPT   REC  MAX
   ----             ----     FL390
                    VDEV=+2540ft
```
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

Procedure

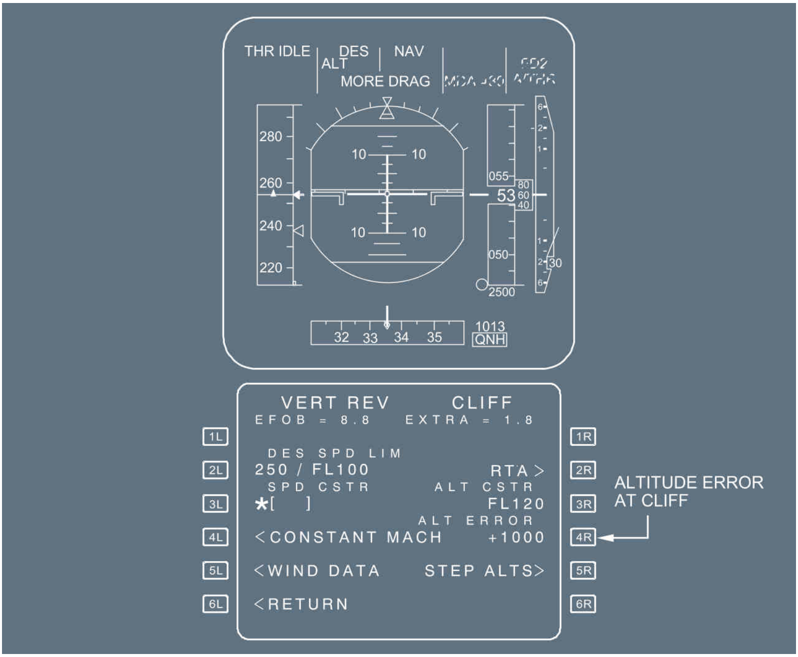
SELECT a descent speed higher than the upper limit when possible.

MONITOR the intercept symbol .

When this symbol reaches the next ALT CSTR waypoint, "MORE DRAG" appears on the PFD, indicating that speedbrakes must be extended in order to match the next altitude constraint. This is an advisory message.

Note: *With DPO , when above the descent profile, the flight crew may have to extend the speed brakes in order to go back on the descent profile.*

- **If an altitude constraint is predicted to be missed by more than 250 ft** the vertical revision page shows ALT ERROR at the waypoint.


THR IDLE
DES
ALT
NAV
MORE DRAG
280
260
240
220
10
10
10
10
055
80
53
60
40
050
2500
32
33
34
35
1013
QNH
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
ALTITUDE ERROR
AT CLIFF

```
 VERT REV        CLIFF
EFOB = 8.8    EXTRA = 1.8

 DES SPD LIM
250 / FL100            RTA>
 SPD CSTR         ALT CSTR
*[   ]                FL120
                ALT ERROR
<CONSTANT MACH        +1000
<WIND DATA       STEP ALTS>
<RETURN
```

- **If a speed constraint is predicted to be missed by more than 10 kt:**
  SELECT an appropriate speed.
  RESUME managed speed when the aircraft is back on the descent profile.

■ **If the aircraft is below the descent profile**

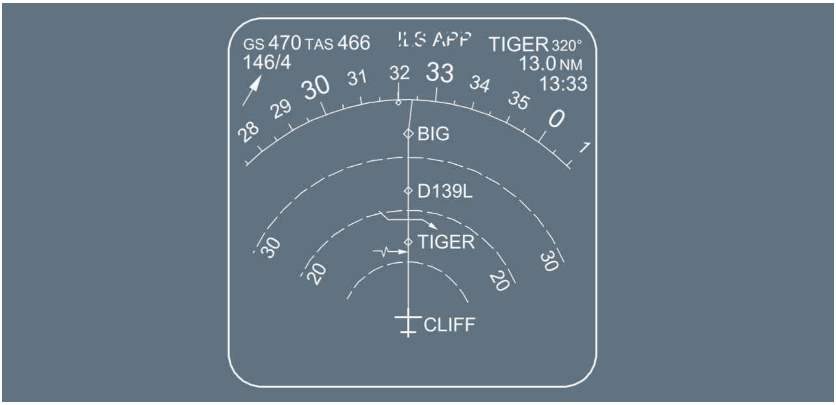
VDEV is up on the PFD and negative on the PROG page. The system maintains the target speed (managed or selected speed).

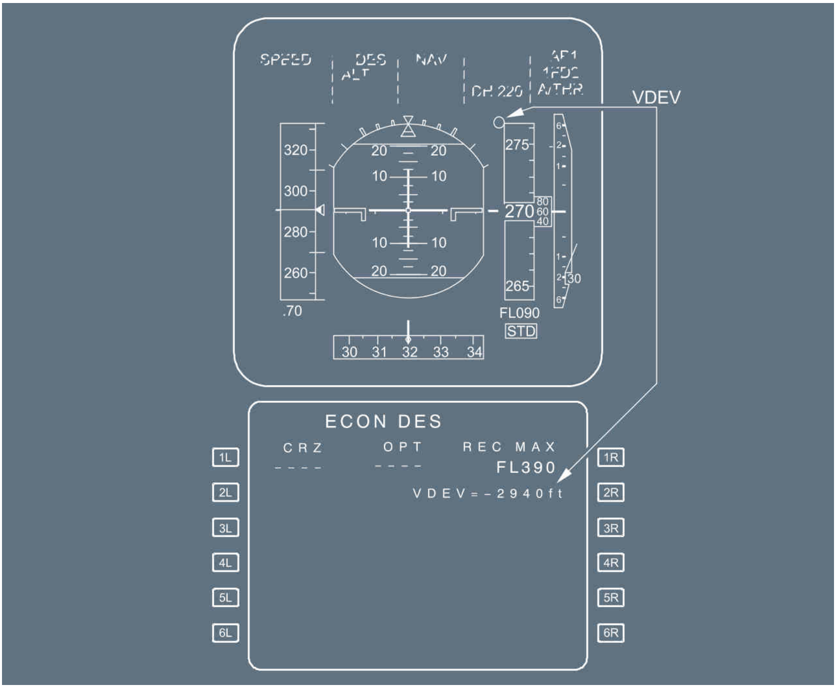
MONITOR the intercept symbol ([]) on the ND and any leveling off at the next ALT CSTR.

● **If the aircraft is flying at an altitude that is higher than both the descent speed limit altitude and the destination elevation +5 000 ft:**

The FMGS maintains the V/S at -1 000 ft/min and the target speed, until the aircraft reaches the altitude constraint or intercepts the descent profile.

■ **If the aircraft is flying at an altitude that is lower than either the descent speed limit altitude, or the destination elevation +5 000 ft:**
The FMGS maintains the V/S at -500 ft/min and the target speed, until the aircraft intercepts either the altitude constraint or the descent profile.


GS 470 TAS 466
146/4
ILS APP
TIGER 320°
13.0 NM
13:33
28
29
30
31
32
33
34
35
0
1
BIG
D139L
TIGER
30
20
20
30
CLIFF


SPEED
DES
ALT
NAV
CR 220
AP1
1FD2
A/THR
VDEV
320
300
280
260
.70
20
10
275
270
265
80
60
40
FL090
STD
30 31 32 33 34
ECON DES
CRZ
OPT
REC MAX

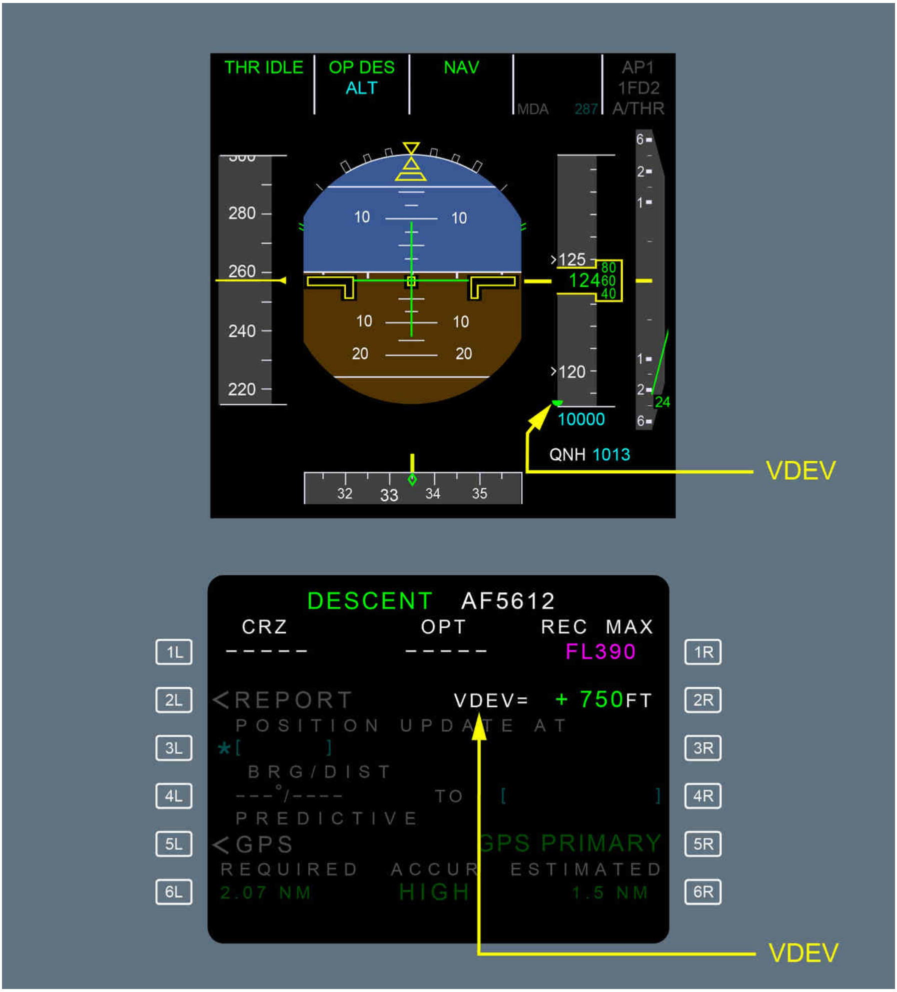
FL390
VDEV=-2940ft
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

- **If the rate of descent has to be increased (ATC requirement):**
  SELECT OP DES mode
  Increase the target speed or extend the speedbrakes.

Ident.: PRO-NOR-SRP-01-60-A-00004009.0007001 / 03 NOV 21
Applicable to: MSN 04827-04860

OP DES, V/S OR FPA MODE ENGAGED

- In either case, the aircraft is no longer guided on the descent profile and altitude constraints are disregarded. If NAV mode is engaged, the ND displays a white circle on waypoint with an altitude constraint. If NAV mode is disengaged, the circle is removed.
- The PFD still shows VDEV for reference purposes
- The target altitude is always the FCU selected altitude (shown in blue).
  On the ND, level-off symbol is blue (no constraint). If NAV mode is engaged and the speed target managed, speed constraints are considered.


THR IDLE
OP DES
ALT
NAV
MDA
287
AP1
1FD2
A/THR
280
260
240
220
10
10
10
10
20
20
125
124
80
60
40
120
10000
QNH 1013
6
2
1
1
2
6
24
32
33
34
35
VDEV
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
VDEV

DESCENT AF5612
CRZ ----- OPT ----- REC MAX FL390
<REPORT VDEV= + 750FT
POSITION UPDATE AT
*[ ]
BRG/DIST
---°/---- TO [ ]
PREDICTIVE
<GPS GPS PRIMARY
REQUIRED ACCUR ESTIMATED
2.07 NM HIGH 1.5 NM

When HDG or TRK mode is engaged, vertical position may also be assessed on the ND using the energy circle. It is displayed as a green arc oriented on the current track and centered on the aircraft current position.

Note: *Altitude and speed predictions displayed on the F-PLN page assume an immediate return to DES mode.*

PROCEDURE

SET the FCU altitude as cleared by ATC, while considering the applicable safe altitude.

L2 *If the next safe altitude is above the ATC-cleared altitude, check with the ATC to verify that this constraint applies.*
If confirmed, set the FCU altitude to the safe altitude, until it is safe to fly at the cleared altitude.

L1 MONITOR the speed target, when the aircraft reaches the speed change symbol.
MONITOR the ALT* or ALT mode, upon reaching the level symbol.
When in HDG/TRK mode, MONITOR the energy circle on the ND.

The predictions presented on the F-PLN page take into account the SPD/ALT constraints. Those predictions assume that DES mode is immediately re-engaged.

CHECK the predictions before re-engaging DES mode (in order to resume the descent profile).

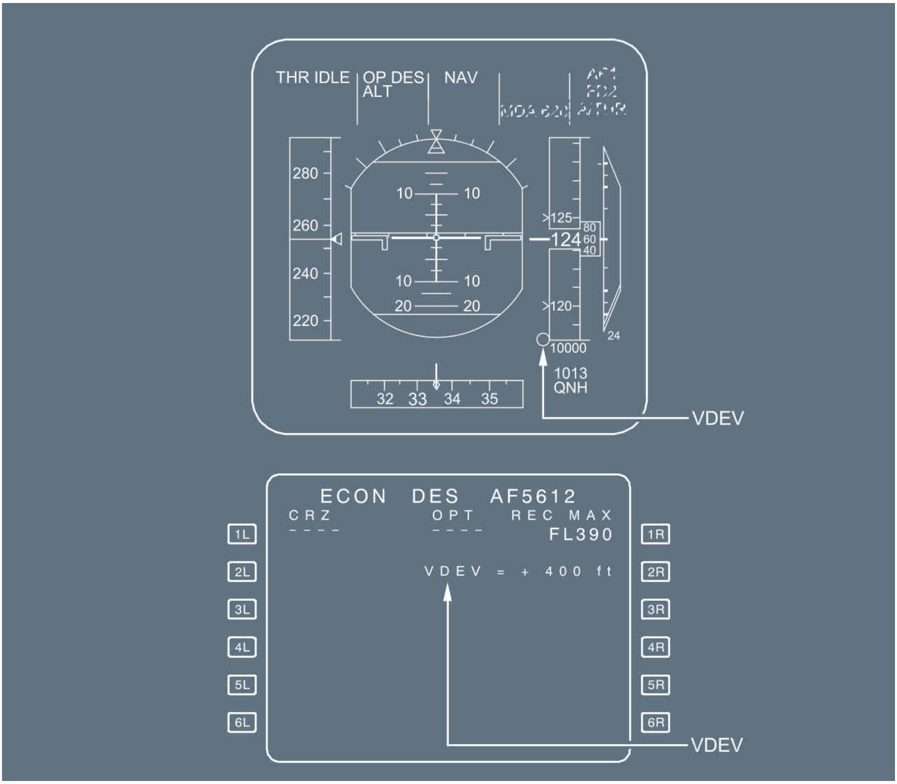
L2 *Note:* *VDEV is available on the PFD even in HDG mode, it is a valuable tool for monitoring the descent, as long as XTK is less than 4 NM.*
The aircraft automatically decelerates for approach, only if it flies over the DECEL pseudo waypoint with NAV mode engaged (or LOC, LOC, F-LOC* ◁ , F-LOC ◁).*

Ident.: PRO-NOR-SRP-01-60-A-00004009.0002001 / 22 MAY 12

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

OP DES, V/S OR FPA MODE ENGAGED

- In either case, the aircraft is no longer guided on the descent profile and altitude constraints are disregarded. If NAV mode is engaged the ND displays a white circle on waypoint with an altitude constraint. If NAV mode is disengaged, the circle is removed.
- The PFD still shows VDEV for reference purposes.
- The target altitude is always the FCU selected altitude (shown in blue).
  On the ND, level-off symbol is blue (no constraint). If NAV mode is engaged and the speed target managed, speed constraints are considered.


THR IDLE
OP DES
ALT
NAV
AP1
FD2
A/THR
280
260
240
220
10
10
10
10
20
20
125
124
120
80
60
40
24
10000
1013
QNH
32
33
34
35
VDEV
ECON DES AF5612
CRZ

OPT

REC MAX
FL390
VDEV = + 400 ft
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
VDEV

When HDG or TRK mode is engaged, vertical position may also be assessed on the ND using the energy circle. It is displayed as a green arc oriented on the current track and centered on the aircraft current position.

Note: *Altitude and speed predictions displayed on the F-PLN page assume an immediate return to DES mode.*

PROCEDURE

SET the FCU altitude as cleared by ATC, while considering the applicable safe altitude.

If the next safe altitude is higher than the ATC-cleared altitude, check with the ATC to verify that this constraint applies.
If confirmed, set the FCU altitude to the safe altitude, until it is safe to fly at the cleared altitude.

MONITOR the speed target, when the aircraft reaches the speed change symbol.
MONITOR the FMA ALT*, ALT, upon reaching the level symbol.

When in HDG/TRK mode, MONITOR the energy circle ◁ on the ND.

The MCDU F-PLN page presents SPD/ALT constraint-matching predictions, which assume that DES mode is immediately re-engaged.

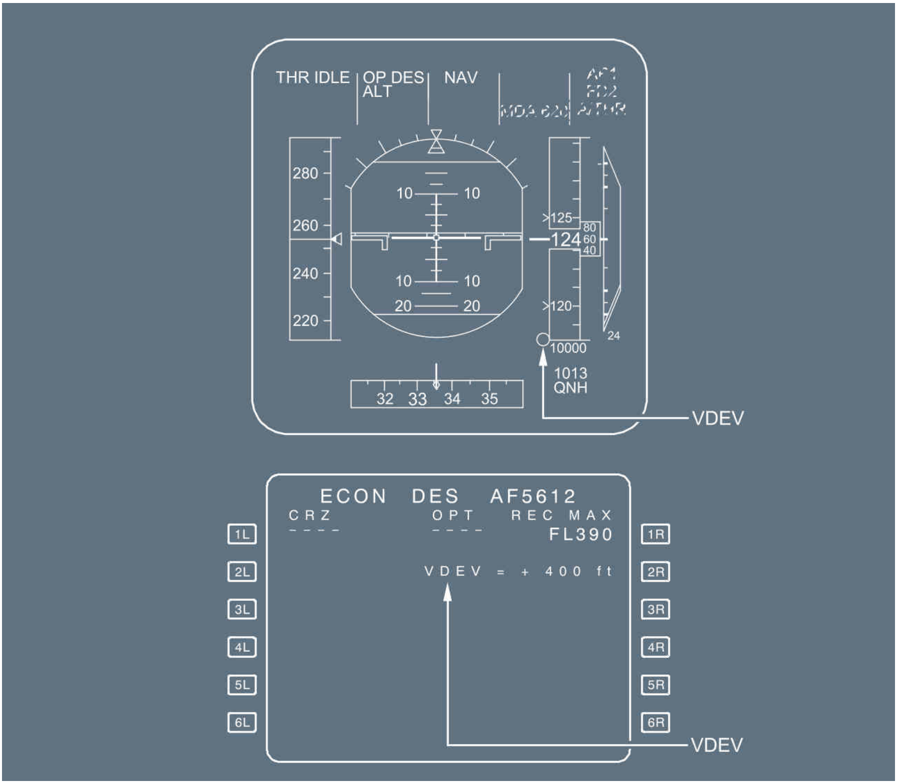
CHECK the predictions before re-engaging DES mode (in order to resume the descent profile).

Note: *VDEV is available on the PFD even in HDG mode; it is a valuable tool for monitoring the descent, as long as crosstrack error (XTK) is less than 5 NM.*
The aircraft automatically decelerates for approach, only if it flies over the DECEL pseudo waypoint with NAV mode engaged (or LOC, LOC).*

3 Ident.: PRO-NOR-SRP-01-60-A-00004009.0004001 / 22 MAY 12
Applicable to: MSN 11531

OP DES, V/S OR FPA MODE ENGAGED

- In either case, the aircraft is no longer guided on the descent profile and altitude constraints are disregarded. If NAV mode is engaged the ND displays a white circle on waypoint with an altitude constraint. If NAV mode is disengaged, the circle is removed.
- The PFD still shows VDEV for reference purposes.
- The target altitude is always the FCU selected altitude (shown in blue).
  On the ND, level-off symbol is blue (no constraint). If NAV mode is engaged and the speed target managed, speed constraints are considered.


THR IDLE
OP DES
ALT
NAV
MDA 620
AP1
FD2
A/THR
280
260
240
220
10
10
10
10
20
20
>125
124
80
60
40
>120
24
10000
1013
QNH
32
33
34
35
VDEV
ECON DES AF5612
CRZ

OPT

REC MAX
FL390
VDEV = + 400 ft
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
VDEV

When HDG or TRK mode is engaged, vertical position may also be assessed on the ND using the energy circle. It is displayed as a green arc oriented on the current track and centered on the aircraft current position.

Note: *Altitude and speed predictions displayed on the F-PLN page assume an immediate return to DES mode.*

PROCEDURE

SET the FCU altitude as cleared by ATC, while considering the applicable safe altitude.

If the next safe altitude is higher than the ATC-cleared altitude, check with the ATC to verify that this constraint applies.
If confirmed, set the FCU altitude to the safe altitude, until it is safe to fly at the cleared altitude.

MONITOR the speed target, when the aircraft reaches the speed change symbol.
MONITOR the FMA ALT*, ALT, upon reaching the level symbol.

When in HDG/TRK mode, MONITOR the energy circle ◁ on the ND.

The MCDU F-PLN page presents SPD/ALT constraint-matching predictions, which assume that DES mode is immediately re-engaged.

CHECK the predictions before re-engaging DES mode (in order to resume the descent profile).

Note: *VDEV is available on the PFD even in HDG mode; it is a valuable tool for monitoring the descent, as long as crosstrack error (XTK) is less than 5 NM.*
The aircraft automatically decelerates for approach, only if it flies over the DECEL pseudo waypoint with NAV mode engaged (or LOC, LOC, F-LOC*, F-LOC).*

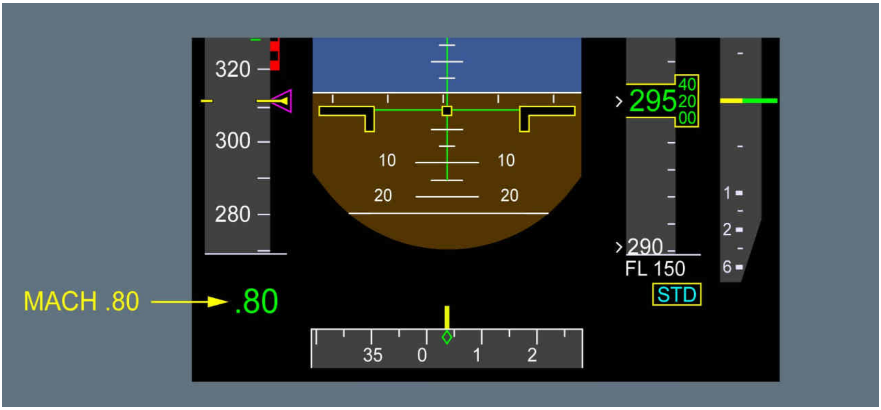
EXPEDITE DESCENT (IF INSTALLED)

Ident.: PRO-NOR-SRP-01-60-00004010.0001001 / 10 MAY 21
Applicable to: ALL

- **When ATC requires a rapid descent:**

  PUSH the EXPED pb ◁ .

  FG pitches the aircraft to acquire and maintain M 0.80/340 kt. FG orders a pitch rate that produces no more than 0.15 g. To resume normal descent, PUSH the ALT knob or engage any other vertical mode.



MONITORING THE NAVIGATION IN THE TERMINAL CONTROL AREA

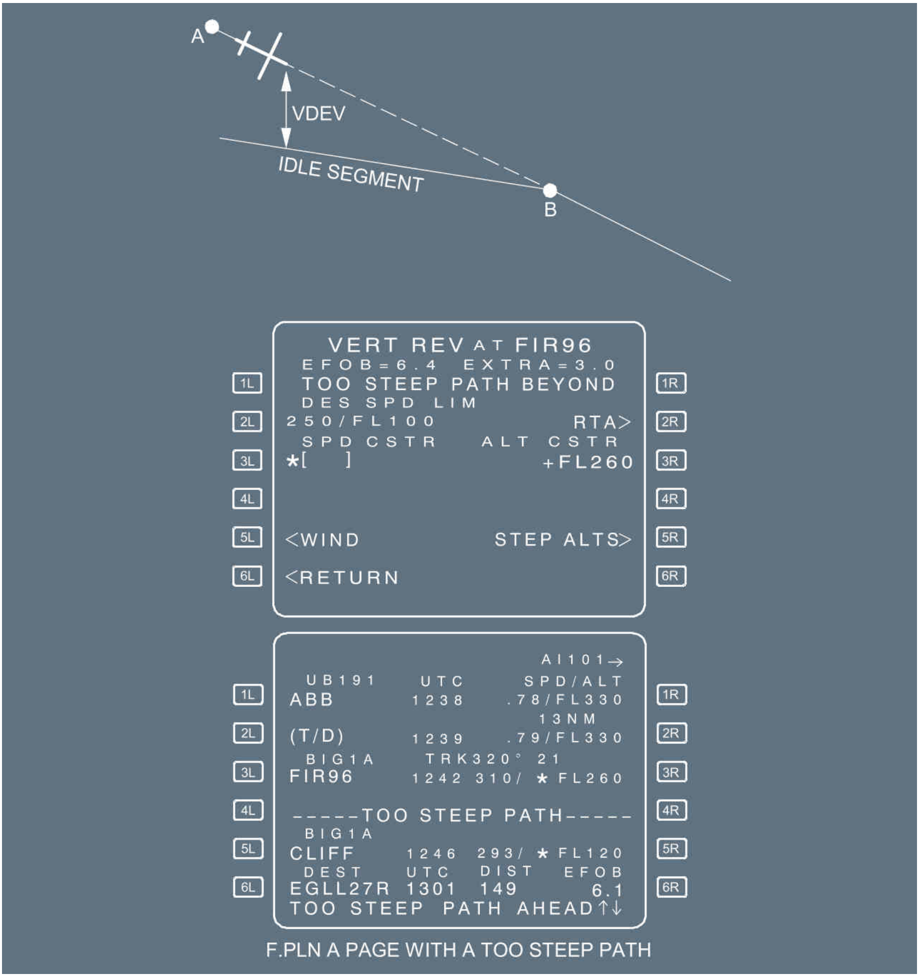
Ident.: PRO-NOR-SRP-01-60-00004012.0002001 / 14 FEB 11
Applicable to: ALL

If the MCDU “AREA RNP IS XX.X” message or “PROCEDURE RNP IS XX.X” message is displayed, the pilot will manually-entered RNP value in the REQUIRED field of the PROG page and clear or modify it, if it is not in accordance with the RNP value specified in the area (NAV or approach chart).

TOO STEEP PATH

Ident.: PRO-NOR-SRP-01-60-00004013.0007001 / 22 MAY 12
4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

“TOO STEEP PATH AHEAD” appears on the MCDU scratchpad, when the system predicts this situation, and TOO STEEP PATH is displayed on the F-PLN page.
When the aircraft is crossing the first waypoint of a TOO STEEP PATH, the system computes a flyable descent profile (with an idle segment). The VDEV makes a jump because it is related to a new profile.



```
    VERT REV AT FIR96
   EFOB=6.4   EXTRA=3.0
   TOO STEEP PATH BEYOND
   DES SPD LIM
 250/FL100               RTA>
   SPD CSTR       ALT CSTR
 *[    ]             +FL260


 <WIND              STEP ALTS>

 <RETURN
```

```
                         AI101→
   UB191      UTC      SPD/ALT
 ABB         1238     .78/FL330
                         13NM
 (T/D)       1239     .79/FL330
   BIG1A       TRK320°   21
 FIR96       1242  310/ *FL260

 -----TOO STEEP PATH-----
   BIG1A
 CLIFF       1246  293/ *FL120
   DEST      UTC   DIST   EFOB
 EGLL27R    1301   149      6.1
 TOO STEEP PATH AHEAD↑↓
```

F.PLN A PAGE WITH A TOO STEEP PATH

PROCEDURE

- **When passing the first waypoint of the TOO STEEP PATH:**

  MONITOR VDEV and predictions at the next CSTR waypoint.

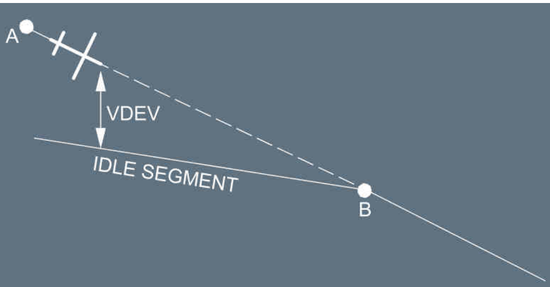
  If required, EXTEND the speedbrakes before seeing the “MORE DRAG” message.

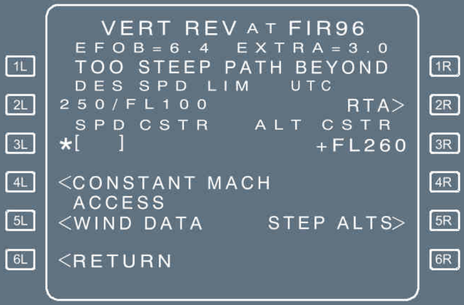
  CONSIDER using a holding pattern, if necessary.

TOO STEEP PATH

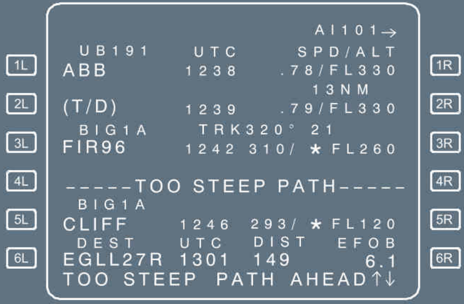
Ident.: PRO-NOR-SRP-01-60-00004013.0008001 / 22 MAY 12
Applicable to: MSN 04827-04860

“TOO STEEP PATH AHEAD” appears on the MCDU scratchpad, when the system predicts this situation, and TOO STEEP PATH is displayed on the F-PLN page.
When the aircraft is crossing the first waypoint of a TOO STEEP PATH, the system computes a flyable descent profile (with an idle segment). The VDEV makes a jump because it is related to a new profile.





```
        VERT REV AT FIR96
  EFOB=6.4    EXTRA=3.0
  TOO STEEP PATH BEYOND
  DES SPD LIM     UTC
250/FL100             RTA>
  SPD CSTR      ALT CSTR
*[    ]             +FL260

<CONSTANT MACH
 ACCESS
<WIND DATA       STEP ALTS>

<RETURN
```



```
                       AI101→
  UB191      UTC      SPD/ALT
 ABB         1238   .78/FL330
                        13NM
 (T/D)       1239   .79/FL330
  BIG1A       TRK320°  21
 FIR96       1242 310/ *FL260

 -----TOO STEEP PATH-----
  BIG1A
 CLIFF      1246  293/ *FL120
  DEST      UTC   DIST   EFOB
 EGLL27R  1301   149      6.1
 TOO STEEP  PATH AHEAD↑↓
```

F.PLN A PAGE WITH A TOO STEEP PATH

PROCEDURE

- **When passing the first waypoint of the TOO STEEP PATH:**

  MONITOR VDEV and predictions at the next CSTR waypoint.
  If required, EXTEND the speedbrakes before seeing the “MORE DRAG” message.
  CONSIDER using a holding pattern, if necessary.

HOLDING PATTERN

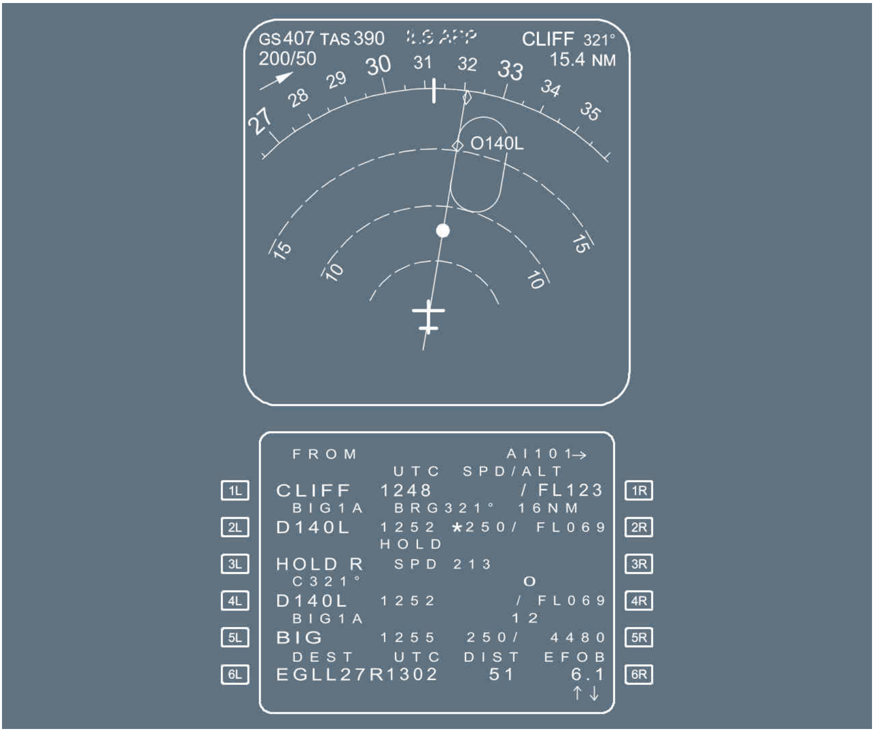
Ident.: PRO-NOR-SRP-01-60-00004014.0001001 / 09 OCT 12
Applicable to: ALL

A hold may be required during the descent, and may be manually inserted.

PROCEDURE

PRESS the F-PLN key.
SELECT the lateral revision page.
SELECT the HOLD prompt.
CHECK the HOLDING data, and MODIFY it if necessary.
CHECK the temporary flight plan and INSERT the holding pattern in it.

Note: *If the holding fix is close to the DECEL pseudo waypoint and the speed is managed, manually activate the approach phase to change the managed target speed to approach speed (VAPP). This will avoid having an increase of speed not appropriate.*


GS 407 TAS 390
200/50
ILS APP
CLIFF 321°
15.4 NM
27
28
29
30
31
32
33
34
35
O140L
15
10
10
15
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R

```
 FROM                 AI101→
        UTC  SPD/ALT
CLIFF  1248        / FL123
 BIG1A  BRG321°  16NM
D140L  1252  *250/  FL069
       HOLD
HOLD R  SPD 213
 C321°               O
D140L  1252        /  FL069
 BIG1A              12
BIG    1255   250/   4480
 DEST   UTC   DIST   EFOB
EGLL27R1302    51     6.1
                      ↑↓
```

MANUAL TERMINATION

Ident.: PRO-NOR-SRP-01-60-00004016.0001001 / 09 DEC 09
Applicable to: ALL

You should not use DES mode when entering a leg with manual termination. Manual termination, which is defined as a track or a heading with no termination, is always part of a database procedure. The computed descent flight profile may not be adequate when flying this type of leg.

Approach

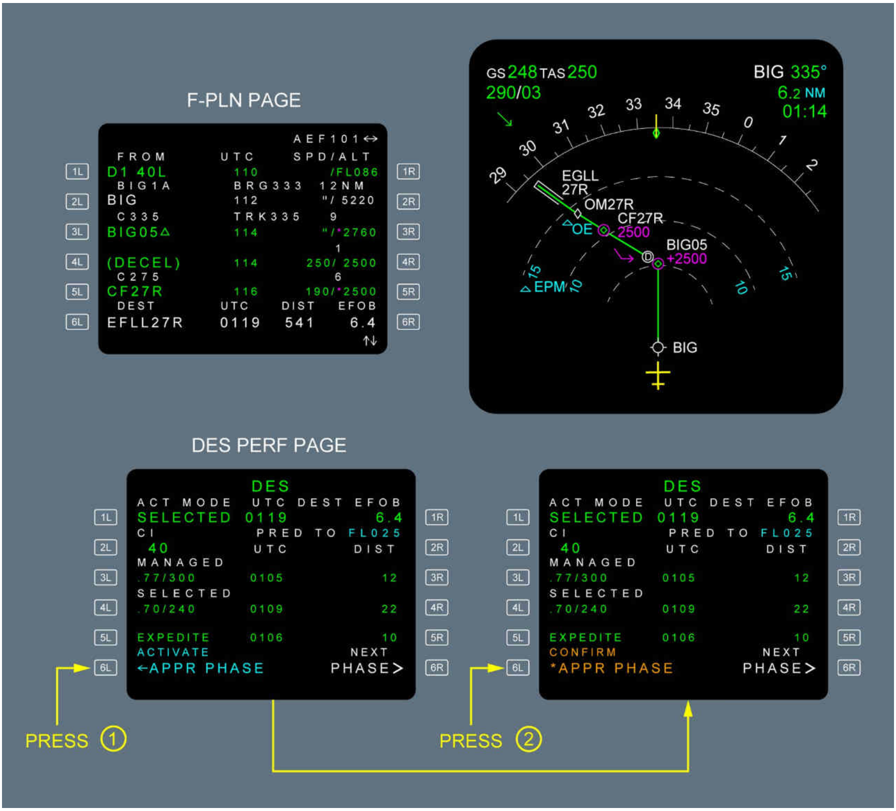
INITIAL APPROACH

Ident.: PRO-NOR-SRP-01-70-00004017.0002001 / 26 NOV 19

1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

UPON REACHING THE INITIAL APPROACH AREA

- Approach phase activates automatically when flying over the DECEL pseudo waypoint with NAV, APP NAV or LOC* or LOC mode engaged.
- Approach phase needs a manual activation on the PERF page in case of one of the following:
  - HDG / TRK mode is engaged, or
  - After a go around, or
  - An early deceleration is required.


F-PLN PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
GS 248 TAS 250
290/03
BIG 335°
6.2 NM
01:14
29
30
31
32
33
34
35
0
1
2
EGLL
27R
OM27R
CF27R
OE
2500
BIG05
+2500
15
EPM
10
10
15
BIG
DES PERF PAGE
PRESS ①
PRESS ②

```
                 AEF101↔
FROM      UTC    SPD/ALT
D1 40L    110     /FL086
  BIG1A    BRG333  12NM
BIG       112     "/ 5220
  C335     TRK335    9
BIG05△    114     "/*2760
                     1
(DECEL)   114    250/ 2500
  C275               6
CF27R     116    190/*2500
DEST      UTC   DIST  EFOB
EFLL27R   0119   541   6.4
                        ↑↓
```

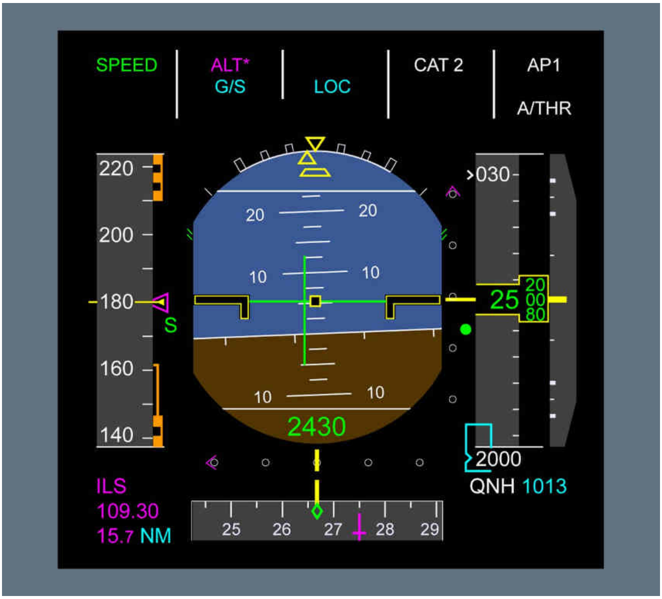
```
          DES
ACT MODE  UTC DEST EFOB
SELECTED  0119      6.4
CI            PRED TO FL025
 40          UTC      DIST
MANAGED
.77/300      0105       12
SELECTED
.70/240      0109       22
EXPEDITE     0106       10
ACTIVATE             NEXT
←APPR PHASE         PHASE>
```

```
          DES
ACT MODE  UTC DEST EFOB
SELECTED  0119      6.4
CI            PRED TO FL025
 40          UTC      DIST
MANAGED
.77/300      0105       12
SELECTED
.70/240      0109       22
EXPEDITE     0106       10
CONFIRM              NEXT
*APPR PHASE         PHASE>
```

MANAGED SPEED

CHECK that managed speed is active: MONITOR the target speed.

During the approach, the autothrust limits the speed of the current configuration. (GD, S, F, VAPP).


SPEED
ALT*
G/S
LOC
CAT 2
AP1
A/THR
220
200
180
160
140
S
>030
25
20
00
80
2000
QNH 1013
20
10
2430
ILS
109.30
15.7 NM
25
26
27
28
29

- **If ATC requires a specific speed:**

  SWITCH to selected speed (turn and pull the speed selector knob on the FCU).

  ADJUST the aircraft configuration accordingly.

- **If ATC orders successive step descents down to the final approach flight path:**

  Use the V/S or FPA mode.

  MONITOR VDEV.

NAV ACCURACY

As required by the SOP.
Without installed GPS and when no DME is available for the accuracy check, use HIGH/LOW on the PROG page.
In this case, consider a “HIGH” to be equivalent to a positive crosscheck.

ATC CLEARANCE

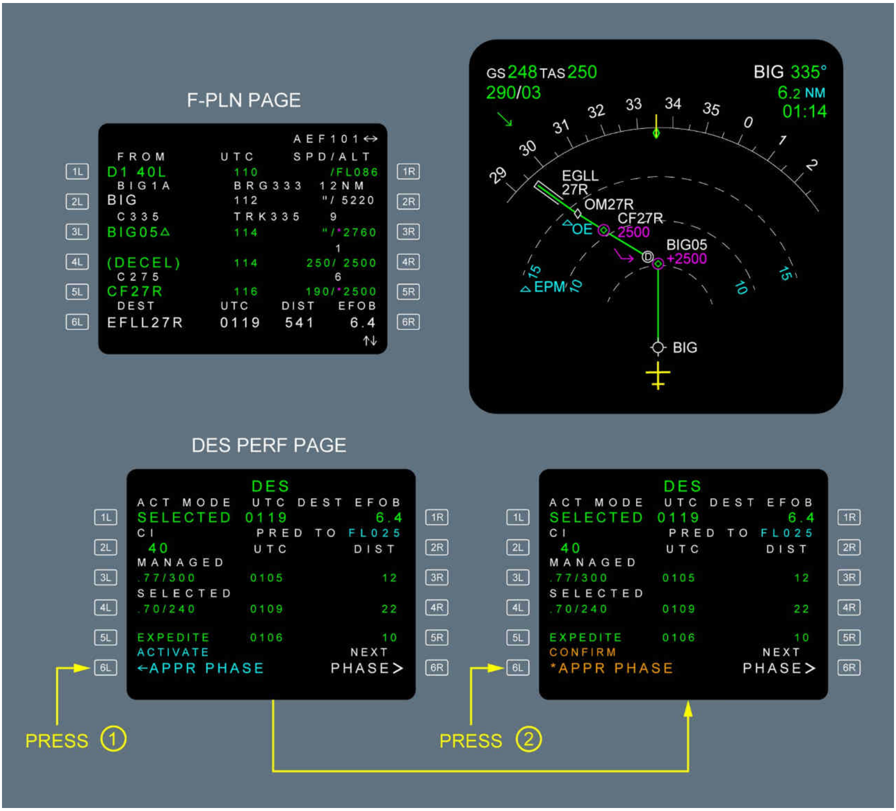
MODIFY the F-PLN, RAD NAV, and PERF APPR data to agree with the latest clearance and landing information.

INITIAL APPROACH

2 Ident.: PRO-NOR-SRP-01-70-00004017.0015001 / 26 NOV 19
Applicable to: MSN 11531

UPON REACHING THE INITIAL APPROACH AREA

- Approach phase activates automatically when flying over the DECEL pseudo waypoint with NAV, LOC*, LOC, F-LOC* or F-LOC mode engaged.
- Approach phase needs a manual activation on the PERF page in case of one of the following:
  - HDG / TRK mode is engaged, or
  - After a go around, or
  - An early deceleration is required.


F-PLN PAGE
GS 248 TAS 250
290/03
BIG 335°
6.2 NM
01:14
29
30
31
32
33
34
35
0
1
2
EGLL
27R
OM27R
CF27R
OE
2500
BIG05
+2500
15
10
EPM
10
15
BIG
DES PERF PAGE
1L
2L
3L
4L
5L
6L
1R
2R
3R
4R
5R
6R
PRESS ①
PRESS ②

```
                          AEF101↔
 FROM          UTC        SPD/ALT
D1 40L          110        /FL086
 BIG1A          BRG333   12NM
BIG             112        "/ 5220
 C335           TRK335     9
BIG05△          114        "/*2760
                           1
(DECEL)         114      250/ 2500
 C275                      6
CF27R           116      190/*2500
 DEST          UTC     DIST   EFOB
EFLL27R        0119    541     6.4
                                 ↑↓
```

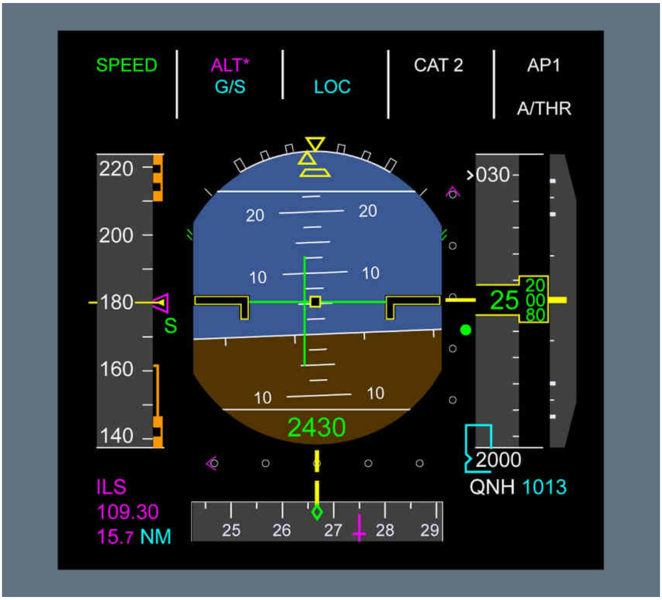
```
              DES
ACT MODE      UTC DEST EFOB
SELECTED      0119      6.4
CI              PRED TO FL025
 40             UTC      DIST
MANAGED
.77/300         0105       12
SELECTED
.70/240         0109       22

EXPEDITE        0106       10
ACTIVATE                 NEXT
←APPR PHASE            PHASE>
```

```
              DES
ACT MODE      UTC DEST EFOB
SELECTED      0119      6.4
CI              PRED TO FL025
 40             UTC      DIST
MANAGED
.77/300         0105       12
SELECTED
.70/240         0109       22

EXPEDITE        0106       10
CONFIRM                  NEXT
*APPR PHASE            PHASE>
```

MANAGED SPEED

CHECK that managed speed is active: MONITOR the target speed.

During the approach, the autothrust limits the speed of the current configuration. (GD, S, F, VAPP).


SPEED
ALT*
G/S
LOC
CAT 2
AP1
A/THR
220
200
180
S
160
140
20
20
10
10
10
10
2430
030
25
20
00
80
2000
QNH 1013
ILS
109.30
15.7 NM
25
26
27
28
29

- **If ATC requires a specific speed:**

  SWITCH to selected speed (turn and pull the speed selector knob on the FCU).

  ADJUST the aircraft configuration accordingly.

- **If ATC orders successive step descents down to the final approach flight path:**

  Use the V/S or FPA mode.

  MONITOR VDEV.

NAV ACCURACY

As required by the SOP.
For Non Precision Approaches flown with the FLS function, the flight crew must check the FLS capability.
Without installed GPS and when no DME is available for the accuracy check, use HIGH/LOW on the PROG page.

In this case, consider a "HIGH" to be equivalent to a positive crosscheck.

ATC CLEARANCE

MODIFY the F-PLN, RAD NAV, and PERF APPR data to agree with the latest clearance and landing information.

ILS/MLS/GLS/FLS/SLS APPROACH

Ident.: PRO-NOR-SRP-01-70-A-00004018.0001001 / 17 MAR 11

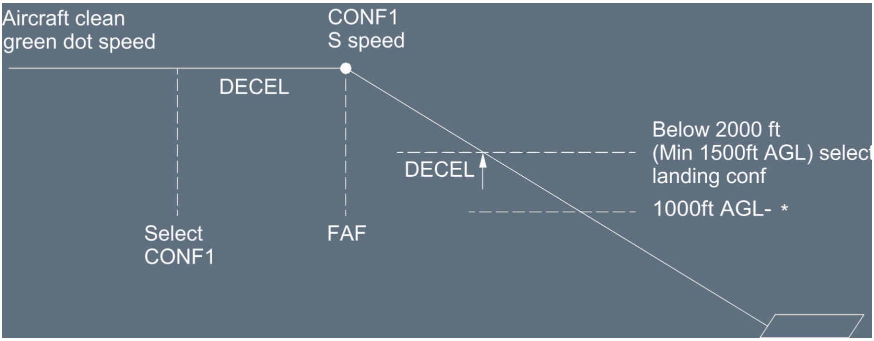
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

INTERMEDIATE/FINAL APPROACH (ILS APPROACH ENTERED IN THE F-PLN)

The preferred technique for flying an ILS approach is to fly a decelerated approach using the AP/FDs, the LOC and G/S modes, A/THR in the SPEED mode, managed speed target is recommended.

DECELERATED APPROACH

The decelerated approach technique brings the aircraft down to 1 000 ft, at VAPP. In most cases, the interception of the final descent path is achieved with CONF 1 at S speed.



(*) The approach must be stabilized at approach speed (minimum ground speed) in the landing configuration before reaching 1 000 ft AGL.

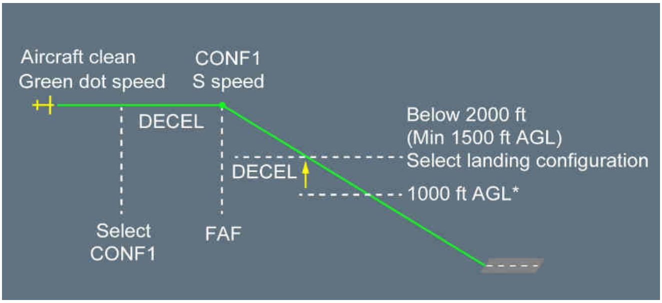
Ident.: PRO-NOR-SRP-01-70-A-00004018.0003001 / 12 MAY 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

INTERMEDIATE/FINAL APPROACH (ILS / GLS / LPV WITH SLS ◁) APPROACH ENTERED IN THE F-PLN)

The preferred technique for flying an ILS / GLS / LPV(with SLS ◁) approach is to fly a decelerated approach using the AP/FDs, the LOC and G/S modes, A/THR in the SPEED mode, managed speed target is recommended.

DECELERATED APPROACH

The decelerated approach technique brings the aircraft down to 1 000 ft, at VAPP. In most cases, the interception of the final descent path is achieved with CONF 1 at S speed.



(*) The approach must be stabilized at approach speed (minimum ground speed) in the landing configuration before reaching 1 000 ft AGL.

Ident.: PRO-NOR-SRP-01-70-A-00004019.0014001 / 12 MAY 22
4 **Applicable to: MSN 10949-11597**

APPROACH MODE ACTIVATION (LOC - G/S)

- **When cleared by ATC and when appropriate:**

  PRESS the APPR pb on the FCU to arm the APPR mode for the approach entered in the flight plan.

  Note: *If a non precision approach is selected in the active flight plan and if the flight crew manually tunes an ILS / GLS ◁ on the RAD NAV page:*

  - *the MCDU and PFD display CHECK APPR SELECTION. This message is a reminder to the flight crew that this manually-tuned landing system does not correspond to the approach that is selected in the flight plan.*
  - *When the APPR pb is pressed on the FCU, the available approach guidance modes are LOC and G/S.*

The FCU APPR pb arms or engages LOC and G/S modes, if :

- An ILS / GLS / LPV (with SLS) approach is entered in the flight plan, or
- An ILS / GLS is manually-tuned on the RADIO NAV page, or
- Both RMPs are set to NAV, and an ILS / GLS is selected.

Ident.: PRO-NOR-SRP-01-70-A-00004019.0011001 / 17 MAR 11
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

APPROACH MODE ACTIVATION (LOC-G/S)

- **When cleared by ATC and when appropriate:**

DEPRESS the APPR pushbutton to arm the APPR mode for the approach entered in the flight plan.

Note: *If a NON PRECISION approach is selected in the active flight plan and if the flight crew manually tunes an ILS/GLS on the RAD NAV page, the MCDU and the PFD display "CHECK APPR SELECTION". This message is a reminder to the flight crew that, although an ILS/GLS is tuned on RAD NAV page, the available approach guidance modes are APP NAV-FINAL when the APPR pushbutton is pressed in on the FCU.*

The FCU APPR pushbutton arms or engages LOC and G/S modes, if:

- An ILS/GLS approach is entered in the flight plan, or
- No approach, or only a runway, is entered in the flight plan, and an ILS/GLS is manually-tuned on the RAD NAV page, or
- Both RMPs are set to NAV, and an ILS/GLS is selected.

Ident.: PRO-NOR-SRP-01-70-A-00004019.0009001 / 17 MAR 11
Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324

APPROACH MODE ACTIVATION (LOC-G/S)

- **When cleared by ATC and when appropriate:**

DEPRESS the APPR pushbutton to arm the APPR mode for the approach entered in the flight plan.

Note: *If a NON PRECISION approach is selected in the active flight plan and if the flight crew manually tunes an ILS on the RAD NAV page, the MCDU and the PFD display "CHECK APPR SELECTION". This message is a reminder to the flight crew that, although an ILS is tuned on RAD NAV page, the available approach guidance modes are APP NAV-FINAL when the APPR pushbutton is pressed in on the FCU.*

The FCU APPR pushbutton arms or engages LOC and G/S modes, if:
- An ILS approach is entered in the flight plan, or
- No approach, or only a runway, is entered in the flight plan, and an ILS is manually-tuned on the RAD NAV page, or
- Both RMPs are set to NAV, and an ILS is selected.

Ident.: PRO-NOR-SRP-01-70-A-00004019.0008001 / 17 MAR 11
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

APPROACH MODE ACTIVATION (LOC-G/S)

- **When cleared by ATC and when appropriate:**

DEPRESS the APPR pushbutton to arm the APPR mode for the approach entered in the flight plan.

Note: *If a NON PRECISION approach is selected in the active flight plan and if the flight crew manually tunes an ILS on the RAD NAV page, the MCDU displays "CHECK APPR SELECTION" and the PFD displays "CHECK APP GUIDANCE" or "CHECK APP SEL" (if CPIP3 installed). These messages are a reminder to the flight crew that, although an ILS is tuned on RAD NAV page, the available approach guidance modes are APP NAV-FINAL when the APPR pushbutton is pressed in on the FCU.*

The FCU APPR pushbutton arms or engages LOC and G/S modes, if:
- An ILS approach is entered in the flight plan, or
- No approach, or only a runway, is entered in the flight plan, and an ILS is manually-tuned on the RAD NAV page, or
- Both RMPs are set to NAV, and an ILS is selected.

Ident.: PRO-NOR-SRP-01-70-A-00004020.0002001 / 05 MAY 22
5 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 08495-09324, 10949-11522, 11572-11597**

AUTOLAND

CHECK that the FMA displays the aircraft capability (CAT 2 or CAT 3) for the intended ILS approach.
MONITOR the radio automatic callout.

- **At 350 ft RA:**

CHECK that LAND is displayed on the FMA.

CHECK ILS course.

Note: *If LAND is not displayed or if the ILS course is not correct, do not perform an autoland. The flight crew should perform a go-around, if visual references are not sufficient.*

- **At 40 ft RA:**

  CHECK that FLARE is displayed on the FMA.

- **At approximately 30 ft RA:**

  CHECK that IDLE is displayed on the FMA, and that autothrust starts to reduce thrust toward IDLE.

- **At 10 ft, “RETARD” callout comes up:**

  MOVE the thrust levers to IDLE.

L2 *Autothrust disconnects.*

L1

- **At touchdown:**

  CHECK that ROLL OUT appears on the FMA.

  Note: *In the case of tailwind during an automatic rollout, it is recommended to use manual braking without delay or automatic braking for an optimised runway centerline tracking.*

- **At the end of the Rollout:**

  Disconnect the autopilot.

L2 *If the flight crew does not disconnect the AP at the end of the rollout, and uses the nosewheel steering handwheel to taxi the aircraft off the runway, the following will occur:*

- *The AP will try to steer the aircraft back to the runway centerline, if the nosewheel steering handwheel is released and the aircraft heading is less than 20 ° off the runway centerline*
- *The AP will automatically disconnect, if the aircraft heading is 20 ° or more off the runway centerline.*

Ident.: PRO-NOR-SRP-01-70-A-00004020.0012001 / 05 MAY 22

6 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

AUTOLAND

CHECK that the FMA displays the aircraft capability (CAT 2 or CAT 3) for the intended ILS approach.
MONITOR the radio automatic callout.

- **At 350 ft RA:**

  CHECK that LAND is displayed on the FMA.

CHECK ILS course.

Note: *If LAND is not displayed or if the ILS course is not correct, do not perform an autoland. The flight crew should perform a go-around, if visual references are not sufficient.*

- **At 40 ft RA:**

  CHECK that FLARE is displayed on the FMA.

- **At approximately 30 ft RA:**

  CHECK that IDLE is displayed on the FMA, and that autothrust starts to reduce thrust toward IDLE.

- **At 10 ft, “RETARD” callout comes up:**

  MOVE the thrust levers to IDLE.

L2 *Autothrust disconnects.*

L1
- **At touchdown:**

  CHECK that ROLL OUT appears on the FMA.

- **At the end of the Rollout:**

  Disconnect the autopilot.

L2 *If the flight crew does not disconnect the AP at the end of the rollout, and uses the nosewheel steering handwheel to taxi the aircraft off the runway, the following will occur:*
- *The AP will try to steer the aircraft back to the runway centerline, if the nosewheel steering handwheel is released and the aircraft heading is less than 20 ° off the runway centerline*
- *The AP will automatically disconnect, if the aircraft heading is 20 ° or more off the runway centerline.*

Ident.: PRO-NOR-SRP-01-70-A-00004020.0033001 / 06 SEP 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

AUTOLAND

CHECK that the FMA displays the aircraft capability for the intended ILS/GLS approach (CAT2 or CAT3 for ILS, AUTO LAND for GLS).
MONITOR the radio automatic callout.

- **At 350 ft RA:**

  CHECK that LAND is displayed on the FMA.

  Note: *If LAND is not displayed, do not perform an autoland. The flight crew should perform a go-around, if visual references are not sufficient.*

CHECK ILS/GLS course.

Note: *If the ILS/GLS course is not correct, do not perform an autoland. In addition for CAT III approach, revert to CAT II minima.*

- **At 40 ft RA:**

  CHECK that FLARE is displayed on the FMA.

- **At approximately 30 ft RA:**

  CHECK that THR IDLE is displayed on the FMA, and that autothrust starts to reduce thrust toward IDLE.

- **At 10 ft, "RETARD" callout comes up:**

  MOVE the thrust levers to IDLE.

  L2 *Autothrust disconnects.*

- L1 **At touchdown:**

  CHECK that ROLL OUT appears on the FMA.

  Note: *In the case of tailwind during an automatic rollout, it is recommended to use manual braking without delay or automatic braking for an optimized runway centerline tracking.*

- **At the end of the Rollout:**

  Disconnect the autopilot.

  L2 *If the flight crew does not disconnect the AP at the end of the rollout, and uses the nosewheel steering handwheel to taxi the aircraft off the runway, the following will occur:*
  - *The AP will try to steer the aircraft back to the runway centerline, if the nosewheel steering handwheel is released and the aircraft heading is less than 20 ° off the runway centerline*
  - *The AP will automatically disconnect, if the aircraft heading is 20 ° or more off the runway centerline.*

Ident.: PRO-NOR-SRP-01-70-A-00004021.0001001 / 17 MAR 11
Applicable to: ALL

MANUAL LANDING

- **At DH:**

  DISCONNECT the APs. SPEED mode remains engaged.

- **At 20 ft "RETARD" automatic call out comes up:**

  MOVE the thrust levers to IDLE if they are not there already. (The A/THR disconnects).

- **At touch down:**

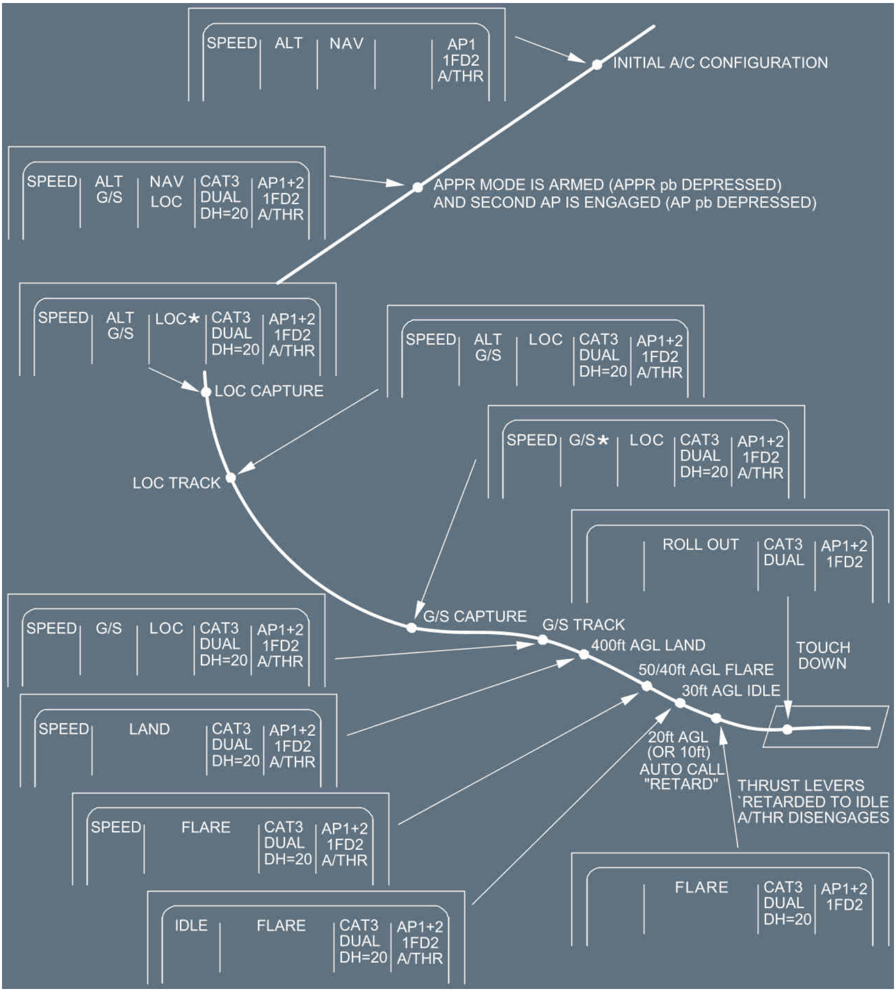
  “ROLL OUT” appears on the FMA and the yaw bar comes up on the PFD.

  Note: The retard call out is only a reminder when a manual landing is performed.

Ident.: PRO-NOR-SRP-01-70-A-00004022.0004001 / 22 MAY 12

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

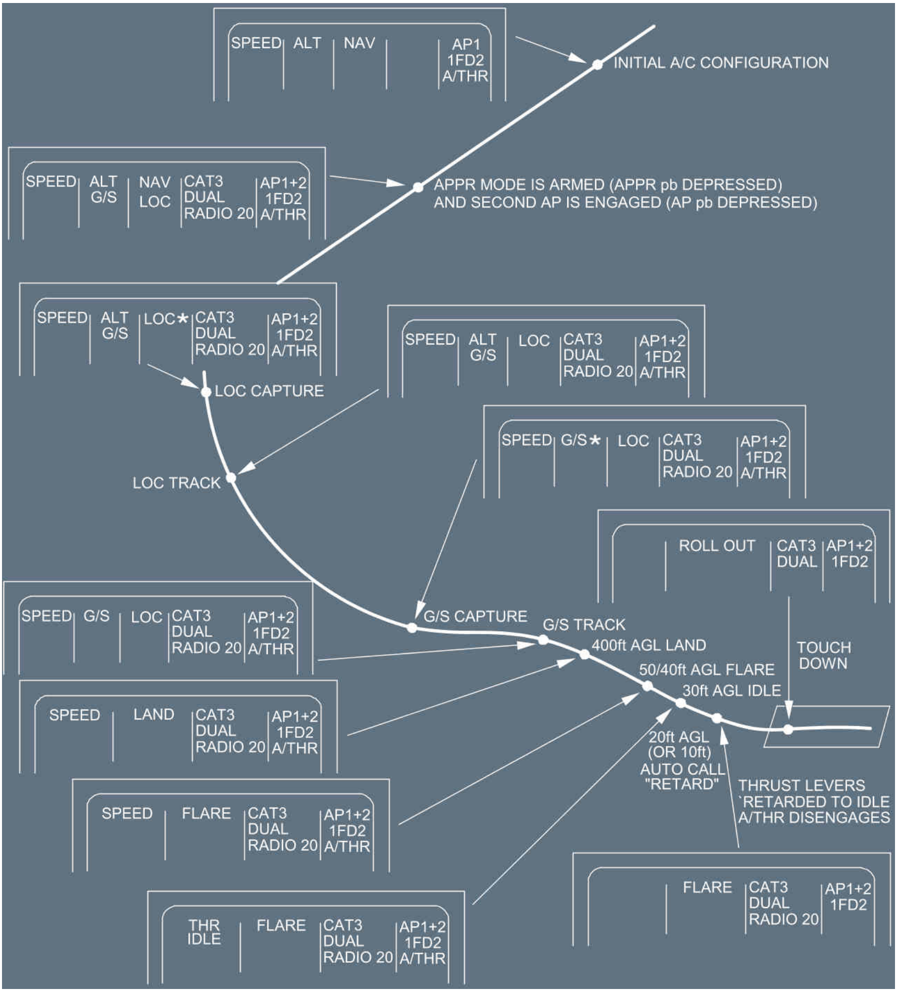
STANDARD ILS AUTOMATIC APPROACH


SPEED ALT NAV AP1 1FD2 A/THR
INITIAL A/C CONFIGURATION
SPEED ALT G/S NAV LOC CAT3 DUAL DH=20 AP1+2 1FD2 A/THR
APPR MODE IS ARMED (APPR pb DEPRESSED) AND SECOND AP IS ENGAGED (AP pb DEPRESSED)
SPEED ALT G/S LOC★ CAT3 DUAL DH=20 AP1+2 1FD2 A/THR
LOC CAPTURE
SPEED ALT G/S LOC CAT3 DUAL DH=20 AP1+2 1FD2 A/THR
LOC TRACK
SPEED G/S★ LOC CAT3 DUAL DH=20 AP1+2 1FD2 A/THR
ROLL OUT CAT3 DUAL AP1+2 1FD2
G/S CAPTURE
G/S TRACK
400ft AGL LAND
50/40ft AGL FLARE
30ft AGL IDLE
TOUCH DOWN
SPEED G/S LOC CAT3 DUAL DH=20 AP1+2 1FD2 A/THR
SPEED LAND CAT3 DUAL DH=20 AP1+2 1FD2 A/THR
20ft AGL (OR 10ft) AUTO CALL "RETARD"
THRUST LEVERS `RETARDED TO IDLE A/THR DISENGAGES
SPEED FLARE CAT3 DUAL DH=20 AP1+2 1FD2 A/THR
FLARE CAT3 DUAL DH=20 AP1+2 1FD2
IDLE FLARE CAT3 DUAL DH=20 AP1+2 1FD2 A/THR

Ident.: PRO-NOR-SRP-01-70-A-00004022.0011001 / 22 MAY 12

7 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

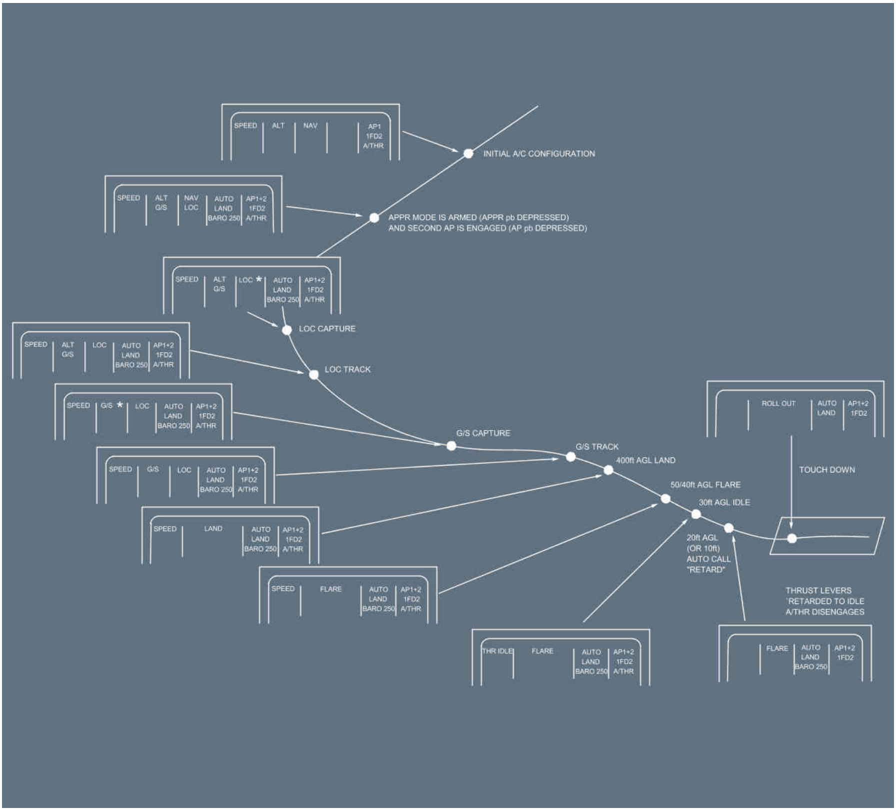
STANDARD ILS AUTOMATIC APPROACH


SPEED | ALT | NAV | AP1 1FD2 A/THR
INITIAL A/C CONFIGURATION
SPEED | ALT G/S | NAV LOC | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR
APPR MODE IS ARMED (APPR pb DEPRESSED)
AND SECOND AP IS ENGAGED (AP pb DEPRESSED)
SPEED | ALT G/S | LOC* | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR
LOC CAPTURE
SPEED | ALT G/S | LOC | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR
LOC TRACK
SPEED | G/S* | LOC | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR
ROLL OUT | CAT3 DUAL | AP1+2 1FD2
SPEED | G/S | LOC | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR
G/S CAPTURE
G/S TRACK
400ft AGL LAND
50/40ft AGL FLARE
30ft AGL IDLE
TOUCH DOWN
SPEED | LAND | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR
20ft AGL
(OR 10ft)
AUTO CALL
"RETARD"
THRUST LEVERS
RETARDED TO IDLE
A/THR DISENGAGES
SPEED | FLARE | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR
FLARE | CAT3 DUAL RADIO 20 | AP1+2 1FD2
THR IDLE | FLARE | CAT3 DUAL RADIO 20 | AP1+2 1FD2 A/THR

Ident.: PRO-NOR-SRP-01-70-A-00013748.0003001 / 17 MAR 11

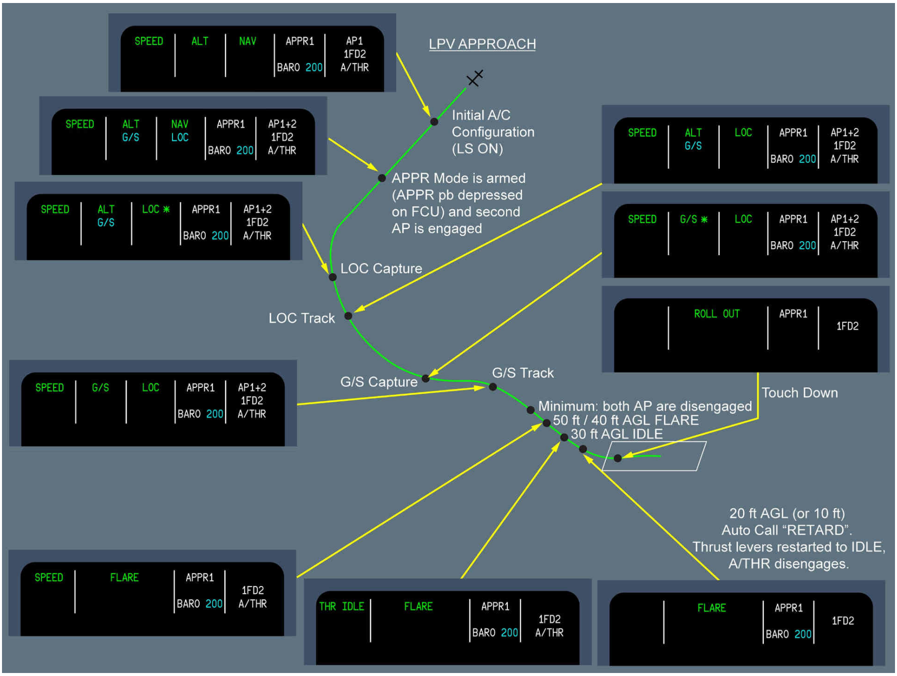
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

STANDARD GLS AUTOMATIC APPROACH


SPEED | ALT | NAV | | AP1 1FD2 A/THR
INITIAL A/C CONFIGURATION
SPEED | ALT G/S | NAV LOC | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
APPR MODE IS ARMED (APPR pb DEPRESSED)
AND SECOND AP IS ENGAGED (AP pb DEPRESSED)
SPEED | ALT G/S | LOC ★ | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
LOC CAPTURE
SPEED | ALT G/S | LOC | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
LOC TRACK
SPEED | G/S ★ | LOC | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
G/S CAPTURE
SPEED | G/S | LOC | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
G/S TRACK
400ft AGL LAND
SPEED | LAND | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
50/40ft AGL FLARE
SPEED | FLARE | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
30ft AGL IDLE
THR IDLE | FLARE | AUTO LAND BARO 250 | AP1+2 1FD2 A/THR
20ft AGL
(OR 10ft)
AUTO CALL
"RETARD"
FLARE | AUTO LAND BARO 250 | AP1+2 1FD2
THRUST LEVERS
RETARDED TO IDLE
A/THR DISENGAGES
ROLL OUT | AUTO LAND | AP1+2 1FD2
TOUCH DOWN

Ident.: PRO-NOR-SRP-01-70-A-00024846.0001001 / 12 MAY 22
Applicable to: ALL

STANDARD LPV APPROACH (SLS ◁)


SPEED | ALT | NAV | APPR1 BARO 200 | AP1 1FD2 A/THR
LPV APPROACH
SPEED | ALT G/S | NAV LOC | APPR1 BARO 200 | AP1+2 1FD2 A/THR
Initial A/C Configuration (LS ON)
SPEED | ALT G/S | LOC | APPR1 BARO 200 | AP1+2 1FD2 A/THR
APPR Mode is armed (APPR pb depressed on FCU) and second AP is engaged
SPEED | ALT G/S | LOC ✳ | APPR1 BARO 200 | AP1+2 1FD2 A/THR
SPEED | G/S ✳ | LOC | APPR1 BARO 200 | AP1+2 1FD2 A/THR
LOC Capture
LOC Track
ROLL OUT | APPR1 | 1FD2
G/S Track
G/S Capture
Touch Down
SPEED | G/S | LOC | APPR1 BARO 200 | AP1+2 1FD2 A/THR
Minimum: both AP are disengaged
50 ft / 40 ft AGL FLARE
30 ft AGL IDLE
20 ft AGL (or 10 ft) Auto Call “RETARD”. Thrust levers restarted to IDLE, A/THR disengages.
SPEED | FLARE | APPR1 BARO 200 | 1FD2 A/THR
THR IDLE | FLARE | APPR1 BARO 200 | 1FD2 A/THR
FLARE | APPR1 BARO 200 | 1FD2

Ident.: PRO-NOR-SRP-01-70-A-00004023.0001001 / 26 NOV 13
Applicable to: ALL

EARLY SELECTION OF APPROACH MODE LOC-G/S

Pressing the APPR pushbutton arms LOC and G/S.
When the aircraft is above 5 000 ft AGL, the Radio altimeter signals may not be valid. As long as the Radio altimeter signals are invalid, the FMA displays CAT 1.

- **When the aircraft is cleared for an ILS/MLS ◁ /GLS ◁ approach:**
  PRESS the APPR pb on the FCU.
- **When the aircraft is below 5 000 ft AGL:**
  Check that the FMA displays the correct capability for the intended approach.

Ident.: PRO-NOR-SRP-01-70-A-00004024.0002001 / 10 MAY 21
Applicable to: ALL

G/S (F-G/S) INTERCEPTION FROM ABOVE

If the aircraft is above the glideslope, the system will not capture the G/S (F-G/S) automatically.
The pilot must bring the aircraft onto the glideslope beam, and select an appropriate V/S to intercept it:

- For approach using ILS, *Refer to PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - Glide Interception from Above*
- For approach using FLS , *Refer to PRO-NOR-SOP-18-C Approach using F-LOC F-G/S Guidance - F-G/S Beam Interception From Above*

Ident.: PRO-NOR-SRP-01-70-A-00004025.0001001 / 17 MAR 11
8 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

DATA LOCK

When the aircraft reaches 700 ft RA with APPR mode (LOC and G/S) armed or engaged, the ILS FREQ and course are frozen in the receiver.
This function (ILS tune inhibit) is available, when at least one AP/FD is engaged. Any attempt to change the ILS frequency or CRS, via the MCDU or RMP, does not affect the receiver.
If the speed is managed, the system does not accept any modifications the pilot may enter on the PERF APPR page (surface wind, selected landing configuration, or VAPP) for speed guidance purposes below this altitude.
When the aircraft reaches 400 ft RA, LAND mode engages. The flight crew can only disengage this mode by engaging the GO AROUND mode.

Ident.: PRO-NOR-SRP-01-70-A-00004025.0003001 / 12 MAY 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

DATA LOCK

When the aircraft reaches 700 ft RA with APPR mode (LOC and G/S) armed or engaged, the ILS FREQ or GLS / SLS channel and the course are frozen in the receiver.
This function (ILS / GLS / SLS tune inhibit) is available, when at least one AP/FD is engaged. Any attempt to change the frequency/channel or CRS, via the MCDU or RMP, does not affect the receiver.
In the same way, SLS de-selection is not available.
If the speed is managed, the system does not accept any modifications the flight crew may enter on the PERF APPR page (surface wind, selected landing configuration, or VAPP) for speed guidance purposes below this altitude.

For ILS / GLS approach, when the aircraft reaches 400 ft RA, LAND mode engages. The flight crew can only disengage this mode by engaging the GO AROUND mode.

Ident.: PRO-NOR-SRP-01-70-A-00004026.0001001 / 17 MAR 11

9 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

USE OF RMPS FOR ILS/DME

If both FMGCs fail, the flight crew can use the RMPs (Radio Management Panels 1 and 2) for back up tuning. Either RMP controls ILS. Prior to select an ILS frequency on one of the RMPs, the flight crew has to select “NAV” button from RMP 1 and RMP 2.
If the ILS has a DME, the PFD will not display the DME distance. In this situation, the flight crew will fly without DME information. If necessary, increase the Decision height (DH) accordingly.

Ident.: PRO-NOR-SRP-01-70-A-00004026.0003001 / 17 MAR 11

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

USE OF RMPS FOR ILS/GLS/DME

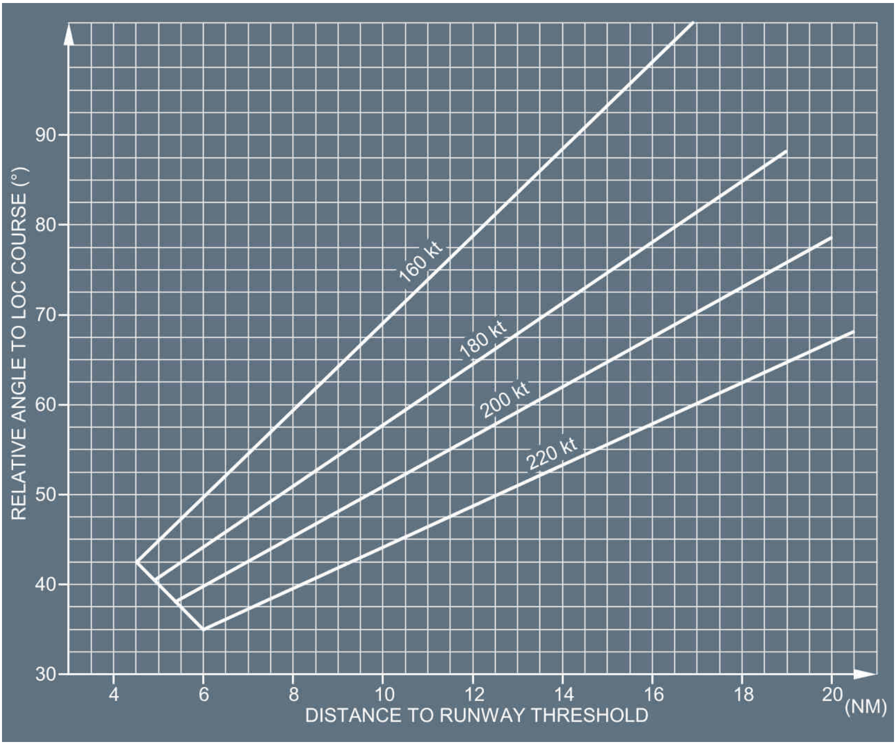
If both FMGCs fail, the flight crew can use the RMPs (Radio Management Panels 1 and 2) for back up tuning. Either RMP controls ILS/GLS. Prior to select an ILS frequency or GLS channel on one of the RMPs, the flight crew has to select “NAV” button from RMP 1 and RMP 2.
If the ILS has a DME, the PFD will not display the DME distance. In this situation, the flight crew will fly without DME information. If necessary, increase the Decision height (DH) accordingly.

Ident.: PRO-NOR-SRP-01-70-A-00004027.0001001 / 22 MAY 12

10 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11522, 11572-11597**

LOCALIZER (LOC) BEAM CAPTURE

The flight crew must always monitor the capture of a LOC beam. During this evolution, the PFD and ND must indicate that associated deviation indications move toward the centre of the scale.
To avoid performing a false capture, the flight crew must be careful not to arm the LOC too early.
The following graph shows the angle of interception versus distance to the runway threshold that ensures that the aircraft will not overshoot the axis by more than one and a half dot.



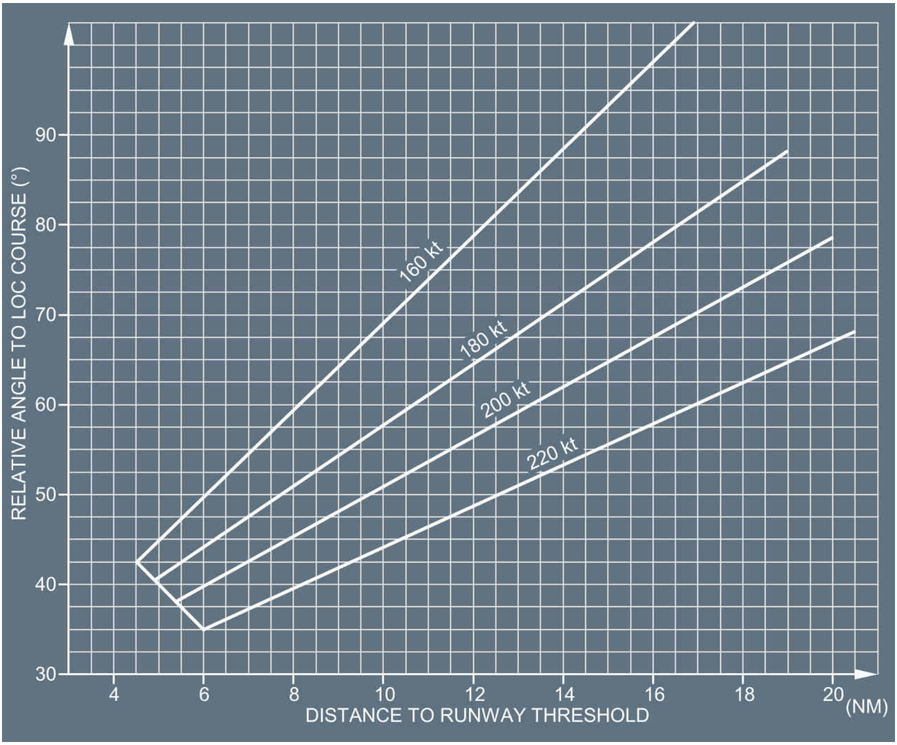
The capture begins when the deviation is two dots or less. It is programmed to line the aircraft up on the beam with a single overshoot, even if the intercept angle is large.

Note: *ICAO requires LOC beam to ensure a normal capture within 10 NM and plus or minus 35 ° from the course centerline. Some ILS systems just meet the requirement and are subject to false capture outside these limits.*

Ident.: PRO-NOR-SRP-01-70-A-00004027.0004001 / 22 MAY 12
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

LOCALIZER (LOC) BEAM CAPTURE

The flight crew must always monitor the capture of a LOC beam. During this evolution, the PFD and ND must indicate that associated deviation indications move toward the centre of the scale. To avoid performing a false capture, the flight crew must be careful not to arm the LOC too early. The following graph shows the angle of interception versus distance to the runway threshold that ensures that the aircraft will not overshoot the axis by more than one and a half dot.



The capture begins when the deviation is two dots or less. It is programmed to line the aircraft up on the beam with a single overshoot, even if the intercept angle is large.

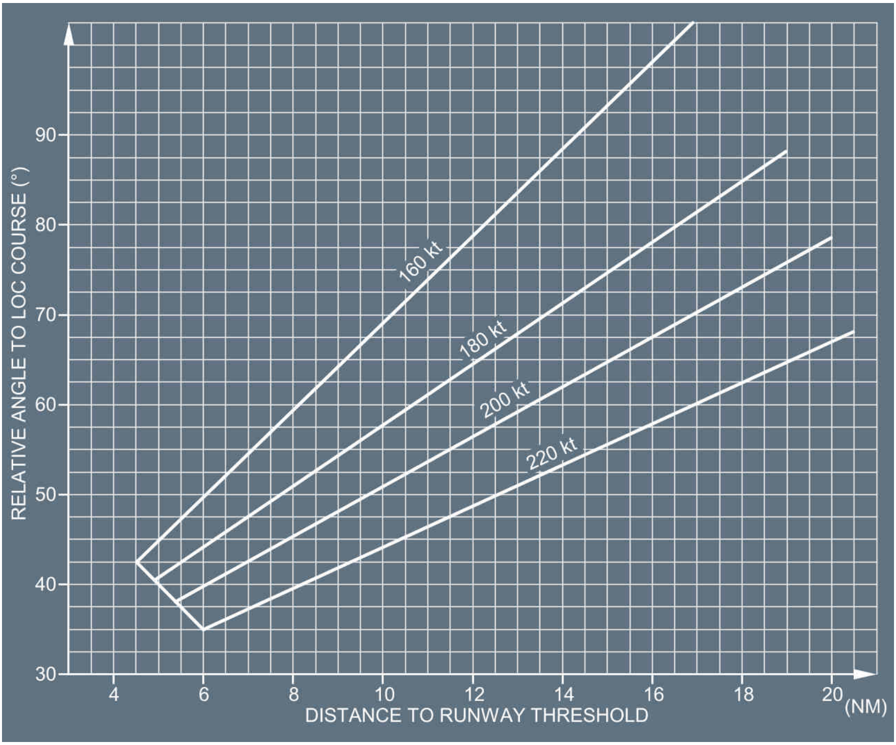
Note: 1. *ICAO requires LOC beam to ensure a normal capture within 10 NM and plus or minus 35 ° from the course centerline. Some ILS/GLS systems just satisfy the requirement and are subject to false capture outside these limits.*
2. *This diagram is based on an average ILS/GLS sensitivity, i.e. on an average distance between the runway threshold and LOC transmitter.*

11 Ident.: PRO-NOR-SRP-01-70-A-00004027.0003001 / 22 MAY 12
Applicable to: MSN 11531

LOCALIZER (LOC) OR F-LOC BEAM CAPTURE

The flight crew must always monitor the capture of a LOC or F-LOC beam. During this evolution, the PFD and ND must indicate that associated deviation indications move toward the centre of the

scale. To avoid performing a false capture, the flight crew must be careful not to arm the LOC or F-LOC too early.
The following graph shows the angle of interception versus distance to the runway threshold that ensures that the aircraft will not overshoot the axis by more than one and a half dot.



The capture begins when the deviation is two dots or less. It is programmed to line the aircraft up on the beam with a single overshoot, even if the intercept angle is large.

SWITCHING FROM NON ILS TO ILS APPROACH

Ident.: PRO-NOR-SRP-01-70-00004028.0002001 / 03 NOV 21

12 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

If an ILS approach is possible when a non ILS was previously scheduled, use one of the following procedures:

USE OF SECOND FLIGHT PLAN

Use a secondary flight plan to prepare the alternate ILS approach, time permitting.

COPY the ACTIVE flight plan.
REVISE the ARRIVAL: insert the ILS approach and the applicable STAR/VIA.
On the RAD NAV page, TUNE in the ILS manually.
REVISE the PERF APPR page.

CHANGE OF THE CLEARANCE

ATC changes the clearance from the non-ILS to the ILS approach.

- **If a secondary flight plan has been prepared:**
  ACTIVATE the SEC F-PLN and adjust.
  Follow subsequent standard procedures.
- **If a secondary flight plan has not been prepared:**
  REVISE the ARRIVAL on the primary F-PLN, inserting the ILS approach.
  REVISE the PERF APPR page.
  Follow subsequent standard procedures.

CAUTION

If the flight crew decides to fly the ILS approach without revising the arrival of the primary flight plan (a non ILS approach is in the F-PLN), LOC and G/S modes will not be available when the flight crew presses the APPR pushbutton.

Consequently, the flight crew should:
- Manually TUNE in the ILS on the RAD NAV page: CHECK that the "CHECK APPR SELECTION" message comes up.
- Press the ILS pushbutton and select ROSE ILS on the EIS CONTROL panel.
- Use HDG, V/S or TRK, FPA modes to fly the ILS.

SWITCHING FROM NON PRECISION TO ILS/GLS/SLS ◁ APPROACH

Ident.: PRO-NOR-SRP-01-70-00004028.0016001 / 12 MAY 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

If an ILS / GLS / LPV (SLS ◁) approach is possible whereas another approach was previously scheduled, use one of the following procedures:

USE OF SECOND FLIGHT PLAN

Use a secondary flight plan to prepare the alternate ILS / GLS / LPV (SLS ◁) approach, time permitting.

COPY the ACTIVE flight plan.
REVISE the ARRIVAL: insert the ILS / GLS / LPV (SLS ◁) approach and the applicable STAR/VIA.
On the RAD NAV page, TUNE in the ILS / GLS manually. A manual tuning of the LPV (SLS ◁) approach on the RAD NAV page is not possible.
REVISE the PERF APPR page.

CHANGE OF THE CLEARANCE

ATC changes the clearance from the initial approach to the ILS / GLS / LPV (SLS ◁) approach.

- **If a secondary flight plan has been prepared:**

  ACTIVATE the SEC F-PLN and adjust.

  Follow subsequent standard procedures.

- **If a secondary flight plan has not been prepared:**

  REVISE the ARRIVAL on the primary F-PLN, inserting the ILS / GLS / LPV (SLS ◁) approach.

  REVISE the PERF APPR page.

  Follow subsequent standard procedures.

  Note: *If the flight crew decides to fly the ILS / GLS / LPV (SLS ◁) approach without revising the arrival of the primary flight plan (a non-precision approach is in the F-PLN), LOC and G/S modes will be available when the flight crew presses the APPR pushbutton.*

SWITCHING FROM GLS/SLS ◁ TO ILS APPROACH

Ident.: PRO-NOR-SRP-01-70-00013072.0016001 / 12 MAY 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

If the flight crew decides to fly an ILS approach whereas the aircraft already flies a GLS/ SLS ◁ approach in that is part of the F-PLN, use the following procedures:

PRESS the APPR pb on FCU. The system reverts to basic modes (HDG V/S, TRK FPA). Continue to follow, in selected modes, the path of the initial GLS/ SLS ◁ approach when the ILS approach is not yet activated.

ACTIVATE the SEC F-PLN if previously prepared with the alternate ILS approach or REVISE the ARRIVAL on the primary F-PLN inserting the ILS approach.

Note: *A manual tuning of the ILS through the RAD NAV MCDU page is also possible.*

Refer to procedures described in Refer to SWITCHING FROM NON ILS/NON GLS TO ILS/GLS APPROACH.

PRESS the APPR pb on FCU.

This will arm the LOC and G/S modes again.

LANDING CATEGORIES

Ident.: PRO-NOR-SRP-01-70-00004038.0001001 / 16 NOV 11

13 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11522, 11572-11597**

Each FMGC computes its own landing category : CAT1, CAT2, CAT3 single, and CAT3 dual and displays the corresponding landing category on the FMAs.
Each category depends upon the availability of aircraft systems and functions.
When the landing capability downgrades, a triple click aural warning is activated.

FAIL-OPERATIONAL AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-operational if, in the event of a failure below alert height, the remaining part of the automatic system allows the aircraft to complete the approach, flare, and landing. A CAT 3 DUAL system is a fail-operational automatic landing system.

Note: *In the event of a failure, the automatic landing system operates as a fail-passive system.*

FAIL-PASSIVE AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-passive if, in the event of a failure, there is no significant out-of-trim condition or deviation of flight path or attitude, but the landing is not completed automatically. A CAT3 single system is a fail-passive automatic landing system.

Note: *With a fail-passive automatic landing system the pilot assumes control of the aircraft after a failure.*

Below 100 ft (radio altimeter), the FMGS freezes the landing capability until LAND mode is disengaged or both APs are off.
Therefore a failure occurring below 100 ft does not change the category of the system.

ALERT HEIGHT

The alert height is the height above touch down, above which a CAT3 autoland would be discontinued and a missed approach executed, if a failure occurred in either the airplane systems or the relevant ground equipments.

Below the alert height, if such a failure occurs, the flare, touchdown and roll out may be accomplished using the remaining automatic system.

LANDING CAPABILITIES

14 Ident.: PRO-NOR-SRP-01-70-00004038.0002001 / 12 MAY 22
Applicable to: MSN 11531

Each FMGC computes its own landing CAPABILITY:
- For ILS : CAT1, CAT2, CAT3 single, and CAT3 dual
- For FLS : F-APP, F-APP + RAW and RAW ONLY
- For SLS : APPR1

Each FMGS then displays the corresponding landing CAPABILITY on the FMAs.
Each capability depends upon the availability of aircraft systems and functions.
When the landing capability downgrades, a triple click aural warning is activated.

FAIL-OPERATIONAL AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-operational if, in the event of a failure below alert height, the remaining part of the automatic system allows the aircraft to complete the approach, flare, and landing. A CAT 3 DUAL system is a fail-operational automatic landing system.

Note: *In the event of a failure, the automatic landing system operates as a fail-passive system.*

FAIL-PASSIVE AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-passive if, in the event of a failure, there is no significant out-of-trim condition or deviation of flight path or attitude, but the landing is not completed automatically. A CAT3 single system is a fail-passive automatic landing system.

Note: *With a fail-passive automatic landing system the pilot assumes control of the aircraft after a failure.*

Below 100 ft (radio altimeter), the FMGS freezes the landing capability until LAND mode is disengaged or both APs are off.
Therefore a failure occurring below 100 ft does not change the category of the system.

ALERT HEIGHT

The alert height is the height above touch down, above which a CAT3 autoland would be discontinued and a missed approach executed, if a failure occurred in either the airplane systems or the relevant ground equipments.
Below the alert height, if such a failure occurs, the flare, touchdown and roll out may be accomplished using the remaining automatic system.

LANDING CATEGORIES

Ident.: PRO-NOR-SRP-01-70-00004038.0003001 / 06 SEP 22

Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Each FMGC computes its own landing category:
- For ILS: CAT1, CAT2, CAT3 SINGLE, and CAT3 DUAL
- For GLS: CAT1, and AUTO LAND.

Each FMGC then displays the corresponding landing category on the FMAs.
Each category depends upon the availability of aircraft systems and functions.
When the landing capability downgrades, a triple click aural warning is activated.

FAIL-OPERATIONAL AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-operational if, in the event of a failure below alert height, the remaining part of the automatic system allows the aircraft to complete the approach, flare, and landing. A CAT3 DUAL system is a fail-operational automatic landing system.

Note: *In the event of a failure, the automatic landing system operates as a fail-passive system.*

FAIL-PASSIVE AUTOMATIC LANDING SYSTEM

An automatic landing system is fail-passive if, in the event of a failure, there is no significant out-of-trim condition or deviation of flight path or attitude, but the landing is not completed automatically. A CAT3 SINGLE system is a fail-passive automatic landing system.

Note: *With a fail-passive automatic landing system the pilot assumes control of the aircraft after a failure.*

Below 100 ft (radio altimeter), the FMGS freezes the landing capability until LAND mode is disengaged or both APs are off.
Therefore a failure occurring below 100 ft does not change the category of the system.

ALERT HEIGHT

The alert height is the height above touch down, above which a CAT3 autoland would be discontinued and a missed approach executed, if a failure occurred in either the airplane systems or the relevant ground equipments.
Below the alert height, if such a failure occurs, the flare, touchdown and roll out may be accomplished using the remaining automatic system.

WARNINGS FOR ILS/GLS APPROACH

Ident.: PRO-NOR-SRP-01-70-00004039.0011001 / 18 MAY 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

AUTOLAND WARNING

For more information on conditions triggering AUTOLAND warning, *Refer to DSC-22_30-80-10 Autoland Warning Light*.

WARNING OF EXCESSIVE BEAM DEVIATION

This warning is a flashing of the LOC and G/S scales on the PFD and ND (ROSE LS mode). It occurs whenever:
- G/S deviation is more than 1 dot (above 100 ft RA)
- LOC deviation is more than 1/4 dot (above 15 ft RA).

WARNING ASSOCIATED WITH ILS/GLS "LANDING CAPABILITY"

Any downgrading in the aircraft’s capability for automatic approach and landing sounds a triple-click aural warning.

FAILURE OF BOTH LOCALIZER AND GLIDESLOPE RECEIVERS

The PFD and ND (ROSE LS mode) display LOC and G/S flags (if the LS pb has been pressed green). LOC and G/S scales disappear from the PFD.

If LOC or G/S modes are engaged and at least one AP/FD is engaged:
- The AP disengages
- The FD reverts to its HDG-V/S or TRK-FPA modes.

FAILURE OF LOCALIZER OR GLIDESLOPE TRANSMITTER (WHEN CAPTURED)

- The corresponding index is lost
- The LOC and G/S scales flash
- The corresponding FD bar flashes.

Above 200 ft RA, if the transmitter failure lasts less than 7 s, the FMA retains the LOC and G/S modes (or the LAND mode) and the APs are able to regain these modes. If the failure lasts longer than 7 s, the AP disengages and the FD reverts to its basic modes. Below 200 ft RA, if the transmitter failure occurs, the AUTOLAND warning appears, indicating that the crew must perform a go-around (if insufficient visual references) with one or two APs engaged.

WARNINGS FOR ILS APPROACH

Ident.: PRO-NOR-SRP-01-70-00004039.0010001 / 18 MAY 22

15 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

AUTOLAND WARNING

For more information on conditions triggering AUTOLAND warning, *Refer to DSC-22_30-80-10 Autoland Warning Light*.

WARNING OF EXCESSIVE BEAM DEVIATION

The LOC and G/S scales flash on the PFD and ND (ROSE ILS mode). It occurs whenever:
- G/S deviation is more than 1 dot (above 100 ft RA)
- LOC deviation is more than 1/4 dot (above 15 ft RA).

WARNING ASSOCIATED WITH ILS "LANDING CAPABILITY"

Any downgrading in the aircraft’s capability for automatic approach and landing sounds a triple-click aural warning.

FAILURE OF BOTH LOCALIZER AND GLIDESLOPE RECEIVERS

The PFD and ND (ROSE ILS mode) display LOC and G/S flags (if the ILS pb has been pressed green). LOC and G/S scales disappear from the PFD.

If LOC or G/S modes are engaged and at least one AP/FD is engaged:
- The AP disengages
- The FD reverts to its HDG-V/S or TRK-FPA modes.

FAILURE OF LOCALIZER OR GLIDESLOPE TRANSMITTER (WHEN CAPTURED)

- The corresponding index is lost
- The LOC and G/S scales flash
- The corresponding FD bar flashes.

Above 200 ft RA, if the transmitter failure lasts less than 7 s, the FMA retains the LOC and G/S modes (or the LAND mode) and the APs are able to regain these modes. If the failure lasts longer than 7 s, the AP disengages and the FD reverts to its basic modes. Below 200 ft RA, if the transmitter failure occurs, the AUTOLAND warning appears, indicating that the crew must perform a go-around (if insufficient visual references) with one or two APs engaged.

WARNINGS FOR ILS APPROACH

Ident.: PRO-NOR-SRP-01-70-00004039.0002001 / 18 MAY 22

16 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

AUTOLAND WARNING

For more information on conditions triggering AUTOLAND warning, *Refer to DSC-22_30-80-10 Autoland Warning Light*.

WARNING OF EXCESSIVE BEAM DEVIATION

The LOC and G/S scales flash on the PFD and ND (ROSE ILS mode). It occurs whenever:
- G/S deviation is more than 1 dot (above 100 ft RA)
- LOC deviation is more than 1/4 dot (above 15 ft RA).

WARNING ASSOCIATED WITH ILS "LANDING CAPABILITY"

Any downgrading in the aircraft's capability for automatic approach and landing sounds a triple-click aural warning.

FAILURE OF BOTH LOCALIZER AND GLIDESLOPE RECEIVERS

The PFD and ND (ROSE ILS mode) display LOC and G/S flags (if the ILS pb has been pressed green). LOC and G/S scales disappear from the PFD.

If LOC or G/S modes are engaged and at least one AP/FD is engaged:
- The AP disengages
- The FD reverts to its HDG-V/S or TRK-FPA modes.

FAILURE OF LOCALIZER OR GLIDESLOPE TRANSMITTER (WHEN CAPTURED)

- The corresponding index is lost
- The LOC and G/S scales flash
- The corresponding FD bar flashes.

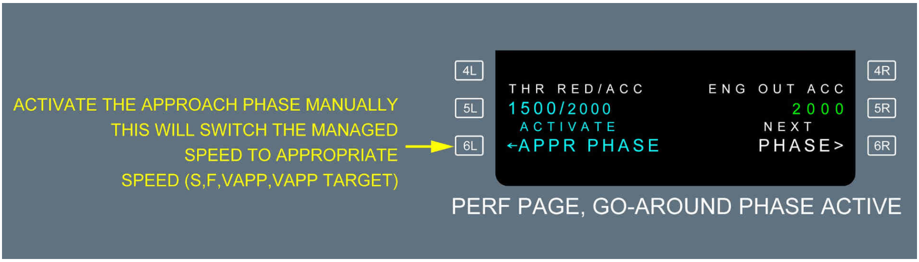
Above 200 ft RA, if the transmitter failure lasts less than 7 s, the FMA retains the LOC and G/S modes (or the LAND mode) and the APs are able to regain these modes. If the failure lasts longer than 7 s, the AP disengages and the FD reverts to its basic modes. Below 200 ft RA, if the transmitter failure occurs, the AUTOLAND warning appears, indicating that the crew must perform a go-around (if insufficient visual references) with one or two APs engaged.

Go-Around

MONITORING THE GO-AROUND

1 Ident.: PRO-NOR-SRP-01-80-00004054.0008001 / 04 SEP 18
Applicable to: MSN 11531

Engage the GO-AROUND phase and GO-AROUND modes by setting the thrust levers to the TOGA position, if at least CONF1 is selected.
When the GO-AROUND phase is engaged, the previously-flown approach is automatically strung back into the flight plan at the end of the missed approach procedure.
In the GO-AROUND phase, the system makes no predictions. Consequently, CLB and DES modes are not available, and the flight crew must monitor constraints.
When the aircraft leaves the GO-AROUND phase, all predictions and modes become available again. During a GO-AROUND phase, the managed speed is Green Dot.


ACTIVATE THE APPROACH PHASE MANUALLY
THIS WILL SWITCH THE MANAGED
SPEED TO APPROPRIATE
SPEED (S,F,VAPP,VAPP TARGET)
4L
5L
6L
THR RED/ACC
1500/2000
ACTIVATE
←APPR PHASE
ENG OUT ACC
2000
NEXT
PHASE>
4R
5R
6R

PERF PAGE, GO-AROUND PHASE ACTIVE

HEADING/TRACK PRESET FUNCTION IN GO-AROUND PHASE

The flight crew can use the heading/track preset, when LOC*, LOC, F-LOC*, F-LOC, FINAL, LAND or GA is engaged.

SET the appropriate heading, or track value, in the window of the FCU.
When necessary, PULL the HDG/TRK selection knob to engage the mode on the preset value.

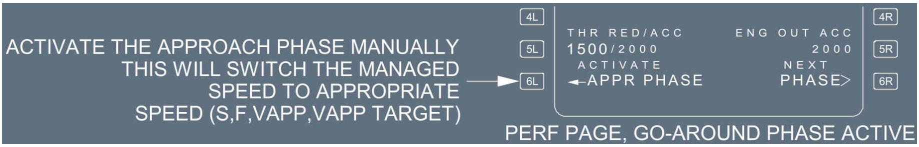
Note: *The heading/track preset is not available in non precision approach in AP/FD FINAL mode.*

MONITORING THE GO-AROUND

Ident.: PRO-NOR-SRP-01-80-00004054.0005001 / 09 JUL 13
2 **Applicable to: MSN 01376-01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

Engage the GO-AROUND phase and GO-AROUND modes by setting the thrust levers to the TOGA position, if at least CONF1 is selected.

When the GO-AROUND phase is engaged, the previously-flown approach is automatically strung back into the flight plan at the end of the missed approach procedure.
In the GO-AROUND phase, the system makes no predictions. Consequently, CLB and DES modes are not available, and the flight crew must monitor constraints.
When the aircraft leaves the GO-AROUND phase, all predictions and modes become available again. During a GO-AROUND phase, the managed speed is Green Dot.



ACTIVATE THE APPROACH PHASE MANUALLY THIS WILL SWITCH THE MANAGED SPEED TO APPROPRIATE SPEED (S,F,VAPP,VAPP TARGET)

PERF PAGE, GO-AROUND PHASE ACTIVE

HEADING/TRACK PRESET FUNCTION IN GO-AROUND PHASE

The flight crew can use the heading/track preset, when LOC*, LOC, LAND or GA is engaged.

SET the appropriate heading, or track value, in the window of the FCU.
When necessary, PULL the HDG/TRK selection knob to engage the mode on the preset value.

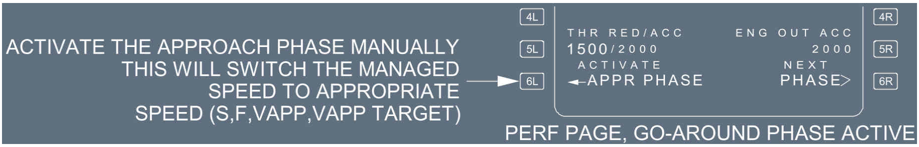
Note: *The heading/track preset is not available in non precision approach in AP/FD FINAL mode.*

MONITORING THE GO-AROUND

Ident.: PRO-NOR-SRP-01-80-00004054.0002001 / 09 DEC 09

3 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

Engage the GO-AROUND phase and GO-AROUND modes by setting the thrust levers to the TOGA position, if at least CONF1 is selected.
When the GO-AROUND phase is engaged, the previously-flown approach is automatically strung back into the flight plan at the end of the missed approach procedure.
In the GO-AROUND phase, the system makes no predictions. Consequently, CLB and DES modes are not available, and the flight crew must monitor constraints.
When the aircraft leaves the GO-AROUND phase, all predictions and modes become available again. During a GO-AROUND phase, the managed speed is Green Dot.



ACTIVATE THE APPROACH PHASE MANUALLY THIS WILL SWITCH THE MANAGED SPEED TO APPROPRIATE SPEED (S,F,VAPP,VAPP TARGET)

PERF PAGE, GO-AROUND PHASE ACTIVE

HEADING/TRACK PRESET FUNCTION IN GO-AROUND PHASE

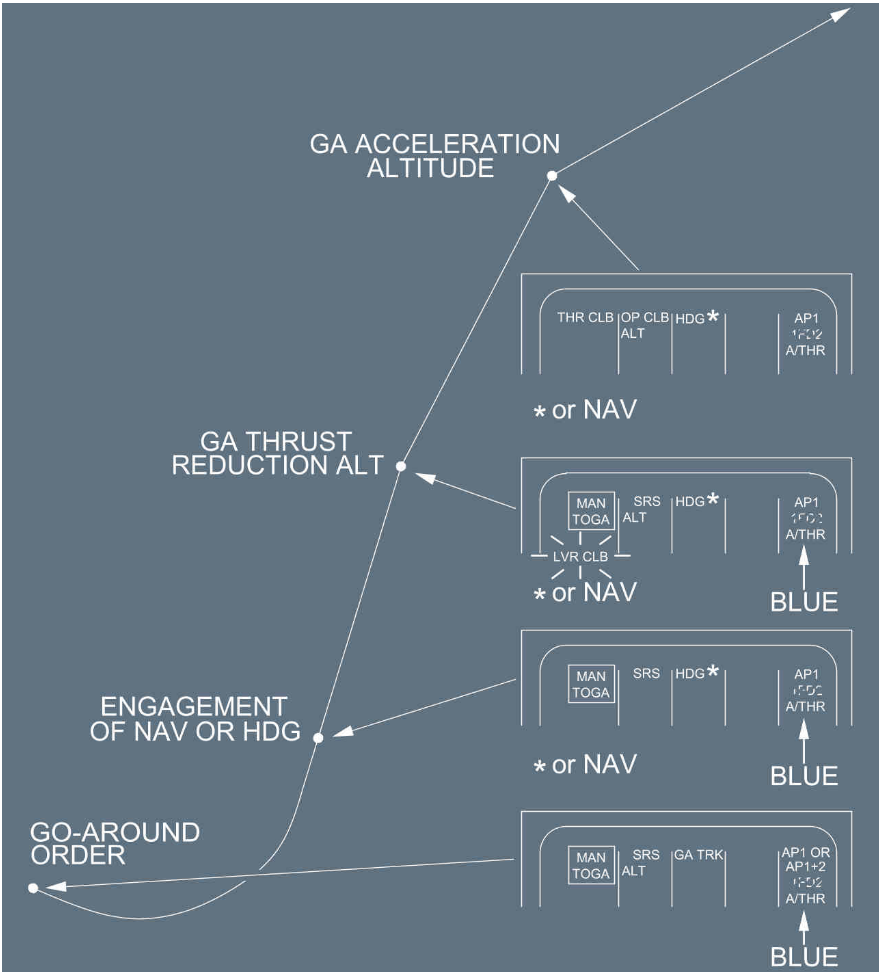
The flight crew can use the heading/track preset, when LOC*, LOC, LAND, FINAL or GA is engaged.

SET the appropriate heading, or track value, in the window of the FCU.
When necessary, PULL the HDG/TRK selection knob to engage the mode on the preset value.

GO-AROUND PROFILE

Ident.: PRO-NOR-SRP-01-80-00004055.0014001 / 22 MAY 12
Applicable to: MSN 01376

- **WITH FD ON:**
  Apply SOP procedures


GA ACCELERATION ALTITUDE
THR CLB
OP CLB
ALT
HDG*
AP1
1FD2
A/THR
* or NAV
GA THRUST REDUCTION ALT
MAN TOGA
SRS
ALT
HDG*
AP1
1FD2
A/THR
LVR CLB
* or NAV
BLUE
ENGAGEMENT OF NAV OR HDG
MAN TOGA
SRS
HDG*
AP1
1FD2
A/THR
* or NAV
BLUE
GO-AROUND ORDER
MAN TOGA
SRS
ALT
GA TRK
AP1 OR AP1+2
1FD2
A/THR
BLUE

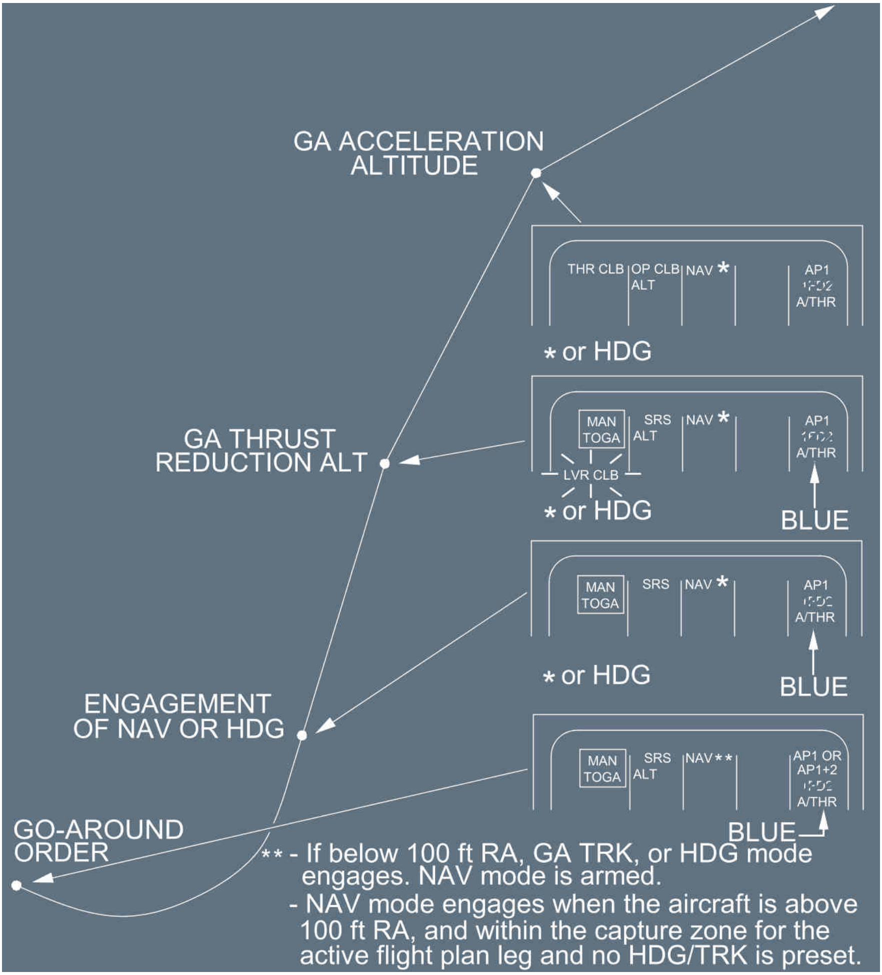
GO-AROUND PROFILE

Ident.: PRO-NOR-SRP-01-80-00004055.0043001 / 22 MAY 12

4 **Applicable to: MSN 01143-01251, 01459-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

- **WITH FD ON:**

  Apply SOP procedures


GA ACCELERATION ALTITUDE
THR CLB
OP CLB
ALT
NAV *
AP1
1FD2
A/THR
* or HDG
GA THRUST REDUCTION ALT
MAN TOGA
SRS
ALT
NAV *
AP1
1FD2
A/THR
LVR CLB
* or HDG
BLUE
MAN TOGA
SRS
NAV *
AP1
1FD2
A/THR
* or HDG
BLUE
ENGAGEMENT OF NAV OR HDG
MAN TOGA
SRS
ALT
NAV**
AP1 OR AP1+2
1FD2
A/THR
BLUE
GO-AROUND ORDER

** - If below 100 ft RA, GA TRK, or HDG mode engages. NAV mode is armed.
- NAV mode engages when the aircraft is above 100 ft RA, and within the capture zone for the active flight plan leg and no HDG/TRK is preset.

MISSED APPROACH: TRY AGAIN

Ident.: PRO-NOR-SRP-01-80-00004057.0001001 / 14 FEB 11

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

If the pilot intends to fly another approach to the destination:
- The flight plan has all the necessary data for the missed approach
- Green Dot is the target speed.

- **When cleared by the ATC to follow the missed approach procedure:**
  ENGAGE NAV mode, or
  TURN and PULL the HDG selector knob to set a heading

  HDG, or TRK, or NAV modes can only be engaged above 100 ft.

- **When entering the initial approach area:**

  Activate the approach phase on the MCDU's PERF GO AROUND page

  - **If the APPR phase is not activated:**

    - Managed approach speed will not be available
    - The system will not furnish predictions
    - MDA/MDH/DH displays will not appear on the PFD.

MISSED APPROACH: TRY AGAIN

Ident.: PRO-NOR-SRP-01-80-00004057.0008001 / 14 FEB 11

5 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

If the pilot intends to fly another approach to the destination:

- The flight plan has all the necessary data for the missed approach
- Green Dot is the target speed.

- **When cleared by the ATC to follow the missed approach procedure:**
  ENGAGE NAV mode, or
  TURN and PULL the HDG selector knob to set a heading

  HDG, or TRK, or NAV modes can only be engaged above 100 ft.

- **When entering the initial approach area:**

  Activate the approach phase on the MCDU's PERF GO AROUND page

  - **If the APPR phase is not activated:**

    - Managed approach speed will not be available
    - The system will not furnish predictions
    - BARO/RADIO minima displays will not appear on the PFD.

MISSED APPROACH: DIVERT

Ident.: PRO-NOR-SRP-01-80-00004058.0005001 / 10 MAY 21

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

- **If the flight crew decides to divert to the alternate:**
  ENABLE ALTN, preferably at the TO waypoint.

- **When cleared to a waypoint:**
  Perform a DIRECT TO.

The system reverts automatically to CLB phase and modifies the target speed from Green Dot to initial speed.
The system automatically sets the CRZ FL to the defaulted alternate CRZ and retains the previous cost index.
The flight crew may adjust these as necessary.

Note: *Diversion may also be initiated by entering a NEW DEST in the LAT REV page at the TO waypoint or using the secondary F-PLN if prepared (Refer to DSC-22_20-60-30 General).*

MISSED APPROACH: DIVERT

Ident.: PRO-NOR-SRP-01-80-00004058.0004001 / 10 MAY 21
Applicable to: MSN 04827-04860

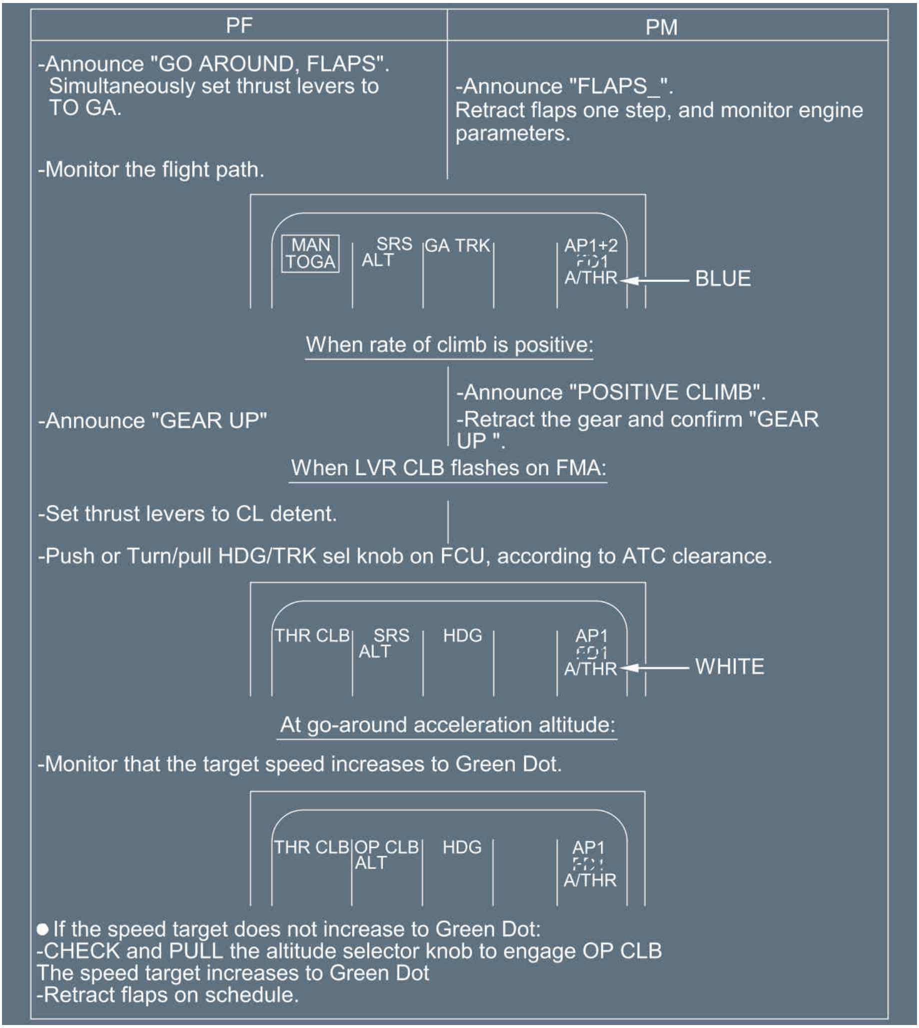
- **If the flight crew decides to divert to the alternate:**
  ENABLE ALTN, preferably at the TO waypoint.
- **When cleared to a waypoint:**
  Perform a DIRECT TO.

The system reverts automatically to CLB phase and modifies the target speed from Green Dot to initial speed.
The system automatically sets the CRZ FL to the defaulted alternate CRZ.
The cost index is set to 0.0 and the message USING COST INDEX 0 is triggered.
The flight crew may adjust these as necessary.

Note: *Diversion may also be initiated by entering a NEW DEST in the LAT REV page at the TO waypoint or using the secondary F-PLN if prepared (Refer to DSC-22_20-60-30 General).*

TASK SHARING DURING A GO-AROUND

Ident.: PRO-NOR-SRP-01-80-00004059.0002001 / 20 JUL 15
Applicable to: ALL



PF	PM
-Announce "GO AROUND, FLAPS". Simultaneously set thrust levers to TO GA. -Monitor the flight path.	-Announce "FLAPS_". Retract flaps one step, and monitor engine parameters.

MAN
TOGA
SRS
ALT
GA TRK
AP1+2
FD1
A/THR
BLUE

When rate of climb is positive:

PF	PM
-Announce "GEAR UP"	-Announce "POSITIVE CLIMB". -Retract the gear and confirm "GEAR UP ".

When LVR CLB flashes on FMA:

-Set thrust levers to CL detent.

-Push or Turn/pull HDG/TRK sel knob on FCU, according to ATC clearance.

THR CLB
SRS
ALT
HDG
AP1
FD1
A/THR
WHITE

At go-around acceleration altitude:

-Monitor that the target speed increases to Green Dot.

THR CLB
OP CLB
ALT
HDG
AP1
FD1
A/THR

- If the speed target does not increase to Green Dot:

-CHECK and PULL the altitude selector knob to engage OP CLB
The speed target increases to Green Dot
-Retract flaps on schedule.

PROCEDURES

SPECIAL OPERATIONS

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PRO-SPO-40 Extended Range Operations

PRO-SPO-40-30 Dispatch Consideration

ETOPS Critical Fuel Reserves.......A

PRO-SPO-40-40 Diversion During Extended Range Operations

Diversion Decision Making.......A

PRO-SPO-40-50 Procedures

General.......A
Normal Procedures.......B
Abnormal and Emergency Procedures.......C

PRO-SPO-40-60 Performance

Maximum Diversion Distance.......A

PRO-SPO-45 Engine Intermix Operations

Engine Intermix Type 1.......A
Engine Intermix Type 2.......B

PRO-SPO-50 Reduced Vertical Separation Minimum - RVSM

General.......A
Required Equipments/Functions for RVSM.......B
RVSM Normal Procedure.......C
RVSM Abnormal and Emergency Procedure.......D

PRO-SPO-51 Performance-Based Navigation (PBN)

General.......A
RNAV 10 / RNP 10.......B
RNAV 5 / BRNAV.......C
RNAV 1 RNAV 2 / P-RNAV - Terminal RNAV.......D
RNP 4.......E
RNP 2 in Oceanic and Remote Continental Area.......F
RNP 2 in Domestic Area.......G
RNP 1 / Terminal RNP 1- Basic RNP 1.......H
RNP APCH / RNAV(GNSS).......I
RNP AR / RNAV(RNP).......J

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PRO-SPO-60 Operations on Narrow Runways

General....................A
Limitations....................B
Procedures....................C

PRO-SPO-62 Operations at EL SALVADOR

General....................A
Limitations....................B
Procedures....................C
Performance....................D

PRO-SPO-85 Simultaneous Parallel Approach Operations

Overview....................A
Break out Turn and Climb Procedure....................B
Break out Turn and Descent Procedure....................C

Localization Title	Toc Index	ID	Reason
PRO-SPO-40-60 Maximum Diversion Distance	A	1	Documentation update: Addition of "Maximum Diversion Distance" documentary unit
PRO-SPO-51 RNP APCH / RNAV(GNSS) - Procedure	I	1	Documentation update: Addition of "RNP APCH / RNAV(GNSS) - Procedure" documentary unit
PRO-SPO-51 RNP AR Operations - Procedures	J	6	Layout modification. No technical change.
			Removal of abbreviation tag in order to comply with the Airbus authoring policy.
			Addition of SBAS (if installed) to indicate that the RNAV(RNP) procedure can also be performed when SBAS (if installed) is displayed on the GPS MONITOR page.
			Correction of a typo error.
PRO-SPO-40-50 Abnormal and Emergency Procedures	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-40-60 Maximum Diversion Distance	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-50 Required Equipments/Functions for RVSM	B	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-50 RVSM Normal Procedure	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-50 RVSM Abnormal and Emergency Procedure	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-51 RNP APCH / RNAV(GNSS) - Procedure	I	2	Effectivity update: The information now also applies to MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01801, 01825, 01826, 01832, 01837, 01855, 02014, 02321, 02734, 02887, 02896, 02904, 02924, 03002, 03032, 03035, 03047, 03058, 03111, 03180, 03211, 03222, 03229, 03266, 03284, 03294, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 03761, 03816, 04000, 04163, 04171, 04192, 04352, 04358, 04389, 04441, 04446, 04465, 04544, 04563, 04570, 04662, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05528, 05591, 05621, 05643, 05749, 05752, 05883, 05947, 05987, 06097, 06121, 06139, 06163, 06165, 06173, 06409, 06414, 06528, 06536, 06561, 06592, 06598, 06632, 06634, 06658, 06670, 06685, 06689, 06712, 06718, 06729, 06798, 06800, 06806, 06813, 06871, 06876, 06895, 06949, 07005, 07081, 07098, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139,

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Localization Title	Toc Index	ID	Reason
			11228, 11293, 11482, 11522, 11572, 11597. The information no longer applies to all MSN.
PRO-SPO-51 RNP AR Operations - General	J	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-51 RNP AR Operations - Required RNP AR Equipment	J	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-51 RNP AR Operations - Procedures	J	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
PRO-SPO-60 Procedures	C	1	Effectivity update: The information now also applies to MSN 11531.
PRO-SPO-60 Procedures	C	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 Limitations	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 Procedures	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
PRO-SPO-62 Performance	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

ETOPS CRITICAL FUEL RESERVES

Ident.: PRO-SPO-40-30-00023321.0001001 / 03 NOV 21
Applicable to: ALL

ICING

The most critical scenario must be compensated for the greater of:

A. The effect of airframe icing during 10 % of the time during icing is forecast, including ice accumulation on unprotected surfaces, and the fuel used by engine and wing anti-ice during this period.

B. Fuel for engine and wing anti-ice for the entire time during which icing is forecast.

Note: *The ETOPS icing fuel reserve is always limited by (B).*

Unless a reliable icing forecast is available, icing may be presumed to occur when the Total Air Temperature is less than +10 °C (50 °F), or if the outside air temperature is between 0 °C (32 °F) and -20 °C (-4 °F) with a relative humidity of 55 % or more.

APU

Fuel consumption of 80 kg/h or 176 lb/h (APU GEN ON, APU BLEED OFF).
In view of our experience, Airbus recommends that the operator includes a contingency fuel provision from departure to the Critical Point, when computing the ETOPS critical fuel planning.

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DIVERSION DECISION MAKING

Ident.: PRO-SPO-40-40-00023322.0001001 / 03 NOV 22
Applicable to: ALL

The technical criteria governing a re-routing or diversion decision can be classified into four categories, as follows:
- Loss of NAT-HLA capability, before entering the NAT-HLA area (as applicable)
- Weather minima at diversion airport(s) going below the company/crew en-route minima, before reaching the ETOPS Entry Point, or diversion airport(s) becoming unsuitable for any reason
- Failure cases requiring a diversion to the nearest airport (cases leading to a LAND ASAP message on the ECAM and/or in the QRH)
- Failure cases resulting in increased fuel consumption, exceeding the available fuel reserves.

Comments and Recommendations

- Electrical generation

  If one IDG fails, a diversion is required in the case of:
  - Blue hydraulic circuit low level, low pressure or overheat, or
  - APU no start, or
  - APU or APU generator inoperative, or
  - Second IDG failure.

- Fuel system
  Some failure cases may lead to fuel gravity feeding which implies flight at lower altitude or to some fuel being unusable. The flight crew's evaluation of the actual situation and the fuel remaining may lead to the decision that a diversion is required.
- Hydraulic system:

  If there is low level, low pressure or overheat on blue hydraulic circuit, a diversion is required in the case of:
  - One IDG failure, or
  - APU no start, or
  - APU/APU GEN failure.

- APU :

  If APU/APU GEN fails, a diversion is required in the case of:
  - Blue hydraulic circuit low level, low pressure or overheat, or
  - One IDG failure.

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GENERAL

Ident.: PRO-SPO-40-50-00002051.0001001 / 26 JUN 17
Applicable to: ALL

For ETOPS flights, the flight crew must apply the below procedures, in addition to the SOP (refer to chapter PRO-NOR-SOP) and the ABNORMAL and EMERGENCY procedures (refer to chapter PRO-ABN).

NORMAL PROCEDURES

Applicable to: ALL

Ident.: PRO-SPO-40-50-A-00021794.0002001 / 26 JUN 17

COCKPIT PREPARATION

FUEL

Before each ETOPS flight, the flight crew must check that the fuel crossfeed valve is operating correctly :

FUEL X FEED .... ON

On the ECAM FUEL page, check that the fuel crossfeed valve is open (indication is inline green).

FUEL X FEED.. OFF

Check that the fuel crossfeed valve is closed.

ABNORMAL AND EMERGENCY PROCEDURES

Ident.: PRO-SPO-40-50-00002053.0006001 / 05 JUN 18
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

ELECTRICAL EMERGENCY CONFIGURATION

The flight crew must complete the ECAM procedure using the following:

AIR CONDITIONING

As cockpit and cabin temperature control is lost, it is recommended to open the cockpit door.

FUEL

As all fuel pumps are lost, the engines are fed by gravity. *Refer to GRVTY FUEL FEEDING Procedure*.

ENGINE ANTI-ICE

Engine anti-ice valves are permanently open, although the ECAM memo ENG A. ICE is not displayed on the ECAM (except if the ENG A. ICE pb is at ON).

WING ANTI-ICE

If only one ENG BLEED is available, PACK 1 must be switched OFF, to avoid having both packs and wing anti-ice supplied by a single bleed source.

ENGINE

As the engines are in degraded N1 mode, the power setting has to be done using tables given in *Refer to EFB-THR-N1 N1 MODE THRUST CONTROL*and following.

BLUE HYDRAULIC CIRCUIT LOW LEVEL OR LOW PRESSURE OR OVERHEAT

Start the APU to ensure availability of the APU generator.

ENGINE OR IDG FAILURE

Start the APU and use the APU electrical channel.

LOSS OF AIR CONDITIONING

In the case of loss of the air conditioning capability (loss of both packs, loss of both bleeds without APU bleed etc.), when at FL 100 with the RAM AIR opened, the CAB FANS must be switched off.

ABNORMAL AND EMERGENCY PROCEDURES

Ident.: PRO-SPO-40-50-00002053.0004001 / 05 JUN 18

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

ELECTRICAL EMERGENCY CONFIGURATION

The flight crew must complete the ECAM procedure using the following:

AIR CONDITIONING

As cockpit and cabin temperature control is lost, it is recommended to open the cockpit door.

FUEL

As all fuel pumps are lost, the engines are fed by gravity. *Refer to GRVTY FUEL FEEDING Procedure*.

ENGINE ANTI-ICE

Engine anti-ice valves are permanently open, although the ECAM memo ENG A. ICE is not displayed on the ECAM (except if the ENG A. ICE pb is at ON).

WING ANTI-ICE

If only one ENG BLEED is available, PACK 1 must be switched OFF, to avoid having both packs and wing anti-ice supplied by a single bleed source.

BLUE HYDRAULIC CIRCUIT LOW LEVEL OR LOW PRESSURE OR OVERHEAT

Start the APU to ensure availability of the APU generator.

ENGINE OR IDG FAILURE

Start the APU and use the APU electrical channel.

LOSS OF AIR CONDITIONING

In the case of loss of the air conditioning capability (loss of both packs, loss of both bleeds without APU bleed etc.), when at FL 100 with the RAM AIR opened, the CAB FANS must be switched off.

ABNORMAL AND EMERGENCY PROCEDURES

Ident.: PRO-SPO-40-50-00002053.0011001 / 21 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**

ELECTRICAL EMERGENCY CONFIGURATION

The flight crew must complete the ECAM procedure using the following:

AIR CONDITIONING

As cockpit and cabin temperature control is lost, it is recommended to open the cockpit door.

FUEL

As all fuel pumps are lost, the engines are fed by gravity. *Refer to GRVTY FUEL FEEDING Procedure*.

ENGINE ANTI-ICE

Engine anti-ice valves are permanently open, although the ECAM memo ENG A. ICE is not displayed on the ECAM (except if the ENG A. ICE pb is at ON).

WING ANTI-ICE

If only one ENG BLEED is available, PACK 1 must be switched OFF, to avoid having both packs and wing anti-ice supplied by a single bleed source.

BLUE HYDRAULIC CIRCUIT LOW LEVEL OR LOW PRESSURE OR OVERHEAT

Start the APU to ensure availability of the APU generator.

ENGINE OR IDG FAILURE

Start the APU and use the APU electrical channel.

LOSS OF AIR CONDITIONING

In the case of loss of the air conditioning capability (loss of both packs, loss of both bleeds without APU bleed etc.), when at FL 100 with the RAM AIR opened, the CAB FANS must be switched off.

ABNORMAL AND EMERGENCY PROCEDURES

Ident.: PRO-SPO-40-50-00002053.0007001 / 05 JUN 18
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

ELECTRICAL EMERGENCY CONFIGURATION

The flight crew must complete the ECAM procedure using the following:

AIR CONDITIONING

As cockpit and cabin temperature control is lost, it is recommended to open the cockpit door.

PRESSURIZATION

If one engine (or one bleed system) is failed, forward cargo ventilation must be closed to avoid CAB PR EXCESS CAB ALT from being triggered on the ECAM during descent or cruise.

FUEL

As all fuel pumps are lost, the engines are fed by gravity. *Refer to GRVTY FUEL FEEDING Procedure*.

ENGINE ANTI-ICE

Engine anti-ice valves are permanently open, although the ECAM memo ENG A. ICE is not displayed on the ECAM (except if the ENG A. ICE pushbutton is at ON).

WING ANTI-ICE

If only one ENG BLEED is available, PACK 1 must be switched OFF, to avoid having both packs and wing anti-ice supplied by a single bleed source.

BLUE HYDRAULIC CIRCUIT LOW LEVEL OR LOW PRESSURE OR OVERHEAT

Start the APU to ensure availability of the APU generator.

ENGINE OR IDG FAILURE

Start the APU and use the APU electrical channel.

LOSS OF AIR CONDITIONING

In the case of loss of the air conditioning capability (loss of both packs, loss of both bleeds without APU bleed etc.), when at FL 100 with the RAM AIR opened, the CAB FANS must be switched off.

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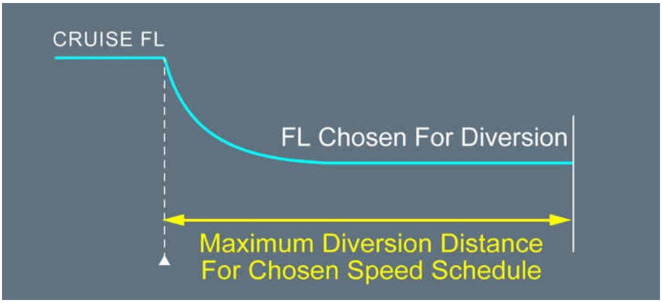
MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0098001 / 17 NOV 20
Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165



The following computation takes into account the below conditions:

- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

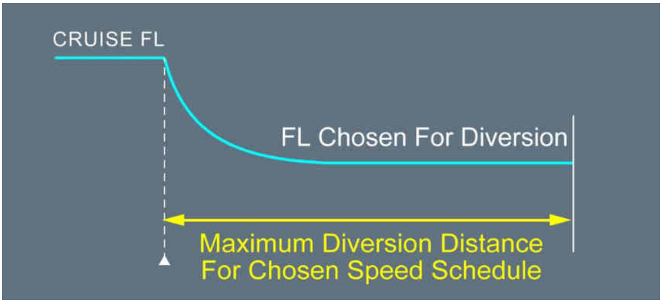
Note: Obstacles have not to be considered to determine if a route is or is not an ETOPS route.

MAXIMUM DIVERSION DISTANCE

SPEED SCHEDULE	A/C WEIGHT AT CRITICAL POINT (KG)	FL FOR DIVERSION	DIVERSION TIME (MIN)				
			60	90	120	150	180
MCT/VMO	60 000	150	414	613	813	1 013	1 214
	65 000	150	412	609	808	1 006	1 205
	70 000	150	409	605	801	998	1 196
	75 000	130	409	603	797	992	1 187
	80 000	120	408	599	792	985	1 178
	85 000	100	407	597	787	978	1 169
	90 000	100	404	592	780	969	1 159
MCT/320 kt	60 000	160	411	610	810	1 010	1 211
	65 000	150	410	607	805	1 003	1 200
	70 000	150	407	603	799	996	1 194
	75 000	140	405	599	793	988	1 182
	80 000	130	402	594	786	978	1 170
	85 000	120	400	589	779	968	1 157
	90 000	110	398	584	771	957	1 144

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0053001 / 17 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904



The following computation takes into account the below conditions:

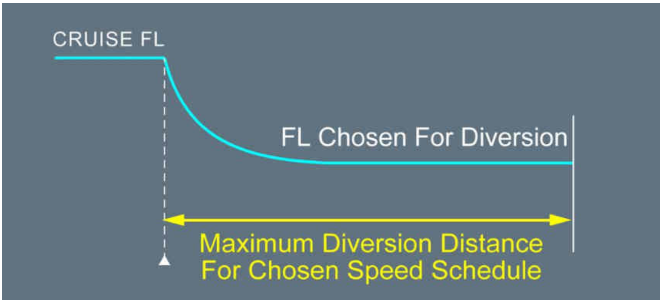
- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

Note: Obstacles have not to be considered to determine if a route is or is not an ETOPS route.

MAXIMUM DIVERSION DISTANCE							
SPEED SCHEDULE	**A/C WEIGHT AT CRITICAL POINT (KG)**	**FL FOR DIVERSION**	**DIVERSION TIME (MIN)**				
			60	**90**	**120**	**150**	**180**
MCT/VMO	50 000	210	427	637	847	1 057	1 267
	55 000	200	428	636	845	1 054	1 263
	60 000	200	426	634	841	1 049	1 257
	65 000	180	427	633	840	1 046	1 253
	70 000	170	427	631	836	1 042	1 247
	75 000	150	427	630	833	1 037	1 241
	80 000	130	426	628	830	1 032	1 235
MCT/320 kt	50 000	210	427	637	847	1 057	1 267
	55 000	200	426	635	843	1 053	1 262
	60 000	200	425	632	840	1 048	1 256
	65 000	190	423	629	835	1 042	1 249
	70 000	180	421	626	831	1 036	1 242
	75 000	170	419	622	825	1 029	1 232
	80 000	160	416	617	817	1 018	1 219

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0051001 / 17 NOV 20
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345



The following computation takes into account the below conditions:
- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

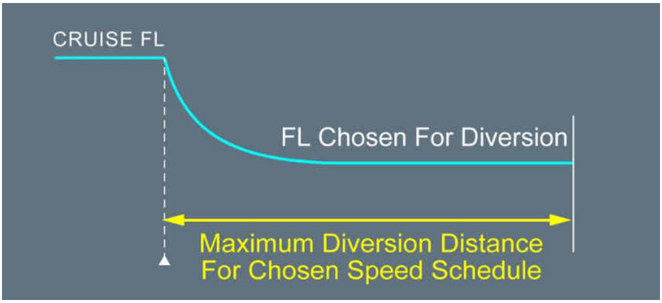
Note: *Obstacles have not to be considered to determine if a route is or is not an ETOPS route.*

MAXIMUM DIVERSION DISTANCE							
SPEED SCHEDULE	**A/C WEIGHT AT CRITICAL POINT (KG)**	**FL FOR DIVERSION**	**DIVERSION TIME (MIN)**				
			60	**90**	**120**	**150**	**180**
MCT/VMO	45 000	170	414	616	819	-	-
	50 000	170	413	615	817	1 019	1 221
	55 000	160	413	614	814	1 015	1 216
	60 000	160	413	612	812	1 012	1 212
	65 000	150	412	610	809	1 008	1 207
	70 000	140	412	609	806	1 004	1 202
MCT/320 kt	45 000	170	414	616	819	-	-
	50 000	170	413	615	817	1 019	1 221
	55 000	160	413	614	814	1 015	1 215
	60 000	160	413	612	812	1 012	1 212
	65 000	150	412	610	807	1 005	1 203
	70 000	150	411	608	805	1 002	1 200

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0049001 / 17 NOV 20

Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876



The following computation takes into account the below conditions:

- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

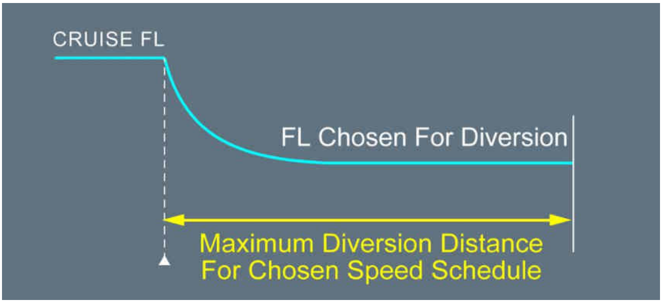
Note: *Obstacles have not to be considered to determine if a route is or is not an ETOPS route.*

MAXIMUM DIVERSION DISTANCE							
SPEED SCHEDULE	**A/C WEIGHT AT CRITICAL POINT (KG)**	**FL FOR DIVERSION**	**DIVERSION TIME (MIN)**				
			60	**90**	**120**	**150**	**180**
MCT/VMO	50 000	160	415	617	819	1 022	1 224
	55 000	160	414	615	817	1 018	1 220
	60 000	160	413	613	813	1 014	1 215
	65 000	160	412	610	809	1 009	1 209
	70 000	160	410	607	804	1 003	1 202
	75 000	160	407	603	799	996	1 193
MCT/320 kt	50 000	170	413	614	815	1 017	1 219
	55 000	160	413	614	815	1 015	1 216
	60 000	160	412	612	813	1 013	1 214
	65 000	160	411	610	809	1 008	1 208
	70 000	160	409	607	804	1 003	1 201
	75 000	160	407	603	799	996	1 193

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0046001 / 17 NOV 20

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098



The following computation takes into account the below conditions:

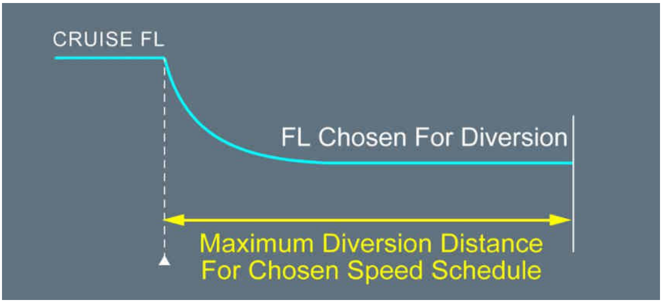
- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

Note: *Obstacles have not to be considered to determine if a route is or is not an ETOPS route.*

MAXIMUM DIVERSION DISTANCE							
SPEED SCHEDULE	A/C WEIGHT AT CRITICAL POINT (KG)	FL FOR DIVERSION	DIVERSION TIME (MIN)				
			60	90	120	150	180
MCT/VMO	55 000	150	421	625	829	-	-
	60 000	150	420	623	826	1 029	1 233
	65 000	140	419	621	823	1 025	1 228
	70 000	140	418	618	819	1 020	1 222
	75 000	130	417	616	816	1 016	1 216
	80 000	120	416	614	812	1 010	1 209
	85 000	110	415	611	808	1 005	1 202
MCT/320 kt	55 000	170	415	617	819	1 021	-
	60 000	160	415	616	816	1 017	1 217
	65 000	160	415	616	816	1 017	1 218
	70 000	160	414	613	813	1 014	1 214
	75 000	150	412	610	807	1 005	1 203
	80 000	150	410	606	804	1 001	1 199
	85 000	140	408	603	797	992	1 187

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0035001 / 17 NOV 20
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662



The following computation takes into account the below conditions:

- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

Note: *Obstacles have not to be considered to determine if a route is or is not an ETOPS route.*

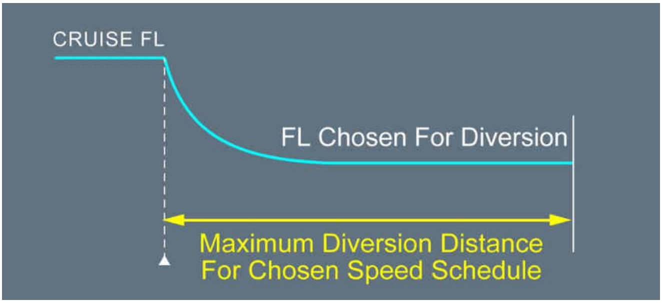
MAXIMUM DIVERSION DISTANCE

SPEED SCHEDULE	A/C WEIGHT AT CRITICAL POINT (KG)	FL FOR DIVERSION	DIVERSION TIME (MIN)					
			60	75	90	120	150	180
MCT/VMO	60 000	150	414	514	613	813	1 014	1 215
	65 000	150	412	510	609	807	1 006	1 205
	70 000	140	410	508	605	802	998	1 196
	75 000	120	409	506	603	797	991	1 186
	80 000	110	407	503	599	791	983	1 176
	85 000	100	405	500	594	784	975	1 166
	90 000	100	401	495	588	775	964	1 153
MCT/320 kt	60 000	160	411	510	610	809	1 010	1 210
	65 000	150	409	507	606	804	1 001	1 199
	70 000	150	406	503	601	797	994	1 192
	75 000	140	403	500	596	790	985	1 180
	80 000	130	400	496	591	783	975	1 167
	85 000	120	398	492	586	775	965	1 154
	90 000	110	395	488	581	767	954	1 141

MAXIMUM DIVERSION DISTANCE

1 Ident.: PRO-SPO-40-60-00023324.0028001 / 17 NOV 20

Applicable to: MSN 11531



The following computation takes into account the below conditions:

- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

Note: Obstacles have not to be considered to determine if a route is or is not an ETOPS route.

MAXIMUM DIVERSION DISTANCE (NM)							
SPEED SCHEDULE	A/C WEIGHT AT CRITICAL POINT (KG)	FL FOR DIVERSION	DIVERSION TIME (MIN)				
			60	90	120	150	180
MCT/VMO	55 000	110	419	622	825	-	-
	60 000	110	418	620	821	1 023	1 226
	65 000	110	417	617	818	1 019	1 220
	70 000	110	416	615	815	1 014	1 214
	75 000	100	415	613	811	1 010	1 209
	80 000	100	414	610	807	1 005	1 202
	85 000	100	412	607	803	999	1 196
	90 000	100	410	604	798	993	1 188
	95 000	100	408	600	792	985	1 178
	100 000	100	405	595	785	976	1 168
MCT/320 kt	55 000	170	415	618	821	-	-
	60 000	170	413	615	816	1 018	1 221
	65 000	160	412	613	813	1 014	1 214
	70 000	160	410	609	808	1 008	1 208

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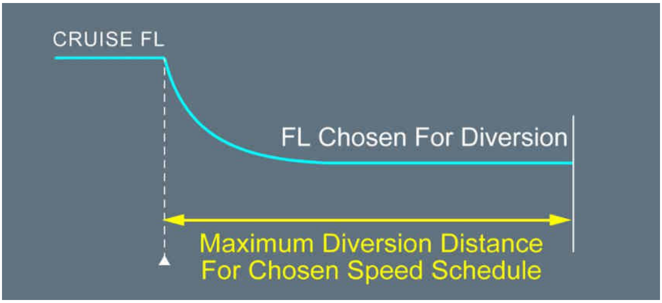
MAXIMUM DIVERSION DISTANCE (NM)							
SPEED SCHEDULE	**A/C WEIGHT AT CRITICAL POINT (KG)**	**FL FOR DIVERSION**	**DIVERSION TIME (MIN)**				
			60	**90**	**120**	**150**	**180**
	75 000	150	409	606	804	1 002	1 199
	80 000	150	406	602	798	995	1 192
	85 000	140	404	598	792	986	1 181
	90 000	130	402	593	785	977	1 169
	95 000	120	400	589	779	968	1 157
	100 000	120	396	584	772	961	1 151

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0024001 / 17 NOV 20

2 **Applicable to: MSN 10949-11522, 11572-11597**



The following computation takes into account the below conditions:

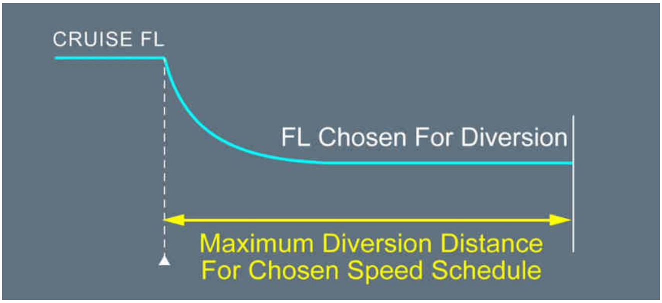
- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

Note: *Obstacles have not to be considered to determine if a route is or is not an ETOPS route.*

MAXIMUM DIVERSION DISTANCE							
SPEED SCHEDULE	A/C WEIGHT AT CRITICAL POINT (KG)	FL FOR DIVERSION	DIVERSION TIME (MIN)				
			60	90	120	150	180
MCT/VMO	50 000	160	419	623	827	1 031	-
	55 000	160	417	619	822	1 025	1 229
	60 000	150	416	617	818	1 019	1 221
	65 000	150	414	613	813	1 013	1 213
	70 000	140	412	609	806	1 004	1 202
	75 000	140	409	604	799	995	1 191
	80 000	130	406	597	790	982	1 176
MCT/320 kt	50 000	180	418	621	826	1 030	-
	55 000	180	416	618	821	1 024	1 228
	60 000	160	414	614	815	1 016	1 216
	65 000	160	412	611	810	1 010	1 210
	70 000	150	410	607	805	1 002	1 200
	75 000	150	406	601	797	993	1 190
	80 000	150	403	594	787	980	1 175

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0018001 / 17 NOV 20
Applicable to: MSN 03733, 04734-04756, 05005, 05097



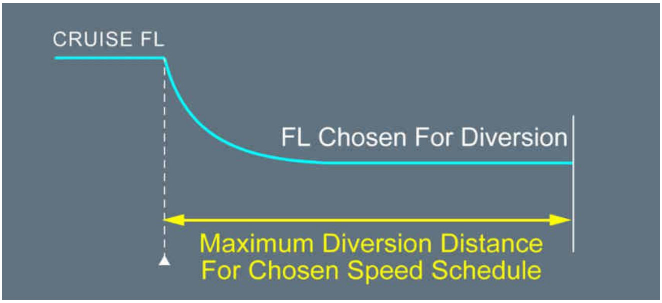
The following computation takes into account the below conditions:
- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

Note: *Obstacles have not to be considered to determine if a route is or is not an ETOPS route.*

MAXIMUM DIVERSION DISTANCE							
SPEED SCHEDULE	A/C WEIGHT AT CRITICAL POINT (KG)	FL FOR DIVERSION	DIVERSION TIME (MIN)				
			60	90	120	150	180
MCT/VMO	50 000	160	409	607	806	1 005	1 204
	55 000	160	407	604	801	999	1 197
	60 000	150	406	601	797	993	1 190
	65 000	120	407	601	795	989	1 184
	70 000	110	406	598	791	984	1 178
	75 000	100	405	595	786	978	1 170
MCT/320 kt	50 000	160	409	607	806	1 005	1 204
	55 000	160	407	604	801	999	1 197
	60 000	150	406	601	797	993	1 190
	65 000	150	403	597	791	986	1 181
	70 000	130	404	596	788	980	1 172
	75 000	120	402	592	781	970	1 160

MAXIMUM DIVERSION DISTANCE

Ident.: PRO-SPO-40-60-00023324.0005001 / 17 NOV 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240



The following computation takes into account the below conditions:
- ISA conditions
- No wind
- Optimum diversion level after engine failure
- Single engine diversion speed schedule.

Note: *Obstacles have not to be considered to determine if a route is or is not an ETOPS route.*

MAXIMUM DIVERSION DISTANCE							
SPEED SCHEDULE	**A/C WEIGHT AT CRITICAL POINT (KG)**	**FL FOR DIVERSION**	**DIVERSION TIME (MIN)**				
			60	**90**	**120**	**150**	**180**
MCT/VMO	50 000	160	414	616	818	-	-
	55 000	160	413	614	815	1 017	1 219
	60 000	160	412	612	812	1 012	1 213
	65 000	160	410	608	807	1 007	1 206
	70 000	160	408	605	802	1 000	1 198
	75 000	160	405	600	795	992	1 188
MCT/320 kt	50 000	160	412	613	814	-	-
	55 000	160	412	613	814	1 015	1 215
	60 000	160	412	612	812	1 012	1 213
	65 000	160	410	608	807	1 007	1 206
	70 000	160	408	605	802	1 000	1 198
	75 000	160	405	600	795	992	1 188

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ENGINE INTERMIX TYPE 1

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Ident.: PRO-SPO-45-A-00002059.0001001 / 30 JUN 14

The following information provides the conditions and procedures necessary in order to temporarily operate an A318/A319/A320/A321 aircraft when a CFM56–5B Single Annular Combustor (SAC) engine is intermixed with a CFM56–5B Double Annular Combustor (DAC) engine.
This engine intermix configuration is indicated in the cockpit with the following placard: “CAUTION: ENGINE INTERMIX TYPE 1” or "CAUTION: ENGINE INTERMIX".

Ident.: PRO-SPO-45-A-00002060.0001001 / 07 DEC 10

ENGINE PARAMETERS

Engine parameters differ significantly, when the engines are at idle:

EGT	:	Up to 250 °C higher on the DAC engine.
FUEL FLOW	:	Up to 25 % higher on the DAC engine.
N1	:	Higher on the DAC engine.
N2	:	Lower on ground on the DAC engine; higher in flight on the DAC engine.

Ident.: PRO-SPO-45-A-00002061.0001001 / 07 DEC 10

CROSSBLEED ENG START

The DAC engine has insufficient acceleration capability to sustain idle speed with a large bleed offtake, when it operates with only 20 injectors. Therefore, it is necessary to preset a 30 % N1 on the supplying engine before launching the start sequence.

Ident.: PRO-SPO-45-A-00004068.0001001 / 07 DEC 10

TAKEOFF PROCEDURE

- The PF must progressively adjust engine thrust in two steps:
  - Step 1 : Idle to 50 % N1.
    Brakes released, when the 50 % N1 is stabilized on both engines.
  - Step 2 : Both engines N1 to takeoff thrust.

  This procedure enables a significantly slower acceleration from ground idle to N1 = 50 % for the double annular combustor.
- Other standard operating procedures apply for takeoff.

Ident.: PRO-SPO-45-A-00002062.0001001 / 07 DEC 10

ENGINE RESPONSE

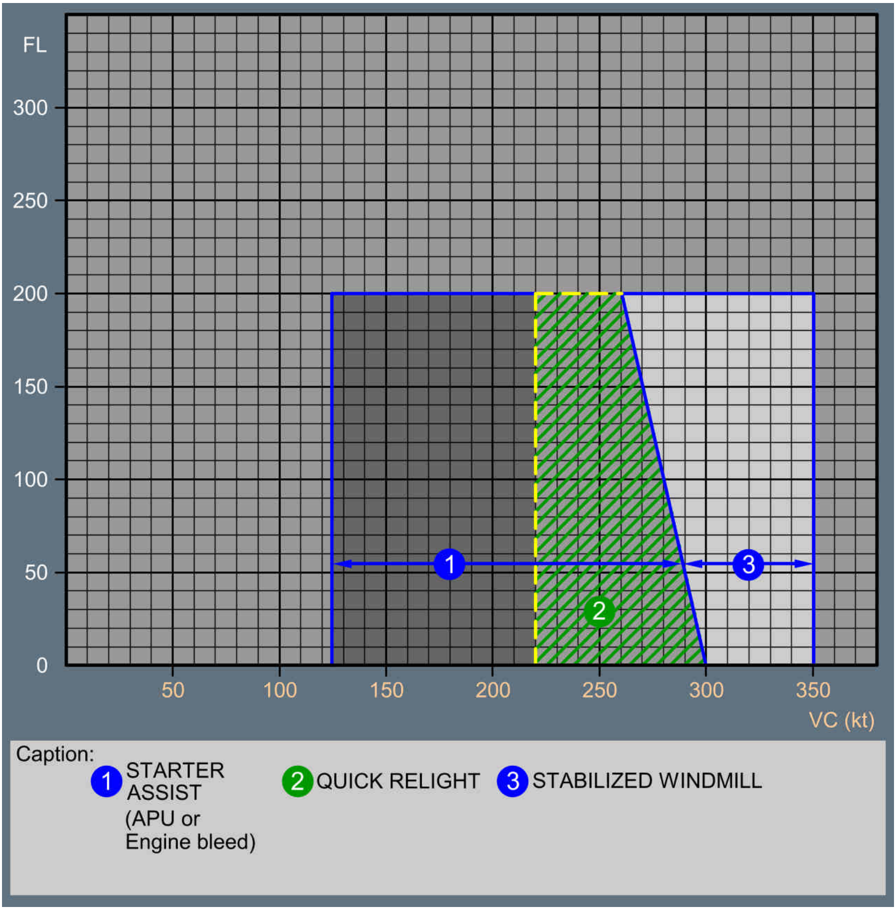
In flight, when the aircraft is in clean configuration, the DAC engine may accelerate from idle more slowly than the SAC engine. This is particularly evident, if the acceleration follows a deceleration.

There is no significant effect on aircraft handling. This difference in engine response disappears when the slats are extended.

Ident.: PRO-SPO-45-A-00004067.0001001 / 09 OCT 12

ENGINE RELIGHT

The DAC engine relight envelope is more restrictive than the SAC engine relight envelope. Therefore, in case of engine intermix, the flight crew must use the DAC engine relight procedure with the corresponding chart (See chart below).



ENGINE INTERMIX TYPE 2

Ident.: PRO-SPO-45-B-00012731.0007001 / 06 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

The following information provides the necessary conditions and procedures in order to temporarily operate an A318/A319/A320/A321 with engine intermix configuration between two different SAC engines among CFM56–5Bx classic, the CFM56–5Bx/P, the CFM56-5Bx/3 and the CFM56-5Bx/P “TI HPC kit”.
FADEC intermix configuration 5BM software (installed on CFM56-5B classic) with FADEC 5BR software is indicated in the cockpit with the following placard: “CAUTION: ENGINE INTERMIX TYPE 2”.

Note: *When FADEC Standard “5BR” or subsequent is installed on both engines, engine thrust behavior is harmonized (transient thrust dissymmetry no longer exist). Therefore, a placard is not necessary and is not displayed.*

Ident.: PRO-SPO-45-B-00012731.0008001 / 06 MAR 17
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

The following information provides the necessary conditions and procedures in order to temporarily operate an A321 with engine intermix configuration between two different SAC engines among CFM56–5Bx classic, the CFM56–5Bx/P, the CFM56-5Bx/3 and the CFM56-5Bx/P “TI HPC kit”.
FADEC intermix configuration 5BM software (installed on CFM56-5B classic) with FADEC 5BR software is indicated in the cockpit with the following placard: “CAUTION: ENGINE INTERMIX TYPE 2”.

Note: *When FADEC Standard “5BR” or subsequent is installed on both engines, engine thrust behavior is harmonized (transient thrust dissymmetry no longer exist). Therefore, a placard is not necessary and is not displayed.*

Ident.: PRO-SPO-45-B-00012732.0010001 / 24 FEB 15
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

ENGINE PARAMETERS

N1 : At maximum CLB thrust, a difference of up to 1.6 % N1 on the CFM56-5B3/3 TI engine may be observed above FL 200.

Ident.: PRO-SPO-45-B-00012732.0001001 / 07 DEC 10
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

ENGINE PARAMETERS

In the case of only one operative pack configuration (only one pack OFF):

- N1 : At idle up to 9 % higher on the CFM56-5B/3 TI engine, on ground or in flight in clean configuration.
- N2 : At idle up to 11 % higher on the CFM56-5B/3 TI engine, on ground or in flight in clean configuration.

Ident.: PRO-SPO-45-B-00012733.0001001 / 07 DEC 10
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

TAKEOFF PROCEDURE

In the case of only one operative pack configuration, due to the difference in N2 at idle between engines, the following takeoff procedure is recommended:

- The PF progressively adjusts engine thrust in two steps:
  - Step 1 : From idle to about 50 % N1 on brakes.
  - Step 2 : From both engines at similar N1 to takeoff thrust after brakes release.
- Other standard operative procedures apply for takeoff.

Ident.: PRO-SPO-45-B-00012734.0007001 / 14 MAY 12
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

ENGINE RESPONSE

In the case of only one operative pack configuration, due to the difference in N2 at idle between engines, the CFM56–5B/3 TI engine may accelerate from idle to high thrust faster than the CFM56–5B/P SAC engine when the aircraft is on ground or in flight in clean configuration. There is no significant effect on aircraft handling.
The difference in engine response disappears in flight when the slats are extended.

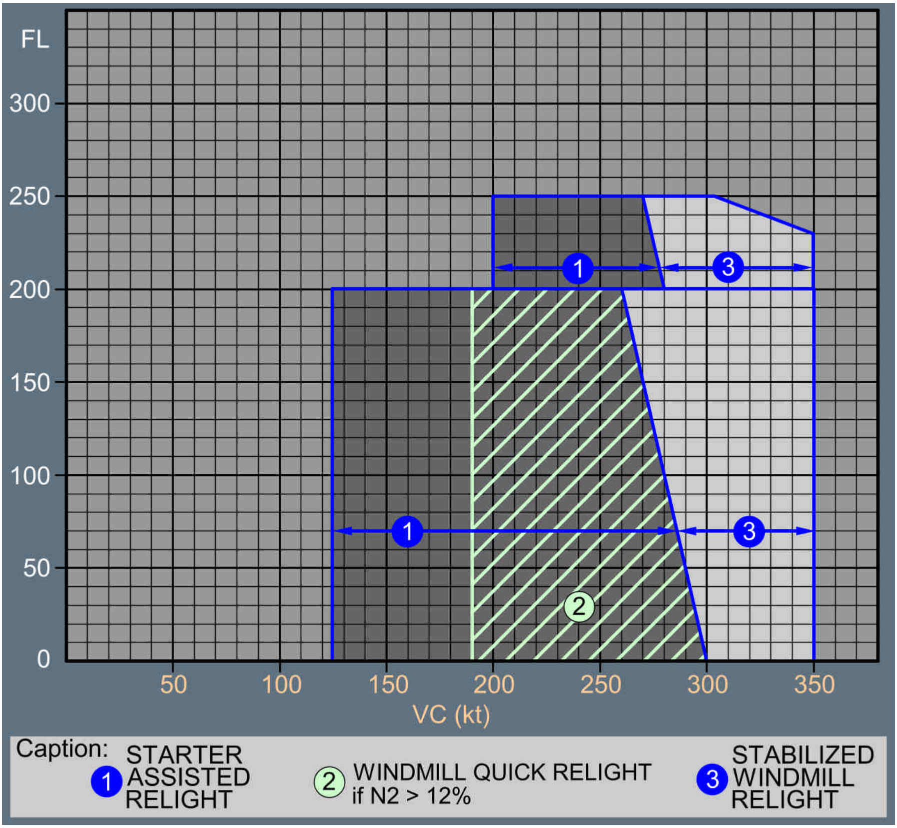
Note: *Depending on the FADEC standard, the flight crew may observe a different deceleration between the two engines (CFM56–5B/P engine is faster to decelerate) when the aircraft is above FL 100 and in unsymmetrical bleed configuration or with the APU BLEED ON.*

Ident.: PRO-SPO-45-B-00016162.0010001 / 02 MAY 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

ENGINE RELIGHT

For SAC-TI engine the maximum altitude for the engine relight envelope is reduced, compared with the SAC engine relight envelope. Therefore, in case of engine intermix, the flight crew must use the SAC-TI engine relight envelope below.

Engine Relight Envelope



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GENERAL

Ident.: PRO-SPO-50-00020828.0001001 / 17 MAR 17
Applicable to: ALL

The A318/A319/A320/A321 aircraft systems are designed to comply with the design criteria of the EASA and FAA regulations (documents references provided in the AFM) for the RVSM capability.
In addition, operators must obtain an operational approval from their national airworthiness authorities, in order to operate within the RVSM airspace. The EASA and FAA regulations (documents references provided in the AFM) also indicate the requirements for obtaining operational approval.

REQUIRED EQUIPMENTS/FUNCTIONS FOR RVSM

Ident.: PRO-SPO-50-00020955.0001001 / 17 MAR 17
Applicable to: MSN 01143-01251, 01459

RVSM regulations require the following equipment/functions in order to be operative :
- ADR1 + ADR2 + two DMCs
- 1 transponder
- 1 Autopilot function
- 1 FCU channel (for altitude target selection and OP CLB/OP DES mode engagement)
- 2 PFD functions (for altitude indication)
- 1 FWC (for altitude alert function).

REQUIRED EQUIPMENTS/FUNCTIONS FOR RVSM

Ident.: PRO-SPO-50-00020955.0002001 / 17 MAR 17
1 **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

RVSM regulations require the following equipment/functions in order to be operative:
- 2 ADRs + 2 DMCs
- 1 transponder
- 1 Autopilot function
- 1 FCU channel (for altitude target selection and OP CLB/OP DES mode engagement)
- 2 PFD functions (for altitude indication)
- 1 FWC (for altitude alert function).

RVSM NORMAL PROCEDURE

Ident.: PRO-SPO-50-00020830.0002001 / 17 MAR 17

2 **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

For flights in RVSM airspace, the flight crew must apply the standard procedures, in addition to the following RVSM procedures.

FLIGHT PREPARATION

The flight crew must take into account the conditions that may affect operations in RVSM airspace, including:

RVSM APPROVAL...CHECK

L2 *Verify that the aircraft is approved for RVSM operations.*

L1 WEATHER...CHECK

L2 *Review the weather forecasted for the flight route. If severe turbulence is expected, this may affect the ability to maintain aircraft altitude.*

L1 REQUIRED EQUIPMENT FOR RVSM...CHECK

L2 *Check that the required equipment is operative (MEL).*
The flight crew should review the maintenance logs and forms, in order to ensure that the equipment required for RVSM is satisfactory.

L1 ALTITUDES...CHECK

L2 *Check that the difference between each altitude indication (in the QNH reference) displayed on PFDs and the airport elevation is less than 75 ft.*
Check that the difference between the two primary altitude indications on the PFDs is less than the tolerance specified in SOP. Refer to PRO-NOR-SOP-06 Glareshield - EFIS Control Panel.

L1 IN FLIGHT

BEFORE ENTERING RVSM AIRSPACE

REQUIRED EQUIPMENT FOR RVSM ....OPERATIVE

L2 *If any of the required equipment fails before the aircraft enters RVSM airspace, the flight crew must request new clearance, to avoid this airspace.*

L1 ALTITUDES...CHECK

L2 *Check on the PFDs that the difference between altitude indications (in the standard baro setting) is less than the specified tolerance in the table below.*
If only two ADRs are operative, the altimeter indications on PFD and standby altimeter should be recorded. This information may be useful in case of subsequent PFD altitude discrepancy, or loss of both remaining ADRs.

L1

		Comparison of Altitude Indication (ft)		
Flight Level	**Speed or Mach Number**	**Difference between ADR1 and ADR2 (on PFDs)**	**Difference between ADR3 and ADR1/2 (on PFDs)**	**Difference between STBY ALTI and ADRs**
FL 50	250 kt	50 (15 m)	65 (20 m)	130 (40 m)
FL 100	250 kt	55 (17 m)	80 (24 m)	185 (56 m)
FL 200	300 kt	90 (27 m)	135 (41 m)	295 (90 m)
FL 300	M 0.78	130 (40 m)	195 (59 m)	390 (119 m)
FL 390	M 0.78	130 (40 m)	195 (59 m)	445 (136 m)

IN RVSM AIRSPACE

AP...KEEP ENGAGED

L2 *Ensure that autopilot is engaged for cruise, and for flight level changes.*

L1 AP GUIDANCE...MONITOR

L2 *During flight level transitions, do not exceed or go below the assigned flight level by more than 150 ft.*

L1
- **Approximately every hour:**

  ALTITUDES...CHECK

L2 *Check that the difference between the altitude indications on PFDs is less than the specified tolerance. For more information, See table in "Before Entering RVSM airspace".*
Regular check of the flight deck instruments should be sufficient.

L1 AT THE END OF THE FLIGHT

ANY MALFUNCTIONS or DEVIATIONS...REPORT

L2 *Report any malfunction of the systems that enable the aircraft to maintain altitude, including:*
- *Any malfunction or loss of required equipment*
- *Any deviation involving the functions that enable the aircraft to maintain altitude.*

RVSM NORMAL PROCEDURE

Ident.: PRO-SPO-50-00020830.0001001 / 17 MAR 17
Applicable to: MSN 01143-01251, 01459

For flights in RVSM airspace, the flight crew must apply the standard procedures, in addition to the following RVSM procedures.

FLIGHT PREPARATION

The flight crew must take into account the conditions that may affect operations in RVSM airspace, including:

RVSM APPROVAL...CHECK

L2 *Verify that the aircraft is approved for RVSM operations.*

L1 WEATHER...CHECK

L2 *Review the weather forecasted for the flight route. If severe turbulence is expected, this may affect the ability to maintain aircraft altitude.*

L1 REQUIRED EQUIPMENT FOR RVSM..CHECK

L2 *Check that the required equipment is operative (MEL).*
The flight crew should review the maintenance logs and forms, in order to ensure that the equipment required for RVSM is satisfactory.

L1 ALTITUDES...CHECK

L2 *Check that the difference between the airport elevation and altitude indications (in the QNH reference) displayed on PFDs by ADR1 and ADR2 is less than 75 ft.*
Check on the PFDs that the difference between altitude indications of ADR1 and ADR2 is less than the tolerance specified in the SOP. Refer to PRO-NOR-SOP-06 Glareshield - EFIS Control Panel.

L1 IN FLIGHT

BEFORE ENTERING RVSM AIRSPACE

REQUIRED EQUIPMENT FOR RVSM ....OPERATIVE

L2 *If any of the required equipment fails before the aircraft enters RVSM airspace, the flight crew must request new clearance, to avoid this airspace.*

L1 ALTITUDES...CHECK

L2 *Check on the PFDs that the difference between altitude indications (in the standard baro setting) of ADR1 and ADR2 is less than the specified tolerance.*
If only two ADRs are operative, the altimeter indications on PFD and standby altimeter should be recorded. This information may be useful in case of subsequent PFD altitude discrepancy or loss of both remaining ADRs.

L1

		Comparison of Altitude Indication (ft)		
Flight Level	**Speed or Mach Number**	**Difference between ADR1 and ADR2 (on PFDs)**	**Difference between ADR3 and ADR1/2 (on PFDs)**	**Difference between STBY ALTI and ADRs**
FL 50	250 kt	50 (15 m)	80 (24 m)	130 (40 m)
FL 100	250 kt	55 (17 m)	80 (24 m)	185 (56 m)
FL 200	300 kt	90 (27 m)	145 (44 m)	295 (90 m)
FL 300	M 0.78	130 (40 m)	355 (108 m)	390 (119 m)
FL 390	M 0.78	130 (40 m)	365 (111 m)	445 (136 m)

IN RVSM AIRSPACE

AP....................KEEP ENGAGED

L2 *Ensure that autopilot is engaged for cruise, and for flight level changes.*

L1 AP GUIDANCE....................MONITOR

L2 *During flight level transitions, do not exceed or go below the assigned flight level by more than 150 ft.*

L1 ● **Approximately every hour:**

ALTITUDES....................CHECK

L2 *Check that the difference between the altitude on PFDs is less than the specified tolerance.*
For more information, See the above "Before Entering RVSM airspace" table.
Regular check of the flight deck instruments should be sufficient.

L1 AT THE END OF THE FLIGHT

ANY MALFUNCTIONS or DEVIATIONS....................REPORT

L2 *Report any malfunction of the systems that enable the aircraft to maintain altitude, including:*
- *Any malfunction or loss of required equipment*
- *Any deviation involving the functions that enable the aircraft to maintain altitude.*

RVSM ABNORMAL AND EMERGENCY PROCEDURE

Ident.: PRO-SPO-50-00020831.0001001 / 17 MAR 17
Applicable to: MSN 01143-01251, 01459

ATC....................NOTIFY

When the aircraft is in RVSM airspace, the flight crew must notify the ATC of the following situations, because they may affect the aircraft's ability to maintain the flight level:
- *The failure of both autopilots*
- *The loss of altimeter system redundancy (only one PFD indication remaining)*
- *An excessive discrepancy in altitude indications, and no way to identify the valid indication*
- *The failure of any other equipment, that affects the aircraft's ability to maintain flight level*
- *The encounter of greater than moderate turbulence*
- *Loss of ADR1 or ADR2.*
  If ADR1 fails, use the AP2.
  If ADR2 fails, use the AP1.
  If the AP is unable to maintain the assigned flight level, select the other AP.

If the flight crew cannot notify the ATC or obtain the ATC clearance before deviating from the assigned flight level, they should follow the established contingency procedure and obtain the ATC clearance as soon as possible.

RVSM ABNORMAL AND EMERGENCY PROCEDURE

Ident.: PRO-SPO-50-00020831.0002001 / 17 MAR 17

3 **Applicable to: MSN 01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

ATC...NOTIFY

When the aircraft is in RVSM airspace, the flight crew must notify the ATC of the following situations, because they may affect the aircraft's ability to maintain the flight level:

- *The failure of both autopilots*
- *The loss of altimeter system redundancy (only one PFD indication remaining)*
- *An excessive discrepancy in altitude indications, and no way to identify the valid indication*
- *The failure of any other equipment, that affects the aircraft's ability to maintain flight level*
- *The encounter of greater than moderate turbulence.*

If the flight crew cannot notify the ATC or obtain the ATC clearance before deviating from the assigned flight level, they should follow the established contingency procedure and obtain the ATC clearance as soon as possible.

GENERAL

Applicable to: ALL

Ident.: PRO-SPO-51-A-00015857.0001001 / 20 MAR 17

GENERAL

The Performance Based Navigation (PBN) concept implies that the aircraft follows the defined track with a requested navigation performance. The PBN includes RNAV and RNP operations.
For RNAV and RNP operations, an operational approval from the airline's national authorities may be required.
The AFM provides regulatory compliances associated with PBN operations.

Ident.: PRO-SPO-51-A-00015859.0001001 / 09 SEP 14

RNAV/RNP CAPABILITY

Before the aircraft enters an RNAV/RNP airspace, RNAV/RNP capability is based on:
- The required RNAV/RNP equipment that is described in each RNAV/RNP section of the FCOM
- Navigation Accuracy HIGH displayed on the MCDU PROG page
- Any specific local requirements published in the Aeronautical Information Publication (AIP).

When the aircraft flies in RNAV/RNP airspace, RNAV/RNP capability is based on:
- Navigation Accuracy HIGH displayed on the MCDU PROG page
- Any specific local requirements published in the Aeronautical Information Publication (AIP).

RNAV 10 / RNP 10

Applicable to: ALL

Ident.: PRO-SPO-51-B-00015854.0001001 / 09 SEP 14

GENERAL

RNAV 10 operations correspond to RNP 10 operations.
In RNAV 10 airspace, the aircraft is expected to fly for a long period of time outside radio navaid coverage.

Ident.: PRO-SPO-51-B-00015855.0001001 / 28 MAY 20

REQUIRED RNAV 10 EQUIPMENT

The minimum navigation equipment required to enter RNAV 10 airspace is:
- Two FMGCs (or one FMGC and one BACK UP NAV ◁✻)
- Two MCDUs
- Two IRS

- Two NDs (the temporary display of ND information via the PFD/ND sw is permitted on PM side)
- One GPS if the flight time outside radio navaid coverage is longer than:
  - 6.2 hr from the time of IRS ground alignment, or
  - 5.7 hr from the time of the last FM position update.

Ident.: PRO-SPO-51-B-00015863.0001001 / 11 APR 17

PROCEDURE

MANAGEMENT OF DEGRADED NAVIGATION

- **If one of the following messages is displayed, the flight crew should resume navigation with the FMGC that provides the correct position:**
  - GPS PRIMARY LOST ◁ on one ND/MCDU
  - NAV ACCUR DOWNGRAD on one ND/MCDU.
- **If the GPS PRIMARY LOST ◁ message is displayed on both NDs/MCDUs, RNAV 10 operations can be continued:**
  - With no time restriction if radio navaids update is available
  - For 5.7 hr from the time of the last position update if radio navaids update is not available. After 5.7 hr, the navigation accuracy must be considered LOW regardless of the navigation accuracy that is displayed on the MCDU PROG page.
- **If one of the following MCDU or ECAM messages is displayed, the flight crew should crosscheck the position data using the POSITION MONITOR page, the IRS 1(2)(3) pages, and the GPS MONITOR page ◁ in order to identify which FMGC position is correct:**
  - FMS1/FMS2 POS DIFF
  - CHECK IRS 1(2)(3)/FM POSITION ◁
  - CHECK A/C POSITION ◁
  - NAV FM/GPS POS DISAGREE ◁

  The flight crew should resume navigation with the FMGC that provides the correct position.
- **If NAV ACCUR DOWNGRAD is displayed on both sides:**
  - As per design FMS REQ ACCUR is set by default; this default value (e.g. 2 NM in cruise, 1 NM in terminal area) is more restrictive than overflown airspace required navigation performance.
  - Any change on FMS REQ ACCUR to be in accordance with airspace requirement is at flight crew's discretion; and should be set back to default value when leaving intended airspace.

If NAV ACCUR DOWNGRAD remains displayed, the flight crew should inform ATC that the RNAV 10 capability is lost.

RNAV 5 / BRNAV

Applicable to: ALL

Ident.: PRO-SPO-51-C-00015851.0001001 / 20 MAR 17

GENERAL

RNAV 5 operations correspond to European BRNAV operations.

Ident.: PRO-SPO-51-C-00015852.0001001 / 28 MAY 20

REQUIRED RNAV 5 EQUIPMENT

The minimum navigation equipment required to enter RNAV 5 airspace is:
- One FMGC
- One MCDU
- One GPS or one DME receiver to update FM position
- Two NDs (the temporary display of ND information via the PFD/ND sw is permitted on PM side)
- One IRS.

Ident.: PRO-SPO-51-C-00015864.0001001 / 11 APR 17

PROCEDURE

MANAGEMENT OF DEGRADED NAVIGATION

- **If one of the following messages is displayed, the flight crew should resume navigation with the FMGC that provides the correct position:**
  - GPS PRIMARY LOST ◁ on one ND/MCDU
  - NAV ACCUR DOWNGRAD on one ND/MCDU.
- **If one of the following MCDU or ECAM messages is displayed, the flight crew should check the navigation accuracy with navaid raw data via the MCDU PROG page in order to identify which FMGC position is correct:**
  - GPS PRIMARY LOST ◁ on both NDs/MCDUs
  - FMS1/FMS2 POS DIFF
  - CHECK IRS 1(2)(3)/FM POSITION ◁
  - CHECK A/C POSITION ◁
  - NAV FM/GPS POS DISAGREE ◁

  The flight crew should resume navigation with the FMGC that provides the correct position.

- **If NAV ACCUR DOWNGRAD is displayed on both sides:**
  - As per design FMS REQ ACCUR is set by default; this default value (e.g. 2 NM in cruise, 1 NM in terminal area) is more restrictive than overflown airspace required navigation performance.
  - Any change on FMS REQ ACCUR to be in accordance with airspace requirement is at flight crew's discretion; and should be set back to default value when leaving intended airspace.

  If NAV ACCUR DOWNGRAD remains displayed, the flight crew should inform ATC that the RNAV 5 capability is lost.

RNAV 1 RNAV 2 / P-RNAV - TERMINAL RNAV

Applicable to: ALL

Ident.: PRO-SPO-51-D-00015848.0001001 / 20 MAR 17

GENERAL

RNAV 1(2) operations correspond to P-RNAV TERMINAL RNAV operations.
The AIP may specify that GPS equipment is required.

Ident.: PRO-SPO-51-D-00015849.0001001 / 28 MAY 20

REQUIRED RNAV 1(2) EQUIPMENT

The minimum navigation equipment required to enter RNAV1/RNAV2 airspace is:

- One FMGC
- One MCDU
- One GPS or one DME receiver to update the FM position
- Two IRS
- One FD in NAV mode
- Two NDs (the temporary display of ND information via the PFD/ND sw is permitted on PM side).

Ident.: PRO-SPO-51-D-00015865.0001001 / 20 MAR 17

PROCEDURE

BEFORE ENTERING RNAV 1(2) AIRSPACE

The FMS navigation database provides the terminal procedure (RNAV SID, RNAV STAR, RNAV TRANSITION, etc.) of the flight plan. The flight crew must crosscheck the terminal procedure from the published charts with the FMS navigation database on the F-PLN page (waypoint sequences, tracks, distances, and altitude or speed constraints). The flight crew must not modify the procedure that is provided by the navigation database, unless required by the ATC (DIR TO, radar vectoring, insertion of waypoints from the navigation database).

MANAGEMENT OF DEGRADED NAVIGATION

- **If one of the following messages is displayed, the flight crew should resume navigation with the FMGC that provides the correct position:**
  - GPS PRIMARY LOST ◁ on one ND/MCDU
  - NAV ACCUR DOWNGRAD on one ND/MCDU.
- **If one of the following messages is displayed, the flight crew should check the navigation accuracy with navaid raw data via the MCDU PROG page in order to identify which FMGC position is correct:**
  - GPS PRIMARY LOST ◁ on both NDs/MCDUs
  - FMS1/FMS2 POS DIFF
  - CHECK IRS 1(2)(3)/FM POSITION ◁
  - CHECK A/C POSITION ◁
  - NAV FM/GPS POS DISAGREE ◁

  The flight crew should resume navigation with the FMGC that provides the correct position.
- **If NAV ACCUR DOWNGRAD is displayed on both sides:**

  The flight crew should inform the ATC that the RNAV 1(2) capability is lost.

RNP 4

Applicable to: ALL

Ident.: PRO-SPO-51-E-00015845.0001001 / 09 SEP 14

GENERAL

In this airspace, the aircraft is expected to fly for a long period of time outside radio navaid coverage.

Ident.: PRO-SPO-51-E-00015846.0001001 / 28 MAY 20

REQUIRED RNP 4 EQUIPMENT

The minimum navigation equipment required to enter RNP 4 airspace is:
- Two FMGCs (or one FMGC and one BACK UP NAV ◁)
- Two MCDUs
- Two IRS
- One GPS
- Two NDs (the temporary display of ND information via the PFD/ND sw is permitted on PM side).

Ident.: PRO-SPO-51-E-00015866.0001001 / 17 MAY 21

PROCEDURE

MANAGEMENT OF DEGRADED NAVIGATION

- **If one of the following messages is displayed, the flight crew should resume navigation with the FMGC that provides the correct position:**
  - GPS PRIMARY LOST on one ND/MCDU
  - NAV ACCUR DOWNGRAD on one ND/MCDU.
- **If one of the following MCDU or ECAM messages is displayed, the flight crew should crosscheck the position data using the POSITION MONITOR page, the IRS 1(2)(3) pages, and the GPS MONITOR page in order to identify which FMGC position is correct:**
  - GPS PRIMARY LOST on both NDs/MCDUs
  - FMS1/FMS2 POS DIFF
  - CHECK IRS 1(2)(3)/FM POSITION ◁
  - CHECK A/C POSITION ◁
  - NAV FM/GPS POS DISAGREE

  The flight crew should resume navigation with the FMGC that provides the correct position.
- **If NAV ACCUR DOWNGRAD is displayed on both sides:**
  - As per design FMS REQ ACCUR is set by default; this default value (e.g. 2 NM in cruise, 1 NM in terminal area) is more restrictive than overflown airspace required navigation performance.
  - Any change on FMS REQ ACCUR to be in accordance with airspace requirement is at flight crew's discretion; and should be set back to default value when leaving intended airspace.

  If NAV ACCUR DOWNGRAD remains displayed, the flight crew should inform ATC that the RNP 4 capability is lost.

RNP 2 IN OCEANIC AND REMOTE CONTINENTAL AREA

Applicable to: ALL

Ident.: PRO-SPO-51-I-00021541.0001001 / 20 MAR 17

GENERAL

In this airspace, the aircraft is expected to fly for a long period of time outside radio navaid coverage.

Ident.: PRO-SPO-51-I-00021542.0001001 / 28 MAY 20

REQUIRED RNP 2 IN OCEANIC AND REMOTE CONTINENTAL AREA EQUIPMENT

The minimum navigation equipment required to enter RNP 2 oceanic and remote continental airspace is:

- Two FMGCs (or one FMGC and one BACK UP NAV ◁)
- Two MCDUs
- Two IRS
- One GPS
- Two NDs (the temporary display of ND information via the PFD/ND sw is permitted on PM side).

Ident.: PRO-SPO-51-I-00021544.0001001 / 20 MAR 17

PROCEDURE

FLIGHT PREPARATION

RAIM/AIME availability should be confirmed for RNP 2 in oceanic and remote continental area operations.
Refer to PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)

MANAGEMENT OF DEGRADED NAVIGATION

- **If one of the following messages is displayed, the flight crew should resume navigation with the FMGC that provides the correct position:**
  - GPS PRIMARY LOST on one ND/MCDU
  - NAV ACCUR DOWNGRAD on one ND/MCDU.
- **If one of the following MCDU or ECAM messages is displayed, the flight crew should crosscheck the position data using the POSITION MONITOR page, the IRS 1(2)(3) pages, and the GPS MONITOR page in order to identify which FMGC position is correct:**
  - GPS PRIMARY LOST on both NDs/MCDUs
  - FMS1/FMS2 POS DIFF
  - CHECK IRS 1(2)(3)/FM POSITION ◁
  - CHECK A/C POSITION ◁
  - NAV FM/GPS POS DISAGREE

  The flight crew should resume navigation with the FMGC that provides the correct position.
- **If NAV ACCUR DOWNGRAD is displayed on both sides:**

  The flight crew should inform the ATC that the RNP 2 capability is lost.

RNP 2 IN DOMESTIC AREA

Applicable to: ALL

Ident.: PRO-SPO-51-J-00021545.0001001 / 28 MAY 20

REQUIRED RNP 2 IN DOMESTIC AREA EQUIPMENT

The minimum navigation equipment required to enter RNP 2 domestic airspace is:
- One FMGC
- One MCDU
- One GPS
- Two IRS
- Two NDs (the temporary display of ND information via the PFD/ND sw is permitted on PM side).

Ident.: PRO-SPO-51-J-00021546.0001001 / 20 MAR 17

PROCEDURE

FLIGHT PREPARATION

RAIM/AIME availability should be confirmed for RNP 2 in domestic area operations.
Refer to PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)

MANAGEMENT OF DEGRADED NAVIGATION

- **If one of the following messages is displayed, the flight crew should resume navigation with the FMGC that provides the correct position:**
  - GPS PRIMARY LOST ◁ on one ND/MCDU
  - NAV ACCUR DOWNGRAD on one ND/MCDU.
- **If one of the following MCDU or ECAM messages is displayed, the flight crew should check the navigation accuracy with navaid raw data via the MCDU PROG page in order to identify which FMGC position is correct:**
  - GPS PRIMARY LOST ◁ on both NDs/MCDUs
  - FMS1/FMS2 POS DIFF
  - CHECK IRS 1(2)(3)/FM POSITION ◁
  - CHECK A/C POSITION ◁
  - NAV FM/GPS POS DISAGREE ◁

  The flight crew should resume navigation with the FMGC that provides the correct position.
- **If NAV ACCUR DOWNGRAD is displayed on both sides:**

  The flight crew should inform the ATC that the RNP 2 capability is lost.

RNP 1 / TERMINAL RNP 1- BASIC RNP 1

Applicable to: ALL

Ident.: PRO-SPO-51-F-00015842.0001001 / 20 MAR 17

GENERAL

RNP 1 operations correspond to RNP 1 Terminal operations.

Ident.: PRO-SPO-51-F-00015843.0001001 / 28 MAY 20

REQUIRED RNP 1 EQUIPMENT

The minimum navigation equipment required to enter RNP 1 airspace is:
- One FMGC
- One MCDU
- One GPS
- Two IRS
- One FD in NAV mode
- Two NDs (the temporary display of ND information via the PFD/ND sw is permitted on PM side).

Ident.: PRO-SPO-51-F-00015867.0001001 / 20 MAR 17

PROCEDURE

FLIGHT PREPARATION

RAIM/AIME availability should be confirmed for RNP 1 operations.
Refer to PRO-NOR-SOP-02 GPS PRIMARY Availability (If Installed)

BEFORE ENTERING RNP 1 AIRSPACE

The FMS navigation database provides the terminal procedure (RNAV SID, RNAV STAR, RNAV TRANSITION, etc.) of the flight plan. The flight crew must check the terminal procedure from the published charts with the FMS navigation database on the F-PLN page (waypoint sequences, tracks, distances, and altitude or speed constraints). The flight crew must not modify the procedure that is provided by the navigation database, unless required by the ATC (DIR TO, radar vectoring, insertion of waypoints from the navigation database).

MANAGEMENT OF DEGRADED NAVIGATION

- **If one of the following messages is displayed, the flight crew should resume navigation with the FMGC that provides the correct position:**
  - GPS PRIMARY LOST ◁ on one ND/MCDU
  - NAV ACCUR DOWNGRAD on one ND/MCDU.

- **If one of the following MCDU or ECAM messages is displayed, the flight crew should check the navigation accuracy with navaid raw data via the MCDU PROG page in order to identify which FMGC position is correct:**
  - GPS PRIMARY LOST ◁ on both NDs/MCDUs
  - FMS1/FMS2 POS DIFF
  - CHECK IRS 1(2)(3)/FM POSITION ◁
  - CHECK A/C POSITION ◁
  - NAV FM/GPS POS DISAGREE ◁

  The flight crew should resume navigation with the FMGC that provides the correct position.
- **If NAV ACCUR DOWNGRAD is displayed on both sides:**

  The flight crew should inform the ATC that the RNP 1 capability is lost.

RNP APCH / RNAV(GNSS)

Ident.: PRO-SPO-51-G-00015839.0001001 / 20 MAR 17
Applicable to: ALL

GENERAL

RNP APCH operations correspond to RNAV(GNSS) or RNAV(GPS) operations.

Ident.: PRO-SPO-51-G-00015840.0001001 / 11 JUL 17
Applicable to: ALL

REQUIRED RNP APCH EQUIPMENT

The minimum equipment required to start RNP APCH operations is:
- One FMGC
- One GPS
- Two IRS
- One MCDU
- One FD
- One PFD on the PF side
- Two NDs (the temporary display of ND information via the PFD/ND switch is permitted on PM side)
- Two FCU channels.

1 Ident.: PRO-SPO-51-G-00015868.0003001 / 12 MAY 22
Applicable to: MSN 11531

PROCEDURE

Refer to PRO-NOR-SOP-18-C Approach using LOC G/S Guidance - General.

Refer to PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - General.
Refer to PRO-NOR-SOP-18-C Approach using F-LOC F-G/S Guidance - General.
Refer to PRO-NOR-SOP-18-C Approach using FPA Guidance - General.

Ident.: PRO-SPO-51-G-00015868.0001001 / 10 MAY 21

2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

PROCEDURE

Refer to PRO-NOR-SOP-18-C Approach using FINAL APP Guidance - General.
Refer to PRO-NOR-SOP-18-C Approach using FPA Guidance - General.

RNP AR / RNAV(RNP)

Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597

Ident.: PRO-SPO-51-H-00012736.0002001 / 23 JUN 15

3

GENERAL

RNP AR operations correspond to RNAV(RNP) operations.
For RNP AR operations, the flight crew should refer to the specific procedures published by the airline.
The airline must obtain an operational approval and the flight crew must be qualified for this type of operations. To obtain this operational approval the airline should refer to the AFM and the associated Airworthiness Compliance Document (ACD). The approved RNP values are given in the AFM and the ACD.
The main procedure steps for RNP AR have been introduced in the Procedures of this FCOM and in the paragraph below. This does not relieve the airline from the need to provide the flight crew with tailored procedures when required.

Ident.: PRO-SPO-51-H-00012737.0003001 / 03 NOV 22

4

REQUIRED RNP AR EQUIPMENT

The minimum equipment required to start RNP AR operations is:
- 2 FMGC
- 2 MCDU
- 2 FD
- 1 AP (2 AP if RNP less than 0.3 is required or missed approach less than 1 NM)
- 2 FAC
- 2 ELAC
- 2 SFCC
- 2 RA

- 2 PFD with L/DEV and V/DEV displays
- 2 ND
- 2 GPS (MMR)
- 3 ADIRS in NAV mode
- TAWS with display of terrain
- FCU with both channels
- 1 FWC

Ident.: PRO-SPO-51-H-00014680.0002001 / 24 FEB 23

5
6

PROCEDURES

The availability of GPS PRIMARY for the estimated time of operation must be verified with an appropriate GPS prediction tool before dispatch.

Prior to starting RNP AR instrument procedures, check that:
- OAT and wind, as applicable, are within limits
- The FMS lateral and vertical F-PLN extracted from the navigation database is in accordance with the instrument procedure chart
- Two GPS sensors are in NAV or SBAS ◁ on GPS MONITOR page
- The correct RNP value is displayed on MCDU with HIGH accuracy
- GPS PRIMARY is available.

For operations with RNP < 0.3 NM, one AP must be engaged.
If obstacles, EGPWS TERRAIN display must be selected on both ND unless weather radar monitoring is required on one side.
Airspeed and configuration must be adapted for the radius of turns in the procedure.

DEPARTURE

Before takeoff, check that NAV is armed.
When NAV is indicated active on FMA and at 100 ft, select AP ON.
Monitor lateral deviation using the L/DEV on PFD.
Callout must be performed when L/DEV reaches ½ dot.
If L/DEV increases towards 1 RNP, take over manually using FD and the L/DEV indication to fly back on the intended flight plan and reengage AP as applicable.

APPROACH

Refer to FCOM-PRO-NOR-SOP-APPROACH-AIRCAFT GUIDANCE MANAGEMENT-APPR using FINAL APP for RNAV(RNP).

GO AROUND

Refer to FCOM-PRO-NOR-SOP-GO AROUND.

ABNORMAL OPERATIONS

Detailed information is provided in the ACD for the airline to develop contingency procedures adapted to each operation.
The flight crew must be trained to conduct departure or missed approach procedures with system failures to ensure a safe extraction.

ENGINE FAILURE

In the case of engine failure during departure or a missed approach procedure, the flight crew must consider the bank angle limitation when flying at a speed below the maneuvering speed. Turns in the procedure may require bank angles above 15 °. Flying with one engine inoperative affects the aircraft lateral performance. The flight crew should be trained and instructed to disconnect AP if the aircraft deviates from the intended track. This training must consider turning and straight legs as appropriate.

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GENERAL

Ident.: PRO-SPO-60-00023439.0002001 / 17 NOV 20
Applicable to: ALL

This chapter gives the limitations, procedures and performance for operations from/to runways with a width below 45 m .
This chapter does not constitute an operational approval to operate on narrow runways.
Such authorization must be obtained by the operator from the appropriate authorities.

LIMITATIONS

Ident.: PRO-SPO-60-00023440.0002001 / 15 NOV 21
Applicable to: ALL

Minimum runway width..30 m

The dispatch from/to narrow runways is not allowed in the case of:
- Nose wheel steering inoperative
- One brake or more inoperative.

Autoland is not allowed.

MAXIMUM DEMONSTRATED CROSSWIND FOR TAKEOFF AND LANDING

Runway Surface Conditions		Maximum Crosswind for Takeoff (Gust included)	Related Landing Performance		Maximum Crosswind for Landing (Gust included)
Runway State or / and Runway Contaminant	**AIREP**[1]		**RWYCC**[2]	**Level**	
Dry	**Dry**	38 kt	**6**	**DRY**	38 kt
Damp **Wet** Up to 3 mm (1/8") of water **Slush** Up to 3 mm (1/8") **Dry snow** Up to 3 mm (1/8") **Wet snow** Up to 3 mm (1/8") **Frost**	**Good**	33 kt	**5**	**GOOD**	33 kt
Compacted snow OAT at or below -15 °C	**Good to Medium**	10 kt	**4**	**GOOD TO MEDIUM**	10 kt

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Runway Surface Conditions		Maximum Crosswind for Takeoff (Gust included)	Related Landing Performance		Maximum Crosswind for Landing (Gust included)
Runway State or / and Runway Contaminant	**AIREP**[(1)]		**RWYCC**[(2)]	**Level**	
Dry snow More than 3 mm (1/8"), up to 100 mm (4") **Wet snow** More than 3 mm (1/8"), up to 30 mm (6/5") **Compacted snow** OAT above -15 °C **Dry snow over compacted snow** **Wet snow over compacted snow** **Slippery wet**	**Medium**	10 kt	**3**	**MEDIUM**	10 kt
Standing Water More than 3 mm (1/8"), up to 13 mm (1/2") **Slush** More than 3 mm (1/8"), up to 13 mm (1/2")	**Medium to Poor**	10 kt	**2**	**MEDIUM TO POOR**	10 kt
Ice (cold & dry)	**Poor**	10 kt	**1**	**POOR**	10 kt

(1) *AIREP: Special Air Report of Braking Action*

(2) *RWYCC: Runway Condition Code*

Note: These maximum demonstrated crosswind values are based on the assumption that the flight crew have been trained accordingly.

PROCEDURES

Ident.: PRO-SPO-60-00023441.0003001 / 17 NOV 20

1 **Applicable to: MSN 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 11531**

Diversion to a 45 m wide runway is recommended in case of :
- Rudder jam
- Rudder pedal jam
- Yaw damper system fault
- Rudder Travel Limit system fault
- All failures leading to the loss of the nose wheel steering (HYD Yellow system loss, double hydraulic failure, double BSCU fault, double LGCIU fault)

PROCEDURES

Ident.: PRO-SPO-60-00023441.0002001 / 17 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321

Diversion to a 45 m wide runway is recommended in case of :
- Rudder jam
- Rudder pedal jam
- Yaw damper system fault
- Rudder Travel Limit system fault
- All failures leading to the loss of the nose wheel steering (HYD Green system loss, double hydraulic failure, double BSCU fault, double LGCIU fault)

PROCEDURES

Ident.: PRO-SPO-60-00023441.0005001 / 17 NOV 20
2 **Applicable to: MSN 10949-11522, 11572-11597**

Diversion to a 45 m wide runway is recommended in case of :
- Rudder jam
- Rudder pedal jam
- Yaw damper system fault
- Rudder Travel Limit system fault
- All failures leading to the loss of the nose wheel steering (HYD Yellow system loss, double hydraulic failure, double BSCU fault, double LGCIU fault)

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GENERAL

Ident.: PRO-SPO-62-00002095.0001001 / 22 OCT 14

1 **Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**

At El Salvador (SCES), the mean runway slope is 3.15 %

This chapter gives the limitations, procedures and performance for operation from/to this runway.
This supplement is only valid for the current PAPI slope at El Salvador that is set at -1.3 °.
This chapter does not constitute an operational approval to operate on this runway. Such authorization must be obtained by the operator from the appropriate authorities.

LIMITATIONS

Ident.: PRO-SPO-62-00002096.0001001 / 21 MAR 17

2 **Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**

At El Salvador, the mean runway slope is 3.15 %.
Takeoff must be performed downhill.
Landing must be performed uphill.
Autoland is not allowed.

PROCEDURES

Ident.: PRO-SPO-62-00002097.0001001 / 21 MAR 17

3 **Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**

Minimum approach speed is VLS +5 kt.

PERFORMANCE

Ident.: PRO-SPO-62-00002098.0001001 / 21 MAR 17

4 **Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**

The Performance Engineering Program/AFM_OCTO Flight Manual modules at the approved revision given in AFM (*Refer to AFM/AFM/PERF/OCTO Performance Database*) have to be used for takeoff and landing.
Takeoff performance must be computed by entering the mean runway slope.
Landing distance determination does not require any speed increment.

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OVERVIEW

Ident.: PRO-SPO-85-00020844.0001001 / 28 NOV 19
Applicable to: ALL

Simultaneous Parallel Approach operations permit ILS/RNAV(GNSS)/RNAV(RNP)/GLS instrument approaches to be performed to dual or triple parallel runway configurations.

Two types of simultaneous approaches to parallel or near-parallel instrument runways exist:
- Independent Approaches, where radar separation minima between aircraft on adjacent extended runway center lines are not prescribed and approaches are monitored to ensure aircraft do not enter a No Transgression Zone (NTZ). A Precision Runway Monitor (PRM) system which enables simultaneous close parallel approaches may also be employed. The air traffic controllers use the PRM system to monitor the aircraft position.
- Dependent Approaches, where radar separation minima between aircraft on adjacent extended runway center lines are prescribed and aircraft are staggered to provide separation from the adjacent final course.

To perform Simultaneous Parallel Approach operations:
- The ATC and flight crew must satisfy specific training requirements.
- The ATC and the aircraft equipment must also comply with specific requirements.

BREAK OUT TURN AND CLIMB PROCEDURE

Ident.: PRO-SPO-85-00020845.0001001 / 17 MAR 17
Applicable to: ALL

Simultaneously:

AP.. OFF
BREAK OUT LEFT(RIGHT), HDG___, ALT___... ANNOUNCE
THRUST LEVERS...TOGA, and back to CL

L2 *The SRS GA and the GA TRK modes engage. The THR CLB mode engages.*
The speed is managed. The speed target is the aircraft speed at SRS GA engagement.
The FMS GO-AROUND phase becomes active. Therefore, the FMS reinserts the approach.

L1 TURN LEFT(RIGHT) AND CLIMB

L2 *As the situation is urgent, the flight crew should temporarily disregard the FD orders.*

Then

L1 HDG___ .... TURN AND PULL

L2 *The GA TRK mode disengages, and the HDG mode engages.*

L1 ALT___ .... TURN AND PULL

L2 *The SRS GA mode disengages, and the OP CLB mode engages. The speed target becomes the FMS speed target of the CLIMB phase.*

L1 SPEED .... PULL AND ADJUST

L2 *For the initial break out procedure, adjust the speed (e.g. 160 kt), in order to avoid a significant acceleration, and an increase in workload.*

L1 ● **When established on the break out path:**

AP .... ON

L2 *Before engaging the AP, ensure that the FD bar orders correspond to the aircraft current path.*

L1 SPEED .... SELECT AS RQRD
FLAPS .... AS RQRD
GEAR .... AS RQRD
TCAS MODE SEL .... TA/RA AS RQRD

BREAK OUT TURN AND DESCENT PROCEDURE

Ident.: PRO-SPO-85-00020846.0001001 / 17 MAR 17
Applicable to: ALL

Simultaneously:

AP .... OFF
TURN LEFT(RIGHT) AND MAINTAIN RATE OF DESCENT
BREAK OUT LEFT(RIGHT), HDG___, ALT___ .... ANNOUNCE

L2 *As the situation is urgent, the flight crew should temporarily disregard the FD orders.*

Then

L1 HDG___ .... TURN AND PULL

L2 *The HDG mode engages. The vertical mode reverts to the V/S mode. The vertical speed target is the aircraft vertical speed at V/S engagement.*

L1 ALT___ .... TURN AND PULL

L2 *This action defines an altitude target. The OP DES mode and the THR IDLE mode engage. The speed target does not change.*

L1 V/S .... MONITOR

CAUTION	*Depending on the speed target, the vertical speed may become excessive. If the rate of descent exceeds 1 000 ft/min, engage the V/S mode and limit the rate of descent to 1 000 ft/min.*

- **When established on the break out path:**

  AP .... ON

  L2 *Before engaging the AP, ensure that the FD bar orders correspond to the aircraft current path.*

L1
- **When cleared by ATC:**

  ALT___ .... TURN

  L2 *Select an altitude target for go-around, in accordance with the ATC clearance.*

  L1 THRUST LEVERS .... TOGA, and back to CL

  L2 *The SRS GA and the GA TRK modes engage. The THR CLB mode engages.*
  The speed is managed. The speed target is the aircraft speed at SRS GA engagement.
  The FMS GO-AROUND phase becomes active.

  L1 HDG___ .... PULL

  L2 *The GA TRK mode disengages, and the HDG mode engages. The SRS GA mode remains engaged, until ALT* engagement.*

  L1 SPEED .... SELECT AS RQRD
  FLAPS .... AS RQRD
  GEAR .... AS RQRD
  TCAS MODE SEL .... TA/RA AS RQRD

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LIMITATIONS

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LIM-INT Introduction

LIM-AG Aircraft General

LIM-AIR Air Bleed/Cond/Press/Vent

LIM-AFS Auto Flight System

LIM-APU Auxiliary Power Unit

LIM-CAB Cabin Systems

LIM-COM Communication

LIM-EFB EFB

LIM-ENG Engines

LIM-F_CTL Flight Controls

LIM-FUEL Fuel

LIM-ICE_RAIN Ice and Rain Protection

LIM-LG Landing Gear

LIM-NAV Navigation

LIM-OXY Oxygen

LIM-ROW_ROP ROW/ROP

LIM-SURV Surveillance

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-INT		**Introduction**	00019839.0001001	04 SEP 17
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-AG-F_CTL		**Flight Maneuvering Load Acceleration Limits**	00020793.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
E	LIM-AG-OPS		**Environmental Envelope**	00021826.0009001	18 MAY 22
	Criteria: 320-271N, 320-273N, K19351, P15763, P4378				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
N	LIM-AG-OPS		**Environmental Envelope**	00021825.0004001	19 JUL 17
	Criteria: P4378, 321-200NX **Applicable to: MSN 11531**				
	LIM-AG-OPS		**Environmental Envelope**	00021817.0047001	27 JUL 17
	Criteria: 00-1054, 319-112, P4378, P6201, P8243 **Applicable to: MSN 03733, 04734-04756, 05005, 05097**				
	LIM-AG-OPS		**Environmental Envelope**	00021817.0035001	27 JUL 17
	Criteria: 319-132, P4378, P6201 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	LIM-AG-OPS		**Environmental Envelope**	00021817.0015001	27 JUL 17
	Criteria: 319-132, P6201 **Applicable to: MSN 03032**				
	LIM-AG-OPS		**Environmental Envelope**	00021818.0043001	19 JUL 17
	Criteria: 00-1020, 320-214, P3197, P4378, P6201, P8243 **Applicable to: MSN 02924, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	LIM-AG-OPS		**Environmental Envelope**	00021818.0038001	27 JUL 17
	Criteria: 320-232, 320-233, P2842, P4378, P6201 **Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02014, 02896-02904**				
	LIM-AG-OPS		**Environmental Envelope**	00021818.0027001	27 JUL 17
	Criteria: 00-1020, 320-214, P6201, P8243 **Applicable to: MSN 03002, 04827-04860**				
	LIM-AG-OPS		**Environmental Envelope**	00021818.0048001	27 JUL 17
	Criteria: 320-232, P2842, P4378 **Applicable to: MSN 01143-01376**				
	LIM-AG-OPS		**Environmental Envelope**	00021818.0014001	19 JUL 17
	Criteria: 320-232, P6201 **Applicable to: MSN 02734**				
	LIM-AG-OPS		**Environmental Envelope**	00021818.0005001	19 JUL 17
	Criteria: 320-232 **Applicable to: MSN 01459**				
	LIM-AG-OPS		**Environmental Envelope**	00021819.0028001	27 JUL 17
	Criteria: 321-211, P4378, P6201, P8243 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-AG-OPS		**Environmental Envelope**	00021819.0026001	27 JUL 17
	Criteria: 321-231, P4378, P6201				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-AG-OPS		**Airport Operations and Wind Limitations**	NG01254	
E	LIM-AG-OPS		**Runway Slope**	00020145.0003001	05 JUN 18
	Criteria: P5914, SA				
E	**Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**				
E	LIM-AG-OPS		**Runway Slope**	00020145.0001001	17 MAR 17
	Criteria: SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02924-03710, 03733-04544, 04570-04974, 05066, 05101-05987, 06097, 06121, 06139-07098, 11531**				
E	LIM-AG-OPS		**Runway Altitude**	00020135.0009001	17 MAR 17
	Criteria: 00-1020, 00-1054, 320-271N, P15763, P2842, P3197, P4378, SA				
E	**Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02924, 03035-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-07098, 10949-11597**				
	LIM-AG-OPS		**Runway Altitude**	00020135.0001001	17 MAR 17
	Criteria: 00-1020, P15763, P4378, SA				
	Applicable to: MSN 01459, 02734, 03002-03032, 04827-04860, 08495-09324				
	LIM-AG-OPS		**Nominal Runway Width**	00020146.0002001	17 MAR 17
	Criteria: 00-1058, P6630, SA				
	Applicable to: ALL				
	LIM-AG-OPS		**Wind for Takeoff and Landing**	00020148.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	LIM-AG-OPS		**Tailwind Takeoff**	00020157.0003001	17 MAR 17
	Criteria: 00-1016, P2960, P4710, SA				
	Applicable to: ALL				
	LIM-AG-OPS		**Tailwind Landing**	00020159.0001001	21 MAR 17
	Criteria: SA				
	Applicable to: MSN 04827-04860				
E	LIM-AG-OPS		**Tailwind Landing**	00020159.0003001	21 MAR 17
	Criteria: 00-1043, P4709, SA				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**				
	LIM-AG-OPS		**Flaps Full Note**	00020168.0002001	22 MAR 17
	Criteria: 57-1173, 319-112, 320-214, J3283, P4709, SA				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
E	LIM-AG-OPS		**Flaps Full Note**	00020168.0001001	22 MAR 17
	Criteria: 00-1043, 319-132, 320-232, 320-233, J3283, P4709, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	LIM-AG-OPS		**Passenger and Cargo Doors Operation**	00020166.0001001	04 JUL 17
	Criteria: SA **Applicable to: ALL**				
	LIM-AG-OPS		**Maximum Recommended Crosswind on Wet and Contaminated Runways**	00020046.0003001	10 MAY 21
	Criteria: SA, PW1100G-JM **Applicable to: ALL**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-AG-SPD		**Cockpit Window Open Maximum Speed**	00001904.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
N	LIM-AG-SPD		**Maximum Flaps/Slats Speeds**	00020087.0013001	04 SEP 18
	Criteria: 321-200NX **Applicable to: MSN 11531**				
E	LIM-AG-SPD		**Maximum Flaps/Slats Speeds**	00020087.0001001	17 MAR 17
	Criteria: A319, A320				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	LIM-AG-SPD		**Maximum Flaps/Slats Speeds**	00020087.0003001	17 MAR 17
	Criteria: K6345, 321-200 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	LIM-AG-SPD		**Maximum Operating Speed VMO/MMO**	00019991.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01459**				
E	LIM-AG-SPD		**Maximum Operating Speed VMO/MMO**	00019991.0002001	17 MAR 17
	Criteria: P6201, SA				
E	**Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	LIM-AG-SPD		**Maximum Speeds with the Landing Gear Extended**	00001901.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-AG-SPD		**Maximum Tire Speed**	00001902.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0050001	17 NOV 20
	Criteria: 321-211 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0042001	17 NOV 20
	Criteria: 320-273N, P15599 **Applicable to: MSN 08495-09324**				
E	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0036001	17 NOV 20
E	Criteria: 320-271N, P15599 **Applicable to: MSN 10949-11522, 11572-11597**				
N	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0033001	17 NOV 20
	Criteria: 321-271NX **Applicable to: MSN 11531**				
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0006001	17 NOV 20
	Criteria: 319-112 **Applicable to: MSN 03733, 04734-04756, 05005, 05097**				
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0011001	17 NOV 20
	Criteria: 319-132 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0015001	17 NOV 20
	Criteria: 320-214 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0019001	17 NOV 20
	Criteria: 320-232 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02734, 02896-02904**				
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0020001	17 NOV 20
	Criteria: 320-233 **Applicable to: MSN 02014**				
	LIM-AG-SPD		**Minimum Control Speeds**	00023443.0029001	17 NOV 20
	Criteria: 321-231 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	LIM-AG-SPD		**Minimum Control Speeds on Narrow Runways**	00023493.0001001	17 NOV 20
	Criteria: 00-1058, P6630 **Applicable to: ALL**				
	LIM-AG-SPD		**Taxi Speed**	00019838.0001001	28 MAY 20
	Criteria: 320-200				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	LIM-AG-SPD		**Wipers Maximum Operating Speed**	00001903.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0113001	18 MAR 11
	Criteria: G-V2524-A5, K5939				
	Applicable to: MSN 02321, 02887				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0486001	18 MAR 11
	Criteria: G-V2527-A5, K2319, K3471				
	Applicable to: MSN 01459				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0295001	18 MAR 11
	Criteria: G-CFM56-5B4, K3065, K3471				
	Applicable to: MSN 05643-05883				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0268001	18 MAR 11
	Criteria: 00-1227, 03-1165, G-CFM56-5B4, G-V2527-A5, G-V2527E-A5, V2527E-A5, K3065, K3471, K6164, K6208				
	Applicable to: MSN 02014, 02734, 02924-03002, 03058, 03180-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 05066, 05101-05342, 05591-05621				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0009001	16 MAY 12
	Criteria: G-CFM56-5B4, K13050, K3471				
	Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
R	LIM-AG-WGHT		**Weight Limitations**	00001893.0927001	03 NOV 22
	Criteria: G-PW1127G-JM, PW1127G-JM, PW1129G-JM, K17133, K17137, K30489				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
N	LIM-AG-WGHT		**Weight Limitations**	00001893.0890001	12 OCT 16
	Criteria: G-PW1133G-JM, 321-271NX, K18070, K18071				
	Applicable to: MSN 11531				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0125001	18 MAR 11
	Criteria: G-CFM56-5B3, G-V2533-A5, K6345, 321-200				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
E	LIM-AG-WGHT		**Weight Limitations**	00001893.0296001	16 NOV 11
	Criteria: 00-1070, G-CFM56-5B6, G-V2524-A5, K4705, K5779				
E	**Applicable to: MSN 01801, 01826, 01837-01855, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04734-04773, 05345**				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0294001	16 NOV 11
	Criteria: 00-1106, 00-1124, 03-1001, G-CFM56-5B6, G-V2524-A5				
	Applicable to: MSN 04563, 05005, 05097				
	LIM-AG-WGHT		**Weight Limitations**	00001893.0012001	16 NOV 11
	Criteria: 00-1227, G-CFM56-5B4, G-V2527-A5, K3065, K3471, K6208				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02896-02904, 03035-03047, 03111, 04953-04974				
N	LIM-AG-WGHT		**Center of Gravity Limits with up to 3 ACTs installation**	00022520.0005001	04 SEP 18
	Criteria: PW1100G-JM, J4530 **Applicable to: MSN 11531**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M[1]	Localization	T[2]	DU Title	DU identification	DU date
	LIM-AIR		**General**	00020807.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-AIR		**APU Bleed Use with HP Air Start Unit**	00020084.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-AIR		**Avionics Ventilation**	00020086.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-AIR		**Cabin Pressure**	00020085.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143-01459**				
E	LIM-AIR		**Cabin Pressure**	00020085.0003001	17 MAR 17
E	Criteria: P6201, SA **Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**				
	LIM-AIR		**Packs Use with LP Air Conditioning Unit**	00020083.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-AFS-10		**Autopilot Function**	NG01695	
	LIM-AFS-10		**Autopilot Function**	00019567.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02887, 03002, 03032, 04563, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	LIM-AFS-10		**Autopilot Function - At Takeoff**	00019753.0001001	23 JUL 18
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02887, 03002, 03032, 04563, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	LIM-AFS-10		**Autopilot Function - NPA**	00019568.0001001	23 JUL 18
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02887, 03002, 03032, 04563, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	LIM-AFS-10		**Autopilot Function - Circling Approach**	00019746.0005001	09 JUN 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02887, 03002, 03032, 04563, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	LIM-AFS-10		**Autopilot Function - ILS/MLS/GLS Approach**	00019747.0001001	06 SEP 22
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02887, 03002, 03032, 04563, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	LIM-AFS-10		**Autopilot Function - Go-Around**	00019750.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02887, 03002, 03032, 04563, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	LIM-AFS-10		**Autopilot Function - Other Phases**	00019751.0001001	06 JUL 17
	Criteria: A319, A320				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01801, 01826, 01837, 01855, 02321, 02887, 03002, 03032, 04563, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-AFS-10		**Autopilot Function**	NG01695	
	LIM-AFS-10		**Autopilot Function**	00019567.0001001	17 MAR 17
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
	LIM-AFS-10		**Autopilot Function - At Takeoff**	00019753.0001001	23 JUL 18
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	LIM-AFS-10		**Autopilot Function - NPA**	00019568.0001001	23 JUL 18
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	LIM-AFS-10		**Autopilot Function - Circling Approach**	00019746.0005001	09 JUN 17
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	LIM-AFS-10		**Autopilot Function - ILS/MLS/GLS Approach**	00019747.0001001	06 SEP 22
	Criteria: SA **Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	LIM-AFS-10		**Autopilot Function - PAR Approach**	00019748.0001001	17 MAR 17
	Criteria: P6314				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	LIM-AFS-10		**Autopilot Function - Go-Around**	00019750.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	LIM-AFS-10		**Autopilot Function - Other Phases**	00019751.0001001	06 JUL 17
	Criteria: A319, A320				
E	**Applicable to: MSN 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904, 02924, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03588, 03595, 03630, 03658, 03662, 03710, 03733, 04000, 04163, 04171, 04192, 04389, 04441, 04446, 04465, 04544, 04734, 04756, 04773, 04827, 04860, 04953, 04974, 05005, 05066, 05097, 05101, 05107, 05184, 05222, 05240, 05342, 05345, 05591, 05621, 05643, 05749, 05752, 05883, 08495, 08529, 08596, 08635, 09190, 09324, 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				

	LIM-AFS-10		**Autopilot Function**	NG01695	
	LIM-AFS-10		**Autopilot Function**	00019567.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	LIM-AFS-10		**Autopilot Function - At Takeoff**	00019753.0001001	23 JUL 18
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	LIM-AFS-10		**Autopilot Function - NPA**	00019568.0001001	23 JUL 18
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	LIM-AFS-10		**Autopilot Function - Circling Approach**	00019746.0005001	09 JUN 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	LIM-AFS-10		**Autopilot Function - ILS/MLS/GLS Approach**	00019747.0001001	06 SEP 22
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	LIM-AFS-10		**Autopilot Function - Go-Around**	00019750.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563**				
E	LIM-AFS-10		**Autopilot Function**	NG01695	
	LIM-AFS-10		**Autopilot Function**	00019567.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	LIM-AFS-10		**Autopilot Function - At Takeoff**	00019753.0001001	23 JUL 18
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	LIM-AFS-10		**Autopilot Function - NPA**	00019568.0001001	23 JUL 18
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	LIM-AFS-10		**Autopilot Function - Circling Approach**	00019746.0005001	09 JUN 17
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	LIM-AFS-10		**Autopilot Function - ILS/MLS/GLS Approach**	00019747.0001001	06 SEP 22
	Criteria: SA **Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	LIM-AFS-10		**Autopilot Function - PAR Approach**	00019748.0001001	17 MAR 17
	Criteria: P6314				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	LIM-AFS-10		**Autopilot Function - Go-Around**	00019750.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	LIM-AFS-10		**Autopilot Function - Other Phases**	00019751.0004001	21 NOV 17
	Criteria: A321				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
E	LIM-AFS-10		**Autopilot Function**	NG01695	
	LIM-AFS-10		**Autopilot Function**	00019567.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				
	LIM-AFS-10		**Autopilot Function - At Takeoff**	00019753.0001001	23 JUL 18
	Criteria: SA				
	Applicable to: MSN 11531				
	LIM-AFS-10		**Autopilot Function - NPA**	00019568.0001001	23 JUL 18
	Criteria: SA				
	Applicable to: MSN 11531				
	LIM-AFS-10		**Autopilot Function - Circling Approach**	00019746.0005001	09 JUN 17
	Criteria: SA				
	Applicable to: MSN 11531				
	LIM-AFS-10		**Autopilot Function - ILS/MLS/GLS Approach**	00019747.0001001	06 SEP 22
	Criteria: SA				
	Applicable to: MSN 11531				
	LIM-AFS-10		**Autopilot Function - Go-Around**	00019750.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				
E	LIM-AFS-10		**Autopilot Function - Other Phases**	00019751.0004001	21 NOV 17
	Criteria: A321				
E	**Applicable to: MSN 11531**				
E	LIM-AFS-10		**Flight Management Function**	NG01711	
	LIM-AFS-10		**Flight Management Function**	00020069.0001001	12 MAY 22
	Criteria: SA				
	Applicable to: ALL				
	LIM-AFS-10		**Navigation Performance**	00020070.0002001	17 MAR 17
	Criteria: 22-1090, 22-1676, P7218, P7666, SA				
	Applicable to: ALL				
E	LIM-AFS-10		**RNP AR**	00020231.0005001	17 MAR 17
	Criteria: 34-1374, 34-1403, 34-1480, P10530, P11256, P11569, P11570, P15572, P9593				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**				
	LIM-AFS-10		**Degraded Situation**	00020389.0001001	04 MAY 18
	Criteria: SA				
	Applicable to: ALL				
	LIM-AFS-10		**Use of NAV Mode**	NG01723	
	LIM-AFS-10		**Use of NAV Mode**	00020334.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	LIM-AFS-10		**Use of NAV Mode - In Terminal Area**	00020335.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	LIM-AFS-10		**Use of NAV Mode - Approach Based on Radio Navaids**	00020336.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	LIM-AFS-10		**Use of NAV Mode - RNAV Approach**	00020337.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				
	LIM-AFS-10		**Use of FLS** ◁	00020808.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	LIM-AFS-10		**Non-Precision Approaches with Engine-Out**	00006519.0001001	09 FEB 11
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03294, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 06895				
E	LIM-AFS-10		**Navigation Database Validation**	NG01820	
	LIM-AFS-10		**Navigation Database Validation**	00021656.0002001	05 MAY 22
	Criteria: 22-1269, 22-1270, 22-1676, P10762, P10763, P10785, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222				
E	LIM-AFS-10		**Navigation Database Validation**	00021656.0006001	05 MAY 22
	Criteria: 22-1269, 22-1270, 34-1374, 34-1403, 34-1480, P10530, P10762, P10763, P11256, P11569, P11570, P15572, P9593, SA				
E	**Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	LIM-AFS-20		**ILS Category II**	00020136.0001001	18 SEP 18
	Criteria: SA **Applicable to: ALL**				
	LIM-AFS-20		**Special Authorization CAT II (SA CAT II)**	00020138.0001001	18 SEP 18
	Criteria: SA **Applicable to: ALL**				
	LIM-AFS-20		**Other than Standard CAT II (OTS CAT II)**	00020139.0001001	18 SEP 18
	Criteria: SA **Applicable to: ALL**				
	LIM-AFS-20		**ILS Category III Fail Passive (Single)**	00020140.0001001	18 SEP 18
	Criteria: SA **Applicable to: ALL**				
E	LIM-AFS-20		**ILS Category III Fail Operational (Dual)**	00020141.0001001	17 MAR 17
	Criteria: CFMI, IAE, J3283, A319, A320, A321, 320-200N, 321-200NX				
E	**Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 08495-09324, 10949-11597**				
	LIM-AFS-20		**ILS Category III Fail Operational (Dual)**	00020141.0008001	18 SEP 18
	Criteria: CFMI, A320 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240**				
	LIM-AFS-20		**ILS Category III Fail Operational (Dual)**	00020141.0005001	18 SEP 18
	Criteria: CFMI, A321 **Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	LIM-AFS-20		**ILS Category III Fail Operational (Dual)**	00020141.0004001	18 SEP 18
	Criteria: IAE, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	LIM-AFS-20		**ILS Category III Fail Operational (Dual)**	00020141.0002001	18 SEP 18
	Criteria: 57-1173, CFMI, IAE, J3283, A320, A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05342, 05528-05987, 06097, 06121, 06139-06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
	LIM-AFS-20		**Engine-Out**	00020142.0001001	17 MAR 17
	Criteria: A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				
E	LIM-AFS-20		**Engine-Out**	00020142.0003001	17 MAR 17
	Criteria: A319, A320, A321, 320-200N				
E	**Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**				
	LIM-AFS-20		**GLS Category I**	00020143.0001001	06 SEP 22
	Criteria: P8500				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
N	LIM-AFS-20		**Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I**	00020144.0015001	07 SEP 17
	Criteria: P15874, A321, 321-200NX **Applicable to: MSN 11531**				
	LIM-AFS-20		**Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I**	00020144.0004001	05 MAR 19
	Criteria: A321 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098**				
	LIM-AFS-20		**Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I**	00020144.0001001	17 MAR 17
	Criteria: A320 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240**				
E	LIM-AFS-20		**Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I**	00020144.0010001	05 MAR 19
E	Criteria: 320-271N, J3283, P15874, A320 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	LIM-AFS-20		**Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I**	00020144.0013001	05 MAR 19
	Criteria: A319 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345**				
	LIM-AFS-20		**Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I**	00020144.0005001	17 MAR 17
	Criteria: 57-1173, J3283, A320 **Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876**				

E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA **Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904**				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904				
	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0001001	17 MAR 17
	Criteria: IAE, SA, A319				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904				
	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0007001	17 MAR 17
	Criteria: 00-1032, P3348, A320				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				
E	**Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904**				
	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904				
	LIM-AFS-20		**Automatic Landing - Runway**	00020156.0001001	05 MAR 19
	Criteria: A320				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143, 01158, 01246, 01251, 01376, 01459, 01518, 01593, 01628, 01825, 01832, 02014, 02734, 02896, 02904				

	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857, 01891, 02513, 03727, 06057, 06103, 06110, 06125, 09558, 09563				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
E	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0004001	17 MAR 17
	Criteria: IAE, P10804, SA, A319, 320-200N, 321-200NX				
E	**Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
E	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0003001	17 MAR 17
	Criteria: 00-1024, 320-271N, P15874, P3756, A319, A320				
E	**Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				
E	**Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345**				
	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
	LIM-AFS-20		**Automatic Landing - Rollout**	00020156.0007001	05 MAR 19
	Criteria: 319-112, 319-132, A319				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01801, 01826, 01837, 01855, 02321, 02887, 03032, 03588, 03595, 03710, 04000, 04163, 04171, 04192, 04389, 04563, 04773, 05345				
E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				
	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0001001	17 MAR 17
	Criteria: IAE, SA, A319				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				
E	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0003001	17 MAR 17
	Criteria: 00-1024, 320-271N, P15874, P3756, A319, A320				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240**				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				
E	**Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240**				
	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				
	LIM-AFS-20		**Automatic Landing - Runway**	00020156.0001001	05 MAR 19
	Criteria: A320				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 02924, 03002, 03035, 03047, 03058, 03111, 03180, 03211, 03266, 03284, 03313, 03391, 03565, 03630, 03658, 03662, 04441, 04446, 04465, 04544, 04953, 04974, 05066, 05101, 05107, 05184, 05222, 05240				

E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0001001	17 MAR 17
	Criteria: IAE, SA, A319				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0002001	17 MAR 17
	Criteria: P15874, P3336, P3337, A320, A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				
E	**Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098**				
	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	LIM-AFS-20		**Automatic Landing - Runway**	00020156.0004001	05 MAR 19
	Criteria: A321				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03222, 03229, 03294, 03761, 03816, 04352, 04358, 04570, 04662, 05528, 05947, 05987, 06097, 06121, 06163, 06165, 06409, 06414, 06592, 06632, 06658, 06670, 06685, 06718, 06729, 06798, 06895, 06949, 07005, 07081, 07098				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03733, 04734, 04756, 05005, 05097				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03733, 04734, 04756, 05005, 05097				
	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0001001	17 MAR 17
	Criteria: IAE, SA, A319				
	Applicable to: MSN 03733, 04734, 04756, 05005, 05097				
E	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0003001	17 MAR 17
	Criteria: 00-1024, 320-271N, P15874, P3756, A319, A320				
E	**Applicable to: MSN 03733, 04734, 04756, 05005, 05097**				
	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0002001	29 NOV 19
	Criteria: 319-112, SA				
	Applicable to: MSN 03733, 04734, 04756, 05005, 05097				
	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03733, 04734, 04756, 05005, 05097				
	LIM-AFS-20		**Automatic Landing - Rollout**	00020156.0007001	05 MAR 19
	Criteria: 319-112, 319-132, A319				
	Applicable to: MSN 03733, 04734, 04756, 05005, 05097				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 03733, 04734, 04756, 05005, 05097				

E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0001001	17 MAR 17
	Criteria: IAE, SA, A319				
	Applicable to: MSN 04827, 04860				
	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0001001	17 MAR 17
	Criteria: A320				
	Applicable to: MSN 04827, 04860				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
E	**Applicable to: MSN 04827, 04860**				
	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
	LIM-AFS-20		**Automatic Landing - Runway**	00020156.0001001	05 MAR 19
	Criteria: A320				
	Applicable to: MSN 04827, 04860				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 04827, 04860				
E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0001001	17 MAR 17
	Criteria: IAE, SA, A319				
	Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0003001	17 MAR 17
	Criteria: 00-1024, 320-271N, P15874, P3756, A319, A320				
E	**Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				
E	**Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				
	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	LIM-AFS-20		**Automatic Landing - Runway**	00020156.0005001	05 MAR 19
	Criteria: 57-1173, J3283, P15874, A320, A321, 321-200NX				
E	**Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 05342, 05591, 05621, 05643, 05749, 05752, 05883, 06139, 06173, 06528, 06536, 06561, 06598, 06634, 06689, 06712, 06800, 06806, 06813, 06871, 06876				
E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
E	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0004001	17 MAR 17
	Criteria: IAE, P10804, SA, A319, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0002001	17 MAR 17
	Criteria: P15874, P3336, P3337, A320, A321				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
E	LIM-AFS-20		**Automatic Landing - Weight**	00020153.0001001	17 MAR 17
	Criteria: 320-271N, P15874, SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
E	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0002001	17 MAR 17
	Criteria: SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
E	LIM-AFS-20		**Automatic Landing - Rollout**	00020156.0008001	05 MAR 19
	Criteria: 320-271N, J3283, P15874, A320				
E	**Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324**				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 08495, 08529, 08596, 08635, 09190, 09324				
E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				
E	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0004001	17 MAR 17
	Criteria: IAE, P10804, SA, A319, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0003001	17 MAR 17
	Criteria: 00-1024, 320-271N, P15874, P3756, A319, A320				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	LIM-AFS-20		**Automatic Landing - Weight**	00020153.0001001	17 MAR 17
	Criteria: 320-271N, P15874, SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0002001	17 MAR 17
	Criteria: SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
E	LIM-AFS-20		**Automatic Landing - Rollout**	00020156.0008001	05 MAR 19
	Criteria: 320-271N, J3283, P15874, A320				
E	**Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597**				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 10949, 11139, 11228, 11293, 11482, 11522, 11572, 11597				

E	LIM-AFS-20		**Automatic Landing**	NG01712	
	LIM-AFS-20		**Automatic Landing**	00020149.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				
	LIM-AFS-20		**Automatic Landing - LS Beam**	00020150.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				
E	LIM-AFS-20		**Automatic Landing - Glide Slope**	00020151.0004001	17 MAR 17
	Criteria: IAE, P10804, SA, A319, 320-200N, 321-200NX				
E	**Applicable to: MSN 11531**				
N	LIM-AFS-20		**Automatic Landing - Airport Elevation**	00020152.0011001	16 JAN 18
	Criteria: P15874, A321, 321-200NX				
	Applicable to: MSN 11531				
N	LIM-AFS-20		**Automatic Landing - Weight**	00020153.0010001	25 JAN 18
	Criteria: 321-271NX, P15874, SA				
	Applicable to: MSN 11531				
E	LIM-AFS-20		**Automatic Landing - Weight**	00021180.0003001	25 JAN 18
	Criteria: SA				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
E	**Applicable to: MSN 11531**				
E	LIM-AFS-20		**Automatic Landing - Pressure Altitude Limit**	00020155.0002001	17 MAR 17
	Criteria: SA, 320-200N, 321-200NX				
E	**Applicable to: MSN 11531**				
E	LIM-AFS-20		**Automatic Landing - Runway**	00020156.0005001	05 MAR 19
	Criteria: 57-1173, J3283, P15874, A320, A321, 321-200NX				
E	**Applicable to: MSN 11531**				
	LIM-AFS-20		**ILS/MLS (If Installed) Automatic Landing in CAT I or Better Weather Conditions**	00020158.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 11531				

M	Localization	T	DU Title	DU identification	DU date
	LIM-AFS-20	x	**Automatic Landing in Johannesburg**	00013685.0001001	25 APR 13
	Criteria: A319, A320, A321				
	Applicable to: ALL				
	Impacted DU: NONE				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-APU		**General**	NG01762	
	LIM-APU		**APU Start**	00020088.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-APU		**Rotor Speed**	00020089.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
E	LIM-APU		**EGT**	00020090.0003001	17 MAR 17
E	Criteria: 49-1067, 49-1082, G0553, K10494, K2450, K4457, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
E	LIM-APU		**EGT**	00020090.0002001	17 MAR 17
E	Criteria: K10494, K2450, SA **Applicable to: MSN 06871-06876**				
	LIM-APU		**APU Start/Shutdown during Refueling/Defueling**	00020091.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
E	LIM-APU		**Operational Envelope**	NG01763	
E	LIM-APU		**Operational Envelope**	00019832.0003001	26 NOV 19
E	Criteria: 00-1054, 49-1061, 49-1067, 49-1082, G0553, K10494, K2450, K4457, K6318, K6936, P4378, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
E	LIM-APU		**Operational Envelope**	00019832.0026001	26 NOV 19
E	Criteria: K10494, K2450, K6318, K6936, P4378, SA **Applicable to: MSN 06871-06876**				
E	LIM-APU		**APU Bleed**	00021771.0002001	04 JUL 17
E	Criteria: 00-1054, 49-1061, 49-1067, 49-1082, G0553, K10494, K2450, K4457, K6318, K6936, P4378, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**				
E	LIM-APU		**APU Bleed**	00021771.0001001	04 JUL 17
E	Criteria: K10494, K2450, K6318, K6936, P4378, SA **Applicable to: MSN 06871-06876**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-CAB		**Power Supply for Portable Electronic Device (PED)**	00020226.0001001	22 MAR 17
E	Criteria: 25-1BCV, K7847 **Applicable to: MSN 01825, 01832, 02887, 02904, 03222-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	LIM-COM		**GSM Onboard** ✈	00020293.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
N	LIM-EFB-24		**Cockpit Portable Electronic Device Outlets**	20800854.9001001	02 MAY 23
	Criteria: **Applicable to: MSN 01143-01251, 01518-11597**				
N	LIM-EFB-24		**Cockpit Portable Electronic Device Outlet**	20800854.9001002	02 MAY 23
	Criteria: **Applicable to: MSN 01376-01459**				
N	LIM-EFB-46		**EFB Class 1 (iPad)**	20800855.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	LIM-EFB-46		**Jeppesen Function (JeppFD-PRO App)**	20800856.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	LIM-EFB-46		**Documents Function (Contents App)**	20800857.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	LIM-EFB-46		**FlySmart Function (OLB/Landing/Loadsheet/Takeoff)**	20800858.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	LIM-EFB-46		**Power charger with cable**	20800859.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	LIM-EFB-46		**Mount**	20800860.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				
N	LIM-EFB-46		**Kneeboard**	20800861.9001001	02 MAY 23
	Criteria: **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-ENG		**Thrust Setting/EGT Limits**	00019960.0020001	18 MAY 18
	Criteria: PW1100G-JM, P20903				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	LIM-ENG		**Thrust Setting/EGT Limits**	00019960.0004001	20 MAR 17
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	LIM-ENG		**Thrust Setting/EGT Limits**	00019960.0017001	20 MAR 17
	Criteria: G-V2524-A5, G-V2527-A5, G-V2527E-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345				
	LIM-ENG		**Thrust Setting/EGT Limits**	00019960.0019001	20 MAR 17
	Criteria: G-V2533-A5				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165				
E	LIM-ENG		**Shaft Speeds**	00020355.0007001	17 NOV 20
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	LIM-ENG		**Shaft Speeds**	00020355.0003001	17 NOV 20
	Criteria: V2500-A5				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
	LIM-ENG		**Shaft Speeds**	00020355.0002001	17 NOV 20
	Criteria: CFM56-5B				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	LIM-ENG		**Oil**	00020354.0001001	10 MAY 21
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6				
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098				
	LIM-ENG		**Oil**	00020354.0010001	10 MAY 21
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	LIM-ENG		**Oil**	00020354.0011001	03 NOV 21
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
E	LIM-ENG		**Starter**	00020356.0004001	04 JUN 19
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	LIM-ENG		**Starter**	00020356.0002001	20 MAR 17
	Criteria: IAE **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
	LIM-ENG		**Starter**	00020356.0001001	20 MAR 17
	Criteria: CFMI **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098**				
	LIM-ENG		**Reverse Thrust**	00020357.0001001	20 MAR 17
	Criteria: SA **Applicable to: ALL**				

N	LIM-ENG		**Reduced Thrust Takeoff**	NG01725	
	LIM-ENG	x	**Flex Takeoff**	00020362.0005001	20 MAR 17
	Criteria: 73-1088, G-V2524-A5, P9496 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345** *Impacted DU: 00020358 Flex Takeoff*				
	LIM-ENG		***Flex Takeoff***	*00020358.0050001*	*05 MAR 19*
	Criteria: PW1129G-JM **Applicable to: MSN 08495-09324**				
E	*LIM-ENG*		***Flex Takeoff***	*00020358.0046001*	*01 JUN 17*
	Criteria: G-PW1127G-JM				
E	**Applicable to: MSN 10949-11522, 11572-11597**				
N	*LIM-ENG*		***Flex Takeoff***	*00020358.0044001*	*01 JUN 17*
	Criteria: G-PW1133G-JM **Applicable to: MSN 11531**				
	LIM-ENG		***Flex Takeoff***	*00020358.0002001*	*20 MAR 17*
	Criteria: G-V2524-A5 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345** *Impacted by TDU: 00020362 Flex Takeoff*				
	LIM-ENG		***Flex Takeoff***	*00020358.0004001*	*20 MAR 17*
	Criteria: G-V2527-A5, G-V2527E-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	LIM-ENG		***Flex Takeoff***	*00020358.0006001*	*20 MAR 17*
	Criteria: G-V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	LIM-ENG		***Flex Takeoff***	*00020358.0008001*	*26 NOV 19*
	Criteria: G-CFM56-5B4, P7919, P8069				

Continued on the following page

Continued from the previous page

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	LIM-ENG		***Flex Takeoff***	*00020358.0021001*	*20 MAR 17*
	Criteria: G-CFM56-5B6, P7919, P8069				
	Applicable to: MSN 03733, 04734-04756, 05005, 05097				
	LIM-ENG		***Flex Takeoff***	*00020358.0023001*	*20 MAR 17*
	Criteria: G-CFM56-5B3, P7919, P8069				
	Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				
	LIM-ENG		**Derated Takeoff (If Installed)**	00020359.0001001	20 MAR 17
	Criteria: 57-1187, 321-211, J3448, SA				
	Applicable to: ALL				
E	LIM-ENG		**Crosswind Operation on Ground**	00020360.0003001	20 MAR 17
	Criteria: PW1100G-JM				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	LIM-ENG		**Crosswind Operation on Ground**	00020360.0001001	20 MAR 17
	Criteria: IAE				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165				
E	LIM-ENG		**Soft Go-Around**	00020363.0002001	04 DEC 17
	Criteria: P13922				
E	**Applicable to: MSN 08495-09324, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-F_CTL		**Flight Maneuvering Load Acceleration Limits**	00020162.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-F_CTL		**Maximum Altitude Flaps/Slats Extended**	00020160.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-F_CTL		**Maximum Flaps/Slats Speeds**	00020163.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-F_CTL		**Use of Flight Controls**	00020000.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	LIM-FUEL		**Certified Fuel**	00019707.0001001	17 MAR 17
	Criteria: 28-1242, J3527, SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098				
E	LIM-FUEL		**Certified Fuel**	00019707.0002001	17 MAR 17
	Criteria: IAL, J3527, J4302, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	LIM-FUEL		**Fuel Temperature**	00019708.0001001	28 NOV 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173-07098				
E	LIM-FUEL		**Fuel Temperature**	00019708.0002001	28 NOV 17
	Criteria: IAL, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	LIM-FUEL		**Fuel Temperature**	00019708.0003001	28 NOV 17
	Criteria: 321-231, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165				
	LIM-FUEL		**Fuel Temperature Limits when JP4 and JET B Fuels are Used**	00019709.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173				
E	LIM-FUEL		**Maximum Allowed Fuel Imbalance**	00020435.0001001	17 MAR 17
	Criteria: 57-1173, A319, A320, 320-200N, J3283				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	LIM-FUEL		**Maximum Allowed Fuel Imbalance**	00020435.0004001	17 MAR 17
	Criteria: 321-231, 321-200				
	Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662				
E	LIM-FUEL		**Maximum Allowed Fuel Imbalance**	00020435.0008001	17 MAR 17
	Criteria: 57-1187, 321-211, 321-231, J3448, 321-200, 321-200NX				
E	**Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	LIM-FUEL		**Minimum Fuel Quantity for Takeoff**	00019771.0001001	17 MAR 17
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-ICE_RAIN Criteria: SA **Applicable to: ALL**		**Definition of Icing Conditions**	00020608.0001001	05 JUN 18
	LIM-ICE_RAIN Criteria: SA **Applicable to: ALL**		**Definition of Severe Ice Accretion**	00020609.0001001	17 MAR 17
	LIM-ICE_RAIN Criteria: SA **Applicable to: ALL**		**Definition of Thin Hoarfrost**	00020610.0001001	17 MAR 17
	LIM-ICE_RAIN Criteria: SA **Applicable to: ALL**		**Rain Repellent** ◁	00020224.0001001	17 MAR 17
	LIM-ICE_RAIN Criteria: SA **Applicable to: ALL**		**Wipers Maximum Operating Speed**	00020225.0001001	17 MAR 17

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-LG		**Braking System**	00020233.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-LG		**Brake Temperature**	00020255.0001001	17 MAR 17
	Criteria: 32-1242, P3341, P4507, A319, A320, A321, 320-200N, 321-200NX **Applicable to: ALL**				
	LIM-LG		**Maximum Speeds with the Landing Gear Extended**	00020237.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-LG		**Maximum Tire Speed**	00020238.0001001	17 MAR 17
	Criteria: SA **Applicable to: ALL**				
	LIM-LG		**Nosewheel Steering (NWS)**	00020236.0001001	12 SEP 17
	Criteria: SA **Applicable to: ALL**				
	LIM-LG		**Taxi with Deflated or Damaged Tires**	00020235.0001001	01 JUN 17
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	LIM-NAV		**Inertial Reference System (IRS)**	00020081.0003001	17 MAR 17
	Criteria: P3040, P3996, P9351, SA **Applicable to: MSN 02887**				
	LIM-NAV		**Inertial Reference System (IRS)**	00020081.0001001	17 MAR 17
	Criteria: P12310, P3040, P3042, P3996, SA **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324**				
E	LIM-NAV		**Inertial Reference System (IRS)**	00020081.0002001	17 MAR 17
E	Criteria: P16015, P4017, SA **Applicable to: MSN 01459, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-OXY		**Minimum Flight Crew Oxygen Pressure**	00020232.0009001	17 MAR 17
	Criteria: K16173, K17059, K31012, K5549, P0040, P0091, SA				
E	**Applicable to: MSN 08495-09324, 10949-11597**				
	LIM-OXY		**Minimum Flight Crew Oxygen Pressure**	00020232.0002001	17 MAR 17
	Criteria: K5549, P0040, P0091, SA				
	Applicable to: MSN 01459				
	LIM-OXY		**Minimum Flight Crew Oxygen Pressure**	00020232.0003001	17 MAR 17
	Criteria: K5549, P0040, P0091, P0160, SA				
	Applicable to: MSN 02014, 02734, 02896-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05752				
	LIM-OXY		**Minimum Flight Crew Oxygen Pressure**	00020232.0004001	17 MAR 17
	Criteria: K13078, K16173, K5549, P0040, P0091, SA				
	Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	LIM-OXY		**Minimum Flight Crew Oxygen Pressure**	00020232.0007001	17 MAR 17
	Criteria: 35-1084, K13078, K16173, K5157, K5549, K5769, K6472, P0040, P0091, P0160, P7062, SA				
	Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02887, 04563, 04827-04860, 05005, 05097, 05883-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	LIM-ROW_ROP		**ROW/ROP**	00016038.0011001	28 MAY 20
	Criteria: P15323, P20429, P20473, P21486				
E	**Applicable to: MSN 10949-11597**				
	LIM-ROW_ROP		**ROW/ROP**	00016038.0008001	04 JUN 19
	Criteria: P15323, P20429				
	Applicable to: MSN 08495-09324				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	LIM-SURV		**GPWS / Predictive GPWS** ◁	00019775.0001001	28 MAY 20
	Criteria: SA **Applicable to: ALL**				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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LIST OF EFFECTIVE TEMPORARY DOCUMENTARY UNITS

M (1)	Localization	DU Title	DU identification	DU date
	LIM-AFS-20	**Automatic Landing in Johannesburg**	00013685.0001001	25 APR 13
	Criteria: A319, A320, A321 **Applicable to: ALL** *Impacted DU: NONE*			

N	LIM-ENG	**Reduced Thrust Takeoff**	NG01725	
	LIM-ENG	**Flex Takeoff**	00020362.0005001	20 MAR 17
	Criteria: 73-1088, G-V2524-A5, P9496 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345** *Impacted DU: 00020358 Flex Takeoff*			

(1) Evolution code : N=New, R=Revised, E=Effectivity

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LIMITATIONS

INTRODUCTION

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PRELIMINARY PAGES - TABLE OF CONTENTS

Introduction..A

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INTRODUCTION

Ident.: LIM-INT-00019839.0001001 / 04 SEP 17
Applicable to: ALL

This FCOM chapter contains operational limitations, related to the aircraft and associated systems. All references to airspeed, Mach and altitude relate to indicated airspeed, indicated Mach, and pressure altitude, unless otherwise noted.

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LIMITATIONS

AIRCRAFT GENERAL

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LIM-AG-F_CTL Flight Maneuvering Load Acceleration Limits

Flight Maneuvering Load Acceleration Limits........ A

LIM-AG-OPS Operational Parameters

Environmental Envelope........ A
Environmental Envelope........ B
Environmental Envelope........ C
Environmental Envelope........ D
Environmental Envelope........ E
Airport Operations and Wind Limitations........ F

LIM-AG-SPD Speeds

Cockpit Window Open Maximum Speed........ A
Maximum Flaps/Slats Speeds........ B
Maximum Operating Speed VMO/MMO........ C
Maximum Speeds with the Landing Gear Extended........ D
Maximum Tire Speed........ E
Minimum Control Speeds........ F
Minimum Control Speeds on Narrow Runways........ G
Taxi Speed........ H
Wipers Maximum Operating Speed........ I

[1] LIM-AG-WGHT Weights

Weight Limitations........ A
Center of Gravity Limits with up to 3 ACTs installation........ B

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Localization Title	Toc Index	ID	Reason
LIM-AG-PLP-TOC Weights		1	Documentation update: Deletion of the "00001893.0112001 Weight Limitations" documentary unit.
LIM-AG-OPS Environmental Envelope	B	2	Documentation update: Addition of "Environmental Envelope" documentary unit
LIM-AG-SPD Maximum Flaps/Slats Speeds	B	1	Documentation update: Addition of "Maximum Flaps/Slats Speeds" documentary unit
LIM-AG-SPD Minimum Control Speeds	F	5	Documentation update: Addition of "Minimum Control Speeds" documentary unit
LIM-AG-WGHT Weight Limitations	A	2	Documentation update: Addition of "Weight Limitations" documentary unit
LIM-AG-WGHT Center of Gravity Limits with up to 3 ACTs installation	B	4	Documentation update: Addition of "Center of Gravity Limits with up to 3 ACTs installation" documentary unit
LIM-AG-OPS Environmental Envelope	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-OPS Runway Slope	F	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-OPS Runway Slope	F	4	Effectivity update: The information now also applies to MSN 11531.
LIM-AG-OPS Runway Altitude	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-OPS Tailwind Landing	F	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-OPS Flaps Full Note	F	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-SPD Maximum Flaps/Slats Speeds	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-SPD Maximum Operating Speed VMO/MMO	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AG-SPD Minimum Control Speeds	F	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-WGHT Weight Limitations	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AG-WGHT Weight Limitations	A	3	Effectivity update: The information now also applies to MSN 03588, 03595.

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FLIGHT MANEUVERING LOAD ACCELERATION LIMITS

Ident.: LIM-AG-F_CTL-00020793.0001001 / 17 MAR 17
Applicable to: ALL

Clean configuration	-1 g to +2.5 g
Other configurations	0 g to +2 g

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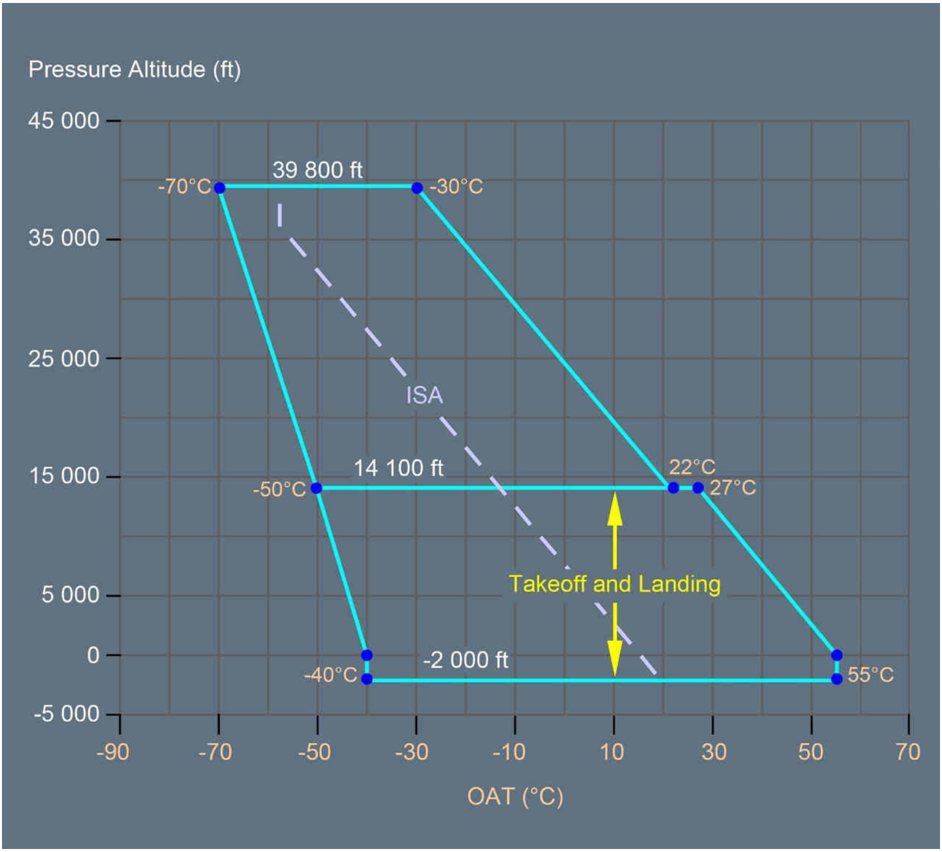
ENVIRONMENTAL ENVELOPE

Ident.: LIM-AG-OPS-00021826.0009001 / 18 MAY 22

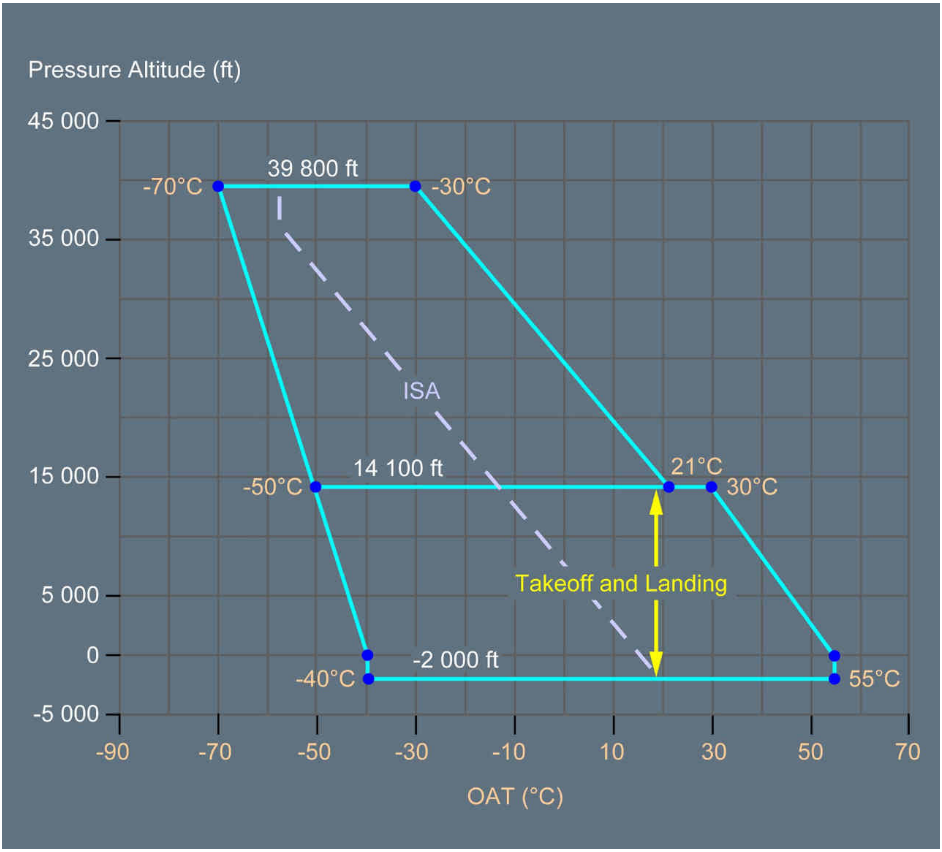
1 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**



ENVIRONMENTAL ENVELOPE

2 Ident.: LIM-AG-OPS-00021825.0004001 / 19 JUL 17

Applicable to: MSN 11531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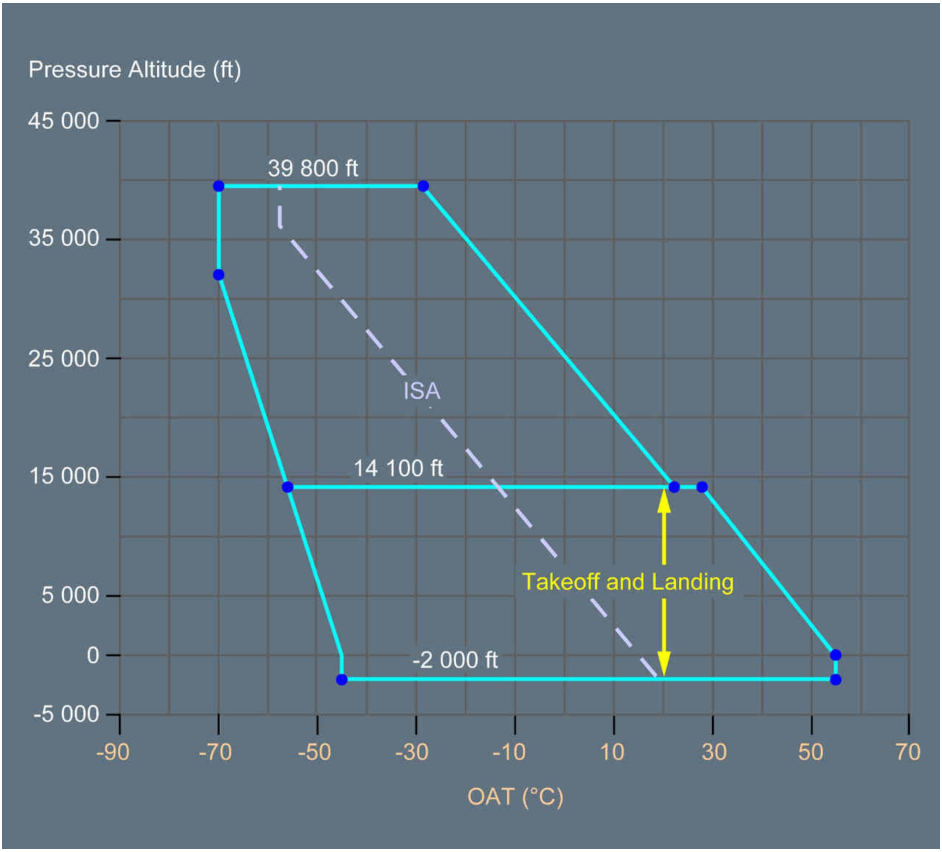
45 000
35 000
25 000
15 000
5 000
0
-5 000
39 800 ft
-70°C
-30°C
ISA
14 100 ft
-50°C
21°C
30°C
Takeoff and Landing
-2 000 ft
-40°C
55°C
-90
-70
-50
-30
-10
10
30
50
70
OAT (°C)

ENVIRONMENTAL ENVELOPE

Ident.: LIM-AG-OPS-00021817.0047001 / 27 JUL 17

Applicable to: MSN 03733, 04734-04756, 05005, 05097



ENVIRONMENTAL ENVELOPE

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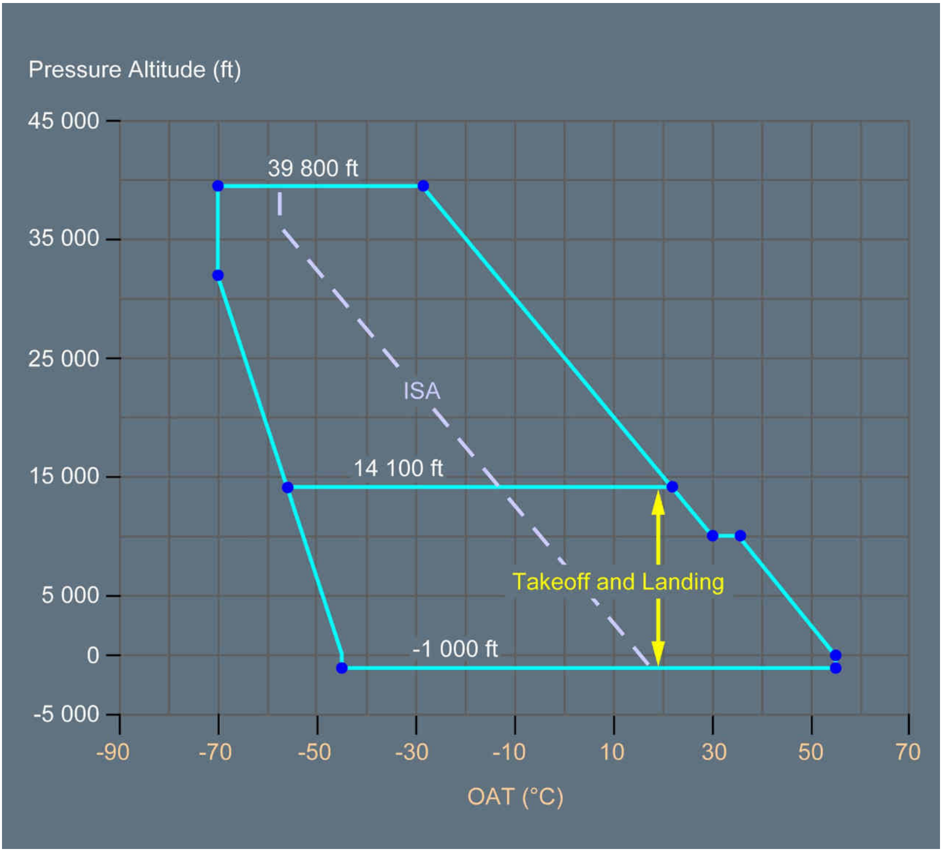
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345



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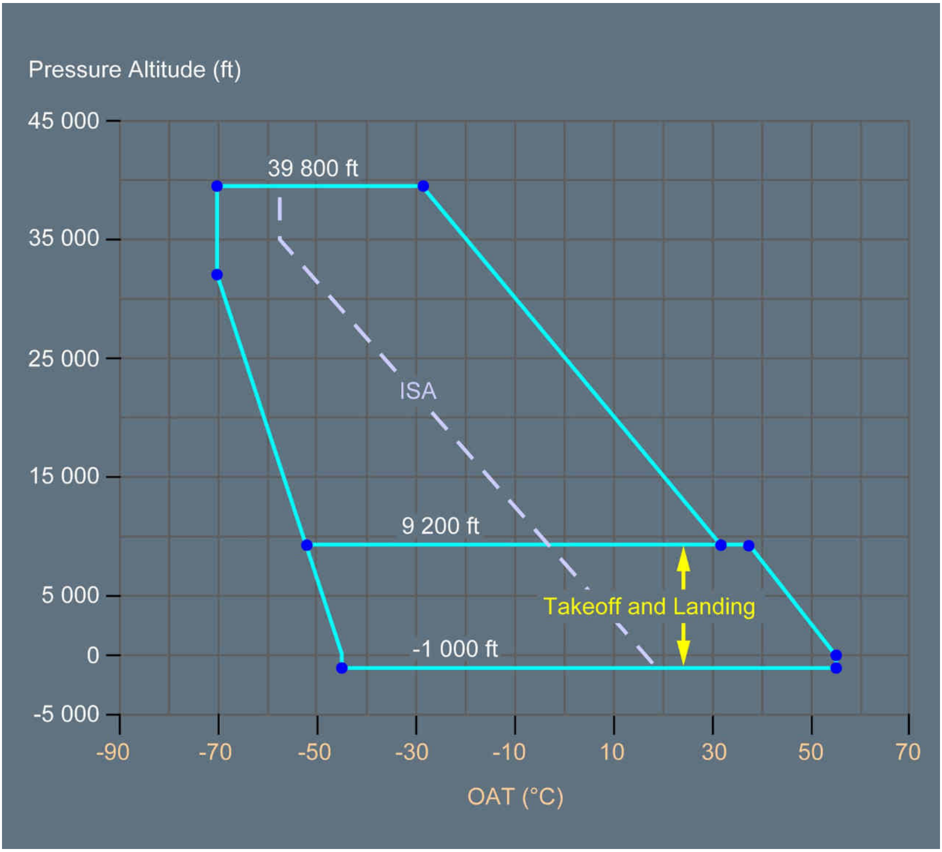
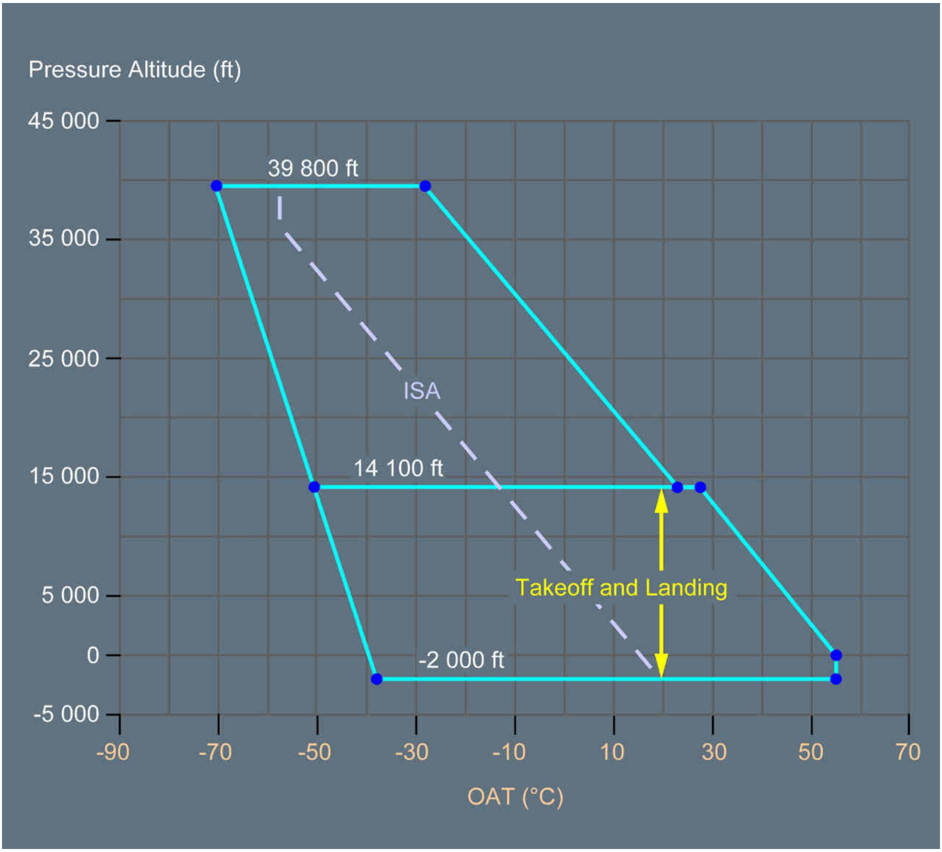
Applicable to: MSN 03032



ENVIRONMENTAL ENVELOPE

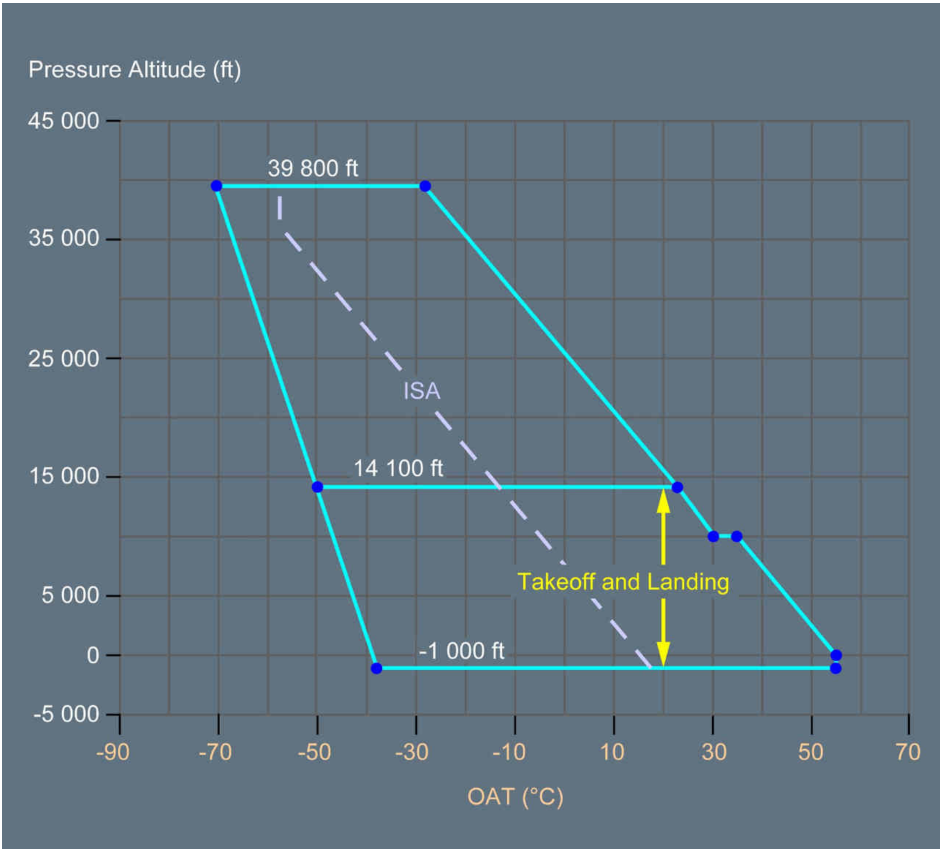
Ident.: LIM-AG-OPS-00021818.0043001 / 19 JUL 17

Applicable to: MSN 02924, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876



ENVIRONMENTAL ENVELOPE

Ident.: LIM-AG-OPS-00021818.0038001 / 27 JUL 17
Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02014, 02896-02904



ENVIRONMENTAL ENVELOPE

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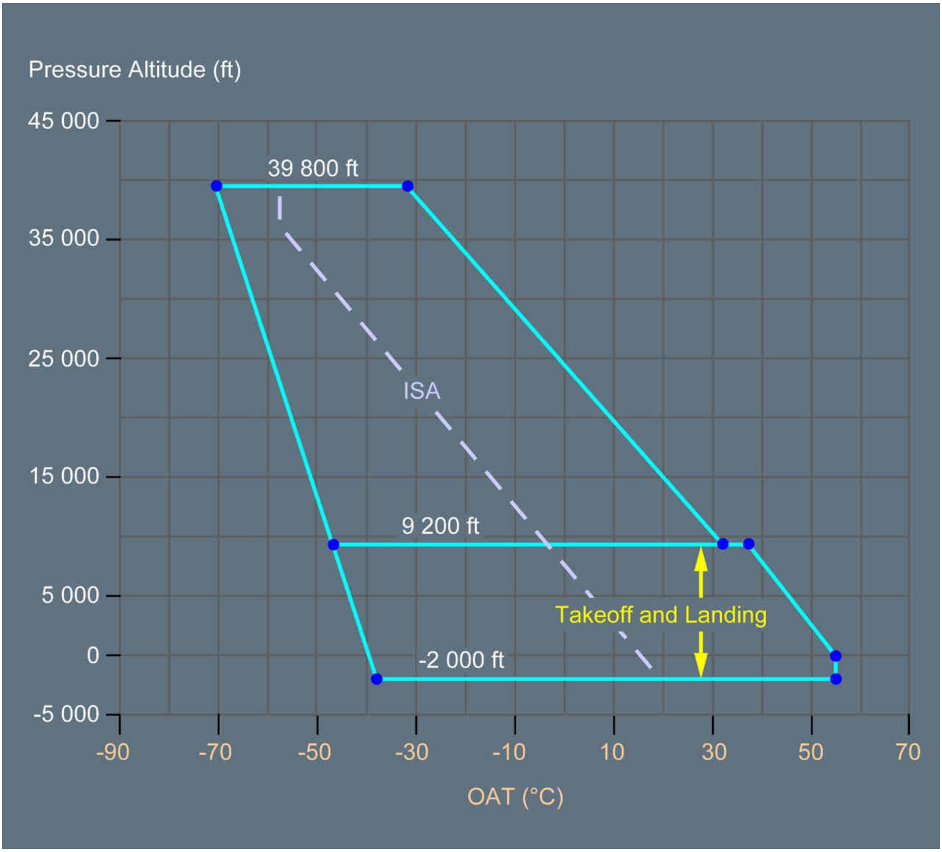

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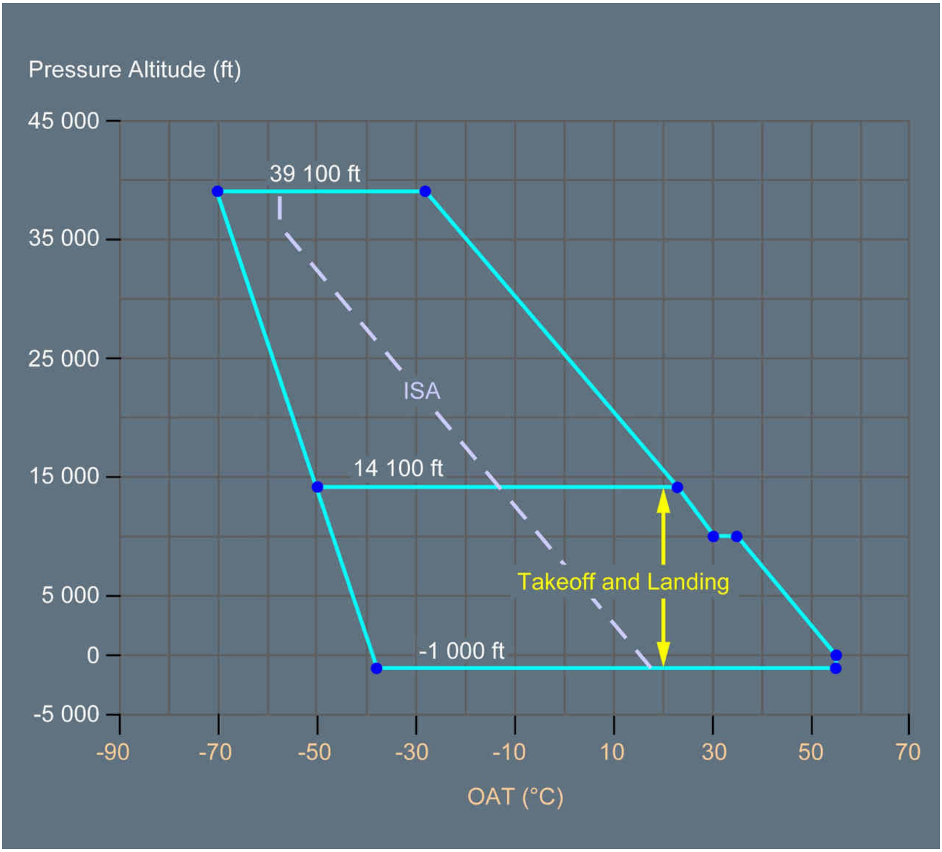

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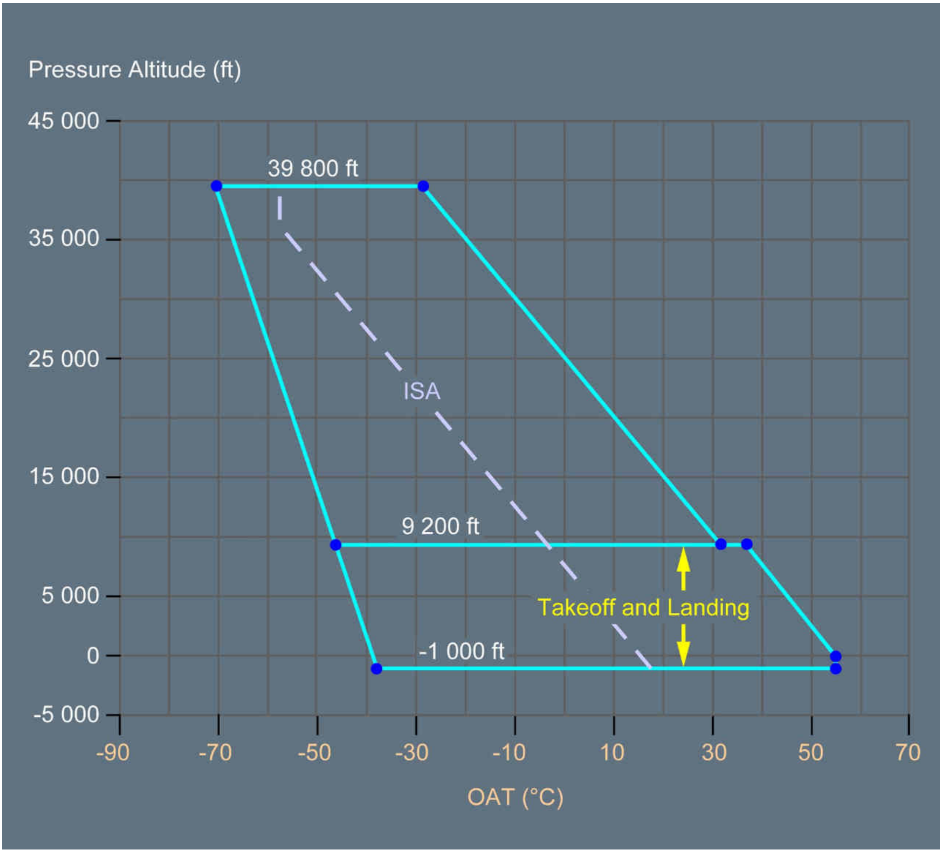
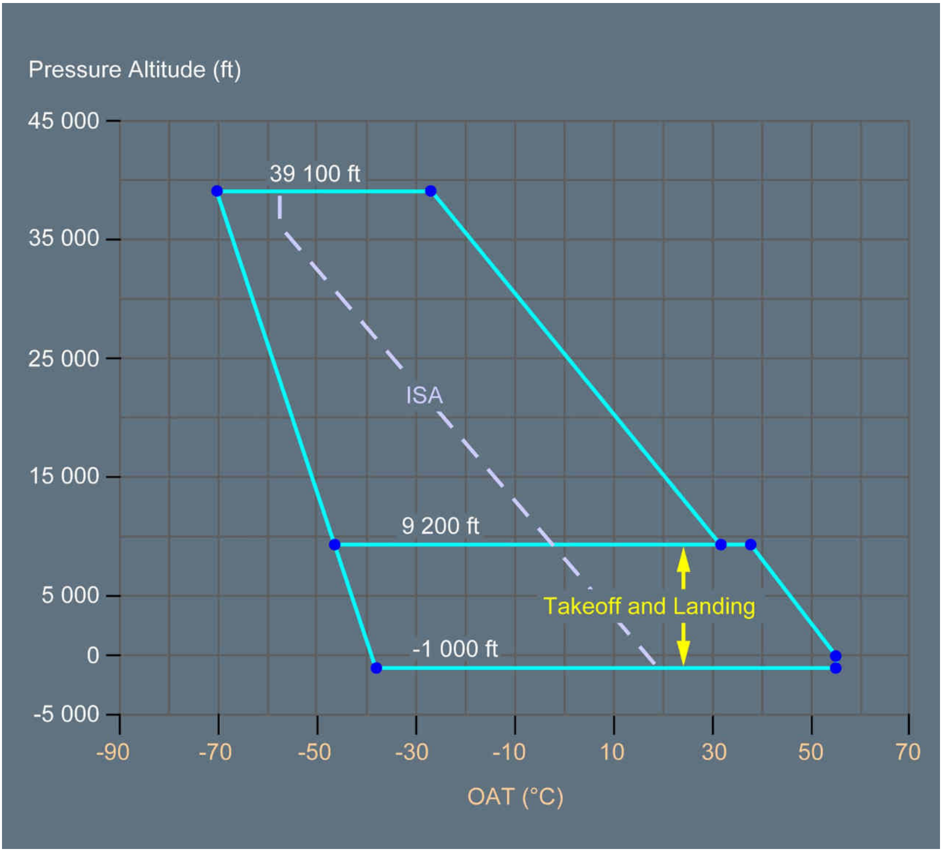
Ident.: LIM-AG-OPS-00021818.0014001 / 19 JUL 17
Applicable to: MSN 02734



ENVIRONMENTAL ENVELOPE

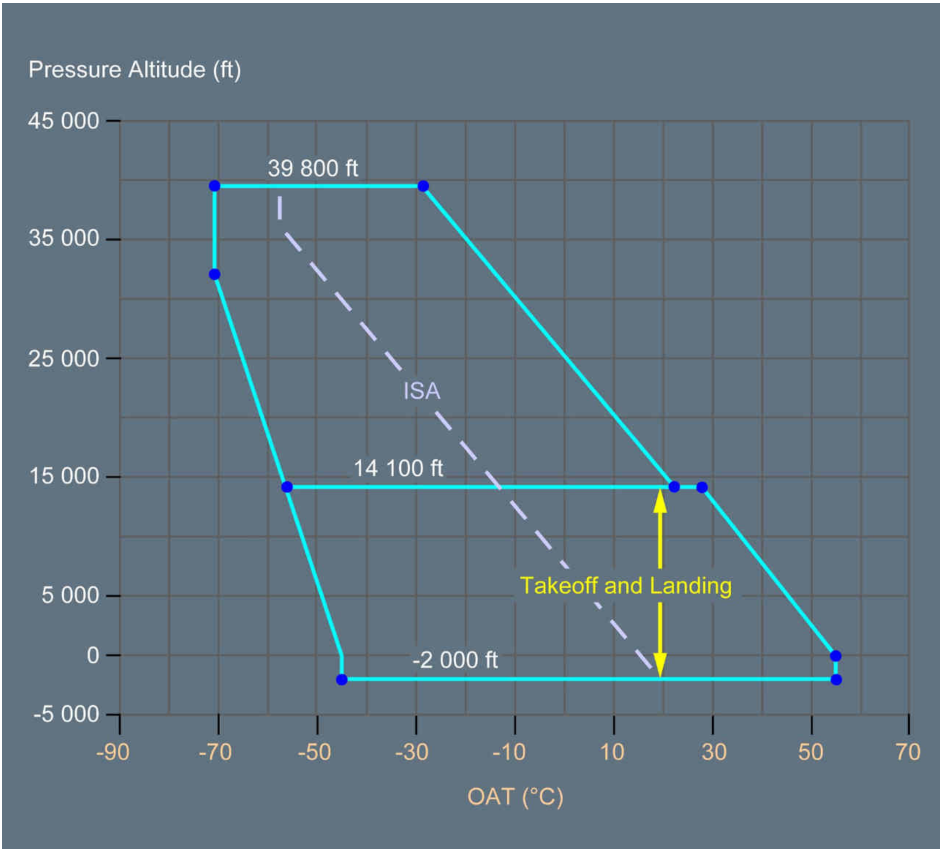
Ident.: LIM-AG-OPS-00021818.0005001 / 19 JUL 17
Applicable to: MSN 01459



ENVIRONMENTAL ENVELOPE

Ident.: LIM-AG-OPS-00021819.0028001 / 27 JUL 17

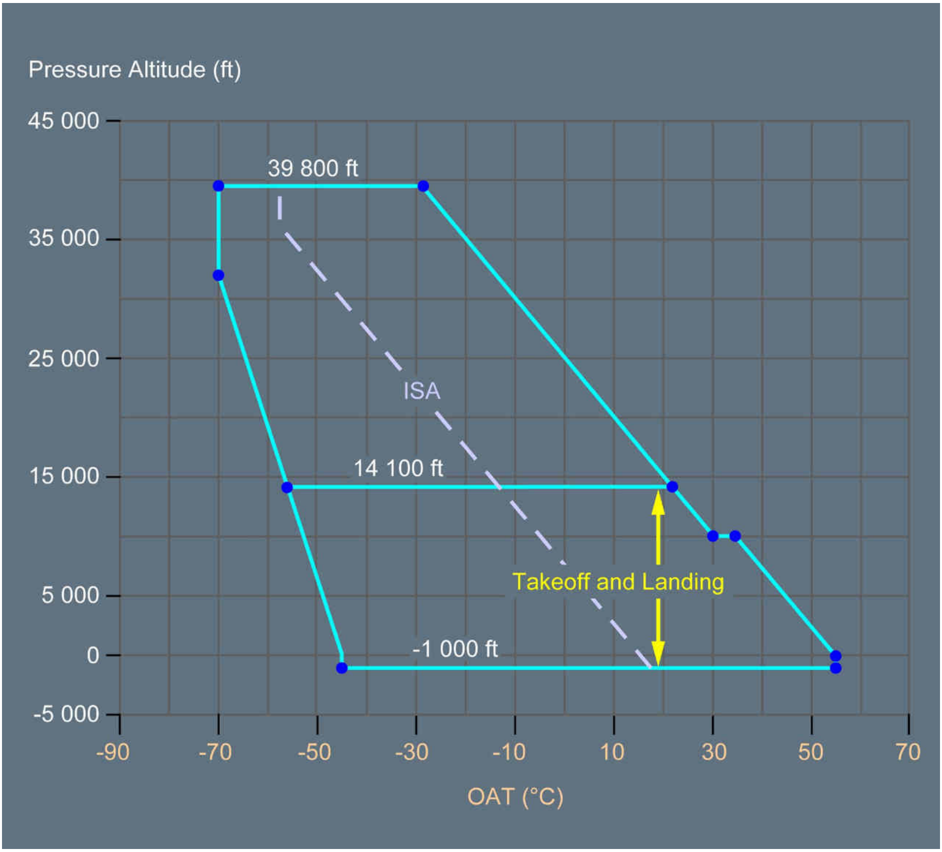
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098



ENVIRONMENTAL ENVELOPE

Ident.: LIM-AG-OPS-00021819.0026001 / 27 JUL 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165



AIRPORT OPERATIONS AND WIND LIMITATIONS

Ident.: LIM-AG-OPS-ARPT_WIND-00020145.0003001 / 05 JUN 18

3 **Applicable to: MSN 02321, 02887-02904, 04563, 05005, 05097, 08495-09324, 10949-11522, 11572-11597**

RUNWAY SLOPE

Runway slope (mean).. ±3.5 %

Ident.: LIM-AG-OPS-ARPT_WIND-00020145.0001001 / 17 MAR 17

4 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014, 02734, 02924-03710, 03733-04544, 04570-04974, 05066, 05101-05987, 06097, 06121, 06139-07098, 11531**

RUNWAY SLOPE

Runway slope (mean).. ±2 %

Ident.: LIM-AG-OPS-ARPT_WIND-00020135.0009001 / 17 MAR 17

5 **Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02887-02924, 03035-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-07098, 10949-11597**

RUNWAY ALTITUDE

Runway altitude.. 14 100 ft

Ident.: LIM-AG-OPS-ARPT_WIND-00020135.0001001 / 17 MAR 17

Applicable to: MSN 01459, 02734, 03002-03032, 04827-04860, 08495-09324

RUNWAY ALTITUDE

Runway altitude.. 9 200 ft

Ident.: LIM-AG-OPS-ARPT_WIND-00020146.0002001 / 17 MAR 17

Applicable to: ALL

NOMINAL RUNWAY WIDTH

Nominal runway width.. 45 m

Minimal runway width.. 30 m

Ident.: LIM-AG-OPS-ARPT_WIND-00020148.0001001 / 17 MAR 17

Applicable to: ALL

WIND FOR TAKEOFF AND LANDING

Maximum demonstrated crosswind (takeoff and landing)........................ 38 kt (gust included)

Note:
- *The maximum demonstrated crosswind value is not an Airplane Flight Manual (AFM) limitation : It is the maximum crosswind condition experienced during the aircraft certification campaign.*
- *Airbus recommends that operators should not intentionally operate in crosswinds that exceed this value.*

Ident.: LIM-AG-OPS-ARPT_WIND-00020157.0003001 / 17 MAR 17

Applicable to: ALL

TAILWIND TAKEOFF

Maximum tailwind for takeoff.. 15 kt

Ident.: LIM-AG-OPS-ARPT_WIND-00020159.0001001 / 21 MAR 17
Applicable to: MSN 04827-04860

TAILWIND LANDING

Maximum tailwind for landing .... 10 kt

Note: For maximum tailwind for automatic landing and rollout, Refer to LIM-AFS-20 Maximum Wind Conditions for ILS/MLS (If Installed) CAT II or CAT III and for GLS (If Installed) CAT I or CAT II.

Ident.: LIM-AG-OPS-ARPT_WIND-00020159.0003001 / 21 MAR 17
6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

TAILWIND LANDING

Maximum tailwind for landing .... 15 kt

Note: For maximum tailwind for automatic landing and rollout, Refer to LIM-AFS-20 Maximum Wind Conditions for ILS/MLS (If Installed) CAT II or CAT III and for GLS (If Installed) CAT I or CAT II.

Ident.: LIM-AG-OPS-ARPT_WIND-00020168.0002001 / 22 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04953-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Note: For landing with a tailwind greater than 10 kt, use FLAPS FULL only.

Ident.: LIM-AG-OPS-ARPT_WIND-00020168.0001001 / 22 MAR 17
7 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

Note: For landing with a tailwind greater than 10 kt, FLAPS FULL is recommended.

Ident.: LIM-AG-OPS-ARPT_WIND-00020166.0001001 / 04 JUL 17
Applicable to: ALL

PASSENGER AND CARGO DOORS OPERATION

The following are the wind limitations for passenger and cargo doors operation:
- The maximum wind for passenger door operation is 65 kt
- The maximum wind for FWD and AFT cargo door operation is 40 kt (or 50 kt, if the aircraft nose is into the wind, or if the FWD and AFT cargo doors are on the leeward side)
- The FWD and AFT cargo doors must be closed before the wind speed exceeds 65 kt.

Ident.: LIM-AG-OPS-ARPT_WIND-00020046.0003001 / 10 MAY 21
Applicable to: ALL

MAXIMUM RECOMMENDED CROSSWIND ON WET AND CONTAMINATED RUNWAYS

Runway Surface Conditions		Maximum Crosswind for Takeoff (Gust included)	Related Landing Performance		Maximum Crosswind for Landing (Gust included)
Runway State or / and Runway Contaminant	AIREP[1]		RWYCC[2]	Level	
Damp **Wet** Up to 3 mm (1/8") of water **Slush** Up to 3 mm (1/8") **Dry snow** Up to 3 mm (1/8") **Wet snow** Up to 3 mm (1/8") **Frost**	**Good**	38 kt	**5**	**GOOD**	38 kt
Compacted snow OAT at or below -15 °C	**Good to Medium**	29 kt	**4**	**GOOD TO MEDIUM**	29 kt
Dry snow More than 3 mm (1/8"), up to 100 mm (4") **Wet snow** More than 3 mm (1/8"), up to 30 mm (6/5") **Compacted snow** OAT above -15 °C **Dry snow over compacted snow** **Wet snow over compacted snow** **Slippery wet**	**Medium**	25 kt	**3**	**MEDIUM**	25 kt
Standing Water More than 3 mm (1/8"), up to 13 mm (1/2") **Slush** More than 3 mm (1/8"), up to 13 mm (1/2")	**Medium to Poor**	20 kt	**2**	**MEDIUM TO POOR**	20 kt
Ice (cold & dry)	**Poor**	15 kt	**1**	**POOR**	15 kt

(1) *AIREP: Special Air Report of Braking Action*

(2) *RWYCC: Runway Condition Code*

Note: *The maximum crosswind values given in the above table are recommended values based on computations.*

COCKPIT WINDOW OPEN MAXIMUM SPEED

Ident.: LIM-AG-SPD-00001904.0001001 / 17 MAR 17
Applicable to: ALL

Maximum speed..........200 kt

MAXIMUM FLAPS/SLATS SPEEDS

1 Ident.: LIM-AG-SPD-00020087.0013001 / 04 SEP 18
Applicable to: MSN 11531

Flaps Lever Position	Configuration on Slat/Flap Display	Max Speed	Flight Phase
0		VMO / MMO	CRUISE
1	1	243 kt	HOLDING
	1 + F	225 kt	TAKEOFF
2	2	215 kt	TAKEOFF/APPROACH
3	3	195 kt	TAKEOFF/APPROACH/LANDING
FULL	FULL	186 kt	LANDING

MAXIMUM FLAPS/SLATS SPEEDS

Ident.: LIM-AG-SPD-00020087.0001001 / 17 MAR 17
2 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

Flaps Lever Position	Configuration on Slat/Flap Display	Max Speed	Flight Phase
0		VMO/MMO	CRUISE
1	1	230 kt	HOLDING
	1 + F	215 kt	TAKEOFF
2	2	200 kt	TAKEOFF/APPROACH
3	3	185 kt	TAKEOFF/APPROACH/LANDING
FULL	FULL	177 kt	LANDING

MAXIMUM FLAPS/SLATS SPEEDS

Ident.: LIM-AG-SPD-00020087.0003001 / 17 MAR 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

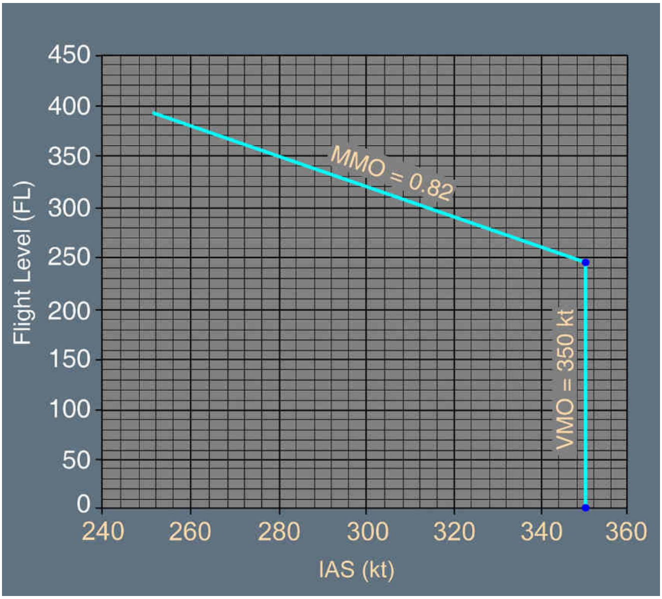
Flaps Lever Position	Configuration on Slat/Flap Display	Max Speed	Flight Phase
0		VMO/MMO	CRUISE
1	1	235 kt	HOLDING
	1 + F	225 kt	TAKEOFF
2	2	215 kt	TAKEOFF/APPROACH
3	3	195 kt	TAKEOFF/APPROACH/LANDING
FULL	FULL	190 kt	LANDING

MAXIMUM OPERATING SPEED VMO/MMO

Ident.: LIM-AG-SPD-00019991.0001001 / 17 MAR 17

Applicable to: MSN 01143-01459

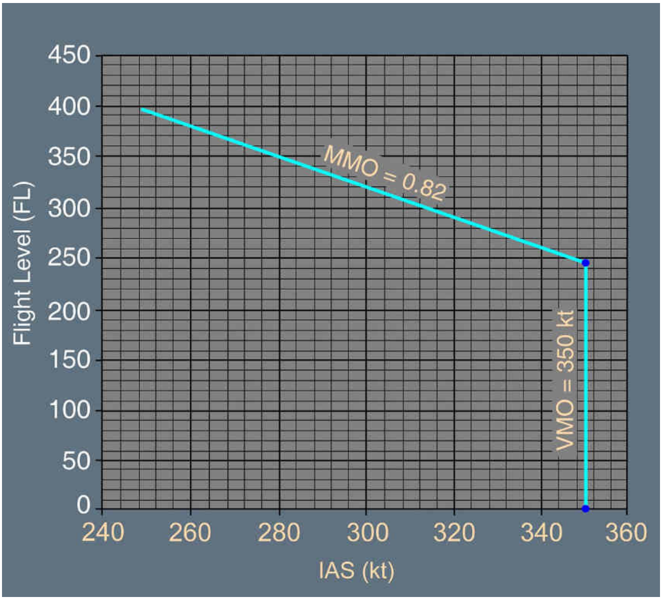
VMO....................350 kt
MMO....................M 0.82



MAXIMUM OPERATING SPEED VMO/MMO

Ident.: LIM-AG-SPD-00019991.0002001 / 17 MAR 17
3 **Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

VMO..350 kt
MMO..M 0.82



MAXIMUM SPEEDS WITH THE LANDING GEAR EXTENDED

Ident.: LIM-AG-SPD-00001901.0001001 / 17 MAR 17
Applicable to: ALL

Maximum speed with the landing gear extended (VLE)..........280 kt /M 0.67
Maximum speed at which the landing gear may be extended (VLO extension) .... 250 kt /M 0.60
Maximum speed at which the landing gear may be retracted (VLO retraction) .... 220 kt /M 0.54

MAXIMUM TIRE SPEED

Ident.: LIM-AG-SPD-00001902.0001001 / 17 MAR 17
Applicable to: ALL

Maximum ground speed..195 kt

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0050001 / 17 NOV 20
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 116 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	115	111	111	109
0	114	110	110	109
2 000	111	107	107	106
4 000	108	104	104	103
6 000	104	101	101	100
8 000	101	98	98	96
10 000	97	95	95	93
12 000	94	92	92	91
14 100	91	91	91	90

Note: *Consider VMCA / VMCG defined in this table regardless of Thrust Bump used or not.*

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0042001 / 17 NOV 20
Applicable to: MSN 08495-09324

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 116 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	116	111	111	111
0	115	111	111	111
2 000	114	110	110	110
4 000	112	110	110	110
6 000	109	110	110	110
8 000	106	110	110	110
10 000	103	110	110	110
12 000	101	110	110	110

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Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
14 100	97	110	110	110
15 100	96	110	110	110

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0036001 / 17 NOV 20

4 **Applicable to: MSN 10949-11522, 11572-11597**

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL....................116 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	111	109	109	109
0	111	109	109	109
2 000	110	108	108	108
4 000	109	108	108	108
6 000	108	108	108	108
8 000	106	108	108	108
10 000	103	108	108	108
12 000	100	108	108	108
14 100	97	108	108	108
15 100	95	108	108	108

MINIMUM CONTROL SPEEDS

5 Ident.: LIM-AG-SPD-00023443.0033001 / 17 NOV 20

Applicable to: MSN 11531

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL....................115 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (KT IAS)	VMCG (KT IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	111	112	112	113
0	111	112	112	112
2 000	108	110	110	110
4 000	105	107	107	107
6 000	101	103	103	104

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Altitude (ft)	VMCA (KT IAS)	VMCG (KT IAS)		
		CONF 1 + F	CONF 2	CONF 3
8 000	98	100	100	101
9 200	96	99	99	99
10 000	95	98	98	98
12 000	92	96	96	96
14 100	89	93	93	94
15 100	87	91	91	92

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0006001 / 17 NOV 20
Applicable to: MSN 03733, 04734-04756, 05005, 05097

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 111 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	110	108	108	108
0	109	107	107	107
2 000	108	106	106	106
4 000	106	104	104	104
6 000	104	103	103	103
8 000	101	100	100	100
10 000	99	98	98	98
12 000	96	96	96	96
14 100	93	94	94	94

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0011001 / 17 NOV 20
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 109 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (KT IAS)	VMCG (KT IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	109	107	107	107
0	108	107	107	107
2 000	107	105	105	105

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Altitude (ft)	VMCA (KT IAS)	VMCG (KT IAS)		
		CONF 1 + F	CONF 2	CONF 3
4 000	105	104	104	104
6 000	104	103	103	103
8 000	101	101	101	101
10 000	99	99	99	99
12 000	97	97	97	97
14 100	94	94	94	94

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0015001 / 17 NOV 20
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 113 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	112	112	110	109
0	110	111	109	109
2 000	108	109	107	107
4 000	108	109	107	107
6 000	107	108	106	105
8 000	104	105	103	103
10 000	100	101	99	99
12 000	97	99	97	96
14 100	94	95	93	93

When the Thrust Bump ◁ is used, consider the following VMCA / VMCG:

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	111	112	110	109
0	110	111	109	109
2 000	108	109	107	107
4 000	108	109	107	107
6 000	108	109	107	106
8 000	105	106	104	104
10 000	102	103	101	101
12 000	99	100	98	97
14 100	95	97	95	95

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0019001 / 17 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02734, 02896-02904

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 109 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	114	113	111	111
0	112	112	110	109
2 000	111	111	109	108
4 000	108	108	106	106
6 000	105	105	103	103
8 000	103	103	101	101
10 000	100	101	99	98
12 000	97	98	96	95
14 100	94	95	93	93

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0020001 / 17 NOV 20
Applicable to: MSN 02014

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 109 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	VMCA (kt IAS)	VMCG (kt IAS)		
		CONF 1 + F	CONF 2	CONF 3
-2 000	112	112	110	109
0	112	112	110	109
2 000	112	111	109	109
4 000	111	111	109	109
6 000	110	110	108	107
8 000	107	107	105	104
10 000	103	103	101	101
12 000	99	100	98	97
14 100	95	96	94	94

MINIMUM CONTROL SPEEDS

Ident.: LIM-AG-SPD-00023443.0029001 / 17 NOV 20
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

MINIMUM CONTROL SPEED FOR LANDING (VMCL)

VMCL.. 114 kt

MINIMUM CONTROL SPEEDS IN THE AIR (VMCA) AND ON THE GROUND (VMCG)

Altitude (ft)	**VMCA (kt IAS)**	**VMCG (kt IAS)**		
		CONF 1 + F	**CONF 2**	**CONF 3**
-2 000	114	110	110	109
0	114	110	110	109
2 000	111	107	107	106
4 000	107	104	104	102
6 000	103	100	100	98
8 000	100	96	96	95
10 000	96	93	93	91
12 000	92	93	93	92
14 100	89	87	87	90

Note: *Consider VMCA / VMCG defined in this table regardless of Thrust Bump used or not.*

MINIMUM CONTROL SPEEDS ON NARROW RUNWAYS

Ident.: LIM-AG-SPD-00023493.0001001 / 17 NOV 20
Applicable to: ALL

For runways with a width below 40 m , the VMCG must be increased by the values indicated in the following table :

Runway Width	30 m	35 m	40 m
∆ VMCG(kt)	+ 2.5	+ 1.5	+ 0

TAXI SPEED

Ident.: LIM-AG-SPD-00019838.0001001 / 28 MAY 20
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

- **When the takeoff weight is higher than 76 000 kg (167 550 lb):**

CAUTION	Do not exceed a taxi speed of 20 kt during a turn.

WIPERS MAXIMUM OPERATING SPEED

Ident.: LIM-AG-SPD-00001903.0001001 / 17 MAR 17
Applicable to: ALL

Maximum speed...230 kt

L2 *Note:* *This limitation is applicable when the wipers are sweeping. It is not applicable if the wipers are not sweeping for any reasons.*

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0113001 / 18 MAR 11
Applicable to: MSN 02321, 02887

Maximum taxi weight........70 400 kg (155 205 lb)
Maximum takeoff weight (brake release)........70 000 kg (154 323 lb)
Maximum landing weight........62 500 kg (137 788 lb)
Maximum zero fuel weight........58 500 kg (128 970 lb)
Minimum weight........35 400 kg (78 044 lb)

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0486001 / 18 MAR 11
Applicable to: MSN 01459

Maximum taxi weight........75 900 kg (167 330 lb)
Maximum takeoff weight (brake release)........75 500 kg (166 448 lb)
Maximum landing weight........64 500 kg (142 198 lb)
Maximum zero fuel weight........61 000 kg (134 481 lb)
Minimum weight........37 230 kg (82 079 lb)

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0295001 / 18 MAR 11
Applicable to: MSN 05643-05883

Maximum taxi weight........77 400 kg (170 637 lb)
Maximum takeoff weight (brake release)........77 000 kg (169 755 lb)
Maximum landing weight........64 500 kg (142 198 lb)
Maximum zero fuel weight........61 000 kg (134 481 lb)
Minimum weight........37 230 kg (82 079 lb)

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0268001 / 18 MAR 11
Applicable to: MSN 02014, 02734, 02924-03002, 03058, 03180-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 05066, 05101-05342, 05591-05621

Maximum taxi weight........77 400 kg (170 637 lb)

Maximum takeoff weight (brake release)	77 000 kg (169 755 lb)
Maximum landing weight	66 000 kg (145 505 lb)
Maximum zero fuel weight	62 500 kg (137 788 lb)
Minimum weight	37 230 kg (82 079 lb)

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0009001 / 16 MAY 12
Applicable to: MSN 04827-04860, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Maximum taxi weight	78 400 kg (172 842 lb)
Maximum takeoff weight (brake release)	78 000 kg (171 960 lb)
Maximum landing weight	66 000 kg (145 505 lb)
Maximum zero fuel weight	62 500 kg (137 788 lb)
Minimum weight	37 230 kg (82 079 lb)

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0927001 / 03 NOV 22
1 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

Maximum taxi weight 1	79 400 kg (175 047 lb)
Maximum takeoff weight 1 (brake release)*	79 000 kg (174 165 lb)
Maximum taxi weight 2	73 900 kg (162 921 lb)
Maximum takeoff weight 2 (brake release)*	73 500 kg (162 039 lb)
Maximum landing weight	67 400 kg (148 591 lb)
Maximum zero fuel weight	64 300 kg (141 757 lb)
Minimum weight	40 300 kg (88 847 lb)

* Dual MTOW is certified. A placard fitted on the aircraft must reflect the current MTOW.

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

2 Ident.: LIM-AG-WGHT-00001893.0890001 / 12 OCT 16
Applicable to: MSN 11531

Maximum taxi weight	89 400 kg (197 093 lb)
Maximum takeoff weight (brake release)	89 000 kg (196 211 lb)
Maximum landing weight	79 200 kg (174 606 lb)

Maximum zero fuel weight	75 600 kg (166 669 lb)
Minimum weight	46 300 kg (102 075 lb)

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0125001 / 18 MAR 11
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Maximum taxi weight	89 400 kg (197 093 lb)
Maximum takeoff weight (brake release)	89 000 kg (196 211 lb)
Maximum landing weight	77 800 kg (171 519 lb)
Maximum zero fuel weight	73 800 kg (162 701 lb)
Minimum weight	47 500 kg (104 720 lb)

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0296001 / 16 NOV 11
3 **Applicable to: MSN 01801, 01826, 01837-01855, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04734-04773, 05345**

Maximum taxi weight 1	75 900 kg (167 330 lb)
Maximum takeoff weight 1(brake release)*	75 500 kg (166 448 lb)
Maximum taxi weight 2	64 400 kg (141 977 lb)
Maximum takeoff weight 2(brake release)*	64 000 kg (141 095 lb)
Maximum landing weight 1*	62 500 kg (137 788 lb)
Maximum landing weight 2*	61 000 kg (134 481 lb)
Maximum zero fuel weight 1*	58 500 kg (128 970 lb)
Maximum zero fuel weight 2*	57 000 kg (125 663 lb)
Minimum weight	35 400 kg (78 044 lb)

* Multiple MTOW, MLW and MZFW are certified. A placard fitted on the aircraft must reflect the current values.

In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0294001 / 16 NOV 11
Applicable to: MSN 04563, 05005, 05097

Maximum taxi weight 1	75 900 kg (167 330 lb)
Maximum takeoff weight 1 (brake release)*	75 500 kg (166 448 lb)

Maximum taxi weight 2	70 400 kg (155 205 lb)
Maximum takeoff weight 2 (brake release)*	70 000 kg (154 323 lb)
Maximum landing weight	62 500 kg (137 788 lb)
Maximum zero fuel weight	58 500 kg (128 970 lb)
Minimum weight	35 400 kg (78 044 lb)

* Dual MTOW is certified. A placard fitted on the aircraft must reflect the current MTOW.
In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

WEIGHT LIMITATIONS

Ident.: LIM-AG-WGHT-00001893.0012001 / 16 NOV 11
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01825, 01832, 02896-02904, 03035-03047, 03111, 04953-04974

Maximum taxi weight 1	77 400 kg (170 637 lb)
Maximum takeoff weight 1 (brake release)*	77 000 kg (169 755 lb)
Maximum taxi weight 2	70 400 kg (155 205 lb)
Maximum takeoff weight 2 (brake release)*	70 000 kg (154 323 lb)
Maximum landing weight	64 500 kg (142 198 lb)
Maximum zero fuel weight (for MTOW 1)*	61 000 kg (134 481 lb)
Maximum zero fuel weight (for MTOW 2)*	60 500 kg (133 379 lb)
Minimum weight	37 230 kg (82 079 lb)

* Dual MTOW is certified. A placard fitted on the aircraft must reflect the current MTOW.
In exceptional cases (in flight turn back or diversion), an immediate landing at weight above maximum landing weight is permitted, provided the pilot follows the overweight landing procedure.

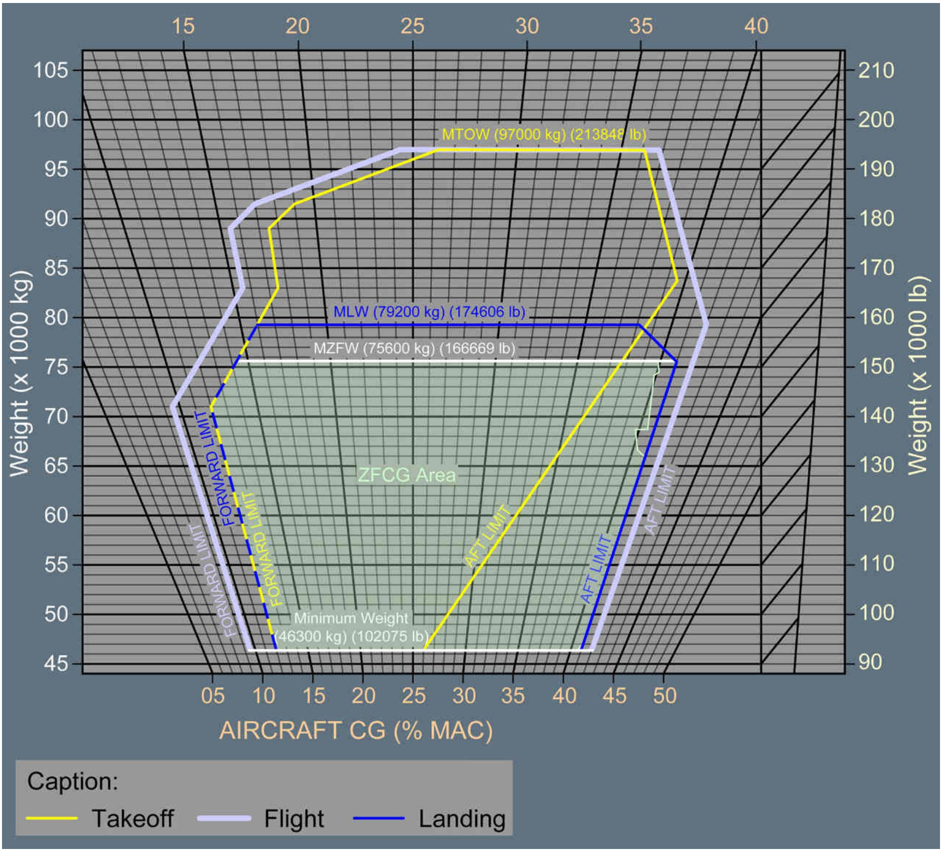
CENTER OF GRAVITY LIMITS WITH UP TO 3 ACTS INSTALLATION

4 Ident.: LIM-AG-WGHT-00022520.0005001 / 04 SEP 18
Applicable to: MSN 11531

The CG envelope provides the CG limits for the highest certified MTOW, MLW and MZFW. The CG limits of the aircraft must be restricted according to the aircraft MTOW, MLW and MZFW given in the Weight Limitations chapter.
The ZFCG at dispatch must be within the ZFCG area.

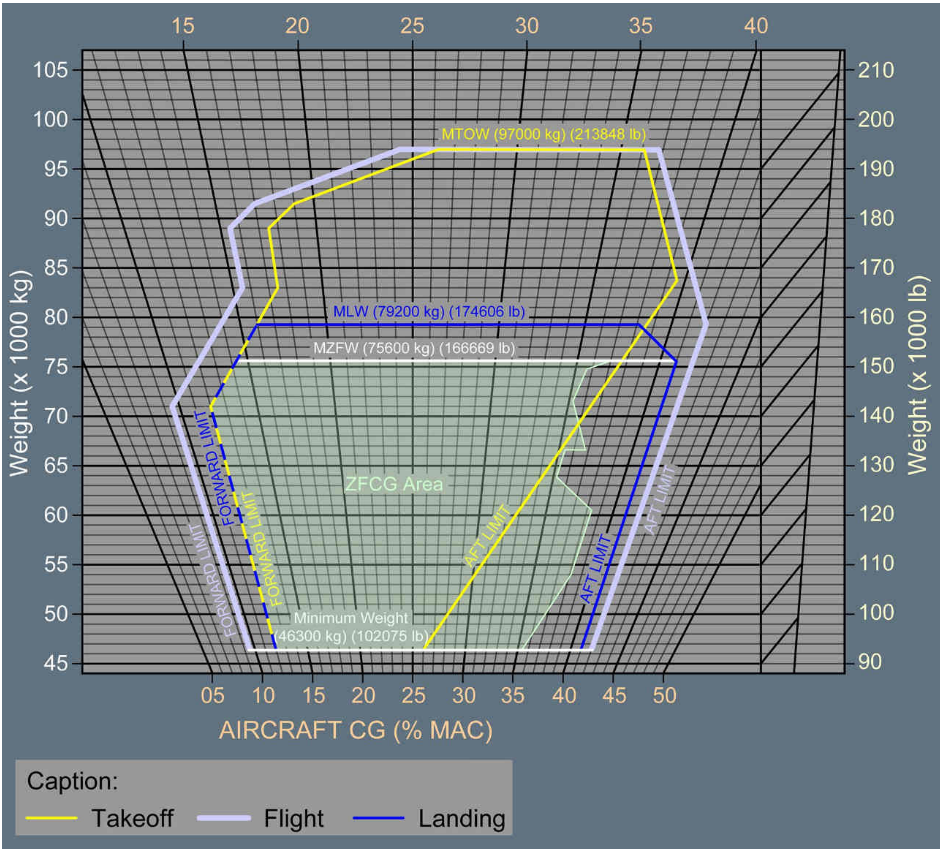
1. The following CG envelope is valid for:
   - Aircraft with only one ACT (AFT1 ACT) installed and refueled.
   - Aircraft with two or three ACTs installed, but only one ACT (AFT1 ACT) refueled.

CG Envelope - One ACT refueled



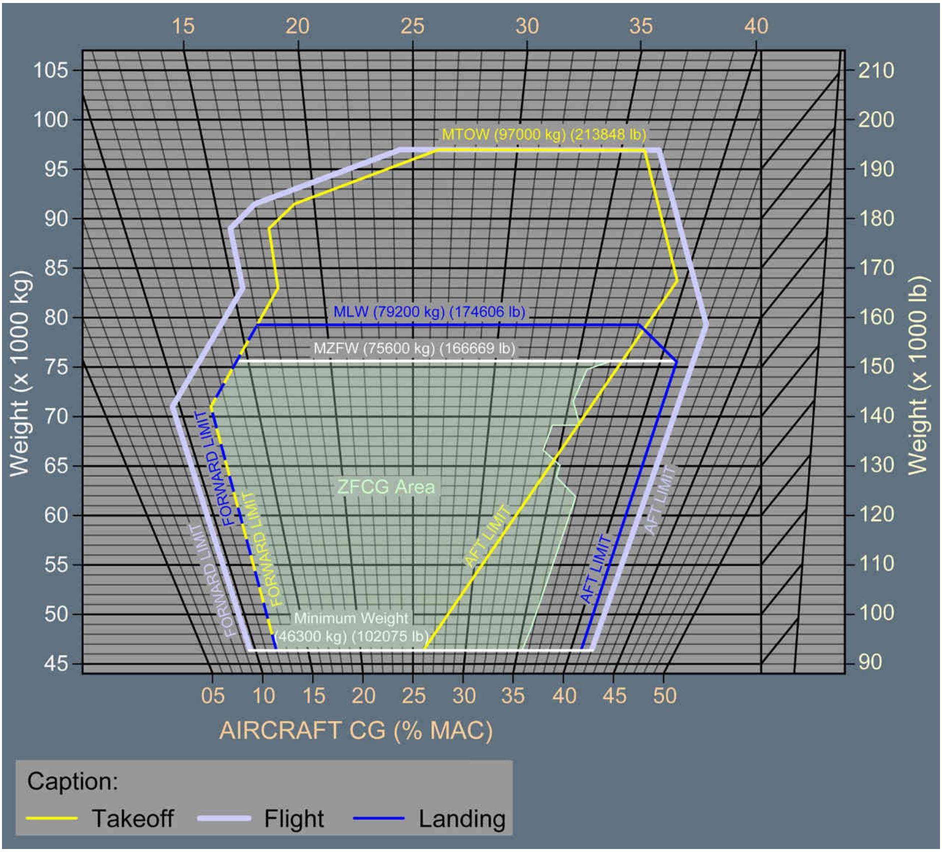
2. The following CG envelope is valid for:
   - Aircraft with only two ACTs (AFT1 ACT and AFT2 ACT) installed and two ACTs refueled.
   - Aircraft with three ACTs installed, but only two ACTs (AFT1 ACT and AFT2 ACT) refueled.

CG Envelope - Two ACTs refueled



3. The following CG envelope is valid for:
   - Aircraft with three ACTs (FWD ACT, AFT1 ACT and AFT2 ACT) installed and three ACTs refueled.

CG Envelope - Three ACTs refueled



- CG limits are given in percentage of the reference chord length aft of the leading edge.
- The reference chord length is 4.193 m (13.76 ft). It is 20.58 m (67.51 ft) aft of the aircraft nose.

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LIMITATIONS

AIR BLEED/COND/PRESS/VENT

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General....A
APU Bleed Use with HP Air Start Unit....B
Avionics Ventilation....C
Cabin Pressure....D
Packs Use with LP Air Conditioning Unit....E

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Localization Title	Toc Index	ID	Reason
LIM-AIR Cabin Pressure	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: LIM-AIR-00020807.0001001 / 17 MAR 17
Applicable to: ALL

With passengers on board, it is not recommended to exceed 20 min without air conditioning supply. The lack of fresh air supply will significantly reduce the cabin's air quality.

APU BLEED USE WITH HP AIR START UNIT

Ident.: LIM-AIR-00020084.0001001 / 17 MAR 17
Applicable to: ALL

The flight crew must not use bleed air from the APU BLEED and from the HP Air Start Unit at the same time, to prevent any adverse effect on the Bleed Air System.

AVIONICS VENTILATION

Ident.: LIM-AIR-00020086.0001001 / 17 MAR 17
Applicable to: ALL

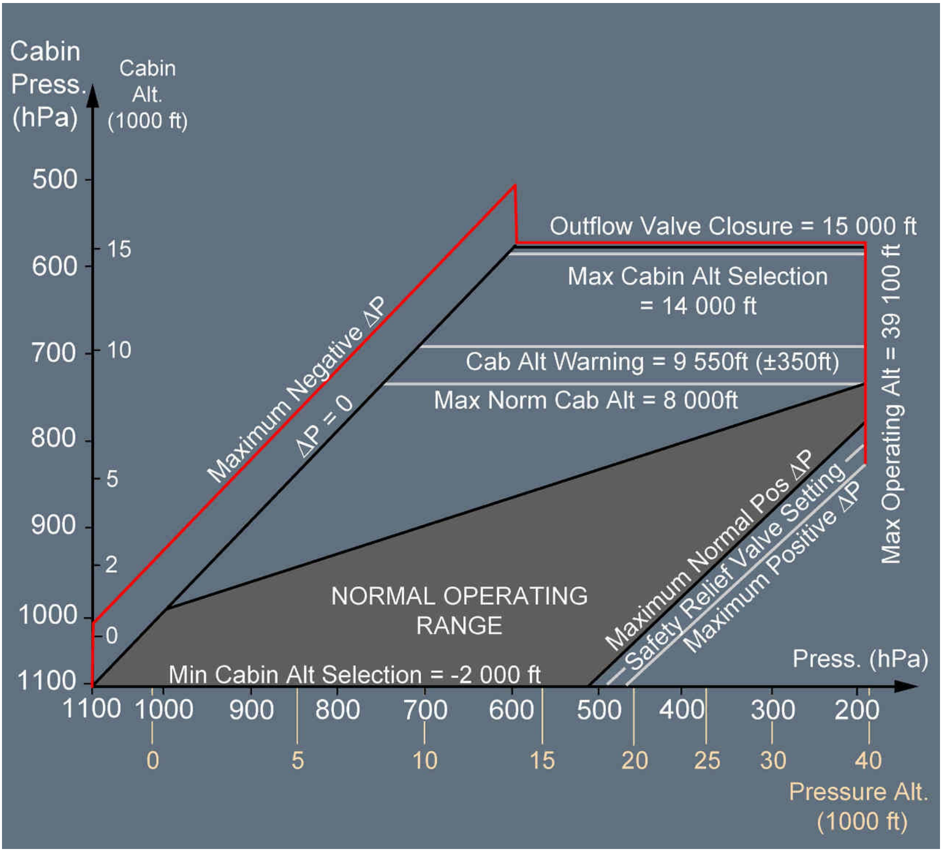
During ground operations and depending on the Outside Air Temperature (OAT), the flight crew must limit the time that the aircraft electric power supply is used, in normal avionics ventilation system configuration, as follows:

OAT ≤ 49 °C	No limitation
49 °C < OAT ≤ 55 °C	2 h
55 °C < OAT ≤ 60 °C	1 h
60 °C < OAT ≤ 64 °C	0.5 h

CABIN PRESSURE

Ident.: LIM-AIR-00020085.0001001 / 17 MAR 17
Applicable to: MSN 01143-01459

Maximum positive differential pressure	9.0 PSI
Maximum negative differential pressure	-1.0 PSI
Safety relief valve setting	8.6 PSI



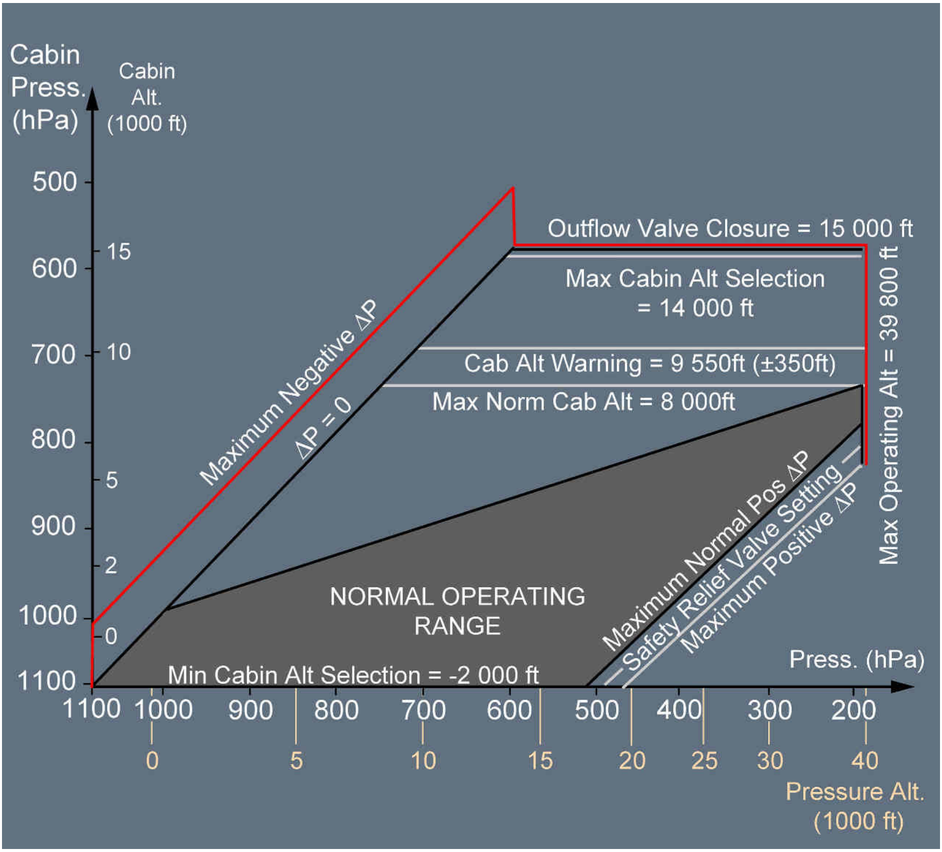
Note: *Maximum differential pressure (Δp) and safety valve setting tolerance = ± 7 hPa (0.1 PSI).*

CABIN PRESSURE

Ident.: LIM-AIR-00020085.0003001 / 17 MAR 17

1 **Applicable to: MSN 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

Maximum positive differential pressure	9.0 PSI
Maximum negative differential pressure	-1.0 PSI
Safety relief valve setting	8.6 PSI



Note: *Maximum differential pressure (Δp) and safety valve setting tolerance = ± 7 hPa (0.1 PSI).*

PACKS USE WITH LP AIR CONDITIONING UNIT

Ident.: LIM-AIR-00020083.0001001 / 17 MAR 17
Applicable to: ALL

The flight crew must not use conditioned air from the packs and from the LP Air Conditioning Unit at the same time, to prevent any adverse effect on the Air Conditioning system.

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LIMITATIONS

AUTO FLIGHT SYSTEM

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LIM-AFS-10 General

Autopilot Function........A
Flight Management Function........B
Use of NAV Mode........C
Use of FLS ◁ ....D
Non-Precision Approaches with Engine-Out........E
Navigation Database Validation........F

LIM-AFS-20 Automatic Approach, Landing and Rollout

ILS Category II........A
Special Authorization CAT II (SA CAT II)........B
Other than Standard CAT II (OTS CAT II)........C
ILS Category III Fail Passive (Single)........D
ILS Category III Fail Operational (Dual)........E
Engine-Out........F
GLS Category I........G
Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I........H
Automatic Landing........I
Automatic Landing in Johannesburg........J

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Localization Title	Toc Index	ID	Reason
LIM-AFS-20 Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I	H	3	Documentation update: Addition of "Maximum Wind Conditions for ILS/MLS (If Installed) CAT II or CAT III and for GLS (If Installed) CAT I" documentary unit
LIM-AFS-20 Automatic Landing - Airport Elevation	I	29	Documentation update: Addition of "Automatic Landing - Airport Elevation" documentary unit
LIM-AFS-20 Automatic Landing - Weight	I	30	Documentation update: Addition of "Automatic Landing - Weight" documentary unit
LIM-AFS-10 Autopilot Function - Other Phases	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - PAR Approach	A	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - Other Phases	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - PAR Approach	A	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-10 Autopilot Function - Other Phases	A	5	Effectivity update: The information now also applies to MSN 11531.
LIM-AFS-10 Autopilot Function - Other Phases	A	6	Effectivity update: The information now also applies to MSN 11531.
LIM-AFS-10 RNP AR	B	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-10 Navigation Database Validation	F	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 ILS Category III Fail Operational (Dual)	E	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Engine-Out	F	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Maximum Wind Conditions for ILS/MLS ◁ CAT II or CAT III and for GLS ◁ CAT I	H	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Glide Slope	I	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
LIM-AFS-20 Automatic Landing - Airport Elevation	I	9	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	12	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	13	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	14	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	15	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Runway	I	16	Effectivity update: The information now also applies to MSN 11531.
LIM-AFS-20 Automatic Landing - Glide Slope	I	17	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	18	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	19	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Pressure Altitude Limit	I	20	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Rollout	I	21	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Glide Slope	I	22	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Airport Elevation	I	23	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	24	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	25	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Pressure Altitude Limit	I	26	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Rollout	I	27	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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Localization Title	Toc Index	ID	Reason
LIM-AFS-20 Automatic Landing - Glide Slope	I	28	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Weight	I	31	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Pressure Altitude Limit	I	32	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-AFS-20 Automatic Landing - Runway	I	33	Effectivity update: The information now also applies to MSN 11531.

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AUTOPILOT FUNCTION

Applicable to: MSN 01143-01459, 01801, 01826, 01837-01855, 02321, 02887, 03002-03032, 04563, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: LIM-AFS-10-10-00019567.0001001 / 17 MAR 17

The autopilot can be used with the following minimum values:

Ident.: LIM-AFS-10-10-00019753.0001001 / 23 JUL 18

At takeoff	100 ft AGL and at least 5 s after liftoff

Ident.: LIM-AFS-10-10-00019568.0001001 / 23 JUL 18

In approach with F-G/S ✈ mode	200 ft AGL
In approach with FINAL APP, V/S or FPA mode	250 ft AGL

Ident.: LIM-AFS-10-10-00019746.0005001 / 09 JUN 17

In circling approach	500 ft AGL for aircraft category C (600 ft AGL for aircraft category D).

Ident.: LIM-AFS-10-10-00019747.0001001 / 06 SEP 22

ILS/MLS ✈ approach when CAT1 is displayed on the FMA	160 ft AGL
ILS/MLS ✈ approach when CAT2 or CAT3 SINGLE or CAT3 DUAL is displayed on the FMA	0 ft AGL if autoland
GLS ✈ approach when CAT1 is displayed on the FMA	160 ft AGL
GLS ✈ approach when AUTO LAND is displayed on the FMA	0 ft AGL if autoland
LPV approach (with SLS ✈) when APPR1 is displayed on the FMA	160 ft AGL

Ident.: LIM-AFS-10-10-00019750.0001001 / 17 MAR 17

After a manual go-around	100 ft AGL

Ident.: LIM-AFS-10-10-00019751.0001001 / 06 JUL 17

1 In all other phases	500 ft AGL
The AP or FD in OP DES or DES mode can be used in approach. However, its use is only permitted if the FCU selected altitude is set to, or above, the higher of the two: MDA/MDH or 500 ft AGL.	

AUTOPILOT FUNCTION

Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02924, 03035-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04544, 04734-05345, 05591-05883, 08495-09324, 10949-11522, 11572-11597

Ident.: LIM-AFS-10-10-00019567.0001001 / 17 MAR 17

The autopilot can be used with the following minimum values:

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Ident.: LIM-AFS-10-10-00019753.0001001 / 23 JUL 18

At takeoff	100 ft AGL and at least 5 s after liftoff

Ident.: LIM-AFS-10-10-00019568.0001001 / 23 JUL 18

In approach with F-G/S ◁ mode	200 ft AGL
In approach with FINAL APP, V/S or FPA mode	250 ft AGL

Ident.: LIM-AFS-10-10-00019746.0005001 / 09 JUN 17

In circling approach	500 ft AGL for aircraft category C (600 ft AGL for aircraft category D).

Ident.: LIM-AFS-10-10-00019747.0001001 / 06 SEP 22

ILS/MLS ◁ approach when CAT1 is displayed on the FMA	160 ft AGL
ILS/MLS ◁ approach when CAT2 or CAT3 SINGLE or CAT3 DUAL is displayed on the FMA	0 ft AGL if autoland
GLS ◁ approach when CAT1 is displayed on the FMA	160 ft AGL
GLS ◁ approach when AUTO LAND is displayed on the FMA	0 ft AGL if autoland
LPV approach (with SLS ◁) when APPR1 is displayed on the FMA	160 ft AGL

Ident.: LIM-AFS-10-10-00019748.0001001 / 17 MAR 17

2 PAR approach (Precision Approach Radar) *Note:* - *The use of the AP and/or FD is authorized in PAR approach, with HDG V/S or TRK FPA.* - *PAR approaches may be subject to operational approval.*	250 ft AGL

Ident.: LIM-AFS-10-10-00019750.0001001 / 17 MAR 17

After a manual go-around	100 ft AGL

Ident.: LIM-AFS-10-10-00019751.0001001 / 06 JUL 17

3 In all other phases	500 ft AGL
The AP or FD in OP DES or DES mode can be used in approach. However, its use is only permitted if the FCU selected altitude is set to, or above, the higher of the two: MDA/MDH or 500 ft AGL.	

AUTOPILOT FUNCTION

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: LIM-AFS-10-10-00019567.0001001 / 17 MAR 17

The autopilot can be used with the following minimum values:

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Ident.: LIM-AFS-10-10-00019753.0001001 / 23 JUL 18

At takeoff	100 ft AGL and at least 5 s after liftoff

Ident.: LIM-AFS-10-10-00019568.0001001 / 23 JUL 18

In approach with F-G/S ◁ mode	200 ft AGL
In approach with FINAL APP, V/S or FPA mode	250 ft AGL

Ident.: LIM-AFS-10-10-00019746.0005001 / 09 JUN 17

In circling approach	500 ft AGL for aircraft category C (600 ft AGL for aircraft category D).

Ident.: LIM-AFS-10-10-00019747.0001001 / 06 SEP 22

ILS/MLS ◁ approach when CAT1 is displayed on the FMA	160 ft AGL
ILS/MLS ◁ approach when CAT2 or CAT3 SINGLE or CAT3 DUAL is displayed on the FMA	0 ft AGL if autoland
GLS ◁ approach when CAT1 is displayed on the FMA	160 ft AGL
GLS ◁ approach when AUTO LAND is displayed on the FMA	0 ft AGL if autoland
LPV approach (with SLS ◁) when APPR1 is displayed on the FMA	160 ft AGL

Ident.: LIM-AFS-10-10-00019750.0001001 / 17 MAR 17

After a manual go-around	100 ft AGL

AUTOPILOT FUNCTION

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: LIM-AFS-10-10-00019567.0001001 / 17 MAR 17

The autopilot can be used with the following minimum values:

Ident.: LIM-AFS-10-10-00019753.0001001 / 23 JUL 18

At takeoff	100 ft AGL and at least 5 s after liftoff

Ident.: LIM-AFS-10-10-00019568.0001001 / 23 JUL 18

In approach with F-G/S ◁ mode	200 ft AGL
In approach with FINAL APP, V/S or FPA mode	250 ft AGL

Ident.: LIM-AFS-10-10-00019746.0005001 / 09 JUN 17

In circling approach	500 ft AGL for aircraft category C (600 ft AGL for aircraft category D).

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Ident.: LIM-AFS-10-10-00019747.0001001 / 06 SEP 22

ILS/MLS ◁ approach when CAT1 is displayed on the FMA	160 ft AGL
ILS/MLS ◁ approach when CAT2 or CAT3 SINGLE or CAT3 DUAL is displayed on the FMA	0 ft AGL if autoland
GLS ◁ approach when CAT1 is displayed on the FMA	160 ft AGL
GLS ◁ approach when AUTO LAND is displayed on the FMA	0 ft AGL if autoland
LPV approach (with SLS ◁) when APPR1 is displayed on the FMA	160 ft AGL

Ident.: LIM-AFS-10-10-00019748.0001001 / 17 MAR 17

4 PAR approach (Precision Approach Radar) *Note:* - *The use of the AP and/or FD is authorized in PAR approach, with HDG V/S or TRK FPA.* - *PAR approaches may be subject to operational approval.*	250 ft AGL

Ident.: LIM-AFS-10-10-00019750.0001001 / 17 MAR 17

After a manual go-around	100 ft AGL

Ident.: LIM-AFS-10-10-00019751.0004001 / 21 NOV 17

5 In all other phases	900 ft AGL
The AP or FD in OP DES or DES mode can be used in approach. However, its use is only permitted if the FCU selected altitude is set to, or above, the higher of the two: MDA/MDH or 900 ft AGL.	

AUTOPILOT FUNCTION

Applicable to: MSN 11531

Ident.: LIM-AFS-10-10-00019567.0001001 / 17 MAR 17

The autopilot can be used with the following minimum values:

Ident.: LIM-AFS-10-10-00019753.0001001 / 23 JUL 18

At takeoff	100 ft AGL and at least 5 s after liftoff

Ident.: LIM-AFS-10-10-00019568.0001001 / 23 JUL 18

In approach with F-G/S ◁ mode	200 ft AGL
In approach with FINAL APP, V/S or FPA mode	250 ft AGL

Ident.: LIM-AFS-10-10-00019746.0005001 / 09 JUN 17

In circling approach	500 ft AGL for aircraft category C (600 ft AGL for aircraft category D).

Continued on the following page

Continued from the previous page

Ident.: LIM-AFS-10-10-00019747.0001001 / 06 SEP 22

ILS/MLS approach when CAT1 is displayed on the FMA	160 ft AGL
ILS/MLS approach when CAT2 or CAT3 SINGLE or CAT3 DUAL is displayed on the FMA	0 ft AGL if autoland
GLS approach when CAT1 is displayed on the FMA	160 ft AGL
GLS approach when AUTO LAND is displayed on the FMA	0 ft AGL if autoland
LPV approach (with SLS) when APPR1 is displayed on the FMA	160 ft AGL

Ident.: LIM-AFS-10-10-00019750.0001001 / 17 MAR 17

After a manual go-around	100 ft AGL

Ident.: LIM-AFS-10-10-00019751.0004001 / 21 NOV 17

6 In all other phases	900 ft AGL
The AP or FD in OP DES or DES mode can be used in approach. However, its use is only permitted if the FCU selected altitude is set to, or above, the higher of the two: MDA/MDH or 900 ft AGL.	

FLIGHT MANAGEMENT FUNCTION

Ident.: LIM-AFS-10-20-00020069.0001001 / 12 MAY 22
Applicable to: ALL

FMGS lateral and vertical navigation is certified for:
- After takeoff, en route, and terminal area operations
- Navigation within RNAV/RNP airspace
- Instrument approach procedures (except ILS, LOC, LOC B/C, LDA, SDF, GLS , MLS and FLS final approaches)
- Missed approach procedures.

The FLS function is certified for:
- RNAV, RNAV (GNSS) approach with LNAV/VNAV or LNAV minima, GPS, VOR, VOR/DME, NDB, NDB/DME instrument approach procedures, using FMS navigation for lateral and vertical navigation
- LOC, ILS (GS out), or LOC B/C instrument approaches, using FMS navigation for vertical navigation, associated with LOC or LOC B/C for lateral navigation.

The SLS function is certified for RNAV (GNSS) approach with LPV or LP minima.
Approval of the FMGS is based on the assumption that the navigation database is validated for intended use.
Obstacle clearance and adherence to airspace constraints remains a flight crew responsibility.
Fuel, time predictions/performance information is provided for advisory purposes only.

Ident.: LIM-AFS-10-20-00020070.0002001 / 17 MAR 17
Applicable to: ALL

NAVIGATION PERFORMANCE

The navigation accuracy depends on:

- IRS drift, or
- One of the following:
  - Radio navaid availability, or
  - Elapsed time since last computation of radio navaid position.

RNP accuracy with GPS PRIMARY ◁ is:

	With AP ON [(1)]	With AP OFF and FD ON [(1)]	With AP OFF and FD OFF
En route	1 NM	1 NM	1.1 NM
In terminal area	0.5 NM	0.51 NM	0.51 NM
In approach	0.3 NM	0.3 NM	0.3 NM with F-LOC ◁ deviation Not authorized without F-LOC ◁ deviation

(1)
- *In NAV (all phases), or*
- *In F-LOC ◁ (approach phase)*

Ident.: LIM-AFS-10-20-00020231.0005001 / 17 MAR 17
7 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**

- **For RNP AR:**
  The aircraft is capable of conducting RNP AR operations when operated in accordance with the recommendations provided in the Airbus Airworthiness Compliance Document (ACD).
  The achieved RNP AR level could be below 0.3 NM and depends on the type of RNP AR application. Refer to ACD for maximum achievable RNP values.

  RNP AR capability has been demonstrated with AP ON for the following modes:
  - Departure in NAV mode
  - Initial and Intermediate approach in NAV or APP NAV modes
  - Final approach in FINAL APP mode
  - Missed approach in NAV mode.

  Note: *For navigation performance and recommendations regarding RNP AR operations with AP OFF / FD ON, refer to the ACD.*

Ident.: LIM-AFS-10-20-00020389.0001001 / 04 MAY 18
Applicable to: ALL

DEGRADED SITUATION

If GPS PRIMARY LOST ◁ is displayed on the ND and MCDU, the navigation accuracy remains sufficient for RNP operations provided that, the RNP value is checked or entered on the MCDU and HIGH ACCURACY is displayed.

USE OF NAV MODE

Applicable to: ALL

Ident.: LIM-AFS-10-30-00020334.0001001 / 17 MAR 17

AFTER TAKEOFF

NAV mode may be used after takeoff provided that:
- GPS PRIMARY ◁ is available, or
- The flight crew checked the FMGS takeoff updating.

Ident.: LIM-AFS-10-30-00020335.0001001 / 17 MAR 17

IN TERMINAL AREA

NAV mode may be used in terminal area provided that:
- GPS PRIMARY ◁ is available, or
- the appropriate RNP is checked or entered on the MCDU, and HIGH accuracy is displayed, or
- FMS navigation is crosschecked with navaid raw data.

Ident.: LIM-AFS-10-30-00020336.0001001 / 17 MAR 17

APPROACH BASED ON RADIO NAVAIDS

A navaids approach may be performed in NAV, APP NAV or FINAL APP, with AP or FD engaged, provided that:
- If GPS PRIMARY ◁ is available, the reference navaid may be unserviceable, or the airborne radio equipment may be inoperative, or not installed, provided that an operational approval is obtained
- If GPS PRIMARY is not available, the reference navaid and the corresponding airborne radio equipment must be serviceable, tuned and monitored during the approach.

Note: *FLS ◁ is the recommended managed lateral and vertical guidance mode for radio navaids approach.*

Ident.: LIM-AFS-10-30-00020337.0001001 / 17 MAR 17

RNAV APPROACH

An RNAV(RNP) approach may be performed, with GPS PRIMARY not available, only if the radio navaid coverage supports the RNP value and HIGH accuracy is displayed on the MCDU with the specified RNP, and an operational approval is obtained.
An RNAV(GNSS) approach may be performed provided that GPS PRIMARY ◁ is available.
Refer to Guidance Modes per Approach Types

Note: *FLS ◁ is the recommended managed lateral and vertical guidance mode for RNAV approach.*

USE OF FLS ◁

Ident.: LIM-AFS-10-00020808.0001001 / 28 MAY 20
Applicable to: ALL

APPROACH BASED ON RADIO NAVAIDS

A navaids approach (e.g. VOR/DME) may be flown with the FLS provided that:
- F-APP capability is displayed on FMA.
  In this case, the reference navaids may be unserviceable, or the airborne radio equipment may be inoperative, or not installed, provided an operational approval is obtained.
- F-APP + RAW capability is displayed on FMA.
  In this case, the reference navaids and the corresponding airborne radio equipment must be serviceable, tuned and monitored during the approach.

An ILS (G/S out), ILS-B/C (G/S out), LOC, LOC-B/C approach may be flown with the lateral LOC (LOC B/C) mode and with the F-G/S mode of FLS function provided that:
- F-APP capability is displayed on FMA.
  In this case, the reference navaids used for the vertical path validation must be tuned and checked at final descent point.
- F-APP + RAW capability is displayed on FMA.
  In this case, the reference navaids used for the vertical path validation must be tuned and checked at final descent point and monitored during the approach.

RNAV(GNSS) APPROACH

An RNAV(GNSS) approach with LNAV minimum may be flown with the FLS provided that the F-APP capability is displayed on FMA.
An RNAV(GNSS) approach with LNAV/VNAV minimum must be flown with the FLS provided that the F-APP capability is displayed on FMA.

Note: *The RNAV(GNSS) approach limitations and procedures must be used to perform an RNAV approach for which the GNSS is not required.*

NON-PRECISION APPROACHES WITH ENGINE-OUT

Ident.: LIM-AFS-10-00006519.0001001 / 09 FEB 11
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03294, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 06895

If one engine is inoperative, it is not permitted to use the autopilot to perform NPAs in the following modes: FINAL APP, NAV V/S, NAV/FPA.
Only FD use is permitted.

NAVIGATION DATABASE VALIDATION

Ident.: LIM-AFS-10-40-00021656.0002001 / 05 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03002, 03035-03565, 03630-03662, 03761-03816, 04352-04358, 04441-04544, 04570-04662, 04827-04974, 05066, 05101-05222

RNAV(GNSS) APPROACHES AND APPROACHES BASED ON VOR/NDB

To fly an approach in lateral managed mode or lateral and vertical managed mode, the approach stored in the Navigation database must be either:
- Produced by an approved supplier compliant with ED76/DO200A or DAT Type 2 requirements, or
- Validated and approved by the Operator.

Note: *RNAV(GNSS) approaches lateral trajectories are geometrically based on waypoints coordinates. Thus, validating waypoints coordinate ensure no coding error on the approach and correct lateral trajectory. Observed lateral track degree of difference between MCDU F-PLN page display and charts may come from inconsistency between FMS MagVar and charted MagVar, which has no effect on lateral trajectory.*

Ident.: LIM-AFS-10-40-00021656.0006001 / 05 MAY 22
8 **Applicable to: MSN 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05240-05987, 06097, 06121, 06139-09324, 10949-11597**

RNAV(GNSS) APPROACHES AND APPROACHES BASED ON VOR/NDB

To fly an approach in lateral managed mode or lateral and vertical managed mode, the approach stored in the Navigation database must be either:
- Produced by an approved supplier compliant with ED76/DO200A or DAT Type 2 requirements, or
- Validated and approved by the Operator.

Note: *RNAV(GNSS) approaches lateral trajectories are geometrically based on waypoints coordinates. Thus, validating waypoints coordinate ensure no coding error on the approach and correct lateral trajectory. Observed lateral track degree of difference between MCDU F-PLN page display and charts may come from inconsistency between FMS MagVar and charted MagVar, which has no effect on lateral trajectory.*

RNAV(RNP) APPROACHES

To fly an RNAV(RNP) procedure (departure, approach, missed approach), the procedure stored in the Navigation Database must be both:

- Produced by an approved supplier compliant with ED76/DO200A or DAT Type 2 requirements, and
- Validated and approved by the Operator.

ILS CATEGORY II

Ident.: LIM-AFS-20-00020136.0001001 / 18 SEP 18
Applicable to: ALL

Minimum decision height..100 ft
At least one autopilot must be engaged in APPR mode, and CAT 2 or CAT 3 SINGLE or CAT 3 DUAL must be displayed on the FMA.
For manual landing, AP should be disconnected no later than 80 ft AGL.

SPECIAL AUTHORIZATION CAT II (SA CAT II)

Ident.: LIM-AFS-20-00020138.0001001 / 18 SEP 18
Applicable to: ALL

Minimum decision height..100 ft
At least one autopilot must be engaged in APPR mode, and CAT 2 or CAT 3 SINGLE or CAT 3 DUAL must be displayed on the FMA.
With HUD ◁ , the flight crew must use the HUD to monitor the approach and perform an automatic landing or a manual landing. If the flight crew performs an automatic approach without automatic landing, the autopilot must be disengaged no later than at 80 ft AGL.
Without HUD, the flight crew must perform an automatic landing.

OTHER THAN STANDARD CAT II (OTS CAT II)

Ident.: LIM-AFS-20-00020139.0001001 / 18 SEP 18
Applicable to: ALL

Minimum decision height..100 ft
At least one autopilot must be engaged in APPR mode, and CAT 2 or CAT 3 SINGLE or CAT 3 DUAL must be displayed on the FMA.
With HUD ◁ , the flight crew must use the HUD to monitor the approach and perform an automatic landing or a manual landing. If the flight crew performs an automatic approach without automatic landing, the autopilot must be disengaged no later than at 80 ft AGL.
Without HUD, the flight crew must perform an automatic landing.

ILS CATEGORY III FAIL PASSIVE (SINGLE)

Ident.: LIM-AFS-20-00020140.0001001 / 18 SEP 18
Applicable to: ALL

Minimum decision height..50 ft
A/THR must be used in selected or managed speed.
At least one autopilot must be engaged in APPR mode, and CAT 3 SINGLE or CAT 3 DUAL must be displayed on the FMA.

ILS CATEGORY III FAIL OPERATIONAL (DUAL)

Ident.: LIM-AFS-20-00020141.0001001 / 17 MAR 17

1 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345, 08495-09324, 10949-11597**

Alert height....................100 ft AGL

A/THR must be used in selected or managed speed.

Both autopilots must be engaged in APPR mode, and CAT 3 DUAL must be displayed on the FMA.

- **CAT III without DH:**
  Minimum Runway Visual Range....................75 m

ILS CATEGORY III FAIL OPERATIONAL (DUAL)

Ident.: LIM-AFS-20-00020141.0008001 / 18 SEP 18

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240

Alert height....................100 ft

A/THR must be used in selected or managed speed.

Both autopilots must be engaged in APPR mode, and CAT 3 DUAL must be displayed on the FMA.

- ■ **CAT III with DH:**
  Minimum Decision Height....................20 ft
- ■ **CAT III without DH:**
  Minimum Runway Visual Range....................75 m

ILS CATEGORY III FAIL OPERATIONAL (DUAL)

Ident.: LIM-AFS-20-00020141.0005001 / 18 SEP 18

Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Alert height....................100 ft

A/THR must be used in selected or managed speed.

Both autopilots must be engaged in APPR mode, and CAT 3 DUAL must be displayed on the FMA.

- ■ **CAT III with DH:**
  Minimum Decision Height....................18 ft
- ■ **CAT III without DH:**
  Minimum Runway Visual Range....................75 m

ILS CATEGORY III FAIL OPERATIONAL (DUAL)

Ident.: LIM-AFS-20-00020141.0004001 / 18 SEP 18

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

Alert height....................100 ft

A/THR must be used in selected or managed speed.
Both autopilots must be engaged in APPR mode, and CAT 3 DUAL must be displayed on the FMA.

- **CAT III with DH:**
  Minimum Decision Height........ 25 ft
- **CAT III without DH:**
  Minimum Runway Visual Range........75 m

ILS CATEGORY III FAIL OPERATIONAL (DUAL)

Ident.: LIM-AFS-20-00020141.0002001 / 18 SEP 18
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05342, 05528-05987, 06097, 06121, 06139-06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Alert height........ 100 ft
A/THR must be used in selected or managed speed.
Both autopilots must be engaged in APPR mode, and CAT 3 DUAL must be displayed on the FMA.

- **CAT III with DH:**
  Minimum Decision Height........ 22 ft
- **CAT III without DH:**
  Minimum Runway Visual Range........75 m

ENGINE-OUT

Ident.: LIM-AFS-20-00020142.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

CAT II and CAT III fail passive autoland are only approved in configuration FULL, and if engine-out procedures are completed before reaching 1 000 ft in approach.

ENGINE-OUT

Ident.: LIM-AFS-20-00020142.0003001 / 17 MAR 17
2 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03222-03229, 03294, 03588-03595, 03710, 03733-04389, 04563-04773, 05005, 05097, 05345-05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-09324, 10949-11597**

CAT II and CAT III fail passive autoland are only approved in configuration 3 and FULL, and if engine-out procedures are completed before reaching 1 000 ft in approach.

GLS CATEGORY I

Ident.: LIM-AFS-20-00020143.0001001 / 06 SEP 22
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Minimum decision height ....200 ft

- **Without automatic landing:**
  At least one autopilot must be engaged in APPR mode, and CAT1 or AUTO LAND must be displayed on the FMA.
- **With automatic landing:**
  At least one autopilot must be engaged in APPR mode, and AUTO LAND must be displayed on the FMA.

MAXIMUM WIND CONDITIONS FOR ILS/MLS ◁ CAT II OR CAT III AND FOR GLS ◁ CAT I

3 Ident.: LIM-AFS-20-00020144.0015001 / 07 SEP 17
Applicable to: MSN 11531

Headwind : 15 kt
Tailwind : 10 kt
Crosswind : 10 kt

Note: *Wind limitation is based on the surface wind reported by ATC. If the wind displayed on the ND exceeds the above-noted autoland limitations, but the tower reports surface wind within the limitations, then the autopilot can remain engaged. If the tower reports a surface wind that exceeds the limitations, only CAT I automatic approach without autoland can be performed.*

MAXIMUM WIND CONDITIONS FOR ILS/MLS ◁ CAT II OR CAT III AND FOR GLS ◁ CAT I

Ident.: LIM-AFS-20-00020144.0004001 / 05 MAR 19
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Headwind :
- 40 kt for CAT II automatic approach
- 30 kt for CAT III and GLS CAT I automatic approach
- 30 kt for automatic landing and automatic rollout

Tailwind : 10 kt

Crosswind :
- 25 kt for CAT II automatic approach
- 20 kt for CAT III and GLS CAT I automatic approach
- 20 kt for automatic landing and automatic rollout

Note: *Wind limitation is based on the surface wind reported by ATC. If the wind displayed on the ND exceeds the above-noted autoland limitations, but the tower reports surface wind within the limitations, then the autopilot can remain engaged. If the tower reports a surface wind that exceeds the limitations, only CAT I automatic approach without autoland can be performed.*

MAXIMUM WIND CONDITIONS FOR ILS/MLS ◁ CAT II OR CAT III AND FOR GLS ◁ CAT I

Ident.: LIM-AFS-20-00020144.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05240

Headwind : 30 kt
Tailwind : 10 kt
Crosswind : 20 kt

Note: *Wind limitation is based on the surface wind reported by ATC. If the wind displayed on the ND exceeds the above-noted autoland limitations, but the tower reports a surface wind within the limitations, then the autopilot can remain engaged. If the tower reports a surface wind beyond limitations, only CAT I automatic approach without autoland can be performed.*

MAXIMUM WIND CONDITIONS FOR ILS/MLS ◁ CAT II OR CAT III AND FOR GLS ◁ CAT I

Ident.: LIM-AFS-20-00020144.0010001 / 05 MAR 19
4 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

Headwind : 30 kt
Tailwind : 10 kt
Crosswind : 20 kt (15 kt for automatic rollout with OEI)

Note: *Wind limitation is based on the surface wind reported by ATC. If the wind displayed on the ND exceeds the above-noted autoland limitations, but the tower reports surface wind within the limitations, then the autopilot can remain engaged. If the tower reports a surface wind that exceeds the limitations, only CAT I automatic approach without autoland can be performed.*

MAXIMUM WIND CONDITIONS FOR ILS/MLS ◁ CAT II OR CAT III AND FOR GLS ◁ CAT I

Ident.: LIM-AFS-20-00020144.0013001 / 05 MAR 19
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 03733, 04000-04192, 04389, 04563, 04734-04773, 05005, 05097, 05345

Headwind : 20 kt (15 kt with OEI)
Tailwind : 10 kt (5 kt with CONF FULL with airport elevation above 5 750 ft or CONF 3)

Crosswind : 20 kt (10 kt with OEI)

Note: *Wind limitation is based on the surface wind reported by ATC. If the wind displayed on the ND exceeds the above-noted autoland limitations, but the tower reports surface wind within the limitations, then the autopilot can remain engaged. If the tower reports a surface wind that exceeds the limitations, only CAT I automatic approach without autoland can be performed.*

MAXIMUM WIND CONDITIONS FOR ILS/MLS ⩤ CAT II OR CAT III AND FOR GLS ⩤ CAT I

Ident.: LIM-AFS-20-00020144.0005001 / 17 MAR 17
Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Headwind : 30 kt

Tailwind : 10 kt

Crosswind : 20 kt without Automatic Rollout / 15 kt with Automatic Rollout

Note: *Wind limitation is based on the surface wind reported by ATC. If the wind displayed on the ND exceeds the above-noted autoland limitations, but the tower reports a surface wind within the limitations, then the autopilot can remain engaged. If the tower reports a surface wind beyond limitations, only CAT I automatic approach without autoland can be performed.*

AUTOMATIC LANDING

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS CAT II and CAT III autoland and GLS CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:

- With CAT II and CAT III ILS/MLS beam and CAT I GLS beam.

Ident.: LIM-AFS-20-10-00020151.0001001 / 17 MAR 17

- With a glide slope angle between -2.5 ° and -3.15 °

Ident.: LIM-AFS-20-10-00020152.0007001 / 17 MAR 17

- With an airport elevation at or below 6 500 ft

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

5 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0001001 / 17 MAR 17

Automatic landing is not allowed below -1 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0001001 / 05 MAR 19

Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that the wind does not exceed the maximum wind conditions for automatic rollout.

Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 01591, 01652, 01802, 01827, 01835, 01857-01891, 02513, 03727, 06057, 06103-06110, 06125, 09558-09563

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS CAT II and CAT III autoland and GLS CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:
- With CAT II and CAT III ILS/MLS beam and CAT I GLS beam.

Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS CAT II and CAT III autoland and GLS CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:

- With CAT II and CAT III ILS/MLS beam and CAT I GLS beam.

Ident.: LIM-AFS-20-10-00020151.0004001 / 17 MAR 17

6 - With a glide slope angle between -2.5 ° and -3.25 °

Ident.: LIM-AFS-20-10-00020152.0003001 / 17 MAR 17

7 - With an airport elevation at or below 9 200 ft

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

8 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0001001 / 17 MAR 17

Automatic landing is not allowed below -1 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0007001 / 05 MAR 19

Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that:

AIRPORT ELEVATION AT OR BELOW 5 750 FT

- No more than idle thrust is used
- Headwind component not above 15 kt
- Tailwind component not above 10 kt
- Crosswind component not above 10 kt.

AIRPORT ELEVATION ABOVE 5 750 FT OR CONF 3

- No more than idle thrust is used
- Headwind component not above 15 kt
- Tailwind component not above 5 kt
- Crosswind component not above 10 kt.

Continued on the following page

Continued from the previous page

Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05240

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS CAT II and CAT III autoland and GLS CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:

- With CAT II and CAT III ILS/MLS beam and CAT I GLS beam.

Ident.: LIM-AFS-20-10-00020151.0001001 / 17 MAR 17

- With a glide slope angle between -2.5 ° and -3.15 °

Ident.: LIM-AFS-20-10-00020152.0003001 / 17 MAR 17

9 - With an airport elevation at or below 9 200 ft

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

10 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0001001 / 17 MAR 17

Automatic landing is not allowed below -1 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0001001 / 05 MAR 19

Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.
During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that the wind does not exceed the maximum wind conditions for automatic rollout.

Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS ✳ CAT II and CAT III autoland and GLS ✳ CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:
- With CAT II and CAT III ILS/MLS ✳ beam and CAT I GLS ✳ beam.

Ident.: LIM-AFS-20-10-00020151.0001001 / 17 MAR 17

- With a glide slope angle between -2.5 ° and -3.15 °

Ident.: LIM-AFS-20-10-00020152.0002001 / 17 MAR 17

- With an airport elevation at or below 5 750 ft

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

11 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0001001 / 17 MAR 17

Automatic landing is not allowed below -1 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0004001 / 05 MAR 19

Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that:
- No more than idle thrust is used
- Headwind and tailwind do not exceed the maximum wind conditions for automatic rollout
- Crosswind component not above 15 kt.

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Continued from the previous page

Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 03733, 04734-04756, 05005, 05097

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS CAT II and CAT III autoland and GLS CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:

- With CAT II and CAT III ILS/MLS beam and CAT I GLS beam.

Ident.: LIM-AFS-20-10-00020151.0001001 / 17 MAR 17

- With a glide slope angle between -2.5 ° and -3.15 °

Ident.: LIM-AFS-20-10-00020152.0003001 / 17 MAR 17

12 - With an airport elevation at or below 9 200 ft

Ident.: LIM-AFS-20-10-00021180.0002001 / 29 NOV 19

- With aircraft weight below the maximum landing weight

Note: *Depending on the situation (e.g. emergency or other) and provided that the runway is approved for automatic landing, the flight crew can decide to perform an autoland up to 69 t (152 118 lb).*

Ident.: LIM-AFS-20-10-00020155.0001001 / 17 MAR 17

Automatic landing is not allowed below -1 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0007001 / 05 MAR 19

Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that:

AIRPORT ELEVATION AT OR BELOW 5 750 FT

- No more than idle thrust is used
- Headwind component not above 15 kt
- Tailwind component not above 10 kt
- Crosswind component not above 10 kt.

AIRPORT ELEVATION ABOVE 5 750 FT OR CONF 3

- No more than idle thrust is used
- Headwind component not above 15 kt
- Tailwind component not above 5 kt
- Crosswind component not above 10 kt.

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Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 04827-04860

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS CAT II and CAT III autoland and GLS CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:

- With CAT II and CAT III ILS/MLS beam and CAT I GLS beam.

Ident.: LIM-AFS-20-10-00020151.0001001 / 17 MAR 17

- With a glide slope angle between -2.5 ° and -3.15 °

Ident.: LIM-AFS-20-10-00020152.0001001 / 17 MAR 17

- With an airport elevation at or below 2 500 ft

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

13 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0001001 / 17 MAR 17

Automatic landing is not allowed below -1 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0001001 / 05 MAR 19

Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.
During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that the wind does not exceed the maximum wind conditions for automatic rollout.

Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS ◁ CAT II and CAT III autoland and GLS ◁ CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:
- With CAT II and CAT III ILS/MLS ◁ beam and CAT I GLS ◁ beam.

Ident.: LIM-AFS-20-10-00020151.0001001 / 17 MAR 17

- With a glide slope angle between -2.5 ° and -3.15 °

Ident.: LIM-AFS-20-10-00020152.0003001 / 17 MAR 17

14 - With an airport elevation at or below 9 200 ft

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

15 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0001001 / 17 MAR 17

Automatic landing is not allowed below -1 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0005001 / 05 MAR 19

16 Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that:
- No more than idle thrust is used
- The wind does not exceed the maximum wind conditions for automatic rollout.

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Continued from the previous page

Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 08495-09324

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS ◁ CAT II and CAT III autoland and GLS ◁ CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:
- With CAT II and CAT III ILS/MLS ◁ beam and CAT I GLS ◁ beam.

Ident.: LIM-AFS-20-10-00020151.0004001 / 17 MAR 17

17 - With a glide slope angle between -2.5 ° and -3.25 °

Ident.: LIM-AFS-20-10-00020152.0002001 / 17 MAR 17

- With an airport elevation at or below 5 750 ft

Ident.: LIM-AFS-20-10-00020153.0001001 / 17 MAR 17

18 - With aircraft weight at or above 44 000 kg (97 004 lb)

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

19 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0002001 / 17 MAR 17

20 Automatic landing is not allowed below -2 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0008001 / 05 MAR 19

21 Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that:
- No more than idle thrust is used
- Headwind component not above 30 kt
- Tailwind component not above 10 kt
- Crosswind component not above 15 kt.

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Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 10949-11522, 11572-11597

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS CAT II and CAT III autoland and GLS CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:
- With CAT II and CAT III ILS/MLS beam and CAT I GLS beam.

Ident.: LIM-AFS-20-10-00020151.0004001 / 17 MAR 17

22 - With a glide slope angle between -2.5 ° and -3.25 °

Ident.: LIM-AFS-20-10-00020152.0003001 / 17 MAR 17

23 - With an airport elevation at or below 9 200 ft

Ident.: LIM-AFS-20-10-00020153.0001001 / 17 MAR 17

24 - With aircraft weight at or above 44 000 kg (97 004 lb)

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

25 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0002001 / 17 MAR 17

26 Automatic landing is not allowed below -2 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0008001 / 05 MAR 19

27 Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that:
- No more than idle thrust is used
- Headwind component not above 30 kt
- Tailwind component not above 10 kt
- Crosswind component not above 15 kt.

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Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING

Applicable to: MSN 11531

Ident.: LIM-AFS-20-10-00020149.0001001 / 17 MAR 17

ILS/MLS ◁ CAT II and CAT III autoland and GLS ◁ CAT I autoland are approved in CONF 3 and CONF FULL.

Ident.: LIM-AFS-20-10-00020150.0001001 / 17 MAR 17

Automatic landing is demonstrated:
- With CAT II and CAT III ILS/MLS ◁ beam and CAT I GLS ◁ beam.

Ident.: LIM-AFS-20-10-00020151.0004001 / 17 MAR 17

28 - With a glide slope angle between -2.5 ° and -3.25 °

29 Ident.: LIM-AFS-20-10-00020152.0011001 / 16 JAN 18

- With an airport elevation at or below 9 200 ft

30 Ident.: LIM-AFS-20-10-00020153.0010001 / 25 JAN 18

- With aircraft weight at or above 51 000 kg (112 436 lb)

Ident.: LIM-AFS-20-10-00021180.0003001 / 25 JAN 18

31 - With aircraft weight below the maximum landing weight

Ident.: LIM-AFS-20-10-00020155.0002001 / 17 MAR 17

32 Automatic landing is not allowed below -2 000 ft pressure altitude.

Ident.: LIM-AFS-20-10-00020156.0005001 / 05 MAR 19

33 Automatic rollout performance is approved on dry and wet runways, but performance on contaminated runways was not demonstrated.

During automatic rollout with one engine inoperative or one thrust reverser inoperative, the flight crew can use the remaining thrust reverser, provided that:
- No more than idle thrust is used
- The wind does not exceed the maximum wind conditions for automatic rollout.

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Ident.: LIM-AFS-20-10-00020158.0001001 / 17 MAR 17

Automatic landing system performance is demonstrated with CAT II or CAT III ILS/MLS airport installation. However, automatic landing in CAT I or better weather conditions is possible on CAT I ground installations or on CAT II/III ground installations when ILS/MLS sensitive areas are not protected, if the following precautions are taken:

- The airline checked that the ILS/MLS beam quality, and the effect of the terrain profile before the runway have no adverse effect on AP/FD guidance. Particularly, the effect of terrain profile within 300 m before the runway threshold must be evaluated
- The flight crew is aware that LOC or G/S beam fluctuations, independent of the aircraft system, may occur. The PF is prepared to immediately disconnect the autopilot, and to take the appropriate action, should not satisfactory guidance occur
- At least CAT2 capability is displayed on the FMA and the flight crew uses CAT II/III procedures
- Visual references are obtained at an altitude appropriate for the CAT I approach. If not, a go-around must be performed.

AUTOMATIC LANDING IN JOHANNESBURG

Ident.: TDU / LIM-AFS-20-00013685.0001001 / 25 APR 13
Applicable to: ALL
Impacted DU: NONE

Automatic landing is not permitted on Johannesburg 03R/21L runways.

LIMITATIONS

AUXILIARY POWER UNIT

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General.........A
APU Start/Shutdown during Refueling/Defueling.........B
Operational Envelope.........C

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Localization Title	Toc Index	ID	Reason
LIM-APU EGT	A	1	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-APU EGT	A	2	Effectivity update: The information no longer applies to MSN 02321, 06689.
LIM-APU Operational Envelope	C	3	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-APU Operational Envelope	C	4	Effectivity update: The information no longer applies to MSN 02321, 06689.
LIM-APU APU Bleed	C	5	Effectivity update: The information now also applies to MSN 02321, 06689, 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-APU APU Bleed	C	6	Effectivity update: The information no longer applies to MSN 02321, 06689.

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GENERAL

Ident.: LIM-APU-10-00020088.0001001 / 17 MAR 17
Applicable to: ALL

APU START

After three consecutive APU start attempts, the flight crew must wait 60 min before a new start attempt.

Ident.: LIM-APU-10-00020089.0001001 / 17 MAR 17
Applicable to: ALL

ROTOR SPEED

Maximum N speed.. 107 %

Ident.: LIM-APU-10-00020090.0003001 / 17 MAR 17
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

EGT

Maximum EGT for APU start (below 35 000 ft).. 1 090 °C
Maximum EGT for APU start (above 35 000 ft).. 1 120 °C
Maximum EGT for APU running..675 °C

Ident.: LIM-APU-10-00020090.0002001 / 17 MAR 17
2 **Applicable to: MSN 06871-06876**

EGT

Maximum EGT for APU start (below 25 000 ft).. 900 °C
Maximum EGT for APU start (above 25 000 ft)..982 °C
Maximum EGT for APU running (with 5 s confirmation for shutdown).................................... 682 °C
Maximum EGT for APU running (for immediate shutdown)................................... 700 °C to 742 °C

APU START/SHUTDOWN DURING REFUELING/DEFUELING

Ident.: LIM-APU-00020091.0001001 / 17 MAR 17
Applicable to: ALL

During refuel/defuel procedures, APU starts or shutdown are permitted with the following restrictions:

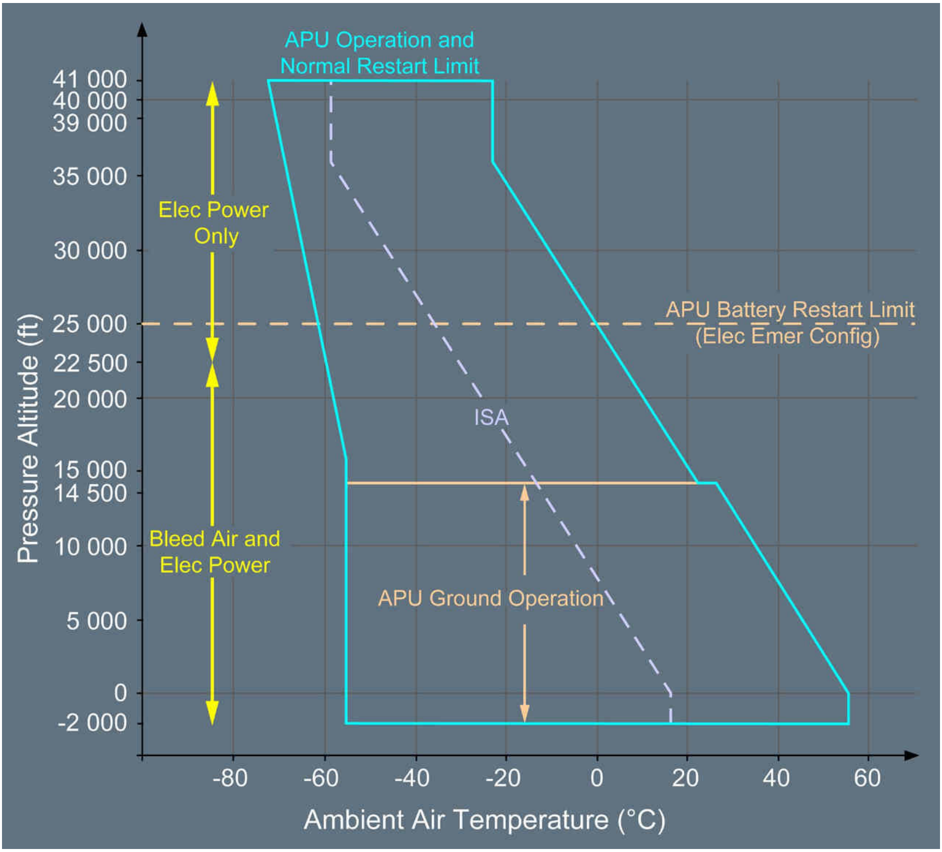
- If the APU failed to start or following an automatic APU shutdown, do not start the APU
- If a fuel spill occurs, perform a normal APU shutdown.

OPERATIONAL ENVELOPE

Ident.: LIM-APU-20-00019832.0003001 / 26 NOV 19

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

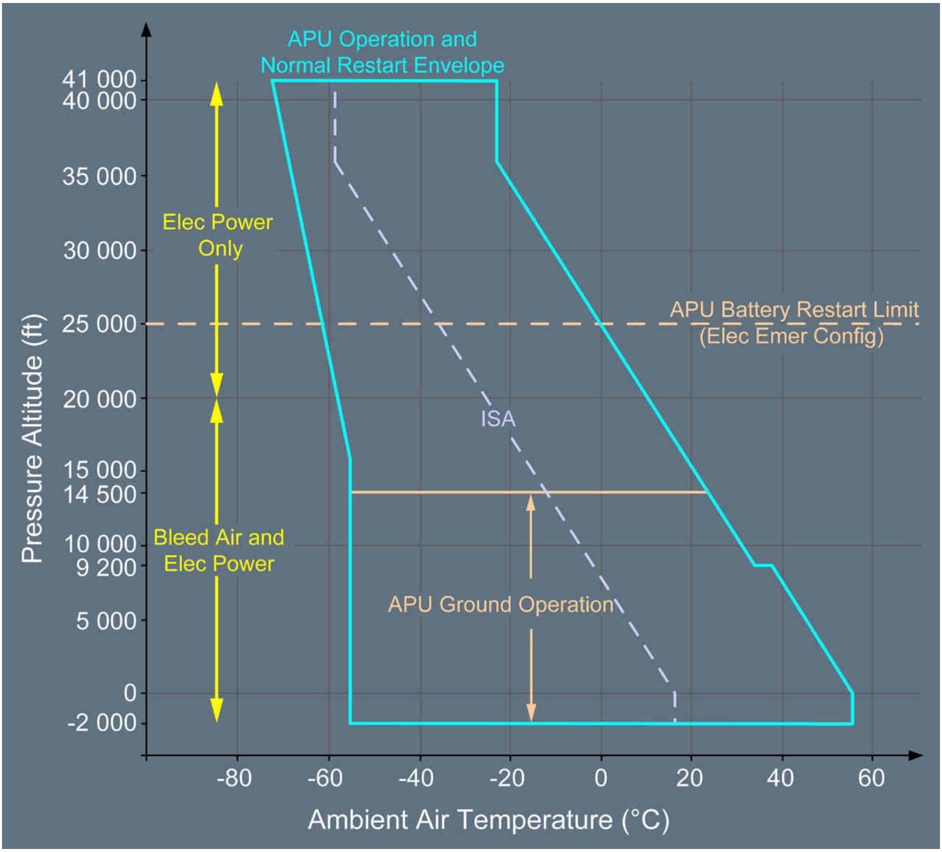
Note: When a value of the environmental envelope of the aircraft is more limited than the operational envelope of the APU, the value of the environmental envelope of the aircraft must not be exceeded. Refer to LIM-AG-OPS Environmental Envelope.



Ident.: LIM-APU-20-00019832.0026001 / 26 NOV 19

4 **Applicable to: MSN 06871-06876**

Note: *When a value of the environmental envelope of the aircraft is more limited than the operational envelope of the APU, the value of the environmental envelope of the aircraft must not be exceeded. Refer to LIM-AG-OPS Environmental Envelope.*



Ident.: LIM-APU-20-00021771.0002001 / 04 JUL 17

5 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-06813, 06895-09324, 10949-11597**

APU BLEED

Max altitude to assist engine start.. 20 000 ft

Max altitude for air conditioning and pressurization (single pack operation)........................ 22 500 ft
Max altitude for air conditioning and pressurization (dual pack operation)........................... 15 000 ft
Use of APU bleed air for wing anti-ice is not permitted.

Ident.: LIM-APU-20-00021771.0001001 / 04 JUL 17

6 **Applicable to: MSN 06871-06876**

APU BLEED

Max altitude to assist engine start.. 20 000 ft
Max altitude for air conditioning and pressurization (single pack operation)........................ 20 000 ft
Max altitude for air conditioning and pressurization (dual pack operation)........................... 15 000 ft
Use of APU bleed air for wing anti-ice is not permitted.

LIMITATIONS

CABIN SYSTEMS

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Power Supply for Portable Electronic Device (PED).. A

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Localization Title	Toc Index	ID	Reason
LIM-CAB Power Supply for Portable Electronic Device (PED)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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POWER SUPPLY FOR PORTABLE ELECTRONIC DEVICE (PED)

Ident.: LIM-CAB-00020226.0001001 / 22 MAR 17

1 **Applicable to: MSN 01825, 01832, 02887, 02904, 03222-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11522, 11572-11597**

The In-Seat Power Supply System (ISPSS) for the Portable Electronic Device (PED) carried by the passengers must be turned off during takeoff and landing.

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LIMITATIONS

COMMUNICATION

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GSM Onboard ⊲ .... A

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GSM ONBOARD

Ident.: LIM-COM-00020293.0001001 / 17 MAR 17
Applicable to: ALL

The use of mobile phones is prohibited in the toilets and the cockpit.

It is prohibited to use the GSM Onboard System:
- Below 3 000 m AGL (approximately 10 000 ft)
- In some geographical areas (refer to the “Regional Operation Data for the Onboard Mobile Telephony System” document for the identification of these geographical areas).

Note: *The GSM Onboard System is able to identify the above-mentioned flight conditions. If the system identifies any of these conditions, it automatically turns off.*

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LIMITATIONS

EFB

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LIM-EFB-24 Cockpit Portable Electronic Device Outlet

Cockpit Portable Electronic Device Outlets....A
Cockpit Portable Electronic Device Outlet....B

LIM-EFB-46 Electronic Flight Bag Class 1 (EFB Class 1)

EFB Class 1 (iPad)....A
Jeppesen Function (JeppFD-PRO App) ....B
Documents Function (Contents App)....C
FlySmart Function (OLB/Landing/Loadsheet/Takeoff)....D
Power charger with cable....E
Mount....F
Kneeboard....G

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Localization Title	Toc Index	ID	Reason
LIM-EFB-24 Cockpit Portable Electronic Device Outlets	A	1	Documentation update: Addition of "Cockpit Portable Electronic Device Outlets" documentary unit
LIM-EFB-24 Cockpit Portable Electronic Device Outlet	B	2	Documentation update: Addition of "Cockpit Portable Electronic Device Outlet" documentary unit
LIM-EFB-46 EFB Class 1 (iPad)	A	1	Documentation update: Addition of "EFB Class 1 (iPad)" documentary unit
LIM-EFB-46 Jeppesen Function (JeppFD-PRO App)	B	2	Documentation update: Addition of "Jeppesen Function (JeppFD-PRO App)" documentary unit
LIM-EFB-46 Documents Function (Contents App)	C	3	Documentation update: Addition of "Documents Function (Contents App)" documentary unit
LIM-EFB-46 FlySmart Function (OLB/Landing/Loadsheet/Takeoff)	D	4	Documentation update: Addition of "FlySmart Function (OLB/Landing/Loadsheet/Takeoff)" documentary unit
LIM-EFB-46 Power charger with cable	E	5	Documentation update: Addition of "Power charger with cable" documentary unit
LIM-EFB-46 Mount	F	6	Documentation update: Addition of "Mount" documentary unit
LIM-EFB-46 Kneeboard	G	7	Documentation update: Addition of "Kneeboard" documentary unit

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COCKPIT PORTABLE ELECTRONIC DEVICE OUTLETS

1 Ident.: LIM-EFB-24-20800854.9001001 / 02 MAY 23
Applicable to: MSN 01143-01251, 01518-11597

ONE OR TWO INOPERATIVE

One or two Cockpit Portable Electronic Device Outlets may be inoperative without restriction.

ALL INOPERATIVE

All Cockpit Portable Electronic Device Outlets may be inoperative provided two additional iPads must be onboard with a minimum battery charge of 80 %.

COCKPIT PORTABLE ELECTRONIC DEVICE OUTLET

2 Ident.: LIM-EFB-24-20800854.9001002 / 02 MAY 23
Applicable to: MSN 01376-01459

INOPERATIVE

Cockpit Portable Electronic Device Outlet may be inoperative provided two additional iPads must be onboard with a minimum battery charge of 80 %.

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EFB CLASS 1 (IPAD)

1 Ident.: LIM-EFB-46-20800855.9001001 / 02 MAY 23
Applicable to: ALL

ONE INOPERATIVE

One iPad may be inoperative or missing provided :

- One paper copy of Terminal Charts must be on board, and
- Remaining iPad is used by Pilots as required.

BOTH INOPERATIVE

Both iPads may be inoperative or missing provided :

- Two paper copies of Terminal Charts must be on board ,
- All the required calculations must be on board for departure, destination and alternate airports, and
- One paper hard copy of the MEL and all the required Local Authorities documents must be on board.

JEPPESEN FUNCTION (JEPPFD-PRO APP)

2 Ident.: LIM-EFB-46-20800856.9001001 / 02 MAY 23
Applicable to: ALL

Note: *The related EFB also has the Documents Function and the Flysmart Function inoperative, the EFB is considered inoperative. Refer to 20800008 **Not found***

Note: *The EFB with all functions operative must be used by Pilots as required.*

ONE INOPERATIVE

One Jeppesen Function may be inoperative provided one paper copy of Terminal charts is available on board for its use.

BOTH INOPERATIVE

Both Jeppesen Functions may be inoperative provided two paper copies of Terminal charts are available on board for their use.

DOCUMENTS FUNCTION (CONTENTS APP)

3 Ident.: LIM-EFB-46-20800857.9001001 / 02 MAY 23
Applicable to: ALL

Note: *The related EFB also has the Jeppesen Function and the Flysmart Function inoperative, the EFB is considered inoperative. Refer to 20800008 **Not found***

Note: *The EFB with all functions operative must be used by Pilots as required.*

ONE INOPERATIVE

One Documents Function may be inoperative without restriction.

BOTH INOPERATIVE

Both Documents Functions may be inoperative provided one paper copy of EOSIDs for departure, alternate and destination airports must be on board.

FLYSMART FUNCTION (OLB/LANDING/LOADSHEET/TAKEOFF)

4 Ident.: LIM-EFB-46-20800858.9001001 / 02 MAY 23
Applicable to: ALL

Note: *The EFB with all functions operative must be used by Pilots as required.*

Note: *Any individual FlySmart Function which operates normally may be used.*

Note: *The related EFB also has the Documents Function and the Jeppesen Function inoperative, EFB is considered inoperative. Refer to 20800008 **Not found***

ONE INOPERATIVE

One FlySmart Function may be inoperative without restriction.

BOTH INOPERATIVE

Both FlySmart Functions may be inoperative provided all the required calculations must be on board for departure, destination and alternate airports.

POWER CHARGER WITH CABLE

5 Ident.: LIM-EFB-46-20800859.9001001 / 02 MAY 23
Applicable to: ALL

Note: *Power charger and cable are considered as one piece.*

ONE INOPERATIVE

One Power charger with cable may be inoperative or missing provided the remaining power charger and cable are used for both iPads as required.

BOTH INOPERATIVE

Both Power chargers with cable may be inoperative provided two additional iPads must be onboard with a minimum battery charge of 80 %.

MOUNT

6 Ident.: LIM-EFB-46-20800860.9001001 / 02 MAY 23
Applicable to: ALL

ONE INOPERATIVE OR MISSING WITH KNEEBOARD CHECKED OPERATIVE

One may be inoperative or missing provided:

- Kneeboard must be used and checked operative, and
- Inoperative mount must be removed from Aircraft.

ONE INOPERATIVE OR MISSING WITH KNEEBOARD INOPERATIVE OR MISSING

If one mount is inoperative or missing and also the kneeboard is inoperative or missing, the related EFB is considered inoperative. The inoperative mount must be removed from the Aircraft.*Refer to 20800008 **Not found***

BOTH INOPERATIVE OR MISSING WITH KNEEBOARD CHECKED OPERATIVE

Both Mounts may be inoperative or missing provided:

- Kneeboard must be used and checked operative, and
- Inoperative mount must be removed from Aircraft, and
- Remaining iPad without kneeboard is considered inoperative.*Refer to 20800008 **Not found***

BOTH INOPERATIVE OR MISSING WITH KNEEBOARD INOPERATIVE OR MISSING

If both mounts are inoperative or missing and also the kneeboard is inoperative or missing, the iPads may be used without kneeboard except during Take off and Landing (when both iPads must be stowed) . Inoperative mounts must be removed from Aircraft. Also *Refer to 20800009 **Not found***

KNEEBOARD

7 Ident.: LIM-EFB-46-20800861.9001001 / 02 MAY 23
Applicable to: ALL

INOPERATIVE OR MISSING WITH RELATED MOUNT CHECKED OPERATIVE

Kneeboard may be inoperative or missing provided at least one Mount is used and checked operative.

INOPERATIVE OR MISSING WITH BOTH MOUNTS INOPERATIVE OR MISSING

The Kneeboard is inoperative or missing and also both Mounts are inoperative or missing, iPads may be used without kneeboard except during Take off and Landing (when both iPads must be stowed). Also .*Refer to 20800009 **Not found***

LIMITATIONS

ENGINES

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Thrust Setting/EGT Limits................ A
Shaft Speeds................ B
Oil................ C
Starter................ D
Reverse Thrust................ E
Reduced Thrust Takeoff................ F
Crosswind Operation on Ground................ G
Soft Go-Around................ H

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LIMITATIONS

ENGINES

PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
LIM-ENG Flex Takeoff	F	6	Documentation update: Addition of "Flex Takeoff" documentary unit

LIM-ENG Thrust Setting/EGT Limits	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Shaft Speeds	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Oil	C	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Starter	D	4	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Flex Takeoff	F	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-ENG Crosswind Operation on Ground	G	7	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-ENG Soft Go-Around	H	8	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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THRUST SETTING/EGT LIMITS

Ident.: LIM-ENG-00019960.0020001 / 18 MAY 18

1 **Applicable to: MSN 08495-09324, 10949-11597**

Operating Conditions		Time Limit	EGT Limit
Takeoff(1) and Go-around	All engines operative	5 min	1 083 °C
	One engine inoperative	10 min	
Maximum Continuous Thrust (MCT)		Not limited	1 043 °C
Starting	On ground		1 083 °C
	In flight		

(1) *Includes TOGA, FLEX, and DERATE ◁ thrust modes.*

THRUST SETTING/EGT LIMITS

Ident.: LIM-ENG-00019960.0004001 / 20 MAR 17

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Operating Conditions		Time Limit	EGT Limit
Takeoff(1) and Go-around	All engines operative	5 min	950 °C
	One engine inoperative	10 min	
Maximum Continuous Thrust (MCT)		Not limited	915 °C
Starting	On ground		725 °C
	In flight		

(1) *Includes TOGA, FLEX, and DERATE ◁ thrust modes.*

THRUST SETTING/EGT LIMITS

Ident.: LIM-ENG-00019960.0017001 / 20 MAR 17

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

Operating Conditions		Time Limit	EGT Limit
Takeoff(1) and Go-around	All engines operative	5 min	635 °C
	One engine inoperative	10 min	
Maximum Continuous Thrust (MCT)		Not limited	610 °C
Starting	On ground		635 °C
	In flight		

(1) *Includes TOGA, FLEX, and DERATE ◁ thrust modes.*

THRUST SETTING/EGT LIMITS

Ident.: LIM-ENG-00019960.0019001 / 20 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

Operating Conditions		Time Limit	EGT Limit
Takeoff[1] and Go-around	All engines operative	5 min	650 °C
	One engine inoperative	10 min	
Maximum Continuous Thrust (MCT)		Not limited	610 °C
Starting	On ground		635 °C
	In flight		

(1) *Includes TOGA, FLEX, and DERATE ◁ thrust modes.*

SHAFT SPEEDS

Ident.: LIM-ENG-00020355.0007001 / 17 NOV 20
Applicable to: MSN 08495-09324, 10949-11597

Maximum N1 in normal operation..100 %
Maximum N1 permitted..105 %

Note: *The N1 limit depends on the ambient conditions and on the configuration of the engine air bleed. These parameters may limit N1 to a value that is less than the above-mentioned N1 value.*

Maximum N2 in normal operation..100 %
Maximum N2 permitted..105 %

SHAFT SPEEDS

Ident.: LIM-ENG-00020355.0003001 / 17 NOV 20
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

Maximum N1..100 %

Note: *The N1 limit depends on the ambient conditions and on the configuration of the engine air bleed. These parameters may limit N1 to a value that is less than the above-mentioned N1 value.*

Maximum N2..100 %

SHAFT SPEEDS

Ident.: LIM-ENG-00020355.0002001 / 17 NOV 20

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

Maximum N1.. 104 %

Note: *The N1 limit depends on the ambient conditions and on the configuration of the engine air bleed. These parameters may limit N1 to a value that is less than the above-mentioned N1 value.*

Maximum N2.. 105 %

OIL

Ident.: LIM-ENG-00020354.0001001 / 10 MAY 21

Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

OIL TEMPERATURE

Maximum continuous temperature.. 140 °C
Maximum transient temperature (15 min).. 155 °C
Minimum starting temperature..-40 °C
Minimum temperature before takeoff.. -10 °C

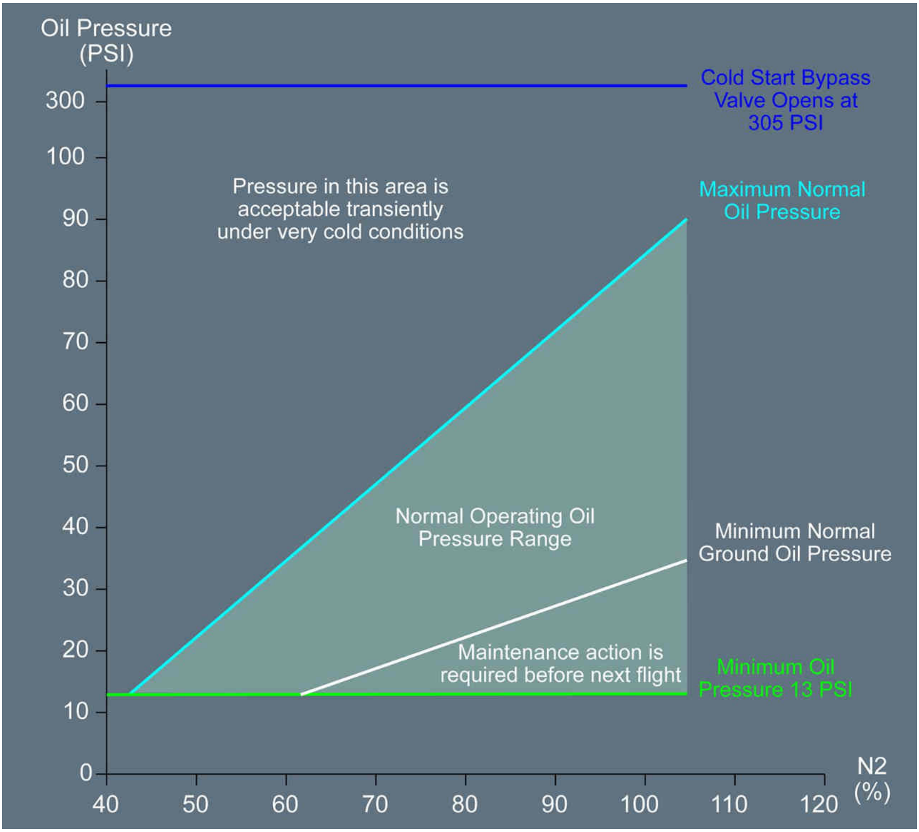
OIL QUANTITY

Minimum oil quantity.. 9.5 qt + estimated consumption

Average estimated consumption = 0.5 qt/h.

OIL PRESSURE

MIN/MAX Oil Pressure (ECAM Indication)



OIL

Ident.: LIM-ENG-00020354.0010001 / 10 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

OIL TEMPERATURE

Maximum continuous temperature.. 155 °C
Maximum transient temperature (15 min).. 165 °C
Minimum starting temperature... -40 °C

Minimum temperature before IDLE is exceeded.........-10 °C
Minimum temperature before takeoff......... 50 °C

OIL QUANTITY

Minimum oil quantity......... 11 qt + estimated consumption

Average estimated consumption = 0.3 qt/h.

MINIMUM OIL PRESSURE

Minimum oil pressure.........60 PSI

OIL

Ident.: LIM-ENG-00020354.0011001 / 03 NOV 21

3 **Applicable to: MSN 08495-09324, 10949-11597**

OIL TEMPERATURE

Maximum temperature.........151 °C
Minimum starting temperature.........-40 °C
Minimum temperature before takeoff......... 52 °C

OIL QUANTITY

Temperature	Minimum oil quantity
OAT at or above -30 °C	14 qt
OAT below -30 °C	16.5 qt

Note: *One of the following actions or oil system characteristics can cause indications of reduced oil quantity on the ENG SD page:*
- *If oil drains from the oil tank to the engine after oil servicing, or*
- *If an engine crank or an engine run is performed on the engine before the flight.*

As a result, if the oil quantity indicated on the ENG SD page is less than the minimum oil quantity defined above, perform one of the following:
- *Check that the oil tank level, that was reported in the technical logbook, is above the minimum oil quantity, or*
- *Check in the technical logbook that the oil tank was fully filled.*

MINIMUM OIL PRESSURE

Minimum oil pressure.........65 PSI

MAXIMUM OIL PRESSURE

Maximum oil pressure.........270 PSI

STARTER

Ident.: LIM-ENG-00020356.0004001 / 04 JUN 19
4 **Applicable to: MSN 08495-09324, 10949-11597**

- A standard automatic start that includes up to two start attempts, is considered one cycle
- For ground starts (automatic or manual), a 35 s pause is required between successive cycles
- A 15 min cooling period is required, subsequent to three failed cycles, or 15 min of continuous or cumulated crank
- The starter must not be run when N2 is above 20 %.

STARTER

Ident.: LIM-ENG-00020356.0002001 / 20 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

- A standard automatic start that includes only one start attempt, is considered one cycle
- For ground starts (automatic or manual), a 15 s pause is required between successive cycles
- A 30 min cooling period is required, subsequent to three failed cycles or 5 min of continuous crank
- For manual start, observe a two-minute maximum cycle time
- For crank, observe a 5 min maximum cycle time
- The starter must not be run when N2 is above 10 % on-ground and 18 % in-flight.

STARTER

Ident.: LIM-ENG-00020356.0001001 / 20 MAR 17
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-07098

- A standard automatic start that includes up to three start attempts, is considered one cycle
- For ground starts (automatic or manual), a 20 s pause is required between successive cycles
- A 15 min cooling period is required, subsequent to four failed cycles
- The starter must not be run when N2 is above 20 %.

REVERSE THRUST

Ident.: LIM-ENG-00020357.0001001 / 20 MAR 17
Applicable to: ALL

Selection of the reverse thrust is prohibited in flight.
Backing the aircraft with reverse thrust is not permitted.
Maximum reverse should not be used below 70 kt. Idle reverse is permitted down to aircraft stop.

REDUCED THRUST TAKEOFF

Ident.: TDU / LIM-ENG-10-00020362.0005001 / 20 MAR 17
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345
Impacted DU: 00020358 Flex Takeoff

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:

- Higher than TMAXFLEX, equal to ISA + 65 °C.

  Note: *When engine anti-ice is on, the flexible temperature is limited to ISA + 60 °C (TMAXFLEX).*

- Lower than the flat rating temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0050001 / 05 MAR 19
Applicable to: MSN 08495-09324

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:

- Higher than TMAXFLEX, equal to ISA + 49 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0046001 / 01 JUN 17
5 **Applicable to: MSN 10949-11522, 11572-11597**

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:
- Higher than TMAXFLEX, equal to ISA + 50 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

6 Ident.: LIM-ENG-10-00020358.0044001 / 01 JUN 17
Applicable to: MSN 11531

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:
- Higher than TMAXFLEX, equal to ISA + 49 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0002001 / 20 MAR 17
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345
Impacted by TDU: 00020362 Flex Takeoff

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:
- Higher than TMAXFLEX, equal to ISA + 65 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0004001 / 20 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:
- Higher than TMAXFLEX, equal to ISA + 55 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0006001 / 20 MAR 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:
- Higher than TMAXFLEX, equal to ISA + 42 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0008001 / 26 NOV 19
Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04827-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:
- Higher than TMAXFLEX, equal to ISA + 53 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0021001 / 20 MAR 17
Applicable to: MSN 03733, 04734-04756, 05005, 05097

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.

TFLEX cannot be:
- Higher than TMAXFLEX, equal to ISA + 60 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020358.0023001 / 20 MAR 17
Applicable to: MSN 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

FLEX TAKEOFF

Takeoff at reduced thrust, so-called as FLEX takeoff, is permitted only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).
Takeoff at reduced thrust is permitted with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.
FLEX takeoff is not permitted on contaminated runways.
The flexible takeoff thrust must never be below the MCT at ISA + 40 °C.

TFLEX cannot be:

- Higher than TMAXFLEX, equal to ISA + 43 °C.
- Lower than the flat temperature (TREF).
- Lower than the actual OAT.

Ident.: LIM-ENG-10-00020359.0001001 / 20 MAR 17
Applicable to: ALL

DERATED TAKEOFF

Selection of TOGA thrust is not permitted when a derated takeoff is performed, except when requested in any abnormal or emergency procedures.
The use of reduced thrust takeoff (FLEX takeoff) is not permitted in association with derated takeoff.
The use of derated takeoff is permitted regardless of the runway condition (dry, wet, or contaminated).

CROSSWIND OPERATION ON GROUND

Ident.: LIM-ENG-00020360.0003001 / 20 MAR 17
7 **Applicable to: MSN 08495-09324, 10949-11597**

ENGINE START

The engine is able to start in crosswind up to 35 kt.

CROSSWIND OPERATION ON GROUND

Ident.: LIM-ENG-00020360.0001001 / 20 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

This engine is able to start in crosswind up to 35 kt .

SOFT GO-AROUND

Ident.: LIM-ENG-00020363.0002001 / 04 DEC 17
8 **Applicable to: MSN 08495-09324, 10949-11597**

The use of GA SOFT mode is prohibited with one engine inoperative.

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LIMITATIONS

FLIGHT CONTROLS

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LIMITATIONS

FLIGHT CONTROLS

PRELIMINARY PAGES - TABLE OF CONTENTS

Flight Maneuvering Load Acceleration Limits........ A
Maximum Altitude Flaps/Slats Extended........ B
Maximum Flaps/Slats Speeds........ C
Use of Flight Controls........ D

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FLIGHT MANEUVERING LOAD ACCELERATION LIMITS

Ident.: LIM-F_CTL-00020162.0001001 / 17 MAR 17
Applicable to: ALL

Refer to LIM-AG-F_CTL Flight Maneuvering Load Acceleration Limits.

MAXIMUM ALTITUDE FLAPS/SLATS EXTENDED

Ident.: LIM-F_CTL-00020160.0001001 / 17 MAR 17
Applicable to: ALL

Maximum operating altitude with slats and/or flaps extended...20 000 ft

MAXIMUM FLAPS/SLATS SPEEDS

Ident.: LIM-F_CTL-00020163.0001001 / 17 MAR 17
Applicable to: ALL

Refer to LIM-AG-SPD Maximum Flaps/Slats Speeds.

USE OF FLIGHT CONTROLS

Ident.: LIM-F_CTL-00020000.0001001 / 17 MAR 17
Applicable to: ALL

CAUTION	Rapid and large alternating control inputs, especially in combination with large changes in pitch, roll or yaw (e.g. large sideslip angles) may result in structural failures at any speed.

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LIMITATIONS

FUEL

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PRELIMINARY PAGES - TABLE OF CONTENTS

Certified Fuel........A
Fuel Temperature........B
Fuel Temperature Limits when JP4 and JET B Fuels are Used........C
Maximum Allowed Fuel Imbalance........D
Minimum Fuel Quantity for Takeoff........E

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Localization Title	Toc Index	ID	Reason
LIM-FUEL Certified Fuel	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-FUEL Fuel Temperature	B	2	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
LIM-FUEL Maximum Allowed Fuel Imbalance	D	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
LIM-FUEL Maximum Allowed Fuel Imbalance	D	4	Effectivity update: The information now also applies to MSN 11531.

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CERTIFIED FUEL

Ident.: LIM-FUEL-00019707.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098

The fuel system is certified with: JET A, JET A1, JET B, JP4, JP5, JP8, N° 3 JET, RT, and TS-1, in accordance with engine manufacturers and fuel specifications.

CERTIFIED FUEL

Ident.: LIM-FUEL-00019707.0002001 / 17 MAR 17
1 **Applicable to: MSN 08495-09324, 10949-11597**

The fuel system is certified with: JET A, JET A1, JP5, JP8, N° 3 JET, RT, and TS-1, in accordance with engine manufacturers and fuel specifications.

FUEL TEMPERATURE

Ident.: LIM-FUEL-00019708.0001001 / 28 NOV 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173-07098

	JET A1/JP8/ N°3 JET	JET A	JP5	RT	TS-1	JET B	JP4
MINI	-43 °C	-36 °C (1)	-42 °C	-45 °C	-45 °C	-46 °C	-54 °C
MAXI	54 °C					49 °C	

(1) *For JET A only, if TAT reaches -34 °C, monitor the fuel temperature on the FUEL SD page, to ensure that it remains above -36 °C.*

Note: *The various types of fuel can be mixed in all proportions. However, in the case of fuel mixture, the minimum fuel specification values provided in the table above are no longer applicable.*

FUEL TEMPERATURE

Ident.: LIM-FUEL-00019708.0002001 / 28 NOV 17
2 **Applicable to: MSN 08495-09324, 10949-11597**

	JET A1/JP8/ N°3 JET	JET A	JP5	RT	TS-1
MINI	-43 °C	-36 °C (1)	-42 °C	-45 °C	-45 °C
MAXI	55 °C				

(1) *For JET A only, if TAT reaches -34 °C, monitor the fuel temperature on the FUEL SD page, to ensure that it remains above -36 °C.*

Note: *The various types of fuel can be mixed in all proportions. However, in the case of fuel mixture, the minimum fuel specification values provided in the table above are no longer applicable.*

FUEL TEMPERATURE

Ident.: LIM-FUEL-00019708.0003001 / 28 NOV 17
Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

	JET A1/JP8/ N°3 JET	JET A	JP5	RT	TS-1	JET B	JP4
MINI	-43 °C	-36 °C(1)	-42 °C	-45 °C	-45 °C	-46 °C	-54 °C
MAXI	54 °C						

(1) *For JET A only, if TAT reaches -34 °C, monitor the fuel temperature on the FUEL SD page, to ensure that it remains above -36 °C.*

Note: *The various types of fuel can be mixed in all proportions. However, in the case of fuel mixture, the minimum fuel specification values provided in the table above are no longer applicable.*

FUEL TEMPERATURE LIMITS WHEN JP4 AND JET B FUELS ARE USED

Ident.: LIM-FUEL-00019709.0001001 / 17 MAR 17
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173

If the wing fuel temperature exceeds 30 °C at engine start, the altitude must be limited to 35 000 ft until the center tank is empty.
If the wing fuel temperature exceeds 40 °C at engine start, the altitude must be limited to 30 000 ft until the center tank is empty.
If the wing fuel temperature exceeds 49 °C at engine start, the altitude must be limited to 25 000 ft until the center tank is empty.

Reason : At high altitude with high fuel temperature, the pressure supplied by the center tank pumps becomes lower than the pressure supplied by the wing tank pumps.

MAXIMUM ALLOWED FUEL IMBALANCE

Ident.: LIM-FUEL-00020435.0001001 / 17 MAR 17
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

The following tables indicate the maximum allowed wing imbalance at takeoff, in flight, and at landing.

FUEL IMBALANCE AT TAKEOFF

INNER TANKS (OUTER TANKS BALANCED)

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	500 kg (1 102 lb)
3 000 kg (6 613 lb)	1 050 kg (2 314 lb)
1 450 kg (3 196 lb)	1 450 kg (3 196 lb)

The variation is linear between these values.

OUTER TANKS (INNER TANKS BALANCED)

Maximum Asymmetry	370 kg (815 lb)

FUEL IMBALANCE IN FLIGHT AND AT LANDING

INNER TANKS (OUTER TANKS BALANCED)

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	1 500 kg (3 306 lb)
4 300 kg (9 479 lb)	1 600 kg (3 527 lb)
2 250 kg (4 960 lb)	2 250 kg (4 960 lb)

The variation is linear between these values, and there is no limitation below 2 250 kg (4 960 lb).

OUTER TANKS

Maximum Asymmetry	690 kg (1 521 lb)(1)

(1) *The maximum fuel imbalance in the outer wing fuel tanks (one full/one empty) is allowed provided that:*
- *The fuel quantity of the outer and inner wing fuel tanks of one side is equal to the fuel quantity of the outer and inner wing fuel tanks on the other side, or*
- *On the side of the lighter outer tank, the fuel quantity of the inner tank is more than the fuel quantity of the opposite inner tank. The difference between the fuel quantity in the inner tanks should not be more than 3 000 kg (6 613 lb).*

Note: *In exceptional conditions (i.e. fuel system failure), the above-mentioned values for maximum fuel imbalance may be exceeded without significant effect to the aircraft handling qualities. The aircraft remains fully controllable in all flight phases.*

MAXIMUM ALLOWED FUEL IMBALANCE

Ident.: LIM-FUEL-00020435.0004001 / 17 MAR 17

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662

The following tables indicate the maximum allowed wing imbalance at takeoff, in flight, and at landing.

FUEL IMBALANCE AT TAKEOFF

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	600 kg (1 323 lb)
3 400 kg (7 496 lb)	600 kg (1 323 lb)
1 200 kg (2 646 lb)	1 200 kg (2 646 lb)

The variation is linear between these values.

FUEL IMBALANCE IN FLIGHT AND AT LANDING

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	1 320 kg (2 910 lb)
4 000 kg (8 818 lb)	1 450 kg (3 196 lb)
2 350 kg (5 180 lb)	2 350 kg (5 180 lb)

The variation is linear between these values, and there is no limitation below 2 350 kg (5 180 lb).

Note: *In exceptional conditions (i.e. fuel system failure), the above-mentioned values for maximum fuel imbalance may be exceeded without significant effect to the aircraft handling qualities. The aircraft remains fully controllable in all flight phases.*

MAXIMUM ALLOWED FUEL IMBALANCE

Ident.: LIM-FUEL-00020435.0008001 / 17 MAR 17

4 **Applicable to: MSN 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

The following tables indicate the maximum allowed wing imbalance at takeoff, in flight, and at landing.

FUEL IMBALANCE AT TAKEOFF

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	400 kg (882 lb)
3 000 kg (6 614 lb)	400 kg (882 lb)
700 kg (1 543 lb)	700 kg (1 543 lb)

The variation is linear between these values.

FUEL IMBALANCE IN FLIGHT AND AT LANDING

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	1 320 kg (2 910 lb)
4 000 kg (8 818 lb)	1 450 kg (3 196 lb)
2 350 kg (5 180 lb)	2 350 kg (5 180 lb)

The variation is linear between these values, and there is no limitation below 2 350 kg (5 180 lb).

Note: *In exceptional conditions (i.e. fuel system failure), the above-mentioned values for maximum fuel imbalance may be exceeded without significant effect to the aircraft handling qualities. The aircraft remains fully controllable in all flight phases.*

MINIMUM FUEL QUANTITY FOR TAKEOFF

Ident.: LIM-FUEL-00019771.0001001 / 17 MAR 17
Applicable to: ALL

Minimum fuel quantity for takeoff..1 500 kg (3 307 lb)
The ECAM alerts that are related to fuel low level in the wing tanks (FUEL WING TK LO LVL, etc.) must not appear for takeoff.

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LIMITATIONS

ICE AND RAIN PROTECTION

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Definition of Icing Conditions.......A
Definition of Severe Ice Accretion.......B
Definition of Thin Hoarfrost.......C
Rain Repellent ....D
Wipers Maximum Operating Speed.......E

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DEFINITION OF ICING CONDITIONS

Ident.: LIM-ICE_RAIN-00020608.0001001 / 05 JUN 18
Applicable to: ALL

- Icing conditions exist when the OAT (on ground or after takeoff) or the TAT (in flight) is at or below 10 °C and visible moisture in any form is present (such as clouds, fog with visibility of 1 sm (1 600 m) or less, rain, snow, sleet or ice crystals).
- Icing conditions also exist when the OAT on the ground and for takeoff is at or below 10 °C and operating on ramps, taxiways or runways where surface snow, standing water or slush may be ingested by the engines, or freeze on engines, nacelles or engine sensor probes.

DEFINITION OF SEVERE ICE ACCRETION

Ident.: LIM-ICE_RAIN-00020609.0001001 / 17 MAR 17
Applicable to: ALL

Ice accretion is considered severe when the ice accumulation on the airframe reaches approximately 5 mm (0.2 in) thick or more.

DEFINITION OF THIN HOARFROST

Ident.: LIM-ICE_RAIN-00020610.0001001 / 17 MAR 17
Applicable to: ALL

Thin hoarfrost is typically a white crystalline deposit which usually develops uniformly on exposed surfaces on cold and cloudless nights.
It is so thin that surface features (lines or markings) can be distinguished beneath it.

RAIN REPELLENT ◁

Ident.: LIM-ICE_RAIN-00020224.0001001 / 17 MAR 17
Applicable to: ALL

The flight crew should only use the rain repellent in the case of moderate to heavy rain.

WIPERS MAXIMUM OPERATING SPEED

Ident.: LIM-ICE_RAIN-00020225.0001001 / 17 MAR 17
Applicable to: ALL

Refer to LIM-AG-SPD Wipers Maximum Operating Speed.

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LIMITATIONS

LANDING GEAR

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LIMITATIONS

LANDING GEAR

PRELIMINARY PAGES - TABLE OF CONTENTS

Braking System....A
Brake Temperature....B
Maximum Speeds with the Landing Gear Extended....C
Maximum Tire Speed....D
Nosewheel Steering (NWS)....E
Taxi with Deflated or Damaged Tires....F

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BRAKING SYSTEM

Ident.: LIM-LG-00020233.0001001 / 17 MAR 17
Applicable to: ALL

The braking system is not designed to hold the aircraft in a stationary position when a high thrust level is applied on at least one engine.
During ground procedures that require a thrust increase with braking, the flight crew must ensure that the aircraft remains stationary, and must be ready to immediately retard the thrust levers to IDLE.

BRAKE TEMPERATURE

Ident.: LIM-LG-00020255.0001001 / 17 MAR 17
Applicable to: ALL

Maximum brake temperature for takeoff (brake fans ✻ off)..300 °C

MAXIMUM SPEEDS WITH THE LANDING GEAR EXTENDED

Ident.: LIM-LG-00020237.0001001 / 17 MAR 17
Applicable to: ALL

Refer to LIM-AG-SPD Maximum Speeds with the Landing Gear Extended.

MAXIMUM TIRE SPEED

Ident.: LIM-LG-00020238.0001001 / 17 MAR 17
Applicable to: ALL

Refer to LIM-AG-SPD Maximum Tire Speed.

NOSEWHEEL STEERING (NWS)

Ident.: LIM-LG-00020236.0001001 / 12 SEP 17
Applicable to: ALL

For NWS angle limit, *Refer to DSC-20-30 Taxiing*.
Towbarless operation on the nose landing gear (towing and pushback) is approved when using the accepted towbarless towing vehicles listed in the Airbus WISE ISI 09.11.00001, with the following information:
Maximum NWS angle... ±85 °

TAXI WITH DEFLATED OR DAMAGED TIRES

Ident.: LIM-LG-00020235.0001001 / 01 JUN 17
Applicable to: ALL

To vacate the runway or taxi at low speed with tire(s) deflated (not damaged), all of the following limitations apply:

- If maximum one tire per gear is deflated (consider three gears)
  Maximum taxi speed during turn.......... 7 kt
- If two tires are deflated on the same main gear (maximum one main gear)
  Maximum taxi speed.......... 3 kt
- For the nosewheel steering (NWS) angle
  Maximum NWS angle.......... 30 °

In addition, if tire damage is suspected, the flight crew must ask for an aircraft inspection prior to vacate the runway or taxi. If the ground crew suspects that a tire burst may damage the landing gear, maintenance action is due.
For more information, *Refer to FCTM/PR-AEP-LG Taxi with Deflated or Damaged Tires*.

LIMITATIONS

NAVIGATION

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Inertial Reference System (IRS)........A

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LIMITATIONS

NAVIGATION

PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
LIM-NAV Inertial Reference System (IRS)	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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INERTIAL REFERENCE SYSTEM (IRS)

Ident.: LIM-NAV-00020081.0003001 / 17 MAR 17
Applicable to: MSN 02887

IR GROUND ALIGNMENT

Ground alignment of the IRS is possible in latitudes between 82 ° North and 82 ° South.

MAGNETIC (MAG) / TRUE REFERENCE

■ If all ADIRUs have the same magnetic variation table:

In NAV mode, the IR will not provide valid magnetic heading and magnetic track angle:
- North of 73 ° North, between 90 ° West and 120 ° West (magnetic polar region), and
- North of 82 ° North, and
- South of 60 ° South.

When flying at latitudes beyond these limits, the TRUE reference must be selected.

■ If one ADIRU has a different magnetic variation table:

In NAV mode, the IR will not provide valid magnetic heading and magnetic track angle:
- North of 60 ° North, between 30 ° West and 160 ° West, and
- North of 75 ° North, and
- South of 55 ° South.

Flying at latitudes beyond these limits is prohibited.

INERTIAL REFERENCE SYSTEM (IRS)

Ident.: LIM-NAV-00020081.0001001 / 17 MAR 17
Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734, 02896-03710, 03733-05987, 06097, 06121, 06139-09324

IR GROUND ALIGNMENT

Ground alignment of the IRS is possible in latitudes between 73 ° North and 73 ° South.

MAGNETIC (MAG) REFERENCE

■ If all ADIRUs have the same magnetic variation table:

In NAV mode, the IR will not provide valid magnetic heading and magnetic track angle:
- North of 73 ° North, and
- South of 60 ° South.

Flying at latitudes beyond these limits is prohibited.

■ If one ADIRU has a different magnetic variation table:

In NAV mode, the IR will not provide valid magnetic heading and magnetic track angle:
- North of 60 ° North, between 30 ° West and 160 ° West, and
- North of 73 ° North, and
- South of 55 ° South.

Flying at latitudes beyond these limits is prohibited.

INERTIAL REFERENCE SYSTEM (IRS)

Ident.: LIM-NAV-00020081.0002001 / 17 MAR 17

1 **Applicable to: MSN 01459, 10949-11597**

IR GROUND ALIGNMENT

Ground alignment of the IRS is possible in latitudes between 82 ° North and 82 ° South.

MAGNETIC (MAG) REFERENCE

■ If all ADIRUs have the same magnetic variation table:

In NAV mode, the IR will not provide valid magnetic heading and magnetic track angle:
- North of 73 ° North, between 90 ° West and 120 ° West (magnetic polar region), and
- North of 82 ° North, and
- South of 60 ° South.

Flying at latitudes beyond these limits is prohibited.

■ If one ADIRU has a different magnetic variation table:

In NAV mode, the IR will not provide valid magnetic heading and magnetic track angle:
- North of 60 ° North, between 30 ° West and 160 ° West, and
- North of 75 ° North, and
- South of 55 ° South.

Flying at latitudes beyond these limits is prohibited.

LIMITATIONS

OXYGEN

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Minimum Flight Crew Oxygen Pressure....A

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Localization Title	Toc Index	ID	Reason
LIM-OXY Minimum Flight Crew Oxygen Pressure	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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MINIMUM FLIGHT CREW OXYGEN PRESSURE

Ident.: LIM-OXY-00020232.0009001 / 17 MAR 17

1 **Applicable to: MSN 08495-09324, 10949-11597**

REF Temperature (1)		°C	-10	0	10	20	30	40	50
		°F	14	32	50	68	86	104	122
MIN CAPT Indication (PSI) (2)	CAPT		460	480	500	520	540	550	570
	CAPT + 3rd Occ.		650	680	700	730	750	780	800
MIN F/O Indication (PSI) (2)	F/O		460	480	500	520	540	550	570
	F/O + 4th Occ.		650	680	700	730	750	780	800

(1) *REF Temperature :*
- *On ground* : *REF Temperature = (OAT + Cockpit TEMP) / 2*
- *In flight* : *REF Temperature = CAB TEMP (°C) - 10 °C, or*
  REF Temperature = CAB TEMP (°F) - 18 °F

(2) *Minimum Bottle Pressure to Cover:*
- *Preflight checks*
- *The use of oxygen, when only one flight crewmember is in the cockpit*
- *Unusable quantity (to ensure regulator operation with minimum pressure)*
- *Normal system leakage*
- *The most demanding case among the following:*
  - *Protection after loss of cabin pressure, with mask regulator on NORMAL (diluted oxygen):*
    - *During emergency descent for all flight crewmembers and observers for 22 min*
    - *During cruise at FL 100 for two flight crewmembers for 98 min.*
  - *Protection against smoke with 100 % oxygen for all flight crewmembers and observers during 15 min at 8 000 ft cabin altitude.*

Note: *The above times that are based on the use of a sealed mask may be shorter for bearded crew (in terms of performance, pressure, or duration).*

MINIMUM FLIGHT CREW OXYGEN PRESSURE

Ident.: LIM-OXY-00020232.0002001 / 17 MAR 17
Applicable to: MSN 01459

REF Temperature (1)		**°C**	**-10**	**0**	**10**	**20**	**30**	**40**	**50**
		°F	**14**	**32**	**50**	**68**	**86**	**104**	**122**
MIN Bottle Pressure (PSI)(2)	2 Crewmembers		656	681	706	731	756	781	806
	2 Crewmembers + 1 OBS		861	893	926	959	992	1 024	1 057
	2 Crewmembers + 2 OBS		1 090	1 132	1 173	1 215	1 256	1 298	1 339

(1) *REF Temperature :*
- *On ground* : *REF Temperature = (OAT + Cockpit TEMP) / 2*
- *In flight* : *REF Temperature = CAB TEMP (°C) - 10 °C, or*
  REF Temperature = CAB TEMP (°F) - 18 °F

(2) *Minimum Bottle Pressure to Cover:*
- *Preflight checks*
- *The use of oxygen, when only one flight crewmember is in the cockpit*
- *Unusable quantity (to ensure regulator operation with minimum pressure)*
- *Normal system leakage*
- *The most demanding case among the following:*
  - *Protection after loss of cabin pressure, with mask regulator on NORMAL (diluted oxygen):*
    - *During emergency descent for all flight crewmembers and observers for 13 min*
    - *During cruise at FL 100 for two flight crewmembers for 107 min.*
  - *Protection against smoke with 100 % oxygen for all flight crewmembers and observers during 15 min at 8 000 ft cabin altitude.*

Note: *The above times that are based on the use of a sealed mask may be shorter for bearded crew (in terms of performance, pressure, or duration).*

MINIMUM FLIGHT CREW OXYGEN PRESSURE

Ident.: LIM-OXY-00020232.0003001 / 17 MAR 17

Applicable to: MSN 02014, 02734, 02896-03710, 03733-04544, 04570-04773, 04953-04974, 05066, 05101-05752

REF Temperature (1)		**°C**	**-10**	**0**	**10**	**20**	**30**	**40**	**50**
		°F	**14**	**32**	**50**	**68**	**86**	**104**	**122**
MIN Bottle Pressure (PSI)(2)	2 Crewmembers		468	486	504	522	540	558	576
	2 Crewmembers + 1 OBS		606	629	652	675	698	721	744
	2 Crewmembers + 2 OBS		759	788	817	846	875	904	933

(1) *REF Temperature :*

- *On ground* : *REF Temperature = (OAT + Cockpit TEMP) / 2*
- *In flight* : *REF Temperature = CAB TEMP (°C) - 10 °C, or*
  REF Temperature = CAB TEMP (°F) - 18 °F

(2) *Minimum Bottle Pressure to Cover:*

- *Preflight checks*
- *The use of oxygen, when only one flight crewmember is in the cockpit*
- *Unusable quantity (to ensure regulator operation with minimum pressure)*
- *Normal system leakage*
- *The most demanding case among the following:*
  - *Protection after loss of cabin pressure, with mask regulator on NORMAL (diluted oxygen):*
    - *During emergency descent for all flight crewmembers and observers for 13 min*
    - *During cruise at FL 100 for two flight crewmembers for 107 min.*
  - *Protection against smoke with 100 % oxygen for all flight crewmembers and observers during 15 min at 8 000 ft cabin altitude.*

Note: *The above times that are based on the use of a sealed mask may be shorter for bearded crew (in terms of performance, pressure, or duration).*

MINIMUM FLIGHT CREW OXYGEN PRESSURE

Ident.: LIM-OXY-00020232.0004001 / 17 MAR 17
Applicable to: MSN 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

REF Temperature (1)		**°C**	**-10**	**0**	**10**	**20**	**30**	**40**	**50**
		°F	**14**	**32**	**50**	**68**	**86**	**104**	**122**
MIN Bottle Pressure (PSI)(2)	2 Crewmembers		716	744	771	798	826	853	880
	2 Crewmembers + 1 OBS		874	907	940	974	1 007	1 040	1 073
	2 Crewmembers + 2 OBS		1 103	1 145	1 187	1 229	1 270	1 312	1 354

(1) *REF Temperature :*

- *On ground* : *REF Temperature = (OAT + Cockpit TEMP) / 2*
- *In flight* : *REF Temperature = CAB TEMP (°C) - 10 °C, or*
  REF Temperature = CAB TEMP (°F) - 18 °F

(2) *Minimum Bottle Pressure to Cover:*

- *Preflight checks*
- *The use of oxygen, when only one flight crewmember is in the cockpit*
- *Unusable quantity (to ensure regulator operation with minimum pressure)*
- *Normal system leakage*
- *The most demanding case among the following:*
  - *Protection after loss of cabin pressure, with mask regulator on NORMAL (diluted oxygen):*
    - *During emergency descent for all flight crewmembers and observers for 22 min*
    - *During cruise at FL 100 for two flight crewmembers for 98 min.*
  - *Protection against smoke with 100 % oxygen for all flight crewmembers and observers during 15 min at 8 000 ft cabin altitude.*

Note: *The above times that are based on the use of a sealed mask may be shorter for bearded crew (in terms of performance, pressure, or duration).*

MINIMUM FLIGHT CREW OXYGEN PRESSURE

Ident.: LIM-OXY-00020232.0007001 / 17 MAR 17

Applicable to: MSN 01143-01376, 01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02321, 02887, 04563, 04827-04860, 05005, 05097, 05883-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098

REF Temperature (1)		**°C**	**-10**	**0**	**10**	**20**	**30**	**40**	**50**
		°F	**14**	**32**	**50**	**68**	**86**	**104**	**122**
MIN Bottle Pressure (PSI)(2)	2 Crewmembers		509	529	548	567	587	606	626
	2 Crewmembers + 1 OBS		615	638	661	685	708	732	755
	2 Crewmembers + 2 OBS		768	798	827	856	885	915	944

(1) *REF Temperature :*

- *On ground* : *REF Temperature = (OAT + Cockpit TEMP) / 2*
- *In flight* : *REF Temperature = CAB TEMP (°C) - 10 °C, or*
  REF Temperature = CAB TEMP (°F) - 18 °F

(2) *Minimum Bottle Pressure to Cover:*

- *Preflight checks*
- *The use of oxygen, when only one flight crewmember is in the cockpit*
- *Unusable quantity (to ensure regulator operation with minimum pressure)*
- *Normal system leakage*
- *The most demanding case among the following:*
  - *Protection after loss of cabin pressure, with mask regulator on NORMAL (diluted oxygen):*
    - *During emergency descent for all flight crewmembers and observers for 22 min*
    - *During cruise at FL 100 for two flight crewmembers for 98 min.*
  - *Protection against smoke with 100 % oxygen for all flight crewmembers and observers during 15 min at 8 000 ft cabin altitude.*

Note: *The above times that are based on the use of a sealed mask may be shorter for bearded crew (in terms of performance, pressure, or duration).*

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LIMITATIONS

ROW/ROP

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LIMITATIONS

ROW/ROP

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ROW/ROP.......A

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Localization Title	Toc Index	ID	Reason
LIM-ROW_ROP ROW/ROP	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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ROW/ROP

Ident.: LIM-ROW_ROP-00016038.0011001 / 28 MAY 20
1 **Applicable to: MSN 10949-11597**

In the case of runways that are not validated for ROPS in the GPWS database, ROPS is inoperative. It is the operator's responsibility to inform the flight crews about the runways that are not validated for ROPS, along the scheduled route.
The ROPS function may be inhibited (ROW/ROP pb-sw set to OFF on SURV panel) for specific approach procedures which have previously been identified as potentially producing undue ROW alerts.
Operations where the FLD assessed during the descent preparation is greater than the LDA must not be conducted, unless specific authorization is obtained from the appropriate authority. For these runways, ROW alerts may be triggered if the ROPS is not inhibited (on the SURV panel, the ROW/ROP pb-sw is ON).
In the case of a failure that affects landing performance and/or the availability of the thrust reversers, ROPS does not prevent runway excursion.
If DRY runway condition is set for WET PFC/GROOVED runway, ROPS does not prevent runway excursion.
In any case, if ROPS alerts are triggered, the flight crew must immediately apply the ROPS procedures.

ROW/ROP

Ident.: LIM-ROW_ROP-00016038.0008001 / 04 JUN 19
Applicable to: MSN 08495-09324

In the case of runways that are not validated for ROPS in the GPWS database, ROPS is inoperative. It is the operator's responsibility to inform the flight crews about the runways that are not validated for ROPS, along the scheduled route.

The ROPS may be inhibited (TERR pb set to OFF on GPWS panel) when the aircraft position is less than 15 NM from the airfield:
- For specific approach procedures which have previously been identified as potentially producing undue ROW alerts.

Operations where the FLD assessed during the descent preparation is greater than the LDA must not be conducted, unless specific authorization is obtained from the appropriate authority. For these runways, ROW alerts may be triggered if the ROPS is not inhibited (on the GPWS panel, the TERR pb is kept ON).

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LIMITATIONS

SURVEILLANCE

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GPWS / Predictive GPWS ◁ .... A

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GPWS / PREDICTIVE GPWS ◁

Ident.: LIM-SURV-00019775.0001001 / 28 MAY 20
Applicable to: ALL

Aircraft navigation must not be based on the use of the terrain display .
The terrain display is intended to serve as a situation awareness tool only, and may not provide the accuracy on which to solely base terrain avoidance maneuvering.

The predictive GPWS ◁ functions should be inhibited (TERR pushbutton to OFF, on the GPWS panel) when the aircraft position is less than 15 NM from the airfield:
- For operations from/to runways not incorporated in the predictive GPWS database.
- For specific approach or departure procedures, which have previously been identified by the operator as potentially causing expected or spurious terrain alerts.

Note: *The decision to inhibit the predictive GPWS functions must not be based on flight crew judgement only.*

Only aircraft with Man-made Obstacle Function ◁ can display obstacles on ND and trigger alerts, based on a dedicated database which includes artificial obstacles worldwide.

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TEMPORARY ABNORMAL BEHAVIORS

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Temporary Abnormal Behaviors Table........A

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Localization Title	Toc Index	ID	Reason
TAB Loss of FMS Predictions in Low Density of Airports	A	7	Documentation update: Addition of "Loss of FMS Predictions in Low Density of Airports" documentary unit
TAB Erroneous Fuel Predictions in the case of Descent with two Altitude Constraints	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB AUTO FLT - Undue Reversion to V/S during Climb and Descent	A	2	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
TAB AUTO FLT - No Engagement of the PRESEL SPD TARGET in Climb	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Loss Of FMS Position Further To IRS Loss	A	4	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
TAB Erroneous Trajectory while in HDG (TRK) Mode during Procedures with a Turn Direction on a Leg with an Altitude Termination	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Erroneous CF Leg Computation following FMS NEW RUNWAY with LS IDENT creation	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Left Turn Not Expected while in HDG or TRK Mode	A	8	Effectivity update: The information no longer applies to MSN 03284, 03313, 03565, 03662, 04544, 04734.
TAB Spurious CAT 2 INOP	A	9	Effectivity update: The information now also applies to MSN 03284, 03313, 03565, 03662, 04544, 04734. The information no longer applies to MSN 06798, 06949, 07005, 07081, 07098.
TAB ATC MSG RECORD NOT RELIABLE - Displayed at ATSU Power-up	A	10	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
TAB Erroneous Detection of Engine Fuel Leak	A	11	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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TEMPORARY ABNORMAL BEHAVIORS TABLE

Ident.: TAB-TABT-00024331.0001001 / 17 MAY 21
Applicable to: ALL

The table below provides a list of all Temporary Abnormal Behaviors.

Ident.: TAB-TABT-00024332.0001001 / 17 MAY 21
Applicable to: ALL

System	Temporary Abnormal Behavior	Link

Ident.: TAB-TABT-00024333.0002001 / 17 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Incorrect Management of Speed Constraint for Arrival Procedure	*Refer to link*

Ident.: TAB-TABT-00024356.0002001 / 17 MAY 21
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

AUTO FLT	Erroneous Fuel Predictions in the case of Descent with Two Altitude Constraints	*Refer to link*

Ident.: TAB-TABT-00024358.0006001 / 17 MAY 21
2 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

AUTO FLT	Undue Reversion to V/S during Climb and Descent	*Refer to link*

Ident.: TAB-TABT-00024360.0003001 / 17 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Erroneous Lateral Guidance in NAV Mode with LOC Mode Armed during Approach	*Refer to link*

Ident.: TAB-TABT-00024361.0003001 / 17 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Erroneous Trajectory during Procedures with a Turn Direction on a Leg with an Altitude Termination	*Refer to link*

Ident.: TAB-TABT-00024362.0002001 / 17 MAY 21
3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

AUTO FLT	No Engagement of the PRESEL SPD TARGET in Climb	*Refer to link*

Ident.: TAB-TABT-00024363.0002001 / 17 MAY 21
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Erroneous Managed Approach Speed after Descent Wind Uplink	*Refer to link*

Ident.: TAB-TABT-00024365.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Misalignment of FMS F-PLN Legs for ILS Approaches	*Refer to link*

Ident.: TAB-TABT-00024366.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Incorrect Management of ETA Entry on Predictive GPS Page	*Refer to link*

Ident.: TAB-TABT-00024367.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Flight Number Erased upon AOC Flight Plan Uplink	*Refer to link*

Ident.: TAB-TABT-00024369.0001001 / 17 MAY 21

4 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

AUTO FLT	Loss of FMS Position further to IRS Loss	*Refer to link*

Ident.: TAB-TABT-00024370.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Unexpected Switch of Speed Target when RTA is used	*Refer to link*

Ident.: TAB-TABT-00024372.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	VOR/DME and VOR/TACAN not Automatically Tuned	*Refer to link*

Ident.: TAB-TABT-00024374.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Optimum Target Speeds not Updated following the Automatic Deletion of a Step Climb	*Refer to link*

Ident.: TAB-TABT-00024376.0002001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Undue Reduction of the Speed Target in case of DIR TO/ABEAM while Flying a Constant Mach Segment	*Refer to link*

Ident.: TAB-TABT-00024377.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Loss of Fuel and Time Predictions during Takeoff Data Insertion	*Refer to link*

Ident.: TAB-TABT-00024387.0001001 / 17 MAY 21

5 **Applicable to: MSN 10949-11597**

AUTO FLT	Erroneous Trajectory while in HDG (TRK) Mode during Procedures with a Turn Direction on a Leg with an Altitude Termination	*Refer to link*

Ident.: TAB-TABT-00024388.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Erroneous Vertical Profile during LOC B/C Approaches with a MAP Located Before the Runway Threshold	*Refer to link*

Ident.: TAB-TABT-00024389.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Erroneous Vertical Guidance in Approach Subsequent to a DIR TO Performed when Near the Top of Descent	*Refer to link*

Ident.: TAB-TABT-00024390.0001001 / 17 MAY 21

6 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324, 10949-11597**

AUTO FLT	Erroneous CF Leg Computation following FMS NEW RUNWAY with LS IDENT creation	*Refer to link*

Ident.: TAB-TABT-00024391.0001001 / 17 MAY 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-04773, 04953-05987, 06097, 06121, 06139-09324

AUTO FLT	Unexpected ILS Auto-tuning	*Refer to link*

7 Ident.: TAB-TABT-00026319.0001001 / 03 NOV 22

Applicable to: MSN 10949-11597

AUTO FLT	Loss of FMS Predictions in Low Density of Airports	*Refer to Link*

Ident.: TAB-TABT-00024395.0001001 / 17 MAY 21

Applicable to: MSN 04827-04860

AUTO FLT	MCDU Frozen after the Flight Crew Accesses the "DIR TO", "HOLD" or "OFFSET" Function	*Refer to link*

Ident.: TAB-TABT-00024399.0001001 / 17 MAY 21

Applicable to: MSN 04827-04860

AUTO FLT	Erroneous Cross Track Error/FD Display Orders after a DIR TO on Aligned Waypoint	*Refer to link*

Ident.: TAB-TABT-00024404.0001001 / 17 MAY 21

Applicable to: MSN 04827-04860

AUTO FLT	Erroneous Fuel Predictions in the case of Descent with Two Altitude Constraints	*Refer to link*

Ident.: TAB-TABT-00024409.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Erroneous Lateral Guidance in NAV Mode with LOC Mode Armed during Approach	*Refer to link*

Ident.: TAB-TABT-00024410.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Erroneous Trajectory Computation while in HDG/TRK Mode during Procedures with a Turn Direction on a Leg With an Altitude Termination	*Refer to link*

Ident.: TAB-TABT-00024412.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Uncommanded Climb near the Top of Descent (T/D)	*Refer to link*

Ident.: TAB-TABT-00024413.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Erroneous Altitude Constraint after SID or STAR Selection Change	*Refer to link*

Ident.: TAB-TABT-00024414.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Waypoint not Sequenced after DIR TO RADIAL IN	*Refer to link*

Ident.: TAB-TABT-00024415.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Unusable MIN DEST FOB Value in the Secondary Flight Plan	*Refer to link*

Ident.: TAB-TABT-00024416.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Unexpected DECELERATE displayed on MCDU (and T/D REACHED on PFD) during Climb	*Refer to link*

Ident.: TAB-TABT-00024417.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Missing or Incorrect Insert UPLINK Prompt on UPLINK T.O DATA Page	*Refer to link*

Ident.: TAB-TABT-00024418.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	FMS Reset upon crossing the 180th Meridian	*Refer to link*

Ident.: TAB-TABT-00024419.0001001 / 17 MAY 21
Applicable to: MSN 04827-04860

AUTO FLT	Dual FMS Reset with Loss of Data upon DIR TO/ABEAM Insertion with 3 STEP ALTS	*Refer to link*

Ident.: TAB-TABT-00024455.0001001 / 17 MAY 21
Applicable to: ALL

AUTO FLT	Misbehaviour of the Enhanced LOC Capture Function	*Refer to link*

Ident.: TAB-TABT-00024456.0001001 / 17 MAY 21
Applicable to: ALL

AUTO FLT	Unexpected G/S Mode Armed	*Refer to link*

Ident.: TAB-TABT-00024457.0001001 / 17 MAY 21
8 **Applicable to: MSN 01143-01251, 01801, 01826, 01855**

AUTO FLT	Left Turn Not Expected while in HDG or TRK Mode	*Refer to link*

Ident.: TAB-TABT-00024458.0001001 / 17 MAY 21
9 **Applicable to: MSN 01376, 01518, 01593-01628, 01825, 01832, 01837, 02014-02321, 02734-03710, 03733-05752, 06895**

AUTO FLT	Spurious CAT 2 INOP	*Refer to link*

Ident.: TAB-TABT-00024462.0001001 / 17 MAY 21
10 **Applicable to: MSN 02734, 02924, 03032-03710, 03733-05987, 06097, 06121, 06139-09324, 10949-11597**

DATALINK	ATC MSG RECORD NOT RELIABLE - Displayed at ATSU Power-Up	*Refer to link*

Ident.: TAB-TABT-00024726.0001001 / 17 MAY 21
Applicable to: ALL

DOORS	Erroneous Activation of the Cabin Pressure Warning Lights without Residual Differential Pressure	*Refer to link*

Ident.: TAB-TABT-00024725.0001001 / 17 MAY 21
11 **Applicable to: MSN 08495-09324, 10949-11597**

ENG	Erroneous Detection of Engine Fuel Leak	*Refer to link*

Ident.: TAB-TABT-00024632.0003001 / 17 MAY 21
Applicable to: MSN 08635

NAV	Undue inhibition of NAV BKUP SPD/ALT ON CAPT(F/O) PFD	*Refer to link*

Ident.: TAB-TABT-00024638.0003001 / 17 MAY 21
Applicable to: MSN 02014, 06561

TCAS	Undue NAV TCAS FAULT alert	*Refer to link*

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PERFORMANCE (EFB)

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EFB-LOD Loading

EFB-THR Thrust Ratings

EFB-TOF Takeoff

EFB-IFT In-Flight

EFB-LDG Landing

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI)**	NG00104	
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL**	00001679.0005001	23 JUN 15
	Criteria: 28-1106, J0006, J2257, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733**				
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL**	00001679.0006001	23 JUN 15
	Criteria: J0006, J2257, K2113, SA **Applicable to: MSN 03222-03229, 03294, 03761-03816**				
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL**	00001679.0007001	23 JUN 15
E	Criteria: J0006, J2257, J2963, SA **Applicable to: MSN 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL**	00001679.0008001	23 JUN 15
E	Criteria: J0006, J2257, J2963, K2113, SA **Applicable to: MSN 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE OUTER TANK**	00001692.0001001	03 NOV 21
E	Criteria: 28-1106, J2257, SA **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE WING TANK**	00009657.0001001	24 NOV 14
	Criteria: J2257, K2113 **Applicable to: MSN 03222-03229, 03294, 03761-03816**				
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE WING TANK**	00009657.0005001	24 NOV 14
E	Criteria: J2257, J2963, K2113 **Applicable to: MSN 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE INNER TANK**	00001680.0001001	03 NOV 21
	Criteria: J0006, SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733				
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE INNER TANK**	00001680.0003001	03 NOV 21
	Criteria: J0006, J2963, SA				
E	**Applicable to: MSN 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE CENTER TANK**	00009658.0001001	03 NOV 21
	Criteria: J0006				
	Applicable to: ALL				
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)**	00001681.0001001	17 MAR 11
	Criteria: SA				
	Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733				
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)**	00001681.0004001	17 MAR 11
	Criteria: J2963, SA				
E	**Applicable to: MSN 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**				
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)**	00001681.0003001	17 MAR 11
	Criteria: K2113, SA				
	Applicable to: MSN 03222-03229, 03294, 03761-03816				
E	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)**	00001681.0005001	17 MAR 11
	Criteria: J2963, K2113, SA				
E	**Applicable to: MSN 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**				
	EFB-LOD-FUL		**USE OF MANUAL MAGNETIC INDICATORS (MMI) - CENTER TANK (LITERS)**	00001682.0001001	16 NOV 11
	Criteria: J0006				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	EFB-THR-N1		**N1 MODE THRUST CONTROL**	00004648.0004001	05 NOV 19
	Criteria: G-V2524-A5 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	EFB-THR-N1		**N1 MODE THRUST CONTROL**	00004648.0010001	05 NOV 19
	Criteria: G-V2527-A5, G-V2527E-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	EFB-THR-N1		**N1 MODE THRUST CONTROL**	00004648.0008001	05 NOV 19
	Criteria: G-V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	EFB-THR-N1		**MAXIMUM TAKEOFF N1**	00001970.0002001	28 JAN 11
	Criteria: G-V2524-A5 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	EFB-THR-N1		**MAXIMUM TAKEOFF N1**	00001970.0005001	28 JAN 11
	Criteria: G-V2527-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02734, 02896-02904**				
	EFB-THR-N1		**MAXIMUM TAKEOFF N1**	00001970.0008001	28 JAN 11
	Criteria: G-V2527E-A5 **Applicable to: MSN 02014**				
	EFB-THR-N1		**MAXIMUM TAKEOFF N1**	00001970.0007001	27 JAN 15
	Criteria: G-V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	EFB-THR-N1		**MAXIMUM GO AROUND N1**	00004650.0006001	08 FEB 11
	Criteria: G-V2524-A5 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	EFB-THR-N1		**MAXIMUM GO AROUND N1**	00004650.0003001	08 FEB 11
	Criteria: G-V2527-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02734, 02896-02904**				
	EFB-THR-N1		**MAXIMUM GO AROUND N1**	00004650.0007001	08 FEB 11
	Criteria: G-V2527E-A5 **Applicable to: MSN 02014**				
	EFB-THR-N1		**MAXIMUM GO AROUND N1**	00004650.0005001	27 JAN 15
	Criteria: G-V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	EFB-THR-N1		**MAXIMUM CONTINUOUS N1**	00004651.0005001	09 DEC 09
	Criteria: 73-1075, 73-1082, G-V2524-A5, P7876, P8521 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				

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M[1]	Localization	T[2]	DU Title	DU identification	DU date
	EFB-THR-N1		**MAXIMUM CONTINUOUS N1**	00004651.0007001	09 DEC 09
	Criteria: 73-1075, 73-1082, G-V2527-A5, G-V2527E-A5, P7876, P8521 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	EFB-THR-N1		**MAXIMUM CONTINUOUS N1**	00004651.0010001	27 JAN 15
	Criteria: G-V2533-A5, P7876, P8521 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	EFB-THR-N1		**MAXIMUM CLIMB N1**	00004652.0003001	09 DEC 09
	Criteria: G-V2524-A5, P10447 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	EFB-THR-N1		**MAXIMUM CLIMB N1**	00004652.0004001	28 JUL 14
	Criteria: G-V2527-A5, G-V2527E-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	EFB-THR-N1		**MAXIMUM CLIMB N1**	00004652.0006001	27 JAN 15
	Criteria: G-V2533-A5, P10447 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				
	EFB-THR-N1		**MAXIMUM CRUISE N1**	00004653.0003001	09 DEC 09
	Criteria: G-V2524-A5 **Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	EFB-THR-N1		**MAXIMUM CRUISE N1**	00004653.0004001	09 DEC 09
	Criteria: G-V2527-A5, G-V2527E-A5 **Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904**				
	EFB-THR-N1		**MAXIMUM CRUISE N1**	00004653.0006001	27 JAN 15
	Criteria: G-V2533-A5 **Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	EFB-TOF-10		**General**	00022478.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-10		**Takeoff Parameters**	00022479.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-20-10		**TOGA Thrust**	00022493.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-20-20-10		**General**	00022494.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-20-20-20		**Flexible Takeoff Definition**	00022495.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-20-20-20		**Flexible Takeoff Principle**	00022497.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
E	EFB-TOF-20-20-20		**Flexible Takeoff Limitations**	00022498.0002001	28 NOV 19
	Criteria: G-CFM56-5B3, G-CFM56-5B4, G-CFM56-5B6, G-PW1127G-JM, G-PW1133G-JM, G-V2524-A5, G-V2527-A5, G-V2527E-A5, G-V2533-A5				
E	**Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098, 10949-11597**				
	EFB-TOF-20-20-30		**Derated Takeoff Principle**	00022500.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-20-20-30		**Derated Takeoff Limitation**	00022501.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-20-20-40		**Flexible Takeoff vs Derated Takeoff**	00022502.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-30-10		**Description**	00022480.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-30-10		**Performance Calculation**	00022481.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-30-20		**Descriptions**	00022482.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-30-20		**Performance Calculation**	00022483.0001001	15 NOV 21
	Criteria: SA				

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M[(1)]	Localization	T[(2)]	DU Title	DU identification	DU date
	Applicable to: ALL				
	EFB-TOF-30-30		**Descriptions**	00022484.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-30-30		**Performance Calculation**	00022485.0001001	03 NOV 22
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-30-30		**Restrictions**	00022486.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-40		**Takeoff with MEL or CDL Item**	00022487.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-TOF-50		**Takeoff Recommendations**	00022489.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	EFB-IFT-10 Criteria: SA **Applicable to: ALL**		**In-Flight Performance Calculation**	00022556.0001001	28 NOV 19
	EFB-IFT-20-10-10 Criteria: SA **Applicable to: ALL**		**General**	00022557.0001001	28 NOV 19
	EFB-IFT-20-10-20 Criteria: SA **Applicable to: ALL**		**Maximum Climb Thrust**	00022560.0001001	28 NOV 19
	EFB-IFT-20-20-10 Criteria: SA **Applicable to: ALL**		**Economic Mach Number (ECON Mach)**	00022561.0001001	28 NOV 19
	EFB-IFT-20-20-10 Criteria: SA **Applicable to: ALL**		**Long Range Cruise Speed (LRC)**	00022562.0001001	28 NOV 19
	EFB-IFT-20-20-10 Criteria: SA **Applicable to: ALL**		**Fixed Speed**	00022563.0001001	28 NOV 19
	EFB-IFT-20-20-10 Criteria: SA **Applicable to: ALL**		**Turbulence Speed**	00022564.0001001	28 NOV 19
	EFB-IFT-20-20-10 Criteria: SA **Applicable to: ALL**		**Maximum Speed**	00022565.0001001	28 NOV 19
	EFB-IFT-20-20-20 Criteria: SA **Applicable to: ALL**		**Definitions**	00022566.0001001	28 NOV 19
	EFB-IFT-20-20-20 Criteria: SA **Applicable to: ALL**		**Altitude Optimization**	00022567.0001001	28 NOV 19
	EFB-IFT-20-30 Criteria: SA **Applicable to: ALL**		**General**	00022568.0001001	28 NOV 19
	EFB-IFT-20-40 Criteria: IAE, SA, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**		**General**	00022569.0002001	05 MAY 22
E E	EFB-IFT-20-40 Criteria: SA, A320 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**		**General**	00022569.0001001	28 NOV 19

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	EFB-IFT-30		**One Engine Inoperative Strategies**	00022570.0001001	28 NOV 19
	Criteria: SA **Applicable to: ALL**				
	EFB-IFT-30		**Long Range Cruise Speed**	00022571.0001001	28 NOV 19
	Criteria: SA **Applicable to: ALL**				
	EFB-IFT-30		**EO MAX Altitude**	00022572.0001001	28 NOV 19
	Criteria: SA **Applicable to: ALL**				
	EFB-IFT-30		**Holding**	00022573.0002001	05 MAY 22
	Criteria: IAE, SA, A320 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165**				
E	EFB-IFT-30		**Holding**	00022573.0001001	28 NOV 19
E	Criteria: SA, A320 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**				

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

M(1)	Localization	T(2)	DU Title	DU identification	DU date
	EFB-LDG-10 Criteria: SA **Applicable to: ALL**		**General**	00022590.0001001	15 NOV 21
	EFB-LDG-10 Criteria: SA **Applicable to: ALL**		**Landing Parameters**	00022591.0001001	28 NOV 19
	EFB-LDG-20 Criteria: SA **Applicable to: ALL**		**Landing Speeds**	00022592.0001001	28 NOV 19
	EFB-LDG-20 Criteria: SA **Applicable to: ALL**		**Landing Distances Definitions**	00022593.0001001	15 NOV 21
	EFB-LDG-30 Criteria: SA **Applicable to: ALL**		**Dry Runway**	00022594.0001001	28 MAY 20
	EFB-LDG-30 Criteria: SA **Applicable to: ALL**		**Wet Runway**	00022595.0001001	15 NOV 21
	EFB-LDG-30 Criteria: SA **Applicable to: ALL**		**Contaminated Runway**	00022596.0001001	03 NOV 22
	EFB-LDG-30 Criteria: SA **Applicable to: ALL**		**Runway Condition Assessment Matrix for Landing**	00022597.0001001	15 NOV 21
	EFB-LDG-40 Criteria: SA **Applicable to: ALL**		**General**	00022598.0001001	28 NOV 19
	EFB-LDG-40 Criteria: SA **Applicable to: ALL**		**Dispatch on Dry Runway**	00022599.0001001	28 NOV 19
	EFB-LDG-40 Criteria: SA **Applicable to: ALL**		**Dispatch on Wet Runway**	00022600.0001001	28 NOV 19
	EFB-LDG-40 Criteria: SA **Applicable to: ALL**		**Dispatch on Contaminated Runway**	00022601.0001001	28 NOV 19
	EFB-LDG-40 Criteria: SA **Applicable to: ALL**		**Dispatch with MEL or CDL Item**	00022602.0001001	28 NOV 19
	EFB-LDG-40 Criteria: SA **Applicable to: ALL**		**In-Flight Landing Distance Crosscheck**	00022603.0001001	15 NOV 21

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	EFB-LDG-40		**ROW ⋞ Landing Distance Crosscheck**	00022715.0001001	28 MAY 20
	Criteria: SA				
	Applicable to: ALL				
E	EFB-LDG-40		**REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)**	00013208.0003001	18 MAR 11
	Criteria: 00-1059, G-CFM56-5B6, J0071, P6283				
E	**Applicable to: MSN 03733, 04734-04756, 05005, 05097**				
E	EFB-LDG-40		**REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)**	00013208.0002001	18 MAR 11
	Criteria: 00-1059, G-V2524-A5, J0071, P6283				
E	**Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345**				
	EFB-LDG-40		**REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)**	00013208.0001001	18 MAR 11
	Criteria: G-V2527-A5, J0071, P6283				
	Applicable to: MSN 01143-01376, 02734				
	EFB-LDG-40		**REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)**	00013208.0006001	18 MAR 11
	Criteria: G-CFM56-5B4, J0071, P6283				
	Applicable to: MSN 03180-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876				
	EFB-LDG-40		**REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)**	00013208.0005001	18 MAR 11
	Criteria: 22-1159, G-V2527-A5, J0071, P6283, P8211				
	Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904				
E	EFB-LDG-40		**REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)**	00019704.0007001	02 APR 19
	Criteria: G-PW1127G-JM, PW1129G-JM, P15599, P6283				
E	**Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**				
	EFB-LDG-50		**General**	00022605.0001001	15 NOV 21
	Criteria: SA				
	Applicable to: ALL				
	EFB-LDG-50		**Landing Performance without In-Flight Failure**	00022606.0001001	28 NOV 19
	Criteria: P4089, SA, 320-200				
	Applicable to: ALL				
	EFB-LDG-50		**Landing Performance following In-Flight Failure**	00022607.0001001	28 NOV 19
	Criteria: SA				
	Applicable to: ALL				
	EFB-LDG-50		**ROW ⋞ Landing Distance Crosscheck**	00022608.0001001	28 MAY 20
	Criteria: SA				

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M(1)	Localization	T(2)	DU Title	DU identification	DU date
	Applicable to: ALL				

(1) Evolution code : N=New, R=Revised, E=Effectivity
(2) Temporary information

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M	Localization	DU Title	DU identification	DU date

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PERFORMANCE (EFB)

LOADING

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EFB-LOD-FUL FUEL

USE OF MANUAL MAGNETIC INDICATORS (MMI).. A

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Localization Title	Toc Index	ID	Reason
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - GENERAL	A	2	Effectivity update: The information now also applies to MSN 11531.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE OUTER TANK	A	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE WING TANK	A	4	Effectivity update: The information now also applies to MSN 11531.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - TO DETERMINE FUEL QUANTITY IN THE INNER TANK	A	5	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)	A	6	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.
EFB-LOD-FUL USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS (LITERS)	A	7	Effectivity update: The information now also applies to MSN 11531.

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USE OF MANUAL MAGNETIC INDICATORS (MMI)

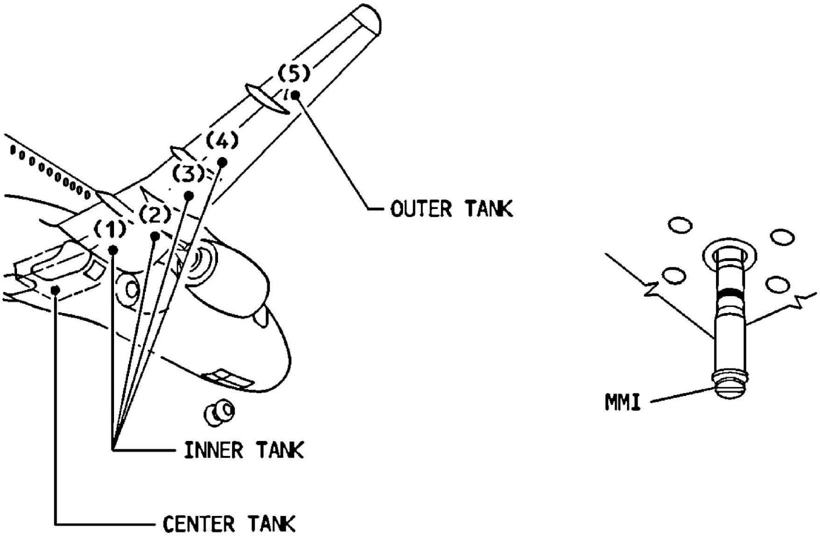
Ident.: EFB-LOD-FUL-C-00001679.0005001 / 23 JUN 15

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733

GENERAL

Indicators are disposed as follows:

- five in each wing tank, four in inner tank and one in outer tank
- one in the center tank



TO DETERMINE AIRCRAFT ATTITUDE

Set ADIRS 1, 2, 3 to the NAV position.
On the LH or RH MCDU, press MCDU MENU pushbutton.
Select CFDSline key (LSK 4L).
Select SYSTEM REPORT/TEST line key (LSK 5L).
Select the line key adjacent to the FUEL indication.
On the MCDU control panel, push the NEXT PAGE key to display the FUEL Main Menu second page.
Select the line key adjacent to the INPUT PARAMETERS VALUES indication.
Use the Table given on the next page to determine the equivalent number and letter from PITCH and ROLL data.
Select RETURN line key (LSK 6L) until CFDS main menu appears.
Press MCDU MENU pushbutton.

PITCH	REF	ROLL	REF
Minus 1.5	1	**Minus 1.5**	A
Minus 1.0	2	**Minus 1.0**	B
Minus 0.5	3	**Minus 0.5**	C
0.0	4	**0.0**	D
Plus 0.5	5	**Plus 0.5**	E
Plus 1.0	6	**Plus 1.0**	F
Plus 1.5	7	**Plus 1.5**	G

Note: *1. This procedure can only be used if:*

- *The PITCH and ROLL data is taken from the ADIRS (identified by an “A” after the PITCH and ROLL title).*
- *The PITCH data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*
- *The ROLL data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*

2. The FQIS input parameters are not automatically updated. Use the NEXT PAGE control on the MCDU to cycle the pages to update the screen.

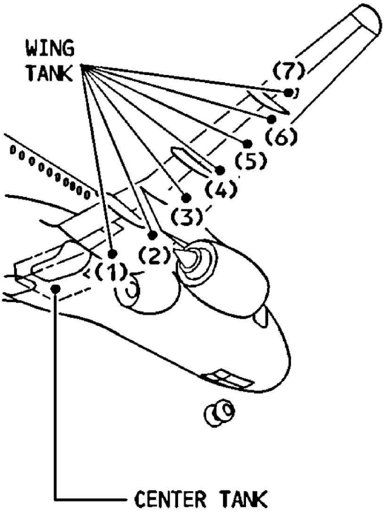
ACCESS PLATFORM..IN POSITION

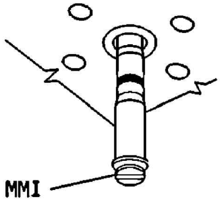
Ident.: EFB-LOD-FUL-C-00001679.0006001 / 23 JUN 15
Applicable to: MSN 03222-03229, 03294, 03761-03816

GENERAL

Indicators are disposed as follows :

- seven in each wing tank,
- one in the center tank





TO DETERMINE AIRCRAFT ATTITUDE

Set ADIRS 1, 2, 3 to the NAV position.
On the LH or RH MCDU, press MCDU MENU pushbutton.
Select CFDSline key (LSK 4L).
Select SYSTEM REPORT/TEST line key (LSK 5L).
Select the line key adjacent to the FUEL indication.
On the MCDU control panel, push the NEXT PAGE key to display the FUEL Main Menu second page.
Select the line key adjacent to the INPUT PARAMETERS VALUES indication.
Use the Table given on the next page to determine the equivalent number and letter from PITCH and ROLL data.
Select RETURN line key (LSK 6L) until CFDS main menu appears.
Press MCDU MENU pushbutton.

PITCH	REF	ROLL	REF
Minus 1.5	1	**Minus 1.5**	A
Minus 1.0	2	**Minus 1.0**	B
Minus 0.5	3	**Minus 0.5**	C
0.0	4	**0.0**	D
Plus 0.5	5	**Plus 0.5**	E
Plus 1.0	6	**Plus 1.0**	F
Plus 1.5	7	**Plus 1.5**	G

Note: *1. This procedure can only be used if :*
- *The PITCH and ROLL data is taken from the ADIRS (Make sure that the FQIS Status page does not show "NO DATA FROM ADIRU 1" and "NO DATA FROM ADIRU 2").*
- *The PITCH data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*
- *The ROLL data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*

2. The FQIS input parameters are not automatically updated every 5.50 s

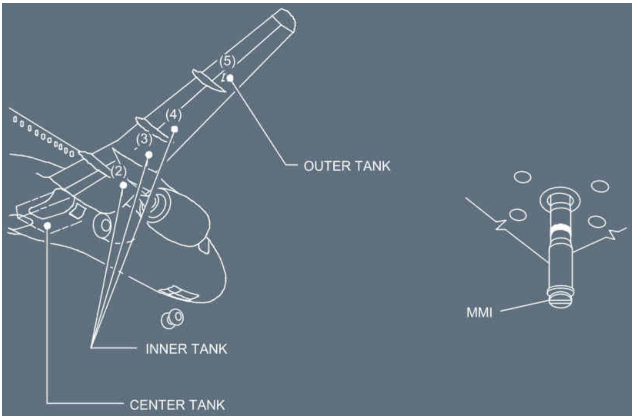
ACCESS PLATFORM..IN POSITION

Ident.: EFB-LOD-FUL-C-00001679.0007001 / 23 JUN 15

1 **Applicable to: MSN 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

GENERAL

Indicators are installed as follows:
- Four in each wing tank: Three in the inner tank and one in the outer tank
- One in the center tank



TO DETERMINE AIRCRAFT ATTITUDE

Set ADIRS 1, 2, 3 to the NAV position.
On the LH or RH MCDU, press MCDU MENU pushbutton.
Select CFDS line key (LSK 4L).
Select SYSTEM REPORT/TEST line key (LSK 5L).
Select the line key adjacent to the FUEL indication.
On the MCDU control panel, push the NEXT PAGE key to display the FUEL Main Menu second page.
Select the line key adjacent to the INPUT PARAMETERS VALUES indication.
Use the Table given on the next page to determine the equivalent number and letter from PITCH and ROLL data.
Select RETURN line key (LSK 6L) until CFDS main menu appears.
Press MCDU MENU pushbutton.

PITCH	REF	ROLL	REF
Minus 1.5	1	**Minus 1.5**	A
Minus 1.0	2	**Minus 1.0**	B
Minus 0.5	3	**Minus 0.5**	C
0.0	4	**0.0**	D
Plus 0.5	5	**Plus 0.5**	E
Plus 1.0	6	**Plus 1.0**	F
Plus 1.5	7	**Plus 1.5**	G

Note: *1. This procedure can only be used if:*

- *The PITCH and ROLL data is taken from the ADIRS (identified by an “A” after the PITCH and ROLL title).*
- *The PITCH data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*
- *The ROLL data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*

2. The FQIS input parameters are not automatically updated. Use the NEXT PAGE control on the MCDU to cycle the pages to update the screen.

ACCESS PLATFORM...IN POSITION

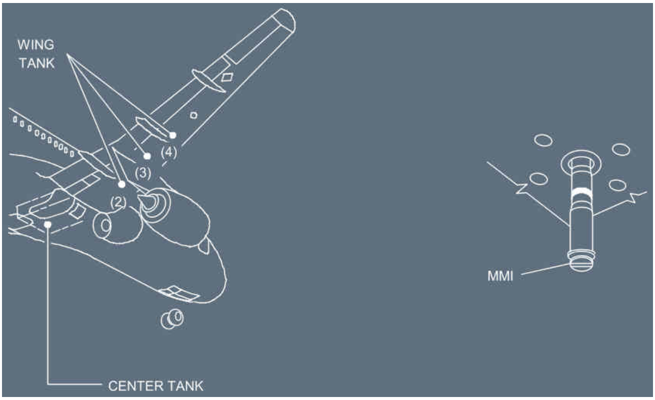
Ident.: EFB-LOD-FUL-C-00001679.0008001 / 23 JUN 15

2 **Applicable to: MSN 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

GENERAL

Indicators are installed as follows:

- Three in each wing tank
- One in the center tank



TO DETERMINE AIRCRAFT ATTITUDE

Set ADIRS 1, 2, 3 to the NAV position.
On the LH or RH MCDU, press MCDU MENU pushbutton.
Select CFDSline key (LSK 4L).
Select SYSTEM REPORT/TEST line key (LSK 5L).
Select the line key adjacent to the FUEL indication.
On the MCDU control panel, push the NEXT PAGE key to display the FUEL Main Menu second page.
Select the line key adjacent to the INPUT PARAMETERS VALUES indication.
Use the Table given on the next page to determine the equivalent number and letter from PITCH and ROLL data.
Select RETURN line key (LSK 6L) until CFDS main menu appears.
Press MCDU MENU pushbutton.

PITCH	REF	ROLL	REF
Minus 1.5	1	**Minus 1.5**	A
Minus 1.0	2	**Minus 1.0**	B
Minus 0.5	3	**Minus 0.5**	C
0.0	4	**0.0**	D
Plus 0.5	5	**Plus 0.5**	E
Plus 1.0	6	**Plus 1.0**	F
Plus 1.5	7	**Plus 1.5**	G

Note: *1. This procedure can only be used if:*

- *The PITCH and ROLL data is taken from the ADIRS (identified by an “A” after the PITCH and ROLL title).*
- *The PITCH data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*
- *The ROLL data displayed for the LEFT, CTR, and RIGHT is no more or less than 0.1 of each other.*

2. The FQIS input parameters are not automatically updated. Use the NEXT PAGE control on the MCDU to cycle the pages to update the screen.

ACCESS PLATFORM...IN POSITION

Ident.: EFB-LOD-FUL-C-00001692.0001001 / 03 NOV 21

3 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733, 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

TO DETERMINE FUEL QUANTITY IN THE OUTER TANK

MMI number 5...UNLOCK and WITHDRAW

The flight crew must withdraw the MMI slowly until the flight crew feels the magnetic attraction between the rod and float magnets.
Do not use force when withdrawing the MMI as this will disengage the float magnet from the rod magnet and bring the rod down onto the mechanical stop.

ROD GRADUATION (which aligns with bottom wing surface)..READ
MMI...IN PLACE and LOCKED
Use the table for the applicable aircraft wing side, aircraft attitude (grid square letter and number), and the MMI stick number 5, to find the volume of fuel in the outer tank (See below).
Multiply the result by the specific gravity to find the fuel weight.

Note: The manual magnetic indication accuracy is around 5 %.

Ident.: EFB-LOD-FUL-C-00009657.0001001 / 24 NOV 14

Applicable to: MSN 03222-03229, 03294, 03761-03816

TO DETERMINE FUEL QUANTITY IN THE WING TANK

MMI (from number 7 to number 1)...UNLOCK and WITHDRAW

The crewmember must slowly withdraw the MMI, until magnetic attraction is felt between the rod and float magnets.
Do not use force when withdrawing the MMI, as this will disengage the float magnet from the rod magnet, and bring the rod down on to the mechanical stop.

ROD GRADUATION (which aligns with bottom wing surface)..READ

MMIs shall be withdrawn from number 7 to number 1 until one MMI measures fuel.

MMI...IN PLACE and LOCKED
Enter the table for the applicable aircraft wing side, aircraft attitude (grid square letter and number), and the applicable MMI stick number, to find the volume of fuel in the wing tank (See below).
Multiply the result by the specific gravity to find the fuel weight.

Note: The manual magnetic indication accuracy is around 5 %.

Ident.: EFB-LOD-FUL-C-00009657.0005001 / 24 NOV 14

4 **Applicable to: MSN 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

TO DETERMINE FUEL QUANTITY IN THE WING TANK

MMI (from number 4 to number 2)....................UNLOCK and WITHDRAW

The crewmember must slowly withdraw the MMI, until magnetic attraction is felt between the rod and float magnets.
Do not use force when withdrawing the MMI, as this will disengage the float magnet from the rod magnet, and bring the rod down on to the mechanical stop.

ROD GRADUATION (which aligns with bottom wing surface)....................READ

MMIs shall be withdrawn from number 4 to number 2 until one MMI measures fuel.

MMI....................IN PLACE and LOCKED

Enter the table for the applicable aircraft wing side, aircraft attitude (grid square letter and number), and the applicable MMI stick number, to find the volume of fuel in the wing tank (See below).
Multiply the result by the specific gravity to find the fuel weight.

Note: *The manual magnetic indication accuracy is around 5 %.*

Ident.: EFB-LOD-FUL-C-00001680.0001001 / 03 NOV 21

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733

TO DETERMINE FUEL QUANTITY IN THE INNER TANK

MMI (from number 4 to number 1)....................UNLOCK and WITHDRAW

The flight crew must withdraw the MMI slowly until the flight crew feels the magnetic attraction between the rod and float magnets.
Do not use force when withdrawing the MMI as this will disengage the float magnet from the rod magnet and bring the rod down onto the mechanical stop.

ROD GRADUATION (which aligns with bottom wing surface)....................READ
MMI....................IN PLACE and LOCKED

MMIs shall be withdrawn from number 4 to number 1 until one MMI measures fuel.

Use the table for the applicable aircraft wing side, aircraft attitude (grid square letter and number), and the applicable MMI stick number to find the volume of fuel in the inner tank (Refer to FCOM - PER.LOD.FUL FUEL. C.USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS).
Multiply the result by the specific gravity to find the fuel weight.

Note: *The manual magnetic indication accuracy is around 5 %.*

Ident.: EFB-LOD-FUL-C-00001680.0003001 / 03 NOV 21

5 **Applicable to: MSN 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

TO DETERMINE FUEL QUANTITY IN THE INNER TANK

MMI (from number 4 to number 2)..UNLOCK and WITHDRAW

The flight crew must withdraw the MMI slowly until the flight crew feels the magnetic attraction between the rod and float magnets.
Do not use force when withdrawing the MMI as this will disengage the float magnet from the rod magnet and bring the rod down onto the mechanical stop.

ROD GRADUATION (which aligns with bottom wing surface)..READ
MMI.. IN PLACE and LOCKED

MMIs shall be withdrawn from number 4 to number 2 until one MMI measures fuel.

Use the table for the applicable aircraft wing side, aircraft attitude (grid square letter and number), and the applicable MMI stick number to find the volume of fuel in the inner tank (Refer to FCOM - PER.LOD.FUL FUEL. C.USE OF MANUAL MAGNETIC INDICATORS (MMI) - WING TANKS).
Multiply the result by the specific gravity to find the fuel weight.

Note: *The manual magnetic indication accuracy is around 5 %.*

Ident.: EFB-LOD-FUL-C-00009658.0001001 / 03 NOV 21
Applicable to: ALL

TO DETERMINE FUEL QUANTITY IN THE CENTER TANK

CENTER TANK MMI...UNLOCK and WITHDRAW

The flight crew member must withdraw the MMI slowly until the flight crew feels the magnetic attraction between the rod and float magnets.
Do not use force when withdrawing the MMI as this will disengage the float magnet from the rod magnet and bring the rod down onto the mechanical stop.

ROD GRADUATION (which aligns with bottom wing surface)..READ
MMI.. IN PLACE and LOCKED
Use the table for the center tank, and for the applicable aircraft attitude (grid square letter and number) to find the volume of fuel in the center tank (See below).
Multiply the result by the specific gravity to find the fuel weight.

Note: *The manual magnetic indication accuracy is around 5 %.*

Ident.: EFB-LOD-FUL-C-00001681.0001001 / 17 MAR 11

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03211, 03266-03284, 03313-03710, 03733

WING TANKS (LITERS)

MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		A*	LEFT WING			G	RIGHT WING			A	RIGHT WING			G	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7**
1	2	50	50	50	50	50	50	50	2	50	50	50	50	50	50	50
	4	100	100	100	100	100	100	100	4	50	50	50	50	50	50	50
	6	100	100	100	100	100	100	100	6	100	100	100	100	100	100	100
	8	150	150	150	150	150	150	150	8	150	150	150	150	150	150	150
	10	200	200	200	200	200	200	200	10	200	200	200	200	200	200	150
	12	250	250	250	250	250	250	250	12	250	250	250	250	250	250	200
	14	300	300	300	300	300	300	300	14	300	300	300	300	300	300	250
	16	350	350	350	350	350	350	350	16	350	350	350	350	350	350	300
	18	450	450	450	450	450	400	400	18	400	400	400	400	400	400	350
	20	500	500	500	500	500	500	500	20	450	450	450	450	450	450	400
	22	550	550	550	550	550	550	550	22	500	500	500	500	500	500	450
	24	650	650	650	650	650	650	600	24	550	550	550	550	550	550	550
	26	750	750	750	750	750	700	700	26	650	650	650	650	650	650	600
	28	800	800	800	800	800	800	800	28	700	700	700	700	700	700	700
	30	900	900	900	900	900	900	900	30	800	800	800	800	800	800	750
	32	1050	1050	1050	1050	1050	1000	1000	32	900	900	900	900	850	850	850
	34	1150	1150	1150	1150	1150	1150	1100	34	950	950	950	950	950	950	950
	36	1250	1250	1250	1250	1250	1250	1250	36	1050	1050	1050	1050	1050	1050	1050
	38	1350	1350	1350	1350	1350	1350	1350	38	1150	1150	1150	1150	1150	1150	1150
	40	1500	1500	1500	1500	1500	1500	1500	40	1250	1250	1250	1250	1250	1250	1250
	42	1600	1600	1600	1600	1600	1600	1600	42	1350	1350	1350	1350	1350	1350	1350
	44	1750	1750	1750	1750	1750	1750	1750	44	1450	1450	1450	1450	1450	1450	1450
	46	1900	1900	1900	1900	1900	1900	1900	46	1550	1550	1550	1550	1550	1550	1550
	48	2000	2000	2000	2000	2000	2000	2050	48	1700	1700	1700	1700	1700	1700	1700
	50	2200	2200	2200	2200	2200	2200	2200	50	1800	1800	1800	1800	1800	1800	1800
	52	2350	2350	2350	2350	2350	2350	2400	52	1950	1950	1950	1950	1950	1950	1950
	54	2500	2500	2500	2500	2500	2550	2550	54	2000	2000	2050	2050	2050	2050	2050
	56	2650	2650	2700	2700	2700	2650	2700	56	2200	2200	2200	2200	2200	2200	2200
	58	2800	2800	2800	2800	2850	2850	2850	58	2300	2300	2300	2300	2300	2350	2350
	60	2950	2950	2950	3000	3000	3050	3050	60	2450	2500	2500	2500	2500	2500	2500
	62	3100	3100	3150	3150	3150	3200	3250	62	2600	2600	2650	2650	2650	2650	2650
	63	3150	3150	3200	3200	3250	3300	3350	63	2650	2650	2700	2700	2700	2700	2700
	MAX	3450	3450	3450	3500	3500	3600	3600	MAX	2950	2950	2950	2950	2950	3000	3000

* GRID SQUARE LETTER

** GRID SQUARE NUMBER

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		A	LEFT WING			G	RIGHT WING			A	RIGHT WING			G	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
2	2	2300	2250	2200	2200	2200	2200	2200	2	2850	2850	2850	2850	2850	2850	2800
	4	2500	2450	2400	2400	2350	2350	2350	4	3050	3050	3050	3050	3050	3000	3000
	6	2650	2600	2600	2600	2550	2500	2500	6	3200	3200	3200	3200	3200	3200	3150
	8	2750	2750	2750	2700	2700	2650	2650	8	3300	3300	3300	3300	3300	3300	3250
	10	2900	2900	2900	2900	2850	2850	2850	10	3500	3500	3500	3500	3450	3450	3400
	12	3100	3100	3100	3100	3100	3050	3000	12	3650	3650	3600	3600	3600	3600	3600
	14	3250	3250	3250	3250	3250	3250	3200	14	3800	3800	3750	3750	3750	3750	3750
	16	3450	3450	3450	3450	3450	3400	3400	16	3950	3900	3900	3900	3900	3900	3900
	18	3700	3650	3650	3650	3650	3600	3600	18	4050	4050	4050	4050	4050	4050	4050
	20	3900	3900	3900	3900	3850	3850	3850	20	4200	4200	4200	4200	4200	4200	4200
	22	4100	4100	4050	4050	4050	4050	4050	22	4250	4250	4250	4300	4300	4300	4300
	24	4300	4300	4300	4300	4300	4300	4300	24	4400	4400	4400	4400	4450	4450	4450
	26	4500	4500	4500	4500	4500	4500	4550	26	4500	4500	4550	4550	4550	4600	4600
	28	4700	4700	4750	4750	4750	4750	4750	28	4600	4650	4650	4700	4700	4750	4800
	30	4950	4950	4950	4950	5000	5000	5000	30	4750	4750	4800	4800	4850	4850	4900
	32	5100	5100	5150	5150	5150	5200	5200	32	4850	4850	4900	4900	4950	5000	5000
	MAX								MAX							
3																
	2	4400	4350	4300	4250	4200	4150	4050	2	5050	5050	5100	5100	5100	5100	5100
	4	4700	4700	4650	4600	4500	4400	4300	4	5150	5150	5200	5200	5200	5200	5200
	6	4950	4950	4900	4850	4800	4700	4550	6	5250	5250	5300	5300	5300	5300	5300
	8	5150	5100	5100	5050	5000	4950	4800	8	5350	5350	5400	5400	5400	5400	5400
	10	5250	5250	5250	5250	5200	5150	5050	10	5450	5450	5500	5500	5500	5500	5500
	12	5400	5400	5400	5400	5350	5300	5250	12	5500	5500	5550	5600	5600	5600	5650
	14	5600	5600	5550	5550	5500	5500	5450	14	5600	5650	5650	5700	5700	5700	5750
	16	5750	5750	5700	5700	5700	5650	5600	16	5650	5700	5700	5750	5750	5800	5800
	18	5900	5900	5850	5850	5850	5850	5800	18	5800	5800	5850	5850	5900	5900	5950
	20	6000	6000	6000	6000	6000	6000	6000	20	5900	5900	5950	5950	6000	6000	6050
4																
	2	5700	5600	5550	5500	5450	5400	5300	2	6000	6050	6100	6100	6100	6100	6100
	4	5850	5750	5700	5650	5600	5550	5500	4	6100	6100	6150	6150	6150	6200	6200
	6	6000	5900	5850	5800	5750	5700	5650	6	6200	6200	6200	6250	6250	6250	6300
	8	6150	6100	6050	6000	5950	5900	5850	8	6250	6300	6300	6350	6350	6350	6400
	10	6300	6300	6250	6200	6150	6150	6100	10	6350	6400	6400	6400	6450	6450	6450
	12	6450	6400	6400	6400	6350	6300	6250	12	6450	6450	6450	6500	6500	6550	6550
	14	6550	6500	6500	6500	6500	6450	6450	14	6500	6550	6550	6550	6600	6600	6650
	16	6600	6600	6600	6600	6600	6600	6550	16	6600	6600	6600	6650	6650	6700	6750
	18	6650	6650	6650	6650	6650	6650	6650	18	6650	6700	6700	6750	6750	6750	6800
	MAX								MAX							
5																
	2	650	600	550	550	550	500	500	2	700	700	700	700	700	700	700
	4	700	650	650	600	600	550	550	4	750	750	750	750	750	750	750
	6	750	700	700	650	650	650	600	6	800	800	800	800	750	750	750
	8	750	750	750	750	700	700	700	8	800	800	800	800	800	800	800
	10	800	800	800	750	750	750	750	10	850	850	850	850	850	850	850
	12	800	800	800	800	800	800	800	12	850	850	850	850	850	850	850
	14	850	850	850	850	850	850	850	14	850	850	850	850	850	850	850
	MAX	850	850	850	850	850	850	850	MAX	850	850	850	850	850	850	850

MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		B*	LEFT WING			F	RIGHT WING			B	RIGHT WING			F	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7**
1	2	50	50	50	50	50	50	50	2	50	50	50	50	50	50	50
	4	50	50	50	50	50	50	50	4	50	50	50	50	50	50	50
	6	100	100	100	100	100	100	100	6	100	100	100	100	100	100	100
	8	150	150	150	150	150	150	150	8	150	150	150	150	150	150	150
	10	200	200	200	200	200	200	200	10	200	200	200	200	200	200	150
	12	250	250	250	250	250	250	250	12	250	250	250	250	250	250	200
	14	300	300	300	300	300	300	300	14	300	300	300	300	300	300	250
	16	350	350	350	350	360	350	350	16	350	350	350	350	350	350	300
	18	400	400	400	400	400	400	400	18	400	400	400	400	400	400	350
	20	450	450	450	450	450	450	450	20	450	450	450	450	450	450	450
	22	550	550	550	550	550	550	550	22	500	500	500	500	500	500	500
	24	600	600	600	600	600	600	600	24	550	550	550	550	550	550	550
	26	700	700	700	700	700	700	700	26	650	650	650	650	650	650	650
	28	800	800	800	800	800	800	800	28	700	700	700	700	700	700	700
	30	900	900	900	900	900	900	850	30	800	800	800	800	800	800	800
	32	1000	1000	1000	1000	1000	1000	950	32	900	900	900	900	900	900	850
	34	1100	1100	1100	1100	1100	1100	1100	34	1000	1000	1000	1000	950	950	950
	36	1200	1200	1200	1200	1200	1200	1200	36	1100	1100	1100	1100	1050	1050	1050
	38	1300	1300	1300	1300	1300	1300	1300	38	1200	1200	1200	1200	1200	1150	1150
	40	1450	1450	1450	1450	1450	1450	1450	40	1300	1300	1300	1300	1300	1300	1300
	42	1550	1550	1550	1550	1550	1550	1550	42	1400	1400	1400	1400	1400	1400	1400
	44	1700	1700	1700	1700	1700	1700	1700	44	1500	1500	1500	1500	1500	1500	1500
	46	1800	1800	1800	1800	1800	1800	1800	46	1600	1600	1600	1600	1600	1600	1600
	48	1950	1950	1950	1950	1950	1950	1950	48	1700	1700	1700	1700	1700	1700	1700
	50	2100	2100	2100	2100	2100	2100	2100	50	1850	1850	1850	1850	1850	1850	1850
	52	2250	2250	2250	2250	2250	2250	2250	52	1950	1950	1950	1950	1950	1950	1950
	54	2400	2400	2400	2400	2400	2400	2450	54	2100	2100	2100	2100	2100	2100	2100
	56	2550	2550	2600	2600	2600	2600	2600	56	2250	2250	2250	2250	2250	2250	2250
	58	2750	2750	2750	2750	2750	2750	2750	58	2400	2400	2400	2400	2400	2400	2400
	60	2850	2850	2850	2850	2900	2900	2950	60	2550	2550	2550	2550	2550	2550	2550
	62	3000	3000	3000	3050	3050	3050	3100	62	2700	2700	2700	2700	2700	2700	2700
	63	3050	3050	3050	3100	3150	3150	3200	63	2750	2750	2750	2750	2750	2750	2750
	MAX	3350	3350	3350	3350	3400	3450	3500	MAX	3000	3000	3000	3000	3000	3000	3000

* GRID SQUARE LETTER

** GRID SQUARE NUMBER

MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		B	LEFT WING			F	RIGHT WING			B	RIGHT WING			F	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
2	2	2350	2350	2300	2300	2250	2200	2200	2	2800	2750	2750	2750	2700	2700	2650
	4	2550	2500	2500	2450	2450	2400	2400	4	2950	2950	2900	2900	2900	2900	2850
	6	2750	2700	2700	2650	2650	2600	2600	6	3100	3100	3100	3100	3100	3050	3050
	8	2850	2850	2800	2800	2800	2750	2750	8	3200	3200	3200	3200	3200	3200	3150
	10	3000	3000	3000	3000	3000	2950	2900	10	3400	3400	3350	3350	3350	3350	3300
	12	3150	3150	3200	3150	3150	3150	3100	12	3550	3550	3550	3550	3500	3500	3450
	14	3350	3350	3350	3350	3350	3300	3300	14	3750	3700	3700	3700	3650	3650	3650
	16	3550	3550	3550	3550	3500	3500	3450	16	3900	3850	3850	3850	3850	3800	3800
	18	3750	3750	3750	3750	3700	3700	3650	18	4050	4000	4000	4000	4000	4000	3950
	20	4000	3950	3950	3950	3950	3900	3900	20	4200	4150	4150	4150	4150	4150	4150
	22	4150	4100	4100	4100	4100	4100	4100	22	4250	4250	4250	4250	4250	4250	4250
	24	4300	4300	4300	4300	4300	4300	4300	24	4400	4400	4400	4400	4400	4400	4400
	26	4500	4500	4500	4500	4500	4500	4500	26	4500	4500	4500	4550	4550	4550	4550
	28	4700	4700	4700	4700	4700	4750	4750	28	4650	4650	4650	4650	4700	4700	4750
	30	4850	4900	4900	4900	4950	4950	4950	30	4750	4750	4800	4800	4850	4850	4900
	32	5050	5100	5100	5100	5100	5150	5150	32	4850	4900	4900	4950	4950	5000	5050
	MAX								MAX							
3																
	2	4550	4500	4500	4450	4400	4350	4300	2	5000	5000	5000	5000	5000	5000	4950
	4	4800	4800	4800	4750	4650	4600	4500	4	5100	5100	5100	5100	5100	5100	5100
	6	5050	5000	5000	5000	4900	4850	4750	6	5200	5200	5200	5250	5200	5200	5200
	8	5150	5150	5150	5150	5100	5000	5000	8	5300	5300	5350	5350	5350	5350	5350
	10	5300	5300	5300	5300	5250	5200	5150	10	5400	5400	5450	5450	5450	5450	5450
	12	5450	5450	5450	5450	5400	5400	5350	12	5500	5500	5550	5550	5550	5550	5550
	14	5600	5600	5600	5550	5550	5550	5500	14	5600	5600	5650	5650	5650	5650	5700
	16	5700	5700	5700	5700	5700	5700	5700	16	5700	5700	5700	5750	5750	5750	5800
	18	5850	5850	5850	5850	5850	5850	5850	18	5800	5800	5800	5850	5850	5850	5900
	20	6000	6000	6050	6050	6050	6000	6000	20	5900	5900	5950	5950	6000	6000	6000
	MAX								MAX							
4																
	2								2	5950	5950	6100	6000	6050	6050	6050
	4	5850	5750	5700	5650	5600	5600	5600	4	6050	6050	6100	6100	6100	6100	6150
	6	6000	6000	5950	5900	5850	5800	5800	6	6150	6150	6200	6200	6200	6200	6200
	8	6150	6150	6100	6100	6050	6000	6000	8	6250	6250	6250	6300	6300	6300	6300
	10	6300	6300	6250	6250	6250	6200	6150	10	6350	6350	6350	6400	6400	6400	6400
	12	6400	6400	6400	6400	6350	6350	6300	12	6400	6450	6450	6450	6500	6500	6500
	14	6500	6500	6500	6500	6500	6450	6450	14	6500	6500	6550	6550	6600	6600	6600
	16	6600	6600	6600	6600	6550	6550	6550	16	6600	6600	6600	6650	6650	6700	6700
	18	6760	6770	6770	6770	6770	6770	6760	18	6750	6770	6800	6830	6850	6870	6880
	MAX								MAX							
5																
	2	650	650	600	600	600	550	550	2	750	700	700	700	700	700	700
	4	750	700	700	650	650	600	600	4	750	750	750	750	750	750	750
	6	750	750	750	700	700	650	650	6	800	800	800	800	750	750	750
	8	800	800	750	750	750	750	700	8	800	800	800	800	800	800	800
	10	800	800	800	800	800	750	750	10	850	850	850	850	800	800	800
	12	850	850	800	800	800	800	800	12	850	850	850	850	850	850	850
	14	850	850	850	850	850	850	850	14	850	850	850	850	850	850	850
	MAX	850	850	850	850	850	850	850	MAX	850	850	850	850	850	850	850

MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		C*	LEFT WING			E	RIGHT WING			C	RIGHT WING			E	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7**
1	2	50	50	50	50	50	50	50	2	50	50	50	50	50	50	50
	4	50	50	50	50	50	50	50	4	50	50	50	50	50	50	50
	6	100	100	100	100	100	100	100	6	100	100	100	100	100	100	100
	8	150	150	150	150	150	150	150	8	150	150	150	150	150	150	150
	10	200	200	200	200	200	200	200	10	200	200	200	200	200	200	150
	12	250	250	250	250	250	250	250	12	250	250	250	250	250	250	200
	14	300	300	300	300	300	300	300	14	300	300	300	300	300	300	250
	16	350	350	350	350	350	350	350	16	350	350	350	350	350	350	350
	18	400	400	400	400	400	400	400	18	400	400	400	400	400	400	400
	20	450	450	450	450	450	450	450	20	450	450	450	450	450	450	450
	22	550	550	550	550	500	500	500	22	500	500	500	500	500	500	500
	24	600	600	600	600	600	600	600	24	600	600	600	600	600	550	550
	26	700	700	700	700	650	650	650	26	650	650	650	650	650	650	650
	28	750	750	750	750	750	750	750	28	750	750	750	750	750	700	700
	30	850	850	850	850	850	850	850	30	800	800	800	800	800	800	800
	32	950	950	950	950	950	950	950	32	900	900	900	900	900	900	900
	34	1050	1050	1050	1050	1050	1050	1050	34	1000	1000	1000	1000	1000	1000	1000
	36	1200	1150	1150	1150	1150	1150	1150	36	1100	1100	1100	1100	1100	1100	1100
	38	1300	1300	1300	1250	1250	1250	1250	38	1200	1200	1200	1200	1200	1200	1200
	40	1400	1400	1400	1400	1400	1400	1400	40	1300	1300	1300	1300	1300	1300	1300
	42	1500	1500	1500	1500	1500	1500	1500	42	1400	1400	1400	1400	1400	1400	1400
	44	1600	1600	1600	1600	1600	1600	1600	44	1550	1550	1500	1500	1500	1500	1500
	46	1750	1750	1750	1750	1750	1750	1750	46	1650	1650	1650	1650	1650	1650	1650
	48	1850	1850	1850	1850	1900	1900	1900	48	1800	1750	1750	1750	1750	1750	1800
	50	2000	2000	2000	2000	2000	2000	2050	50	1900	1900	1900	1900	1900	1900	1900
	52	2150	2150	2150	2150	2150	2150	2200	52	2000	2000	2000	2000	2000	2000	2050
	54	2300	2300	2300	2300	2300	2300	2350	54	2150	2150	2150	2150	2150	2150	2200
	56	2450	2500	2500	2500	2500	2500	2500	56	2300	2300	2300	2300	2300	2300	2350
	58	2600	2650	2650	2650	2650	2650	2700	58	2450	2450	2450	2450	2450	2500	2500
	60	2800	2800	2800	2800	2850	2850	2850	60	2600	2600	2600	2600	2600	2650	2650
	62	2900	2950	2950	2950	2950	2950	3000	62	2750	2750	2750	2750	2800	2800	2800
	63	2950	3000	3000	3000	3050	3050	3100	63	2800	2800	2800	2800	2850	2850	2850
	MAX	3250	3250	3300	3350	3350	3350	3400	MAX	3100	3100	3100	3100	3100	3100	3100

* GRID SQUARE LETTER

** GRID SQUARE NUMBER

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		C	LEFT WING			E	RIGHT WING			C	RIGHT WING			E	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
2	2	2450	2400	2400	2400	2350	2350	2350	2	2700	2650	2650	2600	2600	2550	2550
	4	2650	2600	2600	2600	2550	2550	2500	4	2850	2800	2800	2800	2800	2750	2750
	6	2800	2800	2800	2800	2750	2750	2700	6	3000	3000	3000	3000	3000	2950	2900
	8	2900	2900	2900	2900	2900	2850	2850	8	3100	3100	3100	3100	3100	3100	3050
	10	3100	3100	3100	3100	3100	3050	3000	10	3300	3300	3300	3250	3250	3250	3200
	12	3250	3250	3250	3250	3250	3250	3200	12	3450	3450	3450	3450	3450	3400	3350
	14	3450	3450	3450	3450	3400	3400	3350	14	3650	3650	3600	3600	3600	3550	3550
	16	3650	3650	3650	3600	3600	3550	3550	16	3800	3800	3800	3750	3750	3750	3700
	18	3850	3850	3800	3800	3800	3750	3750	18	4000	3950	3950	3950	3900	3900	3900
	20	4050	4050	4000	4000	4000	3950	3950	20	4150	4100	4100	4100	4100	4100	4100
	22	4200	4200	4150	4150	4150	4100	4100	22	4250	4250	4200	4200	4200	4200	4200
	24	4350	4350	4300	4300	4300	4300	4300	24	4350	4350	4350	4350	4350	4350	4350
	26	4500	4500	4500	4500	4500	4500	4500	26	4500	4500	4500	4500	4500	4500	4550
	28	4650	4650	4650	4700	4700	4700	4700	28	4650	4650	4650	4650	4700	4700	4700
	30	4850	4850	4850	4850	4900	4900	4900	30	4750	4800	4800	4800	4850	4850	4850
	32	5000	5000	5000	5050	5050	5050	5100	32	4900	4900	4950	4950	5000	5000	5050
	MAX								MAX							
3	2	4650	4650	4650	4600	4600	4500	4500	2	4900	4900	4900	4900	4900	4850	4800
	4	4900	4900	4900	4900	4800	4750	4650	4	5050	5100	5100	5100	5100	5050	5000
	6	5100	5100	5100	5050	5050	5000	4900	6	5150	5200	5200	5200	5200	5150	5150
	8	5200	5200	5200	5200	5200	5150	5100	8	5250	5300	5300	5300	5300	5300	5300
	10	5300	5350	5350	5350	5300	5300	5250	10	5350	5400	5400	5400	5400	5400	5400
	12	5450	5450	5450	5450	5450	5450	5400	12	5500	5500	5500	5500	5550	5550	5550
	14	5600	5600	5600	5600	5600	5600	5550	14	5600	5600	5600	5650	5650	5650	5650
	16	5700	5700	5700	5700	5700	5700	5700	16	5700	5700	5750	5750	5750	5750	5800
	18	5800	5850	5850	5850	5850	5850	5850	18	5800	5800	5850	5850	5900	5900	5900
	20	5950	5950	6000	6000	6000	6000	6000	20	5900	5950	5950	6000	6000	6000	6000
4	2	5800	5750	5750	5700	5700	5700	5700	2	5900	5900	5900	5900	5950	5950	5950
	4	5950	5900	5900	5850	5850	5800	5800	4	6000	6000	6000	6050	6050	6050	6050
	6	6050	6050	6000	6000	6000	5950	5950	6	6100	6100	6150	6150	6150	6150	6150
	8	6200	6150	6150	6150	6150	6100	6100	8	6200	6250	6250	6250	6250	6250	6250
	10	6300	6300	6300	6300	6300	6250	6250	10	6300	6350	6350	6350	6350	6350	6350
	12	6400	6400	6400	6400	6400	6400	6400	12	6400	6400	6450	6450	6450	6450	6450
	14	6500	6500	6500	6500	6500	6500	6500	14	6500	6500	6500	6550	6550	6550	6550
	16	6600	6600	6600	6600	6600	6600	6600	16	6550	6600	6600	6600	6600	6600	6600
	18	6730	6740	6750	6750	6760	6760	6770	18	6750	6750	6770	6790	6800	6810	6820
	MAX								MAX							
5	2	700	700	650	650	600	600	600	2	750	700	700	700	700	650	650
	4	750	750	700	700	650	650	650	4	750	750	750	750	700	700	700
	6	750	750	750	750	700	700	700	6	800	800	750	750	750	750	750
	8	800	800	800	750	750	750	750	8	800	800	800	800	800	800	800
	10	800	800	800	800	800	800	800	10	850	850	850	800	800	800	800
	12	850	850	850	800	800	800	800	12	850	850	850	850	850	850	850
	14	850	850	850	850	850	850	850	14	900	900	850	850	850	850	850

MMI Nº	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING							MMI Nº
		D*			BOTH WINGS					D			BOTH WINGS				
		1	2	3	4	5	6	7		1	2	3	4	5	6	7**	
1	2	50	50	50	50	50	50	50	18	3950	3900	3900	3850	3850	3850	3800	2
	4	100	100	100	100	100	100	100	20	4100	4100	4050	4050	4050	4000	4000	
	6	100	100	100	100	100	100	100	22	4200	4200	4150	4150	4150	4150	4150	
	8	150	150	150	150	150	150	150	24	4350	4350	4350	4300	4300	4300	4300	
	10	200	200	200	200	200	200	200	26	4500	4500	4500	4500	4500	4500	4500	
	12	250	250	250	250	250	250	250	28	4650	4650	4650	4650	4650	4700	4700	
	14	300	300	300	300	300	300	300	30	4800	4800	4800	4850	4850	4850	4900	
	16	350	350	350	350	360	350	350	32	4950	4950	5000	5000	5000	5050	5100	
	18	400	400	400	400	400	400	400	MAX								
	20	450	450	450	450	450	450	450									3
	22	500	500	500	500	500	500	500	2	4800	4800	4800	4800	4750	4750	4600	
	24	600	600	600	600	600	600	600	4	5000	5000	5000	5000	4950	4900	4850	
	26	650	650	650	650	650	650	650	6	5100	5150	5150	5100	5100	5100	5050	
	28	750	750	750	750	750	750	750	8	5250	5250	5250	5250	5250	5200	5200	
	30	850	850	850	850	850	850	850	10	5350	5350	5350	5400	5400	5350	5350	
	32	950	950	950	950	950	950	950	12	5450	5500	5500	5500	5500	5500	5500	
	34	1050	1050	1050	1050	1050	1000	1000	14	5600	5600	5600	5600	5600	5600	5600	
	36	1150	1150	1150	1150	1150	1100	1100	16	5700	5700	5700	5750	5750	5750	5750	
	38	1250	1250	1250	1250	1250	1250	1250	18	5800	5800	5850	5850	5850	5900	5900	
	40	1350	1350	1350	1350	1350	1350	1350	20	5900	5900	5950	5950	5950	6000	6000	
	42	1450	1450	1450	1450	1450	1450	1450	MAX								
	44	1550	1550	1550	1550	1550	1550	1550									4
	46	1700	1700	1700	1700	1700	1700	1700	2	5900	5850	5800	5800	5800	5800	5800	
	48	1800	1800	1800	1800	1800	1800	1800	4	6000	5950	5950	5950	5950	5950	5950	
	50	1950	1950	1950	1950	1950	1950	1950	6	6100	6100	6050	6050	6050	6050	6050	
	52	2100	2100	2100	2100	2100	2100	2100	8	6200	6200	6200	6200	6200	6200	6200	
	54	2250	2250	2250	2250	2250	2250	2250	10	6300	6300	6300	6300	6300	6300	6300	
	56	2400	2400	2400	2400	2400	2400	2400	12	6400	6400	6400	6400	6400	6400	6400	
	58	2550	2550	2550	2550	2550	2600	2600	14	6500	6500	6500	6500	6500	6500	6500	
	60	2700	2700	2700	2700	2700	2750	2750	16	6600	6600	6600	6600	6600	6600	6600	
	62	2850	2850	2850	2850	2850	2900	2900	18	6750	6750	6770	6800	6800	6810	6820	
	63	2900	2900	2900	2900	2900	2950	2950	MAX								
	MAX	3050	3050	3100	3100	3100	3150	3150									5
2																	
	2	2550	2550	2500	2500	2450	2450	2450	2	700	700	700	650	650	650	600	
	4	2750	2700	2700	2700	2650	2650	2600	4	750	750	750	700	700	700	650	
	6	2900	2900	2850	2850	2850	2800	2800	6	800	800	750	750	750	750	700	
	8	3000	3000	2950	2950	2950	2950	2900	8	800	800	800	800	800	750	750	
	10	3200	3150	3150	3150	3150	3100	3050	10	850	800	800	800	800	800	800	
	12	3350	3350	3350	3350	3300	3300	3250	12	850	850	850	850	850	850	850	
	14	3550	3550	3550	3500	3500	3450	3450	14	850	850	850	850	850	850	850	
	16	3750	3750	3700	3700	3650	3650	3600	MAX	850	850	850	850	850	850	850	

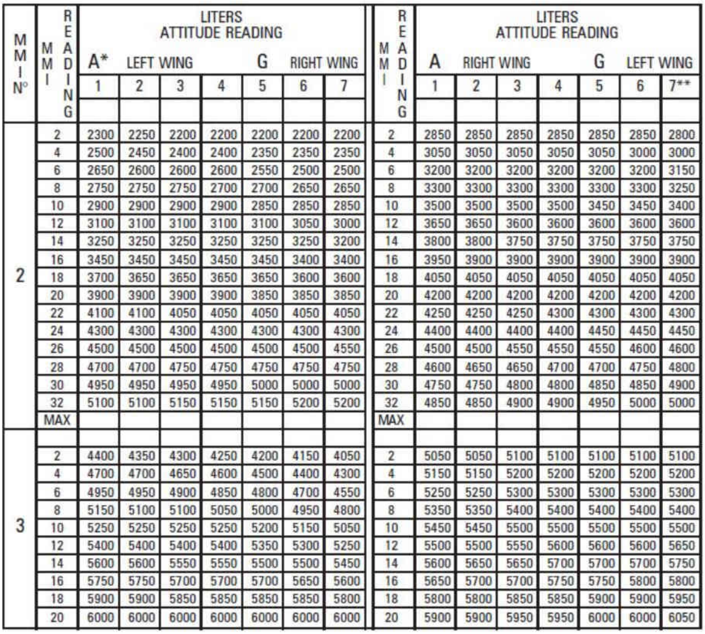
* GRID SQUARE LETTER

**	GRID SQUARE NUMBER

Ident.: EFB-LOD-FUL-C-00001681.0004001 / 17 MAR 11

6 **Applicable to: MSN 04000-04192, 04389-04563, 04734-05345, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876, 08495-09324, 10949-11522, 11572-11597**

WING TANKS (LITERS)



MMI Nº	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		A*	LEFT WING			G	RIGHT WING			A	RIGHT WING			G	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7**
2	2	2300	2250	2200	2200	2200	2200	2200	2	2850	2850	2850	2850	2850	2850	2800
	4	2500	2450	2400	2400	2350	2350	2350	4	3050	3050	3050	3050	3050	3000	3000
	6	2650	2600	2600	2600	2550	2500	2500	6	3200	3200	3200	3200	3200	3200	3150
	8	2750	2750	2750	2700	2700	2650	2650	8	3300	3300	3300	3300	3300	3300	3250
	10	2900	2900	2900	2900	2850	2850	2850	10	3500	3500	3500	3500	3450	3450	3400
	12	3100	3100	3100	3100	3100	3050	3000	12	3650	3650	3600	3600	3600	3600	3600
	14	3250	3250	3250	3250	3250	3250	3200	14	3800	3800	3750	3750	3750	3750	3750
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	18	3700	3650	3650	3650	3650	3600	3600	18	4050	4050	4050	4050	4050	4050	4050
	20	3900	3900	3900	3900	3850	3850	3850	20	4200	4200	4200	4200	4200	4200	4200
	22	4100	4100	4050	4050	4050	4050	4050	22	4250	4250	4250	4300	4300	4300	4300
	24	4300	4300	4300	4300	4300	4300	4300	24	4400	4400	4400	4400	4450	4450	4450
	26	4500	4500	4500	4500	4500	4500	4550	26	4500	4500	4550	4550	4550	4600	4600
	28	4700	4700	4750	4750	4750	4750	4750	28	4600	4650	4650	4700	4700	4750	4800
	30	4950	4950	4950	4950	5000	5000	5000	30	4750	4750	4800	4800	4850	4850	4900
	32	5100	5100	5150	5150	5150	5200	5200	32	4850	4850	4900	4900	4950	5000	5000
	MAX								MAX							
3																
	2	4400	4350	4300	4250	4200	4150	4050	2	5050	5050	5100	5100	5100	5100	5100
	4	4700	4700	4650	4600	4500	4400	4300	4	5150	5150	5200	5200	5200	5200	5200
	6	4950	4950	4900	4850	4800	4700	4550	6	5250	5250	5300	5300	5300	5300	5300
	8	5150	5100	5100	5050	5000	4950	4800	8	5350	5350	5400	5400	5400	5400	5400
	10	5250	5250	5250	5250	5200	5150	5050	10	5450	5450	5500	5500	5500	5500	5500
	12	5400	5400	5400	5400	5350	5300	5250	12	5500	5500	5550	5600	5600	5600	5650
	14	5600	5600	5550	5550	5500	5500	5450	14	5600	5650	5650	5700	5700	5700	5750
	16	5750	5750	5700	5700	5700	5650	5600	16	5650	5700	5700	5750	5750	5800	5800
	18	5900	5900	5850	5850	5850	5850	5800	18	5800	5800	5850	5850	5900	5900	5950
	20	6000	6000	6000	6000	6000	6000	6000	20	5900	5900	5950	5950	6000	6000	6050

*	GRID SQUARE LETTER
**	GRID SQUARE NUMBER

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		A	LEFT WING			G	RIGHT WING			A	RIGHT WING			G	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
4	2	5700	5600	5550	5500	5450	5400	5300	2	6000	6050	6100	6100	6100	6100	6100
	4	5850	5750	5700	5650	5600	5550	5500	4	6100	6100	6150	6150	6150	6200	6200
	6	6000	5900	5850	5800	5750	5700	5650	6	6200	6200	6200	6250	6250	6250	6300
	8	6150	6100	6050	6000	5950	5900	5850	8	6250	6300	6300	6350	6350	6350	6400
	10	6300	6300	6250	6200	6150	6150	6100	10	6350	6400	6400	6400	6450	6450	6450
	12	6450	6400	6400	6400	6350	6300	6250	12	6450	6450	6450	6500	6500	6550	6550
	14	6550	6500	6500	6500	6500	6450	6450	14	6500	6550	6550	6550	6600	6600	6650
	16	6600	6600	6600	6600	6600	6600	6550	16	6600	6600	6600	6650	6650	6700	6750
	18	6650	6650	6650	6650	6650	6650	6650	18	6650	6700	6700	6750	6750	6750	6800
	MAX								MAX							
5																
	2	650	600	550	550	550	500	500	2	700	700	700	700	700	700	700
	4	700	650	650	600	600	550	550	4	750	750	750	750	750	750	750
	6	750	700	700	650	650	650	600	6	800	800	800	800	750	750	750
	8	750	750	750	750	700	700	700	8	800	800	800	800	800	800	800
	10	800	800	800	750	750	750	750	10	850	850	850	850	850	850	850
	12	800	800	800	800	800	800	800	12	850	850	850	850	850	850	850
	14	850	850	850	850	850	850	850	14	850	850	850	850	850	850	850
	MAX	850	850	850	850	850	850	850	MAX	850	850	850	850	850	850	850

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		B*	LEFT WING			F	RIGHT WING			B	RIGHT WING			F	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7**
2	2	2350	2350	2300	2300	2250	2200	2200	2	2800	2750	2750	2750	2700	2700	2650
	4	2550	2500	2500	2450	2450	2400	2400	4	2950	2950	2900	2900	2900	2900	2850
	6	2750	2700	2700	2650	2650	2600	2600	6	3100	3100	3100	3100	3100	3050	3050
	8	2850	2850	2800	2800	2800	2750	2750	8	3200	3200	3200	3200	3200	3200	3150
	10	3000	3000	3000	3000	3000	2950	2900	10	3400	3400	3350	3350	3350	3350	3300
	12	3150	3150	3200	3150	3150	3150	3100	12	3550	3550	3550	3550	3500	3500	3450
	14	3350	3350	3350	3350	3350	3300	3300	14	3750	3700	3700	3700	3650	3650	3650
	16	3550	3550	3550	3550	3500	3500	3450	16	3900	3850	3850	3850	3850	3800	3800
	18	3750	3750	3750	3750	3700	3700	3650	18	4050	4000	4000	4000	4000	4000	3950
	20	4000	3950	3950	3950	3950	3900	3900	20	4200	4150	4150	4150	4150	4150	4150
	22	4150	4100	4100	4100	4100	4100	4100	22	4250	4250	4250	4250	4250	4250	4250
	24	4300	4300	4300	4300	4300	4300	4300	24	4400	4400	4400	4400	4400	4400	4400
	26	4500	4500	4500	4500	4500	4500	4500	26	4500	4500	4500	4550	4550	4550	4550
	28	4700	4700	4700	4700	4700	4750	4750	28	4650	4650	4650	4650	4700	4700	4750
	30	4850	4900	4900	4900	4950	4950	4950	30	4750	4750	4800	4800	4850	4850	4900
	32	5050	5100	5100	5100	5100	5150	5150	32	4850	4900	4900	4950	4950	5000	5050
	MAX								MAX							
3																
	2	4550	4500	4500	4450	4400	4350	4300	2	5000	5000	5000	5000	5000	5000	4950
	4	4800	4800	4800	4750	4650	4600	4500	4	5100	5100	5100	5100	5100	5100	5100
	6	5050	5000	5000	5000	4900	4850	4750	6	5200	5200	5200	5250	5200	5200	5200
	8	5150	5150	5150	5150	5100	5000	5000	8	5300	5300	5350	5350	5350	5350	5350
	10	5300	5300	5300	5300	5250	5200	5150	10	5400	5400	5450	5450	5450	5450	5450
	12	5450	5450	5450	5450	5400	5400	5350	12	5500	5500	5550	5550	5550	5550	5550
	14	5600	5600	5600	5550	5550	5550	5500	14	5600	5600	5650	5650	5650	5650	5700
	16	5700	5700	5700	5700	5700	5700	5700	16	5700	5700	5700	5750	5750	5750	5800
	18	5850	5850	5850	5850	5850	5850	5850	18	5800	5800	5800	5850	5850	5850	5900
	20	6000	6000	6050	6050	6050	6000	6000	20	5900	5900	5950	5950	6000	6000	6000
	MAX								MAX							

* GRID SQUARE LETTER

** GRID SQUARE NUMBER

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		B	LEFT WING			F	RIGHT WING			B	RIGHT WING			F	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
4	2								2	5950	5950	6100	6000	6050	6050	6050
	4	5850	5750	5700	5650	5600	5600	5600	4	6050	6050	6100	6100	6100	6100	6150
	6	6000	6000	5950	5900	5850	5800	5800	6	6150	6150	6200	6200	6200	6200	6200
	8	6150	6150	6100	6100	6050	6000	6000	8	6250	6250	6250	6300	6300	6300	6300
	10	6300	6300	6250	6250	6250	6200	6150	10	6350	6350	6350	6400	6400	6400	6400
	12	6400	6400	6400	6400	6350	6350	6300	12	6400	6450	6450	6450	6500	6500	6500
	14	6500	6500	6500	6500	6500	6450	6450	14	6500	6500	6550	6550	6600	6600	6600
	16	6600	6600	6600	6600	6550	6550	6550	16	6600	6600	6600	6650	6650	6700	6700
	18	6760	6770	6770	6770	6770	6770	6760	18	6750	6770	6800	6830	6850	6870	6880
	MAX								MAX							
5																
	2	650	650	600	600	600	550	550	2	750	700	700	700	700	700	700
	4	750	700	700	650	650	600	600	4	750	750	750	750	750	750	750
	6	750	750	750	700	700	650	650	6	800	800	800	800	750	750	750
	8	800	800	750	750	750	750	700	8	800	800	800	800	800	800	800
	10	800	800	800	800	800	750	750	10	850	850	850	850	800	800	800
	12	850	850	800	800	800	800	800	12	850	850	850	850	850	850	850
	14	850	850	850	850	850	850	850	14	850	850	850	850	850	850	850
	MAX	850	850	850	850	850	850	850	MAX	850	850	850	850	850	850	850

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		C*	LEFT WING			E	RIGHT WING			C	RIGHT WING			E	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7**
2	2	2450	2400	2400	2400	2350	2350	2350	2	2700	2650	2650	2600	2600	2550	2550
	4	2650	2600	2600	2600	2550	2550	2500	4	2850	2800	2800	2800	2800	2750	2750
	6	2800	2800	2800	2800	2750	2750	2700	6	3000	3000	3000	3000	3000	2950	2900
	8	2900	2900	2900	2900	2900	2850	2850	8	3100	3100	3100	3100	3100	3100	3050
	10	3100	3100	3100	3100	3100	3050	3000	10	3300	3300	3300	3250	3250	3250	3200
	12	3250	3250	3250	3250	3250	3250	3200	12	3450	3450	3450	3450	3450	3400	3350
	14	3450	3450	3450	3450	3400	3400	3350	14	3650	3650	3600	3600	3600	3550	3550
	16	3650	3650	3650	3600	3600	3550	3550	16	3800	3800	3800	3750	3750	3750	3700
	18	3850	3850	3800	3800	3800	3750	3750	18	4000	3950	3950	3950	3900	3900	3900
	20	4050	4050	4000	4000	4000	3950	3950	20	4150	4100	4100	4100	4100	4100	4100
	22	4200	4200	4150	4150	4150	4100	4100	22	4250	4250	4200	4200	4200	4200	4200
	24	4350	4350	4300	4300	4300	4300	4300	24	4350	4350	4350	4350	4350	4350	4350
	26	4500	4500	4500	4500	4500	4500	4500	26	4500	4500	4500	4500	4500	4500	4550
	28	4650	4650	4650	4700	4700	4700	4700	28	4650	4650	4650	4650	4700	4700	4700
	30	4850	4850	4850	4850	4900	4900	4900	30	4750	4800	4800	4800	4850	4850	4850
	32	5000	5000	5000	5050	5050	5050	5100	32	4900	4900	4950	4950	5000	5000	5050
	MAX								MAX							
3																
	2	4650	4650	4650	4600	4600	4500	4500	2	4900	4900	4900	4900	4900	4850	4800
	4	4900	4900	4900	4900	4800	4750	4650	4	5050	5100	5100	5100	5100	5050	5000
	6	5100	5100	5100	5050	5050	5000	4900	6	5150	5200	5200	5200	5200	5150	5150
	8	5200	5200	5200	5200	5200	5150	5100	8	5250	5300	5300	5300	5300	5300	5300
	10	5300	5350	5350	5350	5300	5300	5250	10	5350	5400	5400	5400	5400	5400	5400
	12	5450	5450	5450	5450	5450	5450	5400	12	5500	5500	5500	5500	5550	5550	5550
	14	5600	5600	5600	5600	5600	5600	5550	14	5600	5600	5600	5650	5650	5650	5650
	16	5700	5700	5700	5700	5700	5700	5700	16	5700	5700	5750	5750	5750	5750	5800
	18	5800	5850	5850	5850	5850	5850	5850	18	5800	5800	5850	5850	5900	5900	5900
	20	5950	5950	6000	6000	6000	6000	6000	20	5900	5950	5950	6000	6000	6000	6000

* GRID SQUARE LETTER

** GRID SQUARE NUMBER

MMI N°	MMI READING	LITERS ATTITUDE READING						
		C	LEFT WING			E	RIGHT WING	
		1	2	3	4	5	6	7
4	2	5800	5750	5750	5700	5700	5700	5700
	4	5950	5900	5900	5850	5850	5800	5800
	6	6050	6050	6000	6000	6000	5950	5950
	8	6200	6150	6150	6150	6150	6100	6100
	10	6300	6300	6300	6300	6300	6250	6250
	12	6400	6400	6400	6400	6400	6400	6400
	14	6500	6500	6500	6500	6500	6500	6500
	16	6600	6600	6600	6600	6600	6600	6600
	18	6730	6740	6750	6750	6760	6760	6770
	MAX							
5								
	2	700	700	650	650	600	600	600
	4	750	750	700	700	650	650	650
	6	750	750	750	750	700	700	700
	8	800	800	800	750	750	750	750
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	12	850	850	850	800	800	800	800
	14	850	850	850	850	850	850	850

MMI N°	MMI READING	LITERS ATTITUDE READING						
		C	RIGHT WING			E	LEFT WING	
		1	2	3	4	5	6	7
4	2	5900	5900	5900	5900	5950	5950	5950
	4	6000	6000	6000	6050	6050	6050	6050
	6	6100	6100	6150	6150	6150	6150	6150
	8	6200	6250	6250	6250	6250	6250	6250
	10	6300	6350	6350	6350	6350	6350	6350
	12	6400	6400	6450	6450	6450	6450	6450
	14	6500	6500	6500	6550	6550	6550	6550
	16	6550	6600	6600	6600	6600	6600	6600
	18	6750	6750	6770	6790	6800	6810	6820
	MAX							
5								
	2	750	700	700	700	700	650	650
	4	750	750	750	750	700	700	700
	6	800	800	750	750	750	750	750
	8	800	800	800	800	800	800	800
	10	850	850	850	800	800	800	800
	12	850	850	850	850	850	850	850
	14	900	900	850	850	850	850	850

MMI N°	MMI READING	LITERS ATTITUDE READING						
		D*	BOTH WINGS					
		1	2	3	4	5	6	7
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	4	2750	2700	2700	2700	2650	2650	2600
	6	2900	2900	2850	2850	2850	2800	2800
	8	3000	3000	2950	2950	2950	2950	2900
	10	3200	3150	3150	3150	3150	3100	3050
	12	3350	3350	3350	3350	3300	3300	3250
	14	3550	3550	3550	3500	3500	3450	3450
	16	3750	3750	3700	3700	3650	3650	3600
	18	3950	3900	3900	3850	3850	3850	3800
	20	4100	4100	4050	4050	4050	4000	4000
	22	4200	4200	4150	4150	4150	4150	4150
	24	4350	4350	4350	4300	4300	4300	4300
	26	4500	4500	4500	4500	4500	4500	4500
	28	4650	4650	4650	4650	4650	4700	4700
	30	4800	4800	4800	4850	4850	4850	4900
	32	4950	4950	5000	5000	5000	5050	5100
	MAX							
3								
	2	4800	4800	4800	4800	4750	4750	4600
	4	5000	5000	5000	5000	4950	4900	4850
	6	5100	5150	5150	5100	5100	5100	5050
	8	5250	5250	5250	5250	5250	5200	5200
	10	5350	5350	5350	5400	5400	5350	5350
	12	5450	5500	5500	5500	5500	5500	5500
	14	5600	5600	5600	5600	5600	5600	5600
	16	5700	5700	5700	5750	5750	5750	5750
	18	5800	5800	5850	5850	5850	5900	5900
	20	5900	5900	5950	5950	5950	6000	6000
	MAX							

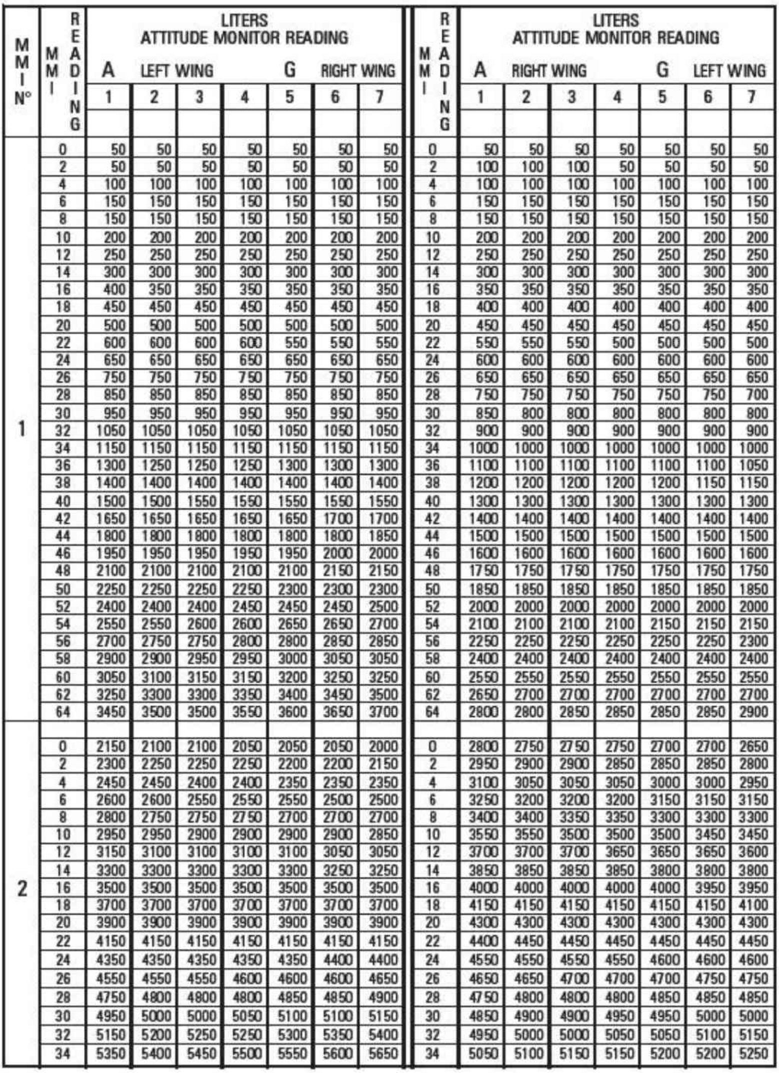
MMI READING	LITERS ATTITUDE READING							MMI N°
	D	BOTH WINGS						
	1	2	3	4	5	6	7**	
2	5900	5850	5800	5800	5800	5800	5800	4
4	6000	5950	5950	5950	5950	5950	5950	
6	6100	6100	6050	6050	6050	6050	6050	
8	6200	6200	6200	6200	6200	6200	6200	
10	6300	6300	6300	6300	6300	6300	6300	
12	6400	6400	6400	6400	6400	6400	6400	
14	6500	6500	6500	6500	6500	6500	6500	
16	6600	6600	6600	6600	6600	6600	6600	
18	6750	6750	6770	6800	6800	6810	6820	
MAX								
								5
2	700	700	700	650	650	650	600	
4	750	750	750	700	700	700	650	
6	800	800	750	750	750	750	700	
8	800	800	800	800	800	750	750	
10	850	800	800	800	800	800	800	
12	850	850	850	850	850	850	850	
14	850	850	850	850	850	850	850	
MAX	850	850	850	850	850	850	850	

* GRID SQUARE LETTER

** GRID SQUARE NUMBER

Ident.: EFB-LOD-FUL-C-00001681.0003001 / 17 MAR 11
Applicable to: MSN 03222-03229, 03294, 03761-03816

WING TANKS (LITERS)



MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		A	LEFT WING			G	RIGHT WING			A	RIGHT WING			G	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
1	0	50	50	50	50	50	50	50	0	50	50	50	50	50	50	50
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	6	150	150	150	150	150	150	150	6	150	150	150	150	150	150	150
	8	150	150	150	150	150	150	150	8	150	150	150	150	150	150	150
	10	200	200	200	200	200	200	200	10	200	200	200	200	200	200	200
	12	250	250	250	250	250	250	250	12	250	250	250	250	250	250	250
	14	300	300	300	300	300	300	300	14	300	300	300	300	300	300	300
	16	400	350	350	350	350	350	350	16	350	350	350	350	350	350	350
	18	450	450	450	450	450	450	450	18	400	400	400	400	400	400	400
	20	500	500	500	500	500	500	500	20	450	450	450	450	450	450	450
	22	600	600	600	600	550	550	550	22	550	550	550	500	500	500	500
	24	650	650	650	650	650	650	650	24	600	600	600	600	600	600	600
	26	750	750	750	750	750	750	750	26	650	650	650	650	650	650	650
	28	850	850	850	850	850	850	850	28	750	750	750	750	750	750	700
	30	950	950	950	950	950	950	950	30	850	800	800	800	800	800	800
	32	1050	1050	1050	1050	1050	1050	1050	32	900	900	900	900	900	900	900
	34	1150	1150	1150	1150	1150	1150	1150	34	1000	1000	1000	1000	1000	1000	1000
	36	1300	1250	1250	1250	1300	1300	1300	36	1100	1100	1100	1100	1100	1100	1050
	38	1400	1400	1400	1400	1400	1400	1400	38	1200	1200	1200	1200	1200	1150	1150
	40	1500	1500	1550	1550	1550	1550	1550	40	1300	1300	1300	1300	1300	1300	1300
	42	1650	1650	1650	1650	1650	1700	1700	42	1400	1400	1400	1400	1400	1400	1400
	44	1800	1800	1800	1800	1800	1800	1850	44	1500	1500	1500	1500	1500	1500	1500
	46	1950	1950	1950	1950	1950	2000	2000	46	1600	1600	1600	1600	1600	1600	1600
	48	2100	2100	2100	2100	2100	2150	2150	48	1750	1750	1750	1750	1750	1750	1750
	50	2250	2250	2250	2250	2300	2300	2300	50	1850	1850	1850	1850	1850	1850	1850
	52	2400	2400	2400	2450	2450	2450	2500	52	2000	2000	2000	2000	2000	2000	2000
	54	2550	2550	2600	2600	2650	2650	2700	54	2100	2100	2100	2100	2150	2150	2150
	56	2700	2750	2750	2800	2800	2850	2850	56	2250	2250	2250	2250	2250	2250	2300
	58	2900	2900	2950	2950	3000	3050	3050	58	2400	2400	2400	2400	2400	2400	2400
	60	3050	3100	3150	3150	3200	3250	3250	60	2550	2550	2550	2550	2550	2550	2550
	62	3250	3300	3300	3350	3400	3450	3500	62	2650	2700	2700	2700	2700	2700	2700
	64	3450	3500	3500	3550	3600	3650	3700	64	2800	2800	2850	2850	2850	2850	2900
2																
	0	2150	2100	2100	2050	2050	2050	2000	0	2800	2750	2750	2750	2700	2700	2650
	2	2300	2250	2250	2250	2200	2200	2150	2	2950	2900	2900	2850	2850	2850	2800
	4	2450	2450	2400	2400	2350	2350	2350	4	3100	3050	3050	3050	3000	3000	2950
	6	2600	2600	2550	2550	2550	2500	2500	6	3250	3200	3200	3200	3150	3150	3150
	8	2800	2750	2750	2750	2700	2700	2700	8	3400	3400	3350	3350	3300	3300	3300
	10	2950	2950	2900	2900	2900	2900	2850	10	3550	3550	3500	3500	3500	3450	3450
	12	3150	3100	3100	3100	3100	3050	3050	12	3700	3700	3700	3650	3650	3650	3600
	14	3300	3300	3300	3300	3300	3250	3250	14	3850	3850	3850	3850	3800	3800	3800
	16	3500	3500	3500	3500	3500	3500	3500	16	4000	4000	4000	4000	4000	3950	3950
	18	3700	3700	3700	3700	3700	3700	3700	18	4150	4150	4150	4150	4150	4150	4100
	20	3900	3900	3900	3900	3900	3900	3900	20	4300	4300	4300	4300	4300	4300	4300
	22	4150	4150	4150	4150	4150	4150	4150	22	4400	4450	4450	4450	4450	4450	4450
	24	4350	4350	4350	4350	4350	4400	4400	24	4550	4550	4550	4550	4600	4600	4600
	26	4550	4550	4550	4600	4600	4600	4650	26	4650	4650	4700	4700	4700	4750	4750
	28	4750	4800	4800	4800	4850	4850	4900	28	4750	4800	4800	4800	4850	4850	4850
	30	4950	5000	5000	5050	5100	5100	5150	30	4850	4900	4900	4950	4950	5000	5000
	32	5150	5200	5250	5250	5300	5350	5400	32	4950	5000	5000	5050	5050	5100	5150
	34	5350	5400	5450	5500	5550	5600	5650	34	5050	5100	5150	5150	5200	5200	5250

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		A	LEFT WING			G	RIGHT WING			A	RIGHT WING			G	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
3	0	4300	4200	4150	4100	4000	3950	3850	0	5050	5050	5050	5050	5000	5000	5000
	2	4500	4450	4350	4300	4250	4150	4100	2	5150	5150	5150	5150	5150	5100	5100
	4	4700	4650	4600	4550	4450	4400	4350	4	5250	5250	5250	5250	5250	5250	5250
	6	4900	4850	4800	4750	4700	4650	4600	6	5350	5350	5350	5350	5350	5350	5350
	8	5100	5050	5050	5000	4950	4900	4850	8	5450	5450	5450	5450	5450	5450	5450
	10	5300	5250	5250	5200	5150	5150	5100	10	5550	5550	5550	5550	5550	5550	5550
	12	5450	5450	5450	5400	5400	5350	5350	12	5650	5650	5650	5650	5650	5650	5650
	14	5650	5650	5650	5650	5600	5600	5600	14	5700	5750	5750	5750	5750	5750	5800
	16	5800	5800	5800	5850	5850	5850	5800	16	5800	5800	5850	5850	5850	5850	5900
	18	5950	5950	6000	6000	6000	6050	6050	18	5900	5900	5900	5950	5950	5950	6000
	20	6100	6100	6150	6150	6200	6250	6250	20	6000	6000	6000	6050	6050	6050	6100
	22	6200	6250	6300	6350	6400	6400	6450	22	6050	6100	6100	6150	6150	6150	6200
4	0	5650	5600	5550	5450	5400	5300	5200	0	6100	6100	6100	6050	6050	6050	6050
	2	5800	5750	5700	5650	5600	5550	5450	2	6150	6150	6150	6150	6150	6150	6150
	4	5950	5950	5900	5850	5800	5750	5700	4	6250	6250	6250	6250	6250	6250	6250
	6	6100	6100	6050	6050	6000	5950	5900	6	6350	6350	6350	6350	6350	6350	6350
	8	6250	6200	6200	6200	6200	6150	6150	8	6400	6400	6450	6450	6450	6450	6450
	10	6350	6350	6350	6350	6350	6350	6350	10	6500	6500	6500	6500	6550	6550	6550
	12	6500	6500	6500	6550	6550	6550	6550	12	6550	6600	6600	6600	6600	6600	6650
	14	6600	6650	6650	6650	6700	6700	6750	14	6650	6650	6650	6700	6700	6700	6750
	16	6750	6750	6800	6800	6850	6850	6900	16	6700	6750	6750	6750	6800	6800	6800
	18	6850	6900	6950	6950	7000	7050	7050	18	6800	6800	6850	6850	6850	6900	6900
	20	7000	7000	7050	7100	7150	7150	7200	20	6850	6900	6900	6900	6950	6950	7000
5	0	6450	6350	6300	6200	6050	5900	5750	0	6800	6800	6750	6750	6700	6650	6650
	2	6550	6500	6450	6350	6250	6150	5950	2	6900	6850	6850	6800	6800	6750	6750
	4	6700	6650	6600	6500	6450	6350	6200	4	6950	6950	6900	6900	6850	6850	6800
	6	6800	6750	6700	6650	6600	6550	6400	6	7000	7000	7000	6950	6950	6900	6900
	8	6950	6900	6850	6800	6750	6700	6600	8	7100	7050	7050	7050	7000	7000	7000
	10	7050	7000	7000	6950	6900	6850	6800	10	7150	7150	7100	7100	7100	7100	7050
	12	7150	7150	7100	7100	7050	7000	6950	12	7200	7200	7200	7200	7150	7150	7150
	14	7250	7250	7250	7200	7200	7150	7100	14	7250	7250	7250	7250	7250	7250	7200
	16	7350	7350	7350	7350	7300	7300	7300	16	7300	7300	7300	7300	7300	7300	7300
	18	7450	7450	7450	7450	7450	7450	7400	18	7400	7400	7350	7350	7350	7350	7350
	20	7550	7550	7550	7550	7550	7550	7550	20	7450	7450	7450	7450	7450	7450	7450
6	0	7150	7100	7050	6950	6900	6800	6650	0	7400	7400	7400	7350	7350	7350	7300
	2	7250	7200	7150	7100	7050	6950	6850	2	7500	7450	7450	7450	7400	7400	7400
	4	7350	7300	7300	7250	7150	7100	7000	4	7550	7500	7500	7500	7500	7450	7450
	6	7450	7400	7400	7350	7300	7250	7200	6	7600	7550	7550	7550	7550	7550	7500
	8	7550	7500	7500	7450	7450	7400	7350	8	7600	7600	7600	7600	7600	7600	7550
	10	7650	7600	7600	7550	7550	7500	7450	10	7650	7650	7650	7650	7650	7650	7650
	12	7700	7700	7700	7650	7650	7650	7600	12	7700	7700	7700	7700	7700	7700	7700
	14	7800	7800	7750	7750	7750	7750	7700	14	7750	7750	7750	7750	7750	7750	7750
	16	7850	7850	7850	7850	7850	7850	7800	16	7800	7800	7800	7800	7800	7800	7800
7	0	7600	7600	7550	7500	7450	7400	7300	0	7800	7800	7800	7800	7800	7750	7750
	2	7700	7700	7650	7600	7550	7500	7450	2	7850	7850	7850	7850	7800	7800	7800
	4	7800	7750	7750	7700	7650	7650	7600	4	7900	7900	7900	7850	7850	7850	7850
	6	7850	7850	7800	7800	7750	7750	7700	6	7950	7900	7900	7900	7900	7900	7900
	8	7900	7900	7900	7850	7850	7850	7800	8	7950	7950	7950	7950	7950	7950	7950
	10	7950	7950	7950	7950	7900	7900	7900	10	8000	8000	8000	8000	8000	8000	8000
	12	8000	8000	8000	8000	8000	7950	7950	12	8000	8000	8000	8000	8000	8000	8000
	14	8050	8050	8050	8000	8000	8000	8000	14	8050	8050	8050	8050	8050	8050	8050

MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		B	LEFT WING			F	RIGHT WING			B	RIGHT WING			F	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
1	0	50	50	50	50	50	50	50	0	50	50	50	50	50	50	50
	2	50	50	50	50	50	50	50	2	100	100	50	50	50	50	50
	4	100	100	100	100	100	100	100	4	100	100	100	100	100	100	100
	6	150	150	150	150	150	150	150	6	150	150	150	150	150	150	150
	8	150	150	150	150	150	150	150	8	150	150	150	150	150	150	150
	10	200	200	200	200	200	200	200	10	200	200	200	200	200	200	200
	12	250	250	250	250	250	250	250	12	250	250	250	250	250	250	250
	14	300	300	300	300	300	300	300	14	300	300	300	300	300	300	300
	16	350	350	350	350	350	350	350	16	350	350	350	350	350	350	350
	18	450	450	450	400	400	400	400	18	400	400	400	400	400	400	400
	20	500	500	500	500	500	500	500	20	500	450	450	450	450	450	450
	22	600	550	550	550	550	550	550	22	550	550	550	550	500	500	500
	24	650	650	650	650	650	650	650	24	600	600	600	600	600	600	600
	26	750	750	750	750	700	700	700	26	700	700	650	650	650	650	650
	28	850	800	800	800	800	800	800	28	750	750	750	750	750	750	700
	30	900	900	900	900	900	900	900	30	850	850	850	850	850	800	800
	32	1000	1000	1000	1000	1000	1000	1000	32	950	900	900	900	900	900	900
	34	1150	1100	1100	1100	1100	1100	1100	34	1000	1000	1000	1000	1000	1000	1000
	36	1250	1250	1250	1250	1250	1250	1250	36	1100	1100	1100	1100	1100	1100	1100
	38	1350	1350	1350	1350	1350	1350	1350	38	1200	1200	1200	1200	1200	1200	1200
	40	1450	1450	1450	1450	1500	1500	1500	40	1300	1300	1300	1300	1300	1300	1300
	42	1600	1600	1600	1600	1600	1600	1600	42	1450	1450	1400	1400	1400	1400	1400
	44	1750	1750	1750	1750	1750	1750	1750	44	1550	1550	1550	1550	1550	1550	1550
	46	1850	1850	1850	1900	1900	1900	1900	46	1650	1650	1650	1650	1650	1650	1650
	48	2000	2000	2000	2000	2050	2050	2050	48	1800	1800	1800	1800	1800	1800	1800
	50	2150	2150	2150	2200	2200	2200	2200	50	1900	1900	1900	1900	1900	1900	1900
	52	2300	2300	2300	2350	2350	2350	2350	52	2050	2050	2050	2050	2050	2050	2050
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	56	2600	2650	2650	2650	2700	2700	2700	56	2300	2300	2300	2300	2350	2350	2350
	58	2800	2800	2800	2850	2850	2900	2900	58	2450	2450	2450	2450	2500	2500	2500
	60	2950	2050	3000	3000	3050	3050	3050	60	2600	2600	2600	2600	2650	2650	2650
	62	3100	3150	3150	3200	3200	3250	3250	62	2750	2750	2750	2750	2800	2800	2800
	64	3300	3350	3350	3400	3400	3450	3450	64	2900	2900	2900	2950	2950	2950	2950
2																
	0	2250	2200	2200	2200	2150	2150	2100	0	2700	2650	2650	2600	2600	2550	2550
	2	2400	2400	2350	2350	2300	2300	2300	2	2850	2800	2800	2750	2750	2700	2700
	4	2550	2550	2500	2500	2450	2450	2450	4	3000	2950	2950	2900	2900	2900	2850
	6	2700	2700	2700	2650	2650	2600	2600	6	3150	3100	3100	3100	3050	3050	3000
	8	2900	2850	2850	2850	2800	2800	2800	8	3300	3300	3250	3250	3200	3200	3200
	10	3050	3050	3000	3000	3000	3000	2950	10	3450	3450	3450	3400	3400	3350	3350
	12	3250	3200	3200	3200	3200	3150	3150	12	3650	3600	3600	3600	3550	3550	3550
	14	3400	3400	3400	3400	3350	3350	3350	14	3800	3800	3750	3750	3750	3700	3700
	16	3600	3600	3600	3550	3550	3550	3550	16	3950	3950	3950	3900	3900	3900	3900
	18	3800	3800	3800	3750	3750	3750	3750	18	4100	4100	4100	4100	4100	4050	4050
	20	4000	4000	4000	4000	4000	3950	4000	20	4250	4250	4250	4250	4250	4250	4250
	22	4200	4200	4200	4200	4200	4200	4200	22	4400	4400	4400	4400	4400	4400	4400
	24	4400	4400	4400	4400	4400	4400	4400	24	4550	4550	4550	4550	4550	4550	4550
	26	4600	4600	4600	4600	4600	4650	4650	26	4650	4650	4700	4700	4700	4750	4750
	28	4800	4800	4800	4850	4850	4850	4900	28	4800	4800	4800	4850	4850	4850	4900
	30	4950	5000	5000	5050	5050	5100	5100	30	4900	4900	4950	4950	5000	5000	5050
	32	5150	5150	5200	5250	5250	5300	5350	32	5000	5000	5050	5100	5100	5150	5150
	34	5300	5300	5350	5400	5450	5500	5550	34	5100	5150	5150	5200	5200	5250	5300

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		B	LEFT WING			F	RIGHT WING			B	RIGHT WING			F	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
3	0	4550	4450	4400	4350	4250	4200	4150	0	5000	5000	5000	4950	4950	4950	4900
	2	4750	4700	4600	4550	4500	4400	4350	2	5100	5100	5100	5100	5050	5050	5050
	4	4900	4900	4800	4750	4700	4650	4600	4	5200	5200	5200	5200	5200	5200	5150
	6	5100	5050	5000	4950	4900	4850	4800	6	5300	5300	5300	5300	5300	5300	5300
	8	5250	5200	5200	5200	5150	5100	5050	8	5400	5400	5400	5400	5400	5400	5400
	10	5400	5400	5350	5350	5350	5300	5250	10	5500	5500	5500	5550	5550	5550	5550
	12	5500	5550	5550	5550	5550	5500	5500	12	5600	5600	5650	5650	5650	5650	5650
	14	5650	5650	5700	5700	5700	5700	5700	14	5700	5700	5700	5700	5700	5700	5800
	16	5800	5800	5850	5850	5850	5900	5900	16	5800	5800	5850	5850	5850	5900	5900
	18	5900	5950	5950	6000	6000	6050	6100	18	5900	5900	5950	5950	5950	6000	6000
	20	6050	6100	6100	6150	6150	6200	6250	20	6000	6000	6050	6050	6050	6100	6100
	22	6200	6200	6250	6300	6300	6350	6400	22	6100	6100	6100	6150	6150	6200	6200
4	0	5750	5750	5750	5700	5650	5600	5500	0	6050	6050	6050	6050	6000	6000	6000
	2	5900	5900	5850	5850	5850	5800	5750	2	6150	6150	6150	6100	6100	6100	6100
	4	6050	6000	6000	6000	6000	5950	5900	4	6200	6200	6200	6200	6200	6200	6200
	6	6150	6150	6150	6150	6150	6150	6100	6	6300	6300	6300	6300	6300	6300	6300
	8	6300	6300	6300	6300	6300	6300	6300	8	6400	6400	6400	6400	6400	6400	6450
	10	6400	6400	6400	6400	6450	6450	6450	10	6500	6500	6500	6500	6500	6500	6550
	12	6500	6550	6550	6550	6550	6600	6600	12	6550	6600	6600	6600	6600	6600	6650
	14	6650	6650	6650	6700	6700	6700	6750	14	6650	6650	6650	6700	6700	6700	6750
	16	6750	6750	6800	6800	6850	6850	6900	16	6750	6750	6750	6750	6800	6800	6800
	18	6850	6900	6900	6950	6950	7000	7050	18	6800	6800	6850	6850	6850	6900	6900
	20	6950	7000	7000	7050	7100	7100	7150	20	6900	6900	6900	6950	6950	7000	7000
5	0	6550	6500	6450	6350	6300	6200	6100	0	6750	6750	6700	6700	6650	6600	6600
	2	6650	6600	6550	6500	6450	6350	6300	2	6850	6850	6800	6800	6750	6700	6700
	4	6750	6750	6700	6650	6550	6500	6450	4	6900	6900	6900	6850	6850	6800	6750
	6	6850	6850	6800	6750	6700	6650	6600	6	7000	7000	6950	6950	6900	6900	6850
	8	7000	6950	6900	6900	6850	6800	6750	8	7050	7050	7050	7000	7000	7000	6950
	10	7100	7050	7050	7000	6950	6950	6900	10	7150	7100	7100	7100	7100	7050	7050
	12	7200	7150	7150	7100	7100	7050	7050	12	7200	7200	7200	7150	7150	7150	7150
	14	7250	7250	7250	7250	7200	7200	7150	14	7250	7250	7250	7250	7250	7250	7200
	16	7350	7350	7350	7350	7300	7300	7300	16	7350	7300	7300	7300	7300	7300	7300
	18	7450	7450	7450	7450	7450	7400	7400	18	7400	7400	7400	7400	7400	7350	7350
	20	7500	7500	7550	7550	7550	7550	7550	20	7450	7450	7450	7450	7450	7450	7450
6	0	7250	7200	7150	7100	7050	7000	6900	0	7400	7400	7350	7350	7300	7300	7250
	2	7300	7300	7250	7200	7150	7100	7050	2	7450	7450	7450	7400	7400	7350	7350
	4	7400	7400	7350	7300	7300	7250	7200	4	7500	7500	7500	7450	7450	7450	7400
	6	7500	7450	7450	7400	7400	7350	7300	6	7550	7550	7550	7550	7500	7500	7500
	8	7550	7550	7550	7500	7500	7450	7450	8	7600	7600	7600	7600	7600	7550	7550
	10	7650	7650	7600	7600	7600	7550	7550	10	7650	7650	7650	7650	7650	7650	7600
	12	7700	7700	7700	7700	7700	7650	7650	12	7700	7700	7700	7700	7700	7700	7700
	14	7800	7800	7750	7750	7750	7750	7750	14	7750	7750	7750	7750	7750	7750	7750
	16	7850	7850	7850	7850	7850	7850	7800	16	7800	7800	7800	7800	7800	7800	7800
7	0	7700	7650	7650	7600	7550	7550	7500	0	7800	7800	7800	7750	7750	7750	7750
	2	7750	7750	7700	7700	7650	7650	7600	2	7850	7850	7800	7800	7800	7800	7800
	4	7800	7800	7800	7750	7750	7750	7700	4	7900	7900	7850	7850	7850	7850	7850
	6	7850	7850	7850	7850	7800	7800	7800	6	7900	7900	7900	7900	7900	7900	7900
	8	7950	7900	7900	7900	7900	7900	7850	8	7950	7950	7950	7950	7950	7950	7950
	10	7950	7950	7950	7950	7950	7950	7950	10	8000	8000	8000	8000	8000	8000	8000
	12	8000	8000	8000	8000	8000	8000	8000	12	8000	8000	8000	8000	8000	8000	8000
	14	8050	8050	8050	8050	8050	8000	8000	14	8050	8050	8050	8050	8050	8050	8050

MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING							MMI READING	LITERS ATTITUDE MONITOR READING						
		C	LEFT WING			E	RIGHT WING			C	RIGHT WING			E	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
1	0	50	50	50	50	50	50	50	0	50	50	50	50	50	50	50
	2	50	50	50	50	50	50	50	2	100	50	50	50	50	50	50
	4	100	100	100	100	100	100	100	4	100	100	100	100	100	100	100
	6	150	150	150	150	150	150	150	6	150	150	150	150	150	150	150
	8	150	150	150	150	150	150	150	8	150	150	150	150	150	150	150
	10	200	200	200	200	200	200	200	10	200	200	200	200	200	200	200
	12	250	250	250	250	250	250	250	12	250	250	250	250	250	250	250
	14	300	300	300	300	300	300	300	14	300	300	300	300	300	300	300
	16	350	350	350	350	350	350	350	16	350	350	350	350	350	350	350
	18	450	400	400	400	400	400	400	18	400	400	400	400	400	400	400
	20	500	500	500	500	500	500	500	20	500	500	450	450	450	450	450
	22	550	550	550	550	550	550	550	22	550	550	550	550	500	500	500
	24	650	650	650	650	650	600	600	24	600	600	600	600	600	600	600
	26	700	700	700	700	700	700	700	26	700	700	700	700	700	650	650
	28	800	800	800	800	800	800	800	28	800	750	750	750	750	750	750
	30	900	900	900	900	900	900	900	30	850	850	850	850	850	850	850
	32	1000	1000	1000	1000	1000	1000	1000	32	950	950	950	950	950	950	950
	34	1100	1100	1100	1100	1100	1100	1100	34	1050	1050	1050	1050	1050	1050	1050
	36	1200	1200	1200	1200	1200	1200	1200	36	1150	1150	1150	1150	1150	1150	1150
	38	1300	1300	1300	1300	1300	1300	1300	38	1250	1250	1250	1250	1250	1250	1250
	40	1450	1450	1450	1450	1450	1450	1450	40	1350	1350	1350	1350	1350	1350	1350
	42	1550	1550	1550	1550	1550	1550	1550	42	1450	1450	1450	1450	1450	1450	1450
	44	1700	1700	1700	1700	1700	1700	1700	44	1600	1600	1600	1600	1600	1600	1600
	46	1800	1800	1800	1800	1800	1850	1850	46	1700	1700	1700	1700	1700	1700	1700
	48	1950	1950	1950	1950	1950	1950	2000	48	1850	1850	1850	1850	1850	1850	1850
	50	2100	2100	2100	2100	2100	2100	2150	50	1950	1950	1950	1950	2000	2000	2000
	52	2250	2250	2250	2250	2250	2250	2300	52	2100	2100	2100	2100	2100	2100	2150
	54	2400	2400	2400	2400	2400	2450	2450	54	2250	2250	2250	2250	2250	2250	2300
	56	2550	2550	2550	2550	2600	2600	2600	56	2400	2400	2400	2400	2400	2400	2450
	58	2700	2700	2700	2750	2750	2750	2800	58	2500	2550	2550	2550	2550	2550	2600
	60	2850	2850	2900	2900	2900	2950	2950	60	2650	2700	2700	2700	2700	2750	2750
	62	3000	3050	3050	3050	3100	3100	3150	62	2850	2850	2850	2850	2900	2900	2900
	64	3200	3200	3250	3250	3300	3300	3350	64	3000	3000	3000	3050	3050	3050	3100
2																
	0	2350	2350	2300	2300	2250	2250	2250	0	2550	2550	2550	2500	2500	2450	2450
	2	2500	2500	2450	2450	2400	2400	2400	2	2700	2700	2700	2650	2650	2600	2600
	4	2650	2650	2600	2600	2600	2550	2550	4	2900	2850	2850	2800	2800	2750	2750
	6	2800	2800	2800	2750	2750	2750	2700	6	3050	3000	3000	2950	2950	2950	2900
	8	3000	2950	2950	2950	2900	2900	2900	8	3200	3200	3150	3150	3100	3100	3100
	10	3150	3150	3100	3100	3100	3100	3050	10	3350	3350	3350	3300	3300	3300	3250
	12	3350	3300	3300	3300	3250	3250	3250	12	3550	3500	3500	3500	3450	3450	3450
	14	3500	3500	3500	3450	3450	3450	3450	14	3700	3700	3650	3650	3650	3650	3600
	16	3700	3700	3650	3650	3650	3650	3650	16	3900	3850	3850	3850	3800	3800	3800
	18	3900	3900	3850	3850	3850	3850	3850	18	4050	4050	4000	4000	4000	4000	4000
	20	4100	4050	4050	4050	4050	4050	4050	20	4200	4200	4200	4200	4200	4150	4150
	22	4250	4250	4250	4250	4250	4250	4250	22	4350	4350	4350	4350	4350	4350	4350
	24	4450	4450	4450	4450	4450	4450	4450	24	4500	4500	4550	4550	4550	4550	4550
	26	4650	4650	4650	4650	4650	4650	4650	26	4650	4650	4700	4700	4700	4700	4700
	28	4800	4800	4850	4850	4850	4850	4900	28	4800	4800	4800	4850	4850	4850	4900
	30	4950	5000	5000	5000	5050	5050	5100	30	4900	4950	4950	5000	5000	5050	5050
	32	5100	5150	5150	5200	5250	5250	5300	32	5050	5050	5100	5100	5150	5150	5200
	34	5250	5250	5300	5350	5400	5450	5500	34	5150	5150	5200	5250	5300	5300	5350

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
		C	LEFT WING			E	RIGHT WING			C	RIGHT WING			E	LEFT WING	
		1	2	3	4	5	6	7		1	2	3	4	5	6	7
3	0	4700	4650	4600	4550	4500	4400	4350	0	4900	4900	4900	4850	4800	4800	4750
	2	4850	4800	4750	4750	4650	4600	4550	2	5050	5050	5000	5000	4950	4950	4900
	4	5000	5000	4950	4900	4850	4800	4750	4	5150	5150	5150	5150	5100	5100	5050
	6	5150	5150	5100	5100	5050	5000	4950	6	5250	5250	5250	5250	5250	5250	5200
	8	5300	5300	5250	5250	5250	5200	5150	8	5400	5400	5400	5400	5400	5400	5350
	10	5400	5400	5400	5400	5400	5400	5350	10	5500	5500	5500	5500	5500	5500	5500
	12	5550	5550	5550	5550	5550	5550	5550	12	5600	5600	5600	5600	5650	5650	5650
	14	5650	5700	5700	5700	5700	5750	5750	14	5700	5700	5700	5750	5750	5750	5750
	16	5800	5800	5850	5850	5850	5900	5900	16	5800	5800	5850	5850	5850	5900	5900
	18	5900	5950	5950	6000	6000	6050	6050	18	5900	5900	5950	5950	6000	6000	6000
	20	6050	6050	6100	6150	6150	6150	6200	20	6000	6000	6050	6050	6100	6100	6150
	22	6150	6200	6200	6250	6250	6300	6350	22	6100	6100	6150	6150	6200	6250	6250
4	0	5850	5850	5800	5800	5750	5750	5700	0	6000	6000	5950	5950	5950	5950	5900
	2	5950	5950	5950	5950	5900	5900	5850	2	6100	6100	6100	6050	6050	6050	6050
	4	6100	6100	6050	6050	6050	6050	6000	4	6200	6200	6200	6200	6150	6150	6150
	6	6200	6200	6200	6200	6200	6200	6200	6	6300	6300	6300	6300	6300	6300	6300
	8	6300	6300	6300	6300	6300	6300	6300	8	6350	6400	6400	6400	6400	6400	6400
	10	6400	6450	6450	6450	6450	6450	6450	10	6450	6450	6500	6500	6500	6500	6500
	12	6550	6550	6550	6550	6600	6600	6600	12	6550	6550	6600	6600	6600	6600	6600
	14	6650	6650	6650	6700	6700	6700	6750	14	6650	6650	6650	6700	6700	6700	6750
	16	6750	6750	6800	6800	6800	6850	6850	16	6750	6750	6750	6800	6800	6800	6850
	18	6850	6850	6900	6900	6950	6950	7000	18	6800	6850	6850	6850	6900	6900	6950
	20	6950	6950	7000	7000	7050	7100	7100	20	6900	6900	6950	6950	7000	7000	7050
5	0	6600	6550	6500	6450	6400	6350	6250	0	6750	6700	6650	6650	6600	6550	6500
	2	6700	6700	6650	6600	6550	6450	6400	2	6800	6800	6750	6700	6700	6650	6600
	4	6800	6800	6750	6700	6650	6600	6550	4	6900	6850	6850	6800	6800	6750	6700
	6	6900	6900	6850	6800	6800	6750	6700	6	6950	6950	6950	6900	6900	6850	6800
	8	7000	7000	6950	6950	6900	6850	6800	8	7050	7050	7000	7000	6950	6950	6900
	10	7100	7100	7050	7050	7000	7000	6950	10	7100	7100	7100	7100	7050	7050	7000
	12	7200	7150	7150	7150	7100	7100	7050	12	7200	7200	7200	7150	7150	7150	7100
	14	7250	7250	7250	7250	7200	7200	7200	14	7250	7250	7250	7250	7250	7200	7200
	16	7350	7350	7350	7350	7300	7300	7300	16	7350	7350	7300	7300	7300	7300	7300
	18	7450	7400	7400	7400	7400	7400	7400	18	7400	7400	7400	7400	7400	7400	7400
	20	7500	7500	7500	7500	7500	7500	7500	20	7450	7450	7450	7450	7450	7450	7450
6	0	7300	7250	7200	7200	7150	7100	7000	0	7350	7350	7300	7300	7250	7250	7200
	2	7350	7350	7300	7300	7250	7200	7150	2	7450	7400	7400	7350	7350	7300	7300
	4	7450	7400	7400	7350	7350	7300	7250	4	7500	7500	7450	7450	7450	7400	7400
	6	7500	7500	7500	7450	7450	7400	7350	6	7550	7550	7550	7500	7500	7500	7450
	8	7600	7550	7550	7550	7500	7500	7450	8	7600	7600	7600	7600	7550	7550	7550
	10	7650	7650	7650	7600	7600	7600	7550	10	7650	7650	7650	7650	7650	7600	7600
	12	7700	7700	7700	7700	7700	7650	7650	12	7700	7700	7700	7700	7700	7700	7700
	14	7800	7750	7750	7750	7750	7750	7750	14	7750	7750	7750	7750	7750	7750	7750
	16	7850	7850	7850	7850	7850	7850	7800	16	7800	7800	7800	7800	7800	7800	7800
7	0	7700	7700	7700	7650	7650	7600	7550	0	7750	7750	7750	7750	7700	7700	7700
	2	7800	7750	7750	7750	7700	7700	7650	2	7800	7800	7800	7800	7800	7750	7750
	4	7850	7800	7800	7800	7800	7750	7750	4	7850	7850	7850	7850	7850	7850	7800
	6	7900	7900	7850	7850	7850	7850	7800	6	7900	7900	7900	7900	7900	7900	7850
	8	7950	7950	7900	7900	7900	7900	7900	8	7950	7950	7950	7950	7950	7950	7900
	10	8000	7950	7950	7950	7950	7950	7950	10	8000	8000	8000	8000	8000	7950	7950
	12	8000	8000	8000	8000	8000	8000	8000	12	8000	8000	8000	8000	8000	8000	8000
	14	8050	8050	8050	8050	8050	8050	8000	14	8050	8050	8050	8050	8050	8050	8050

MMI N°	MMI READING	LITERS ATTITUDE MONITOR READING D BOTH WINGS						
		1	2	3	4	5	6	7
1	0	50	50	50	50	50	50	50
	2	50	50	50	50	50	50	50
	4	100	100	100	100	100	100	100
	6	150	150	150	150	150	150	150
	8	150	150	150	150	150	150	150
	10	200	200	200	200	200	200	200
	12	250	250	250	250	250	250	250
	14	300	300	300	300	300	300	300
	16	350	350	350	350	350	350	350
	18	400	400	400	400	400	400	400
	20	500	500	500	450	450	450	450
	22	550	550	550	550	550	550	550
	24	650	600	600	600	600	600	600
	26	700	700	700	700	700	700	700
	28	800	800	800	800	750	750	750
	30	900	850	850	850	850	850	850
	32	950	950	950	950	950	950	950
	34	1050	1050	1050	1050	1050	1050	1050
	36	1150	1150	1150	1150	1150	1150	1150
	38	1300	1250	1250	1250	1250	1250	1250
	40	1400	1400	1400	1400	1400	1400	1400
	42	1500	1500	1500	1500	1500	1500	1500
	44	1650	1650	1650	1650	1650	1650	1650
	46	1750	1750	1750	1750	1750	1750	1750
	48	1900	1900	1900	1900	1900	1900	1900
	50	2000	2000	2050	2050	2050	2050	2050
	52	2150	2150	2150	2150	2200	2200	2200
	54	2300	2300	2300	2300	2350	2350	2350
	56	2450	2450	2450	2450	2500	2500	2500
	58	2600	2600	2600	2650	2650	2650	2700
	60	2750	2750	2800	2800	2800	2800	2850
	62	2900	2900	2950	2950	3000	3000	3000
	64	3050	3100	3100	3150	3150	3150	3200
2	0	2450	2450	2400	2400	2350	2350	2350
	2	2600	2600	2550	2550	2500	2500	2500
	4	2750	2750	2750	2700	2700	2650	2650
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	18	3950	3950	3950	3950	3950	3900	3900
	20	4150	4150	4150	4150	4100	4100	4100
	22	4350	4350	4300	4300	4300	4300	4300
	24	4500	4500	4500	4500	4500	4500	4500
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	30	4950	4950	5000	5000	5050	5050	5050
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MMI READING	LITERS ATTITUDE MONITOR READING D BOTH WINGS							MMI N°
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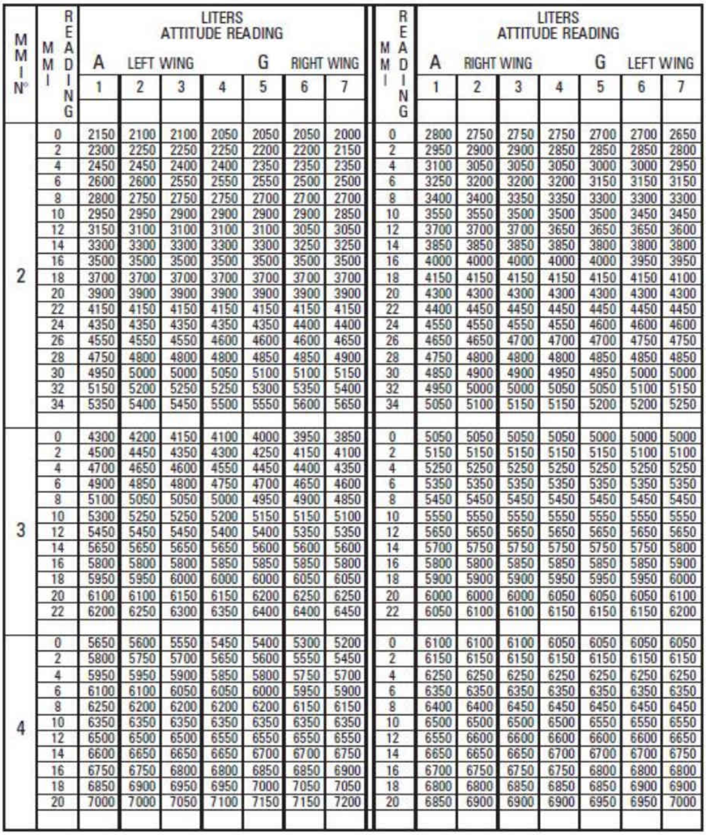
Ident.: EFB-LOD-FUL-C-00001681.0005001 / 17 MAR 11

7 **Applicable to: MSN 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165, 06409-06414, 06592, 06632, 06658-06685, 06718-06798, 06895-07098, 11531**

WING TANKS (LITERS)



MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
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	4	2450	2450	2400	2400	2350	2350	2350	4	3100	3050	3050	3050	3000	3000	2950
	6	2600	2600	2550	2550	2550	2500	2500	6	3250	3200	3200	3200	3150	3150	3150
	8	2800	2750	2750	2750	2700	2700	2700	8	3400	3400	3350	3350	3300	3300	3300
	10	2950	2950	2900	2900	2900	2900	2850	10	3550	3550	3500	3500	3500	3450	3450
	12	3150	3100	3100	3100	3100	3050	3050	12	3700	3700	3700	3650	3650	3650	3600
	14	3300	3300	3300	3300	3300	3250	3250	14	3850	3850	3850	3850	3800	3800	3800
	16	3500	3500	3500	3500	3500	3500	3500	16	4000	4000	4000	4000	4000	3950	3950
	18	3700	3700	3700	3700	3700	3700	3700	18	4150	4150	4150	4150	4150	4150	4100
	20	3900	3900	3900	3900	3900	3900	3900	20	4300	4300	4300	4300	4300	4300	4300
	22	4150	4150	4150	4150	4150	4150	4150	22	4400	4450	4450	4450	4450	4450	4450
	24	4350	4350	4350	4350	4350	4400	4400	24	4550	4550	4550	4550	4600	4600	4600
	26	4550	4550	4550	4600	4600	4600	4650	26	4650	4650	4700	4700	4700	4750	4750
	28	4750	4800	4800	4800	4850	4850	4900	28	4750	4800	4800	4800	4850	4850	4850
	30	4950	5000	5000	5050	5100	5100	5150	30	4850	4900	4900	4950	4950	5000	5000
	32	5150	5200	5250	5250	5300	5350	5400	32	4950	5000	5000	5050	5050	5100	5150
	34	5350	5400	5450	5500	5550	5600	5650	34	5050	5100	5150	5150	5200	5200	5250
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	2	4500	4450	4350	4300	4250	4150	4100	2	5150	5150	5150	5150	5150	5100	5100
	4	4700	4650	4600	4550	4450	4400	4350	4	5250	5250	5250	5250	5250	5250	5250
	6	4900	4850	4800	4750	4700	4650	4600	6	5350	5350	5350	5350	5350	5350	5350
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	14	5650	5650	5650	5650	5600	5600	5600	14	5700	5750	5750	5750	5750	5750	5800
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	20	6100	6100	6150	6150	6200	6250	6250	20	6000	6000	6000	6050	6050	6050	6100
	22	6200	6250	6300	6350	6400	6400	6450	22	6050	6100	6100	6150	6150	6150	6200
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MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
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	2	2400	2400	2350	2350	2300	2300	2300	2	2850	2800	2800	2750	2750	2700	2700
	4	2550	2550	2500	2500	2450	2450	2450	4	3000	2950	2950	2900	2900	2900	2850
	6	2700	2700	2700	2650	2650	2600	2600	6	3150	3100	3100	3100	3050	3050	3000
	8	2900	2850	2850	2850	2800	2800	2800	8	3300	3300	3250	3250	3200	3200	3200
	10	3050	3050	3000	3000	3000	3000	2950	10	3450	3450	3450	3400	3400	3350	3350
	12	3250	3200	3200	3200	3200	3150	3150	12	3650	3600	3600	3600	3550	3550	3550
	14	3400	3400	3400	3400	3350	3350	3350	14	3800	3800	3750	3750	3750	3700	3700
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	18	3800	3800	3800	3750	3750	3750	3750	18	4100	4100	4100	4100	4100	4050	4050
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	22	4200	4200	4200	4200	4200	4200	4200	22	4400	4400	4400	4400	4400	4400	4400
	24	4400	4400	4400	4400	4400	4400	4400	24	4550	4550	4550	4550	4550	4550	4550
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	28	4800	4800	4800	4850	4850	4850	4900	28	4800	4800	4800	4850	4850	4850	4900
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	32	5150	5150	5200	5250	5250	5300	5350	32	5000	5000	5050	5100	5100	5150	5150
	34	5300	5300	5350	5400	5450	5500	5550	34	5100	5150	5150	5200	5200	5250	5300
3	0	4550	4450	4400	4350	4250	4200	4150	0	5000	5000	5000	4950	4950	4950	4900
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	4	4900	4900	4800	4750	4700	4650	4600	4	5200	5200	5200	5200	5200	5200	5150
	6	5100	5050	5000	4950	4900	4850	4800	6	5300	5300	5300	5300	5300	5300	5300
	8	5250	5200	5200	5200	5150	5100	5050	8	5400	5400	5400	5400	5400	5400	5400
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	20	6050	6100	6100	6150	6150	6200	6250	20	6000	6000	6050	6050	6050	6100	6100
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	18	6850	6900	6900	6950	6950	7000	7050	18	6800	6800	6850	6850	6850	6900	6900
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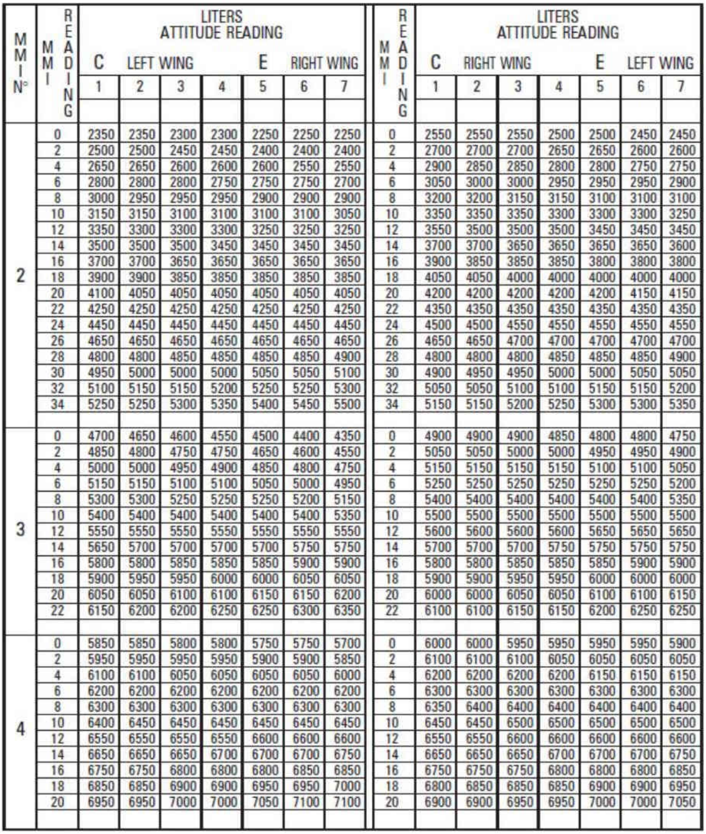

MMI N°	MMI READING	LITERS ATTITUDE READING							MMI READING	LITERS ATTITUDE READING						
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	6	2800	2800	2800	2750	2750	2750	2700	6	3050	3000	3000	2950	2950	2950	2900
	8	3000	2950	2950	2950	2900	2900	2900	8	3200	3200	3150	3150	3100	3100	3100
	10	3150	3150	3100	3100	3100	3100	3050	10	3350	3350	3350	3300	3300	3300	3250
	12	3350	3300	3300	3300	3250	3250	3250	12	3550	3500	3500	3500	3450	3450	3450
	14	3500	3500	3500	3450	3450	3450	3450	14	3700	3700	3650	3650	3650	3650	3600
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	20	4100	4050	4050	4050	4050	4050	4050	20	4200	4200	4200	4200	4200	4150	4150
	22	4250	4250	4250	4250	4250	4250	4250	22	4350	4350	4350	4350	4350	4350	4350
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	26	4650	4650	4650	4650	4650	4650	4650	26	4650	4650	4700	4700	4700	4700	4700
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	22	6150	6200	6200	6250	6250	6300	6350	22	6100	6100	6150	6150	6200	6250	6250
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	18	6850	6850	6900	6900	6950	6950	7000	18	6800	6850	6850	6850	6900	6900	6950
	20	6950	6950	7000	7000	7050	7100	7100	20	6900	6900	6950	6950	7000	7000	7050

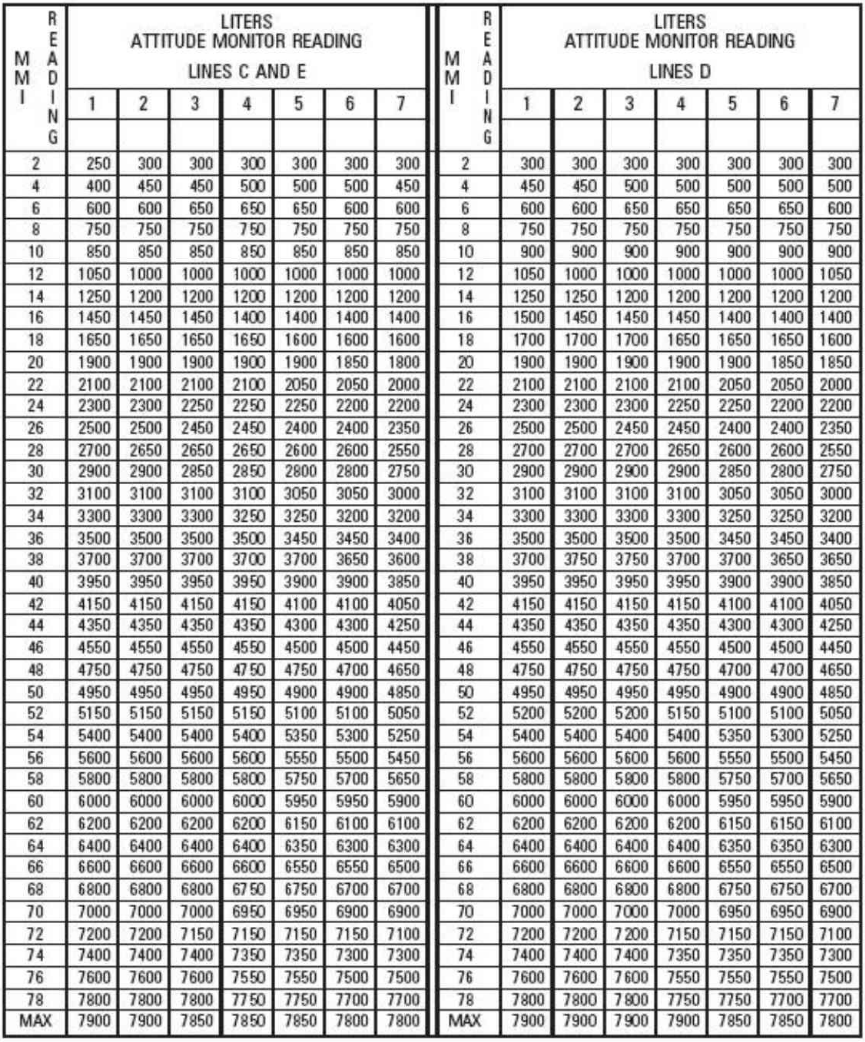
MMI N°	MMI READING	LITERS ATTITUDE READING D BOTH WINGS							MMI READING	LITERS ATTITUDE READING D BOTH WINGS							MMI N°
		1	2	3	4	5	6	7		1	2	3	4	5	6	7	
2	0	2450	2450	2400	2400	2350	2350	2350	0	4850	4800	4800	4750	4700	4650	4550	3
	2	2600	2600	2550	2550	2550	2500	2500	2	4950	4950	4950	4900	4850	4800	4750	
	4	2750	2750	2750	2700	2700	2650	2650	4	5100	5100	5100	5050	5050	5000	4950	
	6	2950	2900	2900	2850	2850	2850	2800	6	5200	5200	5200	5200	5200	5150	5150	
	8	3100	3050	3050	3050	3000	3000	3000	8	5350	5350	5350	5350	5350	5350	5300	
	10	3250	3250	3200	3200	3200	3200	3150	10	5450	5450	5450	5450	5450	5450	5450	
	12	3450	3400	3400	3400	3350	3350	3350	12	5600	5600	5600	5600	5600	5600	5600	
	14	3600	3600	3600	3550	3550	3550	3550	14	5700	5700	5700	5700	5750	5750	5750	
	16	3800	3800	3750	3750	3750	3750	3700	16	5800	5800	5850	5850	5850	5900	5900	
	18	3950	3950	3950	3950	3950	3900	3900	18	5900	5950	5950	5950	6000	6000	6050	
	20	4150	4150	4150	4150	4100	4100	4100	20	6000	6050	6050	6100	6100	6150	6150	
	22	4350	4350	4300	4300	4300	4300	4300	22	6100	6150	6150	6200	6250	6250	6300	
	24	4500	4500	4500	4500	4500	4500	4500									
	26	4650	4650	4650	4700	4700	4700	4700	0	5950	5900	5900	5900	5900	5850	5850	4
	28	4800	4800	4850	4850	4850	4850	4900	2	6050	6050	6000	6000	6000	6000	6000	
	30	4950	4950	5000	5000	5050	5050	5050	4	6150	6150	6150	6150	6150	6100	6100	
	32	5050	5100	5100	5150	5200	5200	5250	6	6250	6250	6250	6250	6250	6250	6250	
	34	5200	5200	5250	5300	5350	5350	5400	8	6350	6350	6350	6350	6350	6350	6350	
									10	6450	6450	6450	6450	6500	6500	6500	
									12	6550	6550	6550	6600	6600	6600	6600	
									14	6650	6650	6650	6700	6700	6700	6750	
									16	6750	6750	6750	6800	6800	6850	6850	
									18	6850	6850	6850	6900	6900	6950	6950	
									20	6900	6950	6950	7000	7000	7050	7050	

Ident.: EFB-LOD-FUL-C-00001682.0001001 / 16 NOV 11
Applicable to: ALL

CENTER TANK (LITERS)

MMI READING	LITERS ATTITUDE MONITOR READING LINES A AND G*						
	1	2	3	4	5	6	7
2	300	300	350	350	350	350	350
4	400	450	450	500	500	500	500
6	600	600	650	650	650	650	650
8	750	750	750	750	750	750	750
10	900	850	850	850	850	850	900
12	1050	1000	1000	1000	1000	1000	1050
14	1250	1250	1200	1200	1200	1200	1200
16	1450	1450	1400	1400	1400	1400	1400
18	1650	1650	1600	1600	1600	1600	1600
20	1900	1850	1850	1850	1850	1800	1800
22	2100	2050	2050	2050	2050	2000	2000
24	2300	2250	2250	2250	2200	2200	2150
26	2450	2450	2450	2450	2450	2400	2350
28	2700	2650	2650	2650	2600	2550	2550
30	2900	2850	2850	2850	2800	2800	2750
32	3050	3050	3050	3050	3000	3000	2950
34	3250	3250	3250	3250	3200	3200	3150
36	3500	3500	3450	3450	3450	3400	3400
38	3700	3700	3700	3700	3650	3650	3600
40	3900	3900	3900	3900	3900	3850	3800
42	4100	4100	4100	4100	4100	4050	4050
44	4350	4350	4350	4300	4300	4250	4250
46	4550	4550	4550	4550	4500	4500	4450
48	4750	4750	4750	4700	4700	4650	4650
50	4950	4950	4950	4950	4900	4900	4850
52	5150	5150	5150	5150	5100	5100	5050
54	5400	5400	5400	5400	5350	5300	5250
56	5600	5600	5600	5600	5550	5500	5450
58	5800	5800	5800	5750	5750	5700	5650
60	6000	6000	6000	5950	5950	5900	5900
62	6200	6200	6200	6150	6150	6100	6100
64	6400	6400	6400	6400	6350	6300	6300
66	6600	6600	6600	6600	6550	6550	6500
68	6800	6800	6750	6750	6750	6700	6700
70	7000	6950	6950	6950	6900	6900	6900
72	7200	7200	7150	7150	7100	7100	7050
74	7400	7400	7350	7350	7300	7300	7300
76	7600	7600	7600	7550	7550	7500	7500
78	7850	7800	7800	7800	7750	7700	7700
MAX	7950	7900	7900	7900	7850	7800	7800

MMI READING	LITERS ATTITUDE MONITOR READING LINES B AND F						
	1	2	3	4	5	6	7**
2	300	300	300	300	300	300	350
4	400	450	450	450	500	500	500
6	600	600	650	650	650	650	600
8	750	750	750	750	750	750	750
10	900	850	850	850	850	850	900
12	1050	1000	1000	1000	1000	1000	1050
14	1250	1200	1200	1200	1200	1200	1200
16	1450	1450	1450	1450	1400	1400	1400
18	1700	1700	1650	1650	1600	1600	1600
20	1900	1900	1900	1850	1850	1850	1800
22	2100	2100	2100	2050	2050	2000	2000
24	2300	2300	2250	2250	2200	2200	2150
26	2500	2500	2450	2450	2400	2350	2350
28	2700	2700	2650	2650	2600	2550	2500
30	2900	2900	2900	2850	2800	2800	2750
32	3100	3100	3100	3050	3050	3000	2950
34	3300	3300	3300	3250	3250	3200	3150
36	3500	3500	3500	3450	3450	3400	3400
38	3700	3700	3700	3700	3650	3650	3600
40	3950	3950	3950	3900	3900	3850	3800
42	4150	4150	4150	4100	4100	4050	4000
44	4350	4350	4350	4300	4300	4250	4200
46	4550	4550	4550	4550	4500	4500	4450
48	4750	4750	4750	4750	4700	4700	4650
50	4950	4950	4950	4950	4900	4900	4850
52	5150	5150	5150	5150	5150	5100	5050
54	5400	5400	5400	5400	5350	5300	5250
56	5600	5600	5600	5600	5550	5500	5450
58	5800	5800	5800	5800	5750	5750	5700
60	6000	6000	6000	6000	5950	5950	5900
62	6200	6200	6200	6200	6150	6150	6100
64	6400	6400	6400	6400	6350	6350	6300
66	6600	6600	6600	6600	6550	6550	6500
68	6800	6800	6800	6800	6750	6750	6700
70	7000	7000	7000	6950	6950	6950	6900
72	7200	7200	7150	7150	7150	7100	7100
74	7400	7400	7350	7350	7350	7300	7300
76	7600	7600	7600	7550	7550	7500	7500
78	7800	7800	7800	7750	7750	7700	7700
MAX	7900	7900	7850	7850	7850	7800	7800



MMI READING	LITERS ATTITUDE MONITOR READING LINES C AND E							MMI READING	LITERS ATTITUDE MONITOR READING LINES D						
	1	2	3	4	5	6	7		1	2	3	4	5	6	7
2	250	300	300	300	300	300	300	2	300	300	300	300	300	300	300
4	400	450	450	500	500	500	450	4	450	450	500	500	500	500	500
6	600	600	650	650	650	600	600	6	600	600	650	650	650	650	600
8	750	750	750	750	750	750	750	8	750	750	750	750	750	750	750
10	850	850	850	850	850	850	850	10	900	900	900	900	900	900	900
12	1050	1000	1000	1000	1000	1000	1000	12	1050	1000	1000	1000	1000	1000	1050
14	1250	1200	1200	1200	1200	1200	1200	14	1250	1250	1200	1200	1200	1200	1200
16	1450	1450	1450	1400	1400	1400	1400	16	1500	1450	1450	1450	1400	1400	1400
18	1650	1650	1650	1650	1600	1600	1600	18	1700	1700	1700	1650	1650	1650	1600
20	1900	1900	1900	1900	1900	1850	1800	20	1900	1900	1900	1900	1900	1850	1850
22	2100	2100	2100	2100	2050	2050	2000	22	2100	2100	2100	2100	2050	2050	2000
24	2300	2300	2250	2250	2250	2200	2200	24	2300	2300	2300	2250	2250	2200	2200
26	2500	2500	2450	2450	2400	2400	2350	26	2500	2500	2450	2450	2400	2400	2350
28	2700	2650	2650	2650	2600	2600	2550	28	2700	2700	2700	2650	2600	2600	2550
30	2900	2900	2850	2850	2800	2800	2750	30	2900	2900	2900	2900	2850	2800	2750
32	3100	3100	3100	3100	3050	3050	3000	32	3100	3100	3100	3100	3050	3050	3000
34	3300	3300	3300	3250	3250	3200	3200	34	3300	3300	3300	3300	3250	3250	3200
36	3500	3500	3500	3500	3450	3450	3400	36	3500	3500	3500	3500	3450	3450	3400
38	3700	3700	3700	3700	3700	3650	3600	38	3700	3750	3750	3700	3700	3650	3650
40	3950	3950	3950	3950	3900	3900	3850	40	3950	3950	3950	3950	3900	3900	3850
42	4150	4150	4150	4150	4100	4100	4050	42	4150	4150	4150	4150	4100	4100	4050
44	4350	4350	4350	4350	4300	4300	4250	44	4350	4350	4350	4350	4300	4300	4250
46	4550	4550	4550	4550	4500	4500	4450	46	4550	4550	4550	4550	4500	4500	4450
48	4750	4750	4750	4750	4750	4700	4650	48	4750	4750	4750	4750	4700	4700	4650
50	4950	4950	4950	4950	4900	4900	4850	50	4950	4950	4950	4950	4900	4900	4850
52	5150	5150	5150	5150	5100	5100	5050	52	5200	5200	5200	5150	5100	5100	5050
54	5400	5400	5400	5400	5350	5300	5250	54	5400	5400	5400	5400	5350	5300	5250
56	5600	5600	5600	5600	5550	5500	5450	56	5600	5600	5600	5600	5550	5500	5450
58	5800	5800	5800	5800	5750	5700	5650	58	5800	5800	5800	5800	5750	5700	5650
60	6000	6000	6000	6000	5950	5950	5900	60	6000	6000	6000	6000	5950	5950	5900
62	6200	6200	6200	6200	6150	6100	6100	62	6200	6200	6200	6200	6150	6150	6100
64	6400	6400	6400	6400	6350	6300	6300	64	6400	6400	6400	6400	6350	6350	6300
66	6600	6600	6600	6600	6550	6550	6500	66	6600	6600	6600	6600	6550	6550	6500
68	6800	6800	6800	6750	6750	6700	6700	68	6800	6800	6800	6800	6750	6750	6700
70	7000	7000	7000	6950	6950	6900	6900	70	7000	7000	7000	7000	6950	6950	6900
72	7200	7200	7150	7150	7150	7150	7100	72	7200	7200	7200	7150	7150	7150	7100
74	7400	7400	7400	7350	7350	7300	7300	74	7400	7400	7400	7350	7350	7350	7300
76	7600	7600	7600	7550	7550	7500	7500	76	7600	7600	7600	7550	7550	7550	7500
78	7800	7800	7800	7750	7750	7700	7700	78	7800	7800	7800	7750	7750	7700	7700
MAX	7900	7900	7850	7850	7850	7800	7800	MAX	7900	7900	7900	7900	7850	7850	7800

*	GRID SQUARE LETTER
**	GRID SQUARE NUMBER

PERFORMANCE (EFB)

THRUST RATINGS

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EFB-THR-N1 N1 MODE THRUST CONTROL

N1 MODE THRUST CONTROL ..... A
MAXIMUM TAKEOFF N1 ..... B
MAXIMUM GO AROUND N1 C
MAXIMUM CONTINUOUS N1 ..... D
MAXIMUM CLIMB N1 ..... E
MAXIMUM CRUISE N1 ..... F

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N1 MODE THRUST CONTROL

Ident.: EFB-THR-N1-00004648.0004001 / 05 NOV 19

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

In case of no EPR available, the thrust control automatically reverts to N1 mode (rated or degraded). *Refer to PRO-ABN-ENG ENG 1(2) EPR MODE FAULT (First Threshold)*.

If the rated N1 mode is lost on both engines, refer to the power management tables given on the following pages.

The herebelow table gives the N1 to be set in cruise to maintain M 0.78.

	FLIGHT LEVEL					
WEIGHT (1000 KG)	**290**	**310**	**330**	**350**	**370**	**390**
44	76.1	75.7	75.3	75	75.3	76.3
46	76.1	75.8	75.4	75.2	76.1	76.7
48	76.2	75.9	75.6	75.5	76.1	77.2
50	76.3	76	75.8	75.8	76.5	77.6
52	76.4	76.1	76	76.1	76.9	78
54	76.5	76.3	76.3	76.5	77.3	78.7
56	76.6	76.5	76.6	76.8	77.6	79.4
58	76.7	76.7	76.9	77.2	78.1	80.1
60	76.9	77	77.2	77.6	78.7	81
62	77.1	77.2	77.5	78	79.4	82
64	77.3	77.5	77.8	78.4	80	
66	77.5	77.8	78.2	79	80.9	
68	77.8	78	78.6	79.6	81.7	
70	78	78.4	79	80.1	82.7	N1 (%)

N1 MODE THRUST CONTROL

Ident.: EFB-THR-N1-00004648.0010001 / 05 NOV 19

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

In case of no EPR available, the thrust control automatically reverts to N1 mode (rated or degraded). *Refer to PRO-ABN-ENG ENG 1(2) EPR MODE FAULT (First Threshold)*.

If the rated N1 mode is lost on both engines, refer to the power management tables given on the following pages.

The herebelow table gives the N1 to be set in cruise to maintain M 0.78.

	FLIGHT LEVEL					
WEIGHT (1000 KG)	**290**	**310**	**330**	**350**	**370**	**390**
50	75.4	75.5	75.7	76	76.8	78
52	75.7	75.8	76	76.4	77.2	78.6
54	75.9	76.1	76.4	76.8	77.6	79.1
56	76.2	76.4	76.8	77.2	78.1	79.7
58	76.4	76.7	77.1	77.6	78.6	80.4
60	76.7	77.1	77.5	78	79.2	81.2
62	77.1	77.4	77.9	78.5	79.7	81.9
64	77.3	77.7	78.3	79	80.3	
66	77.7	78.1	78.6	79.5	81	
68	78	78.5	79.1	80	81.7	
70	78.3	78.8	79.5	80.5	82.5	
72	78.6	79.2	80	81.1		
74	79	79.5	80.4	81.7		
76	79.3	80	80.9	82.4		N1 (%)

N1 MODE THRUST CONTROL

Ident.: EFB-THR-N1-00004648.0008001 / 05 NOV 19

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165

In case of no EPR available, the thrust control automatically reverts to N1 mode (rated or degraded). *Refer to PRO-ABN-ENG ENG 1(2) EPR MODE FAULT (First Threshold)*.

If the rated N1 mode is lost on both engines, refer to the power management tables given on the following pages.

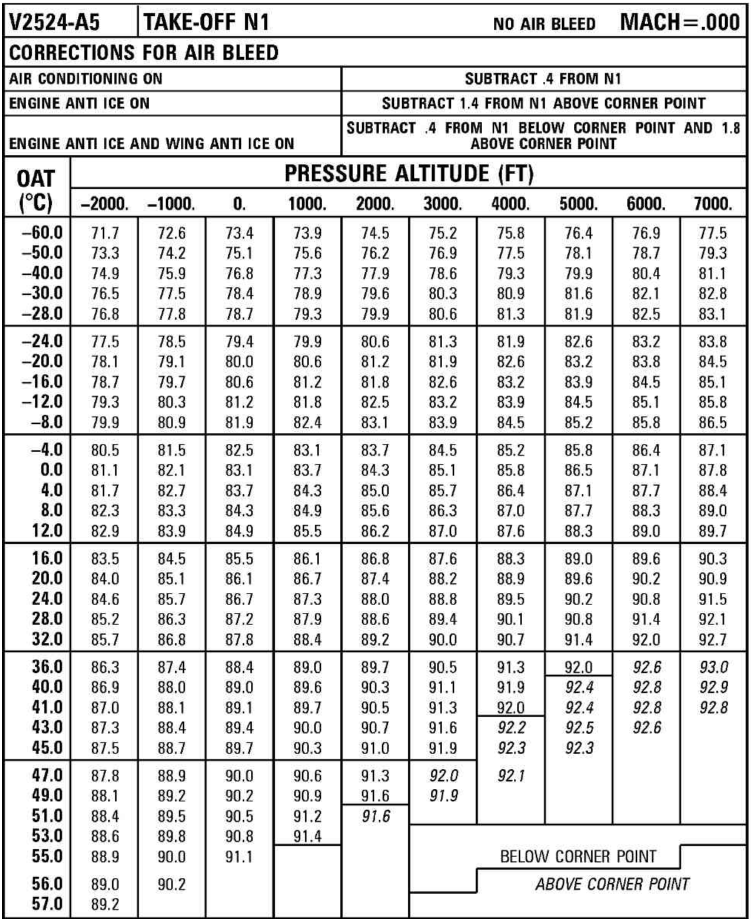
The herebelow table gives the N1 to be set in cruise to maintain M 0.78.

	FLIGHT LEVEL					
WEIGHT (1000 KG)	**290**	**310**	**330**	**350**	**370**	**390**
56	78.1	78.1	78.2	78.4	79.1	80.5
58	78.3	78.4	78.5	78.7	79.5	81.1
60	78.5	78.6	78.8	79.1	79.9	81.6
62	78.7	78.9	79.1	79.4	80.4	82.4
64	78.9	79.1	79.4	79.8	80.9	83.2
66	79.2	79.4	79.7	80.2	81.5	84.1
68	79.4	79.7	80	80.6	82.1	85.2
70	79.7	80	80.4	81.1	82.9	
72	79.9	80.2	80.7	81.6	83.7	
74	80.2	80.6	81.1	82.2	84.6	
76	80.5	80.9	81.5	82.8	85.9	
78	80.7	81.3	82	83.5		
80	81.1	81.6	82.5	84.3		
82	81.3	81.9	83	85.5		
84	81.6	82.3	83.7			
86	81.9	82.7	84.3			
88	82.2	83.2	85.1			
90	82.6	83.7				
92	82.9	84.2				N1 (%)

MAXIMUM TAKEOFF N1

Ident.: EFB-THR-N1-00001970.0002001 / 28 JAN 11

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345



V2524-A5	TAKE-OFF N1	NO AIR BLEED	MACH=.000
CORRECTIONS FOR AIR BLEED			
AIR CONDITIONING ON	SUBTRACT .4 FROM N1		
ENGINE ANTI ICE ON	SUBTRACT 1.4 FROM N1 ABOVE CORNER POINT		
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT .4 FROM N1 BELOW CORNER POINT AND 1.8 ABOVE CORNER POINT		

OAT (°C)	PRESSURE ALTITUDE (FT)									
	−2000.	−1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.
−60.0	71.7	72.6	73.4	73.9	74.5	75.2	75.8	76.4	76.9	77.5
−50.0	73.3	74.2	75.1	75.6	76.2	76.9	77.5	78.1	78.7	79.3
−40.0	74.9	75.9	76.8	77.3	77.9	78.6	79.3	79.9	80.4	81.1
−30.0	76.5	77.5	78.4	78.9	79.6	80.3	80.9	81.6	82.1	82.8
−28.0	76.8	77.8	78.7	79.3	79.9	80.6	81.3	81.9	82.5	83.1
−24.0	77.5	78.5	79.4	79.9	80.6	81.3	81.9	82.6	83.2	83.8
−20.0	78.1	79.1	80.0	80.6	81.2	81.9	82.6	83.2	83.8	84.5
−16.0	78.7	79.7	80.6	81.2	81.8	82.6	83.2	83.9	84.5	85.1
−12.0	79.3	80.3	81.2	81.8	82.5	83.2	83.9	84.5	85.1	85.8
−8.0	79.9	80.9	81.9	82.4	83.1	83.9	84.5	85.2	85.8	86.5
−4.0	80.5	81.5	82.5	83.1	83.7	84.5	85.2	85.8	86.4	87.1
0.0	81.1	82.1	83.1	83.7	84.3	85.1	85.8	86.5	87.1	87.8
4.0	81.7	82.7	83.7	84.3	85.0	85.7	86.4	87.1	87.7	88.4
8.0	82.3	83.3	84.3	84.9	85.6	86.3	87.0	87.7	88.3	89.0
12.0	82.9	83.9	84.9	85.5	86.2	87.0	87.6	88.3	89.0	89.7
16.0	83.5	84.5	85.5	86.1	86.8	87.6	88.3	89.0	89.6	90.3
20.0	84.0	85.1	86.1	86.7	87.4	88.2	88.9	89.6	90.2	90.9
24.0	84.6	85.7	86.7	87.3	88.0	88.8	89.5	90.2	90.8	91.5
28.0	85.2	86.3	87.2	87.9	88.6	89.4	90.1	90.8	91.4	92.1
32.0	85.7	86.8	87.8	88.4	89.2	90.0	90.7	91.4	92.0	92.7
36.0	86.3	87.4	88.4	89.0	89.7	90.5	91.3	92.0	*92.6*	*93.0*
40.0	86.9	88.0	89.0	89.6	90.3	91.1	91.9	*92.4*	*92.8*	*92.9*
41.0	87.0	88.1	89.1	89.7	90.5	91.3	92.0	*92.4*	*92.8*	*92.8*
43.0	87.3	88.4	89.4	90.0	90.7	91.6	*92.2*	*92.5*	*92.6*	
45.0	87.5	88.7	89.7	90.3	91.0	91.9	*92.3*	*92.3*		
47.0	87.8	88.9	90.0	90.6	91.3	*92.0*	*92.1*			
49.0	88.1	89.2	90.2	90.9	91.6	*91.9*				
51.0	88.4	89.5	90.5	91.2	*91.6*					
53.0	88.6	89.8	90.8	91.4						
55.0	88.9	90.0	91.1							
56.0	89.0	90.2								
57.0	89.2									

BELOW CORNER POINT

ABOVE CORNER POINT

V2524-A5 — TAKE-OFF N1 — NO AIR BLEED — MACH=.000

CORRECTIONS FOR AIR BLEED

AIR CONDITIONING ON	SUBTRACT .6 FROM N1
ENGINE ANTI ICE ON	SUBTRACT .7 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT .5 FROM N1 BELOW CORNER POINT AND 1.2 ABOVE CORNER POINT

OAT (°C)	PRESSURE ALTITUDE (FT)									
	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
−60.0	76.9	77.5	78.1	78.7	79.4	80.0	80.6	81.0	81.5	81.8
−50.0	78.7	79.3	79.9	80.6	81.2	81.8	82.5	82.9	83.4	83.7
−40.0	80.4	81.1	81.7	82.4	83.0	83.7	84.3	84.8	85.3	85.5
−30.0	82.1	82.8	83.4	84.1	84.8	85.4	86.1	86.5	87.1	87.3
−20.0	83.8	84.5	85.1	85.8	86.5	87.2	87.9	88.3	88.8	89.1
−18.0	84.1	84.8	85.5	86.2	86.8	87.5	88.2	88.7	89.2	89.5
−16.0	84.5	85.1	85.8	86.5	87.2	87.9	88.5	89.0	89.5	89.8
−12.0	85.1	85.8	86.5	87.2	87.9	88.5	89.2	89.7	90.2	90.5
−8.0	85.8	86.5	87.1	87.8	88.5	89.2	89.9	90.4	90.9	91.2
−4.0	86.4	87.1	87.8	88.5	89.2	89.9	90.6	91.1	91.6	91.9
0.0	87.1	87.8	88.4	89.1	89.8	90.6	91.3	91.7	92.3	92.6
2.0	87.4	88.1	88.8	89.5	90.2	90.9	91.6	92.1	92.6	92.9
4.0	87.7	88.4	89.1	89.8	90.5	91.2	91.9	92.4	92.9	93.2
6.0	88.0	88.7	89.4	90.1	90.8	91.5	92.3	92.7	93.3	93.6
8.0	88.3	89.0	89.7	90.4	91.2	91.9	92.6	93.1	93.6	93.9
10.0	88.6	89.3	90.0	90.8	91.5	92.2	92.9	93.4	93.9	94.2
12.0	89.0	89.7	90.4	91.1	91.8	92.5	93.2	93.7	94.3	94.6
14.0	89.3	90.0	90.7	91.4	92.1	92.8	93.6	94.1	94.6	94.9
16.0	89.6	90.3	91.0	91.7	92.4	93.2	93.9	94.4	94.9	95.2
19.0	90.0	90.8	91.5	92.2	92.9	93.6	94.4	94.9	95.4	*95.5*
20.0	90.2	90.9	91.6	92.3	93.1	93.8	94.5	95.0	*95.4*	*95.3*
23.0	90.7	91.4	92.1	92.8	93.6	94.3	95.0	*95.0*	*94.7*	*94.6*
25.0	91.0	91.7	92.4	93.1	93.9	94.6	*94.8*	*94.6*	*94.3*	*94.2*
28.0	91.4	92.1	92.9	93.6	*94.2*	*94.3*	*94.2*	*94.0*		
31.0	91.9	92.6	93.3	*93.8*	*93.9*	*93.8*	*93.6*			
34.0	92.3	*93.0*	*93.4*	*93.6*	*93.5*					
36.0	*92.6*	*93.0*	*93.4*	*93.4*						
39.0	*92.7*	*93.0*	*93.1*							
41.0	*92.8*	*92.8*								
43.0	*92.6*									

BELOW CORNER POINT

ABOVE CORNER POINT

MAXIMUM TAKEOFF N1

Ident.: EFB-THR-N1-00001970.0005001 / 28 JAN 11

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02734, 02896-02904

V2527-A5	TAKEOFF N1 NO AIR BLEED MACH=.000
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING ON	SUBTRACT .400 FROM N1
ENGINE ANTI ICE ON	SUBTRACT 1.3 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT .3 FROM N1 BELOW CORNER POINT AND 1.6 ABOVE CORNER POINT

OAT (°C)	PRESSURE ALTITUDE (FT)								
	−1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.
−60.0	74.6	75.4	76.2	76.9	77.5	78.0	78.4	78.9	79.5
−40.0	78.0	78.9	79.6	80.5	81.0	81.5	82.0	82.6	83.1
−20.0	81.3	82.2	83.0	83.8	84.4	85.0	85.5	86.0	86.6
0.0	84.4	85.4	86.2	87.1	87.7	88.3	88.8	89.4	90.0
10.0	86.0	86.9	87.8	88.7	89.3	89.9	90.4	91.0	91.6
20.0	87.5	88.4	89.3	90.2	90.9	91.4	92.0	92.6	93.2
22.0	87.8	88.7	89.6	90.5	91.2	91.8	92.3	92.9	93.5
24.0	88.1	89.0	89.9	90.8	91.5	92.1	92.6	93.2	93.8
26.0	88.3	89.3	90.2	91.1	91.8	92.4	92.9	93.5	94.1
28.0	88.6	89.6	90.5	91.4	92.1	92.7	93.2	93.8	94.5
30.0	88.9	89.9	90.8	91.7	92.4	93.0	93.5	94.1	*94.4*
32.0	89.2	90.2	91.1	92.1	92.7	93.3	93.8	*94.1*	*94.1*
34.0	89.5	90.5	91.4	92.4	93.0	93.6	*93.8*	*93.8*	*93.8*
36.0	89.8	90.8	91.7	92.7	93.3	*93.8*	*93.6*	*93.6*	*93.5*
38.0	90.1	91.1	92.0	93.0	93.6	*93.6*	*93.3*	*93.3*	*93.2*
40.0	90.4	91.4	92.3	93.2	*93.6*	*93.3*	*93.1*	*93.0*	*93.0*
42.0	90.7	91.7	92.6	93.5	*93.3*	*93.1*	*92.8*	*92.8*	
44.0	91.0	92.0	92.9	*93.3*	*93.0*	*92.8*	*92.6*		
46.0	91.3	92.3	*93.0*	*93.0*	*92.8*	*92.6*			
48.0	91.5	92.6	*92.7*	*92.7*	*92.5*				
50.0	91.8	*92.5*	*92.5*	*92.5*					
52.0	92.1	*92.2*	*92.2*						
54.0	*92.0*	*92.0*							
56.0	*91.8*								
58.0									

BELOW CORNER POINT
ABOVE CORNER POINT

V2527-A5	TAKE-OFF N1	NO AIR BLEED	MACH=.000

CORRECTIONS FOR AIR BLEED

AIR CONDITIONING ON	SUBTRACT .700 FROM N1
ENGINE ANTI ICE ON	SUBTRACT 1.7 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT .5 FROM N1 BELOW CORNER POINT AND 2.2 ABOVE CORNER POINT

OAT (°C)	PRESSURE ALTITUDE (FT)									
	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
−60.0	78.9	79.5	80.0	80.3	80.6	80.9	81.2	81.5	81.9	82.0
−40.0	82.6	83.1	83.7	84.0	84.3	84.6	84.9	85.3	85.6	85.8
−20.0	86.0	86.6	87.2	87.5	87.8	88.1	88.5	88.8	89.2	89.4
0.0	89.4	90.0	90.6	90.9	91.2	91.6	91.9	92.3	92.7	92.9
5.0	90.2	90.8	91.4	91.7	92.0	92.4	92.7	93.1	93.5	93.7
10.0	91.0	91.6	92.2	92.5	92.9	93.2	93.6	94.0	94.4	94.6
12.0	91.3	91.9	92.5	92.9	93.2	93.5	93.9	94.3	94.7	94.9
14.0	91.6	92.2	92.8	93.2	93.5	93.9	94.2	94.6	95.0	*95.2*
16.0	91.9	92.6	93.2	93.5	93.9	94.2	94.5	95.0	*95.1*	*95.2*
18.0	92.3	92.9	93.5	93.8	94.2	94.5	94.9	*95.0*	*95.2*	*95.3*
20.0	92.6	93.2	93.8	94.2	94.5	94.8	*94.9*	*95.0*	*95.1*	*95.0*
22.0	92.9	93.5	94.1	94.5	94.8	*94.9*	*94.9*	*95.0*	*94.8*	*94.7*
24.0	93.2	93.8	94.4	94.8	*94.8*	*94.8*	*94.8*	*94.6*	*94.5*	*94.4*
26.0	93.5	94.1	94.8	*94.7*	*94.6*	*94.6*	*94.5*	*94.3*	*94.1*	*94.0*
28.0	94.7	94.5	*94.5*	*94.3*	*94.2*	*94.0*				
30.0	94.1	*94.4*	*94.4*	*94.3*	*94.1*	*94.0*	*93.8*			
32.0	*94.1*	*94.1*	*94.1*	*94.0*	*93.8*	*93.7*				
34.0	*93.8*	*93.8*	*93.8*	*93.7*	*93.5*					
36.0	*93.6*	*93.5*	*93.5*	*93.4*						
38.0	*93.3*	*93.2*	*93.2*							
40.0	*93.0*	*93.0*								
42.0	*92.8*									
44.0										
46.0										
48.0										

BELOW CORNER POINT
ABOVE CORNER POINT

MAXIMUM TAKEOFF N1

Ident.: EFB-THR-N1-00001970.0008001 / 28 JAN 11
Applicable to: MSN 02014

V2527E-A5	TAKE-OFF N1 NO AIR BLEED MACH=.000
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING ON	SUBTRACT .400 FROM N1
ENGINE ANTI ICE ON	SUBTRACT 1.3 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT 0.3 FROM N1 BELOW CORNER POINT AND 1.6 ABOVE CORNER POINT

OAT (°C)	PRESSURE ALTITUDE (FT)								
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.
-60.0	74.6	75.4	76.3	77.4	78.5	79.8	81.2	82.4	82.9
-56.0	75.3	76.1	77.0	78.1	79.2	80.5	82.0	83.2	83.7
-52.0	76.0	76.8	77.7	78.8	79.9	81.3	82.7	83.9	84.4
-48.0	76.6	77.5	78.4	79.5	80.6	82.0	83.5	84.7	85.2
-44.0	77.3	78.2	79.1	80.2	81.3	82.7	84.2	85.4	86.0
-40.0	78.0	78.9	79.8	80.9	82.1	83.5	84.9	86.2	86.7
-36.0	78.7	79.5	80.5	81.6	82.8	84.2	85.7	86.9	87.4
-32.0	79.3	80.2	81.1	82.3	83.5	84.9	86.4	87.6	88.2
-28.0	80.0	80.9	81.8	83.0	84.1	85.6	87.1	88.4	88.9
-24.0	80.6	81.5	82.5	83.6	84.8	86.3	87.8	89.1	89.6
-20.0	81.3	82.2	83.1	84.3	85.5	87.0	88.5	89.8	90.3
-16.0	81.9	82.8	83.8	85.0	86.2	87.6	89.2	90.5	91.0
-12.0	82.5	83.5	84.4	85.6	86.8	88.3	89.9	91.2	91.8
-8.0	83.2	84.1	85.1	86.3	87.5	89.0	90.6	91.9	92.5
-4.0	83.8	84.7	85.7	86.9	88.2	89.7	91.3	92.6	93.1
0.0	84.4	85.4	86.4	87.6	88.8	90.3	91.9	93.3	93.8
4.0	85.0	86.0	87.0	88.2	89.5	91.0	92.6	93.9	94.5
8.0	85.6	86.6	87.6	88.9	90.1	91.6	93.3	94.6	95.2
12.0	86.3	87.2	88.2	89.5	90.7	92.3	93.9	95.3	95.9
16.0	86.9	87.8	88.9	90.1	91.4	92.9	94.6	96.0	96.5
20.0	87.5	88.4	89.5	90.7	92.0	93.6	95.2	96.6	*96.7*
24.0	88.1	89.0	90.1	91.3	92.6	94.2	95.9	*96.1*	*95.9*
28.0	88.6	89.6	90.7	92.0	93.3	94.9	*95.6*	*95.4*	*95.2*
32.0	89.2	90.2	91.3	92.6	93.9	*94.8*	*94.9*	*94.7*	*94.5*
36.0	89.8	90.8	91.9	93.2	*94.2*	*94.2*	*94.1*	*94.0*	*93.8*
40.0	90.4	91.4	92.5	*93.7*	*93.7*	*93.6*	*93.4*	*93.3*	*93.1*
44.0	91.0	92.0	93.1	*93.4*	*93.2*	*93.0*	*92.8*		
48.0	91.5	92.6	*92.8*	*92.8*	*92.7*				
52.0	92.1	*92.2*	*92.3*						
56.0	*91.8*								

BELOW CORNER POINT

ABOVE CORNER POINT

V2527E-A5	**TAKE-OFF N1**	**NO AIR BLEED MACH=.000**

CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING ON	SUBTRACT .700 FROM N1
ENGINE ANTI ICE ON	SUBTRACT 1.1 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT .5 FROM N1 BELOW CORNER POINT AND 1.6 ABOVE CORNER POINT

OAT (°C)	**PRESSURE ALTITUDE (FT)**									
	6000.	**7000.**	**8000.**	**9000.**	**10000.**	**11000.**	**12000.**	**13000.**	**14000.**	**14500.**
–60.0	82.4	82.9	83.4	83.3	83.3	83.4	83.3	83.3	83.3	83.3
–56.0	83.2	83.7	84.2	84.1	84.1	84.2	84.1	84.1	84.1	84.1
–52.0	83.9	84.4	85.0	84.9	84.8	85.0	84.9	84.9	84.9	84.9
–48.0	84.7	85.2	85.7	85.6	85.6	85.7	85.7	85.6	85.6	85.6
–44.0	85.4	86.0	86.5	86.4	86.3	86.5	86.4	86.4	86.4	86.4
–40.0	86.2	86.7	87.2	87.1	87.1	87.2	87.2	87.1	87.1	87.1
–36.0	86.9	87.4	88.0	87.9	87.8	88.0	87.9	87.9	87.9	87.9
–32.0	87.6	88.2	88.7	88.6	88.6	88.7	88.7	88.6	88.6	88.6
–28.0	88.4	88.9	89.4	89.3	89.3	89.4	89.4	89.3	89.4	89.4
–24.0	89.1	89.6	90.2	90.1	90.0	90.2	90.1	90.1	90.1	90.1
–20.0	89.8	90.3	90.9	90.8	90.8	90.9	90.8	90.8	90.8	90.8
–16.0	90.5	91.0	91.6	91.5	91.5	91.6	91.5	91.5	91.5	91.5
–12.0	91.2	91.8	92.3	92.2	92.2	92.3	92.3	92.2	92.2	92.2
–8.0	91.9	92.5	93.0	92.9	92.9	93.0	93.0	92.9	92.9	92.9
–4.0	92.6	93.1	93.7	93.6	93.6	93.7	93.7	93.6	93.6	93.6
0.0	93.3	93.8	94.4	94.3	94.3	94.4	94.3	94.3	94.3	94.3
4.0	93.9	94.5	95.1	95.0	95.0	95.1	95.0	95.0	95.0	95.0
8.0	94.6	95.2	95.8	95.7	95.6	95.8	95.7	95.7	95.7	95.7
12.0	95.3	95.9	96.5	96.4	96.3	96.5	96.4	96.4	96.4	96.4
16.0	96.0	96.5	*96.8*	*96.8*	*96.8*	*96.7*	*96.6*	*96.6*	*96.6*	*96.6*
20.0	96.6	*96.7*	*96.5*	*96.3*	*96.1*	*96.1*	*96.0*	*96.0*	*96.1*	*96.1*
24.0	*96.1*	*95.9*	*95.7*	*95.6*	*95.5*	*95.5*	*95.5*	*95.4*	*95.5*	*95.5*
28.0	*95.4*	*95.2*	*95.1*	*95.0*	*94.9*	*94.9*	*94.9*	*94.9*		
32.0	*94.7*	*94.5*	*94.4*	*94.3*	*94.3*	*94.3*				
36.0	*94.0*	*93.8*	*93.7*	*93.6*						
40.0	*93.3*	*93.1*								
44.0										
48.0										
52.0										
56.0										

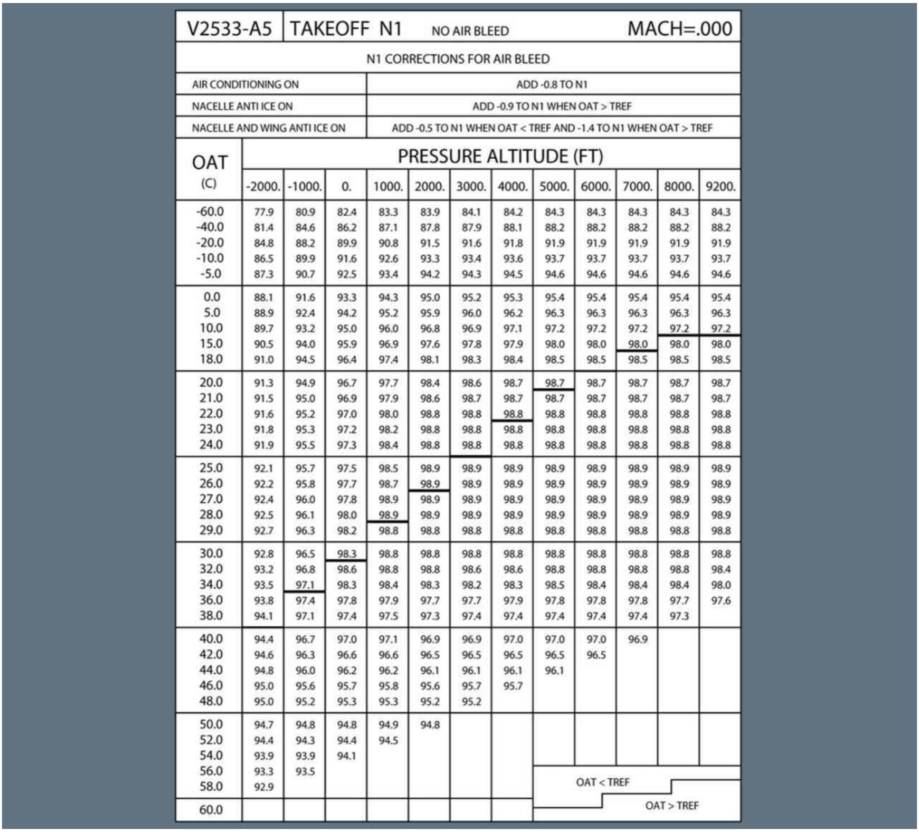
BELOW CORNER POINT

ABOVE CORNER POINT

MAXIMUM TAKEOFF N1

Ident.: EFB-THR-N1-00001970.0007001 / 27 JAN 15

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165



V2533-A5 TAKEOFF N1 NO AIR BLEED MACH=.000

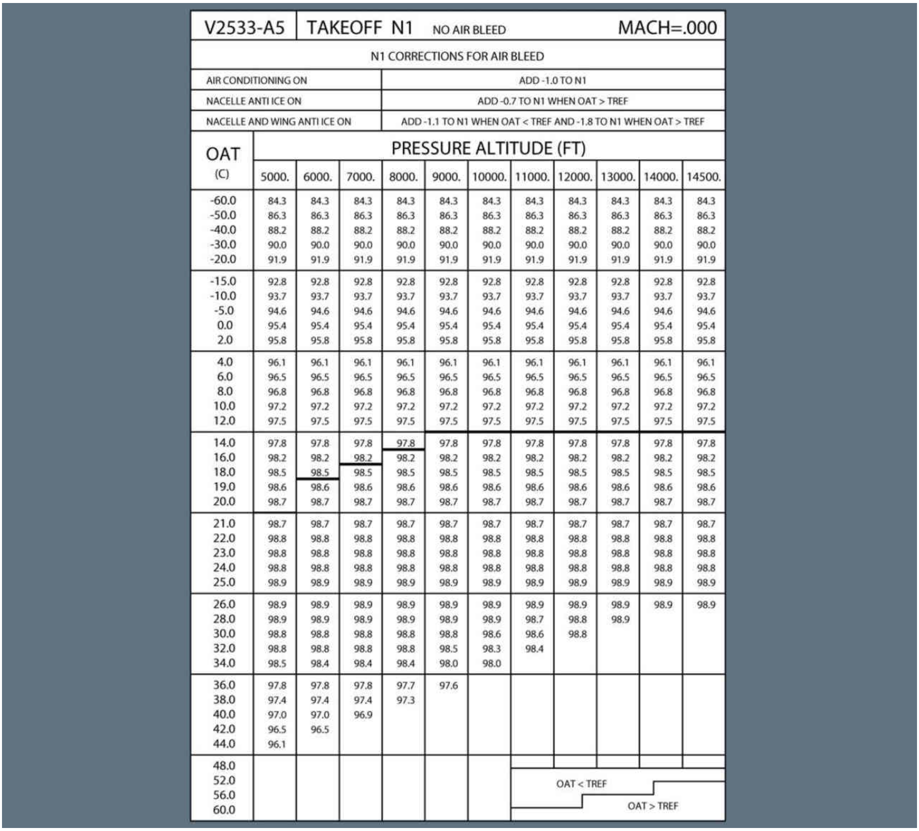
N1 CORRECTIONS FOR AIR BLEED

AIR CONDITIONING ON	ADD -0.8 TO N1
NACELLE ANTI ICE ON	ADD -0.9 TO N1 WHEN OAT > TREF
NACELLE AND WING ANTI ICE ON	ADD -0.5 TO N1 WHEN OAT < TREF AND -1.4 TO N1 WHEN OAT > TREF

OAT (C)	PRESSURE ALTITUDE (FT)											
	-2000.	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	9200.
-60.0	77.9	80.9	82.4	83.3	83.9	84.1	84.2	84.3	84.3	84.3	84.3	84.3
-40.0	81.4	84.6	86.2	87.1	87.8	87.9	88.1	88.2	88.2	88.2	88.2	88.2
-20.0	84.8	88.2	89.9	90.8	91.5	91.6	91.8	91.9	91.9	91.9	91.9	91.9
-10.0	86.5	89.9	91.6	92.6	93.3	93.4	93.6	93.7	93.7	93.7	93.7	93.7
-5.0	87.3	90.7	92.5	93.4	94.2	94.3	94.5	94.6	94.6	94.6	94.6	94.6
0.0	88.1	91.6	93.3	94.3	95.0	95.2	95.3	95.4	95.4	95.4	95.4	95.4
5.0	88.9	92.4	94.2	95.2	95.9	96.0	96.2	96.3	96.3	96.3	96.3	96.3
10.0	89.7	93.2	95.0	96.0	96.8	96.9	97.1	97.2	97.2	97.2	97.2	97.2
15.0	90.5	94.0	95.9	96.9	97.6	97.8	97.9	98.0	98.0	98.0	98.0	98.0
18.0	91.0	94.5	96.4	97.4	98.1	98.3	98.4	98.5	98.5	98.5	98.5	98.5
20.0	91.3	94.9	96.7	97.7	98.4	98.6	98.7	98.7	98.7	98.7	98.7	98.7
21.0	91.5	95.0	96.9	97.9	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7
22.0	91.6	95.2	97.0	98.0	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
23.0	91.8	95.3	97.2	98.2	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
24.0	91.9	95.5	97.3	98.4	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
25.0	92.1	95.7	97.5	98.5	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
26.0	92.2	95.8	97.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
27.0	92.4	96.0	97.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
28.0	92.5	96.1	98.0	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
29.0	92.7	96.3	98.2	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
30.0	92.8	96.5	98.3	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
32.0	93.2	96.8	98.6	98.8	98.8	98.6	98.6	98.8	98.8	98.8	98.8	98.4
34.0	93.5	97.1	98.3	98.4	98.3	98.2	98.3	98.5	98.4	98.4	98.4	98.0
36.0	93.8	97.4	97.8	97.9	97.7	97.7	97.9	97.8	97.8	97.8	97.7	97.6
38.0	94.1	97.1	97.4	97.5	97.3	97.4	97.4	97.4	97.4	97.4	97.3	
40.0	94.4	96.7	97.0	97.1	96.9	96.9	97.0	97.0	97.0	96.9		
42.0	94.6	96.3	96.6	96.6	96.5	96.5	96.5	96.5	96.5			
44.0	94.8	96.0	96.2	96.2	96.1	96.1	96.1	96.1				
46.0	95.0	95.6	95.7	95.8	95.6	95.7	95.7					
48.0	95.0	95.2	95.3	95.3	95.2	95.2						
50.0	94.7	94.8	94.8	94.9	94.8							
52.0	94.4	94.3	94.4	94.5								
54.0	93.9	93.9	94.1									
56.0	93.3	93.5										
58.0	92.9											
60.0												

OAT < TREF

OAT > TREF



V2533-A5 | TAKEOFF N1 NO AIR BLEED MACH=.000

N1 CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING ON	ADD -1.0 TO N1
NACELLE ANTI ICE ON	ADD -0.7 TO N1 WHEN OAT > TREF
NACELLE AND WING ANTI ICE ON	ADD -1.1 TO N1 WHEN OAT < TREF AND -1.8 TO N1 WHEN OAT > TREF

OAT (C)	PRESSURE ALTITUDE (FT)										
	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
-60.0	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3
-50.0	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3
-40.0	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
-30.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
-20.0	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
-15.0	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
-10.0	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
-5.0	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
0.0	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
2.0	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
4.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
6.0	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
8.0	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
10.0	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
12.0	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
14.0	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
16.0	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
18.0	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
19.0	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
20.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
21.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
22.0	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
23.0	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
24.0	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
25.0	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
26.0	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
28.0	98.9	98.9	98.9	98.9	98.9	98.9	98.7	98.8	98.9		
30.0	98.8	98.8	98.8	98.8	98.8	98.6	98.6	98.8			
32.0	98.8	98.8	98.8	98.8	98.5	98.3	98.4				
34.0	98.5	98.4	98.4	98.4	98.0	98.0					
36.0	97.8	97.8	97.8	97.7	97.6						
38.0	97.4	97.4	97.4	97.3							
40.0	97.0	97.0	96.9								
42.0	96.5	96.5									
44.0	96.1										
48.0											
52.0											
56.0											
60.0											

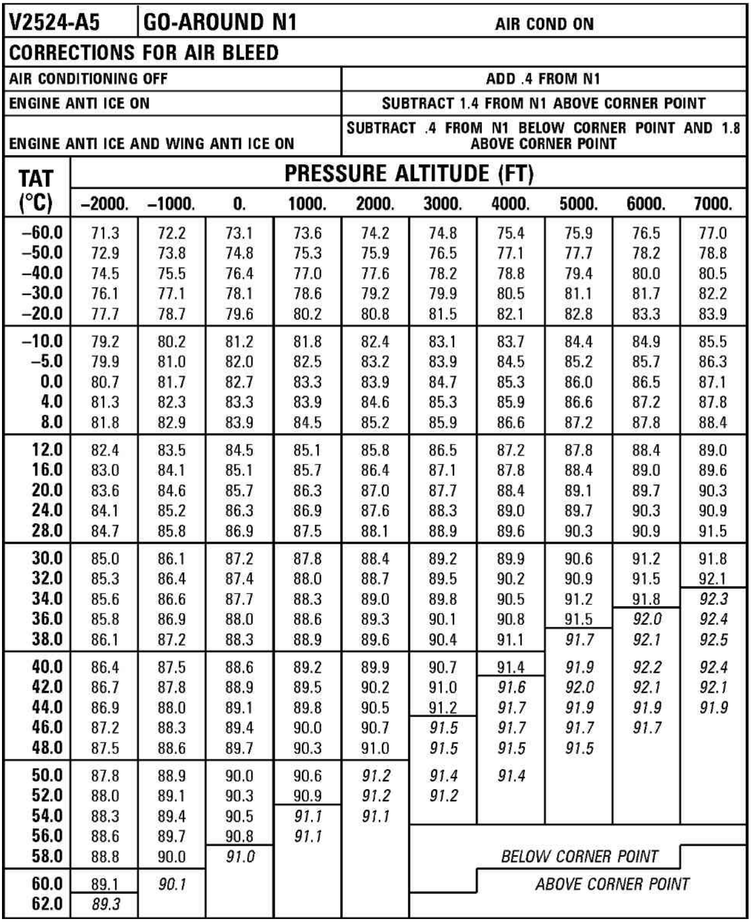
OAT < TREF

OAT > TREF

MAXIMUM GO AROUND N1

Ident.: EFB-THR-N1-00004650.0006001 / 08 FEB 11

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345



V2524-A5	GO-AROUND N1	AIR COND ON

CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	ADD .4 FROM N1
ENGINE ANTI ICE ON	SUBTRACT 1.4 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT .4 FROM N1 BELOW CORNER POINT AND 1.8 ABOVE CORNER POINT

TAT (°C)	PRESSURE ALTITUDE (FT)									
	−2000.	−1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.
−60.0	71.3	72.2	73.1	73.6	74.2	74.8	75.4	75.9	76.5	77.0
−50.0	72.9	73.8	74.8	75.3	75.9	76.5	77.1	77.7	78.2	78.8
−40.0	74.5	75.5	76.4	77.0	77.6	78.2	78.8	79.4	80.0	80.5
−30.0	76.1	77.1	78.1	78.6	79.2	79.9	80.5	81.1	81.7	82.2
−20.0	77.7	78.7	79.6	80.2	80.8	81.5	82.1	82.8	83.3	83.9
−10.0	79.2	80.2	81.2	81.8	82.4	83.1	83.7	84.4	84.9	85.5
−5.0	79.9	81.0	82.0	82.5	83.2	83.9	84.5	85.2	85.7	86.3
0.0	80.7	81.7	82.7	83.3	83.9	84.7	85.3	86.0	86.5	87.1
4.0	81.3	82.3	83.3	83.9	84.6	85.3	85.9	86.6	87.2	87.8
8.0	81.8	82.9	83.9	84.5	85.2	85.9	86.6	87.2	87.8	88.4
12.0	82.4	83.5	84.5	85.1	85.8	86.5	87.2	87.8	88.4	89.0
16.0	83.0	84.1	85.1	85.7	86.4	87.1	87.8	88.4	89.0	89.6
20.0	83.6	84.6	85.7	86.3	87.0	87.7	88.4	89.1	89.7	90.3
24.0	84.1	85.2	86.3	86.9	87.6	88.3	89.0	89.7	90.3	90.9
28.0	84.7	85.8	86.9	87.5	88.1	88.9	89.6	90.3	90.9	91.5
30.0	85.0	86.1	87.2	87.8	88.4	89.2	89.9	90.6	91.2	91.8
32.0	85.3	86.4	87.4	88.0	88.7	89.5	90.2	90.9	91.5	92.1
34.0	85.6	86.6	87.7	88.3	89.0	89.8	90.5	91.2	91.8	*92.3*
36.0	85.8	86.9	88.0	88.6	89.3	90.1	90.8	91.5	*92.0*	*92.4*
38.0	86.1	87.2	88.3	88.9	89.6	90.4	91.1	*91.7*	*92.1*	*92.5*
40.0	86.4	87.5	88.6	89.2	89.9	90.7	91.4	*91.9*	*92.2*	*92.4*
42.0	86.7	87.8	88.9	89.5	90.2	91.0	*91.6*	*92.0*	*92.1*	*92.1*
44.0	86.9	88.0	89.1	89.8	90.5	91.2	*91.7*	*91.9*	*91.9*	*91.9*
46.0	87.2	88.3	89.4	90.0	90.7	*91.5*	*91.7*	*91.7*	*91.7*	
48.0	87.5	88.6	89.7	90.3	91.0	*91.5*	*91.5*	*91.5*		
50.0	87.8	88.9	90.0	90.6	*91.2*	*91.4*	*91.4*			
52.0	88.0	89.1	90.3	90.9	*91.2*	*91.2*				
54.0	88.3	89.4	90.5	*91.1*	*91.1*					
56.0	88.6	89.7	90.8	*91.1*						
58.0	88.8	90.0	*91.0*							
60.0	89.1	*90.1*								
62.0	*89.3*									

BELOW CORNER POINT

ABOVE CORNER POINT

V2524-A5	**GO-AROUND N1**	**AIR COND ON**
CORRECTIONS FOR AIR BLEED		
AIR CONDITIONING OFF		ADD .65 TO N1
ENGINE ANTI ICE ON		SUBTRACT .7 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON		SUBTRACT .5 FROM N1 BELOW CORNER POINT AND 1.2 ABOVE CORNER POINT

TAT (°C)	**PRESSURE ALTITUDE (FT)**									
	6000.	**7000.**	**8000.**	**9000.**	**10000.**	**11000.**	**12000.**	**13000.**	**14000.**	**14500.**
−60.0	76.5	77.0	77.6	78.1	78.7	79.3	79.9	80.3	80.6	80.8
−50.0	78.2	78.8	79.3	80.0	80.6	81.2	81.7	82.1	82.5	82.7
−40.0	80.0	80.5	81.1	81.7	82.4	83.0	83.6	83.9	84.3	84.5
−30.0	81.7	82.2	82.8	83.5	84.1	84.7	85.3	85.7	86.1	86.3
−20.0	83.3	83.9	84.5	85.2	85.8	86.4	87.1	87.5	87.9	88.1
−10.0	84.9	85.5	86.2	86.8	87.5	88.1	88.8	89.2	89.6	89.8
−5.0	85.7	86.3	87.0	87.7	88.3	89.0	89.6	90.0	90.4	90.6
0.0	86.5	87.1	87.8	88.5	89.1	89.8	90.4	90.9	91.3	91.5
2.0	86.9	87.5	88.1	88.8	89.5	90.1	90.8	91.2	91.6	91.8
4.0	87.2	87.8	88.4	89.1	89.8	90.4	91.1	91.5	91.9	92.2
6.0	87.5	88.1	88.7	89.4	90.1	90.8	91.4	91.9	92.3	92.5
8.0	87.8	88.4	89.1	89.8	90.4	91.1	91.8	92.2	92.6	92.8
10.0	88.1	88.7	89.4	90.1	90.8	91.4	92.1	92.5	92.9	93.1
12.0	88.4	89.0	89.7	90.4	91.1	91.7	92.4	92.8	93.3	93.5
14.0	88.7	89.3	90.0	90.7	91.4	92.1	92.7	93.2	93.6	93.8
16.0	89.0	89.6	90.3	91.0	91.7	92.4	93.0	93.5	93.9	94.1
18.0	89.3	90.0	90.6	91.3	92.0	92.7	93.4	93.8	94.2	94.5
19.0	89.5	90.1	90.8	91.5	92.2	92.9	93.5	94.0	94.4	*94.5*
20.0	89.7	90.3	90.9	91.6	92.3	93.0	93.7	94.1	*94.4*	*94.3*
22.0	90.0	90.6	91.3	92.0	92.7	93.3	94.0	*94.3*	*94.0*	*93.8*
24.0	90.3	90.9	91.6	92.3	93.0	93.7	*94.2*	*93.9*	*93.5*	*93.4*
26.0	90.6	91.2	91.9	92.6	93.3	*93.8*	*93.8*	*93.4*	*93.2*	*93.0*
28.0	90.9	91.5	92.2	92.9	*93.5*	*93.5*	*93.3*	*93.1*	*92.8*	*92.7*
30.0	91.2	91.8	92.5	*93.1*	*93.3*	*93.2*	*92.9*	*92.7*	*92.4*	
32.0	91.5	92.1	*92.7*	*93.0*	*93.1*	*92.9*	*92.6*	*92.4*		
34.0	91.8	*92.3*	*92.7*	*92.9*	*92.8*	*92.5*	*92.3*			
36.0	*92.0*	*92.4*	*92.7*	*92.7*	*92.5*	*92.2*				
38.0	*92.1*	*92.5*	*92.6*	*92.4*	*92.2*					
40.0	*92.2*	*92.4*	*92.4*	*92.2*						
42.0	*92.1*	*92.1*	*92.1*							
44.0	*91.9*	*91.9*								
46.0	*91.7*									

BELOW CORNER POINT

ABOVE CORNER POINT

Note: *This table is valid for all aircraft speeds, but the corner point temperature is given for MACH = .225.*

MAXIMUM GO AROUND N1

Ident.: EFB-THR-N1-00004650.0003001 / 08 FEB 11

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02734, 02896-02904

V2527-A5	GO-AROUND N1 AIR COND ON
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	ADD .400 TO N1
NACELLE ANTI ICE ON	SUBTRACT 1.3 FROM N1 ABOVE CORNER POINT
NACELLE ANTI ICE AND WING ANTI ICE ON	SUBTRACT .3 FROM N1 BELOW CORNER POINT AND 1.6 ABOVE CORNER POINT

TAT (°C)	PRESSURE ALTITUDE (FT)								
	–1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.
–60.0	74.3	75.1	75.8	76.6	77.0	77.5	77.9	78.4	78.9
–40.0	77.7	78.5	79.3	80.1	80.6	81.1	81.5	82.0	82.5
–20.0	80.9	81.8	82.6	83.4	84.0	84.5	84.9	85.5	86.0
0.0	84.1	85.0	85.8	86.7	87.2	87.7	88.2	88.8	89.3
10.0	85.6	86.6	87.4	88.3	88.8	89.3	89.8	90.4	91.0
20.0	87.1	88.1	88.9	89.8	90.3	90.9	91.4	92.0	92.5
22.0	87.4	88.4	89.2	90.1	90.7	91.2	91.7	92.3	92.9
24.0	87.7	88.7	89.5	90.4	91.0	91.5	92.0	92.6	93.2
26.0	88.0	89.0	89.8	90.7	91.3	91.8	92.3	92.9	93.5
28.0	88.3	89.3	90.1	91.0	91.6	92.1	92.6	93.2	93.8
30.0	88.6	89.6	90.4	91.3	91.9	92.4	92.9	93.5	*93.7*
32.0	88.9	89.9	90.7	91.6	92.2	92.7	93.2	*93.4*	*93.5*
34.0	89.2	90.1	91.0	91.9	92.5	93.0	*93.2*	*93.2*	*93.2*
36.0	89.4	90.4	91.3	92.2	92.8	*93.3*	*93.0*	*93.0*	*92.9*
38.0	89.7	90.7	91.6	92.5	93.1	*93.0*	*92.8*	*92.7*	*92.6*
40.0	90.0	91.0	91.9	92.8	*93.1*	*92.8*	*92.5*	*92.5*	*92.4*
42.0	90.3	91.3	92.2	93.1	*92.8*	*92.6*	*92.3*	*92.2*	*92.2*
44.0	90.6	91.6	92.5	*92.9*	*92.6*	*92.3*	*92.1*	*92.0*	*91.9*
46.0	90.9	91.9	*92.6*	*92.6*	*92.3*	*92.1*	*91.8*	*91.7*	
48.0	91.2	92.2	*92.3*	*92.3*	*92.0*	*91.8*	*91.5*		
50.0	91.4	*92.1*	*92.1*	*92.0*	*91.8*	*91.5*			
52.0	91.7	*91.8*	*91.8*	*91.8*	*91.5*				
54.0	*91.7*	*91.6*	*91.6*	*91.6*					
56.0	*91.4*	*91.4*	*91.4*						
58.0	*91.2*	*91.2*							

BELOW CORNER POINT

ABOVE CORNER POINT

V2527-A5	**GO-AROUND N1**	**AIR COND ON**
CORRECTIONS FOR AIR BLEED		
AIR CONDITIONING OFF	**ADD .700 TO N1**	
ENGINE ANTI ICE ON	**READ AT TAT +5. (°C)**	
ENGINE ANTI ICE AND WING ANTI ICE ON	**READ AT TAT +5. (°C) AND SUBTRACT 0.500 FROM N1**	

TAT (°C)	**PRESSURE ALTITUDE (FT)**									
	6000.	**7000.**	**8000.**	**9000.**	**10000.**	**11000.**	**12000.**	**13000.**	**14000.**	**14500.**
−60.0	78.4	78.9	79.4	79.7	80.0	80.2	80.4	80.7	80.9	81.1
−40.0	82.0	82.5	83.1	83.3	83.6	83.9	84.1	84.4	84.6	84.8
−20.0	85.5	86.0	86.5	86.8	87.1	87.4	87.7	87.9	88.2	88.3
0.0	88.8	89.3	89.9	90.2	90.5	90.8	91.1	91.3	91.6	91.8
5.0	89.6	90.1	90.7	91.0	91.3	91.6	91.9	92.2	92.5	92.6
10.0	90.4	91.0	91.5	91.8	92.2	92.4	92.7	93.0	93.3	93.4
12.0	90.7	91.3	91.9	92.2	92.5	92.8	93.0	93.3	93.6	93.8
14.0	91.0	91.6	92.2	92.5	92.8	93.1	93.4	93.7	93.9	*94.0*
16.0	91.3	91.9	92.5	92.8	93.1	93.4	93.7	94.0	*94.1*	*94.1*
18.0	91.6	92.2	92.8	93.1	93.4	93.7	94.0	*94.1*	*94.2*	*94.2*
20.0	92.0	92.5	93.1	93.5	93.8	94.1	*94.1*	*94.1*	*94.2*	*94.0*
22.0	92.3	92.9	93.5	93.8	94.1	*94.1*	*94.0*	*94.1*	*93.8*	*93.7*
24.0	92.6	93.2	93.8	94.1	*94.1*	*94.0*	*93.9*	*93.7*	*93.5*	*93.4*
26.0	92.9	93.5	94.1	*94.0*	*93.9*	*93.8*	*93.6*	*93.4*	*93.2*	*93.0*
28.0	93.2	93.8	*94.0*	*93.8*	*93.7*	*93.5*	*93.3*	*93.1*	*92.8*	*92.7*
30.0	93.5	*93.7*	*93.7*	*93.6*	*93.4*	*93.2*	*93.0*	*92.7*	*92.5*	
32.0	*93.4*	*93.5*	*93.4*	*93.3*	*93.1*	*92.9*	*92.6*	*92.4*		
34.0	*93.2*	*93.2*	*93.1*	*92.9*	*92.8*	*92.6*	*92.3*			
36.0	*93.0*	*92.9*	*92.8*	*92.6*	*92.5*	*92.3*				
38.0	*92.7*	*92.6*	*92.5*	*92.4*	*92.3*					
40.0	*92.5*	*92.4*	*92.3*	*92.2*						
42.0	*92.2*	*92.2*	*92.1*							
44.0	*92.0*	*91.9*								
46.0	*91.7*									
48.0										

BELOW CORNER POINT
ABOVE CORNER POINT

Note: This table is valid for all aircraft speeds.

MAXIMUM GO AROUND N1

Ident.: EFB-THR-N1-00004650.0007001 / 08 FEB 11
Applicable to: MSN 02014

V2527E-A5	GO-AROUND N1 AIR COND ON
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	SUBTRACT .400 FROM N1
ENGINE ANTI ICE ON	SUBTRACT 1.3 FROM N1 ABOVE CORNER POINT
ENGINE ANTI ICE AND WING ANTI ICE ON	SUBTRACT 0.3 FROM N1 BELOW CORNER POINT AND 1.6 ABOVE CORNER POINT

TAT (°C)	PRESSURE ALTITUDE (FT)								
	–1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.
–60.0	74.3	75.1	76.0	77.0	78.0	79.3	80.7	81.8	82.2
–56.0	75.0	75.8	76.7	77.7	78.7	80.1	81.5	82.5	83.0
–52.0	75.7	76.5	77.4	78.4	79.5	80.8	82.2	83.3	83.8
–48.0	76.3	77.2	78.1	79.1	80.2	81.5	82.9	84.0	84.5
–44.0	77.0	77.9	78.8	79.8	80.9	82.3	83.7	84.8	85.3
–4.0	77.7	78.5	79.4	80.5	81.6	83.0	84.4	85.5	86.0
–36	78.3	79.2	80.1	81.2	82.3	83.7	85.1	86.2	86.8
–32	79.0	79.9	80.8	81.9	83.0	84.4	85.8	87.0	87.5
–28	79.6	80.5	81.5	82.5	83.7	85.1	86.5	87.7	88.2
–24	80.3	81.2	82.1	83.2	84.4	85.8	87.2	88.4	88.9
–20.0	80.9	81.8	82.8	83.9	85.0	86.5	87.9	89.1	89.6
–16	81.6	82.5	83.4	84.5	85.7	87.1	88.6	89.8	90.3
–12.0	82.2	83.1	84.1	85.2	86.4	87.8	89.3	90.5	91.0
–8.0	82.8	83.8	84.7	85.8	87.0	88.5	90.0	91.2	91.7
–4.0	83.5	84.4	85.4	86.5	87.7	89.1	90.7	91.9	92.4
0.0	84.1	85.0	86.0	87.1	88.3	89.8	91.4	92.6	93.1
4.0	84.7	85.6	86.6	87.8	89.0	90.5	92.0	93.2	93.8
8.0	85.3	86.2	87.2	88.4	89.6	91.1	92.7	93.9	94.5
12.0	85.9	86.9	87.9	89.0	90.2	91.8	93.3	94.6	95.1
16.0	86.5	87.5	88.5	89.6	90.9	92.4	94.0	95.2	95.8
20.0	87.1	88.1	89.1	90.3	91.5	93.0	94.6	95.9	*95.9*
24.0	87.7	88.7	89.7	90.9	92.1	93.7	95.3	*95.4*	*95.2*
28.0	88.3	89.3	90.3	91.5	92.7	94.3	*95.0*	*94.8*	*94.6*
32.0	88.9	89.9	90.9	92.1	93.4	*94.2*	*94.3*	*94.1*	*93.9*
36.0	89.4	90.4	91.5	92.7	*93.6*	*93.7*	*93.5*	*93.3*	*93.2*
4.0.	90.0	91.0	92.1	*93.2*	*93.2*	*93.1*	*92.9*	*92.7*	*92.5*
44.0	90.6	91.6	92.7	*93.0*	*92.8*	*92.5*	*92.3*	*92.1*	*92.0*
48.0	91.2	92.2	*92.4*	*92.4*	*92.2*	*92.0*	*91.7*		
52.0	91.7	*91.8*	*91.9*	*91.9*	*91.7*				
56.0	*91.4*	*91.4*	*91.4*						

BELOW CORNER POINT
ABOVE CORNER POINT

V2527E-A5	GO-AROUND N1	AIR COND ON
CORRECTIONS FOR AIR BLEED		
AIR CONDITIONING OFF	SUBTRACT .700 TO N1	
ENGINE ANTI ICE ON	READ AT TAT +5. (°C)	
ENGINE ANTI ICE AND WING ANTI ICE ON	READ AT TAT +5. (°C) AND SUBTRACT 0.500 FROM N1	

TAT (°C)	PRESSURE ALTITUDE (FT)									
	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
−60.0	81.8	82.2	82.7	82.6	82.5	82.6	82.5	82.4	82.3	82.3
−56.0	82.5	83.0	83.5	83.4	83.3	83.4	83.3	83.2	83.1	83.1
−52.0	83.3	83.8	84.3	84.1	84.1	84.2	84.0	83.9	83.9	83.9
−48.0	84.0	84.5	85.0	84.9	84.8	84.9	84.8	84.7	84.6	84.6
−44.0	84.8	85.3	85.8	85.7	85.6	85.7	85.5	85.4	85.4	85.4
−40.0	85.5	86.0	86.5	86.4	86.3	86.4	86.3	86.2	86.1	86.1
−36.0	86.2	86.8	87.3	87.1	87.1	87.2	87.0	86.9	86.9	86.8
−32.0	87.0	87.5	88.0	87.9	87.8	87.9	87.7	87.6	87.6	87.6
−28.0	87.7	88.2	88.7	88.6	88.5	88.6	88.5	88.4	88.3	88.3
−24.0	88.4	88.9	89.4	89.3	89.2	89.3	89.2	89.1	89.0	89.0
−20.0	89.1	89.6	90.2	90.0	89.9	90.0	89.9	89.8	89.7	89.7
−16.0	89.8	90.3	90.9	90.7	90.7	90.8	90.6	90.5	90.4	90.4
−12.0	90.5	91.0	91.6	91.4	91.4	91.5	91.3	91.2	91.1	91.1
−8.0	91.2	91.7	92.3	92.1	92.1	92.2	92.0	91.9	91.8	91.8
−4.0	91.9	92.4	93.0	92.8	92.7	92.9	92.7	92.6	92.5	92.5
0.0	92.6	93.1	93.6	93.5	93.4	93.5	93.4	93.3	93.2	93.2
4.0	93.2	93.8	94.3	94.2	94.1	94.2	94.1	94.0	93.9	93.9
8.0	93.9	94.5	95.0	94.9	94.8	94.9	94.7	94.6	94.6	94.5
12.0	94.6	95.1	95.7	95.5	95.5	95.6	95.4	95.3	95.2	95.2
16.0	95.2	95.8	*96.4*	*96.2*	*96.0*	*95.8*	*95.6*	*95.5*	*95.5*	*95.5*
20.0	95.9	*95.9*	*95.7*	*95.4*	*95.3*	*95.1*	*95.1*	*95.0*	*95.0*	*95.0*
24.0	*95.4*	*95.2*	*95.0*	*94.9*	*94.8*	*94.7*	*94.6*	*94.5*	*94.5*	*94.5*
28.0	*94.8*	*94.6*	*94.4*	*94.3*	*94.2*	*94.1*	*94.0*	*93.9*	*93.8*	*93.8*
32.0	*94.1*	*93.9*	*93.7*	*93.6*	*93.5*	*93.5*	*93.4*	*93.3*		
36.0	*93.3*	*93.2*	*93.0*	*92.9*	*92.9*	*92.8*				
40.0	*92.7*	*92.5*	*92.4*	*92.4*						
44.0	*92.1*	*92.0*								
48.0										
52.0										
56.0										

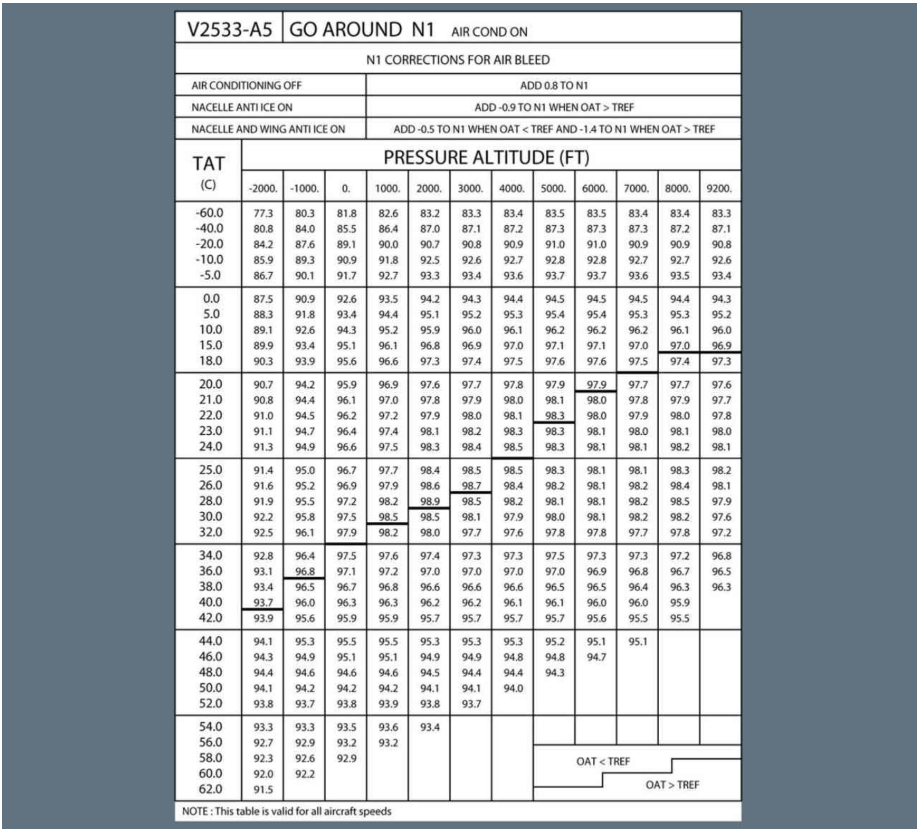
BELOW CORNER POINT
ABOVE CORNER POINT

Note: *This table is valid for all aircraft speeds.*

MAXIMUM GO AROUND N1

Ident.: EFB-THR-N1-00004650.0005001 / 27 JAN 15

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165



V2533-A5 GO AROUND N1 AIR COND ON

N1 CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF	ADD 0.8 TO N1
NACELLE ANTI ICE ON	ADD -0.9 TO N1 WHEN OAT > TREF
NACELLE AND WING ANTI ICE ON	ADD -0.5 TO N1 WHEN OAT < TREF AND -1.4 TO N1 WHEN OAT > TREF

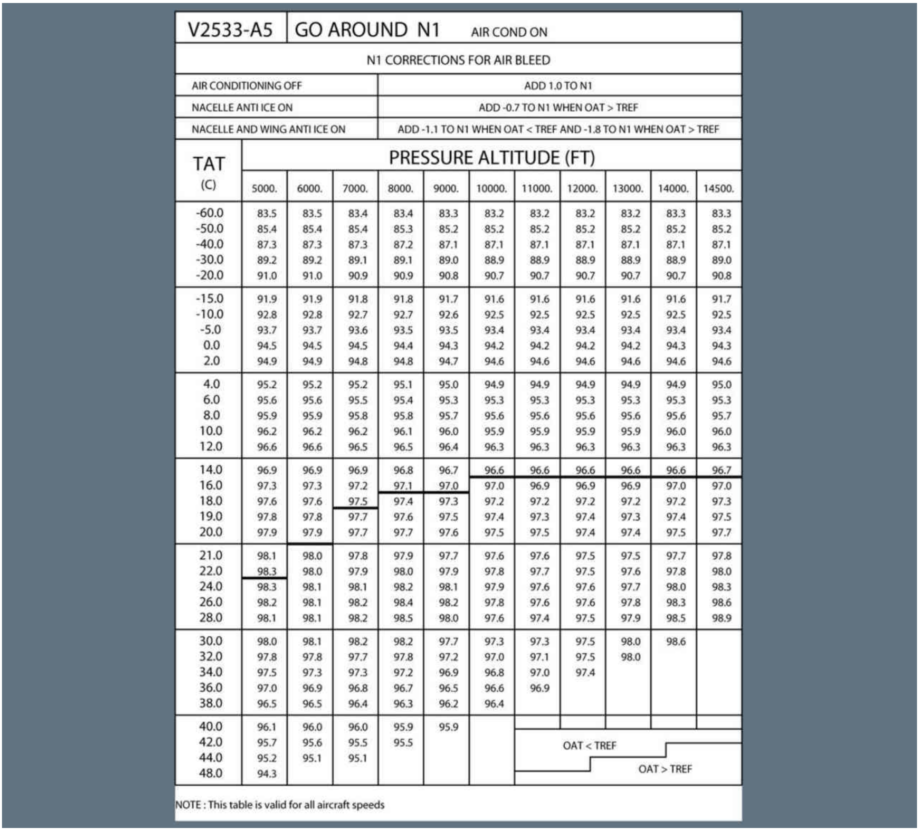
TAT (C)	PRESSURE ALTITUDE (FT)											
	-2000.	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	9200.
-60.0	77.3	80.3	81.8	82.6	83.2	83.3	83.4	83.5	83.5	83.4	83.4	83.3
-40.0	80.8	84.0	85.5	86.4	87.0	87.1	87.2	87.3	87.3	87.3	87.2	87.1
-20.0	84.2	87.6	89.1	90.0	90.7	90.8	90.9	91.0	91.0	90.9	90.9	90.8
-10.0	85.9	89.3	90.9	91.8	92.5	92.6	92.7	92.8	92.8	92.7	92.7	92.6
-5.0	86.7	90.1	91.7	92.7	93.3	93.4	93.6	93.7	93.7	93.6	93.5	93.4
0.0	87.5	90.9	92.6	93.5	94.2	94.3	94.4	94.5	94.5	94.5	94.4	94.3
5.0	88.3	91.8	93.4	94.4	95.1	95.2	95.3	95.4	95.4	95.3	95.3	95.2
10.0	89.1	92.6	94.3	95.2	95.9	96.0	96.1	96.2	96.2	96.2	96.1	96.0
15.0	89.9	93.4	95.1	96.1	96.8	96.9	97.0	97.1	97.1	97.0	97.0	96.9
18.0	90.3	93.9	95.6	96.6	97.3	97.4	97.5	97.6	97.6	97.5	97.4	97.3
20.0	90.7	94.2	95.9	96.9	97.6	97.7	97.8	97.9	97.9	97.7	97.7	97.6
21.0	90.8	94.4	96.1	97.0	97.8	97.9	98.0	98.1	98.0	97.8	97.9	97.7
22.0	91.0	94.5	96.2	97.2	97.9	98.0	98.1	98.3	98.0	97.9	98.0	97.8
23.0	91.1	94.7	96.4	97.4	98.1	98.2	98.3	98.3	98.1	98.0	98.1	98.0
24.0	91.3	94.9	96.6	97.5	98.3	98.4	98.5	98.3	98.1	98.1	98.2	98.1
25.0	91.4	95.0	96.7	97.7	98.4	98.5	98.5	98.3	98.1	98.1	98.3	98.2
26.0	91.6	95.2	96.9	97.9	98.6	98.7	98.4	98.2	98.1	98.2	98.4	98.1
28.0	91.9	95.5	97.2	98.2	98.9	98.5	98.2	98.1	98.1	98.2	98.5	97.9
30.0	92.2	95.8	97.5	98.5	98.5	98.1	97.9	98.0	98.1	98.2	98.2	97.6
32.0	92.5	96.1	97.9	98.2	98.0	97.7	97.6	97.8	97.8	97.7	97.8	97.2
34.0	92.8	96.4	97.5	97.6	97.4	97.3	97.3	97.5	97.3	97.3	97.2	96.8
36.0	93.1	96.8	97.1	97.2	97.0	97.0	97.0	97.0	96.9	96.8	96.7	96.5
38.0	93.4	96.5	96.7	96.8	96.6	96.6	96.6	96.5	96.5	96.4	96.3	96.3
40.0	93.7	96.0	96.3	96.3	96.2	96.2	96.1	96.1	96.0	96.0	95.9	
42.0	93.9	95.6	95.9	95.9	95.7	95.7	95.7	95.7	95.6	95.5	95.5	
44.0	94.1	95.3	95.5	95.5	95.3	95.3	95.3	95.2	95.1	95.1		
46.0	94.3	94.9	95.1	95.1	94.9	94.9	94.8	94.8	94.7			
48.0	94.4	94.6	94.6	94.6	94.5	94.4	94.4	94.3				
50.0	94.1	94.2	94.2	94.2	94.1	94.1	94.0					
52.0	93.8	93.7	93.8	93.9	93.8	93.7						
54.0	93.3	93.3	93.5	93.6	93.4							
56.0	92.7	92.9	93.2	93.2								
58.0	92.3	92.6	92.9									
60.0	92.0	92.2										
62.0	91.5											

OAT < TREF

OAT > TREF

NOTE : This table is valid for all aircraft speeds

Note: *This table is valid for all aircraft speeds, but the corner point temperature is given for MACH = .225.*



V2533-A5	GO AROUND N1 AIR COND ON
N1 CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	ADD 1.0 TO N1
NACELLE ANTI ICE ON	ADD -0.7 TO N1 WHEN OAT > TREF
NACELLE AND WING ANTI ICE ON	ADD -1.1 TO N1 WHEN OAT < TREF AND -1.8 TO N1 WHEN OAT > TREF

TAT (C)	PRESSURE ALTITUDE (FT)										
	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
-60.0	83.5	83.5	83.4	83.4	83.3	83.2	83.2	83.2	83.2	83.3	83.3
-50.0	85.4	85.4	85.4	85.3	85.2	85.2	85.2	85.2	85.2	85.2	85.2
-40.0	87.3	87.3	87.3	87.2	87.1	87.1	87.1	87.1	87.1	87.1	87.1
-30.0	89.2	89.2	89.1	89.1	89.0	88.9	88.9	88.9	88.9	88.9	89.0
-20.0	91.0	91.0	90.9	90.9	90.8	90.7	90.7	90.7	90.7	90.7	90.8
-15.0	91.9	91.9	91.8	91.8	91.7	91.6	91.6	91.6	91.6	91.6	91.7
-10.0	92.8	92.8	92.7	92.7	92.6	92.5	92.5	92.5	92.5	92.5	92.5
-5.0	93.7	93.7	93.6	93.5	93.5	93.4	93.4	93.4	93.4	93.4	93.4
0.0	94.5	94.5	94.5	94.4	94.3	94.2	94.2	94.2	94.2	94.3	94.3
2.0	94.9	94.9	94.8	94.8	94.7	94.6	94.6	94.6	94.6	94.6	94.6
4.0	95.2	95.2	95.2	95.1	95.0	94.9	94.9	94.9	94.9	94.9	95.0
6.0	95.6	95.6	95.5	95.4	95.3	95.3	95.3	95.3	95.3	95.3	95.3
8.0	95.9	95.9	95.8	95.8	95.7	95.6	95.6	95.6	95.6	95.6	95.7
10.0	96.2	96.2	96.2	96.1	96.0	95.9	95.9	95.9	95.9	96.0	96.0
12.0	96.6	96.6	96.5	96.5	96.4	96.3	96.3	96.3	96.3	96.3	96.3
14.0	96.9	96.9	96.9	96.8	96.7	96.6	96.6	96.6	96.6	96.6	96.7
16.0	97.3	97.3	97.2	97.1	97.0	97.0	96.9	96.9	96.9	97.0	97.0
18.0	97.6	97.6	97.5	97.4	97.3	97.2	97.2	97.2	97.2	97.2	97.3
19.0	97.8	97.8	97.7	97.6	97.5	97.4	97.3	97.4	97.3	97.4	97.5
20.0	97.9	97.9	97.7	97.7	97.6	97.5	97.5	97.4	97.4	97.5	97.7
21.0	98.1	98.0	97.8	97.9	97.7	97.6	97.6	97.5	97.5	97.7	97.8
22.0	98.3	98.0	97.9	98.0	97.9	97.8	97.7	97.5	97.6	97.8	98.0
24.0	98.3	98.1	98.1	98.2	98.1	97.9	97.6	97.6	97.7	98.0	98.3
26.0	98.2	98.1	98.2	98.4	98.2	97.8	97.6	97.6	97.8	98.3	98.6
28.0	98.1	98.1	98.2	98.5	98.0	97.6	97.4	97.5	97.9	98.5	98.9
30.0	98.0	98.1	98.2	98.2	97.7	97.3	97.3	97.5	98.0	98.6	
32.0	97.8	97.8	97.7	97.8	97.2	97.0	97.1	97.5	98.0		
34.0	97.5	97.3	97.3	97.2	96.9	96.8	97.0	97.4			
36.0	97.0	96.9	96.8	96.7	96.5	96.6	96.9				
38.0	96.5	96.5	96.4	96.3	96.2	96.4					
40.0	96.1	96.0	96.0	95.9	95.9						
42.0	95.7	95.6	95.5	95.5							
44.0	95.2	95.1	95.1								
48.0	94.3										

OAT < TREF

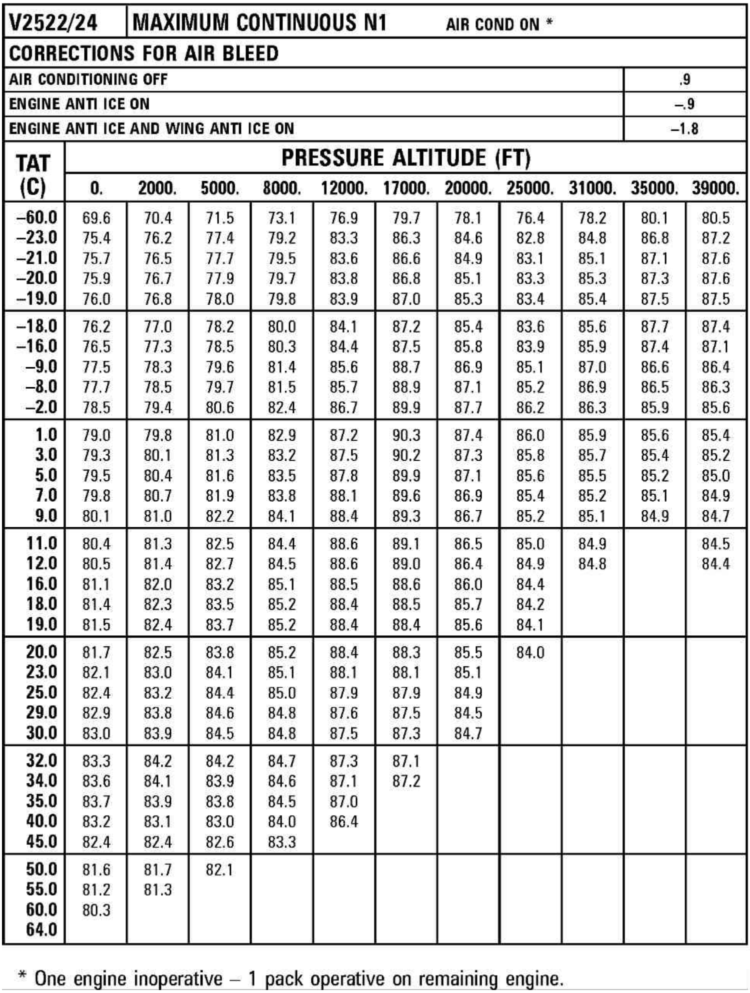
OAT > TREF

NOTE : This table is valid for all aircraft speeds

MAXIMUM CONTINUOUS N1

Ident.: EFB-THR-N1-00004651.0005001 / 09 DEC 09

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345



V2522/24 **MAXIMUM CONTINUOUS N1** AIR COND ON *

CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF	.9
ENGINE ANTI ICE ON	–.9
ENGINE ANTI ICE AND WING ANTI ICE ON	–1.8

TAT (C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
–60.0	69.6	70.4	71.5	73.1	76.9	79.7	78.1	76.4	78.2	80.1	80.5
–23.0	75.4	76.2	77.4	79.2	83.3	86.3	84.6	82.8	84.8	86.8	87.2
–21.0	75.7	76.5	77.7	79.5	83.6	86.6	84.9	83.1	85.1	87.1	87.6
–20.0	75.9	76.7	77.9	79.7	83.8	86.8	85.1	83.3	85.3	87.3	87.6
–19.0	76.0	76.8	78.0	79.8	83.9	87.0	85.3	83.4	85.4	87.5	87.5
–18.0	76.2	77.0	78.2	80.0	84.1	87.2	85.4	83.6	85.6	87.7	87.4
–16.0	76.5	77.3	78.5	80.3	84.4	87.5	85.8	83.9	85.9	87.4	87.1
–9.0	77.5	78.3	79.6	81.4	85.6	88.7	86.9	85.1	87.0	86.6	86.4
–8.0	77.7	78.5	79.7	81.5	85.7	88.9	87.1	85.2	86.9	86.5	86.3
–2.0	78.5	79.4	80.6	82.4	86.7	89.9	87.7	86.2	86.3	85.9	85.6
1.0	79.0	79.8	81.0	82.9	87.2	90.3	87.4	86.0	85.9	85.6	85.4
3.0	79.3	80.1	81.3	83.2	87.5	90.2	87.3	85.8	85.7	85.4	85.2
5.0	79.5	80.4	81.6	83.5	87.8	89.9	87.1	85.6	85.5	85.2	85.0
7.0	79.8	80.7	81.9	83.8	88.1	89.6	86.9	85.4	85.2	85.1	84.9
9.0	80.1	81.0	82.2	84.1	88.4	89.3	86.7	85.2	85.1	84.9	84.7
11.0	80.4	81.3	82.5	84.4	88.6	89.1	86.5	85.0	84.9		84.5
12.0	80.5	81.4	82.7	84.5	88.6	89.0	86.4	84.9	84.8		84.4
16.0	81.1	82.0	83.2	85.1	88.5	88.6	86.0	84.4			
18.0	81.4	82.3	83.5	85.2	88.4	88.5	85.7	84.2			
19.0	81.5	82.4	83.7	85.2	88.4	88.4	85.6	84.1			
20.0	81.7	82.5	83.8	85.2	88.4	88.3	85.5	84.0			
23.0	82.1	83.0	84.1	85.1	88.1	88.1	85.1				
25.0	82.4	83.2	84.4	85.0	87.9	87.9	84.9				
29.0	82.9	83.8	84.6	84.8	87.6	87.5	84.5				
30.0	83.0	83.9	84.5	84.8	87.5	87.3	84.7				
32.0	83.3	84.2	84.2	84.7	87.3	87.1					
34.0	83.6	84.1	83.9	84.6	87.1	87.2					
35.0	83.7	83.9	83.8	84.5	87.0						
40.0	83.2	83.1	83.0	84.0	86.4						
45.0	82.4	82.4	82.6	83.3							
50.0	81.6	81.7	82.1								
55.0	81.2	81.3									
60.0	80.3										
64.0											

* One engine inoperative – 1 pack operative on remaining engine.

Note: *This table is valid for all aircraft speeds.*

MAXIMUM CONTINUOUS N1

Ident.: EFB-THR-N1-00004651.0007001 / 09 DEC 09

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

V2527/27E	MAXIMUM CONTINUOUS N1 AIR COND ON *
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	.8
NACELLE ANTI-ICE ON	–.8
ENGINE ANTI-ICE AND WING ANTI-ICE ON	–1.7

TAT (C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
–50.0	71.9	72.7	74.7	79.3	81.0	83.7	85.4	86.6	80.1	82.0	82.4
–46.0	72.5	73.4	75.4	80.0	81.7	84.4	86.1	87.4	80.8	82.7	83.1
–42.0	73.1	74.0	76.1	80.7	82.5	85.1	86.9	88.1	81.5	83.4	83.8
–38.0	73.8	74.6	76.7	81.4	83.2	85.9	87.6	88.9	82.2	84.2	84.5
–34.0	74.4	75.3	77.4	82.1	83.9	86.6	88.4	89.7	82.9	84.9	85.3
–30.0	75.0	75.9	78.0	82.7	84.6	87.3	89.1	90.4	83.6	85.6	86.0
–26.0	75.6	76.5	78.7	83.4	85.3	88.0	89.8	91.1	84.3	86.3	86.7
–22.0	76.2	77.1	79.3	84.1	85.9	88.7	90.6	91.9	84.9	87.0	87.4
–18.0	76.8	77.8	79.9	84.8	86.6	89.5	91.3	92.6	85.6	87.7	87.4
–14.0	77.4	78.4	80.6	85.4	87.3	90.2	92.0	93.3	86.3	87.1	86.8
–10.0	78.0	79.0	81.2	86.1	88.0	90.8	92.7	93.7	86.9	86.7	86.5
–6.0	78.6	79.6	81.8	86.7	88.6	91.5	93.4	93.1	86.7	86.3	86.0
–2.0	79.2	80.2	82.4	87.4	89.3	92.2	93.7	92.5	86.3	85.9	85.6
2.0	79.8	80.7	83.0	88.0	90.0	92.7	93.1	92.1	85.8	85.5	85.3
6.0	80.4	81.3	83.6	88.6	90.6	92.1	92.7	91.5	85.4	85.2	85.0
10.0	80.9	81.9	84.2	89.3	91.2	91.5	92.2	90.9	85.0	84.8	84.6
14.0	81.5	82.5	84.8	89.9	90.6	90.9	91.6	90.3	84.7		
18.0	82.1	83.1	85.4	90.2	90.0	90.3	91.0	89.9			
22.0	82.6	83.6	86.0	89.8	89.6	89.9	90.6	89.8			
26.0	83.2	84.2	85.9	89.3	89.2	89.5	90.2				
30.0	83.8	84.3	85.9	88.8	88.8	89.0	90.2				
34.0	83.6	84.1	85.8	88.4	88.3	88.8					
38.0	83.5	83.8	85.9	87.8	87.6						
42.0	82.8	83.5	85.7	87.3	87.3						
46.0	82.2	83.3	85.5	86.6							
50.0	82.0	83.0	85.3								
54.0	81.7	82.6	85.1								
58.0	81.4	82.3									
62.0	81.1										
66.0											

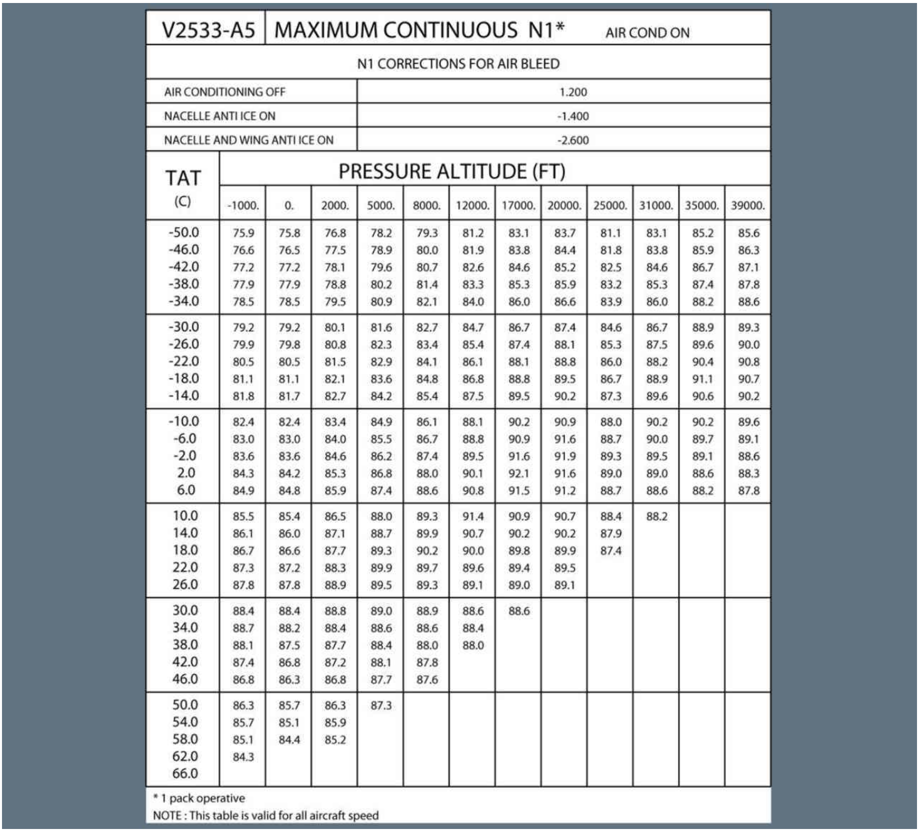
(*) One engine inoperative - 1 pack operative on remaining engine.

Note: This table is valid for all aircraft speeds.

MAXIMUM CONTINUOUS N1

Ident.: EFB-THR-N1-00004651.0010001 / 27 JAN 15

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165



V2533-A5 MAXIMUM CONTINUOUS N1* AIR COND ON

N1 CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	1.200
NACELLE ANTI ICE ON	-1.400
NACELLE AND WING ANTI ICE ON	-2.600

TAT (C)	PRESSURE ALTITUDE (FT)											
	-1000.	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-50.0	75.9	75.8	76.8	78.2	79.3	81.2	83.1	83.7	81.1	83.1	85.2	85.6
-46.0	76.6	76.5	77.5	78.9	80.0	81.9	83.8	84.4	81.8	83.8	85.9	86.3
-42.0	77.2	77.2	78.1	79.6	80.7	82.6	84.6	85.2	82.5	84.6	86.7	87.1
-38.0	77.9	77.9	78.8	80.2	81.4	83.3	85.3	85.9	83.2	85.3	87.4	87.8
-34.0	78.5	78.5	79.5	80.9	82.1	84.0	86.0	86.6	83.9	86.0	88.2	88.6
-30.0	79.2	79.2	80.1	81.6	82.7	84.7	86.7	87.4	84.6	86.7	88.9	89.3
-26.0	79.9	79.8	80.8	82.3	83.4	85.4	87.4	88.1	85.3	87.5	89.6	90.0
-22.0	80.5	80.5	81.5	82.9	84.1	86.1	88.1	88.8	86.0	88.2	90.4	90.8
-18.0	81.1	81.1	82.1	83.6	84.8	86.8	88.8	89.5	86.7	88.9	91.1	90.7
-14.0	81.8	81.7	82.7	84.2	85.4	87.5	89.5	90.2	87.3	89.6	90.6	90.2
-10.0	82.4	82.4	83.4	84.9	86.1	88.1	90.2	90.9	88.0	90.2	90.2	89.6
-6.0	83.0	83.0	84.0	85.5	86.7	88.8	90.9	91.6	88.7	90.0	89.7	89.1
-2.0	83.6	83.6	84.6	86.2	87.4	89.5	91.6	91.9	89.3	89.5	89.1	88.6
2.0	84.3	84.2	85.3	86.8	88.0	90.1	92.1	91.6	89.0	89.0	88.6	88.3
6.0	84.9	84.8	85.9	87.4	88.6	90.8	91.5	91.2	88.7	88.6	88.2	87.8
10.0	85.5	85.4	86.5	88.0	89.3	91.4	90.9	90.7	88.4	88.2		
14.0	86.1	86.0	87.1	88.7	89.9	90.7	90.2	90.2	87.9			
18.0	86.7	86.6	87.7	89.3	90.2	90.0	89.8	89.9	87.4			
22.0	87.3	87.2	88.3	89.9	89.7	89.6	89.4	89.5				
26.0	87.8	87.8	88.9	89.5	89.3	89.1	89.0	89.1				
30.0	88.4	88.4	88.8	89.0	88.9	88.6	88.6					
34.0	88.7	88.2	88.4	88.6	88.6	88.4						
38.0	88.1	87.5	87.7	88.4	88.0	88.0						
42.0	87.4	86.8	87.2	88.1	87.8							
46.0	86.8	86.3	86.8	87.7	87.6							
50.0	86.3	85.7	86.3	87.3								
54.0	85.7	85.1	85.9									
58.0	85.1	84.4	85.2									
62.0	84.3											
66.0												

* 1 pack operative

NOTE : This table is valid for all aircraft speed

Note: *This table is valid for all aircraft speeds.*

MAXIMUM CLIMB N1

Ident.: EFB-THR-N1-00004652.0003001 / 09 DEC 09

Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

V2522/24	MAXIMUM CLIMB N1 AIR COND ON
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	1.1
ENGINE ANTI ICE ON	–.8
ENGINE ANTI ICE AND WING ANTI ICE ON	1.4

TAT (°C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
–60.0	69.7	70.4	71.4	72.3	73.4	74.8	75.7	76.5	78.4	80.4	80.8
–23.0	75.5	76.3	77.4	78.3	79.5	81.0	82.0	82.9	84.9	87.1	87.5
–21.0	75.8	76.6	77.7	78.7	79.8	81.4	82.3	83.3	85.3	87.4	87.9
–20.0	76.0	76.8	77.9	78.8	80.0	81.5	82.5	83.4	85.5	87.6	87.9
–19.0	76.1	76.9	78.0	79.0	80.2	81.7	82.6	83.6	85.6	87.8	87.8
–18.0	76.3	77.1	78.2	79.1	80.3	81.8	82.8	83.7	85.8	87.9	87.7
–16.0	76.6	77.4	78.5	79.4	80.6	82.2	83.1	84.1	86.1	87.7	87.4
–9.0	77.6	78.4	79.5	80.5	81.7	83.3	84.2	85.2	87.2	86.8	86.6
–8.0	77.7	78.6	79.7	80.7	81.9	83.4	84.4	85.4	87.1	86.7	86.5
–2.0	78.6	79.5	80.6	81.6	82.8	84.4	85.3	86.3	86.5	86.1	85.9
1.0	79.0	79.9	81.0	82.0	83.3	84.8	85.8	86.2	86.1	85.8	85.6
3.0	79.3	80.2	81.3	82.3	83.6	85.1	86.1	86.0	85.9	85.6	85.5
5.0	79.6	80.5	81.6	82.6	83.9	85.5	86.4	85.8	85.7	85.5	85.3
7.0	79.9	80.8	81.9	82.9	84.2	85.8	86.3	85.6	85.4	85.3	85.1
9.0	80.2	81.0	82.2	83.2	84.5	86.0	86.1	85.3	85.3	85.1	84.9
11.0	80.5	81.3	82.5	83.5	84.8	85.8	85.9	85.1	85.1	85.0	84.8
12.0	80.6	81.5	82.6	83.6	84.9	85.7	85.8	85.0	85.0	84.9	84.7
16.0	81.2	82.0	83.2	84.2	85.5	85.3	85.3	84.6	84.7	84.6	
18.0	81.5	82.3	83.5	84.5	85.4	85.1	85.1	84.4	84.4		
19.0	81.6	82.5	83.6	84.7	85.3	85.0	85.0	84.3	84.3		
20.0	81.7	82.6	83.8	84.8	85.2	84.9	84.9	84.2	84.2		
23.0	82.2	83.0	84.2	85.2	84.9	84.5	84.6	83.8	83.8		
25.0	82.4	83.3	84.5	85.0	84.6	84.3	84.4	83.6	83.8		
29.0	83.0	83.9	84.7	84.5	84.1	83.9	84.0	83.1			
30.0	83.1	84.0	84.6	84.4	84.0	83.8	83.8	82.9			
32.0	83.4	84.3	84.3	84.1	83.7	83.6	83.6	82.9			
34.0	83.7	84.2	84.0	83.8	83.5	83.3	83.4	83.1			
35.0	83.8	84.0	83.9	83.7	83.4	83.2	83.3				
40.0	83.2	83.2	83.1	83.1	82.9	82.7					
45.0	82.4	82.5	82.5	82.6	82.4						
50.0	81.7	81.8	82.0	82.1	82.3						
55.0	81.3	81.4	81.4								
60.0	80.4	80.5									
64.0	79.7										

Note: This table is valid for all aircraft speeds.

MAXIMUM CLIMB N1

Ident.: EFB-THR-N1-00004652.0004001 / 28 JUL 14

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

V2527/27E	MAXIMUM CLIMB N1	AIR COND ON
CORRECTIONS FOR AIR BLEED		
AIR CONDITIONING OFF		.800
ENGINE ANTI ICE ON		–.800
ENGINE ANTI ICE AND WING ANTI ICE ON		–1.300

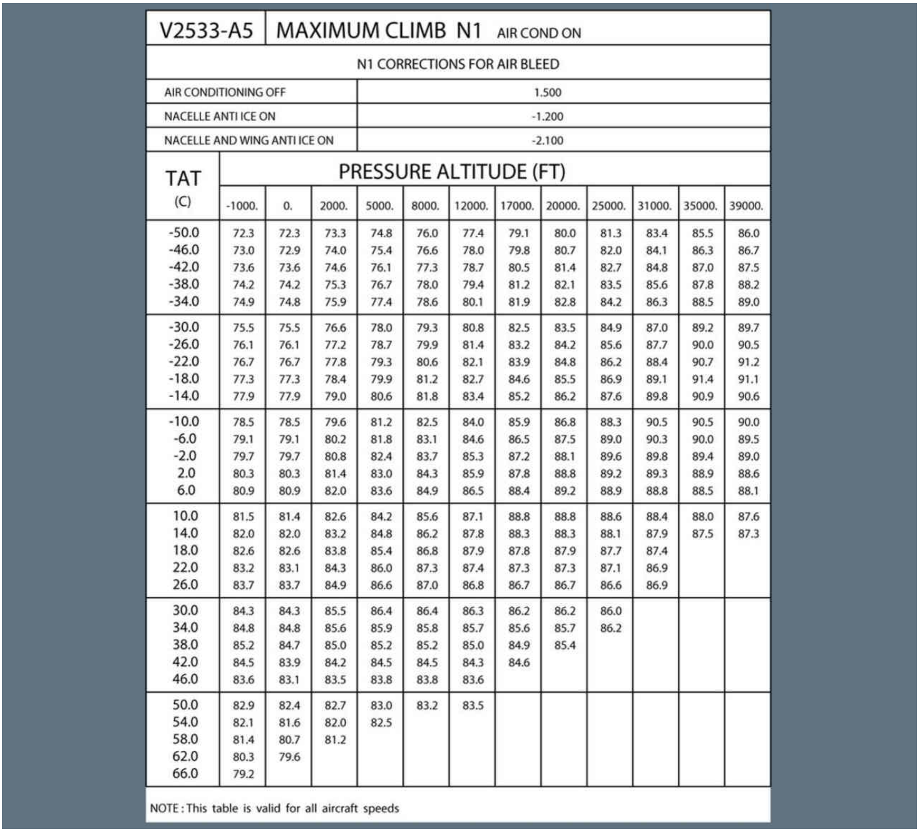
TAT (°C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
–50.0	71.3	72.1	73.1	74.0	75.1	76.5	77.4	78.3	80.2	82.2	82.7
–46.0	72.0	72.7	73.8	74.7	75.8	77.2	78.1	79.0	80.9	83.0	83.4
–42.0	72.6	73.4	74.4	75.3	76.5	77.9	78.8	79.7	81.7	83.7	84.1
–38.0	73.2	74.0	75.0	76.0	77.1	78.6	79.5	80.4	82.4	84.4	84.9
–34.0	73.8	74.6	75.7	76.6	77.8	79.2	80.1	81.1	83.1	85.1	85.6
–30.0	74.4	75.2	76.3	77.2	78.4	79.9	80.8	81.8	83.8	85.8	86.3
–26.0	75.1	75.9	76.9	77.9	79.1	80.6	81.5	82.4	84.4	86.6	87.0
–22.0	75.7	76.5	77.5	78.5	79.7	81.2	82.1	83.1	85.1	87.3	87.7
–18.0	76.3	77.1	78.2	79.1	80.3	81.8	82.8	83.7	85.8	87.9	87.7
–14.0	76.9	77.7	78.8	79.7	80.9	82.5	83.4	84.4	86.5	87.4	87.1
–10.0	77.4	78.3	79.4	80.4	81.6	83.1	84.1	85.0	87.1	86.9	86.7
–6.0	78.0	78.9	80.0	81.0	82.2	83.7	84.7	85.7	86.9	86.5	86.3
–2.0	78.6	79.5	80.6	81.6	82.8	84.4	85.3	86.3	86.5	86.1	85.9
2.0	79.2	80.0	81.2	82.2	83.4	85.0	86.0	86.1	86.0	85.7	85.5
6.0	79.8	80.6	81.8	82.8	84.0	85.6	86.3	85.7	85.5	85.4	85.2
10.0	80.3	81.2	82.3	83.4	84.6	86.0	86.0	85.2	85.2	85.1	84.9
14.0	80.9	81.8	82.9	83.9	85.2	85.5	85.6	84.8	84.9	84.7	84.7
18.0	81.5	82.3	83.5	84.5	85.4	85.1	85.1	84.4	84.4		
22.0	82.0	82.9	84.1	85.1	85.0	84.7	84.7	83.9	83.9		
26.0	82.6	83.5	84.6	84.9	84.5	84.2	84.3	83.4	83.9		
30.0	83.1	84.0	84.6	84.4	84.0	83.8	83.8	82.9			
34.0	83.7	84.2	84.0	83.8	83.5	83.3	83.4	83.1			
38.0	83.6	83.5	83.4	83.3	83.1	82.9	83.1				
42.0	82.9	82.9	82.9	82.9	82.7	82.7					
46.0	82.3	82.3	82.4	82.5	82.3						
50.0	81.7	81.8	82.0	82.1	82.3						
54.0	81.3	81.5	81.6								
58.0	80.7	80.8									
62.0	80.0										
66.0											

Note: *This table is valid for all aircraft speeds.*

MAXIMUM CLIMB N1

Ident.: EFB-THR-N1-00004652.0006001 / 27 JAN 15

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165



V2533-A5 MAXIMUM CLIMB N1 AIR COND ON

N1 CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF	1.500
NACELLE ANTI ICE ON	-1.200
NACELLE AND WING ANTI ICE ON	-2.100

TAT (C)	PRESSURE ALTITUDE (FT)											
	-1000.	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-50.0	72.3	72.3	73.3	74.8	76.0	77.4	79.1	80.0	81.3	83.4	85.5	86.0
-46.0	73.0	72.9	74.0	75.4	76.6	78.0	79.8	80.7	82.0	84.1	86.3	86.7
-42.0	73.6	73.6	74.6	76.1	77.3	78.7	80.5	81.4	82.7	84.8	87.0	87.5
-38.0	74.2	74.2	75.3	76.7	78.0	79.4	81.2	82.1	83.5	85.6	87.8	88.2
-34.0	74.9	74.8	75.9	77.4	78.6	80.1	81.9	82.8	84.2	86.3	88.5	89.0
-30.0	75.5	75.5	76.6	78.0	79.3	80.8	82.5	83.5	84.9	87.0	89.2	89.7
-26.0	76.1	76.1	77.2	78.7	79.9	81.4	83.2	84.2	85.6	87.7	90.0	90.5
-22.0	76.7	76.7	77.8	79.3	80.6	82.1	83.9	84.8	86.2	88.4	90.7	91.2
-18.0	77.3	77.3	78.4	79.9	81.2	82.7	84.6	85.5	86.9	89.1	91.4	91.1
-14.0	77.9	77.9	79.0	80.6	81.8	83.4	85.2	86.2	87.6	89.8	90.9	90.6
-10.0	78.5	78.5	79.6	81.2	82.5	84.0	85.9	86.8	88.3	90.5	90.5	90.0
-6.0	79.1	79.1	80.2	81.8	83.1	84.6	86.5	87.5	89.0	90.3	90.0	89.5
-2.0	79.7	79.7	80.8	82.4	83.7	85.3	87.2	88.1	89.6	89.8	89.4	89.0
2.0	80.3	80.3	81.4	83.0	84.3	85.9	87.8	88.8	89.2	89.3	88.9	88.6
6.0	80.9	80.9	82.0	83.6	84.9	86.5	88.4	89.2	88.9	88.8	88.5	88.1
10.0	81.5	81.4	82.6	84.2	85.6	87.1	88.8	88.8	88.6	88.4	88.0	87.6
14.0	82.0	82.0	83.2	84.8	86.2	87.8	88.3	88.3	88.1	87.9	87.5	87.3
18.0	82.6	82.6	83.8	85.4	86.8	87.9	87.8	87.9	87.7	87.4		
22.0	83.2	83.1	84.3	86.0	87.3	87.4	87.3	87.3	87.1	86.9		
26.0	83.7	83.7	84.9	86.6	87.0	86.8	86.7	86.7	86.6	86.9		
30.0	84.3	84.3	85.5	86.4	86.4	86.3	86.2	86.2	86.0			
34.0	84.8	84.8	85.6	85.9	85.8	85.7	85.6	85.7	86.2			
38.0	85.2	84.7	85.0	85.2	85.2	85.0	84.9	85.4				
42.0	84.5	83.9	84.2	84.5	84.5	84.3	84.6					
46.0	83.6	83.1	83.5	83.8	83.8	83.6						
50.0	82.9	82.4	82.7	83.0	83.2	83.5						
54.0	82.1	81.6	82.0	82.5								
58.0	81.4	80.7	81.2									
62.0	80.3	79.6										
66.0	79.2											

NOTE : This table is valid for all aircraft speeds

Note: This table is valid for all aircraft speeds.

MAXIMUM CRUISE N1

Ident.: EFB-THR-N1-00004653.0003001 / 09 DEC 09
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

V2522/24	MAXIMUM CRUISE N1 AIR COND ON
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	1.1
ENGINE ANTI ICE ON	–.8
ENGINE ANTI ICE AND WING ANTI ICE ON	1.4

TAT (°C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
–60.0	65.6	66.5	67.8	69.1	70.5	72.1	73.0	74.0	75.7	77.3	77.6
–23.0	71.1	72.0	73.5	74.8	76.3	78.1	79.1	80.1	82.0	83.7	84.1
–21.0	71.4	72.3	73.8	75.1	76.6	78.4	79.4	80.5	82.3	84.0	84.4
–20.0	71.5	72.5	73.9	75.3	76.8	78.5	79.6	80.6	82.5	84.2	84.5
–19.0	71.7	72.6	74.1	75.4	76.9	78.7	79.7	80.8	82.6	84.4	84.4
–18.0	71.8	72.8	74.2	75.6	77.1	78.8	79.9	80.9	82.8	84.5	84.3
–16.0	72.1	73.1	74.5	75.9	77.4	79.2	80.2	81.3	83.1	84.4	84.2
–9.0	73.0	74.0	75.5	76.9	78.4	80.2	81.3	82.4	84.2	83.8	83.6
–8.0	73.2	74.2	75.7	77.0	78.6	80.4	81.5	82.5	84.1	83.7	83.5
–2.0	74.0	75.0	76.5	77.9	79.5	81.3	82.4	83.4	83.5	83.1	82.9
1.0	74.4	75.4	76.9	78.3	79.9	81.7	82.8	83.2	83.2	82.9	82.7
3.0	74.7	75.7	77.2	78.6	80.2	82.0	83.1	83.0	83.0	82.7	82.5
5.0	75.0	76.0	77.5	78.9	80.5	82.3	83.4	82.8	82.6	82.4	82.2
7.0	75.2	76.2	77.8	79.2	80.8	82.6	83.2	82.5	82.3	82.2	81.9
9.0	75.5	76.5	78.1	79.5	81.1	82.9	83.0	82.1	82.0	81.9	81.7
11.0	75.8	76.8	78.3	79.8	81.4	82.6	82.7	81.8	81.8	81.6	81.4
12.0	75.9	76.9	78.5	79.9	81.5	82.5	82.6	81.7	81.7	81.5	81.2
16.0	76.4	77.5	79.0	80.5	82.1	81.9	81.9	81.1	81.1	81.0	
18.0	76.7	77.7	79.3	80.7	81.9	81.6	81.7	80.9	80.9		
19.0	76.8	77.9	79.4	80.9	81.7	81.4	81.5	80.7	80.7		
20.0	77.0	78.0	79.6	81.0	81.5	81.2	81.4	80.6	80.6		
23.0	77.3	78.4	80.0	81.4	81.1	80.8	81.0	80.2	80.2		
25.0	77.6	78.7	80.2	81.1	80.7	80.5	80.7	80.0	80.2		
29.0	78.1	79.2	80.4	80.4	80.1	80.1	80.3	79.5			
30.0	78.3	79.3	80.2	80.3	80.0	80.0	80.2	79.4			
32.0	78.5	79.6	79.9	79.9	79.7	79.7	79.9	79.3			
34.0	78.8	79.4	79.6	79.7	79.4	79.4	79.6	79.6			
35.0	78.9	79.3	79.5	79.4	79.2	79.3	79.5				
40.0	78.0	78.2	78.3	78.4	78.4	78.5					
45.0	76.7	76.9	77.2	77.6	77.6						
50.0	75.5	75.9	76.4	76.8	77.4						
55.0	74.5	75.0	75.5								
60.0	73.6	74.0									
64.0	72.6										

Note: *This table is valid for all aircraft speeds.*

MAXIMUM CRUISE N1

Ident.: EFB-THR-N1-00004653.0004001 / 09 DEC 09

Applicable to: MSN 01143-01518, 01593-01628, 01825, 01832, 02014, 02734, 02896-02904

V2527/27E	MAXIMUM CRUISE N1 AIR COND ON
CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	.800
ENGINE ANTI ICE ON	–.800
ENGINE ANTI ICE AND WING ANTI ICE ON	–1.300

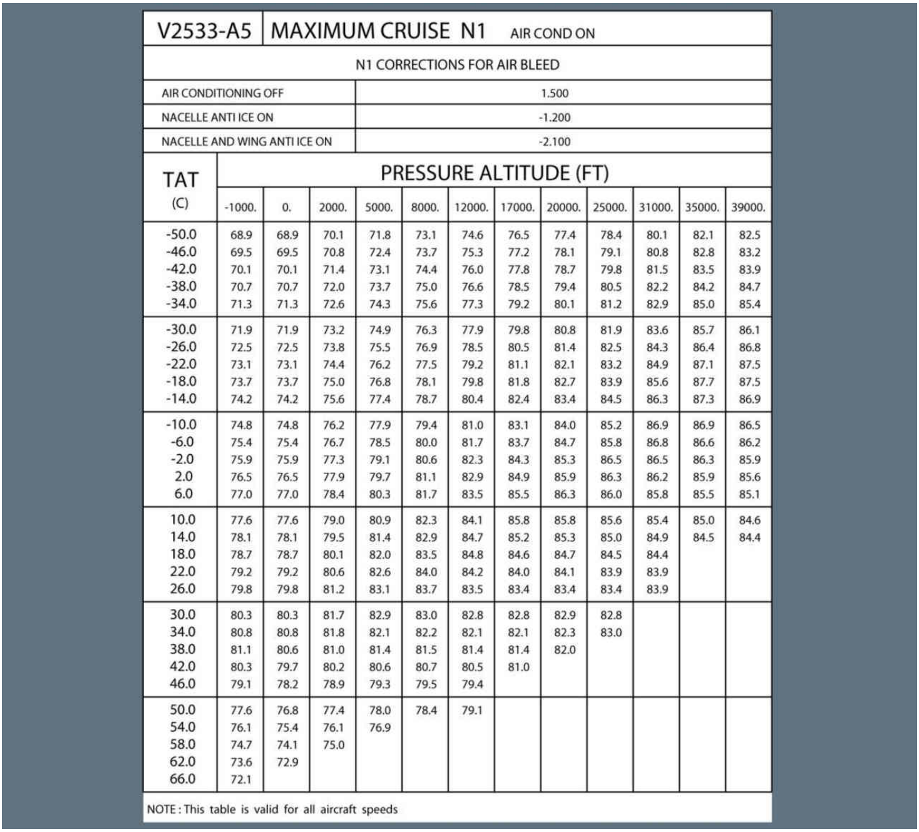
TAT (°C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
–50.0	67.1	68.1	69.4	70.7	72.1	73.7	74.7	75.7	77.4	79.1	79.4
–46.0	67.7	68.7	70.0	71.3	72.7	74.4	75.4	76.4	78.1	79.8	80.1
–42.0	68.3	69.3	70.6	71.9	73.4	75.0	76.1	77.0	78.8	80.5	80.8
–38.0	68.9	69.9	71.3	72.6	74.0	75.7	76.7	77.7	79.5	81.1	81.5
–34.0	69.5	70.4	71.9	73.2	74.6	76.3	77.4	78.4	80.2	81.8	82.2
–30.0	70.1	71.0	72.5	73.8	75.3	77.0	78.0	79.0	80.8	82.5	82.9
–26.0	70.7	71.6	73.1	74.4	75.9	77.6	78.6	79.7	81.5	83.2	83.5
–22.0	71.2	72.2	73.6	75.0	76.5	78.2	79.3	80.3	82.1	83.9	84.2
–18.0	71.8	72.8	74.2	75.6	77.1	78.8	79.9	80.9	82.8	84.5	84.3
–14.0	72.4	73.3	74.8	76.2	77.7	79.5	80.5	81.6	83.4	84.2	84.0
–10.0	72.9	73.9	75.4	76.8	78.3	80.1	81.1	82.2	84.1	83.9	83.7
–6.0	73.5	74.5	75.9	77.3	78.9	80.7	81.8	82.8	83.9	83.5	83.3
–2.0	74.0	75.0	76.5	77.9	79.5	81.3	82.4	83.4	83.5	83.1	82.9
2.0	74.6	75.6	77.1	78.5	80.1	81.9	83.0	83.1	83.1	82.8	82.6
6.0	75.1	76.1	77.6	79.1	80.6	82.5	83.3	82.6	82.5	82.3	82.1
10.0	75.6	76.7	78.2	79.6	81.2	82.8	82.8	82.0	81.9	81.7	81.5
14.0	76.2	77.2	78.7	80.2	81.8	82.2	82.3	81.4	81.4	81.2	81.2
18.0	76.7	77.7	79.3	80.7	81.9	81.6	81.7	80.9	80.9		
22.0	77.2	78.3	79.8	81.3	81.2	80.9	81.1	80.4	80.3		
26.0	77.7	78.8	80.4	80.9	80.6	80.4	80.6	79.9	80.3		
30.0	78.3	79.3	80.2	80.3	80.0	80.0	80.2	79.4			
34.0	78.8	79.4	79.6	79.7	79.4	79.4	79.6	79.6			
38.0	78.5	78.7	78.7	78.8	78.8	78.8	79.3				
42.0	77.5	77.6	77.8	78.1	78.1	78.5					
46.0	76.5	76.7	77.1	77.5	77.5						
50.0	75.5	75.9	76.4	76.8	77.4						
54.0	74.7	75.1	75.6								
58.0	74.0	74.4									
62.0	73.2										
66.0											

Note: *This table is valid for all aircraft speeds.*

MAXIMUM CRUISE N1

Ident.: EFB-THR-N1-00004653.0006001 / 27 JAN 15

Applicable to: MSN 03222-03229, 03294, 03761-03816, 04352-04358, 04570-04662, 05528, 05947-05987, 06097, 06121, 06163-06165



V2533-A5 MAXIMUM CRUISE N1 AIR COND ON

N1 CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	1.500
NACELLE ANTI ICE ON	-1.200
NACELLE AND WING ANTI ICE ON	-2.100

TAT (C)	PRESSURE ALTITUDE (FT) -1000.	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-50.0	68.9	68.9	70.1	71.8	73.1	74.6	76.5	77.4	78.4	80.1	82.1	82.5
-46.0	69.5	69.5	70.8	72.4	73.7	75.3	77.2	78.1	79.1	80.8	82.8	83.2
-42.0	70.1	70.1	71.4	73.1	74.4	76.0	77.8	78.7	79.8	81.5	83.5	83.9
-38.0	70.7	70.7	72.0	73.7	75.0	76.6	78.5	79.4	80.5	82.2	84.2	84.7
-34.0	71.3	71.3	72.6	74.3	75.6	77.3	79.2	80.1	81.2	82.9	85.0	85.4
-30.0	71.9	71.9	73.2	74.9	76.3	77.9	79.8	80.8	81.9	83.6	85.7	86.1
-26.0	72.5	72.5	73.8	75.5	76.9	78.5	80.5	81.4	82.5	84.3	86.4	86.8
-22.0	73.1	73.1	74.4	76.2	77.5	79.2	81.1	82.1	83.2	84.9	87.1	87.5
-18.0	73.7	73.7	75.0	76.8	78.1	79.8	81.8	82.7	83.9	85.6	87.7	87.5
-14.0	74.2	74.2	75.6	77.4	78.7	80.4	82.4	83.4	84.5	86.3	87.3	86.9
-10.0	74.8	74.8	76.2	77.9	79.4	81.0	83.1	84.0	85.2	86.9	86.9	86.5
-6.0	75.4	75.4	76.7	78.5	80.0	81.7	83.7	84.7	85.8	86.8	86.6	86.2
-2.0	75.9	75.9	77.3	79.1	80.6	82.3	84.3	85.3	86.5	86.5	86.3	85.9
2.0	76.5	76.5	77.9	79.7	81.1	82.9	84.9	85.9	86.3	86.2	85.9	85.6
6.0	77.0	77.0	78.4	80.3	81.7	83.5	85.5	86.3	86.0	85.8	85.5	85.1
10.0	77.6	77.6	79.0	80.9	82.3	84.1	85.8	85.8	85.6	85.4	85.0	84.6
14.0	78.1	78.1	79.5	81.4	82.9	84.7	85.2	85.3	85.0	84.9	84.5	84.4
18.0	78.7	78.7	80.1	82.0	83.5	84.8	84.6	84.7	84.5	84.4		
22.0	79.2	79.2	80.6	82.6	84.0	84.2	84.0	84.1	83.9	83.9		
26.0	79.8	79.8	81.2	83.1	83.7	83.5	83.4	83.4	83.4	83.9		
30.0	80.3	80.3	81.7	82.9	83.0	82.8	82.8	82.9	82.8			
34.0	80.8	80.8	81.8	82.1	82.2	82.1	82.1	82.3	83.0			
38.0	81.1	80.6	81.0	81.4	81.5	81.4	81.4	82.0				
42.0	80.3	79.7	80.2	80.6	80.7	80.5	81.0					
46.0	79.1	78.2	78.9	79.3	79.5	79.4						
50.0	77.6	76.8	77.4	78.0	78.4	79.1						
54.0	76.1	75.4	76.1	76.9								
58.0	74.7	74.1	75.0									
62.0	73.6	72.9										
66.0	72.1											

NOTE : This table is valid for all aircraft speeds

Note: This table is valid for all aircraft speeds.

PERFORMANCE (EFB)

TAKEOFF

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EFB-TOF-10 Takeoff Performance Optimization

General....A
Takeoff Parameters....B

EFB-TOF-20 Thrust Options

EFB-TOF-20-10 Takeoff at Maximum Thrust

TOGA Thrust....A

EFB-TOF-20-20 Flexible and Derated Takeoff

EFB-TOF-20-20-10 General

General....A

EFB-TOF-20-20-20 Flexible Takeoff

Flexible Takeoff Definition....A
Flexible Takeoff Principle....B
Flexible Takeoff Limitations....C

EFB-TOF-20-20-30 Derated Takeoff (If Installed)

Derated Takeoff Principle....A
Derated Takeoff Limitation....B

EFB-TOF-20-20-40 Flexible Takeoff vs Derated Takeoff

Flexible Takeoff vs Derated Takeoff....A

EFB-TOF-30 Runway Conditions

EFB-TOF-30-10 Takeoff on Dry Runway

Description....A
Performance Calculation....B

EFB-TOF-30-20 Takeoff on Wet Runways

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EFB-TOF-30-30 Takeoff on Contaminated Runway

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EFB-TOF-40 Takeoff with MEL or CDL Item

Takeoff with MEL or CDL Item....A

EFB-TOF-50 Takeoff Recommendations

Takeoff Recommendations....A

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PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
EFB-TOF-20-20-20 Flexible Takeoff Limitations	C	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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GENERAL

Ident.: EFB-TOF-10-00022478.0001001 / 28 NOV 19
Applicable to: ALL

The takeoff performance optimization is the process which aims at obtaining:
- The maximum performance limited takeoff weight (MTOW (perf))
- The optimum takeoff thrust for a given weight.

The takeoff performance is optimized for a given runway, the associated obstacles, the flaps setting, the prevailing outside conditions (temperature, wind, and QNH) and the aircraft status.

The takeoff performance optimization process:
- Takes into account the parameters that affect takeoff performance
- Optimizes the parameters for which there is a possible range of values or settings

L2 The takeoff performance optimization process is made with the takeoff performance (T.O PERF) application.

TAKEOFF PARAMETERS

Ident.: EFB-TOF-10-00022479.0001001 / 28 NOV 19
Applicable to: ALL

The takeoff performance parameters are:

- The characteristics of the runway
  - L2 Declared lengths (TORA, TODA, ASDA)
  - Elevation
  - Slope
  - Obstacles.
- L1 The regulatory requirements
- The line up distances as applicable
- The outside conditions
  - L2 Outside Air Temperature (OAT)
  - Wind

    L3 Maximum tailwind is limited to a certified value. There is no maximum certified value for headwind, however a headwind higher than 40 kt brings no additional performance credit.
    As per regulation, the computation is based on 150 % of the entered tailwind, and 50 % of the entered headwind.
    A maximum crosswind component is associated with each runway condition.
    For more information on crosswind limitations, *Refer to LIM-AG-OPS Crosswind for Takeoff and Landing*.
    In addition, the flight crew applies a different thrust setting technique during the takeoff procedure when the crosswind component exceeds a threshold value, which may affect the calculation of the takeoff distance depending on the engine model installed on the aircraft.
    For more information on the takeoff procedure, *Refer to PRO-NOR-SOP-12 Takeoff - Takeoff Clearance*.
  - L2 QNH
  - Runway condition.
- L1 The aircraft configuration
  - L2 Aerodynamic configuration
  - Air conditioning setting
  - Anti-ice selection
  - Thrust setting.
- L1 The aircraft status
  - L2 MEL items
  - CDL items.

L1 - The takeoff speeds.

L2
- V1
- VR
- V2.

L1 The following parameters can be optimized:

- Aerodynamics configuration
- Air conditioning
- Thrust setting

L2
- TOGA
- FLEX
- Derate levels.

L1 - Takeoff speeds.

L2 Among the takeoff performance parameters that can be optimized, the takeoff speeds optimization has the largest potential for gain of takeoff weight. The range for optimization varies from 0.84 to 1.0 for V1/VR ratio and from 1.13 to 1.4 for V2/VS1G ratio.

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TOGA THRUST

Ident.: EFB-TOF-20-10-00022493.0001001 / 28 NOV 19
Applicable to: ALL

TOGA is the maximum thrust certified for takeoff.
When all engines are operative, the TOGA thrust rating must not be used more than 5 min.
In the case of one engine out, the TOGA thrust rating may be used for a maximum of 10 min.

The flight crew must use TOGA thrust for takeoff if at least one of the following conditions applies:
- Maximum power is required
- Performance reasons
- Flexible takeoff and derated takeoff are not permitted.

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General

GENERAL

Ident.: EFB-TOF-20-20-10-00022494.0001001 / 28 NOV 19
Applicable to: ALL

The actual takeoff weight of the aircraft is often lower than the maximum regulatory takeoff weight. In this case, it may be possible to takeoff at a thrust less than the maximum takeoff thrust. This allows to increase the engine life, improve the engine reliability and reduce the maintenance costs.

Two categories of takeoff at reduced thrust exist:
- The use of flexible temperature concept referred to as flexible takeoff
- The use of a fixed derated thrust level referred to as derated takeoff.

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Flexible Takeoff

FLEXIBLE TAKEOFF DEFINITION

Ident.: EFB-TOF-20-20-20-00022495.0001001 / 28 NOV 19
Applicable to: ALL

When the actual takeoff weight is lower than the maximum performance limited takeoff weight, the aircraft may comply with the regulatory requirements with a reduced thrust, called flexible takeoff thrust.
This takeoff operation is the FLEX takeoff.

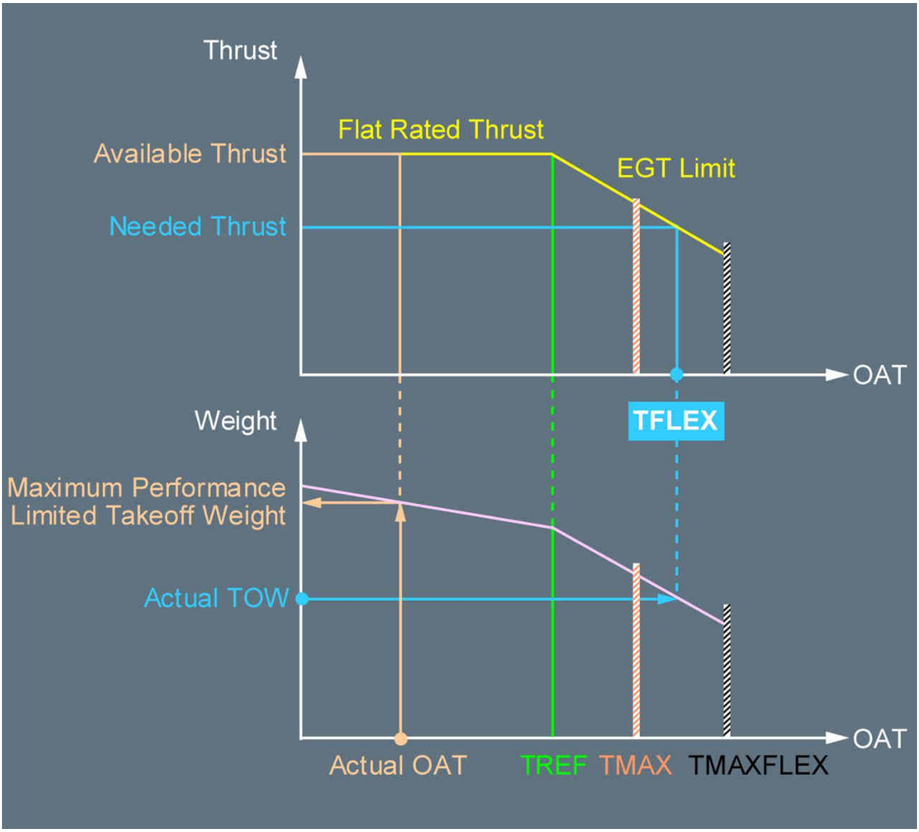
FLEXIBLE TAKEOFF PRINCIPLE

Ident.: EFB-TOF-20-20-20-00022497.0001001 / 28 NOV 19

Applicable to: ALL

The FLEX takeoff principle is based on the change in maximum available thrust with OAT.
The maximum performance limited takeoff weight depends on the maximum available takeoff thrust, therefore it is possible to determine a temperature at which the actual takeoff weight would be limited by performance.
This temperature is referred to as TFLEX (Flex Temperature).

Flexible Takeoff Principle


Thrust
Flat Rated Thrust
Available Thrust
EGT Limit
Needed Thrust
OAT
TFLEX
Weight
Maximum Performance
Limited Takeoff Weight
Actual TOW
OAT
Actual OAT
TREF
TMAX
TMAXFLEX

FLEXIBLE TAKEOFF LIMITATIONS

Ident.: EFB-TOF-20-20-20-00022498.0002001 / 28 NOV 19

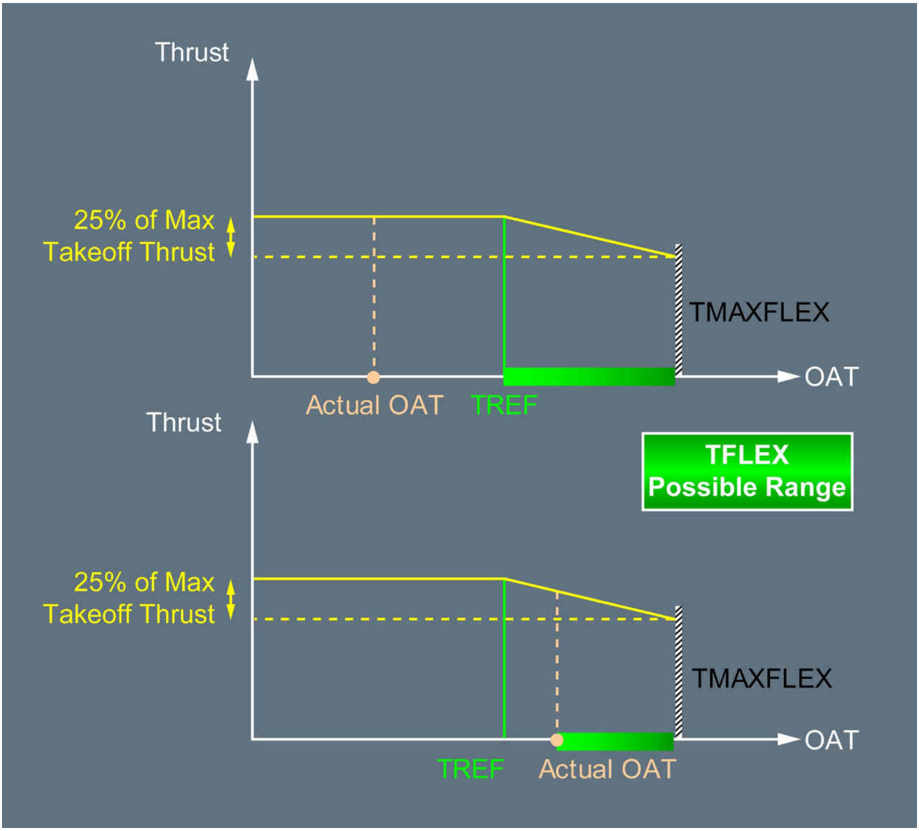
1 **Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-03710, 03733-05987, 06097, 06121, 06139-07098, 10949-11597**

Takeoff at reduced thrust, so-called as FLEX takeoff, is allowed only if the airplane meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flexible temperature (TFLEX).

TFLEX cannot be:
- Higher than TMAXFLEX.

L2 For more information on TMAXFLEX, *Refer to LIM-ENG Flex Takeoff*.

L1
- Lower than the flat rating temperature (TREF).
- Lower than the actual OAT.


Thrust
25% of Max
Takeoff Thrust
TMAXFLEX
OAT
Actual OAT
TREF
Thrust
TFLEX
Possible Range
25% of Max
Takeoff Thrust
TMAXFLEX
OAT
TREF
Actual OAT

FLEX takeoff is not permitted on contaminated runways.
Some items listed in the MEL and CDL do not permit a flexible takeoff.

L2 The operator should check the maximum thrust (TOGA) by:
- Performing full-rated takeoffs at regular intervals, in order to detect a reduced EGT margin, or
- Maintaining an adequate engine monitoring program, in order to follow-up on the engine parameters.

Derated Takeoff (If Installed)

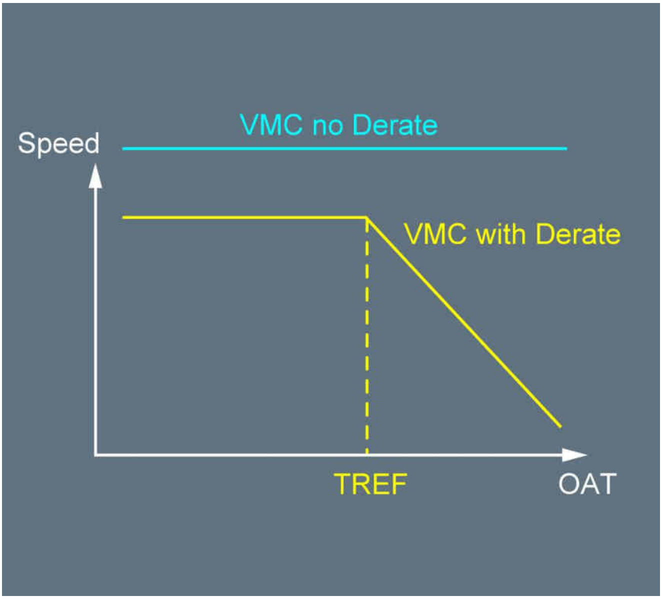
DERATED TAKEOFF PRINCIPLE

Ident.: EFB-TOF-20-20-30-00022500.0001001 / 28 NOV 19
Applicable to: ALL

The derated takeoff enables to improve the takeoff performance if the TOW is limited by VMCG. VMCG limitation usually occurs on short and/or contaminated runways. The principle is to impose a lower engine rating to benefit from lower minimum control speeds.

L2 In the case of derated takeoff, the minimum control speeds (VMCG and VMCA) are decreased because:
- The derated thrust is lower than the maximum takeoff thrust
- The effect of temperature on maximum available thrust is taken into account.

Derated Takeoff Principle



VMCG LIMITING

VMCG only has an impact on the ASD that includes an acceleration and a deceleration phase. The decrease in VMCG allows to use lower V1 values in the speed optimization, which shortens both the acceleration and the deceleration distances.

The weight decrement linked to the derated thrust is largely compensated by the benefit of shorter ASD. As a consequence, if takeoff performance is limited by the VMCG limited weight, an overall improvement can be achieved by derating.

VMCA LIMITING

The penalizing effect on climb gradient of the decrease in thrust outweighs the advantage of a lower VMCA.
Therefore derated takeoff would not improve the takeoff weight if VMCA limited.

DERATED TAKEOFF LIMITATION

Ident.: EFB-TOF-20-20-30-00022501.0001001 / 28 NOV 19
Applicable to: ALL

It is not permitted to combine a derated takeoff and a FLEX takeoff.
When a derated takeoff is performed, the selection of full takeoff thrust, by setting thrust levers to TOGA, is not permitted below the speeds specified in the "Engine Failure After V1 - Continued Takeoff Operating Technique". The only exception is the Recovery Technique at takeoff after the penetration of unforecast windshear.

L2 For more information on the specified speeds, *Refer to FCTM/PR-AEP-ENG Engine Failure after V1*.

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Flexible Takeoff vs Derated Takeoff

FLEXIBLE TAKEOFF VS DERATED TAKEOFF

Ident.: EFB-TOF-20-20-40-00022502.0001001 / 28 NOV 19
Applicable to: ALL

	Flexible Takeoff	Derated Takeoff
Takeoff parameters calculation	TOGA with OAT = TFLEX	Derate level
Thrust level limitations for VMC	TOGA	Derate level
Runway state	Dry and wet only	All
TOGA Selection	Possible at any moment	Possible above F speed
Performance improvement	None	For short and contaminated runways (VMCG limited)
Benefits	Engine life saving	Engine life saving

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DESCRIPTION

Ident.: EFB-TOF-30-10-00022480.0001001 / 28 MAY 20
Applicable to: ALL

A runway is dry when its surface is:
- Free of visible moisture
- Not contaminated.

PERFORMANCE CALCULATION

Ident.: EFB-TOF-30-10-00022481.0001001 / 28 NOV 19
Applicable to: ALL

Takeoff performance is calculated without the benefit of thrust reversers, as per regulation.
Flexible takeoff and derated takeoff are allowed for a takeoff from a dry runway.

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DESCRIPTIONS

Ident.: EFB-TOF-30-20-00022482.0001001 / 15 NOV 21
Applicable to: ALL

WET RUNWAY

A runway is considered as wet, when the surface is covered by any visible moisture or water up to and including 3 mm (1/8 in) depth. When the water film does not exceed 3 mm (1/8 in), there is no significant danger of hydroplaning.

Note: *1. A damp runway is considered wet, regardless of whether or not the surface has a shiny appearance.*
2. A runway is considered slippery wet when a significant portion of its surface does not comply with the applicable minimum friction criteria.

PERFORMANCE CALCULATION

Ident.: EFB-TOF-30-20-00022483.0001001 / 15 NOV 21
Applicable to: ALL

Takeoff performance on a wet runway can be calculated with the benefit of thrust reversers.
However, it is not allowed to take off at a weight higher than the weight on dry runway.
Flexible takeoff and derated takeoff are allowed for a takeoff from a wet runway.

L2 For information on contaminants equivalent to wet runway, *Refer to EFB-TOF-30-30 Performance Calculation*.

L1 For runways that have portions declared as slippery wet, performance should be calculated with the Slippery wet runway condition option, or, if not available, Dry snow 10 mm (2/5").

Note: *Flexible takeoff computation is not available for Dry snow 10 mm (2/5").*

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DESCRIPTIONS

Ident.: EFB-TOF-30-30-00022484.0001001 / 15 NOV 21
Applicable to: ALL

A runway is contaminated when a significant portion (depending on the applicable regulation) of its surface is covered with:

- A layer of fluid contaminant not considered as thin
- A hard contaminant.

FLUID CONTAMINANT

In terms of performance, a contaminated runway is a runway covered by a fluid contaminant with a depth of more than 3 mm (1/8 in). The fluid contaminant can be either:

- Dry snow
- Wet snow
- Standing water
- Slush.

Fluid Contaminants reduce friction forces, and cause:

- Precipitation drag
- Hydroplaning.

L2 Fluid contaminants descriptions:

- Dry snow is snow that, if compacted by hand, does not stay compressed when released. The wind can blow dry snow. The density of dry snow is approximately 0.2 kg/l (1.7 lb/US Gal).
- Wet snow is snow that, if compacted by hand, stays compressed when released, and with which snowballs can be created. The density of wet snow is approximately 0.4 kg/l (3.35 lb/US Gal).
- Standing water occurs due to heavy rain and/or not sufficient runway drainage. Standing water has a depth of more than 3 mm (1/8 in).
- Slush is snow soaked with water, which spatters when stepped on firmly. Slush occurs at temperatures of approximately 5 °C, and has a density of approximately 0.85 kg/l (7.1 lb/US Gal).

L1 HARD CONTAMINANT

In terms of performance, a contaminated runway is a runway covered by a hard contaminant that can be either:

- Compacted snow
- Ice (Cold and Dry)
- Wet ice.

Hard contaminants only reduce friction forces.

L2 Hard contaminants descriptions:

- Compacted snow: the maintenance personnel use a snow groomer to compress the snow on a runway in order to obtain a hard surface
- Ice (Cold and Dry): situation in which ice occurs on the runway in cold and dry conditions
- Wet ice: when the ice on a runway melts, or there are loose/fluid contaminants on top of the ice, the ice is referred to as "wet ice". When there is wet ice on a runway, braking and directional control are difficult or not possible, because the runway surface is very slippery.

PERFORMANCE CALCULATION

Ident.: EFB-TOF-30-30-00022485.0001001 / 03 NOV 22
Applicable to: ALL

Takeoff performance on contaminated runways can be calculated with the benefit of thrust reversers. However, it is not allowed to take off at a weight higher than the weight on a dry runway.

For fluid contaminants, takeoff performance data are provided up to the following depths:
- Dry snow: 100 mm (4 in)
- Wet snow: 30 mm (6/5 in)
- Standing water: 13 mm (1/2 in)
- Slush: 13 mm (1/2 in).

Performance computations for depths above the real depth of contamination on the runway may provide results that are better than the real aircraft performance, because of the excess drag that improves the stopping distance. Airbus recommends to retain the takeoff speeds and thrust setting of the lower MTOW (perf) resulting from two computations: one with the depth above the reported depth and one with the depth below.

Note: *The Airbus EFB TAKEOFF PERF application automatically makes this double computation.*

L2 The following assumptions are considered for the calculation:
- The contaminant covers the entire length of the runway in a layer that has a uniform depth and density
- The friction coefficient is based on studies, and verified by tests
- The screen height at the end of the takeoff segment is 15 ft, instead of 35 ft.

L1 Derated takeoff is allowed on contaminated runways.

EQUIVALENCES

In terms of performance:
- A fluid contamination is equivalent to wet, up to a maximum depth of 3 mm (1/8 in) of:
  - Dry snow
  - Wet snow
  - Standing water
  - Slush.
- Frost is equivalent to wet, unless a lower runway performance code is reported
- Compacted snow with OAT above -15 °C is equivalent to Dry snow 10 mm (2/5 in)

  Note: *Compacted snow is appropriate for OAT at or below -15 °C.*

- Dry snow over compacted snow is equivalent to dry snow of appropriate depth
- Wet snow over compacted snow is equivalent to wet snow of appropriate depth.

DOWNGRADE

- **If both runway condition and RWYCC inputs are available in the T.O PERF application:**
  The flight crew enters the downgraded RWYCC and uses the takeoff computation results without additional restriction.
- **If only the runway condition is available in the T.O PERF application:**
  - **For a runway covered by a hard contaminant, or a fluid contaminant with a depth of 3 mm (1/8 in) or less:**

    In the case of a downgrade to:
    - RWYCC 4, the flight crew computes the takeoff performance with Compacted snow
    - RWYCC 3, the flight crew computes the takeoff performance with Dry snow 10 mm (2/5 in)
    - RWYCC 2, the computation with any depth of Slush or Standing water may not be conservative. The flight crew should delay takeoff
    - RWYCC 1, the flight crew computes the takeoff performance with Ice cold & dry.
  - **For a runway covered by a fluid contaminant with a depth of more than 3 mm (1/8 in):**
    In the case of any downgrade, the flight crew should delay takeoff.

RESTRICTIONS

Ident.: EFB-TOF-30-30-00022486.0001001 / 28 NOV 19
Applicable to: ALL

FLEX takeoff is not permitted on contaminated runways.
Dispatch from a runway covered with wet ice is not permitted, unless a specific method for performance assessment has been established by the operator.
Refer to the AFM for further guidance.

TAKEOFF WITH MEL OR CDL ITEM

Ident.: EFB-TOF-40-00022487.0001001 / 28 NOV 19
Applicable to: ALL

The aircraft can be dispatched with deferred MEL or CDL items.

MEL or CDL items that affect takeoff performance are:
- MEL items that reduce braking capabilities (brakes, spoilers, thrust reversers)
- MEL items that have an effect on thrust available (engine anti-ice valve stuck open)
- MEL items that may lead to a reduced systems efficiency (rudder actuator, DFS, EDP)
- CDL items that increase aircraft drag (seals, fairings).

L2 CDL items are divided in two categories: negligible and non-negligible items.
If the number of negligible CDL items is less or equal to three, no penalty applies.
If the number of negligible CDL items is more than three, a drag increase for each item is applied.

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TAKEOFF RECOMMENDATIONS

Ident.: EFB-TOF-50-00022489.0001001 / 28 NOV 19
Applicable to: ALL

TAKEOFF CONFIGURATION

As a general rule, CONF 1+F gives better performance on long runways (better climb gradient), whereas CONF 3 gives better performance on short runways (shorter takeoff distances).
Sometimes, other parameters, such as obstacles can interfere. In this case, a compromise between climb and runway performance is requested, making CONF 2 the optimum configuration for takeoff.
Environmental takeoff conditions may also impact the choice of the takeoff configuration.
The following takeoff configuration is then recommended:

OUTSIDE CONDITIONS	FLAPS SETTINGS	OBJECTIVE
Dry or wet, well-paved runway	Use the flaps setting that provides the optimum performance. If takeoff weight is not limited by performance, consider using the higher flaps setting. *Note:* *Corresponds to OPT CONF selection in T.O PERF*	To extend engine life and save maintenance costs
High altitude takeoff	Use CONF 2 or CONF 3	To improve comfort
Badly-paved runway, or accelerate stop distance limited runway	Use CONF 2 or CONF 3	To improve comfort and stopping distance

FLEXIBLE TAKEOFF

Flexible takeoff is the recommended method for takeoff at reduced thrust on dry and wet runways.
The highest flexible temperature (TFLEX) extends engine life and saves maintenance costs.
However, if a high TFLEX is reduced by a few degrees only, the engines are not significantly affected.
The highest TFLEX will usually be obtained at the lowest flap setting. However, a higher flaps setting provides a lower decision speed (V1) and more comfort.
To extend engine life and to save maintenance costs, the use of flaps setting that provides the highest TFLEX is recommended. However, when the difference (in terms of TFLEX) between two configurations is low, the highest of both takeoff configurations is preferable.

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PERFORMANCE (EFB)

IN-FLIGHT

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EFB-IFT-10 In-Flight Performance Calculation

In-Flight Performance Calculation....................A

EFB-IFT-20 All Engines Operative Operations

EFB-IFT-20-10 Climb

EFB-IFT-20-10-10 General

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EFB-IFT-20-20 Cruise

EFB-IFT-20-20-10 Speeds

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EFB-IFT-30 One Engine Inoperative Operations

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Localization Title	Toc Index	ID	Reason
EFB-IFT-20-40 General	A	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.
EFB-IFT-30 Holding	D	1	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11531, 11572, 11597.

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IN-FLIGHT PERFORMANCE CALCULATION

Ident.: EFB-IFT-10-00022556.0001001 / 28 NOV 19
Applicable to: ALL

Performance data are split by flight phases: climb, cruise, descent, and holding.
In-flight performance calculation is made with the in-flight performance application (IN-FLT PERF).

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General

GENERAL

Ident.: EFB-IFT-20-10-10-00022557.0001001 / 28 NOV 19
Applicable to: ALL

The climb phase starts at the end of takeoff and ends at the initial cruise level.

The only available thrust option is:
- CLB: maximum climb thrust.

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Climb Thrusts

MAXIMUM CLIMB THRUST

Ident.: EFB-IFT-20-10-20-00022560.0001001 / 28 NOV 19

Applicable to: ALL

The “Maximum Climb” thrust rating is the maximum thrust approved for normal climb.

The FADEC commands this rating when the thrust lever is on the CL detent and the flight crew has selected CLB in the CLB THR list of the FMS ACTIVE/PERF page.

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Speeds

ECONOMIC MACH NUMBER (ECON MACH)

Ident.: EFB-IFT-20-20-10-00022561.0001001 / 28 NOV 19
Applicable to: ALL

COST INDEX

The Cost index (CI) is defined as the ratio between Cost of Time per time unit (CT) and Cost of Fuel per mass unit (CF).
The CI value is expressed in kilograms per minute (kg/min), or hundreds of pounds per hour (100 lbs/hr).
The purpose of the CI concept is to reduce Direct Operating Costs (DOC).

ECON MACH

For a given CI, ECON Mach is defined as the Mach for which DOC are minimum.

LONG RANGE CRUISE SPEED (LRC)

Ident.: EFB-IFT-20-20-10-00022562.0001001 / 28 NOV 19
Applicable to: ALL

The Long Range Cruise speed (LRC) is defined as the Mach number for which the specific range is equal to 99 % of the maximum specific range.

L2 For more information, *Refer to DSC-22_20-40-20 Cost Index (CI)*.

FIXED SPEED

Ident.: EFB-IFT-20-20-10-00022563.0001001 / 28 NOV 19
Applicable to: ALL

The fixed speed is either a Mach or a CAS.

TURBULENCE SPEED

Ident.: EFB-IFT-20-20-10-00022564.0001001 / 28 NOV 19
Applicable to: ALL

Turbulence speeds are recommended when the aircraft flies in a turbulent atmosphere.
For recommended turbulence speed, *Refer to PRO-ABN-MISC [QRH] General*.

MAXIMUM SPEED

Ident.: EFB-IFT-20-20-10-00022565.0001001 / 28 NOV 19
Applicable to: ALL

Maximum speed is either:

- The Maximum Operating Mach (MMO), or
- The Maximum Operating speed (VMO), or
- The speed limited by the available thrust.

L2 For more information on Maximum Speed, *Refer to LIM-AG-SPD Maximum Operating Speed VMO/MMO*.

Altitude/Ceilings

DEFINITIONS

Ident.: EFB-IFT-20-20-20-00022566.0001001 / 28 NOV 19
Applicable to: ALL

OPTIMUM ALTITUDE

The optimum altitude (OPT ALT) is the altitude at which the SR is maximum.

REC MAX

Maximum altitude is defined as the lower of:
- Maximum altitude at maximum cruise thrust in level flight
- Maximum altitude at maximum climb thrust with 300 ft/min vertical speed
- Maximum certified altitude
- 1.3 g buffet limited altitude.

ALTITUDE OPTIMIZATION

Ident.: EFB-IFT-20-20-20-00022567.0001001 / 28 NOV 19
Applicable to: ALL

The optimum altitude definition depends on the cruise type.
The optimum altitude (OPT) displayed on the FMS-PERF page and the optimum altitude (OPTIMUM ALT) determined by the EFB IN-FLT PERF Cruise computation for a given Cost Index (CI) are the result of a minimum cost analysis. To determine these optimum altitudes, both the FMS and IN-FLT PERF calculate the value of the Cost Function (CF) based on the CI. The altitude that provides the lowest value for the CF is displayed as OPT on the FMS-PERF page and as OPTIMUM ALT on the EFB IN-FLT PERF.
These optimum altitude computations take into account a large number of parameters. The FMS and the EFB consider some of these parameters in a different manner. Therefore, OPT on the FMS and OPTIMUM ALT on the EFB may differ.
L2 The main contributor to any difference between OPT on the FMS and OPTIMUM ALT on the EFB is the wind.

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GENERAL

Ident.: EFB-IFT-20-30-00022568.0001001 / 28 NOV 19
Applicable to: ALL

The descent phase starts at the top of descent and ends at landing or level off.
In the case of an emergency descent, MMO/VMO is the best speed profile as it gives high rate of descent, which can be increased by extending the speed brakes, if needed.

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GENERAL

Ident.: EFB-IFT-20-40-00022569.0002001 / 05 MAY 22

Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

The holding phase, when required, starts before the landing phase above the destination or alternate airport.
In CONF CLEAN, the standard holding speed is the Green Dot + 20 kt, as it is a good approximation of the maximum endurance speed.

GENERAL

Ident.: EFB-IFT-20-40-00022569.0001001 / 28 NOV 19

1 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

The holding phase, when required, starts before the landing phase above the destination or alternate airport.
In CONF CLEAN, the standard holding speed is the Green dot, as it is a good approximation of the maximum endurance speed.

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ONE ENGINE INOPERATIVE STRATEGIES

Ident.: EFB-IFT-30-00022570.0001001 / 28 NOV 19
Applicable to: ALL

For more information about One Engine Inoperative Strategies, *Refer to FCTM/PR-AEP-ENG Engine Failure During Cruise*.

LONG RANGE CRUISE SPEED

Ident.: EFB-IFT-30-00022571.0001001 / 28 NOV 19
Applicable to: ALL

If the EO mode of the FMS is active, the FMS takes the engine failure into account to compute the EO-LRC speed/ Mach.

EO MAX ALTITUDE

Ident.: EFB-IFT-30-00022572.0001001 / 28 NOV 19
Applicable to: ALL

The FMS Engine Out Maximum (EO MAX) altitude is a precomputed value, function of the aircraft gross weight and DISA, displayed on all the PERF pages if one engine is inoperative.

L2 **EO MAX** altitude respects the following criteria:
- It can be flown with LRC speed
- It can be held in level flight with:
  - The operating engine at "Maximum Continuous Thrust" rating
  - The failed engine in windmilling
  - Anti-ice OFF
- It can be reached before buffeting with a margin of 0.3 g
- It is less than the maximum certified altitude.

HOLDING

Ident.: EFB-IFT-30-00022573.0002001 / 05 MAY 22
Applicable to: MSN 01143-01518, 01593-01628, 01801, 01825-01826, 01832, 01837-01855, 02014-02321, 02734-02904, 03032, 03222-03229, 03294, 03588-03595, 03710, 03761-04389, 04563-04662, 04773, 05345-05528, 05947-05987, 06097, 06121, 06163-06165

In CONF CLEAN, the standard EO holding speed is the Green Dot + 20 kt.

HOLDING

Ident.: EFB-IFT-30-00022573.0001001 / 28 NOV 19

1 **Applicable to: MSN 02924-03002, 03035-03211, 03266-03284, 03313-03565, 03630-03662, 03733, 04441-04544, 04734-04756, 04827-05342, 05591-05883, 06139, 06173-09324, 10949-11597**

In CONF CLEAN, the standard EO holding speed is the Green dot.

PERFORMANCE (EFB)

LANDING

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EFB-LDG-10 Landing Performance Calculation

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EFB-LDG-20 Landing Speeds and Distances Definitions

Landing Speeds....A
Landing Distances Definitions....B

EFB-LDG-30 Runway Conditions

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Contaminated Runway....C
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EFB-LDG-40 Dispatch Requirements

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EFB-LDG-50 In-Flight Performance Assessment

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Landing Performance following In-Flight Failure....C
ROW ◁ Landing Distance Crosscheck....D

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Localization Title	Toc Index	ID	Reason
EFB-LDG-40 REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)	H	1	Effectivity update: The information now also applies to MSN 05005, 05097.
EFB-LDG-40 REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)	H	2	Effectivity update: The information now also applies to MSN 02321.
EFB-LDG-40 REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)	I	3	Effectivity update: The information now also applies to MSN 11228, 11293, 11482, 11522, 11572, 11597.

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GENERAL

Ident.: EFB-LDG-10-00022590.0001001 / 15 NOV 21
Applicable to: ALL

The landing performance calculation enables:
- At dispatch, to check that the aircraft can land at destination for the predicted conditions, in compliance with the regulatory requirements
- During flight, to check that the aircraft can land at destination for the actual conditions.

L2 The landing performance calculation is made with the landing performance (LDG PERF) application.

LANDING PARAMETERS

Ident.: EFB-LDG-10-00022591.0001001 / 28 NOV 19
Applicable to: ALL

The landing performance parameters are:

- The characteristics of the runway
  - L2 Landing Distance Available (LDA)
  - Elevation
  - Slope
  - Missed approach gradient.
- L1 The regulatory requirements
- The outside conditions
  - L2 Wind

    L3 As per regulation, the computation is based on 150 % of the entered tailwind, and 50 % of the entered headwind.

    The crosswind component does not affect the calculation of the landing distance. However, a maximum crosswind component is associated with each runway condition.

    For more information about crosswind limitation, *Refer to LIM-AG-OPS Crosswind for Takeoff and Landing*.
  - L2 Outside Air Temperature (OAT)
  - Sea level atmospheric pressure (QNH)
  - Icing conditions (anti-ice selection)
  - Runway condition, or landing performance level.
- L1 The aircraft configuration
  - L2 Landing Weight (LW)
  - Aerodynamic configuration
  - Air conditioning setting
  - Aircraft CG position
  - Approach speed and go-around speed.
- L1 The aircraft status.
  - L2 MEL items
  - CDL items
  - Abnormal and emergency configuration (ABN EMER) for in-flight computation only.

L1 The following parameters can be optimized:

- Aerodynamics configuration
- Go-around speed.

L2 For more information about the go-around speed, *Refer to EFB-LDG-20 Landing Speeds*.

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LANDING SPEEDS

Ident.: EFB-LDG-20-00022592.0001001 / 28 NOV 19
Applicable to: ALL

LOWEST SELECTABLE SPEED (VLS)

VLS is the lowest selectable speed. VLS is used to determine the Final Approach Speed (VAPP) in normal conditions.
For more information about VLS, *Refer to DSC-22_10-50-20 Characteristic Speeds*.

REFERENCE SPEED (VREF)

VREF is equal to the VLS of CONF FULL. VREF is used to determine the Final Approach Speed (VAPP) when a system failure affects the landing performance.
For more information about VREF, *Refer to DSC-22_10-50-50 Other Speeds*.

FINAL APPROACH SPEED (VAPP)

VAPP is the speed of the aircraft when crossing the runway threshold. The flaps/slats are in the landing configuration, and the landing gears are extended.
For more information about VAPP, *Refer to DSC-22_10-50-50 Other Speeds*.

GO-AROUND SPEED

In the case of a missed approach, the go-around climb gradient is calculated at the go-around speed.
The standard go-around speed is 1.23 VS1G of the go-around configuration. For approaches with a decision height at or above 200 ft, where approach climb performance is found restrictive, the go-around speed can be increased up to a maximum limit. For more information about maximum go-around acceleration speed, *Refer to AFM/PERF-LDG Approach Climb and Landing Climb*.

LANDING DISTANCES DEFINITIONS

Ident.: EFB-LDG-20-00022593.0001001 / 15 NOV 21
Applicable to: ALL

REQUIRED LANDING DISTANCE

The RLD is the regulatory reference to be used for dispatch landing performance computation.

The RLD is the factored certified landing distance based on:
- Maximum manual braking initiated immediately after main gear touchdown
- Prompt selection of max reverse thrust, maintained to 70 kt, and idle thrust to full stop (when reverse thrust is taken into account)
- Antiskid system and all ground spoilers operative
- The regulatory dispatch factor.

Note: *The RLD calculation considers the effect of the MEL/CDL items that affect the landing performance.*

IN-FLIGHT LANDING DISTANCE

The In-Flight Landing Distance reflects the performance achievable in a typical operational landing without margin.

The In-Flight Landing Distance calculation assumes:
- An airborne phase of 7 s from threshold to touchdown
- In the case of manual braking: maximum manual braking initiated immediately after main gear touchdown
- In the case of autobrake: normal system delays in braking activation
- Antiskid system and all ground spoilers operative
- Prompt selection of max reverse thrust, maintained to 70 kt, and idle thrust to full stop (when reverse thrust is taken into account).

Note: *The In-Flight Landing Distance calculation considers the effect of the inoperative system(s) following:*

- *An MEL/CDL dispatch that affects the landing performance*
- *An in-flight failure (ECAM alert) that affects the landing performance.*

Note: *The In-Flight Landing Distance fulfills the requirements of the Landing Distance at Time of Arrival (LDTA) described in Air Ops AMC1 CAT.OP.MPA.303(e).*

FACTORED IN-FLIGHT LANDING DISTANCE

The definition of the In-Flight Landing Distance does not include any margin. The In-Flight Landing Distance is a realistic distance achievable in nominal conditions, i.e. the actual conditions during the landing are those used for the computation.

It is recommended to apply an appropriate margin to the In-Flight Landing Distance (either determined with or without failure) in order to cover:
- The variability in flying techniques (e.g. flare execution, delay in application of the deceleration means)
- Unexpected conditions at landing (e.g. real runway friction vs. reporting, turbulence, crosswind).

L2 The FLD is defined as:
- The In-Flight Landing Distance multiplied by a Factor, or
- The In-Flight Landing Distance plus an Increment.

L1 It is the airlines responsibility to define the margins (and their applicability) to apply on top of the In-Flight Landing Distance.
The recommended margin is a Factor of 1.15 on the In-Flight Landing Distance. In an emergency situation, the flight crew may decide to disregard this margin.

ROW ◁ LANDING DISTANCE

The ROW ◁ landing distance is calculated below 400 ft based on:
- The detected runway
- The current outside condition (e.g QNH, Temperature…)
- Dry and wet runway conditions
- A realistic manual or automatic landing, normal flare, and de-rotation technique
- Maximum braking
- IDLE REV, when runway condition/braking action is assumed to be DRY-6
- MAX REV, when runway condition/braking action is assumed to be WET-5.

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DRY RUNWAY

Ident.: EFB-LDG-30-00022594.0001001 / 28 MAY 20
Applicable to: ALL

A runway is dry when its surface is:
- Free of visible moisture
- Not contaminated.

WET RUNWAY

Ident.: EFB-LDG-30-00022595.0001001 / 15 NOV 21
Applicable to: ALL

A runway is considered as wet, when the surface is covered by any visible moisture or water up to and including 3 mm (1/8 in) depth. When the water film does not exceed 3 mm (1/8 in), there is no significant danger of hydroplaning.

Note: 1. *A damp runway is considered wet, regardless of whether or not the surface has a shiny appearance.*
2. *A runway is considered slippery wet when a significant portion of its surface does not comply with the applicable minimum friction criteria.*

CONTAMINATED RUNWAY

Ident.: EFB-LDG-30-00022596.0001001 / 03 NOV 22
Applicable to: ALL

A runway is contaminated when a significant portion (depending on the applicable regulation) of its surface is covered with:
- A layer of fluid contaminant not considered as thin
- A hard contaminant.

DESCRIPTION OF FLUID CONTAMINANTS

In terms of performance, a contaminated runway is a runway covered by a fluid contaminant with a depth of more than 3 mm (1/8 in). The fluid contaminant can be either:
- Dry snow
- Wet snow
- Standing water
- Slush.

Fluid Contaminants reduce friction forces, and cause:
- Precipitation drag
- Hydroplaning.

L2 Fluid contaminants descriptions:
- Dry snow is snow that, if compacted by hand, does not stay compressed when released. The wind can blow dry snow. The density of dry snow is approximately 0.2 kg/l (1.7 lb/US Gal).
- Wet snow is snow that, if compacted by hand, stays compressed when released, and with which snowballs can be created. The density of wet snow is approximately 0.4 kg/l (3.35 lb/US Gal).
- Standing water occurs due to heavy rain and/or not sufficient runway drainage. Standing water has a depth of more than 3 mm (1/8 in).
- Slush is snow soaked with water, which spatters when stepped on firmly. Slush occurs at temperatures of approximately 5 °C, and has a density of approximately 0.85 kg/l (7.1 lb/US Gal).

L1 DESCRIPTION OF HARD CONTAMINANTS

In terms of performance, a contaminated runway is a runway covered by a hard contaminant that can be either:
- Compacted snow
- Ice (Cold and Dry)
- Wet ice.

Hard contaminants only reduce friction forces.

L2 Hard contaminants descriptions:
- Compacted snow: the maintenance personnel use a snow groomer to compress the snow on a runway in order to obtain a hard surface
- Ice (Cold and Dry): situation in which ice occurs on the runway in cold and dry conditions
- Wet ice: when the ice on a runway melts, or there are loose/fluid contaminants on top of the ice, the ice is referred to as "wet ice". When there is wet ice on a runway, braking and directional control are difficult or not possible, because the runway surface is very slippery.

L1 LANDING PERFORMANCE CALCULATION

L2 COMPUTATION ASSUMPTIONS

The following assumptions are considered for the calculation:
- The contaminant covers the entire length of the runway
- For fluid contaminants, the landing distance calculation does not take credit of the precipitation drag.

L1 EQUIVALENCES

In terms of performance:
- A fluid contamination is equivalent to wet, up to a maximum depth of 3 mm (1/8 in) of:
  - Dry snow
  - Wet snow
  - Standing water
  - Slush.
- Frost is equivalent to wet, unless a lower runway performance code is reported
- Slippery wet is equivalent to Dry snow
- Compacted snow with OAT above -15 °C is equivalent to Dry snow

Note: Compacted snow is appropriate for OAT at or below -15 °C.

- Dry snow over compacted snow is equivalent to Dry snow
- Wet snow over compacted snow is equivalent to Wet snow.

Note:
- *In the case of a downgraded RWYCC for dispatch computation, Airbus recommends to perform the landing computation with a contaminant included in this RWYCC's category in the RCAM.*
- *In the case of a downgraded or upgraded RWYCC, the flight crew should use the recommendations applicable to in-flight performance calculation. For more information, Refer to FCTM/LANDING PERFORMANCE / DOWNGRADED OR UPGRADED RWYCC.*

RESTRICTIONS

For maximum depth of fluid contaminants, *Refer to EFB-LDG-30 Runway Condition Assessment Matrix for Landing*.
Dispatch to a runway covered with wet ice is not permitted, unless a specific method for performance assessment has been established by the operator.
Refer to the AFM for further guidance.

RUNWAY CONDITION ASSESSMENT MATRIX FOR LANDING

Ident.: EFB-LDG-30-00022597.0001001 / 15 NOV 21
Applicable to: ALL

Runway Surface Conditions		Observations on Deceleration and Directional Control	Related Landing Performance		Maximum Crosswind for Landing (Gust included)
Runway State or / and Runway Contaminant	AIREP(1)		RWYCC	Level	
Dry	-	-	6	**DRY**	38 kt
Damp **Wet** Up to 3 mm (1/8 in) of water **Slush** Up to 3 mm (1/8 in) **Dry snow** Up to 3 mm (1/8 in) **Wet snow** Up to 3 mm (1/8 in) **Frost**	**Good**	Braking deceleration is normal for the wheel braking effort applied. Directional control is normal.	**5**	**GOOD**	38 kt
Compacted snow OAT at or below -15 °C	**Good to Medium**	Braking deceleration and controllability is between Good and Medium.	**4**	**GOOD TO MEDIUM**	29 kt
Dry snow More than 3 mm (1/8 in), up to 100 mm (4 in) **Wet snow** More than 3 mm (1/8 in), up to 30 mm (6/5 in) **Compacted snow** OAT above -15 °C **Dry snow over compacted snow** **Wet snow over compacted snow** **Slippery wet**	**Medium**	Braking deceleration is noticeably reduced for the wheel braking effort applied. Directional control may be reduced.	**3**	**MEDIUM**	25 kt
Standing Water More than 3 mm (1/8 in), up to 13 mm (1/2 in) **Slush** More than 3 mm (1/8 in), up to 13 mm (1/2 in)	**Medium to Poor**	Braking deceleration and controllability is between Medium and Poor. Potential for hydroplaning exists.	**2**	**MEDIUM TO POOR**	20 kt
Ice (cold & dry)	**Poor**	Braking deceleration is significantly reduced for the wheel braking effort applied. Directional	**1**	**POOR**	15 kt

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Continued from the previous page

Runway Surface Conditions		Observations on Deceleration and Directional Control	Related Landing Performance		Maximum Crosswind for Landing (Gust included)
Runway State or / and Runway Contaminant	**AIREP[(1)]**		**RWYCC**	**Level**	
		control may be significantly reduced.			
Wet ice **Water on top of Compacted Snow** **Dry Snow or Wet Snow over ice**	**Less than Poor**	Braking deceleration is minimal to non-existant for the wheel braking effort applied. Directional control may be uncertain.	**0**	**-**	-

(1) *AIREP: Special Air Report of Braking Action*

Note: Refer for FCOM LIM-AFS chapter for Automatic Approach, Landing and Rollout limitations.

GENERAL

Ident.: EFB-LDG-40-00022598.0001001 / 28 NOV 19
Applicable to: ALL

LANDING PERFORMANCE CALCULATION

The landing performance calculation is made with the landing performance (LDG PERF) application, with the computation type set to DISPATCH.

REQUIREMENT ON THE LANDING DISTANCE

The Landing Distance Available (LDA) at destination must be at least equal to the Required Landing Distance (RLD) for the planned landing weight.

REQUIREMENT ON THE GO-AROUND PERFORMANCE

The go-around climb gradient must be at least equal to:
- 2.1 %
- The gradient published in the airport approach chart.

Note: *EU-OPS requires a minimum go-around climb gradient of 2.5 % for instrument approaches with decision heights below 200 ft.*

DISPATCH ON DRY RUNWAY

Ident.: EFB-LDG-40-00022599.0001001 / 28 NOV 19
Applicable to: ALL

Landing performance is calculated without the benefit of thrust reversers, as per regulation.
L2 For information, the AFM publishes the autoland landing distance increments on dry runways.

DISPATCH ON WET RUNWAY

Ident.: EFB-LDG-40-00022600.0001001 / 28 NOV 19
Applicable to: ALL

Landing performance is calculated without the benefit of thrust reversers, as per regulation.
The RLD for a wet runway is the RLD for the dry runway multiplied by 1.15.

DISPATCH ON CONTAMINATED RUNWAY

Ident.: EFB-LDG-40-00022601.0001001 / 28 NOV 19
Applicable to: ALL

Landing performance can be calculated with the benefit of the thrust reversers.
For operators complying with EU-OPS regulation, the landing weight on a contaminated runway cannot exceed the landing weight on a wet runway.

DISPATCH WITH MEL OR CDL ITEM

Ident.: EFB-LDG-40-00022602.0001001 / 28 NOV 19
Applicable to: ALL

The aircraft can be dispatched with deferred MEL or CDL items. In this case, the LDA must be at least equal to the RLD calculated with the applicable MEL or CDL item selected.

MEL or CDL items that affect landing performance are:
- MEL items that reduce braking capabilities (brakes, spoilers, thrust reversers if applicable)
- MEL items that have an impact on thrust available for go-around (engine anti-ice valve stuck open)
- CDL items that increase aircraft drag (seals, fairings).

L2 CDL items are divided in two categories: negligible and non-negligible items.
If the number of negligible CDL items is less or equal to three, no penalty applies.
If the number of negligible CDL items is more than three, a drag increase for each item is applied.

IN-FLIGHT LANDING DISTANCE CROSSCHECK

Ident.: EFB-LDG-40-00022603.0001001 / 15 NOV 21
Applicable to: ALL

The FLD may, in some cases, and particularly on contaminated runway, exceed the RLD considered at dispatch.
The requirements at dispatch remain unchanged and are based on the RLD. It is however recommended to make a preliminary calculation of the FLD at dispatch.
Based on this crosscheck, the crew only need to perform a computation during Descent Preparation in case of changes since dispatch.
If the FLD exceeds the LDA at destination, the Operator may limit the planned weight at destination by the maximum between the RLD and the FLD. The Operator may also consider suitable destination alternates.

ROW ◁ LANDING DISTANCE CROSSCHECK

Ident.: EFB-LDG-40-00022715.0001001 / 28 MAY 20
Applicable to: ALL

The ROW ◁ landing distance may, in some cases, exceed the RLD considered at dispatch.
If the conditions remain unchanged, the flight crew will not be authorized to initiate an approach (unless a specific authorization is obtained from the appropriate authority to deactivate the ROW/ROP ◁).
As a consequence, the dispatch conditions should be adapted in order to prevent a ROW ◁ alert being triggered.

REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)

Ident.: EFB-LDG-40-00013208.0003001 / 18 MAR 11

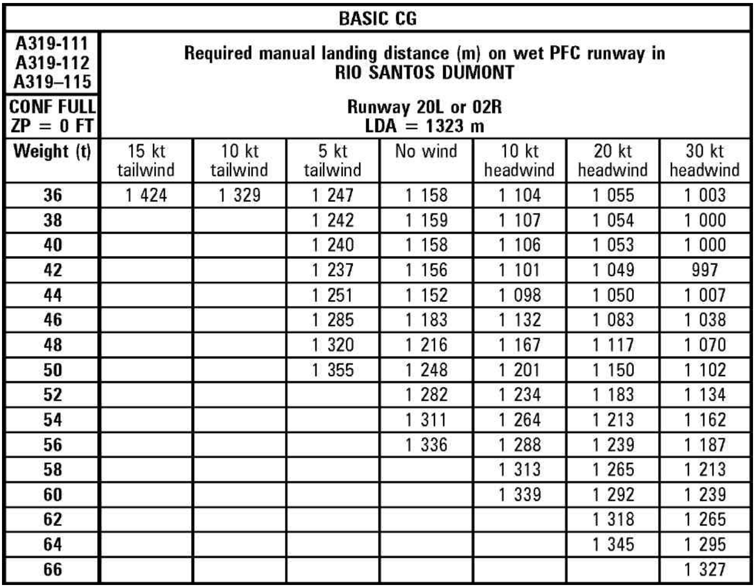
1 **Applicable to: MSN 03733, 04734-04756, 05005, 05097**

INTRODUCTION

The following table shows the required landing distances on wet runway at Santos Dumont airport (SBRJ/SDU) for A319-111/-112/-115 aircraft models fitted with BSCU STD 9 or L4.1 (or higher versions). The use of this table is subject to a specific Flight Manual Supplement. The performance on wet runway given in this table is applicable provided the runway is maintained to acceptable standards for Porous Friction Course type runways in accordance with FAA AC 150/5320-12 or CAA CAP 683 or equivalent.

MANUAL LANDING

REQUIRED LANDING DISTANCE CONF FULL



BASIC CG

A319-111
A319-112
A319–115
CONF FULL
ZP = 0 FT

Required manual landing distance (m) on wet PFC runway in
RIO SANTOS DUMONT

Runway 20L or 02R
LDA = 1323 m

Weight (t)	15 kt tailwind	10 kt tailwind	5 kt tailwind	No wind	10 kt headwind	20 kt headwind	30 kt headwind
36	1 424	1 329	1 247	1 158	1 104	1 055	1 003
38			1 242	1 159	1 107	1 054	1 000
40			1 240	1 158	1 106	1 053	1 000
42			1 237	1 156	1 101	1 049	997
44			1 251	1 152	1 098	1 050	1 007
46			1 285	1 183	1 132	1 083	1 038
48			1 320	1 216	1 167	1 117	1 070
50			1 355	1 248	1 201	1 150	1 102
52				1 282	1 234	1 183	1 134
54				1 311	1 264	1 213	1 162
56				1 336	1 288	1 239	1 187
58					1 313	1 265	1 213
60					1 339	1 292	1 239
62						1 318	1 265
64						1 345	1 295
66							1 327

REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)

Ident.: EFB-LDG-40-00013208.0002001 / 18 MAR 11

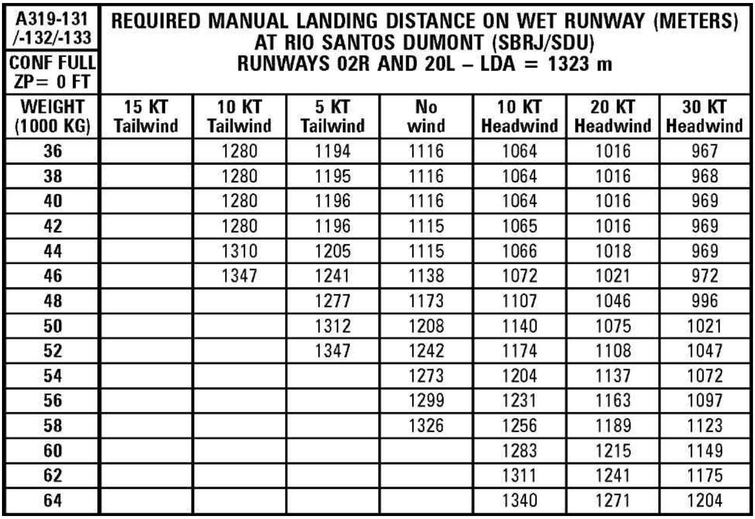
Applicable to: MSN 01801, 01826, 01837-01855, 02321, 02887, 03032, 03588-03595, 03710, 04000-04192, 04389, 04563, 04773, 05345

INTRODUCTION

The following table shows the required landing distances on wet runway at Santos Dumont airport (SBRJ/SDU) for A319-131/-132/-133 aircraft models fitted with BSCU STD 9 or L4.1 (or higher versions). The use of this table is subject to a specific Flight Manual Supplement. The performance on wet runway given in this table is applicable provided the runway is maintained to acceptable standards for Porous Friction Course type runways in accordance with FAA AC 150/5320-12 or CAA CAP 683 or equivalent.

MANUAL LANDING

REQUIRED LANDING DISTANCE CONF FULL



A319-131 /-132/-133 CONF FULL ZP= 0 FT	REQUIRED MANUAL LANDING DISTANCE ON WET RUNWAY (METERS) AT RIO SANTOS DUMONT (SBRJ/SDU) RUNWAYS 02R AND 20L – LDA = 1323 m						
WEIGHT (1000 KG)	15 KT Tailwind	10 KT Tailwind	5 KT Tailwind	No wind	10 KT Headwind	20 KT Headwind	30 KT Headwind
36		1280	1194	1116	1064	1016	967
38		1280	1195	1116	1064	1016	968
40		1280	1196	1116	1064	1016	969
42		1280	1196	1115	1065	1016	969
44		1310	1205	1115	1066	1018	969
46		1347	1241	1138	1072	1021	972
48			1277	1173	1107	1046	996
50			1312	1208	1140	1075	1021
52			1347	1242	1174	1108	1047
54				1273	1204	1137	1072
56				1299	1231	1163	1097
58				1326	1256	1189	1123
60					1283	1215	1149
62					1311	1241	1175
64					1340	1271	1204

REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)

Ident.: EFB-LDG-40-00013208.0001001 / 18 MAR 11
Applicable to: MSN 01143-01376, 02734

INTRODUCTION

The following tables show the required landing distances on wet runway at Santos Dumont airport (SBRJ/SDU) for A320-232/-233 fitted with BSCU STD 8 (or higher standard). The use of these tables is subject to a Flight Manual supplement. The performance on wet runway given in these tables is applicable provided the runway is maintained to acceptable standards for Porous Friction Course type runways in accordance with FAA AC 150/5320-12 or CAA CAP 683 or equivalent

MANUAL LANDING

REQUIRED LANDING DISTANCE CONF FULL – BASIC CG ENVELOPE

A320-232 /-233	Basic CG						
CONF FULL ZP= 0 FT	REQUIRED MANUAL LANDING DISTANCE ON WET RUNWAY (METERS) AT RIO SANTOS DUMONT (SBRJ/SDU) RUNWAYS 02R AND 20L – LDA = 1323 m						
WEIGHT (1000 KG)	15 KT Tailwind	10 KT Tailwind	5 KT Tailwind	No wind	10 KT Headwind	20 KT Headwind	30 KT Headwind
38		1252	1173	1099	1049	1001	956
40		1254	1175	1099	1051	1004	958
42		1256	1177	1101	1053	1005	960
44		1290	1196	1120	1070	1023	977
46		1327	1231	1147	1097	1048	1002
48			1266	1174	1124	1075	1027
50			1299	1205	1150	1100	1052
52			1332	1237	1177	1126	1077
54				1269	1206	1152	1102
56				1302	1239	1178	1127
58				1335	1271	1209	1153
60					1304	1241	1179
62					1336	1273	1210
64						1304	1242
66						1336	1273

REQUIRED LANDING DISTANCE CONF FULL – EXTENDED CG ENVELOPE

A320–232 /–233	Extended FWD CG						
CONF FULL ZP= 0 FT	REQUIRED MANUAL LANDING DISTANCE ON WET RUNWAY (METERS) AT RIO SANTOS DUMONT (SRBJ/SDU) RUNWAYS 02R AND 20L – LDA = 1323 m						
WEIGHT (1000 KG)	15 KT Tailwind	10 KT Tailwind	5 KT Tailwind	No wind	10 KT Headwind	20 KT Headwind	30 KT Headwind
38		1268	1188	1110	1060	1013	967
40		1272	1190	1113	1062	1014	968
42		1295	1196	1117	1067	1019	972
44		1331	1232	1146	1095	1046	998
46			1267	1174	1123	1072	1024
48			1302	1203	1150	1099	1050
50			1337	1237	1178	1126	1076
52				1272	1206	1153	1102
54				1305	1239	1179	1128
56				1338	1271	1206	1153
58					1303	1237	1178
60					1335	1269	1204
62						1300	1234
64						1331	1265
66							1297

REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)

Ident.: EFB-LDG-40-00013208.0006001 / 18 MAR 11

Applicable to: MSN 03180-03211, 03266-03284, 03313-03565, 03630-03662, 04441-04544, 04953-04974, 05066, 05101-05342, 05591-05883, 06139, 06173, 06528-06561, 06598, 06634, 06689-06712, 06800-06876

INTRODUCTION

The following table shows the required landing distances on wet runway at Santos Dumont airport (SBRJ/SDU) for A320-214/-215/-216 aircraft models fitted with BSCU STD 9 or L4.1 (or higher versions). The use of this table is subject to a specific Flight Manual Supplement. The performance on wet runway given in this table is applicable provided the runway is maintained to acceptable standards for Porous Friction Course type runways in accordance with FAA AC 150/5320-12 or CAA CAP 683 or equivalent.

MANUAL LANDING

REQUIRED LANDING DISTANCE CONF FULL

BASIC CG							
A320–214 A320–215 A320–216	Required manual landing distance (m) on wet PFC runway in RIO SANTOS DUMONT						
CONF FULL ZP= 0 ft	Runway 20L or 02R LDA = 1323 m						
Weight (t)	15 kt tailwind	10 kt tailwind	5 kt tailwind	No wind	10 kt headwind	20 kt headwind	30 kt headwind
38	1404	1318	1234	1155	1104	1054	1005
40		1320	1236	1157	1106	1056	1006
42		1321	1237	1157	1106	1056	1008
44		1323	1239	1158	1107	1057	1008
46			1257	1162	1117	1076	1034
48			1291	1192	1149	1107	1067
50			1324	1225	1182	1139	1098
52				1257	1213	1170	1129
54				1290	1245	1202	1159
56				1322	1277	1234	1190
58				1355	1309	1264	1222
60					1341	1296	1253
62						1327	1283
64							1313
66							1344

REQUIRED LANDING DISTANCE CONF FULL – EXTENDED CG ENVELOPE

EXTENDED FORWARD CG							
A320–214 A320–215 A320–216	**Required manual landing distance (m) on wet PFC runway in RIO SANTOS DUMONT**						
CONF FULL ZP= 0 ft	**Runway 20L or 02R LDA = 1323 m**						
Weight (t)	15 kt tailwind	10 kt tailwind	5 kt tailwind	No wind	10 kt headwind	20 kt headwind	30 kt headwind
38	1427	1337	1250	1168	1116	1066	1017
40			1252	1171	1118	1067	1018
42			1255	1172	1119	1067	1018
44			1256	1172	1118	1071	1029
46			1291	1192	1148	1105	1063
48			1327	1226	1181	1137	1096
50				1259	1214	1170	1127
52				1292	1247	1202	1159
54				1325	1279	1234	1191
56					1311	1265	1222
58					1342	1297	1252
60						1327	1282
62							1312
64							1343
66							

REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)

Ident.: EFB-LDG-40-00013208.0005001 / 18 MAR 11
Applicable to: MSN 01518, 01593-01628, 01825, 01832, 02896-02904

INTRODUCTION

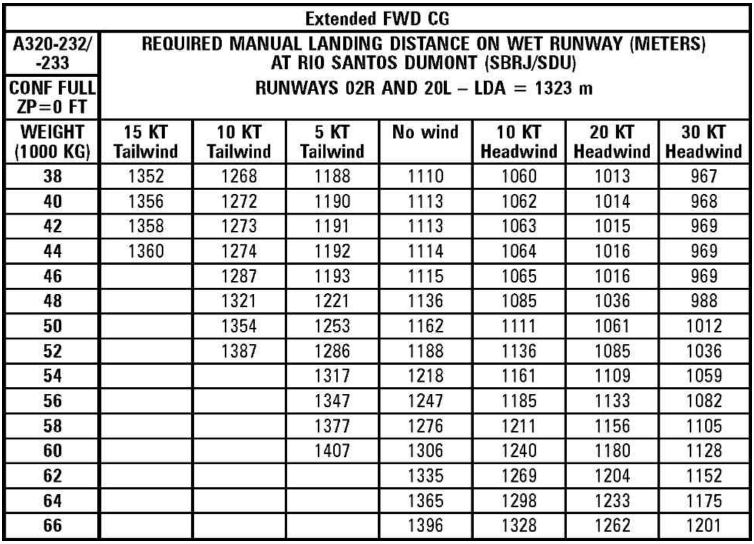
The following tables show the required landing distances on wet runway at Santos Dumont airport (SBRJ/SDU) for A320-232/-233 fitted with BSCU STD 8 (or higher standard) and Lift Improvement Package. The use of these tables is subject to a Flight Manual Supplement. The performance on wet runway given in these tables is applicable provided the runway is maintained to acceptable standards for Porous Friction Course type runways in accordance with FAA AC 150/5320-12 or CAA CAP 683 or equivalent.

MANUAL LANDING

REQUIRED LANDING DISTANCE – BASIC CG ENVELOPE

Basic CG							
A320-232/ -233	REQUIRED MANUAL LANDING DISTANCE ON WET RUNWAY (METERS) AT RIO SANTOS DUMONT (SBRJ/SDU) RUNWAYS 02R AND 20L – LDA = 1323 m						
CONF FULL ZP = 0 FT							
WEIGHT (1000 KG)	15 KT Tailwind	10 KT Tailwind	5 KT Tailwind	No wind	10 KT Headwind	20 KT Headwind	30 KT Headwind
38		1252	1173	1099	1049	1001	956
40		1254	1175	1099	1051	1004	958
42		1256	1177	1101	1053	1005	960
44		1258	1178	1102	1053	1006	960
46		1260	1180	1103	1054	1007	961
48		1288	1191	1112	1063	1015	968
50		1320	1222	1138	1088	1039	991
52		1353	1254	1163	1112	1062	1015
54			1284	1188	1137	1086	1038
56			1315	1218	1161	1110	1061
58			1346	1247	1185	1134	1084
60				1277	1212	1158	1107
62				1307	1242	1182	1131
64				1337	1271	1207	1154
66					1300	1235	1179

REQUIRED LANDING DISTANCE – EXTENDED FORWARD CG ENVELOPE



Extended FWD CG							
A320-232/ -233	REQUIRED MANUAL LANDING DISTANCE ON WET RUNWAY (METERS) AT RIO SANTOS DUMONT (SBRJ/SDU)						
CONF FULL ZP=0 FT	RUNWAYS 02R AND 20L – LDA = 1323 m						
WEIGHT (1000 KG)	15 KT Tailwind	10 KT Tailwind	5 KT Tailwind	No wind	10 KT Headwind	20 KT Headwind	30 KT Headwind
38	1352	1268	1188	1110	1060	1013	967
40	1356	1272	1190	1113	1062	1014	968
42	1358	1273	1191	1113	1063	1015	969
44	1360	1274	1192	1114	1064	1016	969
46		1287	1193	1115	1065	1016	969
48		1321	1221	1136	1085	1036	988
50		1354	1253	1162	1111	1061	1012
52		1387	1286	1188	1136	1085	1036
54			1317	1218	1161	1109	1059
56			1347	1247	1185	1133	1082
58			1377	1276	1211	1156	1105
60			1407	1306	1240	1180	1128
62				1335	1269	1204	1152
64				1365	1298	1233	1175
66				1396	1328	1262	1201

REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)

Ident.: EFB-LDG-40-00019704.0007001 / 02 APR 19

3 **Applicable to: MSN 08495-09324, 10949-11522, 11572-11597**

INTRODUCTION

The following tables show the required landing distances on wet runway at Santos Dumont airport (SBRJ/SDU) for A320-271N and A320-273N SHARP. The use of these tables is subject to an Airplane Flight Manual (AFM) Supplement. The performance data on wet runway given in these tables are applicable provided the runway is maintained to acceptable standards for Porous Friction Course type runways in accordance with FAA AC 150/5320-12 or CAA CAP 683 or equivalent.

MANUAL LANDING

REQUIRED LANDING DISTANCE – ALTERNATE CG ENVELOPE

ALTERNATE CG (28 %)							
A320-271N A320-273N Conf FULL ZP= 0 ft	Required manual landing distance (m) on wet PFC runway in RIO SANTOS DUMONT RUNWAY 20L or 02R LDA= 1 323 m						
Weight (t)	15 kt tailwind	10 kt tailwind	5 kt tailwind	no wind	10 kt headwind	20 kt headwind	30 kt headwind
37	1 425	1 338	1 255	1 176	1 125	1 076	1 028
39			1 258	1 179	1 128	1 078	1 030
41			1 260	1 181	1 130	1 080	1 032
43			1 260	1 181	1 130	1 080	1 033
45			1 260	1 181	1 130	1 080	1 032
47			1 260	1 180	1 129	1 080	1 032
49			1 260	1 179	1 128	1 079	1 031
51			1 261	1 180	1 129	1 079	1 030
53			1 281	1 182	1 132	1 088	1 046
55			1 313	1 209	1 163	1 118	1 075
57			1 346	1 241	1 194	1 148	1 104
59				1 272	1 224	1 178	1 134
61				1 303	1 255	1 208	1 163
63				1 337	1 285	1 238	1 192
65					1 316	1 267	1 221
67					1 347	1 297	1 249

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REQUIRED LANDING DISTANCE AT RIO SANTOS DUMONT (SBRJ/SDU)

REQUIRED LANDING DISTANCE – EXTENDED FORWARD CG ENVELOPE

EXTENDED FORWARD CG							
A320-271N A320-273N Conf FULL ZP= 0 ft	Required manual landing distance (m) on wet PFC runway in RIO SANTOS DUMONT RUNWAY 20L or 02R LDA= 1 323 m						
Weight (t)	15 kt tailwind	10 kt tailwind	5 kt tailwind	no wind	10 kt headwind	20 kt headwind	30 kt headwind
37	1 424	1 336	1 251	1 171	1 120	1 070	1 022
39			1 255	1 175	1 123	1 073	1 025
41			1 258	1 178	1 126	1 076	1 028
43			1 259	1 179	1 127	1 078	1 029
45			1 260	1 180	1 128	1 078	1 030
47			1 261	1 180	1 128	1 078	1 030
49			1 262	1 181	1 129	1 079	1 030
51			1 274	1 182	1 130	1 080	1 037
53			1 308	1 204	1 156	1 111	1 067
55			1 341	1 235	1 187	1 141	1 097
57				1 266	1 218	1 171	1 126
59				1 297	1 248	1 201	1 155
61				1 328	1 279	1 231	1 185
63					1 309	1 260	1 214
65					1 341	1 291	1 243
67						1 322	1 273

GENERAL

Ident.: EFB-LDG-50-00022605.0001001 / 15 NOV 21
Applicable to: ALL

During flight, the flight crew performs a landing performance computation if the landing conditions changed compared with the landing performance computation at dispatch, or with a previous computation (e.g. runway, weather conditions, in-flight failure affecting performance, diversion).
The landing performance calculation is made with the landing performance (LDG PERF) application, with the computation type set to IN-FLIGHT.
The landing distance used for this computation is the FLD. The flight crew uses the RCAM to determine the landing performance level.
If the aircraft has been dispatched with deferred MEL or CDL items, the In-Flight Landing Distance and FLD must be calculated with the applicable MEL or CDL items selected.
In an emergency situation, the flight crew may decide to disregard the FLD. In this case the flight crew must check that the In-Flight Landing Distance is shorter than the LDA at the destination or diversion airport.

L2 For more information on In-Flight Landing Distances, *Refer to EFB-LDG-20 Landing Distances Definitions*.

LANDING PERFORMANCE WITHOUT IN-FLIGHT FAILURE

Ident.: EFB-LDG-50-00022606.0001001 / 28 NOV 19
Applicable to: ALL

LANDING PERFORMANCE CALCULATION

The flight crew enters the expected landing conditions and calculates the landing performance.

FLAPS LEVER POSITION

The FLAPS lever position for landing is at flight crew's discretion.

VAPP DETERMINATION

VAPP is calculated by the FMS and is displayed on the APPR panel of the FMS PERF page.

L2 The VAPP is calculated by the FMS as the maximum of:
- VMCL + 5 kt
- 1.23*VS1G + APPR COR.

  APPR COR is the highest of:
  - 5 kt in case of A/THR ON
  - 5 kt in case of Ice Accretion in CONF FULL
    10 kt in case of Ice Accretion in CONF 3
  - 1/3 Headwind component (excluding gust - maximum 15 kt).

LANDING PERFORMANCE FOLLOWING IN-FLIGHT FAILURE

Ident.: EFB-LDG-50-00022607.0001001 / 28 NOV 19
Applicable to: ALL

LANDING PERFORMANCE ECAM INDICATIONS

After an aircraft system failure that occurs in flight, the flight crew follows the associated ECAM procedure.
When required, the ECAM displays landing performance indications in the applicable procedure.
The ECAM alert items are displayed on the ECAM STATUS page. The ECAM displays LDG DIST PROC APPLY if an ECAM alert item affects landing performance.

LANDING PERFORMANCE CALCULATION

The flight crew enters the ECAM alerts item that affect performance and expected landing conditions in the LDG PERF application to calculate the landing performance.

FLAPS LEVER POSITION

The flight crew selects the FLAPS lever position requested by the ECAM.

Note: *If there are no ECAM instructions, the FLAPS lever position for landing is at flight crew's discretion.*

VAPP DETERMINATION

- **If the ECAM displays LDG DIST PROC APPLY:**
  The flight crew enters into the FMS - PERF - APPR page the VAPP value computed by the LDG PERF application.

ROW ◁ LANDING DISTANCE CROSSCHECK

Ident.: EFB-LDG-50-00022608.0001001 / 28 MAY 20
Applicable to: ALL

The ROW ◁ landing distance may, in some cases, exceed the factored in-flight landing distance.
The flight crew will not be authorized to initiate an approach if a ROW ◁ alert is expected (unless a specific authorization is obtained from the appropriate authority to deactivate the ROW/ROP ◁).
If a ROW ◁ alert is expected, and the flight crew is not authorized to deactivate the ROW/ROP ◁ , the flight crew should request to change the runway, or initiate a diversion.

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